Swiss Society for Neuroscience (SSN)

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Editorial

Among those Swiss neuroscientists who attended the FENS Forum 2006 in Vienna, the predominant opinion was that the meeting was a great success and its excellent organization was quite impressive. The SSN presents its warm congratulations to the colleagues in Vienna. As a consequence, the challenge for the SSN to organize a FENS Forum of at least equal quality in Geneva in 2008 is tremendous and highly stimulating.

In spite of its great organization and the high scientific level, the FENS Forum 2006 in Vienna attracted only nearly the same number of neuroscientists as the two previous FENS meetings in Lisbon (2004) or Paris (2002). The SSN council is of the opinion that there is here an open field for great improvement in 2008, namely the attendance to the FENS Forum. Indeed, we can expect a much broader mobilization, primarily in Switzerland, as we can hope that all neuroscientists in this country will come to Geneva, including our colleagues from clinical disciplines associated to neurosciences. A significant enhancement of attendance to the FENS Forum 2008 will occur only if each of us encourage our colleagues from other European countries (especially those with whom we collaborate scientifically) to come numerous to Switzerland on this occasion. They could combine the meeting itself with visits of laboratories in Switzerland, for instance to establish collaborations, and/or tourism.

The best recipe to attract more neuroscientists is, without any doubt, the scientific excellence of the meeting as reflected by top quality plenary lectures and specialized symposia. Along this line, the call for organizing the symposia in Geneva in 2008 is now open (deadline February 2007: see web site of the FENS). We recommend that all of you SSN members be extremely active from now on, either by making your own proposals or, as propositions for symposia should not only emanate from Switzerland, motivate close colleagues abroad to submit a proposal for a symposium on an exciting topic covered by prominent experts as well as young highly promising neuroscientists. Although there should be no compromise on quality (remaining the main criterion of selection by the Program committee), an adequate geographic distribution may be favorable, for instance by respecting the rule that the program not include more than one speaker per country.
The effort to attract more neuroscientists to Geneva should also be directed towards colleagues from outside Europe (e.g. Asia, America), as very few of them made it to Vienna last summer. Again, the excellence of the scientific program remains the main incentive to decide on making a long trip to a meeting. Personal contacts are likely to play a crucial, decisive role, especially for our colleagues from the US, several of whom are confronted by institutional, administrative obstacles when seeking financial support to attend meetings outside their country. A significant increase of participation of US scientists would certainly contribute to the success of the FENS Forum in Geneva. The SSN members attending the SfN meeting in Atlanta (as well as the SfN 2007 meeting in San Diego) are invited to do all than can to promote the FENS Forum 2008 in Switzerland.

In the context of mobilization, the next SSN national annual meeting in 2007 in Bern will take place in a completely newly designed environment ideal for a scientific meeting. This event will unify during two days (May 9 and 10th) the SSN and the members of the NCCR project "Neural Plasticity and Repair" hosted at the University of Zürich. In addition, partnership with the Swiss Society of Multiple Sclerosis (MS) will ensure that clinicians will contribute significantly to the success of the meeting. The local organizing committee performed a "tour de force" in designing the program by offering to each of the 3 partners the possibility to organize their own activities following their traditional format but, at the same time, creating a three component synergy that will reflect on how active neurosciences are in Switzerland, especially among the young colleagues who are more and more attracted by this discipline of life sciences. The SSN council is of the opinion that the expected large mobilization of Swiss neuroscientists in March 2007 in Bern represents a crucial step towards a successful FENS Forum 2008.

Eric M. Rouiller

SSN meeting 2007 in Bern

Detailed information, including the program, will soon be available on the web site of the SSN. Abstract submission will be done on-line, also on the web site of the SSN, starting December first 2006 with a deadline of January 15th, 2007. Important elections will take place. First, 4 new members of the SSN council will be elected. Second, the assembly will select the next SSN President-Elect (for 2007 and 2008). The latter will become President of the SSN in 2009 and 2010. You are invited to submit to the President of the SSN names of candidates for these elections (for more detail, see the By-laws of the SSN on our website). The deadline for nominating candidates to the election for the SSN council is December 10th 2006.

