

MICAH OLIVAS

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EDUCATION

Stanford University	Ph.D. Genetics	<i>expected</i> 06/25
California State University, Fresno	B.S. Biochemistry (<i>summa cum laude</i>)	06/20
University of Oxford	Visiting Student Physical Chemistry	12/19

AWARDS AND HONORS

Ruth L. Kirschstein National Research Service Award Individual Predoctoral Fellowship (F31)	2023
Stanford ADVANCE Scholar	2020-2021
23andMe Therapeutics Internship (declined)	2020
Phi Kappa Phi Graduate Fellowship	2020
Marshall Scholarship Finalist	2020
Samuel T. Reeves Merit Award (funded Oxford travel)	2019
University of Oxford Visiting Student (Lady Margaret Hall)	2019
Stanford Summer Research Program Symposium Best Poster Award	2019
Stanford Amgen Scholar	2019
Barry M. Goldwater Scholar	2019
CSU Fresno Chemistry and Biochemistry Department Honors	2019
Helen Gigliotti Biochemistry Scholar	2018
American Chemical Society Outstanding Poster Presentation	2017
Fresno State Presidents Scholar	2016-2020
Smittcamp Family Honors Scholar (full-tuition scholarship)	2016-2020

RESEARCH EXPERIENCE

Stanford University School of Medicine , Department of Genetics	2019, 2020-Present
Duke University School of Medicine , Department of Pharmacology and Cancer Biology	2018
California State University, Fresno , Department of Chemistry and Biochemistry	2016- 2020

SELECTED PUBLICATIONS

* Denotes equal contributions

1. C. Fannjiang*, **M. Olivas***, *et al.* (2022) Designing active and thermostable enzymes with sequence-only predictive models. Neural Information Processing Systems (NeurIPS) Learning Meaningful Representations of Life workshop (*Conference Paper*).
2. K. Han, S. E. Pierce, A. Li, K. Spees, G. R. Anderson, J. A. Seoane, Y. H. Lo, M. Dubreuil, **M. Olivas**, *et al.* (2020) CRISPR screens in cancer spheroids identify 3D growth-specific vulnerabilities. *Nature* 580, 136–141
3. A. Waterston, J. Castillo, **M. Olivas**, *et al.* (2018) PM2.5 Exposure and ROS Production in NR8383 Rat Alveolar Macrophages. *Biophysical Journal* 114, 334a

TALKS AND CONFERENCE PROCEEDINGS

POSTERS

1. **M. Olivas***, C. Fannjiang*, C. Markin, N. Naik, P.M. Fordyce. 2022. Leveraging novel protein language models to understand constraints on enzyme function and design. *Poster*. Chan Zuckerberg Biohub Interlab Confabulation.
2. **M. Olivas***, C. Fannjiang*, C. Markin, N. Naik, P.M. Fordyce. 2022. Leveraging novel protein language models to understand constraints on enzyme function and design. *Poster*. Quantitative Biology Institute Bay Area Chemical Biology Symposium.
3. **M. Olivas***, C. Fannjiang*, C. Markin, N. Naik, P.M. Fordyce. 2022. Leveraging novel protein language models to understand constraints on enzyme function and design. *Poster*. Genetics Department Annual Retreat. Stanford, CA.
4. **M. Olivas**, C. Markin, D. Mokhtari, P. Fordyce, and D. Herschlag. 2021. Developing predictive models of enzyme function from physics and phylogeny. *Poster*. Genetics Department Annual Retreat. Stanford, CA
5. **M. Olivas**, K. Han, G.R. Anderson, and M.C. Bassik. 2019. Genome-wide CRISPR screens in 3D tumor spheroids reveal IGF1R processing dependencies in lung adenocarcinoma. *Poster*. 26th annual Stanford Summer Research Program Symposium. Stanford, CA
6. **M. Olivas**, D. Fox, and J. Alvarez. 2019. Development of an inducible Cas9 for temporally controlled gene editing in mammary adenocarcinoma. *Poster*. American Society for Pharmacology and Experimental Therapeutics meeting. Orlando, FL
7. **M. Olivas***, D. Flores*, A. Waterston, L. Dejean, and A. Hasson. 2018. Chemical and signaling bases of PM-mediated ROS production in alveolar macrophages. *Poster*. American Society for Cell Biology meeting. San Diego, CA
8. **M. Olivas**, A. Waterston, L. Dejean, and A. Hasson. 2018. PM_{2.5} Exposure and ROS Production in NR8383 Alveolar Macrophages. *Poster*. California State University Honors Research Conference. Northridge, CA
9. J. Castillo*, **M. Olivas***, A. Waterston, L. Dejean, and A. Hasson. 2018. PM_{2.5} in the Lung Microenvironment. *Talk*. Central Valley Air Quality Coalition meeting. Fresno, CA
10. J. Castillo*, **M. Olivas***, A. Waterston, L. Dejean, and A. Hasson. 2017. Effects of particulate matter aerosols on ROS production in alveolar macrophage cells. *Poster*. 38th annual Central California Research Symposium. Fresno, CA

INVITED TALKS

UC Berkeley, Jennifer Listgarten Lab, General Meeting, Berkeley, CA

May 2023

RESEARCH SUPPORT

ONGOING

F31 HG013267, National Human Genome Research Institute

09/2023-08/2026

High-throughput thermodynamic and kinetic measurements for variant effects prediction in a major protein superfamily

Role: PI; Funding: \$143,908

COMPLETED

Graduate Fellowship Program, Honors Society of Phi Kappa Phi

07/2020-08/2022

Role: PI; Funding: \$8,500