



## Department of Biomedical Engineering

UNIVERSITY OF WISCONSIN-MADISON

news for alumni • fall 2020

### From our chair

We are persevering through this unprecedented academic year in the midst of the continuing COVID-19 pandemic. While the fall semester has been an atypical one, we have continued to deliver the highest-quality education to both our undergraduates and graduate students. Similarly, supporting all of our students, faculty and staff during these difficult times remains our top priority.



Despite these challenges, it is an exciting time for our department. We have hired six new faculty in the last several years who greatly strengthen our research efforts. We now rank among the top 10-15% of all biomedical engineering departments based on metrics of grant funding, citations and overall scholarly achievements. We are also continuing and expanding our efforts on inclusion, equity and diversity.

I hope you and your loved ones are well, and I thank you for your support of our department.

Stay safe and On, Wisconsin!

Paul J. Campagnola  
*Professor and Peter Tong Department Chair*  
*Kellett Faculty Fellow*

[Read more about Professor Campagnola's work](#)

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### Help from afar

Recent master's graduate Rebecca Alcock is leading a UN-backed effort to mobilize PPE production in developing countries.

[Read more](#)



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## Innovative idea

Assistant Professor Aviad Hai will use an NIH Director's New Innovator Award to develop injectable, wireless electronics that could provide a global look at the brain's electrical activity.

[Read more](#)



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## Investment with impact

A historic \$32 million commitment from The Grainger Foundation of Lake Forest, Illinois, will propel the College of Engineering on its growth trajectory. The pledge funds a major undergraduate scholarship program and seven professorships, and establishes the Grainger Dean of the College of Engineering.

[Read more](#)



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## More headlines

- Professor David Beebe is applying his expertise in putting lab tests on small, reproducible chips to a project [testing saliva for COVID-19](#).
- Professors Kristyn Masters, William Murphy and Justin Williams are part of the Biomedical Engineering Society's [2020 Class of Fellows](#).
- A new course is [connecting BME graduate students](#) across disparate areas of study, while also covering required topics and skills for properly conducting research.
- By using [mineral-coated microparticles](#), Professor William Murphy and collaborators have developed a safer and more efficient way to deliver a promising new method for treating cancer and liver disorders and for vaccination.
- Associate Professor Pamela Kreeger will use a [new \\$2.5 million grant](#) from the National Cancer Institute to continue her research into the spread of ovarian cancer.



Professor Melissa Skala has developed a [novel label-free imaging technique](#) that can differentiate active and off-duty T cells.



Sam Alkmin's experience as an exchange student [inspired him to return to UW-Madison](#) to pursue his PhD.

