

Grant Batzel

Marine Biology Research Division
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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

- [4] Lyons, D.C., Perry, K.J., Batzel, G., Henry, J.Q. (2020). BMP signaling plays a role in anterior neural/head development, but not organizer function, in the gastropod *Crepidula fornicata*. *Developmental Biology*, 463(2); 135-157.
- [3] Maboloc, E.A., Batzel, G., Grünbaum D., Chan, K.Y.K. (2020). Vertical distribution of echinoid larvae in pH stratified water columns. *Marine Biology*, 167(13), 1-9.
- [2] 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.
- [1] 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.

Presentations

- [5] 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*
- [4] 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*
- [3] 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*
- [2] 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*
- [1] 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*

Fellowship and Training Grant

- 2019 – 2020 Predoctoral Trainee, NIH Training Program in Marine Biotechnology, UC San Diego
- 2017 – 2018 Regents Fellowship, UC San Diego, La Jolla, CA

Awards

- 2020 Outstanding Teaching Assistant Award, Scripps Institution of Oceanography, La Jolla, CA
- 2019 DBSU XXV Travel Award, Woods Hole, MA
- 2018 NCGAS Travel Award, Indiana University, Bloomington, IN
- 2017 GSA Travel Award, UC 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

Outreach and Service:

- 2020 Hubbs Hall Experimental Aquarium Committee
- 2019 SIO Biology Faculty Position Search Committee (Plankton Ecologist/Physiologist)
- 2019 Birch Aquarium, Lyons Lab Nudibranch Embryology Demonstration
- 2019 High Tech High Media Arts, Urchin Spawning Lab, Chris Millow'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'alaie School, Marine Biology Outreach Event, Dian Hermes' 3rd Grade Class

Teaching and Mentoring:

- 2020 Teaching Assistant, SIO146: Marine Cell and Developmental Biology Laboratory
- 2020 High Tech High Media Arts Internship Mentor, High School Junior, E. Meza-Ehlert and E. Tapia
- 2019 High Tech High Media Arts Internship Mentor, High School Junior, A. Berry
- 2018 Scripps Undergraduate Research Fellowship Mentor, B.S. Student, M. Esmerode, SDSU
- 2018 High Tech High Media Arts Internship Mentor, High School Junior, J. Boyce

Cruises and Fieldwork:

- 2019 *Graduate Student Researcher*, R/V Sproul, Channel Islands, CA (8/19/19 – 8/22/19) (Chief Scientist: Dr. Greg Rouse)
- 2015 *Research Assistant*, Ford Island Biofouling Testing (ONR) (2/1/15 – 6/1/17) (PI: Dr. Michael Hadfield, Dr. Brian Nedved). Pearl Harbor, HI. Monthly 1-day inspections
- 2013 *Undergraduate Researcher*, Kaneohe Bay Plankton Sampling (6/10/13 – 6/24/13) (PI: Dr. Erica Goetze). Kaneohe, HI. 14-days of 1-day collecting

Certifications:

- 2013 PADI Advanced Open Water and Nitrox certified

Professional Memberships:

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