

## Rowan-Virtua School of Osteopathic Medicine Research Strategic Plan

Rowan-Virtua School of Osteopathic Medicine has developed a Strategic Framework for fiscal years 2025-2029 that guides academic, clinical, and scholarly activities and advances our mission “to prepare future physicians and scientists who are committed to improving health in New Jersey and throughout the nation.” Rowan-Virtua School of Osteopathic Medicine’s mission includes four guiding principles that describe how we educate future osteopathic physicians, conduct research, and provide patient care. Among the four principals, the third principle, “to advance research, innovation, and discovery to improve health and solve the medical challenges of today and the future,” embodies the research and scholarly mission at Rowan-Virtua School of Osteopathic Medicine.

MISSION
Rowan-Virtua School of Osteopathic Medicine prepares future physicians and scientists who are committed to improving health in New Jersey and throughout the nation. To advance our mission we:
<ul style="list-style-type: none"><li>• Develop clinically skillful, compassionate, and culturally competent physicians from diverse backgrounds who are grounded in our osteopathic philosophy and ready to meet future healthcare workforce needs</li><li>• Recruit exceptional students from New Jersey, the nation and across the globe.</li><li>• Advance research, innovation, and discovery to improve health and solve the medical challenges of today and the future</li><li>• Provide exceptional patient-centered care, with an emphasis on primary and inter-professional team-based care that responds to the needs of the community.</li></ul>

The Framework was developed by a team led by the Dean of Rowan-Virtua School of Osteopathic Medicine and diverse faculty and administrative leaders from the basic sciences and clinical departments. A strategic planning retreat was held on November 22, 2024 to ensure that all members had an opportunity to provide input into planning. **Goals** were developed for each of the four guiding principles. **Objectives** for each of the goals were created, and timelines to achieve each goal was established.

Three research and scholarly activity **Objectives** were identified through the planning process: **1)** mentor and train scientists who will contribute new knowledge to the biomedical sciences, with a focus on translational cell and molecular biology, neuroscience and osteopathic principles; **2)** serve as the premier center for biomedical, clinical and educational research in South Jersey; and **3)** enhance and support a culture of curiosity and inquiry throughout Rowan-Virtua School of Osteopathic Medicine and the Rowan-Virtua Translational Biomedical Engineering & Sciences. Measurable objectives for each of the goals have been developed; regular meetings will be held to review progress and develop action plans to ensure the objectives are achieved.

RESEARCH AND SCHOLARLY ACTIVITY OBJECTIVES
<b>Advance research, innovation, and discovery to improve health and solve the medical challenges of today and the future. (From Mission)</b>
<b>Objective 1</b> - Mentor and train scientists who will contribute new knowledge to the biomedical sciences, with a focus on translational cell and molecular biology, neuroscience, and osteopathic principles, through creative and collaborative research and scholarship.
<b>Objective 2</b> - Serve as the premier center for biomedical, clinical, and educational research in South Jersey
<b>Objective 3</b> - Enhance and support a culture of curiosity and inquiry throughout Rowan-Virtua School of Osteopathic Medicine and Rowan-Virtua Translational Biomedical Engineering & Sciences.

Rowan-Virtua School of Osteopathic Medicine houses the Science Center with approximately 50-60 basic science faculty members that conduct biomedical research and teach in both the osteopathic medical school curriculum and in graduate degree programs offered by Rowan-Virtua Translational Biomedical Engineering & Sciences. Rowan-Virtua Translational Biomedical Engineering & Sciences offers doctoral, masters-level and certificate programs in cell and molecular biology, histopathology, neuroscience, and general biomedical sciences, translational orthopedic device engineering including a DO/PhD program: <https://sites.rowan.edu/tbes>. The Science Center is a 95,000 square foot building that houses state-of-the-art research facilities. The building is located on the Rowan-Virtua School of Osteopathic Medicine main campus adjacent to the Academic Center, where students attend medical school classes. Because faculty from Rowan-Virtua Translational Biomedical Engineering & Sciences conduct externally funded research that provides research opportunities in their laboratories for osteopathic medical students, maintaining the infrastructure of the Science Center and Rowan-Virtua Translational Biomedical Engineering & Sciences is a key priority of Rowan-Virtua School of Osteopathic Medicine's Strategic Plan for Research.

