CASCADE J. B. SORTE

Curriculum vitae, updated July 2024

Website: <www.cascadesorte.org>

E-mail: csorte@uci.edu

Department of Ecology and Evolutionary Biology 321 Steinhaus Hall, University of California Irvine, CA 92697-2525

ACADEMIC PREPARATION & POSITIONS

Professor, Ecology and Evolutionary Biology, University of California, Irvine
Associate Professor, Ecology and Evolutionary Biology, University of California, Irvine
Assistant Professor, Ecology and Evolutionary Biology, University of California, Irvine
Postdoctoral Research Associate, School for the Environment, University of Massachusetts, Boston
Ph.D., Ecology, University of California, Davis
M.A., Ecology, Evolution, and Marine Biology, University of California, Santa Barbara
B.A., Biology, Whitman College

HONORS & AWARDS

2021	George Mercer Award, Ecological Society of America
2021	Deans Honoree Teaching Award, School of Biological Sciences, UCI
2019	Faculty Mentor of the Month, Undergraduate Research Opportunities Program, UCI
2017-2021	Early Career Fellow, Ecological Society of America
2014	Scientist in Residency Fellow, Sitka Sound Science Center, AK
2009	American Association of University Women American Dissertation Fellow (\$20,000)
2009	College of Biological Sciences Dean's Circle Mentorship Award (\$5,000), UC-Davis
2008	Coastal Environmental Quality Initiatives Fellow, Ocean Protection Council (\$30,000)
2001-2002	Arizona State University Graduate Academic Scholar (\$22,500; moved with advisor to UCSB)
1999	Elected to Sigma Xi, The Scientific Research Society
1995-1999	Claire Sherwood Memorial Fellow, Whitman College (\$15,000) for leadership potential

GRANTS

Current

Sorte C (PI) (12/01/21-11/30/24) Predicting impacts of coastal species redistribution in a changing climate. National Science Foundation Biological Oceanography OCE-2124438 (\$492,382).

Sorte C (Project Director) (10/01/21-9/30/24) Graduate Assistance in Areas of National Need. Department of Education P200A210001(\$913,140 to UCI EEB Department).

Past

- Vilà M (PI/Coordinator, EBD-CSIC, Spain), Gallien L (Co-PI, CNRS, France), Jeschke J (Co-PI, Leibniz Inst/Freie U, Germany), Comín F (Co-PI, IPE-CSIC, Spain), **Sorte C (Co-PI, Lead USA PI)**, Bacher S (Co-PI, U Fribourg, Switzerland), Bradley B (Co-PI, UMass-Amherst) (5/01/19-4/30/24) Understanding and managing the impacts of Invasive alien species on Biodiversity and Ecosystem Services (InvasiBES). Belmont Forum Biodiversa (\$90,000 to UCI; 968,679 euros total).
- **Sorte C (PI)**, Bracken M (Co-PI), Miller L (Co-PI, SDSU), Kroeker K (Co-PI, UCSC) (4/01/18-3/31/22) Collaborative Research: Effects of multiple aspects of climate change on marine biodiversity and ecosystem functioning. National Science Foundation Biological Oceanography OCE-1756173 (\$475,916 to UCI; \$667,777 total).
- Raimondi P (PI, UCSC), Bracken M (Co-PI, UCI), Smith J (Co-PI, Cal Poly Pomona), Burnaford J (Co-PI, CSU Fullerton), Delemarre E (Co-PI, LiMPETS), **Sorte C (Co-PI, UCI)**, Caselle J (Co-PI, UCSB), Gaddam R (Co-PI, UCSC) (5/24/19-11/30/22) Assessment of rocky intertidal habitats for the California marine protected area monitoring program. California Sea Grant / Ocean Protection Council (\$52,921 to UCI).
- **Sorte** C (PI/Fellow), Aguilar-Roca N (Co-PI), Pratt J (Co-PI) (2018-2019) Using the SWIM (Science Writing Integrated Mentoring) Program to increase effectiveness of a Course-based Undergraduate Research Experience (CURE). Development Fellowship, CUREnet (\$1,000). Supports assessment of SWIM program.

- **Sorte** C (2017-2018) Science Writing Integrated Mentoring (SWIM) Program: Increasing Confidence and Effectiveness of UDW (Upper Division Writing) in the Sciences. Campus Writing Center Writing Pedagogy Grant, UC-Irvine (\$2,000). Supports graduate students as writing mentors in a course-integrated program.
- **Sorte C (PI)**, Bracken M (Co-PI) (2016-2017) Effects of multiple aspects of climate change on marine biodiversity and ecosystem functioning. Seed Funding Award, UC-Irvine (\$39,400).
- **Sorte** C (**PI/Director**) (2015-2016) International Colloquium: Will Impacts of Global Change be Greater than the Sum of its Parts? Albert & Elaine Borchard Foundation (\$35,000).
- Davis K (Engineering PI), **Sorte C (Ecology PI)** (2015-2016) Coping with climate change: integrating computational fluid dynamics and ecophysiology to assess poleward range shifts in an equatorward current system. Interdisciplinary Innovation Initiative, UC-Irvine (\$30,975).
- Bracken M (PI), **Sorte C (Co-PI)** (2014-2017) Marine Biology Seawater Laboratory. Small Capital Improvement Program, UC-Irvine (\$200,000). *Funds to renovate seawater lab; matched by \$60K in Sorte start-up funds*.
- **Sorte** C (**PI**), Etter RJ (Co-PI), Hannigan R (Co-PI) (2013-2016) Are blue mussels declining in the Gulf of Maine?: population trajectories, connectivity, and spatiotemporal variation in reproduction. MIT Massachusetts Sea Grant, National Oceanic and Atmospheric Association (\$145,999).
- **Sorte CJB (PI)**, Dukes JS (Co-PI), Lawler JJ (Co-PI) (2010-2012) Working group: Climate change and invasive species: are non-natives poised for greater success in future climatic conditions? National Center for Ecological Analysis and Synthesis (\$65,625 for 4 working group meetings).
- **PUBLICATIONS** (*^undergraduate*, *graduate, and #postdoctoral advisees)
 Google scholar profile: https://scholar.google.com/citations?user=FkbVuScAAAAJ&hl=en
- **Sorte CJB**, *Beshai RA, Dean LS, Fales RJ, Martin EL, ^Sherzai S (*in press*) Evolution and Invasive Species. *In:* Encyclopedia of Evolutionary Biology, 2nd Edition (Eds: Wolf J, Russo C) Elsevier Ltd, Oxford, UK.
- **62.** Bradley BA, Beaury EM, Gallardo B, Ibáñez I, Jarnevich C, Morelli TL, Sofaer HR, <u>Sorte CJB</u>, Vilà M (2024) Observed and potential range shifts of native and non-native species with climate change. *Annual Review of Ecology, Evolution and Systematics*. 55:23-40.
- **61.** Gallardo B, Bacher S, Barbosa AM, Gallien L, González-Moreno P, Martínez-Bolea V, <u>Sorte CJB</u>, Vimercati G, Vilà M (2024) Risks posed by invasive alien species to the provision of ecosystem services in Europe. *Nature Communications*. 15:2631. Doi: s41467-024-46818-3
- **60.** *Wright B, Komyakova V, <u>Sorte CJB</u>, Tingley MW, Pecl GT (2023) Reciprocal knowledge exchange between climate-driven species redistribution and invasion ecology. *Frontiers of Biogeography*. 15(4). 10.21425/F5FBG60804
- **59.** *Waite HR, *Beshai RA, <u>Sorte CJB</u> (2023) On the edge: demography across latitudinal and elevational gradients for range-expanding whelks. *Marine Ecology Progress Series*. doi: 10.3354/meps14349
- **58.** <u>Sorte CJB</u>, *Beshai RA, Henry AK, *Mahanes SA, *Rangel RE, *Waite HR. (2023) Interactions between climate change and species invasions in the marine realm. *In:* Invasive Species and Global Climate Change, 2nd Edition (Ed: Ziska LH) CABI Publishing, Oxfordshire, UK (pp. 119-140). [Fully revised since pub. 23]
- **57.** *Mahanes SA, <u>Sorte CJB</u>, Bracken MES (2023) The functional effects of a dominant consumer are altered following the loss of a dominant producer. *Ecology & Evolution*. 13(8):e10342 (19pp).
- **56. Sorte CJB**, Kroeker K, Miller LP, Bracken MES (2023) Biological modification of coastal pH differs with community composition and by month. *Ecology*. e4113 (8pp).
- **55.** Ibáñez I, Petri L, Barnett DT, Beaury EM, Blumenthal DM, Dukes JS, Corbin JD, Early R, Pearse IS, **Sorte CJB**, Vilà M, Bradley B (2023) Combining local, landscape, and regional geographies to assess plant community vulnerability to invasion impact. *Ecological Applications*. 33:e2821 (15pp).
- **54.** *Beshai RA, ^Truong D, #Henry AK, <u>Sorte CJB</u> (2023) Biotic resistance or invasional meltdown? Diversity reduces invasibility but not exotic dominance in southern California epibenthic communities. *Biological Invasions*. 25:533-549.
- **53.** *Mahanes SA, Bracken MES, <u>Sorte CJB</u> (2022) Climate change amelioration by marine producers: Does dominance predict impact? *The Biological Bulletin*. 243:299-314.

