



## Abbey Thompson

Director, Educational Outreach, Genetics

### Bio

---

#### BIO

Abbey Thompson started as the Genetics Department's Director of Educational Outreach in March 2018. Prior to that, she received her Ph.D. in Genetics from Stanford University, completing her dissertation research with Dr. David Kingsley. During graduate school, she studied the molecular mechanisms underlying the evolution of new traits in vertebrates, using stickleback fish and mice as model systems. Before arriving at Stanford, she did post-baccalaureate work with Dr. Laufey Amundadottir at the National Cancer Institute (NCI), characterizing GWAS SNPs associated with pancreatic cancer. She received her B.A. in Biology from Northwestern University in 2011.

She has many years of experience teaching science in a variety of settings. During graduate school she participated in many different science outreach opportunities. Most notably, she participated in the "Stanford at the Tech" program, which introduced her to The Tech Museum and informal education in that setting. She also taught STEM education for the non-profit group Science from Scientists, bringing hands-on science activities to middle school students. In addition, she volunteered in a variety of different forums, including the Stanford Science Bus, which brought hands-on science activities to a local elementary school; Stanford Medical Youth Science Program, for targets underprivileged high school students who are interested in careers in STEM fields; and panel discussions on genome editing in local high schools.

#### CURRENT ROLE AT STANFORD

- 1) Directs the Stanford@TheTech program, which trains graduate students and postdoctoral fellows in science communication skills by running hands-on activities at The Tech Interactive in San Jose.
- 2) Works with The Tech Interactive to design new hands-on experiences for the Biotinkering Lab, as part of an NIH SEPA grant.
- 3) Runs "Ask a Geneticist" on the Understanding Genetics website, answering genetics questions submitted by people from around the world.
- 4) Serves as liaison between the Department of Genetics at Stanford University and The Tech.

#### EDUCATION AND CERTIFICATIONS

- Ph.D., Stanford University , Genetics (2018)
- B.A., Northwestern University , Biology (2011)

#### LINKS

- LinkedIn Profile: <https://www.linkedin.com/in/abbey-thompson-85404081>

## Professional

---

### WORK EXPERIENCE

- Director of Educational Outreach, Genetics Department - Stanford University (3/2018 - present)
- Graduate Research Assistant - Stanford University (9/2012 - 3/2018)
- STEM Instructor - Science from Scientists (9/2016 - 12/2017)
- Post-Baccalaureate Fellow - National Cancer Institute (7/15/2011)
- Undergraduate Research Assistant - Northwestern University (11/2009 - 6/2011)

## Publications

---

### PUBLICATIONS

- **DNA fragility in the parallel evolution of pelvic reduction in stickleback fish** *SCIENCE*  
Xie, K. T., Wang, G., Thompson, A. C., Wucherpfennig, J. I., Reimchen, T. E., MacColl, A. C., Schluter, D., Bell, M. A., Vasquez, K. M., Kingsley, D. M.  
2019; 363 (6422): 81-+
- **A novel enhancer near the Pitx1 gene influences development and evolution of pelvic appendages in vertebrates.** *eLife*  
Thompson, A. C., Capellini, T. D., Guenther, C. A., Chan, Y. F., Infante, C. R., Menke, D. B., Kingsley, D. M.  
2018; 7
- **Functional characterization of a multi-cancer risk locus on chr5p15.33 reveals regulation of TERT by ZNF148** *NATURE COMMUNICATIONS*  
Fang, J., Jia, J., Makowski, M., Xu, M., Wang, Z., Zhang, T., Hoskins, J. W., Choi, J., Han, Y., Zhang, M., Thomas, J., Kovacs, M., Collins, et al  
2017; 8
- **Three cheers for the three-spined stickleback** *LAB ANIMAL*  
Heng, K., Thompson, A., Chu, D., Kingsley, D. M.  
2016; 45 (11): 421-421
- **CLPTM1L Promotes Growth and Enhances Aneuploidy in Pancreatic Cancer Cells** *CANCER RESEARCH*  
Jia, J., Bosley, A. D., Thompson, A., Hoskins, J. W., Cheuk, A., Collins, I., Parikh, H., Xiao, Z., Ylaya, K., Dzyadyk, M., Cozen, W., Hernandez, B. Y., Lynch, et al  
2014; 74 (10): 2785-2795
- **A Conserved Role for Human Nup98 in Altering Chromatin Structure and Promoting Epigenetic Transcriptional Memory** *PLOS BIOLOGY*  
Light, W. H., Freaney, J., Sood, V., Thompson, A., D'Urso, A., Horvath, C. M., Brickner, J. H.  
2013; 11 (3)
- **Transcription Factor Binding to a DNA Zip Code Controls Interchromosomal Clustering at the Nuclear Periphery** *DEVELOPMENTAL CELL*  
Brickner, D. G., Ahmed, S., Meldi, L., Thompson, A., Light, W., Young, M., Hickman, T. L., Chu, F., Fabre, E., Brickner, J. H.  
2012; 22 (6): 1234-1246