IBRO
50TH ANNIVERSARY (1961 - 2011)

SINS

IBRO
Florence
2011

PROGRAM

8th IBRO WORLD CONGRESS OF NEUROSCIENCE

International Brain Research Organization

Florence - Italy
July 14 - 18, 2011

The 8th IBRO World Congress has been included in the calendar of events related to the Celebrations of the 150th Anniversary of the Unification of the Italian State

www.ibro2011.org

8th IBRO WORLD CONGRESS OF NEUROSCIENCE

International Brain Research Organization

PROGRAM

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WELCOME ADDRESS

On behalf of the Organizing Committee, I have the pleasure of welcoming you to the 8th World Congress of the International Brain Research Organization (IBRO). IBRO was incorporated in 1961 and therefore this meeting marks its 50th Anniversary. IBRO now counts 84 member societies in 61 countries around the globe with a membership of over 75.000 neuroscientists and this meeting intends to provide a living expression of its mission, the promotion of neuroscience and communication between brain researchers around the world, with special emphasis on assisting young investigators in the developing world.

Also thanks to the response by world neuroscientists to the call for Symposia, the scientific committee has been able to put toghether a program at the cutting-edge of current research in neuroscience. The meeting can be synthesized by the following figures: 10 Plenary Lectures, 20 Symposia, 40 Workshops, 14 Special Events, 7 Special Workshops.

The meeting also includes a special workshop on the history of Italian Neuroscience and a Joint meeting between the host Society, the Italian Society of Neuroscience, and the French Society of Neuroscience.

The Renaissance architecture of the Fortezza da Basso will provide the meeting with a stage perfectly consonant with the city of art that hosts the meeting, Florence.

Now, enjoy the meeting and your stay in Florence.

Gaetano Di Chiara

PROGRAM

COMMITTEES

ORGANIZERS

The congress is organized by:

The International Brain Research Organization (IBRO)

The Italian Society of Neuroscience (SINS)

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ACKNOWLEDGEMENTS

The Congress Organisers gratefully acknowledge support received from all exhibitors and the following sponsors:

The Congress Organisers would like also to thank the following sponsors for contributions to Symposia and Workshops:

GENERAL INFORMATION

Congress venue

Fortezza da Basso
Viale Filippo Strozzi 1 - 50129 Florence - Italy
Tel: +39 055 4972301

Opening hours of registration desk

Thursday, July 14	09:00-19:30
Friday, July 15	08:00-18:30
Saturday, July 16	08:00-18:30
Sunday, July 17	08:00-18:30
Monday, July 18	08:00-18:30

Official language

The official language of the congress is English.

Badges

Each participant may collect the badge at the registration desk. Participants are kindly requested to wear their badge during all congress activities and social events.

No color:	Participants
Red color:	Speakers and Chairpersons
Orange color:	Exhibitors
Blue color:	Committees and staff
Green color:	Accompanying persons

Certificate of attendance

A certificate of attendance is available at the registration desk for all participants that will require it.

Projections

PowerPoint projection is available in all meeting rooms. Speakers must load their presentation in the Slide center (first floor) at least three hours before the beginning of their session (or, if their session starts at 8:30, by 16:00 on the previous day).

The opening hours of the slide center are:

Thursday, July 14	12:00-18:30
Friday, July 15	08:00-18:30
Saturday, July 16	08:00-18:30
Sunday, July 17	08:00-18:30
Monday, July 18	08:00-18:30

Posters

There are four sessions of poster presentations: A (Friday, July 15), B (Saturday, July 16), C (Sunday, July 17) and D (Monday, July 18). Posters will be in display in the exhibition area for the whole day. **Posters will be attended by the Presenting Author from 11:40 to 14:15 on each day**.

Posters should be placed on the boards from 9:30 on each day and removed by 17:30. No responsibility will be taken for posters which are left behind. The poster boards are numbered and adhesive material will be available at each board (please do not use drawing pins or thumbtacks). **The number of the abstract corresponds to the number of the poster panel.**

The Posters for **Topic 20 (History, teaching, neuroethics, awareness & social impact)** will be on display for the entire period of the congress (from Friday, July 15 to Monday, July 18) and will be attended by the Presenting Author from 11:40 to 14:15 on the first day, Friday, July 15.

The poster board size is 150 cm high and 90 cm wide.

Italian Society of Neuroscience (Young Investigator Visiting Programme) Poster Prize: The best posters by participants from low-income countries will be selected each day by a Selection Committee and awarded at the late afternoon Plenary Lecture at 17:30 of each day.

Internet connection

Free wifi internet access is available in the ground and first floor of the Pavilion A. Internet point stations are available in the exhibition area (see the floorplan).

Currency / banks / exchange

Italy's national currency is the Euro (€). Exchange is provided by banks and exchange agencies. Banks are open Monday to Friday from 08:00 / 08:30 to 13:00 / 13:30. They are also open in the afternoon, usually from 14:30 / 15:00 to 16:00 / 16:30.

A bank office is available in the Pavilion A, ground floor (see the floorplan).

Electrical current

The electrical current in Italy is 220 volts 50 Hz.

Climate

The average temperature in Florence in July is 18° Celsius (64,4 F) / 31° Celsius (87,8 F). Air conditioning is provided in the Congress Center Fortezza da Basso.

TOURIST TOURS

At the "Social program and tours" desk for tourist tours can be purchased on a "first come first served" basis.
List of available tours:

Half day tours

City center - half day on foot

Thursday, July 14 from 09:30 to 12:00

The 11th century Baptistery and its famous "Doors of Paradise", the Cathedral of Santa Maria del Fiore (il Duomo), with its famous dome raised by Filippo Brunelleschi, and Giotto's 14th century bell-tower (il Campanile) are the most outstanding monuments in the Cathedral Square and create the religious center of the city.
The political center is on the other end the Signoria Square with the Palazzo Vecchio, which is the Town Hall of Florence.
Quite impressive is the incredible series of original statues (Perseus, Neptune, the Rape of the Sabines, etc.) which stands here, so that the square can be considered an open air museum.
Ponte Vecchio, with all its famous jewellery stores, is one more world famous monument of Florence. It's the only bridge which is still original and dates back to the 14th century.
From Ponte Vecchio one of the main streets leads to the Piazza della Repubblica, which is a more recent square created in the 19th century, at the time when Florence was the capital of Italy, where the center of the ancient Roman colony of Florentia used to be. Many of Florence's outdoors cafés are located on this square.

Euro 30,00 per person

Florentine hills - half day by bus

Friday, July 15 from 14:30 to 17:30

Piazzale Michelangelo, located along the "Avenue of the Hills" provides an unforgettable view of the city but the view one can enjoy from San Miniato Church is even more enchanting. This church, with its green and white marble facade, is one of the most important examples of Florentine Romanesque architecture, surrounded by the typical Tuscan countryside. On the hills overlooking Florence to the north, the small historical town of Fiesole, of Etruscan origin, later a Roman town, provides a marvellous and truly exhilarating panorama of Florence, the Arno river valley and the Tuscan hills.

Euro 40,00 per person

Pitti Palace - half day on foot

Sunday, July 17 from 10:00 to 12:00

The Pitti Palace was the third and last - really sumptuous - residence of the Medici Family.
It was later on the residence of the Austrian Grand Dukes and of the Kings of Italy, so that it became richer and richer in decoration and a model for the European royal palaces.
Fully furnished and lavishly decorated, it's also the seat of the Palatine Gallery, with masterpieces by Raffaello, Tiziano, Rubens, and other great masters, and of the Royal Apartments.

Euro 45,00 per person

The Academy Gallery - half day on foot

Saturday, July 16 from 16:00 to 18:00

Michelangelo's David is one of the most admired statues in the world. Thousands of people every day visit the magnificent hall which was purposely built for this masterpiece in order to emphasize its beauty. In the same museum there are some other impressive works by the great master, such as his unfinished statues called the Captives. The Academy Gallery houses furthermore an interesting selection of 13th - 16th century paintings and an important collection of ancient musical instruments.

Euro 42,00 per person

The Uffizi Gallery - half day on foot

Thursday, July 14 from 16:00 to 18:00
Saturday, July 16 from 16:00 to 18:00
Sunday, July 17 from 16:00 to 18:00

The Uffizi Gallery is one of the greatest museums in the world. It was founded in 1581 by Francesco I de' Medici, who collected numerous art-works in the building designed by Vasari. Today the Uffizi contains masterpieces by Italian and foreign artists from 13th to 18th century such as Cimabue, Giotto, Masaccio, Beato Angelico, Leonardo da Vinci, Botticelli, Michelangelo, Piero Della Francesca, Raffaello, Caravaggio, along with Rubens, Rembrandt, Durer, Goya and many others.

Euro 42,00 per person

TOURIST TOURS

Full day tours

Chianti area - full day by bus

Friday, July 15 from 09:30 to 17:00

A relaxing drive through the Chianti wine area amidst lovely, ever changing scenery of vine clad hills, dotted with olive and cypress trees, little country churches, farmhouses, villas and castles, gives the opportunity to see one of the most suggestive areas of Tuscany, known all over the world.

A stop in one of the best Chianti wine estates will give the possibility to taste the local wines with country snacks and to visit the wine cellars

Euro 98,00 per person

Siena and San Gimignano - full day by bus

Monday, July 18 from 08:30 to 18:00

Drive through the Chianti wine area amidst lovely, ever changing scenery of vine clad hills and olive groves to Siena, medieval town situated on the hillside between the Arbia and Elsa rivers, birthplace of St. Catherine and many famous artists. Visit the Cathedral, the Campo Square with the Town Hall, the Church of San Domenico and observe other fine specimens of medieval architecture. On the way home visit San Gimignano, a charming little town perched on a hilltop and preserved almost intact since the Middle Ages, with its famous towers, precious frescoes and other art treasures. Lunch in a typical restaurant in Siena.

Euro 110,00 per person

Pisa and Lucca - full day by bus

Saturday, July 16 from 08:30 to 18:00

Pisa, located on the river Arno, a few kilometers inland, is famous for its “Piazza dei Miracoli”, with the Cathedral, the Leaning Tower, the Baptistery, the Camposanto, a monumental complex and one of the greatest examples of Romanesque architecture and sculpture. It is one of the most beautiful places in Italy: its splendid buildings with their rational and spacious layout rise proudly from the grass lawns. The tour continues to Lucca with its suggestive city walls, the Cathedral, the Church of San Frediano and its “Piazza del Mercato”, a square which has kept the original oval shape of the ancient Roman amphitheater. Lunch in a typical restaurant in Lucca.

Euro 105,00 per person

SOCIAL PROGRAM

Welcome reception

Thursday, July 14

A Welcome Reception will be held after the Opening ceremony, and will be free of charge for registered participants and accompanying persons.

Organ concert in the Basilica of San Lorenzo

Saturday, July 16, at 20:00

An organ concert of approximately 45 minutes will be held in the famous Basilica of San Lorenzo for a limited number of participants. Reservations will be accepted on a “first come first served” basis.

Remaining tickets will be sold at the “Social program and tours” desk.

Please do not forget to present your ticket at the entrance.

Cost of the ticket: Euro 12,00 per person.

Please remember that bare shoulder and/or shorts are not allowed inside churches.

Social dinner

Sunday, July 17, at 20:30

Palazzo Corsini - Lungarno Corsini 10

A seated Social Dinner will be held in the famous Palazzo Corsini in the downtown area of Florence.

Limited number of participants. Reservations are accepted on a “first come first served” basis.

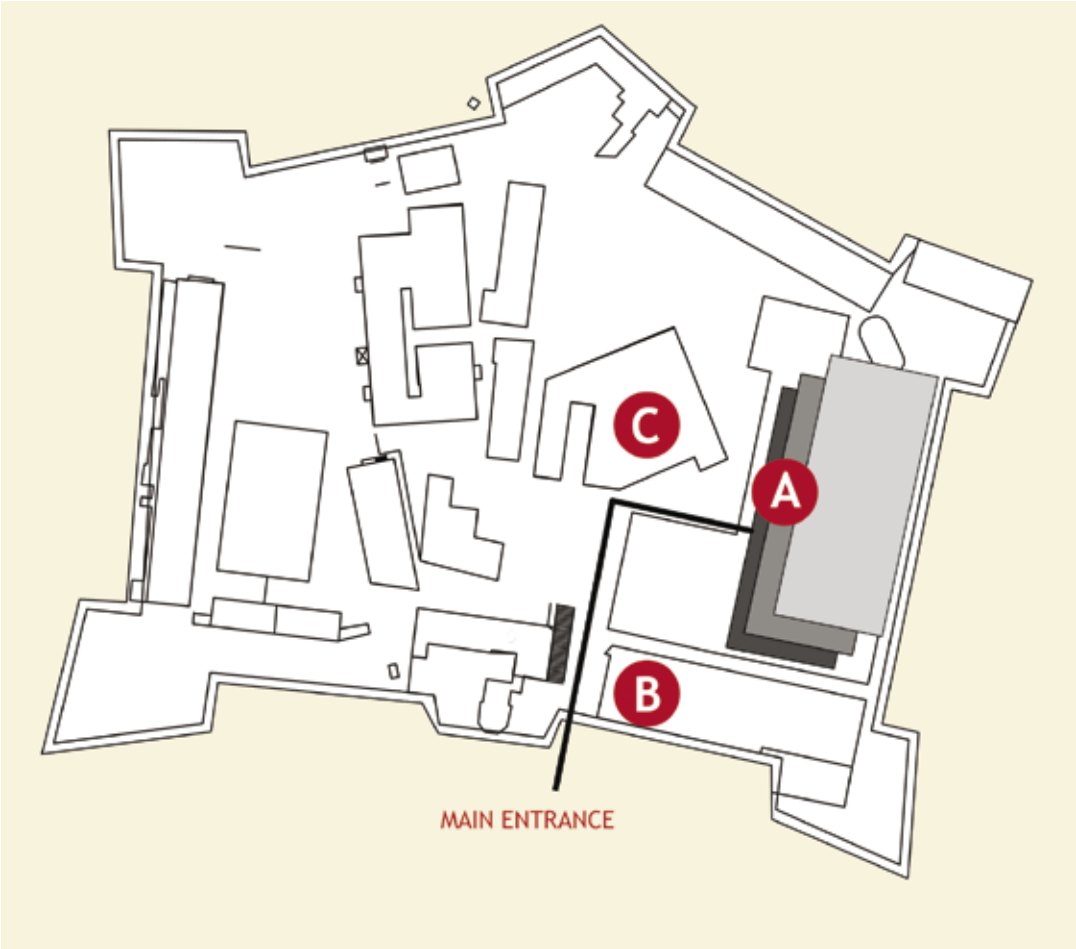
Remaining tickets will be sold to the “Social program and tours” desk until Sunday, July 17 at 10:30.

Please do not forget to present your ticket at the entrance.

Cost of the ticket: Euro 88,00 per person.

CONGRESS FLOORPLANS

FORTEZZA DA BASSO



PAVILION A

Ground floor

Bar
Cloakroom
Exhibition area
Internet point
Poster area
Poster information
Promotional area
Registration area

First floor

Room Vittorio Emanuele II
Room Garibaldi
Room Mazzini
Room Cavour
Slide center

PAVILION B

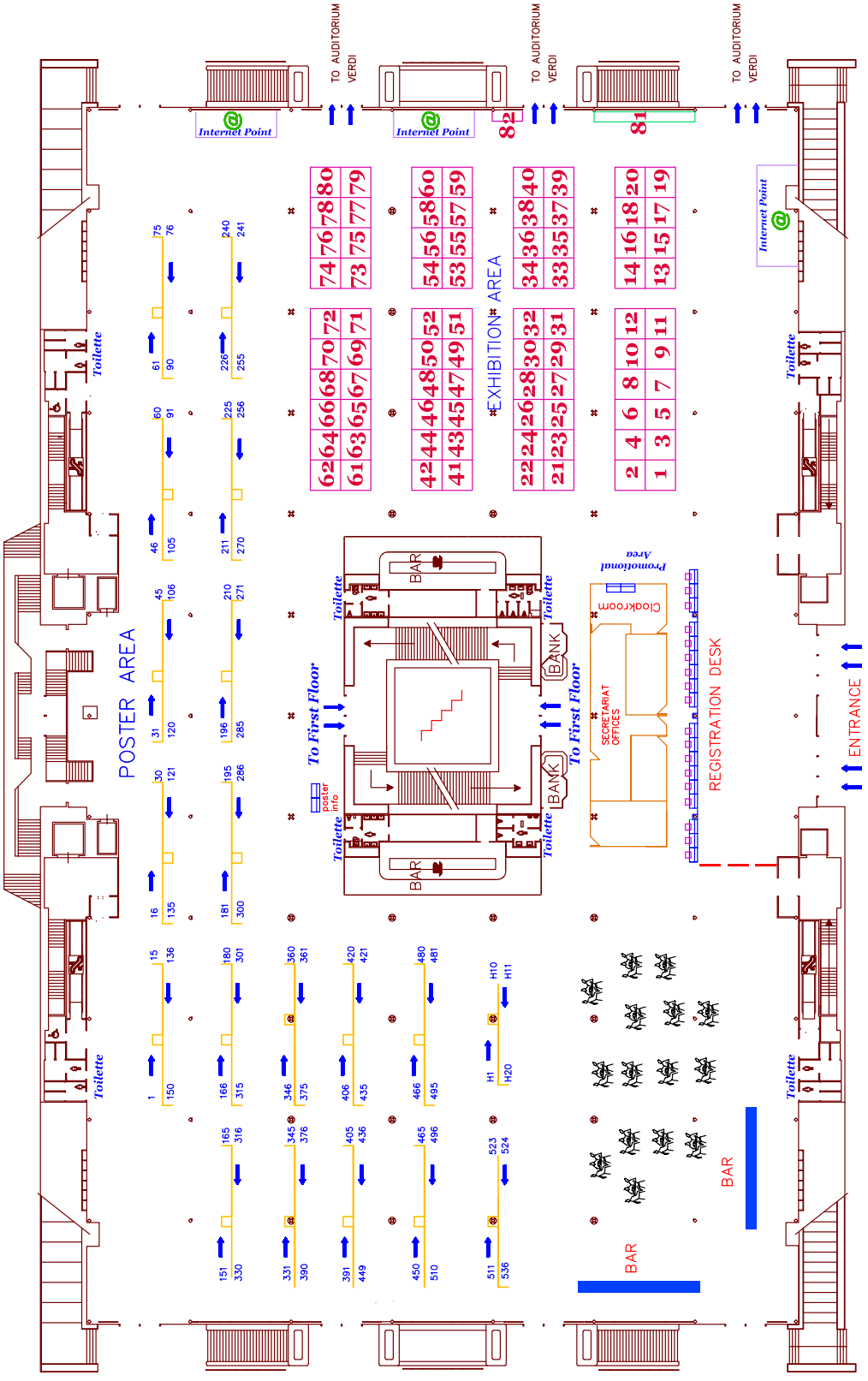
Auditorium Verdi

PAVILION C

IBRO office
IBRO meeting room
Press office
Press room

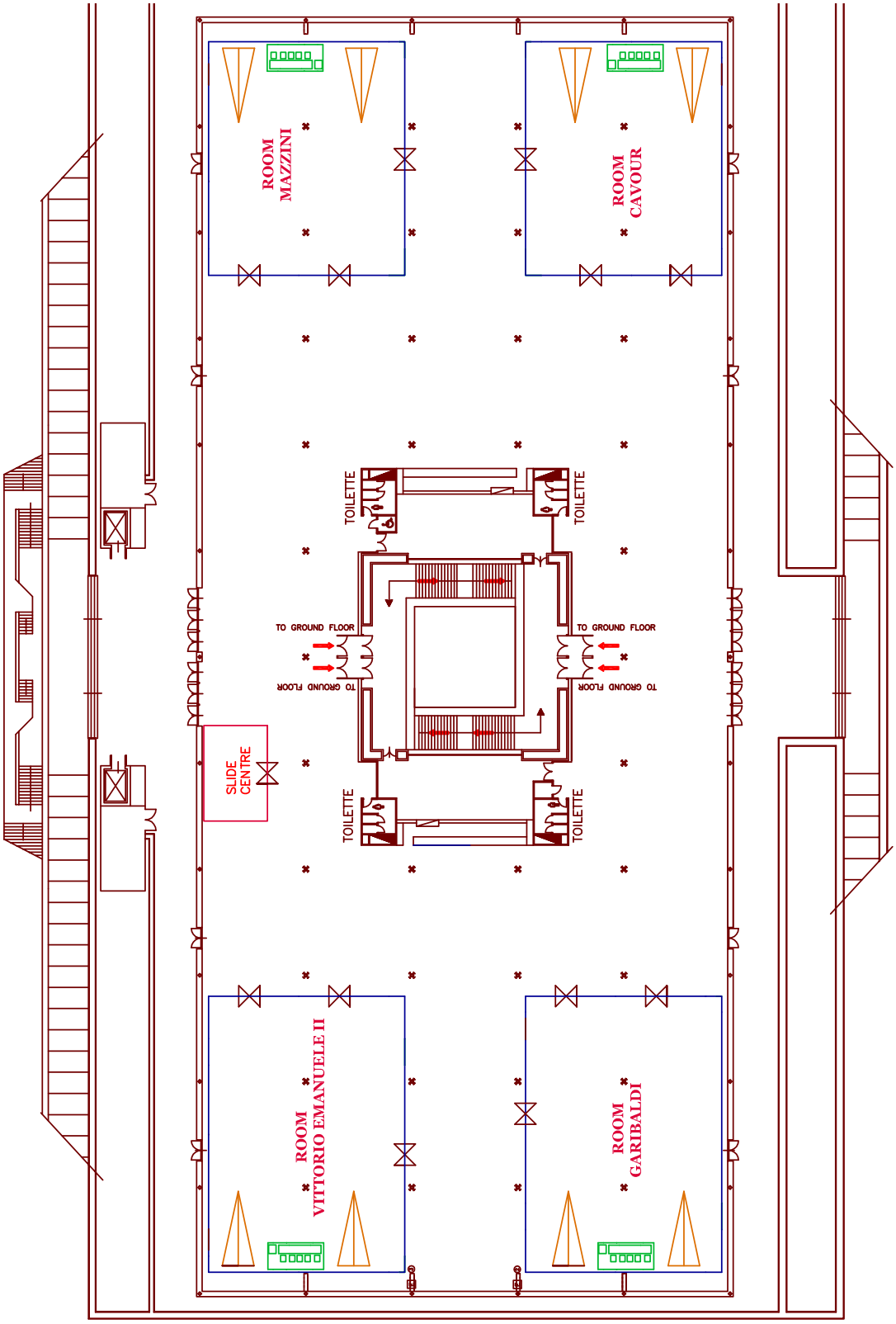
CONGRESS FLOORPLANS

PAVILION A - Ground floor



CONGRESS FLOORPLANS

PAVILION A - First floor



EXHIBITION

List of exhibitors

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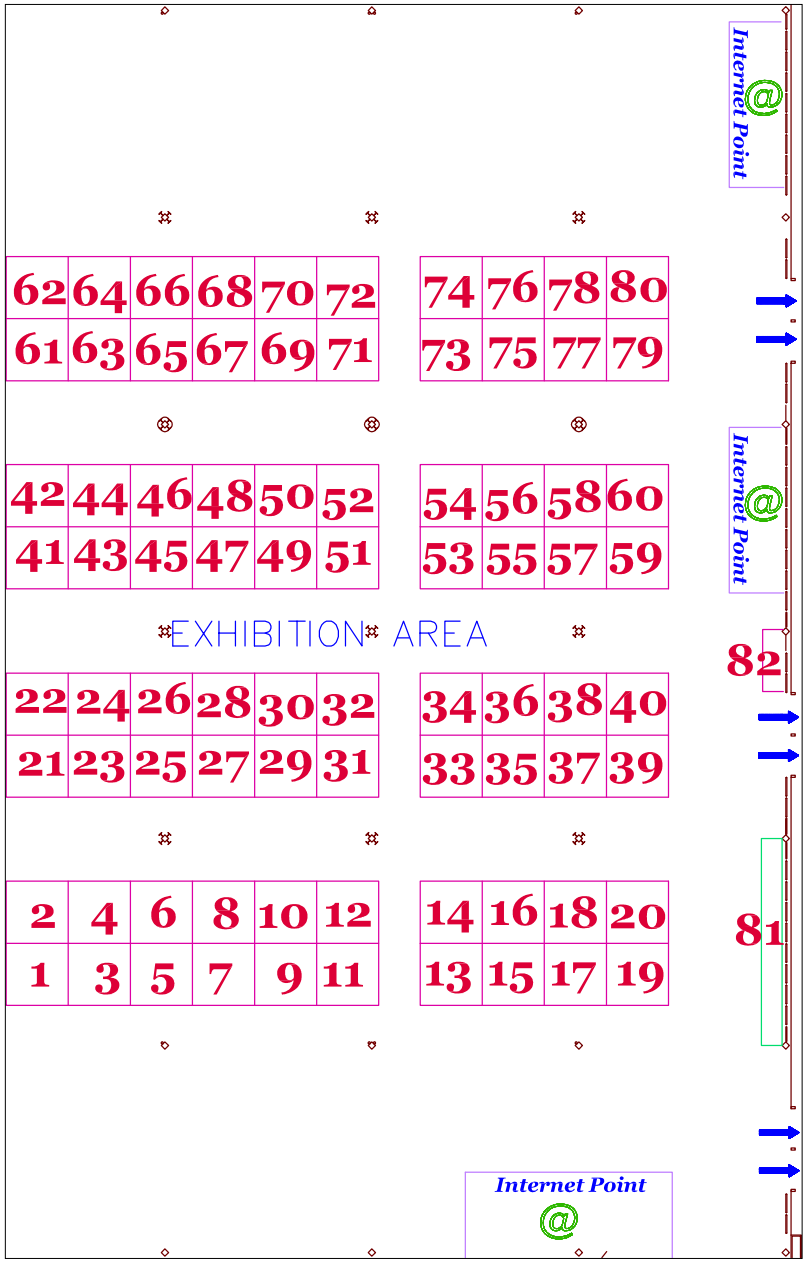
EXHIBITION

Exhibition hours

The exhibition will be open in the following days:

Thursday, July 14	from 15:00 to 20:30
Friday, July 15	from 09:30 to 17:30
Saturday, July 16	from 09:30 to 17:30
Sunday, July 17	from 09:30 to 17:30
Monday, July 18	from 09:30 to 17:30

EXHIBITION FLOORPLAN



COMPANY PROFILES

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Advanced Targeting Systems, Inc. 12

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website: www.ATSbio.com

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Allen Institute for Brain Science 30

551 North 34th Street, Seattle, WA 98103, United States
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Contact person: Kelly Overly, Associate Director Communications
IBRO onsite contact: Terri Gilbert
email: KellyO@alleninstitute.org

The Allen Institute for Brain Science, a nonprofit medical research organization, accelerates understanding of the human brain by fueling discovery across the global scientific community. To this end, the Institute generates innovative public resources and drives technological and analytical advances.

Alpha MED Scientific Inc. 69

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Alpha Omega 71

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website: www.alphaomega-eng.com
Contact person: Yousef Bsoul
email: y.bsoul@alphaomega-eng.com

In 1993, Alpha Omega was established as a small engineering firm by Mr. Imad Younis, based in the biblical city of Nazareth. From those humble beginnings, our organization has grown into a global company offering a plethora of pioneering products for our clients with consistent innovation and uncompromising quality. Since our inception, our team of experts has been dedicated to finding leading - edge solutions in the world of Functional Neurosurgery and Neuroscience with unrelenting focus and drive. Almost two decades and nearly 500 satisfied clients later, our

COMPANY PROFILES

organization continues with this same mission and determination in mind. Year after year, Alpha Omega has managed to consistently maintain its leadership status in the industry, due to our continuous communication and collaboration with our clients. It is this collaboration and our listening ear, which provides us with the necessary knowledge to constantly innovate and improve our product line. We constantly strive to discover new applications and enter new and untouched frontiers in medicine and neuroscience.
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ANY-maze is Stoelting's behavioural tracking software that has become the standard by which other software is measured. ANY-maze is backed by comprehensive technical support and can be used to track literally any animal anywhere (details at www.ANYmazeEurope.com). We also offer a complete selection of mazes, accessories and behaviour instruments. At ANY-maze, we are proud of our tradition of innovation, and have a strong commitment to support scientific research. We seek to offer only high quality, reliable software & instruments, and support them with prompt, educated customer service from our staff of science professionals.

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- Opioids
- Peptide receptors
- Purinergics
- Serotonin
- Vanilloids
- Signalling

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email: marketing@bitplane.com

Bitplane is the world's leading interactive microscopy image analysis software company. Through constant innovation and a clear focus on 3D and 4D image visualisation and analysis, Bitplane actively shapes the way scientists process multi-dimensional microscopic images. Bitplane's core scientific software module Imaris delivers all the necessary functionality for data visualisation, analysis, segmentation and interpretation of 3D and 4D microscopy datasets. Bitplane is part of Andor Technology a world leader in scientific imaging, spectroscopy solutions and microscopy systems.

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Founded in May 2008 near the Blackrock Desert in Utah, the company draws on a legacy of high tech innovation that began with Bionic Technologies, a spin-off from the University of Utah in 1997. Blackrock Microsystems provides enabling tools for the neuroscience, neural engineering and neuroprosthetics research and clinical community worldwide. Blackrock has created a commercial vision for the company to lead the market in implantable microsystems. Our team caters to the immediate and future needs of the research markets. From miniature electrodes and intelligent microsystems, to complex data acquisition systems and ground-breaking algorithms, we drive successful commercialization of cutting edge technology.

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Fax: +353 1 443 0784
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email: e.garry@blueboxsensors.com

Blue Box Sensors Ltd. produce implantable micro-sensors and biosensors that allow long-term in vivo measurements in awake and freely moving animals. These sensors use electrochemical techniques to provide real-time, highly selective and sensitive recordings of oxygen, nitric oxide, or glucose with applications for drug discovery and screening and uncovering disease mechanisms. Blue Box Sensors Ltd. manufacture and supply this sensor range as well as providing complementary integrated hardware and software systems.

Brains On-Line BV 46

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Brains On-Line is a contract research company in neurochemistry, with laboratories located in **Groningen** (the Netherlands) and **San Francisco** (USA). We facilitate preclinical drug development for medications aimed at disorders of the CNS, in particular neuropsychological disorders (depression, schizophrenia) and neurodegenerative disorders (Parkinson's and Alzheimer's disease). Our studies include: proof of principle, dose effectiveness, pharmacokinetic and pharmacodynamic relationships, bioavailability, drug interactions/metabolism, behavior and disease models. We specialize in monitoring dynamic neurochemical parameters in vivo and in freely-moving models. For this we routinely use: (ultra-slow) microdialysis, repeated and automated blood sampling, electrophysiology, sensoring, immunohistochemistry, chemistry, and bioanalysis (with HPLC and LC-MS/MS).
Product/service categories:

- analytical services
- contract research organization
- drug discovery
- electrophysiological data acquisition
- in vitro + in vivo testing
- microdialysis equipment & supplies
- receptor-ligand interactions
- research services

CMA Microdialysis AB 63

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CMA Microdialysis is a medical device company offering a method which enables continuous monitoring of local organ or tissue chemistry both in humans and animals. The method can among other things be used to monitor the effect of medical treatment in living tissue and to determine the concentration of drugs.

DSI - Data Sciences International 21

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DSI offers a wide variety of physiological monitoring solutions for respiratory, cardiovascular, and CNS applications involving acute or chronic studies. Products include data collection and analysis systems coupled with hardwired amplifiers, implantable telemetry, externally worn telemetry, implantable infusion pumps. Sales offices throughout Europe, USA and Asia provide local support and product expertise. Parameters that can be monitored include: EEG, EMG, EOG, ECG, Pressure (arterial, venous, bladder, intra-ocular, pleural, left ventricular, etc.), Temperature, Motor Activity and more. Applications in Neurosciences include studies on Sleep, Epilepsy, Brain, Parkinson, Aging, Addiction, Learning, etc.

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ECNP was established in 1987 to encourage research and to facilitate communication of ideas in the convergent disciplines of neuropsychopharmacology. The following activities enable ECNP to meet these objectives:
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congresses, regional meetings, workshops for young scientists, targeted expert meetings, seminars, consultation meetings
publications
the scientific journal European Neuropsychopharmacology, ECNP Matters newsletter
awards and incentives
awards for outstanding scientists, research grants for young scientists, fellowship awards, poster and travel awards, waived and reduced congress registration fees for young scientists

To facilitate direct dialogues with other scientific bodies and indirect dialogues with the European Union Commissions, the European Parliament and the World Health Organization (WHO), as well as other decision-making bodies

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Contact person: Dr. Fu Du
email: support@fdneurotech.com

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Femtonics focuses on R&D of unique laser scanning two-photon microscopes tuned for the fastest possible 2D and 3D optical measurements which are perfectly suited for cutting-edge brain research and pharmaceutical development. Due to the modular nature of our microscope setups, they can be easily adapted to suit the most various applications. Our product line ranges from specialized laser scanning microscopes and hardware/software upgrades for existing microscope setups to brand new uncaging materials developed by our chemical department. Our multidisciplinary team is always ready to make unique developments to your custom made setups to perfectly meet your needs.

FENS (Federation of European Neuroscience Societies) 55
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Contact person: Meino Gibson, Tanja Butzek
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FENS, the Federation of European Neuroscience Societies, represents 32 national European neuroscience societies and several monodisciplinary societies. FENS was founded in 1998 and is the European partner of the American Society for Neuroscience. FENS was founded with the goals of advancing research and education in neuroscience and representing neuroscience research in the European Commission, IBRO, and other granting bodies.
FENS is governed by the FENS Governing Council and the day to day FENS administration is delegated to the Executive Committee. The Executive Committee is supported by three offices based in Berlin, Brussels and Athens.

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International Neuroinformatics Coordinating Facility (INCF) 35

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The International Neuroinformatics Coordinating Facility, INCF, develops collaborative neuroinformatics infrastructure and promotes the sharing of data and computing resources to the international research community. Software tools and standards for the international neuroinformatics community are being developed through the INCF Programs, which address infrastructural issues of high importance to the neuroscience community. Our mission is to facilitate the work of neuroscientists around the world, and to catalyze and coordinate the global development of neuroinformatics. INCF is funded by contributions from its member countries, based on gross domestic expenditures on research and development (GERD). Please visit incf.org for more information.

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The MIT Press publishes distinguished scholarly books in Neuroscience and related cognitive and biological sciences. New titles in 2011 include: *Networks of the Brain* by Olaf Sporns; *Cerebral Plasticity: New Perspectives*, edited by Leo M Chalupa et al.; *Statistical Analysis of FMRI Data* by F Gregory Ashby; *Neural Control Engineering* by Steven J Schiff; *How We Remember* by Michael E Hasselmo, and *The Cognitive Neuropsychiatry of Parkinson's Disease* by Patrick McNamara. We welcome the submission of proposals and manuscripts for consideration. Please contact: Robert V. Prior, Executive Editor, The MIT Press, 55 Hayward Street, Cambridge, MA 02142, USA. prior@mit.edu

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Noldus Information Technology develops, markets, and supports professional software and instrumentation for animal behavior research. Noldus products enable the collection, analysis, management, and presentation of behavioral data. Scientists all over the world use it to study behavioral processes, automate experiments, improve the quality and efficiency of their research.
The product range includes a number of successes such as The Observer XT, EthoVision XT, CatWalk XT, and PhenoTyper. In addition, Noldus offers accessories to complete the experimental set-up, such as mazes and other test arenas, or even completely integrated systems. To complete their services, they provide consulting, training, and technical support.

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For meanwhile over 25 years npi electronic GmbH develops and produces equipment for research in the life sciences (especially physiological basic research) with main focus on neurosciences. Instruments include patch and voltage clamp amplifiers, oocyte amplifiers, extracellular amplifiers, stimulus isolators, voltammetric and amperometric amplifiers, amplifiers for electroporation, filters, substance application systems, micromanipulators, temperature controllers and data acquisition systems. npi electronic can also supply integrated systems like the robotic ScreeningTool for ion channel drug screening using oocytes, and complete setups. npi electronic is a leader in the design and manufacture of instruments for bioelectrical measurements and for microelectrode techniques.

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Perimed AB 26

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Perimed AB, established in 1981 and headquartered just outside Stockholm, is the world leader in developing, manufacturing and marketing state-of-the-art equipment for microvascular diagnosis (laser Doppler and laser speckle imaging systems). With customers in more than 80 countries, Perimed also actively participates in a wide range of research projects together with leading universities to deepen our understanding of diseases related to blood perfusion and microvascular functions. Knowledge gained is continually re-invested in further development.

PhenoSys GmbH 57

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PhenoSys is a Research and Development (R&D) oriented company that engineers and markets cutting edge technology for automated animal behaviour research. This is achieved by a team uniting the expertise of electrical and mechanical engineering, computer science, and behavioural biology. PhenoSys offers unique automated setups in the field of behaviour biology. Our expertise includes specialized applications of virtual reality and touchscreen technology for animal behaviour environments and RFID (transponder) operated devices in home cage environments. Our experimental systems are used for behavioural phenotyping, for brain research, for experimental psychology and the diagnostic characterization of animal models for translational medicine.

Phoenix Europe GmbH 74

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Phoenix Pharmaceuticals specializes in peptides, antibodies, and immunoassays for neuroscience research including Amyloid-Beta, APL-1, & P5/P35 product lines for Alzheimer's and related diseases. Newer products include our sensitive fluorescent EIA kits and high-quality stem-cell research reagents. Services include hormone level determination (sample prep and assay included); as well as custom peptide synthesis, labeling, and antibody production. Please visit us for a free technical reference CD.

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Pinnacle Technology provides new tools for rodent research that simplify measurement, reduce cost and enable new discoveries. Current products include: wireless and tethered biosensor systems for the real-time measurement of neurotransmitters including glutamate, lactate, glucose, ethanol & catecholamines, EEG/EMG systems for seizure and sleep monitoring, sleep deprivation chambers and integrated video recording.

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Plexon designs and markets intuitive and reliable data-acquisition systems for recording and analyzing spike, field potential and other continuous physiological and behavioral signals. Plexon's MAP and OmniPlex systems are world leaders in real-time spike sorting and field potential data acquisition. Plexon offers a comprehensive product line for the systems neuroscientist, including digital video recording and position tracking, commutators, headstage amplifiers, modular chronic and acute microelectrode drives, single and multi-site microelectrodes, microwire arrays and software to analyze spike, field potential, and behavioral data offline.

Proteintech Group 59

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Cell isolation kits and specialised culture media and supplements
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Royal Society Publishing **33**

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Fax: +44 20 7976 1837
website: royalsocietypublishing.org/journals
Contact person: Joanna Bolesworth
email: joanna.bolesworth@royalsociety.org

The Royal Society publishes four biology journals, all of which encourage submissions in neuroscience:
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Biology Letters publishes short, letter-style articles
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Open Biology is a **new** Open Access journal covering research in cellular and molecular biology
http://rsob.royalsocietypublishing.org
Please come and visit us at booth number 33 where our representative, Joanna Bolesworth will be happy to answer any questions you may have about our journals. Alternatively, visit our website at http://royalsocietypublishing.org

Science/AAAS **54**

Bateman House
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Fax: +44 1223 326501
website: www.sciencemag.org, www.aaas.org

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Scientifica Ltd. **62**

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website: www.scientifica.uk.com
email: sales@scientifica.uk.com

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Society for Neuroscience (SFN) **56**

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Tel: +1 202 962 4000
Fax: +1 202 962 4946
website: www.sfn.org
Contact person: Marci Leach
email: mleach@sfn.org

Founded in 1969 with 500 members, the Society for Neuroscience has grown to more than 41,000 members in 97 countries. Stop by our booth to learn more about our annual meeting, Neuroscience 2011, taking place November 12-16 in Washington, DC or pick up a copy of The Journal of Neuroscience.

Springer **39**

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The Brain Prize 52

Ole Maaloes Vej 3
2200 Copenhagen N, Denmark
Tel & fax number: +45 39 17 82 40
website: www.thebrainprize.org
Contact person: Janne Axelsen
email: info@thebrainprize.org

The Brain Prize will be awarded to one or more scientists who have distinguished themselves by an outstanding contribution to European brain research. The € 1 million prize is a personal prize and has been awarded for the first time in May 2011 to György Buzsaki, Tamás Freund and Péter Somogyi. Awards will be followed by an extensive outreach programme organised together with the major Danish universities. Further information: www.thebrainprize.org

Thermo Scientific 4/6

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9320 Erembodegem, Belgium
Tel & fax: + 32 53 83 44 04
website: www.thermo.com
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Thomas RECORDING GmbH 66

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website: www.ThomasRECORDING.com
email: info@thomasrecording.com

Thomas RECORDING GmbH is the sole manufacturer and distributor of microelectrodes and multi-electrode recording systems and medical applications. As a specialist of microelectrodes for neurophysiological research, it was the first company in the world to develop 4-cores (tetrodes) and 7-cores (heptodes) quartz-platinum/tungsten multifiber microelectrodes. Furthermore, Thomas RECORDING GmbH offers a 5-channel microdrive (mini-matrix), camera-based eye-tracking systems, medical functional neuronavigation systems and stereotaxic frames.

TILL Photonics GmbH 73

Lochhamer Schlag 21, 82166 Gräfelfing, Germany
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Fax: +49 89 895 662 101
website: www.till-photonics.com
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TILL Photonics GmbH develops and markets innovative life science products for fluorescence microscopy as used in fundamental research, applied science and diagnostics. Our key competencies are extremely flexible, modular systems for all current and future microscopy standards as well as complete turnkey solutions for imaging and photometry.

Tobii Technology 20

Niedenau 45, 60325 Frankfurt, Germany
Tel: +49 69 2475034 0
Fax: +49 69 2475034 29
website: www.tobii.com
email: sales.de@tobii.com

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Tocris Bioscience **70**

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website: www.tocris.com
email: customerservice@tocris.co.uk

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TSE Systems GmbH **71**

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website: www.TSE-Systems.com
email: info@TSE-Systems.com

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Tucker-Davis Technologies **40**

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website: www.tdt.com
Contact person: Victor Rush, PhD
email: info@tdt.com

Tucker-Davis Technologies (TDT) is a leading manufacturer of DSP-based data acquisition and stimulus generation systems, offering products ranging from electrodes to complete workstations for neurophysiology and evoked potentials. Core products include: OpenEx software for experiment control and analysis and Z-Series BioAmp Systems for processing high channel count neural data. New products include: RS4 multi-channel data streamer, RV2 video capture and tracking system, the IZ2 multi-channel microstimulator, and the ZCD ZIF-Clip® direct digital headstages-the industry's smallest and highest channel count digitizing headstages. TDT puts 20 years of continuing innovation and experience supporting neuroscience research systems to work for you.

Ugo Basile SRL **60**

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- Gas Anesthesia

Viewpoint **27**

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69410 Champagne Au Mont d'Or, France
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COMPANY PROFILES

VisualSonics **10**

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PROGRAM

PROGRAM INFORMATION

LIST OF PLENARY LECTURES

Thursday, July 14, 2011

EDAB-IBRO PRESIDENTIAL LECTURE 17:30 - Auditorium Verdi
Fifty Years of IBRO
Albert J. Aguayo (Montreal, Canada)

OPENING PLENARY LECTURE PL1 19:00 - Auditorium Verdi
Useful signals from motor cortex
Andrew B. Schwartz (Pittsburgh, USA)

Friday, July 15, 2011

PLENARY LECTURE PL2 08:30 - Auditorium Verdi
Regulation and function of adult neurogenesis in the hippocampal formation
Fred H. Gage (La Jolla, USA)

PRESIDENTIAL PLENARY LECTURE PL3 17:30 - Auditorium Verdi
Motivational value in the human brain
Ray J. Dolan (London, UK)

Saturday, July 16, 2011

PLENARY LECTURE PL4 08:30 - Auditorium Verdi
Local control of synaptic function
Erin M. Schuman (Frankfurt, Germany)

PLENARY LECTURE PL5 17:30 - Auditorium Verdi
The neurobiology of pain and its control
Allan I. Basbaum (San Francisco, USA)

Sunday, July 17, 2011

PLENARY LECTURE PL6 08:30 - Auditorium Verdi
Visualizing circuits in the developing visual system
Joshua R. Sanes (Harvard, USA)

PLENARY LECTURE PL7 17:30 - Auditorium Verdi
Molecular genetics of neurodegenerative dementias
Christine van Broeckhoven (Antwerpen, Belgium)

Monday, July 18, 2011

PLENARY LECTURE PL8 08:30 - Auditorium Verdi
Defining the neuronal circuitry of fear
Andreas Lüthi (Basel, Switzerland)

CLOSING PLENARY LECTURE PL9 17:30 - Auditorium Verdi
Optogenetics: development and application
Karl Deisseroth (Stanford, USA)

LIST OF SPECIAL EVENTS

Thursday, July 14, 2011

SINS SPECIAL FEATURE SS1 15:30 - Auditorium Verdi
ITALIAN PIONEERS IN NEUROSCIENCE OF THE PAST CENTURIES

Friday, July 15, 2011

SPECIAL EVENT SE01 12:30 - Room Mazzini
MUSIC AND BRAIN PLASTICITY:
FOUNDATION IPSEN NEURONAL PLASTICITY PRIZE

SPECIAL EVENT SE02 12:30 - Room Cavour
MOLECULAR AND SYSTEMS NEUROBIOLOGY IN DEVELOPMENT AND DISEASE: CONTRIBUTIONS FROM IBRO ALUMNI WORLDWIDE

SPECIAL EVENT SE03 12:00 - Room Vittorio Emanuele II
JOINT MEETING BETWEEN THE FRENCH AND ITALIAN NEUROSCIENCE SOCIETIES

SDN-SINS SPECIAL LECTURE 1
Wiring the brain: getting rid of unwanted synapses
Cornelius Gross (Monterotondo, Italy)

SDN-SINS MINISYMPOSIUM 1
NOVEL TARGETS IN DRUG ADDICTION

Saturday, July 16, 2011

SPECIAL EVENT SE04 12:30 - Room Mazzini
IBRO SYMPOSIUM: CONTRIBUTION OF IBRO TO WORLD NEUROSCIENCE

SPECIAL EVENT SE05 12:30 - Room Cavour
FINE-SCALE MAPPING OF THE DEVELOPING MOUSE AND HUMAN BRAIN

SPECIAL EVENT SE06 12:30 - Room Vittorio Emanuele II
JOINT MEETING BETWEEN THE FRENCH AND ITALIAN NEUROSCIENCE SOCIETIES

SDN-SINS MINISYMPOSIUM 2
NEW INSIGHTS INTO GEPHYRIN FUNCTION

Sunday, July 17, 2011

SPECIAL EVENT SE07 12:30 - Room Mazzini
INTO THE BRAIN OF PATIENT H.M. - COMPUTERIZED ANATOMICAL EXAMINATION OF A NOTABLE CASE OF AMNESIA

SPECIAL EVENT SE08 12:00 - Room Cavour
ETHICS OF SCIENTIFIC PUBLISHING - WHY DOES IT MATTER? ADVICE FROM EDITORS OF NEUROSCIENCE JOURNALS
SOCIETY FOR NEUROSCIENCE (USA) AND IBRO WORKSHOP

PROGRAM INFORMATION

SPECIAL EVENT SE09 **12:30 - Room Garibaldi**
MEETING JAPANESE NEUROSCIENTISTS

SPECIAL EVENT SE10 **12:30 - Room Vittorio Emanuele II**
JOINT MEETING BETWEEN THE FRENCH AND ITALIAN NEUROSCIENCE SOCIETIES

SDN-SINS MINISYMPOSIUM 3
NEW NEURONS FOR DISEASED BRAINS: FUNCTIONAL SIGNIFICANCE AND PERSPECTIVES FOR BRAIN REPAIR

Monday, July 18, 2011

SPECIAL EVENT SE11 **12:30 - Room Mazzini**
ICSU, THE INTERNATIONAL COUNCIL FOR SCIENCE
SCIENCE AND THE USE OF SCIENTIFIC KNOWLEDGE

SPECIAL EVENT SE12 **12:30 - Room Cavour**
FUNDING OPPORTUNITIES AND GRANT WRITING PRIMER
WOMEN IN WORLD NEUROSCIENCE (WWN) WORKSHOP

SPECIAL EVENT SE13 **12:30 - Room Garibaldi**
FENS/JNS/IBRO/SfN SYMPOSIUM ON LEGAL TRENDS ON THE USE OF ANIMALS IN RESEARCH ACROSS THE WORLD

SPECIAL EVENT SE14 **12:00 - Room Vittorio Emanuele II**
JOINT MEETING BETWEEN THE FRENCH AND ITALIAN NEUROSCIENCE SOCIETIES

SDN-SINS SPECIAL LECTURE 2
Tracking the memory trace during systems consolidation
Bruno Bontempi (Bordeaux, France)

SDN-SINS MINISYMPOSIUM 4
CELLULAR MECHANISMS IN PAIN SENSITIVITY

LIST OF SPECIAL WORKSHOPS

Thursday, July 14, 2011

SPECIAL WORKSHOP SW01 **13:30 - Room Mazzini**
WORKSHOP ON COMMUNICATION OF RESEARCH RESULTS

SPECIAL WORKSHOP SW02 **13:50 - Room Cavour**
NOVEL BRAIN IMAGING TECHNOLOGIES

Friday, July 15, 2011

SPECIAL WORKSHOP SW03 **18:40 - Room Cavour**
YOUNG INVESTIGATOR VISITING PROGRAM (YIP) WORKSHOP

SPECIAL WORKSHOP SW04 **18:40 - Room Mazzini**
EVENING DISCUSSION WITH PLENARY SPEAKERS I:
USING PRE- AND POST-DOCTORAL TRAINING TO PREPARE FOR A SUCCESSFUL PROFESSIONAL CAREER

Saturday, July 16, 2011

SPECIAL WORKSHOP SW05 **18:40 - Room Cavour**
NEUROSCIENCE IN AFRICA: A SAMPLE FROM NORTH, SOUTH, EAST AND WEST AFRICA

SPECIAL WORKSHOP SW06 **18:40 - Room Mazzini**
EVENING DISCUSSION WITH PLENARY SPEAKERS II:
HOW TO START YOUR OWN LAB

Sunday, July 17, 2011

SPECIAL WORKSHOP SW07 **18:40 - Room Mazzini**
EVENING DISCUSSION WITH PLENARY SPEAKERS III:
SELECTING CREATIVE RESEARCH QUESTIONS

LIST OF SYMPOSIA

Friday, July 15, 2011

SYMPOSIUM S01 **09:40 - Auditorium Verdi**
INTEGRATION OF NEW NEURONS IN THE ADULT BRAIN: LESSONS FOR BRAIN REPAIR

SYMPOSIUM S02 **09:40 - Room Mazzini**
MOLECULAR AND CELLULAR DETERMINANTS OF NEURON/GLIA SPECIFICATION

SYMPOSIUM S03 **09:40 - Room Cavour**
ELIMINATION OF AMYLOID FROM THE AGEING AND ALZHEIMER DISEASE BRAIN: UNCLOGGING THE DAM

SYMPOSIUM S04 **09:40 - Room Vittorio Emanuele II**
BLINDSIGHT IN ACTION: RESIDUAL VISUOMOTOR FUNCTIONS AFTER LESIONS OF PRIMARY VISUAL CORTEX

SYMPOSIUM S05 **09:40 - Room Garibaldi**
COMPUTATIONAL STUDY OF MEMORY INFORMATION PROCESSING: DATA ANALYSIS AND MODELING OF CORTICO-HIPPOCAMPAL INTERACTION

Saturday, July 16, 2011

SYMPOSIUM S06 **09:40 - Auditorium Verdi**
PUTTING DENDRITES INTO THE BRAIN: NEW APPROACHES TO STUDYING DENDRITIC FUNCTION IN VIVO

SYMPOSIUM S07 **09:40 - Room Mazzini**
SIGNAL TRANSDUCTION AND CELL BIOLOGY OF GROWTH CONE GUIDANCE

SYMPOSIUM S08 **09:40 - Room Cavour**
SUBCELLULAR LOCALIZATION AND FUNCTION OF VOLTAGE-GATED ION CHANNELS

PROGRAM

SYMPOSIUM S09 09:40 - Room Vittorio Emanuele II
PRION BIOLOGY AND PATHOLOGY

SYMPOSIUM S10 09:40 - Room Garibaldi
THE ENDOGENOUS OPIOID SYSTEMS IN PSYCHIATRIC AND NEUROLOGICAL DISEASES

Sunday, July 17, 2011

SYMPOSIUM S11 09:40 - Auditorium Verdi
CHROMATIN REMODELING IN NEURAL DEVELOPMENT

SYMPOSIUM S12 09:40 - Room Mazzini
GLIAL AND NEURONAL CONTROL OF BRAIN BLOOD FLOW IN HEALTH AND DISEASE

SYMPOSIUM S13 09:40 - Room Cavour
NEW ROLES FOR MELANOPSIN PHOTOPIGMENT IN NON-VISUAL AND VISUAL FUNCTIONS

SYMPOSIUM S14 09:40 - Room Vittorio Emanuele II
MENTAL AND PHYSICAL ACTIVITY AS MODULATORS OF BRAIN FUNCTION AND DISEASE

SYMPOSIUM S15 09:40 - Room Garibaldi
STRESS, PLASTICITY & DRUG-SEEKING

Monday, July 18, 2011

SYMPOSIUM S16 09:40 - Auditorium Verdi
SYNAPTIC AND NETWORK PLASTICITY IN DEVELOPMENT AND LEARNING

SYMPOSIUM S17 09:40 - Room Mazzini
REGULATION OF PRESYNAPTIC CALCIUM CHANNEL ACTIVITY

SYMPOSIUM S18 09:40 - Room Cavour
THE ROLE OF SLEEP IN LEARNING AND MEMORY FORMATION: FROM MOLECULAR MECHANISMS TO COGNITIVE FUNCTION

SYMPOSIUM S19 09:40 - Room Vittorio Emanuale II
MOTOR NEURONS: FROM DEVELOPMENT TO DISEASE

SYMPOSIUM S20 09:40 - Room Garibaldi
SYNAPTIC PROTEIN NETWORKS IN NEUROLOGICAL AND PSYCHIATRIC DISEASES

LIST OF WORKSHOPS

Friday, July 15, 2011

WORKSHOP W01 14:15 - Room Vittorio Emanuele II
BERGMANN GLIA CELLS IN SYNAPTIC FUNCTION

WORKSHOP W02 14:15 - Room Mazzini
NEXT GENERATION SEQUENCING STRATEGIES IN NEUROGENETICS

WORKSHOP W03 14:15 - Room Cavour
BASAL GANGLIA CONTROL OF SLEEP-WAKE REGULATION

WORKSHOP W04 14:15 - Auditorium Verdi
GENETIC MOUSE MODELS TO UNDERSTAND SCHIZOPHRENIA

WORKSHOP W05 14:15 - Room Garibaldi
ACTIVITY-DEPENDENT TRAFFICKING OF NMDA AND KAINATE RECEPTORS IN SYNAPTIC PLASTICITY

WORKSHOP W06 15:50 - Room Cavour
REMODELLING OF NEURAL EXTRACELLULAR MATRIX IN HEALTH AND DISEASE

WORKSHOP W07 15:50 - Room Mazzini
NEUROBIOLOGICAL BASIS OF EMERGING THERAPIES IN DRUG ADDICTION

WORKSHOP W08 15:50 - Room Vittorio Emanuele II
HABILITATION OF HEARING IN THE 21ST CENTURY

WORKSHOP W09 15:50 - Auditorium Verdi
EPILEPTOGENESIS: MECHANISMS AND PREVENTION

WORKSHOP W10 15:50 - Room Garibaldi
THE PERILS AND PITFALLS OF TRANSLATING COMPLEX BRAIN RESEARCH RESULTS FOR PUBLIC UNDERSTANDING

Saturday, July 16, 2011

WORKSHOP W11 14:15 - Room Vittorio Emanuele II
STEM CELLS FOR THE TREATMENT OF SPINAL CORD INJURY: ARE WE THERE YET?

WORKSHOP W12 14:15 - Room Mazzini
THE DIVERSE ACTIONS OF ESTROGENS IN HOMEOSTATIC REGULATION

WORKSHOP W13 14:15 - Room Cavour
ODORANTS, RECEPTORS AND GLOMERULI

WORKSHOP W14 14:15 - Room Garibaldi
STRUCTURAL PLASTICITY AND MEMORY

WORKSHOP W15 14:15 - Auditorium Verdi
TRANSCRIPTOMIC AND GENE EXPRESSION APPROACHES TO NEUROLOGICAL DISORDERS

WORKSHOP W16 15:50 - Room Vittorio Emanuele II
ENGINEERING RECEPTORS TO INVESTIGATE THE IN VIVO CELL SIGNALING CASCADES THAT UNDERLIE PHYSIOLOGY, BEHAVIOUR, AND NEUROLOGICAL DISORDERS

WORKSHOP W17 15:50 - Room Mazzini
NICOTINIC MECHANISMS UNDERLYING REWARD, EMOTION AND COGNITION

PROGRAM INFORMATION

WORKSHOP W18 15:50 - Room Cavour
PHYSIOLOGICAL ROLES AND ANTIPARKINSONIAN POTENTIAL OF METABOTROPIC GLUTAMATE RECEPTORS IN THE BASAL GANGLIA MOTOR CIRCUIT

WORKSHOP W19 15:50 - Auditorium Verdi
STRESS-INDUCED CHANGES IN CORTICO-LIMBIC STRUCTURES

WORKSHOP W20 15:50 - Room Garibaldi
COMMUNICATING NEUROSCIENCE TO THE PUBLIC

Sunday, July 17, 2011

WORKSHOP W21 14:15 - Room Vittorio Emanuele II
BUILDING CEREBELLAR CIRCUITS: FROM NEURONAL SPECIFICATION TO SYNAPSE FORMATION

WORKSHOP W22 14:15 - Room Mazzini
NEURAL MECHANISMS UNDERLYING SPATIAL STABILITY

WORKSHOP W23 14:15 - Room Cavour
BDNF AND THE CONTROL OF THE TRANSLATIONAL MACHINERY IN DENDRITES

WORKSHOP W24 14:15 - Auditorium Verdi
PRION PROTEIN IN INTRACELLULAR AND INTERCELLULAR SIGNALLING IN THE BRAIN

WORKSHOP W25 14:15 - Room Garibaldi
ADVANCES IN OPTICAL IMAGING OF BRAIN FUNCTION

WORKSHOP W26 15:50 - Room Vittorio Emanuele II
ASTROCYTES IN PHYSIOLOGY AND PATOHOLOGY

WORKSHOP W27 15:50 - Room Mazzini
TEMPORAL STRUCTURE OF SPATIAL MEMORY: ATTRACTOR DYNAMICS OF HIPPOCAMPAL SPATIAL PROCESSING IN HEALTH AND SCHIZOPHRENIA

WORKSHOP W28 15:50 - Room Cavour
STRESS AT THE SYNAPSE. HOW BEHAVIORAL STRESS AND CORTICOSTEROIDS MODIFY SYNAPTIC TRANSMISSION AND PLASTICITY

WORKSHOP W29 15:50 - Auditorium Verdi
IMMUNE CELL ENTRY AND FUNCTION WITHIN THE CNS: NEW MECHANISMS AND THERAPEUTIC OPPORTUNITIES

WORKSHOP W30 15:50 - Room Garibaldi
NEURAL MECHANISMS OF RESPIRATORY RHYTHM GENERATION

Monday, July 18, 2011

WORKSHOP W31 14:15 - Room Vittorio Emanuele II
NEUROTRANSMITTER TRANSPORTERS IN SYNAPTIC HOMEOSTASIS

WORKSHOP W32 14:15 - Room Mazzini
PROGRAMMING BY STRESSFUL AND ADVERSE EVENTS IN ADOLESCENCE OF ADULT STRESS REACTIVITY, COGNITION AND EMOTIONS

WORKSHOP W33 14:15 - Room Cavour
RODENT ULTRASONIC VOCALIZATIONS – INSIGHTS INTO THE SOCIAL BRAIN: BRAIN MECHANISMS, COMMUNICATIVE FUNCTION AND EXPRESSION OF AFFECT

WORKSHOP W34 14:15 - Auditorium Verdi
CANNABINOID RECEPTOR SIGNALING AND MODULATION OF MONOAMINERGIC CIRCUITS: IMPLICATIONS FOR BEHAVIOR

WORKSHOP W35 14:15 - Room Garibaldi
HOW TO PROPERLY USE ANIMALS IN RESEARCH: CONSIDERATION OF LEVELS OF PAIN, GENETIC BACKGROUND, TRANSGENICS, AND BEHAVIOR

WORKSHOP W36 15:50 - Room Vittorio Emanuele II
IONIC TRANSPORTERS AND IONIC CHANNELS AS NEW MOLECULAR TARGETS IN STROKE INTERVENTION

WORKSHOP W37 15:50 - Room Mazzini
ADVANCED FUNCTIONAL ANALYSIS OF CEREBELLAR CIRCUITS

WORKSHOP W38 15:50 - Room Cavour
SPATIOTEMPORAL PROFILES OF CORTICAL PROCESSING: A VIEW FROM OPTICAL IMAGING STUDIES IN AWAKE, BEHAVING NONHUMAN PRIMATES

WORKSHOP W39 15:50 - Auditorium Verdi
NEUROBIOLOGY OF NEGLECTED AFRICAN DISEASES

WORKSHOP W40 15:50 - Room Garibaldi
NOVEL GENETIC AND PHARMACOLOGICAL TOOLS PROVIDE NEW INSIGHTS INTO ROLES OF MUSCARINIC ACETYLCHOLINE RECEPTOR SUBTYPES FOR TREATMENT OF CNS DISORDERS

Congress Overview

	Thursday, July 14	Friday, July 15	Saturday, July 16
Special Workshops	SW01 Workshop on communication of research results M (13:30-17:30) SW02 Novel brain imaging technologies C (13:50-16:00)		
Special Feature 15:30-17:00	SINS Special Feature SS1 Italian pioneers in neuroscience of the past centuries V		
17:30-18:50	Opening Ceremony		
Opening Plenary Lecture 19:00-20:00	Opening Plenary Lecture PL1 Usefull signals from motor cortex V **Andrew B. Schwartz** (Pittsburg, USA)		
20:00	Welcome Reception		
Plenary Lectures 08:30-09:30		Plenary Lecture PL2 Regulation and function of adult neurogenesis in the hippocampal formation V **Fred H. Gage** (La Jolla, USA)	Plenary Lecture PL4 Local control of synaptic function V **Erin M. Schumann** (Frankfurt, Germany)
Parallel Symposia 09:40-11:40		S01 Integration of new neurons in the adult brain: lessons for brain repair V S02 Molecular and cellular determinants of neuron glia specification M S03 Elimination of amyloid from the ageing and Alzheimer disease brain: unclogging the dam C S04 Blindsight in action: residual visuomotor functions after lesions of primary visual cortex VE S05 Computational study of memory information processing: data analysis and modeling of cortico-hippocampal interaction G	S06 Putting dendrites back into the brain: new approaches for studying dendritic function in vivo V S07 Signal transduction and cell biology of growth cone guidance M S08 Subcellular localization and function of voltage-gated ion channels C S09 Prion biology and pathology VE S10 The endogenous opioid systems in psychiatric and neurological diseases G
Poster Sessions 11:40-14:15		Poster Session A	Poster Session B
Special Events 12:30-14:00		SE01 Music and brain plasticity: Foundation IPSEN neuronal plasticity prize M SE02 Molecular and systems neurobiology in development and disease: contributions from IBRO alumni worldwide C SE03 SDN-SINS Joint Meeting: Special Lecture 1/ Minisymposium 1 VE (12:00-14:00)	SE04 IBRO Symposium: contribution of IBRO to World Neuroscience M SE05 Fine-scale mapping of the developing mouse and human brain C SE06 SDN-SINS Joint Meeting: Minisymposium 2 VE
Poster Sessions 11:40-14:15		Poster Session A	Poster Session B
Parallel Workshops 14:15-15:45		W01 Bergmann glia cells in synaptic function VE W02 Next generation sequencing strategies in neurogenetics M W03 Basal ganglia control of sleep-wake regulation C W04 Genetic mouse models to understand schizophrenia V W05 Activity-dependent trafficking of NMDA and kainate receptors in synaptic plasticity G	W11 Stem cells for the treatment of spinal cord injury: are we there yet? VE W12 The diverse actions of estrogens in homeostatic regulation M W13 Odorants, receptors and glomeruli C W14 Structural plasticity and memory G W15 Transcriptomic and gene expression approaches to neurological disorders V
Parallel Workshops 15:50-17:20		W06 Remodelling of neural extracellular matrix in health and disease C W07 Neurobiological basis of emerging therapies in drug addiction M W08 Habilitation of hearing in the 21st century VE W09 Epileptogenesis: mechanisms and prevention V W10 The perils and pitfalls of translating complex brain research results for public understanding G	W16 Engineering receptors to investigate the in vivo cell signaling cascades that underlie physiology, behaviour, and neurological disorders VE W17 Nicotinic mechanisms underlying reward, emotion and cognition M W18 Physiological roles and antiparkinsonian potential of metabotropic glutamate receptors in the basal ganglia motor circuit C W19 Stress-induced changes in cortico-limbic structures V W20 Communicating neuroscience to the public G
Plenary Lectures 17:30-18:30		Presidential Plenary Lecture PL3 Motivational value in the human brain V **Ray J. Dolan** (London, UK)	Plenary Lecture PL5 The neurobiology of pain and its control V **Allan I. Basbaum** (San Francisco, USA)
Special Workshops 18:40-19:40		SW03 Young investigator visiting program (YIP) workshop C SW04 Evening discussion with Plenary Speakers I: Using pre-and post-doctoral training to prepare for a successful professional career M	SW05 Neuroscience in Africa: a sample from North, South, East and West Africa C SW06 Evening discussion with Plenary Speakers II: How to start your own lab M

LEGENDA

- C ROOM CAVOUR
- G ROOM GARIBALDI
- M ROOM MAZZINI
- V AUDITORIUM VERDI
- VE ROOM VITTORIO EMANUELE II

PROGRAM

	Sunday, July 17	Monday, July 18
Plenary Lectures 08:30-09:30	Plenary Lecture PL6 Visualizing circuits in the developing visual system V **Joshua R. Sanes** (Harvard, USA)	Plenary Lecture PL8 Defining the neuronal circuitry of fear V **Andreas Lüthi** (Basel, Switzerland)
Parallel Symposia 09:40-11:40	S11 Chromatin remodeling in neural development V S12 Glial and neuronal control of brain blood flow in health and disease M S13 New roles for melanopsin photopigment in non-visual and visual functions C S14 Mental and physical activity as modulators of brain function and disease VE S15 Stress, plasticity & drug-seeking G	S16 Synaptic and network plasticity in development and learning V S17 Regulation of presynaptic calcium channel activity M S18 The role of sleep in learning and memory formation: from molecular mechanisms to cognitive function C S19 Motor neurons: from development to disease VE S20 Synaptic protein networks in neurological and psychiatric diseases G
Poster Sessions 11:40-14:15	Poster Session C	Poster Session D
Special Events 12:30-14:00	SE07 Into the brain of patient H.M. - computerized anatomical examination of a notable case of amnesia M SE08 Ethics of scientific publishing - Why does it matter ? Advice from editors of neuroscience journals. SfN (USA) and IBRO workshop C (12:00-14:00) SE09 Meeting Japanese Neuroscientists G SE10 SDN-SINS Joint Meeting: Minisymposium 3 VE	SE11 ICSU, the international council for science: science and the use of scientific knowledge (12:30-13:30) M SE12 Funding opportunities and grant writing primer women in world neuroscience (WWN) workshop C SE13 FENS/JNS/IBRO/SfN symposium on legal trends on the use of animals in research across the world G SE14 SDN-SINS Joint Meeting: Special Lecture 2/Minisymposium 4 VE (12:00-14:00)
Poster Sessions 11:40-14:15	Poster Session C	Poster Session D
Parallel Workshops 14:15-15:45	W21 Building cerebellar circuits: from neuronal specification to synapse formation VE W22 Neural mechanisms underlying spatial stability M W23 BDNF and the control of the translational machinery in dendrites C W24 Prion protein in intracellular and intercellular signalling in the brain V W25 Advances in optical imaging of brain function G	W31 Neurotransmitter transporters in synaptic homeostasis VE W32 Programming by stressful and adverse events in adolescence of adult stress reactivity, cognition and emotions M W33 Rodent ultrasonic vocalizations - insights into the social brain: brain mechanisms, communicative function and expression of affect C W34 Cannabinoid receptor signaling and modulation of monoaminergic circuits: implications for behavior V W35 How to properly use animals in research: consideration of levels of pain, genetic background, transgenics, and behavior G
Parallel Workshops 15:50-17:20	W26 Astrocytes in physiology and patohology VE W27 Temporal structure of spatial memory: attractor dynamics of hippocampal spatial processing in health and schizophrenia M W28 Stress at the synapse. How behavioral stress and corticosteroids modify synaptic transmission and plasticity C W29 Immune cell entry and function within the CNS: new mechanisms and therapeutic opportunities V W30 Neural mechanisms of respiratory rythm generation G	W36 Ionic transporters and ionic channels as new molecular targets in stroke intervention VE W37 Advanced functional analysis of cerebellar circuits M W38 Spatiotemporal profiles of cortical processing: a view from optical imaging studies in awake, behaving nonhuman primates C W39 Neurobiology of neglected African diseases V W40 Novel genetic and pharmacological tools provide new insights into roles of muscarinic acetylcholine receptor subtypes for treatment of CNS disorders G
Plenary Lectures 17:30-18:30	Plenary Lecture PL7 Molecular genetics of neurodegenerative dementias V **Christine van Broeckhoven** (Antwerpen, Belgium)	Closing Plenary Lecture PL9 Optogenetics: development and application V **Karl Deisseroth** (Stanford, USA)
Special Workshops 18:40-19:40	SW07 Evening discussion with Plenary Speakers III: Selecting creative research questions M	

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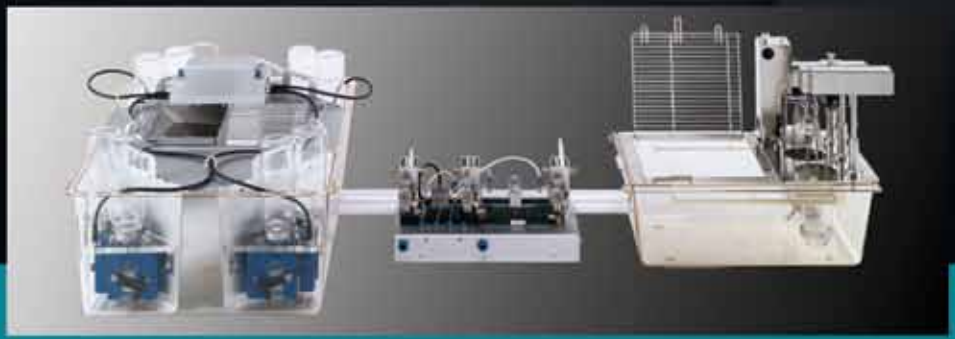

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Scientific Program

Thursday July 14

13:30-17:30 SPECIAL WORKSHOP SW01 Room Mazzini

WORKSHOP ON COMMUNICATION OF RESEARCH RESULTS

Chaired by: **Michael J. Zigmond** (Pittsburgh, USA) and **Beth A. Fischer** (Pittsburgh, USA)

Presenting findings in scientific meetings and peer-reviewed journals are essential components of scientific research and career development. In this workshop we will provide an overview of effective communications. In our overview of *scientific papers*, our discussion will include the structure and preparation of a manuscript, selection of authors, the preparation of tables and figures, and responding to reviewers. Our discussion of *oral presentations* will include the structure, preparation, and delivery of a research seminar and the use of PowerPoint to make effective slides. Relevant aspects of responsible conduct will be considered throughout, including fabrication and falsification of data, plagiarism, and the sharing of essential reagents. Handouts of all major slides, cases, and a bibliography will be provided. This workshop will be of value to individuals at all stages of their career, including those interested in gaining insights into how to train others.

13:50-16:00 SPECIAL WORKSHOP SW02 Room Cavour

NOVEL BRAIN IMAGING TECHNOLOGIES

Chaired by: **Francesco S. Pavone** (Florence, Italy)

13:50
Opening and welcome
Francesco S. Pavone (Florence, Italy)

SW02.1 - 14:00
Strategies to understanding the human brain
Henry Markram (Lausanne, Switzerland)

SW02.2 - 14:30
Visualization of neuronal networks in the mouse brain and mouse embryos by ultramicroscopy
Hans Ulrich Dodt (Wien, Austria)

SW02.3 - 15:00
Advances in correlative light and 3d electron microscopy for studying cell structure
Graham Knott (Lausanne, Switzerland)

SW02.4 - 15:30
Non linear morphofunctional imaging of neural networks
Francesco S. Pavone (Florence, Italy)

15:30-17:00 SINS SPECIAL FEATURE SS1 Auditorium Verdi

ITALIAN PIONEERS IN NEUROSCIENCE OF THE PAST CENTURIES

Chaired by: **Pierfranco Spano** (Brescia, Italy) and **Piergiorgio Strata** (Turin, Italy)

SS1.1 - 15:35
Luigi Galvani: The dawn of electrophysiology
Marco Piccolino (Ferrara, Italy)

SS1.2 - 15:55
From Golgi's black to rainbow colors: unravelling the secrets of stained neurons
Marina Bentivoglio (Verona, Italy)

SS1.3 - 16:15
Giuseppe Moruzzi: The discovery of the ascending reticular system
Giovanni Berlucchi (Verona, Italy)

SS1.4 - 16:35
Vittorio Erspamer: A pioneer in the discovery of serotonin and neuropeptides
Lucia Negri (Rome, Italy)

17:30-18:50 OPENING CEREMONY Auditorium Verdi

Chaired by: **Gaetano Di Chiara** (President, IBRO 2011 Local Organizing Committee)

WELCOME
Gaetano Di Chiara (President, IBRO 2011 Local Organizing Committee)
Lucio Annunziato (President, Italian Society of Neuroscience)
Academic and **City Authorities**
Pierre Magistretti (IBRO, Secretary General)

IBRO 50th ANNIVERSARY
Carlos Belmonte (President, IBRO)

EDAB-IBRO PRESIDENTIAL LECTURE
Fifty Years of IBRO
Albert J. Aguayo (Montreal, Canada)

Presentation of Awards to IBRO Past Presidents, Secretary Generals and Treasurers

19:00-20:00 OPENING PLENARY LECTURE PL1 Auditorium Verdi

Introduced by **Alexa Riehle** (Marseille, France)

Useful signals from motor cortex
Andrew B. Schwartz (Pittsburgh, USA)

20:00 WELCOME RECEPTION

Scientific Program

Friday July 15

NEUROSCIENCE 2011

SOCIETY FOR NEUROSCIENCE

Washington, DC

November 12–16, 2011

More than 30,000 attendees from over 75 countries expected.

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- Saturday Career Day featuring workshops and job fair
- Events for international attendees sponsored by embassies in Washington, DC
- Expanded professional development sessions

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08:30-09:30 PLENARY LECTURE PL2 Auditorium Verdi

Introduced by: **Roberto Lent** (Rio de Janeiro, Brazil)

Regulation and function of adult neurogenesis in the hippocampal formation
Fred H. Gage (La Jolla, USA)

09:40-11:40 SYMPOSIUM S01 Auditorium Verdi

INTEGRATION OF NEW NEURONS IN THE ADULT BRAIN: LESSONS FOR BRAIN REPAIR
SPONSORED BY THE COMPANY OF BIOLOGISTS AND ABCAM
Chaired by: **Alejandro Fabian Schinder** (Buenos Aires, Argentina)

S01.1 - 09:40
Temporal expression of neurotrophin receptors regulates newborn neuron integration into hippocampal circuits
Marco Canossa (Genoa, Italy)

S01.2 - 10:10
Local network activity controls maturation and functional integration of adult-born hippocampal neurons
Alejandro Fabian Schinder (Buenos Aires, Argentina)

S01.3 - 10:40
Molecular development of projection neuron types and building of local microcircuitry in the cerebral cortex
Paola Arlotta (Cambridge, USA)

S01.4 - 11:10
Voluntary versus forced metamorphosis of astroglia into neurons
Benedikt Berninger (Munich, Germany)

09:40-11:40 SYMPOSIUM S02 Room Mazzini

MOLECULAR AND CELLULAR DETERMINANTS OF NEURON/GLIA SPECIFICATION
Chaired by: **Flávia Carvalho Alcantara Gomes** (Rio de Janeiro, Brazil)

S02.1 - 09:40
Glial cells generating neurons: molecular and cellular mechanisms
Magdalena Gotz (Munich, Germany)

S02.2 - 10:10
Radial glial polarity and its contributions to neuronal migration in cerebral cortex
Eva Anton (Chapel Hill, USA)

S02.3 - 10:40
Intra- and extra-cellular factors regulating neural stem cell differentiation during brain development
Kinichi Nakashima (Ikoma, Japan)

S02.4 - 11:10
Cellular determinants of radial glia commitment and astrocyte differentiation: implications for synapse formation
Flávia Carvalho Alcantara Gomes (Rio de Janeiro, Brazil)

09:40-11:40 SYMPOSIUM S03 Room Cavour

ELIMINATION OF AMYLOID FROM THE AGEING AND ALZHEIMER DISEASE BRAIN: UNCLOGGING THE DAM
Chaired by: **Roy Weller** (Southampton, UK)

S03.1 - 09:40
The prion-like aspect of cerebral amyloidosis
Yvonne Eisele (Tubingen, Germany)

S03.2 - 10:10
The role of perivascular drainage in ageing
Roxana Octavia Carare (Southampton, UK)

S03.3 - 10:40
Immunotherapy in Alzheimer's Disease
James Nicoll (Southampton, UK)

S03.4 - 11:10
Dissolving the fibrils and targeting the phagocytes of the Alzheimer's brain
JoAnne McLaurin (Toronto, Canada)

09:40-11:40 SYMPOSIUM S04 Room Vittorio Emanuele II

BLINDSIGHT IN ACTION: RESIDUAL VISUOMOTOR FUNCTIONS AFTER LESIONS OF PRIMARY VISUAL CORTEX
Chaired by: **Carlo Alberto Marzi** (Verona, Italy)

S04.1 - 09:40
Goal-directed grasping and obstacle avoidance after lesions of V1
Melvyn Goodale (London, Canada)

S04.2 - 10:10
Disynaptic routes from superior colliculus to dorsal stream visual areas
Ed Callaway (La Jolla, USA)

S04.3 - 10:40
Sensory-motor blindsight in the physical and social world
Beatrice de Gelder and **Marco Tamietto** (Tilburg, The Netherlands)

S04.4 - 11:10
Is blindsight mediated by the lesioned or the intact hemisphere?
Carlo Alberto Marzi (Verona, Italy)

09:40-11:40 SYMPOSIUM S05 Room Garibaldi

COMPUTATIONAL STUDY OF MEMORY INFORMATION PROCESSING: DATA ANALYSIS AND MODELING OF CORTICO-HIPPOCAMPAL INTERACTION
Chaired by: **Masami Tatsuno** (Lethbridge, Canada)

S05.1 - 09:40
Cortical reactivation of recent neuronal activity patterns in the subsequent sleep is related to hippocampal activity
Francesco Battaglia (Amsterdam, The Netherlands)

S05.2 - 10:10
Memory reactivation during slow-wave sleep and REM sleep
Masami Tatsuno (Lethbridge, Canada)

S05.3 - 10:40
Rhythmic modulation of theta oscillations supports encoding of spatial and behavioural information in the rat hippocampus
Colin Molter (Lausanne, Switzerland)

S05.4 - 11:10
Dynamical representation of environments in the brain
Yoko Yamaguchi (Wako, Japan)

11:40-14:15 POSTER SESSION A Poster Area
(see detail page 46)

Posters should be placed on the boards from 9:30 on each day and removed by 17:30. No responsibility will be taken for posters which are left behind. **Posters will be attended by the Presenting Author from 11:40 to 14:15 on each day.**

The poster boards are numbered and adhesive material will be available at each board (please do not use drawing pins or thumbtacks). **The number of the abstract corresponds to the number of the poster panel.**

The Posters for **Topic 20 (History, teaching, neuroethics, awareness & social impact)** will be on display for the entire period of the congress (from Friday, July 15 to Monday, July 18) and will be attended by the Presenting Author from 11:40 to 14:15 on the first day, Friday, July 15.

