



JOHNS HOPKINS
BIOMEDICAL ENGINEERING

BME Virtual Seminar Series

Josh Makower, MD, MBA

Professor of Medicine and of Bioengineering
Stanford University Schools of Medicine &
Engineering

Monday, November 29th, 2021

1:30 p.m.

Held via Zoom

Faculty host: Youseph Yazdi



Biomedical Innovation: A Transformation from Phenomenon to Proven Process

Abstract: Innovation in medicine and surgery over past centuries has historically happened episodically with chance discoveries in the lab or clinic, or during unique moments in time where opportunity, talent and technology phenomenologically combine to produce significant advances in patient care. More recently, the question has been asked whether we can purposefully direct innovation and intentionally drive it to occur in spaces where there is the most clinical need. Answering this question and addressing it with a process that can be taught, learned and perfected has been one of the central foci for Dr. Josh Makower's career. Dr. Makower will discuss the origins of what is now called "The Biodesign Process" and walk through its structure and evolution through the creation of the Stanford Biodesign Innovation Program, which he co-founded with Dr. Paul Yock, to stories of several innovations produced by students, fellows and faculty of the program and the ultimate commercialization of these innovations. He'll also provide a glimpse of the future now that he has assumed the role of Director of the Center this year.

Bio: Joshua Makower, MD, MBA is the Boston Scientific Applied Biomedical Engineering Professor of Medicine and of Bioengineering at the Stanford University Schools of Medicine and Engineering, and is the Director and Co-Founder of the Stanford Byers Center for Biodesign. Dr. Makower is also a Special Partner at New Enterprise Associates, and Executive Chairman and Founder of ExploraMed Development, LLC. Dr. Makower holds over 300 patents and patent applications. He has also co-founded TransVascular, EndoMatrix, Acclarent, NeoTract, Moximed, Willow, and Revelle Aesthetics, bringing them through invention, discovery, product and clinical development, regulatory and reimbursement approvals and into commercialization. Dr. Makower is a Member of the National Academy of Engineering and the College of Fellows of The American Institute for Medical and Biological Engineering and was awarded the Coulter Award for Healthcare Innovation by the Biomedical Engineering Society in 2018. He received an MBA from Columbia University, an MD from the NYU School of Medicine, and a Bachelor's Degree in Mechanical Engineering from MIT.