Stanford Bio-X
TALKS IN ENGLISH (T.I.E.)

Introducing a broad range of scientific research in the Stanford Bio-X community through jargon-free lectures and discussion.

AUGUST 23, 2021
12:00PM-1:00PM
CLICK THE LINK BELOW TO JOIN US ON ZOOM!
HTTPS://BIOX.STANFORD.EDU/TIEAUG21

12:00PM
Alison Marsden
Professor of Pediatrics (Cardiology) and Bioengineering

"Personalized Computer Models for Surgical Planning in Cardiovascular Disease"

In this talk I will introduce a set of computational tools for modeling blood flow in the heart and vascular system. From a patient's medical image data, we use custom software to construct personalized models of the anatomy and run simulations of blood flow and tissue deformation. These tools are used for personalized surgical and treatment planning in a wide variety of disease applications in adults and in children born with congenital heart defects. Simulations are also crucial for quantifying and understanding how changing mechanical forces impact cardiac and vascular tissues during disease progression. Finally, we will discuss our experience working with medical collaborators for clinical translation.

12:30PM
Joshua Makower
New Director of the Stanford Byers Center for Biodesign

"Developing the Future of the Stanford Byers Center for Biodesign"

Our new Director of the Stanford Byers Center for Biodesign, Dr. Josh Makower, will share some of his history inventing and developing new medical technologies and how that led him to co-found Stanford Biodesign with Dr. Paul Yock twenty years ago. He'll briefly review some of the Center's accomplishments and will lay out his vision for where the Center will go next.