Caltech Division of Chemistry and Chemical Engineering

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Letter from the Director of the Donna and Benjamin M. Rosen Bioengineering Center

September 2022

Dear CCE Faculty, Students, and Staff,

I hope this note finds you all in good health and ready for the new academic year. The Donna and Benjamin M. Rosen Bioengineering Center fosters collaboration across academic, research and social programs at Caltech, and we look forward to engaging closely with the CCE family.

One of our efforts, the Biotechnology Leadership Pre-Doctoral Training Program (BLP), helps Caltech graduate students explore bioengineering-related career trajectories outside of academia, including entrepreneurship, biotech start-ups, industrial research, and more. This year, the BLP admitted **seven** phenomenal CCE students: **Christian Totoiu** (Prof. Ryan Hadt), **Ishaan Dev** and **Jee Won Yang** (Prof. Mikhail Shapiro), **Nicholas Friesenhahn** (Prof. Stephen Mayo), **Ryen O'Meara** and **Ziyang Qin** (from my group), and **Xiaotian Bi** (Prof. Lu Wei). This newest cohort is very accomplished: their experiences include leadership in Engineers without Borders (EWB), volunteering and participation in the Science Olympiad, achieving a National Science Foundation (NSF) Graduate Research Fellowship Program (GRFP) award, and attaining Eagle Scout rank. Please encourage your 2nd and 3rd year graduate students to consider joining the BLP.

This year, the Rosen Center awarded Pilot Research Grants to two CCE faculty members for two collaborative projects. The pilot grants support collaborative, early-stage bioengineering projects that require sharing of ideas, research personnel, and resources between faculty labs. The goal of this award is to help faculty teams develop strong preliminary data that will enhance their competitiveness for larger awards from agencies like the National Institutes of Health (NIH), NSF, DOE, and the Department of Defense (DoD).

CCE's **Prof. John Brady** and **Prof. Chiara Daraio** (EAS) received a Rosen Center pilot grant for "Geometric Design Principles for Mechanical Structures to Control Bacteria Distributions, while **Prof. Rustem Ismagilov** and **Prof. Lea Goentoro** (BBE) received one for "Quantitative Measurements toward Engineering the Microbiome for Inducing Regeneration." I hope you will consider applying for the next Pilot Grant round.

Finally, the Rosen Center's new Executive Director, *Dr. Ngozi Eze*, joined us in April 2022, from MIT. She has been working with faculty and students across Caltech to promote bioengineering and the Rosen Center programs.



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On behalf of all of the Rosen Center's bioengineering faculty and students, researchers and scientists-in-training, best wishes for a productive academic year!

Sincerely,

Professor Frances H. Arnold

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Director, The Donna and Benjamin M. Rosen Bioengineering Center and Linus Pauling Professor of Chemical Engineering, Bioengineering and Biochemistry