High-quality students at the doctoral and master's levels are essential for performing research and maintaining active research labs within Rowan-Virtua School of Osteopathic Medicine and Rowan-Virtua Translational Biomedical Engineering & Sciences, where medical students can participate in research. At the same time, students enrolled in non-thesis Master's and Certificate Programs enhance the biomedical workforce in New Jersey *and* generate revenue that can support student and faculty research, help sustain research programming, and further enhance the availability of research opportunities for medical students. As a result, training scientists who will contribute new knowledge to biomedical sciences is **Objective 1** of Rowan-Virtua School of Osteopathic Medicine's Strategic Framework for Research. Ongoing initiatives have included revising the Rowan-Virtua School of Osteopathic Medicine and Rowan-Virtua Translational Biomedical Engineering & Sciences web pages to highlight faculty research to attract students interested in research, developing an online application portal to make it easier for students to apply to Rowan-Virtua Translational Biomedical Engineering & Sciences programs, developing new programs (e.g., Translational Innovation and Commercialization in Medicine, AI in Medicine, Cytopathology, Orthopedic Device Science), and other initiatives. Currently, there are 57 PhD students enrolled in Rowan-Virtua Translational Biomedical Engineering & Sciences /Translational Biomedical Graduate Studies and 119 students enrolled in our master's and certificate programs.

Efforts to build Rowan-Virtua School of Osteopathic Medicine into a premier center for biomedical, clinical, and educational research in southern New Jersey (**Objective 2**) has met with considerable success. Three key objectives were identified to enhance Rowan-Virtua School of Osteopathic Medicine's health impact on the community, including increasing externally funded research support, recruiting, hiring, and retaining faculty researchers committed to Rowan-Virtua School of Osteopathic Medicine's mission, and highlighting our achievements to demonstrate Rowan-Virtua School of Osteopathic Medicine's health impact among residents of New Jersey.

Recognizing the need to further expand federal funding to clinical faculty, Rowan-Virtua School of Osteopathic Medicine hired grant writing staff and a Director of Grant Acquisitions to promote project development and facilitate proposal development among the clinical faculty with a focus on population health and education and training. Federal, State, and Foundation funding for projects involving training grants, community service, opioid addiction, special needs population and pathways to primary care have increased significantly in the past several years. New initiatives to promote interdisciplinary collaborations and translational research were also developed. An interdisciplinary pain biomarker program funded by the American Osteopathic Association was developed with a vision of future studies on how OMM impacts pain biomarker levels.

Enhancing and supporting a culture of curiosity and inquiry throughout Rowan-Virtua School of Osteopathic Medicine and Rowan-Virtua Translational Biomedical Engineering & Sciences, especially among Rowan-Virtua School of Osteopathic Medicine medical students, is **Objective 3** of Rowan-Virtua School of Osteopathic Medicine's Strategic Framework for research. Key achievements include the hiring of a Director of Medical Scholarship who has developed an outstanding Medical Scholarship Curriculum. Currently, all medical students follow the curriculum throughout all four years of medical school. Increased opportunities for research among students have been realized through expansion of externally funded research stipends and increased numbers of mentors through the Summer Medical Research Fellowship (SMRF) program funded through the New Jersey Health Foundation, a new HRSA-funded summer Clinical Research, Education, and Training Experiences (CREATE) program and a HRSA, Pathways to Primary Care grant program. In the summer of 2025, over 70 medical students were enrolled in these research programs.

<https://School of Osteopathic Medicine.rowan.edu/documents/rowan-School of Osteopathic Medicine-strategic-research-framework.pdf>

Rowan-Virtua School of Osteopathic Medicine operates multiple centers and institutes, which provide a bridge where students and faculty can participate in health disparities research to ensure that we produce culturally competent researchers. The Rowan-Virtua Health Equity Institute is dedicated to identifying and eliminating barriers to health care and transforming the everyday delivery of primary care. Researchers are working on developing innovative mobile units for bringing health care to people in the community who do not engage in traditional access points to help address addiction, overdose, sexual health, suicide prevention, food insecurity, and chronic diseases. The Child Abuse Research and Education Services (CARES)

Institute performs research to advance the care to children with histories of trauma, abuse, and neglect. The New Jersey Institute for Successful Aging provides education, research, and care to people who are aging, including innovative research for the early diagnosis and treatment of Alzheimer's disease. Research is being conducted by the Neuromusculoskeletal Institute to develop innovative ways to improve the quality of life in patients with acute and chronic pain, individuals with pain and substance use disorders, and people with neuromusculoskeletal disorders. The Regional Integrated Special Needs (RISN) Center is leading research efforts to address the complex medical needs of people with developmental disabilities, who experience significant health disparities.