- **52.** *Rangel RE, <u>Sorte CJB</u> (2022) Local-scale thermal history influences metabolic response of marine invertebrates to warming. *Marine Biology*. 169:126 (12pp).
- **51.** Vimercati G, Probert AF, Volery L, Bernardo-Madrid R, Bertolino S, Céspedes V, Essl F, Evans T, Gallardo B, Gallien L, Gonzalez-Moreno P, Grange M, Hui C, Jeschke JJ, Katsanevakis S, Kühn I, Kumschick S, Pergl J, Pyšek P, Rieseberg L, Robinson TB, Saul W-C, **Sorte CJB**, Vilà M, Wilson JRU, Bacher S (2022) The EICAT+ framework enables classification of positive impacts of alien taxa on native biodiversity. *PLOS Biology*. 20(8): e3001729.
- **50.** Lopez BE, Allen JM, Dukes JS, Lenoir J, Vilà M, Blumenthal DM, Beaury EM, Fusco EJ, Laginhas BB, Morelli TL, O'Neill M, **Sorte CJB**, Maceda-Veiga A, Whitlock R, Bradley BA (2022) Global environmental changes more frequently offset than intensify detrimental effects of biological invasions. *Proceedings of the National Academy of Sciences USA*. 119(22), e2117389119.
- **49.** #Henry AK, <u>Sorte CJB</u> (2022) Impact assessment of coastal marine range shifts to support proactive management. *Frontiers in Ecology and the Environment* 20:161-169.
- **48.** *Wallingford PD, <u>Sorte CJB</u> (2022) Dynamic species interactions associated with the range-shifting marine gastropod *Mexacanthina lugubris*. *Oecologia* 198:749-761.
- **47.** Bracken MES, Miller LP, Mastroni SE, Lira SM, <u>Sorte CJB</u> (2022) Accounting for variation in temperature and oxygen availability when quantifying marine ecosystem metabolism. *Scientific Reports* 12:1-11.
- **46.** *Waite HR, <u>Sorte CJB</u> (2022) Negative carry-over effects on larval thermal tolerances across a natural thermal gradient. *Ecology* 103:e03565.
- **45.** Vilà M, Beaury EM, Blumenthal DM, Bradley BA, Early R, Laginhas BB, Trillo A, Dukes JS, **Sorte CJB**, Ibáñez I. (2021) Understanding the combined impacts of weeds and climate change on crops. *Environmental Research Letters* 16:034043.
- **44.** *Pandori LLM, <u>Sorte CJB</u> (2021) Spatial and temporal scales of exposure and sensitivity drive mortality risk patterns across life stages. *Ecosphere*. 12:e03552
- **43.** <u>Sorte CJB</u>, Aguilar-Roca NM, *Henry AK, Pratt JD (2020) A hierarchical mentoring program increases confidence and effectiveness in data analysis and interpretation for undergraduate biology students. *CBE—Life Sciences Education* 19:ar23.
- **42.** *Wallingford PD, Morelli TL, Allen JM, Beaury EM, Blumenthal DM, Bradley BA, Dukes JS, Early R, Fusco EJ, Goldberg DE, Ibanez I, Laginhas BB, Vilà M, **Sorte CJB** (2020) Adjusting the lens of invasion biology to focus on the impacts of climate-driven range shifts. *Nature Climate Change* 10:398-405.
- **41.** Gallardo B, Bacher S, Bradley B, Comin FA, Gallien L, Jeschke JM, <u>Sorte CJB</u>, Vilà M (2019) InvasiBES: Understanding and managing the impacts of Invasive alien species on Biodiversity and Ecosystem Services. *Neobiota.* 50:109-122. [Peer-reviewed project description]
- **40.** *Wallingford PD, <u>Sorte CJB</u> (2019) Predicting predator-prey responses to climate change using community regulation models. *Ecosphere*. 10:e02790.
- 39. Bradley BA, Laginhas B, Whitlock R, Bates A, Bernatchez G, Diez JM, Allen JM, Early R, Lenoir J, Vilà, Sorte CJB (2019) Disentangling the abundance-impact relationship for invasive species. *Proceedings of the National Academy of Sciences USA*. 116:9919-9924. Selected for ESA George Mercer Award
- **38.** *Mahanes SA, <u>Sorte CJB</u> (2019) Impacts of climate change on marine species invasions in northern hemisphere high-latitude ecosystems. *Frontiers of Biogeography*. 11.1. DOI: 10.21425/F5FBG40527.
- **37.** <u>Sorte CJB</u>, Bernatchez G, *Pandori LLM, #Silbiger NJ, Smith AM, *Wallingford PD (2019) Thermal tolerance limits as indicators of current and future intertidal zonation patterns in a diverse mussel guild. *Marine Biology.* 166:6.
- **36.** *Pandori LLM, <u>Sorte CJB</u> (2019) The weakest link: sensitivity to climate extremes across life stages of marine invertebrates. *Oikos*. 128:621-629.
- **35.** *Wallingford PD, *Pandori LLM, Bedgood SA, Bracken MES, Elsberry LA, #Henry AK, *Mahanes SA, <u>Sorte CJB</u> (2019) A guide to the relationships between marine spatial patterns and ecological processes. *Frontiers of Biogeography*. 10:3-4. [Invited book review]

