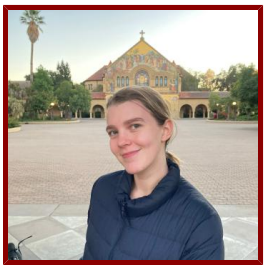
Stanford



Charlotte Brannon

Postdoctoral Scholar, Bioengineering

Bio

STANFORD ADVISORS

- Manu Prakash, Postdoctoral Faculty Sponsor

Teaching

COURSES

2023-24

- Fantastic beasts and where to find them: Biology with non-model organisms: BIOS 262 (Win)

Publications

PUBLICATIONS

- **Creases as information bottlenecks in active elastic sheets** *NATURE PHYSICS*
  Brannon, C. M., Prakash, M.
  2026
- **Cilia-driven epithelial folding and unfolding in an early diverging animal.** *Proceedings of the National Academy of Sciences of the United States of America*
  Brannon, C. M., Prakash, M.
  2025; 122 (51): e2517741122
- **Recurrent repeat expansions in human cancer genomes.** *Nature*
  Erwin, G. S., Gursoy, G., Al-Abri, R., Suriyaprakash, A., Dolzhenko, E., Zhu, K., Hoerner, C. R., White, S. M., Ramirez, L., Vadlakonda, A., Vadlakonda, A., von Kraut, K., Park, et al
  2022
- **Storing and analyzing a genome on a blockchain.** *Genome biology*
  Gursoy, G., Brannon, C. M., Ni, E., Wagner, S., Khanna, A., Gerstein, M.
  2022; 23 (1): 134
- **Privacy-preserving genotype imputation with fully homomorphic encryption** *CELL SYSTEMS*
  Gursoy, G., Chielle, E., Brannon, C. M., Maniatakos, M., Gerstein, M.
  2022; 13 (2): 173-+
- **Functional genomics data: privacy risk assessment and technological mitigation.** *Nature reviews. Genetics*
  Gursoy, G., Li, T., Liu, S., Ni, E., Brannon, C. M., Gerstein, M. B.
  2021
- **Author Correction: Functional genomics data: privacy risk assessment and technological mitigation.** *Nature reviews. Genetics*
  Gürsoy, G., Li, T., Liu, S., Ni, E., Brannon, C. M., Gerstein, M. B.

2021

- **Data Sanitization to Reduce Private Information Leakage from Functional Genomics.** *Cell*
  Gursoy, G., Emani, P., Brannon, C. M., Jolanki, O. A., Harmanci, A., Strattan, J. S., Cherry, J. M., Miranker, A. D., Gerstein, M.
  2020; 183 (4): 905

- **FANCY: fast estimation of privacy risk in functional genomics data** *BIOINFORMATICS*
  Gursoy, G., Brannon, C. M., Navarro, F. C. P., Gerstein, M.
  2020; 36 (21): 5145-5150

- **Using Ethereum blockchain to store and query pharmacogenomics data via smart contracts** *BMC MEDICAL GENOMICS*
  Gursoy, G., Brannon, C. M., Gerstein, M.
  2020; 13 (1): 74

- **Division of labor in bacteria The emergence of subpopulations that perform distinct metabolic roles has been observed in populations of genetically identical bacteria.** *ELIFE*
  Dal Co, A., Brannon, C., Ackermann, M.
  2018; 7