



Department of Biomedical Engineering

UNIVERSITY OF WISCONSIN-MADISON

news for alumni • spring 2021

From our chair

We've reached the end of an unprecedented academic year, where we persevered through the COVID-19 pandemic. While most of our lecture classes continued to be delivered remotely, many of our lab sections and our entire design sequence successfully ran through this spring semester with no interruptions. Thus, 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 has remained our top priority.



Despite these challenges, it is an exciting time for our department. We now rank among the top 10-15% of all biomedical engineering departments based on metrics of grant funding, citations and overall scholarly achievements. Many of our faculty received prestigious new grants this year and several were elected as fellows in professional societies in recognition of their continued excellence. We are also continuing and expanding our efforts in inclusion, equity and diversity.

We look forward to returning to a more normal environment for the fall term. 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

'Dynamic' design experience

Our students have persevered through pandemic-induced roadblocks to create practical prototypes, such as a newborn lumbar puncture training simulator.

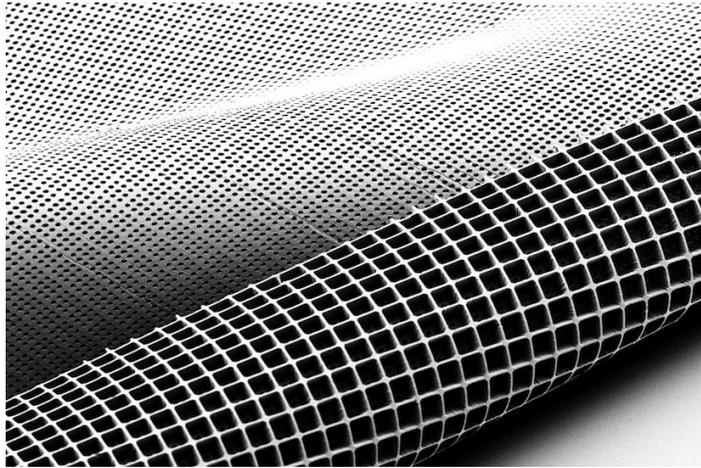
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Repairing retinas

Vilas Distinguished Professor Sarah Gong helped develop a micro-molded scaffolding photoreceptor “patch” designed to be implanted under a damaged retina.

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Data science meets global health

Undergrad Thor Larson is using machine learning to develop a rapid triage solution for diabetic foot ulcer monitoring in India.

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More headlines

- Professor **Walter Block** and Associate Professor **Kevin Eliceiri** were elected to the American Institute for Medical and Biological Engineering’s [prestigious College of Fellows](#).

- Associate Professor **Kris Saha**'s lab has developed an [innovative combination of gene-editing tools and computational simulations](#) that could help treat genetic disorders.
- Assistant Professor **Megan McClean** and **David Beebe**, the John D. MacArthur Professor and Claude Bernard Professor, are using a \$3.8 million grant from the National Institute of Allergy and Infectious Diseases to create [a new kind of microfluidic system](#) that should reveal new details about the dispersal process in systemic fungal infections.
- Vilas Distinguished Professor **Kristyn Masters** was among the coauthors of a [commentary in the journal Cell](#) urging the National Institutes of Health to address racial funding disparities.
- Associate Professor **Kevin Eliceiri** will help lead an initiative to develop and advance [light sheet microscopy technology](#) through a \$1.2 million grant from the Arnold and Mabel Beckman Foundation.
- Associate Professor **Randolph Ashton** and lab members received the [2020 WARF Innovation Award](#) to support their work in neural tissue engineering.
- Recent PhD graduate **Daniel Gil** and Professor **Melissa Skala** demonstrated the effectiveness of [wide-field, one-photon redox imaging](#) as a means of measuring treatment response in patient-derived cancer organoids.
- We honored **Karien Rodriguez** (PhD '10), research technical strategist at Kimberly-Clark Corp., with an [early career award](#) as part of the college's annual alumni awards.



Assistant Professor Megan McClean will use an [NSF CAREER award](#) to



Undergraduate research experience allowed [recent graduate Laura](#)

explore nongenetic heterogeneity
among cell populations.

[Guerrero](#) to gain independence as a
researcher.