Italian Society of Neuroscience (Young Investigator Visiting Programme) Poster Prize: The best posters by participants from low-income countries will be selected each day by a Selection Committee and awarded at the late afternoon Plenary Lecture at 17:30 of each day.

01. Nervous system development & developmental disorders (Migration, differentiation & plasticity)
03. Glia (Schwann cells & oligodendrocytes)
05. Neurogenetics
06. Excitable membranes & ion channels (Pharmacology & disease)
07. Synaptic transmission & signal transduction (Physiology)
08. Neural plasticity (Signalling & synaptic plasticity I)
09. Neuroendocrine & autonomic regulation (Cardiovascular & body weight regulation)
10. Pain (Neuropathic pain)
11. Sensory systems (Visual systems)
13. Learning & memory (Neurochemistry & neurobiology)
14. Cognition & emotion (General, pharmacology & toxicology)
15. Neurodegeneration & aging (Alzheimer's disease)
16. Neurological disorders (Parkinson & neurodegenerative disorders)
17. Psychiatric & behavioural disorders (Depression & bipolar disorder)
20. History, teaching, neuroethics, awareness & social impact

12:30-14:00 SPECIAL EVENT SE01 Room Mazzini
MUSIC AND BRAIN PLASTICITY:
FOUNDATION IPSEN NEURONAL PLASTICITY PRIZE
Chaired by: **Nikos Logothetis** (Tuebingen, Germany) and **Yves Christen** (Paris, France)

SE01.1 - 12:30
How can musical training improve neurocognitive functions?
Helen Neville (Eugene, USA)

SE01.2 - 13:00
When the brain is out of tune: from behavior to genes
Isabelle Peretz (Montreal, Canada)

SE01.3 - 13:30
Music in the Brain: Pitch, Plasticity, Imagery and Emotion
Robert Zatorre (Montreal, Canada)

12:30-14:00 SPECIAL EVENT SE02 Room Cavour
MOLECULAR AND SYSTEMS NEUROBIOLOGY IN DEVELOPMENT AND DISEASE: CONTRIBUTIONS FROM IBRO ALUMNI WORLDWIDE
Chaired by: **Susan J. Sara** (Paris, France) and **Pierre Magistretti** (Lausanne, Switzerland)

SE02.1 - 12:35
Herbal compounds in the treatment of drug abuse: Fruit essential oil of Cuminum cyminum attenuates morphine-induced conditioned place preference
Abbas Haghparast (Teheran, Iran)

SE02.2 - 12:55
Herbal compounds in the treatment of psychiatric disorders:The aqueous extract of leaves of *Piliostigma reticulatum* possesses anxiolytic and antipyretic activity in mice
Elisabeth Ngo Bum (Ngaoundere, Cameroon)

SE02.3 - 13:15
In search of organizing principles during synapse elimination: Correlation between motoneuron size and position at spinal cord and motor unit innervation patterns
Cristina Guatimosim (Belo Horizonte, Brazil)

SE02.4 - 13:35
Molecular architecture of the hippocampal dendritic spine
Bence Racz (Budapest, Hungary)

12:00-14:00 SPECIAL EVENT SE03 Room Vittorio Emanuele II
JOINT MEETING BETWEEN THE FRENCH AND ITALIAN NEUROSCIENCE SOCIETIES

SDN-SINS SPECIAL LECTURE 1
Introduced by: **Giambattista Bonanno** (Genoa, Italy)

SE03.1 - 12:00
Wiring the brain: getting rid of unwanted synapses
Cornelius Gross (Monterotondo, Italy)

SDN-SINS MINISYMPOSIUM 1
NOVEL TARGETS IN DRUG ADDICTION
Chaired by: **Gaetano Di Chiara** (Cagliari, Italy) and **Philippe Rondard** (Montpellier, France)

SE03.2 - 12:35
An update on the role of nucleus accumbens shell dopamine in reward and addiction
Gaetano Di Chiara (Cagliari, Italy)

SE03.3 - 12:55
Addiction, stress and transcription, dissecting the role of the glucocorticoid receptor gene function in dopaminergic pathway
François Tronche (Paris, France)

SE03.4 - 13:15
Activators of the Peroxisome Proliferator-Activated Receptors as a new medication for addiction treatment
Roberto Ciccocioppo (Camerino, Italy)

SE03.5 - 13:35
$GABA_B$ receptor: a complex allosteric machine to tune up synaptic transmission
Philippe Rondard (Montpellier, France)

14:15-15:45 WORKSHOP W01 — Room Vittorio Emanuele II

BERGMANN GLIA CELLS IN SYNAPTIC FUNCTION
Chaired by: **Arturo Ortega** (Mexico City, Mexico)

W01.1 - 14:20
Insights into the biological roles of Bergmann glia by transcriptional profiling
Gabriel Corfas (Boston, USA)

W01.2 - 14:40
Plasticity of neuron to Bergmann glial cell transmission
Tomas Bellamy (Cambridge, UK)

W01.3 - 15:00
The role of Bergmann glia for purinergic modulation of the cerebellar network
Joaquim Deitmer (Kaiserslautern, Germany)

W01.4 - 15:20
Translational control of Bergmann glia/neuronal coupling
Arturo Ortega (Mexico City, Mexico)

14:15-15:45 WORKSHOP W02 — Room Mazzini

NEXT GENERATION SEQUENCING STRATEGIES IN NEUROGENETICS
Chaired by: **Guy A. Rouleau** (Montreal, Canada)

W02.1 - 14:20
Personal genome analyses to elucidate the molecular pathogenesis of neurodegenerative diseases
Shoji Tsuji (Tokyo, Japan)

W02.2 - 14:40
Using next generation sequencing to identify candidate genes for neurogenetic disorders
Iscia Lopez-Cendes (Campinas, Brazil)

W02.3 - 15:00
Is exome sequencing the answer for definitive molecular diagnosis of the many rare hereditary neuropathies?
Garth Nicholson (Sydney, Australia)

W02.4 - 15:20
Next sequencing generation in rare monogenic disorders: An experience in spinocerebellar degenerations
Alexis Brice (Paris, France)

14:15-15:45 WORKSHOP W03 — Room Cavour

BASAL GANGLIA CONTROL OF SLEEP-WAKE REGULATION
Chaired by: **Yoshihiro Urade** (Osaka, Japan)

W03.1 - 14:20
Sources and actions of adenosine in the basal ganglia
Bertil Fredholm (Stockholm, Sweden)

W03.2 - 14:40
The role of adenosine A2A receptors in the nucleus accumbens for sleep-wake regulation
Michael Lazarus (Osaka, Japan)

W03.3 - 15:00
Dopamine D2 receptors in the basal ganglia are essential in the maintenance of wakefulness
Zhi-Li Huang (Shanghai, China)

W03.4 - 15:20
Basal forebrain networks and sleep-wake regulation
Patrick Fuller (Boston, USA)

14:15-15:45 WORKSHOP W04 — Auditorium Verdi

GENETIC MOUSE MODELS TO UNDERSTAND SCHIZOPHRENIA
Chaired by: **Raul R. Gainetdinov** (Genoa, Italy)

W04.1 - 14:20
Mouse models for genes associated with risk for psychosis: a platform for identification of novel antipsychotic targets
Colm O'Tuathaigh (Dublin, Ireland)

W04.2 - 14:40
DISC1 mouse models of schizophrenia: a comparative analysis and future developments
Yavuz Ayhan (Ankara, Turkey)

W04.3 - 15:00
Role of the glutamatergic system in response to stress in animal models of schizophrenia
Fabio Fumagalli (Milan, Italy)

W04.4 - 15:20
Animal models to identify therapeutic mechanisms of antipsychotics
Jean-Martin Beaulieu (Quebec, Canada)

14:15-15:45 WORKSHOP W05 — Room Garibaldi

ACTIVITY-DEPENDENT TRAFFICKING OF NMDA AND KAINATE RECEPTORS IN SYNAPTIC PLASTICITY
Chaired by: **R. Suzanne Zukin** (New York, USA)

W05.1 - 14:20
Regulation of NMDA receptor trafficking by palmitoylation
Richard L. Huganir (Baltimore, USA)

W05.2 - 14:40
SNAP25 is a target of PKC phosphorylation critical to NMDA receptor trafficking
R. Suzanne Zukin (New York, USA)

W05.3 - 15:00
A role for SNAP25 in kainate receptor internalization and synaptic plasticity
Juan Lerma (Alicante, Spain)

W05.4 - 15:20
Bidirectional plasticity expressed by NMDA receptors at hippocampal mossy fiber synapses
Pablo E. Castillo (New York, USA)

15:50-17:20 JOINT IBRO AND COST WORKSHOP W06 Room Cavour
REMODELLING OF NEURAL EXTRACELLULAR MATRIX IN HEALTH AND DISEASE
Chaired by: **Alexander Dityatev** (Genoa, Italy)

W06.1 - 15:55
Extracellular matrix of perineuronal nets and neuroplasticity
Alexander Dityatev (Genoa, Italy)

W06.2 - 16:15
Matrix metalloproteinase MMP-9 in synaptic plasticity, elipeptogenesis and drug addiction
Leszek Kaczmarek (Warsaw, Poland)

W06.3 - 16:35
The neurotrypsin/agrin system - its roles in mental retardation and activity-dependent structural plasticity in the CNS
Peter Sonderegger (Zurich, Switzerland)

W06.4 - 16:55
Plasminogen activating system in post-injury recovery and epileptogenesis
Asla Pitkanen (Kuopio, Finland)

15:50-17:20 WORKSHOP W07 Room Mazzini
NEUROBIOLOGICAL BASIS OF EMERGING THERAPIES IN DRUG ADDICTION
Chaired by: **Marco Diana** (Sassari, Italy)

W07.1 - 15:55
The dopamine hypothesis of drug addiction
Marco Diana (Sassari, Italy)

W07.2 - 16:15
The human dopamine system in addiction
Diana Martinez (New York, USA)

W07.3 - 16:35
Interaction between 5-HT and DA in relation to the treatment of psychostimulant dependence
Valentina Valentini (Cagliari, Italy)

W07.4 - 16:55
Environmental stimulation to treat addiction: insights into the neurobiological mechanisms
Nathalie Thiriet (Poitiers, France)

15:50-17:20 WORKSHOP W08 Room Vittorio Emanuele II
HABILITATION OF HEARING IN THE 21ST CENTURY
Chaired by: **Neil Segil** (Seattle, USA)

W08.1 - 15:55
Challenges for hair cell regeneration as a therapy for deafness
Andrew Forge (London, UK)

W08.2 - 16:15
Novel therapies for noise-induced hearing loss based on the actions of insulin-like growth factor 1 and transforming growth factor β2
Isabel Varela-Nieto (Madrid, Spain)

W08.3 - 16:35
Can we stimulate proliferation of mature inner ear supporting cells by manipulation of the cell cycle machinery? Implications in hair cell regeneration
Ulla Pirvola (Helsinki, Finland)

W08.4 - 16:55
Can we restore lost hearing? Development and regeneration of the inner ear
Neil Segil (Los Angeles, USA)

15:50-17:20 WORKSHOP W09 Auditorium Verdi
EPILEPTOGENESIS: MECHANISMS AND PREVENTION
Chaired by: **Christophe Bernard** (Marseille, France)

W09.1 - 15:55
Epigenetic factor mediate HCN1 channelopathy
Christophe Bernard (Marseille, France)

W09.2 - 16:15
T-type clacium channel upregulation as a pro-epileptogenic factor
Albert Becker (Bonn, Germany)

W09.3 - 16:35
Preventing epileptogenesis: anti-inflammatory strategy
Paolo Fabene (Verona, Italy)

W09.4 - 16:55
Preventing epileptogenesis: growth factors strategy
Michele Simonato (Ferrara, Italy)

15:50-17:20 WORKSHOP W10 Room Garibaldi
THE PERILS AND PITFALLS OF TRANSLATING COMPLEX BRAIN RESEARCH RESULTS FOR PUBLIC UNDERSTANDING
Chaired by: **Peter Jeffrey Snyder** (Providence, USA)

W10.1 - 15:55
Neurologic heuristics and artistic whimsy: the cerebral cartography of Wilder Penfield
Peter Jeffrey Snyder (Providence, USA)

W10.2 - 16:15
Neurosurgical evolution and the media
Dennis Spencer (New Haven, USA)

W10.3 - 16:35
Asymmetries of the brain: the right and the wrong
Giorgio Vallortigara (Rovereto, Italy)

W10.4 - 16:55
The translation of complex stories in neuroscience into “Take Home Messages”: a general summary and synthesis
Linda Mayes (New Haven, USA)

17:30-18:30 PLENARY LECTURE PL3 Auditorium Verdi
PRESIDENTIAL LECTURE
Introduced by: **Gaetano Di Chiara** (Cagliari, Italy)

Motivational value in the human brain
Ray J. Dolan (London, UK)

18:40-19:40 SPECIAL WORKSHOP SW03 Room Cavour
YOUNG INVESTIGATOR VISITING PROGRAM (YIP) WORKSHOP
Chaired by: **Micaela Morelli** (Cagliari, Italy), **Laurent Fagni** (Montpellier, France) and **Marina Pizzi** (Brescia, Italy)

SW03.1 - 18:40
Regulation of phosphatidylcholine-derived signaling during oxidative stress. Participation of synaptic membrane rafts
Melina V. Mateos (Bahia Blanca, Argentina)

SW03.2 - 18:55
The relationship between medial temporal lobe and cortical volumetric measurements and metabolic activity in Alzheimer's Disease, mild cognitive impairment, and controls
Yasmine Said (Cairo, Egypt)

SW03.3 - 19:10
Role of PARP inhibitor, 3-aminobenzamide in the mechanism of programmed neuronal necrosis in Neuro A2 cells under tert-BOOH induced oxidative stress
Vijaya K.M. Prakash (Chennai, India)

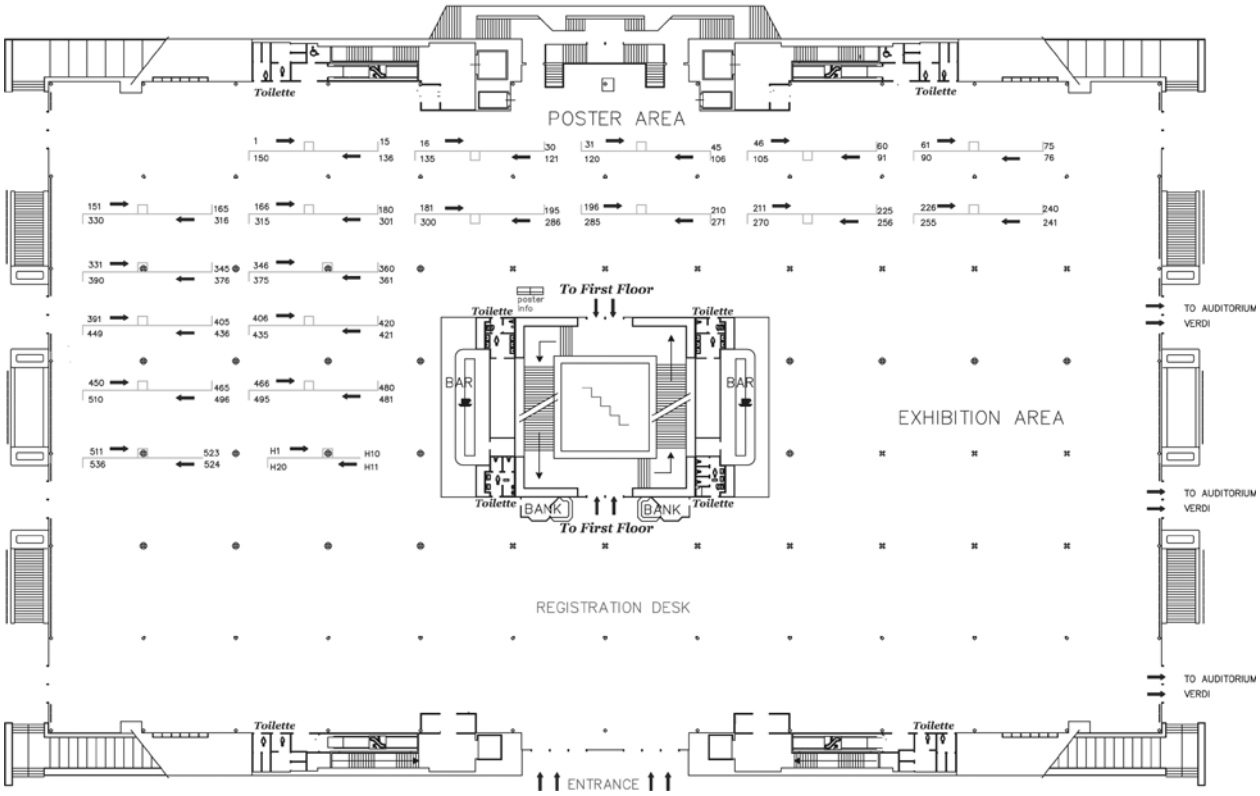
SW03.4 - 19:25
Combined oxaloacetate mediated glutamate scavenging and dehydroepiandrosterone treatment decreases neuronal loss and restores impaired synaptic plasticity after ischemic stroke
Janos Fuzik (Szeged, Hungary)

18:40-19:40 SPECIAL WORKSHOP SW04 Room Mazzini
EVENING DISCUSSION WITH PLENARY SPEAKERS I: USING PRE- AND POST-DOCTORAL TRAINING TO PREPARE FOR A SUCCESSFUL PROFESSIONAL CAREER
Chaired by: **Michael J. Zigmond** (Pittsburgh, USA) and **Beth A. Fischer** (Pittsburgh, USA)
Participants will include **Allan Basbaum** (San Francisco, USA) and **Christine van Broeckhoven** (Antwerp, Belgium)

We will discuss how to optimize your time as a graduate student and a postdoctoral fellow as you prepare to move forward in your career. Considerations will include: How long should your training take? One postdoc or two? How many publications do you need at each stage? Can you switch your focus between grad school and a postdoc? What are the critical characteristics of a good reserch advisor? What do you do if it starts to go wrong? Trainees and mentors are invited to join in the discussion.

POSTER PRESENTATION

Pavilion A - Ground Floor - Poster Area



01. Nervous system development & developmental disorders (Migration, differentiation & plasticity)

A001 **Molecular pathways mediating the pro-migratory activity of Rnd small GTPases in cortical neuronal migration**
R. AZZARELLI, E. PACARY & F. GUILLEMOT

A002 **Role of N-cadherin in cortical interneuron migration during brain development**
C. LUCCARDINI, L. HENNEKINE, L. VIOU, J.-P. RIO, R.-M. MÈGE & C. MÉTIN

A003 **Glycine receptor activation influence early cortical development**
A. AVILA MACAYA, L. NGUYEN & J.-M. RIGO

A004 **CoREST/LSD1 regulate the migration and differentiation of cortical neurons during development**
P. FUENTES, J. CÁNOVAS, F.A. BERNDT, Y. FUENTEALBA, S.C. NOCTOR & M. KUKULJAN

A005 **Brain development abnormality and axon regeneration in the mice lacking in the enzymes synthesizing chondroitin sulfate**
K. TAKEUCHI, S. HIGA, H. KAWANO & M. IGARASHI

A006 **Transcription factor initiation cascade maintains gene expression in the adult nervous system**
K.T. EADE, H. FANCHER, M. RIDYARD & D. ALLAN

A007 **Comparative analysis and functional implications of ligand dependent changes in estrogen- and thyroid hormone receptor expression in the developing cerebellum**
I. TOTH, T.J. SCALISE, A. GYORFFY, D.S. KISS, V. SOMOGYI, G. GOSZLETH, T. BARTHA, L.V. FRENYO & A. ZSARNOVSZKY

A008 **Maturation of sleep homeostasis in the rat: a role for oreoptic area neurons**
I. GVILIA, D. MCGINTY & R. SZYMUSIAK

A009 **Role of the post-synaptic protein Neurograning during olfactory bulb ontogenesis: implications for tufted cell maturation**
S. GRIBAUDO, S. BOVETTI, A. PIGNATELLI, O. BELLUZZI, A. FASOLO & S. DE MARCHIS

A010 **NOGO-A/NgR signalling regulates neuroblast migration and cellular interactions in the SVZ-RMS system**
C. ROLANDO, E. BODA, M.E. SCHWAB, F. ROSSI & A. BUFFO

A011 **The expression level of Eps8 modulates the migratory activity of neural progenitors expressing ErbB4**
G. GAMBAROTTA, F. FREGNAN, S. DE MARCHIS, D. GARZOTTO, N. OFFENHÄUSER & I. PERROTEAU

A012 **Mash1 regulates microtubules and centrosome proteins important for neuronal migration**
P. GARCEZ, V. RAMESH, D. CASTRO, D. BELL & F. GUILLEMOT

A013 **Erythropoietin drives neurodifferentiation in the hippocampus of healthy mice**
L. DAHM, I. HASSOUNA, N. OFFEN, S. SPERLING, R. NEHER, K. HANNKE, M. MITKOVSKI, N. HAGEMEYER, M. DITTRICH, T. DANDEKAR, E. NEHER, A.-L. SIRÉN & H. EHRENREICH

A014 **Foxp2 is a novel target of microRNA-9 and its repression is required for proper neuronal migration in developing mouse neocortex**
Y.M. CLOVIS, W. ENARD, W.B. HUTTNER & D. DE PIETRI TONELLI

A015 **Immunohistochemical investigation of the developing subventricular zone situated in the lateral ventricle in rat brain**
I. ADORJAN, V. GERGELY, E. KANI & M. KALMAN

A016 **Dopamine D2 receptor activity modulates Akt signaling and alters GABAergic neuron development and motor behavior in zebrafish larvae**
B.R. SOUZA, M.A. ROMANO-SILVA & V. TROPEPE

A017 **Neuroprotection by physical activity**
A. MITCHELL

A018 **Enriched early life experiences and reduced anxiety-like behaviour in the adult: a role for IGF-1**
S. BALDINI, N. BERARDI, M. COLTELLI, R. FRANCO & L. MAFFEI

A019 **Early exercise promotes positive hippocampal plasticity and improves spatial memory in the adult life of rats**
S. GOMES DA SILVA, N. UNSAIN, D.H. MASCÓ, M. TOSCANO-SILVA, H.A. DE AMORIM, B.H.S. ARAÚJO, P.S. RODRIGUES SIMÕES, M.D.G. NAFFAH-MAZZACORATTI, R.A. MORTARA, F.A. SCORZA, E.A. CAVALHEIRO & R.M. ARIDA

A020 **Effects of brief periods of unrestricted vision during early monocular form deprivation on V2 development of macaque monkeys**
Y. CHINO, X. TAO, B. ZHANG, J.M. WENSVEEN, R.S. HARWERTH & E.L. SMITH III

A021 **Absence of Mgat5 protein may confer behavioural and physiological resistance to the long-term effects of exposure to adverse early life experiences**
L.A. FELDCAMP, J.-S. DOUCET, M.P. FADEL, J. PAWLING, D.V. ROSA, J.W. DENNIS & A.H. WONG

A022 **Perturbance of postnatal neurogenesis causes prepulse inhibition deficits in the adult mouse and suggests a critical period for establishment of the sensorimotor gating system**
N. GUO, F. SUTO & N. OSUMI

A023 **Cognitive effects in rats submitted to fish oil supplementation and/or physical exercise program from development to midlife**
R.M. ARIDA, A.L.F. RACHETTI, C.L. PATTI, K.A. ZANIN, L. FERNANDES-SANTOS, R. FRUSSA FILHO, S. GOMES DA SILVA, M. TOSCANO-SILVA, F.A. SCORZA, E.A. CAVALHEIRO & R.M. CYSNEIROS

A024 **Effects of prenatal stress on maternal behavior and nest odor preference in rat pups**
M. ALVES DE SOUZA, R. ESCORSIM SZAWKA, L. ALINE CENTENARO, L. AMÁLIA DIEHL, M. BONESSO ALVES & A. BOLTEN LUCION

A025 **Sex difference in the effects of maternal exposure to low levels of corticosterone during lactation on the circadian HPA axis activity and sleep homeostasis of the adult progeny**
C. GIULI, C. CINQUE, A. DI MEGLIO, V. SILLETTI, A.R. ZUENA, A. TRAMUTOLA, G.S. ALEMÀ, G. MENNUNI, P. CASOLINI, F. NICOLETTI, A. CATALANI & J. MAIRESSE

A026 **Detrimental cognitive effects of early maternal deprivation in adolescent male and female rats. Putative underlying mechanisms**
M. VALERO, E.M. MARCO, O. DE LA SERNA, E. BORCEL, R. LLORENTE, M.J. RAMIREZ & M.-P. VIVEROS

A027 **Local glutamatergic and GABAergic connectivity within developing prefrontal cortex contributes to the generation of network oscillations** *in vivo*
K. SIEBERT & I.L. HANGANU-OPATZ

A028 **Role of ATP-sensitive potassium current (I_{KATP}) in prolonged intrinsic bursting activity of developing entorhinal cortex layer III neurons**
M.S. LEMAK, A. DRAGUHN & A.V. EGOROV

A029 **early postnatal learning and development of adult maternal behavioral phenotypes in 129sv mice following blockade of histone deacetylase**
O.V. BURENKOVA, E.A. ALEKSANDROVA & I.Y. ZARAYSKAYA

A030 **Simultaneous monitoring the caspase-activity under optogenetic actuation: a versatile probe for the study of activity-dependent neurogenesis**
J. YOKOSE, T. ISHIZUKA & H. YAWO

A031 **Maternal exposure to low doses of corticosterone during lactation induces behavioral and neuroendocrine effects across generations in rat**
C. CINQUE, A.R. ZUENA, C. GIULI, P. CASOLINI, G.S. ALEMA', A. DI MEGLIO, S. SCACCIANOCE, A. TRAMUTOLA & A. CATALANI

POSTER PRESENTATION

A032 **Persistent effects of chemical and environmental factors on the early development of attentional processing in rats**
A.L. ADAMS-MARRIOTT, T.A. DOUCETTE, C.L. RYAN & R.A. TASKER

A033 **FinnBrain Birth Cohort Study - neurodevelopment and vulnerability to stress**
H. KARLSSON, L. KARLSSON & F. RESEARCH GROUP

A034 **Hipocampal pro-inflammatory cytokines as mediators of the response to early environmental variations**
C.F. K. ROCHA, W. P. NUNES & D. TEIXEIRA

A035 **Neonatal handling disrupts maternal care patterns and alters BDNF signal in the olfactory bulb of rat pups**
A.R. REIS, M.S. DE AZEVEDO, M.A. SOUZA, M.B. ALVES, I. IZQUIERDO, M.P. CAMMAROTA & A.B. LUCION

A036 **Consequences of acute or chronic early maternal separation in adulthood: changes on neural activity, biochemical and expression of glutamatergic transporters in rat brain**
G.B. ACOSTA, A.E. SALATINO & M.M. ODEON

A037 **The effects of diverse environmental conditions on cerebellar granule cell morphometry in prenatally stressed rats**
F. YUCEL & E. ULUPINAR

03. Glia (Schwann cells & oligodendrocytes)

A038 **P2Y receptors and MAPK pathway play a critical role in Schwann cell wound repair**
A. LAMARCA, T. MARTIAÑEZ, M. SEGURA, N. DURANY, N. CASALS & A. GELLA

A039 **PKA-mediated synthesis of GABA in Schwann cells is regulated by the neuroactive steroid allopregnanolone**
E.M. MAMBRETTI, G. BONANNO, A. FARONI, A. PARDUCZ, F. FUMAGALLI, C. PEREGO & V. MAGNAGHI

A040 **Schwann cells exhibit P2Y receptors that regulate intracellular calcium and activate MAPK Pathway**
T. MARTIÁÑEZ, A. LAMARCA, M. SEGURA, N. DURANY, N. CASALS & À. GELLA

A041 **Modulation of EAAC1-mediated glutamate uptake and actin organization in Schwann cells**
C. PEREGO, E.S. DI CAIRANO, E. FINO, M. BALLABIO & V. MAGNAGHI

A042 **Effects of hypoxia and serum deprivation in cultured olfactory ensheathing cells**
R. PELLITTERI, E. RANNO, M.V. CATANIA & D. ZACCHEO

A043 **Olfactory ensheathing glia and schwann cell expression of myelin-related genes under differing media conditions**
C. PLANT, S.V. LEE, M. RYAN, A. HARVEY & G. PLANT

A044 **NCX3 isoform of the Na^{+}/Ca^{+2} exchanger plays a relevant role in the progression of oligodendrocyte precursor cells into oligodendrocytes**
F. BOSCIA, C. D'AVANZO, A. PANNACCIONE, A. SECONDO, A. CASAMASSA, L. FORMISANO, N. GUIDA & L. ANNUNZIATO

A045 **Oligodendrocyte progenitor cell migration: linking the front and the rear end by a localized Ca^{2+}-influx through mechano-sensitive ion channels**
P. HAPPEL, M. SERDAR, N. SCHWERING, K. MÖLLER, I. ROTHENBERG & I.D. DIETZEL-MEYER

A046 **The GPR17 receptor in oligodendroglial cells: cell heterogeneity, maturation and participation in CNS damage**
E. BODA, F. VIGANÒ, R. PAROLISI, M. FUMAGALLI, P. ROSA, M. GOETZ, M.P. ABBRACCHIO, L. DIMOU & A. BUFFO

A047 **Glutamate receptor activation promotes oligodendrocyte differentiation from adult neural multipotent stem cells**
F. CAVALIERE, O. URRA, E. ALBERDI & C. MATUTE

A048 **NG2 cells increase expression of CINC-3, LIX, and IL-10 in response to lipopolysaccharide**
Y. LI, X.L. DU, J. LU, S.S.W. TAY, G.M. ZHOU & B.P. HE

A049 **GPR17 expression pattern in the developing and adult cerebellum**
G. MENICHETTI, E. BODA, P. ROSA, M.P. ABBRACCHIO, A. BUFFO & F. ROSSI

A050 **Visual evoked potentials and MBP gene expression imply endogenous myelin repair in adult rat optic nerve and chiasm following local lysolecithin induced demyelination**
S. MOZAFARI, M.A. SHERAFAT, M. JAVAN, J. MIRNAJAFI-ZADEH & T. TIRAIHI

A051 **Endocannabinoids potentiate synaptic transmission through astrocyte stimulation**
M. NAVARRETE & A. ARAQUE

A052 **Lactate supports oligodendrocyte development and myelination in low energy conditions**
J.E. RINHOLM, N.B. HAMILTON, N. KESSARIS, W.D. RICHARDSON, D. ATTWELL & L.H. BERGERSEN

A053 **Inhibition of PI3K has important effects on oligodendrocyte living cells**
A.D. RIVERA, K. AZIM & A.M. BUTT

A054 **Microengineered hydrogel-based array to mime the glial scar**
D.N. ROCHA, C.C. BARRIAS, J.B. RELVAS & A.P. PÊGO

A055 **Functional and molecular analysis of $GABA_A$ receptors in hippocampal NG2 glial cells**
G. SEIFERT, M. GRAUER, C. SCHÄFER, S. PASSLICK, R. JABS & C. STEINHÄUSER

A056 **Influence of different basal culture media on proliferation of oligodendrocyte precursor cells**
M. SERDAR, R. MARX, M. EHRLICH, S. GOTTFRIED & I.D. DIETZEL

A057 **The fate-decision of NG2-positive glial progenitors depends on the local tissue microenvironment**
J. SYPECKA, A. SARNOWSKA, I. SZABLOWSKA-GADOMSKA, H. WINIARSKA, K. DOMANSKA-JANIK & B. LUKOMSKA

A058 **The regulation of sphingosine-1-phosphate 1 receptor trafficking in glia: implications for multiple sclerosis**
L.M. HEALY & K.K. DEV

A059 **Upregulation of vascular endothelial growth factor-C and its receptor in the spinal cord of Lewis rats with experimental autoimmune encephalomyelitis**
J.-M. PAARK, Y.-J. SHIN, S.-S. JEUN, J.-Y. CHOI, J.-H. CHA & M.-Y. LEE

A060 **Differentation potential of polydedrocytes in the mouse cortex after focal cerebral ischemia**
P. HONSA, H. PIVONKOVA & M. ANDEROVA

A061 **Kir4.1 and Kir5.1 channel expression in white matter glia**
C. BRASKO, V. BAY & A.M. BUTT

A062 **Stereological analysis of glial cells stained with S100 of the brain of rats at different ages**
S.R. DE MELO, R.S. DA CRUZ, S.R.G. DE SOUZA, V. JANEIRO, R.M.W. DE OLIVEIRA & J.N. ZANONI

05. Neurogenetics

A063 **Experiential therapy attenuates the cumulative effects of stress on brain transcriptome and brain damage**
F.C.R. ZUCCHI, Y. YAO, I. KOVALCHUK, D.M. OLSON & G. METZ

A064 **The –C511T polymorphisms in the IL-1b gen promoter on the NOS2A -2600 (CCTTT)n pentanucleotide microsatellite enhance risk to development of cerebral palsy in patient with antecedent of perinatal hypoxia-ischemia**
S. TORRES-MERINO, J.L. MERINO GARCIA, J.A. OREDAIN LEÓN, H.N. MORENO-SANDOVAL, B.A. LEON-CHAVEZ, D. MARTINEZ-FONG & J.A. GONZALEZ-BARRIOS

A065 **Tobacco smoking produces greater striatal ^{11}C-raclopride displacement in *Mu* opioid A118G receptor carriers**
E.F. DOMINO, C.L. EVANS, L. NI, S.K. GUTHRIE, R.A. KOEPPE & J.-K. ZUBIETA

A066 **Xamoterol rescues memory deficit in mouse model of down syndrome by activation of beta-1 adrenergic receptor**
M. SHAMLOO, M. FAIZI & W.C. MOBLEY

A067 **Autism-associated mutations in Neurexin-1beta affect translation initiation and synaptic protein levels**
R.J. CAMACHO-GARCIA, M.I. PLANELLES, M. MARGALEF, M.L. PECERO, R. MARTÍNEZ-LEAL, F. AGUILERA, E. VILELLA, F.G. SCHOLL & A. MARTINEZ-MIR

A068 **Effect of an extract of Mangifera indica L. In patients with spinocerebellar ataxia type 2**
M.M. GUEVARA-GARCIA

A069 **Genes encoding chromatin remodeling proteins are down regulated in hippocampal cells during the course of epileptogenesis**
L. JANJOPPI, M.L. FIUZA, E.A. CAVALHEIRO & O.K. OKAMOTO

A070 **Effect of single BDNF administration on depressive-like behavior in mice with different genetical predisposition to catalepsy**
D. BAZOVKINA, E. KONDAUROVA, V. NAUMENKO & A. KULIKOV

A071 **Epithelial-to-mesenchimal transition: possible role in meningiomas**
N. PECINA-SLAUS, T. NIKUSEVA MARTIC, A. KAFKA, S. BULAT, M. PUSIC, M. ZELJKO, R. HRASCAN & D. TOMAS

A072 **Similar electrophysiological patterns of brain activation during cognitive tasks in non-demented adults related to apolipoprotein E and apolipoprotein J/clusterin genotypes**
N. PONOMAREVA, S. KUNIJEVA, L. SHAGAM, N. CHEGLOVA, D. MALINA & E. ROGAEV

A073 **Copy number variants in two mouse models of affective disorders**
R. WIDNER, J. BRENNDÖRFER, L. CZIBERE, C. WOLF, C. TOUMA, T. BETTECKEN & R. LANDGRAF

A074 **Short report novel mutation in *GLRB* in a large family with hereditary hyperekplexia**
R.S. ALAMEER, M. AL-OWAIN, D. COLAK, A. AL-BAKHEET, A. AL-HEMIDAN, H. ALDHALAAN, Z. RAHBEENI, M. AL-SAYED, B. AL-YOUNES, P. OZAND & N. KAYA

A075 **The effect of the apolipoprotein E gene and promoter polymorphisms in Alzheimer disease in a Tunisian population**
A. ACHOURI RASSAS, H. MRABET KHIARI, S. HADJ FREDJ, T. MESSAOUD & A. MRABET

A076 **Global gene expression profile of identified neurogliaform interneurons in the neocortex**
E. BOLDOG, N. FARAGÓ, M. RÓZSA, E. VÁMOS, S. OLÁH, V. SZEMENYEI, S. LOVAS, L. PUSKÁS & G. TAMÁS

POSTER PRESENTATION

A077 **Through its ability to target nucleosome remodeling, b_4, a subunit of voltage-dependent calcium channels regulates the expression of the tyrosine hydroxylase gene**
K. FABLET, M. BARBADO & M. DE WAARD

A078 **Expression and Distribution of CoREST and LSD1 in adult rat brain**
A.V. GÓMEZ, A. BARRIOS, J. SÁEZ & M.E. ANDRÉS

A079 **Neurons highly express *Stam2* gene**
K. KAPURALIN, M. CURLIN, M. DOBRIVOJEVIC & S. GAJOVIC

A080 **Nuclear β-catenin is constitutively present in postmitotic thalamic neurons due to WNT-independent mechanism**
K. MISZTAL, M.B. WISNIEWSKA, M. AMBROZKIEWICZ & J. KUZNICKI

A081 **Genoarchitectonic analysis of the developing pretectum in *Xenopus laevis***
R. MORONA, J.L. FERRAN, J. PERLADO, J.M. LOPEZ, N. MORENO, L. DOMINGUEZ, A. JOVEN, S. BANDIN, L. PUELLES & A. GONZALEZ

A082 **Comparison of genetically encoded calcium indicators and voltage-sensitive fluorescent proteins readouts after sub- and suprathreshold stimulations**
H. MUNGUBA, S. MIKULOVIC, N.G. NEUMANN & R.N. LEÃO

A083 **Modulation of SYN1 gene promoter by RE1 silencing transcription factor (REST) and Sp1**
F. PAONESSA, F. CESCA, S. LATIFI & F. BENFENATI

A084 **Feasibility study of odor biosensor using dissociate neuronal culture with gene expression of ionotropic odorant receptors**
N. TANADA, T. SAKURAI, H. MITSUNO, D. BAKKUM, R. KANZAKI & H. TAKAHASHI

A085 **Plasticity of opioid receptors in the female periaqueductal gray: multiparity-induced increase in the activity of genes encoding for mu and kappa receptors, post-translational decrease in delta receptor expression**
E. TEODOROV, R. CAMARINI, M.M. BERNARDI & L.F. FELICIO

A086 **RNA species in the axon, growth cone and axonal shaft of cultured rat hippocampal neurons**
Y.-Y. WANG, H.-I. WU, W.-L. HSU, H.-W. CHUNG, P.-H. YANG, Y.-C. CHANG & W.-Y. CHOW

A087 **Fiber-optic monitoring of *zif* 268-promoted EGFP fluorescence in the brain of freely moving mice**
M.A. ZOTS, O.I. IVASHKINA, L.V. AMITONOVA, A.M. ZHELTIKOV & K.V. ANOKHIN

06. Excitable membranes & ion channels (Pharmacology & disease)

A088 **The effect of fluoxetine on AMPA receptors**
O.I. BARYGIN & D.B. TIKHONOV

A089 **A new NO donor does not induce relaxation in basilar artery isolated from normotensive (2K) and renal hypertensive (2K1C) rats**
M. PAULO, G.J. RODRIGUES, R.S. DA SILVA & L.M. BENDHACK

A090 **Arginine offers neuroprotection by blocking acid sensing ion channel**
A.K. BERA & S.M. SWAIN

A091 **Pathophysiology of information processing in neocortical dendrites in Fragile X Syndrome**
A. BONNAN, Y. ZHANG, M. GINGER & A. FRICK

A092 **Modulation of glycine receptors by ginkgolic acid**
S. BULDAKOVA & P. BREGESTOVSKI

A093 **Modulation of the Ca^{2+} permeability of muscle nAChR-channel**
C. DEFLORIO

A094 **Glioma cells alter neuronal chloride equilibrium through extracellular glutamate release**
S. DI ANGELANTONIO, C. BERTOLLINI, A. PICCIONI, E. MURANA, S. COCCO, M.G. MOLINARI, P. BREGESTOVSKI, C. LIMATOLA & D. RAGOZZINO

A095 **Brain sodium channel: functional role of developmentally regulated alternative splicing**
E.V. GAZINA, C.A. REID, K.L. RICHARDS & S. PETROU

A096 **Reduced cerebellar Purkinje cell firing associated with motor impairment in *Ebf2*-null mice**
E. HOXHA, R. TONINI, F. MONTAROLO, L. CROCI, G.G. CONSALEZ & F. TEMPIA

A097 **Role of dorsal hippocampal transient receptor potential vanilloid type 1 (TRPV1) in morphine induced place preference**
M.H. KHANI, A. REZAYOF & M. SAHEBGHARANI

A098 **Chemical hypoxia potentiates NMDA receptor currents, but not non-NMDA receptor currents, in the hypoglossal motor neurons of the rat**
Y. KONO, S. TAKAGI, S. MOCHIO & F. KATO

A099 **Ethanol regulation of the inhibitory effects of ketamine on spinal NMDA-induced pressor responses in rats**
C.-C. LAI, N.-T. KENG & W.-K. HSIEH

A100 **A non toxic fraction from Androctonus australis Hector scorpion venom activates currents carried by Kv7.4 channels**
Z. LANDOULSI, F. MICELI, N. SRAIRI-ABID, M. EL AYEB, M. TAGLIALATELA & R. BENKHALIFA

A101 **Optogenetic inhibition of epileptic activity**
L. MANTOAN, R. WYKES, M.C. WALKER & D.M. KULLMANN

A102 **Structure and function of native $GABA_A$ receptors decoded by single-cell RT-PCR and mouse genetics**
A. MAY, O. KLETKE, U. RUDOLPH, G. GISSELMANN, H.L. HAAS & O.A. SERGEEVA

A103 **Gating current measurements from K_V7 channels carrying disease-causing mutations reveal novel pathogenetic mechanisms for neuronal hyperexcitability**
F. MICELI, E. VARGAS, M.R. CILIO, F. BEZANILLA & M. TAGLIALATELA

A104 **Effect of monocyte chemoattractant protein-1 inhibition on cortical neuron excitability in a model of amyotrophic lateral sclerosis**
M. PIERI, S. CAIOLI, A. ANTONINI, C. SEVERINI, A. GUGLIELMOTTI & C. ZONA

A105 **Effects of amyloid-beta peptides on voltage-gated L-type $Ca_V1.2$ and $Ca_V1.3$ Ca^{2+} channels**
S. KIM & H. RHIM

A106 **Modulation of $GABA_A$ receptor by sulphated neurosteroids**
D. SACHIDANANDAN & A.K. BERA

A107 **Neuroprotective effects of FK506 against excitotoxicity in the kainic acid-induced hippocampal cell death by regulating $GABA_A$ receptor-mediated neuronal chloride homeostasis**
H.J. SHIN, B.T. JEON, E.A. JEONG, D.H. LEE, H.J. KIM, S.S. KANG, G.J. CHO, W.S. CHOI & G.S. ROH

A108 **Tolperison-type ion channel modulators delay the induction of cortical spreading depression by ouabain in mouse brain slices**
I. TARNAWA, M. THÁN, P. KOCSIS & B. FARKAS

A109 **Toad toxin from Bufo regularis inhibits excitability of Cray fish stretch receptor neurons and contractions of smooth muscles of guinea pig ileum**
T. TOLESSA

A110 **Oxcarbazepine is a nicotinic acetylcholine receptor channel blocker**
A.S. VALLÉS & F.J. BARRANTES

A111 **X-ray structures of general anaesthetics bound to a pentameric ligand-gated ion channel**
H. NURY, C. VAN RENTERGHEM, Y. WENG, A. TRAN, M. BAADEN, V. DUFRESNE, J.-P. CHANGEUX, J.M. SONNER, M. DELARUE & P.-J. CORRINGER

A112 **Deregulation of basal autophagy following retinal ischemic injury**
G.P. VARANO, R. RUSSO, A. ADORNETTO, F. CAVALIERE, L.A. MORRONE, G. BAGETTA & M.T. CORASANITI

A113 **Interaction of bupropion and zinc with neuronal nicotinic acetylcholine receptors**
E. VÁZQUEZ-GÓMEZ, U. GODOY-GARCÍA & J. GARCÍA-COLUNGA

A114 **Modulations of acid-sensing ion channels by salicylate and aspirin are protective against acidosis-induced neuronal injury in cerebral cortical neurons of rats**
W. WANG & S. YE

07. Synaptic transmission & signal transduction (Physiology)

A115 **Orexin-A potentiates excitatory synaptic transmission to the locus coeruleus neurons**
H. AZIZI, S. SEMNANIAN, S.J. MIRNAJAFI-ZADEH, K. ROHAMPOUR & H. AZHDARI ZARMEHRI

A116 **Inhibitory microcircuits scale grid fields**
P. BEED, C. BÖHM, S. SCHNEIDERBAUER, M. KRAMAREK, C. LEIBOLD & D. SCHMITZ

A117 **Non conventional activity of the endocannabinoid system at glutamate release in rat cortical astrocytes**
T. BONIFACINO, M. BARI, M. MILANESE, F. GIRIBALDI, P. SPAGNUOLO, N. BATTISTA, A. FINAZZI AGRÒ, M. MACCARRONE & G. BONANNO

A118 **Heterogeneity of glutamatergic and GABAergic release machineries in cerebral cortex**
L. BRAGINA

A119 **Synaptic activation of $GABA_B$ receptors in granule cells reduces $GABA_A$ receptor-mediated responses at the Golgi cell-granule cell synapse in rat cerebellum**
F. BRANDALISE, L. MAPELLI, U. GERBER & P. ROSSI

A120 **GluN2D-containing NMDA receptors in cholinergic interneurons control dopamine release in the mouse striatum**
X. ZHANG & K. CHERGUI

A121 **Beta-adrenergic receptors facilitate heterosynaptic LTP by engaging translation-dependent synaptic tagging and capture**
S.A. CONNOR & P.V. NGUYEN

A122 **NMDA receptor activity in synaptically connected neurons from dissociated striatal and cortical tissue grown on multielectrode arrays**
M. GARCIA-MUNOZ, L. CARRILLO-REID, W.A. STAINES & G.W. ARBUTHNOTT

POSTER PRESENTATION

A123 **Functional and molecular cross-talk between dopamine and NMDA receptors in striatum**
F. GARDONI, C. VASTAGH, V. BAGETTA, E. ZIANNI, S. MARINUCCI, B. PICCONI, P. CALABRESI & M. DI LUCA

A124 **Recovery of vesicular storage and release parameters after high frequency stimulation in excitatory synapses of rat hippocampus**
L. BUI & M.I. GLAVINOVIC

A125 **Location dependency of information processing in the dendrite of hippocampal granule cells**
H. HAYAKAWA, T. KAMIJOU, Y. FUKUSHIMA & T. AIHARA

A126 **Mechanisms of theta oscillations in *in toto* hippocampal preparation**
D. ISHIKAWA, N. MATSUKI & Y. IKEGAYA

A127 **Effect of insulin on $GABA_A$ channels in rat CA1 pyramidal neurons**
Z. JIN, Y. JIN, S. KUMAR-MENDU, E. DEGERMAN, L. GROOP & B. BIRNIR

A128 **Integration of different inputs in the rat hippocampal dentate gyrus**
T. KAMIJO, H. HAYAKAWA, Y. FUKUSHIMA & T. AIHARA

A129 **GABAergic projections from the subplate to Cajal-Retzius cells in the neonatal neocortex**
S. KIRISCHUK & P. UNICHENKO

A130 **Regulation of single cell initiated network events by serotonin in the human cerebral cortex**
G. KOMLÓSI, G. MOLNÁR, S. OLÁH, M. RÓZSA, M. FÜLE, P. BARZÓ & G. TAMÁS

A131 **Dynorphins induce stochastic conductance changes in neuronal plasma membranes providing basis for a new type of signaling**
O. KRISHTAL, V. KHMYZ, O. MAXIMYUK, O. DYACHOK & G. BAKALKIN

A132 **Regulation of synaptic activity by 15-lipoxygenase in dentate gyrus**
M.-L. LEE, W.-L. CHIEN, W.-M. FU & H.-H. LIOU

A133 **Participation of N-and P/Q-type of calcium channels in GABAergic short-term plasticity in hippocampus**
O.P. MIZERNA, S.A. FEDULOVA & N.S. VESELOVSKY

A134 **Plasticity of neurotransmitter segregation in sympathetic neurons *in vivo.* Target connections-dependence**
A. VEGA, F. CIFUENTES & M.A. MORALES

A135 **Transcranial magnetic stimulation (TMS) generates $GABA_B$ mediated inhibition in layer 5 pyramidal neuron dendrites**
S. MURPHY, M. MURAYAMA, L. PALMER & M. LARKUM

A136 **Aspartate: a transmitter candidate at hippocampal synapses**
C. MORLAND, K. NORDENGEN, M. LARSSON, L. PROLO, R. REIMER & V. GUNDERSEN

A137 **Dendritic activity is correlated to neuronal output in vivo**
L.M. PALMER & M.E. LARKUM

A138 **On the events in the hippocampal CA1 neuronal circuit during sharp wave-ripple activity**
C. PAPATHEODOROPOULOS

A139 **Possible physiological role of rapid habituation of the dopaminergic response to palatable food in the rat nucleus accumbens shell**
S. SCHEGGI, D. MARANGI, M.E. SECCI, M.G. DE MONTIS & C. GAMBARANA

A140 **Quantitative ultrastructural analysis of commissural/associational CA3 synapses in wild type and FGF22 knock-out mice**
T. SCHIKORSKI, L. QU, D. CRUZ, L. CUMBA & T. PASAOGLU

A141 **Nicotinic acetylcholine receptors in the habenula of rat and of mice with targeted deletions of distinct nAChR subunit genes: an immunoprecipitation study**
P. SCHOLZE & S. HUCK

A142 **Synaptic transmission and excitability of GABAergic hippocampal neurons of Kidins220/ARMS knock-out mice**
J. SCHOLZ-STARKE, F. CESCA, G. SCHIAVO, F. BENFENATI & P. BALDELLI

A143 **Callosal activation of interneurons in the sensorimotor cortex in rats *in vitro* and *in vivo***
J.M. SCHULZ, L.M. PALMER, D. LEDERGERBER & M.E. LARKUM

A144 **Frequency-dependent modulation of noradrenergic transmission by cannabinoids in the rat prefrontal cortex and its interaction with alpha2-adrenoceptors**
B. SPERLAGH, H. RICHTER, F.A. TEIXEIRA, S.G. FERREIRA, A. KITTEL & A. KOFALVI

A145 **Optically measured propagation speed of action potential in dendrites during different regenerative events**
G. SZALAY, G. KATONA, P. MAÁK, M. VERESS, A. KASZÁS, B. CHIOVINI, D. PÁLFI & B. RÓZSA

A146 **D1 receptor stimulation up-regulates voltage-gated sodium channels in mPFC pyramidal neurons from adult rats**
B. SZULCZYK & P. SZULCZYK

A147 **Physiological role of lactate in the hypoglossal motor neurons**
S. TAKAGI, M. NAGASE, Y. KONO, S. MOCHIO & F. KATO

A148 **Reciprocal actions of leptin on excitatory and inhibitory synaptic transmission between pyramidal and fast spiking cells in rat cerebral cortex**
H. TAKEI, T. SHIRAKAWA, N. KOSHIKAWA & M. KOBAYASHI

A149 **Age-dependent remodelling of inhibitory synapses onto hippocampal CA1 oriens-lacunosum moleculare interneurons**
L. TOPOLNIK, C. SALESSE, C. LACHARITE MUELLER, S. CHAMBERLAND & D. TOPOLNIK

A150 **Dynamic spike threshold contributes to spike timing and synaptic coincidence detection in thalamic reticular neurons *in vivo***
F. TRINCADO, F. MUÑOZ & P. FUENTEALBA

A151 **The subcellular distribution of presynaptic glycine receptors correlates with the occurrence of endogenous sources of their agonists**
J. TROJANOVA, A. KULIK, J. JANACEK & R. TURECEK

A152 **Dopaminergic modulation of the voltage activated sodium current in cochlear afferent neurons of the rat**
C.B. VALDÉS, E.E. SOTO & R.S. VEGA

A153 **Alpha1-adrenoreceptors modulate glutamate release onto VTA DA cells**
M.C. VELÁSQUEZ-MARTÍNEZ, R. VÁZQUEZ-TORRES, M.E. VÉLEZ-HERNÁNDEZ & C.A. JIMÉNEZ-RIVERA

A154 **Corticostriatal plasticity and network dynamics in anatomically defined primary neuronal culture system**
C. VICKERS, G. ARBUTHNOTT & J. WICKENS

A155 **Evidences for synaptic connection between cholinergic and noradrenergic neurons in rat pons**
H.-W. YANG, T.-W. CHANG, M.-J. LI & M.-Y. MIN

A156 **Mechanisms of dopamine plasticity in mouse striatum and its modulation by alpha-synuclein**
L. YAVICH & H. CHADCHANKAR

08. Neural plasticity (Signalling & synaptic plasticity I)

A157 **NR2A subunit expression rapidly increases after LTP induction in adult rats**
A.I. AGUIRRE, M.V. BAEZ, M.V. OBERHOLZER, M. CERCATO & D.A. JERUSALINSKY

A158 **Polysialic acid removal modifies the plastic response of prefrontocortical inhibitory circuits to dopamine D2R agonists**
E. CASTILLO-GÓMEZ, C. GARCÍA-MOMPÓ, H. CARCELLER, S. COVIELLO & J. NÁCHER

A159 **Neuronal specific βPix isoform, βPix-b stimulates actin-dependent comet tail and dendritic spine formation through its interaction with N-WASP**
Y. KIM, D. PARK & S. CHANG

A160 **D-serine control of NMDA receptor activity and synaptic plasticity in the nucleus accumbens**
L. CURCIO, L. LEONE, M.V. PODDA, R. PIACENTINI, S. SACCHI, L. POLLEGIONI, C. GRASSI & M. D'ASCENZO

A161 **Cofilin under arrest: a new role for β-Arrestin2 in spatial control over cofilin activity in NMDA-induced plasticity in hippocampal neurons**
C. PONTRELLO, K. DE FEA & I.M. ETHELL

A162 **Selective Rac1 mutants promote cell survival and axon regeneration in the injured retina**
M. ETTORRE, E. LORENZETTO, M. BOLOMINI-VITTORI, V. PONTELLI, C. LAUDANNA & M. BUFFELLI

A163 **Plasticity of the developing neurons in rats administered with ethyl alcohol**
P. DAVID

A164 **Circadian cycling of the expression and activity of nitric oxide synthase (NOS) in the hippocampus of pigeons (*C. livia*)**
A.V.S. MACHADO, L.O.M. FARIA, A.S. VIEIRA, S.A. TEIXEIRA, M.N. MUSCARA & E.A.M. FERRARI

A165 **Long-term synaptic plasticity and related gene expression in the cerebellar cortex**
D. GANDOLFI, S. CERRI, J. MAPELLI, M. POLIMENI, S. TRITTO, M.-T. ARMENTERO, F. BLANDINI & E. D'ANGELO

A166 **A central role for BDNF and Sonic Hedgehog in controlling synaptic plasticity in motoneuron-depleted spinal cord**
R. GULINO & M. GULISANO

A167 **Regulated miRNA biogenesis and P-body mRNA localization determine specificity of BNDF-induced protein synthesis**
Y.A. HUANG, C.R. RUIZ, E.C.H. EYLER & M.K. MEFFERT

A168 **Expression of the type 1 metalloproteinase in the adult rat brain in normal conditions and after the intraperitoneal kainic acid treatment**
V.N. IERUSALIMSKY & P.M. BALABAN

A169 **Molecular mechanism of dendritic spine enlargement during LTP**
M. KHAN, G. LAKHANPAL & K. OKAMOTO

A170 **The regulation of dendritic spine structural plasticity by CaMKII beta**
G.K. LAKHANPAL, K. KIM, M. KATO-HAYASHI, Y. HAYASHI & K. OKAMOTO

A171 **Variations of cell proliferation in relation with seasonal reproduction in sheep hypothalamus**
M. MIGAUD, S. SEGURA, D. PILLON, I. FRANCESCHINI & M. BATAILLER

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A172 **CaMKII mediates morphine-induced spine loss, but not morphine-induced loss of GluR1**
E.C. MILLER, A. KAM, H. LOH, P.Y. LAW & D. LIAO

A173 **Expression of Arc and phosphorylation of CREB in the same cortical neurons after reactivation of a spatial exploration task**
E.A. MORALES & V. RAMIREZ-AMAYA

A174 **Regulation of the Ras-MAPK pathway by neurofibromin in the dendritic spines of CA1 pyramidal neurons in the hippocampus**
A.F. OLIVEIRA & R. YASUDA

A175 **Unmasking synaptic plasticity in the adult mouse through CSPGs digestion**
M. PANNIELLO, L. DE VIVO, S. LANDI, T. PIZZORUSSO & G.M. RATTO

A176 **Nicotine produces neurotrofic effects on mesencephalic dopaminergic neurons: role of dopamine D3 receptors and nicotinic acetylcholine receptors**
L. PLEBANI, L. CAVALLERI, F. BONO, E. MERLO PICH, M. ZOLI, P.F. SPANO, C. MISSALE & G. COLLO

A177 **Modulatory effects of α5GABA$_A$ receptors on synaptic plasticity in ventral and dorsal CA1 hippocampal field**
H. POFANTIS, S. KOUVAROS & C. PAPATHEODOROPOULOS

A178 **Alpha7-nicotinic acetylcholine receptors switch Ltd. into LTP at the mossy fibre - granule cell synapse of cerebellum**
F. PRESTORI, P. LOMBARDO, C. BONARDI, M.E. DE STEFANO, R.J. GOSELINK, M. SCHONEWILLE, D. BERTRAND, C.I. DE ZEEUW & E. D'ANGELO

A179 **Dendritic microRNAs and GluA2 expression**
A. ROCCHI & T. TKATCH

A180 ***In vitro* isolation of neural precursor cells from adult ewe hypothalamus**
S. SEGURA, M. BATAILLER, D. PILLON, J. DUPONT, I. FRANCESCHINI & M. MIGAUD

A181 **Origin of Nogo-A/RTN4-A as a neurite outgrowth inhibitor**
A. SHYPITSYNA, E. MÁLAGA-TRILLO, A. REUTER & C.A.O. STUERMER

A182 **Serotonin receptor 7 (Htr7): a key-regulator of neuronal morphology in striatal circuits**
L. SPERANZA, G.C. BELLENCHI, U. DI PORZIO & C. PERRONE-CAPANO

A183 **P2X7 receptor mediated regulation of BDNF production in the hippocampus**
C. CSÖLLE & B. SPERLÁGH

A184 **Short-term cholecystokinin-4 intraperitoneal treatment enhances amphetamine-induced stereotyped behavior in rats**
B.N. FISCHER, L. VERGAMINI, H.R. SILVA, C. LOPES & C.A. TIEPPO

A185 **Serotonin affects plasticity induction in the cerebellar granular layer**
S. TRITTO, P. LOMBARDO, E. CESANA & E. D'ANGELO

A186 **Wnt and glycogen synthetase kinase-3 regulate mammalian target of rapamycin in late LTP**
N. TZAVARAS, T. MA, P. TSOKAS, E.M. LANDAU & R.D. BLITZER

09. Neuroendocrine & autonomic regulation (Cardiovascular & body weight regulation)

A187 **Blockade of delta opioid receptors in the ventrolateral periaqueductal gray region inhibits the hypotensive response evoked by endotoxemia in conscious rats**
M.S. YILMAZ, C. FELEDER & W.R. MILLINGTON

A188 **Contribution of BDNF/TrkB cascade to brain stem cardiovascular regulation during acute experimental temporal lobe epilepsy**
C.Y. TSAI, A.Y.W. CHANG & S.H.H. CHAN

A189 **Hypothalamic supraoptic but not paraventricular nucleus is involved in cardiovascular responses to carbachol microinjected into the bed nucleus of stria terminalis of unanesthetized rats**
F. ALVES, C. CRESTANI, C. BUSNARDO, J. ANTUNES-RODRIGUES, G. FELIPE, L. RESSTEL & F. CORRÊA

A190 **Different role of Non-NMDA and NMDA glutamate receptors into the paraventricular nucleus of the hypothalamus in modulating pressor response evoked by acute restraint in rats**
C. BUSNARDO, F. ALVES, R. TAVARES, L. RESSTEL & F. CORREA

A191 **Neuroendocrine and cardiovascular effects of hydroxyethyl starch-induced blood volume expansion during experimental septic shock**
M.B. SANTIAGO, J. ANTUNES-RODRIGUES & A. GIUSTI-PAIVA

A192 **Tachycardic response to microinjection of acetylcholine into the ventrolateral gray area is abolished in sinoaortic denervated rats**
M.V. DEOLINDO, E.A. FORTALEZA & F.M. CORREA

A193 **The role of claustrum in cardiovascular regulation**
M. HATAM & A. NASIMI

A194 **Chronic treadmill running lowers resting blood pressure by upregulating hypothalamic GABAergic system in normotensive rats**
Y.-C. HSU, H.-I. CHEN, Y.-M. KUO, L. YU, T.-Y. HUANG, S.-J. CHEN, J.-I. CHUANG, F.-S. WU & C. JEN

A195 **Glycine transporter-like immunoreactivities (GlyT1 and GlyT2) in the rat hypothalamus, with special reference to the magnocellular neurohypophysial system**
A. MARTINEZ, L. GENTIL, C.E. D'ARCY, L.J. AGOSTINELLI, K.L. GOSSELINK, M. MIRANDA & A.M. KHAN

A196 **Heart rate variability during and after acute intermittent hypoxia in rats**
M. VALIC, Z. VALIC, I. PAVLINAC, R. PECOTIC & Z. DOGAS

A197 **Activation of muscarinic receptors within the lateral hypothalamus increases cardiovascular and thermogenetic sympathetic outflow**
F. DEL VECCHIO, A. ALTZACHMAN, R. AMICI, M. CERRI, M. LUPPI, D. MARTELLI, M. MASTROTTO, E. PEREZ, D. TUPONE & G. ZAMBONI

A198 **Glutamatergic receptors mediate cardiovascular responses evoked by the microinjection of L-proline into the supraoptic nucleus of unanesthetized rats**
S. LOPES DA SILVA, C. BUSNARDO & F.M.A. CORREA

A199 **Paraventricular nucleus of the hypothalamus directly innervates brainstem cardiac parasympathetic neurons**
D. MENDELOWITZ & R. PINOL

A200 **Morphology of neuropeptide CNP2 modulation of heart activity in terrestrial snail**
N. ASEYEV, I.S. ZAKHAROV & P.M. BALABAN

A201 **NADPH oxidase-derived superoxide mediate cardiovascular effects of Urotensin II in spontaneously hypertensive rats**
N. LU, Y.C. ZHU & R. WANG

A202 **Angiotensinase activity in hypothalamus and plasma of hypertensive rats after sympathetic β receptor blockade**[a]
M. RAMÍREZ, A. SEGARRA, A. VILLAREJO, I. BANEGAS, R. WANGENSTEEN, F. VIVES & I. PRIETO

A203 **Hypothalamic and plasmatic angiotensin metabolism in L-NAME treated hypertensive rats**[a]
F. VIVES, A. SEGARRA, A. VILLAREJO, I. BANEGAS, R. WANGENSTEEN, M. RAMÍREZ, F. HERMOSO & I. PRIETO

A204 **The influence of orexins on the firing rate of rat intergeniculate leaflet and suprachiasmatic nuclei neurons - electrophysiological and immunohistological studies**
D. PEKALA, T. BLASIAK & M.H. LEWANDOWSKI

A205 **Effect of food entrainment on activation and mRNA expression of medullary A1 and A2 cell groups**
K. KÖNCZÖL, R.S. PAPP, É. RENNER, T.L. BALÁZSA, K. GALLATZ, Z.E. TÓTH & M. PALKOVITS

A206 **Impaired hypothalamic STAT3 phosphorylation in the tolerance to endotoxin-induced hypophagia and leptin resistance**
B.C. BORGES, R. RORATO, J. ANTUNES-RODRIGUES & L.L.K. ELIAS

A207 **Histamine influences body temperature and energy expenditure by modulating the activity of two populations of preoptic neurons**
I.V. TABAREAN & M. SANCHEZ ALAVEZ

A208 **Leptin is not required for fertility**
O. WANG, S. SAKIHARA, K. GUDMUNDSSON & J. MAJZOUB

A209 **Deletion of *Mecp2* in pituitary Pomc-expressing cells increases body weight without altering food intake nor stress response**
P. OJEDA-PROVOSTE, J. SOTO-COVASICH, R. TORRES-ANDRADE, H.A. ROA-ROJAS, M. RUBINSTEIN, J.I. YOUNG & B. KERR

A210 **Melatonin and the peripheral clock genes in the regulation of energy metabolism**
J. CIPOLLA-NETO, M. TANEDA, R. PERES, R. PELICIARI-GARCIA, S. BORDIN & F.G. AMARAL

A211 **Nesfatin-1 influences the excitability of glucosensing neurons in the hypothalamus**
J. DONG, X. CHEN & Z.-Y. JIANG

A212 **Nesfatin-1 influences the excitability of glucosensing neurons in the Dorsal Vagal complex**
Z.-Y. JIANG

A213 **Water extract of medicinal herbal complex suppresses body weight gain through neuroendocrine control in diet-induced obese rats**
I.S. SHIN, H.J. KIM, S.J. HWANG & M.R. KIM

A214 **Glucagon-like peptide-1 of brainstem origin activates dorsomedial hypothalamic neurons in satiated rats**
E. RENNER, N. PUSKAS, A. DOBOLYI & M. PALKOVITS

A215 **A key role of orexin (hypocretin) neurons in defense response against stressor**
T. KUWAKI

A216 **Functional heterogeneity of orexin-expressing neurons in the hypothalamus of rats**
R.S. PAPP, C. ÁDORI, T. BALÁZSA, K. KÖNCZÖL, G. LOURMET, É. RENNER & M. PALKOVITS

A217 **Orexin induces excitation of respiratory neuronal network in the isolated brainstem-spinal cord of neonatal rat**
S.-I. KUWANA, T. SUGITA, Y. KAKU, H. ARISAKA & S. SAKURABA

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10. Pain (Neuropathic pain)

A218 **The locus coeruleus activity is preserved in neuropathic rats**
C. ALBA-DELGADO, P. SANCHEZ-BLAZQUEZ, G. BORGES, J.E. ORTEGA, I. HORRILLO, J.A. MICO, J.J. MEANA, F. NETO & E. BERROCOSO

A219 **Autophagy disruption in the mouse spinal cord following peripheral nerve injury**
L. BERLIOCCHI, R. RUSSO, M. MAIARÙ, A. LEVATO, G. BAGETTA & M.T. CORASANITI

A220 **Glia activation along the nervous system during oxaliplatin-dependent neuropathic pain**
L. DI CESARE MANNELLI, L. BONACCINI, T. MELLO, M. ZANARDELLI, A. PACINI & C. GHELARDINI

A221 **Oxidative stress induced by oxaliplatin: focus on neuropathy**
M. ZANARDELLI, L. DI CESARE MANNELLI, P. FAILLI & C. GHELARDINI

A222 **Effect of nerve injury on cold intolerance and its relation to the distribution and density of CGRP-fibers in the rat foot sole**
L.S. DURAKU, A. HOSSAINI, L. FALKE, S. HOENDERVANGERS, E.T. WALBEEHM & T.J.H. RUIGROK

A223 **Gender differences in pain response to peripheral injury in mice**
M. MAIARÙ, L. BERLIOCCHI, A. LEVATO, G. BAGETTA & M.T. CORASANITI

A224 **MiR-134: a LimK1 targeting microRNA involved in central pain sensitization**
S. ABDEL SALAM, A. FAVEREAUX, M. MOFTAH, A. CALAS, F. NAGY & M. LANDRY

A225 **Neuropathic pain reduces connectivity between hippocampus and prefrontal cortex in rats performing a spatial working memory task**
H. CARDOSO-CRUZ, D. LIMA & V. GALHARDO

A226 **Analgesic efficacy of the novel imidazoline-2 ligand CR4056 in preclinical models of neuropathic pain**
M. LANZA, F. FERRARI, C. MEREGALLI, A. CANTA, A. CHIORAZZI, G. CAVALETTI & G. CASELLI

A227 **Roles M1 receptors in the anterior cingulate cortex (ACC) in neuropathic pain**
Y. TAKANO, K. HONDA, Y. MATSUZAKI & R. SAITO

A228 **Brainstem injection of lidocaine induces the activation of descending pain-inhibitory mechanisms in a rat model of mononeuropathy**
S.F. ATWEH, J. BOU-DAGHER, J. BARCHINI, S. TCHAGCHAGIAN, S.J. JABBUR & N.E. SAADE

A229 **Impaired neuropathic pain in Sortilin deficient mice following peripheral nerve injury**
C.B. VAEGTER, M. RICHNER, L.T. PALLESEN & A. NYKJAER

A230 **Loss of serotoninergic neurons, oxidative stress damage and cell death at the RVM during painful diabetic neuropathy**
C. MORGADO, P. PEREIRA-TERRA, M. MARTINS-OLIVEIRA, D. RAPOSO & I. TAVARES

A231 **Fifth lumbar spinal nerve injury causes neurochemical changes in corresponding as well as adjacent spinal segments. A possible mechanism underlying neuropathic pain**
S. SHEHAB

A232 **Minocycline differently affects analgesic efeicacy of opioid receptor ligands in a rat model of neuropathic pain**
J. MIKA, E. ROJEWSKA, W. MAKUCH, K. STAROWICZ, M. ZYCHOWSKA & B. PRZEWLOCKA

A233 **Loss of calcineurin in the post-synaptic density of spinal dorsal horn neurons contributes to neuropathic pain following chronic constriction injury of the rat sciatic nerve**
G. MILETIC, J.A. LIPPITT, K.M. SULLIVAN & V. MILETIC

A234 **Long-lasting pruritic dermatitis in rats neonatally treated with capsaicin or its analog; a potential rat model reflecting a broad spectrum of chronic itch**
K.Y. JEONG, S.K. BACK, C. LI, M.A. KIM, E.J. LIM, J. LEE, H.J. KIM & H.S. NA

A235 **Interleukin-10 plays a key role in additive relief of neuropathic pain following repeated treatment of propentofylline in a rat model**
H. YI, S. BACK, J. PARK, J. LEE, S. BEAK, C. LI, K. JEONG & H. NA

A236 **The coexistence of stress and neuropathic pain leads to an impairment of noradrenergic locus coeruleus neurons**
L. BRAVO, S. TORRES-SÁNCHEZ, C. ALBA-DELGADO, R. REY-BREA, J. MICÓ & E. BERROCOSO

A237 **Early intervention of ERK activation in the spinal cord can block the initiation of peripheral nerve injury-induced neuropathic pain in rats**
M. HAN & R. HUANG

A238 **Inhibition of neuropathic manifestations following nerve injury in rats by spinal cord stimulation involves both segmental and supraspinal mechanisms**
N.E. SAADE, J. BARCHINI, S. TCHACHAGHIAN, S.J. JABBUR, Z. SONG, B.A. MEYRSON & B. LINDEROTH

A239 **Potential anti-migraine effect of melatonin in the nitroglycerin-infusion model**
S. MANEESRI LE GRAND, P. PHANSUWAN-PUJITO, S. PATUMRAJ & A. SRIKIATKHACHORN

A240 **Modulation of hyperpolarization-activated channels by eugenol dissects mechanical allodynia and thermal hyperalgesia following peripheral nerve injury**
S.J. JUNG, K.-Y. YEON, G. CHUNG, Y.H. KIM, J.H. HWANG, A.J. DAVIES, M.-K. PARK, D.K. AHN, J.S. KIM & S.B. OH

A241 **Facial injections of pruritogens or algogens elicit distinct behavior responses in rats and excite overlapping populations of primary sensory and trigeminal subnucleus caudalis neurons**
A.H. KLEIN, M. IODI CARSTENS & E. CARSTENS

A242 **CX3CL1 is involved in the LTP of C-fiber evoked field potential in spinal cord**
C. BIAN, Y.Q. ZHANG & Z.Q. ZHAO

A243 **Co-culture model of porcine DRG neurons and keratinocytes to investigate neuron specific interaction**
L. PONCE, A. KLUSCH, I. SCHÄFER, A. HOLLOSCHI, M. SCHMELZ, M. HAFNER & M. PETERSEN

A244 **Expression of protein kinases in the central branch of the dorsal root ganglia**
M. NAIDU, R. ASHER & J. FAWCETT

11. Sensory systems (Visual systems)

A245 **Lesions of the primate striate cortex (V1) during infancy and in adulthood differentially alter the interconnectivity of the visual thalamic nuclei and middle temporal (MT) area**
C. WARNER & J.A. BOURNE

A246 **Eye position signals in monkey medial posterior parietal cortex: combined influence of vergence and version**
R. BREVEGLIERI, G. DAL BO', K. HADJIDIMITRAKIS, F. BERTOZZI, A. BOSCO, C. GALLETTI & P. FATTORI

A247 **Orientation-selective information encoded and decoded in human primary visual cortex**
K. CHENG, P. SUN, S. MOKHTARY, D.J. HEEGER, K. TANAKA & J.L. GARDNER

A248 **Attentional reorienting in reach-related cortex as evidenced by rTMS**
M. CIAVARRO, E. AMBROSINI, G. COMMITTERI, P. FATTORI & C. GALLETTI

A249 **Transcranial electrical currents to probe crossmodal phosphenes**
S. CONVENTO, G. VALLAR, C. GALANTINI & N. BOLOGNINI

A250 **Effect of experimental glaucoma on the non-image forming visual system**
N. DE ZAVALÍA, S.A. PLANO, D.C. FERNANDEZ, M.F. LANZANI, E. SALIDO, N. BELFORTE, M.I. KELLER SARMIENTO, D. GOLOMBEK & R.E. ROSENSTEIN

A251 **Patch-clamp studies on membrane patches excised from Drosophila photoreceptor rhabdomeres support a role of DAG on the activation of TRP and TRPL channels**
R. DELGADO & J. BACIGALUPO

A252 **Time dependence of fixational evoked potentials (fERP) along successive visual fixations during free viewing of natural scenes**
C. DEVIA, P. GALAZ, R. MAYOL & P. MALDONADO

A253 **Vestibular system directly modulates somatosensory cortical processing**
E.R. FERRÈ, G. BOTTINI & P. HAGGARD

A254 **Frequency pattern and strength of oscillations in activity of cats superior colliculus neurons**
A. FOIK, M. WYPYCH, G. MOCHOL & W.J. WALESZCZYK

A255 **New insights on the dynamic cortical association field in the cat primary visual cortex**
F. GERARD-MERCIER, P.V. CARELLI, M. PANANCEAU, A. DARET & Y. FRÉGNAC

A256 **Expression of novel opsins in the vertebrate inner retina: a new type of photoreceptor cells?**
M.E. GUIDO, P.S. NIETO, D.M. VERRA, N.M. DIAZ, D.J. VALDEZ, V.A. ACOSTA-RODRIGUEZ, L.P. MORERA, M.A. CONTIN & D. HICKS

A257 **Fix your eyes where you can reach: neurons in the macaque medial parietal cortex prefer gaze positions in peripersonal space**
K. HADJIDIMITRAKIS, F. BERTOZZI, R. BREVEGLIERI, G. DAL BO', A. BOSCO, C. GALLETTI & P. FATTORI

A258 **The functional and anatomical changes of retinotopy induced by early postnatal monocular enucleation in the visual system**
K. KAMEYAMA, Y. TSUCHIE, H. MIYATA & Y. HATA

A259 **Contributions of primate prefrontal and posterior parietal cortex in guiding visual attention**
F. KATSUKI & C. CONSTANTINIDIS

A260 **Differential contribution of feedforward and local input signals toward local field potentials in the macaque middle temporal area**
F.A. KHAWAJA & C.C. PACK

A261 **Localisation of two groups of neurons with different dynamics of orientation tuning in functional modules of cat's primary visual cortex**
S.A. KOZHUKHOV, N.A. LASAREVA, R.V. NOVIKOVA, A.S. TIKHOMIROV, D.Y. TSUTSKIRIDZE, R.S. IVANOV & I.V. BONDAR

A262 **Correlation of the electrical activity recorded from the sensory cortex and paraventricular nucleus of virgin and post-lactating rats**
M.A. LARA GARCIA, O.D. LARA GARCIA, A. CORTÉS-SOL, M. ALVARADO & P. PACHECO

POSTER PRESENTATION

A263 **PRMT8 regulates critical period plasticity in mouse visual cortex**
P.K.M. LEE, T.T.V. CHING, M. BEZZI, E. GUCCIONE & J.C.G. SNG

A264 **Analysis of sensory afferents of extraocular muscles in the trigeminal ganglion and their sensory endings in eye muscle of the rat**
K. LIENBACHER, H. KIMURA & A.K.E. HORN

A265 **Effects of senescense on human chromatic and achromatic spatial contrast sensitivity**
M.G. LIMA, G.S. SOUZA, B.D. GOMES, A.R. RODRIGUES & L.C.L. SILVEIRA

A266 **Intracellular signaling pathways involved in thrombin-induced RPE cell proliferation**
A.M. LOPEZ-COLOME, A. PARRALES & E. LÓPEZ

A267 **Does H+ release from horizontal cells mediate lateral feedback inhibition in the outer retina? A tale of two techniques**
R.P. MALCHOW, J. JACOBY, S.T. ALFORD, H. QIAN & M.A. KREITZER

A268 **Statistical analysis of fixation and saccades during free viewing of natural scenes**
R. MAYOL, C. DEVIA, P. GALAZ & P. MALDONADO

A269 **The postnatal expression of histaminergic ganglion cells in the developing gerbil retina**
H. IMADA, M. OHKUMA & E.-I. MIYACHI

A270 ***In vivo* two-photon calcium imaging of the cellular arrangement and functional connectivity in layer 2/3 of the mouse primary visual cortex**
Y. MORI, K. IKEZOE, J. FURUTAKA, K. KITAMURA, H. TAMURA & I. FUJITA

A271 **Hodological organization of the visual nidopallium in the chick (Gallus Gallus). Visual columns in the avian telencephalon?**
P. AHUMADA & J. MPODOZIS

A272 **Touch to see: neuropsychological evidence of a sensory mirror system for touch**
E. OLGIATI, A. MARAVITA, A. XAIZ, L. POSTERARO, F. FERRARO & N. BOLOGNINI

A273 **Infraslow rhythm in the olivary pretectal nucleus - modulation by light and role of rod-cone phototransduction pathway**
P. ORLOWSKA, H.J. SZKUDLAREK & M.H. LEWANDOWSKI

A274 **A comparison of receptive field properties between functionally connected neurons in the lateral geniculate nucleus and the perigeniculate nucleus of the cat**
H. OSAKI, T. NAITO, S. SOMA & H. SATO

A275 **Ocular surface wetness is regulated by TRPM8-dependent cold thermoreceptors of the cornea**
A. PARRA, R. MADRID, D. ECHEVARRIA, S. DEL OLMO, C. MORENILLA-PALAO, M.C. ACOSTA, J. GALLAR, A. DHAKA, F. VIANA & C. BELMONTE

A276 **Evidence for a visuo-tactile mirror system in the human somatosensory cortex: a rTMS study**
A. ROSSETTI, A. MARAVITA, C. MINIUSSI & N. BOLOGNINI

