# IDOM IMPAGT



## **Spotlight**

## 2012 Ray A. & Robert L. Kroc Lecture and Spring Symposium



Mark A. Magnuson, MD

Wednesday, March 28, 2012 - TRC Lobby & Auditorium 12:00 - 5:00 pm

The Annual Spring Symposium will begin with a poster session judged by <u>our esteemed</u> <u>panel of guest Judges</u>. Awards will be given for the best basic science and the best patient-oriented research posters. Following welcome remarks by the Director and the Dean, there will be two noteworthy talks by Joshua Rabinowitz, M.D., Ph.D. and Kenneth Zaret, Ph.D. The day will culminate with the Kroc Lecture delivered by Mark A. Magnuson, M.D., Director, Vanderbilt Center for Stem Cell Biology; Louise B. McGavock Chair and Professor of Molecular Physiology and Biophysics, Vanderbilt University.

For more information visit - www.med.upenn.edu/idom/Kroc12/index.html

## **DRC Pilot Award Winners**

Matthew R. Hayes, Ph.D., Assistant Professor of Psychiatry

**Project Title:** "Glucagon-Like Peptide-1 Signaling in the Venetral Tegmental Area and Nucleus Accumbens in Control of Food Intake"

Edward B. Lee, M.D., Ph.D., Assistant Professor of Pathology and Laboratory Medicine Project Title: "Genomic and Regional Targets of Leptin Receptor Signaling"

Changhong Li, M.D., Ph.D., Research Assistant Professor of Pediatrics / Endocrinology
Project Title: "The Role of Glycine and its Receptor in Regulation of Islets Function and Glucose Homeostasis"

David J. Steger, Ph.D., Research Assistant Professor of Medicine

Project Title: "Genome-wide Approaches for Determining Transcriptional Pathways Driving Adipocyte Differentiation"

Marion Vetter, M.D., R.D., Assistant Professor of Medicine

**Project Title:** "A Mechanistic Study of the Role of Endogenous Glucagon-like Peptide-1(GLP-1) in Improved Postmeal Glucose Tolerance Following Two Types of Bariatric Surgery versus Diet" YEAR 2

Kathryn E. Wellen, Ph.D., Assistant Professor of Cancer Biology

Project Title: "Role of ATP-Citrate Lyse in Glucose-Regulated Gene Expression"

Kyoung-Jae Won, Ph.D., Research Assistant Professor of Genetics

Project Title: "Comparative Epigenomic Analysis in Brown and White Adipocyte Tissues"

## **Awards**

## 2012 AACE Award Recipient





**Congratulations Dr. Mandel** 

Susan J. Mandel, MD, MPH
Professor of Medicine and Radiology
Division of Endocrinology, Diabetes and Metabolism

Congratulations to Susan J. Mandel, MD, MPH for being selected by the American Association of Clinical Endocrinologists (AACE) to receive the H. Jack Baskin, MD Endocrine Teaching Award.

The award will be presented at the AACE 21st Annual Scientific & Clinical Congress in Philadelphia, May 23-27, 2012.

## Penn Medicine Teaching Award



Congratulations Dr. Mitchell

Christina M. Mitchell, MD
Assistant Professor of Clinical Medicine
Division of Endocrinology, Diabetes and Metabolism

The Penn Med Class of 2014 recognizes Dr. Christina Mitchell for her outstanding contribution to their education and growth as future physicians!

## Research News and Announcements

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## Penn DRC Competing Renewal received NIH perfect score



The Penn Diabetes Research Center (DRC) competitive renewal application received a perfect score of 10.

The Penn Diabetes Center is truly a team effort, and this exceptional success is a tribute to our dedicated faculty and staff!

## Revising the "Textbook" on Liver Metabolism Offers New Targets for Diabetes Drugs, According to Penn Study



A team of researchers led by Morris Birnbaum, MD, PhD, Professor of Medicine and IDOM Associate Director, has overturned a "textbook" view of what the body does after a meal in a study which appears in Nature Medicine. The Penn group showed that mice without the genes Akt1 and Akt2 in their livers were insulin resistant and defective in their response to feeding with respect to blood sugar levels. Read Press Release

## Brown Fat and Weight Loss - The Future of Fat



Mitch Lazar, MD, PhD, Director of the Institute for Diabetes, Obesity, and Metabolism, and Patrick Seale, PhD, Assistant Professor of Cell and Developmental Biology, are mentioned in a Popular Mechanics research round-up on brown fat. Brown fat has long been known to exist in infants and animals such as mice, but until recently, scientists thought it disappeared before human adulthood, leaving only the white fat that's associated with weight gain. Some studies confirmed that not only is brown fat common in adults, it's also important to metabolism: Younger, thinner people have more detectable brown fat. Animal studies also suggest brown fat boosts weight loss. Read Popular Mechanics Article

## Penn Study Finds Gender Differences in Liver Cancer Risk Explained by Small Changes in Genome



Men are four times more likely to develop liver cancer compared to women, a difference attributed to the sex hormones androgen and estrogen. Although this gender difference has been known for a long time, the molecular mechanisms by which estrogens prevent -- and androgens promote -- liver cancer remain unclear.

Now, new research, published in Cell from the lab of Klaus Kaestner, PhD, Professor of Genetics in the Perelman School of Medicine at the University of Pennsylvania, has found that the difference depends on which proteins the sex hormones bind next to. Specifically a group of transcriptional regulatory proteins called Foxa 1 and 2. Read Press Release

## Hormone May Spur New Drugs to Fight Fat



Boston scientists discovered a hormone secreted by muscles in exercise that could lead to creation of new obesity, diabetes and other drugs. "It's a new molecule and a new pathway and a new mechanism for thinking about how to get at this very, very difficult problem of treating chronic diseases that are affecting tens of millions of people," said Mitchell A. Lazar, MD, PhD, Director of the Institute for Diabetes, Obesity, and Metabolism. Lazar noted that the discovery also raises questions about the role of the hormone in the body. Read Boston Globe Article