Informatics and the Brain

In neuroscience, I believe, most major breakthroughs are due to individual scientists that somehow through dedicated work and creative recombinations reach conclusions that lead to important new insights. At the same time science also progresses through larger dedicated efforts, like for instance the human genome project. When it was first planned, it was actually, not rarely, ridiculed, and one may also say that much of the sequencing represented work, contained relatively little of creative scientific efforts, although phenomenal methodological advances were made during this period. The early critics were proved to be wrong! The human genome, and all the other genomes that have been sequenced since, provide a very important platform from which thousands of scientists now design new experiments. Much of the current research in life science is dependent on this type of information stored in different databases and available for the neuroscience and systems biology community. Actually, the genome information would be useless, if it were not for databases and clever data-mining approaches developed in interaction with the informatics community.

Most likely, the progress in neuroscience would also profit markedly from informatics platforms. Scientists with very different backgrounds and methodology explore the function of the brain. There are perhaps 15
different fields that can easily be singled out, from psychiatry, linguistics and cognitive psychology to molecular neuroscience, neurophysiology and structural biology. All these areas are of critical importance, but they use vastly different methods from observation and description of different patterns of behaviour to the molecular methods used to study the machinery of the synapse. If we are to understand brain function in terms of nerve cells, synapses, cortical columns or networks in the motor system, we need to master all levels from genes via microcircuits to behaviour or disease. It is clearly not sufficient to make a correlation between a modified gene function and a behavioural phenotype, although this may provide important clues for further studies.

Within neuroscience we have thus, a formidable problem of communication - an eminent psychiatrist establishing new aspects of a clinical syndrome may not master relevant facts on the molecular, synaptic or systems level, and vice versa for the molecular specialist. A major hurdle is thus information transfer between all the different specialists, or formulated in a different way, for a given specialist to gain access to all the relevant information at all organizational levels. A solution to this problem would be a development of interoperable neuroinformatics databases that, however, would need to be more complex than those of the human genome project. We need to bridge many specialities and include for instance spatial information from the ultrastructural level and upwards, and temporal information extending from the microsecond level to the circadian and lifetime perspective, as well as facts about the many diseases of the brain. Currently, there are many different attempts both on the clinical and basic science side that strive to develop the infrastructure. One global effort is the OECD initiated International Neuroinformatics Coordinating Facility with 16 member countries including Japan, Korea, India, the US and a number of European countries (www.incf.org). This and other actions in different parts of the world strive to provide platforms to facilitate a rapid progress of neuroscience and allow for databases that can also store large data sets and help integrate brain function.

Prof. Sten Grillner

Editorial from a Communication and Publication Committee Member

One of the summer 2011 events of particular interest for all FENS members will be the 8th International Brain Research Organization (IBRO) World Congress of Neuroscience that will be held in Florence, Italy, on July 14-18, 2011. FENS is contributing to the success of the initiative with the participation of a significant number of associates, by providing 30 travel grants and by organizing a symposium on the “Legal trends on the use of animals” chaired by Roberto Caminiti of the FENS committee on animal research (CARE). IBRO and FENS have common objectives and actively collaborate to promote education and interaction between neuroscientists with the final aim of improving brain knowledge. Both societies support education and training of young researchers and jointly organize an appreciated FENS-IBRO neuroscience school program (see: http://fens.mdc-berlin.de/pens/).

The International program committee of the Congress selected 20 Symposia and 40 Workshops (each with 4 speakers) taking into account not only the quality of the research but also the participation of scientists located in the developing countries. Furthermore, 9 outstanding scientists were invited to give plenary lectures. A number of other special events of interest for all FENS members will be organized. Approximately 2500 posters have been received and will be given appropriate space for presentation and discussion. 3000 scientists are so far registered. The
majority of them are from Italy (338), but significant numbers of registered scientists are from Japan (173), Brazil (184), and USA (151). We expect that the number of participants will be approximately 4500-5000. Since IBRO strongly encourage the participation of young people working in the developing world, the Congress will be characterized by a strong participation of scientists from emerging countries of Asia and Africa, in addition to those coming from Europe and Americas.

