

### **Pennington Scientific Symposium**

# Circadian Biology and Sleep: Missing Links in Obesity and Metabolism?

April 27-28, 2009

# **Symposium Chairs**

Molly Bray, PhD

Associate Professor of Pediatrics Baylor College of Medicine Children's Nutrition Research Center

Jeffrey Gimble, MD, PhD

Professor, Stem Cell Biology Pennington Biomedical Research Center Louisiana State University System

Andrew Young, PhD

Chief, Military Nutrition Division U.S. Army Resarch Institute of Environmental Medicine

This symposium was coordinated by the Division of Education

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> Phillip J. Brantley, PhD, Director Anne Schulte, Assistant Director

#### Monday, April 27

- SESSION CHAIR: Molly Bray, PhD Molecular Mechanisms in Circadian Biology and Metabolism
- 8:00-8:30 Claude Bouchard, PhD Pennington Biomedical Research Center: Mission, Structure, Programs and Financing
- 8:30-9:30 Joseph Takahashi, PhD Northwestern University Keynote Address: Uncovering the Molecular Basis of Circadian Biology
- 9:30-10:15 Joseph Bass, MD, PhD Northwestern University Feinberg School of Medicine Obesity and Metabolism in the Clock Mutant Mice: Lessons for Human Metabolism

#### 10:15-10:30 BREAK

- 10:30-11:15 Carla Green, PhD University of Virginia Nocturnin: A Novel Circadian and Metabolic Regulator
- 11:15-12:00Jared Rutter, PhDUniversity of Utah School of Medicine<br/>Nutrient sensing and signaling: Roles in energy balance and elsewhere
- 12:00 1:00 LUNCH
- SESSION CHAIR: Jeff Gimble, MD, PhD Circadian Biology of Sleep
- 1:00-1:45 Albert Stunkard, MD University of Pennsylvania A Biobehavioral Model of the Night Eating Syndrome
- 1:45-2:30 Nicolas Cermakian, PhD McGill University Regulation of central and peripheral circadian rhythms in mice and humans
- 2:30-2:45 BREAK
- 2:45-3:30 Jonathan Johnston, PhD University of Surrey Adipocyte rhythmicity in vitro
- 3:30-4:15 James Gangwisch, PhD Columbia University The Epidemiological Relationships Between Sleep Patterns and Metabolic Disorders
- 4:15-5:00 Round Table Discussion
- 5:00 Hospitality Suite
- 6:30 Tour and Dinner for Out of Town Attendees PBRC 9:00 Hospitality Suite

<u>Tuesday, April 28</u>	
SESSION CHAIR:	Tom Balkin, PhD – Central & Peripheral Metabolic Tissues and Circadian Mechanisms
8:30-9:15	<b>Andrew Butler, PhD</b> The Scripps Research Institute The role of melanocortin neuronal pathways in circadian biology: a new homeostatic output involving melanocortin-3 receptors?
9:15-10:00	<b>Molly Bray, PhD</b> Baylor College of Medicine <i>Genetic Variation in Circadian Genes: Relation to Obesity and Adipocyte Biology</i>
10:00 – 10:15	BREAK
10:15-11:00	<b>Gregory Sutton, PhD</b> Pennington Biomedical Research Center. LSU System <i>Maternal Imprinting and Metabolism: A Circadian Relationship?</i>
11:00-11:45	<b>Jeff Gimble, MD, PhD</b> Pennington Biomedical Research Center, LSU System Food Entrainment and the Circadian Regulatory Apparatus in Peripheral Tissues
11:45-12:45	Lunch
SESSION CHAIR:	Michael Twery, PhD - Integrating Sleep, Metabolism, and Circadian Pathways
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12:45-1:30	<ul> <li>Martin Young, PhD Baylor College of Medicine The Circadian Biology of Cardiac Tissues: A Metabolic Model for Understanding Human Metabolic Syndrome</li> <li>Tracy Rupp, PhD Walter Reed Army Institute of Research Long-term effects of nightly sleep duration on cognitive performance, alertness,</li> </ul>
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12:45-1:30 1:30-2:15 2:15-2:30	Martin Young, PhD         Baylor College of Medicine         The Circadian Biology of Cardiac Tissues: A Metabolic Model for Understanding Human         Metabolic Syndrome         Tracy Rupp, PhD         Walter Reed Army Institute of Research         Long-term effects of nightly sleep duration on cognitive performance, alertness,         metabolism and obesity         BREAK         Alexandros Vgontzas, MD         Penn State College of Medicine

5:00Hospitality Suite7:00Dinner - Lod Cook Alumni Center9:00Hospitality Suite