This program is supported by
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?

Email us at bme-reu@wakehealth.edu or calibir@wakehealth.edu
Contact us by phone at 336.716.2507

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2024 Wake Forest School of Medicine Biomedical Engineering & Informatics Summer Research Internship Program

May 27th, 2024 – August 2nd, 2024

NSF and NIH Research Site

Ashley Weaver, PhD
Associate Professor, Dept. of BME
Co-PI of NSF REU & NIH R25

Ryan McGinnis, PhD
Associate Professor, Dept. of BME
Co-PI of NSF REU

Metin Gurcan, PhD
Director, Center for Artificial Intelligence, Co-PI of NIH R25

APPLY ONLINE!

Redcap.link/WakeSummer24

Application Deadline: January 26, 2024

Atrium Health Wake Forest Baptist

The Biomedical Engineering (BME) Department and Center for Artificial Intelligence Research at Wake Forest University School of Medicine will offer several summer research opportunities in 2024 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
- Imaging and artificial intelligence
- Development and use of machine learning based algorithms
- Academic Learning Health Care Systems

All students participating in the program will carry out research under the supervision of prominent BME and Informatics research faculty, write a research abstract, present their work, and have additional opportunities to see their work published.

Students admitted into the program will receive a **$5,500 internship payment *(pre-tax)*** for their participation **and on-campus housing** for non-local students.

The program is competitive. Applicants should be undergraduates pursuing degrees in engineering, mechanics, bioengineering, biotechnology, informatics, chemistry, computer science, mathematics, biology, pre-medicine, and related fields to be eligible and must have a cumulative GPA of 3.0 or higher (on the 4.0 scale).

Students must have completed at least two semesters of undergraduate education and be at least 18 years of age by the first day of the program (May 27th, 2024). 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.

This opportunity is also available to **master's level graduate students** who have an interest in **Biomedical Informatics** research. Please contact **calibir@wakehealth.edu for more information.**

This intensive summer research experience provides mentoring and research experiences focusing on Biomedical Engineering and Informatics research. 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 Winston-Salem college students are also encouraged to apply.

The main criteria for the selection of summer scholars will be personal scholarship and academic excellence and the match of applicant interests with those of participating researchers. In addition to the completed online application and 1-page personal statements, please submit the following documentation: A complete transcript of your undergraduate study to date, and one letter of recommendation; this may be requested from professors related to your major, an advisor, and/or department chair. Personal references (including family members) are NOT accepted.