

## Summary Credentials of Mentors Available to Trainees in the M.D./Ph.D. Program

**2020 – 2021 Academic Year** 

Saint Louis University School of Medicine

## Participating Faculty Mentors for the Saint Louis University M.D./Ph.D. Program **Primary Appointment:** Name, Degree(s) Rank **Research Interests Secondary Appointment** Mycobacteriology; development of new Abate, Getahun, M.D., Ph.D. Assistant Professor therapeutics (drugs and immunotherapy) and Internal Medicine: vaccines for tuberculosis and nontuberculous Molec, Micro, & Immunol, mycobacteria. Sensorimotor information processing of visual Ariel, Michael, Ph.D. Professor and vestibular inputs used for cerebellar and Pharmacology & Physiology oculomotor control of brainstem reflexes. Effectiveness/efficiency of chronic disease **SLU Center for Outcomes** Armbrecht, Eric S., Ph.D. Associate Professor services, programs and products; Areas of Research focus: asthma, diabetes, and heart failure. 1) Molecular mechanisms leading to chronic Aurora, Rajeev, Ph.D. Associate Professor inflammation, including diet, microbiota and hormones. 2) Mechanisms that resolve Molec. Micro. & Immunol. inflammation. 3) Crosstalk between immune and skeletal systems. RNA binding protein function and link to Ayala, Yuna M., Ph.D. Assistant Professor neurodegeneration, including movement Biochem. & Molec. Biology disorders and dementia Control of sterol and lipoprotein homeostasis by Baldán, Angel, Ph.D. Associate Professor non-coding RNAs. Control of hepatic and Biochem. & Molec. Biology intestinal triglyceride metabolism Historical, political, and philosophical Bishop, Jeffrey, M.D., Ph.D. Professor underpinnings of various medical and scientific **Health Care Ethics** practices. Emerging Viral Infectious Diseases; Assistant Professor Molec. Micro & Immunology Brien, James D., PhD mechanisms of neutralizing antibody: virus selection by the adaptive immune response. Clinical and economic health outcomes in **SLU Center for Outcomes** Buchanan, Paula M., Ph.D. Associate Professor transplantation, diabetes, and cancer. Research Control of ingestive behaviors by the central Butler, Andrew A., Ph.D. Professor Pharmacology & Physiology nervous melanocortin system; control of glucose and lipid metabolism. Elucidating mechanisms of liver fibrogenesis, and searching for anti-fibrotic agents for the Chen, Anping, Ph.D. Associate Professor Pathology prevention and treatment of this disease.

vaccination. Identifying cell types/molecular which

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Mole. Micro. & Immunol.

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			control flavivirus replication in primary human cells. Establishing the mechanism of GB Virus C'sinhibition of HIV replication. Human vaccine clinical trials.		
Gonzalo-Hervas, Susana, Ph.D.	Associate Professor	Biochem. & Molec. Biology	Mechanisms contributing to genomic instability in cancer and aging: nuclear architecture, chromatin structure, and DNA repair.		
Grucza, Richard, Ph.D.	Professor	Family and Community Medicine ;SLU Center for Outcomes Research	"Epidemiology of substance use disorders (addiction) and policy influences: 1.) OUD treatment outcomes; 2.) Adolescent trends in substance use and conduct problems; 3.) Alcohol-related morbidity and mortality among older adults."		
Hawiger, Daniel, M.D., Ph.D.	Associate Professor	Molec. Micro. & Immunol.	Regulation of T cell differentiation and functions by Dendritic cells to prevent autoimmune diseases and cancer.		
Heyduk, Tomasz, Ph.D.	Professor	Biochem. & Molec. Biology	Molecular mechanisms of transcription regulation; protein structure and function; development of novel sensors for biomolecules.		
Hinyard, Leslie J., Ph.D.	Associate Professor, Assoc. Dir. Academic Affairs - SLUCOR	SLU Center for Outcomes Research	Outcomes of interprofessional/collaborative practice; quality of life in diabetes; clinical and quality of life outcomes in oropharyngeal cancer.		
Hoft, Daniel F., M.D., Ph.D.	Professor & Division Director	Internal Medicine; Molec. Micro. & Immunol.	Molecular immunologic studies of mucosally invasive intracellular pathogens.		
Kolar, Grant, M.D.,Ph.D.	Associate Research Professor	Pathology & Ophthalmology	Role of G protein receptors in diabetes associated complications and pain.		
Kornbluth, Jacki, Ph.D.	Professor	Pathology; Molec. Micro. & Immunol.	Tumor immunology; regulation of cell-mediated cytotoxicity.		
Korolev, Sergey, Ph.D.	Associate Professor	Biochem. & Molec. Biology	"Mechanism of DNA repair proteins in genome stability and cancer. Drug design and inhibition of DNA repair pathways for cancer treatment."		
Liu, Jianguo, M.D., Ph.D.	Professor	Internal Medicine; Molec. Micro. & Immunol.,	Molecular mechanisms of cytokine gene expression and their immunological activities in autoimmune, tumor and infectious diseases.		