Rowan-Virtua School of Osteopathic Medicine holds annual strategic planning meetings where progress and challenges in meeting goals and objectives are discussed. Action plans are developed to address gaps in meeting research objectives. Reports are generated weekly on current grant funding, and monthly reports are sent to the Dean on new clinical and basic sciences research projects being developed and submitted for funding.

**\*This strategic plan applies to both the main campus of Rowan-Virtua School of Osteopathic Medicine, located in Stratford, New Jersey, and Rowan-Virtua School of Osteopathic Medicine's satellite campus, located in Sewell, New Jersey.**

## RESEARCH STRATEGIC FRAMEWORK ACTION PLAN

**GOAL: Advance research, innovation, and discovery to improve health and solve the medical challenges of today and the future**

**OBJECTIVE:** Develop and train scientists who will contribute new knowledge to the biomedical sciences, with a focus on translational cell & molecular biology, neuroscience, and osteopathic principles, through creative and collaborative research and scholarship.

**OUTCOME:** Increase the quality and quantity of the applicant pool to the Translational Biomedical Graduate Studies program in the Rowan-Virtua School of Translational Biomedical Engineering & Sciences (Rowan-Virtua Biomedical Engineering & Sciences) and Rowan-Virtua School of Osteopathic Medical (Rowan-Virtua School of Osteopathic Medicine) both from New Jersey and nation-wide.

### 12 MONTH ACTION ITEMS

ACTION ITEM 1: Simplify the application process and offer increased administrative support					
LEAD	START	END	RESOURCES	METRIC / DEFINITION OF SUCCESS	STATUS
	7/25	9/26	-Slate enrollment services - Rowan-Virtua Biomedical Engineering & Sciences administrative offices	-fewer incomplete, abandoned applications -decreased requests to assist with application process -increased number of completed applications	On track
NOTES:	We have simplified the application process and continue to improve the process as new data becomes available Rowan-Virtua Translational Biomedical Engineering & Sciences and Rowan-Virtua School of Osteopathic Medicine				

  

ACTION ITEM 2: Increase web-traffic and Google search visibility for graduate studies					
LEAD	START	END	RESOURCES	METRIC / DEFINITION OF SUCCESS	STATUS
	7/25	9/26	-Rowan University Marketing -Student input for features - Rowan-Virtua Biomedical Engineering & Sciences program directors and other leadership	-monthly or bi-monthly highlight of biomedical graduate student researcher -increased web-traffic on the Rowan-Virtua Biomedical Engineering & Sciences webpage	On track
NOTES:	We have re-vamped our website with assistance from TBES administration, marketing, and IRT. The new and improved website features rolling highlights of outstanding collaborative clinical and basic translational biomedical research. RV-TBES and Rowan-Virtua School of Osteopathic Medicine				

<b>ACTION ITEM 3:</b> Enhance recruitment, outreach, and marketing for our graduate and dual degree programs					
LEAD	START	END	RESOURCES	METRIC / DEFINITION OF SUCCESS	STATUS
	7/25	9/26	Translational Biomedical Engineering & Sciences Program Admissions and Recruitment committees will develop program specific recruitment & marketing strategies	-increase the number of first year matriculated students by 10-15% for Fall 2026 -increase the number of students seeking dual degree options	On track
NOTES:	Additional recruiting events planned; recruiting and admissions interview visits for applicant finalists in the Rowan-Virtua Translational Biomedical Engineering & Sciences, Translational Biomedical Graduate Studies program have been restructured to offer the applicants a more positive and interactive experience with current students, faculty, and the admissions committee.				

