

## Grant Batzel

Marine Biology Research Division  
Scripps Institution of Oceanography  
La Jolla, California, 92093, USA  
tel: 858-222-9000, [gbatzel@ucsd.edu](mailto:gbatzel@ucsd.edu)

### Education

2017 – Present Ph.D. Student, Marine Biology, Scripps Institution of Oceanography, La Jolla, CA  
2015 B.S., Marine Biology, University of Hawaii Manoa, Honolulu, HI

### Training

2016 Laval Biology Summer Course, Friday Harbor Laboratories, Friday Harbor, WA

### Professional Experience

2017 – Present Graduate Student Researcher, Scripps Institution of Oceanography, UCSD  
(Advisor: Dr. Deirdre C. Lyons)  
2015 – 2017 Larval Biology Assistant, University of Hawaii at Manoa  
(PI: Dr. Michael G. Hadfield)  
2013 – 2015 Undergraduate Researcher, University of Hawaii at Manoa  
(PI: Dr. Michael G. Hadfield)

### Publications

Batzel, G., Nedved, B.T., Hadfield, M.G.\* (2016). Expression and Localization of Carbonic Anhydrase Genes in the Serpulid Polychaete *Hydroides elegans*. *The Biological Bulletin*, 231(3), 175-184.

### Manuscripts

Maboloc, E.A.\*, Batzel, G.\*, Grünbaum D., Chan, K.Y.K. (2019). Vertical distribution of larval sand dollars in pH stratified water columns. *In Review*

Batzel, G., Moreno, B., Lopez, L., Nguyen, N., Livingston, B.T., Joester, D., Lyons, D.C.\* (2019). Proteomic Analysis of Biomineral Extracellular Matrix Proteins in the Metazoa. *In Preparation*

### Book Chapters

Nesbit, K.T., Fleming, T., Batzel, G., Pouv, A., Rosenblatt, H.D., Pace, D.A., Hamdoun A., Lyons, D.C.\* (2019). The painted sea urchin, *Lytechinus pictus*, as a genetically-enabled developmental model. *Methods in Cell Biology*, 150, 105-123.

### Presentations

Batzel, G., Lopez L., Nguyen C., Livingston B.T., Lyons D.C. (2018). Proteomic analysis of shells from the slipper snail *Crepidula fornicata*: a model organism for studying biomineralization in gastropods. Developmental Biology of the Sea Urchin and Other Marine Invertebrates XXV, Woods Hole, MA, *Oral Presentation*

Batzel, G., Lyons D.C. (2018). Elucidating the molecular mechanisms for biomineralization using the slipper-snail *Crepidula* (Gastropoda: Calyptraeidae). Society for Integrative and Comparative Biology, San Francisco, CA, *Poster Presentation*

Batzel, G., Maboloc E.A., Grünbaum D. (2017). Larvae of the echinoid *Dendraster excentricus* change swimming behavior to avoid low pH in columns with layers of acidified and ambient seawater. Developmental Biology of the Sea Urchin XXIV, Woods Hole, MA, *Poster Presentation*

Batzel, G., Maboloc E.A., Grünbaum D. (2017). Larvae of the echinoid *Dendraster excentricus* change swimming behavior to avoid low pH in columns with layers of acidified and ambient seawater. Society for Integrative and Comparative Biology, New Orleans, LA, *Oral Presentation*

Batzel, G., Nedved B.T., Hadfield M.G. (2016). Presence and localization of carbonic anhydrase genes in *Hydroides elegans*. Society for Integrative and Comparative Biology, Portland, OR, *Oral Presentation*

#### **Awards and Fellowships**

2019 DBSU XXV Travel Award, Woods Hole, MA  
2018 NCGAS Travel Award, Indiana University, Bloomington, IN  
2017 GSA Travel Award, University of California San Diego, La Jolla, CA  
2017 Regents Fellowship, University of California San Diego, La Jolla, CA  
2017 DBSU XXIV Travel Award, Woods Hole, MA  
2016 Larval Biology Course Support, Friday Harbor Laboratories, Friday Harbor, WA  
2013 UROP Award, University of Hawaii Manoa, Honolulu, HI

#### **Service and Outreach:**

2019 Birch Aquarium “Egg-stravaganza” outreach activity  
2019 Student Search Committee - SIO Biology Faculty Position (Plankton Ecologist/Physiologist)  
2019 High Tech High Media Arts, Urchin Spawning Lab, Chris Wakefield’s Junior Biology Class  
2018 High Tech High Media Arts, Urchin Spawning Lab, Brad Davidson’s Junior Biology Class  
2017 Organizer - SIO-BUG (Bioinformatics User Group), Next Generation Sequencing Workshop  
2017 Wai’alae School, Marine Biology Outreach Event, Dian Hermes’ 3<sup>rd</sup> Grade Class

#### **Teaching and Mentoring:**

2019 High Tech High Media Arts Internship Mentor, High School Junior, Amelia Berry  
2018 Scripps Undergraduate Research Fellowship Mentor, B.S. Student, Milagros Esmerode, SDSU  
2018 High Tech High Media Arts Internship Mentor, High School Junior, John Boyce

#### **Fieldwork:**

2015 Ford Island Biofouling Testing (ONR) (PI: Dr. Michael G. Hadfield, Dr. Brian T. Nedved). Pearl Harbor, HI. Monthly 1-day inspections (2/1/15 – 6/1/17)  
2013 Kaneohe Bay Plankton Sampling (PI: Dr. Erica Goetze, Dr. Michele Jungbluth). Kaneohe, HI. 14-days of 1-day collecting (6/10/19 – 6/24/19)

#### **Certifications:**

2013 PADI Advanced Open Water and Nitrox certified

#### **Professional Memberships:**

2017 Society for Developmental Biology  
2016 Society for Integrative and Comparative Biology