

Maya S. deVries

Sustainable Oceans NSF National Research Traineeship
University of California, Davis
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EDUCATION

Ph.D. Integrative Biology, University of California, Berkeley. 2012.

- Thesis: The Ecology and Morphology of Stomatopod Crustaceans
- Co-advisors: Dr. Sheila N. Patek and Dr. Todd E. Dawson

B.S. Evolution and Ecology Major, English Minor, University of California, Davis. 2004.

- UC Davis Evolution & Ecology Department Citation for Excellence in Research & Academics.
- High Honors

APPOINTMENTS

2018 – Director of Training Activities. Sustainable Oceans NSF National Research Traineeship, Coastal and Marine Studies Institute, University of California, Davis.

2013–18 Postdoctoral Fellow. Scripps Institution of Oceanography, University of California, San Diego.

2013 Visiting Fellow. Naos Marine Laboratory, Smithsonian Tropical Research Institute, Panama.

FELLOWSHIPS & GRANTS

Fellowships

- **NSF Ocean Sciences Division Broadening Participation Postdoctoral Fellowship. 2014 – 2016.**
- **Scripps Institution of Oceanography Postdoctoral Scholar Award. 2013 – 2014.**
- AAAS Science and Technology Policy Fellowship. 2013. Declined.
- Phi Beta Kappa Graduate Fellowship. 2011.
- **Fulbright Student Research Fellowship, Panama. 2010 – 2011.**
- Smithsonian Tropical Research Institute Short-Term Fellowship. 2008.
- UC Berkeley Department of Integrative Biology Summer Fellowship. 3 awards. 2008 – 2010.

Grants

- Society for Integrative and Comparative Biology Broadening Participation Travel Award. 2018.
- UC San Diego Center Launch Grant. 2017.
- UC San Diego Frontiers of Innovation Scholars Program. 2017.
- Galeta Marine Laboratory Research and Outreach Grant. 2013.
- Smithsonian Tropical Research Institute Fellow Travel Award. 2011.
- Berkeley Sigma Xi Honors Society Grants-In-Aid-of-Research. 4 awards. 2007 – 2010.
- UC Museum of Paleontology Graduate Student Research Award. 4 awards. 2006 – 2010.
- Sigma Xi Scientific Honors Society Grants-In-Aid-of-Research. 2 awards. 2008 – 2009.
- Society of Integrative & Comparative Biology Grants-In-Aid-of-Research. 2009.
- UC Berkeley Hansen Conference Travel Award. 2 awards. 2007, 2009.
- American Museum of Natural History Lerner-Gray Fund. 2008.
- Sackler Evolution & Biodiversity Colloquium Travel Grant. 2007.

PUBLICATIONS

*mentored student co-author

- DiRenzo, G.V., T.S. Tunstall, R. Ibáñez, **M.S. deVries**, A.V. Longo, K. R. Zamudio, K.R. Lipps. 2018. External Reinfection of a fungal pathogen does not contribute to pathogen growth. *EcoHealth*. <https://doi.org/10.1007/s10393-018-1358-x>.
- deVries, M.S.** 2017. The role of feeding morphology and competition in governing the diet breadth of sympatric stomatopod crustaceans. *Biology Letters*. 13: 20170055 doi:10.1098/rsbl.2017.0055. Featured on the *Royal Society Publishing Blog*.
- deVries, M.S.**, S.J. Webb*, J. Tu, D.D. Deheyn, E.C. Burak, V. Morgan*, R. Sah, J.R. A. Taylor. 2016. Stress physiology and weapon integrity of intertidal mantis shrimp under future ocean conditions. *Scientific Reports*. 6:38637 doi:10.1038/srep38637.
- deVries, M.S.**, B.C. Stock, J.H. Christy, G.R. Goldsmith, & T.E. Dawson. 2016. Specialized morphology corresponds to a generalist diet: linking form and function in mantis shrimp crustaceans. *Oecologia* 182: 429-442 doi:10.1007/s00442-016-3667-5. Featured in *Explorations Now*.
- deVries, M.S.**, C. Martínez del Río, T.S. Tunstall, & T.E. Dawson. 2015. Isotopic incorporation rates and discrimination factors in mantis shrimp. *PLOS ONE*. doi:10.1371/journal.pone.0122334.
- deVries, M.S.**, E.A.K. Murphy, & S.N. Patek. 2012. Strike mechanics of an ambush predator: the spearing mantis shrimp. *Journal of Experimental Biology* 215: 4374-4384. Featured in *Inside JEB, Phenomenon: Not Exactly Rocket Science*.
- Staaterman, E.S., C.W. Clark, A. Gallagher, T. Claverie, **M.S. deVries**, & S.N. Patek. 2012. The acoustic ecology of the California mantis shrimp. In: Popper, A. N. and Hawkins, A. eds *Effects of Noise on Aquatic Life*. Springer Science+Business Media, LLC, New York.
- Staaterman, E.S., C.W. Clark, A.J. Gallagher, **M.S. deVries**, T. Claverie, & S.N. Patek. 2011. Rumbling in the benthos: the acoustic ecology of the California mantis shrimp. *Aquatic Biology* 13: 97-105.
- deVries, M.S.** & P.C. Wainwright. 2006. The effects of acute temperature change on prey capture kinematics in largemouth bass, *Micropterus salmoides*. *Copeia* 3: 437-444.

