

2007 PARENTAL BRAIN CONFERENCE

Back Bay Hilton Hotel – Boston, Massachusetts

“Program at a Glance”

Thursday, June 7, 2007

- 2:00 – 7:00 PM Registration
- 7:00 – 7:15 Opening Welcome (Dr. Bridges & Dean Kochevar)
- 7:15 – 8:15 **Keynote Lecture** – David R. Rubinow, MD, “*Postpartum Depression: Context-Dependent Effects of Reproductive Steroids*”
(Sponsor: Tufts University, Vice-Provost Office for Research)
- 8:15 – 10:00 Reception – Music by the Arneis Ensemble

Friday, June 8, 2007

- 7:30 – 8:00 AM Continental Breakfast
- 8:00 – 8:15 Welcome
- 8:15 – 10:00 **Symposium 1 - Neural Systems & Maternal Behavior – I**
(Chair: Bob Bridges; Sponsor: Boston College)
- Michael Numan, “*Hypothalamic Interaction with the Mesolimbic Dopamine System and the Regulation of Maternal Responsiveness*”
- Joan I. Morrell, “*Maternal Motivation During the Postpartum Period*”
- Craig Ferris, “*Imaging Brain Activity Associated with Pup Suckling*”
- 10:00 – 10:20 Coffee Break
- 10:20 – 12:40 **Symposium 2 – Neural Systems & Maternal Behavior – II**
(Chair: Phyllis Mann; Sponsor: NIDA)
- Luciano Felicio, “*Maternal Choices: Neural Mediation - Caring for Young or Hunting?*”

Frédéric Lévy, *"Neural Networks Involved in the Onset of Maternal Behavior in Sheep"*

Dario Maestripieri, *"The Role of the Brain Serotonergic System in the Origin and Transmission of Adaptive and Maladaptive Variations in Maternal Behavior in Rhesus Macaques"*

Jeffrey P. Lorberbaum, *"Regional Brain Activity in Parents Listening to Infant Cries"*

12:40 – 2:10 PM

Lunch & Poster Session

2:10 – 3:55

Symposium 3 - Maternal Aggression, Stress & Anxiety/Depression – I

(Chair: Inga Neumann; Sponsor: The Heinz Family Philanthropies)

Oliver J. Bosch, *"Brain Oxytocin and Vasopressin Regulate Maternal Behavior and Aggression: Link to Mom's Anxiety"*

Stephen C. Gammie, *"Maternal Aggression Links to Anxiety and Depression: Possible Common Roles for CRF and Related Peptides"*

Haruhiro Higashida, *"CD38-Dependent Oxytocin Release on Social and Parental Behavior"*

3:55 – 4:10

Coffee Break

4:10 – 5:55

Symposium 4 - Maternal Aggression, Stress & Anxiety/Depression – II

(Chair: Judith Stern; Sponsor: NIMH)

Joseph Lonstein, *"Infant Cues, Neurochemistry, and Postpartum Anxiety"*

Inga D. Neumann, *"Brain Oxytocin and Prolactin: Anxiolytic and Anti-Stress Effects during Pregnancy and Lactation"*

Eydie L. Moses-Kolko, *"Measurement of Striatal Dopamine-2 Receptor Binding in Postpartum Depression Using Positron Emission Tomography"*

6:00 – late

Boston at Night

Saturday, June 9, 2007

7:00 – 8:00 AM

Continental Breakfast

8:00 – 10:20

**Symposium 5 – Neuropeptide Regulation and Actions during
Pregnancy and Lactation**

(Chair: Dave Grattan; Sponsor: NICHD)

Marc Freeman, *"Biological and Mathematical Modeling Approaches to Defining the Role of Oxytocin and Dopamine in the Control of Mating-Induced Prolactin Secretion"*

Gloria Hoffman, *"Transmitter Changes in the Neuroendocrine Regulation of Prolactin During Lactation"*

Luz Torner, *"Role of Prolactin in the Behavioral and Neuroendocrine Stress Adaptations During Lactation"*

Alison J. Douglas, *"Switching on Oxytocin Neurons Perinatally"*

10:20 – 10:35

Coffee Break

10:35 – 12:55 PM

Symposium 6 - The Energetics of Motherhood

(Chair: John Russell; Sponsor: The "Mother-Infant Conference"
Montreal, Canada)

