NUTR Training Faculty Research Bios

Hubert Amrein, Professor, Molecular and Cellular Medicine, College Station (amrein@tamu.edu), 979-436-0799

Nutrition is intrinsically connected to the sensory perception of foods. Research in the Amrein laboratory focuses on the effects of food consumption in animals with impaired sensory perception. They are investigating these connections through studying the function of specific taste receptors and neuropeptides on food intake and metabolism in the fruit fly Drosophila melanogaster using molecular genetics, behavioral and neural imaging approaches.

Jenna D. Anding, Associate Department Head for Extension, Associate Professor and Extension Specialist, College Station, (j-anding@tamu.edu), 979-847-9227

A registered and licensed dietitian, Jenna has more than 25 years of experience in developing and evaluating Extension education programs on topics that include food preservation, food safety, and nutrition. For the past 13 years Jenna has worked collaboratively with faculty members in the College of Agriculture and Life Sciences to secure funding from the Centers for Disease Control and Prevention to expand her work into community development to address healthy food access and opportunities for increasing physical activity.

Karen Beathard, Instructional Professor & Didactic Program Director, Department of Nutrition, College Station, (karen.beathard@ag.tamu.edu), 979-321-7072

Dr. Karen Beathard is an Instructional Professor and Registered Dietitian Nutritionist (RDN) who manages the Didactic Program in Dietetics (DPD) in the Department of Nutrition at Texas A&M University. Her research interests expand from creating professional development programs to researching the relationship between nutrition and cognitive performance.

Jiang Chang, Professor and Deputy Director, Chancellor EDGES Fellow, Center for Genomic and Precision Medicine, Texas A&M Institute of Biosciences and Technology, Houston, (jiangchang@tamu.edu), 713-677-7603

Heart failure (impaired ventricular pump function) is an eventual outcome for diverse cardiovascular disorders and the leading cause of combined morbidity and mortality in the United States and other developed industrial nations. Dr. Chang's research focuses on mechanistic and therapeutic studies in cardiovascular diseases and the interplay between nutrition and metabolic diseases. Dr. Chang's lab welcomes graduate students with a passion for science who seek solid training and mentorship to build successful careers.

Robert S. Chapkin, Distinguished Professor of Nutritional Sciences, Regents Professor, University Faculty Fellow and Allen Endowed Chair in Integrative Nutrition & Complex Diseases, College Station, (r-chapkin@tamu.edu), 979-845-0419, 979-845-0448

Dr. Chapkin's research is focused on the molecular mechanisms by which diet modulates host-microbiome interaction, e.g., aryl hydrocarbon/NR4A1 signaling cascades; diet and cancer stem cell biology; noninvasive biomarkers using host exfoliomics and gut microbial metagenomics in premature infants; oncogenes, proteolipid nanoclustering and membrane therapy; dietary interactions and ferroptosis; colon cancer and chronic inflammation.

Mahua Choudhury, Associate Professor of Pharmaceutical Sciences, Texas A&M Health Science Center, College Station, (mchoudhury@pharmacy.tamhsc.edu), 979-436-0286

Dr. Choudhury is an Associate Professor in the Pharmaceutical Sciences Department and graduate faculty in the Nutrition department and an executive member of Genetics program. Dr. Choudhury works on epigenetic regulation in metabolic health and pregnancy complications due to diets and chemicals including plastic.

Roderick Dashwood, John S Dunn Chair, Professor, and Director, Center for Epigenetics & Disease Prevention, Institute of Biosciences and Technology, Houston, (rdashwood@tamu.edu), 713-677-7806

Dr. Dashwood's research integrates multiomic, genetic, epigenetic and immune approaches for precision oncology. Epigenetic readers, writers and erasers that reversibly regulate immune players in the antigen presentation pathway are of current mechanistic interest. Clinical specimens and organoids from patients undergoing colectomy provide for human translation**.**

Shaodong Guo, Associate Professor, Department of Nutrition, College Station, (Shaodong.guo@tamu.edu), 979-845-0850

The research goal of Dr. Shaodong Guo's laboratory is to investigate the mechanisms of insulin resistance, diabetes mellitus, and associated aging and chronic diseases, aiming at therapeutic and dietary interventions. In particular, his lab has focused on studying the role of the transcription factor FoxO1 signaling in control of glucose metabolism, longevity and inflammaging-associated metabolism and tissue homeostasis via expression of their target genes in metabolism and immunity, via measuring changes in cell signaling, gene expression, mitochondrial function, and inflammation in tissues of FoxO1 mutant mice, thus providing biochemical and molecular evidence for our fundamental understanding of the mechanisms of hormonal regulation of Foxo1 signaling in control of metabolism and healthspan.