A277 **Effect of vibration on human retinal layers using electroretinogram**
S.M.M. SHUSHTARIAN

A278 **Crossmodal stimulation influences communication in visual-somatosensory cortical networks of the developing Brown Norway rat**
K. SIEBEN & I.L. HANGANU-OPATZ

A279 **Downregulation of HDAC1 reinstates ocular dominance plasticity in the adult visual cortex**
J.C. SNG, V.K. LIM, D. DONG, W. GOH, J.J. JIN, L. WONG, A. LENNARTSSON, P. CARNINCI, M. FAGIOLINI & T. HENSCH

A280 **Fast response MRI signals in visual object processing areas**
Y. SUNG & S. OGAWA

A282 **The role of eye movements in lightness perception**
M. TOSCANI, M. VALSECCHI & K.R. GEGENFURTNER

A283 **Relationship between tapetum fibrosum and retinal pigment epithelium in the horse**
M. UEHARA, S. TAKAGI, A. SHINOZAKI & Y.Z. HOSAKA

A284 **Optogenetic stimulation of transgenic zebrafish expressing an optimized channelrhodopsin variant**
K. UMEDA, W. SHOJI, S. SAKAI, T. ISHIZUKA & H. YAWO

A285 **Effect of diabetes on the retinal adenosinergic system**
J. VINDEIRINHO, G.N. COSTA, C. CAVADAS & P.F. SANTOS

A286 **Size tuning of inhibitory interactions in the receptive fields of a dragonfly feature-selective neuron**
S.D. WIEDERMAN, J.R. DUNBIER & D.C. O'CARROLL

A287 **mGluR6 deletion downregulates the TRPM1 channel in retinal ON bipolar cells and renders the cells hyperpolarized**
Y. XU, M. FINA, A. DHINGRA, C. KOIKE, T. FURUKAWA & N. VARDI

A288 **Neural correlate of blindsight in the superior colliculus**
M. YOSHIDA, K. TAKAURA & T. ISA

13. Learning & memory (Neurochemistry & neurobiology)

A289 **Noradrenergic system influences spatial decision-making tasks depending on the ambiguity**
S. AMEMIYA, N. KUBOTA, T. NISHIJIMA & I. KITA

A290 **Endocannabinoid signaling mediates the impairing effects of stress-level glucocorticoids on memory retrieval**
P. ATSAK, D. HAUER, P. CAMPOLONGO, G. SCHELLING & B. ROOZENDAAL

A291 **Noradrenergic activation of the basolateral amygdala modulates consolidation of object-in-context recognition memory**
A. BARSEGYAN, J.L. MCGAUGH & B. ROOZENDAAL

A292 **Short-term exercise-induced cognitive enhancement in rodents is associated with BDNF-stimulated cell signaling pathways**
R.G. BECHARA, R. LYNE & A. KELLY

A293 **Early postnatal maternal deprivation in rats induces memory deficits in adult life that can be mediated by modification of the cholinergic system and the CREB and ERK1/2 phosphorylation**
F. BENETTI, M. CAMMAROTA & I.A. IZQUIERDO

A294 **Nedd4 and Nedd4-2 E3 ubiquitin ligases - unravelling the physiological roles in the central nervous system**
D. BONGIORNO, N. BOASE, S. KUMAR & P. PORONNIK

A295 **The role of GABA in consolidation, reconsolidation and extinction of memory in an invertebrate model**
M. CARBÓ TANO, V.A. MOLINA & M.E. PEDREIRA

A296 **CPT1c deficiency impairs feeding behaviour, motor function and memory performance**
P. CARRASCO

A297 **Effects of acute cholecystokinin in spatial memory in rats**
E.A. ARAUJO, M.A. CHAMMA, L.S. MAGALHÃES, A.M.S. GOMES, S.A. BARBOSA, H.R. SILVA, C. LOPES & C.A. TIEPPO

A298 **Long-term sensitization in the leech: role of a 10 kDa protein**
C. CIAMPINI, E. BRAMANTI, G. FEDERIGHI, M. BRUNELLI & R. SCURI

A299 **Structural correlate of long-term motor memory formation in cerebeller cortex of mice**
W. AZIZ, W. WANG, Y. FUKAZAWA & R. SHIGEMOTO

A300 **The proteasome degradation pathway is involved in object recognition learning and memory processes**
Á.M. CARRIÓN, Á. FONTÁN-LOZANO, I. SUÁREZ-PEREIRA & R. ROMERO-GRANADOS

A301 **Overlap in neuronal representations of spatial and contextual fear memories in the hippocampus depends on the order of memory reactivation**
S.A. CHEKHOV, O.I. IVASHKINA, D.V. BEZRIADNOV & K.V. ANOKHIN

A302 **MicroRNA expression changes in the ventral striatum and the hippocampus during spatial learning**
A. FINOCCHIARO, J. CAMON, V. FERRETTI, V. LICURSI, P. FRAGAPANE, C. MANNIRONI, S. VINCENTI, P. PAGGI, A. OLIVERIO, R. NEGRI, C. PRESUTTI & A. MELE

A303 **Hippocampal protein expression levels in *Fmr* 1 KO mice following visual-spatial learning**
R.M. GANDHI, C.S. KOGAN, L. MACLEOD & C. MESSIER

A304 **A key role of Synaptic Adhesion-Like Molecule SALM1 in long-term memory through its PDZ binding domain**
D. GENOUX, B.L. SCHNEIDER, P. AEBISCHER & C. SANDI

A305 **Expression of inducible transcriptional factor Zif/268 in the prenatal mouse brain after fetal learning**
A.A. IVANOVA, A.A. LAZUTKIN, I.Y. ZARAYSKAYA & K.V. ANOKHIN

A306 **Impairment of long-term memory by halogenated thymidine analogues in mice**
O.I. IVASHKINA, M.A. ZOTS, D.V. BEZRIADNOV & K.V. ANOKHIN

A307 **Formation of polyribosomes in dendritic spines of barrel field neurons during associative learning**
M. JASINSKA, E. SIUCINSKA, E. JASEK, M. KOSSUT, E. PYZA & J.A. LITWIN

A308 **Are hippocampal NMDA and muscarinic receptors required for memory consolidation? Open field exposure prevents scopolamine and MK801 instigated retrograde amnesia in the rat**
M. SNITCOFSKY, N.C. COLETTIS, E. KORNISIUK, F. SANTANA, J. QUILLFELDT & D.A. JERUSALINSKY

A309 **Evaluation of differences in hippocampal synaptic plasticity along the dorsoventral axis**
J. KENNEY & D. MANAHAN-VAUGHAN

A310 **A-type voltage gated potassium channels regulate proliferation in dentate gyrus and memory function in adult mice**
F. KHAN, F. KANEEZ SHAD & S. SIDDIQUE

A311 **Monitoring cell surface protein trafficking in the striatum and the hippocampus of the mouse during early versus late visual-spatial learning**
A. LAEREMANS, B. VAN DE PLAS, I. GANTOIS, R. D'HOOGE, D. BALSCHUN & L. ARCKENS

A312 **The role of DNA ligase IV on hippocampal synaptic plasticity and remote memory**
J.Y. LAGUNA TORRES, M. COLÓN CESARIO, E. CASTRO, I. SANTOS SOTO & S. PEÑA DE ORTIZ

POSTER PRESENTATION

A313 **Expression of c-Fos reveals areal and regional diversity of retrosplenial cortex during acquisition of spatial place avoidance in the rat**
M.E. MALINOWSKA & M.J. WESIERSKA

A314 **Epigenetic modifications in the ventral striatum are necessary for long term memory stabilization**
A. MASTRODONATO, D. GAGLIO, E. MINICOCCI, P. FRAGAPANE, M. MUSTO, A. OLIVERIO, G. CAMILLONI & A. MELE

A315 **Single bouts of exercise improve learning in the rat: assessment of underlying mechanisms**
S.V. MC CREDDIN & Á.M. KELLY

A316 **Investigating neuronal circuits in the Dentate Gyrus**
C.J. MCCLURE, A.J. MURRAY, K. COLE, L. CHEYNE, G. RIEDEL & P. WULFF

A317 **Autoshaping, memory, forgetting: 5-HT$_6$ and 5-HT$_7$ receptors, SERT and transporters of other neurotransmission systems**
A. MENESES, G. PEREZ-GARCIA, R. TELLEZ, T. PONCE-LOPEZ, A. GALLEGOS-CARI & C. CASTILLO

A318 **Relative changes of intrinsic excitability are sufficient for preferential recruitment of neurons into a fear memory trace**
V. MERCALDO, A.P. YIU, S.A. KUSHNER, P.W. FRANKLAND & S.A. JOSSELYN

A319 **CREB function is required for structural re-arrangements occurring during memory formation**
S. MIDDEI, G.H. HOUELAND, A. SPALLONI, P. LONGONE, C. PITTENGER, M. D'AMELIO, V. CAVALLUCCI, S.M. O'MARA, M. AMMASSARI-TEULE & H. MARIE

A320 **NCX3 knock-out mice display an impairment in hippocampal LTP and spatial learning and memory**
P. MOLINARO, D. VIGGIANO, R. NISTICÒ, A. SECONDO, R. SIRABELLA, F. BOSCIA, A. PANNACCIONE, A. SCORZIELLO, B. MEHDAWY, S. SOKOLOW, A. HERCHUELZ, G. DI RENZO & L. ANNUNZIATO

A321 **Expression of rat hippocampal *Arc* and *Homer 1a* in spatial learning using 8-arm and 12-arm radial mazes**
N. NIKBAKHT NASRABADI, B. ZAREI, E. SHIRANI, J. MOSHTAGHIAN, A. ESMAEILI & S. HABIBIAN

A322 **Inducible system for mapping neuronal assemblies**
D.K. RANGEL GUERRERO, H. OKUNO & V. RAMÍREZ AMAYA

A323 **Conditioned taste aversion induces persistent modification of in vivo neocortical long-term potentiation threshold: molecular mechanisms implicated**
L.F. RODRÍGUEZ-DURÁN, D.V. CASTILLO, M.G. MOGUEL-GONZALEZ, S. ANGELES-DURÁN & M.L. ESCOBAR

A324 **Role of NMDA receptor and nitric oxide synthesis in the olfactory bulb and amygdala in conditioned odour aversion**
G.R. ROLDÁN, H. GONZÁLEZ-SÁNCHEZ, A. QUIROZ & J. TOVAR-DÍAZ

A325 **The absence of CX3CR1 abolished the potentiating effect of enriched environment on hippocampal plasticity and learning processes**
M. SCIANNI, L. MAGGI, I. BRANCHI, I. D'ANDREA, C. LAURO & C. LIMATOLA

A326 **Histone H1 Poly[ADP]-Ribosylation regulates the chromatin alterations required for learning consolidation**
I. SUÁREZ-PEREIRA, Á. FONTÁN-LOZANO, Y. DEL POZO-MARTÍN & Á.M. CARRIÓN

A327 **How the hippocampus regulates object working memory load: the role of protein kinases**
G. TORROMINO, S. SANNINO, F. RUSSO, V. PERRI, P. FRAGAPANE, A. MELE & E. DE LEONIBUS

A328 **Excessive synaptic growth and defects of learning dependent spinogenesis in Eps8 *knock out* mice**
S. ZAMBETTI, E. MENNA, G. FOSSATI, D. BRAIDA, A. DONZELLI, S. CONDLIFFE, M. ORLANDO, M. FRANCOLINI, C. REGONDI, C. FRASSONI, M. SALA & M. MATTEOLI

14. Cognition & emotion (General, pharmacology & toxicology)

A329 **Assessment of cognitive functions and some markers of synaptic plasticity in diabetic rats**
S.N. AMIN, S.M. YOUNAN, M. FAROUK, L.A. RASHED & I. MOHAMADY

A330 **Motivation for social interaction induced production of rich and wide USV repertoire in adult male mice**
J. CHABOUT, P. SERREAU, L. BELLIER, E. EY, T. BOURGERON, T. AUBIN & S. GRANON

A331 **Neurophilosophy: reconciliation of philosophy and science**
S.S. DASTGHEIB

A332 **Serotonin precursor (5-hydroxytryptophan) has a profound effect on aggressive interactions in male crickets, Gryllus bimaculatus**
V. DYAKONOVA & A. KRUSHINSKY

A333 **Decreased locomotor activity in enriched mice is independent of the duration of the enrichment period: a longitudinal study in NMRI mice**
P. MESA-GRESA, A. PÉREZ-MARTÍNEZ & R. REDOLAT

A334 **Effects of a visual illusion on zebrafish behavior**
M. NAJAFIAN, N. ALERASOOL & J. MOSHTAGHIAN

A335 **Influence of exposure to an enriched environment on changes induced in locomotor and exploratory behavior by chronic social stress in NMRI male mice**
A. PÉREZ-MARTÍNEZ, P. MESA-GRESA & R. REDOLAT

A336 **Long-term effects of early exposure to environmental enrichment on exploratory behavior in NMRI male mice**
R. REDOLAT, P. MESA-GRESA & A. PÉREZ-MARTÍNEZ

A337 **Locomotor activity stimulatory effects of neuropeptide S in mice are due to selective NPSR activation and display no tolerance liability**
C. RUZZA, A. RIZZI, G. MARZOLA, A. PULGA, R. GUERRINI & G. CALÒ

A338 **One for all and all for one: the importance of shoaling on behavioral and stress responses in zebrafish**
N. PAGNUSSAT, A. PIATO, I. SCHAEFER, A.R. TAMBORSKI, C. BONAN, D.R. LARA & M.R. VIANNA

A339 **Working memory, anxiety and depression in an animal model of iron deficiency**
P. VIEYRA-REYES, B.F. PLIEGO-RIVERO & P. REYES-TAPIA

A340 **Differential patterns of cognitive function impairment in animal models of psychiatric disorders**
J. WALLACE, R. MCQUADE, H.M. MARSTON & S.E. GARTSIDE

A341 **The theory of neuronal epistemology: cognitive and emotional implications**
Y. ZAMBRANO

A342 **The effects of inactivation of rat anterior insular cortex and orbitofrontal cortex on risk preference in the amount and delay gambling tasks**
H. ISHII, S. OHARA, K.-I. TSUTSUI & T. IIJIMA

A343 **REM sleep promoting effects of melanin-concentrating hormone (MCH) microinjections into the dorsal raphe nucleus**
P. LAGOS, H. JANTOS, J.M. MONTI & P. TORTEROLO

A344 **Orexin a injection into medial preoptic area inhibit maternal behavior in rats**
M. OLFAT, A. SARIHI, M. HOSEINI PANAH, A.H. EMAM, M. VAFAI RAD & S. SEIF

A345 **The influence of halothane on behavioral parameters of rats with midazolam premedication**
Z. VADACHKORIA, L. DZIDZIGURI, E. MITAISHVILI, G. MOSIDZE, E. BAKURADZE, I. MODEBADZE & D. DZIDZIGURI

A346 **Subanesthetic doses of NMDA antagoniste ketamine interfere with logically based decision-making in monkeys**
E. BRUNAMONTI, F. DI BELLO, V. MIONE & S. FERRAINA

A347 **Pharmacological modulation of LPA-mediated signaling in depression-like behaviors**
C. ROSELL-VALLE, C. PEDRAZA, E. CASTILLA-ORTEGA, J.M. CARAMÉS, A.I. GÓMEZ-CONDE, M. CIFUENTES, J. CHUN, F. RODRÍGUEZ DE FONSECA, L.J. SANTÍN & G. ESTIVILL-TORRÚS

A348 **Activation of cannabinoid CB1 receptors of basolateral amygdala potentiates nicotine reward in rats**
S. HASHEMI ZADEHA, A. REZAYOF, M. SARDARI & M.R. ZARRINDAST

A349 **Activation of 5-HT3 receptor disrupts development of gamma oscillations in hippocampal CA1**
Y. HUANG, K. YOON, H. KO, S. JIAO & A. MOROZOV

A350 **Emotional and cognitive consequences of repeated cannabis administration and intermittent MDMA ("ecstasy") exposure in adolescent male and female rats**
A. LLORENTE-BERZAL, R. LLORENTE, M.P. VIVEROS & E.M. MARCO

A351 **Behavioural and neurochemical effects of exposure to organophosphate pesticides**
C.Y. SAVY, C.M. MORRIS, P.G. BLAIN & S.J. JUDGE

A352 **Effects of positive modulators of GABAergic signaling on cognitive impairments in a rat model of schizophrenia**
M.R. STEFANI, R.S. WARD, C.M. CURTIN, A.E. LEHMANN, E.C. MASSEAU, N.E. WOOD & E.L. FEIGHERY

A353 **Effects of anpirtoline on acoustic startle responses and sensorimotor gating in rats**
D.A. WELDON & C.M. BRIGGS

A354 **Functional correlates of hippocampal theta: cannabinoids and novelty dissociate two components of the theta frequency-speed relationship**
D.P. AMOS, C. LEVER & J. O'KEEFE

A355 **EEG spectral measurements during the presentation of the International Afective Pictures (IAPs)**
M. ERZSEBET, P. BELÉN, G. YAÑEZ, M.A. RODRÍGUEZ, H.O. RODRÍGUEZ & V. GUERRERO

A356 **Comparison of the EEG pattern during meditation or music listening in humans**
O. GOZDZIEWICZ & E. JURKOWLANIEC

A357 **The effect on the activity of the cerebral cortex during a coincidence-anticipation timing task: changes in the rations of the visible section and the masking section**
R. KOSHIZAWA, A. MORI, K. OKI, T. OZAWA, M. TAKAYOSE & N. MINAKAWA

A358 **Neurophysiology of executive control in the stop-signal paradigm: effect of trait anxiety**
E.A. LEVIN, A.N. SAVOSTYANOV, A.C. TSAI, A.Y. ZHIGALOV, J.-D. LEE & M. LIOU

POSTER PRESENTATION

A359 **The mechanism of amygdala β-adrenergic receptor activation in the reinstatement of conditioned fear**
H.-C. LIN, Y.-C. TSENG, S.-C. MAO, P.-S. CHEN, C.-H. YEH & P.-W. GEAN

A360 **Occurrence patterns of the electroencephalogram (EEG) for infants**
N.T. MINAKAWA, A. MORI, K. OKI, R. KOSHIZAWA, M. TAKAYOSE & H. KUSHI

A361 **The effect of a high intensity exercise load on cerebral activity during a choice reaction task**
K. OKI, A. MORI, R. KOSHIZAWA, M. TAKAYOSE, T. OZAWA, N.T. MINAKAWA & Y. KITA

A362 **Acute stress fails to induce major changes in head-directionally tuned cells of the post and presubiculum**
J. PASSECKER, V. HOK, A. DELLA-CHIESA & S.M. O'MARA

A363 **Exploring emotional interrelations with motor performance: adjustments to visual distortion during a visuo-motor task**
E. QUARTA, D. MINCIACCHI & S. HANNETON

A364 **Physiological and neuropsychological impact from domestic violence**
A. MOZZAMBANI, R. RIBEIRO, S. FUSO & M. MELLO

A365 **Fm theta brain wave activity during plastic model building**
M. TAKAO, M. YAMAGAMI, J. TANIUCHI, N. MASUDA, H. SHIMIZU & T. KAMEI

A366 **EEG frontal activity to accurate inhibition during a visual oddball task**
M. TAKAYOSE, A. MORI, T. OZAWA, K. OKI, R. KOSHIZAWA & N.T. MINAKAWA

A367 **Event-related desynchronization of alpha-band rhythm caused by anticipation of mimic collision: MEG study**
K. YOKOSAWA, D. KIKUZAWA, T. WATANABE, F. TAKEUCHI, K. SEKIHARA, G. AOYAMA, M. TAKAHASHI & S. KURIKI

15. Neurodegeneration & aging (Alzheimer's disease)

A368 **Hippocampal distribution of neuropeptide Y in rat model of streptozotocin-induced experimental dementia of Alzheimer's type**
A. ARIZA ANDRADE, R. ANDRADE ESPINOZA & L.A. AGUILAR MENDOZA

A369 **Increased tunnel positive cells in all subfields of rat hippocampus due to ethanol administration after memory reactivation**
K. ABRARI, J. ALIJAN-POUR, T. LASHKAR BLUKI, M.T. GHORBANIAN, I. GOUDARZI & M. ELAHDADI SALMANI

A370 **Targeting an aggregation of alpha-synuclein to the mouse forebrain as a model of dementia with Lewy bodies**
O. ANICHTCHIK & M.G. SPILLANTINI

A371 **Astroglial changes in the hippocampus of APP transgenic mice. Effects of environmental enrichment**
J. BEAUQUIS, P. ROIG, V. GALVÁN, A.F. DE NICOLA & F.E. SARAVIA

A372 **Curcumin effects against amyloid β-induced toxicity: role of protein SUMOylation**
J. BENDER HOPPE, C. SALBEGO, M. RATTRAY, B. WHALLEY & H. CIMAROSTI

A373 **No correlation between cell cycle disturbances, secreted Abeta levels, and clinical parameters of familial Alzheimer's disease patients with various presenilin 1 mutations**
E. BIALOPIOTROWICZ, B. KUZNIEWSKA, N. KACHAMAKOVA-TROJANOWSKA, A. SZYBINSKA, J. KUZNICKI & U. WOJDA

A374 **Altered intracellular distribution of PrP^C and impairment of proteasome activity in tau-overexpressing cortical neurons**
N. CANU, I. FILESI, A. PRISTERA & S. BIOCCA

A375 **Intranasal administration of an optimized human nerve growth factor reduces memory deficit and amyloid oligomers accumulation in APPxPS1 mice**
S. CAPSONI, S. COVACEUSZACH, S. MARINELLI, M. CECI, D. VIGNONE, G. AMATO, F. PAOLETTI, F. MALERBA, G. UGOLINI, F. PAVONE & A. CATTANEO

A376 **Endogenous glial-mediated protective mechanisms against Aβ aggregation and neurotoxicity**
R.S. CHUNG, C. HOWELLS, E.D. EATON, W.R. BENNETT & A.K. WEST

A377 **Inhibition of glial cells ameliorate amyloid beta-induced changes in intrinsic neuronal excitability**
S. DARIANI, M. HAGHANI, M. SHABANI & M. JANAHMADI

A378 **Synaptic dysfunction in Alzheimer's disease: the role of Synaptobrevin1/VAMP1**
A. LÕRINCZ, F. ZOU, D.W. DICKSON, N.R. GRAFF-RADFORD, R.C. PETERSEN, S.G. YOUNKIN & F. DEÁK

A379 **APP intracellular domain enhances neurite outgrowth through $G\alpha_s$ coupling to adenylate cyclase signaling**
C. DEYTS, K. VETRIVEL, Y. SHEPHERD, G. THINAKARAN & A. PARENT

A380 **Zinc mitigates the onset of aluminium induced neurodegeneration**
D.K. DHAWAN & N. SINGLA

A381 **Adult hippocampal neurogenesis and cortical gliogenesis in APP mutant mice**
T. ED DAMI, A. FIORENTINI, C. GROSSI, I. LUCCARINI, C. TRAINI & F. CASAMENTI

A382 **In vitro study of beta-amyloid-specific T cell responses in humans**
D. ETHELL, A. BEGUM & X. WUSHOUER

A383 **WIN55,212-2 attenuates amyloid-beta-induced neuroinflammation in rats: involvement of peroxisome proliferator-activated receptor gamma**
G. FAKHFOURI, A. AHMADIANI, R. RAHIMIAN, F. MORADI & A. HAERI

A384 **Age-related variations of peroxisomes in the neocortex and hippocampus of a transgenic mouse model of Alzheimer's disease**
F. FANELLI, L. CRISTIANO, E. BENEDETTI, B. D'ANGELO, M. D'AMELIO, S. SEPE, C. BERNARDI, F. CECCONI, A. CIMINI, M.P. CERÙ & S. MORENO

A385 **Atheromatosis extent in coronary artery disease is not correlated with apolipoprotein-E polymorphism and its plasma levels, but associated with cognitive decline**
C.N. FERREIRA, L.M. LIMA, M.G. CARVALHO, H.J. REIS, A. PALOTAS & M.O. SOUZA

A386 **Microglia is differentially activated by β-amyloid soluble aggregates**
D. FERRERA, C. CANALE, F. BENFENATI & L. GASPARINI

A387 **The relationship between inflammation and Alzheimer´s disease in a South African population**
L. GRACE & M. COMBRINCK

A388 **Hyperhomocysteinemia induced mitochondrial dysfunction and oxidative damage in rat brain: implications in Alzheimer´s disease**
P. BEHERA & S. CHAKRABARTI

A389 **Ca^{2+} release from ER stores in Alzheimer´s disease models**
J. GRUSZCZYNSKA-BIEGALA, A. JAWORSKA, A. SZYBINSKA, K. HONARNEJAD, J. HERMS & J. KUZNICKI

A390 **17b estradiol reverses the effectf of beta-amyloid injection in hippocampus**
R. GUEVARA GUZMAN, C. BERNAL-MONDRAGON & S. RIVAS-ARANCIBIA

A391 **The Vps10p-domain receptor sortilin interacts with amyloid precursor protein and might affect its intracellular traffic and processing**
C. GUSTAFSEN, A.-S. CARLO, A. NYKJÆR, P. MADSEN, T. WILLNOW & C.M. PETERSEN

A392 **Clinicopathological study of diffuse neurofibrillary tangles with calcification - with special reference to TDP-43 proteinopathy and alpha-synucleinopathy**
C. HABUCHI, S. IRITANI, H. SEKIGUCHI, Y. TORII, T. ARAI, M. HASEGAWA, H. AKIYAMA, H. SHIBAYAMA & N. OZAKI

A393 **CB1 cannabinoid receptors activation protects rat hippocampal CA1 pyramidal neurons from aberrant alterations in intrinsic electrophysiological properties induced by amyloid β peptide**
M. HAGHANI, Z. GHOTBEDIN, M. SHABANI & M. JANAHMADI

A394 **Early inflammatory process in a novel transgenic rat model of Alzheimer's disease**
C.E. HANZEL, M.F. IULITA, S. ALLARD & A.C. CUELLO

A395 **Iron and amyloid β peptide oligomers enhance ryanodine receptor-mediated calcium release in primary hippocampal neurons which in turn stimulates mitochondrial fission**
C. HIDALGO, C. SANMARTIN, A. PAULA-LIMA, S. HARTEL, A. GARCIA & M.T. NUÑEZ

A396 **Brain alterations in nerve growth factor metabolism in a novel rat transgenic model of Alzheimer´s disease**
M.F. IULITA, C.E. HANZEL, S. ALLARD, W.C. LEON & A.C. CUELLO

A397 **$A\beta_{42}$ oligomers alter Ca^{2+} dynamics in mouse primary neuronal cultures**
M.J. KIPANYULA, C. LAZZARI, L. CONTRERAS, E. ZAMPESE, T. POZZAN, A. PICCINI, M. TABATON & C. FASOLATO

A398 ***In vitro* studies of the pathogenic effect of missense mutations on key biological properties of progranulin associated with CNS neurodegeneration**
G. KLEINBERGER, A. CAPELL, N. BROUWERS, K. SLEEGERS, M. CRUTS, C. HAASS & C. VAN BROECKHOVEN

A399 **Allomargaritarine as potential neuroprotector**
S.G. KLOCHKOV, M.E. NEGANOVA, S.V. AFANAS'EVA & E.F. SHEVTSOVA

A400 **Extracellular actions of tau protein on choline transporters CHT1 and detection of tau via surface plasmon resonance biosensor**
Z. KRISTOFIKOVA, D. RIPOVA, K. HEGNEROVA, M. BOCKOVA & J. HOMOLA

A401 **Gene signature and Epstein Barr virus infections in Alzheimer's disease**
F. LICASTRO, T. LAZZAROTTO, I. CARBONE, M. IANNI & E. PORCELLINI

A402 **The APP/PS1 mouse cerebellum: a morphological study**
S. LOMOIO, E. ASO, M. CARMONA, D. NECCHI, E. SCHERINI & I. FERRER

POSTER PRESENTATION

A403 **A key role for lysine residues in amyloid ß-protein folding, assembly and toxicity**
D. LOPES, S. SINHA & G. BITAN

A405 **Effect of amyloid-beta (25-35) on glutamate receptor subunit gene expression in rat hippocampal slices**
J. MAYORDOMO-CAVA, M.O. NAVA, J. YAJEYA, J.D. NAVARRO-LOPEZ & L. JIMENEZ-DIAZ

A406 **Strategic modification of brain ganglioside distribution to protect against neurodegeneration, aberrant protein folding, and cognitive impairment**
M.P. MCDONALD, A. DHANUSHKODI, E. AKANO, L. DANTZLER, L.C. GREGG, Y. XUE, T. OYELAMI & S.K. RAO

A407 **Effects of neuronal activity on intra- and extra-cellular beta amyloid in a transgenic murine model of Alzheimer's disease**
F. MONTAROLO, R. PAROLISI, E. HOXHA & F. TEMPIA

A408 **Activity of retinal ganglion cells is impaired in the P301S mutant human tau transgenic mouse**
M. NADIA, E. BARINI, M. GOEDERT, M.G. SPILLANTINI, A. BLAU, P. MEDINI & L. GASPARINI

A409 **Effects of amyloid-beta(25-35) on inhibitory fimbria-CA3 hippocampal synapse responses**
M.O. NAVA, L. JIMENEZ-DIAZ, J. MAYORDOMO, A. DELAFUENTE, J. CRIADO, A. RIOLOBOS, M. HEREDIA, J. YAJEYA & J.D. NAVARRO-LÓPEZ

A410 **Iron transporters DMT1 and ZIP14 expression in hippocampus and cortex of control and APPswe/PS1 mice**
J. SALAZAR, P. URRUTIA & M.T. NUNEZ

A411 **Inhibition of choline acetyltransferase an a mechanism for ADDLs induced cholinergic dysfunction**
N. NUNES-TAVARES, L.E. SANTOS, J.B. MOREIRA, T.R. BOMFIM, F.F. OLIVEIRA & F.G. DE MELLO

A412 **Niemann-pick disease type C1 (Npc1) effectively protects against tauopathy**
S. ZONNUR, V. MESKE, F. ALBERT, R. DÖSCHER, F. GLÖCKNER, J. GÖTZ & T.G. OHM

A413 **Herpes simplex virus type 1 (HSV-1) increases the excitability of rat neocortical neurons and triggers amyloid precursor protein (APP) processing**
R. PIACENTINI, C. RIPOLI, L. CIVITELLI, M.E. MARCOCCI, G. DE CHIARA, A.T. PALAMARA & C. GRASSI

A414 **Mild Cognitive Impairment single-domain: a case report on the self location and mental body transformation in the space**
M. PISTELLI, D. DI GIACOMO, M. DI PAOLA & D. PASSAFIUME

A415 **Alzheimer's disease amyloid β-protein mutations and deletions that define neuronal binding**
J.F. PODUSLO, N.C. OLSON & K.G. HOWELL

A416 **Amyloid-beta peptide induces PCNA expression and appearance of binucleated neurons in rat hippocampus**
M.S. POPOVA, M.Y. STEPANICHEV, N.A. LAZAREVA & N.V. GULYAEVA

A417 **The role of tauroursodeoxycholic acid as a modulator of amyloid β-induced synaptic toxicity**
R.M. RAMALHO, A.F. NUNES, R.B. DIAS & C.M.P. RODRIGUES

A418 **Elevated cytokine release by peripheral blood mono-nuclear cells and resistance to β-amyloid peptide in the elderly manifest in Alzheimer's disease patients**
H.J. REIS, N.P. ROCHA, A.L. TEIXEIRA, P. CARAMELLI, H.C. GUIMARAES & A. PALOTAS

A419 **Effects of different forms of amyloid β-peptide on synaptic function**
C. RIPOLI, E. RICCARDI, R. PIACENTINI, L. LEONE, G. BITAN & C. GRASSI

A420 **The relationship between medial temporal lobe and cortical volumetric measurements and metabolic rates in controls, mild cognitive impairment, and Alzheimer's disease**
Y.Y. SAID, W. TSUI, E. PIRRAGLIA, Y. LI, B. KUCZYNSKI & M.J. DELEON

A421 **Alzheimer's disease and synaptic dysfunction: the role of JNK**
A. SCLIP, X. ANTONIOU, D. CARDINETTI, A. ARNABOLDI, P. VEGLIANESE, M. MESSA & T. BORSELLO

A422 **Regulation of APP processing and abeta production by GSK-3 signaling and its pharmaceutical potential**
P.T.T. LY, H. ZOU, W. ZHOU & W. SONG

A423 **Identification of aberrantly expressed microRNAs in Alzheimer´s disease**
L. STÖCKMANN, M. WOLTER, P. ZIPPER, K. GIERGA, S. WEGGEN & G. REIFENBERGER

A424 **REST regulates *DYRK1A* transcription in a negative feedback loop**
X. SUN, M. LU, L. ZHENG & L. WANG

A425 **Synaptic alterations of human caudate nucleus in Alzheimer's disease**
K. TSAMIS, D. MYTILINAIOS, M. CHIOTELLI, S. NJAU & S. BALOYANNIS

A426 **Identification of sodium selenate as a potential treatment for Alzheimer´s disease**
J. VAN EERSEL, Y.D. KE, X. LIU, F. DELERUE, J.J. KRIL, J. GOTZ & L.M. ITTNER

A427 **Multiple transmitter receptor changes in the forebrain of a transgene mouse model of Alzheimers disease**
E. VON STADEN, K. AMUNTS & K. ZILLES

16. Neurological disorders (Parkinson & neurodegenerative disorders)

A428 **Beta-amyloid and TDP-43 mutually modulate their pathology and parkin promotes their clearance in gene transfer models**
A.M. HERMAN, P. KHANDELWAL & C.E.-H. MOUSSA

A429 **Comparing the motor performance and movement patterns of choreic Hundington's patients with those of dyskinetic Parkinson's patients; insight into basal ganglia dysfunctions**
C. DUVAL

A430 **Disrupted networks topology in Parkinson disease estimated via MRI data and graph theory**
R. RODRIGUEZ-ROJAS, G. SANABRIA, L. MELIE, D. GARCIA, M. CARBALLO, R. GONZALEZ & J.A. OBESO

A431 **Effects of chronic nicotine administration in a rodent model of Parkinson´s disease**
J.-R. GARCÍA-MONTES, D. MILLAN-ALDACO, M. PALOMERO-RIVERO, A.-C. EQUIHUA-BENITEZ, M. GUERRA-CRESPO, S. MIHAILESCU, O. PROSPERO-GARCÍA & R.-R. DRUCKER-COLÍN

A432 **The trafficking of GPR37 receptor by interacting proteins**
P. DUTTA & K.K. DEV

A433 **Chronic blockade of neuronal nitric oxide synthase enzyme reduces both L-DOPA-induced dyskinesias and striatal FosB/Delta-FosB overexpression in a rat model of parkinsonism**
F.E. PADOVAN-NETO & E. DEL BEL

A434 **Behavioral and biochemical evaluation of a chronic L-DOPA treatment in a Parkinsonian rat model of depression**
N. SCHINTU, X. ZHANG, A.A. MATHÉ & P. SVENNINGSSON

A435 **Role of alpha-synuclein aggregation and the Nrf2/ HO-1 pathway in iron-induced neurotoxicity**
Q. HE, N. SONG, H. XU, X. YU, J. XIE & H. JIANG

A436 **Altered DAT function in a mouse model of Parkinson disease**
D. LEO, M.-J. BOURQUE, C. KORTLEVEN, E.A. FON & L.-É. TRUDEAU

A437 **The role of G protein-coupled receptor kinase 6 (GRK6) in Parkinson's disease and L-DOPA treatment**
F. MANAGO, A. SALAHPOUR, T. SOTNIKOVA, S. ESPINOZA, M. CARON, R. PREMONT & R. GAINETDINOV

A438 **Central inflammation in early life and silent neurotoxicity in the adult rat brain**
Z. CAI, L.-W. FAN, L.-T. TIEN, Y. PANG, R.C.S. LIN, K.L. SIMPSON & P.G. RHODES

A439 **Treadmill exercise prevents the decrease of tyrosine hydroxylase expression in the 6-hydroxydopamine rat model of Parkinson's disease**
C.C. REAL, A.S. ALVES, A.F. FERREIRA, G.P. CHAVES, R.S. PIRES, A. TORRAO & L.R. BRITTO

A440 **The role of Parkin-Pick1 in mitochondrial dysfunction**
D. DEB & K.K. DEV

A441 **Activation of ATP-sensitive potassium channels enhanced iron uptake and iron-induced oxidative stress in SK-N-SH cells**
X. DU, H. XU, N. SONG, H. JIANG & J. XIE

A442 **PPAR-gamma agonist rosiglitazone inhibits TNF-alpha production by microglia and arrests neurodegeneration in a progressive Parkinson´s disease model**
A.R. CARTA, A. PISANU, L. FRAU, S. SPIGA & E. CARBONI

A443 **Nurr1-induced transcriptome („Nurrome'): concentration-dependent effects of Nurr1 on distinct biological processes and implications for CNS therapeutics of Parkinson's disease and drug abuse**
M.J. BANNON & M.M. JOHNSON

A444 **It's the locus coeruleus, James! The role of the locus coeruleus and the noradrenergic system in Parkinsonian tremor**
I.U. ISAIAS, A. MARZEGAN, J. VOLKMANN, G. PEZZOLI & P. CAVALLARI

A445 **Differential effects of levadopa and subthalamic deep brain stimulation on spatial working memory performance in Parkinson's disease**
C.R. CAMALIER, J.A. ALBRITTON, S. PARK, J.S. NEIMAT & B.S. FOLLEY

A446 **CB_1 in the basal ganglia: a morphological and pharmacological approach in an animal model of Parkinson's disease**
G.P. CHAVES, C.Y. MAZUCANTI, C.C. REAL, L.R.G. BRITTO & A.S. TORRÃO

A447 **Evaluation of drugs acting on D_2-CB_1-A_{2A} receptor oligomers in rat models of Parkinson's disease**
G. COSTA, N. SIMOLA, C.E. MÜLLER, M.-T. ARMENTERO, R. FRANCO & A. PINNA

A448 **Anticonvulsant effects of a CD88 antagonist in several murine seizure models**
M.J. BENSON, N.K. THOMAS, G. LEINENGA, D. SHE, T. WOODRUFF & K. BORGES

POSTER PRESENTATION

A449 **Bee venom as a new agent for the symptomatic treatment of Parkinson's disease: behavioral and electrophysiological evidence from rat models**
N. MAURICE, L. URIEN, B. DEGOS, C. MELON, C. MOURRE, M. AMALRIC & L. KERKERIAN-LE GOFF

A450 **Role of the striatal direct pathway in normal and pathological behaviors**
D. REVY, H. MARIE, M. AMALRIC, L. KERKERIAN & C. BEURRIER

A451 **Reactive astrocytes as a potential rescuer in rat Parkinsonism with endogenous expression of brain-derived and glial cell-line derived neurotrophic factors**
C.N.P. LUI, L.W. CHEN & K.K.L. YUNG

A452 **Redistribution of DAT/α-synuclein complexes visualized "in situ" by proximity ligation assay in a transgenic mouse model of Parkinson's disease**
A. BELLUCCI, L. NAVARRIA, E. FALARTI, M. ZALTIERI, M. SPILLANTINI, C. MISSALE & P. SPANO

A453 **Overexpression of parkin in rat dopaminergic nigrostriatal system protects against methamphetamine neurotoxicity**
A. MOSZCZYNSKA & B.K. YAMAMOTO

A454 **Gene silencing of N-methyl-D-aspartate 2B receptor protect dopaminergic neurons in animal models**
O.T.W. NG & K.K.L. YUNG

A455 **Pramipexole versus L-DOPA in an experimental model of Parkinson's disease: behavioural and electrophysiological analysis**
S. MARINUCCI, C. SGOBIO, V. BAGETTA, V. GHIGLIERI, V. PENDOLINO, P. CALABRESI & B. PICCONI

A456 **Corticostriatal long-term depression in L-DOPA-induced dyskinesia: insight into the role of the cGMP/phosphodiesterases pathway**
V. PENDOLINO, B. PICCONI, V. BAGETTA, V. GHIGLIERI, V. PAILLÈ, M. DI FILIPPO, A. TOZZI, C. GIAMPÀ, F.R. FUSCO, C. SGOBIO & P. CALABRESI

A457 **Behavioural characterization of dyskinesias induced by L-DOPA or dopamine receptor agonists in a rat model of Parkinson´s disease**
H. IDERBERG, D. RYLANDER & M.A. CENCI

A458 **The role of vascular endothelial growth factor (VEGF) in L-DOPA-induced dyskinesia**
K.E. OHLIN, H.S. LINDGREN & M.A. CENCI

A459 **D1 and NMDA receptor interplay in physiological and pathological conditions: focus on Parkinson's disease**
V. BAGETTA, V. GHIGLIERI, V. PENDOLINO, C. SGOBIO, S. MARINUCCI, F. GARDONI, M. DI LUCA, C. VASTAGH, B. PICCONI & P. CALABRESI

A460 **Exercise is not beneficial and may accelerate symptom onset in a mouse model of Huntington's disease**
M. POTTER, C. YUAN, C.S. OTTENRITTER, M.R. MUGHAL & H. VAN PRAAG

A461 **Aberrant synaptic connectivity may underlie the early symptoms- the learning and memory deficits in Huntington´s disease**
R.P. MURMU & J.-Y. LI

A462 **C-Jun-mediated sulfiredoxin induction by BDNF confers resistance against 3-nitropropionic acid in rat neurons: implication for Huntington's disease therapy**
D.-I. YANG & C.-L. WU

A463 **VEGF and its role in processing of amyloid precursor protein in the neuro-glia-vascular unit**
R. SCHLIEBS, S. BÜRGER, K. GÜNTER & M. BIGL

A464 **The behavioral effects of transient global ischemia on APP/PS1 mouse model of Alzheimer's disease**
S. KEMPPAINEN, E. PEKKARINEN & H. TANILA

A465 **Expression changes of stearoyl-CoA desaturase isoforms in neuronal and glial responses to various kinds of brain injury**
S.-Y. SONG, C. KATO & K. NAKASHIMA

A466 **Neurodevelopmental structural changes of the central nervous system in 11 cases of Alzheimer disease**
M.F. TRISTÁN-HUNDÍS, M.C. MANZANAREZ-COLIN, S. , PALACIOS-ESCALONA, D.S. TOTXO-GUERRERO, B. PERALTA-RODRÍGUEZ, N. GELISTA HERRERA, M. , REYES PÉREZ, G. ALAN JUÁREZ, C. CASTAÑEDA-GONZÁLEZ, H. REZA GARDUÑO TREVIÑO & D. REMBAO-BOJÓRQUEZ

A467 **HIV/Cocaine-induced dementia: cocaine hijacks sigma-1 receptors to the lipid raft to enhance the monocyte transmigration into the brain**
T.-P. SU & S. BUCH

A468 ***Ex vivo* characterization of progranulin gene silencing in primary neuronal cultures to study the biological basis of FTLD-U**
M. ZALTIERI, L. NAVARRIA, P. SPANO & A. BELLUCCI

A469 **Pathological features of ALS/FTLD in transgenic mice produced with genomic fragments encoding wild-type or mutant forms of human TDP-43**
V. SWARUP, C. BAREIL, D. PHANEUF, J. ROBERTSON & J.-P. JULIEN

A470 **Anti-inflammatory effects of electroacupuncture in a symptomatic ALS animal model**
E.J. YANG, J.H. JIANG, S.H. KIM & S.-M. CHOI

A471 **The regulator of ubiquitin-proteasome system in an ALS model**
S. KIM, E.J. YANG & S.M. CHOI

A472 **Proteomic expression analysis of cerebrospinal fluid (CSF) in search for diagnosis biomarkers in amyotrophic lateral sclerosis (ALS)**
J. BORG, A. CAMPOS, C. DIEMA, N. OMEÑACA, E.D. OLIVEIRA, A. ZANZONI, D. ROSSELL & M. VILASECA

A473 **Monocyte chemoattractant protein-1 up modulates GABA-induced currents in cortical neurons from a murine model of amyotrophic lateral sclerosis**
S. CAIOLI, M. PIERI, A. ANTONINI, A. GUGLIELMOTTI & C. ZONA

A474 **Abnormal motor axon excitability in the transgenic SOD1^{G127X} mouse model of amyotrophic lateral sclerosis**
M. MOLDOVAN, S. ALVAREZ, V. PINCHENKO, S. MARKLUND, K.S. GRAFFMO & C. KRARUP

A475 **Does running-based exercise affect the life span of an ALS mouse model ?**
Y.N. GERBER, J.-C. SABOURIN, J.-P. HUGNOT & F.E. PERRIN

A476 **Inefficient RNA editing of GluA2 with ADAR2 downregulation and sporadic ALS**
T. HIDEYAMA, T. YAMASHITA, H. AIZAWA & S. KWAK

A477 **Senataxin, a protein defective in ALS4 and AOA2 neurodegenerative diseases, is involved in neuritogenesis**
C. VANTAGGIATO, S. BONDIONI, G. AIROLDI, A. BOZZATO, G. BORSANI, E.I. RUGARLI, N. BRESOLIN, E.I. CLEMENTI & M.T. BASSI

A478 **Activation of extrasynaptic NR2B subunit of NMDA receptors by human monocyte-derived macrophages: implications for HIV-associated encephalopathy**
H. XIONG, J. YANG, D. HU & J. LIU

A479 **Involvement of miRNA in the pathogenesis of Spinocerebellar ataxia type 6 (SCA6)**
T. TANABE, S. HASHIMOTO, H. SAEGUSA, L. LI & S. ZONG

A480 **Kinetics alterations and reduced calcium currents at the calyx of Held in a S218L Cav 2.1 knockin migraine mouse model**
M.N. DI GUILMI, C. GONZÁLEZ INCHAUSPE, I.C. FORSYTHE, A. VAN DEN MAAGDENBERG, J.G.G. BORST & O.D. UCHITEL

A481 **Determining the roles of CBP in forebrain principal neurons**
L.M. VALOR, M. JIMENEZ-MINCHAN, R. OLIVARES, M.M. PULOPULOS, B. LUTZ & A. BARCO

A482 **Mechanistic studies in mouse models of Charcot-Marie-Tooth diseases caused by tRNA synthetase mutations**
M. STUM, K. MIERS, K. SEBURN & R. BURGESS

A483 **Increased phosphorylated α-synuclein relates to its insolubility in MSA**
K.E. MURPHY, Y.-J.C. SONG, Y. HUANG, W.-P. GAI & G.M. HALLIDAY

A484 **High frequency stimulation in commissural fiber suppresses the neural activity in rat hippocampal CA3 region in vivo**
X. ZHENG, Z. FENG & D.M. DURAND

A485 **Cell-autonomous role of AFG3L2 in neurodegeneration**
E. ALMAJAN, S. SEMMLER, P. MARTINELLI, E. BARTH & E.I. RUGARLI

A486 **Characterization of TorsinA in cerebellar synaptic circuitry in a mouse model of DYT1 dystonia**
F. PUGLISI, G. PONTERIO, G. MANDOLESI & A. PISANI

A487 **Mechanisms of motoneuron death in a type II spinal muscular atrophy mouse model**
M. BOIDO, A. PIRAS, V. VALSECCHI & A. VERCELLI

17. Psychiatric & behavioural disorders (Depression & bipolar disorder)

A488 **Correlations between brain-derived neurotrophic factor (BDNF), vascular endothelial growth factor (VEGF), and vascular risk factors in late-onset major depression**
R.B. DALBY, B. ELFVING, P.H.P. POULSEN, L. FOLDAGER, R. ROSENBERG & P. VIDEBECH

A489 **The serotonin-syndrome in mice: signs mediated by the 5-HT$_{1A}$-receptor**
B. BERT, R. HABERZETTL, J. BROSDA & H. FINK

A490 **Garden rehabilitation stabilises IL-2 and INF-gamma levels but does not relieve depressive-symptoms**
C. BAY-RICHTER, L. TRÄSKMAN-BENDZ, P. GRAHN & L. BRUNDIN

A491 **Sesamol suppresses oxido-nitrosative stress-induced neuro-inflammatory cascade in experimental model of pain-depression dyad**
V. ARORA, A. KUHAD, V. TIWARI & K. CHOPRA

A492 **Activation of CaMKII and PKA by Tianeptine enhances AMPA receptor function via the p38 mapk/mek/jnk pathways**
G. JUHÁSZ, V. SZEGEDI, B. BARKÓCZI, G. KAPUS, M. SPEDDING & B. PENKE

A493 **Investigation of antidepressants activity of sound beats created with different algorithms of modulation in comparison with antidepressants in forced swim test (FST) on rats**
N.L. ISVARINA, M.V. LENSMAN, V.O. MUROVETS & A.A. SAVOXIN

POSTER PRESENTATION

A494 **Complex regulation of the human tryptophan hydroxylase-2(TPH2) gene transcription in immortalized raphe serotonergic neurons, RN46A cells**
Y. INOUE, Y. OKADA, T. HIROI & H. MATSUI

A495 **Effect of genetic deletion and pharmacological antagonism of P2X7 receptors in animal models of mood disorders**
F. GÖLÖNCSÉR, R.D. ANDÓ, Á. KITTEL, K. SOPRONI, J. HALLER, T. NÉMETH, A. MÓCSAI & B. SPERLÁGH

A496 **Calmodulin-1 gene knock down in the ventral hippocampus prevents the antidepressant like effect of chronic imipramine treatment**
F.R. FERREIRA, W.S. ARAUJO-JR. & F.S. GUIMARAES

A497 **microRNAs in depressive behavior: evidence from learned helpless model of depression**
Y. DWIVEDI & N. SMALHEISER

A498 **Environmental enrichment rescues sexually-dimorphic abnormal corticosterone response in the R6/1 mouse model of Huntington's disease**
X. DU, T. RENOIR, T.Y. PANG & A.J. HANNAN

A499 **Early treatment with ethosuximide prevents neurochemical abnormalities in the brain and depression-like behavioral consequences of genetic absence epilepsy**
K.Y. SARKISOVA, M.A. KULIKOV, V.S. KUDRIN, A.A. FOLOMKINA & A.S. BAZYAN

A500 **Stress-induced increase of anti-apoptotic protein, Bcl-xl, gene expression in the brainstem of fluoxetine-treated rats correlates with monoamine metabolism**
G.T. SHISHKINA, T.S. KALININA, I.V. BEREZOVA & N.N. DYGALO

A501 **Anti-immobility effect of the combined treatment with antidepressant drugs and memantine in the forced swim test in mice. The role of sigma$(\sigma)_1$ receptors**
G. SKUZA, W. SADAJ & M. KABZINSKI

A502 **Right-pawed but not left-pawed male Wistar rats are protected against behavioral despair manipulation**
E. SOYMAN, E. LACIN, E. TUNCKOL & R. CANBEYLI

A503 **Olfactory bulbectomy and zinc deficiency influences BDNF expression in the rat and mouse brain cortex**
B. SZEWCZYK, M. SOWA KUCMA, K. MLYNIEC & G. NOWAK

A504 **Depressive-like profile induced by MCH microinjections into the dorsal raphe nucleus evaluated in the forced swim test**
J. URBANAVICIUS, P. LAGOS, C. SCORZA, R. MIRABALLES & P. TORTEROLO

A505 **Testosterone shows antidepressant efficacy in a vulnerable population submitted to chronic variable stress**
S.R. WAINWRIGHT, J.L. WORKMAN & L.A.M. GALEA

A506 **Neural circuit mechanisms of behavioral susceptibility and resilience to social defeat**
J.J. WALSH, A.K. FRIEDMAN, M.K. LOBO, D. CHADHURY, B. JUAREZ, V. GRADINARU, K. DEISSEROTH, E. NESTLER & M.-H. HAN

A507 **Antidepressant effects in the forced swim test (FST): involvement of bed nucleus of the stria terminalis (BNST)**
S. YANAGIDA, K. MOTOMURA, A. OOHASHI, M. HAYASHI & S. KANBA

A508 **The effect of *Mycobacterium avium* chronic infection on depressive-like behavior is dependent on the mouse genetic background**
S. ROQUE, B. RODRIGUES, S. MONTEIRO, C. BRANCO, C. NOBREGA, N. SOUSA, J.A. PALHA & M. CORREIA-NEVES

A509 **The effect of repeated co-treatment with an antidepressant drugs and a low dose of risperidone on behavioral reactivity of the central serotonergic, adrenergic and dopaminergic systems in mice**
Z. ROGÓZ, M. KABZINSKI & W. SADAJ

A510 **Folic acid prevents the depressive-like behavior elicited by the pro-inflammatory cytokine TNF-α in the mouse tail suspension test**
J. BUDNI, M. MORETTI, A.E. FREITAS, V.B. NEIS, C.M. RIBEIRO, G.O. BALEN & A.L.S. RODRIGUES

A511 **Intact histamine transmission is required for selective serotonin reuptake inhibitors (SSRIs) to produce their effect in the tail suspension test**
L. MUNARI, G. PROVENSI, M.B. PASSANI, N. GALEOTTI, H. OHTSU & P. BLANDINA

A512 **Gene expression profile of dermal fibroblast from depressed patients**
C. MORA, A. BARBON, A. CATTANEO, E. MILANESI, A. BOZZATO, M. GENNARELLI & S. BARLATI

A513 **Dose-dependent effects of interferon-alpha on anxiety, depressive-like behavior and the brain monoamines level in rats kept in standard or overcrowded conditions**
N.A. LOGINOVA, E.V. LOSEVA, K.Y. SARKISOVA & V.S. KUDRIN

A514 **Short-term effects of central antidepressant treatment on exploratory behavior and hippocampal neurogenesis in adult mice**
M. PODOLAN, J. DOS SANTOS, T. WALBER, F. POSSAMAI, F. MELLEU, V. DE SOUZA, T.S. DOS SANTOS, C. CENTURION-WENNINGER, J. MARINO-NETO & C. LINO DE OLIVEIRA

A515 **Ethological and neuropharmacological assessments of acupuncture effect on murine depression-like behavior aggravated by Bacillus Calmette-Gue´rin inoculation**
S. KWON, B. LEE, B.-J. SUR, M. KIM, H. LEE & D.-H. HAHM

A516 **Chronic fluoxetine treatment differently affect male and female mice behavior in forced swim test**
J. KERCMAR, S.A. TOBET & G. MAJDIC

A517 **Generation and characterization of drug-inducible forebrain-specific mice mutant for both glycogen synthase kinase-3 alpha and beta genes**
O. KAIDANOVICH-BEILIN & J.R. WOODGETT

A518 **Loss of motivation for cognitive learning induced by in vivo delivery of antibody against AMPA receptor GluR1 C-terminus into hippocampal neurons via HVJ-E vector**
M. SAJI, K. NODA, M. OGATA, N. SUZUKI & H. AKITA

A519 **Anti-depressant effects of Paecilomyces japonica on repeated restraint stress-induced behavioral responses in ovariectomized female rats**
M.S. YE, H.J. PARK, H.S. SHIM, Y.H. AHN, D.-H. HAHM, H. LEE & I. SHIM

A520 **Dexmedetomidine reduces lipopolysaccharide induced neuroinflammation, sickness behavior, and anhedonia**
C.-H. HSING, T.-S. WEI, W. CHOU, J.-J. WANG & C.-H. YEH

A521 **Adult neurogenesis in a mouse model of affective behavior: pharmacological and non-pharmacological interventions**
A. SAH, P. MARKT, S. SOTNIKOV, C. KOEHL, R. LANDGRAF & N. SINGEWALD

A522 **Mood stabilizer lithium inhibits amphetamine-induced 4-HNE-VMAT2 and 4-HNE-SNAP25 adducts in rat frontal cortex**
J.-F. WANG, H. TAN, L. SHAO, V. TANG & W.G. HONER

A523 **Chronic N-methyl D-aspartate administration induces „mania-like" behavioral changes in rats**
A.Y. TAHA, H.-W. KIM, A. HAMIDI, T. TRAGON, E. RAMADAN, G. CHEN, S.I. RAPOPORT & J.S. RAO

A524 **Lithium exerts anti-anhedonic activity in two models of anhedonia in rats**
M.E. SECCI, G. MARCHESE, S. SCHEGGI, C. GAMBARANA & M.G. DE MONTIS

A525 **Increased mitochondria 3-nitrotyrosine levels in postmortem prefrontal cortex of subjects with bipolar disorder and schizophrenia**
A.C. ANDREAZZA, J.F. WANG & L.T. YOUNG

A526 **Lithium and tamoxifen modulates GSK-3B changes in striatum of rats induced by d- amphetamine in an animal model of mania**
J. QUEVEDO, S.S. VALVASSORI, K.C. CECHINEL, R.B. VARELA, J. LOPES- BORGES, G. DA LUZ, M.F. VITTO & C.T. DE SOUZA

A527 **Dopamine/glycogen synthase kinase 3β interactions and lithium**
R. MCQUADE

A528 **Histochemical detection of neurons accumulating mitochondrial DNA deletions in mice with mutant *Polg1* gene**
M. KUBOTA-SAKASHITA, T. KASAHARA, F. ISONO, A. TAKATA & T. KATO

A529 **Forced desynchronization as a behavioral model to bipolar disorder**
B.D.V. KOIKE, M. RIBEIRO, B.S.B. GONÇALVES & J.F. ARAUJO

A530 **Induction of neurons for superficial cortical layers from mouse embryonic stem cells by valproic acid**
B. JULIANDI, M. ABEMATSU, T. SANOSAKA & K. NAKASHIMA

A531 **Effects of acupuncture on dopaminergic transmission in a mouse model of Parkinson's disease**
H. BAE, S.-N. KIM, A.-R. DOO, J.-Y. PARK, W. MOON, Y. CHAE, H. LEE & H.-J. PARK

A532 **Acupuncture induced dopaminergic neuron survival and motor function improvement via PI3K/Akt signaling pathway in a mouse model of Parkinson's disease**
S.-R. MIN, S.-N. KIM, A.-R. DOO, J.-Y. PARK, W. MOON, Y. CHAE, H. LEE & H.-J. PARK

20. History, teaching, neuroethics, awareness & social impact

H001 **Scientists and the unification of Italy**
M. BENTIVOGLIO & M.C. STEFANINI

H002 **Using impulse reviewer training sites to engage students in basic research**
K.B. DAVISON, M. BARKHUIZEN, K. CRISP, K. CRONISE, S. SMITH, S.M. SWEITZER, S. SYMINGTON, V. TURGEON & L.S. JONES

H003 **Neuroscience and teacher training: a dialogue needed**
F.A.H. DE CARVALHO, A.M. MAIATO & D.M. BARROS

H004 **IBRO inter-regional activities initiative**
K.A. KORALEK, R. ROCKSTAD-REX & M. DI LUCA

H005 **The international neurobioetica multidisciplinary study and research group: report of meetings, seminars and future work**
A. GINI, A. GARCIA & R. PASCUAL

H006 **Neurology training in Ethiopia: past, present and future**
J. GEMECHU, G. ZENEBE, M. ZEBENIGUS & Y. WOLDEAMANUEL

H007 **Teaching tools in Africa**
S. JULIANO

H008 **Milestones in neuroscience of epilepsia partialis continua**
Y. LEKOMTSEVA

H009 **An epistemological investigation within the neurosciences: the utility of the comparison with some psychotherapeutic models**
M.A. MANGIONE

H010 **Ethical intelligence and education for culture of peace: the neuro-physiologocal dynamics in a sustainable way**
R.D.F. MIGLIORI

H011 **Objective-based learning and integrated approach to assessment of neuroscience practical instruction for medical students**
A.B. ODUTOLA

H012 **The evaluation of the Croatian version of the Epworth sleepiness Scale and STOP questionnaire as screening tools for obstructive sleep apnea syndrome**
R. PECOTIC, I. PAVLINAC, M. VALIC, N. IVKOVIC & Z. DOGAS

H013 **The prefix ‚Neuro' in terms like neuromarketing, neuroeconomics: truly transdisciplinary approaches or just catchy hyped up syllables?**
S. PRABHU, H. MISRA, B. AUGIER & A. SHERDIL

H014 **Five years after: reviewing progress and forthcoming challenges of a novel Canadian neuroethics research program**
E. RACINE & E. BELL

H015 **The mystical dimensions of neuroethics**
M. RAZA

H016 **Education on drug abuse to children and adolescents from poor and violent urban communities**
M. ROCHA

H017 **The research nursery "neuroplasticity"**
L. FRANCIS, M. AVILA, A.M. SABOGAL GUAQUETA, E. MAYORGA, D. NAVARRO, A. BONILLA, N. BONILLA, L. DE LOS REYES, L. TRUJILLO, M. HERNANDEZ, J. SALGUERO, A. ROJAS, J. DIAZ, J. MONROY, L. ROJAS, C. MURCIA, U. FLOREZ & A. BENITEZ

H018 **Awareness and social impact of neuroscience education in India: a students' perspective**
J.K. SINHA & S. GHOSH

H019 **Neuroethics in a deontological and utilitarian context. An ERP analysis on the "emotional effect"**
A. TERENZI & M. BALCONI

H020 **From Kinshasa to Kigali, from Qindao to Manasar: the IBRO initiative in encouraging young neuroscientists around the world**
S. SARA, K.M. MOREIRA & R. AKINYEMI

Scientific Program

Saturday July 16

08:30-09:30 PLENARY LECTURE PL4 Auditorium Verdi

Introduced by: **Yukiko Goda** (London, UK)

Local control of synaptic function
Erin M. Schuman (Frankfurt, Germany)

09:40-11:40 SYMPOSIUM S06 Auditorium Verdi

PUTTING DENDRITES BACK INTO THE BRAIN: NEW APPROACHES FOR STUDYING DENDRITIC FUNCTION IN VIVO

Chaired by: **Greg Stuart** (Canberra, Australia)

S06.1 - 09:40
Synaptic activation of dendrites and spines in sensory cortex neurons in vivo
Arthur Konnerth (Munich, Germany)

S06.2 - 10:10
Two-photon imaging of Purkinje cell dendritic activity in vivo
Kazuo Kitamura (Tokyo, Japan)

S06.3 - 10:40
Exploring dendritic activity in vivo from different angles - what do we learn about cortical networks
Matthew Larkum (Bern, Switzerland)

S06.4 - 11:10
Dendritic synaptic integration in mouse visual cortex in vivo
Michael Hausser (London, UK)

09:40-11:40 SYMPOSIUM S07 Room Mazzini

SIGNAL TRANSDUCTION AND CELL BIOLOGY OF GROWTH CONE GUIDANCE

Chaired by: **Yimin Zou** (La Jolla, USA)

S07.1 - 09:40
Cell polarity signaling and growth cone guidance
Yimin Zou (La Jolla, USA)

S07.2 - 10:10
ADF/Cofilin-mediated actin turnover directs neuritogenesis in the developing mammalian brain
Frank Bradke (Martinsried, Germany)

S07.3 - 10:40
Membrane dynamics in growth cone guidance
Hiroyuki Kamiguchi (Wako, Japan)

S07.4 - 11:10
Molecular mechanisms of axon branching and its role in neural circuit formation
Dietmar Schmucker (Leuven, Belgium)

09:40-11:40 SYMPOSIUM S08 Room Cavour

SUBCELLULAR LOCALIZATION AND FUNCTION OF VOLTAGE-GATED ION CHANNELS

Chaired by: **Matthew Nolan** (Edinburgh, UK)

S08.1 - 09:40
Polarized subcellular distribution of voltage-gated Na+ and K+ channels in the central nervous system
Andrea Lorincz (Budapest, Hungary)

S08.2 - 10:10
Compartmentalized processing and storage in pyramidal neurons
Judit Makara (Ashburn, USA)

S08.3 - 10:40
HCN channel regulation of cortical glutamatergic synaptic transmission
Mala Shah (London, UK)

S08.4 - 11:10
Kv1.1 in neuronal excitability and synaptic transmission: insights from channelopathies
Dimitri Kullmann (London, UK)

09:40-11:40 SYMPOSIUM S09 Room Vittorio Emanuele II

PRION BIOLOGY AND PATHOLOGY

Chaired by: **Rafael Linden** (Rio de Janeiro, Brazil)

S09.1 - 09:40
Reggie/flotillin and prion protein in axon growth and adherens junction formation
Claudia Stuermer (Konstanz, Germany)

S09.2 - 10:10
Interaction of mammalian prion proteins with nucleic acids and glycosaminoglycans
Jerson Silva (Rio de Janeiro, Brazil)

S09.3 - 10:40
The role of the N-terminal region of prion protein in prion disease
Suehiro Sakaguchi (Tokushima, Japan)

S09.4 - 11:10
The role of neuroinflammation in the pathogenesis of prion disease
Hugh Perry (Southampton, UK)

09:40-11:40 SYMPOSIUM S10 Room Garibaldi

THE ENDOGENOUS OPIOID SYSTEMS IN PSYCHIATRIC AND NEUROLOGICAL DISEASES

Chaired by: **Brigitte Kieffer** (Illkirch, France)

S10.1 - 09:40
Mu and delta opioid receptors: opposing roles
Brigitte Kieffer (Illkirch, France)

S10.2 - 10:10
Opioids and the coordination of stress response
Andreas Zimmer (Bonn, Germany)

S10.3 - 10:40
A role for p38 MAPK in kappa opioid receptor-dependent dysphoria
Michael Bruchas (St. Louis, USA)

S10.4 - 11:10
The dynorphin/KOP system in temporal lobe epilepsy
Christoph Schwarzer (Innsbruck, Austria)

11:40-14:15 POSTER SESSION B Poster Area

(see detail page 77)

Posters should be placed on the boards from 9:30 on each day and removed by 17:30. No responsibility will be taken for posters which are left behind. **Posters will be attended by the Presenting Author from 11:40 to 14:15 on each day.**

The poster boards are numbered and adhesive material will be available at each board (please do not use drawing pins or thumbtacks). **The number of the abstract corresponds to the number of the poster panel.**

The Posters for **Topic 20 (History, teaching, neuroethics, awareness & social impact)** will be on display for the entire period of the congress (from Friday, July 15 to Monday, July 18) and will be attended by the Presenting Author from 11:40 to 14:15 on the first day, Friday, July 15.

Italian Society of Neuroscience (Young Investigator Visiting Programme) Poster Prize: The best posters by participants from low-income countries will be selected each day by a Selection Committee and awarded at the late afternoon Plenary Lecture at 17:30 of each day.

01. Nervous system development & developmental disorders (Developmental disorders)
02. Axonal guidance, synaptic formation & trophic factors (Axonal guidance)
04. Stem cells: neural injury & repair (Stem cells)
06. Excitable membranes & ion channels (Physiology)
07. Synaptic transmission & signal transduction (Trafficking & signalling)
08. Neural plasticity (Signalling & synaptic plasticity II)
11. Sensory systems (Auditory systems & sleep)
12. Motor systems (Mechanisms)
13. Learning & memory (Physiology & clinical aspects)
15. Neurodegeneration & aging (Oxidative stress, inflammation & other disorders)
16. Neurological disorders (Epilepsy)
17. Psychiatric & behavioural disorders (Schizophrenia, psychostimulants & drugs of abuse)
18. Neuroinformatics & computational neuroscience
19. Neuroelectronics & neurorobotic interfaces
20. History, teaching, neuroethics, awareness & social impact

12:30-14:00 SPECIAL EVENT SE04 Room Mazzini

IBRO SYMPOSIUM: CONTRIBUTION OF IBRO TO WORLD NEUROSCIENCE

Chaired by: **Masao Ito** (Wako, Japan) and **Gordon M. Shepherd** (New Haven, USA)

INTRODUCTORY OVERVIEWS

The origins of IBRO
Masao Ito (Wako, Japan)

Worldwide brain research in the last 50 years
Gordon M. Shepherd (New Haven, USA)

NEUROSCIENCE IN THE IBRO REGIONS

Participants: **Rajesh Kalaria** (Africa), **Hitoshi Okamoto** (Asia and the Pacific), **Omar Macadar** (Latin America), **Gordon Shepherd** (Northern America), **Tamas Freund** (Western and Eastern Europe).

CONCLUDING REMARKS

Torsten Wiesel (New York, USA)

This symposium will briefly summarize the rise of neuroscience in the past 50 years, and highlight the unique role played by IBRO in supporting that rise at an international level

12:30-14:00 SPECIAL EVENT SE05 Room Cavour

FINE-SCALE MAPPING OF THE DEVELOPING MOUSE AND HUMAN BRAIN

Chaired by: **John Hohmann** (Seattle, USA)

SE05.1 - 12:35
A new approach to mammalian brain ontologies based on ontogeny
Luis Puelles (Murcia, Spain)

SE05.2 - 12:55
Spatial mapping of gene expression in developing mouse brain
Salvador Martinez (Alicante, Spain)

SE05.3 - 13:15
High resolution reference atlases in human brain
Allan Jones (Seattle, USA)

SE05.4 - 13:35
Mapping of gene expression across human development
John Hohmann (Seattle, USA)

12:30-14:00 SPECIAL EVENT SE06 Room Vittorio Emanuele II

JOINT MEETING BETWEEN THE FRENCH AND ITALIAN NEUROSCIENCE SOCIETIES

SDN-SINS MINISYMPOSIUM 2
NEW INSIGHTS INTO GEPHYRIN FUNCTION

Chaired by: **Antoine Triller** (Paris, France) and **Enrico Cherubini** (Trieste, Italy)

SE06.1 - 12:35
Regulation of inhibitory receptors interactions with gephyrin: Real time dynamics at single molecular level
Antoine Triller (Paris, France)

SE06.2 - 12:55
At inhibitory synapses iLTP is associated with gephyrin-induced down-regulation of $GABA_A$ receptors mobility
Andrea Barberis (Genoa, Italy)

SE06.3 - 13:15
At GABAergic synapses gephyrin regulates transynaptic signalling
Enrico Cherubini (Trieste, Italy)

SE06.4 - 13:35
Targeting spinal GABAergic and glycinergic inhibition to develop novel analgesics
Pierrieck Poisbeau (Strasbourg, France)

14:15-15:45 WORKSHOP W11 Room Vittorio Emanuele II

STEM CELLS FOR THE TREATMENT OF SPINAL CORD INJURY: ARE WE THERE YET?

Chaired by: **Eva Sykova** (Prague, Czech Republic)

W11.1 - 14:20
Stem cells and biomaterials for the treatment of spinal cord injury
Eva Sykova (Prague, Czech Republic)

W11.2 - 14:40
Use of neural stem cells for repair of the injured spinal cord
Michael G. Fehlings (Toronto, Canada)

W11.3 - 15:00
Transplantation of human bone marrow-derived cells induces axonal sprouting and improves functional outcome after axonal damage to the spinal cord
Jeffery D. Kocsis (New Haven, USA)

W11.4 - 15:20
Cell integration and axon growth in the spinal cord
James W. Fawcett (Cambridge, UK)

14:15-15:45 WORKSHOP W12 Room Mazzini
THE DIVERSE ACTIONS OF ESTROGENS IN HOMEOSTATIC REGULATION
Chaired by: **Shaila Mani** (Houston, USA)

W12.1 - 14:20
Estrogen receptor beta regulation of stress responses
Robert Handa (Phoenix, USA)

W12.2 - 14:40
Estrogens and neuroprotection mechanisms in cholinergic neurons
Istvan Abraham (Dunedin, New Zealand)

W12.3 - 15:00
Estrogen regulation of hippocampal synaptogenesis
Gabriele Rune (Hamburg, Germany)

W12.4 - 15:20
Novel actions of estrogen receptors in nociception
Paul Micevych (Los Angeles, USA)

14:15-15:45 WORKSHOP W13 Room Cavour
ODORANTS, RECEPTORS AND GLOMERULI
Chaired by: **Peter Mombaerts** (Frankfurt, Germany)

W13.1 - 14:20
Phragrance and pharmacology: a functional approach to mammalian odorant receptors
Stuart Firestein (New York, USA)

W13.2 - 14:40
Olfactory transduction in the mouse: amplification by calcium-activated chloride channels
Anna Menini (Trieste, Italy)

W13.3 - 15:00
Protomaps in the development of the mouse olfactory system
Charles Greer (New Haven, USA)

W13.4 - 15:20
Olfaction targeted
Peter Mombaerts (Frankfurt, Germany)

14:15-15:45 WORKSHOP W14 Room Garibaldi
STRUCTURAL PLASTICITY AND MEMORY
Chaired by: **Paul Frankland** (Toronto, Canada)

W14.1 - 14:20
Neocortical rewiring and memory storage
Gerald Finnerty (London, UK)

W14.2 - 14:40
Structural plasticity of the long-term consolidation of memories in the cortex
Paul Frankland (Toronto, Canada)

W14.3 - 15:00
Bidirectional remodeling of hippocampal and cortical circuits during extinction of remote conditioned fear
Martine Ammassari-Teule (Rome, Italy)

W14.4 - 15:20
Integration of adult born hippocampal neurons into behaviorally relevant networks and their role in information processing
Victor Ramirez-Amaya (Mexico City, Mexico)

14:15-15:45 WORKSHOP W15 Auditorium Verdi
TRANSCRIPTOMIC AND GENE EXPRESSION APPROACHES TO NEUROLOGICAL DISORDERS
Chaired by: **Yuri Bozzi** (Trento, Italy)

W15.1 - 14:20
Gene expression profiling of forebrain areas in a mouse model of autism
Yuri Bozzi (Trento, Italy)

W15.2 - 14:40
mRNA and miRNA transcriptomes of epileptic tolerance
David Henshall (Dublin, Ireland)

W15.3 - 15:00
Transcriptome analysis of dopaminergic cells: implications for Parkinson's disease
Stefano Gustincich (Trieste, Italy)

W15.4 - 15:20
In-situ hybridization profiling of gene expression changes in the prefrontal cortex of Schizophrenic patients
John Hohmann (Seattle, USA)

15:50-17:20 WORKSHOP W16 Room Vittorio Emanuele II
ENGINEERING RECEPTORS TO INVESTIGATE THE IN VIVO CELL SIGNALING CASCADES THAT UNDERLIE PHYSIOLOGY, BEHAVIOUR, AND NEUROLOGICAL DISORDERS
Chaired by: **John Neumaier** (Seattle, USA)

W16.1 - 15:55
Probing striatal function using pathway-selective viral vectors and engineered receptors
John Neumaier (Seattle, USA)

W16.2 - 16:15
Control of Gi/o signaling and neuronal activity by light to modulate spinal cord and motor function
Stefan Herlitze (Bochum, Germany)

W16.3 - 16:35
Activation of astrocytic GPCRs in vivo leads to a striking behavioral phenotype
Ken McCarthy (Chapel Hill, USA)

W16.4 - 16:55
5-HT4 RASSL and neurodegenerative diseases
Joel Bockaert (Montpellier, France)

15:50-17:20 WORKSHOP W17 Room Mazzini
NICOTINIC MECHANISMS UNDERLYING REWARD, EMOTION AND COGNITION
Chaired by: **Sigismund Huck** (Vienna, Austria)

W17.1 - 15:55
Nicotinic receptors and attention performance: focus on receptor desensitization
Huibert D. Mansvelder (Amsterdam, The Netherlands)

W17.2 - 16:15
Endogenous cholinergic inputs and the modulation of cortico-amygdala transmission
Lorna W. Role (Stony Brook, USA)

W17.3 - 16:35
Alpha 5 nicotinic receptors and the mechanisms of drug withdrawal
Mariella De Biasi (Houston, USA)

W17.4 - 16:55
Nicotinic receptors and synaptic plasticity in the meso-accumbens dopamine system
Daniel S. McGehee (Chicago, USA)

15:50-17:20 WORKSHOP W18 Room Cavour
PHYSIOLOGICAL ROLES AND ANTIPARKINSONIAN POTENTIAL OF METABOTROPIC GLUTAMATE RECEPTORS IN THE BASAL GANGLIA MOTOR CIRCUIT
Chaired by: **P. Jeffrey Conn** (Nashville, USA)

W18.1 - 15:55
Physiological roles and antiparkinsonian potential of mGluRs in the basal ganglia motor circuit
P. Jeffrey Conn (Nashville, USA)

W18.2 - 16:15
Role of metabotropic glutamate receptors in Parkinsonian motor impairment in the rat
Marianne Amalric (Marseille, France)

W18.3 - 16:35
Neuroprotective role of metabotropic glutamate receptors in experimental parkinsonism
Giuseppe Battaglia (Pozzilli, Italy)

W18.4 - 16:55
Group I and group III mGluRs: potential targets for antiparkinsonian and neuroprotective therapies in MPTP-treated monkeys
Yoland Smith (Atlanta, USA)

15:50-17:20 WORKSHOP W19 Auditorium Verdi
STRESS-INDUCED CHANGES IN CORTICO-LIMBIC STRUCTURES
Chaired by: **Mouna Maroun** (Haifa, Israel)

W19.1 - 15:55
Effects of stress on neuronal structure and function in medial prefrontal cortex
Cara Wellman (Bloomington, USA)

W19.2 - 16:15
Interactions between the amygdala and the prefrontal cortex under stressful conditions
Mouna Maroun (Haifa, Israel)

W19.3 - 16:35
Synaptic changes in prefronto-limbic circuits induced by neonatal adverse socio-emotional experience
Katharina Braun (Magdeburg, Germany)

W19.4 - 16:55
Impact of stress and ageing on hippocampal corticosterone and memory retrieval in mice
Daniel Beracochea (Talence, France)

15:50-17:20 WORKSHOP W20 Room Garibaldi
COMMUNICATING NEUROSCIENCE TO THE PUBLIC
Chaired by: **Colin Blakemore** (Oxford, UK)

W20.1 - 15:55
No time to be ethical?
Julie Robillard (Vancouver, Canada)

W20.2 - 16:15
What matters in developing countries
Rajesh Kalaria (Newcastle, UK)

W20.3 - 16:35
What matters in Europe
Piergiorgio Strata (Turin, Italy)

W20.4 - 16:55
Brain research in the media
Elaine Snell (London, UK)

17:30-18:30 PLENARY LECTURE PL5 Auditorium Verdi

Introduced by: **Catherine Bushnell** (Montreal, Canada)

The neurobiology of pain and its control
Allan I. Basbaum (San Francisco, USA)

18:40-19:40 SPECIAL WORKSHOP SW05 Room Cavour

NEUROSCIENCE IN AFRICA: A SAMPLE FROM NORTH, SOUTH, EAST AND WEST AFRICA

Chaired by: **Abdul H. Mohammed** (Stockholm, Sweden)

SW05.1 - 18:40
Unraveling the relationship between arousal and energy: a study of bipolar disorder
Fleur Howells (Cape Town, South Africa)

SW05.2 - 18:55
Lead toxicity, basal ganglia and circadian rhythms
Mariam Sabbar (Rabat, Morocco)

SW05.3 - 19:10
Prevalence and clinical description of epilepsy in a rural community in Uganda
Angelina Kakooza-Mwesige (Kampala, Uganda)

SW05.4 - 19:25
Predictive factors of dependence after stroke
Marieme Soda Diop Sene (Dakar, Senegal)

18:40-19:40 SPECIAL WORKSHOP SW06 Room Mazzini

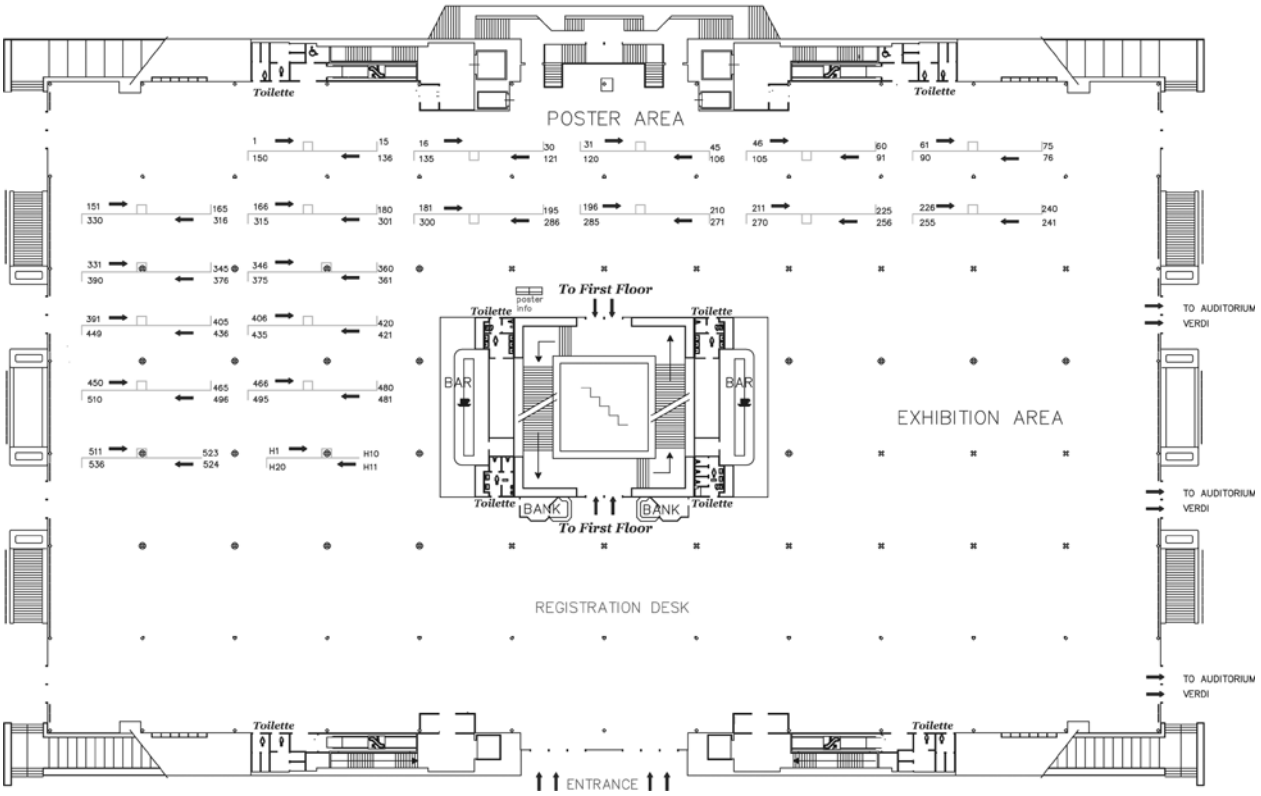
EVENING DISCUSSION WITH PLENARY SPEAKERS II: HOW TO START YOUR OWN LAB

Chaired by: **Michael J. Zigmond** (Pittsburgh, USA) and **Beth A. Fischer** (Pittsburgh, USA)
Participants will include **Joshua R. Sanes** (Boston, USA)

We will consider some of the issues involved in starting a lab as a new junior investigator, including the relative merits of bringing in undergraduates, graduate students, postdocs, and research assistants into your lab; how quickly to grow; the distinction among supervision, advising, and mentoring; and the strengths and weaknesses of collaborations for junior investigators. Trainees and mentors are invited to join in the discussion.