During the Florence congress, the Italian Society for Neuroscience (SINS) and the French Society for Neurosciences (SN) will also organize their Joint meeting with two further plenary lectures and four symposia. Finally, IBRO decided to celebrate in Florence its 50th anniversary of life: it was indeed incorporated in 1961 and now counts 84 member societies (including FENS and the Society for Neurosciences) in 61 countries around the globe with a membership of over 75,000 neuroscientists.

Detailed information on this event can be obtained from the congress site (www.ibro2011.org) were you can also find a list of hotels, travel and touristic information and much more.

Prof. Flavio Moroni

## Joint Programming on Neurodegenerative Diseases

If we consider European research as a full entity, despite its competences, skills and its high quality degree, and when compared to other performing large countries like USA, we remain especially fragmented. Indeed, in Europe, 85% of research budgets are spent on national programmes exclusively. Only about 5% of the total public funding of research is common to European countries through the 7th Framework Programme for Research and Technological Development; about 10% is dedicated to support intergovernmental schemes or organisations. How can we increase this part of the common budget, reduce duplication and improve efficiency?

In this context, neurodegenerative diseases and Alzheimer’s disease in particular have to face a major contradiction in Europe: these diseases represent one of the major threats to our economies and health systems in the coming years and yet, compared to other domains, their research exhibits the highest degree of fragmentation and of lack of coordination. How can we, as European countries, then build a new way of efficient collaboration to tackle such a major medical, societal and economic challenge?

### The basis of a new era for European research

In July 2008, a communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions was published by the Commission introducing a new concept of collaboration among owners of national research programmes: joint programming. It can be defined as “a process in which Member States define a common vision and a strategic research agenda, in order to address a major societal challenge for which the scale and the
Joint programming, a definition

Joint programming is neither another programme, nor any new tool to add to the extensive tool-box of existing national, intergovernmental or Framework Programmes. The focus of Joint Programming is not on spending money, but about assigning money. The primary goal of joint programming is to allow a synergistic use of shrinking research budgets in a difficult economic climate. It relies on evidence that grouping calls for grants among several European countries will reinforce the potential for scientific collaboration amongst first class researchers and will allow a rise in the level of ambition in Europe. Despite separate attributions of funds from each country, a single scientific evaluation of projects has at least to be set up through an international peer-review process. Three main stages can be identified in the development of joint programming: the development of a common vision; the translation of this common vision into a strategic research agenda (SRA); the implementation of this SRA under an adequate management structure. Given the magnitude of the impact of neurodegenerative diseases on ageing, which is dominated by Alzheimer’s disease, a European mobilization of research on this topic would accelerate the provision of solutions in the biological, health, and social fields. This constitutes the bases of a shared vision on which a SRA will have to be built. This SRA must address three main challenges. The first challenge is scientific and needs to invest in basic research based on a bottom up approach. The second challenge is medical and implies to develop more intensively translational researches. Last but not least, the third challenge concerns research on social care and health services.

JPND, the state-of-play

As of May 2011, 23 countries have officially joined the initiative (Albania, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom). A management structure has been established whose first meeting was held on 18th June, 2009. A list of clear and realistic scientific, medical and social objectives were proposed by an outstanding international scientific advisory board (SAB), composed of fifteen top-ranking scientists from all over the world, thanks to the consultation of a hundred of scientists from all fields. The final SRA will be available in the last quarter of 2011 after editing by stakeholders to fit as best as possible to this societal challenge. A strong willingness exists to coordinate similar programmes aimed at transnational European added value whilst not undermining existing opportunities and avoiding unnecessary duplication with national programmes as demonstrated. An initiative issued from 6 countries in an attempt to build relationships within their centres of excellence has, for instance, already been launched. As a first “case study” for JPND, several countries (19 until May 2011) decided to support on their own national research budgets an initiative sug-
gested by the SAB: the optimisation of biomarkers and harmonisation of their use between clinical centres, for which a call will be launched before the middle of the year.

JPND will have published its SRA and tested its first experiments before the end of the year. Then the next step will be the way countries will implement this SRA. Each country will have to match its own strategic plans for this topic, or to build up one. Finally, the ultimate challenge will reside in the scale-up of JPND in order to offer, to this new and exciting collaborative initiative, the funds it deserves to tackle as quickly as possible such a threat with cutting-edge European research.

