Virtua Health College of Medicine & Life Sciences of Rowan University

Research Opportunities
2027 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 2027 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	My primary research interests include surgical robotics, medical image processing, computer-assisted surgery, and artificial intelligence in healthcare. My research focuses on developing intelligent robotic and image-guided surgical systems that integrate advanced robotic mechanisms, medical imaging, navigation, and AI-based algorithms to improve surgical precision, safety, and clinical outcomes, particularly in orthopedic surgery.
Dr. Nimish Acharya NJISA Stratford, Science Center, A101	Email: acharynk@rowan.edu	TBI, inflammation & cerebrovascular function.
Dr. Grace Chen Biomedical Engineering Glassboro, Engineering Hall, 210	Email: chenyin@rowan.edu	The Chen Lab develops biodegradable and bioresponsive materials for vascular grafts, cardiac patches, and regenerative medicine. We integrate polymer chemistry, 3D printing, electrowriting, mechanobiology, and in vivo models to design next-generation cardiovascular therapies.
Dr. Renee Demarest Cell and Molecular Biology Science Center 314	Email: demarest@rowan.edu	Histopathology & translational animal models.
Dr. Steve Garwood Medical Education & Research Stratford, Academic Center, Rm. 219	Email: garwoods@rowan.edu	Providing Peer Feedback with the Situation-Behavior-Impact (SBI) Model. This research focuses on the critical skill of peer feedback. At RVSOM, we've been providing instruction on this process since 2023 and via our research have developed multiple tools and approaches to improve effectiveness of the instructional session and peer feedback provided by students.
Dr. Francois Gould Neuroscience Stratford, Science Center A210	Email: gouldf@rowan.edu	Swallowing dysfunction & aspiration.

Dr. James Grinias Chemistry and Biochemistry Glassboro, Science Hall 322	Email: grinias@rowan.edu	In this project, students will learn how to effectively analyte complex biological and clinical samples using liquid chromatography and mass spectrometry. Specific focus will be on the use of miniaturized/portable instrumentation to measure targeted analytes in samples like urine and plasma.
Dr. Michael Henry Cell and Molecular Biology Science Center 320	Email: henrymf@rowan.edu	Mitochondrial disorders & antifungals.
Dr. Natarajaseenivasan Kalimuthusamy Neuroscience Stratford, Science Center, B 206	Email: kalimuthusamy@rowan.edu	My research focuses on understanding mitochondrial dysfunction, calcium and iron dyshomeostasis, and redox signaling in neurodegenerative diseases, particularly in the context of HIV-associated neurocognitive disorders and substance abuse.
Dr. Zachary Klase Cell and Molecular Biology Science Center 120	Email: klase@rowan.edu	Substance use, HIV & inflammation.
Dr. Jessica Loweth Neuroscience Stratford, Science Center 240	Email: loweth@rowan.edu	TBI, opioid vulnerability & substance use disorders.
Dr. Vincent Manna Cell and Molecular Biology Stratford, Science Center	Email: mannav6@rowan.edu	Lung tumor formation & tumor/stroma crosstalk.
Dr. Dmitriy Markov Cell and Molecular Biology Stratford, Science Center 305	Email: markovdm@rowan.edu	Biochemistry and molecular biology of post-translational regulation of mitochondrial gene expression in pathogenic and other budding yeast.
Dr. Rachel Navarra Neuroscience Stratford, Science Center, 227	Email: navarra@rowan.edu	Behavioral pharmacology, traumatic brain injury, histology, etc.
Dr. Shanmughapriya Santhanam Cell and Molecular Biology Science Center B130	Email: santhanam@rowan.edu	Understand how mitochondrial cation signaling maintain ion homeostasis and myocyte health.
Dr. Clare Stephens Pediatrics 1474 Tanyard Road, Sewell	Email: lipperinc1@rowan.edu	Vaccinations/vision screening/developmental delay. Happy to discuss potential projects with students on topics that align with outpatient pediatrics - looking this year specifically for students who have ideas on vaccination rates, routine pediatric screening, or mental health issues.
Dr. Kinsley Yin Cell and Molecular Biology Science Center B220	Email: yinki@rowan.edu	Sepsis-induced immunosuppression & SPMs.

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) January 18, 2027.**
The **2027 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.