

**Lucas Clayton Wheeler**  
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<https://lcwheeler.github.io/>

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**EDUCATION:**

PhD 2017                      University of Oregon, Chemistry and Biochemistry  
B.S. 2012                      Montana State University, Chemistry and Biochemistry

**AREAS OF SPECIAL INTEREST:**

Evolutionary biology, evolutionary biochemistry, biophysics.

**PROFESSIONAL EXPERIENCE:**

2014-present                PhD candidate & Graduate Research Fellow, University of Oregon  
2012-2013                    PhD student & Graduate Teaching Fellow, University of Oregon  
2009-2012                   Undergraduate Research Assistant, Montana State University

**AWARDS:**

2015                            Best student talk at Mechanisms of Protein evolution III meeting  
2015                            Student travel award to Mechanisms of Protein evolution III  
2011-2012                    Montana INBRE student research award, Montana State University  
2011                            Geer-Howald-Callis summer research award, Montana State University  
2011                            Swager summer research award, Montana State University

**PUBLICATIONS:**

Hiranmayi Duvvuri, **Wheeler LC**, Harms MJ (2017). Pytc: a python package for the analysis of Isothermal Titration Calorimetry experiments. bioRxiv, 234682

**Wheeler LC**, Anderson JA, Morrison AJ, Wong CE, Harms MJ (2017) Conservation of specificity in two low-specificity proteins. doi: 10.1021/acs.biochem.7b01086

**Wheeler LC**, Harms MJ (2017). S100A5 binds Ca<sup>2+</sup> and Cu<sup>2+</sup> independently. BMC Biophysics doi: <https://doi.org/10.1186/s13628-017-0040-y>

**Wheeler LC**, Donor MT, Prell JS, Harms MJ (2016). Multiple Evolutionary Origins of Ubiquitous Cu<sup>2+</sup> and Zn<sup>2+</sup> Binding in the S100 protein Family. PLoS ONE 11(10): e0164740. doi:10.1371/journal.pone.0164740

**Wheeler LC**, An-Lim S, Marqusee S, Harms MJ (2016). The thermostability and specificity of ancient proteins. Curr. Op. Struct. Biol. (LCW and SAL contributed equally to the work)

## CONFERENCE PRESENTATIONS:

**2017:** Society for Molecular Biology and Evolution. Austin Texas.

Poster: *"Phage display and deep sequencing to study the evolution of binding specificity"*

**2016:** Third International Symposium on Protein Folding and Dynamics. Bangalore, India.

Poster: *"Tracing the evolution of peptide binding specificity in the S100 protein family using phage display and deep sequencing"*

Submitted talk: *"Tracing the evolution of peptide binding specificity in the S100 protein family using phage display and deep sequencing"*

**2016:** Gibbs Conference on Biological Thermodynamics. Carbondale, Illinois.

Submitted talk: *"Tracing the evolution of peptide binding specificity in the S100 protein family using phage display and deep sequencing"*

**2015:** Mechanisms of Protein Evolution III: Origins. Denver, Colorado.

Submitted talk: *"Tracing the evolutionary fluctuations of peptide binding specificity in the S100 protein family"* (won prize for best student talk)

**2015:** Gibbs Conference on Biological Thermodynamics. Carbondale, Illinois.

Poster: *"Tracing the evolutionary fluctuations of peptide binding specificity in the S100 protein family"*

**2015:** Protein Folding Consortium Workshop. Berkeley, California.

Poster: *"Evolutionary biophysical studies of peptide specificity in the S100 family"*

Submitted talk: *"Probing the evolutionary history of peptide binding specificity in the S100 protein family"*

**2014:** Gibbs Conference on Biological Thermodynamics. Carbondale, Illinois.

Poster: *"Evolutionary biophysical studies of peptide specificity in the S100s"*

**2014:** Protein Folding Consortium Workshop. Ann Arbor, Michigan.

Poster: *"Evolutionary biophysical studies of protein function in the S100 family"*

## OUTREACH AND OTHER VOLUNTEER ACTIVITIES:

- Volunteer chemistry lab organizer for the CU Upward Bound program
- Co-chair of the Quantitative Problem Solving and Research Communication Consortium at University of Oregon, 2016-present
- ASUO SafeRide program Volunteer, 2016-2017
- Mad Duck Science Fridays, University of Oregon, May 15, 2015
- Presented at the University of Oregon GSA's inaugural GradTalk series. The Barn Light Lounge, Eugene, OR, November 12, 2014
- Mad Duck Science Fridays, University of Oregon, November 22, 2013
- Mad Duck Science Fridays, University of Oregon, October 4, 2013
- Undergraduate Chemistry Society officer, Montana State University. Helped to organize many outreach activities in elementary, middle, and high school classrooms. 2009-2012