



Martin McLaughlin

Postdoctoral Scholar, Bioengineering

Bio

STANFORD ADVISORS

- Michael Fischbach, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Substrate Recognition by the Peptidyl-(S)-2-mercaptoglycine Synthase TgIHI during 3-Thiaglutamate Biosynthesis.** *ACS chemical biology*
McLaughlin, M. I., Yu, Y., van der Donk, W. A.
2022
- **Overall Retention of Methyl Stereochemistry during B-12-Dependent Radical SAM Methyl Transfer in Fosfomycin Biosynthesis** *BIOCHEMISTRY*
McLaughlin, M., Pallitsch, K., Wallner, G., van der Donk, W. A., Hammerschmidt, F.
2021; 60 (20): 1587-1596
- **The Fellowship of the Rings: Macrocyclic Antibiotic Peptides Reveal an Anti-Gram-Negative Target.** *Biochemistry*
McLaughlin, M. I., van der Donk, W. A.
2020; 59 (4): 343-345
- **Insights into AMS/PCAT transporters from biochemical and structural characterization of a double Glycine motif protease.** *eLife*
Bobeica, S. C., Dong, S. H., Huo, L., Mazo, N., McLaughlin, M. I., Jiménez-Osés, G., Nair, S. K., van der Donk, W. A.
2019; 8
- **Stereospecific Radical-Mediated B12-Dependent Methyl Transfer by the Fosfomycin Biosynthesis Enzyme Fom3.** *Biochemistry*
McLaughlin, M. I., van der Donk, W. A.
2018; 57 (33): 4967-4971
- **Crystallographic snapshots of sulfur insertion by lipoyl synthase.** *Proceedings of the National Academy of Sciences of the United States of America*
McLaughlin, M. I., Lanz, N. D., Goldman, P. J., Lee, K. H., Booker, S. J., Drennan, C. L.
2016; 113 (34): 9446-50
- **Structure of Quinolate Synthase from *Pyrococcus horikoshii* in the Presence of Its Product, Quinolinic Acid.** *Journal of the American Chemical Society*
Esakova, O. A., Silakov, A., Grove, T. L., Saunders, A. H., McLaughlin, M. I., Yennawar, N. H., Booker, S. J.
2016; 138 (23): 7224-7
- **Allosteric Inhibition of Human Ribonucleotide Reductase by dATP Entails the Stabilization of a Hexamer** *BIOCHEMISTRY*
Ando, N., Li, H., Brignole, E. J., Thompson, S., McLaughlin, M. I., Page, J. E., Asturias, F. J., Stubbe, J., Drennan, C. L.
2016; 55 (2): 373-381

- **X-ray structure of an AdoMet radical activase reveals an anaerobic solution for formylglycine posttranslational modification.** *Proceedings of the National Academy of Sciences of the United States of America*
Goldman, P. J., Grove, T. L., Sites, L. A., McLaughlin, M. I., Booker, S. J., Drennan, C. L.
2013; 110 (21): 8519-24
- **Structural basis for methyl transfer by a radical SAM enzyme.** *Science (New York, N.Y.)*
Boal, A. K., Grove, T. L., McLaughlin, M. I., Yennawar, N. H., Booker, S. J., Rosenzweig, A. C.
2011; 332 (6033): 1089-92