Report CAEN Grant CATEGORY 1: RESEARCH A. Visit by the Applicant to Another Laboratory

The grant was used to visit the lab of Dr. James Herman at the Department of University of Psychiatry and Behavioral Neuroscience of the University of Cincinnati. The dates of the visit were December 1- February 14.

During the visit I was trained in specific techniques, participating in the processing of the tissue collected on the corresponding animal experiments to test the proposed hypothesis:

Adolescent stress causes life-long impairment in prefrontal cortical glucocorticoid signaling.

For the studies we used the Western Blot technique to assess nuclear and cytosolic content of the glucocorticoid receptors GR and MR on micropunch samples from prefrontal cortical subdivisions, basolateral amygdala, paraventricular nucleus, and hippocampus. We also set all the variables for the qPCR methods to assess corticosteroid receptor mRNA expression in equivalent punches from the contralateral brain hemisphere.

We assessed samples from males and females for the experimental groups and we obtained important preliminary data that will allow us to further investigate the long-term consequences of chronic variable stress during adolescence.

During the program I had the opportunity to be part of the research group of Dr. Herman and to develop a strong academic relationship with all of them. As a consequence of this, Dr. Herman and I developed a project to apply for a postdoctoral fellowship. Effectively, my experience with the CAEN grant has opened valuable doors for my future as a scientist. I am very thankful to everyone involved who helped make this possible for me.

Bellow you will find some photos from Dr. Herman's Laboratory









