

Samuel Tracy

Phone: (916) 764-9002 Email: stracy@g.harvard.edu Web: <https://seasamgo.github.io>

Ph.D. student in Biostatistics at Harvard University focusing on methods for failure time data and single-cell sequencing data. In particular: developing and adapting sampling techniques, optimization theory, adjustments for missingness, clustering methods, and dimensionality reduction. My advisor is Dr. Guo-Cheng Yuan. I am also an advocate for open-source development, reproducible research and diversity in STEM.

EDUCATION

Ph.D. Biostatistics	Harvard University	2019 ¹
M.A. Biostatistics	Harvard University	2016
B.S. Applied Mathematics, <i>magna cum laude</i>	UC San Diego	2014

PROFESSIONAL EXPERIENCE

Research Consultant <i>Harvard University, Boston, MA</i> Department of Biostatistics Consulting Center	09/2017 – present
Student Intern <i>Clinical and Translational Research Institute, San Diego, CA</i> Clinical data visualization and analysis under Dr. Ronghui Xu and James Proudfoot	03/2013 – 06/2013

TEACHING EXPERIENCE

Teaching Assistant <i>T.H. Chan Harvard School of Public Health, Boston, MA</i> BST 210 Applied Regression Analysis (Spring 2016, 2017) BST 226 Applied Longitudinal Analysis (Spring 2018)	01/2016 – present
Instructor and Administrator <i>StatStart, Boston, MA</i> Student-run high school program in statistical computing for minorities in STEM (Summer 2015, 2016, 2017)	01/2015 – 08/2017
Teaching Assistant <i>UC San Diego, San Diego, CA</i> MATH 10ABC Calculus Series (Fall 2013, Winter 2014, Spring 2014)	09/2013 – 06/2014
Academic Liaison <i>Fallbrook High School, Fallbrook, CA</i> All-subjects tutor and liaison through the UC San Diego Educational Studies Department	01/2013 – 03/2013

¹anticipated

PROJECTS

Chen, T., Tracy, S., Uno, H. Minimal-area confidence bands for failure time data.

Tracy, S., Dries, R., Yuan, G.C. scRNA-seq dropout imputation via subsampling of genes.

Tracy, S., Yuan, G.C. Scoring lineage prediction with single-cell data.

PUBLICATIONS

Talbot, O., Ocampo, A., Tracy, S., Mosesso, K., Rahman, A., and Pagano, M. StatStart 2015. *ASA: The Statistics Teacher Network*, 87: 4-8, 2016.

SKILLS & INTERESTS

Software – R, MATLAB, Stata, Java, C++, Python

Interests – tumor evolution and heterogeneity, systems architecture, cyber security

SOFTWARE

Co-creator and maintainer of the R package **optband** (on CRAN and GitHub), a package for statistical confidence bands applied to failure time data and optimized by area.

SELECTED INVOLVEMENT

Graduate Student Council , <i>Department Representative</i>	09/2015 – 08/2017
Roxbury Prep Tutoring , <i>Co-director</i>	09/2016 – 05/2017
Roxbury Prep Tutoring , <i>Coordinator</i>	09/2015 – 05/2016
Student Conduct Code Committee , <i>Student Representative</i>	01/2014 – 06/2014
Global Water Brigades , <i>Honduras Brigade Member</i>	01/2014 – 03/2014

REFERENCES

Yuan, Guo-Cheng

Associate Professor, Department of Biostatistics, Harvard T.H. Chan School of Public Health
Address: 360 Longwood Ave, Room 1060, Boston, MA 02215
Tel: 617-582-8532 Email: gcyuan@jimmy.harvard.edu

Xu, Ronghui

Professor, Department of Mathematics, University of California, San Diego
Address: 9500 Gilman Drive #0112, La Jolla, CA 92093
Tel: 858-534-6380 Email: rxu@ucsd.edu