

*Committee members:**S. Clarke**President**N. Schaeren-Wiemers**Vice-president**Ch. Michel**Secretary**E. Welker**Treasurer**J. Kiss**P. Lavenex**C. Lüscher**A. Lüthi**J. Mosbacher**R. Müri**C. Sandi**E. Seifritz**E. Stöckli**A. Zurn***SSN - NEWSLETTER Vol. 7(1) April 2008****Contents**

- Editorial
- Jump-The-FENS
- SSN Travel Fellowships 2008
- Best Publication Award 2007
- FENS National Scientific Highlights of the Year
- 1000th SSN member
- IBRO Western European Region Committee

**Editorial**

Dear SSN members,

The 6th Forum of European Neuroscience (FENS), to take place 12-16 July 2008 in Geneva, is reaching the last stages of preparation. The Local Organising Committee is attending to the last details of what is likely to be a fantastic meeting. On the whole FENS 2008 will be again a larger meeting than the preceding one. Ann Kato, the president of the LOC, gives us the following numbers:

- More than 5000 registrations already !
- 3500 abstracts submitted (vs 3200 in Vienna 2006)
- Over 133 exhibitors (vs 107 in Vienna)
- More than 400 travel stipends offered by FENS, IBRO and member societies

- 9 Plenary Lectures (sponsored by Wiley-Blackwell & the Gatsby Charitable Foundation)
- 56 Symposia (224 talks)
- 12 Satellite Meetings (vs 5 in Vienna 2006)
- 4 Technical Workshops plus Media Workshop
- Special Symposium : “Neuron-Cell” Sponsored on Saturday July 12th
- 12 “Special Lectures” (vs 9 in Vienna 2006)
- 9 Special Events (vs 6 in Vienna 2006)
- 22 Social Events in total including breakfast meetings, business meetings, socials, special interest socials, dinners

A special social program will be provided by the students of the Lemanic doctoral school in Neuroscience – read about it in this Newsletter.

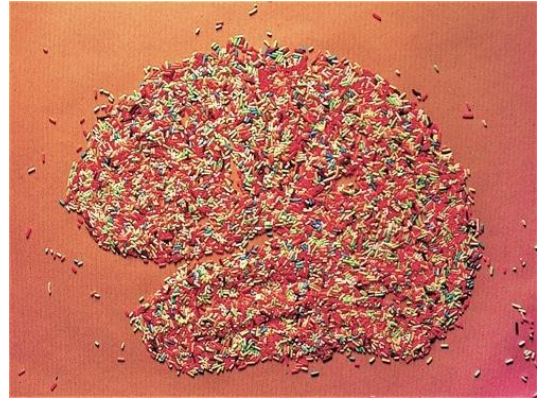
Our society together with the Swiss Academy of Sciences and Nestlé offers 65 travel fellowships to attend FENS 2008. The Selection Committee, chaired by Anne Zurn, has received over 220 applications. The laureates are listed in this issue.

Last year annual meeting, held in March in Bern, and this years FENS had a fantastic effect on our membership numbers. Recently we have welcomed our 1000th member – discover in the issue who it is and what he does.

Furthermore, you will discover in this Newsletter, who the winner of the Best Publication Award 2007 is and what the FENS National Scientific Highlights of the Year are.

Stephanie Clarke
President SSN

Jump-the-FENS



As mentioned in the previous Newsletter, students of the Lemanic doctoral school in Neuroscience created the idea to organize during the FENS forum three evenings at the lake side where the student participants would get together. As a first step, Arnaud Bisetti, Pierre Mégevand, Lorenzo Poglià, Charles Quairiaux and Dragan Viceic developed a WEB-site (<http://web.mac.com/jumpthefens>) where practical information is given how coming to Geneva is compatible with a low student budget. Their next step was to find a suitable place where the three evenings (13 – 15.07.08) could be organized. With the support of the local organizing committee, they managed to reserve the “Plage de ONU”, a beautiful spot on the lake side, close to public transport and ideally equipped for the purpose of the social gatherings during summer time. On this site, students will meet while having a drink and some food (including “raclette”) in a relaxing atmosphere dominated by the view on the lake that is reinforced by music and a light show.

Currently the organizers are actively searching for sponsors that will cover the costs for the infrastructure as well as keeping the costs for the refreshments minimal. The lemanic doctoral school will

produce t-shirts through which the Lemanic school -students will easily be recognized in their role as hosts. This informal way of students-meeting-students has been enthusiastically received by the FENS-officials and deserves all meteorological support!!