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Prof. Philippe Amouyel
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European Brain Institute (EBRI)

Rita Levi-Montalcini, has recently created the European Brain Research Institute (EBRI) in Rome in 2004. There she is involved in the battle against neurodegenerative diseases like Alzheimer, Parkinson. She has recently launched the challenge to fight Amyotrophic Lateral Sclerosis (ALS), a progressive and lethal neurodegenerative disease, by evaluating the efficacy of the product she discovered, the Nerve Growth Factor (NGF) for which she received the Nobel Prize in 1986, together with Stanley Cohen.

EBRI was created in response to the need for a Centre in Italy that would foster and promote neurobiological and neurophysiological research with the aim of finding new therapies against Alzheimer’s disease, Parkinson’s disease and other neurodegenerative disorders. In addition, another objective of EBRI is to attract foreign scientists to Italy, as well as offering Italian neuroscientists working in prestigious foreign Institutes, a chance to return home.

From its start EBRI is located in a 10,000 sq meters building together with two other Neuroscience Institutes: the Institute of Neurobiology and Molecular Medicine of the National Research Council (CNR) Santa Lucia Foundation’s Neuroscience Laboratories. EBRI scientific activity is currently organized with five main laboratories: Neurotrophic Factor and Neurodegenerative Diseases (Group Head: Antonino Cattaneo), Cellular Physiology of Cortical Microcircuits (Group Head: Alberto
Bacci), Metabolism in Neurodegeneration (Group Head: Michelangelo Campanella), Molecular Mechanisms and therapeutics of Neurodegenerative Diseases (Group Head: Pietro Calissano). A new laboratory on stem-cells was established in March 2011 (Group Head: Andreas Andrutsellis-Theotokis).

Since January 2010 Giuseppe Nisticò is the commissioner of EBRI. Many initiatives have been relaunched since then including the scientific collaboration with several prestigious Institutes in Europe such as the Wolfson Institute, University College of London (Sir Salvador Moncada), the Biothecnology Center Bicocca University of Milan (Prof. Lidia Alberghina), University of Florence Department of Biotechnology (Prof. Federico Cozzolino), and the Hebrew University of Jerusalem (Prof. Hermona Soreq). In addition an agreement for approx. two millions euros has been signed with a Chinese Biotech Company (Xiamen Bioway Biotech Co.).

EBRI covers the necessary expenses thanks to financial supports deriving from specific research projects as from the Italian Ministry of University and Research, Regione Lazio-FILAS, IIT (Italian Institute for Technology), Bank of Rome Foundation; collaborations with Industries and other potential partners, from supporting member payments and private citizen donations.

Rita Levi-Montalcini, now almost 102 years old, is a wonderful lady still enthusiastic to guide young researchers. She says: “I do not sleep anymore during the night, but my imagination and creativity has increased enormously in the last years, thus I elaborate new ideas and discuss the next day with my young coworkers” (see also http://nobelprize.org/mediaplayer/index.php?id=1101, for an interview by Adam Smith, Editor-in-Chief of Nobelprize.org in Rome, Italy, 26 November 2008).

Giuseppe Nisticò, EBRI Commissioner, Rome
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DZNE: A new National Centre for Research on Neurodegenerative Diseases

In his message (winter issue 2011), Sten Grillner highlighted the increasing problem that neurodegenerative diseases pose for society “…Jes Olesen and colleagues (2005) of the European Brain Council estimated that in Europe, Japan and North America the costs were 33 - 35% of the entire costs for health care in any given country...”. To reduce this burden, more investments in translational neuroscience research are essential. Following an initiative of Prof. Annette Schavan, Federal Minister for Science and Education, the German Federal and State Governments decided to address the issue by creating a new Helmholtz institute to research into causes and possible treatment/prevention of neurodegenerative disorders. The DZNE (Deutsches Zentrum für Neurodegenerative Erkrankungen) was founded on 3 of April 2009.

The fields of research include Alzheimer’s, other dementias and Parkinson’s disease, but also more rare conditions such as prion and Huntington’s diseases. The core of DZNE research will be to translate fundamental discoveries into clinical applications and to link advanced clinical and population studies to understanding of molecular mechanism of disease pathogenesis. DZNE research also involves aspects of public health and covers additional aspects including public information.