Bradley Johnston, Associate Professor, Department of Nutrition, College Station, (Bradley.johnston@tamu.edu)

Dr. Bradley Johnston is an Associate Professor in the Departments of Nutrition (primary appointment), Epidemiology and Biostatistics at Texas A&M University. His work involves health status measurement (e.g. minimal patient/population important difference; quality of life), and the application of randomized trial, meta-analysis and public health guideline recommendation methods to a wide range of areas, with a particular interest in Evidence-Based Nutrition (EBN). Evidence-based nutrition practice emphasizes the best available data from human studies for health outcomes that are important to patients and members of the public (e.g. risk of cancer, heart disease and quality of life, dietary satisfaction).

Richard Kreider, Professor, Health & Kinesiology, College Station, (rbkreider@tamu.edu), 979-458-1498

Dr. Kreider's research focuses on the role of exercise and nutrition in health, performance, rehabilitation, and disease.

Grace Lee, Assistant Professor, Department of Nutrition, College Station, (grace.lee@ag.tamu.edu), 979-321-7084

Dr. Grace Lee's research focuses on behavioral nutrition, global food security, and community-based nutrition interventions. Her work examines barriers to healthy eating and physical activity among under-resourced populations and develops community-based strategies to address psychosocial, behavioral, and environmental factors that improve nutritional outcomes.

Beth Racine, Professor and Associate Department Head for Extension, El Paso, (beth.racine@ag.tamu.edu), 915-859-9111

Dr. Racine is a public health nutrition researcher; in addition to research, she has two administrative positions. She is the Texas A&M AgriLife Research Center at El Paso Director and the Associate Department Head for Extension programs within the Nutrition Department.

Chad Rethorst, Associate Professor, Department of Nutrition, Dallas, (chad.rethorst@ag.tamu.edu), 972-952-9625

Dr. Rethorst's research focuses on the development and optimization of behavioral interventions to improve the health of persons with chronic medical conditions, the use of digital technologies in the delivery and evaluation of behavior change interventions, and the effects of health behaviors on mental health.

Steven Riechman, Associate Professor of Health and Kinesiology, Health and Kinesiology Department, College Station, (sriechman@hlkn.tamu.edu), 979-862-3213

Dr. Riechman's research interests include human muscle and cognitive performance and fatigue. Specifically nutritional and exercise interaction on sustained cognitive and physical performance in challenging environments.

Catharine Ross, Professor, Department of Nutrition, College Station, (catharine.ross@ag.tamu.edu), 979-314-8050

Dr. Ross's research interests are in micronutrients especially vitamin A and retinoic acid, as modulators of immune system, lung and liver gene expression and functions. Current emphasis on B cell biology and early-life immune responses and the development of immunological memory.

Rebecca Seguin-Fowler, Associate Professor, Associate Director of AgriLife Research, Dallas, (r.seguin-fowler@ag.tamu.edu)

Rebecca Seguin-Fowler, PhD, RDN, LD, CSCS is director of the Healthy Living social and behavioral research program for the Texas A&M Institute for Advancing Health Through Agriculture. Her research aims to advance science and practice related to the influence of sociocultural, community, and policy factors on health behaviors and outcomes, particularly among underserved populations, with a focus on sustainable, scalable, and cost-effective program development and dissemination.

Yuxiang Sun, Associate Professor, Department of Nutrition, College Station (yuxiangs@tamu.edu), 979-862-9143

Dr. Yuxiang Sun's previous research has revealed that the nutrient-sensing hormone ghrelin plays important roles in obesity, diabetes, inflammation, aging, and Alzheimer's disease. Her team is currently focused on the new interdisciplinary frontiers of gut-brain axis, immunometabolism, neuroinflammation, and inflammaging of the ghrelin system, which have profound implications for many diseases. Her lab employs state-of-the-art mouse models and cutting-edge cellular/molecular techniques, providing an excellent training environment for modern biomedical research.

Masako Suzuki, Assistant Professor, Department of Nutrition, College Station, (Masako.suzuki@ag.tamu.edu), 979-321-7076

Dr. Suzuki's research goal is to identify mechanisms of how the offspring memorize their environmental exposure status in utero throughout life and how the genetic variations contribute to the effects. Her lab focuses on the effects of an in utero micronutrient deficiency on cell subtype proportions and cell memory and diseases later in life, such as

asthma, metabolic, and immune diseases, with the long-term goal is to understand the mechanisms by which genetic and prenatal environmental factors contribute to congenital disabilities and disease risks later in life to develop preventative interventions ultimately in the line of Developmental Origins of Health and Disease (DOHaD) and health disparity.

Jacob Szeszulski, Assistant Professor, Department of Nutrition, Dallas, Jacob.Szeszulski@ag.tamu.edu, 989-313-2974

Dr. Jacob Szeszulski's primary research interest is in the development, implementation, evaluation, and dissemination of school- and community-based physical activity and nutrition programs for youth. Specifically, he is interested in understanding policies, systems, and environments that affect youth physical activity and nutrition, identifying organizational and contextual factors that affect the delivery of school- and community-based programs, and using community-based participatory research approaches to reduce disparities in youth's health behaviors, and subsequent health outcomes.

