Metabolic Pathophysiology Core

Keywords: pathophysiology, in vivo, metabolic, Core, imaging, training

843 Light Hall

Director: Owen McGuinness, Ph.D.

Managing Director and Core Contact: Louise Lantier, Ph.D.

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 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 Metabolic Regulation: In vivo

Light Hall Room 843

Director: Owen P. McGuinness, Ph.D.

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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