# MSSRP Mentor List - Summer 2021

The first stage of the MSSRP application process is to research a few mentors whose work interests you, and to ask Rose Polgar (<u>mp154@case.edu</u>) to help you get in contact with those mentors.

- 1. Please use the information below as a jumping-off point for your own research on mentors you may want to work with.
- 2. You should utilize the CWRU, UH, and/or Cleveland Clinic websites to get more details of what each mentor is researching.
- 3. You should utilize PubMed and browse the list of publications for mentors you are interested in working with.
- 4. We encourage you to consider basic and translational research in addition to clinical research.

### Mentors by category:

GROUP 1: Digestive Diseases	GROUP 2: Liver Diseases	GROUP 3: <u>Diabetes &amp;</u> <u>Metabolic Diseases</u>	GROUP 4: <u>Kidney</u> <u>Diseases</u>
Derek Abbott, MD PhD	J. Mark Brown, PhD	David Buchner, PhD	Walter Boron, MD, PhD
Fabio Cominelli, MD PhD	Henri Brunengraber, MD PhD	Atul Chopra, MD*	Leslie Bruggeman, PhD*
Wendy Goodman, PhD*	Srinivasan Dasarathy, MD	Darcy Freedman, PhD	Katherine Dell, MD
Andrei Ivanov, PhD	Maria Hatzoglou, PhD	Rose Gubitosi-Klug, MD PhD	Christopher Flask, PhD
Jeanette Messer, DVM PhD*	Feng Lin, PhD	Grace McComsey, MD	Stanley Hazen, MD, PhD
Theresa Pizarro, PhD	Takuya Sakaguchi, MD		John O'Toole, MD
Florian Rieder, MD PhD*			Mahboob Rahman, MD
Rodriguez-Palacios, PhD DVM*			Jeffrey Schelling, MD*
Vinay Varadan, PhD*			John Sedor, MD
			Jonathan Stamler, MD

GROUP 5: GI & Liver Tumorigenesis	GROUP 6: Inflammation/Infection	
Amitabh Chak, MD	Donald Anthony, Jr, MD, PhD	
Gregory Cooper, MD MPH	Robert Bonomo, MD	
Amar Desai, PhD*	Sahera Dirajlal-Fargo, MS DO*	
Kishore Guda, PhD	Curtis Donskey, MD	
Zhenghong Lee, MD	Craig Hodges, PhD	
Anant Madabhushi, PhD	Alan Levine, PhD	
Sanford Markowitz, MD PhD	Laura Nagy, PhD	
Gordon McLennan, MD*	Parameswaran Ramakrishnan, PhD	
Zhenghe Wang, PhD	Carlos Subauste, MD	
Lan Zhou, MD, PhD*		
* Junior faculty mentors, paired with a senior mentor with a strong-track record of mentorship to ensure the highest level of training.		

## Mentor research interests:

## TABLE B. Faculty Research & Case MSSRP T35 Mentoring

**DEREK ABBOTT, MD, PhD**, Professor of Pathology, CWRU SoM; MSTP T32 Program Director; **Research:** Mechanisms of NOD2 activation Crohn's disease (CD)

**DONALD ANTHONY, Jr, MD, PhD**, Associate Professor of Medicine (Infectious Diseases & HIV) & Pathology, CWRU SoM; HIV T32 Program Director; **Research:** Immune cell function during hepatitis C virus infection;

**ROBERT BONOMO, MD,** Professor of Medicine, Pharmacology, Molecular Biology & Microbiology, CWRU SoM; **Research:** Genetic determinants of ß-lactamases

**WALTER BORON, MD, PhD,** David N. & Inez Myers/Antonio Scarpa Professor & Department Chair of Physiology & Biophysics, CWRU SoM; **Research:** RTPT-δ in acid-base disturbances in renal proximal tubes

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**J. MARK BROWN,** Associate Staff Scientist, Cardiovascular Disease & Metabolic Sciences, Cleveland Clinic LRI, Assistant Professor of Molecular Medicine, CCLCM-CWRU; **Research:** Gut bacterial metabolite TMAO in host stress response to insulin resistance

**LESLIE BRUGGEMAN, PhD,** Professor of Medicine (Nephrology & Hypertension), CWRU SoM; **Research:** Molecular and cellular biology of chronic kidney diseases

**HENRI BRUNENGRABER, MD, PhD,** Mount Sinai Auxiliary Commemorative Professor of Nutrition & Biochemistry; **Research:** Metabolic regulation; artificial nutrients; liver metabolism; alcoholism markers; mass spectrometry; metabolomics

**DAVID BUCHNER, PhD,** Assistant Professor of Genetics & Biochemistry, CWRU SoM; **Research:** Genetics and pathophysiology of obesity and diabetes

