Virtua Health College of Medicine & Life Sciences of Rowan University

Research Opportunities
2026 SMRF Program

Below is a listing of research opportunities that are available for Rowan-Virtua SOM Medical Students who have an interest in submitting applications for approval to participate in the 2026 Summer Medical Research Fellowship Program.

Contact Name/Department	Contact Information	Project Title/Information
Dr. Mohammad Abedin Biomedical Engineering JHSC Camden, Suite 420	Email: abedin@rowan.edu	We are developing Robossis, a surgical robotic system for long bone fracture surgery. Data analysis, cadaver study, workflow development, VR training.
Dr. Nimish Acharya NJISA Stratford, Science Center, A101	Email: acharynk@rowan.edu	Inflammatory changes and cerebrovascular dysfunction are the two most common post-traumatic brain injury (TBI) events responsible for poor prognosis in patients with moderate-severe TBI. Animal experiments run in the Acharya Lab are designed to study the potential beneficial effects of various diets and anti-inflammatory supplements in limiting TBI-induced inflammatory and cerebrovascular changes in patients with moderate-severe TBI.
Dr. Michael Anikin Medical Education & Scholarship; Molecular Biology Stratford, Science Center, Lab A309	Email: anikinmi@rowan.edu	We investigate the molecular mechanisms of mitochondrial RNA metabolism that regulate gene expression in the organelle. Specifically, we study nuclear DNA-encoded protein factors that control the biogenesis of mitochondrial OXPHOS (oxidative phosphorylation) complexes in various yeast species.
Dr. Danielle (Dani) Arigo Psychology Glassboro, Robinson Hall 116 Camden, JHSC 312	Email: arigo@rowan.edu	Women's health, psychological and social influences on health behavior (e.g., social support, social comparison), digital health, integrated healthcare, chronic illness management, pain experiences.
Dr. Valerie Carabetta Biomedical Sciences Camden, Medical Education Building, 570F	Email: carabetta@rowan.edu	The focus of my lab is combatting antibiotic resistance in bacteria. We study highly drug-resistant bacteria and devise new strategies to eliminate them. This includes researching novel combinations of drugs (newly available + standard of care) and the use of bacteriophage as a drug. Additional projects may become available, as we actively collaborate with the Cooper University Hospital ID department.
Dr. Ying Chen Biomedical Engineering Glassboro, Engineering Hall 210	Email: chenyin@rowan.edu	Biomaterials, vascular grafts, cardiac patch, 3d printing, electrospinning.
Dr. Francois Gould Neuroscience Stratford, Science Center A210	Email: gouldf@rowan.edu	Projects in the lab include kinematic analysis of feeding mechanics in two models of PD, as well as analysis of motor patterns, and brain histology. I study the neurological and biomechanical basis of dysphagia (pathological swallowing) in animal models of Parkinson's disease.

Dr. Michael Henry Cell and Molecular Biology Stratford, Science Center Rms 305, 320, and 305	Email: henrymf@rowan.edu	My lab seeks to better understand the causes of mitochondrial disorders. The Baker's yeast model organism is used to study features of mitochondrial genome expression conserved in humans. We also study the yeast pathogen Candida albicans to identify potential targets for anti-fungals.
Dr. Andrea Iannuzzelli RISN Center Sewell	Email: iannuzzelli@rowan.edu	Special Needs Adults (Autism, wellness, lifestyle medicine, preventive care).
Dr. Natarajaseenivasan Kalimuthusamy Neuroscience Stratford, Science Center, B230	Email: kalimuthusamy@rowan.edu	Mitochondria-derived vesicular pathway for selective removal of oxidized cargo during HIV infection and drug abuse. Lipid Metabolism and Mitochondrial Bioenergetics in Neurodegenerative Diseases.
Dr. Archana Kumari Neuroscience Stratford, Science Center, B230	Email: kumari@rowan.edu	Children with tongue dorsum lesions and speech disorders experience significant challenges with eating and speaking. While the developmental changes in tongue are well-documented, the signaling that orchestrates these changes remains under-researched. We are trying to understand Hedgehog signaling regulation of distinct tongue compartments using transgenic mouse models.
Dr. Clare Stephens Department of Pediatrics Stratford, Tanyard Rd.	Email: lipperinc1@rowan.edu	Our department is interested in many areas including but not limited to vaccine hesitancy/refusal, healthy sleep habits, technology usage, etc.
Dr. Jessica Loweth Neuroscience Stratford, Science Center 240	Email: loweth@rowan.edu	Investigating molecular mechanisms mediating increased risk of prescription opioid misuse following traumatic brain injury.
Dr. Vincent Manna Cell and Molecular Biology Stratford, Science Center	Email: mannav6@rowan.edu	Lung cancer and e-cigarette usage; email for more details.
Dr. Daniel Manvich Neuroscience Stratford, Science Center, Room A202	Email: manvich@rowan.edu	We are an addiction neuroscience laboratory. We employ a diverse array of preclinical methodologies (mostly in rodent models) to investigate the behavioral and neuropharmacological effects of drugs of abuse, primarily psychostimulants and opioids.
Dr. Dmitriy Markov Medical Education and Scholarship Stratford, Science Center, A309	Email: markovdm@rowan.edu	Benchwork involving biochemical, molecular biology and genetics methods. Mitochondrial RNA processing in pathogenic yeast.
Dr. Catherine Neary Cell and Molecular Biology Stratford, Science Center, 314	Email: nearycl@rowan.edu	Altered metabolism is a hallmark of cancer cells. This provides an opportunity to exploit these differences to eliminate the cancer cells. My primary project investigates the intersection between metabolic stress and cell death signaling.

Dr. Dimitri Pestov Cell and Molecular Biology Stratford, Science Center B120	Email: pestovdg@rowan.edu	We are an RNA biology lab focused on ribosomes and translation. One major current project is to develop novel ribosomal RNA-based biomarkers to assess pathological changes in scenarios such as hypoxia, ischemia/reperfusion injury, and inflammatory responses.
Dr. Priya Santhanam Cell and Molecular Biology Stratford, Science Center B130	Email: santhanam@rowan.edu	The laboratory works on mitochondrial ion signaling in metabolomic and cardiovascular diseases.
Dr. Aubrey Olson Family Medicine Stratford, Medical Arts Building	Email: troutmam@rowan.edu	Women's health, sports medicine, primary care.

If you have an interest in any of the above projects, please reach out right away to the contact person for that department.

NOTE: The **deadline for application submissions** is **(Monday) February 9, 2026.**
The **2026 SMRF Program Instructions/Guidelines and the Application Cover Page are available at** http://som.rowan.edu/oursom/pipeline/research/smrf.html

If you have any questions, please contact the Rowan-Virtua SOM Research Office at somresearch@rowan.edu.