- **34.** Bracken MES, #Silbiger NJ, Bernatchez G, <u>Sorte CJB</u> (2018) Primary producers may ameliorate impacts of daytime CO₂ addition in a coastal marine ecosystem. *Peer J.* 6:e4739.
- **33.** #Silbiger NJ, <u>Sorte CJB</u> (2018) Biophysical feedbacks mediate carbonate chemistry in coastal ecosystems across spatiotemporal gradients. *Scientific Reports*. 8:796.
- **32.** <u>Sorte CJB</u>, *Pandori LLM, Cai S, Davis K (2018) Predicting persistence in benthic marine species with complex life cycles: linking dispersal dynamics to redistribution potential and thermal tolerance limits. *Marine Biology*. 165:20.
- 31. Bonebrake TC, Brown CJ, Bell JD, Blanchard J, Chauvenet A, Champion C, Chen I-C, Clark TD, Colwell RK, Danielsen F, Dell AI, Donelson JM, Evengard B, Ferrier S, Frusher S, Garcia RA, Griffis RB, Hobday AJ, Jarzyna MA, Lee E, Lenoir J, Linnetved H, Martin VY, McCormack PC, McDonald J, E McDonald-Madden, Mitchell N, Mustonen T, Pandolfi JM, Pettorelli N, Possingham H, Pulsifer P, Reynolds M, Scheffers BR, Sorte CJB, Strugnell JM, Tuanmu M-N, Twiname S, Verges A, Villanueva C, Wapstra E, Wernberg T, Pecl GT. (2018) Climate-driven species redistribution requires integrated research to protect biodiversity and maintain human benefits. *Biological Reviews*. 93:284-305.
- 30. Pecl GT, Araujo MB, Bell JD, Blanchard J, Bonebrake TC, Chen I-C, Clark TD, Colwell RK, Danielsen F, Evengard B, Falconi L, Ferrier S, Frusher S, Garcia RA, Griffis R, Hobday AJ, Janion-Scheepers C, Jarzyna MA, Jennings S, Lenoir J, Linnetved HI, Martin VY, McCormack PC, McDonald J, Mitchell NJ, Mustonen T, Pandolfi JM, Pettorelli N, Popova E, Robinson SA, Scheffers BR, Shaw JD, Sorte CJB, Strugnell JM, Sunday JM, Tuanmu M-N, Verges A, Villanueva C, Wernberg T, Wapstra E, Williams SE (2017) Biodiversity redistribution under climate change: impacts on ecosystems and human well-being. Science. 355(6332): eaai9214.
- **29.** Van Gennip SJ, Popova EE, Yool A, Pecl GT, Hobday AJ, <u>Sorte CJB</u> (2017) Going with the flow: the role of ocean circulation in global marine ecosystems under a changing climate. *Global Change Biology*. 23(7):2602-2617.
- **28.** <u>Sorte CJB</u>, ^Davidson VE, ^Franklin MC, Benes KM, Doellman MM, Etter RJ, Hannigan RE, Lubchenco J, Menge BA (2017) Long-term declines in an intertidal foundation species parallel shifts in community composition. *Global Change Biology*. 23:341-352.
- **27.** Early R, Bradley BA, Dukes JS, Lawler JJ, Olden JD, Blumenthal DM, Gonzalez P, Grosholz ED, Ibáñez I, Miller LP, <u>Sorte CJB</u>, Tatem AJ (2016) Global threats from invasive species in the 21st century and national response capacities. *Nature Communications*. 7:12485.
- **26.** <u>Sorte CJB</u> (2016) Evolution and invasive species. *In:* Encyclopedia of Evolutionary Biology (Ed: Kliman R) Elsevier Ltd, Oxford, UK. 2:282-287.
- **25.** <u>Sorte CJB</u>, Bracken MES (2015) Warming and elevated CO₂ interact to drive rapid shifts in marine community production. *PLoS ONE*. 10:e0145191.
- **24.** Bradley BA, Early RI, <u>Sorte CJB</u> (2015) Space to invade? Comparative range infilling and potential range of invasive and native plants. *Global Ecology & Biogeography*. 24:348-359.
- 23. <u>Sorte CJB</u> (2014) Synergies between climate change and species invasions: evidence from marine systems. *In:* Invasive Species and Global Climate Change (Eds: Ziska LH, Dukes JS) CABI Publishing, Oxfordshire, UK.
- **22.** Ibáñez I, Diez JM, Miller LP, Olden JD, <u>Sorte CJB</u>, Blumenthal DM, Bradley BA, D'Antonio CM, Dukes JS, Early RI, Grosholz ED, Lawler JJ (2014) Integrated assessment of biological invasions. *Ecological Applications*. 24:25-37.
- **21.** Bates AE, McKelvie CM, <u>Sorte CJB</u>, Morley SA, Jones N, Mondon J, Bird TJ, Quinn G (2013) Geographical range, heat tolerance, and invasion success in aquatic species. *Proceedings of the Royal Society B.* 280: 20131958.
- **20.** <u>Sorte CJB</u>, Etter RJ, ^Spackman R, Boyle EE, Hannigan RE (2013) Elemental fingerprinting of mussel shells to predict population sources and redistribution potential in the Gulf of Maine. *PLoS ONE*. 8:e80868.
- **19.** <u>Sorte CJB</u>, White JW (2013) Competitive and demographic leverage points of community shifts under climate warming. *Proceedings of the Royal Society B.* 280:20130572.
- **18.** <u>Sorte CJB</u>, Ibáñez I, Blumenthal DM, Molinari NA, Miller LP, Grosholz ED, Diez JM, D'Antonio CM, Olden JD, Jones SJ, Dukes JS (2013) Poised to prosper? A cross-system comparison of climate change effects on native and non-native species performance. *Ecology Letters*. 16:261-270.

- **17. Sorte CJB** (2013) Predicting persistence in a changing climate: flow direction and limitations to redistribution. *Oikos.* 122:161-170.
- **16.** *Cockrell MA, <u>Sorte CJB</u> (2013) Predicting climate-induced changes in population dynamics of invasive species in a marine epibenthic community. *Journal of Experimental Marine Biology and Ecology.* 440:42-48.
- **15.** Diez JM, D'Antonio CM, Dukes JS, Grosholz ED, Olden JD, <u>Sorte CJB</u>, Blumenthal DM, Bradley BA, Early R, Ibáñez I, Jones SJ, Lawler J, Miller LP (2012) Will extreme climatic events facilitate biological invasions? *Frontiers in Ecology and the Environment* 10:249-257.
- **14.** Bradley BA, Blumenthal DM, Early RI, Grosholz ED, Lawler JJ, Miller LP, <u>Sorte CJB</u>, D'Antonio CM, Diez JM, Dukes JS, Ibáñez I, Olden JD (2012) Global change, global trade, and the next wave of plant invasions. *Frontiers in Ecology and the Environment* 10:20-28.
- **13.** Fischer EV, Mackey KRM, Cusack DF, DeSantis LRG, Harzell-Nichols L, Lutz JA, Melbourne-Thomas J, Meyer R, Riveros-Iregui DA, **Sorte CJB**, Taylor JR, White SA (2012) Pre-tenure interdisciplinary research: is it a career risk? *Eos, Transactions of the American Geophysical Union* 93:311-312.
- **12.** Bracken MES, Menge BA, Foley MM, <u>Sorte CJB</u>, Lubchenco J, Schiel DR (2012) Mussel selectivity for high-quality food drives carbon inputs into open-coast intertidal ecosystems. *Marine Ecology Progress Series* 459:53-62.
- 11. <u>Sorte CJB</u>, Stachowicz JJ (2011) Patterns and processes of compositional change in a California epibenthic community. *Marine Ecology Progress Series* 435:63-74.
- **10.** <u>Sorte CJB</u>, Jones SJ, Miller LP (2011) Geographic variation in temperature tolerance as an indicator of potential population responses to climate change. *Journal of Experimental Marine Biology and Ecology* 400:209-217.
- **9.** *Zerebecki RA, <u>Sorte CJB</u> (2011) Temperature tolerance and stress proteins as mechanisms of invasive species success. *PLoS ONE* 6:e14806.
- **8.** <u>Sorte CJB</u>, Williams SL, *Zerebecki RA (2010) Ocean warming increases threat of invasive species in a marine community. *Ecology* 91:2198-2204.
- 7. <u>Sorte CJB</u>, Williams SL, Carlton JT (2010) Marine range shifts and species introductions: comparative spread rates and community impacts. *Global Ecology and Biogeography* 19:303-316.
- **6. <u>Sorte CJB</u>**, *Fuller A, Bracken MES (2010) Impacts of a simulated heat wave on composition of a marine community. *Oikos* 119:1909-1918.
- **5.** Harley CDG, Hughes AR, Hultgren K, Miner BG, <u>Sorte CJB</u>, Thornber CS, Rodriguez LF, Tomanek L, Williams SL (2006) The impacts of climate change in coastal marine systems. *Ecology Letters* 9:228-241.
- **4.** <u>Sorte CJB</u>, Hofmann GE (2005) Thermotolerance and heat-shock protein expression in Northeastern Pacific *Nucella* species with different biogeographical ranges. *Marine Biology* 146:985-993.
- **3.** <u>Sorte CJB</u>, Hofmann GE (2004) Changes in latitudes, changes in aptitudes: *Nucella canaliculata* (Mollusca: Gastropoda) is more stressed at its range edge. *Marine Ecology Progress Series* 274:263-268.
- **2.** Halpin PM, <u>Sorte CJ</u>, Hofmann GE, Menge BA (2002) Patterns of variation in levels of Hsp70 in natural rocky shore populations from microscales to mesoscales. *Integrative and Comparative Biology* 42:815-824.
- **1. <u>Sorte CJ</u>**, Peterson WT, Morgan CA, Emmett RL (2001) Larval dynamics of the sand crab, *Emerita analoga*, off the central Oregon coast during a strong El Niño period. *Journal of Plankton Research* 23:939-944.

MANUSCRIPTS IN REVIEW AND IN REVISION (available on request)

- Bradley BA, Evans AE, Vilà M, Barnett DT, Beaury EM, Blumenthal DM, Corbin JD, Dukes JS, Early R, Ibáñez I, Pearse IS, Petri L, Sofaer HR, <u>Sorte CJB</u> (*in revision*) A quantitative classification of the geography of non-native flora in the U.S. *Global Ecology & Biogeography*.
- Buonaiuto D et al. (*in revision*) Using plant invasions to compare occurrence- and abundance-based calculations of biotic homogenization: are results complementary or contradictory? *Global Ecology & Biogeography*.
- *Chan M, Tsang TPN, Dingle C, Early R, <u>Sorte CJB</u>, Bonebrake TC (*in revision*) Microhabitat coverage but not habitat heterogeneity influences avian species composition in Hong Kong urban parks. *Urban Forestry & Urban Greening*.