In Review

- deVries, M.S.**, Webb, S.J. (equal authorship), J.R.A. Taylor. Changes in the relationship between jaw length to test diameter in the Aristotle's lantern of the purple sea urchin is not a plastic response. In review: *Proceedings of the Royal Society B*.
- Glick, P., A. Ong (equal authorship), **M.S. deVries**, S.A. Sandin, E.W. Hawkes, M.T. Tolley. Retraction of a Soft Robot for Coral Reef Exploration. In review: *IEEE International Conference on Robotics and Automation*.

TEACHING

Teaching Leadership & Awards

- NSF funded redesign of coursework for *Introduction to Organismal Biology*. Fall 2012.
- UC Berkeley Outstanding Graduate Student Instructor Award. 2008.
- Educational Initiatives Award for *Introduction to Organismal Biology Field Section*. UC Berkeley. \$10,000. 2007.

Instructor. Center for Marine Biodiversity & Conservation, Scripps Institution of Oceanography.

- *Introduction to Marine Biodiversity and Conservation* at the USC Wrigley Marine Science Center, Catalina Island. Master's level course. Summer 2016, 2017.

Instructor. Smithsonian Tropical Research Institute. Courses taught in Spanish.

- *Statistical Workshop in R*. Spring 2011.
- *Ecology and Coastal Management*. Field course. Fall 2010.

Graduate Student Instructor. University of California, Berkeley.

- *Wildlife Ecology*. Spring 2012.
- *Introduction to Organismal Biology*. Fall 2005, 2006, 2011, Spring 2010.
- *Biology and Geomorphology of Tropical Islands* in Moorea, French Polynesia. Field course. Fall 2009.
- *Animal Behavior*. Spring 2006, 2007.
- *Introduction to Organismal Biology Field Section*. Field course. Fall 2006.

Teaching Assistant. University of California, Davis.

- *Comparative Vertebrate Anatomy Laboratory*. Fall 2004.

Guest Lectures

- *Current Research in Marine Biology*. Scripps Institution of Oceanography. 2014, 2015, 2016.
- *Biomechanics of Marine Life*. Scripps Institution of Oceanography. 2014, 2017.
- *Introduction to Field Biology*. Smithsonian Tropical Research Institute. 2013.
- *Stable Isotope Biogeochemistry*. UC Berkeley. 2012.
- *Coastal Marine Ecosystems*. University of Panama. 2011.
- *Biology and Geomorphology of Tropical Islands*. UC Berkeley. 2009.

STUDENT MENTORSHIP

Scripps Institution of Oceanography and UC San Diego. 2014 – Present.

- 3 undergraduates in the Scripps Undergraduate Research Fellowship program
- 1 Master's student and 1 Ph.D. student in the Department of Mechanical and Aerospace Engineering
- 16 volunteers and 2 paid laboratory assistants, three of which are conducting independent research projects and/or will be authors on final publications

UC Berkeley. 2006 – 2012.

- 11 undergraduates in the Undergraduate Research Apprenticeship Program, two of which are authors on published abstracts.
- 3 volunteer and work-study undergraduates.

Smithsonian Tropical Research Institute and The University of Panama. 2011. 2013.

- 5 undergraduates on group projects and 1 student intern on independent project.

INVITED SEMINARS

- Louisiana State University. Department of Oceanography and Coastal Studies. 2018.
- California State University, Long Beach. Department of Biological Sciences. 2018.
- San Francisco State University. Biology Department. 2017.
- Occidental College. Biology Department. 2016.
- Loma Linda University. Department of Earth and Biological Sciences. 2016.
- San Diego State University. Department of Biology. 2015.

- San Diego Coral Club (consortium of researchers from Scripps Institution of Oceanography, San Diego State University, University of San Diego). 2015, 2017.
- California State University, Fullerton. Department of Biological Science. 2014.
- Scripps Institution of Oceanography, UC San Diego. Marine Biology Research Division. 2014.
- Smithsonian Tropical Research Institute, Panama. Talk of the Month Lecture Series. 2011.
- Department of Integrative Biology, UC Berkeley. Chalk Talk. 2011.