The DZNE comprises multiple advanced research sites with a larger site in Bonn and others in Dresden, Göttingen, Magdeburg, Munich, Rostock/Greifswald, Tübingen and Witten. The funding is up to € 66M per year and the Federal and State Governments have committed substantial resources to create building infrastructure at each site. At each site, DZNE is strongly linked with the Univer-
sites in a symbiotic partnership to translate blue-sky research into applications. DZNE also collaborates with other research organizations including Max Planck, Leibnitz and Fraunhofer. Together with the British (Medical Research Council) MRC and the Canadian Institutes of Health Research (CIHR), DZNE is one of the founding members of the COEN initiative (www.coen.org) which now include Belgium, Ireland and Italy to fund joint research programmes on neurodegenerative diseases across national borders.

The DZNE Bonn is currently housed at the Caesar Research Centre

The major advantage of DZNE is the clustering of advanced expertise in Germany on neurodegenerative disorders. Research from the fundamental mechanism of protein misfolding, seeding and propagation to human imaging and cognitive analysis can more effectively address the problem of identification of new targets and early markers and outcome measures in clinical trials. Experience in stem cell research, genetics and epigenetic disease mechanisms can also open the way to prevention and strategy for brain regeneration. Finally, advanced studies in epidemiology of patient care and nursing can offer immediate benefits to careers and patients affected by neurodegenerative diseases.

Two years after its start, DZNE employs 365 members of staff and has the highest ratio of foreign scientists in Germany with 28% overall and 53% at its larger site in Bonn. Over 200 scientific publications have been produced in these first two years. The international dimension of DZNE and its growing potential offers to European Neuroscientists an ideal place for high quality research with a perspective for a rapid translation into the care and prevention of neurodegenerative disorders.

Pierluigi Nicotera is the Scientific Director and Chairman of the Executive Board of DZNE

Veronika Ermer coordinates DZNE Scientific Strategy

Pierluigi Nicotera & Veronika Ermer
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EJN: Why would you pay to get published?

An enormous number of “Open Access” (OA) journals have emerged in recent years and compete for your publications in the neurosciences. OA journals in the neuroscience field are often a part of large OA series, such as the BioMed Central (BMC) OA journals (now owned by Springer) which include BMC Neuroscience and close to twenty additional journals covering aspects of neuroscience. Other impressively large series of neuroscience OA journals are the Frontiers journals and the journals by the Hindawi Publishing Corporation, each with over 20 different journals covering experimental and clinical neurosciences. Nature Publishing announced in January the forthcoming OA journal “Scientific Reports” as a further addition to their program after the launch of the hybrid Nature Communications.

Open Access comes at a cost to the author, with publishing fees ranging generally from around $1,000 to over $2,500 per article. “Open Access” is, of course, a bit of a misnomer, suggesting a free ride, and thus may be more accurately termed “Pay to Publish” (see also the inspiring editorial by Moore, 2010). As some OA journals publish several thousand papers a year, and taking into account the relatively low production costs for such journals, these journals must be immensely profitable, generating millions of dollars of revenue.

It is difficult to gauge the motivation for authors to publish in OA journals. In most countries, publication of research supported by public institutions (such as NIH) requires that manuscripts and articles are deposited into open access systems. Furthermore, the great majority of institutional researchers have access to most scientific journals via their institutional subscription systems. Most journals that are not OA journals will release an article without restrictions for a fee that is often comparable with the publishing fees for OA journals. It seems doubtful that lack of access to their articles represents a sufficiently widespread concern to motivate authors publishing in OA journals.

On their websites and advertising campaigns, many OA journals boast fast publication upon acceptance. Some forget to mention that articles typically are posted on-line “as they are” rather than being copy-edited, proof-read and typeset by production editors. In contrast, many traditional journals, including EJN, have high quality as well as rapid on-line publication schedules of typeset articles that appear satisfactory to the majority of authors.

OA journals emphasize their bias-free reviewing process (e.g., “…a fair and unbiased process...certifying the accuracy and validity of articles, not on evaluating their significance...”;
http://www.frontiersin.org/about/reviewsystem; “…publish all papers that are judged to be technically sound. Judgments about the importance of any particular paper are them made after publication by the readership…” (http://www.plosone.org/static/information.action). We did not, however, find statements addressing the conflict of interest that is inherent to a scheme that links acceptance of a manuscript directly to income.

