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

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

We are developing 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 example papers describe our research program:

- High-content characterization of single-cell immune dynamics. M. Junkin, A. Kaestli, F. Zhang, A. Hoffmann, S. Tay. **Cell Reports** 15, 1 (2016)
- Digital quantification of proteins and mRNA in single mammalian cells. C. Albayrak, C. Jordi, C. Zechner, C. Bichsel, M. Khammash, S. Tay. **Molecular Cell** 61, 914 (2016)
- 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)

Applications from a range of backgrounds including Engineering, Chemistry, Physics and Biology 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 is located at the Knapp Center at the University of Chicago, and we are affiliated with the Institute for Molecular Engineering (www.ime.uchicago.edu) and Institute for Genomics and Systems Biology (http://www.igsb.anl.gov/).

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).