# Yale/NIDA Neuroproteomics Center Newsletter

(Established 8/23/2004)

February, 2016

## **Non-Competing Center Grant Renewal**

Since we are working on the Center's non-competing renewal, please edit the listing of Center publications and poster abstracts attached to this email and return changes by Friday, February 15, 2016. Please note that we will be reporting on progress and publications since submission of our competing renewal on 9/25/2014 and please remember to cite DA018343 in all publications where work was supported by the Center.

## **Suspension of 10% Charge for MS/Proteomics**

To facilitate access to our new ETD-equipped Orbitrap Fusion Tribrid and Q-Exactive Plus mass spectrometers, the 10% charge for use of MS and proteomics analyses provided by our Discovery and Targeted Proteomics Cores has been suspended through the end of this Grant Year 11. To qualify for this discount services must be requested and samples shipped/delivered prior to 5/31/16.

#### **Fusion & Parallel Reaction Monitoring (PRM)**

The two-fold increase in MS/MS scan rate of the Fusion enables it to reach deeper than older platforms into the human and other proteomes and to increase by >50% the number of proteins identified by discovery analyses. In addition, the Center can now offer targeted analyses that utilize PRM to leverage the increased resolution and mass accuracy of the Fusion to provide increased selectivity and confidence in protein identifications and quantitation. Indeed, the Center is now developing a PRM assay for Post-Synaptic Density (PSD) proteins that are enriched on going from synaptosome to more highly purified PSD preparations. If you foresee use of a PSD/PRM assay, please contact the Co-Directors so we can keep you apprised of progress.

### **Pilot Projects Grants Opportunity**

The Center is now accepting applications for pilot projects. The goals of this program are to encourage young investigators in our Center's laboratories to embark on careers in substance abuse research, disseminate the Center's core technologies to researchers investigating the neurobiology of addiction who are not yet using neuroproteomics technologies, and to expand the technical abilities of the Center. Pilot Grants provide short term funding to obtain preliminary data so applicants can apply for longer term grant support. These awards provide \$7,500 D.C. to help pay for the cost of preparing samples for analysis in the Center's Cores. Applications are accepted from: 1) Center investigators and 2) their Postdoctoral Fellows and higher level research staff, 3) non-Center investigators expert in substance abuse with interests in initiating research in neuroproteomics, 4) non-Center investigators with expertise in cellular and molecular aspects of neuronal signaling with interests in initiating neuroproteomics research. Awards will be for one year for research that is directly related to the Center's theme of the "Proteomics of Altered Signaling in Addiction" and that propose to apply existing technologies from the Cores or to develop new technologies. Awards to non-Center investigators will be accompanied by Center membership for the term of the award. Priority will be given to new projects that are related to our Center's theme, to collaborative projects involving multiple investigators, and to Technology Development projects. The receipt deadline for applications is April 1, 2016. Additional information: http://medicine.yale.edu/keck/nida/general/pilot\_grants.aspx

#### **New Projects/Use of Cores**

Please contact the Co-Directors, Angus and Ken, to ensure that new projects and potential pilot award proposals qualify for Center support!

#### **Pilot Project Grants**

We are delighted to announce that the following Pilot Project Grants have been awarded for Grant Year 11.

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PI	Institution	Center Lab	Project Title
Becky Carlyle	Yale University	Angus Nairn	Assessing proteomic differences between the two major cell types of the striatum
Anthony Koleske	Yale University	N.A.	Mechanisms of cocaine-induced dendritic spine refinement and plasticity.
Joachim Uys	Medical University South Carolina	Peter Kalivas	Quantitative proteomic analysis of S-glutathionylated proteins after cocaine-induced reinstatement
Jian Xu	Yale University	Paul Lombroso	Post-translational modification of STEP61 by BDNF signaling: implications in drug abuse.