SSN activities in autumn 2006

You can still register for two activities proposed by the SSN, namely the symposium of continuous education on animal experimentation on October 6th in Zürich and the Ph.D. student day on October 16th in Fribourg. Registration for both events can be done on-line from the SSN website.

Meeting announcement

IBRO WORLD CONGRESS OF NEUROSCIENCE

MELBOURNE AUSTRALIA

July 12-17th, 2007

Abstract deadline: January 31st, 2007

**Book Review**

A comprehensive survey on the somatosensory rehabilitation of patients suffering from peripheral nerve injuries is now available, covering the vast topic of disorders of the cutaneous sense. First published in French in 2004, the handbook for somatosensory rehabilitation (published here in English) deals with the definitions, testing, rehabilitation and prevention of disorders affecting cutaneous nerves. In addition, the author (Claude Spicher) reports on more than two decades of his own clinical work, with full descriptions of practical approaches in treating patients. The handbook for somatosensory rehabilitation will greatly help therapists of all disciplines and, at the same time raises important basic neuroscience issues related to functional recovery after peripheral nerve lesion and to neural plasticity.


**SSN-IBRO Fellowship 2005**

In 2005, the SSN-IBRO fellowship was awarded to Dr. Céline Costa.

Find on the next page the report on her scientific work conducted during the one-year post-doctoral training in the laboratory of Prof. M. Rüegg (University of Basel).
The role of mTOR interactors in synapse growth

Cell growth is an essential process for the development and maintenance of cell size. Growth is linked to increases in protein translation. In neurons, protein synthesis (i.e. translation) has been shown to be essential for several aspects in development and during processes of adaptation to external stimuli in the adult. For example, long-term memory requires enhanced proteins synthesis whereas short-term memory formation does not. Similarly, late forms of synaptic plasticity, such as late phases of long-term potentiation (LTP) and long-term depression (LTD) depend on protein synthesis. The mammalian target of rapamycin (mTOR) is one of the main regulators of protein translation. Recent experiments have shown that mTOR assembles into two distinct protein complexes, called mTOR complex 1 (mTORC1) and mTOR complex 2 (mTORC2). During the year of the IBRO fellowship, I have been involved in the characterization of raptor, the distinguishing binding partner of mTORC1, and rictor, the binding partner of mTORC2. Using immunostaining of cultured hippocampal neurons and subcellular fractionation of brain lysates, we find that neurons do express both raptor and rictor and that raptor is enriched at synapses. These experiments are in line with previous work showing that some of the downstream targets of mTORC1 are enriched at postsynaptic spines. We therefore conclude that both raptor and rictor may play important roles in regulating the mTOR pathway in the brain. To study the role of raptor and rictor in the brain more specifically, I also contributed to the establishment of mice in which raptor or rictor can be inactivated in a tissue-specific manner using the Cre/loxP technology. Moreover, we established neuronal cultures of hippocampus isolated from mice carrying floxed alleles for either raptor or rictor. Transfection of such neurons with plasmids encoding Cre recombinase will allow us to selectively inactivate the genes.

In summary, the fellowship gave me the possibility to observe that raptor and rictor are expressed in neurons, which supports our hypothesis that mTORC1 and/or mTORC2 play a role at synapses. Moreover, it gave us the opportunity to establish essential tools that will help us to answer the question of the role of these proteins in the brain.

Céline Costa

Call for Symposia

6th FENS Forum of European Neuroscience

July 12–16, 2008
Geneva | Switzerland
 Palexpo

A must in Europe for neuroscientists all over the world.
Deadline for Submission of Symposia:
February 28, 2007

The Forum Programme Committee will establish the scientific programme of the FENS Forum 2008 on the basis of the proposals from European scientists from all areas of neuroscience research. Instructions and application forms for symposia can be obtained from:
http://forum.fens.org/2008
or by mail:
FENSForum@Bordeaux.Inserm.fr