POSTER PRESENTATION

Pavilion A - Ground Floor - Poster Area



01. Nervous system development & developmental disorders (Migration, differentiation & plasticity)

B001 **Resveratrol prevents alcohol-induced cognitive deficits and brain damage by blocking inflammmatory signaling and cell death cascade in neonatal rat brain**
V. TIWARI & K. CHOPRA

B002 **Changes in $GABA_A$ receptor expressions and brain cytoskeleton in normally grown (NG) and intrauterine growth restricted (IUGR) piglet across the perinatal period**
V.P. KALANJATI, P.B. COLDITZ & S.T. BJORKMAN

B003 **Influence of lipopolysaccharide injected to pregnant mice on behavior and brain glucocorticoid receptors of the adult offspring**
N. CHLODZINSKA, M. GAJERSKA, K. BARTKOWSKA, K. TURLEJSKI & R.L. DJAVADIAN

B004 **Altered organization of GABAergic cortical interneurons in MECP2 mouse mutants**
N. MORELLO, E. CALCAGNO, G. SRUBEK TOMASSY, E.M. BOGGIO & M. GIUSTETTO

B005 **Ccrude ethanol root bark and leaf extract of rauwolfia vomitoria (apocynacceae) induces reactive astrocytes in cerebral cortex of albino Wistar rat foetuses**
T. EKANEM, M. ELUWA, P. UDOH, A. AKPANTAH, O. ASUQUO, M. EKONG & A. EKEOMA

B006 **Caffeine causes neuroprotection after hypoxic-ischemic (HI) brain injury in neonatal mice**
V. URMALIYA, M. WINERDAL, U. ÅDÉN & B.B. FREDHOLM

B007 **Functional analysis of neuroligin-2 mutations linked to schizophrenia**
G. CHEN, C. SUN, M.-C. CHENG, R. QIN & C.-H. CHEN

B008 **Alterations in nitric oxide synthase (NOS) expressing neurons in cerebral cortex of rats prenatally exposed to chlorpyrifos**
J. VATANPARAST, M. NASEH & G. HAMIDI

B009 **Effect of prenatal methamphetamine exposure on spatial memory and protein expression of NMDA receptor in adult rat**
M. VRAJOVÁ, B. SCHUTOVÁ, V. BUBENÍKOVÁ-VALEŠOVÁ & R. ŠLAMBEROVÁ

B010 **Differentiated Rett syndrome mouse induced pluripotent stem cells reveal novel neurophysiological phenotypes**
N. FARRA, W.-B. ZHANG, A.P. WONG, P. PASCERI, J.H. EUBANKS, M.W. SALTER & J. ELLIS

POSTER PRESENTATION

B011 **Deficits in inhibitory neurotransmission of the developing amygdala in the fragile X syndrome mouse model**
S. KRATOVAC, R.L. VISLAY-MELTZER, J.L. OLMOS-SERRANO, S.M. PALUSZKIEWICZ, B.S. MARTIN, M.M. HUNTSMAN & J.G. CORBIN

B012 **Proteomic identification of co-factors for the Rett syndrome responsible gene product, MeCP2**
K. TSUJIMURA, Y. FUKAO, M. FUJIWARA & K. NAKASHIMA

B013 **Ultrastructural changes in rat cortical neurons exposed to ethanol**
T. GUADAGNOLI, M.P. ARONNE, L.M. LÓPEZ, M.M. GIRONACCI & H.A. BRUSCO

B014 **Consequences of an early neurotropic enterovirus infection on CNS development and memory function in the surviving host**
D.A. VAN DEREN, JR., J.M. TABOR-GODWIN, N. KHA, S. MACIEJEWSKI, C.M. RULLER, S. GLUHM, S.M. ROBINSON, N. AN, N.U. GUDE, M.A. SUSSMAN, L. WHITTON, P.E. GILBERT & R. FEUER

B015 **Quantitative and qualitative changes of *Pafah1b* complex subunits during mouse brain development**
T. ESCÁMEZ, O. BAHAMONDE, R. TABARES-SEISDEDOS, S. MARTÍNEZ & D. ECHEVARRIA

B016 **Pharmacotherapy with fluoxetine rescues dendritic hypotrophy in the Ts65Dn mouse model for DS**
S. GUIDI, F. STAGNI, E. RAGAZZI, P. BIANCHI, E. CIANI & R. BARTESAGHI

B017 **Developmental exposure to diazinon impairs novel object recognition in later life in a mouse model**
T.-T. WIN-SHWE & H. FUJIMAKI

B018 **Generalized impairment of cell proliferation in peripheral tissues of the Ts65Dn mouse model for DS**
C. FUCHS, S. TRAZZI, S. GUIDI, E. CIANI & R. BARTESAGHI

B019 **Neuroprotective effects of uridine in a rat model of neonatal hypoxic-ischemic encephalopathy**
T. ALKAN, Z. MINBAY, M. CETINKAYA, B. GOREN, E. ORENLILI, N. KOKSAL & M. CANSEV

B020 **The spontaneously hypertensive rat model for attention deficit/hyperactivity disorder may have delayed DAT function that activates at higher dopamine concentrations**
J.H. HSIEH, G. GERHARDT & V.A. RUSSELL

B021 **Epigenetic changes and protein homocysteinylation lead to impaired development and plasticity of neuroprogenitors under folate deficiency**
N. AKCHICHE, N. MARTIN, J.-L. GUÉANT, R. KEREK, G. POURIÉ, V. KOZIEL, D. HELLE, J.-M. ALBERTO, S. ORTIOU, J.-L. DAVAL & C. BOSSENMEYER-POURIÉ

B022 **Early prenatal LPS exposure reduces striatum tyrosine hydroxilase levels, motor behavior and IL-1 beta levels of male rats**
T.B. KIRSTEN, G.P. CHAVES, A. ZAGER, A.S. TORRAO, J. PALERMO-NETO & M.M. BERNARDI

B023 **Hypoxic-ischemic brain injury: modifications in enzymatic activities associated with alterations in histological analysis in the hippocampus of neonatal rats**
V.C. PIMENTEL, M.B. MORETTO, V.M. MORSCH, S.A. DA LUZ & M.R. SCHETINGER

B024 **Prenatal exposure to cigarette smoke causes persistent changes in the oxidative balance and in DNA structural integrity in rats submitted to the animal model of schizophrenia**
D.D.B. FRAGA, P.F. DEROZA, F.V. GHEDIM, A.V. STECKERT, R.D. DE LUCA, A. SILVERIO, A. CIPRIANO, D. LEFFA, G.D. BORGES, J.L. QUEVEDO, R. PINHO, F.D. PIZZOL, V. ANDRADE & A.I. ZUGNO

B025 **Prenatal exposure of valproic acid-induced behavioral and biochemical changes in rats**
H.S. SHIM, H.-J. PARK, K.S. KIM, D.-H. HAHM, H. LEE & I. SHIM

B026 **Lead toxicity during growth spurt period - Golgi and electron microscopic study in rats**
S.M. RAO & S. SMITHA

B027 **Distribution of immune inhibitory molecule CD200 and its receptor in the developing C57BL/6 mice brain before and after H/I injury**
K. SHRIVASTAVA, G. LLOVERA, P. GONZALEZ & L. ACARIN

B028 **Neurodevelopmental effects of prenatal crude oil exposure in mice offsprings**
O.E. MESEMBE

B029 **Dysregulated amyloid precursor protein mRNA translation affects spine morphology in fragile X Syndrome**
E. PASCIUTO, S. DE RUBEIS, T. WAHLE, C. DOTTI, B. DE STROOPER & C. BAGNI

B030 **Early hypoxic-ischemic injury disrupts the oscillatory coupling within developing prefrontal-hippocampal networks**
M.D. BROCKMANN & I.L. HANGANU-OPATZ

B031 **Nutritional deficiency in methyl donors during development and brain maturation leads to long term tissue and functional disorders**
N. MARTIN, C. BOSSENMEYER-POURIÉ, J.-L. GUÉANT, J.-L. DAVAL & G. POURIÉ

B032 **How autistic children know what you are doing. An EEG study**
C. BERCHIO, M.A. UMILTÀ, F. APICELLA, R.R. FEDERICO, F. MURATORI & V. GALLESE

B033 **Platinum compound treatment and neurotoxicity during CNS development: expression of calcium-binding proteins and neurofilament protein in the rat hippocampal formation**
V.M. PICCOLINI, V. DAL BO, M.G. BOTTONE, C. FENOGLIO, S. DE PASCALI, F.P. FANIZZI & G. BERNOCCHI

B034 **Neurotransmitter levels in different brain areas of the mouse model for autism spectrum disorder**
C. GERACE, C. VIAGGI, F. VAGLINI, C. PARDINI & G.U. CORSINI

B035 **The short time structural plasticity of dendritic spines is altered in a mouse model of rett- syndrome**
S. LANDI, E. PUTIGNANO, E.M. BOGGIO, M. GIUSTETTO, T. PIZZORUSSO & G.M. RATTO

B036 **Developmental exposure to chlorpyrifos and diazinon impairs passive avoidance retention in adult rats**
M. NASEH, J. VATANPARAST & M. BANIASADI

B037 **The protective role of vitamin C on the hippocampal neurons in perinatally lead poisoned rat pups**
H. SEPEHRI, F. GANJI & H. AMIRKHANLOU

B038 **TBC1D24: a novel epilepsy gene involved in neuronal development**
A. FALACE, C. CARDOSO, A. REPRESA, F. BENFENATI, F. ZARA & A. FASSIO

B039 **Effects of maternal ethanol intake during pregnancy and lactation on the locomotor and exploratory activities in pups at different stages of brain development**
S.E. MUSSI, V.G.O. VIDAL, D.F. DA SILVA, H.M. FIORILLO, M.M. IYOMASA & M.L.N.M. ROSA

B040 **Functional analyses of autism-related mutations in contactin genes**
O. MERCATI, M. KONYUKH, A. DANCKAERT, K. WATANABE, R. DELORME, M. LEBOYER, P. CHASTE, A. MARUANI, F. AMSELLEM, N. LEMIÈRE, C. LEBLOND, V. DUFRESNE, J.-P. BOURGEOIS, T. BOURGERON & I. CLOËZ-TAYARANI

B041 **Effects of prenatal exposure to cannabinoid agonist on postmitotic neuroblasts and glutamatergic cortical neurons in the developing cerebral cortex**
T.M. SAEZ & H.A. BRUSCO

B042 **Effect of early life nicotine exposure on limbic system development in the male rat**
R. ALLEMANG-GRAND, S.J. BIGNUCOLO, A.A. PETRONE, A.C. HOLLOWAY & A.T. KONKLE

02. Axonal guidance, synaptic formation & trophic factors (Axonal guidance)

B043 **Attractive axon guidance requires phosphatidylinositol 3-kinase-dependnent membrane trafficking in the growth cone**
H. AKIYAMA, T. TOJIMA & H. KAMIGUCHI

B044 **The GATA transcription factor, *grn* , transcriptionaly regulates *Unc-5* in drosophila dorsal motoneurons**
A. ARZAN ZARIN, A. C DALY, J. HEULSMEIER & J.P. LABRADOR

B045 **Cannabinoid receptor CB_2 modulates axon guidance**
A. ARGAW, G. DUFF, H. CHERIF, B. CÉCYRE, N. TEA & J.-F. BOUCHARD

B046 **Snapin mediates the AC6-induced inhibition of neurite outgrowth by hijacking Snap25 from the SNARE apparatus**
C.-S. WU, J.-T. LIN, C.-L. CHIEN, W.-C. CHANG, H.-L. LAI & Y. CHERN

B047 **Transcriptome analysis in the superior cervical ganglion of dystrophic *mdx* mice**
V. LICURSI, I. CAIELLO, M.E. DE STEFANO, R. NEGRI & P. PAGGI

B048 **Cyclic AMP and PKA are involved in the neuronal response to polymerized laminin**
A.C. GIORDANI DUARTE, T. COELHO-SAMPAIO & E. FREIRE

B049 **Lipid-mediated axon guidance in the developing spinal cord**
A.T. GUY, Y. NAGATSUKA, P. GREIMEL, T. NABETANI, M. INOUE, A. NAKATA, N. OOASHI, Y. ITO, K. OHTA, Y. HIRABAYASHI & H. KAMIGUCHI

B050 **A chemical genetic approach identifies antipsychotics as potential regeneration promoting compounds**
A.L. JOHNSTONE, G.W. REIERSON, R.P. SMITH, V.P. LEMMON & J.L. BIXBY

B051 **Characterization of developmental mechanisms and axonal growth of dorsal interneurons in the chick hindbrain**
A. KOHL, A. KLAR & D. SELA-DONENFELD

B052 **Lack of dystrophin affects axon regeneration *in vivo* and neurite outgrowth *in vitro***
L. LOMBARDI, I. LANNI & M.E. DE STEFANO

B053 **Quantitative time-lapse measurements of neurite- and axon growth effected by substrate-bound gradient**
P. ZENTIS, L. RAJAPPA, M. PABST, R. FRICKE, B. HOFMANN, D. SAALFRANK, M. PRÖMPERS, M. BANZET, A. OFFENHÄUSSER & S. MEFFERT

B055 **Neuronal growth-associated proteins (nGAPs) regulate growth cone morphology**
M. NOZUMI, J. LU, K. TAKEUCHI & M. IGARASHI

B056 **Stimulation of neurite retraction and growth by local release of guidance molecules from lipid vesicles**
G. PINATO, L. THUY LIEN, E. D'ESTE, V. TORRE & D. COJOC

B057 **Imaging sensory neurons and neuroblastoma SH-SY5Y during manipulation with optical tweezers**
B.M. RADU, D.D. BANCIU, A. MARIN, D.I. ROTARU & M. RADU

B058 **Gene therapy to promote peripheral nerve regeneration after trauma lesions**
S. RAIMONDO, F. NOVATI, S. BOMPASSO, S. MOIMAS, I. PERROTEAU, M. GIACCA & S. GEUNA

B059 **Investigation of odorant receptor-mediated adhesion in S180 cells**
M. RICHARD, S. JAMET, C. GOURIER, F. PINCET & A. TREMBLEAU

POSTER PRESENTATION

B060 **Transgenic models for the study of regenerative processes of peripheral nerves**
G. RONCHI, P. SALAMONE, F. DI SCIPIO, L. MURATORI, S. BOMPASSO, M. FORNARO & S. GEUNA

B061 **Maturation of the cisternal organelle in the hippocampal neuron's axon initial segment**
D. SÁNCHEZ-PONCE, J. DEFELIPE, J.J. GARRIDO & A. MUÑOZ

B062 **Cross regulations between intrinsic and environmental semaphorins during motor axon guidance**
I. SANYAS, M. BOZON, F. MORET & V. CASTELLANI

B063 **Axonal guidance receptors and neuronal death after spinal cord injury**
M.I. SHIFMAN

B064 **Hierarchical structure of asymmetric rotational motility from molecular motors to neural circuits**
A. TAMADA, S. KAWASE, F. MURAKAMI & H. KAMIGUCHI

B065 **The signaling pathways controlling clathrin-mediated endocytosis for bidirectional growth cone guidance**
T. TOJIMA, R. ITOFUSA & H. KAMIGUCHI

B066 **Adhesion and differentiation of neuronal cells on anisotropic nanostructured substrates: neurite contact guidance tolerance to topographical noise**
I. TONAZZINI, S. MEUCCI, P. FARACI, Y. ELGERSMA, F. BELTRAM & M. CECCHINI

B067 **Investigating the role of drebrin in the neuronal growth cone**
D.C. WORTH, S. GERALDO, C. DALY & P. GORDON-WEEKS

04. Stem cells: neural injury & repair (Stem cells)

B068 **A mesenchymal-like Zeb1+ niche harbors dorsal radial GFAP+ stem cells in the spinal cord**
J.-C. SABOURIN, P.-O. GUICHET, A. PRIVAT, A. PATTYN, F.E. PERRIN & J.-P. HUGNOT

B069 **Neuroprotective effects of bone marrow-derived mesenchymal stem cells after spinal cord injury in adult rats**
L.N. NOVIKOVA, M. BROHLIN, P.J. KINGHAM, M. WIBERG & L.N. NOVIKOV

B070 **Human Mesenchymal Precursor Cells (hMPCs) from Spinal Cord Injured (SCI) patients transplanted into rat Spinal Cords after complete transection**
S. LOVETT, S. HODGETTS & G. PLANT

B071 **Intravenously administered mesenchymal stem cells improve lifespan and motor skills in a mouse model of ALS**
M. MILANESE, T. BONIFACINO, F. GIRIBALDI, M.C. PRINCIPATO, S. MORANDO, S. CASAZZA, D. GIUNTI, L. VERGANI, A. UCCELLI, A. VOCI & G. BONANNO

B072 **Bone marrow transplantation in hindlimb muscles in amyotrophic lateral sclerosis mouse model rescues motor-neurons from death and improves motor function**
D. PASTOR, M.C. VISO-LEÓN, A. RANDO, J. JARAMILLO-MERCHÁN, J. JONES & S. MARTÍNEZ

B073 **Mesenchaymal stem cells improve learning and memory in rats with Alzheimer´s disease**
A. ALIZADEH, P. BABAEI, B. SOLTANI & A. SOLTANI

B074 **Neural marker expressions of neuronal induced human bone marrow mesenchymal stem cells**
N. KARAKAS, G. ARIKAN & S. ISIK

B075 **Cell therapy after global ischemia in adult rats induces radial glia-like cell differentiation in the SVZ**
F. GUBERT, C. ZAVERUCHA-DO-VALLE, F.R. FIGUEIREDO, A.S. DE VASCONCELOS, M. BARGAS-REGA, A.L. MENCALHA, E. ABDLHAY, M.F. SANTIAGO & R. MENDEZ-OTERO

B076 **Therapeutic effect of bone-marrow mononuclear cells in the optic nerve regeneration**
C. ZAVERUCHA DO VALLE, F. GUBERT, L. MESENTIER-LOURO, M. BARGAS-REGA, B. PAREDES, A.L. MENCALHA, E. ABDELHAY, M.F. SANTIAGO & R. MENDEZ-OTERO

B077 **Roles of notch and ErbB signaling in the fate commitment of bone marrow-derived schwann cells**
D.K.-Y. SHUM, E.W.-Y. TAI, G.K.-H. SHEA, K.H.-Y. LEUNG & Y.-S. CHAN

B078 **MSCs reduce neuronal cell death in glutamate-treated cortical neurons**
A. SCUTERI, D. MAGGIONI, E. DONZELLI, M. RAVASI, V. RODRIGUEZ-MENENDEZ, M. MILOSO & G. TREDICI

B079 **Rat adult mesenchymal stem cells promote myelin formation *in vitro***
M. RAVASI, A. SCUTERI, S. PASINI, D. MAGGIONI, E. DONZELLI, M. BOSSI & G. TREDICI

B080 **Genes and cellular types involved in optic nerve regeneration after bone marrow derived cell therapy**
L.A. MESENTIER-LOURO, J.L.L. CORONEL, C. ZAVERUCHA-DO-VALLE, A.J. SILVA-JUNIOR, A.L. MENCALHA, E. ABDELHAY, A.L. TORRES, B. DIAZ-PAREDES, R. MENDEZ-OTERO & M.F. SANTIAGO

B081 **Human dental pulp cells: a new source of cell therapy in a mouse model of compressive spinal cord injury**
F.M. ALMEIDA, S.A. MARQUES, B.S. RAMALHO, D.V. CADILHE, S.K. REHEN & A.M.B. MARTINEZ

B082 **Axon regeneration properties of human periodontal ligament stem cells**
J. JARAMILLO-MERCHÁN, C. BUENO, C. RAMIREZ, D. PASTOR, M.C. VISO-LEÓN, L. MIRA-PASCUAL, J.V. TORRES-PÉREZ, J. JONES & S. MARTÍNEZ

B083 **Effect of specific culture conditions on differentiation of CD 133+/CD 133- umbilical cord blood cells into neural lineages**
L. SLOVINSKA, I. NOVOTNA, M. CIZEK, J. RADONAK & D. CIZKOVA

B084 **Treatment of children with severe head injury by umbilical cord blood nucleated cells: a pilot clinical study**
Z. SEMENOVA, Y. ROMANOV, N. SEMENOVA, O. KARASEVA, L. ROSCHAL, V. SMIRNOV & N.Y. SEMENOVA

B085 **Novel stem cell based therapy for the treatment of inflammation-induced fetal brain injury**
T. YAWNO, J. SCHUILWERVE, T.J. MOSS, P. VOSDOGANES, A.J. WESTOVER, G. JENKIN, E.M. WALLACE & S.L. MILLER

B086 **PKC inhibits myelin repair in the context of local demyelination induced in mice optic chiasm**
F. POURABDOLHOSSEIN, M. JAVAN, S. DEHGHAN, S. MOZAFARI, J. MIRNAJAFIZADEH & B. DEMENEIX

B087 **Studying the effect of cyclic AMP on the symptoms of EAE model of multiple sclerosis and myelin repair by neural stem cells in mice**
S. KHEZRI, M. JAVAN, S. SEMNANIAN & H. BAHARVAND

B088 **Nogo receptor knockdown in EAE-mice potentiates myelin repair by mobilizing endogenous neural stem cells**
M. JAVAN, S. KHEZRI, S. SEMNANIAN & H. BAHARVAND

B089 **Using human fetal neural stem cells or human induced pluripotent stem cell-derived neural precursors for the treatment of experimental spinal cord injury**
N. ROMANYUK, T. AMEMORI, K. TURNOVCOVA, P. JENDELOVA, B. ONTENIENTE, J. PRICE & E. SYKOVA

B090 **Intravascular administration of stem cells for neurological diseases: lessons from amyotrophic lateral sclerosis**
D. MITRECIC, C. NICAISE, S. GAJOVIC & R. POCHET

B091 **Irradiation promotes adult neural stem cells proliferation before acquisition of EGF-R**
M. DAYNAC, J.R. PINEDA, A. CHICHEPORTICHE, C. TRANCHEVENT, F. BOUSSIN & M.-A. MOUTHON

B092 **Neural stem cells-enriched tubulization improves anatomical and functional restoration of severed rat sciatic nerve**
L. VERGA FALZACAPPA, M. LANDO, R. TURRINI, A. MELATINI, R. MELE & G. LEANZA

B093 **Chances substantially increase survival of stem cells in host tissue by preconditioning of both stem cells as well as host tissue before implantation**
J. BURDA, V. DANIELISOVA, M. NEMETHOVA, M. GOTTLIEB & R. BURDA

B094 **Neural stem cells transplantation and treadmill training exercise for spinal cord injury**
D.H. HWANG, H.Y. SHIN, B.-Y. RYU & B.G. KIM

B095 **Effect of HCMV infection on expression of notch associated signaling molecules in human neural stem cells during differentiation into astrocytes**
X.-Q. LU

B096 **Neuronal differentiation of neural stem cells by a novel retinoic acid-loaded nanoparticles delivery system**
T. SANTOS, R. FERREIRA, J. MAIA, S. XAPELLI, L. CORTES, F. AGASSE, J. BRAGANÇA, L. FERREIRA, J.O. MALVA & L. BERNARDINO

B097 **A vascular niche factor for neural stem cells of the mammalian brain**
J. NAMIKI, S. SUZUKI, S. SHIBATA, Y. MATSUZAKI & H. OKANO

B098 **Cytokines produced by grafted neuroectodermal stem cells prevent motoneuron cell death**
K. PAJER, G. FEICHTINGER, D. KLEIN, H. REDL & A. NÓGRÁDI

B099 **The effect of BDNF and Adipose tissue derived stem cells transplantation on cognitive defecit in Alzheimer model of rats**
P. BABAEI, B. SOLTANI & A. ALIZADEH

B100 **SIKVAV-modified hydrogel scaffolds for neural differentiation and the treatment of spinal cord injury**
S. KUBINOVA, L. BARANOVICOVA, A. HEJCL, S. FOROSTYAK, D. ARBOLEDA & E. SYKOVA

B101 **Human adipose tissue-derived stem cell conditioned medium activates frataxin production in Friedreich's ataxia cells**
J. JONES, J. JARAMILLO-MERCHÁN, C. BUENO & S. MARTÍNEZ

B102 **Mesenchymal stem cells derived from adipose tissue increase vascularization and open field locomotion after spinal cord injury**
K. MENEZES, J.P. GONÇALVES, A.S. CRUZ, D.V. LOPES, M. BONAMINO, J.R.L. MENEZES, M.I.D. ROSSI & T. COELHO-SAMPAIO

B103 **Ontogeny-recapitulating generation and tissue integration of ES cell-derived Purkinje cells**
K. MUGURUMA, A. NISHIYAMA, Y. ONO, H. MIYAWAKI, T. HIRANO & Y. SASAI

B104 **Generation of cortical neurons from human embryonic stem cells and human induced pluripotent cells**
D. TORNERO & Z. KOKAIA

B105 **Influence of a delay between lesion and transplantation on neo-angiogenesis, cell proliferation and survival of cortical grafted embryonic neurons**
A. GAILLARD, S. PÉRON, F. DEBARBIEUX, P. WEBER, G. ROUGON & M. JABER

B106 **Induced PSA expression in ES-derived dopaminergic neurons improves graft/host integration and behavioral recovery in PD animals**
D. BATTISTA, Y. GANAT, U. RUTISHAUSER & L. STUDER

POSTER PRESENTATION

B107 **Efficient generation and developmental analysis of basal forebrain cholinergic neurons from mouse embryonic stem cells**
S. ISHII, Y. OKADA, F. MIYA, T. TSUNODA, T. SHIMAZAKI & H. OKANO

B108 **Modulation of neural differentiation of mouse embryonic stem cells by bradykinin**
I.C. NASCIMENTO, M.M. PILLAT, A.A. NERY & A.H. ULRICH

B109 **Evaluation of human iPS cells by neural differentiation and tumorigenicity**
Y. OKADA, F. MIYA, Y. KANEMURA, M. KOIKE, K. KOHDA, M. YUZAKI, Y. UCHIYAMA, T. TSUNODA, S. YAMANAKA & H. OKANO

B110 **Role of glioma stem-like cells in angiogenesis process during the glioblastoma development**
S. BULNES, Á. GARCÍA-BLANCO, H. BENGOETXEA, N. ORTUZAR, E.G. ARGANDOÑA, I. RICO-BARRIO & J.V. LAFUENTE

06. Excitable membranes & ion channels (Physiology)

B111 **Physiological and morphological features of layer II/III pyramidal cells in rat insular cortex**
K. ADACHI, N. KOSHIKAWA & M. KOBAYASHI

B112 **CCL2 increases Nav1.8 current and nociceptor excitability through a $G_{i/0}$ dependent-mechanism**
M. BELKOUCH, M.A. DANSEREAU, M. POHL, N. BEAUDET, A. CHRAIBI, S. MELIK-PARSADANIANTZ & P. SARRET

B113 **$Ca_V2.2$ Ca^{2+} channel peptides inhibit synaptic transmission and G protein modulation in superior cervical ganglion neurons (SCGNs)**
G. BUCCI, C. VOGL, S. MOCHIDA & G.J. STEPHENS

B114 **Sodium-activated potassium current functional expression in the vestibular afferent neurons of the rat**
B.S. CERVANTES, E.E. SOTO, R.S. VEGA & S.H. ZAMUDIO

B115 **Site specificity of hippocalcin signaling in dendrites of hippocampal neurons**
V.P. CHERKAS, N.I. KONONENKO, A.V. DOVGAN, L.P. HAYNES, R.D. BURGOYNE & P.V. BELAN

B116 **Enhanced dendritic action potential backpropagation in parvalbumin-positive basket cells during sharp wave activity**
B. CHIOVINI, G.F. TÚRI, G. KATONA, A. KASZÁS, D. PÁLFI, F. ERDÉLYI, G. SZABÓ, H. MONYER, A. CSÁKÁNYI, S.E. VIZI & B. RÓZSA

B117 **Localisation of $GABA_A$ receptor alpha subunits in the rat locus coeruleus**
N.L. CORTEEN, W. SIEGHART, A. BUTT & J.D. SWINNY

B118 **Serotonin induces central fatigue by inhibiting sodium channels at the axon initial segment of motoneurons**
F. COTEL, R. EXLEY, R.W. BERG, S. CRAGG & J.-F. PERRIER

B119 **IK_{Ca}-Ca_V3 complex reduces temporal summation of parallel fiber input in cerebellar Purkinje cells**
J.D.T. ENGBERS, D. ANDERSON, R. REHAK, H. ASMARA, W.H. MEHAFFEY, S. HAMID, B.E. MCKAY, M. KRUSKIC, G.W. ZAMPONI & R.W. TURNER

B120 **Structural and functional subdivision of the axon initial segment following activity-dependent plasticity**
M.S. GRUBB

B121 **Both A-current inactivation and EPSP decay rates increase during development in hippocampal CA1 neurons**
S. HONG & C.D. FIORILLO

B122 **Profound alterations in the intrinsic excitability of cerebellar Purkinje neurons following neurotoxin 3-acetylpyridine-induced ataxia in rat: new insights into the role of small conductance K^+ channels**
M.R. KAFFASHIAN, M. SHABANI, I. GOUDARZI, G. BEHZADI, A. ZALI & M. JANAHMADI

B123 **Spatial distributions of GABA receptors and local inhibition of spike-induced Ca^{2+} transients investigated with GABA uncaging in the dendrites of CA1 pyramidal neurons**
Y. KANEMOTO, M. MATSUZAKI, S. MORITA, A. MOMOTAKE & H. KASAI

B124 **Intrinsic discharge patterns of floccular purkinje cells in rat**
Y.G. KIM, C.H. KIM, Y.K. KIM, J. KIM & S.J. KIM

B125 **Lack of adaptation of interspike intervals in Purkinje cells of the vestibulocerebellum**
S.J. KIM, C.-H. KIM, Y.G. KIM, C.H. RYU & J. KIM

B126 **L-type calcium channels modulate hippocampal sharp wave - ripple activity**
S. KOUVAROS, H. POFANTIS & C. PAPATHEODOROPOULOS

B127 **Effect of inhibition and Ih in the control of spike timing during theta-frequency oscillation in an integrate-and-fire neuron model**
J. KWAG

B128 **Molecular mechanisms of persistent activity in the prefrontal cortex**
Y.-T. LEI, S. THUAULT, E.R. KANDEL & S.A. SIEGELBAUM

B129 **Unipolar brush cells generate delayed bursts under H-current control**
F. LOCATELLI, L. BOTTÀ, S. MASETTO & E. D'ANGELO

B130 **$GABA_A$ and $GABA_B$ receptors mediate tonic Inhibition of noradrenergic A7 neurons in rats**
H.-W. YANG, H.-Y. WANG, H.-C. LU & M.-Y. MIN

B131 **The $Ca_V2.3$ E/R-Type Ca^{2+} channel is a modulator of rodent sleep architecture**
A. MÜNCH, T. PROF. SCHNEIDER, R. MÜLLER & M. PD DR. DR.WEIERGRÄBER

B132 **Erg potassium channels in vestibular afferent neurons isolated from the rat**
M.C. PEREZ FLORES, E. SOTO & R. VEGA

B133 **Serotonergic modulation of excitability in a cerebellar interneuron**
A. POLENGHI & L. FORTI

B134 **Interaction between low voltage activated calcium channels (Cav3) and large conductance calcium and voltage activated potassium channels (BK)**
R. REHAK, C. BLADEN, R.W. TURNER & G.W. ZAMPONI

B135 **Contribution of BK channels to action potential repolarization at minimal cytosolic Ca^{2+} concentration in chromaffin cells**
R. SCOTT, D. BUSTILLO-MERINO, L. OLIVOS-ORÉ, M.V. BARAHONA, I. CUCHILLO-IBAÑEZ & A.R. ARTALEJO

B136 **Revisiting inward rectification: K ions permeate through Kir2.1 channels during high-affinity block by spermidine**
R.-C. SHIEH

B137 **Acid-sensing ion channel 3 (ASIC3) in the trigeminal mesencephalic neurons**
Y.-H. SU, C.-C. CHEN & M.-Y. MIN

B138 **An immunohistochemical study of $GABA_A$ and glycine receptor subunits in the adult human hypoglossal nucleus**
H.J. WALDVOGEL, F.M. BIGGINS, K. BAER, M.I. REES & R.L. FAULL

B139 **Resting potassium currents in rat prefrontal cortex pyramidal neurons**
G. WITKOWSKI, A. KSIAZEK & P. SZULCZYK

07. Synaptic transmission & signal transduction (Trafficking & signalling)

B140 **Interactions between P2X and $GABA_A$ receptors in the central nervous system**
J. ANDREW, O. PALYGIN & Y. PANKRATOV

B141 **Microparticles shed from microglia represent a new pathway of glia-to-neuron communication**
F. ANTONUCCI, E. TUROLA, L. RIGANTI, M. CALEO, C. PERROTTA, E. CLEMENTI, P. GIUSSANI, P. VIANI, M. MATTEOLI & C. VERDERIO

B142 **TRP, TRPL and cacophony channels mediate Ca^{2+} influx and exocytosis en photoreceptor synaptic terminals**
J. BACIGALUPO, G. ASTORGA & M. SANHUEZA

B143 **Chronic high glucose does not affect the content and distribution of several exocytotic and vesicular proteins in primary retinal cell cultures**
F.I. BAPTISTA, A. CASTILHO, J.M. GASPAR, J. LIBERAL, C. AVELEIRA & A.F. AMBRÓSIO

B144 **Muscarinic receptors may suppress slow afterhyperpolarization by decreasing hippocalcin translocation to its membrane targets**
A.V. DOVGAN, N.I. KONONENKO, V.P. CHERKAS, T.M. TSUGORKA, L.P. HAYNES, R.D. BURGOYNE & P.V. BELAN

B145 **Decoding transcriptional networks in activity-dependent gene expression: a comparative genomics study of CREB, SRF, EGR1 and FOS regulons**
E. BENITO, L.M. VALOR & A.L. BARCO

B146 **Studying the Ras-ERK pathway through single-cell analysis in acute brain slices**
I.M. MORELLA & R. BRAMBILLA

B147 **Characterization of Ca^{2+} influx and vesicle exocytosis in synaptic terminals of SNAP-$25^{+/-}$ mice**
S. CHANG & H. TASCHENBERGER

B148 **PAK3 and its splice variants form regulatory heterodimers with PAK1 in brain**
G. COMBEAU, P. KREIS, V. ROUSSEAU, M. AMAR, P. FOSSIER & J.-V. BARNIER

B149 **A_1-A_{2A} heteromer is coupled to both G_s and $G_{i/0}$ protein**
S. CRISTOVAO-FERREIRA, S.H. VAZ, J.A. RIBEIRO & A.M. SEBASTIAO

B150 **Calmyrin2 involvement in vesicular trafficking mediated by the interaction with SNARE proteins**
K. DEBOWSKA, M. BLAZEJCZYK, C. HOOGENRAAD, J. JAWORSKI, J. KUZNICKI & U. WOJDA

B151 **Characterization and regulation of diacylglycerol lipase in isolated nuclei from rat cerebellum**
V.L. GAVEGLIO, S.J. PASQUARÉ & N.M. GIUSTO

B152 **A role of endophilin A in clathrin coated vesicles uncoating at neuronal synapses**
S. GIOVEDI, I. MILOSEVIC, X. LOU, A. RAIMONDI, S. PARADISE, F. BOSCO, F. BENFENATI, O. CREMONA & P. DE CAMILLI

B153 **Compared distribution of CB1 and mGluR2/3 receptors in the dentate gyrus of the mouse**
S.M. GÓMEZ-URQUIJO, A. RAMOS-URIARTE, I. ELEZGARAI, N. PUENTE & P. GRANDES

B154 **Characterization of BDNF expression and function in cultured Bergmann glial cells**
A.M. GUILLEM, I. POBLETE-NAREDO, L.C.R. .HERNANDEZ-KELLY, E. LOPEZ-BAYGHEN & A. ORTEGA

B155 **NMDA receptors containing the NR2B (GluN2B) subunit are critical for synapse development, homeostatic synaptic plasticity, and social behavior**
C.-C. WANG, B. NAKASHIMA, S.-C. CHANG, A. GHOSH & B. HALL

POSTER PRESENTATION

B156 **Arginylated calreticulin: a pro-apoptotic protein?**
C. LOPEZ SAMBROOKS, M.A. CARPIO & M.E. HALLAK

B157 **Functional expression of choline transporter-like protein 1 (CTL1) in human neuroblastoma cells and its link to acetylcholine synthesis**
M. INAZU, T. YAMADA, H. TAJIMA, T. MATSUMIYA & K. NISHIOKA

B158 **Fibroblast growth factor homologous factor 1 (FHF1/FGF12) regulates neuronal morphology by interaction with NEMO/IKKγ in the axon-initial segment of adult neurons and negative modulation of constitutive NF-κB signaling**
H.-G. KÖNIG, B.J. FENNER, R.F. SCHWAMBORN, T. BERNAS & J.H. PREHN

B159 **Histone Deacetylase 6 regulates the acute stress-induced enhancement of glutamatergic signaling in the prefrontal cortex**
J.B. LEE & Z. YAN

B160 **Actin dependent recruitment of reluctant SVs into the fast releasing pool at the calyx of Held**
J.S. LEE, W.-K. HO & S.-H. LEE

B161 **Extracellular cGMP modulates presynaptic kainate receptors**
M. MARCOLI, C. CERVETTO, M.C. MAZZOTTA, D. FRATTAROLI & G. MAURA

B162 **GLAST/EAAT1-dependent signaling in cultured Bergmann glia**
Z. MARTINEZ-LOZADA, L.C.R. HERNANDEZ-KELLY & A. ORTEGA

B163 **Regulation of phosphatidylcholine-derived signaling during oxidative stress. Participation of synaptic membrane rafts**
M.V. MATEOS, G.A. SALVADOR & N.M. GIUSTO

B164 **Cellular and synaptic localization of EAAT2a in human cerebral cortex**
M. MELONE, M. BELLESI, A. DUCATI, M. IACOANGELI & F. CONTI

B165 **Insights into the role of PKC-dependent ubiquitination and phosphorylation on the glycine transporter 1 function**
S.P. BARRERA, J. VARGAS-MEDRANO, F. PLENGE, V. CASTREJON & M. MIRANDA

B166 **Functional interaction between alphaCaMKII and GluN2B controls ERK-dependent structural plasticity**
O. NICOLE, F. ELGAAMOUCH, O. MOUSTIÉ, M. LEMIEUX, P. DE KONINCK & A. BUISSON

B167 **Structural basis and functional consequences of the interaction of NMDA receptor 2B subunit with calcium/calmodulin-dependent protein kinase II**
M. MADHAVAN, A. G.M., R. PRABHU, J. CHERIYAN & R.V. OMKUMAR

B168 **Gephyrin regulates GABAergic and glutamatergic synaptic transmission in hippocampal cell cultures**
R. PIZZARELLI, Z. KASAP VARLEY, R. ANTONELLI, S. STANCHEVA, E. CHERUBINI & P. ZACCHI

B169 **Nitric oxide canonical pathway modulates ascorbate uptake and SVCT-2 expression in cultured retinal cells: involvement of NF-κB signaling**
C.C. PORTUGAL, T.G. ENCARNAÇÃO, R. SOCODATO & R. PAES-DE-CARVALHO

B170 **Mctp1 is expressed in the CNS and involved in regulation of neuronal exocytosis**
L. QIU & F. LIANG

B171 **Modulation of endoplasmic reticulum structure and function in neurons**
O.A. RAMÍREZ, M. JAUREGUIBERRY, M. OSORIO-REICH, T. ASAHI, J. ORTEGA, A. COUVE & S. HÄRTEL

B172 **Imaging Delta Opioid Receptor trafficking in acute hippocampal slices using fluorescent DOR-eGFP *knock-in* mice**
X. REZAÏ, M.J. ROUX, A. MATIFAS, J.-L. VONESCH, B.L. KIEFFER & D. MASSOTTE

B173 **Dopamine D1R activation triggers Erk1/2 activation in striatal neurons through the interaction with the protein tyrosine phosphatase Shp-2**
D. SAVOLDI, P. SAVOIA, C. FIORENTINI, C. MATTANZA, G. COLLO, P.F. SPANO & C. MISSALE

B174 **Neuronal glycoprotein M6a induces filopodia formation via association with cholesterol-rich lipid rafts**
C. SCORTICATI, K. FORMOSO & A.C. FRASCH

B175 **Approach for photic entrainment mechanisms of circadian clock via SCOP signaling**
K. SHIMIZU & Y. FUKADA

B176 **A novel intersectin-mediated mechanism for synaptic vesicle clustering**
A. PECHSTEIN, J. BACETIC, W. JIAO, F. ONOFRI, E. SOPOVA, F. BENFENATI, V. HAUCKE & O. SHUPLIAKOV

B177 **Membrane lipid rafts are required for D2 dopamine receptor signaling**
D.R. SIBLEY, L.A. HAZELWOOD, R.A. ROOF, R.B. FREE, S.M. VANDERWERF, Y. HAN, K.A. NEVE & J.A. JAVITCH

B178 **The two transcription factors Sp1 and CREB regulate NCX1 and NCX2 expression and activity through ERK1/2 and p38 map kinases in PC12 cells**
R. SIRABELLA, A. SECONDO, A. PANNACCIONE, P. MOLINARO, M. CATALDI, G. DI RENZO & L. ANNUNZIATO

B179 **AMPA-coupled nitric oxide (NO) production regulates Src tyrosine kinase activation in retinal cells**
R. SOCODATO, F. SANTIAGO, C.C. PORTUGAL, A.R. SANTIAGO, A.F. AMBRÓSIO & R. PAES-DE-CARVALHO

B180 **Molecular and morphological configuration for 2-arachidonoylglycerol-mediated retrograde signaling at mossy cell-granule cell synapses in the dentate gyrus**
M. UCHIGASHIMA, M. YAMAZAKI, M. YAMASAKI, A. TANIMURA, K. SAKIMURA, M. KANO & M. WATANABE

B181 **Deprivation of anticipated food under scheduled feeding induces c-Fos expression in the caudal part of the arcuate nucleus of hypothalamus through histamine receptors in rats: potential involvement of E3 subgroup of histaminergic neurons in the tuberomammillary nucleus**
H. UMEHARA, H. FUKUI, H. MIZUGUCHI, N. TAKEDA, E. SENBA, Y. HAYASHI & N. ISHIMARU

B182 **Role of TBC1D24 and the protein partner ARF6 at the synapse:**
M. FADDA, N. VANNI, A. FALACE, P. LIPPIELLO, F. ONOFRI, P. BALDELLI, F. ZARA, F. BENFENATI & A. FASSIO

B183 **Modulation of GAT-1 transporter in astrocytes by BDNF involves the truncated form of TrkB receptors coupled to a non-classic PLC-γ/PKC-δ and Erk/MAP kinase pathway**
S.H. VAZ, S. CRISTOVAO-FERREIRA, J.A. RIBEIRO & A.M. SEBATIAO

B184 **Scanning mutagenesis of the I-II loop of the Cav2.2 calcium channel identifies residues Arginine 376 and Valine 416 as molecular determinants of voltage dependent G protein inhibition**
L.B. VIEIRA, W.H. TEDFORD, A.E. KISILEVSKY, D. VARELA, L. CHEN & G.W. ZAMPONI

B185 **Distribution of interleukin-1 receptor complex at the synaptic membrane driven by interleukin-1beta and NMDA stimulation**
F. GARDONI, M. BORASO, E. ZIANNI, E. CORSINI, C.L. GALLI, F. CATTABENI, M. MARINOVICH, M. DI LUCA & B. VIVIANI

B186 **Vesicle circulation distributes and optimizes synaptic neuropeptide release**
M.Y. WONG, D.L. DEITCHER, C. ZHOU & E.S. LEVITAN

08. Neural plasticity (Signalling & synaptic plasticity II)

B187 **Over-expression of GAP-43 induces cytoskeleton modifications in injured Purkinje cell axons**
E. PAJAJ, A. BUFFO, F. ROSSI & D. CARULLI

B188 **Activation of Rho GTPases triggers dendritic spine remodeling and functional plasticity in the adult rat visual cortex**
C. CERRI, A. FABBRI, E. VANNINI, M. SPOLIDORO, M. COSTA, L. MAFFEI, C. FIORENTINI & M. CALEO

B189 **Stochasticity of the induction of cerebellar long-term depression: a signaling pathway modeling study**
G. ANTUNES & E. DE SCHUTTER

B190 **The effects of NMDA subunit composition on calcium influx and spike timing-dependent plasticity in striatal medium spiny projection neurons**
R.C. EVANS, T. MORERA-HERRERAS, Y. CUI, K. DU, T. SHEEHAN, J. HELLGREN KOTALESKI, L. VENANCE & K.T. BLACKWELL

B191 **The role of stress-regulated glycoprotein M6a in neuronal growth and plasticity**
B. FUCHSOVA, A. ALVAREZ JULIÁ & A.C. FRASCH

B192 **Role of gephyrin for differentiation of newborn olfactory bulb neurons in adult mice**
M. GRABIEC, F. DEPREZ, V. DUVEAU, J.-M. FRITSCHY & S. TYAGARAJAN

B193 **Calcium stores and synaptic plasticity in the ventral and dorsal hippocampus**
G. GRIGORYAN & M. SEGAL

B194 **Effects of PSA-NCAM removal in the interneuronal structural plasticity**
R. GUIRADO, M. PEREZ-RANDO, D. SANCHEZ-MATARREDONA, U. MARTI-MENGUAL & J. NACHER

B195 **Repeated sexual experience increases long-term gene expression of the GluR2 subunit of the AMPA receptor, but does not alter trafficking of either GluR1 or GluR2**
V.L. HEDGES & R.L. MEISEL

B196 **Chronic blockade of adenosine A_{2A} receptors abolish BDNF effect on hippocampal LTP**
A. JERÓNIMO-SANTOS, V.L. BATALHA, C. MÜLLER, J. HOCKEMEYER, A.M. SEBASTIÃO, L.V. LOPES & M.J. DIÓGENES

B197 **BDNF induces matrix metalloproteinase 9 (MMP-9) expression in neurons via serum response factor/c-Fos pathway**
B. KUZNIEWSKA, M. BLAZEJCZYK, A. MALIK, J. JAWORSKI, L. KACZMAREK & K. KALITA-BYKOWSKA

B198 **In vitro and in vivo analysis of dendritic AMPA receptor mRNAs trafficking**
L. LA VIA, A. BARBON, C. ORLANDI, D. BONINI, I. RUSSO & S. BARLATI

B199 **The regulatory role of proheparanase in synaptic plasticity at the hippocampus**
C.W. MA, W.C. CHAM, C.H. LAI, Y.S. CHAN & D.K.Y. SHUM

B200 **Wilm's Tumor 1, a new candidate in synaptic plasticity**
C. MARIOTTINI, J.M. SECO, R.D. BLITZER & R. IYENGAR

B201 **Ecto-metallopeptidase bound to plasma membrane of the nerve cells**
M.I. MOSEVITSKY & E.S. KROPOTOVA

B202 **Cholinergic modulation of CA1 synapses by the muscarinic M_1 receptor subtype in rat hippocampal slices**
M.V. OBERHOLZER, E. KORNISIUK, F. URBANO, C. CERVEÑANSKY, D. SERVENT & D.A. JERUSALINSKY

POSTER PRESENTATION

B203 **Use of phospho-Trk enzyme-linked immunosorbent assay (ELISA) to study neurotrophin-induced Trk activation in cultured cells: focus on BDNF-TrkB signalling**
T. RANTAMÄKI, H. ANTILA, H. AUTIO, L. VESA & E. CASTREN

B204 **Possible involvement of the ERK-CREB pathway in the developmental and lesion-induced plasticity of the superior colliculus**
L. RUIZ, G. VIERCI, C.S. OLIVEIRA, R.B. LEAL & F.M. ROSSI

B205 **Probable mechanisms of Ca^{2+}-dependent quantal size regulation in mouse motor terminals**
O. SKITEVA, V. LAPTEVA & O. BALEZINA

B206 **Role of LIS1 in synaptogenesis and plasticity**
A. SUDAROV, F. GOODEN, W. GAN & M.E. ROSS

B207 **Modulation of hippocampal long-term potentiation by activation of the muscarinic acetylcholine receptors involves the inhibition of Kv7/M potassium channels**
E. SUZUKI & T. OKADA

B208 **Colocalization of membrane-associated prostaglandin E synthase-2 and prostaglandin E_2 receptor EP in the rat cerebellum**
T. SUZUKI-YAMAMOTO, C. IMURA, R. NAKAJIMA, K. TOIDA, K. ISHIMURA, Y. KAWAKAMI & Y. TAKAHASHI

B209 **Live imaging of forskolin induced changes in spine morphology accompanied by enhanced MMP-9 activity**
Z. SZEPESI, M. BIJATA, P. ALOT, B. RUSZCZYCKI, J. WLODARCZYK & L. KACZMAREK

B210 **Astrocytes as possible targets of psychopharmacological compounds and conductors of synaptic plasticity**
S. TANASIC, B. DI BENEDETTO, E.M. WAGNER, R. RUPPRECHT & G. RAMMES

B211 **Different time exposure to an enriched environment modifies the expression of brain-derived neurotrophic factor in the cerebellum**
D. VAZQUEZ SANROMAN, C. SANCHIS SEGURA, J. MANZO & M. MIQUEL

B212 **$GABA_{B1a}$ receptor isoform controls plasticity state of hippocampal boutons**
I. VERTKIN, T. LAVIV, B. BETTLER & I. SLUTSKY

B213 **Homeostatic NMDA receptor down-regulation via brain derived neurotrophic factor and nitric oxide-dependent signaling in cortical but not in hippocampal neurons**
R. SANDOVAL, A. CAVIEDES, A. GONZALEZ, F. PANCETTI & U. WYNEKEN

B214 **Activity-dependent change in AMPA-receptor trafficking investigated by photolysis of a caged inhibitory peptide in cerebellar Purkinje cell**
K. YAMAGUCHI, Y. TATSU, S. NAGAO & M. ITO

B215 **Acute modulation of hippocampal long-term synaptic plasticity by extracellular iron**
W.-H. YUNG, Y.-Y. LEUNG, J.Y.C. CHOI & Y. KE

11. Sensory systems (Auditory systems & sleep)

B216 **P2X7 receptor as a candidate for glutamate release in cochlear cells**
S. ALLOISIO, C. CERVETTO, R. BARBIERI, M. MAZZOTTA, D. FRATTAROLI, M. MARCOLI, G. MAURA & M. NOBILE

B217 **The cholinergic basal forebrain in the ferret and its inputs to the auditory cortex**
V.M. BAJO LORENZANA, N.D. LEACH, P.M. CORDERY, F.R. NODAL & A.J. KING

B218 **Persistent influence of the early acoustic environment on inferior colliculus neurons**
J. BARTOSOVA, Z. BURES, T. CHUMAK, J. POPELAR & J. SYKA

B220 **Task-dependent neuronal activity in the auditory cortex of nonhuman primates**
M. BROSCH, M. BABANIN, E. SELEZNEVA, Y. HUANG & H. SCHEICH

B221 **Change in cerebral serotonin activity in tinnitus: an intensity dependence of auditory evoked potentials study**
G. CARTOCCI, G. ATTANASIO, N. LOCURATOLO, C. PAULETTI, F. FATTAPPOSTA & R. FILIPO

B222 **Conditional overexpression of Isl1 results in vestibular and hearing abnormalities in mice**
T. CHUMAK, G. PAVLINKOVA, L. KUTHANOVA, R. BOHUSLAVOVA, D. BUCKIOVA & J. SYKA

B223 **Auditory cortex tonic activity modulates cochlear responses in chinchillas**
A. LEON, D. ELGUEDA, M.A. SILVA, C.M. HAMAME & P.H. DELANO

B224 **Tonotopic map plasticity in mature auditory cortex following passive exposure to behaviorally-irrelevant sounds**
J.J. EGGERMONT

B225 **Reactive oxygen species (ROS) and noise-induced hearing loss (NIHL): time sequence of ROS generation and of functional/morphological changes in the cochlea**
S.L.M. ERAMO, R. ROLESI, P. DE BARTOLO, L. PETROSINI, D. TROIANI & A.R. FETONI

B226 **Comparison of task related plasticity in primary and secondary auditory cortex in the ferret**
J.B. FRITZ, S. ATIANI & S.A. SHAMMA

B227 **Multiple critical periods of the developing auditory cortex**
M.N. INSANALLY, H. KOVER, H. KIM, B. ALBANNA & S. BAO

B228 **Acoustic saliency represented in Mismatch Negativity in rat auditory cortex**
T. ISOGUCHI, R. KANZAKI & H. TAKAHASHI

B229 **Expression of TMEM16A/anoctamin 1, A calcium-activated chloride channel in the mouse cochlea**
I.-B. KIM, J.H. JEON, J.W. PARK, J.W. LEE, S.W. JEONG, S.W. YEO & M.-H. CHUN

B230 **The function of TRP channels in drosophila auditory transduction**
B. LEHNERT & R. WILSON

B231 **Plasticity in the neural processing of auditory feedback during self-vocalization following short-term pitch training**
Z. CHEN, F.C.K. WONG, P. LIU, D. HUANG & H. LIU

B232 **Development of the telencephalic song nuclei of male and female blue capped cordon bleus (*Uraeginthus cyanocephalus)***
M.N. LOBATO, S.M.A. LIMA, N. GEBERZHAN & M. GAHR

B233 **Characterization of glycinergic inhibition to MNTB principal cells**
F. MAYER, M. NELSEN & A. KLUG

B234 **Protein transduction into the otocyst utilizing poly-arginine**
T. MIWA, R. MINODA, M. ISE, E. YUMOTO, T. KAITSUKA & K. TOMIZAWA

B235 **Beneficial effect of vinpocetine treatment on sensorineural hearing loss**
V. NEKRASSOV & M. SITGES

B236 **The prosensory function of notch in the ear is mediated by Sox2**
J. NEVES & F. GIRALDEZ

B237 **The global features and substructure of functional network in the auditory cortex for stream segregation**
T. NODA, R. KANZAKI & H. TAKAHASHI

B238 **Estrogen signaling impacts linear aspects of song coding, determines mutual information and discriminability between coded songs**
R.R. PINAUD & L.A. TREMERE

B239 **Neurogenic vestibular evoked potentials: a new method of non-invasively recording function from the vestibular nervous system**
E.S. PAPATHANASIOU & S.S. PAPACOSTAS

B240 **Diffusion tensor imaging of connections between human auditory and somatosensory cortex**
T. RO, T. ELLMORE & M. BEAUCHAMP

B241 **A comparison of the effect of contralateral acoustic stimulation on cochlear potentials in the awake and anesthetized chinchilla**
C. AEDO, E. TAPIA, E. PAVEZ & L. ROBLES

B242 **Development of the acoustic startle response in normal and noise-exposed rat pups**
N. RYBALKO, T. CHUMAK, J. POPELAR, Z. BURES & J. SYKA

B243 ***FGF10* gene expression patterns in the developing chicken inner ear**
L.O. SÁNCHEZ-GUARDADO, L. RODRÍGUEZ-GALLARDO, L. PUELLES & M. HIDALGO-SANCHEZ

B244 **Identification of injection sites for recombinant pseudorabies virus strains injected into the auditory cortex as retrograde tracers**
É.R. SZABÓ, D. TOMBÁCZ, Z. BOLDOGKŐI, M. PALKOVITS & Á. DOBOLYI

B245 **Developmental acquisition of auditory responsiveness in zebrafish**
M. TANIMOTO, M. INOUE & Y. ODA

B246 **Activation of group II metabotropic glutamate receptors modulates short-term plasticity of glutamatergic and GABAergic responses through glutamate spillover in the central nucleus of the inferior colliculus**
R. FARAZIFARD & S.H. WU

B247 **The expression of the $GABA_BR1$ and $GABA_BR2$ receptor subunits in the rat's central auditory structures**
L. JAMAL & H. ZHANG

B248 **Stress and insomnia prevalence in internally displaced persons**
N. DARCHIA, T. BASISHVILI, M. ELIOZISHVILI, L. MAISURADZE, N. LORTKIPANIDZE, N. NACHKEBIA, T. ONIANI & I. GVILIA

B249 **Cholinergic interaction between medial preoptic area and pedunculo pontine tegmentum in the regulation of sleep**
A. JIMENEZ-ANGUIANO, N. GARCIA-CÁRDENAS, E. VÁZQUEZ-SALAZAR, P. POSADAS RODRÍGUEZ & J. VELÁZQUEZ-MOCTEZUMA

B250 **Projections from sleep/arousal-related hypothalamic nuclei to the mesopontine cholinergic complex in the rat**
H.S. LEE

12. Motor systems (Mechanisms)

B251 **Lower brainstem connections of nucleus accumbens of the domestic chick**
E. BÁLINT & A. CSILLAG

B252 **Millisecond-precise timing of sensory information coding in Purkinje cells of rat cerebellum**
R.K. BHUVANASUNDARAM, P. LOMBARDO & E. D'ANGELO

B253 **Non-collateral and collateral projections from the dorsal column nuclei to the cerebellar caudal vermis: double fluorescent labeling in the rabbit**
D. BUKOWSKA, L. ZGUCZYNSKI & B. MIERZEJEWSKA-KRZYZOWSKA

POSTER PRESENTATION

B254 **When a motor task resembles a linguistic task: the contribution of the N400 ERP effect**
C.L. CALDIROLI & M. BALCONI

B255 **Motor program selection: impact of dynamic changes in extraneuronal milieu**
V. DYAKONOVA, Y. CHISTOPOLSKY, T. DYAKONOVA, I. ZAKHAROV & D. SAKHAROV

B256 **Virtual embodiment elicits a mu rhythm ERD when the virtual hand is threatened**
M. GONZÁLEZ-FRANCO, T.C. PECK & M. SLATER

B257 **Perception of human action-related sounds in altered acoustic environments: a mismatch negativity study**
L. GRISONI, E.F. PAVONE, M. PAZZAGLIA & S.M. AGLIOTI

B258 **Motoneurons are not involved in temporal summation of sensory information**
R. GUZULAITIS, A. ALABURDA, O. RUKSENAS, R. BUISAS & J. HOUNSGAARD

B259 **Effect of low protein diet on Purkinje cells of cerebellum**
G. HASSANZADEH, F. ATTARI, M. AZARNIA, H. HAMDOLLAHZADEH, M. JAVADI & R. GHORBANI^

B260 **Influence of vibration on plasticity of hypothalamic-vestibular connection**
K.V. MELKUMYAN, S.H. SARKISYAN & S.M. MINASSIAN

B261 **Mirror neurons and virtual reality: an fMRI study within a complex interactive environment**
C. MODROÑO, G. NAVARRETE, F. MARCANO, A.F. RODRÍGUEZ-HERNÁNDEZ, M. FERRER, Y. MARCELINO, M.A. LEÓN & J.L. GONZÁLEZ-MORA

B262 **Prefrontal motor-monitoring area prior to the EMG onset, as monitored on EEG beta band**
A. MORI, K. OKI, R. KOSHIZAWA, M. TAKAYOSE, T. OZAWA, N.T. MINAKAWA & Y. KITA

B263 **Is there a "motor pallium" in the lamprey?**
F.M. OCAÑA, K. SAITOH, F. RODRÍGUEZ, B. ROBERTSON & S. GRILLNER

B264 **A morphological analysis of sources of input to four types of spinocerebellar tract neurons in the cat lumbar spinal cord**
S. SHAKYA SHRESTHA, B.A. BANNATYNE, E. JANKOWSKA, I. HAMMAR, E. NILSSON, M. WATANABE & D.J. MAXWELL

B265 **Gene transfer into the chick by using Tol2 transposition for studying the nervous system development**
M. SHIBATA & N. SATO

B266 **Development in pathway-selective gene delivery and neuronal ablation with enhanced retrograde transfer of a modified lentiviral vector in primate brain**
K.-I. INOUE, S. KATO, K. KOBAYASHI & M. TAKADA

B267 **Emergence of correlated spontaneous activity in the zebrafish spinal cord**
E. WARP, G. AGARWAL, C. WYART, F. DEL BENE, A.B. ARRENBERG, H. BAIER & E.Y. ISACOFF

B268 **Organization of projection from the medullary reticular nuclei to the pyramis and uvula in the rabbit cerebellum**
L. ZGUCZYŃSKI, D. BUKOWSKA & B. MIERZEJEWSKA-KRZYŻOWSKA

B269 **Preliminary central nervous system effects of the aqueous seed extract of *Mucuna pruriens* in mice**
R.A. MAGAJI, S.A.I. MALAJIYA, M.G. MAGAJI & B. IBRAHIM

13. Learning & memory (Physiology & clinical aspects)

B270 **Gating of activity propagation in the hippocampus by dentate gyrus synaptic plasticity**
E. ÁLVAREZ, C. QUESADA, V. MAKAROV, O. HERRERAS & S. CANALS

B271 **The processing of spatial and temporal features of sequential movements is associated with distinct changes in activity of two classes of neurons in the primate putamen**
P. APICELLA, M. DEFFAINS & E. LEGALLET

B272 **Juxtacellular recording and labeling in the cerebral cortex of freely moving rodents**
R.G. AVERKIN

B273 **RO4938581, a GABA-A α5 selective inverse agonist modulates γ oscillations in hippocampal brain slices recorded with high-resolution microelectrode arrays**
I. BALDINOTTI, G. TRUBE, U. HUMBEL, A. HIERLEMANN & F. KNOFLACH

B274 **The cerebellum and perceptual learning**
C. DELUCA, A. GOLZAR, E. SANTANDREA, E. LO GERFO, J. ESTOCINOVA, A. MORTARO, G. MORETTO, A. FIASCHI, C. TOMASELLO, C. MARIOTTI, M. TINAZZI & L. CHELAZZI

B275 ***c-Fos* induction in the rat amygdala in response to the intake of a glucose-saccharin solution**
J. DELA CRUZ, K. KEST, G. FITZGERALD, T.R. COKE, C. SAMPSON, R. RANALDI, K. TOUZANI, A. SCLAFANI & R.J. BODNAR

B276 **Working memory tasks reflections on electrical activity of the brain**
A.A. ELBAZ, A.M. AMEEN, A. OSSAMA & M.A. ELBARBARY

B277 **Functional role of c-Fos in sound frequency discrimination**
D. GIEREJ, V. LIOUDYNO, M. MIKOSZ, A. NOWAK, M. BLAZEJCZYK, R.K. FILIPKOWSKI, J. JAWORSKI, L. KACZMAREK & E. KNAPSKA

B278 **Theta band encoding of novelty within the dorsal subiculum**
P.T. HUERTA & E.H. CHANG

B279 **The influence of fear conditioning on activation of Guinea pig auditory cortex in the absence of sound**
Y. IDE, M. TAKAHASHI, J. LAUWEREYNS, G. SANDNER, M. TSUKADA & T. AIHARA

B280 **Age-related changes in the hippocampal sharp wave-ripple activity**
D. KOTZADIMITRIOU & C. PAPATHEODOROPOULOS

B281 **Dynamic oscillations during contextual fear conditioning**
A.C. KUNICKI, B.S. MACHADO, E. MORYA, S. RIBEIRO & K. SAMESHIMA

B282 **Hippocampal subfield patterns of activity along rostrocaudal axis are differently affected by visual information, spatial novelty and locomotion in open field**
P. KUPTSOV & M.G. PLESKACHEVA

B283 **A new interneuron class in CA1 gates asynchronous inputs to pyramidal cell dendrites**
K.E. LEAO, A. TORT, N. CHETAN, K. KULLANDER & R.N. LEAO

B284 **Reward-contingent sensory responses in paraventricular thalamus of freely-moving rats**
Y. LI & B.I. HYLAND

B285 **Post training sleep rebound disrupts memory retention and sleep wake cycle sequential pattern in rats**
K.M. MOREIRA, D.C. HIPOLIDE, P.A. TIBA, J.R. SATO, S. TUFIK & M.G. OLIVEIRA

B286 **Oscillatory activity predicts learning which predicts the survival of new neurons in the hippocampus**
M.S. NOKIA & T.J. SHORS

B287 **Cholinergic denervation disrupts temporal learning in rodent visual cortex**
E.B. ROACH & M.G. HUSSAIN SHULER

B288 **Electrophysiological characteristics of CA1 pyramidal neurons in medial hippocampus of mouse at early and late phases of spatial learning**
V. SABANOV, I. GANTOIS, E. ISCRU, R. D'HOOGE & D. BALSCHUN

B289 **Different compartments of apical CA1 dendrites have different plasticity thresholds for expressing synaptic tagging and capture**
S. SAJIKUMAR & M. KORTE

B290 **Storage capacity of phase-coded patterns in sparse neural networks**
S. SCARPETTA, F. GIACCO & A. DE CANDIA

B291 **Reorganization of spatial maps in the hippocampal circuit**
F. STELLA & A. TREVES

B292 **Genetic and correlation analyses of hippocampus-dependent learning in Carousel arena and spontaneous behavior in the open-field test**
A. STUCHLIK, H. HATALOVA, A.N. GRZYB, T. PETRASEK, I. PROKOPOVA, R. OVERALL, J. SILHAVY, V. ZIDEK, G. KEMPERMANN, M. PRAVENEC & K. VALES

B293 **Ouroboros model mapped to brain**
K. THOMSEN

B294 **Reminder-induced recovery of fear memory impaired by inhibition of protein synthesis in mice**
K. ANOKHIN, S. ZWORYKINA, E. AMELCHENKO, D. BEZRYADNOV & S. CHEKHOV

B295 **Stress: is it good for memory persistence?**
D.M. BARROS, G.M. PARFITT, A.K. BARBOSA, R.C. COSTA & A. KOTH

B296 **Effect of desensitization on remote contextual fear memory**
V. CESTARI, S. CANNAS, D. SARAULLI, C. ROSSI-ARNAUD & M. COSTANZI

B297 **Effect of maternal separation on fear conditioning and extinction in adolescent rats**
A. CHOCYK, A. PRZYBOROWSKA, D. DUDYS, I. MAJCHER & K. WEDZONY

B298 **Prior history of attentional contingencies interferes with decision making without necessarily becoming declarative knowledge**
C.M.C. CORRÊA & G.F. XAVIER

B299 **Preconditioning effect of intermittent normobaric hypoxia**
K. DEYKUN, M. POMETLOVÁ, J. MAREŠ & O. RAŠKA

B300 **Effect of one-month diabetic mice on learning and memory retrieval using step-down method**
M. ESLAMI, M. NASIRI

B301 **Glucocorticoids in the insular cortex enhance memory consolidation of different components of the inhibitory avoidance training**
R.V. FORNARI, R. WICHMANN, E. ATUCHA, T. DESPREZ & B. ROOZENDAAL

B302 **A high fat and refined sugar diet effects cognitive function and protein expression in the hippocampus and prefrontal cortex of the rat**
H. FRANCIS, M. PARDEY, P. HAYNES & J. CORNISH

B303 **Influence of dexamethasone on survival and adult behaviour of perinatally stressed Swiss mice**
M. GAJERSKA, A. GŁOWACZ, K. TURLEJSKI & R.L. DJAVADIAN

B304 **Reconsolidation of recognition memory: evidences from a paradigm of retroactive interference**
R. MELANI, T. PIZZORUSSO & N. BERARDI

POSTER PRESENTATION

B305 **Development of a voltage-sensitive probe system and viral vector for optical visualization of activity in specific neurons**
S. OHARA, S. SATO, K.-I. TSUTSUI & T. IIJIMA

B306 **New learning accelerates systems consolidation of a contextual fear memory: effects of pretest muscimol infused into the hippocampus or the cingulate cortex after multiple interposed tasks**
L. DE FREITAS CASSINI, J. HAUBRICH, F. DIEHL, F. SANTANA, L. DE OLIVEIRA ALVARES & J.A. QUILLFELDT

B307 **On the role of dopamine in object recognition memory processing**
J.I. ROSSATO, C.R. FURINI, L.R. BEVILAQUA & M. CAMMAROTA

B308 **Right hemisphere dominance of dentate granule cell activation after exploration of novel environment in wild-type and *iv* mutant mice**
R. SHIGEMOTO, H. AHMED, R. KAWAKAMI & Y. FUKAZAWA

B309 **Effect of androgen on maturation of retention mechanism of extinction memory after conditioned taste aversion learning in mice**
E. SUZUKI, T. KAWABE, M. NISHIYAMA, H. EDA-FUJIWARA, R. SAITO, R. SATOH & T. MIYAMOTO

B310 **Delayed *de novo* protein synthesis is required for spatial memory reconsolidation**
V. VARGAS-LÓPEZ, M. LAMPREA RODRIGUEZ & A. MÚNERA

B311 **Physical exercise prevents cognitive impairment of rats subjected to experimental hyperprolinemia**
A.G. FERREIRA, E.B. SCHERER, M.J. DA CUNHA, F.R. MACHADO, A.A. DA CUNHA, C.A. NETTO & A.T. WYSE

B312 **Novel classes improve memory in elementary school children: evidence of behavioral tagging in humans**
F. BALLARINI, C. MARTINEZ, N. ALEN, D. MONCADA, M. DÍAZ PEREZ & H. VIOLA

B313 **Methylphenidate as cognitive enhancer: absence of effects on long-term memory in healthy subjects**
S. BATISTELA, O.F.A. BUENO, L.J. VAZ & J.C.F. GALDURÓZ

B314 **Women increase their performance trained with decreasing reward conditions on a conceptual learning task**
C. DELGADO, P.H. DÉLANO, C. ALEGRÍA, C. BAHAMONDES, C. CORTÉS & M.L. AYLWIN

B315 **The nature of limitations on visual working memory**
M.Z.U.H. KATSHU

B316 **A fMRI study of motor learning in healthy volunteers: differential neural substrates underlying skill learning and adaptation**
S. LEFEBVRE, L. DRICOT, W. GRADKOWSKI, P. LALOUX & Y. VANDERMEEREN

B317 **Time courses of unique and repeated autobiographical events: an fMRI study**
P. MARTINELLI, A.-D. DEVAUCHELLE, M. SPERDUTI, T. GALLARDA, S. LION, J.F. MEDER, A.S. RIGAUD, M.O. KREBS, C. HOPPENHEIM & P. PIOLINO

B318 **Shift in the response preference during visual discrimination learning**
R. MONTEFUSCO-SIEGMUND, P.E. MALDONADO & M.L. AYLWIN

B319 **Pattern separation associated with reduced asymmetry in Dentate Gyrus activity in Schizophrenia**
M. PALEJA, T.A. GIRARD, K.A. HERDMAN & B.K. CHRISTENSEN

B320 **Encoding and recall of picture associations activates multiple thalamo-cortical networks**
G. PERGOLA, A. RANFT, I. DAUM & B. SUCHAN

B321 **Using 3d virtual environments to assess hippocampal function during spatial navigation - a fMRI study**
A. POMES, B. SPANLANG, J.R. LANDIN, P.S. PINEDA, M. SLATER, E. POMAROL-CLOTET & P. MCKENNA

B322 **Personality-related difference in neural activations underlying the effect of monetary rewards on remembering difficult memories**
Y. SHIGEMUNE, T. TSUKIURA, R. NOUCHI, T. KAMBARA & R. KAWASHIMA

B323 **Motor skill learning correlates to increased REM sleep duration**
M.L. STAVRINOU, S. KOLLIA, A. KOUPPARIS, P. ATHANASOPOULOU, G. DAMASKOS & G.K. KOSTOPOULOS

B324 **Effectiveness of neuromodulation on working memory in mild cognitive impairment**
N. SAUNDERS & B. TURMAN

15. Neurodegeneration & aging (Oxidative stress, inflammation & other disorders)

B325 **Neuroprotective effects of erythropoietin in the cuprizone model of demyelination**
N. HAGEMEYER, S. BORETIUS, A. RONNENBERG, S. SPERLING, A. VON STREITBERG, C. OTT, H. WELPINGHUS, J. FRAHM & H. EHRENREICH

B326 **Identification of novel remyelinating agent using an *in vitro* screening system**
R.P. MURPHY, M. PICKERING & K.J. MURPHY

B327 **Leukocyte counts in multiple sclerosis and Alzheimer´s disease**
S.J. VAN RENSBURG, M.J. KOTZE, F.C. POTOCNIK, G. HON, M. DE KLERK & R.T. ERASMUS

B328 **Growth-related oncogene-alpha (GRO-alpha) deficit correlates with the failure of remyelination in the *taiep* rat**
G. SOTO-RODRIGUEZ, D. MARTINEZ-FONG, J.R. EGUIBAR, A. UGARTE, J.A. GONZALEZ-BARRIOS, N.G. PAZOS-SALAZAR, E. BRAMBILA, F. MARTINEZ-PEREZ, L. MILLAN-PEREZ-PEÑA & B.A. LEON-CHAVEZ

B329 **Excitatory and inhibitory synapses in the hippocampal formation display alterations in aged mice lacking the *Neil3* gene**
C.E. REGNELL, T. MEDIN, G.A. HILDRESTRAND, O. MOLDESTAD, Y. SEJERSTED, L. LUNA, S. ZANDSTRA KROKEIDE, M. BJØRÅS & L.H. BERGERSEN

B330 **IGF-1 prevents ROS- and p53-mediated cell death in the nervous system *in vivo***
M. TAMBORINI & K.-H. HERZOG

B331 **Hsp70.1 and related lysosomal factors programming neuronal necrosis**
T. YAMASHIMA

B332 **The neuroprotection of SIRT1 on NMDA-induced excitotoxicity in cultured cortical cell**
X. YANG, H. QIN, R. WANG, P. SI & C. ZHANG

B333 **Differential induction of small heat shock proteins in rat hippocampal neurons after heat shock, hypoxia and oxidative stress**
B. BARTELT-KIRBACH & N. GOLENHOFEN

B334 **Mediation of mitochondrial intrinsic pathways on the molecular mechanism of apoptosis by paraquat: involvement of superoxide anion**
A. CZERNICZYNIEC, J. BUSTAMANTE & S. LORES ARNAIZ

B335 **Early *in vivo* secondary damage following partial injury to a central nervous system tract**
J. WELLS, M.R. KILBURN, J.A. SHAW, C.A. BARTLETT, A.R. HARVEY, S.A. DUNLOP & L. FITZGERALD

B336 **Role of oxidative stress in ethanol-induced neurotoxicity of neonatal cerebellum**
M. ELAHDADI SALMANI, I. GOUDARZI, A. RAMAZANI, T. LASHKARBOLUKI, M.T. GHORBANIAN & K. ABRARI

B337 **Accelerated protection of dopaminergic neurons against 6-OHDA cytotoxicity by enhanced activity of neurotrophic factor GDNF and anti-oxidant enzyme GPX-1**
M. GARDANEH, E. GHARIB & Y. PANAHI

B338 **Pharmacologic suppression of DFP-induced oxidative injury and dendritic damage by memantine**
R.C. GUPTA, S. MILATOVIC & D. MILATOVIC

B339 **Inhibition of protein kinase C or c-Jun N-terminal kinase attenuates the taxol-induced oxidative neuronal death in murine cortical cultures**
J.-K. KIM, S. HWANG & K.-O. CHAY

B340 **LiuWei dihuang wan and its main component paeonol attenuate neuronal damage induced by inflammation and oxidative stress in rat primary microglia and cortical neurons**
Y.-C. LO & Y.-T. TSENG

B341 **Effect of quercetin and sesamin against high glucose-induced oxidative stress and apoptosis in rat dopaminergic neurons**
J. BOURNIVAL, J. RENAUD, M.-A. FRANCOEUR & M.-G. MARTINOLI

B342 **Cell type-specific expression and nuclear localization of Sirt6 in the rat CNS**
P. MEMAR ARDESTANI & F. LIANG

B343 **3',4',7-trihydroxyflavone attenuates hydrogen peroxide-induced neuronal cell death by the defense of oxidative stress pathways**
S.-H. KWON, S.-I. HONG, Y.-H. JUNG, K.-W. LEE, I.-J. YOU, L.T. NGUYEN, J.-A. KIM, M.-J. KIM, S.-Y. LEE & C.-G. JANG

B344 **Protective effect of rutin against intracerebral streptozotocin induced memory impairment in rat**
H. JAVED, M.M. KHAN, A. KHAN, K. VAIBHAV, M.E. AHMAD, A. AHMAD, S.S. RAZA, R. TABASSUM & F. ISLAM

B345 **Interlukin 12 and Interleukin 18 gene administration induces leukocyte recruitment and activation of microglia in the brain**
M.C. RODRIGUEZ-GALAN, E.A. GAVIGLIO, J.A. SORIA, B. BARRIOS, D.S. ARROYO & P. IRIBARREN

B346 **Lymphocytes exhibit neuroprotection in Kainate-induced cell death via astrocytes activation and inhibition of MAP kinase signalling pathway**
R. SHRESTHA, O. MILLINGTON, J. BREWER & T.J. BUSHELL

B347 **Ethaneβ-sultam, a taurine prodrug, reduces the inflammatory response evoked by ‚binge drinking' both *in vivo* and *in vitro***
C. STEFANINI, M.A. COLIVICCHI, C. BALLINI, M. PAGE, P. DE WITTE, D.T. DEXTER, R.J. WARD & L. DELLA CORTE

