



MADISON SCHOLARS SYMPOSIUM PROGRAM

Networking Across Multiple Disciplines of Biomedical Research

NIH T32-Sponsored Scholars from Biology of Aging and Age-Related Diseases

Endocrinology and Reproductive Physiology

Molecular and Applied Nutrition

1:00-4:30pm May 8th 2019 HSLC Room 1325

Introductory Remarks

Rozalyn Anderson Associate Professor of Medicine

Algorithm for Intraoperative Detection of Component Malalignment during Total Knee Arthroplasty

Joshua Roth, PhD – Department of Biomedical Engineering

Metabolic dysregulation following TBI in *Drosophila melanogaster*

Laura Swanson – Department of Genetics

Intestine-specific loss of *Cpt2*, required for long-chain fatty acid oxidation, alters systemic energy metabolism and glucose homeostasis

Mitchell Lavarias – Department of Nutritional Sciences

Nutritional and endocrine regulation of mammary *mTORC1* and its role in milk protein synthesis

Virginia Pszczolkowski - Department of Dairy Sciences

Decreased consumption of branched-chain amino acids promotes lifespan and healthspan in wild-type and progeroid mice

Nicole Cummings – Department of Medicine: Endocrinology, Metabolism, & Diabetes

The Amyloid Plaque Microenvironment

Dylan Souder - Department of Medicine: Geriatrics & Gerontology

Metabolic Regulation of the Epigenome: Chromatin Adaptation to Methyl-Metabolite Depletion

Spencer Haws – Department of Nutritional Sciences

Networking & Refreshments

2:15-2:45pm Foyer HSLC

The role of *nesprin-3* in mammalian neural stem cells

Tiara Porter – Department of Neuroscience

Structural and Functional Insights into Sirtuin-dependent Chromatin Deacetylation

Wallace Liu, PhD - Department of Biomolecular Chemistry

Caloric restriction induces unique transcriptional responses among adipose depots in rhesus monkeys

Josef Clark, PhD – Department of Medicine: Geriatrics & Gerontology

The Endoplasmic Reticulum Acetyl-transferases: Novel Targets for Neurodegenerative Disorders

Mark Farrugia, PhD – Department of Medicine: Geriatrics & Gerontology

Src and ERK are not the only Mediators of Endothelial Dysfunction; p38MAPK also Regulates Pregnancy-Derived Uterine Artery Endothelial Monolayers

Rachel (Lane) Dahn - Department of Obstetrics and Gynecology

AT-1: A central regulator of proteostasis and autophagy

Inca Dieterich - Department of Medicine: Geriatrics & Gerontology

Integrative analysis of mouse liver co-expression networks and human lipid GWAS data pinpoints *Sestrin1* as a regulator of cholesterol metabolism

John Li, PhD - Department of Nutritional Sciences

Reprogrammed Synovial Fluid-Derived Mesenchymal Stem Cells Acquire Enhanced Therapeutic Potential

Brian Walczak, DO - Department of Orthopedics and Rehabilitation

Closing Remarks

Sanjay Asthana Associate Dean of Gerontology