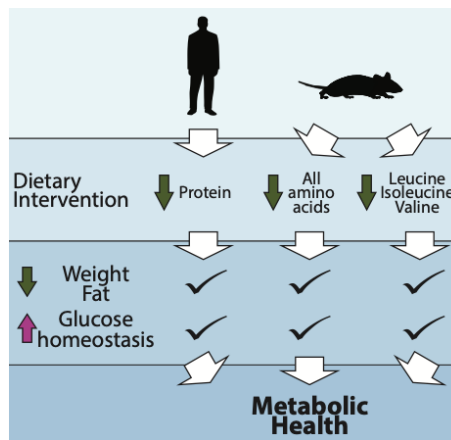
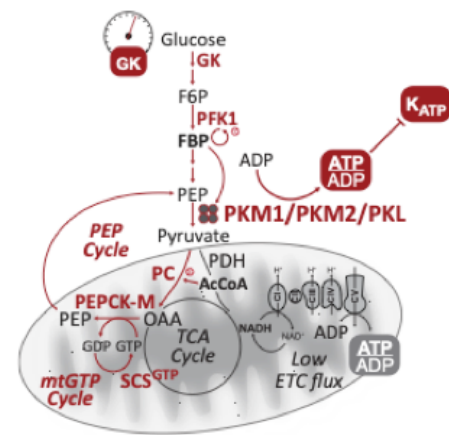


Genetics of insulin secretion



Dietary interventions to improve health

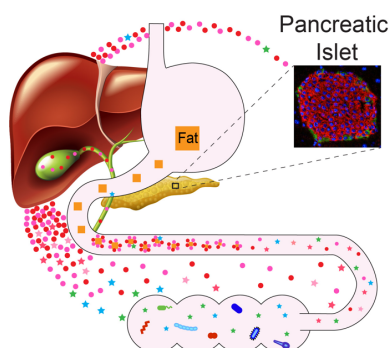


Pyruvate kinases control insulin secretion

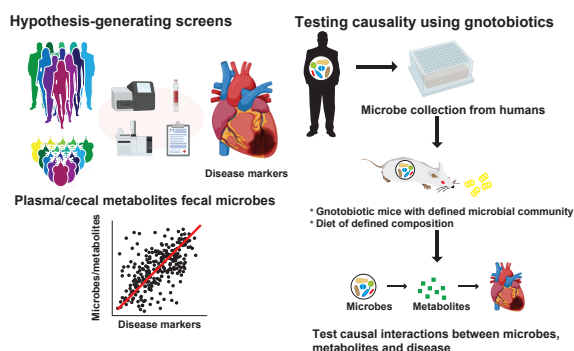
Postdoctoral positions available Metabolism and Nutrition Training Program (MANTP)

Outstanding career training opportunities in metabolism and nutrition-related biomedical research in the research programs of 31 faculty from 11 department at UW-Madison, a tier-one research institution. The MANTP has postdoctoral (PhD, MD) training positions in five research focus areas: i) **Genetics and Nutrition**; ii) **Gut Microbiome**; iii) **Mechanisms Controlling Nutrient Metabolism and Action**; iv) **Nutrition-linked Metabolic Disease**; and v) **Population Health Nutrition**. Training involves up to 3 years of NIH-level salary, in-depth assistance in grant writing and review and seminar presentation, funding for unique professional-development activities, development of mentoring skills and opportunities to develop a teaching portfolio. Madison, WI provides outstanding affordable housing, restaurants and activities for multiple lifestyles. Details at: <https://nutrisci.wisc.edu/nih-training-grant/>. See next page/reverse side for list of faculty trainers.

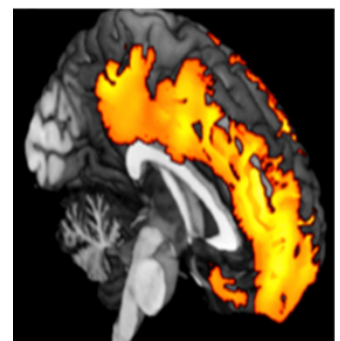
Applicants should send a cover letter stating research interests and career goals, a CV and three letters of reference to: Rick Eisenstein PhD, Metabolism and Nutrition Prog. UW-Madison, 1415 Linden Drive, Madison, WI 53706 (eisenste@nutrisci.wisc.edu). UW-Madison is an equal opportunity/affirmative action employer. We promote excellence through diversity and encourage all qualified applicants to apply. Positions open only to U.S. citizens and non-citizen nationals per NIH policy.