PUBLISHED CONFERENCE ABSTRACTS

*mentored student co-author

Symposia & Invited Presentations

- deVries, M.S.** B.C. Stock, & J.H. Christy. Southern California Academy of Sciences. Santa Monica, CA. 2017.
- deVries, M.S.**, S.J. Webb*, J. Tu, D.D. Deheyn, J.R.A. Taylor. (Discussion Leader, Invited Flash Talk). Gordon Research Seminar and Conference. Waterville, NH. 2016.
- deVries, M.S.** (Symposium Organizer, Chair, Presenter). AAAS Pacific Division. San Diego, CA. 2016.
- Taylor, J.R.A. & **M.S. deVries**. AAAS Pacific Division. San Diego, CA. 2016.
- Trice, M. & **M.S. deVries** (Co-presenters). Council on International Education Exchange. Minneapolis, MN. 2013.
- Patek, S.N., **M.S. deVries**, & E.A.K. Murphy. Society for Integrative & Comparative Biology. San Francisco, CA. 2013.
- deVries, M.S.** Smithsonian Tropical Research Institute Fellows' Symposium. Panama City, Panama. 2011.
- deVries, M.S.** Central America Fulbright Enrichment Seminar. San Jose, Costa Rica. 2011.

Contributed Presentations

- deVries, M.S.** Society for Integrative & Comparative Biology. San Francisco, CA. 2018.
- Lowder, K.B., **M.S. deVries**, C.B. Kelly, J.R.A. Taylor. Society for Integrative & Comparative Biology. San Francisco, CA. 2018.
- Lowder, K.B., J.R.A. Taylor, **M.S. deVries**. 11th International Workshop and Conference on Lobster Biology and Management. Portland Maine, 2017.
- deVries, M.S.**, A. Raza*, S.J. Webb*, J.R.A. Taylor. Society for Integrative & Comparative Biology. New Orleans, LA. 2017.
- deVries, M.S.**, B.C. Stock, & J.H. Christy. International Coral Reef Symposium. Honolulu, HI. 2016.
- Webb, S.J.* & **M.S. deVries** AAAS Pacific Division. San Diego, CA. 2016. Winner of two AAAS Pacific Division Awards.
- deVries, M.S.**, S.J. Webb*, J. Tu, D.D. Deheyn, and J.R. Taylor. Society for Integrative & Comparative Biology. Portland, OR. 2016.
- Webb, S.J.* & **M.S. deVries**. Society for Integrative & Comparative Biology. Portland, OR. 2016.
- deVries, M.S.**, S.J. Webb*, J. Tu, D.D. Deheyn, & J.R.A. Taylor. Western Society of Naturalists. Sacramento, CA. 2015.
- Webb, S.J.* & **M.S. deVries**. Western Society of Naturalists. Sacramento, CA. 2015.
- deVries, M.S.** & J.R. Taylor. Society for Integrative & Comparative Biology. Palm Beach, FL. 2015.
- deVries, M.S.** & J.H. Christy. Society for Integrative & Comparative Biology. Charleston, SC. 2012.
- deVries, M.S.**, S. Lu*, C. Martínez del Río, & T.E. Dawson. Society for Integrative & Comparative Biology. Seattle, WA. 2010.
- deVries, M.S.** Ecological Society of America. Albuquerque, NM. 2009.

deVries, M.S. Society for Integrative & Comparative Biology. Boston, MA. 2009.
deVries, M.S. Applications of Stable Isotope Techniques to Ecological Studies. Honolulu, HI. 2008.
deVries, M.S. Ecological Society of America. San Jose, CA. 2007.
deVries, M.S. & S.N. Patek. Society for Integrative & Comparative Biology. Phoenix, AZ. 2007.
deVries, M.S. & P.C. Wainwright. Society for Integrative & Comparative Biology. Orlando, FL. 2006.

PROFESSIONAL AND UNIVERSITY SERVICE

Grant proposal reviewer for National Science Foundation (Ocean Sciences Division)

Manuscript reviewer for:

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| • <i>Biology Letters</i> (Top Referee, 2013) | <i>Journal of Experimental Biology</i> |
| <i>Ecography</i> | <i>Journal of Experimental Marine Biology and Ecology</i> |
| <i>Evolution</i> | <i>Journal of Experimental Zoology Part A</i> |
| <i>Hydrobiologia</i> | <i>Journal of the Royal Society Interface</i> |
| <i>Journal of Aquaculture Research and Development</i> | <i>Royal Society Open Science</i> |
| <i>Journal of Crustacean Biology</i> | |

Society for Integrative and Comparative Biology (SICB).

- Postdoc Representative. SICB Broadening Participation Committee. 2016 – 2017.
- Mentorship committee. Develop programs and avenues of support for a broad membership.
- Session Chair. 2016, 2017, 2018.
- Judge for Best Student Presentation and Poster. Division of Animal Behavior. 2016.
- Judge for Best Student Presentation and Poster. Division of Invertebrate Zoology. 2016 – 2018.

