

Jenna Judge, Ph.D.

Curriculum vitae

EDUCATION

Ph.D., Integrative Biology, University of California Berkeley	2009–2015
Deep Sea Biodiversity Course, Friday Harbor Laboratories	Summer 2014
Bachelor of Science, Aquatic Biology, University of California Santa Barbara	2005–2009
Marine Biology Semester Abroad, University of Queensland, Brisbane, Australia	Fall 2007

PROFESSIONAL EXPERIENCE

Coordinator, NOAA SF Bay and Outer Coast Sentinel Site Cooperative **May 2016–present**

Funded by a California Sea Grant Extension Fellowship

- Built collaborative network linking federal, state, regional, and local agencies with coastal resource managers and scientists.
- Coordinated, planned and hosted meetings, workshops, and symposia ranging from 6 to 140 participants and practiced facilitation skills to support collaborative decision making.
- Authored original case studies and outreach pieces based on the best available science to inform adaptive management of coastal and marine resources.

Lecturer, UC Berkeley **January–May 2016**

- Course coordinator and lead instructor for Invertebrate Zoology. Delivered lectures and coordinated all lab activities and field trips.
- Managed two graduate student assistants, one undergraduate assistant, and 3 instructional staff.

Writer & Editor, UC Museum of Paleontology, Berkeley **Sept 2015–April 2016**

- Produced scientific content for the forthcoming “Understanding Global Change” website with online education resources integrated with Next Generation Science Standards.

Doctoral Research, UC Berkeley **2009–2015**

Dissertation Title: *Patterns of Specialization in the Deep Sea at the Individual, Ecosystem, and Evolutionary Level* – Advised by David Lindberg

- Planned multi-year collaborative projects, completed multivariate ecological analyses, published in peer-reviewed journals, and presented the results of my research at local, national, and international conferences, public talks, and online articles.

Researcher, Benthic Biology and Ecology Expedition, **2011–2013**

Monterey Bay Aquarium Research Institute, Moss Landing, CA

- Lead a team of deep-sea ecologists, ROV pilots, taxonomists, and undergraduates as part of managing one of several dissertation projects.
- Coordinated logistics to obtain and prepare wood substrates for ROV deployment and retrieval.
- Analyzed biodiversity and community structure in relation to environmental variables in R.
- Interviewed, hired, and trained 7 undergraduates to sort and identify >7,000 macroinvertebrate specimens collected from experimental sunken wood in Monterey Canyon at 3100 m via ROV.
- Coordinated sample exchange with international taxonomic experts for specimen identification and subsequent descriptions of new taxa.
- Supervised an undergraduate research assistant to create an image atlas of morphotypes identified from ROV footage.

Graduate Student Researcher, USGS Project, UC Museum of Paleontology, Berkeley, CA **Summer 2013**

- Worked as part of a team to organize a historic USGS fossil collection, find missing information

using map resources and searching reports, and update collection database.

Visiting Scholar, Bavarian State Collection of Zoology (ZSM), Munich, Germany Spring 2012

- Produced 3D anatomical reconstruction of a deep-sea limpet from histological serial sections as part of my dissertation research. Integrated reconstruction with previous work of collaborator.

Visiting Scholar, The University Museum, University of Tokyo, Japan Summer 2011

- Forged connections with Japanese deep-sea biologists and learned microscopy skills.
- Visited marine lab at Sagami Bay and JAMSTEC.

Graduate Student Researcher, Invertebrate Collections Curation, UC Museum of Paleontology, Berkeley, CA Summer 2010

- Curated and organized invertebrate fossil collections, facilitated loan returns, and updated the museum collections database.

