



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

Rozalyn Anderson, PhD (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 (Assoc. 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 (Prof. of Population Health Sciences) Genetic, demographic, behavioral, physiological, and environmental correlates of vitamin D levels in the blood; association between vitamin D and other health outcomes, such as blood pressure and lipid concentrations

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 (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 (Assoc. Prof of Medicine) The regulation of healthy aging by what, when, and how we eat.

Vanessa Leone, PhD (Asst. Prof of Animal Biologics and Metabolism) studies the intersection of diet, gut microbes, circadian rhythms, and metabolism using preclinical models.

Matthew Merrins PhD. (Assoc. 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 how interactions between genetics and diet contribute to obesity and diabetes.

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) studies intestinal lipid processing and systemic metabolism.