# LAURA J. JURGENS, PH. D.

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## **CURRENT APPOINTMENTS**

2019-Present 2019-Present	Assistant Professor, Department of Marine Biology, Texas A&M University Galveston Faculty, Ecology and Evolutionary Biology, Interdisciplinary Degree Program, Texas
	A&M University (College Station)
2019-Present	Faculty, Marine Biology Graduate Program, Texas A&M University Galveston
2021-Present	Assistant Professor, Adjunct, Department of Ecology and Conservation Biology, Texas A&M University (College Station)

## **EDUCATION**

Ph.D. Ecology, University of California Davis, Area of emphasis: Marine Ecology, June 2015
B.S. Ecology and Evolutionary Biology, *Highest Honors*, University of California Santa Cruz, June 2008

## SCHOLARLY PUBLICATIONS

**Jurgens, L.J.**, \*Ashlock, L., and Gaylord, B. Facilitation alters climate change risk on rocky shores. (Early View Nov 2021; in print February 2022. *Ecology*. DOI: 10.1002/ecy.3596 \**graduate student* 

Zabin, C., **Jurgens, L.J.**, Bible, J.. Patten, M., Chang, A., Grosholz, E., and K. Boyer. Increasing the resilience of ecological restoration to extreme climatic events. In press at *Frontiers in Ecology and the Environment*. MS ID# FEE21-0069

Freestone, A.L., Torchin, M.E., **Jurgens, L.J.**, \*Bonfim, M., \*Lopez, D., \*Repetto, M.F., Schloder, C., Sewall, B., Ruiz, G.M. 2021. Stronger predation intensity and impact on prey communities in the tropics. *Ecology* 102(8):e03428.DOI: 10.1002/ecy.3428 \**graduate student* 

\*Ninokawa, A., Takeshita, Y., Jellison, B., **Jurgens, L.J.** and B. Gaylord. 2020. Biological modification of seawater chemistry by an ecosystem engineer, the California mussel, *Mytilus californianus. Limnology & Oceanography* 65: 157-172 DOI: 10.1002/lno.11258 \**graduate student* 

Gaylord, B., \*Barclay, K.M., Jellison, B.M., **Jurgens, L.J.**, \*Ninokawa, A.T., Rivest, E.B., and L.R. Leighton. 2019. Ocean change within shoreline communities: From biomechanics to behavior and beyond. *Conservation Physiology* 7(1) DOI: 10.1093/conphys/coz077 \*graduate student

**Jurgens, L.J.,** \*Bonfim, M., \*Lopez, D., \*Repetto, M.F., Freitag, G., McCann, L., Larson, K., Ruiz, G.M., and A.L. Freestone. 2018. Poleward range expansion of a non-indigenous bryozoan and new occurrences of exotic ascidians in southeast Alaska. *BioInvasions Records7(4): 357-366.* DOI: 10.3391/bir.2018.7.4.02 \**graduate student* 

Jurgens, L.J. and B. Gaylord. 2018. Physical effects of habitat-forming species override latitudinal trends in temperature. *Ecology Letters* 21(2): 190-196. DOI: 10.1111/ele.12881 *Recommended by the Faculty of 1000.* 

Ebert, T... **Jurgens, L.J.**, *et al.* [more than 30 authors]. 2018. Size, growth, and density data for shallow water sea urchins of the North American Pacific coast from Mexico to Alaska including the Aleutian Island chain, 1956 – 2016. *Ecology. Data paper.* DOI: 10.1002/ecy.2123

**Jurgens, L. J.**, Freestone, A.L, Torchin, M.E. and G. Ruiz. 2017. Prior predation shapes community resistance to an extreme climate event. *Ecosphere.* DOI: 10.1002/ecs2.1986

**Jurgens, L.J.** and B. Gaylord. 2016. Edge effects reverse facilitation in a widespread foundation species. *Scientific Reports*. DOI:10.1038/srep37573

Raimondi, P.T., **Jurgens, L.J.** and M.T. Tinker. 2015. Evaluating potential conservation conflicts between two listed species: sea otters and black abalone. *Ecology* 96(11): 3102–3108.

**Jurgens, L.J.**, Rogers-Bennett, L.R.B., Raimondi, P.T., Schiebelhut, L., Dawson, M., Grosberg, R. and B. Gaylord. 2015. Patterns of mass mortality among rocky shore invertebrates across 100 km of northeastern Pacific coastline. *PLoS ONE*. DOI: 10.1371/journal.pone.0126280

Gaylord, B., Nickols, K. and **Jurgens, L.J.** 2012. Roles of transport and mixing processes in kelp forest ecology. *Journal of Experimental Biology* 215:997-1007.