Travel Fellowships for attending FENS 2008

The Swiss Society for Neuroscience offers 65 travel fellowships to attend the FENS Forum 2008 in Geneva, of which 5 are sponsored by the Swiss Academy of Sciences and 10 by Nestlé. The Selection Committee, chaired by Anne Zurn, received over 220 applications, most of them of very high standard.

Fifty fellowships are sponsored by the Society for Neuroscience for PhD students and young postdocs who are members of a FENS Society and who work in Swiss, other European, or extra-European laboratories. The awards are 500, 700 and 1000 CHF, respectively.

Receipients from Swiss laboratories:

Bonnici, Brenda, Basel, Switzerland
Jalili, Mahdi, Lausanne, Switzerland
Oeschger, Franziska, Lausanne, Switzerland
Palchikova, Svitlana, Zurich, Switzerland
Potes, Catarina, Zurich, Switzerland
Senn, Verena, Basel, Switzerland
Stein, Maria, Berne, Switzerland
Sury, Matthias, Berne, Switzerland
Thurley, Kay, Berne, Switzerland
Waselle, Laurent, Lausanne, Switzerland
Willadt, Silvia, Basel, Switzerland
Wurtz, Pascal, Berne, Switzerland

Receipients from other European laboratories :

Agasse, Fabienne, Coimbra, Portugal
Amborska, Renata, Warsaw, Poland
Arranz, Amaia, Leioa-Vizcaya, Spain
Bethus, Ingrid, Edinburgh, United Kingdom
Brandt, Nicola, Berlin, Germany
Cetin, Timur, Groningen, Netherlands
Chintawar, Satyan, Bruxelles, Belgium
Czöndör, Katalin, Budapest, Hungary
De Vivo, Luisa, Ancona, Italy
Grabiec, Marta, Warsaw, Poland

Granic, Ivica, Haren, Netherlands
Hadinger, Nora, Budapest, Hungary
Hangya, Balazs, Budapest, Hungary
Komissarova, Natalia, Moscow, Russia
Miraucourt, Loïs, Bordeaux, France
Nekovarova, Tereza, Prague, Czech Republik
Oliveira, Joao, Leipzig, Germany
Pallotto, Marta, Torino, Italy
Perkovska, Sanja, Montpellier, France
Poirier, Guillaume, Cardiff, United Kingdom
Rosskothén, Iris, Innsbruck, Austria
Sanchez Ponce, Diana, Madrid, Spain
Schaub, Christina, Bonn, Germany
Schunk, Eduard, Innsbruck, Austria
Sivakumaran, Sudhi, Trieste, Italy
Susac, Ana, Zagreb, Croatia
Toth, Kinga, Budapest, Hungary
Toth, Mate, Budapest, Hungary
Zemankovics, Rita, Budapest, Hungary

Receipients from extra-European laboratories:

Chaudhury, Sraboni, New-Dehli, India
Chertoff, Mariela, Buenos Aires, Argentina
Cheung, Yuen-Ting, Hong-Kong, China
Pathipati, Praneeti, Auckland, New Zealand
Ross, Jaime, Baltimore, USA
Salazar, Rodrigo, Bozeman, USA
Shepherd, Jason, Cambridge, USA
Taccola, Giuliano, Trieste, Italy (disabled)
Tovar y Romo, Luis, Mexico, Mexico

Five fellowships are sponsored by the Swiss Academy of Sciences, 600 euros each

The recipients are:
AbuBaker, Mohammed, Bangalore, India
Basu, Amrita, New-Dehli, India
Estrada Sanchez, Ana Maria, Mexico, Mexico
Kaushik, Mahesh, New-Delhi, India
Pillai, Anup, Bangalore, India

Ten fellowships are sponsored by Nestlé, 750.- euros each

The recipients are:
Cherkas, Volodymyr, Kiev, Ukraine
Grigoryan, Gayane Yuri, Yerevan, Armenia
Jantas, Danuta, Krakow, Poland
Malik, Anna, Warsaw, Poland
Misztal, Katarzyna, Warsaw, Poland
Mugantseva, Ekaterina, Pushchino, Russia
Papp, Ildiko, Debrecen, Hungary
Szego, Eva, Budapest, Hungary

Tsaparina, Diana, Saint-Petersburg, Russia
Ziemlinska, Ewelina, Warsaw, Poland

Best Publication Award 2008

The SSN awards every year a prize to a student-member working towards a pre-doctoral degree or a doctoral degree for a best publication.

