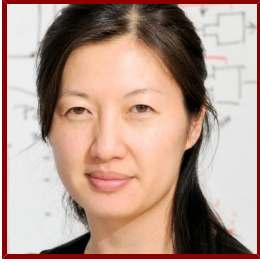


Stanford



Alice Ting

Professor of Genetics, of Biology and, by courtesy, of Chemistry

Bio

ACADEMIC APPOINTMENTS

- Professor, Genetics
- Professor, Biology
- Professor (By courtesy), Chemistry
- Member, Bio-X
- Member, Maternal & Child Health Research Institute (MCHRI)
- Member, Stanford Cancer Institute
- Faculty Fellow, Stanford ChEM-H
- Member, Wu Tsai Neurosciences Institute

ADMINISTRATIVE APPOINTMENTS

- Professor of Genetics, Biology, and by courtesy, Chemistry, Stanford University, (2016- present)
- Professor of Chemistry, MIT, (2014-2016)
- Associate Professor of Chemistry, MIT, (2007-2014)
- Assistant Professor of Chemistry, MIT, (2002-2007)

HONORS AND AWARDS

- Alexander M. Cruickshank Award Lecture, Gordon Research Conferences (2018)
- NIH Director's Transformative Research Award, NIH (2018)
- Chan Zuckerberg Biohub Investigator, Chan Zuckerberg Biohub (2017)
- NIH Director's Transformative Research Award, NIH (2013)

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PROFESSIONAL EDUCATION

- Post-doc, University of California, San Diego , Biochemistry (with Roger Tsien) (2002)
- Ph.D., University of California, Berkeley , Chemistry (with Peter Schultz) (2000)
- A.B., Harvard University , Chemistry (research advisor E. J. Corey) (1996)
- High school, Texas Academy of Math and Science (1992)

LINKS

- Laboratory website: <http://www.tinglab.org>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

The goal of our laboratory is to develop, scale up, and broadly disseminate molecular technologies for mapping cells and functional circuits. At the sub-cellular scale, maps document the spatial organization of proteins, RNA, DNA, and metabolites with nanometer precision and temporal acuity on the order of seconds. Maps also chart the connectivity between these molecules, elucidating the circuits and signaling processes that give rise to function.

Beyond the single cell, we also strive to map cellular ensembles, such as brain tissue. Can we create tools that contribute to the construction of cell and tissue atlases, and can we map the cellular circuits that give rise to function and behavior? To achieve these ambitious goals, our laboratory has focused on the development of scalable technologies to detect, measure, and manipulate molecules and circuits, both at the sub-cellular level, and at the level of cell populations.

Teaching

COURSES

2018-19

- Advanced Cell Biology: BIO 214, BIOC 224, MCP 221 (Win)

2017-18

- Advanced Cell Biology: BIO 214, BIOC 224, MCP 221 (Win)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Josh Tycko

Postdoctoral Faculty Sponsor

Rongbing Huang, Christina Kim, Mateo Sanchez Lopez, Boxuan Zhao

Doctoral Dissertation Advisor (AC)

Shuo Han

Publications

PUBLICATIONS

- **Efficient proximity labeling in living cells and organisms with TurboID** *NATURE BIOTECHNOLOGY*
Branon, T. C., Bosch, J. A., Sanchez, A. D., Udeshi, N. D., Svinkina, T., Carr, S. A., Feldman, J. L., Perrimon, N., Ting, A. Y.
2018; 36 (9): 880-+
- **A light- and calcium-gated transcription factor for imaging and manipulating activated neurons.** *Nature biotechnology*
Wang, W., Wildes, C. P., Pattarabanjird, T., Sanchez, M. I., Glocker, G. F., Matthews, G. A., Tye, K. M., Ting, A. Y.
2017
- **Proteomic Analysis of Unbounded Cellular Compartments: Synaptic Clefs.** *Cell*
Loh, K. H., Stawski, P. S., Draycott, A. S., Udeshi, N. D., Lehrman, E. K., Wilton, D. K., Svinkina, T., Deerinck, T. J., Ellisman, M. H., Stevens, B., Carr, S. A., Ting, A. Y.
2016; 166 (5): 1295-1307 e21
- **A split horseradish peroxidase for the detection of intercellular protein-protein interactions and sensitive visualization of synapses.** *Nature biotechnology*
Martell, J. D., Yamagata, M., Deerinck, T. J., Phan, S., Kwa, C. G., Ellisman, M. H., Sanes, J. R., Ting, A. Y.
2016; 34 (7): 774-80

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