While there is no data to substantiate this view, there seems to be a widespread notion that the reviewing process of many OA journals is relatively benign. The famous “fake paper” affair (http://chronicle.com/article/Open-Access-Publisher-Appears/47717) may have fueled such views. However, some researchers take the view that since the scientific “market place” attributes significance to a publication in the long-term, neither the particular journal nor its impact factor matter. Accordingly, the less intrusive reviewing often attributed to some OA journals is considered a plus.
These issues will continue to be discussed and the opinions of scientists will continue to vary greatly. However, associated monetary issues should be taken seriously. Most researchers conduct their research using public funds. If this research is published in journals that are owned or co-owned by scientific organizations, the considerable proceeds from scientific publishing are returned to nourish and maintain the scientific community.

There is no submission fee and no page charge for publishing in EJN. In other words, expenses for the authors are nil. The proceeds from EJN fund the activities of FENS, including the popular FENS-IBRO schools and the NENS Schools, the FENS job market and travel fellowships and, as sponsored directly by Wiley-Blackwell, the FENS-EJN Awards (http://fens.mdc-berlin.de/awards/). Therefore, publishing in EJN, besides being free, funds FENS.

Yes, our reviewers and editors evaluate the significance of papers, and yes, we have biases - biases toward quality papers and to continuously increasing the quality of EJN, and helping authors to improve the scientific content of their manuscripts. And we won’t hide our opinions behind four, six or even eight reviewers, as is the case now with some journals (see also Ploegh, 2011). Our expert editors and reviewers - all practicing scientists as opposed to professional editors - will get back to you, based on usually just two reviews, typically within 2-3 weeks. Our practicing editors understand that your research rarely results in perfect data and clear-cut, headline-grabbing stories; they have a realistic view of what constitutes a meaningful set of data (Ploegh, 2011) and they appreciate the often “messy” nature of biological data. They also experience rejections for their own papers, and thus such decisions are never taken lightly.

Furthermore, we all serve, way too frequently, as reviewers. Although we share a collective responsibility for maintaining the integrity and quality of our field, as a reviewer for EJN your work eventually benefits the neuroscience community, and that is you and your students.

Our focus on quality does not stop with the acceptance of your paper. The production editors ensure flawless usage of English, correction of typographic errors, and consistency in the presentation of text and figures. Furthermore, together with Wiley-Blackwell, we are taking steps to ensure the long-term, stable archiving of the electronic version of your paper. This is an increasingly important (and costly) issue that many OA journals are surprisingly silent about.

In short, publishing in EJN does not draw money from authors’ tax-payer funded research, and yet it generates considerable support for your neuroscience community.

The Editors of EJN

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References


The FENS History Committee was established in 2010 and comprises of 7 members:

Helmut Kettenmann (Chair)

Sten Grillner

Jacques Epelbaum

Nicholas Wade

Marina Bentivoglio

Ulf Norrsell

Michael Hagner

This committee is particularly interested in supporting projects in the field of the History of European Neuroscience that can be made accessible via the FENS website for the History of European Neuroscience.

Currently, the website gathers material available in the field and lists autobiographies, videos, pictures and other electronic material which document the History of Neuroscience in Europe. Data is linked from the websites of the Society for Neuroscience (SfN), International Brain Research Organization (IBRO), University College London (UCL), the German Neuroscience Society (NWG), along with other societies and institutions. We gratefully acknowledge the support of these organizations. We would like to encourage other partners to join this venture and to provide links to additional historical material. Hence, FENS has recently launched another Call for Proposals to provide funding for various History of European Neuroscience projects.

Call for Proposals: FENS Funding in European Neuroscience History Projects

FENS will carry out this History funding initiative once more in 2011 and will provide grants for outstanding projects which document the history and development of Neuroscience in Europe. The projects will be funded by up to €3000. The deadline for application is June 30, 2011.

FENS is particularly keen to support the presentation of historic material such as films, photos, images or histological slides on the web. FENS has created a new page on the FENS website devoted to the History of European Neuroscience and your project will be integrated there once finalized. The project should be designed to be made available on the web and completed within 1-2 years.