Intestinal control of systemic metabolism



Microbes, metabolites and cardiovascular disease



Cerebrovascular dysfunction in metabolic syndrome

University of Wisconsin-Madison

UW-Madison
Metabolism and Nutrition Training Program (MANTP) (NIH T32)
Faculty Trainer - Research Descriptions

- Rozalyn Anderson, PhD** (Assoc. Prof. of Medicine). Metabolism of aging and delayed of aging by caloric restriction.
- Alan Attie PhD** (Prof. of Biochemistry) studies the genetics and genomics of obesity-induced type 2 diabetes.
- Vincent Cryns MD** (Prof of Medicine) studies metabolic stress and cancer, including nutritional interventions such as methionine restriction as novel therapeutic paradigms for cancer.
- Dawn Davis MD, PhD** (Assoc. Prof. of Medicine) Changes in pancreatic beta cell gene expression in response to obesity and in the setting of beta cell proliferation.
- John Denu PhD** (Prof. of Biomolecular Chemistry) investigates the biological function of acetylation and other reversible protein modifications modulating signal transduction, gene activation and intermediary metabolism.
- David Eide PhD** (Prof of Nutritional Sciences) studies the mechanism of zinc uptake and homeostasis using the yeast *Saccharomyces cerevisiae* as a model for understanding these processes in humans.
- Rick Eisenstein PhD** (Prof. of Nutritional Sciences) studies how erythropoiesis and iron metabolism are controlled and coordinated including how dysregulation of molecular sensors of iron and oxygen causes disease.
- Feyza Engin PhD** (Asst. Prof. of Biomolecular Chemistry) Understanding chronic inflammatory disease induced by diet and other factors. How bile-acids induce alterations of the gut microbiome in type 1 diabetes; dysregulation of sphingolipid homeostasis in dietary- or genetically-induced models of type 2 diabetes and obesity.
- Corinne Engelmann PhD** (Assoc. Prof of Population Health Sciences) Genetic, demographic, behavioral, physiological, and environmental correlates of blood vitamin D level; association between vitamin D and health outcomes.
- Luis Fernandez, MD** (Prof. of Surgery) Metabolic derangements associated with organ transplantation.
- Luke Funk MD** (Assoc. Prof. of Surgery) minimally invasive techniques for bariatric and metabolic surgery, esophageal and gastric disorders, abdominal wall hernias, and gall bladder disorders
- James Gern MD** (Prof. of Medicine) studies how respiratory viruses and other environmental exposures including vitamin D metabolism and food allergies affect the onset of allergic diseases and asthma.
- Guy Groblewski PhD** (Prof. of Nutritional Sciences) studies the molecular mechanisms of membrane trafficking events in digestive epithelial cells of the pancreas and how their dysregulation leads to pancreatitis and pancreatic cancer.
- Laura Hernandez PhD** (Asst. Prof of Dairy Sciences) is focused on the ability of the autocrine and paracrine factors in the mammary gland to coordinate maternal metabolism during lactation.
- Michelle Kimple, PhD** (Assoc. Prof. of Medicine) is elucidating how dysfunctional G protein-coupled receptor signaling contributes to the pathogenesis of type 1 and type 2 diabetes and using this information to improve treatments.
- HuiChuan Lai PhD** (Prof. of Nutritional Sciences) studies how nutrition affects the onset and progression of pediatric chronic diseases including cystic fibrosis (CF), asthma, and obesity.
- Dudley Lamming PhD** (Asst. Prof of Medicine) Protein regulation of cellular processes that affect growth, metabolism, and aging.
- Julie Mares PhD** (Prof. of Opthal./Visual Sci.) conducts epidemiological studies on retinal biomarkers for carotenoids and other nutritional factors preserving vision and cognitive function & serve as markers of persons at risk for decline.
- Kristen Malecki PhD** (Assoc. Prof. of Pop. Health) – Diet, inflammation, gut microbiome and epigenetics.
- Matthew Merrins PhD.** (Asst. Prof of Medicine and Biomolecular Chemistry) Ability of pancreatic islet beta cells to trigger cell proliferation and release of insulin during periods of increased insulin needs.
- Joshua Mezrich MD** (Assoc. Prof. of Surgery) transplant tolerance and how environmental exposures including diet alter the immune system.
- Denise Ney PhD** (Prof. Nutritional Sciences) studies the nutritional management and etiology of skeletal fragility in phenylketonuria using genetic mouse models and human subjects.
- David Pagliarini PhD** (Morgridge Institute Metabolism Leader and Assoc. Prof. of Biochemistry) studies mitochondrial dysfunction in obesity, obesity-induced type II diabetes and other diseases using large scale MS-based proteomics & biochemical and molecular approaches.
- Brian Parks PhD** (Asst. Prof. of Nutritional Sciences) studies how interactions between genetics and diet contribute to obesity and diabetes.
- J. Wesley Pike PhD** (Prof. of Biochemistry) Transcriptional mechanisms of steroid hormone action, particularly vitamin D, in the skeleton.
- Federico Rey PhD** (Assoc. Prof of Bacteriology) Microbe-nutrient interactions and cardiometabolic disease.
- Scott Reeder MD, PhD** (Prof. of Radiology, Med. Eng. and Med. Physics) development of MRI methods for quantification of abdominal adiposity, liver fat, liver iron overload and other features of diffuse liver disease, hemodynamics of portal hypertension, and the use of new contrast agents in liver and biliary diseases.
- William Schrage PhD** (Prof. of Kinesiology) Human cardiovascular control during exercise or environmental stress, focused on the impact of obesity and insulin resistance on blood flow regulation to skeletal muscle and brain.
- Sherry Tanumihardjo PhD** (Prof. of Nutritional Sciences) studies methods for vitamin A assessment and carotenoid bioavailability emphasizing provitamin A carotenoids in staple crops to improve vitamin A status world-wide
- Amy Trentham-Dietz PhD** (Prof. of Pop. Health Sciences) Diet and other modifiable risk factors in cancer prevention.
- Eric Yen PhD** (Assoc. Prof of Nutritional Sciences) Intestinal lipid processing and systemic metabolism