#### **PRIOR ACADEMIC APPOINTMENTS**

Research Fellow, Smithsonian Environmental Research Center, September 2018–January 2019 Postdoctoral Fellow, Smithsonian Environmental Research Center, Smithsonian Tropical Research Institute, and Temple University Department of Biology. July 2015–August 2018

Graduate Student Researcher, Bodega Ocean Acidification Research (BOAR); Bodega Bay, CA; 2010 - 2013

Research Assistant, Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO); Santa Cruz, CA; 2006–2008

Research Assistant, OSU-UCSC-UH Joint bio-physical coupling project; Santa Cruz, CA 2007

#### **RESEARCH GRANTS**

2021	\$99,971	TPWD-CF State Wildlife Grants Program. <i>Evaluating effects of oyster restoration reef design on habitat enhancement and ecology. Role: Co -PI.</i> With Dr. Jennifer Pollack. Project Start: 10/22.
2021	\$99,843	Texas General Land Office. CMP Cycle 26. <i>Evaluating the trophic value of beneficial uses restoration sites for coastal birds. Role: Lead PI.</i> \$85,215 to Jurgens. Project start: 10/21
2020	\$69,305	Texas Commission on Environmental Quality. <i>Effects of erosion control structures on shoreline marsh species populations. Role: Lead Pl.</i> \$69,305 to Jurgens. Project start: 9/21
2020	\$30,000	CONACyT-TAMU Collaborative Research Grant Program. <i>Effects of a</i> <i>Changing Climate on a Habitat-Forming Species Range and Biodiversity.</i> <i>Role: Lead Pl.</i> \$16,800 to Jurgens. Project start: 9/20
2020	\$131,459	Texas General Land Office Coastal Management Program. <i>Galveston Bay Foundation Oyster Shell Recycling Program: Citizen science, engagement, and education. Role: Co-PI.</i> \$23,140 to Jurgens. Project start: 10/20
2019	\$90,427	Texas Commission on Environmental Quality. <i>Galveston Bay Oyster Microplastics: Baselines and Impacts. Role: Lead PI.</i> \$79,164 to Jurgens Project start: 9/20
2019	\$26,111	The Conservation, Food, and Health Foundation. <i>Sustaining biodiversity and subsistence gleaning in Philippine seagrass habitats. Role: Solo Pl.</i> \$26,111 to Jurgens. Project start: 3/20

2013	\$2000	University of California Davis Natural Reserve System Grant. <i>Biophysical effects of California mussel beds on climate stresses</i> . Role: Graduate student, solo applicant.
2012	\$122,691	NSF RAPID. <i>Ecological &amp; genetic recovery from a massive invertebrate die-off along the central coast of California.</i> Role: graduate student contributor (co-written with and awarded to Drs. Mike Dawson, Rick Grosberg, Brian Gaylord).
2010	\$3650	PADI Foundation Research Grant Alternate life histories and pulse versus press subsidies of macroalgae into nearshore food webs.

## COURSES

*Ecosystem Functions in Marine Environments* MARB 640; graduate core curriculum course (Fall 2020, Fall 2021)

*Marine Invertebrate Zoology* MARB 435 Texas A&M Galveston; Instructor of record; Writing intensive course with laboratory (Spring 2019, 2020, 2021, 2022)

Coastal Marine Research UC Davis, Teaching Assistant (2012, 2013, 2014) Mixed Models in R for Everyone, Bodega Marine Laboratory, UC Davis, Workshop Leader (2014) Mechanical Design in Organisms (Biomechanics), UC Davis, Guest Lecturer (2013) Mechanical Design in Organisms (Biomechanics), UC Davis, Teaching Assistant (2012, 2013, 2014) Plant Communities of California, UC Davis, Guest Lecturer (Spring 2013, 2014) Introduction to Ecology (101), UC Davis, Guest Lecturer (Spring 2014) Introduction to Ecology (101), UC Davis, Teaching Assistant (Spring 2010) Undergraduate Seminar in Conservation Ecology, UC Davis, Guest Lecturer (Fall 2009)

## INVITED SCHOLARLY PRESENTATIONS

Gordon Research Seminar: Unifying Ecology Across Scales. Biddeford, ME. August 2018.

Marine Biological Laboratory Seminar. Woods Hole, MA. May 2018.

School for Marine Science & Technology Seminar. University of Massachusetts Dartmouth. May 2018.

Department of Biology Seminar. University of South Carolina. Columbia, SC. February 2018.

Rosenberg Institute Seminar. San Francisco State University, Tiburon, CA. August 2016.

