October, Cordoba, Argentina

Dear Roberto Cappai

CAEN Chair

Professor

Earlier this year I have been awarded a Travel Fellowship by the International Society of Neurochemistry to visit another laboratory. For this purpose I have been kindly hosted by Dr. Daniel Choquet from Interdisciplinary Institute for Neuroscience (IINS) in Bordeaux France for two months.

During my stay I had the opportunity to exchange ideas and work with a group of very talented scientists. The time I spent there helped me to learn to use different kind of microscope such as Microscope Spinning-Disk LIFA, Microscope vidéo-spinning-disk-FRAP and Microscope of Super Resolution GSD and improve useful skills that I handled already (e.g molecular cloning and immunofluorescence). Very importantly, I also had the chance to obtain results with live imaging microscopy using a Tomatoe-tagged truncated motor KIF5C (KIF5C 560 TdT; Jacobson, et al 2006) and GFP-tagged Syntaxin 6 (Sxt6 GFP).

KIF5C is an anterograde motor involved in a specific transport to the axon. Others group have previously shown that coincident with axon specification, truncated motor KIF5C accumulates only in the emerging axon. On the other hand; preliminary data from our laboratory indicated that the SNARE protein Stx6 (presumably transported by KIF5c) is necessary for the polarized insertion of IGF-1r to the plasma membrane of a single neurite, a phenomenon required for the regulation of initial axonal elongation and the establishment of neuronal polarity (Oksdath et al.,unpublished data; Grassi et al., in preparation; Sosa et al. 2006).

I have studied the transport of the SNARE Sxt6 in a stage 2 of hipocampal neuron with live imaging. The main outcome of these experiments is that neurite with high accumulation of KIF5C 560 TdT has more anterograde transport of the Sxt 6. This suggests that Sxt 6 is a potential cargo protein of the molecular motor KIF5c. We expect to send at least a manuscript to a high impact journal in the next months showing these results.

In sum, this was a great professional and personal experience and therefore I am highly grateful to the International Society of Neurochemistry. This short stay will definitely impact

my career in a positive way: I had to communicate my ideas effectively in a language that is not my own, discuss experiments and literature, write a project, generate new hypotheses, resolve technical issues and so on. Having gone through all those steps by myself will make me stand firmer and more resolute for future scientific challenges. Hence, I thank your organization for this significant opportunity and strongly encourage future students to go on such experience during their PhD studies.

Best Regards;

Mariana Oksdath Mansilla