

# Umihiko Hoshijima

## Curriculum Vitae

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Department of Ecology, Evolution, and Marine Biology  
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### EDUCATION

- 2013-present **University of California, Santa Barbara** – Santa Barbara, California  
Ph.D. in Ecology, Evolution, and Marine Biology.
- 2009-2013 **University of California, Santa Cruz** – Santa Cruz, California  
B.S. in Biological Sciences, with Honors  
Minors in Chemistry, Electronic Music

### GRANTS IN SUPPORT OF RESEARCH

- 2015-present **California Sea Grant** - *Global Change Ecophysiology of egg masses and juveniles of the kelp forest fish, *Scorpaenichthys marmoratus**  
(\$24,999)
- 2015-present **UCSB Associated Students Coastal Fund** - *Sensor deployments in kelp forests – measuring carbon dioxide and oxygen levels to assess the impacts of a changing ocean* (\$1,414)

### FELLOWSHIPS AND AWARDS

- 2014-present **National Science Foundation** - Graduate Research Fellowship (GRFP)
- 2014 **Continuing Student Graduate Fellowship** – Department of Ecology, Evolution and Marine Biology, UC Santa Barbara
- 2013-2014 **Graduate Fellowship** – Department of Ecology, Evolution and Marine Biology, UC Santa Barbara
- 2012 **National Science Foundation** – Research Experience for Undergraduates (NSF-REU) recipient. Shannon Point Marine Center, Western Washington University, Washington.

### PROFESSIONAL EXPERIENCE

- 2013-present **Graduate research**, Department of Ecology, Evolution, and Marine Biology, University of California, Santa Barbara.  
Advisor: Professor Gretchen Hofmann.

## UMIHIKO HOSHIJIMA

- 2013      **Lab and field technician** at the Department of Ecology and Evolutionary Biology, University of California, Santa Cruz.  
Advisor: Professor Mark Carr.
- 2010-2013      **Lab and field technician** at the National Marine Fisheries Service, NOAA, Santa Cruz, CA.  
Advisor: Dr. Sean Hayes.
- 2012      **NSF-REU Internship** at Shannon Point Marine Center, Western Washington University, Washington.  
Advisor: Dr. Kathy van Alstyne.
- 2007      **Lab technician** at The Scripps Research Institute, San Diego, CA.  
Advisor: Professor Larry Gerace.

### MANUSCRIPTS IN PREPARATION AND REVIEW

- Hughes, BB, Hammerstrom K., Grant N., **Hoshijima U.**, Eby, R., Wasson, K. 2014. The role of trophic cascades in dictating a phase shift from macroalgae to seagrass in a macroalgal dominated estuary. *In review*. Target journal: *Ecology*.
- Dilly, G.F., Rivest, E.B., L. Kapsenberg, Nguyen, A.T., **Hoshijima U.**, Lunden, J.J., Johnson, K.M., and Hofmann, G.E. 2014. Exploring local adaptation to ocean acidification in *Mytilus californianus* during simulated upwelling events in Acidification Respirometry Chambers (ARCs). *In prep*. Target journal: *J. Experimental Biology*.

### PRESENTATIONS OF RESEARCH

- Hoshijima, U.** *Global Change Biology: From California to Antarctica*. Invited talk, Marine Science course, La Jolla High School CA. January 2015.
- Hoshijima, U.** and van Alstyne, K. *pH Fluctuation of Local Macroalgae in Response to Environmental Stressors*. NSF-REU final presentation, Shannon Point Marine Center, Anacortes, WA. (oral presentation, August 2012)

### WORKSHOPS ATTENDED/INSTRUCTED

- 2015      **Instructor** - *Scientific Programming with R*. UC Santa Barbara, CA (April 17-18).
- 2014      *Autonomous pH Sensor - Best Practices*, Scripps Institute of Oceanography, San Diego, CA (August 4-8).
- 2014      *Scientific Programming Workshop*, UC Santa Barbara, CA (Jan 31 – Feb 1).

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### TEACHING AND STUDENT ADVISING

- 2014 Teaching Assistant, *The Diversity of Life*. Ecology, Evolution and Marine Biology. University of California, Santa Barbara.
- 2007-2009 Private Guitar Instructor
- 2007-2009 Lead Student Instructor, National Ocean Sciences Bowl (NOSB), La Jolla High School, USA.

### ACADEMIC SERVICE

- 2014-present Mentor for undergraduate Biology students, Graduate Biology Mentorship Association (BIOME), UC Santa Barbara.
- 2013-present Cohort representative, Ecology, Evolution and Marine Biology Graduate Student Advisory Committee (GSAC). UC Santa Barbara.

### FIELD RESEARCH

- 2014 **Grantee**, NSF/United States Antarctic Program (USAP); **McMurdo Station, Antarctica** (11 weeks). PI: Professor Gretchen Hofmann.
- 2014 Channel Islands Research Cruise for Acidification Studies (CIRCAS), Santa Barbara, CA; NOAA ship *R/V Shearwater* (5 days). Chief Scientist: Dr. James Lunden.
- 2011 NOAA- SWFSC Salmon Cruise, California Current; *F/V Frosti* (6 days). Chief Scientist: Dr. Sean Hayes.

### IN THE PRESS

- **UCSB Bottom Line** – “UCSB Hofmann Lab Examines Effects of Ocean Acidification on Sculpin” <https://thebottomline.as.ucsb.edu/2015/03/ucsb-hoffman-lab-examines-effects-of-ocean-acidification-on-rockfish>
- **The UC Santa Barbara Current, Noozhawk Santa Barbara** – “Understanding Adaptive Capacity – UCSB researchers receive funding to study the effect of pH variability on the early life stages of a kelp forest rockfish” <http://www.news.ucsb.edu/2015/015021/understanding-adaptive-capacity> [http://www.noozhawk.com/article/understanding\\_adaptive\\_capacity](http://www.noozhawk.com/article/understanding_adaptive_capacity)
- **UCSB GradPost** - “Graduate Student Umi Hoshijima Takes On Bitter Cold and Lightning-quick Penguins”. December 1, 2014. <http://gradpost.ucsb.edu/headlines/2014/12/1/graduate-student-umi-hoshijima-takes-on-bitter-cold-and-ligh.html>
- **NPR Morning Edition** - “Underwater Meadows Might Serve As Antacid For Acid Seas”. Photo Credit. July 15, 2014. <http://www.npr.org/2014/07/15/330440072/underwater-meadows-might-serve-as-antacid-for-acid-seas>

## UMIHIKO HOSHIJIMA

### RESEARCH DIVING

- PADI: Open Water certification.
- NAUI: advanced open water, rescue diver, teaching assistant, and master diver certifications.
- AAUS: scientific diving authorization maintained at UC Santa Barbara (30ft).
- First Aid, CPR, Dan O<sub>2</sub> Certifications
- 130+ dives, 90+ hours logged.

### MEMBERSHIPS AND AFFILIATIONS

- Sigma Xi Scientific Research Society
- Western Society of Naturalists
- American Academy of Underwater Sciences
- Santa Barbara Coastal Long Term Ecological Research (SBC-LTER) Project

### REFERENCES

Prof. Gretchen Hofmann Professor, PhD advisor  
University of California, Santa Barbara  
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Dr. Sean Hayes Research Fisheries Biologist  
NOAA Fisheries, Santa Cruz, CA  
Assistant Adjunct Professor, UC Santa Cruz  
sean.hayes@noaa.gov

Dr. Kathy van Alstyne Marine Scientist  
Shannon Point Marine Center  
Western Washington University, WA  
kathy.vanalstyne@wwu.edu