Department of Biology Seminar. Temple University, Philadelphia, PA. August 2015.

Tupper Seminar. Smithsonian Tropical Research Institute. Panamá, Panama. December 2015.

Mary Louise Riley Seminar. Bodega Marine Laboratory, Bodega Bay, CA. June 2015.

Population Biology Seminar. University of California Davis. Davis, CA. January 2015

#### SELECTED SCHOLARLY PRESENTATIONS

Agrawal, A\*. & **Jurgens, L.J.** 2021.Effects of asynchronous stressors on the Eastern oyster, *Crassostrea virginica.* Ecological Society of America annual meeting. Long Beach, CA, USA.

Agrawal, A\*. & **Jurgens, L.J.** 2020. Temporal effects of multiple stressors on *Crassostrea virginica*, the Eastern oyster. Gulf Estuarine Research Society (CERF Regional Meeting). \**Graduate mentee, award winner for Best Graduate Student Presentation* 

Parodi, K\*. & **Jurgens, L.J.** 2020. Fouling community development on docks in Galveston Bay. Poster presentation. State of the Bay, Galveston, TX, USA. *\*Undergraduate mentee* 

Hubbard, E.\* & Jurgens, L.J. 2020. Galveston Bay shoreline oyster restoration monitoring. Poster presentation. State of the Bay, Galveston, TX, USA. \**Graduate mentee* 

**Jurgens, L.J.** Predator and salinity effects on invertebrate communities in Galveston Bay marinas. Oral presentation. State of the Bay, Galveston, TX, USA.

**Jurgens, L.J.** & B. Gaylord. 2018. Intertidal foundation species overwhelm effects of latitude and shore elevation on heat exposure. Oral presentation. Annual meeting of the Western Society of Naturalists, Pasadena, CA.

**Jurgens, L.J.** 2017. Predation during initial assembly alters disturbance resistance in a tropical invertebrate community. Oral presentation. Annual meeting of the Ecological Society of America. Portland, OR.

Hyunh, E.\*, **Jurgens, L. J.**, Chang, A., Freestone, A.L., Ruiz, G., & M.E. Torchin. 2017. Recruitment patterns of sessile invertebrates in San Francisco Bay. Poster presentation. Bay Area Conservation Biology Symposium. Santa Cruz, CA. *\*Undergraduate mentee* 

**Jurgens, L. J.** 2016. Predation during assembly alters disturbance resistance in a tropical invertebrate community. Oral presentation. Annual meeting of the Western Society of Naturalists. Monterey, CA.

**Jurgens, L.J.**, Wynkoop, L.M.\* & B. Gaylord. 2014. Multiple, divergent effects of a ubiquitous foundation species on organism-scale climate and thermal risk. Oral presentation. Annual meeting of the Ecological Society of America. Sacramento, CA. \**Undergraduate mentee* 

#### STUDENT ADVISEES

**Anika Agrawal,** Texas A&M Galveston Marine Biology Department, M.S. F2019 – S2021 **Emily Hubbard,** Texas A&M Galveston Marine Biology Department, M.S. F2019 – present **Aurora Gaona Hernandez**, Texas A&M Galveston Marine Biology Department, M.S. S2021 – present

#### ACADEMIC SERVICE

Ad hoc Reviewer, U.S. National Science Foundation, Biological Oceanography Program Proposal Reviewer, NOAA Sea Grant Program, New York Sea Grant Reviewer, Biological Conservation, Biological Invasions, Global Ecology & Biogeography, Estuaries & Coasts, The American Naturalist, Marine Environmental Research. Oecologia, Marine Ecology Progress Series, Ecosphere, Bulletin of the Southern California Academy of Sciences Undergraduate Affairs Committee, Texas A&M Marine Biology Department, 2019-present Search Committee, Coral Reef FTE, Texas A&M Marine Biology Department 2021-present Scholarship Committee, Texas A&M Galveston Marine Biology Department, 2019 Organizing Member, Western Society of Naturalists Diversity, Equity & Inclusion Committee, 2018 Founding member, Bodega Marine Laboratory Diversity Committee, 2014–2015 Representative, Executive Committee, UC Davis Coastal Marine Sciences Institute, 2014–2015 Organizing committee, UC Davis Graduate Group in Ecology Diversity Committee, 2014–2015 Admissions Committee, Ecology Graduate Group, University of California Davis, 2012–2014 Chair, UC Davis Bodega Marine Laboratory Seminar Committee 2011–2013 **Steering committee**, Bodega Marine Sciences Association 2010–2014 Co-organizer, Bodega Marine Laboratory Graduate Professional Development series