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Nguyen, Andrew, Ph.D.	Assistant Professor	Internal Medicine; Pharmacology & Physiology	Frontotemporal dementia; lysosome biology; lipid metabolism; nucleic acid-based therapeutics
Macarthur, Heather, Ph.D.	Associate Professor	Pharmacology & Physiology	Vascular control mechanisms; endothelial mediators; sympathetic neurotransmission.
McCommis, Kyle, Ph.D.	Assistant Professor	Biochem & Molec. Biology	Importance of mitochondrial function in the pathogenesis and treatment of heart failure, diabetes, and nonalcoholic fatty liver disease.
McHowat, Jane, Ph.D.	Professor	Pathology	Mechanisms of cigarette smoking-related diseases, including heart disease, cancer and inflammation.
Montano, Adriana, Ph.D.	Associate Professor	Pediatrics; Biochem. & Molec. Biology	Newborn screening of mucopolysaccharidoses Morquio A disease Treatments for Lysosomal Storage Disorders Cardiovascular effects of glycosaminoglycan accumulation Oral tolerand Molecular mechanisms of the disease
Peng, Guangyong, M.D., Ph.D.	Professor	Internal Medicine; Molec. Micro. & Immunol.,	Tumor suppressive microenvironment; and tumor infiltrating Tcells; tumor vaccine development and immunotherapy.
Pinto, Amelia K., PhD	Assistant Professor	Molec. Micro. & Immunol	Viral Immunology; innate and adaptive immune correlates of protections, vaccine efficacy, and the impact of weight and age associated immune defects on protection from viral infections.
Pozzi, Nicola, Ph.D.	Assistant Professor	Biochem. & Molec. Biology	Research Interests: mechanisms of thrombosis and immunothrombosis, autoimmunity, X-ray crystallography, single molecule spectroscopy, protein chemistry and protein engineering.
Ray, Ranjit, Ph.D.	Professor	Internal Medicine; Molec. Micro. & Immunol.	Virology; immunology; pathogenesis of hepatiti virus-host interaction; molecular mechanisms of disease.
Ray, Ratna B., Ph.D.	Professor	Pathology; Internal Medicine	Transcriptional regulation; tumor biology; microRNA regulation in cancer; epigenetic regulations in cancer; chemoprevention; HCV

mediated pathogenesis.

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Salter, Erica K., Ph.D.	Associate Professor	Health Care Ethics; Pediatrics	Clinical ethics consultation; pediatric clinical ethics; standards of medical decision-making.	
Salvemini, Daniela, Ph.D.	Professor	Pharmacology & Physiology; Internal Medicine	Molecular mechanisms of chronic neuropathic pain and opioid-unwanted actions. Drug discovery and development of novel non-narcotic analgesics.	
Samson, Willis K. 'Rick', Ph.D.	Professor & Core Program Director	Pharmacology & Physiology	Neuropeptides and the control of ingestive behaviors, cardiovascular function and stress hormone secretion.	
Skowyra, Dorota, Ph.D.	Associate Professor	Biochem. & Molec. Biology	ubiquitin-proteasome system in health and disease (currently: autoimmune diseases/type 1 diabetes, protein aggregation-based diseases/alpha-1 deficiency)	
Sverdrup, Francis M., Ph.D.	Associate Professor	Biochem. & Molec. Biology	Drug discovery; transcriptional regulation, chemical biology, epigenetic regulation of gene expression in facioscapulohumeral muscular dystrophy (FSHD)	
Tavis, John E., Ph.D.	Professor	Molec. Micro. & Immunol.	Hepatitis B virus reverse transcription; Hepatitis B virus polymerase biochemistry; Hepatitis B virus drug discovery.	
Teague, Ryan M., Ph.D.	Associate Professor	Molec. Micro. & Immunol.	T cell biology, tumor immunology & cancer immunotherapy	
Walker, John K., Ph.D.	Assistant Professor	Pharmacology & Physiology	Application of synthetic & medicinal chemistry to drug discovery and the development of new small molecule drug therapies.	
Yosten, Gina L.C., Ph.D.	Assistant Professor	Pharmacology & Physiology	Role of G protein-coupled receptors in diabetes- and obesity-associated cardiovascular disease; deorphanization of orphan GPCRs.	
Zahm, D. Scott, Ph.D.	Professor	Pharmacology & Physiology	Neuroanatomical and functional organization of basal forebrain; neurodegeneration; role of peptides in psychostimulant and opioid actions.	
Zhang, Jinsong, Ph.D.	Associate Professor	Pharmacology & Physiology	Epigenetic, transcriptional and signaling regulation of gene expression; leukemia fusion proteins; nuclear receptors in diabetes & cancer.	

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