The number of genetically altered mice with relevance or potential relevance to metabolic disease continues to grow. The techniques necessary to study the impact of genetic (or pharmacologic) manipulations on metabolic and endocrine processes are difficult and specialized. Performing well-controlled metabolism experiments in mice is difficult due to their small size. This is particularly true if the goal is to study conscious mice free of stress. The Aims of the MPC are to serve the needs of the scientific community by:

- Providing state-of-the-art services to assess the regulation of metabolic flux \textit{in vivo} using a variety of glucose clamp and exercise protocols.
- Determining the components of energy balance with high precision and time resolution.
- Providing robust imaging technology to monitor the dynamics of cellular process.
- Training investigators in approaches to study metabolism in conscious unstressed mice.
- Providing innovative mouse bariatric surgery models with application to basic and translational research.
- Responding to the needs of the scientific community through development of new procedures.

Subcore \textbf{Metabolic Regulation: In vivo}

\textit{Light Hall Room 843}

Director: \textbf{Owen P. McGuinness, Ph.D.}

Research Assistants:
- Tasneem Ansari
- Merrygay James
- Alicia Locke
- Carlo Malabanan
- Teri Stevenson
- Staci Bordash
Services
Cost for Services - Vanderbilt Investigator-Initiated Services
Cost for Services - Non-Vanderbilt (USA) Academic Investigator-Initiated Services

*****Energy Balance Core: Considerations Before Starting a Study*****

Subcore **Tissue and In vivo Imaging**
742 Light Hall
Director: Sam Wells, Ph.D.

Subcore **Bariatric Surgery**
843 Light Hall
Director: Louise Lantier, Ph.D.

Subcore **Murine Pancreatic Islet Isolation Core** (run through the Vanderbilt DRTC)
748 Preston Research Building
Director: Marcela Brissova, Ph.D.
Research Assistant: Anastasia Golovin

Attachments

- [Bariatric_surgery.docx](#)  - Added on October 21, 2014 at 8:14 AM by Fran Tripp

- [MMPC_Energy_balance_core_experimental_design_notes.docx](#)  - Added on October 21, 2014 at 8:18 AM by Fran Tripp