- *Rangel RE, Bracken MES, Kroeker K, Miller LP, <u>Sorte CJB</u>. (*in revision*) Factorial field manipulation reveals multi-stressor effects on a critical habitat-forming shellfish. *Journal of Experimental Biology*.
- *Waite HR, <u>Sorte CJB</u>. (*in review*) Transgenerational effects can be positive but attenuate with extended exposure to climate change. *Aquatic Ecology*.
- Jarić I, ... Sorte CJB, ...et al. (in preparation) Priority questions in invasion science. For submission to Ecology Letters.

PRESS (Selected articles & interviews. Links for some older shows are at https://cascadesorte.org/?page_id=146)

- 2024 Spectrum News. Video interview. (in preparation)
- 2024 KCAW Alaska Public Radio, Sitka. Morning Edition, Live.
- 2023 Boston Globe. 19 August. "As the Gulf of Maine warms, where are the mussels?" < https://www.bostonglobe.com/2023/08/19/science/mussels-are-disappearing-from-the-gulf-of-maine-as-the-climate-warms/>. *Sunday cover article*.
- 2021 Scienceline.org. 15 January. "Spurred by climate change, invasive species threat looms over northeast U.S." https://scienceline.org/2021/01/spurred-by-climate-change-invasive-species-threat-looms over-northeast-us/.
- Voice of America. 09 October. "Spread of Alien Plant, Animal Species Predicted to Rise Globally by 2050". https://www.voanews.com/a/science-health_spread-alien-plant-animal-species-predicted rise-globally-205/6196938.html.
- 2019 FiveThirtyEight. 18 November. "Is this fish winning climate change?". https://fivethirtyeight.com/features/its-gettin-hot-in-here-so-be-a-sawtail-fish/>.
- 2019 Radio Canada. 04 November. Radio interview in French. "Les espèces aquatiques invasives". .
- 2018 Environmental Monitor. 26 February. "Marine vegetation could serve as a buffer against increasingly acidic oceans". https://www.fondriest.com/news/marine-vegetation-serve-buffer-increasingly-acidic-oceans.htm.
- Orange County Register (cover article). 23 February. "A hunt for the invasive dark unicorn snail shows UCI students how climate change is altering Crystal Cove tide pools". https://www.ocregister.com/2018/02/23/a-hunt-for-the-invasive-dark-unicorn-snail-shows-uci students-how-climate-change-is-altering-crystal-cove-tide-pools/.
- Hakai Magazine. "Seaweed and seagrass buffer the acidity of the nearby ocean". 15 February. https://www.hakaimagazine.com/news/seaweed-and-seagrass-buffer-the-acidity-of-the-nearby-ocean.
- 2018 Discover Magazine. "Marine life can buffer ocean acidity, study finds". 16 January. http://blogs.discovermagazine.com/science-sushi/2018/01/16/marine-life-can-buffer-ocean acidity-study-finds/#.W4XZ5ZUU9D9>
- Associated Press. Patrick Whittle "Drill, baby, drill? Election reignites offshore-oil debate". 22 November.

 Article ran in news outlets including *ABC News, New York Times, Washington Post, Seattle Times.*http://www.californiademocrat.com/news/news/story/2016/nov/22/drill-baby-drill-election-reignites-offshore-oil-debate/650048>.
- VOCM Nightline. Live Talk Radio with host Jonathan Richler. 30 August. Starts at 16:00. http://vocm.com/shows/night-line-with-jonathan-richler/
- 2016 Canadian Broadcasting Corporation Radio Interview. 29 August. "Blue mussels on the decline in the Gulf of Maine". http://www.cbc.ca/beta/news/canada/new-brunswick/programs/shift/blue-mussels-on-the-decline-in-the-gulf-of-maine-1.3740389.
- 2016 Maine Public Radio. Interview with Patty Wight. "Blue mussels in decline in Gulf of Maine". 29 August. http://news.mpbn.net/post/blue-mussels-decline-gulf-maine#stream/0
- 2016 Associated Press. Patrick Whittle "Mussels disappearing from New England waters, scientists say". 28 August. Article ran in >25 news outlets including ABC News, Boston Globe, Chicago Tribune, La

- *Gran Epoca*, *Las Vegas Sun*, *Los Angeles Daily News*, *Manila Bulletin*, *New York Times*, *SF Gate*, *Wall Street Journal*. https://www.boston.com/news/local-news/2016/08/28/mussels-disappearing from-new-england-waters-scientists-say.
- 2016 Christian Science Monitor. 02 August. "Why are spiny damselfish going into permanent 'night mode'?" Commented as climate change expert. http://www.csmonitor.com/Science/2016/0802/Why-are spiny-damselfish-going-into-permanent-night-mode.
- Hakai Magazine. "Testing climate change in a tide pool". 07 January. https://www.hakaimagazine.com/article-short/testing-climate-change-tide-pool.
- 2015 Portland Press Herald, Portland, ME. "Where have Maine's mussels gone?" http://www.pressherald.com/2015/08/30/where-have-maines-mussels-gone/>. 30 August.
- Maine Public Radio. "While Maine mussel fishermen struggle, farmers 'continue to grow'". Aired 20 Feb. http://news.mpbn.net/post/while-maine-mussel-fishermen-struggle-farmers-continue-grow.
- The Forecaster, Falmouth, Maine. 22 January. "Mussel weakness: Massive decline in Casco Bay poses questions about once-thriving population". http://www.theforecaster.net/mussel-weakness-massive-decline-in-casco-bay-poses-questions-about-once-thriving-population/.
- 2014 KCAW Alaska Public Radio, Sitka. Nature Show #58: "Matt Bracken and Cascade Sorte". 20 July. http://www.kcaw.org/wp-content/uploads/Programming/Sunday%20130%20to%20230.mp3
- 2014 KCAW Alaska Public Radio, Sitka. Morning Edition, Live. 09 July. "Science and tide pools". http://www.kcaw.org/2014/07/09/science-and-tide-pools/
- 2010 KFSK Alaska Public Radio, Petersburg. 28 June. "Researcher calls for attention to invasive marine species".

INVITED PRESENTATIONS

- 2023 Alaska Invasive Species Partnership Annual Workshop (Keynote Address)
 U. Alaska Southeast Natural History Speaker Series, Sitka, AK (Public Talk)
 Northeast Regional Invasive Species and Climate Change Symposium (Keynote Address)
- 2022 Centro de Investigación Científica y de Educación Superior de Ensenada, Baja California, Mexico UC Davis Bodega Marine Lab (Student Invited Speaker)
- 2021 Invasive Species Research Conference of Invasive Species Council of British Columbia (Keynote Address)
 Delta Invasive Species Symposium, California
- 2020 Western Society of Naturalists Annual Conference UC (University of California) Center Sacramento Speaker Series
- 2019 University of Exeter, Penryn, United Kingdom
 International Conference on Aquatic Invasive Species, Montreal, Canada (Keynote Address)
 Species on the Move Conference, South Africa (Keynote Address)
 Scripps Institution of Oceanography, La Jolla, CA
 - Marine Science Institute, University of Texas, Port Aransas, TX (L. R. Schweppe Endowment Speaker)
- 2018 Northeast Regional Invasive Species & Climate Change Management, Amherst, MA (Symposium Talk) Chancellor's Club, University of California, Irvine, CA University of California, Irvine, CA Multi-Agency Rocky Intertidal Network (MARINe) Conference, San Pedro, CA (Symposium Talk) University of California, Riverside, CA
- 2017 UCI Osher Lifelong Learning Institute, Irvine, CA (Public Lecture)
 Western Regional Panel on Aquatic Nuisance Species, San Diego, CA (Keynote Address)
 Ecological Society of America Conference, Portland, OR (Organized Oral Session Talk)
 California State Summer School for Mathematics and Science, Irvine, CA (Distinguished Faculty Lecture)
 Estación Biológica de Doñana (Biological Station of Doñana), Seville, Spain
 Southern California Academy of Sciences, Santa Monica, CA (Symposium Talk)
 Concordia University, Irvine, CA
- 2016 World Wetlands Day Symposium, Irvine, CA (Symposium Talk)
 Native Nations Protecting Coastal Land and Waters in California, Irvine, CA (Symposium Talk)
 Darling Marine Center, University of Maine, Damariscotta, ME
 University of California, Merced, CA