Please apply using this application form and send it to britta.morich@fens.org.
NENS Annual General Meeting

On March 19th and 20th, coordinators from sixteen doctoral schools met in Lausanne for the 2011 annual general meeting (AGM) of NENS. This was the first meeting organized by the new NENS committee, and it was aimed at evaluating the benefits and expectations the schools had for the NENS activities. To this end, four speakers were invited, all being involved in the coordination of doctoral programs at different levels. David Riddle, president of the Committee of Neuroscience Department and Programs, a committee of the Society for Neuroscience, presented their activities and in particular described the information they gathered over the years with their Survey of the doctoral schools activities. Zdravko Lackovic, president of ORPHEUS (Organization for PhD Education in Biomedicine and Health Sciences in the European System) presented the activities of his association that has a major component of scientists with medical training and working in hospital research environment.

The participating programmes of this association are widely spread in Central Europe and also in a number of Western Europe countries. The aim of the association is to insure standards for quality in the training of the different programs, which is often more difficult to establish for researchers with parallel clinical activity. Harry Steinbusch, director of the program EURON presented the organization of this international program that manages to harmonize academic curricula from different countries for students performing part of their studies in at least two different institutions. This program offers the students opportunities for a wide exposure to diversified science environment. This was a very stimulating example of what can be achieved regardless of the apparent barriers that one could expect in the European landscape with the different academic cultures. Finally, Erkki Raulo, coordinator of ERA-NET Neuron reported on the various supported activities for young investigators.

Among the activities supported by NENS, it was emphasized that it is important to maintain and even develop support for student mobility. The NENS stipends are one example that appeared successful, but should be made available if possible at even larger scale. One proposal supported by the participants was to open the exchanges beyond the limits of Europe and allow for instances of exchange for young North American Students to perform a lab project as part of their curriculum credits. A project for short visit in relation with a major international meeting such as FENS Forum was also reported. Stipends would be jointly awarded by a national society (Japan or China for instance) for participation to the meeting combined with a NENS stipend during a short stay (2-3 weeks just before or after the meeting) in a hosting European laboratory. Both types of exchange would favour the visibility of the European research institutions as potential sites for postdoctoral training and for fostering the collaborations between distant laboratories. NENS was encouraged to develop programs for professional development that would be supported by a Job Market Service combined with Job Fair activity during the Forum. There, doctoral and postdoctoral students would meet representatives of academic or governmental institutions as well as industry, biotech or publishing companies to know more about opportunities and competences.
required for those various professional profiles. Finally, NENS would be expected to promote support by the European Community for training in neuroscience and disseminate the information among the affiliated schools in order to favour the development of these international programs.

It was finally recommended that the NENS AGM would take place during the FENS Forum in order to facilitate the larger participation of coordinators at the meeting. It will be already implemented in 2012 at the Barcelona FENS Forum.

Jean Pierre-Hornung
NENS Chair 2010-2012

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New... FENS/ESF Conference Partnership

A new joint conference series on “The Dynamic Brain: from genes to behaviour“ will be jointly organized by FENS and the European Science Foundation (ESF).

ESF has been hosting high-level scientific conferences for over 20 years. Together with a range of national and international partners, it is offering a truly European conference scheme to scientific communities.

The new FENS/ESF conferences on the Dynamic Brain not only complement the existing series, they also add a new strategic dimension to the ESF scheme.

FENS Featured Regional Meeting

The 2011 FENS Featured Regional Meeting - Central European SiNAPSA Neuroscience Conference ‘11 (SNC’11) takes place in Ljubljana, Slovenia from September 22 to 25, 2011.

A joint project of neuroscientists from Slovenia, Trieste, Italy, and Zagreb, Croatia, SNC’11 will be an unprecedented regional neuroscience meeting and a unique opportunity for networking and future collaborations. With its satellite meetings and accompanying special events devoted to neuroscience education and promotion, SNC’11 will be a hub of European neuroscience in 2011.

The SNC’11 programme (http://www.sinapsa.org/SiNC11/programme) includes plenary and special talks by Pasko Rakic, Colin Blakemore, Richard Frackowiak, Maria Grazia Spillantini, Barry Dickson, Palmer Taylor and Donald Sanders, fifteen thematic symposia, an educational workshop on affective neuroscience, a course on single fiber electromyography and nerve/muscle ultrasound, and the young neuroscientists forum.

The conference venue is the Cankarjev dom Culture and Congress Centre, located at the very centre of Ljubljana and within walking distance of all major hotels, shops, restaurants and main sights (http://www.sinapsa.org/SiNC11/venue).

