

# 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.”**

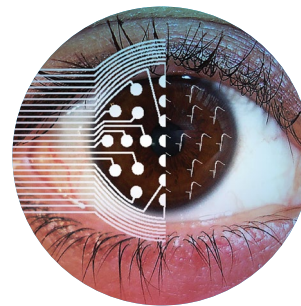
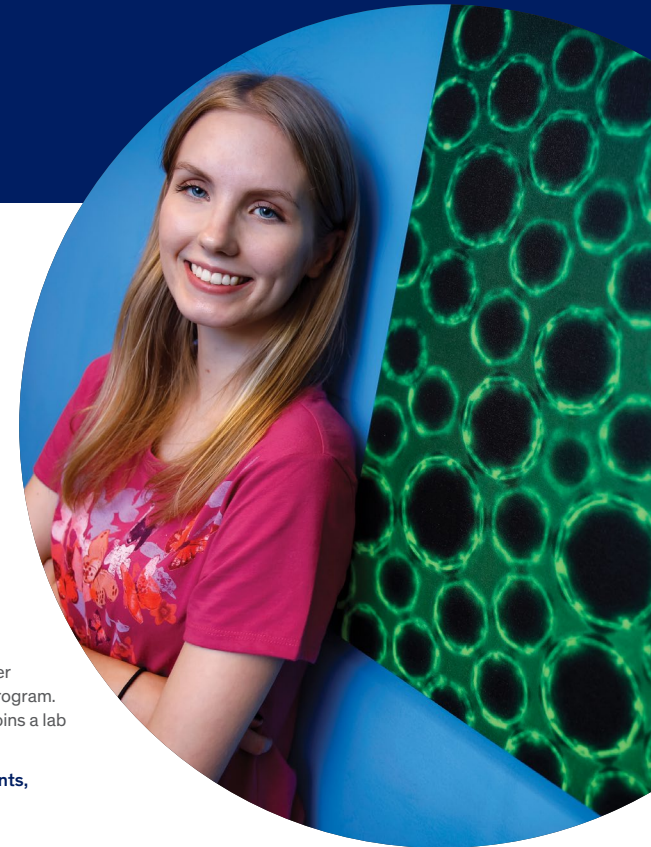
**Nicholas Marjanovic**, Biomedical engineering '15  
Chief Technology Officer, HidelT Wearables

### 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](http://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:

- ▶ A three-layer contact lens that delivers medicine for glaucoma and other eye diseases
- ▶ Devices to improve eye surgery and laparoscopic arm surgery
- ▶ "Smart tape" that monitors athletes' joints and provides feedback to prevent injury
- ▶ An app to test water for manganese, which can cause neurological disorders if present at elevated levels

With a biomedical engineering degree, you might:



Create next-generation prosthetics and wearable devices



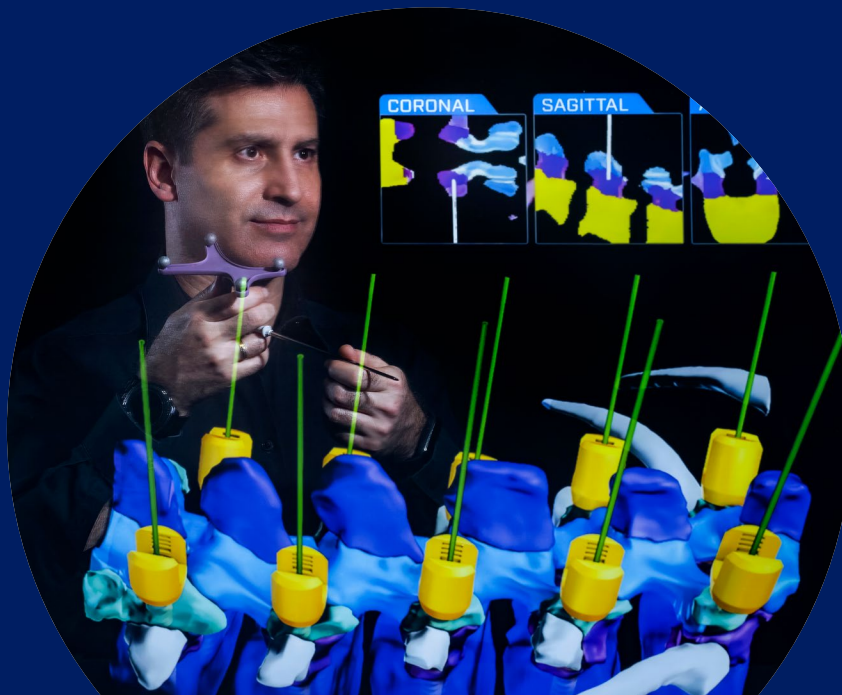
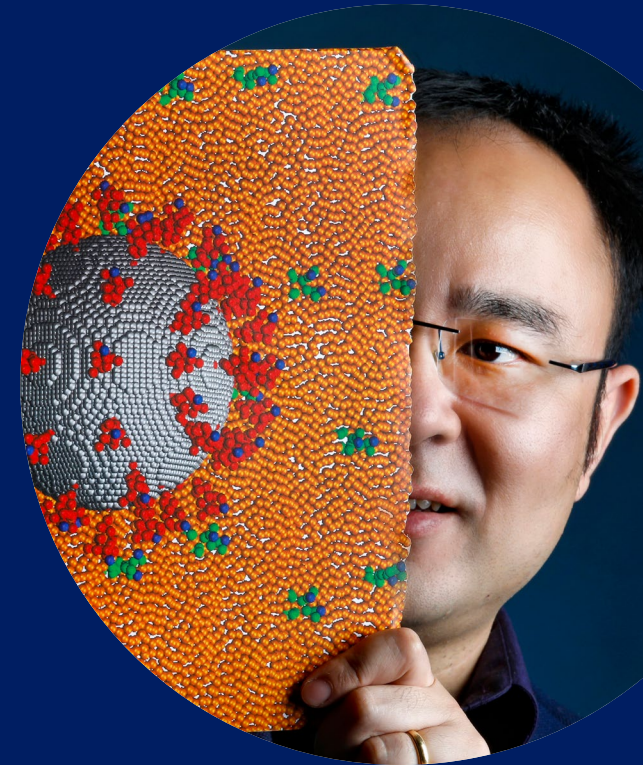
Engineer organs to increase the availability of transplants



Resolve the problem of antibiotic-resistant bacteria



Chicago is  
where you  
will rise.



**Biomedical Engineering**

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