

# **Report on visit Lab**

## **(CAEN Cat 1A, April 2015 round)**

Dates of visit: July 1st - October 30th 2015

**From: Tinakoua Anass**

Unit of Research on Biological Rhythms, Neurosciences and Environment  
Faculty of Sciences Mohammed V University, Rabat – Morocco

**To: Pr. Roberto Cappai**

ISN-CAEN Chair

Dear ISN-CAEN Chair,

I was awarded a 2015 ISN/CAEN Travel Award 1A for a scientific visit to another laboratory.

This fellowship gave me the excellent opportunity to work in the team of Dr. BENAZZOUZ Abdelhamid at the Institute of Neurodegenerative Diseases (IMN), University of Bordeaux.

As expected, Dr. Benazzouz and his team, have kindly offered me a good environment for the smooth running of my stay in Bordeaux, by providing all the necessary resources and technical supports for the good accomplishment of the experiments

The main objectives of my visit to the lab of Dr. Benazzouz, was to complete unachieved experiments from early stay in the IMN. As mentioned in my application form, we investigated the effects of DA cell degeneration, alone or combined with the NA and/or 5-HT depletions, on the electrical activity of suprachiasmatic nucleus (SCN) neurons using extracellular electrophysiological recordings. Those experiments have been followed by investigating the electrophysiological responses of SCN neurons to systemic injection of D1 and D2 dopamine receptor agonists and antagonists in animals with different monoamine depletions. In order to achieve this set of experiments, I needed to validate our experimental model by measuring the extent of DA, NA and 5-HT depletions in different groups of

lesioned animals, which should allow us to select data only from animals that show a significant loss of monoaminergic neurotransmitters. Provision has been made to use immunohistochemistry and high performance liquid chromatography (HPLC) for this validation.

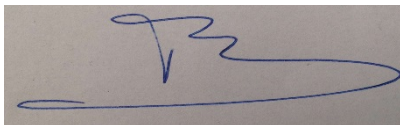
Effectively, at the first stage of my visit, I received hand-on training on immunohistochemistry and HPLC, followed by the start of experiment. I notice here that all planned experiments have been well conducted without any detriment. However, in parallel to the progress of the initially planned experiments and in order to optimize our statistical tests, we have planned to increase the numbers of animals of each group and to complete the pharmacological manipulations. For this issue, my stay in Bordeaux was kindly extended by the lab of Dr. Benazzouz for few months.