Neobiota International Conference on Biological Invasions, Vianden, Luxembourg (Keynote Address)

Ecological Society of America Conference, Fort Lauderdale, FL (Symposium Talk)

University of Exeter, Penryn, United Kingdom

UCI Osher Lifelong Learning Institute, Irvine, CA (Public Lecture)

Newport Bay Conservancy, Climate Change & El Niño Symposium, Newport Beach, CA (Public Lecture)

2015 Western Society of Naturalists Conference, Sacramento, CA (Symposium Talk)

Humboldt State University, Arcata, CA

Newport Bay Conservancy Symposium on Invasive Species, Costa Mesa, CA (Public Lecture)

MIT Massachusetts Sea Grant, Boston, MA

UCI "Building Partnerships for Ocean Health in Southern California" Conference, Irvine, CA

Back Bay Science Center, Newport Beach, CA (Public Lecture)

University of Canterbury, Christchurch, New Zealand

University of Otago, Dunedin, New Zealand

Victoria University, Wellington, New Zealand

California State University, Fullerton, CA

UCI Biological Sciences Faculty Retreat, Costa Mesa, CA

2014 University of Washington, Seattle, WA

Hopkins Marine Station, Stanford University, Pacific Grove, CA

California State University, Long Beach, CA

Sitka Sound Science Center, Sitka, AK (Public Lecture)

2013 University of California, Irvine, CA

Scripps Institution of Oceanography, La Jolla, CA

University of Connecticut, Groton, CT

2012 California Polytechnic State University, San Luis Obispo, CA

California State University, Northridge, CA

2011 University of California, Berkeley, CA

University of Rhode Island, RI

Northeastern University Marine Science Center, Nahant, MA (Public Lecture)

University of Massachusetts, Boston, MA

Green Mountain College, Poultney, VT

University of Massachusetts, Amherst, MA

National Center for Ecological Analysis and Synthesis, Santa Barbara, CA

2010 Brown University, Providence, RI

Petersburg Marine Mammal Center, Petersburg, AK (Public Lecture)

2009 Moss Landing Marine Laboratories, Moss Landing, CA

Canada Aquatic Invasive Species Network Annual Meeting (Keynote Lecture; Williams SL & Sorte CJB)

2000 Oregon Shores Coastal Coalition and CoastWatch Conference, Newport, OR

CONTRIBUTED PRESENTATIONS – past 5 years

(\undergraduate, \undergraduate, and \undergraduate, and \undergraduate)

- 2024 **Sorte C**, *Waite H. Transgenerational effects can be positive but attenuate with extended exposure to climate change. Ecological Society of America. Long Beach, CA.
- 2024 ^Suen KJ, *Beshai R, **Sorte C**. Evaluating whether mussels provide a refuge for prey of a range-shifting predator in southern California. Southern California Academy of Sciences, Orange, CA.
- 2024 ^Ramsey SM, *Beshai RA, **Sorte CJB**. The potential for coexistence between the range expanding dark unicorn whelk and a native southern California whelk species. Southern California Academy of Sciences, Orange, CA.
- 2023 *Beshai RA, *Cameron CT, Ladah LB, Lorda J, Bourdeau PE, **Sorte CJB.** Population and community impacts of two range-expanding predators, the whelks *Acanthinucella spirata* and *Mexacanthina lugubris*, along the Pacific Coast. Western Society of Naturalists, Monterey, CA.
- 2023 **Sorte C**, Kroeker K, Miller L, Rangel R, Bracken M. Impacts of temperature and CO2 on rocky shore ecosystems: results of a factorial field experiment. Ecological Society of America. Portland, OR.

- 2023 *Beshai RA, *Cameron CT, Ladah LB, Lorda J, Bourdeau PE, **Sorte CJB.** Population and community impacts of two range-expanding predators, the whelks *Acanthinucella spirata* and *Mexacanthina lugubris*, along the Pacific Coast. Ecological Society of America. Portland, OR. Poster.
- 2023 ^Sherzai S, *Beshai RA, **Sorte CJB.** Assessing the impacts of a range-shifting whelk, *Mexacanthina lugubris*, on its prey species across native and expanded ranges. Southern California Academy of Sciences. Santa Barbara, CA. Poster.
- 2023 ^Lau V, *Rangel R, **Sorte C**. Impacts of ocean acidification on the shell structure of two ecologically important shellfish species, the Pacific Blue Mussel (*Mytilus trossulus*) and the California Mussel (*Mytilus californianus*) from differing latitudes over time. Southern California Academy of Sciences. Santa Barbara, CA. Poster.
- 2022 *Rangel R, Kroeker K, Bracken M, Miller L, **Sorte** C. Climate change impacts on the shell structure of an ecologically important shellfish. Society for Integrative and Comparative Biology. Austin, TX.
- 2022 *Rangel R, Kroeker K, Bracken M, Miller L, **Sorte** C. Climate change impacts on the shell structure of an ecologically important shellfish. American Physiological Society, San Diego, CA. Poster.
- 2022 *Waite H, **Sorte CJB**. A blast from the past: effects of early life stage experiences in a range shifting intertidal snail. Society for Advancement of Chicanos/Hispanics and Native Americans in Science, San Juan, Puerto Rico.
- 2022 **Sorte** C, Kroeker K, Miller L, Rangel R, Bracken M. Seasonal variation in community composition affects biological modification of coastal pH. Western Society of Naturalists. Oxnard, CA.
- 2022 Allen A, *Mahanes S, *Cameron C, **Sorte C** Impacts of the invasive alga *Sargassum muticum* and native surfgrass *Phyllospadix* on species richness in southern California. Western Society of Naturalists. Oxnard, CA.
- 2022 *Waite H, **Sorte CJB**. Preparing the next generation for climate change: parental effects on larval thermal tolerance in the California mussel (*Mytilus californianus*). OCMPAC Coastal Marine Research Symposium.
- 2022 *Beshai RA, ^Truong D, #Henry AK, **Sorte CJB**. Biotic resistance or invasional meltdown? Diversity reduces invasibility but not exotic dominance in southern California epibenthic communities. Neobiota International Conference on Bioinvasions, Tartu, Estonia.
- 2022 *Wallingford PD, **Sorte CJB**. Dynamic species interactions associated with the range-shifting gastropod *Mexacanthina lugubris*. Ecological Society of America, Montreal, Canada.
- 2022 *Mahanes SA, Bracken MES, **Sorte CJB**. Do dominant marine producers ameliorate climate change? Joint Aquatic Sciences Meeting, Grand Rapids, MI.
- 2022 *Wallingford PD, **Sorte CJB**. Dynamic species interactions associated with the range-shifting gastropod *Mexacanthina lugubris*. American Society of Limnology and Oceanography.
- 2021 *Beshai RA, ^Truong DA, #Henry AK, **Sorte CJB.** Invasional meltdown in southern California marine communities: could greater community diversity facilitate invader dominance? Poster, Invasive Species Council of British Columbia Invasive Species Research Conference. Virtual.
- 2021 *Beshai RA, ^Truong DA, #Henry AK, **Sorte CJB.** Invasional meltdown in southern California marine communities: could greater community diversity facilitate invader dominance? Poster, Ecological Society of America. Virtual.
- 2021 *Mahanes SA, Bracken MES, **Sorte CJB**. Multiple roles of a dominant seaweed in driving environmental conditions and community structure. Ecological Society of America. Virtual.
- 2020 Bracken MES, Kroeker KJ, Miller LP, **Sorte CJB**. Realistic field manipulations to simulate future climate conditions modify seaweed photosynthetic performance. Western Society of Naturalists. Virtual.
- 2020 *Mahanes SA, Bracken MES, **Sorte CJB**. The effects of habitat-forming alga on environmental conditions and community composition. Western Society of Naturalists. Virtual.
- 2020 *Waite H, **Sorte CJB**. Preparing the next generation for climate change: parental effects on larval thermal tolerance in the California mussel (*Mytilus californianus*). Western Society of Naturalists. Virtual.
- 2020 *Rangel R, Sorte CJB. Staying local: small-scale environmental history influences the metabolic response of marine invertebrates to increased temperature. Society for Advancement of Chicanos/Hispanics and Native Americans in Science. Virtual.