For 2007 the award of CHF 4000.- has been attributed to Manuel Mameli for the article:

Manuel Mameli, Benedicte Balland, Rafael Lujan and Christian Lüscher
Rapid synthesis and synaptic insertion of GluR2 for mGluR-LTD in the ventral tegmental area. *Science*, 2007 July 27; 317(5837): 530-3.

Manuel Mameli was born in 1978 in Cagliari (Sardinia, Italy). After his studies in Biology at the University of Cagliari in the Dept. of Neuroscience he joined the laboratory of C.F. Valenzuela at the University of New Mexico as a Research Fellow. Here, he trained in electrophysiological patch-clamp techniques and studied the modulatory effects of ethanol and neurosteroids on synaptic transmission in the hippocampus and cerebellum. After this period, he joined the laboratory of C. Lüscher as a graduate student and became interested in the mechanisms underlying the drug-induced plasticity in the ventral tegmental area.



Summary of the work by the prize winner

A leading hypothesis considers addiction as a pathological form of learning and memory (Hyman et al., 2006). This is in part rooted in the observation that addictive drugs trigger synaptic plasticity in brain circuits involved in reinforcement and reward processing. We focus on the ventral tegmental area (VTA), which constitutes the origin of the mesolimbic dopamine (DA) system and projects to the nucleus accumbens (NAc) and other associated limbic structures.

Our group had previously shown that a single *in vivo* injection of cocaine drives the insertion of GluR2-lacking AMPA receptors (AMPA receptors) at excitatory synapses onto DA neurons of the VTA (Bellone and Lüscher 2006). Moreover, in the same paper evidence was provided that metabotropic glutamate receptor-dependent long-term depression (mGluR-LTD) could reverse cocaine-evoked synaptic plasticity.

In the present article (Mameli et al., 2007), we now unravel the expression mechanism of mGluR-LTD in the VTA. First, mGluR-LTD was dependent on the presence of GluR-lacking AMPARs since

we only observed it in slices of mice that had received a single dose of cocaine the day before. mGluRs activation led to a decrease in synaptic strength of excitatory synaptic currents in DA neurons that was associated with a disappearance of rectification. While the number of receptors remained constant, we measured a significant decrease of the single channel conductance, suggesting a redistribution of AMPA receptors of distinct subunit composition. Moreover, mGluR-LTD was blocked by the injection of GluR2 C-terminal peptides, the knockdown of GluR2 by through antisense DNA or siRNA, and by protein translation inhibitors. Taken together, our findings support the hypothesis that mGluR-LTD in the VTA is not due to the simple removal of AMPARs from the synapse. Instead, AMPARs are replaced by new ones that contain newly synthesized GluR2 subunits, are less conductive and calcium permeable.

Our work is the demonstration of a novel expression mechanisms of LTD that is expressed by a switch of AMPARs made of different subunits. Our data provides new insights into the mechanisms underlying the reversal of drug-induced modifications at excitatory synapses and identify mGluRs as a target to promote reversal drug-induced synaptic changes.

1. Hyman S.E., Malenka R.C. and Nestler E.. *Annu. Rev. Neurosci.* 2006; 29: 565-598.
2. Bellone C. and Luscher C.. *Nat Neurosci.* 2006 May; 9(5): 636-41.
3. Mameli M., Balland B., Lujan R. and Lüscher C.. *Science* 2007 July; 317: 530-533.

New FENS initiative: National Scientific Highlights of the Year

FENS started this year a new initiative, which allows each national society to propose a Scientific Highlight of the Year, which will be then posted on the FENS website. The SSN council wishes to honour young scientist in this way and link the Swiss National Scientific Highlight to the Best Publication Award. For 2007 our laureate is Manuel Mameli; for the description of his work, see above.

1000th SSN member

The 1000th member to register for our Society is Ludovic J. Wrobel. Ludovic did his PhD at Gif sur Yvette and started this year as postdoc in the group of Prof. Mario Raggenbass at the CMU in Geneva, where he works on the signalling pathway of vasopressin in cranial nerves. We wish him a very successful scientific carrier!

IBRO Western European Region Committee

Swiss neuroscientists are often asked to serve on international committees and panels. The IBRO Western European Region Committee, on which Ann Kato served until this spring, elected new members, among whom are two of our colleagues, Dominique Muller and Beat Gähwiler.