Do not miss this unique Central European neuroscience event of 2011.

Ljubljana, Slovenia
Introducing new FENS officers

Marian Joels works at the University Medical Hospital in Utrecht and is director of the Rudolf Magnus Institute. Her research focuses on the effect of stress hormones in the brain. She is FENS President-Elect.

Sigismund Huck leads a laboratory for Cellular Neurophysiology at the Center for Brain Research, Medical University of Vienna. His current research interests are properties and functions of neuronal nicotinic acetylcholine receptors. He is the FENS Secretary-general-elect.

Mike Stewart is Professor in Neuroscience in the Open University, Milton Keynes, UK. His research interests are in neurodegeneration and ageing. He is treasurer elect from 2011-2013, and will take up the position of Treasurer from 2013-2015.

Ole Kiehn carries out research into the way by which neurons and networks regulate movements. The research focuses in particular on the development and central regulation, as well as the cellular and molecular structure, of networks in the spinal cord that generate walking movements. He is the chair of the Programme Committee for the FENS forum 2012.

Mara Dierssen leads the research group for Neurobehavioral Analysis at the Genes and Disease Program of the Center for Genomic Regulation in Barcelona. Its current research interest is the role of putative candidate genes for human complex genetic diseases. She is the Chair of the Host Society Committee of the FENS Forum 2012.

The former FENS president Tamas Freund is one of the co-awardees of the Brain Prize 2011

Three Hungarian neuroscientists have been awarded the €1 million BRAIN PRIZE 2011 for their brilliant analysis of brain circuits involved in memory. One of them is Tamas Freund, FENS President from 2004 to 2006.

The Brain Prize 2011 is awarded jointly to Péter Somogyi, Tamás Freund and György Buzsáki, ‘for their wide-ranging, technically and conceptually brilliant research on the functional organization of neuronal circuits in the cerebral cortex, especially in the hippocampus, a region that is crucial for certain forms of memory’. The three scientists are all native Hungarians, who from their current locations in Europe and the USA share an interest in the way in which circuits of nerve cells process information in the brain.

Although the work of these three Hungarian researchers has been aimed at a fundamental understanding of brain function, it illuminates the causes and symptoms of a variety of clinical conditions, from epilepsy and Parkinson’s disease to anxiety and dementia. It has set the gold standard for correlating structure and function, from molecules to behaviour.

Tamas Freund is Director of the Institute of Experimental Medicine of the Hungarian Academy of Sciences, Budapest, Hungary. He has concentrated on the role of inhibitory ‘interneurons’ - small nerve cells that release the neurotransmitter γ-amino butyric acid (GABA), which reduces activity in the nerve cells to which they connect. Freund and his group have identified in the hippocampus three novel types of such cells that connect...
to other inhibitory nerve cells. He has made
the important discovery that control of inhibi-
tory interneurons by other inhibitory cells
regulates rhythmic patterns of activity, which
are essential for normal memory formation.
He has also demonstrated that cannabinoid-
related molecules - naturally occurring
transmitters in the brain and certain drugs
acting on the brain - work on a specific class
of inhibitory nerve cells, and he has sug-
gested ways in which the failure of this me-
chanism might be involved in a variety of
diseases.

The award ceremony took place on May 2, 2011 in
Copenhagen, Denmark and the Prize Lectures was
given on May 3, 2011, also in Copenhagen.

The Brain Prize of € 1 million is awarded by
Grete Lundbeck European Brain Research
Foundation, a charitable non-profit organiza-
tion. The Brain Prize is a personal prize
awarded to one or more scientists who have
distinguished themselves by an outstanding
contribution to European neuroscience.

Email: info@thebrainprize.org

The Joint ISN-ESN Meeting
Athens, Greece,
August 28 - September 1, 2011

Dusan Dobrota
ESN President
Email: dobrota@jfmed.uniba.sk
FENS Forum 2012 in Barcelona

The Scientific Programme for the next FENS Forum will comprise

- 9 plenary lectures
- 12 special lectures
- 56 symposia
- 4 technical workshops
- 6 special events
- poster sessions
- on 6.000 m² of exhibit space.

For more information please visit the meeting website at http://forum.fens.org/2012.

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