- 2020 *Waite H, **Sorte CJB**. Preparing the next generation for climate change: parental effects on larval thermal tolerance in the California mussel (*Mytilus californianus*). Society for Advancement of Chicanos/Hispanics and Native Americans in Science. Virtual.
- 2020 *Wallingford PD, **Sorte CJB**. Impacts of the Predatory Whelk *Mexacanthina lugubris*: A Dark Unicorn in Southern California. Poster, Ocean Sciences Meeting, San Diego, CA.
- 2020 **Sorte CJB**, Aguilar-Roca NM, Henry AK, Pratt JD. A hierarchical mentoring program increases confidence and effectiveness in critical thinking skills of undergraduate biology students. Poster, Society for the Advancement of Biology Education Research (SABER) West Meeting, Irvine, CA. *Presented by A. Henry*.
- 2020 *Rangel R, **Sorte CJB**. Staying local: small-scale metabolic response of marine invertebrates to increased temperature. Society for Integrative and Comparative Biology. Austin, TX.
- 2019 #Henry AK, **Sorte CJB**. Risk assessment of ecological impacts by range-expanding marine species in North America. Western Society of Naturalists, Ensenada, Mexico.
- 2019 *Waite HR, **Sorte CJB**. Does the apple not fall from the tree? Parental effects on larval thermal tolerance in the mussel, *Mytilus trossulus*. Poster, Western Society of Naturalists, Ensenada, Mexico.
- 2019 Morelli TL, *Wallingford PD ... **Sorte CJB**. Assessing impacts of climate-driven range shifts through the lens of invasion biology. Species on the Move, Kruger National Park, South Africa.
- 2019 *Wallingford PD, **Sorte CJB.** Impacts of *Mexacanthina lugubris*, the dark unicorn in Southern California intertidal communities. Southern California Academy of Sciences, Northridge, CA.
- 2018 **Sorte CJB.** Following in Susan's footsteps: environmental context and buffering capacity of tide pool primary producers. Western Society of Naturalists, Tacoma, WA.
- 2018 *Mahanes SA, Bracken MES, **Sorte CJB.** Fickle fronds: the effects of a dominant alga on community diversity and composition. Poster, Western Society of Naturalists, Tacoma, WA.
- 2018 *Rangel R, **Sorte CJB.** Local-scale environmental history influences the response of Alaskan tide pool species to increased temperature. Poster, Western Society of Naturalists, Tacoma, WA.
- 2018 *Pandori LLM, **Sorte CJB.** Risky business: vulnerability of California mussels to warming varies across life stages and microhabitats. Western Society of Naturalists, Tacoma, WA.
- 2018 *Truong DA, Henry AK, **Sorte CJB.** Space Invaders! Biotic interaction strength differs by stage of development in the fouling community of Bodega Harbor, California. Poster, Western Society of Naturalists, Tacoma, WA.
- 2018 *Wallingford PD, **Sorte CJB.** Predicting predator-prey responses to climate change using a community regulation model. Western Society of Naturalists, Tacoma, WA.

TEACHING

Instructor

Courses (unde	rgraduate level except for EEB Department Ecology Group)
Spring 2023	Bio Sci E120: Marine Biology (253 students), co-taught with M. Bracken
Fall 2022	Bio Sci 186L: Population & Community Ecology Lab (22 students)
Spring 2022	Bio Sci 186L: Population & Community Ecology Lab (21 students)
Spring 2022	Bio Sci E120: Marine Biology (188 students), co-taught with M. Bracken

- Spring 2021 Bio Sci 186L: Population & Community Ecology Lab (22 students)
- Spring 2021 Bio Sci E120: Marine Biology (136 students), co-taught with M. Bracken
- Spring 2020 Bio Sci E120: Marine Biology (164 students)
- Spring 2020 Eco Evo 221: Plant Ecology (Ecology Group) (7 students)
- Spring 2019 Bio Sci E120: Marine Biology (191 students), co-taught with M. Bracken
- Fall 2018 Bio Sci 186L: Population & Community Ecology Lab (30 students)
- Fall 2018 Eco Evo 201: Ecol & Evo Biol (EEB Department Seminar) (7 students)
- Spring 2018 UNI STU3: Science of Cli-Fi (15 students)
- Spring 2018 Bio Sci E120: Marine Biology (189 students), co-taught with M. Bracken
- Fall 2017 Bio Sci E190: Population & Community Ecology Lab (20 students)
- Spring 2017 UNI STU 3: Science of Cli-Fi (11 students)
- Spring 2017 Bio Sci E120: Marine Biology (163 students), co-taught with M. Bracken

Fall 2016	Bio Sci E186: Population & Community Ecology (6 students)
Spring 2016	Bio Sci E120: Marine Biology (100 students), co-taught with M. Bracken
Winter 2016	Eco Evo 221: Plant Ecology (Ecology Group) (10 students)
Fall 2015	Bio Sci E186: Population & Community Ecology (6 students)
Spring 2015	Bio Sci E120: Marine Biology (93 students), co-taught with M. Bracken

Undergraduate Research: Bio Sci 199: Marine Ecology

Year	# Students in	Fall	Winter	Spring
2023-24		2	3	3
2022-23		2	4	4
2021-22		3	4	4
2020-21		2	2	2
2019-20		2	3	3
2018-19		3	5	4
2017-18		3	3	4
2016-17		1	2	3
2015-16		2	2	3
2014-15		1	2	3

Guest Instructor & Academic Teaching Consulting

2021-22 & 2024 Informational interviews & beta testing for NSF-funded "AI Science Communication" project developing a K-12 chat bot to teach about climate change in oceans

2021 Bio 3436: Global Skills, Field Course, University of Exeter, UK (virtual) Winter 2019,2020 ESS 148: Marine Ecosystems (Lecture & Discussion; ~30 students)

Summer 2018 Ridge to Reef UCI Training Program Summer Institute (1/2 day Field Course; 25 students)

Winter 2015,2016,2018 ESS 60B: Local Environmental Issues (Lecture & Discussion; ~35 students)

Published & Publicized Teaching Materials (*\text{undergraduate and *graduate advisees)

- *Beshai R, Sherzai S, ^Ramsey S, ^Suen K, ^Magee A, <u>Sorte C</u>. PK-12 Resource Content Sheet on invasive species (information sheet for educators). Environmental and Climate Change Literacy Projects.
- 2020 Population and Community Ecology Materials (below) reviewed by The Cutting Edge and included in Exemplary Teaching Activities collection of the Teach the Earth Collection of NAGT (National Association of Geoscience Teachers) at https://serc.carleton.edu/teachearth/exemplary.html>.
- 2018 Sorte CJB, Wallingford PD. Population and Community Ecology Teaching Materials for a Course-Based Undergraduate Research Experience. CUREnet https://serc.carleton.edu/curenet/collection/207507.html

Teaching Experience – prior to UCI appointment

Instructor

- 2013 Marine Biology (undergraduate, 30 students), Northeastern University
- 2013 Climate Change (undergraduate, 35 students), Emerson College
- 2013 Invasive Species: Evolution, Ecology & Management (graduate, 4 students), UMass-Boston
- 2012 Marine Biology (undergraduate, 20 students), Northeastern University
- 2012 Climate Change (undergraduate, 30 students), Emerson College
- 2012 Invasive Species (undergraduate, 31 students), Emerson College
- 2011 Invasive Species: Evolution, Ecology & Management (graduate, 11 students), UMass-Boston
- 2011 Ecology (undergraduate, 40 students), Northeastern University
- 2010 Ecology (undergraduate, 90 students), Northeastern University
- 2005 Introduction to Principles of Biology Lab (undergraduate, 25 students), Santa Rosa Junior College

Guest Lectures

Coastal and Marine Pollution, UMass-Boston
 Global Change Biology, UMass-Boston
 Animal Behavior, Hampshire College

Changing Oceans, Duke University

2008, 09, 11 Invertebrate Zoology, Three Seas Program, Northeastern University Marine Science Center

ADVISING

2016

2014

Postdoctoral Scholars

2017-21 Amy Henry (currently lecturer, UCI Masters in Conservation and Restoration Science Program)

2015-17 Nyssa Silbiger (currently faculty at University of Hawaii, Manoa)

