



## Department of Chemical and Biological Engineering

UNIVERSITY OF WISCONSIN-MADISON

news for alumni • spring 2020

### From our chair

Another academic year is coming to a close: Class projects are completed and final exams are graded. This spring semester has been anything but ordinary, though, amid the uncertainty of the global COVID-19 pandemic. For the first time ever, we celebrated graduation remotely. We are proud of the accomplishments of our graduating students, wish them the best, and hope they will be back to join us for an in-person celebration in the future.



As we wrap up the spring semester, we are engaged in the challenging job of transitioning our iconic summer lab to remote instruction. The summer lab team, led by Professor Thatcher Root, has been busily assembling and shipping an experimental toolkit to our students, so they can learn and develop their skills through informals right in their own homes. You can also read about how Professor John Yin's work with viral engineering applies to fighting COVID-19 and Associate Professor Victor Zavala's efforts to keep kids engaged and learning. I hope you and your loved ones are well, and thank you for your support of our department.

On, Wisconsin!

Regina Murphy

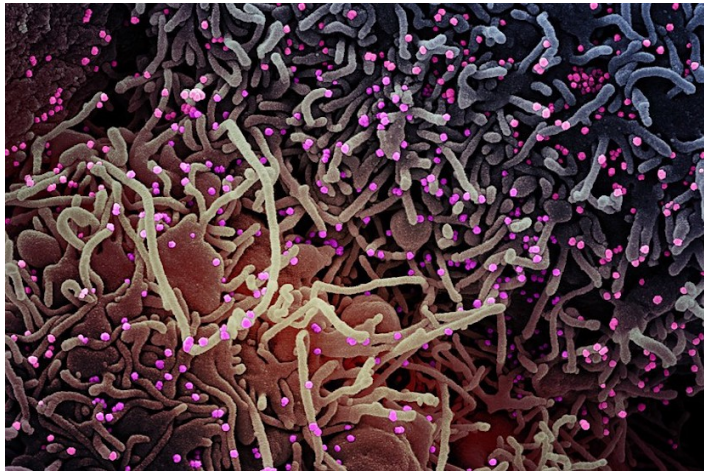
*R. Byron Bird Department Chair and Kreuz-Bascom Professor*

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### Viral engineering

The National Science Foundations has awarded Professor John Yin two grants for projects related to human coronaviruses.

[Read more](#)



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## Game on

Associate Professor Victor Zavala collaborated on a video game to educate and entertain kids currently stuck at home.

[Read more](#)



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## Path finder

Professor Brian Pfleger's lab is working on a process that converts levulinic acid derived from biomass into sustainable chemicals.

[Read more](#)

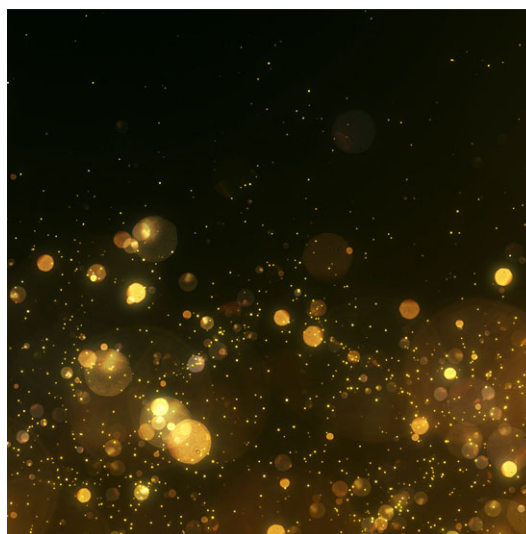


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## More headlines

- Reid Van Lehn and his students are developing machine learning techniques to identify cosolvents that could [speed up the conversion of biomass to fuels](#).

- Associate Professor Victor Zavala is creating a [statistics course and textbook](#) geared toward chemical engineers.
- Professor Michael Graham is using fluid dynamics to understand [why sickle cell disease damages blood vessels](#).
- CBE affiliates Ophelia Venturelli and Philip Romero won a WARF Innovation award for developing a microfluidic tool for [mapping how bacteria interact in complex microbiomes](#).



Over 45 years, Professor James Dumesic's influence touched [dozens of students in academics and industry](#).

Computational chemistry by Professor Manos Mavrikakis and his team is helping researchers [make more efficient use of precious metals](#) in catalysis.

Help UW-Madison engineers respond to COVID-19

