INRC/CPDD 2011 PRELIMINARY PROGRAM

**Tuesday**
7-10 pm  INRC opening reception/CPDD banquet

**Wednesday**
800-900 am  Welcome
John Traynor, INRC President
Sari Izenwasser and Ellen Unterwald, INRC Co-Chairs

9-10 am  **Plenary:** Nora Volkow

10am-12pm  **Symposium 1: Epigenetics of Drug Abuse Genes**
Chairs: Li-Na Wei and Hiroshi Ueda

12-2 pm  **Posters** (INRC and CPDD) and Lunch

2-4 pm  **Symposium 2: Human Brain Imaging of Opioid Receptors**
Chairs: Woody Lin and Steve Grant

4-600 pm  **Symposium 3: New Perspectives on Buprenorphine**
Chairs: Sandra Comer and John Traynor

**Thursday**
730-930 am  **Posters** (INRC and CPDD) and Breakfast

930-1130 am  **Symposium 4: Therapeutic Potential of Nociceptin Receptor Ligands**
Chairs: Claes Wahlestedt and Larry Toll

1130-1 pm  Lunch Break

1-3 pm  **Symposium 5: Sex Differences in Pain**
Chairs: Vishnudutt Purohit and Cora Lee Wetherington

315-515 pm  **Oral Session 1:** Submitted abstracts from INRC

515-630 pm  Business meeting

8-10 pm  Data Blitz

**Friday**
730-830 am  Breakfast

830-930 am  **Plenary:** Eric Nestler

945-1145 am  **Symposium 6: Genetic mouse models for the opioid system**
Chair: Brigitte Kieffer

1145-115 pm  Lunch Break

115–315 pm  **Symposium 7: Delta opioid receptors – novel therapeutic uses**
Chair: Ellen Unterwald

330– 530 pm  **Symposium 8: Novel therapeutic applications of kappa opioid receptor ligands**
Chairs: Ivy Carroll and Bill Carlezon

7-10 pm  INRC Banquet
Saturday
730-8 am Breakfast

8-9 am Founders lecture: Charles Chavkin

915-1115 am Symposium 9: MOR regulatory proteins
Chair: Laura Bohn

1115-1130 Coffee Break

1130-130 pm Symposium 10: Young investigator symposium: Opioid Modulation of Neural Circuits
Chair: Michael Bruchas

130 pm End of meeting
Symposium 1: Epigenetics of Drug Abuse Genes  
Chairs: Li-Na Wei and Hiroshi Ueda

Speakers:
Courtney Miller, The Scripps Research Institute, USA  
DNA methylation: a dynamic and stable regulator of memory

Marcelo Wood, UC Irvine, USA  
The role of chromatin modifying enzymes in the acquisition and extinction of context-drug associated memory

Li-Na Wei, University of Minnesota Medical School, USA  
Epigenetics of opioid receptor genes – nutrients, drugs and behavior

Georgy Bakalkin, Uppsala University, Sweden  
Chromatin plasticity in addicted brain: prodynorphin upregulation in human alcoholics

Symposium 2: Human Brain Imaging of Opioid Receptors  
Chairs: Woody Lin and Steve Grant

Speakers:
David Borsook, McLean Hospital, USA  
Imaging opioid effects on brain systems

David Gorelick NIDA IRP, USA  
Mu-opioid receptors and cocaine addiction

Diana Martinez, Columbia University, USA  
Development and clinical use of a PET radioligand for the kappa receptor

Jon-Kar Zubieta, University of Michigan, USA  
Endogenous opioid system modulation of motivation circuitry

Symposium 3: New Perspectives on Buprenorphine  
Chairs: Sandra Comer and John Traynor

John Traynor, University of Michigan, USA  
The unique pharmacology of buprenorphine

Stephen Husbands, Bath, UK  
New ligands from an old friend

Gavril Pasternak, Memorial Sloan Kettering Cancer Center, USA  
Buprenorphine: a novel receptor target and mechanism of action

Sandra Comer, Columbia University, USA  
Abuse liability of buprenorphine in humans under various states of opioid physical dependence
Symposium 4: Therapeutic Potential of Nociceptin Receptor Ligands
椅子: Claes Wahlestedt and Larry Toll

Nurulain Zaveri, Astraea Therapeutics, USA
To mix or not to mix: modulation of opioid activity by nociceptin receptor ligands

Holden Ko, University of Michigan, USA
Therapeutic potential of NOP ligands as spinal analgesics

Roberto Ciccocioppo, University of Camerino, Italy
The Nociceptin/Orphanin FQ system, as a treatment target for addiction.

