

# ALISON L. GOULD

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## EDUCATION

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- 2016 **Ph.D. Ecology and Evolutionary Biology** • University of Michigan • Ann Arbor, MI  
2009 **M.S. Marine Biology** • San Francisco State University • Estuary & Ocean Science Center  
2005 **B.A. Mathematics • Biology** • University of Virginia • Charlottesville, VA

## APPOINTMENTS

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- 2018-present **Research Scientist** • California Academy of Sciences (CAS) • Ichthyology • Microbiology  
2018-present **Sandler Faculty Fellow Affiliate** • University of California, San Francisco  
2018 **NSF Postdoctoral Fellow in Biology** • CAS • Ichthyology  
2017 **Postdoctoral Fellow** • University of California, Berkeley • Molecular and Cell Biology  
2015-16 **Rackham Predoctoral Fellow** • University of Michigan (UM)  
2013-14 **Carl and Linda Hubbs' Fellow** • University of Michigan Museum of Zoology (UMMZ)  
2012 **Assistant Curator** • UMMZ • Ichthyology Division  
2009-10 **Research Technician** • Taxon Biosciences, Inc. • Tiburon, California

## PUBLICATIONS

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- Gould, AL** and PV Dunlap (2019) Shedding light on specificity: population genomic structure of a symbiosis between a coral reef fish and luminous bacterium. *Frontiers in Microbiology* 10:2670
- Gould, AL**, V Zhang, B Obadia, A Gavryushkin, L Lamberti, N Beerenwinkel, E Jones, J Carlson and W Ludington (2018) Microbiome interactions shape host fitness. *PNAS* 115(51):E11951–E11960
- Gould, AL** and PV Dunlap (2017) Genomic analysis of a cardinalfish with larval homing potential reveals genetic admixture in the Okinawa Islands. *Molecular Ecology* 26:3870-82
- Gould, AL**, \*K Dougan, \*S Koenigbauer and PV Dunlap (2016) Life history of the symbiotically luminous coral reef fish *Siphamia tubifer* (Perciformes: Apogonidae). *J Fish Biology* 89:1363-1377
- Gould, AL**, S Harii and PV Dunlap (2015) Cues from the reef: olfactory preferences of a symbiotically luminous cardinalfish. *Coral Reefs* 34:673–677
- Gould, AL**, S Harii and PV Dunlap (2014) Homing behavior and site fidelity of the symbiotically luminous cardinalfish, *Siphamia tubifer* (Perciformes: Apogonidae). *Marine Biology* 161:2897-907
- Kimmerer, WJ, T Ignoffo, A Slaughter and **AL Gould** (2014) Food-limited reproduction and growth of three copepod species in the low-salinity zone of the San Francisco Estuary. *J Plankton Research* 0:1-14
- Dunlap, PV, **AL Gould**, ML Wittenrich and M Nakamura (2012) Symbiosis initiation in the bacterially luminous sea urchin cardinalfish *Siphamia versicolor* (Perciformes: Apogonidae). *J Fish Biol* 81:1340-56
- Urbanczyk, H, Y Ogura, TA Hendry, **AL Gould**, N Kiwaki, JT Atkinson, T Hayashi and PV Dunlap (2011) Genome sequence of *Photobacterium mandapamensis* strain svers. 1.1, the bioluminescent symbiont of the cardinal fish *Siphamia versicolor*. *J Bacteriology* 193:3144-45
- Gould, AL** and WJ Kimmerer (2010) Development, growth, and reproduction of the cyclopoid copepod *Limnoithona tetraspina* in upper San Francisco Estuary. *Marine Ecology Progress Series* 412:163-77
- Kimmerer, WJ and **AL Gould** (2010) A Bayesian approach to estimating copepod development times from stage frequency data. *Limnol Oceanogr Methods* 8:118-26 \*undergraduate students mentored