<b>ACTION ITEM 4:</b> Launch new Master's and Certificate Programs including 1) Translational Innovation and Commercialization in Medicine, 2) AI in Medicine, 3) Cytopathology, and 4) Orthopedic Device Sciences					
LEAD	START	END	RESOURCES	METRIC / DEFINITION OF SUCCESS	STATUS
	7/25	9/26	-Recruitment & marketing strategies -Survey tools to gauge interest and format of new offerings -Student input for new certificate and degree programs	-student enrollment in the new programs -obtain positive student feedback -faculty engagement and interest	On track
NOTES:	We continue to meet the evolving needs of the medical and biomedical research landscape by implementing new degree offerings in line with future gaps in workforce expertise.				

**GOAL: Advance research, innovation, and discovery to improve health and solve the medical challenges of today and the future**

**OBJECTIVE:** Serve as the premier center for biomedical, clinical, and educational research in South Jersey.

**OUTCOME:** Secure \$35 million annual awards in research grants / sponsored projects.

#### 12 MONTH ACTION ITEMS

<b>ACTION ITEM 1:</b> Submit an increased numbers of extramural grant applications and contracts					
LEAD	START	END	RESOURCES	METRIC / DEFINITION OF SUCCESS	STATUS
	7/25	7/26	Requires continued and expanded support from the Pre & Post-award Office of Sponsored Projects	Volume and value numbers are 10-15% higher than June 30, 2025.	On track
NOTES:					

<b>ACTION ITEM 2:</b> Secure increased extramural grants and contracts					
LEAD	START	END	RESOURCES	METRIC / DEFINITION OF SUCCESS	STATUS
	7/25	7/26	Requires continued and expanded support from the Pre & Post-award Office of Sponsored Projects	Dollar amount of extramural grants and contracts secured is 10-15% greater than the amount of June 30, 2025.	On track
NOTES:					

**GOAL: Advance research, innovation, and discovery to improve health and solve the medical challenges of today and the future**

**OBJECTIVE:** Serve as the premier center for biomedical, clinical, and educational research in South Jersey.

**OUTCOME:** Recruit, support and retain funded researchers committed to our mission and to the growth of the research enterprise.

#### 12 MONTH ACTION ITEMS

<b>ACTION ITEM 1:</b> Recruit one (1) funded research faculty member in the Department of Neuroscience					
LEAD	START	END	RESOURCES	METRIC / DEFINITION OF SUCCESS	STATUS
	7/25	12/26	Faculty Affairs, Human Resources, Dean's Office, CFO	Faculty members on board and grants transferred and active at Rowan University by Fall 2026.	On track
NOTES:					

<b>ACTION ITEM 2:</b> Recruit one (1) funded faculty clinical/translational researcher for joint appointment between clinical and basic science departments					
LEAD	START	END	RESOURCES	METRIC / DEFINITION OF SUCCESS	STATUS
	7/25	6/26	Faculty Affairs, Human Resources, Dean's Office, CFO	Hired by July 2026.	On track
NOTES:					

<b>ACTION ITEM 3:</b> Recruit one (1) funded research faculty member in the Department of Cell & Molecular Biology					
LEAD	START	END	RESOURCES	METRIC / DEFINITION OF SUCCESS	STATUS
	7/25	12/26	Faculty Affairs, Human Resources, Dean's Office, CFO	Faculty member on board and grants transferred and active at Rowan University by Fall 2026.	On track
NOTES:					



**GOAL: Advance research, innovation, and discovery to improve health and solve the medical challenges of today and the future**

**OBJECTIVE:** Serve as the premier center for biomedical, clinical, and educational research in South Jersey.

**OUTCOME:** Demonstrate the impact of Rowan Research on health outcomes and quality of life in New Jersey

**12 MONTH ACTION ITEMS**

<b>ACTION ITEM 1:</b> Feature at least one research story per quarter in local print, news, or on-line media					
LEAD	START	END	RESOURCES	METRIC / DEFINITION OF SUCCESS	STATUS
	7/25	6/26	Rowan University Marketing Department Faculty and Students	-Four research features will appear in news media during the evaluation period	On track
NOTES:	We have worked and continue working with marketing to identify news worthy events within Rowan-Virtua School of Osteopathic Medicine				

**GOAL: Advance research, innovation, and discovery to improve health and solve the medical challenges of today and the future**

