Postdoctoral positions on developing the next generation of high-throughput single-cell analysis methods

Applications are invited for immediate openings at the new Systems Biology and Bioengineering Group with Professor Savas Tay, at the Institute for Molecular Engineering, **University of Chicago** (http://ime.uchicago.edu/savas_tay/).

We are developing novel single-cell analysis methods and microfluidic devices to improve measurement functionality, accuracy and throughput. We are particularly interested in multiplexed proteomic, transcriptomic and genomic methods at the single-cell level, with applications to immunity and cell signaling. The following papers describe the biological focus of our research program:

- Noise facilitates transcriptional control under dynamic inputs. Kellogg & Tay, **Cell** 160, 381 (2015)
- Digital signaling decouples activation probability and population heterogeneity. Kellogg, Tian, Lipniacki, Quake, Tay. **eLife** 4:e08931 (2015)
- Single-cell NF-kB dynamics reveal digital activation and analogue information processing. Tay, et al. **Nature** 466, 267 (2010)

Applications from a range of backgrounds including Engineering, Chemistry, and Physics are invited. Required skills include cell culture, basic biochemistry, microscopy, image processing, and programming in MATLAB. Experience with microfluidics, cloning, and modeling are a plus. Constructing and using sophisticated computer controlled experimental setups will be necessary.

Our new laboratory will be located at University of Chicago, and we will be affiliated with the Institute for Molecular Engineering (www.ime.uchicago.edu) and Institute for Genomics and Systems Biology (http://www.igsb.anl.gov/). The researchers recruited through this project will have the opportunity to visit and collaborate with our current group at ETH Zurich in Switzerland (www.microfluidics.ethz.ch) during 2016.

Highly motivated candidates with a strong track record of publications should send an application package with research interests, full CV with experimental and computational skills listed in detail, names and contact information of 3 references to Savas Tay (savas.tay AT gmail.com).