

Berkeley Bioengineering

October 2021

Dear Friends and Colleagues,

As I write this, our campus is experiencing a level of energy and excitement it has not seen in a long time. Students and faculty are back on campus for in-person instruction, research laboratories are operating at full speed, and Memorial Glade on a sunny afternoon is again dotted with students. In short, Berkeley is starting to feel like Berkeley again. This has all been made possible by [near-universal COVID-19 vaccination](#), ample testing capacity, and – not least – the diligence, hard work, and resilience of our students, staff, and faculty.



Despite all the transitions of the past few months, the Berkeley Bioengineering community continues to excel in the laboratory, classroom, and community. In this newsletter, you'll read about activities ranging from exploiting CRISPR tools to make new COVID-19 diagnostics to applying lessons from bat navigation to develop better driverless cars. This inspired mixture of curiosity-driven and society-facing research continues to make Berkeley Bioengineering one of the most visible and respected programs in the country, as exemplified by our top-six placement in the most recent US News graduate and undergraduate rankings.

Your support and generosity make such a difference in all that we do, so please consider [contributing to the department](#). Very best wishes for a healthy and exciting fall, and Go Bears!

Sanjay Kumar
Chair, Department of Bioengineering



Berkeley BioE Ranks 6th

Our program has been ranked #6 among U.S. undergraduate bioengineering programs by US News & World Report.

This is our highest ranking yet, as Berkeley BioE continues our climb to the top!



2021 Fall Welcome photos

To celebrate being back on campus, we threw an all-BioE welcome party on September 17 at the Campanile Esplanade. Check out the photos of an awesome day!

Research News

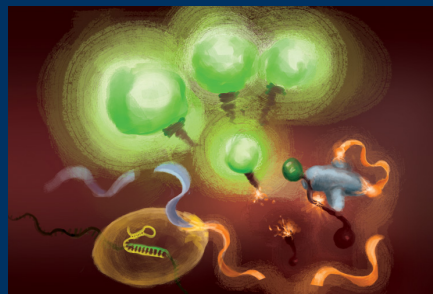


Can bats help us design a better driverless car?

A new effort from the lab of Michael Yartsev to translate bats' neurological navigation rules into computational algorithms may guide development of better navigation systems for driverless cars.

Using two CRISPR enzymes, a COVID diagnostic in only 20 minutes

Patrick Hsu, Liana Lareau and Daniel Fletcher have collaborated on a new rapid COVID test that rivals the sensitivity of the gold-standard qRT-PCR testing, with results in less than an hour.



Unlocking the keys to healthy longevity

Diablo Magazine published a feature article on Conboy Lab's research on the aging process this fall. Also, Irina Conboy is one of the principal partners of a new intercampus study on the aging brain funded by a 5-year NIH grant. The study will examine changes to blood