**OBJECTIVE:** Enhance and support a culture of curiosity and inquiry throughout Rowan-Virtua School of Osteopathic Medicine and Rowan-Virtua Translational Biomedical Engineering & Sciences

**OUTCOME:** Develop and implement a research course for all Rowan-Virtua School of Osteopathic Medicine medical students and increase opportunities for student research

**12 MONTH ACTION ITEMS**

<b>ACTION ITEM 1:</b> Sustain Medical Scholarship curriculum and improve research readiness as more of our students participate in clinical and translational research					
LEAD	START	END	RESOURCES	METRIC / DEFINITION OF SUCCESS	STATUS
	7/25	6/26	Clinical and Basic Science Faculty, Administration	-Improved student performance in research endeavors -Increased scholarly contributions to scientific understanding of human disease and wellness	On track
NOTES:	We have streamlined curriculum to align with cutting edge innovations in biomedical and clinical research				

<b>ACTION ITEM 2:</b> Expand the number of summer medical research fellowship (SMRF) stipends and mentors					
LEAD	START	END	RESOURCES	METRIC / DEFINITION OF SUCCESS	STATUS
	7/25	6/26	Rowan-Virtua School of Osteopathic Medicine, donors, New Jersey Health Foundation, HCOP grant, HRSA grant	Increase the number of stipends and mentors by 20%.	On track
NOTES:	We have made significant progress simplifying the mentor-mentee “matching” process. We have also added several discipline-specific research opportunities for our medical students. Programmatically, our process is evolving to meet the needs of the increased number of medical students participating in research				

**GOAL: Advance research, innovation, and discovery to improve health and solve the medical challenges of today and the future.**

**OBJECTIVE:** Enhance and support a culture of curiosity and inquiry throughout Rowan-Virtua School of Osteopathic Medicine and Rowan-Virtua Translational Biomedical Engineering & Sciences.

**OUTCOME:** Increase faculty engagement in research, scholarly activity, and mentorship.

#### 12 MONTH ACTION ITEMS

<b>ACTION ITEM 1:</b> Include research productivity, scholarly activity, teaching and mentorship as important considerations in faculty evaluations and recommendations for promotion.					
LEAD	START	END	RESOURCES	METRIC / DEFINITION OF SUCCESS	STATUS
	7/25	12/26	Revise Faculty evaluations to include expectations for productivity, scholarly activity, and mentorship.	-Revised faculty evaluation form -increased faculty engagement in these three focus areas	On track
NOTES:					

**GOAL: Advance research, innovation, and discovery to improve health and solve the medical challenges of today and the future**

**OBJECTIVE:** Enhance and support a culture of curiosity and inquiry throughout Rowan-Virtua School of Osteopathic Medicine and Rowan-Virtua Translational Biomedical Engineering & Sciences

**OUTCOME:** Promote interdisciplinary and collaborative research by enhancing relationships with other Rowan Colleges and campuses.

**12 MONTH ACTION ITEMS**

<b>ACTION ITEM 1:</b> Increase faculty involvement in program to fund PhD students working on projects involving more than one Rowan University College.					
LEAD	START	END	RESOURCES	METRIC / DEFINITION OF SUCCESS	STATUS
	7/25	6/26	Doctoral student funding opportunity for research involving more than one college	-increased numbers of collaborations among schools and colleges with student co-mentors across different disciplines	On track
NOTES:					

<b>ACTION ITEM 3:</b> Collaborate with the Virtua Health and the University to stand-up Orthopedics and Regenerative Medicine Institutes					
LEAD	START	END	RESOURCES	METRIC / DEFINITION OF SUCCESS	STATUS
	7/25	12/26	Rowan-Virtua School of Osteopathic Medicine and Rowan-Virtua Translational Biomedical Engineering & Sciences Administration New faculty lines (see above) Virtua Health College planning team Facilities and IRT	-meeting milestones for phased approach to secure critical mass of faculty with expertise in these translational research areas.	On track
NOTES:	We have identified numerous faculty experts within these areas of research and built multi-disciplinary teams among numerous schools and colleges				

BLUE	GREEN	YELLOW	RED
Completed	On track	Off track, but plan exists to get back to green	Significantly off track / corrective action needed

