

Neurobiology of Stress Workshop 2012 – Philadelphia, PA – Final Program

Tuesday, June 12

6:00 – 8:00PM **Opening Reception and Registration/Check-in** – Colket Translational Research Building (CTRB) Lobby (3501 Civic Center Boulevard)

Wednesday, June 13

7:30- 8:15AM **BREAKFAST** - CTRB Lobby (all food will be provided here)

All oral presentations will be delivered in 1200A/B, First Floor of CTRB

8:15– 8:30AM Opening Remarks from the Organizers: **Dr. Seema Bhatnagar and Dr. Teresa Reyes.**

8:30-9:45AM Keynote Talk: **Dr. George Koob:**

“The role of brain stress systems in the dark side of addiction”

Session I: The role of stress in drug addiction and relapse.

Chair: **Dr. Julie Blendy**, Professor, Dept. of Pharmacology, University of Pennsylvania

9:45 – 10:15AM **Dr. Julie Blendy**, Professor, Dept. of Pharmacology, University of Pennsylvania
Stress and reward sensitivity following nicotine withdrawal

10:15 – 10:45AM **Dr. John Mantsch**, Associate Professor & Chair, Dept. of Biological Sciences, Marquette University
Neurobiological mechanisms that contribute to stress-related cocaine use

10:45 – 11:05AM **COFFEE BREAK**

11:05 - 11:35AM **Dr. Klaus A. Miczek**, the Moses Hunt Professor of Psychology, Psychiatry, Pharmacology and Neuroscience at Tufts University
Social stress and cocaine self-administration in females: Dopamine-CRF interactions in VTA-NAC

11:35 – 12:-05AM **Dr. Rebecca Ashare**, Postdoctoral fellow, Center for Interdisciplinary Research on Nicotine Addiction, Department of Psychiatry, Perelman School of Medicine.
Stress, autonomic reactivity and smoking relapse

12:05AM – 12:30AM **Session I Discussion:** Overall Issues and Insights

12:30PM – 2:00PM **Box Lunch and Mentor Discussions** – seating for Mentor Discussions provided on the 14th Floor of Biomedical Research Building II/III, located in Osler Circle across the street from CTB – there will be guides to direct participants to the building from the lobby of CTB. Please also see the included directions in this booklet.

Session II: Molecular Mechanisms and Neural Circuits in Stress Regulation.

Chair: **Dr. Audrey Seasholtz**, Professor, Department of Biological Chemistry, University of Michigan.

- 2:00 – 2:35PM **Dr. Rita Valentino**, Professor, Dept. of Anesthesiology and Critical Care Medicine, Children’s Hospital of Philadelphia and University of Pennsylvania, Perelman School of Medicine
Sex-biased stress signaling
- 2:35 – 3:10PM **Dr. Mathias V. Schmidt**, Faculty, Neurobiology of Stress Research Group, Max Planck Institute of Psychiatry
Nectin-3 links CRHR1 signaling to stress-induced memory deficits
- 3:10 – 3:30PM **COFFEE BREAK**
- 3:30 - 4:05PM **Dr. James Herman**, Professor, Departments of Psychiatry and Behavioral Neuroscience, University of Cincinnati
Neurocircuit Mechanisms Controlling Stress
- 4:05 – 4:40PM **Dr. John Christianson**, Postdoctoral Fellow, Department of Psychology and Neuroscience, University of Colorado
The stressor controllability circuitry: the medial prefrontal cortex and beyond!
- 4:40PM – 5:10PM **Session 2 Discussion:** Overall Issues and Insights

Thursday, June 14

Session III: Neurobiological mechanisms underlying stress-related disorders.

Chair: **Dr. Robert Spencer**, Professor, Psychology and Neuroscience, University of Colorado-Boulder.

- 7:30- 8:30AM **Breakfast**
- 8:30 – 9:10AM **Dr. Lisa Shin**, Associate Professor, Department of Psychology, Tufts University
Functional Neuroimaging Studies of Posttraumatic Stress Disorder
- 9:10 – 9:50AM **Dr. Becca Shansky**, Assistant Professor, Department of Psychology Northeastern University
Structural plasticity in the prefrontal cortex: interactions of sex, circuit, and stress

- 9:50 – 10:10AM **COFFEE BREAK**
- 10:10 - 10:50AM **Dr. Mitch Kling**, Associate Professor of Psychiatry, University of Pennsylvania and VA Medical Center
Central and Peripheral Stress System Activity in Major Depression and Post-Traumatic Stress Disorder: Similarities and Differences
- 10:50 – 11:30AM **Dr. Francis Lee**, Professor of Psychiatry and Pharmacology, Weill Cornell Medical College
Role of Neurotrophins in Fear-related Learning
- 11:30 – 12:00PM **Session II Discussion:** Overall Issues and Insights
- Noon – 1:30PM **Box Lunch**

Session IV: Stress effects in vulnerable development time periods.

Chair: **Dr. Mary Dallman**, Professor Emerita, Department of Physiology, University of California, San Francisco.

- 1:30 – 2:10PM **Dr. John Russell**, Professor, Center for Integrative Physiology, University of Edinburgh
Pre-natal stress programming of modulation of stress responses by neurosteroids
- 2:10 – 2:50PM **Dr. Tallie Z. Baram**, Professor of Anatomy/Neurobiology and Pediatrics, University of California at Irvine
Synaptic 'rewiring' of stress-processing neurons: the signal to activate epigenetic machinery?
- 2:50 – 3:10PM **COFFEE BREAK**
- 3:10 - 3:50PM **Dr. Sheryl Beck**, Dept. of Anesthesiology and Critical Care Medicine, Children's Hospital of Philadelphia and the University of Pennsylvania, Perelman School of Medicine.
Serotonin raphe circuitry development and stress
- 3:50 – 4:30PM **Dr. Susan Andersen**, Associate Professor of Psychiatry, McLean Hospital, Harvard Medical School
Sensitive periods and the effects of adverse experience on the brain and behavior in young adulthood
- 4:30 – 5:00PM **Session III Discussion:** Overall Issues and Insights
- 5:30 – 8:30PM **Trainee Poster Session** – Note special location - **Penn Archaeology Museum – 3rd Floor (Asia Buddhism, Chinese Rotunda and Egyptian Artifacts Rooms)**

Friday, June 15

Session V: Epigenetics and Stress.

Chair: **Dr. Teresa M. Reyes**, Department of Pharmacology and Institute for Translational Medicine and Therapeutics, University of Pennsylvania.

- | | |
|-----------------|---|
| 7:30- 8:30AM | BREAKFAST |
| 8:30 – 9:10AM | Dr. Tracy Bale , Associate Professor of Neuroscience, Director, Neuroscience Center, University of Pennsylvania
<i>Sex specific epigenetic programming of stress pathways: are we wired at birth?</i> |
| 9:10 – 9:50AM | Dr. David M. Dietz , Assistant Professor, Department of Pharmacology and Toxicology, University at Buffalo (SUNY)
<i>From father to offspring- paternal transmission of depression and anxiety phenotypes</i> |
| 9:50 – 10:10AM | COFFEE BREAK |
| 10:10 - 10:50AM | Dr. Dietmar Spengler , Molecular Endocrinology Research Group Leader, Max Planck Institute of Psychiatry
<i>DNA Memories of Early Social Life</i> |
| 10:50 – 11:30AM | Dr. Marcelo Wood , Associate Professor, Department of Neurobiology and Behavior, University of California-Irvine
<i>The molecular brake pad hypothesis: Creating enduring memories</i> |
| 11:30 – 12:00PM | Session IV Discussion: Overall Issues and Insights |