

University of California, Irvine  
Department of Ecology and  
Evolutionary Biology  
321 Steinhaus Hall  
Irvine, CA 92697  
(619) 895-9594  
amy.zimmerman@uci.edu

# AMY E. ZIMMERMAN

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## EDUCATION

- 2008-present    **PhD Candidate in Ecology and Evolutionary Biology**  
University of California, Irvine, CA  
Advisor: **Steven D. Allison**  
Dissertation: *Resource allocation strategies of prokaryotes*
- 2003-2006    **B.A. in Biology (graduated *magna cum laude*)**  
Point Loma Nazarene University, San Diego, CA  
Advisor: **David E. Cummings**  
Project: *Activity and diversity of iron reducing bacteria in estuarine sediments*

## RESEARCH INTERESTS

Marine microbial ecology  
Microbial biogeochemistry  
Global change ecology

## PROFESSIONAL AND TEACHING EXPERIENCE

- 2009-2011    **Graduate Teaching Fellow**, NSF GK-12 Program, UC Irvine
- 2008-2009    **Graduate Teaching Assistant**, UC Irvine  
BIO100LW: Experimental Biology Laboratory  
BIO94: Organisms to Ecosystems
- 2008    **Participant**, Microbial Diversity Course, Stanford University Hopkins Marine Station, Pacific Grove, CA
- 2006-2008    **Research Associate**, Kent Sea Tech Corporation, San Diego, CA  
Project: *Targeted bacteriophage therapeutics as replacements for conventional antibiotics in aquaculture*
- 2006-2007    **Laboratory Instructor**, Point Loma Nazarene University  
BIO210: Cell Biology and Biochemistry
- 2005-2006    **Independent Undergraduate Researcher**, Point Loma Nazarene University
- 2004-2006    **Laboratory Assistant**, Point Loma Nazarene University  
BIO315: General Microbiology  
BIO220: Microbiology of Infectious Diseases  
BIO210: Cell Biology and Biochemistry

**PUBLICATIONS**

**Zimmerman, A. E.**, A. C. Martiny, and S. D. Allison. **2013**. Microdiversity of extracellular enzyme genes among sequenced prokaryotic genomes. *ISME Journal* advance online publication, 10 January 2013.

Cummings, D. E., **A. E. Zimmerman**, K. R. Unruh, and S. Spring. **2010**. Influence of microbially reducible Fe(III) on the bacterial community structure of estuarine surface sediments. *Geomicrobiology Journal* 27(4): 292-302.

**Zimmerman, A. E.**, A. C. Martiny, and S. D. Allison. Phylogenetic diversity of cellular stoichiometry among marine bacteria. In prep for submission to *Environmental Microbiology* or *FEMS Microbial Ecology*.

**Zimmerman, A. E.**, A. C. Martiny, M.W. Lomas and S. D. Allison. Variation in phosphorus, RNA content, and alkaline phosphatase activity along a latitudinal transect in the Sargasso Sea. In prep for submission to *Limnology and Oceanography* or *Aquatic Microbial Ecology*.

**FELLOWSHIPS AND AWARDS**

2012	Edward A. Steinhaus Teaching Award, UC Irvine (\$500)
2011	EEB Department Travel Grant, UC Irvine (\$400)
2010	Honorable Mention, NSF Graduate Student Research Fellowship
2010	EEB Department Travel Grant, UC Irvine (\$400)
2009-2011	GK-12 Fellowship, NSF (\$30,000/yr)
2003-2006	Science Honors Scholarship, PLNU (\$7,575/yr)
2003-2006	Music Performance Scholarship, PLNU (\$2,000/yr)
2005-2006	Trowbridge Education Scholarship, PLNU (\$300)
2005-2006	Marcie Weintraub Scholarship, PLNU (\$200)

**PRESENTATIONS** (formerly under A.E. Hebling)

**Zimmerman, A.E.** 2012. *Microbial ecology and the classroom*. [Invited Presentation] MO BIO Laboratories. San Diego, CA.

