This program is supported as an NSF & NIH Research Site: NSF Grant #1950281 and NIH R25-LM014214.

Winston Salem's Innovation Quarter is home to the Department of Biomedical Engineering, located in Biotech Place, the Center for Artificial Intelligence Research, located in Bailey Power Plant, and the Wake Forest Institute for Regenerative Medicine (WFIRM), located in the Richard H. Dean Biomedical Research Building.

Questions?

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2025 Wake Forest School of Medicine Summer Research Internship Program for Undergraduate & Master's Students

Hosted by Department of Biomedical Engineering and Center for Artificial Intelligence Research

May 26th, 2025 – August 1st, 2025

Program Co-Directors:

Metin Gurcan, PhD

Director, Center for Artificial Intelligence Research

Arezoo Movaghar, PhD

Assistant Professor, Center for Artificial Intelligence Research

Ryan McGinnis, PhD

Associate Professor, Dept. of Biomedical Engineering

Ashley Weaver, PhD

Associate Professor, Dept. of Biomedical Engineering



Visit our <u>website</u> for more information & access the 2025 application starting mid-October!

Application OPENS: October 23rd, 2024 Application Deadline: January 24th, 2025





The Department of Biomedical Engineering (BME) and Center for Artificial Intelligence Research (CAIR) at Wake Forest University School of Medicine will offer several summer research opportunities in 2025 focusing on Imaging and Mechanics-based Projects on Accidental Cases of Trauma (IMPACT) and Culturally Augmented Learning In Biomedical Informatics Research (CALIBIR).

The Summer Research Internship program is a **10-week program** focused on multidisciplinary BME and informatics-based research. Exciting projects are offered on topics including, but not limited to:

- Injury prediction modeling
- Finite element modeling applied to trauma
- Military, sports, and spaceflight safety
- Osteoporosis prevention
- Biomechanical injury mechanisms
- Diagnostics and therapies for cancer patients
- Medical device testing and prototyping
- Biomedical informatics and data science
- Machine learning and artificial intelligence
- Informatics for aging research
- Medical imaging and analysis
- Academic Learning Health Care Systems

Visit our website to view all research projects offered for summer of 2025.

All students participating in the program will carry out research under the supervision of prominent BME and CAIR research faculty, write a research abstract, present their work, and have additional opportunities to see their work published. Our program provides hands-on research experiences for undergraduate and master's students from across the country. Participants engage in boot camps, seminars, trainings, social events, and networking opportunities.

Students admitted into the program will receive an **internship stipend** for their participation **and on-campus housing** for non-local students.

The program is highly competitive! Applicants should be either an **undergraduate or master's student** actively enrolled and pursuing a degree in engineering, mechanics, bioengineering, biotechnology, informatics, chemistry, computer science, mathematics, biology, premedicine, or other STEM related fields to be eligible.

A cumulative GPA of 3.0 or higher (on the 4.0 scale) is required for consideration. Students *must* be at least 18 years of age by the first day of the program (May 26th, 2025) to be eligible.

Students must have completed at least <u>two</u> semesters of undergraduate or master's graduate education. Those who graduate from their academic institution *before* the start of the program are *ineligible* for participation.

International students who currently have a J-1 or F-1 visa and who are already attending school in the United States are eligible to apply. There are a limited number of spots for international students due to grant eligibility.

We are committed to providing research opportunities to all students, with a special interest in applications from students attending colleges with limited research opportunities in science, technology, engineering, and mathematics (STEM). First-generation college attendees, community college, and local North Carolina/Winston-Salem college students are also encouraged to apply.

The main criteria for the selection of summer interns will be based on experience, academic excellence, and the match of applicant interests with those of participating faculty researchers. In addition to the completed online application, applicants must submit:

- 1-page personal statement
- Resume/CV
- Academic transcript(s) unofficial or official accepted
- One academic/professional reference
 - Personal references (including family members) are NOT accepted.