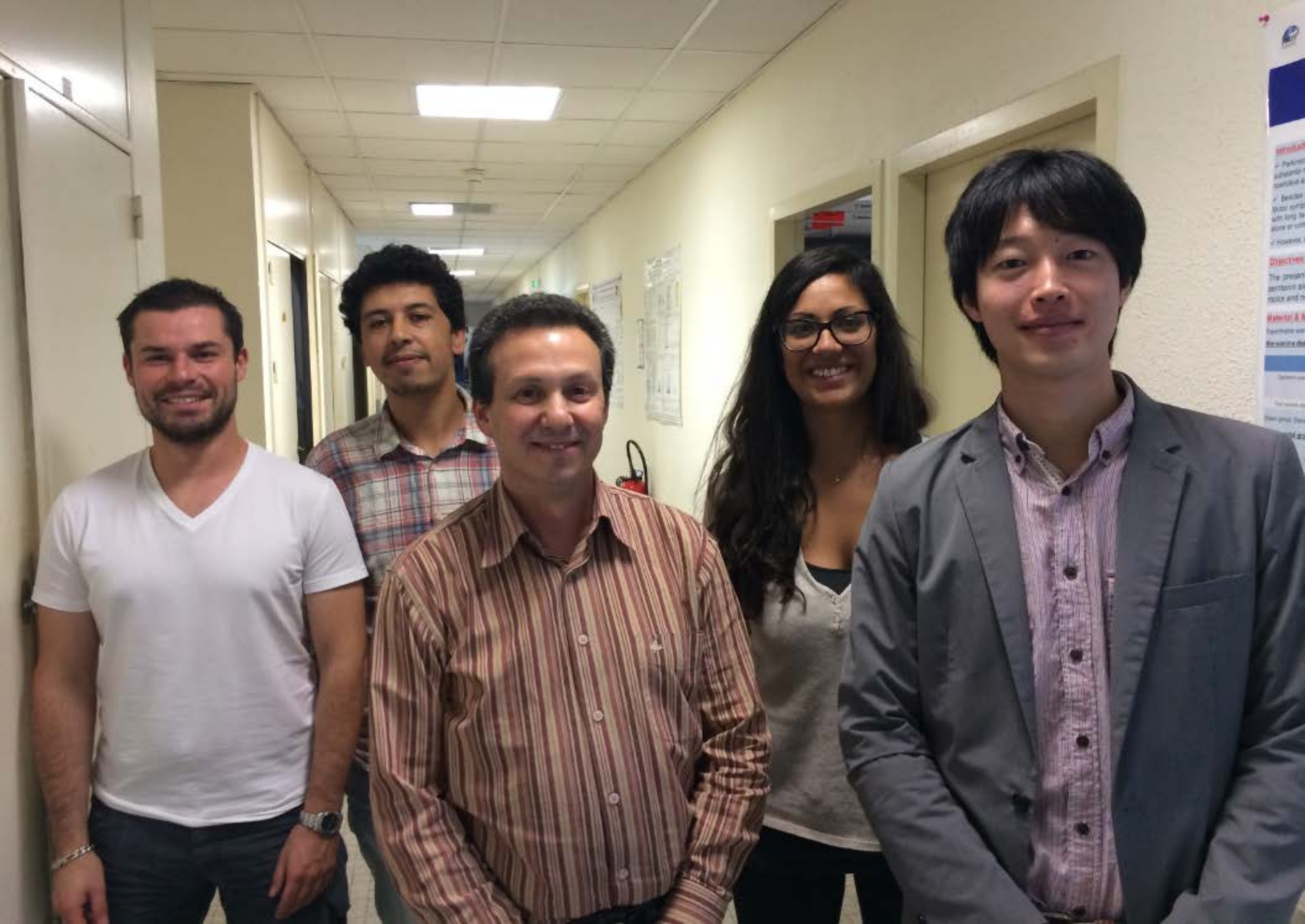
The work that I have done in the IMN and funded by the ISN, has improved my technical skills and deepen my knowledge of techniques in Neurosciences. In addition, this fund allowed me to complete critical unachieved experiments for my thesis and consequently allowed me to defense my thesis, which was on December 28, 2015.

In sum, this stay will definitely impact my career in a positive manner. Hence, I would like to thank ISN/CAEN for providing me this great opportunity. As well as was the case in my thesis manuscript, I will acknowledge the ISN in all publications and presentations emanating from this work. I also would like to thank Dr. Benazzouz for his support and generosity. This lab visit would not have been possible without his encouragement.

Best regards,

TINAKOUA Anass





## ATTESTATION

M. TINAKOUA Anass visited my Lab in Bordeaux from July 1st to October 30th 2015 in order to achieve his work that he did in my team for his PhD thesis. He successfully integrated my team and accomplished the experiments. This work was very important for him and for his PhD thesis that he defended in december 2015.

**Dr. Abdelhamid  
BENAZZOZ**

**Team leader** : Monoamines,  
Stimulation cérébrale  
profonde & Parkinson

abdelhamid.benazzouz@u-  
bordeaux.fr

Institut des Maladies  
Neurodégénératives

CNRS UMR 5293  
Bâtiment 3B 1<sup>er</sup> étage  
146 rue Léo-Saignat  
Case 28  
33076 Bordeaux – France

Tél. : 05 57 57 46 25  
Fax : 05 56 98 61 82

I wish to thank the ISN/CAEN for having given to Anass Tinakoua the opportunity to visit my team.

Bordeaux, april 26th 2016



Dr. Abdelhamid Benazzouz