SIO Postdoc Representative. Scripps Institution of Oceanography, UC San Diego. 2014 –.

- Secure funding for and organize monthly networking meetings; manage postdoc listserv.

Alumni Ambassador. Fulbright US Student Program. 2012 – 2014.

- Presented at universities and conferences to promote STEM participation in Fulbright.

Co-coordinator, founding member. Integrative Biology Women in Science, UC Berkeley. 2007 – 2010.

- Organized monthly group meetings on strategies for success in science careers.

Graduate Student Representative. UC Museum of Paleontology, Berkeley Natural History Museum. 2008.

- Liaison between graduate students in UC Berkeley's seven natural history museums.

PUBLIC ENGAGEMENT IN SCIENCE

Accredited Delegate. United Nations Framework Convention on Climate Change (UNFCCC).

- COP22. Press conference on technologies to monitor climate change effects in the ocean. 2016.
- COP23. Press conference on the role of local management in climate change adaptation on coral reefs. 2017.

Scripps Institution of Oceanography and the Birch Aquarium. 2014 –.

- *Perspectives on Ocean Sciences Lecture Series* at the Birch Aquarium.
Available at: <https://ucsd.tv/search-details.aspx?showID=30922>
- Panelist for official screening of the documentary, *Chasing Corals*, Kihei, Maui, HI
- Coursework development for Title I students based on my research.
- Aquarium exhibit on mantis shrimp.
- Blog posts for *Scripps News*, Scripps Institution of Oceanography, UC San Diego.
- Public lectures for Ocean Enterprises, SEACAMP San Diego, Pint of Science Festival.

Board of Directors. Cambio Creativo, Panama. Chair 2013 – 2015.

- Responsible for strategic, legal and fiduciary direction of 501(c)(3) that couples art and science.
- Raised over \$80,000 through donations and grants (State Department's Alumni Engagement Innovation Fund and the US Embassy).
- Blog posts for Cambio Creativo after school program.

Galeta Marine Laboratory, Smithsonian Tropical Research Institute. 2008 – 2015.

- Initiated beach cleanup program.
- Raised over \$10,000 through corporate sponsorship and the US Embassy.
- Monthly research lectures to the public.

University of California, Berkeley. 2006 – 2012.

- Graduate Student Staff Member for Cal:Blast Teacher Training Program.
- Graduate Student Researcher with the UC Museum of Paleontology Outreach Team.
- Volunteer Coordinator and fundraiser of over \$20,000 for the inaugural Expanding Your Horizons in Science and Mathematics Conference at UC Berkeley.
- Blog posts for the UC Museum of Paleontology and Moorea BioCode Project.
- Facebook page about stomatopod biology called "Oscar Stomatopod" that has over 500 friends

SELECT MEDIA COVERAGE

Physics Girl YouTube episode. 2017.

Royal Society Publishing Blog. 2017.

Explorations Now, Scripps News, Scripps Institution of Oceanography. 2016.

KPBS Radio. 2016.

Berdan, S.N., A. Goodman, C. Taylor. 2013. *A Student Guide to Study Abroad*. The Institute of International Education, New York. pp. 7, 302.

SERTV's *Ser Mujer*. Panama. 2013.

Inside JEB. 2012.

Phenomenon: Not Exactly Rocket Science.

National Geographic. 2012.

Bionieuws. Netherlands, 2012.

ScienceDaily. 2012.

LiveScience. 2012.

La Estrella. Panama, 2 articles in 2011.

Radio Marbella. Panama, 2011.

Radio Panama. Panama, 2011.

Mongabay. 2010.

Daily Planet. Discovery Channel. 2009.

La Prensa. Panama, 2009.

Evolution series. The History Channel. 2008.

PROFESSIONAL AFFILIATIONS

Society for Integrative & Comparative Biology

Ecological Society of America

Western Society of Naturalists

American Association for the Advancement of Science

International Society for Reef Studies

Phi Beta Kappa

Sigma Xi Scientific Honors Society

American Academy of Underwater Sciences

FIELD STATION EXPERIENCE

Charles Darwin Research Station, Galapagos Islands, Ecuador. • Division of Aquatic Resources, Maui, Hawaii. • Gump South Pacific Research Station, Moorea, French Polynesia. • Heron Island Research Station, Great Barrier Reef, Australia. • Lizard Island Research Station, Great Barrier Reef, Australia. • Moreton Bay Research Station, Stradbroke Island, Australia. • Smithsonian Tropical Research Institute, Panama (Galeta, Naos, and Bocas del Toro). • Wrigley Institute for Environmental Studies, Catalina Island, California.