

THE UNIVERSITY OF MICHIGAN

Regents Communication

ACTION REQUEST

Subject: Report of Faculty Death
Action Requested: Adoption of Memorial Statement

The Regents of the University of Michigan acknowledge with profound sadness the death of **Kevin B. Wood, Ph.D.**, associate professor of biophysics and associate professor of physics, in the College of Literature, Science, and the Arts. Professor Wood died on September 28, 2024.

Professor Wood received his B.S. degree from Centre College in Danville, KY in 2001, his M.S. degree from the University of California, San Diego in 2003, and his Ph.D. degree from the University of California, San Diego in 2007. He completed postdoctoral fellowships at Harvard University before coming to the University of Michigan in 2013 as an assistant professor. He has served on the faculty of the University of Michigan since and was promoted to associate professor in 2020.

Professor Wood's research focused on complex biosystems, computational biophysics and spectroscopy and microscopy. Professor Wood's laboratory combined theoretical approaches from statistical physics with experiments on living microbial (bacterial) colonies to understand the emergent cooperative behavior in response to antibiotics and the development of antibiotic resistance. Significant results emerged from his work on bacterial biofilms and the influence of sub-inhibitory concentrations of antibiotics on these biofilms. Professor Wood's laboratory also developed mathematical models based on their experiments demonstrating how cooperation between sensitive and resistant cells shapes the architecture of biofilms in response to antibiotics. In studies in this vein, Professor Wood's laboratory examined the origins of the inoculum effect, wherein cell density can modulate antibiotic inhibition and subsequently the evolution of resistance in bacterial populations and extended these ideas to demonstrate how competition between the dynamics of bacterial subpopulations and the environment can shape community-wide resistance to antibiotic influx.

Through the work of his career, Professor Wood did more than research, he also served as the Program in Biophysics' associate director of undergraduate studies. He was a dedicated teacher who was an outstanding mentor to undergraduate, graduate, and post-graduate trainees.

As we mourn the loss of our beloved colleague, we extend our heartfelt condolences to his wife, Sarah, his son, Sam, his daughter, Emily, and his many loving relatives and friends.

Requested by:



Jon Kinsey
Vice President and Secretary of the University

May 2025