Shaun Brothers, The Scripps Research Institute, USA
Discovery and development of nociceptin receptor agonists in alcohol dependence

Symposium 5: Sex Differences in Pain and Opioid Analgesia
椅子: Vishnudutt Purohit and Cora Lee Wetherington

Speakers:
Linda LeResche, University of Washington, USA
Gender differences in pain

Elise Y. Sarton, Leiden University Medical Center, The Netherlands
Opioid analgesia and sex differences: An overview

Anne Z. Murphy, Georgia State University, USA
Impact of Age and Sex in the Antihyperalgesic Actions of Morphine: Role of Periaqueductal Gray

Alan Gintzler, State University of New York Downstate Medical Center, USA
The importance of sex in pain; sexual dimorphic expression in spinal cord of mu-opioid and kappa-opioid receptor heterodimers.

Symposium 6: Genetic mouse models for the opioid system
椅子: Brigitte Kieffer

Speakers:
Julie Blendy, University of Pennsylvania, USA
Functional characterization of the OPRM1 A112G SNP in mice

Markus Heilig, NIAAA, USA
The role of OPRM1 variation for alcohol reward examined using a reverse translational approach

Dominique Massotte/ Brigitte Kieffer, Institut de Génétique et de Biologie Moléculaire et Cellulaire, France
Direct visualization of delta opioid receptor internalization under physiological conditions

Jia Bei Wang, University of Maryland, USA
Opioids induced cellular and behavioral changes in MOPr phosphorylation-deficient (PD) mice

Andreas Zimmer, University of Bonn, Germany
Dynorphins regulate the intensity of fear memory: from mice to men
Symposium 7: Delta opioid receptors – novel compounds and uses
Chair: Ellen Unterwald

Jennifer Whistler and Richard van Rijn, University of California San Francisco, USA
**Dual efficacy of DOR subtype selective ligands for ethanol consumption and its side effects of withdrawal-induced anxiety and hyperalgesia**

Richard D. Howells, UMDNJ-NJ Medical School, USA
**Inhibition of human multiple myeloma cell proliferation by naltrindole**

Robin Polt, University of Arizona, USA
**Delta agonist glycopeptides: CNS active drugs from endogenous neuropeptides**

Michele Morari, Ph.D., University of Ferrara, Italy
**Delta opioid receptor agonists in parkinson’s disease: a reappraisal**

Symposium 8: Novel Therapeutic Applications of Kappa Opioid Receptor Ligands
Chair: Ivy Carroll
Co-Chair: Bill Carlezon

**Speakers:**
Tom Prisinzano, University of Kansas, USA
**Natural product serived KOP ligands as novel treatments for drug abuse**

Richard Houghten, Torrey Pines Institute for Molecular Studies, USA
**High throughput in vivo screening for the identification of novel analgesics.**

Alan Cowan, Temple University, USA
**Kappa opioid receptor ligands and development of antipruritic agents**

Bill Carlezon, McLean Hospital, USA
**Disruption of kappa-opioid receptor function attenuates behavioral effects of stress in rodents**

Ivy Carroll, RTI, USA
**Discovery and development of selective kappa opioid receptor antagonists**

Symposium 9: MOR regulatory proteins
Chair: Laura Bohn

**Speakers:**
Vanna Zachariou, University of Crete
**RGS9-2 actions in the Nucleus Accumbens modulate opiate addiction and analgesia**

Bill Dewey, University of Virginia, USA
**In vivo evidence for the role of PKC and other intracellular molecules in opioid tolerance**

Zajie Jim Wang, University of Illinois, USA
**CaMKII in opioid tolerance and opioid-induced hyperalgesia**

Laura M. Bohn, The Scripps Research Institute, USA
**Mu opioid regulation by beta-arrestins and implications for drug development**
Symposium 10: Young investigator symposium: Opioid Modulation of Neural Circuits

Chair: Michael Bruchas

Speakers:
Thomas Kash, University of North Carolina School Of Medicine
Stress regulation of kappa opioid receptor signaling in the extended amygdala

Elyssa B. Margolis, Ernest Gallo Clinic & Research Center, UCSF
Opioid enhancement of GABA<sub>A</sub> receptor function in VTA dopamine neurons: A novel non-G protein mediated signaling mechanism induced by stress

Christopher Ford, Case Western Reserve University
Dopamine mediated synaptic transmission in the VTA

Jose Moron-Concepcion, Columbia University Medical Center
Context-dependent sensitization to morphine alters hippocampal neuroplasticity

Elena Bagley, The University of Sydney
Drug-induced GABA transporter currents enhance GABA release and produce opioid withdrawal behaviours.