Brian S. Cheng

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EDUCATION

2014	Ph.D. Ecology	Advisor: Dr. Ted Grosholz	University of California, Davis
2008	M.S. Biology	Advisor: Dr. Kevin Hovel	San Diego State University
2001	B.S. Aquatic Biology		University of California, Santa Barbara

APPOINTMENTS

2024-	Associate Professor	University of Massachusetts Amherst
2017-2024	Assistant Professor	University of Massachusetts Amherst
2017	Scientist-in-Residence Shoals Marine Lab	University of New Hampshire
2014-2017	Postdoctoral Fellow	Smithsonian Institution
	Marine GEO: Advisors: Drs. Greg Ruiz, Mark Torchin, Andrew Altieri	

PUBLICATIONS

postdoctoral fellow^, graduate student*, or undergraduate student+ in my lab or other mentees#

Published or In Press

1. DiFiore, B.P., **B.S. Cheng**, J. Dutka-Gianelli, A. Kinchla, A. Jordaan. (2025) An alternative bait for the American lobster industry made from fishery by-products. ***Fisheries Research*** 286:107389
2. Blumenthal, J.G.*, A.L. Chang, **B.S. Cheng**, E.M. Hines, L. Nanus, C.J. Zabin. (2025) Fine-scale habitat factors linked to density but not distribution of an invasive estuarine predator. ***Aquatic Invasions*** 20(1):69-87
3. Bentley, B.P.^, **B.S. Cheng**, R.S. Brennan, J.D. Swenson, J.L. Adkins, A.R. Villeneuve*, L.M. Komoroske. (2025) Successful invasion into new environments without evidence of rapid adaptation by a predatory marine gastropod. ***Molecular Ecology*** 33:e17575
4. Lonthair, J.#, N. Wegner, **B.S. Cheng**, N. Fangue, M. O'Donnell, A. Regish, J. Swenson, E. Argueta, S. McCormick, B. Letcher, L.M. Komoroske. (2024) The gill oxygen limitation hypothesis remains unsupported by experimental evidence. Response to 'Testing mechanistic theories must be based on correct interpretations'. ***Journal of Experimental Biology*** 227:jeb248173.
5. Zabin, C.J., A.L. Chang, J.G. Blumenthal*, **B.S. Cheng**. (2024) Exploring intertidal refugia as an approach for the restoration of an intertidal oyster. ***Marine Ecology Progress Series*** 738:119-132.
6. Skorupa, A.J.*, A.H. Roy, P.D. Hazelton, D. Perkins, T. Warren, **B.S. Cheng**. (2024) Food, water quality, and the growth of a freshwater mussel: implications for population restoration. ***Freshwater Science*** 43:730247.
7. Fernandez, N.B.*, L.M. Komoroske, A.J. Danylchuk, C. Primack, **B.S. Cheng**. (2024) Damming creates winners and losers: life history traits fail to predict vulnerability in freshwater fishes. ***Global Ecology and Conservation*** 52:e02957
8. Lonthair, J.#, N. Wegner, **B.S. Cheng**, N. Fangue, M. O'Donnell, A. Regish, J. Swenson, E. Argueta, S. McCormick, B. Letcher, L. Komoroske. (2024) Smaller body size under warming is not due to gill-oxygen limitation in a coldwater salmonid. ***Journal of Experimental Biology*** 227:jeb246477. *Featured in the Washington Post and BBC News Mundo*

9. Sasaki, M.^, J.M. Barley*, S. Gignoux-Wolfsohn, C.G. Hays, M.W. Kelly, A.B. Putnam#, S.N. Sheeth, A.R. Villeneueve*, **B.S. Cheng**. (2022) Greater evolutionary divergence of thermal limits within marine than terrestrial species. ***Nature Climate Change*** 12:1175-1180.

