Alexander M. Wolff

Education

Ph.D., Biophysics — In Progress
University of California, San Francisco — San Francisco, California
Research Advisor: James Fraser, Ph.D.
Dissertation Title: TBD

M.S., Molecular Biology — May 2015
University of Wyoming — Laramie, WY
Research Advisor: Mark Stayton, Ph.D.
Thesis Title: "Effects of Pericardiectomy, Exercise Training and Myocardial Infarction upon Left-Ventricular mRNA Steady-State Concentrations of Selected Biomarkers"

B.S. *cum laude*, Kinesiology & Health Promotion — May 2013
University of Wyoming — Laramie, WY

Publications

Accepted – In Press

Wolff, A.M.; Rasmussen, T.P.; Wichern, C.R.; Peterson, M.R.; Stayton, M.M.; & Thomas, D.P. "Effects of chronic pericardiectomy on training- and MI-induced left ventricular hypertrophy." International Journal of Sports Medicine. 2016

Grants and Fellowships

NIH T32 Research Fellow
University of California, San Francisco
- Fall 2015
  - ✓ Molecular Biophysics Training Grant

Matilda Edlund Scholarship
University of California, San Francisco
- Fall 2015
  - ✓ 1 of 2 awarded to incoming graduate class at UCSF

INBRE Undergraduate Research Fellowship
University of Wyoming
- Summer 2012
- Fall 2012
- Spring 2013
  - ✓ Designed a project and chose candidate genes to examine the effects of exercise after a myocardial infarction in a mouse model

- ✓ Wrote a paper summarizing my results and the experience I gained at the end of each award
- ✓ Attended the University of Wyoming Undergraduate Research Symposium to learn about ethics in scientific research

Research Experience

Fraser Lab, Dissertation Research — Jun 2016-Current
University of California, San Francisco
Summary: Using diffuse X-ray scattering to inform allosteric connections between distant sites in proteins.

Kampmann Lab, Biophysics Rotation — Mar 2016-Jun 2016
University of California, San Francisco
Summary: Investigating the role of TDP-43 in protein aggregation.

Agard Lab, Biophysics Rotation — Jan 2016-Mar 2016
University of California, San Francisco
Summary: Using X-ray scattering interferometry to monitor HSP90's conformational ensemble.

Frost Lab, Biophysics Rotation — Sep 2015-Dec 2015
University of California, San Francisco
Summary: Determining the role of lipid composition on ESCRTIII's ability to induce membrane tubulation.

Fraser Lab, Biophysics Rotation — Jun 2015-Sep 2015
University of California, San Francisco
Summary: Optimizing micro-crystal formation for serial femtosecond crystallographic experiments.

Stayton Lab, Thesis Research — Jun 2012-May 2015
University of Wyoming
Summary: Discovery of potential mRNA biomarkers of clinical and agricultural relevance.

Teaching Experience

Teaching Assistant, PC111 — Sep 2016-Current
University of California, San Francisco

Module Assistant, iPQB Bootcamp — Sep 2016
University of California, San Francisco

- ➢ Prepared & delivered lecture on experimental methods in structural biology
- ➢ Designed & lead structure validation activity using PyMOL software

Teaching Assistant, General Chemistry — Sep 2013-Dec 2013
University of Wyoming

- Supervised laboratory sections
- Lead discussion sections
- Wrote and proctored quizzes for discussion sections
- Proctored and graded exams
- Tutored students one-on-one during office hours & tutorial hours

Teaching Assistant, Human Anatomy — Jan 2012-Dec 2012
University of Wyoming

- Lead group discussions
- Proctored quizzes

Honors & Awards

University of Wyoming

- Outstanding Chemistry Teaching Assistant Award — Apr 2014
- Trustee's Pride Scholarship — Aug 2009-May 2013
- Hathaway Honors Scholarship — Aug 2009-May 2013
- President's Honor Roll
- Provost's Honor Roll
- Dean's Honor Roll

Before College

- People to People Student Ambassador — Jul 2006

Conferences & Presentations

Wolff, A.M.; Thomas, D.P.; & Stayton, M.M. "Effects of Aerobic Training on Gene Expression in the Heart after a Myocardial Infarction." Oral and Poster Presentations at University of Wyoming's Undergraduate Research Days, Laramie, WY. April 27, 2013.

Public Service

Bay Area Science Festival — Nov 2016

Occupation

Laboratory Technician, Fay Lab — Mar 2013-Sep 2013
University of Wyoming

- Prepared media for bacteria & *C. elegans*
- Used autoclave to sterilize equipment and media
- Prepared buffers and solutions

References

Available upon request