THE INSTITUTE FOR MOLECULAR ENGINEERING

THE UNIVERSITY OF CHICAGO

Savaş Tay

ASSOCIATE PROFESSOR IN MOLECULAR ENGINEERING

Savaş Tay is a bioengineer and systems biologist who works at the interface of biology, physics, and nanoengineering. He joins the University of Chicago as an Associate Professor in the summer of 2016. A main focus for Tay will be to understand the role of molecular pathway dynamics in environmental sensing, pathogen recognition, cell-to-cell signaling and cellular information processing. He develops high-throughput automated microfluidic systems for single cell analysis, and uses them to perform precision measurements on living cells to develop predictive models of complex biological systems like the immune system. Such models can serve as a rapid test-bed for drug studies and genome editing applications.

Before becoming interested in biological research, Tay was an optical physicist. He received a PhD from the College of Optical Sciences at the University of Arizona. While in Arizona, he developed the world's first dynamic holographic 3D display. After his PhD, he took a postdoctoral position at Stanford University's Bioengineering Department and Howard Hughes Medical Institute, where he worked on microfluidics and cell signaling. In 2011, Tay was appointed as Assistant Professor of Bioengineering in the Department of Biosystems Science and Engineering, ETH Zurich, Switzerland.

Tay was awarded the highly prestigious European Research Commission Starting Grant in 2013. He serves at the editorial board of Nature Scientific Reports. His work in engineering and biology has been featured in many media outlets including the BBC, Bloomberg News, CNN, Discovery Channel, National Geographic, National Public Radio, Daily Telegraph, Nikkei, and MIT Technology Review.

Assistant Professor of Bioengineering, Department of Biosystems Science and Engineering, Swiss Federal Institute of Technology, ETH Zurich

Postdoctoral Research,
Stanford University Bioengineering Department and Howard Hughes Medical Institute

EDUCATION

PhD, College of Optical Sciences, University of Arizona

B.Sc., Physics and Education, Marmara University, Istanbul