

Stanford



Elias Roth Gerrick

Postdoctoral Scholar, Pathology

Bio

BIO

Eli received his B.S. in Microbiology and Immunology from U.C. Irvine in 2013, where he worked in the lab of Dr. Celia Goulding. He earned his Ph.D. from Harvard University in 2018 in the lab of Dr. Sarah Fortune, where he studied post-transcriptional regulation of gene expression in *Mycobacterium tuberculosis*. Eli joined the Howitt lab at Stanford in the summer of 2018, where he is studying the influence of protozoan members of the microbiome on intestinal immunity.

INSTITUTE AFFILIATIONS

- Member, Maternal & Child Health Research Institute (MCHRI)

HONORS AND AWARDS

- NSF Graduate Research Fellowship, National Science Foundation (2014-2017)
- Herchel Smith Graduate Research Fellowship, Herchel Smith Foundation (2013-2014)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Harvard University (2018)
- Bachelor of Science, University of California, Irvine (2013)

STANFORD ADVISORS

- Michael Howitt, Postdoctoral Faculty Sponsor

Research & Scholarship

LAB AFFILIATIONS

- Michael Howitt (7/16/2018)

Publications

PUBLICATIONS

- **Transcriptional profiling identifies novel regulators of macrophage polarization.** *PLoS one*
Gerrick, K. Y., Gerrick, E. R., Gupta, A. n., Wheelan, S. J., Yegnasubramanian, S. n., Jaffee, E. M.
2018; 13 (12): e0208602
- **Small RNA profiling in *Mycobacterium tuberculosis* identifies MrsI as necessary for an anticipatory iron sparing response.** *Proceedings of the National Academy of Sciences of the United States of America*
Gerrick, E. R., Barbier, T. n., Chase, M. R., Xu, R. n., François, J. n., Lin, V. H., Szucs, M. J., Rock, J. M., Ahmad, R. n., Tjaden, B. n., Livny, J. n., Fortune, S. M.
2018; 115 (25): 6464–69

- **Programmable transcriptional repression in mycobacteria using an orthogonal CRISPR interference platform.** *Nature microbiology*
Rock, J. M., Hopkins, F. F., Chavez, A. n., Diallo, M. n., Chase, M. R., Gerrick, E. R., Pritchard, J. R., Church, G. M., Rubin, E. J., Sassetti, C. M., Schnappinger, D. n., Fortune, S. M.
2017; 2: 16274

- **Comprehensive Essentiality Analysis of the Mycobacterium tuberculosis Genome via Saturating Transposon Mutagenesis.** *mBio*
DeJesus, M. A., Gerrick, E. R., Xu, W. n., Park, S. W., Long, J. E., Boutte, C. C., Rubin, E. J., Schnappinger, D. n., Ehrt, S. n., Fortune, S. M., Sassetti, C. M., Ioerger, T. R.
2017; 8 (1)

- **DNA replication fidelity in Mycobacterium tuberculosis is mediated by an ancestral prokaryotic proofreader.** *Nature genetics*
Rock, J. M., Lang, U. F., Chase, M. R., Ford, C. B., Gerrick, E. R., Gawande, R. n., Coscolla, M. n., Gagneux, S. n., Fortune, S. M., Lamers, M. H.
2015; 47 (6): 677–81

- **Structural basis of toxicity and immunity in contact-dependent growth inhibition (CDI) systems.** *Proceedings of the National Academy of Sciences of the United States of America*
Morse, R. P., Nikolakakis, K. C., Willett, J. L., Gerrick, E., Low, D. A., Hayes, C. S., Goulding, C. W.
2012; 109 (52): 21480-5