

2020 Sue Geller Undergraduate

Dr. Reinhard Laubenbacher



Dr. Laubenbacher is a professor in the Department of Cell Biology and director of the Center for Quantitative Medicine at the University of Connecticut School of Medicine. He also holds an appointment as Professor of Computational Biology at the Jackson Laboratory for Genomic Medicine. He has held visiting positions at the Los Alamos National Laboratory, the Mathematical Sciences Research Institute in Berkeley, CA, and Cornell University.

Current interests in Dr. Laubenbacher's research group include the development of multiscale computational models of disease processes, in particular the immune response to respiratory fungal pathogens, the role of iron in tumor growth, and the control of heterogeneous biofilms.

Mathematics and Medicine

The use of mathematical and computational techniques in the life sciences has exploded in recent decades, driven in part by the increased availability of data at all spatial and temporal scales. In medicine, these data have enabled the calibration of mathematical and statistical models that play a key role in the rise of personalized medicine. This talk will present some examples of mathematical approaches to disease, its understanding and its treatment.

Monday, March 23rd

Reception: 5:30-6:00 Lecture: 6:00-7:00 Discussion: 7:00-7:30

Blocker 117



The Sue Geller Undergraduate Lecture Series is intended as a venue for undergraduate students to interact with a leading researcher from outside Texas A&M University who has also demonstrated a deep interest in mentoring students. Before 2018 it was known as the Mathematics Undergraduate Research Lecture Series.