B348 **Chronic neuroinflammation disrupts FKN-CX3CR1 signaling in the hippocampus**
J.M. MORGANTI, K. BELARBI, C. ARELLANO, C. GEMMA, P.C. BICKFORD & S. ROSI

B349 **The synthesis of TGFβs 1 and 2 is mediated through Wnt signaling pathway in rat cortical astrocytes**
S. BOZORGMEHR, A. PARVANEH TAFRESHI, S. ABBASI & B. ZEYNALI

B350 **Brain injury markers and autoantibodies to functionally significant brain proteins in pathogenesis and prognosis of brain trauma in children**
E.G. SOROKINA, J.B. SEMENOVA, O.V. KARASEVA, O.M. VOLPINA, V.P. REUTOV, O.K. GRANSTREM, V.G. PINELIS & L.M. ROSHAL

POSTER PRESENTATION

B351 **Traumatic brain injury complicated by sepsis is associated with modification of the amount and the structure of sialic acids**
C. ADEMBRI, E. SGAMBATI, V. SELMI, L. VITALI, A. PACINI, L. BONACCINI, L. DI CESARE MANNELLI & A.R. DE GAUDIO

B352 **Use of fluorochrome-labeled inhibitors of caspases to detect neuronal apoptosis in whole-mounted lamprey brain after spinal cord injury**
A. BARREIRO-IGLESIAS, M.E. SELZER & M.I. SHIFMAN

B353 **Stabilization of mutant rhodopsin in treatment of retinal degeneration in Retinitis pigmentosa**
F. BALEM, N. YANAMALA, P.S. AKAMINE, G.L. IOSHIMOTO, B.V. NAGY, D.F. VENTURA, D.E. HAMASSAKI & J. KLEIN-SEETHARAMAN

B354 **Cognition on dialysis patients**
N. STOICEA, D. SCHARRE, D. SPETIE, A. NARAYANAN, A. GUSTI & S. GUSTI

B355 **Erythropoietin and carbamylated-erythropoietin effects upon neuronal and erythropoietic systems. Mechanisms and receptors involved**
M.E. CHAMORRO, S.D. WENKER, D.M. VOTA, D.C. VITTORI & A.B. NESSE

B356 **Cellular localization of calpastatin plice variants**
J. GEDDES, A. JOSHI, V. BONDADA, A. MAAMOUN, D. LOU, S. WILLIAMS & C. ROGERS

B357 **Neuropeptide Y is neuroprotective against methamphetamine-induced toxicity in hippocampal organotypic slice cultures**
J. GONÇALVES, C.F. RIBEIRO, J.O. MALVA & A.P. SILVA

B358 **Neuroprotective effects of the 17β-Estradiol against ethanol-induced neurotoxicity**
I. GOUDARZI, A. RAMEZANI, T. LASHKARBOLUKI, M.T. GHORBANIAN, K. ABRARI & M. ELAHDADI SALMANI

B359 **Agonists of group-III metabotropic glutamate receptors (mGluR III) attenuate staurosporine-induced necrotic, but not apoptotic neuronal cell damage**
D. JANTAS, A. GREDA, A. PILC & W. LASON

B360 **Microfluidic in-vitro model of blood brain barrier**
S. KIM, H. LEE, J. YEON, T. MOORE, M. CHUNG, Y. CHUNG & N.L. JEON

B361 **Gold nanoparticles (AuNPs) cross the BBB and induce cytotoxicity in SH-SY5Y cells**
E. VITALE, R. IMPERATORE, I. FERRANDINO, A. LONGO, G. CAROTENUTO, S. DE NICOLA & L. CRISTINO

B362 **Two-dimensional mapping of intracellular elements in Purkinje cells of Lurcher mutants**
K. KRANDA, V. HAVRANEK, Z. PUKRHARTOVA & F. VOZEH

B363 **Effects of the extract from wolfberry on the survival of retinal ganglion cells after optic nerve transection**
H.Y. LI, R.C. CHANG & K.F. SO

B364 **Withdrawal of habituated wheel running decreases cell proliferation and the number of immature neuron in the mice hippocampus through the BDNF-independent pathway**
T. NISHIJIMA, T. ITAGAKI, S. AMEMIYA, N. KUBOTA, C. MOTOKI & I. KITA

B365 **The phycotoxin okadaic acid induces toxicity in the CNS: evidence from isolated brain cells and organotypic cultures**
A. NOVELLI, A. PÉREZ-GÓMEZ, A. FERRERO-GUTIÉRREZ, A.R. TASKER & M.T. FERNÁNDEZ-SÁNCHEZ

B366 **Expression of the 2F7 epitope in the rat embryo and adult brain**
I. O'BRIEN, A. SULLIVAN, Y. NOLAN & A. TOULOUSE

B367 **The NeuN labeling-pattern in avian central nervous system**
M.F. PASSETTO, R.F. SANTANA, A.L.B. CABRAL, F.C.S. MENETTI & C.A.B. TOLEDO

B368 **Neuroprotection by estradiol reverts neurodegenerative markers in a perinatal asphyxia model**
G.E. SARACENO, M.V. AYALA, M.S. BADORREY, M.L. AÓN-BERTOLINO, J.I. ROMERO, R.A. KOLLIKER, L.M. GARCÍA-SEGURA & F. CAPANI

B369 **Chronic pain-emotional stress-induced neurodegeneration**
A. TISHKINA, I.P. LEVSHINA, N.V. PASSIKOVA, M.Y. STEPANICHEV & N.V. GULYAEVA

B370 **Glutamate stimulation induces a two-phase cofilin rod formation mediated by both NMDA and non-NMDA receptors in cultured hippocampal neurons**
Y. WANG, B. CHEN, L. CHEN, M. ZHOU & M. JIANG

B371 **Transgenic and cellular models of neurodegeneration associated with protein aggregation in the studies of potential neuroprotectors**
T.A. SHELKOVNIKOVA, I.V. KHRITANKOVA, A.A. USTYUGOV, V.L. BUCHMAN, N.N. NINKINA & S.O. BACHURIN

B372 **Large vessel atherosclerosis exacerbates elevation in cerebral glutamate concentrations in metabolic syndrome**
A.P. HALEY, M.M. GONZALES, D.E. EAGAN, T. TARUMI, M. VAGHASIA, S. PANDYA & H. TANAKA

B373 **Caffeine potentiation of 3,4-methylenedioxymethamphetamine (MDMA) toxicity: role of age**
L. FRAU, A.S. KHAIRNAR, S. FENU & M. MORELLI

B374 **Chronic nicotine exposure enhances cholinergic vasodilation in the cerebral cortex induced by stimulation of the nucleus basalis of Meynert in rats**
S. UCHIDA, H. HOTTA, H. MISAWA & K. KAWASHIMA

B375 **Mitochondria as the target for neuroprotection**
E. SHEVTSOVA, D. VINOGRADOVA, E. KIREEVA & S. BACHURIN

B376 **Mechanisms of LMO4-Mediated regulation of neuronal calcium dynamics and synaptic plasticity**
Z. QIN, X. ZHOU, K. LEE, J.-C. BÉIQUE & H.-H. CHEN

B377 **Mitochondrial DNA toxicity compromises mitochondrial function in neurons, causing synaptic abnormalities**
K.H. LAURITZEN, C. CHENG, A. KLUNGLAND & L.H. BERGERSEN

B378 **Novel neuroprotective action of copper complexes**
A.R. WHITE, L. BICA, C. DUNCAN, K. PRICE, K. BARNHAM, P. CROUCH & P. DONNELLY

B379 **Oestrogen regulates mitochondrial respiratory chain enzyme transcription in the mouse spinal cord**
S. JOHANN, D. MICHAEL, C. BEYER & S. ARNOLD

16. Neurological disorders (Epilepsy)

B380 **Loss of AMPA receptor GluA4 subunits at corticothalamic synapses in the reticular thalamic nucleus of the epileptic stargazer mouse**
O. SHEVTSOVA & B. LEITCH

B381 **Acute administration of Tacrolimus after traumatic brain injury ameliorates post-traumatic epilepsy in a rat model**
J.N. CAMPBELL, B. SINGH & S.B. CHURN

B382 **ATP-sensitive potassium channels contribute to the time-dependent alteration in the pentylenetetrazole-induced seizure threshold in diabetic mice**
A. KARIMOLLAH, M. GHASEMI & S. HAMED

B383 **Anticonvulsant activity of *Eclipta alba* using experimental models of epilepsy**
M.F. SHAIKH & S. SATHAYE

B384 **MRI study of early and late consequences of prolonged seizures and effects of ginsenosides of ginseng on lithium-pilocarpine model of status epilepticus**
E.M. SULEYMANOVA, M.V. GULYAEV & N.E. CHEPURNOVA

B385 **Changes in hippocampal connexin 36 mRNA and protein levels during acquisition of seizures in the kindling model of epileptogenesis**
S. BEHESHTI, M. SAYYAH, M. GOLKAR, A. YAZDI, J. BABAIE, H. SEPEHRI & B. VAZIRI

B386 **Mitochondrial function of JNK isoforms during status epilepticus-induced neuronal damage**
G. SPIGOLON, Y. ZHAO, A. VERCELLI, B. CHRISTOPHE & T. HERDEGEN

B387 **Hippocampal structural neuroprotection and antiepileptogenic effects of hypoxic preconditioning in a model of status Epilepticus**
R.A. DO VAL DA SILVA, O.Y. GALVIS-ALONSO, R.C. SCANDIUZZI, M. BASSI, M.L. GLASS, R.N. ROMCY-PEREIRA & J.P. LEITE

B388 **Effect of seizures induced by 4-aminopyridine on EAAT-3 and GAT-1 expression in dentate gyrus and CA1 hippocampus**
L. MEDINA-CEJA & F. SANDOVAL-GARCÍA

B389 **Differential expression of proteins in the hippocampus of patients with temporal lobe epilepsy**
D.S. PERSIKE, M.L. DE LIMA, R.P. AMORIM, E.M.T. YACUBIAN, R. CENTENO, M. CANZIAN & M.J.S. FERNANDES

B390 **Structural and functional MRI investigation of the brain of old epileptic rats**
A. ANDRIOLI, P. MARZOLA, E. NICOLATO & M. BENTIVOGLIO

B391 **Amygdala kindling causes robust alterations in the intrinsic electrophysiological properties of hippocampal CA1 pyramidal neurons in brain slices**
Z. GHOTBEDDIN, J. MIRNAJAFIZADEH, S. SEMNANIAN, M. JANAHMADI & M. HAGHANI

B392 **Pentoxifylline reverses rat behavioral, metabolic and neurochemical changes after pilocarpine-induced seizures**
G. VIANA, R. SIQUEIRA, K.R. NEVES, D. GONÇALVES, A. VIANA & G. MATOS

B393 **Effect of caloric restriction on hippocampal BDNF and NT3 expression and spontaneous recurrent seizures after 1 hour of status epilepticus**
S. HAFIZI, M. KARIMI-RAD, M. ABBASI, A.P. TAFRESHI & M. RAZA

B394 **Epigenetic regulation of Matrix Metalloproteinases 9 expression during epileptogenesis**
K. ZYBURA-BRODA, R. AMBORSKA, K. LESZEK & M. RYLSKI

B395 **Evaluation of the anticonvulsant activity of the alcoholic extract of Humulus lupus L. against seizures induced by pentylenetetrazole and electroconvulsive shock in mice**
M. GANJKHANI, A. FALLAH, M.R. JAFARI & M. KAMALINEJAD

B396 **Inhibition of neural nitric oxide synthase poteniates seizures induced by homocysteine in adult rats**
D. HRNCIC, A. RASIC - MARKOVIC, V. SUSIC, D. DJURIC & O. STANOJLOVIC

B397 **Anticonvulsant and neuroprotective effects of *Pimpinella anisum in rat brain***
F. KARIMZADEH, M. HOSSEINI, H. ALAVI, G.R. HASSANZADEH, M. BAYAT, M. JAFARYAN & A. GORJI

B398 **Enhancement of theta oscillations in the medial septal area of the epileptic brain *in vivo* and *in vitro***
V.V. SINELNIKOVA, A.E. MALKOV, I.Y. POPOVA, M.V. BUTUZOVA & V.F. KICHIGINA

POSTER PRESENTATION

B399 **Imaging investigation of brain edema after middle cerebral artery occlusion in agmatine-treated rats: a functional magnetic resonance approach**
M.-T. LIN, Y.-C. HUANG, T.-J. CHUANG, J.-W. LIN, M.-W. CHANG, C.-C. WANG, C.-Z. YANG, C.-C. HSU, C.-P. CHANG, C.-C. CHIO & J.-R. KUO

B400 **Astrocytes and GABAergic fast-spiking interneurons signalling in focal seizures**
G. LOSI, M. CAMMAROTA & G. CARMIGNOTO

B401 **Don´t mess with your biological clock: seizure aggravation after the phase shift**
M.K. SMYK, A.M. COENEN, M.H. LEWANDOWSKI & G. VAN LUIJTELAAR

B402 **EEG dynamic of the septum and linked structures during pentylenetetrazol kindling**
E. MUGANTSEVA & V. KITCHIGINA

B403 **TSA-amplified *in situ* hybridization shows dendritic localization of exon IV 5' UTR containing BDNF transcripts in different epileptogenesis models**
D.A. LOPEZ-ESPINDOLA & E.E. ALIAGA

B404 **The enduring effects of early-life stress on limbic epileptogenesis are mediated by HPA axis hyper-reactivity**
A.S. KOE, M.R. SALZBERG, T.J. O'BRIEN, M.J. MORRIS & N.C. JONES

B405 **Kallikrein 6 *(KLK6)* is involved in temporal lobe epilepsy**
P.S.R. SIMÕES, S.R. PEROSA, G.A. ARGAÑARAZ, E.T. YACUBIAN, R. CENTENO, H. CARRETE, M. CANZIAN, D. AMADO, J.A. SILVA JR, E.A. CAVALHEIRO & M.D.G. NAFFAH-MAZZACORATTI

B406 **The pilocarpine model in NMRI mice: histological, video-EEG and pharmacokinetic characterization**
M. MAZZUFERI, G. KUMAR, C. ROSPO & R.M. KAMINSKI

B407 **Characterization of a focal epilepsy model in the mouse based on intracortical administration of Tetanus neurotoxin**
E. VANNINI, M. MAINARDI, M. PIETRASANTA, O. ROSSETTO & M. CALEO

B408 **Cannabinoid 1 receptor as therapeutic target in chronic epilepsy**
R. DI MAIO, J. CANNON, L. MONTERO & J.T. GREENAMYRE

B409 **Effects of R-verapamil on seizure susceptibility and glutamate and GABA release in a model of phenytoin-resistant seizures**
L.L. ROCHA, H. LUNA-MUNGUIA & S. OROZCO-SUAREZ

B410 **Does the calcium sensing receptor have a role in neuronal function and idiopathic epilepsy?**
S. GIBBS, L. SADLEIR, D.E.C. COLE, G.N. HENDY & E. WILTSHIRE

B411 **Electrical amygdala kindling model and SUDEP: cardiovascular aspects**
A.P. PANSANI, D.B. COLUGNATI, G.H.M. SCHOORLEMMER, E.Y.D.F. SONODA, E.A. CAVALHEIRO, S.L. CRAVO & F.A. SCORZA

B412 **Neuroethological and neuroanatomical evidences of altered endogenous anticonvulsant circuitry in the Wistar audiogenic rats (WAR) strain**
G.G. PODOLSKY-GONDIM, S.S. MARRONI, T.L. PINHEIRO, J.A.C. OLIVEIRA, F. ROSSETTI & N. GARCIA-CAIRASCO

B413 **Consistency between the effects of carbamazepine, phenytoin, oxcarbazepine, lamotrigine, topiramate, valproic acid, levetiracetam and vinpocetine on 4-aminopyridine-induced epileptiform activity in vivo and cerebral presynaptic ion channel mediated responses in vitro**
M. SITGES, B.I. ALDANA, L.M. CHIU & V. NEKRASSOV

B414 **Reduced susceptibility to seizures and increased dendritic targeting and translation of BDNF and TrkB mRNAs in FXR2 KO mice**
A. BUZZI, P. PILO BOYL, G. BAJ, E. TONGIORGI, M. SIMONATO & C. BAGNI

B415 **Chronic lamotrigine treatment on seizure and anxiety-/depression-like behaviors of the rat with spontaneous absence epilepsy**
F.-Z. SHAW, H.-W. LEE & H.-Y. HUANG

B416 **Anticonvulsant activity of *Eucalyptus globulus* in laboratory animals**
U. EL-LITHY

B417 **Myo-inositol and scyllo-inositol as anticonvulsants on pentylenetetrazol induced seizures**
E. MIKAUTADZE, M. NOZADZE, E. LEPSVERIDZE, E. MIKELADZE, N. KUCHIASHVILI, T. KIGURADZE & R. SOLOMONIA

B418 **Experimental febrile seizures cause sensitization of hippocampal dentate granule $GABA_A$ receptors**
A. SWIJSEN, G. HOOGLAND, D. JANSSEN & J.-M. RIGO

B419 **Diffusion barriers created by the extracellular matrix and glia in human dysplastic cortex**
L. VARGOVA, A. HOMOLA, M. CICANIC, J. ZAMECNIK, P. MARUSIC, P. KRSEK & E. SYKOVA

B420 **Anticonvulsant and antiepileptogenic properties of crinum purpurascens leaves in mice**
D.N. MIREILLE SYLVIANE, T. CHRISTOPHER, F. CHRISTIAN, T. EDWIDGE, A. ALBERT, A. TAZOACHA & M. FELICITE

B421 **Influence of minocycline and valproic acid on development of epilepsy induced by intracerebral hemorrhage**
K. MAJAK, P. KOWIANSKI, B. DOMARADZKA-PYTEL & J. MORYS

B422 **Antiabsence effects of safranal in acute experimental seizure models: EEG and autoradiography**
H.R. SADEGHNIA, M.A. CORTEZ, D. LIU & H. HOSSEINZADEH

B423 **The development of epilepsy results in alterations in HCN channel expression and cardiac function in genetic and acquired rat models: a mechanism for SUDEP?**
K.L. POWELL, C. NG LI MIN, J.T. KENNARD, V. URMALIYA, E. OZTURK, N.C. JONES, G. DESZI, I. MEGATIA, C.A. REID, D. PINAULT, P. WHITE & T.J. O'BRIEN

B424 **MEMRI intensity and c-fos expression after short duration of pilocarpine-induced status epilepticus (SE)**
J.M. MALHEIROS, R.S. POLLI, A. TANNÚS, E. VIDOTO, M. MARTINS & L. COVOLAN

B425 **Fish oil decreases methylmalonic acid-induced seizures**
C.R.R. BANDERÓ, M.G.S.S. SALVADORI, A.T. GOMES, N.D. RI, A.F. FURIAN, M.S. OLIVEIRA, L.M. RAMBO, F.A. SCORZA, R.M. CYSNEIROS, T. EMANUELLI & C.F. MELLO

B426 **Componentes of renin-angiotensin system is modified in the hippocampus of rats submitted to pilocarpine model of epilepsy**
T.L.F. GOUVEIA, M.I.B. FRANGIOTTI, J.M. BRITO, E.F. CASTRO NETO, M.M. SAKATA, A.C. FEBBA, D.E. CASARINI, E.A. CAVALHEIRO, J.A. SILVA JR, R.C. ARAÚJO, D. AMADO & M.G. NAFFAH-MAZZACORATTI

B427 **Pilocarpine model in imunodeficient mice: neurochemical, electroencephalographic and histological changes**
M.J.D.S. FERNANDES, T. VIGNOLI, S.G. MASSIRONI, R.D.C.S. COIMBRA, M.D.G.N. MAZZACORATTI, E.F. CASTRO NETO & D.S. PERSIKE

B428 **Unique anticonvulsant profile of triheptanoin in acute and chronic mouse epilepsy models**
N.K. THOMAS, S. WILLIS, T.H. KIM, C.A. REID, S. PETROU, A. MATTHIAS & K. BORGES

B429 ***In vitro* predictors of severe hypersensitivity reactions to aromatic anti-epilepsy drugs**
P.A.L.S. HWANG & M. NEUMAN

B430 **Modulation of endocannabinoid transport blocks Kainic acid-induced status epilepticus**
L. SHUBINA & V.F. KITCHIGINA

B431 **Fast-spiking inhibitory interneurons govern focal seizure propagation**
M. CAMMAROTA, G. LOSI & G. CARMIGNOTO

B432 **Changes of epileptiform discharges after activation of locus coeruleus**
E. SARALIDZE, L. KHUCHUA & T. IOSELIANI

B433 **Tissue non-specific alkaline phosphatase in the human neocortex**
O. KANTOR, I. BRUN -HEATH, M. ERMONVAL, J. XIAO, M. PALKOVITS, G. KOVACS, T. DOCZI, T. GLASZ, G. BAKSA, M. ASHABER, P.O. COURAUD, E. MORNET, L. NÉGYESSY & C. FONTA

B434 **Biperiden as a disease modifying agent for temporal lobe epilepsy**
S. BITTENCOURT, E. FERRAZOLI, M.F. VALENTE, B. LONGO, S. ROMARIZ, C. MACEDO, B. BRITO, M. AARAO, M. MIRANDA, A. ALMEIDA & L.E. MELLO

B435 **Effects of temporal lobe epilepsy in the quality of sexual function in women**
M. PINTO, I. SILVA, V. ALTMANN, Ñ. ALONSO, K. LIN, A. JACKOWSKI, R. CENTENO, H. CARRETE, E. YACUBIAN, M.D.G. NAFFAH-MAZZACORATTI, E. CAVALHEIRO & D. AMADO

B436 **Effect of seizures on the auditory brainstem response in genetically seizure-prone rats**
A.S. POSPELOV

B437 **Reduction in AMPA receptor GluA4 subunit expression at synapses in inhibitory but not excitatory thalamic neurons of the epileptic stargazer mouse**
B. LEITCH & O. SHEVTSOVA

B438 **Neocortical malformations of medically intractable temporal lobe epilepsy: morphological study of 60 patients**
J. VILLEDA, M.A. ALONSO VANEGAS, L.L. ROCHA & S. SUÁREZ OROZCO

B439 **Distribution and role of purinergic receptors in the hippocampus during and after pilocarpine-induced status epilepticus**
S.S. TAY, Y. LI, Y.C. TANG, D.L. MA, S.T. DHEEN & F.R. TANG

B440 **Could basal ganglia input structures control ongoing focal motor seizures? Results of Subthalamic nucleus DBS and further plan in a primate model**
S.V. PRABHU, B. PIALLAT, S. MICHALLAT, A. SHERDIL, O. DAVID & S. CHABARDÈS

POSTER PRESENTATION

B441 **Temporal characterization of c-Fos activation and neuronal death in the hippocampus after pilocarpine induced status epilepticus in marmosets (*Callithrix jacchus*)**
M.M. BLANCO, K.O. GARCIA, J.C. PONTES, S.M. CININI, C.S. DA SILVA, B.M. LONGO & L.E. MELLO

B442 ***In vivo* two-photon imaging of paroxysmal depolarizing shifts: role of astrocytes and fast spiking interneurons**
M. BRONDI, S. SULIS-SATO, G. DE VITO & G.M. RATTO

B443 **Purinergic modulation of high-affinity GABA and glutamate uptake by synaptic plasma membrane vesicles of the human neocortex**
A.R. BARBOSA, S. GUERRA-GOMES, F. FERREIRINHA, M.G.B. LOBO, P. CORREIA-DE-SÁ & J.M. CORDEIRO

B444 **Expression and possible roles of aquaporin 9 in hippocampal CA1 cells of epileptic rats**
F.C. TESCAROLLO & L. COVOLAN

B445 **In epileptic seizures, nitric oxide may regulate glutamate brain levels by modulating glutamate dehydrigenase activity**
L.A. VEGA RASGADO, E. MARTÍNEZ REYES & F. VEGA-DÍAZ

B446 **Unbalanced adenosine A_1/A_{2A} receptors modulation of $[Ca^{2+}]_i$ influx in the hippocampus and neocortex of patients with mesial temporal lobe epilepsy (MTLE)**
C. TEIXEIRA, S. GUERRA-GOMES, F. FERREIRINHA, M.G.B. LOBO, J.M. CORDEIRO & P. CORREIA-DE-SÁ

B447 **Interictal 99mTc-HMPAO-SPECT and 18F-FDG-PET in detection of epileptic foci**
A. KAPRELYAN, D. MINCHEV, A. KLISSAROVA & P. BOCHEV

17. Psychiatric & behavioural disorders (Schizophrenia, psychostimulants & drugs of abuse)

B448 **Dysbindin, a candidate gene for schizophrenia, is expressed in retinal Müller glia cells**
A. MATTEUCCI, L. GADDINI, G. MACCHIA, T.C. PETRUCCI, P. MACIOCE, F. MALCHIODI-ALBEDI & M. CECCARINI

B449 **Chronic psychosocial stress during adolescence in the neuregulin 1 heterozygous mutant mouse: a putative model of gene × environment interactions in schizophrenia**
L. DESBONNET, C. O'TUATHAIGH, G. CLARKE, E. PETIT, C. O'LEARY, N. CLARKE, J. CRYAN, T. DINAN & J.L. WADDINGTON

B450 **A CAG repeat polymorphism of KCNN3 predicts SK3 channel function and cognitive performance in schizophrenia**
H.M. EHRENREICH

B451 **Trace amine associated receptor 1 (TAAR1) modulates D2 dopamine receptor-related behavior and striatal signaling**
S. ESPINOZA, F. MANAGÒ, M. MESSA, T.D. SOTNIKOVA, M.G. CARON & R.R. GAINETDINOV

B452 **Immunohistochemical study of GABAergic neurons in the hippocampal formation of genetically modified animal model of schizophrenia**
M. HAGIKURA, H. SEKIGUCHI, S. IRITANI, C. HABUCHI, Y. TORII, K. KURODA, K. KAIBUCHI & N. OZAKI

B453 **First potent and selective trace amine-associated receptor 1 (TAAR1) agonist alters monoamine-mediated neurotransmission and behavior**
A. HARMEIER, F.G. REVEL, J.-L. MOREAU, A. BRADAIA, R.D. NORCROSS, C.A. MEYER, J.G. WETTSTEIN & M.C. HOENER

B454 **A pilot study of the care program approach in Japan (CPA-J) for patients with organic psychosis presenting cognitive disorders**
M. HIROZANE, N. HIRABAYASHI, Y. MIZUNO, Y. NAMIHISA, T. SUGIYAMA, T. TAKASHIMA & M. SAKATA

B455 **Immunohistchemical study of VMAT 2 in the hippocampal formation of animal models of schizophrenia**
S. IRITANI, H. SEKIGUCHI, C. HABUCHI, Y. TORII, T. NABESHIMA, K. KAIBUCHI & N. OZAKI

B456 **Neurochemical studies on the different effects of galantamine and donepezil on isolation rearing-induced deficits of prepulse inhibition in mice**
T. MATSUDA, K. KODA, Y. OTA, Y. AGO & K. TAKUMA

B457 **Interactions between BACE/NRG1 and glutamatergic pathways in the development of schizophrenia-like endophenotypes**
T. MELNIKOVA, E. CHO, D. LEE & A. SAVONENKO

B458 **Antipsychotic potential of antioxidative agents in immune /inflammatory models for schizophrenia**
M. MIZUNO, H. SOTOYAMA & H. NAWA

B459 **Novel PDE10A ligand as a PET probe for imaging psychiatric disorders: pharmacological and toxicological evaluation**
S. ERDMANN, F. SIEGERT, G. SCHWAN, P. BRUST, N. STRÄTER, R. ALTENBURGER, D. BRIEL & K. NIEBER

B460 **Activities of glucose-6-phosphate and lactate dehydrogenase hydrogenase in ketamine induced N-methyl-D-phosphate dehydrogenase hypofunction model of schizophrenia in prefrontal cortex of rats**
O.O. OWOLABI, G.O. AFOLAYAN, A. OBEMBE & A.E. CAXTON-MARTINS

B461 **Initial phenotypic studies on novel mutants with targeted deletion of the schizophrenia risk gene DTNBP1 (dysbindin)**
E. PETIT, C. O'TUATHAIGH, B. KIRBY, L. DESBONNET, C. NIAHM, O. TIGHE, C. O'LEARY, J. JOEL, A. SHAW, S. SHEARDOWN, A.D. MORRISON, S. WILSON, E. SHAPLAND, J.N. KEW & J. WADDINGTON

B462 **Effect of 3α5βpregnanolone glutamate on schizophrenia like behavior**
K. VALES, H. KRISTINA, L. RAMBOUSEK, J. SVOBODA, V. BUBENIKOVA, H. CHODOUNSKA, L. VYKLICKY & A. STUCHLIK

B463 **Aging effects on morphologies of the superior temporal gyrus and its sub-region in schizophrenia:a postmortem study**
Y. TORII, S. IRITANI, H. SEKIGUCHI, C. HABUCHI, M. HAGIKURA, T. ARAI, K. IKEDA & N. OZAKI

B464 **Some CNS depressant effects of *Crinum zeylanicum* Linn (Amaryllidaceae) in mice**
A.Y. TIJANI, O.A. SALAWU, J.A. ANUKA & I.M. HUSSAINI

B465 **Common variations in the Methyl-CpG-Binding-Protein 2 gene modulate autistic traits in a schizophrenic population**
M. TANTRA, A. KÄSTNER, C.B. BODDA, S. GRUBE, K. RADYUSHKIN, A. RONNENBERG, A. MANNAN & H. EHRENREICH

B466 **Role of Trace Amine Associated Receptor 1 (TAAR1) in animal models of dopamine-related brain disorders**
T. SOTNIKOVA, S. ESPINOZA & R. GAINETDINOV

B467 **Effects of microinjections of apomorphine and haloperidol into the inferior colliculus on the prepulse inhibition of the acoustic startle reflex in rats**
R.C.B. SILVA, S.Y. SATAKE & K.Y. YAMADA

B468 **Impairment of the tyrosine hydroxylase neuronal network in the orbitofrontal cortex of a genetically-modified mouse model of schizophrenia**
H. SEKIGUCHI, S. IRITANI, C. HABUCHI, Y. TORII, K. KURODA, K. KAIBUCHI & N. OZAKI

B469 **Preclinical study of the stimulant effect induced by coca-paste seized samples, a smokable cocaine with a widespread use in Latin America**
C. SCORZA, X. LÓPEZ-HILL, J.P. PRIETO, M.N. MEIKLE, J. URBANAVICIUS, E. UMPIÉRREZ, J.A. ABIN-CARRIQUIRY & G. PRUNELL

B470 **Reserpine reverts dopaminergic tolerance induced by chronic cocaine treatment in rats**
H.R. SILVA, S.A. BARBOSA, C. LOPES & C.A. TIEPPO

B471 **The drug-seeking behavior of adult male rats is not increased by prenatal methamphetamine exposure**
R. SLAMBEROVA, B. SCHUTOVA, L. HRUBA & M. POMETLOVA

B472 **Switch from positive to neutral living environments increases vulnerability to cocaine**
N. THIRIET, J. NADER, C. CHAUVET, R. EL RAWAS, L. FAVOT, M. JABER & M. SOLINAS

B473 **Rimonabant repeated treatment inhibits c-fos expression in cocaine-sensitized mice**
E.A.V. MARINHO, T.S. YOKOYAMA, A.J. OLIVEIRA-LIMA, R. SANTOS, A.W. HOLLAIS, L. RIBEIRO, B.M. LONGO & R. FRUSSA-FILHO

B474 **Retinoic acid signaling and drug addition: methamphetamine-mediated rewarding behavior is enhanced in RARβ null mutant mice**
Y.-Y. LIN, P. CHAMBON & F.-C. LIU

B475 **Effect of oxytocin administration in the nucleus accumbens core or the subthalamic nucleus on methamphetamine-induced reward**
S.J. BARACZ, M.C. PARDEY, G.E. HUNT, I.S. MCGREGOR & J.L. CORNISH

B476 **Specific and nonspecific bilateral lesioning of the Caudate Nucleus alter differently the acute and chronic effects of Methylphenidate administration**
C. CLAUSSEN, S. CHONG & N. DAFNY

B477 **Behavioral effects of fatty acid amide hydrolase inhibition on the morphine withdrawal symptoms**
S. SHAHIDI, P. HASANEIN, M. MAHMOODI & A. KOMAKI

B478 **Noradrenergic transmission within the central nucleus of the amygdala contributes to the anxiogenic effects of self-administered cocaine**
J.M. WENZEL, Z.-I. SU, Z.M. HABER & A. ETTENBERG

B479 **Acupuncture reduces the reinforcing effects of morphine: the mediation of GABA receptors**
C.H. YANG, B.H. LEE, J.H. LEE, J.Y. LEE, S.A. KIM, D.H. KIM, E.M. AHN & S.S. YOON

POSTER PRESENTATION

B480 **Reinstatement of nicotine-seeking behavior in rats: effects of nicotinic receptor partial agonist cytisine**
E.V. RADCHENKO, O.A. DRAVOLINA & A.Y. BESPALOV

B481 **Effects of cannabidiol on mCPP-induced increase in marble burying behaviour**
M. NARDO, P.C. CASAROTTO & F.S. GUIMARÃES

B482 **Distribution of tyrosine hydroxylase positive cells in different subregions of the VTA in morphine-dependent rats**
G. MULAS, F. PIRAS, C. MURA, C. CANNIZZARO, S. SPIGA & M. DIANA

B483 **Serotonergic dysfunction mediates decrease in motivation for instrumental action in hypothyroidism model monkeys**
T. MINAMIMOTO, A. OH-NISHI, Y. HORI, Y. NAGAI & T. SUHARA

B484 **Dissociating the development of morphine tolerance**
M. KERMANI AHANGARANI FARAHANI, A. HAGHPARAST & A. KHANI

B485 **The effect of calorie restriction on drug-seeking and relapse: an electrophysiological investigation of the Nucleus Accumbens (NAc)**
L. GUCCIONE, E. DJOUMA & A.G. PAOLINI

B486 ***In vitro* evaluation of mu-opioid receptors in obesity: a PET study**
R.M. MORESCO, G. GELSOMINO, G. RIZZO, A. SARTORIO, F. AGOSTI, A. PANZACCHI, E. TUROLLA, M. MATARRESE, F. FAZIO & C.L. LAFORTUNA

B487 **Plasma R-methadone levels and therapeutic outcome in opioid addiction**
G. MANNAIONI, E. MASINI, R. MASTROIANNI, V. GALLI, C. LANZI, M. LOTTI, A. DILAGHI, A. TOTTI, C. PRATUCCI, I. PACILEO, M. SILI, L. BERTIERI, F. ORSINI, B. OCCUPATI, A. MICHAHELLES, R. CIUTI, P. PEZZATI, E. BIANCHINI, G. FABBRO, A. BIGGERI, F. TORRICELLI, C. GIULIANI, S. BARDI, M. CESERI, E. BALDINI, A. ATZORI, A. MANFREDI, P. GAI, S. GARCIA, C. ULIVA, C. GROPPI, F. FABRIZI, M. TEDICI, C. MARZOCCA, P. TROTTA, G. TAVANTI, L. PALAGI, P. LEONARDI, G. GRENCI, B. PALMERANI, D. POSARELLI, P. PANTI, L. CALVIANI, A. RICCI, M. CARLETTI, L. BERNI, A. GUIDI, G. LAVACCHINI & F. MORONI

B488 **JWH-018: a cannabinoid compound of Spice drugs stimulates dopamine transmission in the nucleus accumbens shell**
M.A. DE LUCA, P. CABONI, Z. BIMPISIDIS & G. DI CHIARA

B489 **Morphine withdrawal is associated with multiple epigenetic histone modifications in the rat lateral septum and nucleus accumbens**
A. CICCARELLI, A. CALZA, F. SANTORU, A. CONCAS, M. SASSOÈ-POGNETTO & M. GIUSTETTO

B490 **N-acetylcystine attenuates the behavioral and molecular responses induced by hallucinogenic 5-HT$_{2A}$ receptor agonists in mice**
H.-H. CHEN & C.-C. CHIANG

B491 **Hippocampal proliferative processes are needed for behavioral effects of Cannabidiol**
A.C. CAMPOS, J. PALAZUELLOS, T. AGUADO, D.C. AGUIAR, M. GUZMAN, I. GALVE-ROPERH & F.S. GUIMARÃES

B492 **Fruit essential oil of cumin (*Cuminum cyminum L.*) reduced the raising effect of L-Arginine on morphine-induced conditioned place preference in mice**
P. AZIZI

B493 **Development of behavioral sensitization and not only an ethanol chronic treatment is associated with high accumbal phosphor-Thr34 DARPP-32 levels induced by dopamine D1 receptor agonist administration**
K.P. ABRAHAO, F.O. GOELDNER & M.L.O. SOUZA-FORMIGONI

18. Neuroinformatics & computational neuroscience

B494 **Software for simulating the processing of visual stimuli in the retina**
D. ALEXANDRU, M. GEORGESCU, B. CATALIN, D. GEORGESCU & M. IANCAU

B495 **A computational investigation of the cortical circuitry for early processing of real and illusory contour detection**
A. COHEN & P. TIESINGA

B496 **How unique is the message in a retinal ganglion cell spike train?**
J.B. TROY, F. YRAZU & C.L. PASSAGLIA

B497 **VistaTraining: a new method for visual perception improvement**
J.M. RODRIGUEZ-FERRER

B498 **Slow modulations of spiking activity as determinants of local field potentials**
V. D'ANDREA, M. MATTIA, S. FERRAINA & P. DEL GIUDICE

B499 **The influence of ambient sounds on cerebral activity**
M. GEORGESCU, D. GEORGESCU, B. CATALIN, V. SFREDEL, D. ENESCU BIERU, D. ALEXANDRU, O. STREATA, V. NESTIANU & M. IANCAU

B500 **Roles of short- and long-term synaptic plasticity for the distal reward problem**
T. XIAKAMOTO & K. KITANO

B501 **Simultaneous intravital two photon imaging of layers I to V with chronically implanted microprisms**
N.B. GILFOY, R.N.S. SACHDEV, D.A. MCCORMICK & M.J. LEVENE

B502 **Discounted value problem becomes ill-posed by subject's strategy**
Y. YAMAGUCHI & Y. SAKAI

B503 **Neuronal and synaptic functional connectivity by sequence mining techniques**
A.G. ZIPPO, R. STORCHI, M. VALENTE, G.C. CARAMENTI & G.E.M. BIELLA

B504 **A mismatch-based model for memory reconsolidation and extinction in attractor networks**
R. OSAN, A.B.L. TORT & O.B. AMARAL

B505 **Machine-readable description of neuron types and properties**
D.J. HAMILTON, M. BERGAMINO, J. DE FELIPE, N. LE NOVÈRE, G.M. SHEPHERD, M.P. WITTER & G. ASCOLI

B506 **Sensorimotor cortex functional connectivity during foot motor execution and imagery: a study on healthy individuals using eConnectome**
A. ATHANASIOU, K. KALOGIANNI & P.D. BAMIDIS

B507 **Dendritic morphology alterations and epilepsy: a neurocomputational study**
M.F. GARCÍA, J. TEJADA & A.C. ROQUE

B508 **Advancing massively-parallel analytic capabilities for multielectrode recordings**
D. GARDNER, J. BANFELDER, A.B. JAGDALE, M. REPUCCI & J.D. VICTOR

B509 **Neuronal classification from network connectivity**
R. GOLDIN, P. SALOMONSKY, C. PRIEBE, D.J. MARCHETTE & G. ASCOLI

B510 **Atlas aided stereotactic deep brain stimulation: aDBS**
M. MAJTANIK, D. LÖCHEL, V. STURM & J.K. MAI

B511 **Interplay between network dynamics and connectivity in dissociated cortical cultures: a theoretical and experimental approach**
P. MASSOBRIO, V. PASQUALE, M. GAROFALO & S. MARTINOIA

B512 **3D finite element model of extracellular stimulation of neurons and networks**
S. MIKULOVIC, P. BAUER, N. NEUMANN, F. RATTAY & R. LEAO

B513 **A computational model of imbalance in excitatory/inhibitory ratio and its relation to switch attention deficit in autistic brain**
N. MOHAMMADI SEPAHVAND, R. BAKHTIARI KOUHSORKHI, M. NILI AHMADABADI & B. NADJAR ARAABI

B514 **How much do neurons weight? A universal glia scaling rule for mammalian brains and its implications for brain structure, development and evolution**
B. MOTA & S. HERCULANO-HOUZEL

B515 **Role of thermoregulated conductances on the dynamic response of peripheral innocuous cold receptor terminals: a mathematical modeling approach**
E. OLIVARES, R. MADRID & P. ORIO

B516 **Free concepts association: a neural model**
E. RUSSO & A. TREVES

B517 **Realistic modeling cerebellar UBC intrinsic excitability**
S. SUBRAMANIYAM, P. PERIN, F. LOCATELLI, S. MASETTO, S. SOLINAS & E. D' ANGELO

19. Neuroelectronics & neurorobotic interfaces

B518 **A semi-automated machine for isotropic fractionation of large brains**
F.A.C. AZEVEDO, H.C. ANDRADE-MORAES, M.R. CURADO, A.V. OLIVEIRA-PINTO, D.M. GUIMARAES, D. SZCZUPAK, B.V. GOMES, D. OLIVEIRA & R. LENT

B519 **Advancing neuronal cellular and network analysis using a high-density 11,011-microelectrode CMOS array**
D.J. BAKKUM, U. FREY, J. MUELLER, M. FISCELLA, H. TAKAHASHI & A. HIERLEMANN

B520 **Talking to cells with light: a high power two dimensional microLEDs array for optoelectronic retinal prosthesis and optogenetics applications**
R. BERLINGUER PALMINI, B. MCGOVERN, K. MEHRAN, N. GROSSMAN & P. DEGENAAR

B521 **Decoding the neural representation for action observation and action production from non-invasive electroencephalography (EEG) signals**
J.L. CONTRERAS-VIDAL & T.J. BRADBERRY

B522 **Hybrid opto-electrical control of neural tissue**
A.R. DUKE, H. LU, M.W. JENKINS, P.E. KONRAD, A. MAHADEVAN-JANSEN, H.J. CHIEL & E.D. JANSEN

B523 **Validation of a high-density microelectrode array for acute brain slice recordings**
E. FERREA, L. MEDRIHAN, A. MACCIONE, P. BALDELLI, D. GHEZZI, F. BENFENATI & L. BERDONDINI

POSTER PRESENTATION

B524 **A hybrid bio-organic interface for neuronal photoactivation**
D. GHEZZI, M.R. ANTOGNAZZA, M. DAL MASCHIO, E. LANZARINI, G. LANZANI & F. BENFENATI

B525 **Voltage and current stimulus range for wild-type and *rd1* mice retina with optimal modulation of retinal ganglion cell (RGC) response**
Y.S. GOO, K.N. AHN, S.B. RYU & K.H. KIM

B526 **Voltage-sensitive dye imaging for primary cultured neurons, acute slice of cerebral cortex, and visual cortex by using a biomedical photonic LSI (BpLSI) device**
T. KOBAYASHI, M. MOTOYAMA, Y. SAWADSARINGKARN, A. TAGAWA, T. NODA, K. SASAGAWA, T. TOKUDA, Y. HATANAKA, H. TAMURA, Y. ISHIKAWA, S. SHIOSAKA & J. OHTA

B527 **Softer materials decrease foreign body response in the brain**
P. MOSHAYEDI, K. FRANZE, A.F. CHRIST, G.S. YEO, J.W. FAWCETT & J. GUCK

B528 **Inferring linear and angular kinematics during walking from non-invasive EEG signals**
A. PRESACCO, L. FORRESTER & J.L. CONTRERAS-VIDAL

B529 **Investigating 2D/3D patterned networks coupled with high-resolution MEAs for functional studies**
A. SIMI, E. MARCONI, A. MACCIONE, T. NIEUS, A. BOSCA, F. BRANDI, F. BENFENATI, S. DANTE & L. BERDONDINI

B530 **High resolution recording in the rat brain cortex by a multi transistor array chip**
M. MASCHIETTO, S. GIRARDI, F. FELDERER, E. PASQUALOTTO, M. MAHMUD & S. VASSANELLI

B531 **Comparison of visual acuity between visual prosthetic approaches**
M. VURRO & J.S. PEZARIS

20. History, teaching, neuroethics, awareness & social impact

H001 **Scientists and the unification of Italy**
M. BENTIVOGLIO & M.C. STEFANINI

H002 **Using impulse reviewer training sites to engage students in basic research**
K.B. DAVISON, M. BARKHUIZEN, K. CRISP, K. CRONISE, S. SMITH, S.M. SWEITZER, S. SYMINGTON, V. TURGEON & L.S. JONES

H003 **Neuroscience and teacher training: a dialogue needed**
F.A.H. DE CARVALHO, A.M. MAIATO & D.M. BARROS

H004 **IBRO inter-regional activities initiative**
K.A. KORALEK, R. ROCKSTAD-REX & M. DI LUCA

H005 **The international neurobioetica multidisciplinary study and research group: report of meetings, seminars and future work**
A. GINI, A. GARCIA & R. PASCUAL

H006 **Neurology training in Ethiopia: past, present and future**
J. GEMECHU, G. ZENEBE, M. ZEBENIGUS & Y. WOLDEAMANUEL

H007 **Teaching tools in Africa**
S. JULIANO

H008 **Milestones in neuroscience of epilepsia partialis continua**
Y. LEKOMTSEVA

H009 **An epistemological investigation within the neurosciences: the utility of the comparison with some psychotherapeutic models**
M.A. MANGIONE

H010 **Ethical intelligence and education for culture of peace: the neuro-physiologocal dynamics in a sustainable way**
R.D.F. MIGLIORI

H011 **Objective-based learning and integrated approach to assessment of neuroscience practical instruction for medical students**
A.B. ODUTOLA

H012 **The evaluation of the Croatian version of the Epworth sleepiness Scale and STOP questionnaire as screening tools for obstructive sleep apnea syndrome**
R. PECOTIC, I. PAVLINAC, M. VALIC, N. IVKOVIC & Z. DOGAS

H013 **The prefix ‚Neuro' in terms like neuromarketing, neuroeconomics: truly transdisciplinary approaches or just catchy hyped up syllables?**
S. PRABHU, H. MISRA, B. AUGIER & A. SHERDIL

H014 **Five years after: reviewing progress and forthcoming challenges of a novel Canadian neuroethics research program**
E. RACINE & E. BELL

H015 **The mystical dimensions of neuroethics**
M. RAZA

H016 **Education on drug abuse to children and adolescents from poor and violent urban communities**
M. ROCHA

H017 **The research nursery "neuroplasticity"**
L. FRANCIS, M. AVILA, A.M. SABOGAL GUAQUETA, E. MAYORGA, D. NAVARRO, A. BONILLA, N. BONILLA, L. DE LOS REYES, L. TRUJILLO, M. HERNANDEZ, J. SALGUERO, A. ROJAS, J. DIAZ, J. MONROY, L. ROJAS, C. MURCIA, U. FLOREZ & A. BENITEZ

H018 **Awareness and social impact of neuroscience education in India: a students' perspective**
J.K. SINHA & S. GHOSH

H019 **Neuroethics in a deontological and utilitarian context. An ERP analysis on the "emotional effect"**
A. TERENZI & M. BALCONI

H020 **From Kinshasa to Kigali, from Qindao to Manasar: the IBRO initiative in encouraging young neuroscientists around the world**
S. SARA, K.M. MOREIRA & R. AKINYEMI

Scientific Program

Sunday July 17

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New CRONO PAR III represents the third generation of CRONO PAR pumps for Parkinson Disease treatment with apomorphine®.
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CANE
MEDICAL TECHNOLOGY

08:30-09:30 PLENARY LECTURE PL6 Auditorium Verdi
Introduced by: **Domenico E. Pellegrini-Giampietro** (Florence, Italy)

Visualizing circuits in the developing visual system
Joshua R. Sanes (Harvard, USA)

09:40-11:40 SYMPOSIUM S11 Auditorium Verdi
CHROMATIN REMODELING IN NEURAL DEVELOPMENT
Chaired by: **Victor Tarabykin** (Berlin, Germany)

S11.1 - 09:40
Epigenetic regulation of neural stem/progenitor cell differentiation
Yi Eve Sun (Los Angeles, USA)

S11.2 - 10:10
A novel epigenetic mechanism in neurons
Antonella Riccio (London, UK)

S11.3 - 10:40
The role of histone modifying enzymes in motor neuron development
Soo-Kyung Lee (Houston, Texas)

S11.4 - 11:10
Control of neocortical development by Satb proteins
Victor Tarabykin (Berlin, Germany)

09:40-11:40 SYMPOSIUM S12 Room Mazzini
GLIAL AND NEURONAL CONTROL OF BRAIN BLOOD FLOW IN HEALTH AND DISEASE
Chaired by: **Serge Charpak** (Paris, France)

S12.1 - 09:40
The regulation of brain blood flow by synaptic activity in vivo
Martin Lauritzen (Glostrup, Denmark)

S12.2 - 10:10
Astrocyte modulation of cerebral blood vessels in health and disease
Brian MacVicar (Vancouver, Canada)

S12.3 - 10:40
Glial regulation of blood flow in the normal and diabetic retina
Eric Newman (Minneapolis, USA)

S12.4 - 11:10
Regulation of capillary diameter by pericytes in health and disease
David Attwell (London, UK)

09:40-11:40 SYMPOSIUM S13 Room Cavour
NEW ROLES FOR MELANOPSIN PHOTOPIGMENT IN NON-VISUAL AND VISUAL FUNCTIONS
Chaired by: **Howard Cooper** (Bron, France)

S13.1 - 09:40
Light and the human circadian timing system
Claude Gronfier (Bron, France)

S13.2 - 10:10
Melanopsin input to visual structures of the brain in the mouse
Robert J. Lucas (Manchester, UK)

S13.3 - 10:40
Short wavelength light modulation of cognitive and emotional brain function in humans
Gilles Vandewalle (Liege, Belgium)

S13.4 - 11:10
Use of ectopically expressed Melanopsin to restore vision in blind animals
Satchidananda Panda (La Jolla, USA)

09:40-11:40 SYMPOSIUM S14 Room Vittorio Emanuele II
MENTAL AND PHYSICAL ACTIVITY AS MODULATORS OF BRAIN FUNCTION AND DISEASE
Chaired by: **Anthony Hannan** (Melbourne, Australia)

S14.1 - 09:40
Brain and environment
Lamberto Maffei (Pisa, Italy)

S14.2 - 10:10
Regulation and function of adult hippocampal neurogenesis: the role of exercise
Henriette van Praag (Baltimore, USA)

S14.3 - 10:40
Unraveling the role of genes and environment in cognitive dysfunction
Jess Nithianantharajah (Cambridge, UK)

S14.4 - 11:10
Preventive and curative effects of environmental enrichment on drug addiction
Marcello Solinas (Poitiers, France)

09:40-11:40 SYMPOSIUM S15 Room Garibaldi
STRESS, PLASTICITY & DRUG-SEEKING
SPONSORED BY THE BRITISH JOURNAL OF PHARMACOLOGY
Chaired by: **Andrew Lawrence** (Victoria, Australia)

S15.1 - 09:40
Pregnancy induces changes in the brain plasticity: reversal by stress due to maternal separation
Giovanni Biggio (Cagliari, Italy)

S15.2 - 10:10
The effect of drug exposure on learning-related plasticity in the striatum and decision-making
Bernard Balleine (Sydney, Australia)

S15.3 - 10:40
The role of neuronal nicotinic acetylcholine receptors in the development of alcohol and nicotine use disorders
Selena Bartlett (San Francisco, USA)

S15.4 - 11:10
New anti-relapse drugs: findings from preclinical and translational studies
Rainer Spanagel (Mannheim, Germany)

11:40-14:15 POSTER SESSION C Poster Area
(see detail page 108)

Posters should be placed on the boards from 9:30 on each day and removed by 17:30. No responsibility will be taken for posters which are left behind. **Posters will be attended by the Presenting Author from 11:40 to 14:15 on each day.**

The poster boards are numbered and adhesive material will be available at each board (please do not use drawing pins or thumbtacks). **The number of the abstract corresponds to the number of the poster panel.**

The Posters for **Topic 20 (History, teaching, neuroethics, awareness & social impact)** will be on display for the entire period of the congress (from Friday, July 15 to Monday, July 18) and will be attended by the Presenting Author from 11:40 to 14:15 on the first day, Friday, July 15.

Italian Society of Neuroscience (Young Investigator Visiting Programme) Poster Prize: The best posters by participants from low-income countries will be selected each day by a Selection Committee and awarded at the late afternoon Plenary Lecture at 17:30 of each day.)

01. Nervous system development & developmental disorders (Axonogenesis, synaptogenesis & miscellanea)
03. Glia (Astrocytes)
06. Excitable membranes & ion channels (Trafficking, mechanisms & methods)
08. Neural plasticity (Pharmacology & disease)
09. Neuroendocrine & autonomic regulation (Hormones, salt & water balance)
10. Pain (Inflammation & other mechanisms)
11. Sensory systems (Other perception systems)
12. Motor systems (Disease)
13. Learning & memory (Pharmacology & toxicology)
14. Cognition & emotion (Human cognition & emotion)
15. Neurodegeneration & aging (Aging, epilepsy & ischemia)
16. Neurological disorders (Inflammation & other disorders)
17. Psychiatric & behavioural disorders (Compulsive behaviour, panic & other disorders)
20. History, teaching, neuroethics, awareness & social impact

12:30-14:00 SPECIAL EVENT SE07 Room Mazzini
INTO THE BRAIN OF PATIENT H.M. - COMPUTERIZED ANATOMICAL EXAMINATION OF A NOTABLE CASE OF AMNESIA
Presented by: **Jacopo Annese** (San Diego, USA)

12:00-14:00 SPECIAL EVENT SE08 Room Cavour
ETHICS OF SCIENTIFIC PUBLISHING -- WHY DOES IT MATTER? ADVICE FROM EDITORS OF NEUROSCIENCE JOURNALS SOCIETY FOR NEUROSCIENCE (USA) AND IBRO WORKSHOP
Participants: **Jean-Marc Fritschy** (Eur J Neurosci, Editor-in-Chief), **Nancy Ip** (Soc Neurosci, Councilor), **Atsushi Iriki** (Neurosci Res, Editor-in-Chief), **Steve Lisberger** (Neuroscience, Chief Editor) and **John Maunsell** (J Neurosci, Editor-in Chief)

Publishing a scientific article involves complex decisions about who should be an author, what previous work must be cited, and how to summarize data succinctly yet faithfully. While clear principles and guidelines exist, they can be complex and subtle, but failing to meet accepted standards can have serious consequences. In this workshop, editors of several prominent neuroscience journals will review guidelines to help authors avoid issues related to topics including authorship, dual submission, duplicate publication, copyright violation, plagiarism, and misrepresentation of data. The session will include presentations that provide specific examples and pointers to resources with guidance on specific topics related to ethics in scientific publication

12:30-14:00 SPECIAL EVENT SE09 Room Garibaldi
MEETING JAPANESE NEUROSCIENTISTS
Chaired by: **Noriko Osumi** (Sendai, Japan) and **Hitoshi Okamoto** (Wako, Japan)

SE09.1
Neuroscience must go on: Situation in Sendai 4 months after 3/11 disaster
Noriko Osumi (Sendai, Japan)

SE09.2
Gratefulness for friendship of overseas colleagues and activity of JNS
Tadaharu Tsumoto (Wako, Japan)

SE09.3
NIPS activity to support affected scientists in Eastern Japan
Ryuichi Shigemoto (Okazaki, Japan)

SE09.4
Neuroscience Research and Education in Tokyo after the 0311 Disaster
Masanobu Kano (Tokyo, Japan)

SE09.5
Unity in the face of adversity: A tale of a foreign student's life in earthquake stricken country
Wajeeha Aziz (Okazaki, Japan)

SE09.6
Normal life and work have returned to the Greater Tokyo area after brief post-quake confusion
and uncertainty
Kang Cheng (Wako, Japan)

On March 11, 2011, the greatest earthquake in the history of Japan struck Tohoku, the northeast part of the main island of Japan. Multiple waves of Tsunami almost completely swept away the villages and towns in the affected coastal areas. After this unprecedented disaster, the neuroscientists in Japan have received a great encouragement and supports from the colleagues all over the world. In this event, we would like to express our thanks to the world neuroscience community, and report about the state of Japan then and after 3.11. We welcome our friends from all over the world to come and join this event and use this opportunity to meet Japanese colleagues.

12:30-14:00 SPECIAL EVENT SE10 Room Vittorio Emanuele II
JOINT MEETING BETWEEN THE FRENCH AND ITALIAN NEUROSCIENCE SOCIETIES

SDN-SINS MINISYMPOSIUM 3
NEW NEURONS FOR DISEASED BRAINS: FUNCTIONAL SIGNIFICANCE AND PERSPECTIVES FOR BRAIN REPAIR
Renata Bartesaghi (Bologna, Italy) and **Claire Rampon** (Toulouse, France)

SE10.1 - 12:35
Gene-environment interactions and experience-dependent cellular plasticity in mouse models of brain disorders
Anthony Hannan (Melbourne, Australia)

SE10.2 - 12:55
Pharmacotherapy with antidepressants restores neurogenesis in the Ts65Dn mouse model for Down syndrome
Renata Bartesaghi (Bologna, Italy)

SE10.3 - 13:15
Adult hippocampal neurogenesis and functional recovery in mouse models of Alzheimer's disease
Claire Rampon (Toulouse, France)

SE10.4 - 13:35
Stem cell therapy in Parkinson's disease: when neurogenesis meets neuroprotection
Lidia Cova (Milan, Italy)

14:15-15:45 WORKSHOP W21 Room Vittorio Emanuele II

BUILDING CEREBELLAR CIRCUITS: FROM NEURONAL SPECIFICATION TO SYNAPSE FORMATION

Chaired by: **Constantino Sotelo** (Alicante, Spain)

W21.1 - 14:20
Regulation of cerebellar neurogenesis as revealed through the analysis of transgenic mice
Giacomo Consalez (Milan, Italy)

W21.2 - 14:40
The genesis of cerebellar GABAergic neurons
Ferdinando Rossi (Turin, Italy)

W21.3 - 15:00
Molecular control of neuronal migration in the cerebellar system
Alain Chedotal (Paris, France)

W21.4 - 15:20
Molecular mechanisms of synaptic specificity in cerebellar circuits
Peter Scheiffele (Basel, Switzerland)

14:15-15:45 WORKSHOP W22 Room Mazzini

NEURAL MECHANISMS UNDERLYING SPATIAL STABILITY

Chaired by: **David Burr** (Florence, Italy)

W22.1 - 14:20
Saccadic suppression from the pulvinar pathway
Robert Wurtz (Bethesda, USA)

W22.2 - 14:40
The role of oculomotor proprioception in spatial computations
Michael Goldberg (New York, USA)

W22.3 - 15:00
Space encoding during fast eye movements
Frank Bremmer (Marburg, Germany)

W22.4 - 15:20
Spatio-temporal plasticity of receptive fields during saccades
Concetta Morrone (Pisa, Italy)

14:15-15:45 WORKSHOP W23 Room Cavour

BDNF AND THE CONTROL OF THE TRANSLATIONAL MACHINERY IN DENDRITES

Chaired by: **Enrico Tongiorgi** (Trieste, Italy)

W23.1 - 14:20
BDNF-induced changes in the proteome of dendrites: protein synthesis vs. protein degradation
Carlos Duarte (Coimbra, Portugal)

W23.2 - 14:40
BDNF and the translational control of long-term potentiation
Clive Bramham (Bergen, Norway)

W23.3 - 15:00
Regulation of miRNAs-mediated synaptic plasticity by BDNF
Simon Arthur (Dundee, UK)

W23.4 - 15:20
Diversity in the regulation of BDNF splice variants translation
Enrico Tongiorgi (Trieste, Italy)

14:15-15:45 WORKSHOP W24 Auditorium Verdi

PRION PROTEIN IN INTRACELLULAR AND INTERCELLULAR SIGNALLING IN THE BRAIN

Chaired by: **Marco Prado** (London, Canada)

W24.1 - 14:20
Imaging prions: the site of pathological conversion and mechanism of spreading
Chiara Zurzolo (Paris, France)

W24.2 - 14:40
LRP1-prion protein (PrPC) interactions as controllers of amyloid processing by neurons
Roger Morris (London, UK)

W24.3 - 15:00
Copper dependent regulation of NMDA receptor by cellular prion protein - a role in Alzheimer's disease
Gerald Zamponi (Calgary, Canada)

W24.4 - 15:20
Regulation of cellular signaling: Prion protein on the move
Marco Prado (London, Canada)

14:15-15:45 WORKSHOP W25 Room Garibaldi

ADVANCES IN OPTICAL IMAGING OF BRAIN FUNCTION SPONSORED BY LEICA MICROSYSTEMS

Chaired by: **Gian Michele Ratto** (Pisa, Italy) and **Giorgio Carmignoto** (Padova, Italy)

W25.1 - 14:20
Targeted patch clamp recordings from fine dendrites
Thomas Nevian (Bern, Switzerland)

W25.2 - 14:40
STED microscopy to study macromolecular architectures at synapses
Stephan J. Sigrist (Berlin, Germany)

W25.3 - 15:00
High resolution fluorescence imaging of optically cleared mouse brain tissue
Gunter Giese (Heidelberg, Germany)

W25.4 - 15:20
Chloride and pH imaging in vivo using a GFP-based sensor
Daniele Arosio (Trento, Italy)

15:50-17:20 WORKSHOP W26 Room Vittorio Emanuele II

ASTROCYTES IN PHYSIOLOGY AND PATOHOLOGY

Chaired by: **Michael VL Bennett** (New York, USA)

W26.1 - 15:55
Endocannabinoid-mediated astrocyte-neuron signalling
Alfonso Araque (Madrid, Spain)

W26.2 - 16:15
Normal and pathological astrocyte-oligondendrocyte coupling
Luis C. Barrio (Madrid, Spain)

W26.3 - 16:35
Cholinergic signalling in astrocyte-neuron communication
Gertrudis Perea (Cambridge, USA)

W26.4 - 16:55
Pannexin and connexin hemichannels in spinal cord inflammation
Michael VL Bennett (New York, USA)

15:50-17:20 WORKSHOP W27 Room Mazzini
TEMPORAL STRUCTURE OF SPATIAL MEMORY: ATTRACTOR DYNAMICS OF HIPPOCAMPAL SPATIAL PROCESSING IN HEALTH AND SCHIZOPHRENIA
Chaired by: **Alessandro Treves** (Trieste, Italy)

W27.1 - 15:55
Constructing a sense of place - the role of cue detection and cue integration
Kate Jeffery (London, UK)

W27.2 - 16:15
Memories as hippocampal attractor states and their competition disclosed by teleportation
Karel Jezek (Prague, Czech Republic)

W27.3 - 16:35
Neural correlates of cognitive control and schizophrenia-related disorganization in hippocampus
Andre A. Fenton (Brooklyn, USA)

W27.4 - 16:55
Instability in attractor neural network dynamics and schizophrenia
Edmund T. Rolls (Oxford, UK)

15:50-17:20 WORKSHOP W28 Room Cavour
STRESS AT THE SYNAPSE. HOW BEHAVIORAL STRESS AND CORTICOSTEROIDS MODIFY SYNAPTIC TRANSMISSION AND PLASTICITY
Chaired by: **Maurizio Popoli** (Milan, Italy)

W28.1 - 15:55
Metaplasticity of corticosteroid actions in the synapse
Marian Joels (Utrecht, The Netherlands)

W28.2 - 16:15
Imaging the interplay of stress hormone and glutamate receptor at the single molecule level
Laurent Groc (Bordeaux, France)

W28.3 - 16:35
Action of stress on presynaptic release of glutamate and modulation by antidepressant agents
Maurizio Popoli (Milan, Italy)

W28.4 - 16:55
Synaptic and local circuit plasticity in the dentate gyrus. Potential relevance to traumatic memories
Ziv Ardi (Haifa, Israel)

15:50-17:20 WORKSHOP W29 Auditorium Verdi
IMMUNE CELL ENTRY AND FUNCTION WITHIN THE CNS: NEW MECHANISMS AND THERAPEUTIC OPPORTUNITIES
Chaired by: **Robyn Klein** (St. Louis, USA)

W29.1 - 15:55
From immune surveillance to autoimmune disease: how effector T cells invade the brain
Alexander Fluegel (Martinsried, Germany)

W29.2 - 16:15
Lymphocytes and loss of blood-brain barrier polarity during CNS inflammation
Robyn Klein (St. Louis, USA)

W29.3 - 16:35
Immunomodulatory role of adiponectin in the animal model of multiple sclerosis
Laura Piccio (St. Louis, USA)

W29.4 - 16:55
A role for mucins in leukocyte trafficking in neurological diseases
Gabriela Constantin (Verona, Italy)

15:50-17:20 WORKSHOP W30 Room Garibaldi
NEURAL MECHANISMS OF RESPIRATORY RHYTHM GENERATION SPONSORED BY THE MENARINI INTERNATIONAL FOUNDATION
Chaired by: **Fulvia Bongianni** (Florence, Italy)

W30.1 - 15:55
Multiple oscillators for respiratory pattern formation
Ana Abdala (Bristol, UK)

W30.2 - 16:15
Differential contribution of pacemaker neurons to respiratory rhythm generation
Fernando Peña (Mexico City, Mexico)

W30.3 - 16:35
Synaptically activated burst-generating conductances in respiratory rhythm generation in the mammalian preBötzinger Complex
Christopher A. Del Negro (Williamsburg, USA)

W30.4 - 16:55
Neurotransmitters and ionic mechanisms within the respiratory network of the lamprey
Donatella Mutolo (Florence, Italy)

17:30-18:30 PLENARY LECTURE PL7 Auditorium Verdi
Introduced by: **Maria Grazia Spillantini** (Cambridge, UK)

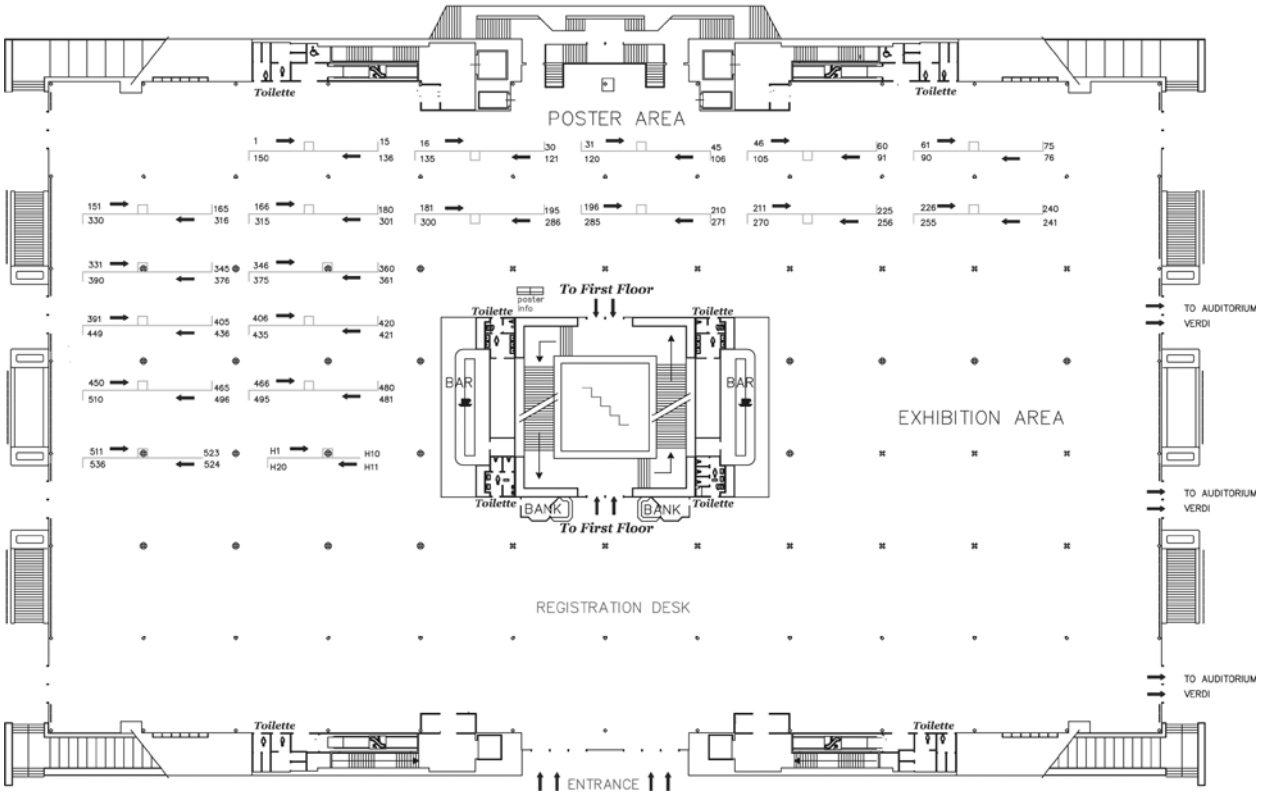
Molecular genetics of neurodegenerative dementias
Christine van Broeckhoven (Antwerpen, Belgium)

18:40-19:40 SPECIAL WORKSHOP SW07 Room Mazzini
EVENING DISCUSSION WITH PLENARY SPEAKERS III: SELECTING CREATIVE RESEARCH QUESTIONS
Chaired by: **Michael J. Zigmond** (Pittsburgh, USA) and **Beth A. Fischer** (Pittsburgh, USA)
Participants will include **Fred H. Gage** (La Jolla, USA)

We will consider how to go about selecting the right research questions, a key element in a successful career. Some of the issues we are likely to discuss are: How to determine if a project is feasible given your resources? How much reading of the literature should you do before making a selection? How many projects should you have going at one time? How important is having a hypothesis? Why is having a "secret weapon" one of the characteristics of being successful? How does one balance innovation with likelihood of success? Trainees and mentors are invited to join in the discussion.