STAKEHOLDER FACILITATION & WORKSHOP PLANNING EXPERIENCE

- Co-planner and co-leader: Identification of Natural Infrastructure Options for Adapting to Sea Level Rise Technical Advisory Committee Meeting, 30 participants **May 2017**
- Co-planner: San Francisco Bay Geospatial Workgroup meeting, 45 participants **May 2017**
- Co-planner and co-leader: Bay Area Ecosystems Climate Change Consortium meeting, 50 participants **April 2017**
- Lead facilitator: Trash Monitoring Conceptual Model Development Workshop, 30 participants, 2 days **April 2017**
- Lead planner and facilitator: Water Levels and Tidal Datums Webinar with NOAA CO-OPS, 20 participants **April 2017**
- Co-planner and co-leader: NOAA Sentinel Site Program Partnership Workshop in Silver Spring, 35 participants, 3 days **March 2017**
- Lead planner and facilitator: Tracking Elevation Change in Marshes with National Geodetic Survey, 25 participants **Feb 2017**
- Co-planner and co-facilitator: San Francisco Bay Wetland Permitting and Monitoring Workshop, 60 participants **Jan 2017**
- Co-planner and co-sponsor: Beyond the Golden Gate Research Symposium, 140 participants **Dec 2016**
- Co-planner and co-leader: Identification of Natural Infrastructure Options for Adapting to Sea Level Rise, Technical Advisory Committee Meeting, 29 participants **Oct 2016**
- Host: Planning and Facilitating Collaborative Meetings, NOAA Training, 28 participants, 2 days **Oct 2016**

CONFERENCE PRESENTATIONS

- Talk (lead author & presenter): "Natural Shoreline Infrastructure Case Studies for Coastal Resilience in California" National Adaptation Forum. **Saint Paul, MN** **May 2017**
- Poster (lead author & presenter): "Partnering to meet the challenges of sea level rise: NOAA's San Francisco Bay and Outer Coast Sentinel Site Cooperative." California Climate Change Symposium. **Sacramento, CA** **Jan 2017**
- Poster (lead author & presenter): "Partnering to meet the challenges of sea level rise: NOAA's San Francisco Bay and Outer Coast Sentinel Site Cooperative." Restore America's Estuaries National Summit on Coastal and Estuarine Restoration / Biennial Meeting, The Coastal Society. **New Orleans, LA** **Dec 2016**

- Poster (lead author & presenter): “Partnering to meet the challenges of sea level rise: NOAA’s San Francisco Bay and Outer Coast Sentinel Site Cooperative.” Beyond the Golden Gate Research Symposium. Romburg Tiburon Center for Environmental Studies, **Tiburon, CA** **Dec 2016**
- Talk (lead author & presenter): “Macroinvertebrate community assembly on deep-sea wood falls in Monterey Bay is strongly influenced by wood type.” Western Society of Naturalists. **Sacramento, CA** **Nov 2015**
- Talk (lead author & presenter): “Patterns of Specialization in the Deep Sea at the Individual, Ecosystem, and Evolutionary Level.” Public Ph.D. Finishing Talk (Recording: <http://bit.ly/2oDsKU1>). **Berkeley, CA** **May 2015**
- Talk (lead author & presenter): “Are evolutionary strategies for a life on sunken wood common or distinct in deep-sea limpets?” World Congress of Malacology. **Ponta Delgada, Azores** **July 2013**
- Poster (lead author & presenter): “Supertrees help illustrate patterns across broad taxonomic, yet fine ecological scales: the case of bivalve and gastropod colonization of chemosynthetic habitats.” World Congress of Malacology. **Ponta Delgada, Azores** **July 2013**
- Talk (lead author & presenter): “A 3D investigation of the morphology of lepetellid limpets (*Lepetella sierrai*): hypotheses on feeding ecology and symbiosis.” Society for Integrative and Comparative Biology, **San Francisco, CA** **Jan 2013**
- Talk (lead author & presenter): “A 3D investigation of the morphology of lepetellid limpets (*Lepetella sierrai*): hypotheses on feeding ecology and symbiosis.” Deep-Sea Biology Symposium, **Wellington, NZ** **Dec 2012**
- Talk (lead author & presenter): “Testing diversification processes in chemosymbiotic gastropods: a phylogenetic approach.” Chemosymbiotic molluscs and their environments. Natural History Museum, **London, U.K.** **April 2011**
- Poster (lead author & presenter): “A phylogenetic perspective on the molluscan lineages in chemosynthetically-based ecosystems in the deep sea.” Society for Integrative and Comparative Biology, **Salt Lake City, UT** **Jan 2011**

OUTREACH EXPERIENCE

Webmaster, NOAA Sentinel Site Cooperative **May 2016 – ongoing**

- Updates website with current projects and partners
- Revises and posts updated 2-page document highlighting Cooperative projects