**AMITBAH CHAK, MD,** Professor of Medicine (GI & Liver Diseases) & Oncology, CWRU SoM; **Research:** Barrett's esophagus (BE) & esophageal adenocarcinoma, novel endoscopic imaging techniques

**ATUL CHOPRA, MD, PhD,** Assistant Professor of Medicine (Cardiology), CWRU SoM; **Research:** Asprosin neutralization as an anti-obesity treatment

**FABIO COMINELLI, MD, PhD,** Hermann Menges, Jr. Professor of Medicine & Pathology, Chief, Division of GI & Liver Diseases, CWRU SoM; Director, Case MSSRP T35; Co-Director, Digestive Diseases T32 (NIDDK); **Research:** Role of cytokines & gut microbiota in IBD

**GREGORY COOPER, MD,** Professor of Medicine (GI & Liver Diseases); **Research:** Screening & surveillance for colorectal cancer (CRC)

**SRINIVASAN DASARATHY,** Staff Scientist, Department of Inflammation & Immunity, Cleveland Clinic LRI; Professor of Molecular Medicine, CCLCM-CWRU; **Research:** Mechanisms of sarcopenia in cirrhosis; clinical research in non-alcoholic steatohepatitis

**KATHERINE DELL, MD,** Staff Scientist, Pediatric Nephrology, Cleveland Clinic Pediatric Institute; Professor of Pediatrics (Nephrology), CCLCM-CWRU; **Research:** Imaging of ARPKD in kidney disease

**AMAR DESAI, PhD,** Assistant Professor, Case Comprehensive Cancer Center, CWRU SoM; **Research:** 15-PGDH in improving bone marrow transplantation

**SAHERA DIRAJLAL-FARGO, MS, DO,** Assistant Professor, Department of Pediatrics, CWRU SoM; **Research:** Pediatric HIV complications, inflammation & immune activation

**CURTIS DONSKEY, MD,** Professor of Medicine (Infectious Diseases & HIV), CWRU SoM; **Research:** Mechanisms used by normal intestinal microflora to inhibit colonization by nosocomial pathogens

**CHRISTOPHER FLASK, PhD,** Assistant Professor of Radiology, Pediatrics & Biomedical Engineering, CWRU SoM and School of Engineering; **Research:** Imaging of ARPKD in kidney disease

**DARCY FREEDMAN, PhD, MPH,** Associate Professor of Epidemiology & Biostatistics, CWRU SoM; **Research:** Nutritional interventions & obesity

WENDY GOODMAN, PhD, Instructor of Pathology, CWRU SoM; Research: Regulatory T-cells in CD

**ROSE GUBITOSI-KLUG, MD, PhD,** Professor of Pediatrics (Endocrinology) & Associate Professor of Pharmacology, CWRU SoM; **Research:** Epidemiology of long-term type I diabetes

**KISHORE GUDA, PhD,** Associate Professor of Medicine, CWRU SoM; **Research:** Genetics of colon & esophageal cancer

**MARIA HATZOGLOU, PhD,** Professor of Nutrition & Pharmacology, CWRU SoM; **Research:** Molecular mechanisms regulating gene expression during nutrient stress

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**STANLEY HAZEN, MD, PhD,** Van Bleeksma Chair of Vascular Cell Biology & Artherosclerosis, Cleveland Clinic LRI; Professor of Molecular Medicine, CCLCM-CWRU; **Research:** Diet-induced gut microbiota-mediated pathways & chronic kidney disease

**CRAIG HODGES, PhD**, Associate Professor of Genetics & Genome Sciences; **Research:** CFTR gene function & mouse models of cystic fibrosis

**ANDREI IVANOV, PhD,** Staff Scientist, Department of Inflammation & Immunity, Cleveland Clinic LRI; Professor of Molecular Medicine, CCLCM-CWRU; **Research:** Actomyosin cytoskeleton & intestinal barrier dysfunction in IBD

**MUKESH JAIN, MD,** Professor of Medicine, Physiology, & Biophysics, CWRU SoM; **Research:** Kruppel-like factors in lipid metabolism

**ZHENGHONG LEE, PhD,** Professor of Radiology & Associate Professor of Biomedical Engineering, CWRU SoM; **Research:** Imaging technologies for liver cancer proliferation

**FENG LIN, PhD,** Staff Scientist, Department of Inflammation & Immunity, Cleveland Clinic LRI; Professor of Molecular Medicine, CCLCM-CWRU; **Research:** Compliment activation to improve diabetes

**ANANT MADABUSHI, PhD,** F. Alex Nason Professor II of Biomedical Engineering, Professor of Pathology, Radiation Oncology, Radiology & Urology, CWRU SoM; **Research:** Quantitative image analysis & multi-modal correlation of large data sets for disease diagnostics and prognostics of GI cancers