## GRANTS AND AWARDS

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2018-23	<b>NIH Director's Early Independence Award (DP5)</b> • NIH-DP5-OD026405-01	\$1,250,000
	"Investigating mechanisms of specificity in a bioluminescent vertebrate-bacteria symbiosis"	
2017-19	<b>NSF Postdoctoral Fellowship in Biology</b> • NSF-DBI-1711430	\$138,000
	"Investigating modes of ecological speciation in a symbiotically luminous coral reef fish"	
2014	<b>NSF Doctoral Dissertation Improvement Grant (DDIG)</b> • NSF-DEB-1405286	\$17,510
	"DISSERTATION RESEARCH: The evolutionary ecology of a vertebrate-microbe symbiosis"	
2014	<b>PADI Foundation Grant</b> • PADI-11180	\$4,550
	"The use of olfactory cues for homing and settlement by a bioluminescent cardinalfish"	
2014	<b>Graduate Women in Science (GWIS) National Fellowship</b> • Honorable Mention	
2014	<b>Susan Lipschutz Award for women scholars</b> • Rackham Graduate School, UM	\$6,000
2013-15	<b>Ichthyology Graduate Student Awards</b> • UMMZ	\$6,220
2013	<b>Robert and Francis Miller Ichthyology Award</b> • UMMZ	\$1,000
2013	<b>Rackham International Travel Grant</b> • UM	\$1,200
2012	<b>Rackham International Research Award</b> • UM	\$5,000
2011-13	<b>Rackham Graduate Student Research Grants</b> • UM	\$4,500
2011-12	<b>Department of Ecology and Evolutionary Biology Block Grants</b> • UM	\$3,258
2008	<b>Robert W. Maxwell Scholarship</b> • San Francisco State University (SFSU)	\$4,000

## FELLOWSHIPS

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2017-19	<b>NSF Postdoctoral Fellowship in Biology (PRFB)</b> • California Academy of Sciences (CAS)
2015-16	<b>Rackham Predoctoral Fellowship</b> • Rackham Graduate School, UM
2013-14	<b>Carl and Linda Hubbs' Fellowship</b> • UMMZ
2011	<b>NSF East Asia and the Pacific Summer Institute (EAPSI) Fellowship</b> • Okinawa, Japan
2004	<b>NSF Research Experience for Undergraduates (REU)</b> • University of Alaska, Southeast

## OTHER PUBLICATIONS AND PATENTS

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E Jones, L Lamberti, **AL Gould**, V Zhang, B Obadia, A Gavryushkin, N Beerenwinkel, J Carlson and W Ludington (2019) How do microbes shape fruit fly fitness? *Biomedical Science Journal for Teens*

Ashby, M, L Wood, U Lidström, C Clarke, **AL Gould**, D Strapoc, AJ Lambo, BJ Huizinga (2015) US Patent 9,206,680 B2. Compositions and methods for identifying and modifying carbonaceous compositions

## TEACHING EXPERIENCE

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2014	<b>Ecology Lab (EEB372)</b> • Graduate Student Instructor • UM
2011-13	<b>Animal Diversity (BIO288)</b> • Graduate Student Instructor • UM
2010	<b>Introductory Ecology &amp; Evolution (BIO171)</b> • Graduate Student Instructor • UM
2008	<b>Biological Oceanography (BIO582)</b> • Teaching Assistant • SFSU

## INVITED SEMINARS

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2020	San Diego State University • Biology Department Seminar • San Diego, CA
2019	Washington State University, Vancouver • Biological Sciences Seminar • Vancouver, WA
2019	Carnegie Institution for Science • Symposium on Biological Interactions • Baltimore, MD
2019	Stanford University • Biology Department • Eco/Evo Lunch Seminar • Palo Alto, CA
2019	Harvard University • Department of Organismic and Evolutionary Biology • Cambridge, MA
2018	Institute for Biodiversity Science and Sustainability Seminar (CAS) • San Francisco, CA
2017	Estuary and Ocean Science Center • Rosenberg Institute Seminar • SFSU • Tiburon, CA
2017	Bay Area Postdoc Symposium • Buck Institute for Research on Aging, Novato, CA