**Zimmerman, A.E.** 2012. *Is graduate school for you?* [Invited Presentation] Graduate School Event, Point Loma Nazarene University. San Diego, CA.

**Zimmerman, A. E.**, S. D. Allison, & A. C. Martiny. **2012**. *Phylogenetic diversity of cellular stoichiometry among marine bacteria*. [Poster] 14th International Symposium on Microbial Ecology, Copenhagen, Denmark.

**Zimmerman, A. E.**, S. D. Allison, & A. C. Martiny. **2011**. *Cellular stoichiometry of the marine Roseobacter lineage*. [Presentation] Ecological Society of America 96th Annual Meeting, Austin, TX.

**Zimmerman, A. E.**, A. C. Martiny, & S. D. Allison. **2011**. *Distribution of alkaline phosphatase-encoding genes among microbial taxa*. [Poster] AAAS Annual Meeting, Washington, DC.

- Zimmerman, A. E.**, & S. D. Allison. 2011. *Microbial extracellular enzymes: Can we infer function from phylogeny?* [Presentation] Department of Ecology and Evolutionary Biology Graduate Student Symposium, University of California, Irvine. Irvine, CA.
- Zimmerman, A. E.**, & S. D. Allison. 2010. *Distribution of enzyme-encoding genes among microbial taxa: Alkaline phosphatase.* [Poster] 13th International Symposium on Microbial Ecology, Seattle, WA.
- Zimmerman, A. E.**, & S. D. Allison. 2010. *Distribution of enzyme-encoding genes among microbial taxa.* [Presentation] Department of Ecology and Evolutionary Biology Graduate Student Symposium, University of California, Irvine. Irvine, CA.
- Zimmerman, A.E.** 2009. *Graduate Research at a University of California School.* [Invited Presentation] Graduate School Event, Point Loma Nazarene University. San Diego, CA.
- Callahan H.A., M. Vicknair, C. Phan, S. Srinagesh, **A. Hebling**, C. Miller, J.T. Buchanan, J.C. Van Oltst, & J.M. Carlberg. 2007. *Targeted bacteriophage therapeutics as replacements for conventional antibiotics in aquaculture.* [Poster] 17th Evergreen International Phage Meeting, Olympia, WA.
- Hebling, A. E.**, & D. E. Cummings. 2006. *Exploratory research on Fe(III)-reducing bacteria in the sediments of the Tijuana Estuary.* [Presentation] West Coast Biological Sciences Undergraduate Research Conference. Point Loma Nazarene University, San Diego, CA.
- Hebling, A. E.**, & D. E. Cummings. 2006. *Exploratory research on Fe(III)-reducing bacteria in the sediments of the Tijuana Estuary.* [Invited Presentation] Science Honors Weekend, Point Loma Nazarene University. San Diego, CA.

### **PROFESSIONAL SERVICE**

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| 2012-2013    | Organizer, EEB Graduate Student Invited Speaker, UC Irvine         |
| 2012-present | Undergraduate Research Mentor (Mary Hanna, Ellie Olmos), UC Irvine |
| 2011-2012    | Graduate Student Representative, EEB Department, UC Irvine         |
| 2011-present | Science Fair Judge, Newport-Mesa Unified School District           |
| 2011         | Organizer, EEB Graduate Student Symposium, UC Irvine               |
| 2010         | Science Fair Judge, Irvine Unified School District                 |
| 2006         | Research Mentor (Kelsey Unruh), Point Loma Nazarene University     |

### **SOCIETY MEMBERSHIP**

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|--------------|---|
| 2010, 2012   | International Society for Microbial Ecology |
| 2009-present | American Society for Microbiology           |
| 2009-present | Ecological Society of America               |
| 2004-2006    | Tri-Beta Biology Honors Society             |