

Biomedical Engineering

News, research and stories from Biomedical Engineering at WashU

March 2025

Dear Colleagues,

As we emerge from winter into a new season, this newsletter celebrates individual contributions from our WashU BME faculty, trainees and alumni that lead our biomedical engineering community. Indeed, our success as innovators and change-makers and as providers of a highly valued education arise from our collaborative community of students, postdoctoral researchers and engaged faculty and staff committed to advancing the human condition.

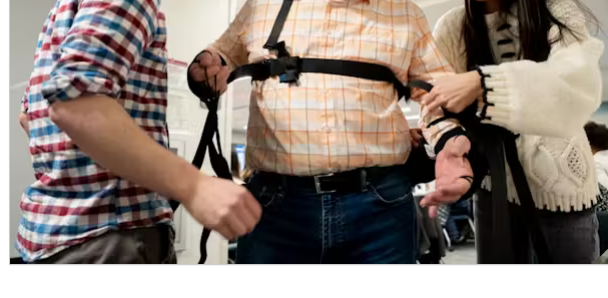


Spring at WashU

Read on for stories celebrating research advances in materials science and in strategies to diagnose and treat dementia, both powerful illustrations of how we are driven to improve lives through investment in research.

Lori A. Setton
Professor and Chair

Stories that matter



[Students invent new adaptive tech during 10-day Make-a-Thon blitz](#)

This year's Make-a-Thon yielded eight projects.

[Teacher researchers partner with WashU faculty to ignite curiosity in students](#)

Program provides opportunities for faculty to connect with K-12 educators in the broader community.



[Postdoctoral scholars shape academic life, bolster innovation and collaboration](#)

Postdoctoral trainees share their experiences working in WashU's Department of Biomedical Engineering.



[Chair of the Faculty Senate Council discusses increased interest in faculty governance among other things](#)

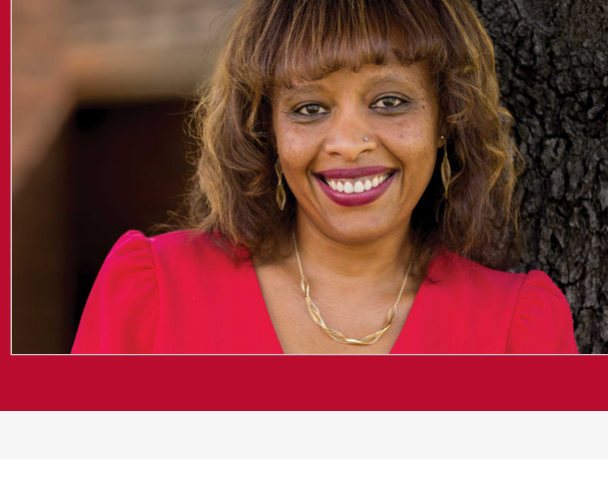
Biomedical Engineering (BME) professor Dennis Barbour sat down with Student Life for an interview about his role as Chair of the [Faculty Senate Council](#) (FSC).



Young alumni

[Metasebya Solomon](#)

Biomedical engineering PhD alumna attributes her success in biotechnology to many mentors throughout life.

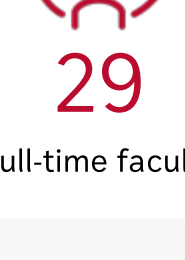


Our community



28

Postdoctoral scholars



29

Full-time faculty



168

PhD students
(fall 2024)

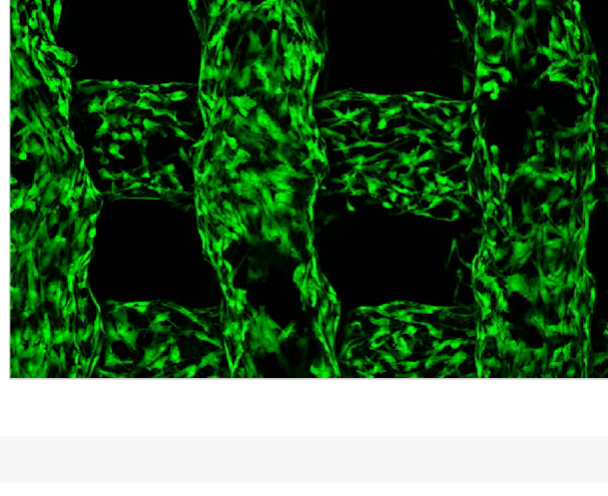
In the media



[Scientific American: Mysterious blobs found inside cells are rewriting the story of how life works](#)

Tiny specks called biomolecular condensates are leading to a new understanding of the cell.

Research news



[For success in bioelectronics, build with nature-inspired design](#)

Alexandra Rutz's lab creates bioelectronic scaffolds that would allow researchers to create new tissue with a host of potential applications.

[Grant will fund development of vaccines to prevent dementia](#)

Researchers at Washington University are looking to find new ways to design vaccines to protect against inflammation in the brain that causes dementia.

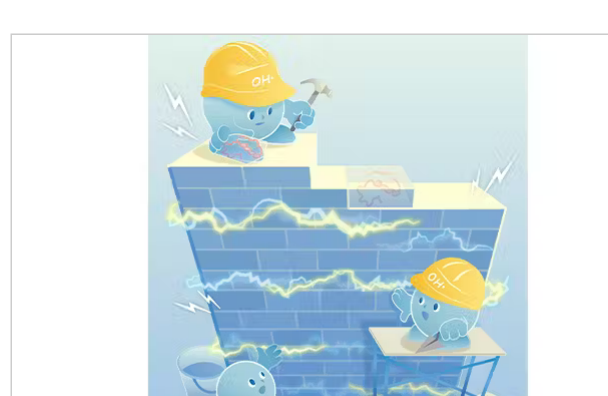


[Colon polyps diagnosed more accurately by adding OCT to colonoscopy](#)

Quing Zhu leads team that developed custom probe to better analyze polyps.

[Electrochemical field key to how dementia precursors 'break bad'](#)

Researchers at Washington University in St. Louis have found electrochemical rules for how toxic protein assemblies form, opening the way for better treatments of dementia.



Awards & Recognitions



[Hu elected Fellow of Optica](#)



[Six McKelvey Engineering faculty among world's highly cited researchers](#)



[Berkland named inaugural Mark and Becky Ruhmann Levin Professor](#)



[Farang, Mintz selected as Spencer T. and Ann W. Olin Fellows](#)

By the numbers



\$20.4M

Research awards



\$750K

Research expenditures
per PI



#2

NIH funding for
School of Medicine