Social Media Engagement **Feb 2012 – ongoing**

- Twitter @jenna_judge – 460 followers

Invited Public Speaker

- Nerd Nite North Bay: “Sunken wood and the critters who call it home.” **May 2016**
- Marin Science Seminar: “Into the Woods with Marine Biology.” **Sept 2015**
- East Bay Science Café: “From the Forest to the Deep Blue Sea, Wood Shapes Animal Communities” **July 2015**
- UC Berkeley Cal Day: “Waterlogged Wood on the Seafloor and the Critters that Call it Home” **April 2014**

Media Coverage

- OceanBites (<http://oceanbites.org/how-much-wood-can-a-wood-boring-clam-bore/>) **August 2016**
- Berkeley Science Review (<http://berkeleysciencereview.com/jenna->) **July 2014**

- judge-graduates/)
- KALX radio interview on “The Graduates” (<http://apple.co/2nd5GuX>) **April 2014**
- National Geographic (<http://bit.do/ngwood>). **Nov 2013**
- Science Inquiry Leader, CAL:BLAST Program, Oakland & Asilomar, CA** **2013–2014**
 - Developed curriculum and led workshop for Oakland Unified School District (OUSD) K-5 teachers on ocean acidification.
 - Led 4-day summer science inquiry program.
- Blog author, The Eclectic Limpet** **2012–2015**
 - <http://eclecticlimpet.wordpress.com>
 - Wrote about research, fieldwork, and teaching experiences for a general audience.
- Museum Tour Guide & Outreach, UC Berkeley Museum of Paleontology** **2009–2015**
 - Led interactive tours of the UC Museum of Paleontology for second-grade classes.
 - Outreach volunteer at the *Bay Area Science Festival*, *Cal Day*, and *Dinner with a Scientist*.

PROFESSIONAL DEVELOPMENT

- Trainee: “Navigating the Environmental Compliance Process for Wetland Projects in San Francisco Bay and Outer Coast,” Tiburon, CA **April 2017**
- Trainee: “RTK-GPS and leveling” training, Rush Ranch, Suisun City, CA **Feb 2017**
- Attendee: “Bay-Delta Science Conference,” Sacramento, CA **Nov 2016**
- Participant: “Bay Science Collaborative,” Tiburon, CA **Sept 2016**
- Participant: “CA Sea Grant Extension Meeting,” La Jolla, CA **Sept 2016**
- Participant: “Responding to Sea Level Rise in the South Bay: Local and Regional Implications of Alternative Future Shoreline Configurations.” Fremont, CA **Sept 2016**
- Participant: “West Coast Coastal Managers Meeting,” Portland, OR **Sept 2016**
- Trainee: “Facilitation Skills for Scientists and Resource Managers Training,” Tiburon, CA **Sept 2016**
- Participant: “CA Sea Grant Fellows Meeting,” Santa Rosa, CA **May 2016**
- Attendee: “Ocean Climate Summit,” San Francisco, CA **May 2016**
- Participant: Marine Biodiversity Field Course, Banyuls-sur-Mer, France. **July 2012**

GRANTS & AWARDS

- *Identification of Natural Infrastructure Options for Adapting to Sea Level Rise*, Sub-award for California 4th Climate Assessment Project, \$10,000 **2016–2017**
- CA Sea Grant Extension Fellowship, stipend and travel expenses **2016–2017**
- Outstanding Graduate Student Instructor Award, UC Berkeley **2015**
- UC Museum of Paleontology Fellowship, stipend and tuition **2014**
- UCMP Research Award **2014**
- American Microscopical Society, Honorable Mention for presentation at SICB **2013**
- Unitas Malacologica, Travel Grant to attend World Congress of Malacology **2013**
- Conchologists of America, Research Grant **2013**
- American Malacological Society Research Grant **2013**
- AMNH Lerner-Gray Research Grant **2013**
- Sigma Xi, Berkeley Chapter Research Award **2013**
- UCMP Research Award **2013**
- German Academic Exchange Service (DAAD) Fellowship **2012**

- UCMP Research Award **2012**
- East Asia Pacific Summer Institute Japan, NSF/JSPS **2011**
- Paleontological Society Research Award **2010**
- Sigma Xi, Berkeley Chapter Research Award **2010**
- Conchologists of America Grant **2010**

UNIVERSITY TEACHING EXPERIENCE

Lecturer, Integrative Biology, UC Berkeley **Spring 2016**

- Course coordinator and lead instructor for Invertebrate Zoology (responsibilities noted above). 27 students.

