

## Postdoctoral positions available

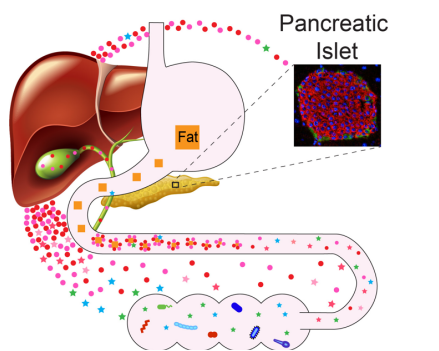
# Metabolism and Nutrition Training Program (MANTP)

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:

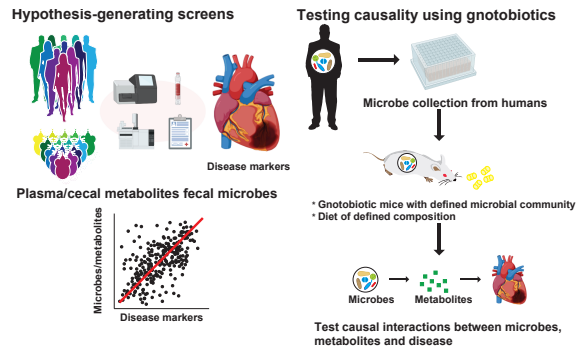
- i) **Genetics and Nutrition;** ii) **Gut Microbiome;** iii) **Mechanisms Controlling Nutrient Metabolism and Action;** iv) **Nutrition-linked Metabolic Disease;** and v) **Population Health Nutrition.**

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.

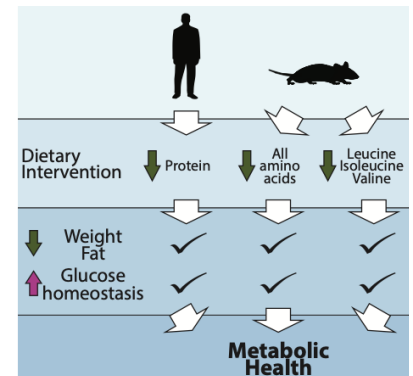
Applicants should send a cover letter stating research interests and career goals, a CV and three letters of reference to: Rick Eisenstein PhD, Metabolism and Nutrition Prog. UW-Madison, 1415 Linden Drive, Madison, WI 53706 ([eisenste@nutrisci.wisc.edu](mailto:eisenste@nutrisci.wisc.edu)). UW-Madison 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



Dietary interventions to improve health

## 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. dysregulation of sphingolipid homeostasis in 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.
- Jing Fan, PhD** (Asst. Prof of Nutritional Sciences) Immunometabolism and cancer metabolism; metabolic regulation in dynamic mammalian systems.
- 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.
- Andrew Hryckowian, PhD** (Asst. Prof of Gastroenterology) Building novel concepts and approaches (e.g., dietary intervention, bacteriophage therapy) for coping with bacterial pathogens.
- 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.
- Adam Kuchnia, PhD** (Asst. Prof of Nutritional Sciences) Understanding how disease affects muscle and protein metabolism and muscle assessment techniques
- 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.
- Vanessa Leone, PhD** (Asst. Prof of Animal and Dairy Science) Intersection of diet, gut microbes, circadian rhythms, and metabolism using preclinical models.
- Kristen Malecki PhD** (Assoc. Prof. of Pop. Health) – Diet, inflammation, gut microbiome and epigenetics.
- Julie Mares PhD** (Prof. of Ophthal./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.
- 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.
- Brian Parks PhD** (Asst. Prof. of Nutritional Sciences) studies interactions between genetics and diet, obesity and systems genetics.
- Joseph Pierre, PhD** (Prof. of Nutritional Sciences) The role of dairy products in gut microbiome, nutrition, and intestinal physiology and 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.
- Federico Rey PhD** (Assoc. Prof of Bacteriology) Microbe-nutrient interactions and cardiometabolic disease.
- 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.
- Jan Peter Van Pijkeren** (Prof. of Food Sciences) Understanding probiotic mechanisms towards the development of next-generation probiotics.
- Corinne Voils, PhD** (Prof. of Surgery). Research focus on identifying behavioral strategies to increase long-term weight loss.
- 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 -

- Salary at NIH predoctoral 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.
- Mock-review of your required NIH F32 or similar nationally competitive predoctoral 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.
- Travel (\$1000/yr) and research (up to ~\$1000/yr) funds for your research
- Trainee-specific meetings (2-4 / semester) with outside speakers from academia, industry and other venues to discuss career trajectories and opportunities.
- Journal club linked to outside speaker visits
- Opportunity to host or co-host speaker.
- 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.
- Local and national meetings with trainees from other T32s where the focus is on improving research presentations at national meetings.
  - Annual Spring research retreat
  - Annual Talk or poster presentation with other T32s (Madison Scholars Symposium)
  - Annual retreat with U. Chicago T32 “Digestive Diseases and Nutrition”  
(~1 day conference that enhances exposure to basic and translational aspects of nutrition related biomedical research)
- Opportunities to mentor young investigators.
- Guidance from the MANTP Executive Committee in planning your career trajectory.
- Input regarding application letters, CVs, research presentation and what to expect in interviews.

Applicants should send a cover letter, 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](mailto:eisenstein@nutrisci.wisc.edu)

*UW-Madison is an equal opportunity/affirmative action employer.  
Positions are open only to U.S. citizens and non-citizen nationals.*