Graduate Students

Oranante Sina	enis
2024-present	Kyle Suen, M.S. student
2020-present	Ryan Beshai, Ph.D. student
2022-2023	Courtney Cameron, Ph.D. student (decided not to pursue a Ph.D. and changed career path)
2018-2023	Racine Rangel, Ph.D. (awarded >\$17K in grants at UCI, currently President's Postdoc at UCSC)
2018-2023	Heidi Waite, Ph.D. (awarded \$3,8K in grants at UCI, now science officer at Ocean Science Trust)
2017-2022	Samuel Mahanes, Ph.D. (currently Policy Fellow, Calif. Council on Science & Tech.)
2015-2020	Piper Wallingford, Ph.D. (awarded ~\$18K in grants while at UCI, currently scientist at TNC)
2014-2019	Lauren Pandori, Ph.D (awarded ~\$14K in grants while at UCI, currently scientist with NPS)

Graduate Student Committees

2024-present	Abby Simpson, Ph.D. committee, EEB, UCI
2022-present	Namfon Booncharoen (Tangkwa), Ph.D. committee, National Cheng Kung University, Taiwan
2022-2023	Bailey McCann, M.S., Cal Poly, Humboldt
2020-2023	Phoebe Dawkins, Ph.D., Ecology & Evolutionary Biology (EEB), UC-Irvine (UCI)
2021-2022	Ha Nguyen, Ph.D., Education, UCI
2020-2021	Brigette Wright, M.S., University of Tasmania, Australia
2017-2021	Nalleli Carvajal, Ph.D., EEB, UCI
2017-2021	Kendra Walters, Ph.D., EEB, UCI
2016-2022	Ashley Peterson, Ph.D., EEB, UCI
2015-2019	Alyssa Frederick, Ph.D., EEB, UCI
2015-2019	Laura Elsberry, Ph.D., EEB, UCI
2015-2018	Chan Wai Shan Melanie (Chocolate), M.Phil., University of Hong Kong
2017	Shukai Cai, M.S., Civil & Environmental Engineering, UCI

Ph D Qualifying Evan Committees (in addition to those listed above)

Kevin Rothstein-Kightly, M.S., EEB, UCI

ualifying Exam Committees (in addition to those listed above)
Jun Yu, Earth System Science, UCI
Keira Monuki, Center for Population Biology, UC-Davis
Yi Liu, Earth System Science, UCI
Cynthia Rodriguez, Ecology & Evolutionary Biology, UCI
Johann Lopez, Earth System Science, UCI
Kylla Benes, Ecology & Evolutionary Biology, UCI

Maggie Simon, UC-Los Angeles

Graduate Thesis External Examiner

2024	Wenjie Wu, Ph.D., University of Auckland, New Zealand
2022	Adriana Rebolledo Navarro, Ph.D., Monash University, Australia
2019	Marlena Janine Ledet, Ph.D., University of New South Wales, Australia
2019	Ella Morran, M.Sc., Stellenbosch University, South Africa

- Past Graduate Students (3; from the Three Seas Marine Biology Master's Program, Northeastern University)
- 2009 Marcy Cockrell (Ph.D. U. South Florida, currently Biol. Admin., FL Dept. Agric. Cons. Serv. Aquaculture)
- 2009 Robyn Zerebecki (Ph.D. Northeastern University, currently Assistant Professor, Univ. Louisiana Lafayette)
- 2008 Adam Fuller (Ph.D. U. Alabama; currently Hatchery Director, Feather River College, Quincy, CA)

Current Undergraduate Research Students

Undergraduate Research: Bio Sci 199 students

(UROP = Undergraduate Research Opportunities Program; SURP = Summer Undergraduate Research Program)

2024-present Kelsey Djan

2024-present Alexa Magee (awarded SURP funding)

Past Undergraduate Students

- 2023-24 Soffia Ramsey (awarded UROP funding)
- 2023-24 Kyle Suen (completed Honors thesis & Excellence in Research; awarded UROP funding)
- 2023-24 Edward Nguyen
- 2023 James Kim
- 2023 Jonathan Reyes
- 2021-23 Safa Sherzai (awarded UROP & SURP funding)
- 2021-23 Vanessa Lau (awarded UROP & SURP funding; completed Excellence in Research)
- 2021-22 Caitlyn Cortes (awarded UROP & SURP funding)
- 2021-22 Abigail Gonzalez (awarded UROP funding)
- 2020-21 Katherine Phan (awarded UROP funding)
- 2020-21 Caroline Hoeft (completed Honors Thesis)
- 2020 Stephany Lira
- 2019-20 Abigail Vara
- 2019-20 Jolene Viramontes (awarded UROP funding)
- J. Connor Basile (awarded SURP & UROP funding)
- 2018-19 Haley Heesch (awarded UROP funding)
- 2017-19 Danny Truong (awarded SURP & UROP funding; presented at 2018 & 2019 Undergraduate Research Symposium and 2018 Western Society of Naturalists Conference; UROP Video Challenge #1 Judge's Choice Award)
- 2019 Joseph Spaziano
- 2018-19 Deida Lopez (awarded UROP funding; presented at 2019 Undergraduate Research Symposium)
- 2017-18 Eduardo Cruz (awarded UROP funding; presented at 2018 Undergraduate Research Symposium)
- 2017-18 Ritika Singh (awarded SURP & UROP funding; presented at 2018 Undergraduate Research Symposium)
- 2016-17 Mackenzie Peich
- 2016 Samer Khan
- 2015-16 Savannah Todd
- 2015-16 Alyssa Medina (thesis published in undergraduate research journal; presented at 2016 Undergraduate Research Symposium)
- 2015 Kunheng Cai
- 2014-15 Betzabe Alvizo

Summer Research Mentoring

- UC-Irvine Summer Undergraduate Research Program (SURP): Safa Sherzai (2022), Vanessa Lau (2022), Caitlyn Cortes (2021), J. Connor Basile (2019), Danny Truong (2018), Ritika Singh (2017)
- Whitman College Summer Internship Program: Leah Samuels (2020), Grant Gallaher (2019; completed undergraduate senior thesis), Victoria Davidson (2014; completed undergraduate senior thesis)
- UC-Irvine HBCU (Historically Black Colleges & Universities) Summer Research Program: Kamaria Bush (2017)
- UMass-Boston Research Experiences for Undergraduates Program: Marcus Franklin (2013; Cornell University undergraduate senior thesis), Carissa McKinney (2011), Robert Spackman (2011)
- UC-Davis Bodega Marine Lab Research Experiences for Undergraduates Program: Jasmina Cerda (2009), Omar Bonilla (2007); served as Graduate Supervisor of BML REU program in 2009

Research Interns

Keira Monuki (2016-18; presented at 2016 WSN & 2018 SICB conferences), Gabriella McGann (2015), Michael Hutson (2011), Jordan Tower (2011), Sarah Trieweiler (2011), Rachel Wong (2010), Melanie Evans (2006)

MENTORING & PUBLIC SERVICE

2024	Guide, tide po	ol walk. Sitka Sound	Science Center, Sitka, AK

- Developed outreach materials on impacts of climate change on coastal ecosystems presented at a table during Earth Week on campus, UC Irvine
- 2022 Online interview with biology class at Birmingham Charter High School, Van Nuys, CA
- 2020-21 Member, Environmental Advisory Council, Tammy Kim, Vice-Mayor, Irvine, CA
- 2019 Taught middle school summer camp activities focused on ocean acidification & ecosystem processes, Sitka Sound Science Center, Sitka, AK
- Supervised development of active learning exercises presented to 2 high school classes by technicians on our NSF-funded research project, Sitka Sound Science Center, Sitka, AK
- 2018 Marine Biology Career Presentation, Rancho San Joaquin Middle School, Irvine, CA
- 2017 Pen pal for elementary student, Adopt-a-scientist Program, Irvine, CA
- 2017 Volunteer, Children's Water Education Festival, Irvine, CA
- 2014 Co-coordinator, Sitka Sound Science Center day camp for 3rd-5th graders, Sitka, AK
- 2014 Developed climate change demonstration, Estuary Awareness Day, Back Bay Sci. Center, Newport Beach
- 2010 Mentor, high school student internship (2 months in the lab), Marblehead, MA
- 2010 Mentor, Ambrose Elementary School Mentor Program (group leader of 3 students), Winchester, MA
- 2008-10 Tide pool presentations, YMCA Pre-kindergarten Program, Marblehead, MA
- 2007-10 Public Open House demonstrations, Marine Science Center, Northeastern University
- 2007 Mentor, high school student's career project, Sebastopol, CA
- 2002 Undergraduate Mentoring in Environmental Biology Program, Arizona State University
- 2002 Presentations (2) on careers in marine biology, elementary and high schools, AZ
- 2001 Group Leader, South Shore Elementary School Girls' Science Club (3 students), Albany, OR
- 2001 Mentor, high school students (2) in Job Shadow Program, Corvallis, OR
- 2000-01 Co-leader, Zoology Club field trips to Friday Harbor Labs, Oregon State University