POSTER PRESENTATION

Pavilion A - Ground Floor - Poster Area



01. Nervous system development & developmental disorders (Migration, differentiation & plasticity)

C001 **Regulation of NGF-promoted axonal growth by IL-1β and TNF during the sympathetic neuron development**
A. NOLAN & G.W. O'KEEFFE

C002 **Role of FABPs in the neurotrophic effect of oleic acid during the postnatal development of the brain**
A.A. ARROYO, A. TABERNERO & J.M. MEDINA

C003 **Expression of neurotrophin receptors TrkB, TrkC and p75 in the developing brain of the Monodelphis opossum**
K. BARTKOWSKA, R.L. DJAVADIAN & K. TURLEJSKI

C004 **Postnatal expression of CRMP4 mRNA in the brain and structural changes in the olfactory bulb of CRMP4-knockout mice**
A. TSUTIYA, M. SAKOH, N. YAMASHITA, Y. GOSHIMA & R. OHTANI-KANEKO

C005 **Gabaergic interneurons display plateau potential activity at the onset of the spontaneous activity during early spinal cord development**
H. LE-CORRONC, A. CZARNECKI, R. CHIARA, F.J. ALVAREZ & P. LEGENDRE

C006 **Tyrosine kinase Ack1 in axonal and dendritic branching in mouse neurons**
J.M. UREÑA, M.M. MASDEU, A. LA TORRE & E. SORIANO

C007 **Nak regulates localization of clathrin in local dendrite growth**
W.-K. YANG, Y.-H. PENG, H.-C. LIN, C.-Y. OU, H. LI, H. SUO, Y.-J. LIN, T.-T. LAI, X. ZHOU, H. PI, H.C. CHANG & C.-T. CHIEN

C008 **Development of the visual system in children**
S. AYALA-SORIANO, R. LIONS, T. MELLOW, A. LIASIS & C. CLARK

C009 **MRI analysis of early structural and functional human brain development**
C.R. ALMLI

C010 **Effect of low doses of ionizing radiation on neurite outgrowth and neuronal survival**
N. SAMARI, G. PANI, L. DE SAINT-GEORGES, S. BAATOUT, L. LEYNS & R. BENOTMANE

C011 **A role for dynamic actin in the development and maintenance of the dendritic arbor**
G.S. WITHERS, D.D. BRANDNER & G.R. STERNE

C012 **Expression analysis of α1A and α1D voltage operated calcium channels subunits throughout the fetal bovine hypothalamus**
A. PERUFFO, M. GIACOMELLO, M. SUMAN, S. MONTELLI, B. COZZI & C. BALLARIN

C013 **Synapse formation and dendritic development in vitro are influenced by astrocytes in a contact dependent manner**
C.S. WALLACE, K. CHORY, J.R. STERRITT, J. GUGGENHEIM & G.S. WITHERS

C014 **Effect of prenatal hypothyroidism on the dendritic arborization pattern of trigeminal motoneurons during postnatal development**
F. GANJI & H. SEPEHRI

C015 **Roles of innexins in gangliogenesis, process retraction and specification of electrotonic circuitry**
E. MACAGNO, C. FIRME, M. BAKER, A. SANCHEZ, B. KANDARIAN, W. ALLAN, J. SETHI & T. GAASTERLAND

C016 **5-HT_{1A} and 5-HT_{2B} serotonin receptors in neurite outgrowth: involvement of EGR-1**
T. ANELLI, S. CARDARELLI, M. ORI, I. NARDI, G. POIANA & S. BIAGIONI

C017 **PI(4,5)P_2 regulates neuronal dendritic outgrowth through the PDZ interaction between preso and beta-pix**
H.W. LEE, J. MO, D. LEE, S. HONG, S. HAN, H. YEO, I.J. RHYU, E. KIM & H. KIM

C018 **Synaptophysin expression in the cerebbellar granular layer of prenatally stressed rats reared in different conditions**
E. ULUPINAR & H. AY

C019 **A comparative neuroanatomical study of the hypothalamus in cichlids and other teleosts**
M. BOROOMANDI & M. HOFMANN

C020 **Do the quantitative GABAergic neurons in the rostral thalamic reticular nucleus of genetic absence epilepsy rats from Strasbourg (GAERS) differ developmently from those in normal control Wistar rats**
S. CAVDAR, H. HACIOGLU, S.D. YILDIZ & F. ONAT

C021 **Comparative histological study of the visua irelay centers in the hedgehog *Atelerix albiventris* and the pangolin *Manis tricuspis***
A.J. DAVID

C022 **Discriminant analysis of brain adrenoceptor profiles during adult sex reversal in hermaphrodite teleost fish**
B. ZIKOPOULOS, G. POTAMIAS & C. DERMON

C023 **The transcription factor REST is a novel molecular target for the neurotoxic effect of the polychlorinated biphenyl mixture Aroclor 1254 in neuroblastoma SH-SY5Y cells**
L. FORMISANO, N. GUIDA, S. COCCO, A. SECONDO, R. SIRABELLA, L. ULIANICH, F. PATURZO, G. DI RENZO & L.M. CANZONIERO

C024 **Subtle and disease specific structural patterns in human Neurofibromatosis type 1 confirm findings from the animal model**
J. DUARTE, M. RIBEIRO, I. VIOLANTE, G. CUNHA, E. SILVA & M. CASTELO-BRANCO

C025 **Genoarchitectonic delimitation of the avian dorsal pallium (hyperpallium, Wulst) from neighbouring pallial domains**
J.E. SANDOVAL, A. ALONSO, A. AYAD, M. MARTÍNEZ-DE-LA-TORRE, J.L. FERRAN & L. PUELLES

C026 **Identifying the relationship of mesensephalic raphe nuclei with hippocampus and lateral septum in the rat brain**
G. HASSANZADE, T. GHADIRI GARJAN & G. BEHZADI

C027 **Lactate effectively covers energy demands and maintains synaptic function during network activity in neonatal hippocampal slices**
A. IVANOV, M. MUKHTAROV, P. BREGESTOVSKI & Y. ZILBERTER

C028 **BMPs regulate neuronal cells in traumatic spinal cord injury by agmatine**
Y.M. PARK, S.K. SEO, K.A. PARK, J.E. LEE* & W.T. LEE*

C029 **Novel beta-dystroglycan-associated protein complex in nuclei of cerebral cortex neurons**
D. MARTÍNEZ-ROJAS, R. RODRÍGUEZ-MUÑOZ, V. ALEMÁN, O. CHÁVEZ-GONZÁLEZ & A. RENDON

C030 **Nuclear choline acetyltransferase activates transcription of a high-affinity choline transporter**
A. MATSUO, J.-P. BELLIER, M. NISHIMURA, O. YASUHARA, N. SAITO & H. KIMURA

C031 **Investigating the role of Sorting Nexin 8 in the central nervous system**
G. MUIRHEAD & K.K. DEV

C032 **α-2 subunit of nicotinic cholinergic receptor is expressed in the medial extended amygdala**
A. POMBERO & S. MARTINEZ

C033 **What´s happening in the brain of exercising ZDF rats, animal model for diabeties ?**
S.S. YI, J.H. SHIN, S.M. NAM, I.K. HWANG, W. SONG, Y.S. YOON & J.K. SEONG

C034 **Simultaneous Golgi-Cox and immunofluorescence labeling in brain slices by confocal microscopy**
S. SPIGA, G. MULAS & M. DIANA

C035 **Versatile roles of a molecular motor myosin Va in the cerebellum**
Y. TAKAGISHI

C036 **High levels of dopamine transporter and NMDAR1 receptor in prefrontal cortex of Naples high-excitability rats, an animal model of ADHD: effects of intranasal dopamine or MK-801**
C. PAGANO, P. ILLIANO, A. TINO, A. AMBROSONE, L.A. RUOCCO, C. TRENO, C. MATTERN, M.A. DE SOUZA SILVA, J.P. HUSTON & A.G. SADILE

POSTER PRESENTATION

C037 **Morphometric study of the HuC/HuD and nNOS neurons of the duodenum of rats with acute diabetes treated with insulin**
S. TRANNIN DE MELLO, M. HUBNER DE MIRANDA NETO, J. NELISIS ZANONI & S. LUCY MOLINARI

C038 **New neuronal targets of β-catenin~LEF1/ TCF**
M.B. WISNIEWSKA, A. NAGALSKI, M. DABROWSKI & J. KUZNICKI

03. Glia (Astrocytes)

C039 **Expression and regulation of Interleukin-20 receptor A (IL-20RA) in C57BL/6 mice astroglial cells**
B. ABD NIKFARJAM

C040 **Astrocytes have a more efficient glyoxalase system than neurons: implications for methylglyoxal cytotoxicity**
M. BÉLANGER, T. LAROCHE, I. ALLAMAN & P.J. MAGISTRETTI

C041 **Expression and function of glycine transporters, GlyT1 and GlyT2, in rat astrocytes**
R.I. AROEIRA, J.A. RIBEIRO, A.M. SEBASTIÃO & C.A. VALENTE

C042 **Glial purinergic signalling modulates extracellular K^+ regulation and axonal conduction in CNS white matter**
V. BAY, P. HURST & A. BUTT

C043 **Pharmacological characterization and single-cell gene expression profiling of two astrocytic populations responding with different volume changes to oxygen-glucose deprivation**
J. BENESOVA, V. RUSNAKOVA, P. HONSA, H. PIVONKOVA, M. KUBISTA & M. ANDEROVA

C044 **Nitric oxide as well as coculture with b.End3 cells stabilizes HIF-1alpha and induces HIF-1alpha target genes in primary astrocytes**
B. BRIX, L. PELLERIN & O. JÖHREN

C045 **Purification and differentiation of astrocyte precursor cells from the mouse optic nerve**
S. HONG, Y. IIZUKA, C.Y. KIM & G.J. SEONG

C046 **NICD/RBPJκ activation during astrocytic differentiation in C6 cells**
C. ANGULO-ROJO, B. MEZA-BAYGHEN, A. ORTEGA & E. LOPEZ-BAYGHEN

C047 **Brain glycogen could decrease with high-intensity intermittent exercise without hypoglycemia: possible role of brain monoamines**
T. MATSUI, S. SOYA, T. ISHIKAWA, M. OKAMOTO, Y. ICHITANI, K. KAWANAKA & H. SOYA

C048 **Phosphorylation of rat glial glutamine transporter SN1 at Ser52 by protein kinase C induces its internalization**
L.S.H. NISSEN-MEYER, E.H. HAMDANI, M.C. POPESCU & F.A. CHAUDHRY

C049 **Immunogold localization of connexin 43 in astrocytes: localization of hemichannels close to synapses**
L. ORMEL & V. GUNDERSEN

C050 **Cyclic nucleotide-gated channels are expressed in rat cortical astrocytes**
M.V. PODDA, L. LEONE, R. PIACENTINI, M. D'ASCENZO & C. GRASSI

C051 **Response of cochlear nucleus astrocytes to monaural conductive hearing loss**
H. WANG, S. HUI-PIN, E. COTE, J. PANDERVILLE & M.E. RUBIO

C052 **The involvement of gliotransmitters on basic nociception and the development of inflammatory pain**
M. SLEZAK, W. MAKUCH, E. ROJEWSKA, B. PRZEWLOCKA & R. PRZEWLOCKI

C053 **Extracellular Glutamate-GABA balance in the cerebral cortex**
P. UNICHENKO, O. MYAKHAR & S. KIRISCHUK

C054 **Metabotropic glutamate receptors mediate calcium signals in CNS white matter glia**
I. VANZULLI & A.M. BUTT

C055 **Alterations in astrocytic aquaporin 4 expression in the brain of hSOD1^{G93A} ALS rat model**
D. BATAVELJIĆ, A. KORENIĆ, M. AMIRY-MOGHADDAM & P.R. ANDJUS

C056 **nNOS inhibition reduces hippocampal astrocyte activation and interictal spikes 72 hours following kainic acid-induced status epilepticus in mice**
E. BEAMER, G. SILLS & T. THIMMASETTAPPA

C057 **Upregulation of kruppel-like factor 6 in reactive astroytes is correlated with that of HSP47 in the mouse hippocampus after pilocarpine-induced status epilepticus**
K.H. JEONG, K.-E. LEE, K.-O. CHO & S.Y. KIM

C058 **CXCL16, acting on astrocytes, prevents glutamate excitotoxic cell death in hippocampus**
M. ROSITO, C. DEFLORIO, F. TRETTEL & C. LIMATOLA

C059 **The functional expression of TRPV4 channels is significantly increased in reactive hippocampal astrocytes seven days after cerebral hypoxia/ischemia**
O. BUTENKO, D. DZAMBA, I. PRAJEROVA, J. BENESOVA, V. BENFENATI, S. FERRONI & M. ANDEROVA

C060 **Ischemia-preconditioned neurons protect astrocytes against ischemia via upregulation of erythropoietin**
Y. KE, X. WU, X. HE & Q. GONG

C061 **Beta-amyloid peptide induces upregulation of purinergic and glutamate signalling in astrocytes in the rat brain**
A. GONZALO-RUIZ, B. MARTIN, S. DELSO, M. SANZ-ANQUELA & P. GONZALO

C062 **CCAAT/enhancer binding protein δ is differently regulated by fibrillar and oligomeric forms of the Alzheimer amyloid-β peptide**
V. RAMBERG, L. TRACY, M. SAMUELSSON, L.N.G. NILSSON & K. IVERFELDT

C063 **Astrocyte-microglia interactions in the response to inflammatory stimuli**
L. FACCI, M. BARBIERATO, P. GIUSTI & S.D. SKAPER

C064 **Progressive deposition of osteopontin and calcium in the hippocampus following transient forebrain ischemia in rats**
Y.-J. SHIN, J.-M. PARK, H.L. KIM, J.-Y. CHOI, J.-H. CHA & M.-Y. LEE

C065 **GLP-1 expression in glial cells**
L.M. TRACY, C. KAPPE, C. PATRONE, Å. SJÖHOLM & K. IVERFELDT

C066 **Regulation of the neuroinflammatory response by glial cells: cytokines and SRs dependent crosstalk of astrocytes and microglial cells**
R. VON BERNHARDI, P. MURGAS, B. SOLER, G. RAMÍREZ & B. FLORES

C067 **Different effects of infections and proinflammatory cytokine response on mouse astrocytes and microglia induced by coxsackieviruses A16 and B3**
G. WANG, J. ZENG, W. LI, D. ZHANG, X. CHEN & K. LI

06. Excitable membranes & ion channels (Trafficking, mechanisms & methods)

C068 **Cav3.2 ubiquitination and degradation by the ER-associated degradation (ERAD) pathway**
A. GARCIA CABALLERO & G.W. ZAMPONI

C069 **Modulation of the L-type $Ca_v1.3$ channel by the nitric oxide-cGMP protein kinase G signaling pathway**
M.A. GANDINI, A. SANDOVAL, A. ALMANZA, A. ANDRADE, E. SOTO & R. FELIX

C070 **C-terminal membrane associability of Bestrophin 3 affects its activation as a chloride channel**
X. HAN, Z. QU, H. JIA, R. HUAI & S. ZHU

C071 **TSC22D1 regulates cerebellum granule neurons differentiation by interacting with TSC22D4 and BKCa potassium channels**
V. CARLETTI, S. CANTERINI, S. NUSCA, F. MANGIA & M.T. FIORENZA

C072 **KIF21A mediates the axonal transport of NCKX2**
K.-H. LEE, D. LEE, W.-K. HO & S.-H. LEE

C073 **Glucose-6-phosphate selectively decreases calcium accumulation in rat brain endoplasmic reticulum**
D.C. MCMULLEN, W.S. KEAN, A. VERMA, J.T. COLE & W.D. WATSON

C074 **On the mechanism of glutamate-induced delayed mitochondrial depolarization in brain neurons**
A.M. SURIN, V.G. PINELIS, I.A. KRASILNIKOVA, L.S. KHIROUG, D. CHUDAKOV & B.I. KHODOROV

C075 **P2Y receptor-evoked enhancement of calcium-activated potassium currents in neonatal rat striatal slices**
E. COPPI, F. PEDATA & A. GIBB

C076 **AMPA receptor regulation at the mRNA and protein level in rat primary cortical cultures**
C. ORLANDI, L. LA VIA, D. BONINI, C. MORA, I. RUSSO, A. BARBON & S. BARLATI

C077 **Transmembrane AMPA receptor regulatory protein γ-8 is involved with the regulation of spontaneous activity and mental condition**
M. YAMAZAKI, M. FUKAYA, K. AKASHI, A. AIBA, M. WATANABE & K. SAKIMURA

C078 **Role of intracellular ions in Gat1 reverse transport**
F. CHERUBINO, S. BERTRAM, E. BOSSI & A. PERES

C079 **Effects of estradiol and IGF-1 on the sodium-calcium exchanger (NCX) in rat cortical neurons**
J.C. SÁNCHEZ, D.F. LÓPEZ-ZAPATA, L.M. DE LOS REYES & L. FRANCIS

C080 **Surface traffic of dendritic CaV1.2 calcium channels in hippocampal neurons**
V. DI BIASE, M. HEINE, P. TULUC, M. CAMPIGLIO, G.J. OBERMAIR & B.E. FLUCHER

C081 **PIP_2-mediated HCN3 channel gating is crucial for rhythmic burst firing in thalamic neurons**
S.-W. YING, G.R. TIBBS, A. PICOLLO, S.Y. ABBAS, R.L. SANFORD, A. ACCARDI, F. HOFMANN, A. LUDWIG & P.A. GOLDSTEIN

C082 **Acquisition of neuron-like electrophysiological properties in neuroblastoma cells by controlled expression of NDM29 ncRNA**
P. GAVAZZO, V. SERENA, C.F. MARCHETTI, M. NIZZARI, R. CANCEDDA & A. PAGANO

C083 **Subcellular localization of VDAC (porin) in noradrenaline-storing organelles in *Locus Coeruleus* neurons of human control brain**
I. KLOUKINA-PANTAZIDOU, S. HAVAKI, M. CHRYSANTHOU-PITEROU & M.R. ISSIDORIDES

C084 **Nitric oxide effects on acid sensitive ion channels depend on their state and subunit composition**
N.A. DOROFEEVA, S.M. SWAIN, M.V. NIKOLAEV, N.N. POTAPJEVA, A.K. BERA & K.V. BOLSHAKOV

C085 **Specific interaction of TSC22D4 forms with chromatin, mitochondrial apoptosis inducing factor and nuclear matrix in differentiated and apoptosis-committed cerebellum granule neurons**
S. CANTERINI, V. CARLETTI, F. MANGIA & M.T. FIORENZA

POSTER PRESENTATION

C086 **Trafficking of HCN1 channels in the postnatal rat hippocampus**
J. BARRY & S. SIEGELBAUM

C087 **Modulation of spike firing in mesencephalic trigeminal nucleus neurons via protein kinase C dependent pathway**
G. CHUNG, J.S. KIM, Y. KANG & S.B. OH

C088 **Optical imaging of calcium waves evoked by infrared neural stimulation in the rat brain**
J. CAYCE, M. BOUCHARD, E.D. JANSEN, E. HILLMAN & A. MAHADEVAN-JANSEN

C089 **Chloride 2-photon imaging**
S. SULIS SATO, L. MARIOTTI, D. AROSIO, G. BONY, M. BRONDI, D. CAMILLO, L. CANCEDDA & G.M. RATTO

C090 **Electrophysiological characterization of a novel small peptide from the venom of *Conus californicus* that targets voltage-gated neuronal Ca^{2+} channels**
O. LÓPEZ, J. BERNALDEZ, A. LICEA, E. SALCEDA, R.O. ARELLANO, R. VEGA & E. SOTO

C091 **Patterned optical activation of channelrhodopsin-expressing neurons and neural circuits: multi-independent light stimulation system (MiLSS)**
S. SAKAI, K. UENO, T. HONJOH, T. ISHIZUKA & H. YAWO

C092 **Genetically encoded Cl-Sensor as a tool for studying Cl^- distribution in neurons**
T.V. WASEEM, M. MUKHTAROV, S. BULDAKOVA, I. MEDINA & P. BREGESTOVSKI

C093 **The molecular determinants involved in ion flux regulation of channelrhodopsins**
S. TANIMOTO, H. WANG, Y. SUGIYAMA, T. ISHIZUKA & H. YAWO

C094 **Improved component analysis of seemingly single-peak compound action potentials of rat and mouse spinal cord white matter**
A. VELUMIAN, M. SAMOILOVA & M.G. FEHLINGS

08. Neural plasticity (Pharmacology & disease)

C095 **Full and conditional CB1 receptor knock-outs in the amphetamine sensitization model in mice**
E. ANDERZHANOVA, A.L. TERZIAN & C.T. WOTJAK

C096 **Chronic cocaine treatment induces neuroplasticity on central nicotinic receptors**
H.R. SILVA, S. BARBOSA, L.L.S. COSTA, E.A. ARAUJO, C.A. TIEPPO & C. LOPES

C097 **Evidence for structural plasticity of visual cortical representations in a human model of ganglion cell death**
O. C. D'ALMEIDA, C. MATEUS & M. CASTELO-BRANCO

C098 **High-fat diet-induced obesity impairs the dendritic morphology of hippocampal pyramidal neurons in mice with sex difference**
L.-C. CHIOU, S.-F. TENG, L.-J. LEE, C.-P. CHEN, C.-T. CHEN, L.-L. HWANG & I.-K. HO

C099 **Developing a novel platform for studying, in vivo, the neural response to traumatic brain injury**
J. CHUCKOWREE & T. DICKSON

C100 **Matrix metalloproteinase inhibition attenuates detrimental effect of ischemic stroke on cortical plasticity: in situ visualization of metabolic and gelatinolytic activity**
A. CYBULSKA-KLOSOWICZ, M. LIGUZ-LECZNAR, D. NOWICKA, M. KOSSUT & J. SKANGIEL-KRAMSKA

C101 **Acute effects of Modafinil on the brain resting state in young healthy subjects**
R. ESPOSITO, F. CILLI, V. PIERAMICO, A. TARTARO, G.L. ROMANI & S.L. SENSI

C102 **Effect of chronic treatment with grape juice Bordeaux variety on biochemical and neurochemical parameters in rats supplemented with high fat diet**
C. FUNCHAL, D. LACERDA, M. DE ALMEIDA, C. TEIXEIRA, A. DE JESUS, É. PEREIRA JÚNIOR, R. ANDRADE, T. GEMELLI, P. BOCK, C. WANNMACHER, J.A. HENRIQUES, C. DANI & R. GOMEZ

C103 **Combined oxaloacetate mediated glutamate scavenging and dehydroepiandrosterone treatement decreases neuronal loss and restores impaired synaptic plasticity after ischemic stroke**
J. FUZIK, M. MAROSI, L. KNAPP, G. OLÁH, D. NAGY, L. GELLÉRT, K. KOCSIS, T. FARKAS & J. TOLDI

C104 **Perilesional treatment with chondroitinase ABC and rehabilitation promote motor skill recovery and synaptic plasticity after focal stroke in rats**
L. GHERARDINI, M. GENNARO & T. PIZZORUSSO

C105 **Lasting synaptic changes underlie attention deficits caused by nicotine exposure during adolescence**
N.A. GORIOUNOVA, D.S. COUNOTTE, T. PATTIJ, S. SPIJKER & H.D. MANSVELDER

C106 **Theta pulse stimulation: a natural stimulus pattern can alter NMDA receptor subunits composition in hippocampus area CA1 of morphine dependent rats**
N. HOSSEINMARDI, Y. FATHOLLAHI, M. JAVAN & N. NAGHDI

C107 **Synergistic effects of sodium butyrate, a histone decetylase inhibitor, and pyridoxine on cell proliferation and neuroblast differentiation in the dentate gyrus of aging model**
D.Y. YOO, W. KIM, S.M. NAM, J.Y. CHUNG, J.H. CHOI, Y.S. YOON & I.K. HWANG

C108 **The effect of TRPV1 antagonist and CB1 agonist on kindling model of seizure in rats**
S. KHAKSAR, P. KAHALI, N. NADERI & F. MOTAMEDI

C109 **Impaired short-term plasticity caused by mitochondrial dysfunction is the earliest synaptic deficit in a mouse model of Alzheimer's disease**
K.R. KIM, S.H. LEE, S.-Y. RYU, S. SON, H.S. HONG, I. MOOK-JUNG, S.-H. LEE & W.-K. HO

C110 **Effect of paired associative stimulation on corticomotor excitability in chronic smokers**
A.P. LAVENDER, H. OBATA, N. KAWASHIMA & K. NAKAZAWA

C111 **Changes of synapses in the CA1 area under ischemic injury**
Y. RUAN, Z. SHI, X. HAN, Z. LEI & Z.C. XU

C112 **Examining post-ischemic neuroplasticity following a novel, appetitively-motivated form of movement therapy in the rat**
J.M. LIVINGSTON-THOMAS, T.A. DOUCETTE & A.R. TASKER

C113 **Participation of orexin system in the behavioural sensitization induced by ethanol in male mice**
G.C. MACEDO, S.E. KAWAKAMI, T. VIGNOLI, R. SINIGAGLIA COIMBRA & D. SUCHECKI

C114 **Caffeine regulates corticostriatal dopamine transporter density and improves attention deficits in an animal model of attention deficit hyperactivity disorder (ADHD)**
P. PANDOLFO, N. MACHADO, A. KÖFALVI, R. TAKAHASHI & R. CUNHA

C115 **Acute application and chronic application of methylphenidate influence long-term potentiation in rat hippocampus slices in opposite ways**
B. MORALES, A. ARIAS-CAVIERES, C. ROZAS, S. LOYOLA, C. SANCHEZ, G. UGARTE, F. MAUREIRA, P. ROJAS & M. ZEISE

C116 **Hippocampal branching pattern, spine density and protein expression are affected by chronic restraint stress**
D. ORLOWSKI, B. ELFVING, H.K. MÜLLER, G. WEGENER & C.R. BJARKAM

C117 **Blockade of phrenic long term facilitation by microinjections of the 5-HT$_{1A}$ receptor antagonist WAY-100635 into the raphe nucleus of the rat**
I. PAVLINAC, R. PECOTIC, Z. DOGAS & M. VALIC

C118 **Low-dose domoic acid induces subfield-selective injury and triggers cell proliferation and neurogenesis in organotypic hippocampal cell cultures**
A. PEREZ-GOMEZ & R.A. TASKER

C119 **Modulation of hippocampal glutamatergic currents after acute glucocorticoid exposure in a mice model of early life stress**
A.G. PILLAI, H. KRUGERS, F. HOLSBOER, M. SCHMIDT & M. JOELS

C120 **A longitudinal analysis of structural brain changes in chronic pain**
R. RODRIGUEZ-RAECKE, A. NIEMEIER, K. IHLE, W. RUETHER & A. MAY

C121 **Reduced cell proliferation and neuroblast differentiation in the dentate gyrus of high fat diet-fed mice is ameliorated by metformin and glimepiride treatment**
D.Y. YOO, W. KIM, S.M. NAM, J.H. CHOI, I.K. HWANG, Y.S. YOON & K. SEO

C122 **Chronic restraint stress causes a reduction in neuroligin-2 distribution in rat hippocampus**
I.V. KRAEV, M. FANTIN, N. MEDVEDEV, C. SANDI & M.G. STEWART

C123 **Protein kinase Mzeta inhibitor (ZIP) alters cocaine sensitization initiation and expression and decreases VTA AMPA mediated currents**
M.E. VELEZ-HERNANDEZ, R. VAZQUEZ-TORRES, M.C. VELASQUEZ-MARTINEZ, T. SACKTOR & C.A. JIMENEZ-RIVERA

C124 **Agmatine reduces brain apoptosis, astrogliosis, and edema after transient cerebral ischemia in rats**
C.-C. WANG, C.-C. CHIO, J.-R. KUO, B.-C. CHENG, M.-T. LIN, Y.-C. HUNG & C.-P. CHANG

C125 **Activation of microglia and increases in inflammatory cytokines in the hippocampus of type 2 diabetic rats**
S.M. NAM, D.Y. YOO, W. KIM, S.S. YI, I.K. HWANG, J.K. SEONG & Y.S. YOON

09. Neuroendocrine & autonomic regulation (Hormones, salt & water balance)

C126 **Sexually dimorphic effects of estrogen on dendritic spines of granule cells in cultures of rat accessory olfactory bulb**
Y. WU, K. MORIYA-ITO, T. IWAKURA, A. TSUTIYA, M. ICHIKAWA & R. OHTANI-KANEKO

C127 **Effects of ERα and β agonists, estrogen and androgen on number of ER α-immunoreactive cells in the hypothalamus of female rats**
M. KANAYA, O. AYAKO & K. YAMANOUCHI

C128 **Effects of unilateral lesion of ventromedial hypothalamus on densities of estrogen receptor-α immunoreactive cells in intact side**
Y. SHIMOGAWA & K. YAMANOUCHI

C129 **Highly induction of the hippocampal DHT (dihydrotestosterone) in response to treadmill running in male rats**
M. OKAMOTO, Y. HOJO, K. INOUE, T. MATSUI, S. KAWATO & H. SOYA

C130 **Xenoestrogens and anxiety in mice: sexually dimorphic effects of postnatal exposure to genistein**
A. RODRIGUEZ GOMEZ, B. FOGLIO, F. FILICE & G. PANZICA

POSTER PRESENTATION

C131 **Differential effects of the section of dorsal connections to the anterior hypothalamus on FSH and LH surge secretion**
R. DOMÍNGUEZ, E. CABRERA, M. CÁRDENAS, A. FLORES & M.-E. CRUZ

C132 **Gonadotropin-releasing hormone (GnRH) agonist enhances GnRH receptor-1 gene expression in the hypothalamus of neonatal male rats**
N.N. DYGALO, T.S. KALININA, T.V. SHEMENKOVA & G.T. SHISHKINA

C133 **Valproic acid mediates disruption in hypothalamo-hypophyseal gonadal axis by upregulating GAD65 and GAD67**
D. LAKHANPAL & G. KAUR

C134 **Variations in the neuroendocrine profile of mother rats with overlapped-litters might account for the adaptations in their maternal behavior**
N. URIARTE, D. AGRATI, M.J. ZULUAGA, O. GONÇALVEZ, A. FERREIRA & A. LUCION

C135 **Oxytocin is required for acquisition of odor preference in the female rat toward pups**
A. MUNETOMO, Y. KONDO, T. MIYAMOTO & Y. SAKUMA

C136 **The ability of glucocorticoids to induce tyrosine hydroxylase gene expression changes in parallel to the ratio of jun/fos mRNA levels in the perinatal rat brainstem**
T. KALININA, G. SHISHKINA & N. DYGALO

C137 **Deletion of ghrelin alters the response of Edinger-Westphal nucleus to restraint stress in the mouse**
L. XU, B. GEENEN, S.J. SPENCER, Z.B. ANDREWS, E.W. ROUBOS & T. KOZICZ

C138 **Retinohypothalamic projections to LH are involved in the light-mediated modulation of wakefulness through interaction with orexinergic and endocannabinoid systems**
R. IMPERATORE, A. IOVINE, A. DI NUNZIO, I. FERRANDINO, V. DI MARZO & L. CRISTINO

C139 **Exposure to chronic stress and air pollution are related with open field behavior and oxidative stress?**
G.D. GAMARO, G. PORTELLA, L.S. FAGUNDES, M.R. PIVA & C.R. RHODEN

C140 **Chronic restraint stress decreases 5-HT$_7$ receptor expression in the rat hypothalamic paraventricular nucleus**
B.B. GARCÍA-IGLESIAS, M.E. MENDOZA-GARRIDO, G. GUTIERREZ-OSPINA & J.A. TERRÓN

C141 **Glucocorticoids disrupt neuroendocrine and behavioral responses during lactation**
F.C. VILELA & A. GIUSTI-PAIVA

C142 **Influence of Neurotrophin-3 on Na^+-current regulation by thyroid hormone**
B.A. IGELHORST, C. BUSSE, M. LANGE, V. NIEDERKINKHAUS & I.D. DIETZEL

C143 **Hyperthyroidism alters glutamate uptake and modulates cytoskeleton dynamics by altering MAPK signaling pathways in cerebral cortex of immature rats**
A. ZAMONER, P.B. GOULART, S. TCHERNIN WOFCHUK, F.R.M.B. SILVA & R. PESSOA-PUREUR

C144 **Hypo- and hyperthyroidism affect neuropeptide glutamic-acid-isoleucine (NEI) concentration in discrete brain areas of adult male rats**
C. AYALA, S.R. VALDEZ, M.L. NAVARRA MORERO, M. SOAJE, N.B. CARREÑO, M.S. SANCHEZ, J.C. BITTENCOURT, G.A. JAHN & M.E. CELIS

C145 **Hyperthermia induced by sleep deprivation: possible involvement of IL-1β**
V.L. GOMES, B.D. PALMA, L.A. ESUMI, S. TUFIK & D.C. HIPOLIDE

C146 **Effects of menstrual cycle on disturbance of automatic nervous system caused by sleep deprivation**
J.-S. WANG

C147 **Regulation of sodium potassium ATPase subunits by thyroid hormone in cortical cultures from neonatal rat brain**
S. MOHANASUNDARAM, D. TURCU & I.D. DIETZEL

C148 **3-iodothyronamine, a pharmacological modulator of the hypothalamus-pancreas-thyroid axes in mice**
M.E.M.M. MANNI, G.D.S. DE SIENA, I.D. DICEMBRINI, E. BIGAGLI, L.C. CINCI & M.L. LODOVICI

C149 **Collapsin response mediator protein-4 (CRMP4) affects dopaminergic neurons in the AVPV**
M. SAKOH, T. IWAKURA, A. TSUTIYA, N. YAMASHITA, T. SHIGA, Y. GOSHIMA & R. OHTANI-KANEKO

C150 **Effects of flavonoids on catecholamine synthesis and secretion in cultured bovine adrenal medullary cells**
N. YANAGIHARA, H. ZHANG, Y. TOYOHIRA, S. UENO & M. TSUTSUI

C151 **A new player in the regulation of suckling-induced prolactin release in rat**
M. CSERVENAK, I. BODNÁR, T.B. USDIN, M. PALKOVITS, G.M. NAGY & A. DOBOLYI

C152 **Beta-ENDORPHIN: effects by volume-transmission via the CerebroSpinal Fluid (CSF)**
J.G. VEENING & H.P. BARENDREGT

C153 **Some parameters of the immune system activity are modulated by ECS, a non-pharmacological antidepressive treatment**
E. KLIMEK, A. ROMAN, J. KUŚMIERCZYK & I. NALEPA

C154 **P2X4 and P2X7 ATP receptors are involved in control of the respiratory rhytm in mouse neonates**
J.L. EUGENIN, C. CODDOU, E.U. BRAVO, S. BELTRÁN, C. CAPELLI, C. ACUÑA & I. LLONA

C155 **Modulation by catecholamines of lipolysaccharide-induced peritoneal macrophages´ activity in rats treated with electroconvulsive shock**
J. KUSMIERCZYK, A. ROMAN, E. KLIMEK & I. NALEPA

C156 **The antipyretic effects of IL-1 receptor antagonist on lipopolysacchride-induced fever in rabbits**
K.-C. LIN, C.-U. CHEONG, C.-M. CHAO, J.-W. LIN, M.-W. CHANG, C.-C. WANG, M.-T. LIN, C.-Z. YANG, C.-C. HSU, C.-P. CHANG & C.-C. CHIO

C157 **Downregulation of the cough reflex by clonidine in the rabbit**
E. CINELLI, F. BONGIANNI, D. MUTOLO & T. PANTALEO

C158 **Electroacupuncture stimulation alleviates poloxamer 407-induced hyperlipidemia by regulating HMG-Co A reductase and LDL-receptor expression in rats**
J. PARK, B. LEE, C.S. YIN, H.-J. LEE & D.-H. HAHM

C159 **Concurrent recording of spontaneous fluctuations in skin sympathetic nerve activity and whole-brain fMRI signal intensity in awake humans**
V.G. MACEFIELD, C. JAMES & L.A. HENDERSON

C160 **Neurogenic and myogenic mechanisms of intestinal motility**
M. COSTA, N. SPENCER & S. BROOKES

C161 **Somnogenic PGD_2 is expressed by the leptomeninges in the brain**
Y. CHÉRASSE, M. LAZARUS, Y. OISHI, Y. URADE & O. HAYAISHI

C162 **Chronic ethanol treatment increases hypothalamic AVP and OT mRNA expression**
A. LOPES DA SILVA, E.T. UCHOA, L.L. ELIAS, L.B. RESSTEL & J. ANTUNES-RODRIGUES

C163 **Localization of vesicular nucleotide transporter in the central nervous system**
E.P. KO-MITAMURA, M. LAZARUS, Y. MORIYAMA & Y. URADE

C164 **Insulin-regulated aminopeptidase (IRAP) identification in the rat pineal gland and the angiotensin IV effect on melatonin synthesis**
S.C. AFECHE, M.V. ABRAHÃO, F.G. AMARAL, R. PERES & J. CIPOLLA-NETO

C165 **Neuropeptides and nitric oxide in the brain of a disease vector insect**
B.P. SETTEMBRINI, A. TORBIDONI, A. GONZALEZ & G.L. GALVANI

C166 ***Aegle marmelose* modulates pancreatic regeneration through PDX 1 expression in streptozotocin induced diabetic rats**
M. ANITHA, J. SADANANDAN, N. MOHAN SHOBANA & P. CHIRAMADATHIKUDIYIL SKARIA

C167 **Postsynaptic CO_2 responses and histological characteristics of Phox2b-positive parafacial neurons in newborn rat medulla**
H. ONIMARU, K. IKEDA & K. KAWAKAMI

C168 **Anti-inflammatory effect of vagus nerve stimulation in a rat model: a mechanistic study**
C. PICQ, V. SINNIGER, J.-F. MAYOL, D. CLARENCON & B. BONAZ

C169 **Identification of distinct median preoptic neurons encoding osmotic and thermal signals**
D. MARTELLI, M.L. MATHAI, R.M. MCALLEN & M.J. MCKINLEY

C170 **Water avoidance stress activates central neurons in mice: modulation by colitis**
F. REICHMANN, M.E. EDELSBRUNNER & P. HOLZER

C171 **Oxytocin potentiates the increased water intake induced by polyethylene glycol administration**
A. BERNAL, J. MAHÍA, C. MEDIAVILLA & A. PUERTO

C172 **Sodium apetite behavior in offspring of female rats suplemented with sodium selenite during pregnancy and lactation**
W.S. CORTES, R.L. MELO, G.E. IMPÉRIO, G.E.G. KLUCK, C.S. ALMEIDA & L.C. REIS

C173 **Cholinergic mechanisms of the subfornical organ are involved on sodium intake induced by gabaergic activation of the lateral parabrachial nucleus**
C.F. RONCARI, R.B. DAVID, L.A. DE LUCA JR, D.S.A. COLOMBARI, P.M. DE PAULA & J.V. MENANI

C174 **Role of NMDA, AMPA and AT1 receptors in hemorrhage-induced AVP secretion**
A.S. MECAWI, T. VILHENA-FRANCO, L.L.K. ELIAS & J. ANTUNES-RODRIGUES

C175 **Morphological and quantitative analysis of neurons in lateral human hypothalamus and distribution of OX1R receptors**
D. MYTILINAIOS, K.I. TSAMIS & S.J. BALOYANNIS

C176 **Distribution of oxytocin receptors in the forebrain of ewes**
D.E. OLAZABAL

C177 **Intracisternal injection of L-cysteine activates hypothalamic vasopressin neurons in freely moving rats**
Y. TAKEMOTO

10. Pain (Inflammation & other mechanisms)

C178 **Antinociceptive and anti-inflammatory activities of essential oil of *nepeta crispa* in experimental rat models**
T. ALI, M. JAVAN, A. SONBOLI, S. SEMNANIAN & N. BEGUM

C179 **Interleukin-1 Receptor Type I activation in DRG contributes to inflammatory hyperalgesia in the peripheral tissue**
D. ARALDI, A.S. VIEIRA, E.V. DIAS & C.A. PARADA

POSTER PRESENTATION

C180 **Chronic paracetamol treatment induce an increment in pro-inflammatory cytokines and vascular cell adhesion molecules via NF kappa B signaling in rats with cortical spreading depression**
C. CHANTONG, T. THONGTAN, A. SRIKIATKHACHORN & S. MANEESRI-LE GRAND

C181 **Glucosylceramide has anti-inflammatory and anti-eczema effects on oxazlolne - induced contect dermatitis in mice**
S.-H. KIM, M. YEOM, H. LEE & D.-H. HAHM

C182 **Role of dopamine receptors of the Nucleus Accumbens on the inflammatory pain**
E.V. DIAS, A.S. VIEIRA & C.A. PARADA

C183 **Effects of neonatal noceptive inflammatory stimuli on hippocampal dentate granule cell proliferation are gender-specific**
M.A. LIMA, R. GUINSBURG & L. COVOLAN

C184 **Intraplantar PGE_2 causes nociceptive response in young rats**
M.A. REDUA & N.C. COIMBRA

C185 **Involvement of cholinergic mechanisms in the reversal of local inflammation and hyperalgesia by a peptide analogue to thymulin (PAT)**
B. SAFIEH-GARABEDIAN, R. MARDAM BEY, J. BARCHINI, F. SHAMAA, M. OZ, O.M. EL-AGNAF & N.E. SAADE

C186 **Increased serum IL-6 level time-dependently regulates hyperalgesia and spinal mu opioid receptor expression during CFA-induced arthritis**
J. ZARINGHALAM, E. TEKIEH, H. MANAHEJI & B. ALANI

C187 **An essential role of cathepsin B in inflammatory pain through the processing and secretion of IL-1β and IL-18 from microglia**
Z. WU, L. SUN, Y. HAYASHI & H. NAKANISHI

C188 **Anti-hyperalgesic and anti-inflammatory effects of *Achillea santolina* and *Stachys athorecalyx* extracts on complete Freund´s adjuvant-induced short-term inflammation in male Wistar rats**
E. TEKIEH, J. ZARINGHALAM, H. MANAHEJI & S. REZAZADEH

C189 **Changes in local expression of NGF and its receptors following nerve injury**
J. PELESHOK & A. RIBEIRO-DA-SILVA

C190 **Blocking nerve growth factor degradation in the rat hind paw skin leads to hypersensitivity to noxious stimuli and to sympathetic fibre sprouting**
G.M. LONGO, M. OSIKOWICZ, A.C. CUELLO & A. RIBEIRO-DA-SILVA

C191 **Analgesic, antipyretic and anti-inflammatory effects of fractions from aqueous extract of *Chromolaena odorata* leaves in rats**
B.V. OWOYELE & A.O. SOLADOYE

C192 **Influence of low dose naltrexone on hyperalgesia, paw edema and immune response in rats with chronic paw inflammation**
M. KOWALCZYK, B. ANTKOWIAK & M. PALUCH

C193 **Effect of acetaminophen treatment on the calcitonin gene related peptide induced c-Fos expression in cultured human microglial cells**
W. YISARAKUN, C. CHANTONG, S. MANEESRI-LE GRAND & T. THONGTAN

C194 **ERK activity in anterior nucleus of paraventricular thalamus plays an important role in mechanical hyperalgesia**
Y.-T. CHANG, M.-Y. MIN & C.-C. CHEN

C195 **Possible involvement of serotonergic mechanisms in the central analgesic effect of some NSAI drugs**
R. ARSLAN & N. BEKTAS

C196 **Increased noradrenaline release in a pain facilitatory area of the brain enhances descending pain facilitation**
I. MARTINS, M.G. DE VRIES, S.P. WILSON, B.H. WESTERINK & I. TAVARES

C197 **Inhibitory effect of krill lecithin-derived phosphatidylserine to skin lesions of atopic dermatitis-like mouse model**
B.-J. SUR, B. LEE, M. YEOM, S. KWON, J.-J. HAN, H.D. CHOI, H. LEE & D.-H. HAHM

C198 **T-lymphocyte infiltration and signaling in the dorsal spinal cord contribute to the development of dynamic allodynia in a murine model of herpetic pain**
A. SASAKI, A. SHINODA, T. ANDOH & Y. KURAISHI

C199 **Effect of serotonin depletion on the cortical spreading depression induced the release of calcitonin gene related peptide and substance P in the trigeminovascular nociceptive system**
C. SAENGJAROENTHAM, T. THONGTAN, A. SRIKIATKACHORN & S. MANEERSRI-LE GRAND

C200 **Smad interacting protein 1 modulates thermal, but not mechanical pain**
B. PRADIER, I. RACZ, T. VAN DE PUTTE, M. JEUB, A. MARKERT, D. MAUER, E. SEUNTJENS, V. GAILUS-DURNER, H. FUCHS, M. HRABÉ DE ANGELIS, D. HUYLEBROECK, H. BECK & A. ZIMMER

C201 **Nettle affects nociception in the animal model of visceral pain**
A. BATHAEI & S. SHAHIDI

C202 **A comparison of natural killer cell-mediated lysis of embryonic and adult DRG primary cultured neuronal cells**
J. LEE, A.J. DAVIES, M.-S. KIM, K.-M. LEE & S.B. OH

C203 **Antinociceptive effect of acute sucrose on incision pain model in rats**
L.O.A. SANOTOS, M.A. REDUA & N.C. COIMBRA

C204 **Efficacy of melatonin in treating myofascial face pain: a double-blind, randomized, placebo-controlled study**
S. ZANETTE, L. VIDOR, W. CAUMO, I.D.S.L. TORRES, I.C.C. DE SOUZA, A. DE SOUZA & B. DETÂNICO

C205 **Pain perception, placebo analgesia, and bayesian decision theory (BDT)**
D. ANCHISI

C206 **Perturbing and measuring neural activity in the pain resonance network: TMS studies**
S. BORGOMANERI, A. AVENANTI & S.M. AGLIOTI

C207 **The influence on postoperative analgesia by preemptive analgesia and its objective evaluation**
J. FRICOVA, M. VEJRAŽKA & R. ROKYTA

C208 **Effects of a non-invasive vestibulocortical activation technique in persistent pain states**
T.T. NGO, W.N. BARSDELL, M.J. CHOU, C. ARNOLD, A. NUNN, S.T. HILL, D.J. BROWN, S.J. GIBSON & S.M. MILLER

C209 **Neural correlates of vicarious pain evoked by somatic and emotional cues**
E. VACHON-PRESSEAU, M. ROY, M.-O. MARTEL, E. CARON, P. JACKSON & P. RAINVILLE

C210 **Evaluation of a Bayesian model of pain modulation and placebo effect**
M. ZANON, M. GREMESE & D. ANCHISI

11. Sensory systems (Other perception systems)

C211 **Genetic approach to elucidate ASIC3-mediated sensory pathway**
S.-H. LIN & C.-C. CHEN

C212 **M2 receptor activation causes desensitization to mechanical and heat stimuli negatively modulating TPVR1 channel expression and activity in sensory neurons**
F. DE ANGELIS, S. MARINELLI, B. FIORETTI, L. CATACUZZENO, F. FRANCIOLINI, J. WESS, F. PAVONE & A.M. TATA

C213 **Cellular mechanisms for presynaptic inhibition of sensory afferents**
R. DELGADO LEZAMA, R.K. CHRISTENSEN, R.E. RUSSO, B. LYKKE LIND, N. SCHMITT, M. LOEZA-ALCOCER, A. VICTOR PETERSEN, M. LAURITZEN & J.-F. PERRIER

C214 **The effects of tendon vibration on proprioceptive uncertainty**
C.T. FUENTES, H. GOMI & P. HAGGARD

C215 **Mechanoreceptive Ruffini endings innervating by ASIC3-positive trigeminal ganglion neurons**
T. MAEDA, F. RAHMAN & F. HARADA

C216 **Acid sensing ionic channel currents in spiral ganglion neurons of the mouse**
A. GONZALEZ GARRIDO, R. VEGA & E. SOTO

C217 **Development of neurons containing substance P and calcitonin gene-related peptide in the rat sensory ganglia**
P.M. MASLYUKOV, V.V. PORSEVA, M.B. KORZINA, O.A. VASLILJEVA & A.I. EMANUILOV

C218 **Significance of the IL-6 signal transducer gp130 for neuronal regeneration**
S. QUARTA, N. SCHERBAKOV, M. ANDRATSCH, S. GELEY & M. KRESS

C219 **Differential pharmacology of native P2X3 receptors in primate and rat sensory neurons**
G. MO, A. SERRANO, R. GRANT, M. PARE, D. O'DONNELL, M. PERKINS, P. SEGUELA & C.Q. CAO

C220 **Role of sensory inputs on newborn periglomerular cell survival and distribution in the adult mouse olfactory bulb**
S. BOVETTI, A. VEYRAC, S. GARCIA, O. FRIARD, A. FASOLO, A. DIDIER & S. DE MARCHIS

C221 **Evidence for ventral and dorsal streams in the chemical senses**
J. FRASNELLI, J.N. LUNDSTROM, S. NEGOIAS, J. GERBER, T. HUMMEL & F. LEPORE

C222 **Dynamic properties of multiple olfactory neurons in *Drosophila* antennal basiconic sensilla**
A.S. FRENCH, P.H. TORKKELI & J. SCHUCKEL

C223 **Expression and anterograde transport of NT-3 in the primary olfactory pathway**
K. GUTHRIE & H. LIU

C224 **Morpho-functional imaging of the honeybee olfactory system by in-vivo two-photon microscopy**
A. HAASE, E. RIGOSI, G. ANFORA, C. VINEGONI, G. VALLORTIGARA & R. ANTOLINI

C225 **Reduced responses to general odorants and pheromones in mouse model for Alzheimer disease**
T. OOSAKO, T. NARUKAWA, T. NOGUCHI, T. SUZUKI & M. KASHIWAYANAGI

C226 **A comparison of the changes in morphology induced by vinblastine and docetaxel on the olfactory mucosa of rabbits**
B.M. KAVOI, A.N. MAKANYA, J. PLENDL & S.G. KIAMA

C227 **Impact of tonic inhibition on synaptic integration in olfactory bulb granule cells**
C. LABARRERA & K. ANGELO

POSTER PRESENTATION

C228 **Two distinct mechanisms of odorants which can counteract the predator odor induced stress responses**
M. MATSUKAWA, T. MURAKAMI, N. KATSUYAMA, M. IMADA, S. AIZAWA & T. SATO

C229 **Sodium-channel subtypes and membrane current characteristics of the procerebral neurons of *Helix***
Z. PIRGER, K. ELEKES & T. KISS

C230 **Phosphorylation via PKC regulates the function of the Drosophila odorant coreceptor**
V. SARGSYAN, B. HANSSON & D. WIECHER

C231 **Olfactory crypt cells of the rainbow trout respond to odorants related to reproduction**
A. BAZÁES, R. OSORIO & O. SCHMACHTENBERG

C232 **Remarkable diversity in the vomeronasal system of placental mammals: can ecology serve as a predictor of morphology?**
R. SUAREZ, P. FERNÁNDEZ-ABURTO & J. MPODOZIS

C233 **Odor concentration sensitive neurons in the anterior piriform cortex**
A. SHIMIZU, J. WANG, S. OHARA, K.-I. TSUTSUI & T. IIJIMA

C234 **The role of temporal features of the afferent spike train in the perception of vibrotactile stimulus frequency**
I. BIRZNIEKS & R.M. VICKERY

C235 **Neonatal whisker trimming alters neural activity and behavior of adult rats**
Y.-F. CHU, C.-T. YEN & L.-J. LEE

C236 **Warming and cooling of the tongue differentially modulates responses of ethanol/sucrose-responsive parabrachial nuclei (PbN) cells in the hamster**
C.-S. LI & Y.K. CHO

C237 **Responses to tactile stimuli are slowed down by absent, but potential, distracters**
F. MARINI, L. CHELAZZI & A. MARAVITA

C238 **The proprioceptive map of the arm is systematically and individually constructed**
L. RINCON GONZALEZ & S.I. HELMS TILLERY

C239 **Consequences of elevated 5-HT levels during development for signal propagation and short term plasticity in the adolescent rat barrel cortex**
S. MICELI, M. SELTEN, M. NEGWER, S. VAN BEEST, J. HOMBERG, R. BAKKER & D. SCHUBERT

C240 **Selective expression of a muscarinic acetylcholine receptor M3 on type III cells in mouse fungiform taste buds**
Y. MORI, Y. OHTUBO & K. YOSHII

C241 **Learned preference for dried-bonito *dashi* (a traditional Japanese fish broth): a complex world of taste and smell**
T. KONDOH, T. MATSUNAGA, H. YAMAZAKI, T. KAMBE & M. NAGAO

C242 **Postnatal development of taste bud cells in mouse fungiform papillae**
Y. OHTUBO, M. IWAMOTO & K. YOSHII

C243 **Electrophysiological study of the involvement of the insular cortex of rats in interoception**
M. AGUILAR, S. KIM, F. TORREALBA, T. COLEMAN & P. MALDONADO

C244 **Distribution of connexin36 in juvenile and adult rodent spinal cord: Co-localization with vglut-1 suggests primary afferent terminals form mixed chemical and electrical synapses**
W. BAUTISTA, D.A. MCCREA & J.I. NAGY

C245 **The role of pre-existing representations in the induction of high-level adaptation aftereffects**
V. DAELLI

C246 **In vivo connection imaging and its application to monkey inferotemporal face system**
N. ICHINOHE

C247 **The role of ASIC3 and TRPV1 in blood volume regulation**
C.-H. LEE HANS & C.-C. CHEN

C248 **Evaluation of somatosensory evoked potentials and sensory reorganization at cortical level following repairing transected cervical roots in the ventral aspect**
Y.-L. LIN, K.-T. CHANG, Y.-H. SHIH, H. CHENG & M.-C. HUANG

C249 **A novel genetic approach to study neuroanatomical circuits**
J.A.G. MACKINNON & O. GRIESBECK

C250 **Artificial multi-cortical synchronization by electrical microstimulation enables behavioral discrimination in the rat**
P.E. MALDONADO, H.E. MANZUR-VALDIVIA, J. ALVAREZ & C. BABUL

C251 **Medioventral part of the posterior thalamus in the mouse**
K. MOTOMURA & T. KOSAKA

C252 **Elevated serotonin levels during cortical development affect the structural organization of thalamocortical and intracortical somatosensory networks**
M. NEGWER, C. KALKHOVEN, M. SELTEN, S. VAN BEEST, J. HOMBERG & D. SCHUBERT

C253 **Ventral pallidal neural response to non-selective dopamine receptors agonist, apomorphine: an electrophysiological study in anesthetized rats**
M. ORDIKHANI-SEYEDLAR, D. FARZIN & A. HAGHPARAST

C254 **The rat claustrum: anatomical axes defined by cellular morphology**
R. ORMAN, K. PATEL & F. SCALIA

C255 **Antidromic potential spread modulates the receptor responses in the stretch receptor neurons of the crayfish**
N. PURALI

C256 **State-dependent correlations between spontaneous neocortical activity and cerebral blood flow**
R.N.S. SACHDEV, Y. YU, P. HERMAN, B.G. SANGANAHALLI, D.A. MCCORMICK & F. HYDER

C257 **Properties and mechanisms of orientation tuning of the cat lateral geniculate nucleus**
H. SATO, T. NAITO, H. OSAKI, N. SUEMATSU, O. SADAKANE, M. OKAMOTO & S. SHIMEGI

C258 **Octopamine-induced increase in sensitivity in spider VS-3 mechanosensory neurons is mediated by Ca^{2+}/calmodulin dependent protein kinase II**
P.H. TORKKELI, I. PANEK & S. MEISNER

12. Motor systems (Disease)

C259 **Synergistic effect of smoking and LPO in pathogeneis of ALS: an Indian study**
A. ANAND, P. GUPTA & S. PRABHAKAR

C260 **Evidence of increased nuclear SOD1 in lymphocytes of sporadic ALS patients**
C. CEREDA, E. LEONI, G. MAZZINI, E. ALVISI, M. CERONI & E. COVA

C261 **Transcriptional and post-transcriptional regulation of mRNA SOD1 under oxidative stress**
S. GAGLIARDI, P. MILANI, M.L. AMADIO, V. SARDONE, A. GHIROLDI, A. PASCALE, E. COVA & C. CEREDA

C262 **Different mutant SOD1 clearance in muscle and motoneuronal cell models of amyotrophic lateral sclerosis**
E. ONESTO, E. GIORGETTI, P. RUSMINI, V. CRIPPA, N. FERRI, A. ZITO, M. GALBIATI & A. POLETTI

C263 **Behavioral effects induced by continuous magnetic field in an experimental model of Parkinson induced by neurotoxin 6-hydroxydopamine in Wistar rats**
G. BERTOLINO & J.E. DE ARAUJO

C264 **Genetic evidence for the involvement of D2 receptors in the motor effects of nociceptin/orphanin FQ receptor (NOP) ligands**
M. CALCAGNO, R. VIARO, M. PESENTE, E. BORRELLI & M. MORARI

C265 **Beta-band local field potentials (LFP) recorded from subthalamic nucleus in patients with Parkinson´s disease during saccadic eye movements**
A. YUGETA, A. SUNDARAM, A.M. LOZANO, M. HODAIE, W.D. HUTCHISON & R. CHEN

C266 **Involvement of IL-1 in the activated microglia-induced Parkinson´s disease animal model**
S. TANAKA, A. ISHII, H. OHTAKI, S. NUMAZAWA, S. SHIODA & T. YOSHIDA

C267 **A rise in synchronization of neuronal activity in the rat subthalamic nucleus under dopamine depletion**
A. LINTAS, I. SILKIS & A.E.P. VILLA

C268 **Motor activity and GABAergic synaptic transmission of dopamine D1 and D2 receptor knock-out mice**
T. MOMIYAMA, A. SATO, M. KATSUKI & T. SASAOKA

C269 **MPP^+ modulates hyperpolarization-activated current (I_h) in dopaminergic neurons of the substantia nigra pars compacta**
A. MASI, R. NARDUCCI, F. MORONI & G. MANNAIONI

C270 **Morphologic and functional impact of nanoscaled scaffolds of carbon nanotubes on spinal explants growth *in vitro***
A. FABBRO, A. VILLARI, J. LAISHRAM, D. SCAINI, F.M. TOMA, A. TURCO, M. PRATO & L. BALLERINI

C271 **Modulation of H-reflex in flexor pollicis brevii during the preparatory period of a force producing task: a pilot study**
E. AIMOLA, M. SANTELLO, L. LAUDANI & A. CASABONA

C272 **Sense of the body and the self in spinal cord injury patients**
B. LENGGENHAGER, M. PAZZAGLIA, G. SCIVOLETTO, M. MOLINARI & S.M. AGLIOTI

C273 **Late phase TNF-a treatment does not affect functional outcome after spinal cord injury**
P.M. VIDAL VERA, S. NELISSEN, L. GEBOES, E. LEMMENS & S. HENDRIX

C274 **Diversity of cell death pathways involved in spinal cord injury induced by metabolic perturbations mimicking ischemia and magnesium ions**
E. BIANCHETTI, M. MLADINIC & A. NISTRI

C275 **Immunohistochemical study of the spinal motor neurons in rabbits after pharmacologic preconditioning and ischemia/reperfusion**
I. DOMORÁKOVÁ, E. MECHÍROVÁ, M. STEBNICKÝ, M. ŽOFČÁK, M. DANKOVÁ, M. JANITOROVÁ, V. DANIELISOVÁ & J. BURDA

C276 **Delayed pharmacologic preconditioning provides elevation of HSP and antioxidant enzymes after spinal cord ischemia**
E. MECHÍROVÁ, I. DOMORÁKOVÁ, V. DANIELISOVÁ, M. DANKOVÁ, M. STEBNICKÝ, M. ŽOFČÁK & J. BURDA

C277 **Cannabidiol increases locomotor recovery after cryogenic spinal cord injury in rats**
M. KWIATKOSKI, F. GUIMARAES & E. DEL-BEL

C278 **Age differences in short-latency afferent inhibition revealed by a constant TMS intensity paradigm**
M. YOUNG-BERNIER, P. DAVIDSON & F. TREMBLAY

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C279 **Body part-specific emotions influence action recognition in apraxia patients**
M. PAZZAGLIA, G. GALLI & S.M. AGLIOTI

C280 **Analysis of myosin-V immunoreactive myenteric neurons from arthritic rats**
E.B. ROMANO, J.N. ZANONI & I.D. DA SILVA SOUZA

C281 **Motor recovery and synaptic plasticity after ventral root avulsion and repair with fibrin sealant combined with bone marrow mononuclear stem cells (BMSC)**
R. BARBIZAN, J.L. CARVALHO, M.F. CORAT, A.C. RODRIGUES, A.M. GOES, B. BARRAVIEIRA, R.S.F. JUNIOR & A.L.R. OLIVEIRA

C282 **Comparative extrapyramidal effects of *Rauwolfia vomitoria*, chlorpromazine and reserpine in mice**
S.A. BISONG, R.E. BROWN & E.E. OSIM

C283 **Behavioural and cerebellar histomorphological effects of artesunate and amodiaquine combination in rats**
M.B. EKONG, A.O. IGIRI, M.A. ELUWA & T.B. EKANEM

13. Learning & memory (Pharmacology & toxicology)

C284 **The cognitive effects of CEE depend on whether menopause etiology is transitional or surgical**
J.I. ACOSTA, S.E. MENNENGA, B.B. BRADEN & H.A. BIMONTE-NELSON

C285 **Aversive effects of ethanol: comparison of ethanol-induced and lithium chloride-induced conditioned taste avoidance in female Wistar rats**
Á. AGÜERO-ZAPATA, L. DE LA TORRE-VACAS & B. GONZÁLEZ-SEGURA

C286 **Protective effect of black ginseng on TMT-induced memory deficient rats**
Y.H. AHN, H.J. PARK, H.S. SHIM, M.S. YE, D.H. HAHM, H. LEE & I. SHIM

C287 **The effects of acute administration of dioica urtica on the object recognition task in mice**
M. AKHAVAN & S. SHAHIDI

C288 **The effects of nicotinic acetylcholine receptors antagonist microinjection on cross state-dependent learning between WIN55, 212-2 and nicotine or ethanol**
S. ALIJANPOUR, A. REZAYOF & M.R. ZARRINDAST

C289 **D1 and D2 dopamine receptors in the nucleus accumbens are involved in restoration of inhibitory avoidance memory by nicotine**
R. AZIZBEIGI, S. AHMADI & M.R. ZARRINDAST

C290 **Neurobehavioral properties of leaf extracts of Spondias mombin in Wistar rats**
O.R. ASUQUO, T.B. EKANEM, P.B. UDOH & M.A. ELUWA

C291 **Rats exposed to cocaine during late gestation show long-term deficits in spatial learning ability**
K. BEDI & Z.M. ISMAIL

C292 **The cognitive effects of calcium channel blockers in mice; influence of an allosteric modulation of the nicotinic cholinergic receptors**
G. BIALA, M. KRUK, J. KOZAK & K. JOZWIAK

C293 **Chronic intracerebroventricular βNGF infusion improves hippocampal-dependent memory**
A.M. BIRCH & Á.M. KELLY

C294 **Sildenafil, a selective phosphodiesterase type 5 inhibitor, enhances memory reconsolidation of an inhibitory avoidance task in mice**
M.M. BOCCIA, M.G. BLAKE, M. KRAWCZYK & C.M. BARATTI

C295 **Prolonged stress-induced impairment of memory in rats is alleviated by parallel administration of the cod liver oil**
J.J. BRASZKO & E. TROFIMIUK

C296 **Evaluation of chronic alcohol self-administration in male and female rats using a 3-bottle choice paradigm: sexually dimorphic effects on spatial learning and reference memory**
S. CACACE, F. PLESCIA, I. BARBERI, E. CANNIZZARO & C. CANNIZZARO

C297 **Analysis of gene expression of glutamate receptors *Nr2a* and *Nr2b* in brain structures of rats submitted to conditioned emotional response and to treatment with the standardized extract of *Ginkgo biloba* L**
V.M. FAVARO, D.R. OLIVEIRA, J.M. CERUTTI & S.M. CERUTTI

C298 **The effects of flumazenil in abstinence syndrome and tolerance to the anxiolytic effects of diazepam are context dependent**
S.E. CRUZ-MORALES, B. IDELFONSO & J.C.P. ARRIAGA-RAMÍREZ

C299 **Dopamine D2 receptors activation mediates object working memory capacity in mice**
E. DE LEONIBUS

C300 **Effect of L-Arginine on passive avoidance memory in adult male rats exposed to restraint-stress**
H. ESHAGH HAROONI, Z. MOAYED FARD, S. NIKNEJAD, A.-A. MOAZEDI, L. KHAJEPOUR & G.-A. PARHAM

C301 **Downregulation of neuronal activity marker gene Arc/Arg3.1 expression in the brain of scopolamine-induced amnesic mice and its attenuation by *Withania Somnifera***
A. GAUTAM & M.K. THAKUR

C302 **Modulation of hippocampal sharp wave - ripple activity by the mu opioid receptor**
P. GIANNOPOULOS & C. PAPATHEODOROPOULOS

C303 **The effect of ghrelin on the impairment of memory induced in rat by MK-801**
F. GOSHADROU, M. KERMANI

C304 **Central actions of the tripitramine, a selective M2 muscarinic receptor antagonist**
G. GALVAO, V. GAGLIARDI, T. MORANDIM, E. VIEIRA, M.R. GUERRA, M. PREZA & M. GAMBERINI

C305 **Granisetron improved scopolamine-induced memory impairment in mice: involvement of nitric oxide**
M. JAVADI-PAYDAR, M. ZAKERI, A. NOROUZI & A.R. DEHPOUR

C306 **Lead-induced impairment of learning and memory at different developmental stages of neuronal development in rats**
K.M. KHAN, R. ABDUR, A.-K. GHANIM & K. ISLAM

C307 **The role of cannabinoid receptors in mediating the chronic effects of L-type calcium channel blocker (verapamil) on learning and memory in rat**
H. KOMAKI, M. NOORBAKHSH, S. SHAHIDI & A. SARIHI

C308 **Effect of Krill phosphatidylserine on neurite outgrowth of Neuro-2A cells and improvement of memory in rats**
B. LEE, J. PARK, H. LEE & D.-H. HAHM

C309 **Fluoxetine reverses chemotherapy-induced reduction in hippocampal neurogenesis and spatial memory**
L. LYONS, M. ELBELTAGY, G. BENNETT & P. WIGMORE

C310 **Behavioral and morphological consequences of single epileptic seizure elicited by flurothyl**
J. MAREŠ, P. MAĎA, K. DEYKUN, M. POMETLOVÁ, R. ROKYTA & J. POKORNÝ

C311 **Intra-cerebellar injection of histamine inhibits emotional memory consolidation while chlorpheniramine present no effect**
R. MATTIOLI & A.C.L. GIANLORENÇO

C312 **Effects of the selective orexin-1 receptor antagonist SB-334867-A on acquisition, retrieval, and consolidation of taste aversion learning**
C. MEDIAVILLA & S. RISCO

C313 **The effect of scopolamine on hippocampal function and Akt activation**
M. MOOSAVI, G. YADOLLAHI KHALES, L. ABBASI, A. ZARIFKAR & K. RASTEGAR

C314 **Effect of pentoxifylline on ischemia- induced brain damage and spatial memory impairment in rat**
S. MOVASSAGHI, Z.N. SHARIFI, M. MEHDIZADEH & M. SOLEYMANI

C315 **The effects of vitamin B6 and folic acid on memory retrieval in rats**
M. NASSIRI-ASL, M.-R. SAROOKHANI, E. ABBASI & A.-A. ZANGIVAND

C316 **The activation of basolateral amygdala NMDA receptors inhibited amnesia induced by intra-ventral tegmental area microinjection of muscimol**
F. NAZARI-SERENJEH, A. REZAYOF & M.-R. ZARRINDAST

C317 **α, β-amyrin ameliorates learning and memory impairments induced by scopolamine in mice**
S.R. OH, H.A. JUNG, C.I. PARK, Y.H. CHOI & J.W. JUNG

C318 **Enhanced learning and memory of normal young rats by repeated oral administration of Krill phosphatidylserine**
H.J. PARK, H.S. SHIM, Y.H. AHN, M.S. YE, J.J. HAN, D.H. HAHM, H. LEE & I. SHIM

C319 **Improvement of memory by essential oils containing cypress against scopolamine-induced amnesia**
C.-J. PARK & C.-I. PARK

C320 **(-)-Linalool, a naturally occurring monoterpene compound, impairs memory acquisition in the object recognition task, inhibitory avoidance test and habituation to a novel environment**
P. PATRICIA, V. COELHO, J. GIANESINI, R. VON BOROWSKI, L. MARTINS, D. FERNADES, J. PICADA, A.R. SANTOS & L.F. BRUM

C321 **ABT239, an H_3 receptor antagonist, does not induce pro-cognitive effects nor increase cortical ACh release in rodents lacking neuronal histamine**
G. PROVENSI, L. MUNARI, M.B. PASSANI, M.G. GIOVANNINI, T. GARRISON, M. COWART, J. BRIONI & P. BLANDINA

C322 **Stimulus property affects temporal discrimination in rats**
S. SAKATA, M. MIZUMOTO & A. UJITA

C323 **Neuroprotective effect of FK506 reduces hippocampal damage and memory deficit after transient global ischemia in rat**
Z.N. SHARIFI, S. MOVASSAGHI, G. HASSANZADEH, M.R. ZARRINDAST & N. NOURI

C324 **Effects of chronic administration of valproic acid on learning and hippocampal adult neurogenesis in rats**
S. SINTONI, E. KURTYS, M. SCANDAGLIA, A. CONTESTABILE, M. BENTIVOGLI & B. MONTI

C325 **Repeated learning and inverse learning after impairment of reconsolidation caused by NMDA glutamate receptors antagonists: the role of initial learning abilities**
O.A. SOLOVIEVA, A.T. PROSHIN, Z.I. STOROZHEVA & V.V. SHERSTNEV

C326 **δ^9-tetrahydrocannabinol causes adolescent learning impairment by attenuation of plasticity and subtle disruption of neurogenesis in the hippocampus**
R.W.J. STEEL, J.H. MILLER & D.J. DAY

C327 **The effect of anesthetic dose of ketamin on water maze memory acquisition, consolidation and retrieval**
G. YADOLLAHI KHALES, M. MOOSAVI, L. ABBASI, A. ZARIFKAR & K. RASTEGAR

POSTER PRESENTATION

14. Cognition & emotion (Human cognition & emotion)

C328 **Action simulation plays a critical role in deceptive action recognition**
A. AVENANTI, E. TIDONI, S. BORGOMANERI & G. DI PELLEGRINO

C329 **Neurotransmitter receptor distribution and functional activations found in Broca's region**
M. BACHA-TRAMS, K. ZILLES, K. AMUNTS & A.D. FRIEDERICI

C330 **Consolidation of multiple objects in working memory depends upon type of attention**
S. BAIJAL & N. SRINIVASAN

C331 **Language processing lateralisation: investigation on the dorsolateral prefrontal cortex (DLPC) by functional near infrared spectroscopy**
S. BISCONTI, G. DI SANTE, R. DE CAROLIS, M. FERRARI & V. QUARESIMA

C332 **Hemispheric asymmetries in the processing of words in the first and second language: a cross-cultural study**
A. D'ANSELMO, S. REITERER & A. BRANCUCCI

C333 **Inhibitory control mechanism in bilingual language processing**
T. DASH & B.R. KAR

C334 **Gaze direction interacts with numerical representation**
R. FALCONE, E. BRUNAMONTI, A. GENOVESIO, S. COSTA & S. FERRAINA

C335 **Parietal cortex mediates the interaction between numerosity and time**
M.J. HAYASHI, R. KANAI & V. WALSH

C336 **Activation of cross-modal and multimodal brain areas in musical cognition**
S.A. HELEKAR, J. BISHOP, C. KARMONIK, S. FUNG, G.I. ALLEN, R. YEKOVICH & D.B. ROSENFIELD

C337 **Effect of presentation of Arabic numerals on temporal order judgment task**
T. HORAGUCHI, Y. YAMAKAWA & S.-I. SASAKI

C338 **The neural substrate in which an acute moderate exercise improves cognitive function is different between younger and older adults**
K. HYODO, I. DAN, K. SUWABE, H. YANAGISAWA & H. SOYA

C339 **Spatiotemporal dynamics of theta band phase synchronization underlying perceptual closure process in two-tone visual image presentation**
Y. KAKIMOTO, M. KAWASAKI, K. AIHARA & Y. YAMAGUCHI

C340 **Dual EEG analyses for synchronized behaviors of two person during alternately tapping tasks**
M. KAWASAKI, K. KITAJO & Y. YAMAGUCHI

C341 **Multi-modal processing of facial and vocal information in the human rain**
H.-T. KAZUKO, K. MASAHIRO, V.B. FRANCOIS, F. HIDENAO & C. ANDRZEJ

C342 **Cognitive impairment in children following exposure to pneumococcal meningitis: an event-related potential study**
M. KIHARA, M. DE HAAN, H.H. GARRASHI, E.O. WERE, B.R. NEVILLE & C.R. NEWTON

C343 **Expectancy during temporal judgments of scripts: a pupillary and eye movement study**
S. LANDGRAF, S. RAISIG & E. VAN DER MEER

C344 **Management of an alpha rhythm - a key to the creative development**
T. MAKOTROVA & G. MAKOTROVA

C345 **Role and time course of the modulation of the motor system during the processing of action-related verbs**
G. MIRABELLA, S. IACONELLI, S. SPADACENTA, P. FEDERICO & V. GALLESE

C346 **Widely distributed word processing in human cortex**
H.W. MÜLLER, M. BEU, C. ANTKE, A. HEINZEL & H. HAUTZEL

C347 **Mental transformations of visual stimuli in humans and in monkeys: rotation vs. translation**
T. NEKOVAROVA, J. NEDVIDEK, D. KLEMENT, R. ROKYTA & J. BURES

C348 **An event-related brain potential study to examine individual differences in arithmetic skill**
M.I. NÚÑEZ-PEÑA, M. GRACIA-BAFALLUY & E. TUBAU

C349 **Specific characteristics in the time perception during the number comparison task: what happens at 8 sec inter-stimulus interval?**
Y. OGATA, T. HORAGUCHI & M. YAMAMOTO

C350 **The role of incubation on ideational fluency: an EEG study**
M. PALMIERO, D. DI GIACOMO & N. SRINIVASAN

C351 **Imitation strategies in callosotomized patients**
C. PIERPAOLI, L. FERRANTE, G. BERLUCCHI, A. ORTENZI, T. MANZONI & M. FABRI

C352 **NIRS can detect cortical activity reflecting the fMRI-based default mode network during the resting state**
S. SASAI, F. HOMAE, H. WATANABE, A.T. SASAKI, H. TANABE, N. SADATO & G. TAGA

C353 **Mimicking someone else is being someone else?**
B. SPANLANG, A. POMES, J.R. LANDIN, P.S. PINEDA & M. SLATER

C354 **Processing of syntactic structures with different frequencies of use: an ERP study**
Á.J. TABULLO, Y. SEVILLA, A. YORIO, E. SEGURA, S. ZANUTTO & A. WAINSELBOIM

C355 **Neural substrates for storage of duration information: an fMRI study**
K. TAKAHASHI, S. SUGAWARA, S. TANAKA, K. WATANABE & N. SADATO

C356 **Visual attention during a bisection timing task**
A.L. TOSCANO-ZAPIEN, D. VELAZQUEZ-LOPEZ & D.N. VELAZQUEZ-MARTINEZ

C357 **Embodied language comprehension in motion**
C. MADDEN, P.F. DOMINEY & J. VENTRE-DOMINEY

C358 **Executive function among patients with frontopolar cortex damage**
M. ZIAEI & J. PERSSON

C359 **Reversed task-queing reveals flexible control-adjustment in task-switching subsequent to pretrial-conflict**
U. ZIMMERMANN, H. RUGE, D. SCHMIDT, S. SCHOENFELD & T. GOSCHKE

C360 **The response of the right human amygdala is stronger to central vs peripheral animal faces: an fMRI study**
I. ALMEIDA, M. VAN ASSELEN & M. CASTELO-BRANCO

C361 **Neuroscience and education: the effect of emotion on relabeling naïve conceptions of physical phenomena as undesirable or risky during the acquisition of domain-specific knowledge in physics**
G. BROCKINGTON, M.H. IMMORDINO-YANG & S. WONG

C362 **Depth perception and defensive distances**
E. COMBE, Z.C. CHAO & N. FUJII

C363 **Variability of emotional defensive profiles to threatening stimuli in humans**
O. FERNANDES JR, F. BRAGA, F.S. ERTHAL, I.P.A. DAVID, E. VOLCHAN, L. OLIVEIRA & M.G. PEREIRA

C364 **Empathic responsivity to infant cry and joy in women**
S. GRAZIANO, E. MACALUSO, C. TRENTINI, D. LENZI, G.L. LENZI, G. LAVIOLA, A.M. SPERANZA & M. AMMANITI

C365 **The role of D2 dopamine receptors in false memories**
R.V. GUARNIERI, R.R. RIBEIRO, J.C. GALDUROZ, L.M. STEIN & O.F.A. BUENO

C366 **Monitoring yoga state through Sahaja meditation: an fMRI study**
S.E. HERNÁNDEZ, C. MADROÑO & J.L. GONZÁLEZ-MORA

C367 **Task demands influence the processing of emotional words: n event-related potentials study**
J.A. HINOJOSA, C. MÉNDEZ-BÉRTOLO & M.A. POZO

C368 **Activation of the reward system by joining hands with familiar person: an fMRI study**
H. KAWAMICHI, R. KITADA, K. YOSHIHARA, H.K. TAKAHASHI & N. SADATO

C369 **Anxiety modulates exogenous attention to negative stimuli: behavioral and electrophysiological data**
D. KESSEL, M. TAPIA & L. CARRETIÉ

C370 **Characteristics of EEG in subjects with different level of emotional intelligence**
O. KISLOVA & M. RUSALOVA

C371 **The primate pulvinar reveals subjective confidence in one´s own vision**
Y. KOMURA, A. NIKKUNI & T. UETAKE

C372 **Influence of emotional distraction on working memory performance in Borderline Personality Disorder**
A. KRAUSE-UTZ, N.Y.L. OEI, I. NIEDTFELD, M. BOHUS, P. SPINHOVEN, C. SCHMAHL & B.M. ELZINGA

C373 **Caudate nucleus processes experience-dependent interaction between language and emotion in mothers' infant-directed speech**
Y.-T. MATSUDA, K. UENO, K. CHENG, R. MAZUKA & K. OKANOYA

C374 **Characterizing executive control impairments in fibromyalgia: neural correlates based on brain electrical activity**
F. MERCADO, P. BARJOLA, M. FERNÁNDEZ-SÁNCHEZ, V. FRESNO & F. GÓMEZ-ESQUER

C375 **Interaction between slow and rapid sympathetic responses is essential for sound-induced aversiveness**
Y. OOISHI & M. KASHINO

C376 **Training in temporal processing ameliorates spatial working memory in aphasic patients**
A. ORON, A. MOCZULSKA, J. SKOLIMOWSKA, M. LEWANDOWSKA, I. DOMITRZ, B. PILCZUK, H. KWIECINSKI & E. SZELAG

C377 **Performance and flexibility on sequence learning: description by informational entropy**
R. PAVÃO, J.P. SAVIETTO, L.N.D.O. SILVA, J.R. SATO, G.F. XAVIER & A.F. HELENE

C378 **Creativity and intelligence as characteristics of brain function damage in the prefrontal and parietal cortex**
A.M. PERFILEV, O.M. RAZUMNIKOVA & V.V. STUPAK

C379 **Women's judgment on male facial attractiveness: effects of race and menstrual cycle phase?**
L.M. PERILLA-RODRÍGUEZ, C. PERIN, A.I.F. MENDES & S.S. FUKUSIMA

C380 **Activation in the ventral putamen in response to emotional positive and negative stimuli in the visual and auditory modalities**
S. SCHUMACHER, V.L. MARCAR, T. LOENNEKER, K. OPWIS, E. MARTIN & C. MARTIN-SOELCH

POSTER PRESENTATION

C381 **Modulation of the motor system during the processing of action-related verbs with and without emotional meaning**
S. SPADACENTA

C382 **Sensory-motor alpha suppression evoked by the observation of emotional hand gestures**
A. STRELTSOVA, M.A. UMILTA', T. BEL-BAHAR, P. FEARON, P. FONAGY & V. GALLESE

15. Neurodegeneration & aging (Aging, epilepsy & ischemia)

C383 **Crucial role of CB1 receptors on hippocampal GABAergic neurons in brain aging**
O. ALBAYRAM, J. ALFERINK, A. PIYANOVA, K. MONORY, B. LUTZ, A. ZIMMER & A. BILKEI-GORZO

C384 **Type I diabetes induces early neuronal and glial changes in the rat hippocampus**
A.F. AMBROSIO, J.M. GASPAR, F.I. BAPTISTA, Á.F. CASTILHO, J. LIBERAL & J. GONÇALVES

C385 **Absolute composition of neurons and non neuronal cells of the aging human brain with dementia**
C.H. ANDRADE-MORAES, D.R. PARENTE-BRUNO, L. POLICHISO, A.V. OLIVEIRA-PINTO, L.T. GRINBERG, R.E.P. LEITE, R.E.L. FERRETTI, C.A. PASQUALUCCI & R. LENT

C386 **Effects of green tea and green tea extract in cerebellum oxidative status of aged rats**
M.J. SANTOS-MARQUES, M. ASSUNCAO & J. ANDRADE

C387 **Aging of the dystrophin-glycoprotein complex: studies in the dystrophin-deficient mdx mice**
A. PERTILLE, L.M. APOLINÁRIO, C.Y. MATSUMURA, A.P.T. TANIGUTI, H. SANTO NETO & M.J. MARQUES

C388 **The synaptic responses of adenosine receptors in the rat hippocampus are modified by chronic stress: the aging hypothesis**
V.L. BATALHA, A.M. SEBASTIÃO & L.V. LOPES

C389 **TRPM2 current potentiation with age *in vitro* is dependent on oxidative stress**
J.C. BELROSE, J.F. MACDONALD & M.F. JACKSON

C390 **Microglial responses in aged rats after early undernourishment and late exercise: stereological analysis of the somatosensory cortex**
R.P. BORGES, C.M. LIMA, L.C. VIANA, M.A. OLIVEIRA, T.T. CARDOSO, I.N.F. ALMEIDA, D.G. DINIZ, J.B. TORRES, A. PEREIRA, M.B. OLIVEIRA, A.A. LOPES, R.F. SILVA, R.A. GUEDES, A.A. SANTOS, D.S. LIMA, V.H. PERRY, P.F. VASCONCELOS, C. CUNINGHAM, R.C.A. GUEDES & C.W.P. DINIZ

C391 **Age-related changes in protein levels in the central auditory system of the rat**
J. BURIANOVA, L. OUDA & J. SYKA

C392 **Estrogen-α sensitive brainstem areas are less affected by lipofuscin accumulation**
H. DE WEERD, J.G. VEENING, R. KORTEKAAS, J.J. VAN DER WANT & P.O. GERRITS

C393 **The neuron-astrocyte-microglia triad in normal brain aging and a model of neuroinflammation in the rat**
D. LANA, F. CERBAI, D. NOSI, P. PETKOVA-KIROVA, S. ZECCHI, H.M. BROTHERS, G.L. WENK & M.G. GIOVANNINI

C394 **Neuronal Shc in neural development, plasticity, and brain aging**
N. MORI

C395 **Visualization of ageing-related changes in the perineuronal net density and composition in the somatosensory cortex of the mouse**
D. NOWICKA, M. KARETKO-SYSA & J. SKANGIEL-KRAMSKA

C396 **Analysis of gene expression profile by microarrays in SAMP8, a senescence accelerated mice**
D. ORTUÑO-SAHAGÚN, A.E. ROJAS-MAYORQUÍN, C. GUZMÁN-BRAMBILA, J. FOLCH, A.M. CANUDAS, A. CAMINS & M. PALLAS

C397 **Age-related changes in calbindin immunoreactivity in the central auditory system of the rat**
L. OUDA, J. BURIANOVÁ & J. SYKA

C398 **Uncovering molecular mechanisms of early-onset age-related memory deficits in CB1 receptor knockout mice**
A. PIYANOVA, Ö. ALBAYRAM, K. MICHEL, R. BUCHALLA, B. LUTZ, A. ZIMMER & A. BILKEI-GORZO

C399 **Behavioral and cellular markers of olfactory aging and their response to enrichment**
N.L. REY, J. SACQUET, A. VEYRAC, F. JOURDAN & A. DIDIER

C400 **Age-related changes in the expression of pro-autophagic protein ambra1 in mouse brain**
S. SEPE, R. NARDACCI, F. FANELLI, G.M. FIMIA, F. CECCONI, M. PIACENTINI & S. MORENO

C401 **Impaired BDNF signaling in hypothalamus may underlie accelerated ageing in WNIN obese mutant rats**
J.K. SINHA, N.V. GIRIDHARAN & M. RAGHUNATH

C402 **Running alters cytokine levels in the blood serum, cortex and hippocampus of aged rats**
R.B. SPEISMAN, A. KUMAR, A. RANI, T.C. FOSTER & B.K. ORMEROD

C403 **Aging, caloric restriction, and caloric excess result in adaptations in apoptosis-inducing factor, caspase 3, and cytochrome c in rat cortex**
C.R. ZAMZOW, Z. MING, W.W. LAUTT & P.F. GARDINER

C404 **Neuronal CREB (cAMP Responsive Element Binding)-1 mediates brain response to calorie restriction**
S. FUSCO, C. RIPOLI, M.V. PODDA, L. LEONE, S. CHIATAMONE, G. TOIETTA, G. SCHÜTZ, M. MCBURNEY, A. RICCIO, C. GRASSI, T. GALEOTTI & G. PANI

C405 **Malnutrition in infancy as a susceptibility factor for temporal lobe epilepsy in adulthood induced by pilocarpine experimental model**
F.R. CABRAL, M.R. PRIEL, B.H.S. ARAÚJO, L.B. TORRES, E. LIMA, T.G. DO VALE, F. PEREIRA, H.A. AMORIM, E.A. CAVALHEIRO, D. AMADO & M.D.G. NAFFAH-MAZZACORATTI

C406 **Capsaicin prevents kainic acid-induced epileptogenesis in mice**
J.-G. LEE, J.-M. YON, T.-H. LEE, I.-J. BAEK, K.-W. OH, S.-S. NAHM, B.-J. LEE, Y.-W. YUN & S.-Y. NAM

C407 **Cytoskeletal reorganisation and quantification of tau microtubule-associated protein in patients with temporal lobe epilepsy**
Y. LEKOMTSEVA, G. GUBINA-VAKULIK & M. WHITTINGTON

C408 **Neuronal degeneration following kainic acid induced status epilepticus in Wistar and genetic absence epileptic rats**
Ü.S. ŞEHIRLI, O. SARıÖZ, K. TEZCAN, E. SAKALLı, Y.Ö. ÇAKMAK, F. ONAT & R. GÜLHAN AKER

C409 **The effect of repetitive spreading depression on neuronal damage in juvenile rat brain**
M.J.S.R. PROF ALI GORJI

C410 **NMDA and DHPG preconditioning induce ischemic tolerance with differential mechanisms in rat organotypic hippocampal slices**
E. GERACE, E. ZIANNI, E. LANDUCCI, F. GARDONI, T. SCARTABELLI, G. MANNAIONI, F. MORONI, M. DI LUCA & D. PELLEGRINI-GIAMPIETRO

C411 **Tolerance in two animal models of brain ischemia *in vivo* induced by preconditioning with NMDA receptor antagonists**
D. MAKAREWICZ, M. DUSZCZYK, J.W. LAZAREWICZ & E. SALINSKA

C412 **Ischemic preconditioning supresses alterations induced by hyperhomocysteinemia on SPCA CA2+ atpase gene expression**
J. LEHOTSKY, M. PAVLIKOVA, M. KOVALSKA, P. KAPLAN & Z. TATARKOVA

C413 **Attenuation of focal cerebral ischemia by bradykinin postconditioning**
V. DANIELISOVA, J. BURDA, M. NEMETHOVA & M. GOTTLIEB

C414 **Postconditioning with normobaric hypoxia differently reduces neuronal loss in two models of brain ischemia *in vivo***
M. DUSZCZYK, D. MAKAREWICZ, M. MALEK, A. ZIEMBOWICZ, J.W. LAZAREWICZ & E. SALINSKA

C415 **Comparison of ischemic and chemical postconditioning by mapping of Bcl2 and Bax immunoreactivity in the rat hippocampus**
M. NEMETHOVA, V. DANIELISOVA, M. GOTTLIEB & J. BURDA

C416 **Protective effect of the Ceylon green tea in apoptosis of hypoxic human brain epithelial cells**
S.H. HUANG, Y.Z. ZHU & K.R.D. DE SILVA

C417 **Group III metabotropic glutamate receptor agonists attenuate neuronal cell death in primary cortical cultures exposed to kainate excitotoxicity or oxygen-glucose deprivation**
H. DOMIN, D. JANTAS & M. SMIALOWSKA

C418 **Modulation of the expression of RAGE isoforms in a rat model of transient middle cerebral occlusion**
R. GRECO, A.S. MANGIONE, D. AMANTEA, F. PETRELLI, G. NAPPI, F. BLANDINI, G. BAGETTA & C. TASSORELLI

C419 **Indoleamine 2,3-dioxygenase is associated with nitric oxide-mediated neurotoxicity in focal cerebral ischemia in mice**
S.A. HWANG, S.J. KIM, C.D. KIM & W.S. LEE

C420 **Focal photothrombotic stoke affects expression and composition of perineuronal nets in cerebral cortex of the rat**
M. KARETKO-SYSA, D. NOWICKA & J. SKANGIEL-KRAMSKA