Postdoctoral Training Opportunities with the Metabolism and Nutrition Training Program (MANTP) at UW-Madison

- An NIH-funded T32 Training Program -

- Up to 3 years of funding of your salary at NIH postdoctoral rates in a highly collegial community of scientists focused on the molecular, genetic, biochemical and clinical and population-based aspects of nutrition-related biomedical research (trainers listed on back/next page).
- Mock-review of your F32 or similar postdoctoral fellowship proposal in study section composed of other trainees and faculty trainers.
- Gain experience at grant reviewing via participation as a reviewer in MANTP mock study section.
- Funds (up to \$2500) to pay help pay for unique professional development opportunities such as a class at Cold Spring Harbor Laboratories.
- Trainee-specific meetings (2-4 / semester) with outside speakers from academia, industry and other venues to discuss career trajectories and opportunities.
- Annual meetings to discuss the research progress of all trainees including opportunities to deliver a “chalk-talk” that addresses the broad relevance of your work and its applicability to the NIH mission.
- Integrative annual retreat with U Chicago T32 on “Digestive Diseases and Nutrition” where the focus is on increased exposure to cutting edge translational research, improving research presentations at national meetings, professional development activities and networking.
- Opportunities to mentor young investigators.
- Guidance from the MANTP Executive Committee in planning your career trajectory – both short- and long-term.
- Input regarding application letters, CVs, research presentation and what to expect in interviews.

Applicants should send a cover letter describing research background and career goals, curriculum vitae and three letters of reference to:

Rick Eisenstein Ph.D.
Dept. of Nutritional Sciences, University of Wisconsin
1415 Linden Drive, Madison, WI 53706
Email contact: eisenstein@nutrisci.wisc.edu

*UW-Madison is an equal opportunity/affirmative action employer.
We promote excellence through diversity and encourage all qualified individuals to apply.
Positions are open only to U.S. citizens and non-citizen nationals per NIH policy.*