## CONTRIBUTED TALKS

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- 2020 Society for Integrative and Comparative Biology • Austin, TX
- 2019 2<sup>nd</sup> International Fish Microbiota Workshop • Eugene, OR
- 2018 7<sup>th</sup> Conference on Beneficial Microbes • Madison, WI
- 2017 7<sup>th</sup> Annual Symbiosis Meeting • Yosemite, CA
- 2016 13<sup>th</sup> International Coral Reefs Symposium • Honolulu, HI
- 2016 Western Society of Naturalists Annual Meeting • Monterey, CA
- 2015 Fish at Night Symposium • Miami, FL
- 2015 Western Society of Naturalists Annual Meeting • Sacramento, CA
- 2015 Benthic Ecology Meeting • Québec City, Québec, Canada
- 2014 Ecological Society of America Annual Meeting • Sacramento, CA
- 2014 Western Society of Naturalists Annual Meeting • Tacoma, WA
- 2013 9<sup>th</sup> Indo-Pacific Fish Conference • Okinawa, Japan
- 2009 Coastal and Estuarine Research Federation Conference • Portland, OR

## SERVICE AND OUTREACH

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Peer Reviewer *eLife, Molc Ecol, Behav Ecol, MEPS, PLoS ONE, J Fish Biol, J Cont Shelf Res Mar Biodiversity, Current Zoo, FEMS Microbiol, Genes, J Exp Mar Biol Ecol*

- 2020 Grant Review Panelist • National Science Foundation • Division of Biological Infrastructure
- 2019-20 Volunteer • Skype a Scientist
- 2019 Panelist • Teen Environmental Education Mentorship (TEEM) Career Panel
- 2018-19 Project Mentor • Careers in Science Internship Program (CAS)
- 2018-19 Volunteer • NightLife events at CAS (guest panelist for Women in Science NightLife)
- 2014-16 Regional Coordinator • Great Lakes Bowl, National Ocean Science Bowl
- 2014-15 Elected Representative • Admissions Committee, EEB Department (UM)
- 2013-14 Volunteer • Females Excelling More in Mathematics, Engineering and the Sciences (FEMMES) capstone event (UM)
- 2012-15 Volunteer • ID Day (UMMZ)
- 2012-13 President • Graduate Researchers in Ecology and Evolutionary Biology (UM)
- 2011-14 Volunteer Judge • Great Lakes Bowl, National Ocean Science Bowl
- 2011-13 Volunteer • 826michigan Writing Workshops
- 2011-12 Elected Representative • Executive Committee, EEB Department (UM)
- 2008-10 Volunteer Judge • Sea Lion Bowl, National Ocean Science Bowl
- 2008-09 Volunteer • Marine Science Institute, Earth Day on the Bay, San Francisco
- 2006-07 Volunteer Docent • Richardson Bay Audubon Center, Bay Shores Studies
- 2006-07 Volunteer • Expanding Your Horizons, Women in Math and Science Fair
- 2002-05 Volunteer • Big Siblings Program, Madison House, University of Virginia

## MENTORSHIP

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- 2018-19 Jessica Herbert • Careers in Science (CiS) Internship Program (CAS)
- 2018-19 Noelle Kasly • undergraduate research assistant, SFSU (CAS)
- 2017 Andrew Wang • high school summer intern, UC Berkeley
- 2015-16 Karen Hug • undergraduate research assistant, UM
- 2015-16 Clara Tift • undergraduate research assistant, UM
- 2014-15 Scott Koenigbauer • Undergraduate Research Opportunities Program (UROP), UM
- 2014-15 Maggie Grundler • undergraduate Honors thesis, UM
- 2012-14 Katherine Dougan • undergraduate research assistant, UM