David R. Grattan, *"Mechanisms of Hypothalamic Leptin Resistance During Pregnancy"*

Barbara Woodside, *"Interactions between Prolactin and the Neural Pathways Controlling Energy Balance"*

Claire-Dominique Walker, *"Perinatal High Fat Feeding of the Mother Induces Long-Term Changes in the Mesocorticolimbic Dopamine System of the Offspring"*

John D. Buntin, *"Energetics of Parenting in an Avian Model: Hormones and Neuropeptides Regulating Parental Provisioning in Doves."*

12:55 – 2:15

Lunch and Poster Session

2:15 – 4:00

**Symposium 7 - Individual Variations in Maternal Behavior:
from Genes to Experience - I**

(Chair: Joe Lonstein; Sponsor: British Society for Neuroendocrinology)

James P. Curley, *"Behavioral and Neuroendocrine Consequences of Parent-of-Origin Effects"*



Larry Young, "*Oxytocin, Vasopressin, and Individual Variation in Parental Care in Prairie Voles*"

Francis A. Champagne, "*Epigenetic Mechanisms and the Transmission of Maternal Care Across Generations*"

4:00 – 4:15

Coffee Break

4:15 – 6:00

**Symposium 8 – Individual Variations in Maternal Behavior:
from Genes to Experience – II**

(Chair: Larry Young; Sponsor: NIMH)

Cort A. Pedersen, "*Oxytocin and Mothers' Developmental Effects on Their Daughters*"

Naomi Popeski, "*Neural Activation as a Function of Adversity in Human Mothers*"

Jenae M. Neiderhiser, "*Genetic and Environmental Influences on Mothering: The Role of Mother's Genes and Child's Genes*"

7:00 PM

Banquet & Talk "*Bringing Forth the Next Generation, and the Next*" Professor John Russell, PhD, University of Edinburgh, Edinburgh, Scotland. (Sponsor: Tufts University, Cummings School of Veterinary Medicine)

Sunday, June 10, 2007

7:00 – 8:00 AM

Continental Breakfast

8:00 – 8:45

Plenary Lecture – Sarah Blaffer Hrdy, "*Cooperative Breeding and the Paradox of Facultative Fathering in the Human Species*"

(Sponsor: Center for Behavioral Neuroscience, Georgia State University)

8:45 – 10:30

Symposium 9 – Alternate Patterns of Parental Care

(Chair: Jay Rosenblatt; Sponsor: Tufts University, Cummings School of Veterinary Medicine)

Jeffrey A. French, "*Family Life in Marmosets: Causes and Consequences of Variation in Care Giving*"

Sue Carter, "*The Making of a Monogamous Mammal: Early Experience and the Developmental Programming of Oxytocin and Vasopressin*"

Kelly G. Lambert, *"The Adaptive Nature of Parental-Induced Neurobiological Modifications: Consideration of Enhanced Resilience in Maternal and Paternal Rodent Models"*

10:30 – 10:45

Coffee Break

10:45 – 1:05 PM

Symposium 10 – Biparental Care: Neural and Physiological Mechanisms

(Chair: Geert DeVries; Sponsor: NIMH)

Catherine A. Marler, *"The Effects of Paternal Behavior on Offspring Aggression and Hormones in the Biparental California Mouse"*

Jon Levine, *"Fathers Behaving Badly: Role of Progesterone Receptors"*

Katherine A Wynne-Edwards *"From Dwarf Hamster to Daddy: Neuroendocrine Substrates for Paternal Behavior"*

Zuoxin X. Wang, *"The Monogamous Male Brain"*

1:05 – 1:50

Lunch

1:50 – 4:10

Symposium 11 – Neuroplasticity and Reproductive Experience

(Chair: Craig Kinsley; Sponsor: University of Richmond)

Dionysia T. Theodosis, *"Neuronal-Glial Plasticity and Reproduction"*

Elizabeth M. Byrnes, *"Neuroendocrine and Behavioral Adaptations Following Reproductive Experience in the Female Rat"*

Liisa A. Galea, *"Reproductive Experience Affects Hippocampal Function and Morphology"*

Alison Fleming, *"Plasticity in the Maternal Circuit: Experience, Dopamine, and Mothering"*

4:10 – 4:20

Closing Remarks