David Threadgill, Department Head, Department of Nutrition, Distinguished Professor of Molecular and Cellular Medicine and Biochemistry & Biophysics and Director of the Texas A&M Institute of Genome Sciences and Society, College Station, (dwthreadgill@tamu.edu), 979-436-0850

Research in the Threadgill lab focuses on understanding how genetic differences influence response to diet and another environmental factors. Interest includes not only genetic variation but also how diet differentially impacts the epigenome to have lasting effects on health and disease using the mouse as a model system.

Lexi MacMillan Uribe, Assistant Professor, Department of Nutrition, Dallas, (lexi.macmillanuribe@ag.tamu.edu), 972-952-9275

Dr. Uribe is a health equity researcher who uses community-informed strategies to develop, adapt, and evaluate health promotion programs that address food and nutrition security and reduce chronic disease risk in historically marginalized and underserved communities. More specifically, her research aims to evaluate programs and strategies for improving diet- and chronic disease-related outcomes; use community-informed and mixed-methods approaches to inform health promotion programs; understand the role of culture in diet and incorporating culture into program development; develop valid and reliable evaluation tools for health promotion programs; and leverage digital technology to deliver health education and information.

Heidi Vanden Brink, Assistant Professor, Department of Nutrition, College Station, (heidi.vandenbrink@ag.tamu.edu), 979-321-7073

Dr. Vanden Brink leads a clinical research program that intersects nutrition, metabolism, and reproductive physiology. We are particularly interested in detecting, understanding, and preventing the degree to which dietary intake and metabolic disease influence reproductive development in adolescence leading to conditions such as Polycystic Ovary Syndrome (PCOS).

Sumanthi Venkatesh, Assistant Professor and Extension Specialist, Houston, (sumanthi.venkatesh@ag.tamu.edu), 832-856-3497

Dr. Sumathi Venkatesh is an Assistant Professor and Extension Specialist with expertise in nutrition research and extension projects, committed to advancing public health through education and outreach. She has contributed to the development and implementation of various health and nutrition program curricula and evaluation tools aimed at reducing preventable diseases in Texas, including initiatives in school nutrition, weight management, recipe development, hands-on cooking schools, physical activity, and worksite wellness.

Rosemary Walzem, Professor, Department of Poultry Science, College Station, (Rosemary.Welzem@ag.tamu.edu), 979-847-7361

As a comparative nutritionist and registered dietitian, Dr. Walzem's lab's goal is to understand the relationships between diet and health phenotypes related to lipid and lipoprotein biology including chronic diseases, such as diabetes and atherosclerotic cardiovascular disease in humans and lipid intensive productive phenotypes such as egg-laying in chickens. These seemingly disparate areas connect through the need to understand the relationships between physical/chemical aspects of lipoprotein metabolism, normal and dysregulated particle physiology.

Chaodong Wu, Professor, Faculty Fellow of Texas A&M AgriLife Research, Department of Nutrition, College Station, (cdwu@tamu.edu), 979-458-1521

Dr. Wu has focused his research on elucidating roles of inflammation-metabolism interactions in unhealthy nutrition-associated insulin resistance and adipose tissue inflammation, as well as hepatic steatosis and liver inflammatory responses. Specifically, Dr. Wu has studied the roles of multiple molecules varying from cell surface receptor to intracellular mediator in regulating macrophage activation as it relates to the pathogenesis of metabolic diseases, mainly metabolic dysfunction-associated steatotic liver disease (MASLD) and steatohepatitis (MASH).

Chia-Shan (Jenny) Wu, Research Assistant Professor, Department of Nutrition, College Station, (chiashan.wu@ag.tamu.edu), 979-321-7068

Dr. Wu's research is focused on understanding the biology of aging and chronic diseases, in particular the regulation of gut-brain axis in age-related metabolic dysfunction and cognitive impairment. You can learn more about Dr. Wu's publications here.

Guoyao Wu, Distinguished Professor of Animal Science, Texas A&M AgriLife Research Senior Faculty Fellow, and University Faculty Fellow, College Station, (g-wu@.tamu.edu), 979-845-1817

Dr. Guoyao Wu's research focuses on biochemistry, nutrition and physiology of amino acids; fetal nutrition and metabolism, cardiovascular physiology and disease; diabetes; intestinal metabolism and development; comparative animal nutrition.

Linglin Xie, Associate Professor, Department of Nutrition, College Station (Linglin.xie@tamu.edu), 979-862-9141

Dr. Xie's research focuses on the interplay between maternal factors, environmental exposures, and their impact on offspring health, with key areas of interest including obesity-related adipose tissue fibrosis, maternal-fetal interactions in metabolic disorders, environmental influences on pregnancy outcomes, and heart development.

Kurt Zhang, Associate Professor, Center of Epigenetics & Disease Prevention, Institute of Biosciences and Technology, College Station (kzhang@tamu.edu), 979-847-8714

Dr. Zhang's laboratory is using cutting edge genomics technology and developing robust AI and stochastic models to understand the molecular interactions and cell-cell that underpin human diseases. His research has recently focused on investigating the interactions between genes and the environment/nutrition underlying the onset of metabolic diseases through the use of single-cell and spatial transcriptomics technologies.