Instructor, Cold Spring Harbor Watson School, Evolution Course, Cold **March 2015**

Spring Harbor, NY

- Lectured and led exercises on biodiversity and application of evolutionary methods for graduate level course. 16 students.

Graduate Student Instructor, Integrative Biology, UC Berkeley **Fall 2009–Spring 2015**

- Spring 2015: IB146LF Behavioral Ecology, 5 units. Led discussion, lab, and field trips. 34 students.
- Fall 2014: IB158LF Biology and Geomorphology of Tropical Islands, 13 units. Mentored a class of advanced undergraduates through a field course in Moorea, French Polynesia. Coordinated logistics involved for marine, freshwater, and terrestrial projects. 22 students.
- Fall 2013: IB41 Marine Mammals, 2 units. Gave 2 guest lectures, office hours, and graded exams and reports. 160 students.
- Spring 2013: IB169 Evolutionary Medicine, 4 units. Led discussions. 75 students.
- Fall 2012: IB160 Evolution, 4 units. Led discussions, graded exams and reports. 66 students.
- Fall 2011: IB41 Marine Mammals, 2 units. Gave 1 guest lecture, office hours, and graded exams and reports. 160 students.
- Spring 2011: Biology 1B, 4 units. Led discussion and lab. 40 students.
- Fall 2010: Biology 1B, 4 units. Led discussion and lab. 40 students.
- Spring 2009: Biology 1B, 4 units. Led discussion and lab. 40 students.
- Fall 2009: Biology 1B, 4 units. Led discussion and lab. 40 students.

Guest Lecturer, Integrative Biology, UC Berkeley **2011–2014**

- April 2014. Invertebrate Zoology. "Waterlogged wood on the seafloor and the critters that call it home." 32 students.
- Dec. 2013. Marine Mammals. "Conservation in the marine environment." 160 students.
- Nov. 2013. Marine Mammals. "Whale falls: marine mammals contribute to other ecosystems after death." 160 students.
- Nov. 2011. Marine Mammals. "The demise of whaling and consequences for marine ecosystems." 160 students.

Course Assistant, Marine Biological Laboratories, Embryology Course, Woods **Summer 2008**

Hole, MA

- Coordinated logistics for lab and lecture class for graduate students covering wide range of developmental biology methods and model systems. 28 students.

PUBLICATIONS

Judge, J., Newkirk, S., Hayden, M., Veloz, S., Battalio, B., Cheng, T., and Leo, K. *in review*. Natural Shoreline Infrastructure Case Studies for Coastal Resilience in California. California 4th Climate Change Assessment Report.

Chang, L., **Judge, J.**, and Lindberg, D.R. *in prep.* Evolutionary patterns of specialization in deep-sea molluscs: a supertree perspective.

Judge, J. and Barry, J.P. 2016. Macroinvertebrate community assembly on deep-sea Wood falls in Monterey Bay is strongly influenced by wood type. *Ecology*. 97(11):3031–3043.

McClain, C.R., Barry, J.P., Eernisse, D., Horton, T, **Judge, J.**, Kakui, K., Mah, C., and Warén, A. 2016. Multiple processes generate productivity-diversity relationships in experimental wood-fall communities. *Ecology*. 97(4):885-98.

Judge, J. 2014. Testing relationships of a new form of boring bivalve: the interesting kind. Deep Sea Biodiversity, Connectivity and Ecosystem Function. Friday Harbor Laboratories Course Report. <http://bit.ly/2oWhQZQ>.

Judge, J. and Haszprunar, G. 2014. The anatomy of *Lepetella sierrai* (Vetigastropoda, Lepetelloidea): implications for reproduction, feeding, and symbiosis in lepetellid limpets. *Invertebrate Biology* 133: 324–339.