

# BIOMEDICAL ENGINEERING

## Biomedical engineers do their work where technology and biology meet.

They improve quality of life by developing innovative technologies to diagnose and treat illnesses and by expanding the boundaries of what living organisms can do. In addition to preparing you for careers from research and development to patient care, biomedical engineering provides an ideal foundation for medical school or law school, especially in areas such as patent law.



**"I hope my work will allow individuals with disabilities to seamlessly connect and interact with the digital world around them."**

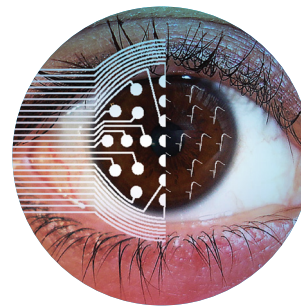
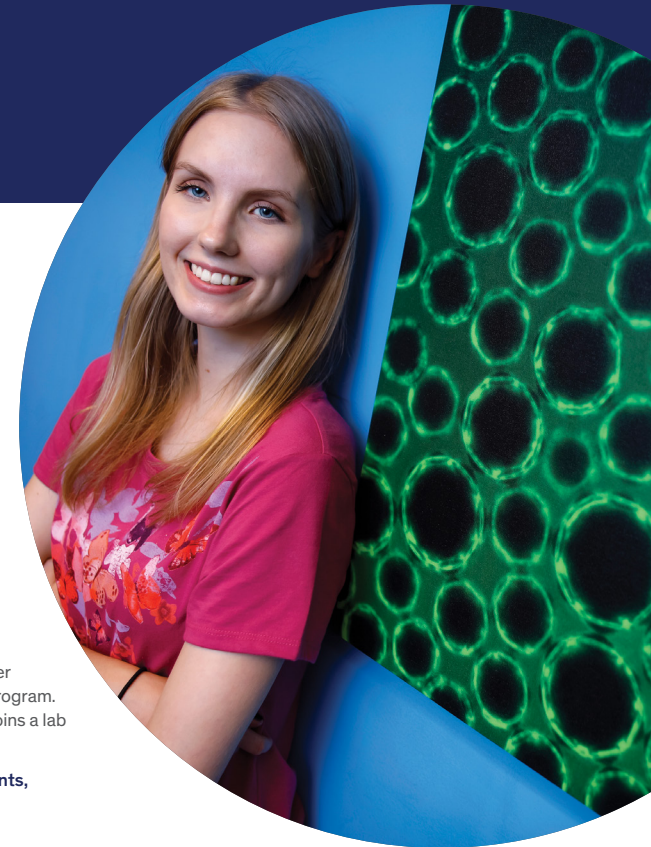
**Nicholas Marjanovic**, Biomedical engineering '21  
Chief Technology Officer, HidelT Wearables

**Not every contributing author to the academic journal *Micromachines* is an undergraduate student. Amanda Bogseth is.**

As a junior in biomedical engineering, Amanda conducted research that was valuable enough for publication. She studied microfluidic devices, which can have critical implications for medical diagnostics, tissue engineering, drug discovery, and drug delivery. She conducted the research with one of her professors, Richard and Loan Hill Professor Ian Papautsky, PhD, and Jian Zhou, a postdoctoral researcher.

Amanda got her first chance at research a few years earlier through UIC Engineering's Guaranteed Paid Internship Program. "I would recommend that anyone interested in research joins a lab as an undergrad," she said.

Visit [bme.uic.edu](https://bme.uic.edu) to learn more about major requirements, courses, and internships.



### CREATIVITY IN ACTION

For our annual senior design showcase, the UIC Engineering Expo, biomedical engineering students have:

- ▶ Created an automated slicing device to help pathologists study samples from prostate surgeries.
- ▶ Designed and built a device to help image mice to support clinical trial research.
- ▶ Developed an oral brush to help researchers complete genomic analysis.
- ▶ Created a reliable container for a stormwater purification system.