C421 **Effects of cannabinoids in models of cerebral ischemia**
E. LANDUCCI, E. GERACE, T. SCARTABELLI, F. MORONI & D. PELLEGRINI-GIAMPIETRO

C422 **Long-term remodeling of rat pial microcirculation after transient middle cerebral artery occlusion**
D. LAPI, S. VAGNANI, T. MASTANTUONO, D. SAPIO & A. COLANTUONI

C423 **Fructus mume rescued spatial memory impairments and altered MAPK signaling induced by chronic cerebral hypoperfusion in Wistar rat**
J. MA, B.-R. CHOI, S.-H. HAN, C.-H. HAN, W.-K. JEON & J.-S. HAN

C424 **Nerve Growth Factor (NGF) mimetics modulate ischemic brain damage**
F. NUNNARI, E. GERACE, D. CIRELLI, G. CASTRONOVO, S. BONO, E. LANDUCCI, D. PELLEGRINI-GIAMPIETRO & F. COZZOLINO

C425 **The effect of aging on medial frontal activity during verbal fluency monitored by multi-channel near-infrared spectroscopy**
S. OBAYASHI & Y. HARA

C426 **UPR response to transient global ischemia in 3- and 18-month-old rats**
D. PÉREZ-RODRÍGUEZ, N. DÍAZ-MORALES, B. MARTÍNEZ-VILLAYANDRE, J.M. GONZALO-ORDEN, M. REGUEIRO PURRIÑOS & A. FERNÁNDEZ LÓPEZ

POSTER PRESENTATION

C427 **Activation of autophagy in a model of retinal ischemia following high intraocular pressure**
A. PIRAS, D. GIANETTO, D. CONTE, A. BOSONE & A. VERCELLI

C428 **The γ-secretase modulator CHF5074 elicits neuroprotection and increase histone acetylation in primary cortical neurons exposed to oxygen glucose deprivation**
V. PORRINI, I. SARNICO, A. LANZILLOTTA, C. BRANCA, M. BENARESE, P.F. SPANO, B.P. IMBIMBO & M. PIZZI

C429 **Hemorrhagic stroke: neuroprotective effects of peptide drug cortexin**
V.P. REUTOV, A. KRUSHINSKY, V. KUZENKOV, E. SOROKINA, L. BAIDER, Z. KUROPTEVA, N. SAMOSUDOVA, O. GRANSTREM, I. POLETAEVA, A. KAMENSKY, V. KOSHELEV, D. ESIPOV, M. SVINOV, N. KOSITZYN & V. PINELIS

C430 **Neuroprotective effect of San-Huang-Xie-Xin-Tang on subarachnoid hemorrhage in rat**
J.-L. YEH, P.-C. HSU, I.-J. CHEN & A.-L. KWAN

C431 **Prevention of cerebral artery dysfunction by KMUP-1 after subarachnoid hemorrhage: the role of BK_{Ca} channels**
B.-N. WU, S.-L. CHIA, J.-Y. CHEN, Y.-L. TSAI & I.-J. CHEN

C432 **Calpain-mediated cleavage of Beclin-1 following retinal ischemic injury**
F. CAVALIERE, R. RUSSO, G.P. VARANO, A. ADORNETTO, L.A. MORRONE, G. BAGETTA & M.T. CORASANITI

C433 **NCX1 and NCX3: two new effectors of delayed preconditioning in brain ischemia**
A. VINCIGUERRA, G. PIGNATARO, F. BOSCIA, E. ESPOSITO, R. SIRABELLA, O. CUOMO, G. DI RENZO & L. ANNUNZIATO

16. Neurological disorders (Inflammation & other disorders)

C434 **Inflammatory response in rat brain chronically exposed to polychlorinated biphenyls and brominated flame retardants**
B. DABROWSKA-BOUTA, M. FRONTCZAK-BANIEWICZ, G. SULKOWSKI, A. LENKIEWICZ & L. STRUZYNSKA

C435 **Increased vascular endothelial growth factor in cerebrospinal fluid as a predictive marker for subsequent ventriculoperitoneal shunt infection**
D.-H. PARK, J.-H. LEE, D.-B. BACK, S.-H. KANG, T.-H. CHO & Y.-G. CHUNG

C436 **Acupuncture stimulation to HT8 acupoint suppresses kainic acid-induced inflammatory events in mouse hippocampus**
S.-T. KIM, A.-R. DOO, H. LEE, C.S. YIN & H.-J. PARK

C437 **A kinetic study of the cytokine/chemokines levels and disruption of blood-brain barrier in infant rats after pneumococcal meningitis**
T. BARICHELLO, J.S. GENEROSO, A.L. CIPRIANO, G.D. SAVI, C. SILVESTRE, F. PETRONILHO, F. DAL-PIZZOL, M.C. VILELA & A.L. TEIXEIRA

C438 **Tuberculous meningitis in Alexandria, Egypt**
W.A. HAZZAH

C439 **Temporal profile of inflammatory cytokines in the cortex of brain injured rats**
J.T. COLE, C.L. DALGARD, W.S. KEAN, J.J. LUCKY, S. DESAI, D. MCMULLEN, H.B. POLLARD & W.D. WATSON

C440 **Role of ABC transporter proteins in the inflammatory disease known Rasmussen's encephalitis**
S. OROZCO-SUÁREZ, D. RAYO, R. GARCIA, J. DIEGOPÉREZ, I. FERIA-ROMERO, G. RAMÍREZ, M.I. FRAIRE, R. CABRERA, J. SOSA, I. GRIJALVA & L. ROCHA

C441 **Differential effects of Theiler's virus infection on hippocampal cell proliferation and neuronal progenitor cells in C57BL/6 and SJL mouse strains at two time points**
M. JAFARI, V. HAIST, W. BAUMGÄRTNER, S. WAGNER, V.M. STEIN, A. TIPOLD, H. WENDT & H. POTSCHKA

C442 ***thy1*GFP-M mice as novel tool to investigate brain dendritic cells**
C. LAPERCHIA, A.L. MASCARO, L. SACCONI, G. GRASSI ZUCCONI, M. BENTIVOGLIO, M. BUFFELLI & F.S. PAVONE

C443 **Neuraminidase expression influences the spread of rabies virus in the central nervous system of infected animals**
B.M. JAHUN,, A.B. OGUNKOYA, A.J. NOK & J.U. UMOH

C444 **Wakefulness monitoring and neuroinflammation in experimental African trypanosomiasis**
P.F. SEKE ETET, J.M. GEMECHU, G. GRASSI-ZUCCONI, G. BERTINI & M. BENTIVOGLIO

C445 **CNS expression of Aquaporin 4 as recognized by NMO-IgG from Neuromyelitis Optica patients**
S. AMBROSINI, S. SORBI, D. MINCIACCHI & S. MATÀ

C446 **The beneficial effects of therapeutic plasma exchange on the frequency, proportion and function of the most important subsets of CD4+ T lymphocytes in the immuno-pathogenesis of multiple sclerosis: regulatory T cells and Th17 cells**
A. JAMSHIDIAN

C447 **Pharmacological blockade of glutamate receptors (mGluR and iGluR) reduces neurological deficits in EAE rats**
G. SULKOWSKI, B. DABROWSKA - BOUTA, A. LENKIEWICZ & L. STRUZYNSKA

C448 **The S1P1 receptor subtype inhibits demyelination and regulates chemokine release in cerebellar slice cultures**
G.K. SHERIDAN & K.K. DEV

C449 **Complex computational analysis of gait and visual evoked potentials on patients with multiple sclerosis**
B. CATALIN, C.M. NEAMŢU, T. AVRAMESCU, L. RUSU, D. GEORGESCU, O.E. NEAMŢU, M. GEORGESCU, A. NESTIANU, I. STREATA, D. ENESCU-BIERU & M. IANCĂU

C450 **The role of S1P receptors in a T cell-induced demyelination model**
A.J. PRITCHARD, G.K. SHERIDAN & K.K. DEV

C451 **Gene expression profile of brain cells in response to C-Phycocyanin treatment in the experimental autoimmune encephalomyelitis model**
G. PENTON-ROL, N. LAGUMERSINDEZ-DENIS, M. LUCA, A. BERGAMI, M. NAZABAL-GALVEZ, J.R. FERNANDEZ-MASSO, A. CINTADO-BENITEZ, N. POLENTARUTTI, E. BONAVITA, A. LLOPIZ-ARZUAGA, G. GUILLEN-NIETO, P.A. LOPEZ-SAURA, R. FURLAN, A. MANTOVANI & E. PENTON-ARIAS

C452 **TNF-α mediates anxiety-like behavior in experimental autoimmune encephalomyelitis**
N. HAJI, L. SACCHETTI, D. FRESEGNA, G. MANDOLESI, A. GENTILE, A. MUSELLA, H. SEPMAN, P. STRATA & D. CENTONZE

C453 **Ribosomal protein S6 is hypoactivated in cerebellar and cerebral cortices of animal models of Rett syndrome**
E. CALCAGNO, N. MORELLO, E. CASTROFLORIO, E.M. BOGGIO & M. GIUSTETTO

C454 **MeCP2 T158A mutation disrupts methyl-DNA binding, protein stability, and neuronal synchronization leading to Rett syndrome-like phenotypes in mice**
D. GOFFIN, M. ALLEN, M. AMORIM, L. ZHANG, J. WANG, A.S. REYES, C. ONG, S. COHEN, L. HU, G.C. CARLSON, S.J. SIEGEL, M.E. GREENBERG & Z. ZHOU

C455 **Generation and characterization of MeCP2^{270} mutant mice**
C. BODDA, K. CAN, L.A. KIFAYATHULLA, H.Y. AGBEMENYAH & A.U. MANNAN

C456 **Functional assessment of knee joint mobility in adult persons with Down syndrome**
M.S. VALLE, A. CASABONA, M. PISASALE, M.R. PANTÒ & M. CIONI

C457 **Behavioral characterization of the PAK3 knockout mouse: a model of X-linked mental retardation**
S. FARLEY, J.-V. BARNIER, S. LAROCHE & C. VAILLEND

C458 **Optimizing a luminex-based immunoassay for Fragile-X Syndrome (FXS) screening**
R.J. KASCSAK, R.B. KASCSAK, G. LAFAUCI, P. METHA, T. ADAYEV, C. CHEN, H. HONG & W.T. BROWN

C459 **Dysfunction of GABAergic neurons in the visual cortex of Engrailed 2 mouse model of autism**
S. GENOVESI, M. ALLEGRA, P. SGADÒ, M. CALEO & Y. BOZZI

C460 **Genes and pathways differentially expressed in the forebrain of Engrailed-2 null mice**
G. PROVENZANO, P. SGADÒ & Y. BOZZI

C461 **Organoarsenic compound-induced central nervous disorders in the chronic phase**
K. NAKAMAGOE, K. ISHII, T. HORAGUCHI, S. TAKIGUCHI, A. SHIMIZU & A. TAMAOKA

C462 **Eye-movements during "virtual" grasping in unilateral neglect patient**
M. BALCONI, D. CRIVELLI, M. SOZZI, L. PISANI, A.P. CANNATÀ & S. AMENTA

C463 **Clinico-anatomical correlates of visuo-spatial neglect**
M.N. TOBA, R. MIGLIACCIO, M. THIEBAUT DE SCHOTTEN, P. PRADAT-DIEHL & P. BARTOLOMEO

C464 **Endoplasmic reticulum stress following traumatic brain injury**
V.P. NAKKA & R. VEMUGANTI

C465 **Astroglial-NF-kB, oligogenesis and oligodendrocyte death follwing spinal cord injury**
J. JOHNSTONE, J. RICARD, V. BRACCHI-RICARD & J.R. BETHEA

C466 **IGF-1 administration after a mild traumatic brain injury in mice activates the adaptive arm of ER stress**
V. RUBOVITCH, A. SHACHAR, H. WERNER & C.G. PICK

C467 **Selective activation of α7 nicotinic acetylcholine receptor subunit (nAChRα7) as a new anti-inflammatory strategy prevents muscular degeneration in *mdx* mice**
P.E.C. LEITE, L. GANDIA, R. DE PASCUAL, W.C. SANTOS, J. LAGROTA-CANDIDO & T. QUIRICO-SANTOS

C468 **Etanercept, a TNF-alpha inhibitor, penetrates into the cerebral fluid system to improve outcome of experimental traumatic injury**
C.-P. CHANG, C.-U. CHEONG, C.-M. CHAO, J.-W. LIN, M.-W. CHANG, C.-C. WANG, M.-T. LIN, C.-Z. YANG, C.-C. HSU & C.-C. CHIO

C469 **Hyperbaric oxygen therapy protects against experimental traumatic brain injury**
M.-T. LIN, C.-P. CHANG, C.-C. CHIO, K.-C. LIN, C.-M. CHAO, K.-C. NIU, M.-W. CHANG, C.-U. CHEONG, C.-H. CHANG, J.-W. LIN & J.-R. KUO

C470 **Post-traumatic changes in mitochondrial function precede cognitive impairment**
W.D. WATSON, J.J. LUCKY, J.E. BUONORA, M.A. SELAK, W.S. KEAN, A.M. YARNELL, D.C. MCMULLEN, N.E. GRUNBERG & J.T. COLE

C471 **Upregulation of heme Oxygenase-1 ameliorates methamphetamine-induced loss of dopamine transporter in mouse striatum**
M.T. LEE, D.H.T. YEN & J.C. YEN

POSTER PRESENTATION

C472 **Olfactory and respiratory lamina propria transplantation after spinal cord transection in rats: Effects on functional recovery and axonal regeneration**
L.A. CENTENARO, M.D.C. JAEGER, J. ILHA, M.A. DE SOUZA, P.I.K. GASPAR, N.B. CUNHA, S. MARCUZZO & M. ACHAVAL

C473 **Use of serum S100 protein as a predictor of outcome after mild or moderate traumatic brain injury**
H.A. ELSHATOURY, A.A.A. ELSAYED, A.E. GALHOOM & O.S. EL-WARDANY

C474 **Etanercept, a tumor necrosis factor-a inhibitor, protects against experimental traumatic brain injury**
J.-R. KUO, T.-J. CHUANG, C.-U. CHEONG, C.-M. CHAO, J.-W. LIN, M.-W. CHANG, M.-T. LIN, C.-Z. YANG, C.-C. HSU, C.-P. CHANG & C.-C. CHIO

C475 **Chronic imaging of the in vivo spinal cord using two-photon fluorescent microscopy: a method for placing and maintaining spinal cord windows**
K.K. FENRICH, P. WEBER, M. HOCINE, G. ROUGON & F. DEBARBIEUX

C476 **Grafted human embryonic progenitors expressing neurogenin-2 stimulate axonal sprouting and improve motor recovery after severe spinal cord injury**
G. BONIFACE, C. SERGUERA, N. LONJON, J. MALLET, A. PRIVAT & F.E. PERRIN

C477 **Modulation of neurite outgrowth by a novel thiourea derivative**
L.-C. OU, J.-H. CHERN & S.-H. YEH

C478 **Sural nerve biopsy in chronic inflammatory demyelinating polyneuropathy with and without concomitant diseases**
S. EL MOUSLY, R.R. MOUSTAFA, N.G. EL HEFNAWY, H. SHAHEEN, S.A. MOHAMED & A. EL ETRIBI

C479 **Functional characterization in zebrafish of the WNK1/HSN2 isoform causing a human peripheral neuropathy**
V. BERCIER, E. BRUSTEIN, M. LIAO, P. DION, G.A. ROULEAU & P. DRAPEAU

C480 **Galectin-3 expression in a gliosarcoma experimental model induced by orthotopic injection of NG97ht cells**
K.M. FURUZAWA, C.M.L. MACHADO, R.Y. IKEMORI, A.S. VIEIRA, J. VASSALLO, F. LANGONE, R. CHAMMAS & F. ROGERIO

C481 **Translational neuropathology: correlation of clinical and molecular genetic data in cases of anaplastic astrocytoma**
R. SCHOBER, H. HOLLAND, P. AHNERT, W. KRUPP, H. KIRSTEN, D. FRITZSCH & J. MEIXENSBERGER

C482 **Minocycline inhibits the growth of glioma through endoplasmic reticulum stress-induced autophagic cell death and caspase activation**
W.-T. LIU, C.-H. YEH & P.-W. GEAN

C483 **REM sleep deprivation and restriction increase blood-brain barrier permeability to Evans blue**
B. GOMEZ-GONZALEZ, G. HURTADO-ALVARADO & J. VELAZQUEZ-MOCTEZUMA

C484 **Disturbances of paradoxical sleep and changes of M2 muscarinic cholinoreceptors density produced by cessation of multiple administrations of the antagonists of brain muscarinic cholinergic system**
N. NACHKEBIA, E. CHKHARTISHVILI, N. MAGLAKELIDZE, O. MCHEDLIDZE, E. CHIJAVADZE, M. BABILODZE, S. DZADZAMIA, E. ZHURAVLIOVA, D. MIKELADZE & T. ONIANI

C485 **The structural changes of sleep-wakefulness cycle produced by NMDA receptors blockade**
O. MCHEDLIDZE, E. CHKHARTISHVILI, E. CHIJAVADZE, M. BABILODZE, S. DZADZAMIA, T. ONIANI & N. NACHKEBIA

C486 **Disturbances in ultradian distribution of different eehavioral states of sleep cycles in animal model of depression with probable deficiency of brain monoamine content**
E. CHKHARTISHVILI, E. CHIJAVADZE, O. MCHEDLIDZE, S. DZADZAMIA, M. BABILODZE, N. DARCHIA, N. ONIANI, N. MAGLAKELIDZE & N. NACHKEBIA

C487 **Transplant and pharmacological therapy in a rodent model of narcolepsy**
A.K. DE LA HERRÁN-ARITA, D. MILLÁN-ALDACO, M. PALOMERO-RIVERO, M. GUERRA-CRESPO & R. DRUCKER-COLÍN

C488 **Effects of pramipexole or chronic physical exercise on a new animal model of restless legs syndrome/periodic leg movement**
A.M. ESTEVES, R. FRUSSA-FILHO, C. LOPES, D.A. CAVAGNOLLI, M.K. FRANK, R.M. ARIDA, S. TUFIK & M.T. DE MELLO

C489 **Continuous activation of $GABA_A$ receptors within the lateral hypothalamus increases NREM sleep at neutral and cold ambient temperature in rats**
M. MASTROTTO, A. AL TZACHMANI, R. AMICI, M. CERRI, F. DEL VECCHIO, M. LUPPI, D. MARTELLI, E. PEREZ, D. TUPONE & G. ZAMBONI

C490 **Relationships between prion protein and clock gene expression**
M. BONACONSA, R. WANG, G. GRASSI ZUCCONI & M. BENTIVOGLIO

C491 **Brain dendritic cells in experimental African trypanosomiasis**
G. GRASSI-ZUCCONI, C. LAPERCHIA, P.F. SEKE ETET, A. ANDRIOLI, N. VAN REET, P. BUSCHER, F.S. PAVONE, M. BUFFELLI & M. BENTIVOGLIO

C492 **Activation of c-Fos in the brain of stressed rats (Rattus norvegicus) of a wild strain**
R.L. DJAVADIAN, I. GOZDZ, N. CHLODZINSKA, W. PISULA & K. TURLEJSKI

C493 **Study of hippocampus-dependent learning in Nogo-A-deficient rats shows a deficit in behavioral flexibility but no deficit in visuospatial working memory**
T. PETRASEK, I. PROKOPOVÁ, Š. BAHNÍK, Z. KRISTOFIKOVA, M. VRAJOVA, S. BERGER, K. SCHONIG, D. BARTSCH, K. VALEŠ, D. RIPOVA & A. STUCHLIK

17. Psychiatric & behavioural disorders (Compulsive & panic behaviour, other disorders)

C494 **Brain regions involved in predatory behaviour are activated during abnormal, hypoarousal-driven intraspecific aggression in the rat**
A. TULOGDI, M. TOTH, J. HALASZ, E. MIKICS & J. HALLER

C495 **Involvement of 5-HT1A receptors of the dorsomedial hypothalamic nucleus in the mediation of the antipanic-like effect caused by chronic fluoxetine administration**
H. ZANGROSSI & V. DE BORTOLI

C496 **Role of neurochemistry in the adaptive value of behavior: competition between maternal behavior and the sick during lactation**
A.F. NASCIMENTO

C497 **Maternal separation increases anxiety-like behavior only in male mice**
S.E. KAWAKAMI, I.M.H. QUADROS & D. SUCHECKI

C498 **Serotonergic neurons of dorsal raphe nucleus attenuate defensive behaviour elaborated by dorsomedial hypothalamus**
A. FRANCISCO, R.L. FREITAS & N.C. COIMBRA

C499 **Relationship between phenotypic characteristics and comorbidities of obsessive compulsive disorder**
B. VISWANATH, J.C. NARAYANASWAMY, A.V. CHERIAN, T. KANDAVEL, S.B. MATH & J.Y. REDDY

C500 **Knockdown of serotonin (5-HT) 5-HT_{2C} receptor in the nucleus accumbens shell differentially alters impulsive-compulsive behavioral indices**
K.A. CUNNINGHAM, N.C. ANASTASIO, S.J. STUTZ, R.M. SEARS, R.G. FOX, J.D. HOMMEL, T.A. GREEN, R.J. DI LEONE & F.G. MOELLER

C501 **Body sway patterns in patients with social anxiety disorder viewing fearful facial expressions**
K.C. ARRAIS, I.M.P. LINARES, J.P. MACHADO-DE-SOUSA, N.B. DE MELO, M.N. LEVITAN, M.H.N. CHAGAS, A.E. NARDI, A.W. ZUARDI, J.E.C. HALLAK & J.A.S. CRIPPA

C502 **Gestational chronic mild stress: a potential animal model of stress-induced postpartum depression?**
N.H.K. ABDUL AZIZ, D.A. KENDALL & M.-C. PARDON

C503 **Clomipramine, but not haloperidol or aripiprazole, inhibits quinpirole-induced water contrafreeloading, a putative animal model of compulsive behavior**
C. SCHEPISI, L. DE CAROLIS, M. MILELLA & P. NENCINI

C504 **Utilization pattern of a state sponsored psychiatric ambulance service in Bangalore, India - a descriptive study**
P.S. KAMAT, N. KUMAR C, K. SHATRUNJAYAN, N.R. PRASHANTH & H. CHANDRASHEKAR

C505 **Neonatal immune activation by bacterial or viral stimulation in an animal model of schizophrenia: effects on behaviour and level of cytokines**
H. TEJKALOVÁ, J. KLASCHKA & Š. RŮŽIČKOVÁ

C506 **Inverse effects of lipopolysaccharide on anxiety in pregnant mice and male offspring**
J. SOLATI & A.-A. SALARI

C507 **Long-term effect of early life trauma is determined by genetic predisposition of the individual**
T.-L. STERLEY, F.M. HOWELLS & V.A. RUSSELL

C508 **Involvement of microRNAs in autism and autism spectrum disorders**
P.J. ROGUE

C509 **Genes for attention deficit hyperactivity disorder (ADHD) related in silico to ischemia-hypoxia response and vascular factors in the brain**
R. SCHMIDT-KASTNER & N. PITTS

C510 **Understanding the neural basis of motor dysfunction in mouse models of Rett Syndrome**
W. LIAO & S.-H. SU

C511 **The ADHD-susceptibility gene *Iphn3.1* modulates dopaminergic neuron formation and locomotor activity during zebrafish development**
M. LANGE, W. NORTON, M. COOLEN, M. CHAMINADE, P. VERNIER, K.-P. LESCH & L. BALLY-CUIF

C512 **Mouse models of advanced paternal age: relevance to neuropsychiatric disorders**
C.J. FOLDI, D.W. EYLES, T. FLATSCHER-BADER, J.J. MCGRATH & T.H.J. BURNE

C513 **Early and adult hippocampal TGF-beta1 overexpression have opposite effects on behaviors relevant to autism**
A.M. DEPINO & L. LUCCHINA

C514 **The role of amygdala in the valproate-induced rat autism-like model**
Y.-H. CHAN, P.-W. GEAN & P.-S. CHEN

C515 **Gestational/lactational exposure to organophosphorous pesticides in mice affects social behavior and related brain neuroendocrine markers: relevance for children's vulnerability to neurodevelopmental disorders**
A. VENEROSI PESCIOLINI, S. TAIT, L. STECCA, L. RICCERI, A. MANTOVANI & G. CALAMANDREI

POSTER PRESENTATION

C516 **Behavioral study of offspring of female rats supplemented with sodium selenite during pregnancy and lactation**
A.L.B. SILVEIRA, R.L. MELO, G.E. IMPÉRIO, J.R. MACEDO, C. SILVA-ALMEIDA, F.A.C. CEARA, L.C. REIS & W.S. CORTES

C517 **Effects of maternal ethanol intake during pregnancy and lactation on the fear, anxiety and spatial memory in pups at different stages of brain development**
R.M. ÁLVARES, G.M. MIQUELIN, M.S. GRAÇA, V. BORTOLANI, B.O. BORGES, M.M. IYOMASA & M.L.N.M. ROSA

C518 **Increased secretory material in the subcommissural organ and ventricular area in bile duct ligated rats**
O. ELHIBA, H. GAMRANI & S. AHBOUCHA

C519 **Traffic of leukocytes in the central nervous system is associated with cytokine and chemokine up-regulation in a model of severe sepsis encephalopathy**
C.M. COMIM, M.C. VILELA, L.S. CONSTANTINO, F. PETRONILHO, F. VUOLO, H. HOJAS, A.S. MIRANDA, N. LACERDA-QUEIROZ, D.H. RODRIGUES, O.J. CASSOL-JR, J.L. ROCHA, T. BARICHELLO, A.L. TEIXEIRA, J. QUEVEDO & F. DAL-PIZZOL

C520 **Epigallocatechin gallate attenuates behavioral and biochemical deficits in experimental paradigm of chronic fatigue syndrome**
A.K. SACHDEVA, A. KUHAD & K. CHOPRA

C521 **Epigenetic analysis of BDNF Val66Met transgenic mouse reveals changes in specific BDNF transcripts**
S. CORNA, A. MALLEI, C. BENEVENTO, D. TARDITO, G. RACAGNI, F.S. LEE & M. POPOLI

C522 **Neuropeptide S attenuates the increase in REM sleep induced by ketamine anesthesia**
T. KUSHIKATA, G. CALO', R. GUERRINI, K. MORIYA, M. OISHI, C. YAKOSHI & K. HIROTA

C523 **Study of histamine H3 receptor antagonists in a cognitive test battery in rodents**
J. LASZY, I. GYERTYÁN, É. SCHMIDT & G. LÉVAY

C524 **Genome-wide epigenetic analysis in transgenic mice with the human polymorphism (Val66Met) of BDNF gene**
A. MALLEI, S. CORNA, C. BENEVENTO, D. TARDITO, G. RACAGNI, F.S. LEE & M. POPOLI

C525 **Seven-day pretreatment with nobiletin mitigates MK-801-induced hyperactivity of ddY mice in an elevated-plus maze**
T. SATO, S. ABE, W. SUN, A. YOKOSUKA, Y. SASHIDA, Y. MIMAKI, J. GYOBA & T. YAMAKUNI

C526 **Characterization of astrocyte specific D-amino acid oxidase overexpressing mice**
S. IMBEAULT, D.-M. OTTE, H. SCHRAGE & A. ZIMMER

C527 **Neuroprotective effect of n-3 PUFA on chronic NMDA induced neuroinflammatory and arachidonic acid cascade markers in rat brain**
J.S. RAO, M. KELLOM, H.-W. KIM, Y. CHEON, A. TAHA & S.I. RAPOPORT

C528 **When does a word become meaningful?**
N.A. TAROYAN & R.I. NICOLSON

20. History, teaching, neuroethics, awareness & social impact

H001 **Scientists and the unification of Italy**
M. BENTIVOGLIO & M.C. STEFANINI

H002 **Using impulse reviewer training sites to engage students in basic research**
K.B. DAVISON, M. BARKHUIZEN, K. CRISP, K. CRONISE, S. SMITH, S.M. SWEITZER, S. SYMINGTON, V. TURGEON & L.S. JONES

H003 **Neuroscience and teacher training: a dialogue needed**
F.A.H. DE CARVALHO, A.M. MAIATO & D.M. BARROS

H004 **IBRO inter-regional activities initiative**
K.A. KORALEK, R. ROCKSTAD-REX & M. DI LUCA

H005 **The international neurobioetica multidisciplinary study and research group: report of meetings, seminars and future work**
A. GINI, A. GARCIA & R. PASCUAL

H006 **Neurology training in Ethiopia: past, present and future**
J. GEMECHU, G. ZENEBE, M. ZEBENIGUS & Y. WOLDEAMANUEL

H007 **Teaching tools in Africa**
S. JULIANO

H008 **Milestones in neuroscience of epilepsia partialis continua**
Y. LEKOMTSEVA

H009 **An epistemological investigation within the neurosciences: the utility of the comparison with some psychotherapeutic models**
M.A. MANGIONE

H010 **Ethical intelligence and education for culture of peace: the neuro-physiologocal dynamics in a sustainable way**
R.D.F. MIGLIORI

H011 **Objective-based learning and integrated approach to assessment of neuroscience practical instruction for medical students**
A.B. ODUTOLA

H012 **The evaluation of the Croatian version of the Epworth sleepiness Scale and STOP questionnaire as screening tools for obstructive sleep apnea syndrome**
R. PECOTIC, I. PAVLINAC, M. VALIC, N. IVKOVIC & Z. DOGAS

H013 **The prefix ‚Neuro' in terms like neuromarketing, neuroeconomics: truly transdisciplinary approaches or just catchy hyped up syllables?**
S. PRABHU, H. MISRA, B. AUGIER & A. SHERDIL

H014 **Five years after: reviewing progress and forthcoming challenges of a novel Canadian neuroethics research program**
E. RACINE & E. BELL

H015 **The mystical dimensions of neuroethics**
M. RAZA

H016 **Education on drug abuse to children and adolescents from poor and violent urban communities**
M. ROCHA

H017 **The research nursery "neuroplasticity"**
L. FRANCIS, M. AVILA, A.M. SABOGAL GUAQUETA, E. MAYORGA, D. NAVARRO, A. BONILLA, N. BONILLA, L. DE LOS REYES, L. TRUJILLO, M. HERNANDEZ, J. SALGUERO, A. ROJAS, J. DIAZ, J. MONROY, L. ROJAS, C. MURCIA, U. FLOREZ & A. BENITEZ

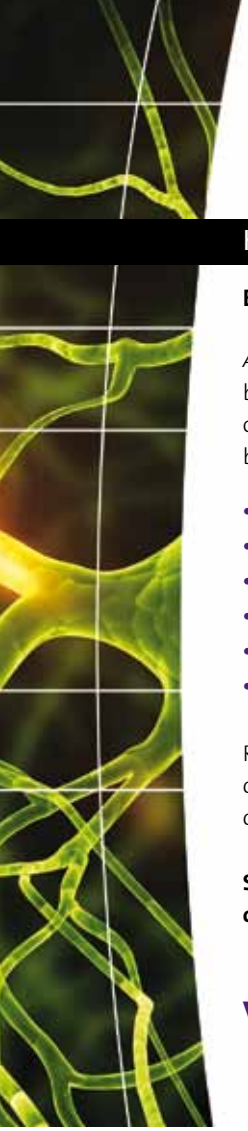
H018 **Awareness and social impact of neuroscience education in India: a students' perspective**
J.K. SINHA & S. GHOSH

H019 **Neuroethics in a deontological and utilitarian context. An ERP analysis on the "emotional effect"**
A. TERENZI & M. BALCONI

H020 **From Kinshasa to Kigali, from Qindao to Manasar: the IBRO initiative in encouraging young neuroscientists around the world**
S. SARA, K.M. MOREIRA & R. AKINYEMI

Scientific Program

Monday July 18



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ACS Publications

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08:30-09:30 PLENARY LECTURE PL8 Auditorium Verdi
Introduced by: **Donata Oertel** (Madison, USA)

Defining the neuronal circuitry of fear
Andreas Lüthi (Basel, Switzerland)

09:40-11:40 SYMPOSIUM S16 Auditorium Verdi
SYNAPTIC AND NETWORK PLASTICITY IN DEVELOPMENT AND LEARNING
Chaired by: **Ying-Shing Chan** (Hong Kong, China)

S16.1 – 09:40
A role of endocannabinoids in development and plasticity of inhibitory circuits in the visual cortex
Tadaharu Tsumoto (Wako, Japan)

S16.2 – 10:10
The role of nitric oxide and GluR1 in experience-dependent plasticity in the somatosensory cortex
Kevin Fox (Cardiff, UK)

S16.3 – 10:40
Acquisition of glutamate receptors in central vestibular synapses is crucial for developmental recognition of spatial orientation
Ying-Shing Chan (Hong Kong, China)

S16.4 – 11:10
Role of NMDA receptors in synaptic transmission and plasticity in the amygdala
Pankaj Sah (Brisbane, Australia)

09:40-11:40 SYMPOSIUM S17 Room Mazzini
REGULATION OF PRESYNAPTIC CALCIUM CHANNEL ACTIVITY
Chaired by: **Gary Stephens** (Reading, UK)

S17.1 – 09:40
Regulation of presynaptic calcium channels and short-term synaptic plasticity
William Catterall (Seattle, USA)

S17.2 – 10:10
Differential effects of presynaptic calcium channel subtypes in control of synaptic transmission
Richard Tsien (Stanford, USA)

S17.3 – 10:40
Spatial and temporal regulation of calcium channels
Sumiko Mochida (Tokyo, Japan)

S17.4 – 11:10
Regulation of calcium channel activity by auxiliary alpha2delta subunits
Annette Dolphin (London, UK)

09:40-11:40 SYMPOSIUM S18 Room Cavour
THE ROLE OF SLEEP IN LEARNING AND MEMORY FORMATION: FROM MOLECULAR MECHANISMS TO COGNITIVE FUNCTION
Chaired by: **Debora Hipolide** (Sao Paulo, Brazil) and **Peter Meerlo** (Groningen, The Netherlands)

S18.1 – 09:40
Sleep-related brain oscillations and memory consolidation
Susan Sara (Paris, France)

S18.2 – 10:10
The molecular and cellular effects of sleep deprivation on hippocampal function
Ted Abel (Philadelphia, USA)

S18.3 – 10:40
Sleep deprivation effects on learning and memory: the role of glucocorticoids
Paula Tiba (Sao Paulo, Brazil)

S18.4 – 11:10
Consequences of mild sleep disruption: changes in regional brain activity and learning strategy
Peter Meerlo (Groningen, The Netherlands)

09:40-11:40 SYMPOSIUM S19 Room Vittorio Emanuele II
MOTOR NEURONS: FROM DEVELOPMENT TO DISEASE
Chaired by: **Angelo Poletti** (Milan, Italy) and **Caterina Bendotti** (Milan, Italy)

S19.1 – 09:40
From neuronal precursors to motorneuronal cells. A promise for understanding and counteracting disease.
Georg Haase (Marseille, France)

S19.2 – 10:10
Induction of mutant proteins clearance in Amyotrophic Lateral Sclerosis and SpinoBulbar Muscular Atrophy
Angelo Poletti (Milan, Italy)

S19.3 – 10:40
Toxicity mediated by a sumoylated glutamate transporter c-terminus fragment: an unconventional role for EAAT2 in motor neuron degeneration in ALS
Davide Trotti (Philadelphia, USA)

S19.4 – 11:10
Axonal transport in motor neurons: from in vitro screens to real time in vivo assays
Giampietro Schiavo (London, UK)

09:40-11:40 SYMPOSIUM S20 Room Garibaldi
SYNAPTIC PROTEIN NETWORKS IN NEUROLOGICAL AND PSYCHIATRIC DISEASES
Chaired by: **Michela Matteoli** (Milan, Italy)

S20.1 – 09:40
Synaptic gene networks in attention and cognition disorder
Mattijs Verhage (Amsterdam, The Netherlands)

S20.2 – 10:10
Modulation of calcium dynamics by SNAP-25, a synaptic protein involved in different psychiatric disorders
Michela Matteoli (Milan, Italy)

S20.3 – 10:40
Synaptic proteins and autism spectrum disorders
Nils Brose (Gottingen, Germany)

S20.4 – 11:10
mRNA metabolism and synaptic dysfunctions: insights from the Fragile X Syndrome
Claudia Bagni (Leuven, Belgium)

11:40-14:15 POSTER SESSION D Poster Area

(see detail page 138)

Posters should be placed on the boards from 9:30 on each day and removed by 17:30. No responsibility will be taken for posters which are left behind. **Posters will be attended by the Presenting Author from 11:40 to 14:15 on each day.**

The poster boards are numbered and adhesive material will be available at each board (please do not use drawing pins or thumbtacks). **The number of the abstract corresponds to the number of the poster panel.**

The Posters for **Topic 20 (History, teaching, neuroethics, awareness & social impact)** will be on display for the entire period of the congress (from Friday, July 15 to Monday, July 18) and will be attended by the Presenting Author from 11:40 to 14:15 on the first day, Friday, July 15.

Italian Society of Neuroscience (Young Investigator Visiting Programme) Poster Prize: The best posters by participants from low-income countries will be selected each day by a Selection Committee and awarded at the late afternoon Plenary Lecture at 17:30 of each day.

01. Nervous system development & developmental disorders (Neurogenesis)
02. Axonal guidance, synaptic formation & trophic factors (Synaptic formation & trophic factors)
03. Glia (Microglia, cancer & miscellanea)
04. Stem cells: neural injury & repair (Neurogenesis)
07. Synaptic transmission & signal transduction (Pharmacology & disease)
08. Neural plasticity (Physiology of circuit plasticity)
10. Pain (Receptors, channels & transmitter systems)
12. Motor systems (Movement & coordination)
13. Learning & memory (Localization & animal models)
14. Cognition & emotion (Food intake, reward, fear & anxiety)
15. Neurodegeneration & aging (ALS, Parkinson & Huntington's disease)
16. Neurological disorders (Ischemia, hypoxia & neurotoxicity)
17. Psychiatric & behavioural disorders (Anxiety & stress-related disorders)
20. History, teaching, neuroethics, awareness & social impact

12:30-13:30 SPECIAL EVENT SE11 Room Mazzini

ICSU, THE INTERNATIONAL COUNCIL FOR SCIENCE: SCIENCE AND THE USE OF SCIENTIFIC KNOWLEDGE
Maurizio Iaccarino (Naples, Italy)

12:30-14:00 SPECIAL EVENT SE12 Room Cavour

FUNDING OPPORTUNITIES AND GRANT WRITING PRIMER
WOMEN IN WORLD NEUROSCIENCE (WWN) WORKSHOP
Chaired by: **Jean King** (Worcester, USA) and **Orly Weinreb** (Haifa, Israel)

SE12.1 – 12:35
NIH funding opportunities for international collaborations and fellowships
Emmeline Edwards (Bethesda, USA)

SE12.2 – 12:55
Networking with EU (European Union) grants
Marina Bentivoglio (Verona, Italy)

SE12.3 – 13:15
Funding sources from across the globe for young neuroscientists
Orly Weinreb (Haifa, Israel)

SE12.4 – 13:35
Successful grant writing strategies and tips for sailing through peer review
Jean King (Worcester, USA)

12:30-14:00 SPECIAL EVENT SE13 Room Garibaldi

FENS/JNS/IBRO/SfN SYMPOSIUM ON LEGAL TRENDS ON THE USE OF ANIMALS IN RESEARCH ACROSS THE WORLD
Chaired by: **Roberto Caminiti** (Rome, Italy) and **Sharon Juliano** (Bethesda, USA)

Introduction – 12:30
Roberto Caminiti (Rome, Italy)

SE13.1 – 12:40
The status of legal rights for animals in the USA
Sharon Juliano (Bethesda, USA)

SE13.2 – 13:00
Bioethics and animal research in Latin America: Status and challenges
Pedro Maldonado (Santiago, Chile)

SE13.3 – 13:20
Our campaigns for legislations on neuroscience research using experimental animals in Japan
Kiyoshi Kurata (Hirosaki, Japan)

SE13.4 – 13:40
The consequences of the new EU Directive on protection of animals on neuroscience research in Europe
Kris Turlejski (Warsaw, Poland)

12:00-14:00 SPECIAL EVENT SE14 Room Vittorio Emanuele II

JOINT MEETING BETWEEN THE FRENCH AND ITALIAN NEUROSCIENCE SOCIETIES

SDN-SINS SPECIAL LECTURE 2
Introduced by: **Philippe Vernier** (Gif-sur-Yvette, France)

SE14.1 – 12:00
Tracking the memory trace during systems consolidation
Bruno Bontempi (Bordeaux, France)

SDN-SINS MINISYMPOSIUM 4
CELLULAR MECHANISMS IN PAIN SENSITIVITY
Chaired by: **Marc Landry** (Bordeaux, France) and **Valerio Magnaghi** (Milan, Italy)

SE14.2 – 12:35
Spinal functions of pre- and post-synaptic GABA-B receptors in neuropathic pain
Marc Landry (Bordeaux, France)

SE14.3 – 12:55
Vanilloids increase neural activity and microglia caspase-3 in the prefrontal cortex of neuropathic mice
Sabatino Maione (Naples, Italy)

SE14.4 – 13:15
Peripheral acid-sensing ion channels in pain
Eric Lingueglia (Sophia Antipolis, France)

SE14.5 – 13:35
Role of peripheral metabotropic GABA-B receptor in nociception
Valerio Magnaghi (Milan, Italy)

14:15-15:45 WORKSHOP W31 Room Vittorio Emanuele II

NEUROTRANSMITTER TRANSPORTERS IN SYNAPTIC HOMEOSTASIS

Chaired by: **Vania Prado** (London, Canada)

W31.1 – 14:20
Role of plasma membrane transporters in the control of monoamine
Marc Caron (Durham, USA)

W31.2 – 14:40
Keeping up with acetylcholine: how vesicular storage regulates transmission
Vania Prado (London, Canada)

W31.3 – 15:00
Glycine transporters: regulators of inhibitory and excitatory synaptic transmission
Heihrich Betz (Frankfurt, Germany)

W31.4 – 15:20
VGLUT3 : synergizing serotoninergic and cholinergic transmission
Salah El Mestikawy (Paris, France)

14:15-15:45 WORKSHOP W32 Room Mazzini

PROGRAMMING BY STRESSFUL AND ADVERSE EVENTS IN ADOLESCENCE OF ADULT STRESS REACTIVITY, COGNITION AND EMOTIONS

Chaired by: **Seema Bhatnagar** (Philadelphia, USA)

W32.1 – 14:20
Lasting cognitive deficits after social instability stress in adolescence in male and female rats
Cheryl McCormick (St Catharines, Canada)

W32.2 – 14:40
Sex specific effects of adolescent isolation on stress-regulatory neural substrates in adulthood
Seema Bhatnagar (Philadelphia, USA)

W32.3 – 15:00
Differential impact of juvenile stress and corticosterone in juvenility and in adulthood in male and female rats
Gal Richter-Levin (Haifa, Israel)

W32.4 – 15:20
Gene – environment interaction during adolescence shapes adult disease vulnerability
Mathias Schmidt (Munich, Germany)

14:15-15:45 WORKSHOP W33 Room Cavour

RODENT ULTRASONIC VOCALIZATIONS – INSIGHTS INTO THE SOCIAL BRAIN: BRAIN MECHANISMS, COMMUNICATIVE FUNCTION AND EXPRESSION OF AFFECT

Chaired by: **Markus Wöhr** (Marburg, Germany)

W33.1 – 14:20
Ultrasonic vocalizations as an index of sociability in mice: the role of the μ-opioid system
Francesca D'Amato (Rome, Italy)

W33.2 – 14:40
GABAA receptors and maternal separation distress: evidence from knock-in mice and pharmacological modulation
Klaus Miczek (Boston, USA)

W33.3 – 15:00
Adult rat 50 kHz ultrasonic vocalizations: call heterogeneity, individual differences, and dopaminergic mechanisms
Paul Clarke (Montreal, Canada)

W33.4 – 15:20
Brain mechanisms underlying ultrasonic communication in rodents
Markus Wöhr (Marburg, Germany)

14:15-15:45 WORKSHOP W34 Auditorium Verdi

CANNABINOID RECEPTOR SIGNALING AND MODULATION OF MONOAMINERGIC CIRCUITS: IMPLICATIONS FOR BEHAVIOR

Chaired by: **Elisabeth Van Bockstaele** (Philadelphia, USA)

W34.1 – 14:20
New perspectives in cannabinoid signaling
Ken Mackie (Bloomington, USA)

W34.2 – 14:40
Cannabinoid modulation of noradrenergic circuits
Elisabeth Van Bockstaele (Philadelphia, USA)

W34.3 – 15:00
Cannabinoids and dopamine: implications for psychiatric disorders
Eleni Tzavara (Paris, France)

W34.4 – 15:20
Endocannabinoid signaling: roles in neurodegeneration and schizophrenia
Andrea Giuffrida (San Antonio, USA)

14:15-15:45 WORKSHOP W35 Room Garibaldi

HOW TO PROPERLY USE ANIMALS IN RESEARCH: CONSIDERATION OF LEVELS OF PAIN, GENETIC BACKGROUND, TRANSGENICS, AND BEHAVIOR

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Chaired by: **Sharon Juliano** (Bethesda, USA) and **Silvina Diaz** (Paris, France)

W35.1 – 14:20
Do animals experience pain in the same way as humans?
Paul Flecknell (Newcastle, UK)

W35.2 – 14:40
Genetic background problems in the analysis of cognitive and neuronal changes in genetically modified mice
Hans-Peter Lipp (Zurich, Switzerland)

W35.3 – 15:00
The challenge of working with genetically modified rodents
Fernando Benavides (Smithville, USA)

W35.4 – 15:20
Behavioral measures and animal models in cognitive and behavioral neuroscience
Amy Starosciak (Bethesda, USA)

15:50-17:20 WORKSHOP W36 Room Vittorio Emanuele II

IONIC TRANSPORTERS AND IONIC CHANNELS AS NEW MOLECULAR TARGETS IN STROKE INTERVENTION

Chaired by: **Lucio Annunziato** (Naples, Italy)

W36.1 – 15:55
The Na+/H+ exchanger: A target for therapeutic intervention in cerebral ischemia
Dandan Sun (Madison, USA)

W36.2 – 16:15
Na+/Ca2+ exchanger gene products: Molecular targets for the identification of new therapeutic strategies in cerebral ischemia
Lucio Annunziato (Naples, Italy)

W36.3 – 16:35
Molecular participants in mitochondrial cell death channel formation during neuronal ischemia
Elizabeth A. Jonas (New Haven, USA)

W36.4 – 16:55
Role of TRPM7 in ischemic CNS injury
John F. MacDonald (Toronto, Ontario)

15:50-17:20 WORKSHOP W37 Room Mazzini
ADVANCED FUNCTIONAL ANALYSIS OF CEREBELLAR CIRCUITS
Chaired by: **Egidio D'Angelo** (Pavia, Italy)

W37.1 – 15:55
Large scale realistic computational networks of the cerebellum
Egidio D'Angelo (Pavia, Italy)

W37.2 – 16:15
Role of mGluR1/TRPC3 cerebellar function: from dendritic spines to behavior
Jana Hartmann (Munich, Germany)

W37.3 – 16:35
Probing the function of cerebellar Golgi and Lugaro cells in vivo
Ingrid Van Welie (London, UK)

W37.4 – 16:55
Signal analysis of multi electrode chronic recordings in the cerebellar cortex and nuclei in freely moving animals
Dana Cohen (Ramat Gan, Israel)

15:50-17:20 WORKSHOP W38 Room Cavour
SPATIOTEMPORAL PROFILES OF CORTICAL PROCESSING: A VIEW FROM OPTICAL IMAGING STUDIES IN AWAKE, BEHAVING NONHUMAN PRIMATES
Chaired by: **Anna Roe** (Nashville, USA)

W38.1 – 15:55
Simultaneous spatio-temporal imaging of blood-oxygenation and neurophysiological signals
Amir Shmuel (Montreal, Canada)

W38.2 – 16:15
Representing motion on V1 surface
Frederic Chavane (Marseille, France)

W38.3 – 16:35
Inter-areal cortical binding patterns in the macaque monkey
Hamutal Slovin (Ramat Gan, Israel)

W38.4 – 16:55
Spatiotemporal patterns of somatosensory activation
Anna Roe (Nashville, USA)

15:50-17:20 WORKSHOP W39 Auditorium Verdi
NEUROBIOLOGY OF NEGLECTED AFRICAN DISEASES
Chaired by: **Krister Kristensson** (Stockholm, Sweden)

W39.1 – 15:55
African Trypanosomes and the blood-brain barrier: From neuropathogenesis to search for diagnostic biomarkers
Willias Masocha (Kuwait City, Kuwait)

W39.2 – 16:15
Brain injury in cerebral malaria: Integrating clinical, biochemical, and brain imaging studies to assess pathogenesis
Richard Idro (Kampala, Uganda)

W39.3 – 16:35
Sleep disturbances during infections relevant for sub-Saharan Africa
Paul F. Seke Etet (Verona, Italy)

W39.4 – 16:55
Khat: a widely used natural amphetamine in Africa
Nilesh B. Patel (Nairobi, Kenya)

15:50-17:20 WORKSHOP W40 Room Garibaldi
NOVEL GENETIC AND PHARMACOLOGICAL TOOLS PROVIDE NEW INSIGHTS INTO ROLES OF MUSCARINIC ACETYLCHOLINE RECEPTOR SUBTYPES FOR TREATMENT OF CNS DISORDERS
Chaired by: **Carrie K. Jones** (Nashville, USA)

W40.1 – 15:55
Molecular mechanisms of allosterism at muscarinic receptors: Implications for CNS treatments
Katie Leach (Melbourne, Australia)

W40.2 – 16:15
Structural determinants and functional effects of novel M1 allosteric activators provide novel insights for treatment of CNS disorders
Chris Langmead (Welwyn Garden City, UK)

W40.3 – 16:35
Novel M1, M4, and M5 allosteric modulators for the treatment of psychosis and enhancement of cognition.
Carrie K. Jones (Nashville, USA)

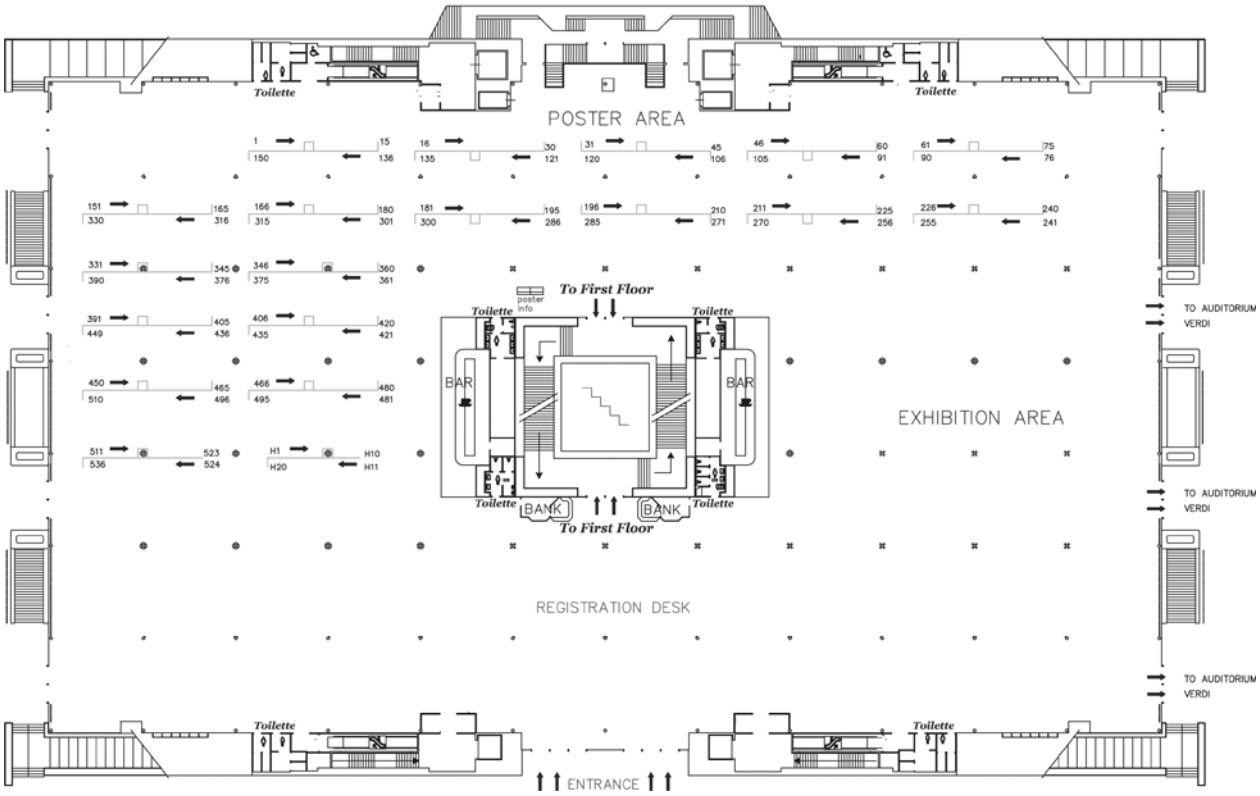
W40.4 – 16:55
Muscarinic regulation of basal ganglia circuitry and its implication for dystonia
Paola Bonsi (Rome, Italy)

17:30-18:30 CLOSING PLENARY LECTURE PL9 Auditorium Verdi
Introduced by: **Fabio Benfenati** (President, IBRO 2011 International Programme Committee)

Optogenetics: development and application
Karl Deisseroth (Stanford, USA)

POSTER PRESENTATION

Pavilion A - Ground Floor - Poster Area



01. Nervous system development & developmental disorders (Migration, differentiation & plasticity)

D001 **Transmembrane serine protease inhibitors HAI-1 and HAI-2 regulate neural progenitor cell division in culture**
R. KOIVUNIEMI, J. SCHRÖDER, H. KATAOKA & D. LINDHOLM

D002 **The atypical RhoGTPase Rnd3 regulates neural progenitor proliferation and organization in the developing cerebral cortex**
E. PACARY, R. AZZARELLI & F. GUILLEMOT

D003 **LEF1 and TCF7L2 are candidates for terminal selectors of thalamic neurons**
A. NAGALSKI, M. DABROWSKI, J. KUZNICKI & M.B. WISNIEWSKA

D004 **Chromatin remodeling BAF170 controls cerebral cortical size**
T.C. TUOC & A. STOYKOVA

D005 **Nuclear envelope potential: an origin of the first correlated neural activity**
M. YAMASHITA

D006 **Platelet activating factor induces a post-replication checkpoint response at the S/G2 transition of the cell cycle and blocks interkinetic nuclear migration in retinal progenitor cells**
L. FRAGEL-MADEIRA, T.S.G. MELETTI, R.M. MARIANTE, M. EINICKER-LAMAS, R.Q. MONTEIRO, R.R. BERNARDO, A.H.C.S. LOPES & R. LINDEN

D007 **Interneuron specification in the zebrafish spinal cord**
K.E. LEWIS, S. ENGLAND, S. DE JAGER, J. MORALES & G. CERDA MOYA

D008 **YAP regulates neuronal differentiation through Sonic hedgehog signaling pathway**
J.-Y. YU, Y.-T. LIN, M.-Y. LI, J.-Y. DING & T.-W. WANG

D009 **Expression analysis of genes involved in the Shh signaling pathway in the developing chicken cerebellum**
B. REICHENBACH & E.T. STOECKLI

D010 **Regulation of regional identity by the Pax6, Tbr2, and Tbr1 transcription factor cascade in developing mouse neocortex**
G.E. ELSEN, R.D. HODGE, F. BEDOGNI, R.A.M. DAZA, N. SHIBA, S.L. REINER & R.F. HEVNER

D011 **Quantitative analysis of nerve growth factor in the amniotic fluid during chick embryonic development**
E. DIANATI & F. MASHAYEKHI

D012 **Comparative analyses of the embryonic neocortical germinal zones of rat, ferret, and monkey**
C.L. CUNNINGHAM, V. MARTINEZ CERDENO, J.L. ANTCZAK, J. CAMACHO, M. CZIEP, A.N. PRAKASH & S.C. NOCTOR

D013 **The early embryonic origin of the cortical hypoplasia in p73-deficient mice**
M. GONZALEZ-GOMEZ, O.C. MEDINA-BOLIVAR, E.R. HERNANDEZ- DIAZ, D. GALINDO-MIRELES & G. MEYER

D014 **Spinal progenitors in the neonatal rat: intrinsic properties and their regulation by neurotransmitters**
N. MARICHAL, G. GARCÍA, M. RADMILOVICH, O. TRUJILLO-CENÓZ & R.E. RUSSO

D015 **Sonic Hedgehog activity is required for CXCR4 signaling in cerebellar granule precursor neurons and medulloblastoma**
R. SENGUPTA, S. WARD, L. YANG, O. MEUCCI, R. WECHSLER-REYA & J.B. RUBIN

D017 **CDKL5, a novel gene involved in RTT, modulates neuronal proliferation and differentiation**
C. FUCHS, S. TRAZZI, E. VALLI, G. PERINI, R. BARTESAGHI & E. CIANI

D018 **Polarized preferences of Fgf8 morphogenetic signal activity along the mammalian neural tube**
I. CRESPO-ENRIQUEZ, L. LAHTI, J. PARTANEN, S. MARTINEZ & D. ECHEVARRIA

D019 **Expression of *Igsf21, Pde10a* and *Btbd3* in the Fgf8$^{null/neo}$ mutant mouse forebrain**
A. BOTELLA-LÓPEZ & S. MARTÍNEZ

D020 **The identification of the factors promoting differentiation and maturation of cerebellar Purkinje cells**
M. SUGIE, Y. OKADA, O. TAO, M. KAWAMURA & H. OKANO

D021 **Role of the Nkx transcription factors in the specification of the basal midbrain**
J.A. MORENO-BRAVO, A. PEREZ-BALAGUER, J.E. MARTINEZ-LOPEZ, S. MARTINEZ & E. PUELLES

D022 **Expression domains of FLRTs family in the mouse mid-hindbrain region during neural tube development**
J. LAHOZ, I. CRESPO-ENRIQUEZ, T. ESCAMEZ, S. MARTINEZ & D. ECHEVARRIA

D023 **The T-box brain transcription factor Tbr2 controls glutamatergic fate determinants in the postnatal and adult subventricular zone**
R.J. KAHOUD, R.D. HODGE, B.R. NELSON, G.E. ELSEN & R.F. HEVNER

D024 **The early development of human neocortical GABAergic interneurons**
N.A.A. AL-JABERI, N. BAYATTI, S.M. LINDSAY & G.J. CLOWRY

D025 **Cortical radial glia mediates a homocellular network of coupling in the early postnatal subventricular zone**
A.L.R. XAVIER, A.S. FREITAS, C.M. FURTADO, C.H. PEREIRA, M.M. FRÓES & J.R.L. DE MENEZES

D026 **Oligodendrocytes precursors originate in prosomere 1: identification of chick Sulf1 as a new oligodendrocyte lineage related gene**
R. GARCIA, C. SOULA & S. MARTINEZ

D027 **Prenatal disruption of the serotonin synthesis and ontogeny of serotonergic nuclei: a matter of time**
A.D. CHAVEZ ARRIETA, M.G. FLORES CRUZ, R. VALLE BAUTISTA & A. ESCOBAR

D028 **Hindbrain segmentation in shark embryos: a survey of an ancestral organization**
I. RODRIGUEZ-MOLDES, I. CARRERA, S. POSE-MÉNDEZ, I. QUINTANA-URZAINQUI, E. CANDAL, R. ANADÓN, S. MAZAN & S. FERREIRO-GALVE

D029 **Wnt signal regulates the establishment of temporo-spatial coordinates of positional information in thalamic and pretectal epithelium**
M. NAVARRO-GARBERI, A. MARTINEZ-FERRE & S. MARTINEZ

D030 **Shh expression in the diencephalic zona limitans intrathalamica is regulated by Wnt signaling**
A. MARTINEZ-FERRE, M. NAVARRO-GARBERI & S. MARTINEZ

D031 **Generation and characterization of human ES cells carrying Sox1-reporter gene for neural differentiation**
K. YOSHIDA, S.-I. OTA, C. HARA, Y. OKADA & H. OKANO

D032 **Modulation of cell-cycle dynamics is required to regulate the number of cerebellar GABAergic interneurons and their rhythm of maturation**
E. PARMIGIANI, K. LETO, A. BARTOLINI, A. DI GREGORIO, D. IMPERIALE, A. DE LUCA, R.K. FILIPKOWSKI, L. KACZMAREK & F. ROSSI

D033 **Neurogenesis and nerves in the choroid plexus**
W. PRASONGCHEAN, B. VERNAY & P. FERRETTI

D034 **Topographic correlation of mature and developing mouse raphe nuclei with rhombomeric domains**
A. ALONSO, M. MARTINEZ-DE-LA-TORRE, P. MERCHÁN, L. SÁNCHEZ-ARRONES, J.E. SANDOVAL, R. ARTUCH & L. PUELLES

D035 **Expression of vascular endothelial growth factor receptor-3 in the developing rat forebrain**
M.C. WARD & A.M. CUNNINGHAM

D036 **Bioavailability of BrdU in the rat serum after intraperitoneal administration**
A. MATIAŠOVÁ, J. ŠEVC, V. KÚTNA, J. MIKEŠ, R. JENDŽELOVSKÝ, P. FEDOROČKO & Z. DAXNEROVÁ

POSTER PRESENTATION

D037 **The lining of central canal serves as the source of gliogenesis even during the first weeks of postnatal development of rat**
J. ŠEVC, V. KÚTNA, A. MATIAŠOVÁ, Š. GEDROVÁ & Z. DAXNEROVÁ

D038 **Mash1 protein stability is regulated by the E3 ubiquitin ligase Huwe1**
N. URBAN, C. HUNT & F. GUILLEMOT

D039 **Spatio-temporal analysis of the expression pattern of Iroquois a gene cluster in the developing CNS of chick embryos**
R. CORRAL-SAN MIGUEL, B. LORENTE-CÁNOVAS, L. TOMÁS-ROCA, F. MARÍN & P. AROCA

D040 **A targeted serotonergic neuron reporter stem cell line to model in vitro serotonergic neuron development and function**
G. PACINI, A. MARINO, B. PELOSI, S. MIGLIARINI, A. FERRARI & M. PASQUALETTI

D041 **The orphan nuclear receptor Nurr1 promotes the dopaminergic differentiation by regulating the expression of the transcription factor Pitx3**
R. DE GREGORIO, F. VOLPICELLI, C. PETRONE, C. PERRONE-CAPANO, U. DI PORZIO & G. BELLENCHI

D042 **Characterization of the endocannabinoid system in ST14A neural precursors**
V. POMATTO, M. TEDESCHI, S. RAPELLI, E. COTTONE, P. BOVOLIN & M.F. FRANZONI

D043 **HDAC 11 differentially expresses during prenatal and postnatal murine brain development**
A. GOUDARZI & F. AJAMIAN

D044 **Dynamic long- and short-range processes mediate Dll1-Notch signaling between diverse progenitor types in the embryonic neocortex**
B.R. NELSON, R.D. HODGE, F. BEDOGNI & R.F. HEVNER

D045 **The T-box transcription factor Tbr2 is required for development of the hippocampus and for maintenance of neurogenesis in the adult dentate gyrus**
R.D. HODGE, G.E. ELSEN, B.R. NELSON, R.J. KAHOUD, K.E. MUSSAR, R. YANG & R.F. HEVNER

D046 **Comparison of BrdU and Ki-67 labeling in the rat rostral migratory stream**
E. RACEKOVA, J. BLASKO, K. LIEVAJOVA, M. MARTONCIKOVA & I. VANICKY

D047 **Blood vessels in the rostral migratory stream of adult rats**
M. MARTONCIKOVA, J. BLASKO, K. LIEVAJOVA & E. RACEKOVA

D048 **Adult born neurons convey higher levels of associativity to information processing in the dentate gyrus of the hippocampus**
M.B. PARDI, L.A. MONGIAT, A.F. SCHINDER & A. MARIN-BURGIN

D049 **Induction of neurogenesis by IFRD1/PC4 in adult hippocampus**
L. MICHELI, L. LEONARDI, S. FARIOLI-VECCHIOLI, I. CINÀ, M. CECCARELLI & F. TIRONE

D050 **Expression and functional role of COUP-TFI in olfactory bulb GABAergic interneurons**
S. BOVETTI, D. GARZOTTO, M. ARMENTANO, S. BONZANO, C. GIACHINO, A. FASOLO, P. PERETTO, M. STUDER & S. DE MARCHIS

02. Axonal guidance, synaptic formation & trophic factors (Synaptic formation & trophic factors)

D051 **Selective localization of collybistin at a subset of inhibitory synapses in brain circuits**
E. FROLA, A. PATRIZI, L. VILTONO, K. HARVEY, R.J. HARVEY & M. SASSOÈ-POGNETTO

D052 **Developmental regulation of neurexin differs at glutamatergic and GABAergic synapses**
G. PREGNO, E. FROLA, A. PATRIZI, M. ARESE & M. SASSOÈ-POGNETTO

D053 **Bidirectional modulation of neuronal maturation by Kainate receptors**
J.M. MARQUES, R.J. RODRIGUES, J.L. ROZAS, S. SELAK & J. LERMA

D054 **Silencing GABAergic transmission affects the maturation and spine development of newborn granule cells in the adult mouse olfactory bulb**
M. PALLOTTO, A. NISSANT, J.-M. FRITSCHY, U. RUDOLPH, M. SASSOÈ-POGNETTO, P. PANZANELLI & P.-M. LLEDO

D055 **Astrocytes assist synaptogenesis in the adult rat cochlear nucleus after total sensory deafferentation**
R.B. ILLING, M. FREDRICH & A.C. ZEBER

D056 **Subunit specific changes in diffusion of GABAARs in response to GABABR signalling**
K. GERROW & A. TRILLER

D057 **Synapsin I controls synapse formation in a phosphorylation- and activity-dependent manner**
L.E. PERLINI, F. BOTTI, E.F. FORNASIERO, M. GIANNANDREA, D. BONANOMI, M. AMENDOLA, L. NALDINI, F. BENFENATI & F. VALTORTA

D058 **Modification of synapsin I by O-GlcNAc inhibits localization of synapsin I to synapses**
Y.V. SKOROBOGATKO, A. LANDICHO, G. GALLO & K. VOSSELLER

D059 **Synaptic trafficking of Frizzled-5, a receptor for Wnts, mediates activity-dependent synapse formation**
M. SAHORES, S. SIBILLA, A. GIBB & P.C. SALINAS

D060 **Alterations in synaptogenesis and Purkinje cell maturation in the cerebellum of Cstb-deficient mouse, a model for progressive myoclonus epilepsy, EPM1**
S. TEGELBERG, T. JOENSUU, P. HAKALA, J. VESTERINEN, O. KOPRA & A.-E. LEHESJOKI

D061 **PICK1 mediates synaptic targeting of AMPA receptors in neurexin-induced postsynaptic sites**
J. XU & J. XIA

D062 **Development of the calyx-type synapses in the embryonic chick ciliary ganglion - a brainbow study**
R. EGAWA, S. HOSOSHIMA, T. ISHIZUKA, H. NAKAMURA & H. YAWO

D063 **Peripheral sensory nerve transection-induced remodeling of afferent synapses in the somatosensory thalamus of mice**
Y. TAKEUCHI, Y. NAGUMO & M. MIYATA

D064 **Dystroglycan mediates GABAergic synapse formation in cerebellar Purkinje cells and recruits neuroligin 2 and $GABA_A$ receptors to postsynaptic specializations**
F. BRIATORE, G. PREGNO, E. FROLA, M.E. DE STEFANO, S. DI ANGELANTONIO, A. PATRIZI & M. SASSOE-POGNETTO

D065 **Role of synapsins in the regulation of the effects of neurotrophins on neuronal development**
F. BRUZZONE, S. MAININI, F. BENFENATI & F. ONOFRI

D066 **Developmental alterations the neuronal networks in layer 4 of rat barrel cortex**
G. RADNIKOW, J.R. LÜBKE & D. FELDMEYER

D067 **Regulation of neurexin processing at synapses by Alzheimer's disease-associated presenilins**
E. SERVIÁN-MORILLA, C.A. SAURA, A. MARTINEZ-MIR & F.G. SCHOLL

D068 **Role of synapsin II mutations associated with autism or epilepsy in neuronal development and synaptic vesicle cycling**
A. MARTE, M. FADDA, A. FASSIO, A. CORRADI, P. COSSETTE & F. BENFENATI

D069 **Rab8 regulates Fasciclin II recycling to modulate synaptic growth**
M. NAHM & S. LEE

D070 **Synaptic vesicle clustering is induced by cooperation of N-cadherin and Neuroligin-1**
A. STAN, K. PIELARSKI, T. BRIGADSKI, N. WITTENMAYER, V. LESSMANN, T. DRESBACH & K. GOTTMANN

D071 **Engrailed expression affects synaptic connectivity of *Drosophila* antennal sensory neurons**
J.M. BLAGBURN & B. MARIE

D072 **Analysis of the temporal expression and neurotrophic effects of GDNF in the developing rat nigrostriatal system**
A.M. GAVIN, S. WYATT, G.W. O'KEEFFE & A.M. SULLIVAN

D073 **Dopamine D2 receptor-induced upregulation of GDNF is mediated by the transcription factor Zif268**
S. AHMADIANTEHRANI & D. RON

D074 **Focal delivery of BDNF to cultured neurons with optical tweezers**
E. D'ESTE, G. BAJ, G. PINATO, E. TONGIORGI & D. COJOC

D075 **Antidepressant-induced TrkB receptor proteome in the adult mouse brain**
L.K. VESA, T.P. RANTAMÄKI & E.H. CASTRÉN

D076 **BDNF induces calcium binding proteins expression in spinal neurons**
E. ALBANESI, F. BENFENATI & R. ANELLI

D077 **The role of target-derived GDNF in axonal outgrowth of transplanted ventral mesencephalic dopaminergic neurons in a mouse model of Parkinson's disease**
S. GREALISH, J.-O. ANDRESSOO, M. SAARMA & A. BJÖRKLUND

D078 **The mechanisms underlying the role of adenosine A_{2A} and BDNF TrkB receptors upon neuronal maturation**
F.F. RIBEIRO, N. ASSAIFE-LOPES, R. SILVA, D. BRITES, J.A. RIBEIRO & A.M. SEBASTIÃO

D079 **Neurotrophin-induced polarized expression of $p75^{NTR}$ specifies axons during development and adult neurogenesis**
E. ZUCCARO, M. BERGAMI, B. VIGNOLI, G. BONY, S. SANTI, L. CANCEDDA & M. CANOSSA

D080 **Interleukin-1beta and Neurotrophin-3 stimulate synergistically distinct aspects of neurite outgrowth**
S. HENDRIX, F. BOATO, K. ROSENBERGER, D. LUEDECKE, E.N. PETERS & R. NITSCH

D081 **Effects of BDNF and FGF-2 on optic nerve regeneration after axotomy**
R.E. BLANCO, G.S. VEGA & C. DEL CUETO

03. Glia (Microglia, cancer & miscellanea)

D082 **A Trojan horse mechanism for neurotranslocation of nanosized particles**
J. CADUSSEAU, Z. KHAN, O. TILLEMENT, F. LUX & R.K. GHERARDI

D083 **Histamine modulates microglial inflammatory response**
R. FERREIRA, T. SANTOS, F. AGASSE, J.O. MALVA & L. BERNARDINO

D084 **Microglia profiling after peripheral *versus* central inflammatory challenge**
J.M. GEMECHU, G. GRASSI-ZUCCONI, M. BENTIVOGLIO & A. ANDRIOLI

POSTER PRESENTATION

D085 **Development of the microglial phenotype *in vitro***
K. GULYA & M. SZABO

D086 **Using impedance spectroscopy for monitoring the effects of minocycline on the proliferative activity of microglial cells**
D. JANSSEN, K. VERBOVEN, S. DUCHATEAU, J. BROEDERS, B. BRÔNE & J.-M. RIGO

D087 **K_v1.3 channel regulation of microglia-associated neurotoxicity**
J. LIU, C. XU, L. CHEN & H. XIONG

D088 **Proteomically identified microglial-secreted molecules are neuroprotective in *in vitro* models of neurodegeneration**
I. MENGONI, E. POLAZZI, E. PEÑA ALTAMIRA, A. CONTESTABILE & B. MONTI

D089 **Functional properties of spinal cord embryonic microglia in situ**
C. RIGATO, N. SWINNEN, R. BUCKINX, J.M. RIGO, H. LE-CORRONC & P. LEGENDRE

D090 **Microglia invasion and migration in the embryonic neocortex**
N. SWINNEN, S. SMOLDERS, B. BRÔNE, P. LEGENDRE & J.-M. RIGO

D091 **Erythropoietin action upon activation of microglial cells**
S.D. WENKER, M.E. CHAMORRO, D.C. VITTORI & A.B. NESSE

D092 **NeuroAIDS review: pre- and post-HAART lessons on the role of microglia and metabolic dysregulation in chronic neurodegenerative disease**
G.M. WANDERI & K.C. SIGEI

D093 **Monitoring microglia morphology, behavior and phenotype in ischemic mice by in vivo two-photon microscopy**
S. FUMAGALLI, F. ORTOLANO & M.G. DE SIMONI

D094 **Activated microglia inhibit axonal regeneration by RGMa**
M. KITAYAMA, M. UENO, T. ITAKURA & T. YAMASHITA

D095 **Minocycline *in vitro* reduces microglial activation in a *CSTB*-deficient mouse, a model for progressive myoclonus epilepsy, EPM1**
O. OKUNEVA, I. KÖRBER, T. JOENSUU, A.-E. LEHESJOKI & O. KOPRA

D096 **Evaluation of cytotoxic effects after prolonged exposure of human astrocytoma cells to fructose-boronophenylalaline, a boron delivery drug for boron neutron capture therapy**
U. DE SIMONE, T. COCCINI, E. RODA, G.J. BAKEINE, C. FERRARI & L. MANZO

D097 **Antitumor activity of zonisamide on C6 rat glioma cells**
Z. BOR, N. BEKTAS, R. ARSLAN & Z. INCESU

D098 **Type-3 Metabotropic glutamate receptor blockade enables the cytotoxic activity of temozolomide on human glioma stem cells**
C. NICCOLINI, C. CICERONI, M. BONELLI, M. LAURENZA, E. MASTRANTONI, P. SPINSANTI, L. RICCI VITIANI, R. DE MARIA, F. STOCCHI, F. NICOLETTI, G. BATTAGLIA & D. MELCHIORRI

D099 **Expression and localization of Kir channels in human Glioblastoma Multiforme**
M. PAPANIKOLAOU, G. PILKINGTON & A.M. BUTT

D100 **Proteomic analysis of signaling processes in glioblastoma cells after sub-lethal photodynamic treatment**
A. UZDENSKY, A. JUSENIENE & J. MOAN

D101 **Modulation of the inflammatory response in glial cells by histone deacetylase inhibitors**
M. BORASO, A. GALMOZZI, V. GALBIATI, E. CORSINI, C.L. GALLI, M. MARINOVICH, M. CRESTANI & B. VIVIANI

D102 **Glia- and neuron-specific functions of TrkB signaling during retinal degeneration and regeneration**
T. HARADA, X. GUO, K. NAMEKATA, L.F. PARADA & C. HARADA

D103 **Glutamatergic neurotransmission is modulated by glia and ATP in nucleus tractus solitarius neurons sending projections to ventral medulla of rats**
D. ACCORSI-MENDONÇA, L.G. BONAGAMBA & B.H. MACHADO

D104 **Effect of adenosine A_1 and A_{2A} antagonists on 3,4 methylenedioxymethamphetamine (MDMA)-induced neuroinflammation and dopamine neuron toxicity in mouse brain**
A. KHAIRNAR, L. FRAU, S. FENU, A. PLUMITALLO & M. MORELLI

D105 **Cellular and molecular remodeling in the adult rat spinal cord injury after chondroitinase ABC treatment**
U. MILBRETA, Y. VON BOXBERG, P. MAILLY, F. NOTHIAS & S. SOARES

D106 **MALDI TOF MS profiling of central nervous system glia**
Å. FEX SVENNINGSEN, J. HANREIDER, G. WICHER, J. BERGQUIST & M. ANDERSSON

D107 **Correlative microscopy of Bergmann glial cells of vertebrate cerebellum**
O.J. CASTEJÓN

D108 **Rac1 GTPase participates in müller glial cells proliferation after excitotoxic retinal injury**
L.C. SILVA, M.F. SANTOS, P.S. AKAMINE & D.E. HAMASSAKI

D109 **Regulation of the gabaergic transpoter-3 (GAT-3) in the avian retina**
C.S. SCHITINE, I. ORNELAS, K.C. CALAZA, P.F. GARDINO, R.A.M. REIS & F.G. MELLO

D110 **Blocking N-cadherin-based cell-cell adhesion leads to apoptosis of ependymal cells and denudation of brain ventricular walls**
L.F. BATIZ, C. OLIVER, C.A. GONZÁLEZ & E.M. RODRÍGUEZ

D111 **Glucosensing in hypothalamic tanycytes: signaling through connexin 43 hemichannels**
M.A. GARCIA, J.A. ORELLANA, P.J. SAEZ, C. CORTES-CAMPOS, R.J. ELIZONDO, K.F. SHOJI, S. CONTRERAS-DUARTE, V. FIGUEROA, J.X. JIANG, F. NUALART & J.C. SAEZ

D112 **SVCT2 and GLUT1 polarization and function in mouse and human choroid plexus cells**
F. NUALART, V. ULLOA, K. SALAZAR, K. REINICKE, F. PÉREZ, N. JARA, K. OYARCE & M.A. GARCÍA

D113 **Immunohistochemical alterations of dystroglycan complex related to blood-brain barrier permeability in different vessels and following lesions**
M. KÁLMÁN, E. FARAGÓ, S. SADEGHJAN, J. MAHALEK & K. PÓCSAI

D114 **Ultrastructural features of *Camelus dromedarius* pitiucytes and neurosecretion**
F.Z. DJAZOULI ALIM, M. RODRÍGUEZ, C. ANDRADE, N. LEBAILI & N. MAHY

D115 **Ultrastructural study on the process of osteopontin accumulation in neuronal cell debris in a rat model of stroke**
H.L. KIM, Y.-J. SHIN, J.-M. PARK & M.-Y. LEE

D116 **Visualization of GABA release in the developing cerebellar cortex**
S. YOSHIDA

04. Stem cells: neural injury & repair (Neurogenesis)

D117 **Ependymal cells display reactive astroglial phenotype with disruption of planar cell polarity and altered motile cilia function after stroke**
C.C. YOUNG, J.M. VAN DER HARG, K.J. BROOKS, A.M. BUCHAN & F.G. SZELE

D118 **EPHB3 limits the expansion of neural stem/progenitor cells in the SVZ by regulating P53 during homeostasis and following brain injury**
M.H. THEUS, J. RICARD, S.G. KERNIE & D.J. LIEBL

D119 **Methamphetamine impairs neurogenesis in dentate gyrus cell cultures: protective role of neuropeptide Y**
S. BAPTISTA, A.R. BENTO, J. GONÇALVES, L. BERNARDINO, C.F. RIBEIRO, J.O. MALVA, F. AGASSE & A.P. SILVA

D120 **The endocannabinoid system promotes proliferation and neuronal differentiation in murine subventricular zone cell cultures**
S. XAPELLI, L. SARDÀ, L. BERNARDINO, T. SANTOS, C.S. SCHITINE, L. CORTES, R.A.D.M. REIS, F. AGASSE & J. MALVA

D121 **The inhibition of infant rat hipocampal progenitor cell proliferation with endogenous protein factor**
E. BAKURADZE, I. MODEBADZE, G. MOSIDZE & D. DZIDZIGURI

