UC SANTA BARBARA

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Innovation for Humanity

For her innovative research and significant contributions to the biological engineering field, Michelle O'Malley, an associate professor in UC Santa Barbara's chemical engineering department, has been elected a fellow of the American Institute for Medical and Biological Engineering (AIMBE).

"We offer sincere congratulations to Professor O'Malley for this well-deserved recognition," said Rod Alferness, dean of the UCSB College of Engineering. "Michelle embodies the spirit of innovation and collaboration that we pride ourselves on at UCSB, and that makes her a remarkable, highly productive and impactful scientist."

Nominated by their peers, the 156 newly elected fellows represent the top 2% of the medical and biological community. They are selected for their contributions in research, academia, industry and government.

"I am extremely honored to be elected a fellow of the AIMBE," O'Malley said. "It means a lot to me that the biochemical engineering community values our group's research and the impact it has had on several fields — from value-added chemical production to pharmaceutical development.

"As a new AIMBE fellow, I also take seriously my responsibility to advance research investment and help shape U.S. policy related to medical and biological engineering," she added. "Given current world events, this will be more important than ever before."

O’Malley’s research group focuses on the biotech potential of unusual microbes from nature, which may have significant applications when it comes to renewable energy and to manufacturing chemicals and drugs. Her most recent work investigated the functions of anaerobic gut fungi, primitive microbes found mainly in large herbivores. The fungi’s enzymes and unique ability to transform cellulose from plants into sugars could offer new sources of biofuels and methods of producing the next generation of pharmaceuticals.

Among the numerous awards and recognitions O’Malley has earned for her work are the Presidential Early Career Award for Scientists and Engineers, the National Science Foundation CAREER Award and the Department of Energy’s Early Career Award. She also was named to MIT Technology Review’s 35 Innovators Under 35. In 2019 alone, O’Malley was awarded $2.25 million award from the U.S. Department of Energy to advance the knowledge of and technology for advanced biofuels, received the American Society of Microbiology Award for Early Career Applied and Biotechnological Research. In addition, Science News named her among its SN10: Scientists to Watch.

Election to the AIMBE College of Fellows is one of the highest professional distinctions accorded to medical and biological engineers. Their ranks include three Nobel Prize laureates, 18 recipients of the Presidential Medal of Science and/or Technology and Innovation, 173 elected members of the National Academy of Engineering, 83 National Academy of Medicine inductees, and 36 National Academy of Sciences members.

About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.