**With a biomedical engineering degree, you might:**



Create next-generation prosthetics and wearable devices




Engineer organs to increase the availability of transplants

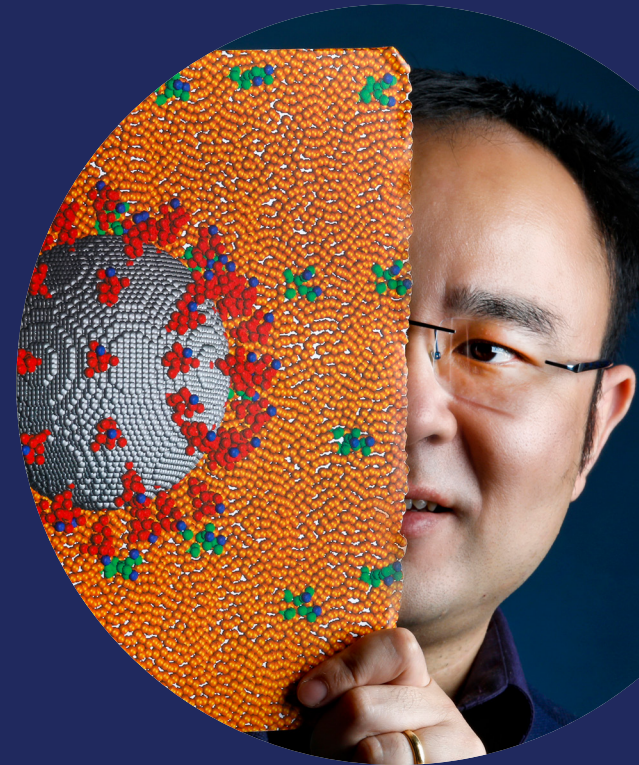
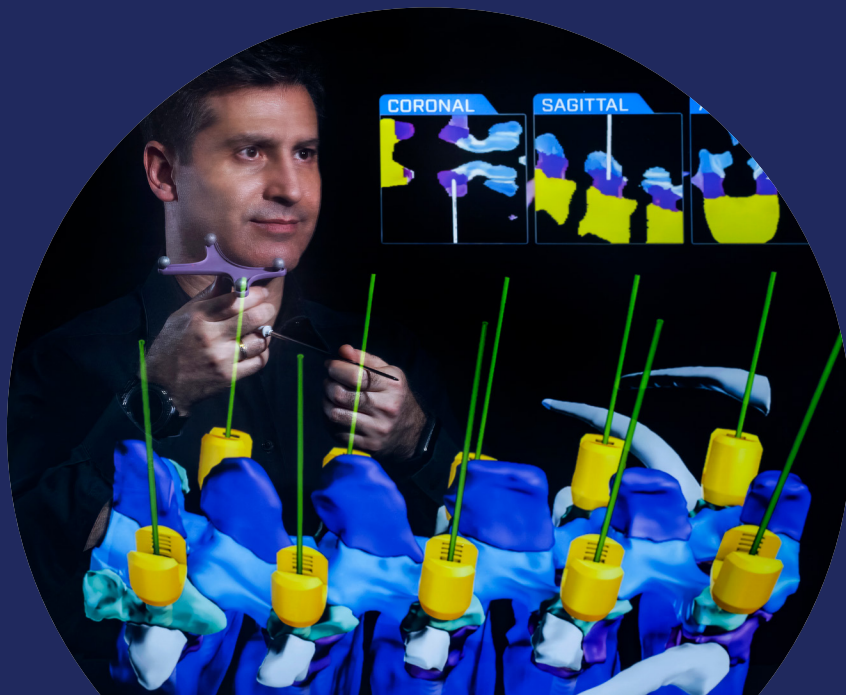


Resolve the problem of antibiotic-resistant bacteria





# Chicago is where you will rise.



**Biomedical Engineering**

[bme.uic.edu](http://bme.uic.edu)



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