D122 **Tracing neuronal progeny of adult rat ependymal cells using electroporation**
K. DEVARAJU, F.B. HEIDER, C.E. CLEMENTSON, J. FRISÉN, Z. KOKAIA & O. LINDVALL

D123 **Treatment with 3,6´-thiothalidomide, a new selective TNF-α inhibitor, suppresses the effect of beta-amyloid on neurogenenic hippocampal niche**
I. RUSSO, L. CARACCIOLO, D. TWEEDIE, N. GREIG, S. BARLATI & F. BOSETTI

D124 **A novel migratory stream in the postnatal hippocampus**
V. CUCCIOLI & S. MARTINEZ PEREZ

D125 **Galectin-1 is expressed in early-type neural progenitor cells and down-regulates neurogenesis in the adult hippocampus**
Y. IMAIZUMI, M. SAKAGUCHI, T. MORISHITA, M. ITO, F. POIRIER, K. SAWAMOTO & H. OKANO

D126 **Modulation of postnatal neurogenesis following perinatal asphyxia**
P. MORALES R, A. JARA-CAVIERES, P. ESPINA-MARCHANT, N. PÉREZ, V. MUÑOZ, G. CUNICH, D. BUSTAMANTE, P. GEBICKE-HAERTER & M. HERRERA-MARSCHITZ

D127 **Histamine as a promising proneurogenic factor on subventricular zone stem cells: a new approach for brain repair**
L. BERNARDINO, M.F. EIRIZ, T. SANTOS, S. XAPELLI, S. GRADE, A. ROSA, L. CORTES, J. BRAGANÇA, F. AGASSE, L. FERREIRA & J. MALVA

D128 **Exposure to extremely low-frequency (50 Hz) electromagnetic fields enhances adult hippocampal neurogenesis in C57BL/6 mice**
L. LEONE, B. CUCCURAZZU, M.V. PODDA, R. PIACENTINI, E. RICCARDI, C. RIPOLI, G.B. AZZENA & C. GRASSI

D129 **IL-1b negatively regulates expression of the orphan nuclear receptor TLX in adult rat hippocampal neural precursor cells**
S. RYAN & Y.M. NOLAN

D130 **Human cytomegalovirus infection inhibits the differentiation of human hippocampus neural precursor cells into astrocytes**
B. WANG

D131 **Local injection of ethidium bromide into the hippocampus can be modeled to study of the gray matter demyelination and acquisition of spatial memory in the rat**
M. GOUDARZVAND, M. JAVAN, J. MIRNAJAFI-ZADEH & T. TIRAIHI

POSTER PRESENTATION

D132 **FGF-2 potentiates myelin repair in mouse optic chiasm and nerves by recruiting oligodendrocytes progenitor cells**
S. DEHGHAN, M. JAVAN, F. POURABDOLHOSSEIN, J. MIRNAJAFIZADEH & H. BAHARVAND

D133 **Agonists differently regulate endocytic trafficking of the "dual" receptor GPR17 in differentiating oligodendroglial cells**
A. FRATANGELI, E. PARMIGIANI, S. MACCHI, E. GIARDINO, D. LECCA, M. FUMAGALLI, M.P. ABBRACCHIO & P. ROSA

D134 **Postnatal transplantation of interneuronal precursor cells modifies the anxiety-like behavior in adult mice**
M.F. VALENTE, M.E. CALCAGNOTTO, S. ROMARIZ, L. RUIZ, R. FRUSSA-FILHO, L.E. MELLO & B.M. LONGO

D135 **Positive autoregulation of serotonergic neurons by 5-HT$_{2B}$ receptors revealed by serotonin selective antidepressants**
S.L. DIAZ, S. DOLY, N. NARBOUX-NÊME, S. FERNANDEZ, P. MAZOT & L. MAROTEAUX

D136 **Flk1+/Nrp1+ cells: in vivo differentiation potential along neural and endothelial lineages**
V. LABAT-GEST, A. NOGHERO, A. BUFFO, A. GUALANDRIS & F. ROSSI

D137 **Influence of pigment epithelium derived factor on neurogenesis, apoptosis and inflammatory processes after traumatic brain injury**
A.-L. PINA, P. CASALIS, M.Y. TERZI, V. LANG, U. THOMALE & P. VAJKOCZY

D138 **The effects of male pheromones on adult neurogenesis in the accessory olfactory bulb of female mice**
J.-H. WU & T.-W. WANG

D139 **Effect of HCMV infection on NGF expression in human glioma U251 cells**
Y.-Y. WANG

D140 **Combining neural progenitors and injectable alginate biomaterial releasing growth factors (GFs) for spinal cord repair**
D. CIZKOVA, L. SLOVINSKA, I. NOVOTNA, M. CIZEK, V. CIGANKOVA & S. COHEN

D141 **Hippocampal-derived neural progenitor cells establish synaptic junctions after grafting into the adult ischemic brain**
O. TSUPYKOV, T. PIVNEVA, A. PODDUBNA, V. KYRYK, O. KUCHUK & G. SKIBO

D142 **Induction of a functional antiviral response and selection for attenuated coxsackievirus variants in persistently infected neural progenitor and stem cells**
R. FEUER, R.E. RHOADES, S. DELINE, J.B. RUEDAS, J. PERRAULT & G. TSUENG

D143 **The Cyclic-AMP Response Element Binding protein (CREB) and its role in neural progenitor cells and brain cancer**
N. PAPALEXIS & T. MANTAMADIOTIS

D144 **SEZ-derived neural progenitors contribute to remyelination of the corpus callosum in the cuprizone model of CNS demyelination**
T.D. MERSON, S.W. NG, P. SOO & T.J. KILPATRICK

D145 **Functional long-distance regeneration of sensory axons in the spinal cord**
L.E. WONG, M.E. GIBSON & E. FRANK

D146 **A study of axonal regeneration on culture of mouse neurons by laser dissection and optical tweezers**
F. DIFATO, H. TSUSHIMA, M. PESCE, F. BENFENATI, A. BLAU & E. CHIEREGATTI

D147 **The characterization of rat brain cell nuclear membrane GlcNAc-specific lectin**
R. AKHALKATSI & T. MACHARADZE

D148 **Bis(12)-hupyridone, a novel multifunctional dimer, promotes neuronal differentiation more potently than its monomeric natural analogue huperzine A possibly through alpha7 nAChR**
W. CUI, G.-Z. CUI, W. LI, Z. ZHANG, S. HU, R. HAN, S. MAK, H. ZHANG, P.R. CARLIER, C.-L. CHOI, S.M.-Y. LEE & Y. HAN

D149 **Role of PARP inhibitor, 3-aminobenzamide in the mechanism of programmed neuronal necrosis in Neuro 2A cells under tert-BOOH induced oxidative stress**
V.P. KRISHNAN MUTHAIAH, S.S. RAJAN, T. PALANIAPPAN, K. CHANDRASEKHAR & S. VENKATACHALAM

07. Synaptic transmission & signal transduction (Pharmacology & disease)

D150 **CB1 receptor independent inhibitory effects of cannabinoid agonists on the release of [^{3}H]GABA from hippocampal synaptosomes in the CB1 knockout mice**
R.D. ANDÓ & B. SPERLÁGH

D151 **Blockade of RasGRF1-NR2B coupling attenuates dyskinesia and prevents the accompanying rise of nigral GABA levels in mice**
S. BIDO, S. FASANO, R. BRAMBILLA & M. MORARI

D152 **Δ^9-tetrahydrocannabinol (Δ^9-THC) exposure during adolescence and mesolimbic DA response to Δ^9-THC and heroin in adult Lewis and Fischer344 rats**
C. CADONI, T. MUTO & G. DI CHIARA

D153 **Nitric oxide-active compounds modulate glutamatergic and GABAergic transmission in globus pallidus of rat**
F. CARLETTI, V. RIZZO, S. FRISCIA, G. FERRARO & P. SARDO

D154 **5-HT$_7$ receptor activation reverses mGluR-Ltd. in the hippocampus of wild-type and Fmr1 knockout mice**
L. COSTA, M. SPATUZZA, C. TROVATO, C.M. BONACCORSO, S.A. MUSUMECI, M.V. CATANIA & L. CIRANNA

D155 **To burst or not to burst during electro-cortical suppression: a question of stimulus strength, anesthetic depth and bursting history**
A.O. CONSTANTINESCU, A. ILIE, D. CIOCAN, B. DAVID, A.-M. ZAGREAN, L. ZAGREAN & M. MOLDOVAN

D156 **Adenosine is released *per se* in physiological conditions. During ischemia it is primarily a product of extracellular ATP, *in vivo***
F. CORTI, A. MELANI, H. STEPHAN, C.E. MULLER, M.G. VANNUCCHI & F. PEDATA

D157 **The effects of nicotine and non-nicotinic components of cigarette smoke on the expression and function of DAT**
K.M. DANIELSON, P. TRUMAN & B.M. KIVELL

D158 **Abnormal glutamate release in a mouse model of amyotrophic lateral sclerosis**
F. GIRIBALDI, M. MILANESE, T. BONIFACINO, F. ONOFRI, L. MUSAZZI, D. TARDITO, M. MESSA, C. USAI, G. RACAGNI, F. BENFENATI, M. POPOLI & G. BONANNO

D159 **The influence of repetitive pulsed magnetic stimulation on neuronal cultures**
S. GREHL, H.M. VIOLA, R.M. SHERRARD, S.A. DUNLOP, L.C. HOOL & J. RODGER

D160 **Cocaine sensitization does not alter substance P effects on locomotion or excitatory synaptic transmission in the rat**
S.B. KOMBIAN, K.V.V. ANANTHALAKSHMI, J.A. ZIDICHOUSKI & T.M. SALEH

D161 **The mGlu5 receptor positive allosteric modulator ADX-47273 has diffential effects on early and late LTP in rat hippocampal slices**
K.S. KROKER, G. RAST, C. DORNER-CIOSSEK & H. ROSENBROCK

D162 **Synaptic transmission imbalance induced by a nonsense mutation of Synapsin I gene involved in epilepsy and autism**
G. LIGNANI, A. RAIMONDI, E. FERREA, A. ROCCHI, T. TKATCH, F. VALTORTA, P. COSSETTE, P. BALDELLI & F. BENFENATI

D163 **Loss of tonic inhibition underlies cortico-hippocampal network hyperexcitability in the Synapsin II KO mice**
L. MEDRIHAN, E. FERREA, A. MACCIONE, L. BERDONDINI, P. BALDELLI & F. BENFENATI

D164 **Glutamate and acetylcholine alterations during seizure activity induced by 4-aminopyridine administration monitored by an electrochemiluminescence method**
A. MORALES-VILLAGRAN & J.M. ORTEGA-IBARRA

D165 **Electrophysiological characterization of Eps8 null neurons shows alterations in neurotransmission**
R. MORINI, E. MENNA, S. ZAMBETTI & M. MATTEOLI

D166 **Chronic morphine augments Dentate Gyrus population spikes that can be restored after withdrawal in freely moving rats**
M. NOORBAKHSHNIA, F. MOTAMEDI & S.Z. NOURBAKHSHNIA

D167 **Drugs of abuse differentially affect dopamine transmission in the nucleus accumbens shell and core of Hatano high- and low-avoidance rat strains**
G. PIRAS, R. FRAU, V. VALENTINI & G. DI CHIARA

D168 **Tropisetron upregulates cannabinoid CB$_1$ receptors in cerebellar granule cells: possible involvement of calcineurin**
R. RAHIMIAN, G. FAKHFOURI, S. EJTEMAEI MEHR, M.R. KHORRAMIZADEH, K. MOUSAVIZADEH & A.R. DEHPOUR

D169 **A galanin (2-11) analogue specific for Galanin receptor type 2 (GalR2)**
J. RUNESSON, K. KARLSSON & Ü. LANGEL

D170 **Characterization of a new muscarinic toxin from the venom of the Brazilian coral snake *Micrurus lemniscatus* in rat hippocampus**
D.C. SILVA, I.D.F. BATISTA, D.C. PIMENTA, I. LEBRUN, F.M. ABDALLA & M.R.L. SANDOVAL

D171 **The adenine receptor, a new target within the CNS: molecular-pharmacological analysis and pathophysiological relevance**
F. SIEGERT, M. BLOßFELD, A. OBST, B. BUMNARAN & K. NIEBER

D172 **Reaction time from sensory stimulation to volitional movement decreases with intensity and spatial coverage of stimulus**
A.H. VETTE, B. LAKHANI, A. MANSFIELD & W.E. MCILROY

D173 **Levetiracetam inhibits synaptic transmission through inhibition of presynaptic voltage-dependent Ca^{2+} channels in superior cervical ganglion neurones**
C. VOGL, B.J. WHALLEY, S. MOCHIDA & G.J. STEPHENS

D174 **Dexamethasone-induced up-regulation of human norepinephrine transporter involves the glucocorticoid receptor and increased binding of C/EBP-β to the proximal promoter of this gene**
Q. ZHA, Y. WANG & M.-Y. ZHU

D175 **Simultaneous monitoring multiple neurotransmitters and neuromodulators in mouse hippocampus by microperfusion and chromatographic separation**
M. BARANYI & B. SPERLÁGH

D176 **Synaptic vesicle recycling in living animals**
A. DENKER, I. BETHANI, K. KRÖHNERT, E. NEHER & S.O. RIZZOLI

POSTER PRESENTATION

D177 **Regulating nNOS function using lentiviral-mediated gene delivery**
M. DOUCET, A. HARKIN & K.K. DEV

D178 **Correlative microscopy: application for the study of GABAB distribution in the dorsal spinal cord**
P. HORAKOVA, S. LACOMME, E. GONTIER, A. CALAS, F. NAGY & M. LANDRY

D179 **Post-stress behavior is modulated by SERT regulation of extra-synaptic 5-HT signaling**
G. JAFARI, Y. XIE, A. KULLYEV & J. SZE

D180 **Excitatory electrophysiological effects of multi-walled carbon nanotubes on rat brain slices**
P. VARRÓ, I.C. SZIGYÁRTÓ, A. GERGELY, E. KÁLMÁN & I. VILÁGI

08. Neural plasticity (Physiology of circuit plasticity)

D181 ***In vivo* imaging of climbing fibers plasticity after laser axotomy**
A.L. ALLEGRA MASCARO, P. CESARE, L. SACCONI, G. GRASSELLI, P. STRATA & F.S. PAVONE

D182 **Ultra-structural features in the posterodorsal medial amygdala of male and female rats**
J. BRUSCO, E.T. IKEDA, A.A. RASIA-FLHO & J.E. MOREIRA

D183 **Pattern separation and pattern completion in CA3 improve with spatial water maze overtraining that induced mossy fiber synaptogenesis**
M. CARASATORRE, A. OCHOA & R.-A. VICTOR

D184 **Adult neurogenesis Gallotia galloti lizards is affected by external and internal cues**
M.C. DAMAS-HERNANDEZ & F.J. DELGADO-GONZALEZ

D185 **Structural and biochemical alterations of auditory cortex following noise-induced hearing loss**
P. DE BARTOLO, F. PACIELLO, S.L.M. ERAMO, A.R. FETONI, L. PETROSINI & D. TROIANI

D186 **Associative learning induces plasticity of vibrissae representation in SII cortex**
W. DEBOWSKA, M. LIGUZ-LECZNAR & M. KOSSUT

D187 **Denervation-induced plasticity and perineuronal net modifications in the adult mouse deep cerebellar nuclei**
S. FOSCARIN, A. FARALLI, D. PONCHIONE, E. PETITTO, F. ROSSI & D. CARULLI

D188 **Neuroplastic changes in chick retina after spectral deprivation**
N.S. FOSSER, L. RONCO, V.G. SÁNCHEZ, C.A. BEJARANO & H. RÍOS

D189 **Visuomotor plasticity induced by visual deprivation in *Rana pipiens*: role of spontaneous electrical activity and CREB phosphorylation**
S. GEORGE, M. MISRA, K. YANG & B. MILLINER

D190 **Optogenetic enhancement of synaptic network of rat hippocampus *in vivo***
T. HONJOH, T. ISHIZUKA & H. YAWO

D191 **Developmental switch in the spike timing dependent plasticity at layer 4 to layer 2/3 synapses in coincidence with the initiation of critical period in the mouse barrel cortex**
F. KIMURA & C. ITAMI

D192 **Interaction of dendritic locations on STDP of hippocampal CA1 area using optical imaging**
M. KONDO, M. TSUKADA, H. SASAKI & T. AIHARA

D193 **Social hierarchy in male zebrafish *(Danio rerio):* effects on adult brain proliferation pattern**
P. MAKANTASI, L. GKOLES & C.R. DERMON

D194 **Long-term plasticity chains in the cerebellar cortex**
J. MAPELLI, D. GANDOLFI & E. D'ANGELO

D195 **Adult hippocampal neurogenesis, defensive behavior and environmental enrichment in pigeons (*Columba livia*)**
F.F. MELLEU, V. DE SOUZA, M. PODOLAN, J. DOS SANTOS, T. WALBER, C. CENTURION-WENNINGER, T.S. DOS SANTOS, C. LINO-DE-OLIVEIRA & J. MARINO-NETO

D196 **Exploring the role of serotonin in S1 expansion in blinded neonatal rats**
R. MARTÍNEZ MÉNDEZ, P. PADILLA CORTÉS & G. GUTIÉRREZ OSPINA

D197 **Carbachol-induced hippocampal theta rhythm is suppressed after inactivation of the pedunculopontine nucleus in rats**
P. MATULEWICZ, J. ORZEL-GRYGLEWSKA & E. JURKOWLANIEC

D198 **Sensory cortical and limbic arg3.1/arc gene expression following exposure to novel or familiar visual and/or auditory stimuli in C57BL/6 and anophthalmic ZRDCT/An mutant mice**
D. MICELI, J. REPÉRANT, M. MEDINA & D. KUHL

D199 **Requirement of type 1 metabotropic glutamate receptor for experience-dependent pruning of retinogeniculate synapses**
M. NARUSHIMA, M. UCHIGASHIMA, K. HASHIMOTO, A. AIBA, M. WATANABE, M. MIYATA & M. KANO

D200 **Input-pathway specific establishment of repetitive-LTP-induced long-lasting synaptic enhancement in cultured hippocampal slices**
Y. OE, K. TOMINAGA-YOSHINO & A. OGURA

D201 **Median nerve representation in rat S1 and immediate plasticity after acute forepaw deafferentation**
J.T. OLIVEIRA, A.M.B. MARTINEZ, R.E. BITTENCOURT-NAVARRETE & J.G. FRANCA

D202 **Different outcomes of the 2-deoxyglucose brain mapping with unilateral and bilateral whisker stimulation in experience-dependent plasticity induced by sensory deprivation**
S. OLKOWICZ, M. KAZMIERCZAK & J.A. JABLONKA

D203 **iTBS-induced after effects parallel changes in oscillatory activity of neural populations in an old world monkey**
O. PAPAZACHARIADIS & S. FERRAINA

D204 **Newborn interneurons in the accessory olfactory bulb promote mate recognition in female mice**
L. OBOTI, R. SCHELLINO, C. GIACHINO, P. CHAMERO, M. PYRSKI, T. LEINDERS-ZUFALL, F. ZUFALL, A. FASOLO & P. PERETTO

D205 **Critical periods for integration and functional activation of new neurons in the accessory olfactory bulb of adult female mice**
R. SCHELLINO, L. OBOTI, C. GIACHINO, P. CHAMERO, M. PYRSKI, T. LEINDERS-ZUFALL, F. ZUFALL, A. FASOLO & P. PERETTO

D206 **Combination training in aging individuals increases cognitive performances, modifies the resting state brain activity, and is affected by dopamine-related genes**
V. PIERAMICO, R. ESPOSITO, F. SENSI, F. CILLI, D. MANTINI, P.A. MATTEI, V. FRAZZINI, D. CIAVARDELLI, V. GATTA, G.L. ROMANI & S.L. SENSI

D207 **Experience-dependent expression of miR132 regulates ocular dominance plasticity**
P. TOGNINI, E. PUTIGNANO, A. COATTI & T. PIZZORUSSO

D208 **Selective disruption of perineuronal nets in mice lacking Crtl1 is sufficient to make fear memories susceptible to erasure**
A. POLI, E. PUTIGNANO, R. MELANI, D. SILINGARDI, J.W. FAWCETT, N. BERARDI & T. PIZZORUSSO

D209 **Parallel fiber - purkinje cell Ltd. induced by granular layer output patterns**
L. CONGI, F. PRESTORI & E. D'ANGELO

D210 **Shifts in inhibition underlie ocular dominance plasticity in the rat visual cortex**
L. RESTANI, M. PIETRASANTA, C. CERRI, L. GIANFRANCESCHI & M. CALEO

D211 **A low dose of anandamide facilitates male rat sexual behaviour expression and reverses sexual exhaustion**
G. RODRÍGUEZ-MANZO & A.G. CANSECO-ALBA

D212 **The interaction between orexin and cannabinoid systems in locus coeruleus on pain modulation**
M.S. SAFARI, A. HAGHPARAST, A. AHMADIANI & S. SEMNANIAN

D213 **Developmental shift of NMDA receptor subunits is essentially involved in closing the critical period plasticity window in corticospinal synapse elimination in vitro**
T. OHNO, N. ISOO, N. MURABE, H. MAEDA, N. YOSHIOKA, M. MISHINA & M. SAKURAI

D214 **Swimming forced exercise affects neuroplastic positive responses in mouse cerebellum**
M. SCHULTZ, A.P.B. ARAÚJO & M. PORCIONATTO

D215 **mRNA translation during sleep consolidates cortical plasticity *in vivo***
J. SEIBT, M.C. DUMOULIN, S.J. ATON, T. COLEMAN, A. WATSON, N. NAIDOO & M.G. FRANK

D216 **Regulation of dendritic spines by naturally rewarding behaviors**
N. STAFFEND & R. MEISEL

D217 **Modulation by acetylcholine of STDP in rat hippocampal CA1 network**
E. SUGISAKI, Y. FUKUSHIMA, M. TSUKADA & T. AIHARA

D218 **Mode of endocannabinoid degradation after depolarization-induced retrograde synaptic suppression in cerebellar Purkinje cells**
A. TANIMURA, M. YAMAZAKI, M. UCHIGASHIMA, N. UESAKA, T. MIKUNI, K. HASHIMOTO, M. WATANABE, K. SAKIMURA & M. KANO

D219 **Chronic odorant exposure during early postnatal stage increases the number of specific glomeruli in olfactory bulb**
P. VALLE-LEIJA, E. BLANCO-HERNÁNDEZ, R. DRUCKER-COLÍN, G. GUTIÉRREZ-OSPINA & R. VIDAL-TAMAYO

D220 **Sleep deprivation decreases neuronal excitability and responsiveness in rats**
I. VILÁGI, Z. HARASZTI, T. HAJNIK, S. BORBÉLY & L. DÉTÁRI

D221 **Doublecortin-positive cells in the arcuate nucleus and their putative role in energy homeostasis**
L. WERNER, M.J. ROSSNER & M. SCHWANINGER

D222 ***In-vivo* studying neuroanatomical connectivities using novel MR-visible compound GdDOTA-CTB**
C.W.-H. WU

D223 **Early binocular deprivation differentiates central from peripheral area 17 as visualized by *zif268* expression in cat**
M. ZAPASNIK, K. LASKOWSKA - MACIOS, T.-T. HU, M. KOSSUT, L. ARCKENS & K. BURNAT

10. Pain (Receptors, channels & transmitter systems)

D224 **Activation of mGluR5 phosphorylates ERK in both excitatory and inhibitory interneurons in the rat spinal dorsal horn**
K.S. AL GHAMDI, J. RIDDELL & A.J. TODD

POSTER PRESENTATION

D225 **Trafficking of AMPA receptors at extrasynaptic plasma membrane of spinal lamina II neurons during persistent inflammatory pain**
O. KOPACH, S.-C. KAO, R.S. PETRALIA, P. BELAN, Y.-X. TAO & N. VOITENKO

D226 **Trafficking of spinal AMPA receptors: a basis for future therapies of persistent pain**
N. VOITENKO, O. KOPACH, A. SOTNYK, V. VIATCHENKO-KARPINSKI, Y.-X. TAO & P. BELAN

D227 **Functional significance of the TRPV1 receptor at the central terminals of primary C afferents in the spinal dorsal horn**
M. YOSHIMURA, D. XIE & D. UTA

D228 **The role of TRPA1 channel on stress-induced recurrence of colitis caused by dextran sulfate sodium (DSS)**
A. VIANA, M. COLA, A. BENTO, R. DUTRA, S.M. RATES & J.B. CALIXTO

D229 **Mechanisms of TRPM8-mediated $[Ca^{2+}]_i$ and electrical oscillations in sensory neurons**
M.S. YOREK, P. HOULIHAN, A. SLUPE & Y.M. USACHEV

D230 **Plasticity of trigeminal system and pain sensitization: a role of calcitonin gene-related peptide on transient receptor potential vanilloid-1 expression in rat trigeminal ganglion**
D. CHATCHAISAK, A. SRIKIATKHACHORN, P. GOVITRAPONG & B. CHETSAWANG

D231 **Modulation of synaptic transmission by cytokine TNFα and TRPV1 receptors in a model of peripheral neuropathy**
D. SPICAROVA, V. NERANDZIC & J. PALECEK

D232 **Analysis of the eye-wiping response to Cap at different sex, age, doses and drop volume administrated**
B. SANTIAGO, I.E. DIAZ-MUÑOZ, A. DOMÍNGUEZ, P. CARRILLO, P. PACHECO & M. CAMACHO

D233 **TDAG8-mediated TRPV1 sensitization is through two distinct G-protein pathways**
Y.C. CHANG & W.H. SUN

D234 **Local anaesthetic action on ion channels - a new interpretation**
J. NILSSON, H. ZEBERG, K. SAHLHOLM, M. MADEJA & P. ÅRHEM

D235 **Common mechanisms of drug interactions with sodium and T-type calcium channels**
C. BLADEN & G.W. ZAMPONI

D236 **Pathways mediating behavioral hypersensitivity induced by elevated calcium channel alpha-2-deltal-1 proteins**
Z.D. LUO, A. SANDHU, E. CHANG & C.-Y. LI

D237 **Visceral hypersensitivity induced by forebrain-specific suppression of native Kv7/KCNQ/M-channel activity in mice**
Y. BI, H. CHEN, J. SU, X. CAO, W. XU & K. WANG

D238 **Chronic non-specific low back pain reduction with acupuncture and baclofen: a randomised controlled clinical trial of efficacy**
M. ZARRINGHALAM, J. ZARINGHALAM & H. MANAHEJI

D239 **Nitric oxide-mediated heterologous regulation of Gi-coupled receptors**
A.-M. BABEY, V. RAMIREZ & K.M. STANDIFER

D240 **Orexin-A modulated pain through the brain stem**
H. AZHDARI ZARMEHRI, S. SEMNANIAN, Y. FATHOLLAHI & E. ERAMI

D241 **Antinociceptive effect of different psychostimulants in prenatally methamphetamine-exposed rats**
A. YAMAMOTOVA, B. SCHUTOVÁ, L. HRUBÁ, R. ŠLAMBEROVÁ & R. ROKYTA

D242 **Nociceptive function of spontaneous high current spikes in the anterior cingulate cortex**
B.C. SHYU, H.-C. SHIH & J.-W. YANG

D243 **Pain sensitivity to cold stimuli is associated with the functional A118G polymorphism of the OPRM1 gene**
M. MARTÍNEZ-JAUAND, J. GEA, C. SITGES, V. RODRÍGUEZ, I. COSTA, J.A. CASTRO & M. PEDRO

D244 **Effect of bilateral destruction of the nucleus cuneiformis on morphine-induced attenuation of formalin pain responses mediated by nucleus raphe magnus**
M. EBRAHIMZADEH-SARVESTANI, M. ORDIKHANI-SEYEDLAR, M. ZIAEI, A. PARVISHAN & A. HAGHPARAST

D245 **Pain-induced expression of the homeobox gene *Prrxl1* in peptidergic and non-peptidergic DRG neurons**
C. MONTEIRO, M. MATOS, S. REBELO, V. GALHARDO, C. REGUENGA & D. LIMA

D246 **UFP-112 a highly potent and selective peptide agonist for the nociceptin/orphanin FQ receptor: in vitro and in vivo studies**
G. CALO', A. RIZZI, D. REGOLI, S. SALVADORI & R. GUERRINI

D247 **Separating analgesia from addictive liability within the ventral tegmental area**
E. SCHIFIRNET, A. AMINE, J.M. LUCAS, C.S. LATI, S.E. BOWEN & G.S. BORSZCZ

D248 **Presynaptic inhibition of dorsal horn nociceptive responses mediated by sensorimotor cortical stimulation**
J. PÉREZ-SÁNCHEZ, M. CONDÉS-LARA, G. MARTÍNEZ-LORENZANA, J. RODRÍGUEZ-JIMÉNEZ & G. ROJAS-PILONI

D249 **A central role for the insula in the perception of bodily needs and pain**
F. TORREALBA, M. CONTRERAS, C. MADRID, T. PELISSIER, L. CONSTANDIL, R. HENDRIKX, M. VÁSQUEZ & P. ALVAREZ

D250 **Leptin-controlled orexin/endocannabinoid interactions in the mouse periaqueductal grey: role in the regulation of the descending antinociceptive pathway**
L. CRISTINO, L. LUONGO, R. IMPERATORE, A. DI NUNZIO, S. BOCCELLA, S. PETROSINO, P. ORLANDO, S. MAIONE & V. DI MARZO

D251 **Decrease of spinal faah activity modulates endocannabinoid/endovanilloid system and delays the development of neuropathic pain in rats**
W. MAKUCH, K. STAROWICZ, M. ZYCHOWSKA & B. PRZEWLOCKA

D252 **Role of cannabinoid receptors in hyperalgesia induced by nitroglycerin: study in animal model of migraine**
A.S. MANGIONE, R. GRECO, G. LEVANDIS, G. SANDRINI, G. NAPPI & C. TASSORELLI

D253 **Role of GLT-1 transporter activation in prevention of cannabinoid tolerance by the beta-lactam antibiotic, ceftriaxone, in mice**
O. GUNDUZ, C. OLTULU & A. ULUGOL

D254 **PPARα mediates a transcription-independent effect of palmitoylethanolamide on dorsal root ganglion neurons**
V. SEYBOLD, Y. XIONG, L. COICOU & I. KHASABOVA

D255 **Acid-induced signaling is enhanced by oligomerization of OGR1 and G2A**
Y.S. SU, C.W. HUANG & W.H. SUN

D256 **Reduced striatal D2 receptor binding in Fibromyalgia**
K. LEDERMANN, J. JENEWEIN, H. SPROTT, G. HASLER, U. SCHNYDER, C. BURGER, A. JOHAYEM, T. CSERVENYAK, S. KOLLIAS, A. BUCK & C. MARTIN-SOELCH

D257 **Modulation of postsynaptic reaction in the neocortical neurons during stimulation of nucleus raphe**
T. LABAKHUA, T. JANASHIA, G. GEDEVANISHVILI, T. TKEMALADZE & E. ABZIANIDZE

12. Motor systems (Movement & coordination)

D258 **Changes in "intra-limb" anticipatory postural adjustments after a short-term immobilization of both wrist and fingers**
F. BOLZONI, C. BRUTTINI, R. ESPOSTI & P. CAVALLARI

D259 **The precision of a voluntary movement relies on its associated anticipatory postural adjustments**
A. CARONNI, F. BOLZONI, R. ESPOSTI & P. CAVALLARI

D260 **Influence of audio-stimuli on isochronic repetitive movements: time analysis using kinematic and EEG data**
C. DEL TONGO, R. BRAVI, E. QUARTA, A. TOGNETTI, G. DALLE MURA & D. MINCIACCHI

D261 **The effect of physical similarity on motor resonance mechanisms: a behavioral and electrophysiological study**
M.-C. DÉSY, J.-F. LEPAGE & H. THÉORET

D262 **A quantitative analysis of human visuomotor behaviour during social cooperation**
F. DI BERARDINO, G. CONFALONE, S. FERRARI-TONIOLO, F. VISCO-COMANDINI & A. BATTAGLIA-MAYER

D263 **Coordination of iso- and antidirectionally coupled arm oscillations in the parasagittal plane**
R. ESPOSTI & F.G. BALDISSERA

D264 **Effects of reversible inactivation of posterior parietal cortex on reaching movements with target jump**
S. FERRARI-TONIOLO, S. SABERI-MOGHADAM, P.S. ARCHAMBAULT, R. CAMINITI & A. BATTAGLIA-MAYER

D265 **A sensory-motor network for the bodily self**
F. FERRI, F. FRASSINETTI, M. ARDIZZI, M. COSTANTINI & V. GALLESE

D266 **Fine control of human hand shape**
T.E. JERDE & M. FLANDERS

D267 **Cortical integration of hand actions in a bimanual prehension task**
E.P. GARDNER, J. CHEN & D. PUTRINO

D268 **Brain lesion overlap reveals distinct neural processes of quick online controls for visual target and background**
H. GOMI, T. ASO, K. KADOTA, K. KAWANO & H. FUKUYAMA

D269 **Two types of NMDA-induced rhythmic activity in the trigeminal motor nerve of neonatal mice *in vitro***
Y. IHARA, K. NAKAYAMA, K. TAKAHASHI & T. INOUE

D270 **Tectoreticular pathway and its link to visuomotor control**
A.A. KARDAMAKIS, M. STEPHENSON-JONES, B. ROBERTSON & S. GRILLNER

D271 **Neuronal activity in the frontal eye field and adjacent cortical areas of monkeys during reaching by eyes and/or hand**
K. KURATA

D272 **The effect of intermittent hypoxia on ethanol-impaired motor coordination**
H. LO, C.-Y. CHEN & H.-H. LIN

D273 **On the potentiation of motor affordances by visual objects**
S. MAKRIS, A. HADAR & K. YARROW

D274 **Oromotor rhythmic activity evoked by electrical stimulation of the trigeminal nerve sensory root in an isolated brainstem preparation from neonatal mice**
K. NAKAYAMA, Y. IHARA & T. INOUE

POSTER PRESENTATION

D275 **Properties of synaptic transmission from regions surrounding the trigeminal motor nucleus to trigeminal motoneurons in neonatal rats**
M. NONAKA, T. INOUE, A. NISHIMURA, K. NAKAYAMA, A. MOCHIZUKI, S. NAKAMURA, S. YOSHIMURA & T. IIJIMA

D276 **Control of muscle activation as a function of the initial leg position in a simple cycling paradigm**
J. PADULO, P. MIGNOGNA, G. ATTENE, G.M. MIGLIACCIO, S. D'OTTAVIO & D. VIGGIANO

D277 **Hand and mouth movement-related neurons in the macaque ventrolateral prefrontal cortex**
S. ROZZI, L. SIMONE, F. RODÀ, M. BIMBI, A. CALAPAI, G. LUPPINO & L. FOGASSI

D278 **Evolution of neural variability in the parieto-frontal system during change of motor intention**
S. SABERI -MOGHADAM, S. FERRARI-TONIOLO, P.S. ARCHAMBAULT, R. CAMINITI & A. BATTAGLIA-MAYER

D279 **Role of goal and motor expertise during the observation of usual actions performed by inusual effectors**
I. SENNA, N. BOLOGNINI & A. MARAVITA

D280 **Paw preference in rats is related to distinct patterns of brain monoamine function in a sex-dependent manner**
R. SULLIVAN, S. CHEHAB, M. DUFRESNE & F. LAPLANTE

D281 **Electrophysiological correlates of goal-directed movements in humans: successful and unsuccessful trials**
A. TREMBACH, E. KUZMENKO, O. GORBATOVA & S. SEROPYAN

D282 **Behavioural and neurophysiological correlates of manual performance asymmetries in right and left-handers**
T.W. DAVIDSON & F. TREMBLAY

D283 **A comparison of movement-related single unit activity in the primate globus pallidus and motor cortex during the performance of motor sequence tasks**
R.S. TURNER

D284 **The process of learning tool-use in 3 years old children observed from hand preference given tool location and orientation, and gaze**
K. WATANABE

D285 **Neural correlates of multiple time scales during long-term motor sequence learning**
N.F. WYMBS & S.T. GRAFTON

13. Learning & memory (Localization & animal models)

D286 **Entorhinal cortex role in fear conditioning consolidation in the rat**
E. BALDI & C. BUCHERELLI

D287 **Lesions of the Basolateral Amygdala, but not Central, can interfere with the performance under omission of different reward magnitudes**
J.L.O. BUENO, D.M. JUDICE-DAHER & T.F. TAVARES

D288 **Strengthening of new formed emotional memories by glucocorticoid and glutamate-NMDA receptors: temporal activation and the involvement of hippocampus**
A.P. CAROBREZ, J.A.V. KROON & R.R. SOUZA

D289 **Memory reactivation and hippocampal pricise representation of memory**
L. DE OLIVEIRA ALVARES, F. SANTANA, A. CRESTANI, J. HAUBRICH, L. CASSINI, J. QUILLFELDT & K. NADER

D290 **Identification of a neural correlate of hippocampal-dependent memory in the dentate gyrus**
C.A. DENNY, K.F. TANAKA, K. LAUGHMAN, R.A. BRACHMAN & R. HEN

D291 **Are the anterior thalamic nuclei necessary for remembering *when* an item was encountered?**
J.R. DUMONT & J.P. AGGLETON

D292 **The role of DLPFC and trait anxiety in emotional memory retrieval. A rTMS study**
C. FERRARI & M. BALCONI

D293 **Fear responses are mediated by different regions of the rat brain: role of dorsal striatum on acquisition and consolidation of emotional memory, evaluated by hormonal and behavioral expression**
T.L. FERREIRA, R.B. FERRARI, D. SUCHECKI, P.A. TIBA & M.G.M. OLIVEIRA

D294 **Brain circuits involved in rat egocentric learning under different light-dark (lighting) conditions**
C. FIDALGO, N.M. CONEJO, H. GONZALEZ-PARDO, M. MENDEZ L. & J.L. ARIAS

D295 **Novel localization of NF-kappa B in mouse synaptic terminals. Activation dynamics during memory consolidation**
M. LAGOS, M. BOCCIA, M. BLAKE, N. CORBI, C. PASSANANTI, C.M.M. BARATTI, A.G. ROMANO & R.A.M. FREUDENTHAL

D296 **Labilize or not labilize? That is the question**
M.S. FUSTIÑANA, V. DE LA FUENTE, R. FREUDENTHAL & A. ROMANO

D297 **Effects of cathecholaminergic lesions of prelimbic prefrontal cortex on cued discrimination task performance in rats**
R. GÁLOSI, A. TÓTH, P. ZOLTÁN & L. LÉNÁRD

D298 **Effects of histamine microinjected into the cerebellar vermis on memory retention of inhibitory avoidance learning in mice**
A.C.L. GIANLORENÇO, A. CANTO-DE-SOUZA & R. MATTIOLI

D299 **Does the hippocampus facilitate storage of contextual fear memory by nonhippocampal networks?**
T.L. GULBRANDSEN, F.T. SPARKS & R.J. SUTHERLAND

D300 **Fear extinction and renewal result in activation of anatomically different neuronal populations in the lateral, but not in the central amygdala**
E. KNAPSKA, M. MACIAS, T. WERKA, M. MIKOSZ, A. NOWAK, J. JAWORSKI & L. KACZMAREK

D301 **Dopamine D4 transmission in the prefrontal cortex controls the salience of emotional experience by modulating CaMKII activity**
N. LAUZON & S.R. LAVIOLETTE

D302 **Size matters: exploration of larger arenas is preferentially reduced by caudal hippocampal lesions in mice**
I. LEBEDEV, P. KUPTSOV, R. DEACON & M. PLESKACHEVA

D303 **Intra-medial pre-frontal cortical dopamine D1 receptor antagonism impairs working memory in the male rat**
D. MADULARU, A.L. BILODEAU & W.G. BRAKE

D304 **Processing of a fear memory: early and late role of the medial prefrontal cortex**
C. GONZALEZ, C. KRAMAR, C. KATCHE, J. ROSSATO, F. GARAGOLI, M. TOMAIUOLO, J. HOLMBERG, G. DORMAN, M. CAMMAROTA & J.H. MEDINA

D305 **Enhancement of neurotransmission in the nucleus of the solitary tract modulates taste aversive memory formation through noradrenergic and glutamatergic activity in the amygdala**
M.I. MIRANDA & N.E. GARCÍA-MEDINA

D306 **Learning impairment caused by intra-CA1 microinjection of testosterone increases the number of astrocytes**
N. NAGHDI, S. EMAMIAN, H. SEPEHRI, M. JAHANSHAHI, Y. SADEGHI & S. CHOOPANI

D307 **The modulation of the hippocampal function by the cholinergic and noncholinergic cells of the septum**
T. NANEISHVILI, M. DASHNIANI, M. BURJANADZE, N. CHKHIKVISHVILI, G. MAGLAKELIDZE, G. BESELIA & R. SAKANDELIDZE

D308 **Bilateral cholinergic lesions in the nucleus basalis impair sound localization and perceptual learning**
N.D. LEACH, V.M. BAJO LORENZANA, P.M. CORDERY, F.R. NODAL & A.J. KING

D309 **Participation of cholinergic system in persistence of memory in rats**
G.M. PARFITT, R.C. CAMPOS, Â.K. BARBOSA, A.P. KOTH & D.M. BARROS

D310 **Enhanced inhibitory avoidance learning protects against memory consolidation deficits induced by protein synthesis inhibition in dorsal hippocampus**
R.A. PRADO-ALCALÁ, L.M. RODRÍGUEZ-SERRANO, A.C. MEDINA & G.L. QUIRARTE

D311 **Glucocorticoid administration into the striatum facilitates memory consolidation of tone fear conditioning but not of contextual fear conditioning**
V.A. ARENAS, L.G. GARCÍA-LARA, N. SERAFÍN, A. REYES DE LA TORRE, R.A. PRADO-ALCALÁ, B. ROOZENDAAL & G.L. QUIRARTE

D312 **Expression of contextual fear conditioning depends of acetylcholine in lateral septal area**
D.G. REIS, A.A.A. SCOPINHO, F.M.A. CORRÊA & L.M.B. RESSTEL

D313 **Learning-induced morphological changes of large mossy fiber terminals at DG-CA3 synapses**
L. RESTIVO & P.W. FRANKLAND

D314 **Role of secondary and tertiary auditory cortices in the storage of fear memories**
T. SACCO & B. SACCHETTI

D315 **Ibotenic acid lesions of nucleus basalis magnocellularis interrupt spatial but not passive avoidance memory in rats**
A.H. SOLTANI TEHRANI, B. SOLTANI TEHRANI, P. BABAEI & S. FELLEZI

D316 **Learning-induced c-Fos expression in the retrosplenial cortex depends on the number of stages of the previous training**
O.E. SVARNIK, A.I. BULAVA, T.A. FADEEVA, K.V. ANOKHIN & Y.I. ALEXANDROV

D317 **Impact of neuronal CPEB2 on the translation of mRNAs involved in synaptic plasticity**
S.L. TURIMELLA, V. VANGOOR, L. KACZMARCZYK, P. BEDNER, S. PAßLICK, G. SEIFERT, R. JABS, C. STEINHÄUSER & M. THEIS

D318 **Involvement of the teleost telencephalic pallium in spatial cognition evaluated by cytochrome oxidase histochemistry**
S. UCEDA, B. RODRÍGUEZ, I. MARTÍN & F. RODRÍGUEZ

D319 **The brain response during acquisition of aversive taste memory**
A. UEMATSU, T. TSURUGIZAWA, A. KITAMURA, K. IWATSUKI, H. UNEYAMA & K. TORII

D320 **Glucocorticoid administration into the nucleus accumbens shell modulates memory consolidation of both safe taste learning and conditioned taste aversion**
R. WICHMANN & B. ROOZENDAAL

D321 **Visuo-spatial learning and memory in the AppSwe/PS1dE9 and 5XFAD mouse models of Alzheimer disease**
R.E. BROWN, T.P. O'LEARY & R.K. GUNN

D322 **Memory dysfunction and oxidative DNA damage in rat treated by arsenic**
M.S. BIN SAYEED, F. HASAN, M. ARIF & A. HASNAT

POSTER PRESENTATION

D323 **Molecular and structural alterations in the central nervous system of mice lacking cathepsin K**
S. DAUTH, R.F. SÎRBULESCU, S. JORDANS, M. REHDERS, L. AVENA, J. OSWALD, A. LERCHL, P. SAFTIG & K. BRIX

D324 **Methylphenidate improves the behavioral and cognitive deficits of neurogranin knockout mice**
F.L. HUANG & K.-P. HUANG

D325 **Functional autoradiography reveals unaltered cannabinoid CB1 receptor signalling in three brain regions of APP/PS1 transgenic mice**
E. KÄRKKÄINEN, H. TANILA & J.T. LAITINEN

D326 **Anatomical, neurochemical and functional consequences of selective cholinergic lesioning combined with local infusion of pre-aggregated amyloid peptide**
G. KLEINER, V. ANTONINI & G. LEANZA

D327 **Specific deficit in cognitive coordination after systemic injection of dizocilpine (MK-801): support for phenomenological validity of a pharmacological animal model of cognitive symptoms in schizophrenia**
S. KUBIK, H. BUCHTOVA, K. VALES & A. STUCHLIK

D328 **Effect of acupunctureon LPS-induced cognitive impairmentin mice**
J.M. LEE, A.R. DOO, H.S. SHIM, B. LEE, H. LEE, H.J. PARK & C.S. YIN

D329 **Masticatory deprivation followed by rehabilitation improves spatial learning and memory in adult albino Swiss mice**
F.C.C.S. MENDES, A.P.G. FELÍCIO, M. FALSONI, M.L.F. ANDRADE, M.N.F. ALMEIDA, J. BENTO TORRES, C.W. PICANÇO-DINIZ & M.C.K. SOSTHENES

D330 **Effects of acute mild stress on spatial memory in Huntington´s disease mice**
C. MO, T. RENOIR & A. HANNAN

D331 **Age-dependent episodic memory impairments in the Tg2576 model of amyloid pathology**
A.M. PALMER & M. GOOD

D332 **Cognitive functions of $P2X_7$ receptor knockout mice with intrahippocampal lipopolysacharide infusions**
L. SANG RIM, L. SO HEE, L. JAE RAN & H. JUNG SOO

D333 **Individual cholinergic synaptic and nicotinic receptor organization of learning and memory in rats with normal and chronic ischaemic brains**
E.I. ZAKHAROVA, Z.I. STOROJEVA, M.V. RAYEVSKAYA & A.M. DUDCHENKO

14. Cognition & emotion (Food intake, reward, fear & anxiety)

D334 **Attenuated amygdala activity in mice overexpressing the serotonin transporter during fear conditioning using *in vivo* oxygen amperometry**
C. BARKUS, A. HUBER, L. CAPITAO, A.M. TAYLOR, K.A. JENNINGS, T. SHARP, D.M. BANNERMAN & S.B. MC HUGH

D335 **Nucleus accumbens and prefrontal cortex dopamine modifications during operant responding for sucrose**
V. BASSAREO, P. MUSIO, F. CUCCA & G. DI CHIARA

D336 **Melanin-concentrating hormone microinjections into the medial preoptic area reduces maternal behavior in the lactating rat**
L. BENEDETTO, M. PEREIRA, P. LAGOS, P. TORTEROLO & A. FERREIRA

D337 **Effect of medial prefrontal cortex 6-hydroxy-dopamine on the nucleus accumbens dopamine responsiveness to appetitive stimuli**
Z. BIMPISIDIS, M.A. DE LUCA, V. VALENTINI & G. DI CHIARA

D338 **Effects of physical and social environmental enrichment on ultrasonic vocalizations in rats**
J.C. BRENES & R.K.W. SCHWARTING

D339 **Regulation of motivation to self-administer acetaldehyde by L-cysteine in Wistar rats**
G.R. FOIS, G. MUGGIRONI, M. DIANA & A.T. PEANA

D340 **The effect of sucrose dilution on licking microstructure resembles the effect of either dopamine antagonists or reward devaluation on operant responding for a reward**
A. GALISTU & P.S. D'AQUILA

D341 **Dopamine correlates of altered sucrose reward in a dietary obese rat model of Roux-en-Y gastric bypass surgery**
A. HAJNAL, A. ZHARIKOV, M.R. FIELDS, M. SUN & N.K. ACHARYA

D342 **The neurons of the prefrontal cortex are able to discriminate the value of food reinforcement in the delayed reward task in cats**
E. KULESHOVA, V. SIDORINA, A. ZALESHIN & G. MERZHANOVA

D343 **Spectral theta peak shifts during operant conditioning of electroencephalographic band activity in rats**
M. ROH, M. KIM, I.-S. JANG, P. CHOI, J.J. CHROBAK & M.-G. LEE

D344 **Selection for high vs. low rates of juvenile 50 kHz vocalization alters anxiety and fear extinction in Long Evans rats**
K.Z. MEYZA, C.M. MCCORMICK, J. BURGDORF, R.A. KROES, J.R. MOSKAL, J. PANKSEPP & S.M. BRUDZYNSKI

D345 **Effect of time discounting on the reward- and conditioned stimulus-related activity of striatal neurons**
K. OYAMA, I. HERNÁDI, T. IIJIMA & K.-I. TSUTSUI

D346 **Are the cognition-enhancing effects of voluntary wheel running mediated by its rewarding effects via the secretion of glucocorticoids?**
M. EBADA, D.A. KENDALL & M.C. PARDON

D347 **Reward related single-unit activity changes in the rat medial prefrontal cortex**
Z. PETYKÓ, A. TÓTH, R. GÁLOSI, K. KARÁDI, K. MÁTHÉ, I. SZABÓ, Z. KARÁDI & L. LÉNÁRD

D348 **Activation of orexin receptors in CA1 region of hippocampus is not rewarding for rats**
E. RIAHI, F. KHODAGHOLI & A. HAGHPARAST

D349 **Comparative study of the influence of the acute administration of drugs of abuse on 50-kHz ultrasonic vocalization in male rats**
N. SIMOLA, S. FENU, A. PLUMITALLO, A. PINNA & M. MORELLI

D350 **Naloxone fails to block CPP induced by electrical stimulation on the lateral hypothalamus**
M.J. SIMON, R. GARCIA & A. PUERTO

D351 **Neural mechanisms underlying endogenous-exogenous attention**
A. CARBONI, D. KESSEL, M. TAPIA, S. LÓPEZ, J. ALBERT, A. CAPILLA, Á. HAGEDOORN & L. CARRETIÉ

D352 **Inhibition of superior colliculi activity during exogenous attention**
L. CARRETIÉ, M. RÍOS, J.A. PERIÁÑEZ, D. KESSEL, J. ALBERT, S. LÓPEZ-MARTÍN & J. ÁLVAREZ-LINERA

D353 **The effect of eye movements, visual stimulation and task complexity on alpha ERD**
N.S. ERMACHENKO, A.A. ERMACHENKO & A.V. LATANOV

D354 **Emotional faces induce lateral attention shifts**
R. GUPTA & J. RAYMOND

D355 **The role of cholinergic cortical modulation in visual and olfactory attention using the 5-Choice serial reaction time task**
V. LJUBOJEVIC, P. LUU & E. DE ROSA

D356 **Endogenous-like orienting of visual attention in rats**
C.F. MAROTE & G.F. XAVIER

D357 **The effect of crossmodal attention takes longer to appear than that of unimodal attention**
L.L. RIGHI & L.E. RIBEIRO-DO-VALLE

D358 **Contingent attentional capture in the Posner cueing paradigm: the use of placeholders**
F.A. SAIS & L.E. RIBEIRO DO VALLE

D359 **Effects of the ovine-CRF injections into the periaqueductal gray columns on conditioned fear responses**
K.G. BORELLI, L. ALBRECHET-SOUZA & M.L. BRANDAO

D360 **Fear response in Steroidogenic factor 1 knockout mice exposed to cat odor**
T. BUDEFELD, S. TOBET & G. MAJDIC

D361 **Different fear states engage distinct networks within the intercalated cell clusters of the amygdala**
D. BUSTI, R. GERACITANO, N. WHITTLE, Y. DALEZIOS, M. MAŃKO, W. KAUFMANN, K. SÄTZLER, N. SINGEWALD, M. CAPOGNA & F. FERRAGUTI

D362 **Effects of angiotensin II receptor antagonists on anxiety and some oxidative stress markers in rat**
A.S. CIOBICA, L. HRITCU, V. BILD, M. PADURARIU & W. BILD

D363 **Isolation stress during the pre-pubertal period in rats induces long-lasting oxidative stress in the hippocampus**
R. KROLOW, C. NOSCHANG, L. DIEHL, L. PETTENUZZO, S.N. WEIS, D. ARCEGO, M. MARCOLIN, A.P. HUFFELL, C. MOTTA & C. DALMAZ

D364 **The elevated T-maze task as an animal model to simultaneously investigate the effects of drugs on memory and anxiety in mice**
E.C. GAVIOLI, L.S. ASTH, E. ANDRE & V.P. RACHETTI

D365 **Long-term emotional consequences of traumatic stress depends on the degree of context fear conditioning**
C.E.N. GIRARDI, P.A. TIBA & D. SUCHECKI

D366 **Functional status of brain mitochondria under psycho-emotional stress**
Z. KUCHUKASHVILI, N. KOSHORIDZE, K. MENABDE, G. BURJANADZE, M. CHACHUA & M. CHIPASHVILI

D367 **Functional characterization of DRR1, a novel stress-inducible gene in the mouse brain**
C. LIEBL, M.V. SCHMIDT, J.-P. SCHÜLKE, C. AVRABOS, M. EDER, T. REIN & M.B. MÜLLER

D368 **Higher doses of the endocannabinoid anandamide can potentiate flight reaction induced by nitric oxide donor in the dorsolateral periaqueductal gray: involvement of TRPV1 receptors**
S.F. LISBOA & F.S. GUIMARÃES

D369 **Modulation of conditioned fear by relaxin-3/RXFP3 signaling in the central amygdala of the rat**
S. MA, F.E. OLUCHA-BORDONAU, M.A. HOSSAIN, J.D. WADE, A.J.M. VERBERNE & A.L. GUNDLACH

D370 **Anxiety-like behavior in spatial memory performances after bilateral vestibular deafferentation in rats**
M.-L. MACHADO, V. LELONG-BOULOUARD, V. BOUET, T. FRERET, M. BOULOUARD, P. DENISE & S. BESNARD

POSTER PRESENTATION

D371 **Role of the rat insular cortex in conditioned fear**
C. MADRID, M. CONTRERAS, K. GÓMEZ, M. VÁSQUEZ & F. TORREALBA

D372 **Females are less susceptible to early life stress induced behavioral deficits - what is the underlying mechanism?**
J. MANIAM, L. BOBROVSKAYA, L. ONG, P. DUNKLEY & M.J. MORRIS

D373 **Acute corticosterone administration induces delayed effects on anxiety-like behaviors via an interaction with the noradrergic system**
F. MESSANVI, S. CHATTARJI & B. ROOZENDAAL

D374 **(Fe)male empathy: sex-specific neural correlates of socially transferred fear**
M. MIKOSZ, E. KNAPSKA, A. NOWAK, E. NIKOLAEV, N. MADROWSKI, J. SADOWSKA, L. KACZMAREK & T. WERKA

D375 **Effect of clonazepam exposure on social interaction of rats at three developmental stages**
A. MIKULECKÁ, M. ŠUBRT & H. KUBOVÁ

D376 **Polymorphisms in the serotonin transporter gene are associated with emotion regulation difficulties and attentional biases to threatening faces**
A.C. MIU, R. VULTURAR, A. CHIS, J. AVRAM, I. COCIA, L.C. USCATESCU & A. BECIU

D377 **Behavioural characterization of mice knockout for the neuropeptide S receptor gene**
A. PULGA, C. RUZZA, A. RIZZI, G. MARZOLA & G. CALO'

D378 **Evidence for a disruptive effect of cannabidiol on fear memory reconsolidation**
C.A. STERN, L. GAZARINI, A.P. CAROBREZ, R.N. TAKAHASHI, F.S. GUIMARÃES & L.J. BERTOGLIO

15. Neurodegeneration & aging (ALS, Parkinson & Huntington's disease)

D379 **The antidyskinetic effect of exercise on L-DOPA-treated hemiparkinsonian mice**
A.S. AGUIAR JR, A. HOELLER, E.L. MOREIRA, P.A. OLIVEIRA, F.C. MATHEUS, F.M. CÓRDOVA, A.A. CASTRO, R.B. LEAL, A. LATINI, R. RAISMAN-VOZARI & R.D. PREDIGER

D380 **DJ-1 knock-down impairs astrocytes mitochondrial function**
G. AMBROSI, N.J. LARSEN, S.J. MULLETT, D.A. HINKLE & S.B. BERMAN

D381 **Nigral dynorphin peptide levels are associated with L-DOPA-induced dyskinesia in experimental Parkinson´s disease**
M. ANDERSSON, A. KARLSSON, M. FÄLTH, J. HANRIEDER & J. BERGQUIST

D382 **OPA1 cleavage mediates impaired mitochondrial dynamics in an experimental model of Parkinsonism**
A. ALAIMO, R.M. GOROJOD, C.E. SAPIENZA & M.L. KOTLER

D384 **Peripheral markers of neuroinflammation in Parkinson´s disease**
E. BAZZINI, M.-T. ARMENTERO, S. CERRI, G. LEVANDIS, C. GHEZZI, C. PACCHETTI, S. CRISTINA, C. TASSORELLI, R. ZANGAGLIA & F. BLANDINI

D385 **Neuroprotective effects of FGF-20 on ventral mesencephalic embryonic dopamine neurons and in the partial 6-OHDA rat model of Parkinson's disease**
E.L. BOSHOFF & S. DUTY

D386 **Exploring nicotinic acetylcholine receptor independent effects of nicotine on mitochondrial dynamics as a potential mechanism of nicotine-mediated neuroprotection in Parkinson's disease**
L.M. BUHLMAN & P. LEWIS

D387 **Neuroprotective potential of adenosine A_{2A} and cannabinoid CB_1 receptor antagonists in an animal model of Parkinson's disease**
S. CERRI, G. LEVANDIS, G. AMBROSI, A. PINNA, R. FRANCO, C.E. MÜLLER, F. BLANDINI & M.T. ARMENTERO

D388 **The protective effect of icariin against MPP^+-induced toxicity in MES23.5 cells**
W. CHEN, L. WU, L. ZHOU & A. XU

D389 **Electrophysiological effects of group I metabotropic glutamate receptors on pallidal neurons in normal and 6-OHDA parkinsonian rats**
L. CHEN, X.-R. SUN, Y. XUE, R. XU & R. QI

D390 **Urate and inosine protection mechanisms in a cellular model of Parkinson's disease**
S. CIPRIANI, C.A. DESJARDINS, T.C. BURDETT, Y. XU, K. XU & M.A. SCHWARZSCHILD

D391 **Effect of 6-hydroxydopamine on MKP-1 expression in differentiated embryonic rat ventral mesencephalic neural precursor cells**
L.M. COLLINS, A. TOULOUSE & Y.M. NOLAN

D392 **Early cognitive impairment in a Parkinson´s disease rat model**
T.M. FLORIO, G. CONFALONE, D. MINCHELLA, A. CAPOZZO, E. SCARNATI, A. SOTGIU & M. ALECCI

D393 **Neurorescue properties of cystamine following MPTP-induced parkinsonism in mice**
C. GIBRAT, M. BOUSQUET, K. GUÉ, M. SAINT-PIERRE, C. ROUILLARD & F. CICCHETTI

D394 **Leucine-rich repeat kinase 2 regulates autophagy through a calcium-dependent pathway involving NAADP**
P. GÓMEZ-SUAGA, B. LUZÓN-TORO, D. CHURAMANI, L. ZHANG, D. BLOOR-YOUNG, S. PATEL, P.G. WOODMAN, G.C. CHURCHILL & S. HILFIKER

D395 **Neuroprotective effect of 3',4',7-trihydroxyflavone on 6-hydroxydopamine-induced cell death in SH-SY5Y cells**
S.-I. HONG, S.-H. KWON, K.-W. LEE, I.-J. YOU, T.-L. NGUYEN, J.-A. KIM, Y.-H. JUNG, M.-J. KIM, S.-Y. LEE & C.-G. JANG

D396 **Reconstruction of the nigrostriatal pathway by intranigrale transplantation**
M. JABER, B. SAHA, I. FRAPPÉ & A. GAILLARD

D397 **Lonicera japonica THUNB. protects neurotoxins-induced parkinsonism by inhibitions of oxidative stress and dopamine depletion in in vivo and in vitro models**
S.-H. KWON, S.-I. HONG, Y.-H. JUNG, K.-W. LEE, I.-J. YOU, L.T. NGUYEN, J.-A. KIM, M.-J. KIM, S.-Y. LEE & C.-G. JANG

D398 **Mutant alpha-synuclein attenuated its interaction with mortalin**
J. XU, F. XU & J. JIN

D399 **Protective action of matrix metalloproteinase-7 against in dopaminergic neuronal degeneration**
K.H. KANG, H.C. LIOU, W.H. YU & W.M. FU

D400 **Phenotypic traits of striatal neurons expressing tyrosine hydroxylase and effects of nigrostriatal dopamine pathway injury**
M. KLIETZ, C. DEPBOYLU, G.U. HÖGLINGER, E. WEIHE & M.K.-H. SCHÄFER

D401 ***In vitro* imaging of transplanted adult mesenchymal stem cells in an animal model of Parkinson's disease**
G. LEVANDIS, P. BOSSOLASCO, S. CERRI, V. DIANA, V. SILANI, G. LAMBERTENGHI DELILIERS, E. POLLI, L. COVA, F. BLANDINI & M.T. ARMENTERO

D402 **Neurotransmitter receptors in Parkin and DJ-1 knockout mice - a quantitative multireceptor study**
J. LOPEZ ESCOBAR, K. AMUNTS & K. ZILLES

D404 **Alpha-synuclein protects neurons from oxidative stress down-stream from free-radical production and scavenging**
R.E. MUSGROVE, A.E. KING & T.C. DICKSON

D405 **Alpha-synuclein modulates the localization, expression and function of NR2B-containing NMDA receptors: implications in the pathogenesis of Parkinson's disease**
L. NAVARRIA, M. ZALTIERI, P. SPANO & A. BELLUCCI

D406 **Regenerative potential of the rodent substantia nigra**
A. NORAZIT, M.N. NGUYEN, C.G.M. DICKSON, B. CAVANAGH, S.-A. POULSEN, A. MACKAY-SIM & A.C.B. MEEDENIYA

D407 **Antioxidant capacity alterations in serum of Parkinson's disease patients: a possible biomarker?**
K. OMURA, S. FUJIHARA, M. DOMINGUES, R. GASPAR, E. YAMADA, S. PERCARIO, K. KIETZER & J. FREITAS

D408 **Mice with genetic deletion of the heparin binding growth factor midkine exhibit early preclinical features of Parkinson's disease**
R.D. PREDIGER, A.E. ROJAS-MAYORQUIN, A.S. AGUIAR JR., C. CHEVARIN, R. MONGEAU, M. HAMON, L. LANFUMEY, E. DEL BEL, H. MURAMATSU, J. COURTY & R. RAISMAN-VOZARI

D409 **The intranasal MPTP model of Parkinson´s disease: new insights for an old toxin**
R. RAISMAN-VOZARI, A.S. AGUIAR-JR, E.L. MOREIRA, F.C. MATHEUS, A.A. CASTRO, R. WALZ, A.F. DE BEM, A. LATINI, C.I. TASCA, M. FARINA & R.D. PREDIGER

D410 **GIRK2, DCC and PITX3 protein localisation in human midbrain dopamine neurons**
S. REYES, K. DOUBLE, L. THOMPSON, D. KIRIK, H. COOPER & G. HALLIDAY

D411 **Role of nociceptin/orphanin system in paraquat and maneb animal model of Parkinson's disease**
S.D.C. BASTIAS CANDIA, M. DI BENEDETTO, S. CANDELETTI & P. ROMUALDI

D412 **Pathogenetic mechanisms of familial Parkinson's disease: wt and A30P a-synucleins affect the structure of microfilaments - a FRET study**
G. RONZITTI, F. DIFATO, A. BLAU & E. CHIEREGATTI

D413 **Effects of *schinus terebinthifolius Raddi*, on behavioral test, in a rotenone model of Parkinson's disease in rats**
A. SERENIKI, C. MEDEIROS-LINARD & S.S. LOPES

D414 **Hypoxic signaling in exercise-induced neuroprotection**
M. SMEYNE & R.J. SMEYNE

D415 **Behavioral effects of DBS therapy in 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) marmoset model of Parkinson´s disease: preliminary results**
A. YOON CHOI, L.P.N. DA SILVA, S.M. CININI, F.R. CABRAL, A.C.M. CRUZ- JR., E. AMARO-JR. & L.E. MELLO

D416 **Abnormal physiological responses and delayed axonal regeneration following nerve crush in mice overexpressing normal or ALS-linked TDP-43**
J.-N. AUDET, V. SWARUP & J.-P. JULIEN

D417 **Motor neuron hyper-excitability in a mouse model of amyotrophic lateral sclerosis is associated with significant changes in motor neuron morphology and dye-coupleing**
M.C. BELLINGHAM, R. KANJHAN, M. FOGARTY & P.G. NOAKES

D418 **Site-specific excitotoxicity and axonal degeneration in amyotrophic lateral sclerosis**
C.A. BLIZZARD, K.A. HOSIE, A.E. KING & T.C. DICKSON

D419 **A prolonged pharmacological blockade of type-5 metabotropic glutamate receptors protects cultured spinal cord motor neurons against excitotoxic death**
S. D'ANTONI, A. BERRETTA, G. SEMINARA, P. LONGONE, A.M. GIUFFRIDA-STELLA, G. BATTAGLIA, M.A. SORTINO, F. NICOLETTI & M.V. CATANIA

POSTER PRESENTATION

D420 **ALS-CSF induced Ultrastructural changes in NSC-34 cells (an *in vitro* model of ALS)**
S. GHOSH, B.K. CHANDRASEKHAR SAGAR, P.A. ALLADI & T.R. RAJU

D421 **Mutant human TDP-43 overexpression in mice leads to a dose-dependent ALS motor neuron phenotype**
J. JANSSENS, H. WILS, G. KLEINBERGER, G. JORIS, I. CUIJT, S. KUMAR-SINGH & C. VAN BROECKHOVEN

D422 **Dynactin p150^{Glued} characterization and its interaction with tubulin binding cofactor B (TBCB)**
G.F. KUH, M. MEYER-OHLENDORF, M. STOCKMANN, L. LINTA, C. PROEPPER, A.C. LUDOLPH, S. LIEBAU, T.M. BOECKERS & J. BOCKMANN

D423 **A possible role of neuregulin 1 in synapse maintenance in ALS**
J. LASIENE, B.E. JACOBSON POWERS, P.J. HORNER & K. YAMANAKA

D424 **Motor behavior tests to detect early symptoms in a mouse ALS model**
V. VALSECCHI, M. BOIDO, G. SPIGOLON, A. PIRAS & A. VERCELLI

D425 **Novel therapeutic approach to prevent degeneration linked to protein aggregation in rat spinal cord neuronal cultures: enhancing 26S proteasome activity, p62/sequestosome1 levels and survival with cAMP**
N. MYEKU & M. FIGUEIREDO-PEREIRA

D426 **Melatonin protects against toxicity caused by expanded CAG repeats expression in a cell line model of Huntington's disease by restoring ubiquitin proteasomal pathway and mitochondrial integrity**
J. CHAKRABORTY, K.P. MOHANAKUMAR, N.R. JANA & R. USHA

D427 **The PPARgamma rescues the mitochondrial dysfunction in cortex of Huntington disease**
M.-C. CHIANG, Y. CHERN & R.-N. HUANG

D428 **Modulation of striatal inhibitory synapses in neural degeneration**
E. HERNÁNDEZ-ECHEAGARAY, E. NIETO-MENDOZA & A. RUELAS

D429 **Lycopene reverses biochemical and behavioral alterations in 3-nitropropionic acid induced Huntington's disease**
A. MEHROTRA & R. SANDHIR

D430 **Effect of JAK2 inhibition on neuronal death, gliosis and neurogenesis in the striatum of adult mice after unilateral injection of quinolinic acid, an experimental model of Huntington's disease**
R.S. IGNARRO, A.S. VIEIRA, C.R. SARTORI, F. LANGONE, C.A. PARADA & F. ROGERIO

D431 **Attenuation of proinflammatory cytokines and apoptotic process by verapamil and diltiazem against quinolinic acid induced Huntington like alterations in rats**
H. KALONIA & A. KUMAR

D432 **Protective effect of resveratrol on 3NP induced Huntington's disease rat model**
T.-K. LIN, S.-D. CHEN, C.-W. LIOU & Y.-C. CHUANG

D433 **Altered synapsin 1 and GluR1 immunoreactivity in the hippocampus of YAC128 Huntington's disease mice**
W.-S. LOH, J. MONTGOMERY & A.L. MCGREGOR

D434 **Targeting the UPR transcription factor XBP1 protects against experimental Huntington's disease by enhancing mutant Huntington clearance by autophagy**
R.L. VIDAL, A. FIGUEROA, F.A. COURT, P. THIELEN, C. WIRTH, A.M. CUERVO, L.H. GLIMCHER & C. HETZ

D435 **Role of p53 and Bcl-2 in neurotoxicity mediated by mitochondrial dysfunction induced with 3-Nitropropionic Acid (3-NP)**
X. ZHANG & Z. QIN

D436 **Development of a novel model for polyglutamine pathogenesis using the chicken embryo**
H. NAKAYAMA, M. SHIBATA, K. ITO, O. UEMURA, H. OKAMOTO & N. SATO

16. Neurological disorders (Ischemia, hypoxia & neurotoxicity)

D437 **Molecular indicators of cognition deficit in cerebral stroke patients**
E.I. ELISTRATOVA, M.A. GRUDEN, V.V. SHERSTNEV & V.I. SKVORTZOVA

D438 **Genistein and daidzein have neuroprotective effects through ligand-binding-independent PPARΓ activation**
O. HURTADO, I. BALLESTEROS, M.I. CUARTERO, M. TORRES, J. SÁNCHEZ-PRIETO, M. CASTELLÓ-RUIZ, M.C. BURGUETE, E. ALBORCH, I. LIZASOAIN & M.A. MORO

D439 **Experimentally induced embolic stroke in rats: a novel quantification method of blood-brain barrier damage and histochemical characterization of affected tissue**
W. HÄRTIG, J. GROSCHE, J. PELZ, D. SCHNEIDER, C. WEISE, U. BAUER, J. KACZA, U. GÄRTNER, C. HOBOHM & D. MICHALSKI

D440 **Changes in $GABA_A$ receptor expression in *in-vitro* brain ischemia**
M. MELE & C.B. DUARTE

D441 **Role of Ca^{2+}-Permeable AMPA Receptors in ischemia: characterization of the OGD-induced cell death and genetic expression profile of the ischemic response**
J. FERNANDES, M. VIEIRA, C. DUARTE, A.L. CARVALHO & A. SANTOS

D442 **Coupling of Ca^{2+}-permeable AMPA receptors to the JNK and p38 signalling pathways: implications for cerebral global ischemia**
M. VIEIRA, J. FERNANDES, A. BURGEIRO, C. DUARTE, A.L. CARVALHO & A. SANTOS

D443 **Neuroprotective action of mildronate, an inhibitor of L-carnitine biosynthesis, after acute and chronic administration in rats**
B. SVALBE, L. ZVEJNIECE, S. GRINBERGA, E. LIEPINSH & M. DAMBROVA

D444 **Dysregulation of the transcriptional hypoxic response in CSB-deficient neural cells**
C. GLON, M. MAJORA, T. SCHREIBER, E. FRITSCHE, S. FRANKE, M. SCHNEIDER & J. KRUTMANN

D445 **In vitro effect of methionine and/or methionine sulphoxide on oxidative stress parameters in cerebral cortex of young rats**
F.M. STEFANELLO, T.M. DA SILVA, E.B. SCHERER, F. SCHMITZ & A.T. WYSE

D446 **Antioxidant-nanocarier attenuates intracerebral hemorrhage induced by focused ultrasound**
P. CHONPATHOMPIKUNLERT, C.H. FAN, Y. OZAKI, T. YOSHITOMI, C.K. YEH & Y. NAGASAKI

D447 **Enhanced expression of nestin and protection against apoptosis by erythropoietin after hypoxia in the neonatal brain**
M. YAMADA, C. BURKE, P. COLDITZ, D. JOHNSON & G. GOBE

D448 **Tumor necrosis factor alpha (TNF-α) and Interleukin 1 beta (IL-1β) are differently regulated by phototrombosis in early post - stroke period in young and aged mice**
M. LIGUZ-LECZNAR, R. ZAKRZEWSKA & M. KOSSUT

D449 **Effect of terminal anoxia/ischemia on cell swelling and extracellular potassium concentration in a-syntrophin knock-out mice**
L. DMYTRENKO, L. VARGOVA & E. SYKOVA

D450 **Evaluation of antioxidative, anti-apoptotic and neuroprotective effect of Chrysin in focal cerebral ischemia/reperfusion induced oxidative stress in rats**
S.S. RAZA, M. ASHAFAQ & F. ISLAM

D451 **Neuroprotective action of novel synthetic creatine- and phosphocreatine-derived compounds in *in vivo* models of focal and global cerebral ischemia In rats**
M. LENSMAN, V.O. MOUROVETS, D.E. KORZHEVSKIY, S.V. BUROV, O.A. PISAREV, A.I. ARTEMJEVA, N.L. IZVARINA, A.A. SAVOCHIN, P.P. YAKUTSENI, V.A. OTELLIN, S.A. POLENOV & M. BALESTRINO

D452 **Targeting epigenetic regulation of NF-KappaB and histones in the therapy of post-ischemic brain injury**
C. BRANCA, A. LANZILLOTTA, I. SARNICO, M. BENARESE, G. PIGNATARO, O. CUOMO, L. ANNUNZIATO, G. FARACO, F. BLASI, A. CHIARUGI, P.F. SPANO & M. PIZZI

D453 **Acetylation of NF-kappaB p50/RelA and histones in the epigenetic regulation of pro-apoptotic transcription: a neuroprotective target in brain ischemia**
A. LANZILLOTTA, I. SARNICO, R. INGRASSIA, F. BORONI, C. BRANCA, M. BENARESE, G. FARACO, F. BLASI, A. CHIARUGI, P.F. SPANO & M. PIZZI

D454 **Brain's hemoglobin-detoxification system: a role in neuroprotection after intracerebral hemorrhage simulated in rat**
X. ZHAO, J. ARONOWSKI, G.-H. SUN, J. ZHANG, R. STRONG, S. SONG & J.C. GROTTA

D455 **Distribution of the thioredoxin family protein in the rat central nervous system. Role in the perinatal asphyxia pathogenesis**
F. CAPANI, M.L. AON-BERTOLINO, J.I. ROMERO, G.E. SARACENO, P. GALEANO, M. HOLUBIEC, S. BADORREY, M.V. AYALA, R. KÖLLIKER-FRERS, E.-M. HANSCHMANN & C. LILLLIG

D456 **The role of cannabinoid CB2 receptors in neuroprotection in hypoxia-ischaemia**
J.R. RIVERS & J.C. ASHTON

D457 **Identification of proteins regulated by ferulic acid in focal cerebral ischemic injury: a proteomic approach**
P.-O. KOH, J.-H. SUNG, E.-H. CHO, S.-O. KOH & M.-O. KIM

D458 **Improved functional recovery after stroke through enhancement of the endogenous neurogenesis in aged rats**
T.-A. BALSEANU, A.-M. BUGA, N. OPRESCU, R. VINTILESCU, C. POEHLKE, J. KAISER, M. IANCAU & A. POPA-WAGNER

D459 **Tetrabromobisphenol-A in subtoxic concentrations exacerbates OGD nerotoxicity in primary cultures of rat cerebellar granule cells**
E. ZIEMINSKA, A. STAFIEJ & J.W. LAZAREWICZ

D460 **PLGA Nanoparticles for brain delivery of tissue inhibitor of matrix metalloproteinases as means to ameliorate consequences of ischemic cell death**
M. CHATURVEDI, B. SREEDHAR & L. KACZMAREK

D461 **Characterisation of hypoxic spreading depression in the Substantia Nigra in acute brain slices**
R. KARUNASINGHE & J. LIPSKI

D462 **Behavioral study of cerebral neonatal hypoxic-ischemic injury in immature rats**
E.F. SANCHES, N.S. ARTENI & C.A. NETTO

D463 **Effect of polyphenol green tea epigallocatechin gallate on behavioral parameters in animals submitted to neonatal hypoxia-ischemia**
V. LORA, S.N. WEIS, E.F. SANCHES, L.M. VALENTIM, N.S. ARTENI, A.T.S. WYSE & C.A. NETTO

POSTER PRESENTATION

D464 **RAGE and NF-kB are involved in neuronal death induced by sleep apnea**
M.F. ANGELO, R.X. AVILES REYES, A. VILLARREAL, J. LUKIN & A.J. RAMOS

D465 **Reactions of rCBF and DC-potentials of the brain evoked by word fluency test in patients with vascular encephalopathy**
V. FOKIN, N. PONOMAREVA, M. KROTENKOVA, R. KONOVALOV, M. TANASHIAN & O. LAGODA

D466 **Hyperdehydroepiandrosterone in hypoxic ischemic encephalopathy neonates with circulatory collapse**
A. KHASHANA

D467 **AMP-dependent thermoregulation: a new hypothalamic relay of relevance to ischemic brain injury**
M. MUZZI, F. BLASI, M. PITTELLI, R. FELICI, A. MASI, E. COPPI, C. TRAINI, A. PUGLESE, F. MORINI & A. CHIARUGI

D468 **Physical exercise increases acute adaptive angiogenic response to moderate altitude**
E.G. ARGANDOÑA, R. LEDEZMA, H. BENGOETXEA, S. BULNES, N. ORTUZAR, I. RICO-BARRIO & J.V. LAFUENTE

D469 **Rat model of focal cerebellar infarction with endothelin-1**
S.H. JUNG

D470 **Pretreatment of red ginseng extract has protective effects on ischemic stroke model**
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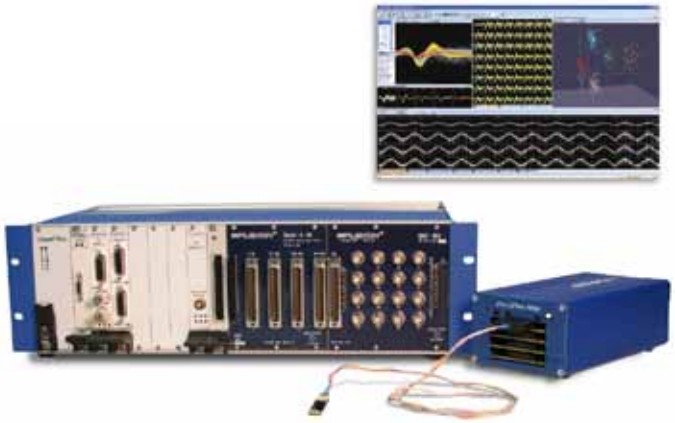

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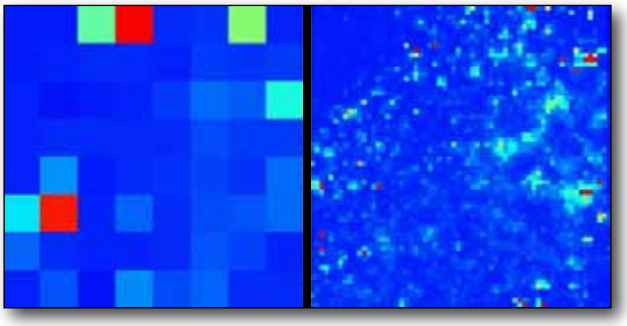

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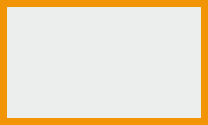

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