**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

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**Introductory Remarks**
Rozalyn Anderson, Associate Professor of Medicine

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**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

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**Networking & Refreshments**
2:15-2:45pm Foyer HSLC

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**The role of nesprin-3 in mammalian neural stem cells**
Tiaira 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 Acetyltransferases: Novel Targets for Neurodegenerative Disorders**
Mark Farrugia, PhD – Department of Medicine: Geriatrics & Gerontology

**A 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 Walzcad, DO - Department of Orthopedics and Rehabilitation

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**Closing Remarks**
Sanjay Asthana, Associate Dean of Gerontology