**SANFORD MARKOWITZ, MD, PhD,** Frances Wragg Ingalls Professor of Cancer Genetics, Genetics & Genome Sciences, & Molecular Biology & Microbiology, CWRU SoM; **Research:** Immunogenetics of CRC

**GRACE McCOMSEY, MD,** Professor of Pediatrics & Division Chief of Pediatric Infectious Diseases/ Rheumatology, CWRU SoM; **Research:** Gut integrity markers after HIV infection & metabolic complications

**GORDON McLENNAN, MD,** Professor of Pathology & Urology, Division Chief of Anatomic Pathology, CWRU SoM; **Research:** Genitourinary pathology

**JEANNETTE MESSER, DVM, PhD,** Assistant Staff Scientist, Department of Inflammation & Immunity, Cleveland Clinic LRI; Adjunct Assistant Professor of Molecular Medicine, CCLCM-CWRU; **Research:** HMGB1 in IBD

**LAURA E. NAGY, PhD,** Staff Scientist, Department of Inflammation & Immunity, Cleveland Clinic LRI; Professor of Physiology & Biophysics, CWRU; Professor of Molecular Medicine, CCLCM-CWRU; **Research:** Alcohol-induced chronic hepatitis & diabetes

**JOHN O'TOOLE, MD,** Staff Scientist, Department of Inflammation & Immunity, Cleveland Clinic LRI; Associate Professor of Molecular Medicine, CCLCM-CWRU & CWRU SoM; **Research:** Genetics of human kidney disease

**THERESA PIZARRO, PhD,** Professor of Pathology & Medicine, CWRU; Case MSSRP T35 Co-Director; **Research:** Mucosal immunity

**MAHBOOB RAHMAN, MD,** Professor of Medicine (Nephrology & Hypertension), CWRU SoM; **Research:** Predictors of chronic renal insufficiency progression

**PARAMESWARAN RAMKRISHNAN, PhD,** Assistant Professor of Pathology & Biochemistry, CWRU SoM; **Research:** Signal transduction in autoimmunity & immunometabolism in type-1 diabetes & inflammation-induced colon cancer; **T35 Trainees:** Dr. Ramakrishnan was provisional mentor at the request of **Angela Lui** (2019), who investigated the role of NF-κB c-Rel and OGlcNAcylation in autoimmune diabetes, and is now a T35 secondary faculty mentor.

**FLORIAN RIEDER, MD, PhD,** Assistant Professor (Medicine), CCLCM/CWRU SoM; **Research:** Gut Microbiome-induced Intestinal Fibrosis

**ALEXANDER RODRIGUEZ-PALACIOS, PhD, DVM,** Assistant Professor of Medicine (GI & Liver Diseases), CWRU SoM; **Research:** Mouse models of intestinal inflammation

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**TAKUYA SAKAGUCHI, PhD,** Associate Staff, Department of Inflammation & Immunity, Cleveland Clinic LRI; Assistant Professor of Molecular Medicine, CCLCM-CWRU; **Research:** Biliary system formation; nonalcoholic steatohepatitis using a zebrafish model

**JEFFREY SCHELLING, MD,** Professor of Medicine (Nephrology & Hypertension), CWRU SoM; **Research:** Mechanisms of chronic kidney disease in diabetes

**JOHN SEDOR, MD,** Staff Scientist, Department of Inflammation & Immunity, Cleveland Clinic LRI; Professor of Physiology & Biophysics, CWRU SoM; **Research:** Nephropathy susceptibility genes and kidney disease

**JONATHAN STAMLER, MD,** Robert S. and Sylvia K. Reitman Family Foundation Distinguished Chair and Professor of Medicine & Professor of Biochemistry, CWRU SoM; **Research:** S-nitrosylation in renal function

**CARLOS SUBAUSTE, MD, PhD,** Professor of Medicine (Infectious Diseases & HIV Medicine), Ophthalmology & Pathology, CWRU SoM; **Research:** CD40 in immune responses to pathogens; diabetic inflammation; uses transgenic diabetic mouse

**VINAY VARADAN, MD,** Assistant Professor of General Medical Sciences (Oncology), CWRU SoM; **Research:** Integrative analysis of large-scale molecular profiling datasets to identify novel biomarkers & therapeutic targets

**ZHENGHE WANG, PhD,** Dale H. Cowan M.D. & Ruth Goodman Blum Professor of Cancer Research & Professor of Genetics & Genome Sciences, CWRU SoM; **Research:** Metabolic programming in CRC

LAN ZHOU, MD, PhD, Associate Professor of Pathology, CWRU SoM; Research: HES-1 in inflammationinduced CRC