Stanford

Chris Mathy

Postdoctoral Scholar, Genetics

Curriculum Vitae available Online

Bio

HONORS AND AWARDS

- Byers Family Discovery Fellow, UCSF (2018-2021)
- Service and DEIB Award, Graduate Group in Bioengineering, UCSF and UC Berkeley (2022)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, Protein Society (2021 - present)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, University of California San Francisco (2022)
- Bachelor of Science, Stanford University , BIOE-BSH (2016)
- Doctor of Philosophy, University of California, Berkeley , Bioengineering (2022)

STANFORD ADVISORS

- Lars Steinmetz, Postdoctoral Faculty Sponsor

LINKS

- chrismathy.com: https://chrismathy.com/about.html

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

ML for protein / cell engineering; synthetic mitochondrial genomes.

Publications

PUBLICATIONS

- **Emerging maps of allosteric regulation in cellular networks.** *Current opinion in structural biology*
  Mathy, C. J., Kortemme, T.
  2023; 80: 102602
- **A complete allosteric map of a GTPase switch in its native cellular network.** *Cell systems*
  Mathy, C. J., Mishra, P., Flynn, J. M., Perica, T., Mavor, D., Bolon, D. N., Kortemme, T.
  2023
- **A proposed workflow for proactive virus surveillance and prediction of variants for vaccine design.** *PLoS computational biology*
  Baker, J. J., Mathy, C. J., Schaletzky, J.

2021; 17 (12): e1009624

- **Systems-level effects of allosteric perturbations to a model molecular switch.** *Nature*

  Perica, T., Mathy, C. J., Xu, J., Jang, G. M., Zhang, Y., Kaake, R., Ollikainen, N., Braberg, H., Swaney, D. L., Lambright, D. G., Kelly, M. J., Krogan, N. J., Kortemme, et al

  2021; 599 (7883): 152-157

- **The Global Phosphorylation Landscape of SARS-CoV-2 Infection.** *Cell*

  Bouhaddou, M., Memon, D., Meyer, B., White, K. M., Rezelj, V. V., Correa Marrero, M., Polacco, B. J., Melnyk, J. E., Ulferts, S., Kaake, R. M., Batra, J., Richards, A. L., Stevenson, et al

  2020; 182 (3): 685-712.e19

- **A SARS-CoV-2 protein interaction map reveals targets for drug repurposing.** *Nature*

  Gordon, D. E., Jang, G. M., Bouhaddou, M., Xu, J., Obernier, K., White, K. M., O'Meara, M. J., Rezelj, V. V., Guo, J. Z., Swaney, D. L., Tummino, T. A., Hüttenhain, R., Kaake, et al

  2020; 583 (7816): 459-468