PROFESSIONAL SERVICE

UCI Department of Ecology & Evolutionary Biology

1	<i>y</i>
Faculty mento	ring committees: Celia Symons, Tobin Hammer (chair), Ana Vedrenne
2021-	Chair, Graduate Assistance in Areas of National Need (GAANN) Steering Committee
2017-18	Member, Strategic Plan Committee
2017-18	Member, Committee to Revise EcoEvo Undergraduate Major
2014-18	Member, Graduate Assistance in Areas of National Need (GAANN) Steering Committee
2016-17	Member, Search Committee, WATER Cluster Hire
2016	Panelist, Work-Life Balance, EEB Brown Bag Lunch Seminar

Panelist, Work-Life Balance, EEB Brown Bag Lunch Seminar

2015 Panelist, NSF REU (Research Experiences for Undergraduate) Program, UCI Ecology Club

2015 Reviewer, Graduate Comparative Physiology Course Paper

UCI School of Biological Sciences

2020-21	EEB representative, Subcommittee on Integrative Biology Major
2018	Member, Search Committee, Exercise Neuroscience (search delayed)
2017-21	Member, Undergraduate Honors Committee (1 of 2 EEB representatives)
2016-19	Co-organizer, UCI pre-tenure faculty Science Writing Retreat (2016 & 2019 UC Anza Borrego
	Reserve; 2017-2019 Catalina Island USC Wrigley Institute; ~6 participants)
2016	Panelist, Graduate School for Bio Sci students, Student Outreach and Retention (SOAR) Center
2015	Reviewer, Excellence in Research Paper, UCI Biological Sciences

UCI

2022-present UCI representative on the Natural Communities Coalition

2014-present	Acting co-chair (term: 2021-23), Research committee chair (2020-21), Inclusiveness committee
- 1	member (2020-present), Research committee member (2014-present) & Representative
	(2014-present), Orange County Marine Protected Area Council
2020-22	Graduate Council representative on the Academic Program Review Board of the Academic Senate
2020-22	BioSci representative on the Graduate Council of the Academic Senate
2018	Panelist, Oceans Session, UCI Climate Solutions Summit
2016-17	Member & UCI OCEANS Representative, Organizing Committee, H2O Headwaters to Oceans
	Conference (spring 2017 at UCI)
2016	Participant, CLEANR and UCI OCEANS Roundtable on Assessing California's Marine Protected
	Area Network: Managing Regulatory Fragmentation, Shifting Baselines, and Uncertainty
2014	Drafted memo re: UCI Marine Research at Kerckhoff Marine Lab on behalf of UCI OCEANS
2014	Presentation, CEO Executive Roundtable, Crystal Cove State Park, Newport Beach, CA

University of California

2018	Reviewer, UC Innovative Learning Technology Initiative (reviewed syllabus for online course)
2017	Reviewer, UC Presidents Postdoctoral Fellowship Program
2016	Panelist, UC-Mexus Grant Review Committee for dissertation research projects, UC Riverside

Scholarly (dates for reviews since 9/2023)

Journal Article Reviewer: Aquatic Conservation, Biological Conservation, Biological Invasions, Biology Letters, BioScience, Conservation Biology, Conservation Letters, Deep Sea Research, Diversity & Distributions, Ecological Monographs, Ecology, Ecology Letters, Ecosphere, Estuaries and Coasts, Functional Ecology, Geoscience and Remote Sensing Letters, Global Change Biology, Global Ecology & Biogeography, Journal of Animal Ecology, Journal of Applied Ecology, Journal of Biogeography, Journal of Ecology, Journal of Experimental Marine Biology & Ecology (11/2023), Marine Biology, Marine Ecology Progress Series, Nature Climate Change, Oecologia, Oikos, PLoS ONE, Proceedings of the National Academy of Sciences USA, Proceedings of the Royal Society B (2/2024), Progress in Oceanography, Reviews in Fish Biology, Science, Scientific Reports, Trends in Ecology & Evolution (10/2023)

Proposal Reviews: National Science Foundation (12/2023), BiodivERsA, Agence Nationale de la Recherche (France), FONDECYT Chilean National Science and Technology Commission, Royal Society Te Aparangi Marsden Fund (New Zealand), Natural Environment Research Council (British), Research Grants Council of Hong Kong, Ser Cymru National Research Network (Wales)

Other Reviews: NSF/NASA DISCCRS (DISsertation initiative for the advancement of Climate Change ReSearch) Fellowships, Graduate Women in Science Fellowships, International Biogeography Society Travel Grants, UC-Davis Graduate Group in Ecology Admission Applications

2017-present	Associate Editor, Frontiers of Biogeography
2016-present	Associate Editor, NeoBiota (MSa:10/23-2/24, Oyster 7/24-)
2024	Panelist, LTER (Long Term Ecological Research), National Science Foundation Division of
	Environmental Biology
2022	Guest Editor, Marine Ecology Progress Series special issue on range shifts (handled 3 papers)
2021	Panelist, National Science Foundation Biological Oceanography Program
2019-2022	Panelist, American Association of University Women (AAUW) American Fellowship Program
2019	Deputy Editor, Frontiers of Biogeography (stepped down when on sabbatical)
2017-2018	Associate Editor, Diversity & Distributions (total manuscripts handled: 15)
2015-2019	Associate Editor, Global Ecology and Biogeography (total manuscripts handled: 19)
2017	Organizer, Organized Oral Session, Ecological Society of America, Portland, OR
2017	Panelist, Academic Job Market Discussion, International Biogeography Society, Tucson, AZ
2014-2016	Member, Steering Committee, 1st "Species on the Move" Conference, Tasmania, Australia
2016	Assessor, Safina Center Report on the blue mussel fishery in ME, MA, RI & NY states
2013	Organizer, Student Paper Competition, International Biogeography Society
2009-2013	Member, Early Career Biogeographers Committee, International Biogeography Soc.
2011	Biology and Biotechnology Career Panelist, Endicott College, Beverly, MA
2010	Participant, Rapid Assessment Survey of Marine Invasive Species from Maine to Rhode Island

PROFESSIONAL DEVELOPMENT

2022-2024	Working Group Participant, "Invasive Plant Impacts", John Wesley Powell Center for Analysis and Synthesis, USGS, Fort Collins, CO (2 week-long meetings per year)
2022	Co-organizer, Workshop on Novel Species in Seagrass ecosystems at ISBW14 (International
2019-2021	Seagrass Biology Workshop) Working Group Participant, "The Other Side of Invasibility: Vulnerability of Recipient
	Ecosystems", National Center for Ecological Analysis and Synthesis, Santa Barbara, CA (2
	week-long meetings per year)
2019	Invited Participant, NSF funded "Invasion Biology Rules of Life" workshop
2019	R Workshop, UCI Teaching and Learning Resource Center
2018	Getting Students to Read & Preparing to Write a "W" Course Workshops, UCI
2018	Active Learning Institute Certification, Division of Teaching Excellence & Innovation, UCI
2018	Selected Participant, Andina workshop "Species range extensions & local adaptation", Argentina
2017	Introduction to Network Analysis Workshop, International Biogeography Society, Tucson, AZ
2016	Bioinformatics Workshop, Species on the Move Conference, Hobart, Tasmania
2011	Selected Participant, NSF/NASA DISCCRS (Climate Change Research) Symposium
2011	Selected Participant, NSF ADVANCE workshop, Rice University
2010	Structural Equation Modeling (1 week course), Sven Loven Centre for Marine Sci. Tjarno, Sweden

PROFESSIONAL SOCIETY AFFILIATIONS (past 10 years)

Ecological Society of America, International Biogeography Society, Sigma Xi Scientific Research Society, Society for Integrative and Comparative Biology, Western Society of Naturalists