    Sasaki, M.^ and **B.S. Cheng**. (2022) Populations adapt more to temperature in the ocean than on land. ***Nature Climate Change*** 12:1098-1099. *Research Briefing: invited editorial highlight, not peer reviewed

10. Ashton, G.V., A.L. Freestone, J.E. Duffy, M.E. Torchin, B.J. Sewall, B. Tracy, M. Albano, A.H. Altieri, L. Altvater, R. Bastida-Zavala, A. Bortolus, A. Brante, V. Bravo, N. Brown, A. H. Buschmann, E. Buskey, R.C. Barrera, **B.S. Cheng**, R. Collin, R. Coutinho, L. De Gracia, G.M. Dias, C. DiBacco, A.A.V. Flores, M.A. Haddad, Z. Hoffman, B.I. Erquiaga, D. Janiak, A.J.Campeán, I. Keith, J.Leclerc, O.P. Lecompte-Pérez, G.O. Longo, H. Matthews-Cascon, C.H McKenzie, J. Miller, M. Munizaga, L.P. D Naval-Xavier, S.A. Navarrete, C. Otálora, L.A. Palomino-Alvarez, M.G. Palomo, C. Patrick, C. Pegau, S. V Pereda, R.M. Rocha, C. Rumbold, C. Sánchez, A. Sanjuan-Muñoz, C. Schlöder, E. Schwindt, J. Seemann, A. Shanks, N. Simoes, L. Skinner, N. Yolimar Suárez-Mozo, M. Thiel, N. Valdivia, X. Velez-Zuazo, E. A. Vieira, B. Vildoso, I.S. Wehrtmann, M. Whalen, L. Wilbur, G.M. Ruiz (2022) Predator control of marine communities increases with temperature across 115 degrees of latitude. ***Science*** 376:1215-1219.

11. **Cheng, B.S.**, J.G. Blumenthal*, A.L. Chang, J.M. Barley*, M.C. Ferner, K.J. Nielsen, G.M. Ruiz, C.J. Zabin. (2022) Severe introduced predator impacts despite attempted functional eradication. ***Biological Invasions*** 24:725-739. *Featured in the San Francisco Chronicle*

12. Barley, J.M.*, **B.S. Cheng**, M. Sasaki#, S. Gignoux-Wolfsohn, C.G. Hays, A.B. Putnam#, S. Sheeth, A.R. Villeneuve*, M.W. Kelly. (2021) Limited plasticity in thermally tolerant populations: evidence for a trade-off. ***Proceedings of the Royal Society B*** 288:20210765

13. Villeneuve, A.R.*, L.M. Komoroske, **B.S. Cheng.** (2021) Environment and phenology shape local adaptation in thermal performance. ***Proceedings of the Royal Society B*** 288:20210741

14. Villeneuve, A.R.*, L.M. Komoroske, **B.S. Cheng**. (2021) Diminished warming tolerance and plasticity in low latitude populations of a marine gastropod. ***Conservation Physiology*** 9:coab039

15. Hollarsmith, J.A., J.S. Sadowski, M.M.M. Picard, **B.S. Cheng**, J. Farlin, A. Russell, E.D. Grosholz. (2020) Relative effects of event-driven estuarine acidification (EA) on growth and survival of native and commercial oysters. ***Limnology and Oceanography*** 65:224-235.

16. Banerjee, S.M., C.D. Allen, T. Schmitt, **B.S. Cheng**, J. A. Seminoff, T. Eguchi, L. M. Komoroske. (2019) Baseline health parameters of eastern Pacific green turtles at Southern California foraging grounds. ***Chelonian Conservation and Biology*** 18:163-174.

17. **Cheng, B.S.**, A.H. Altieri, M.E. Torchin, and G.M. Ruiz. (2019) Can marine reserves restore lost ecosystem function? a global synthesis. ***Ecology*** 100:e02617.

    Featured in Nature Sustainability | Science Daily

18. **Cheng, B.S.**, G.M. Ruiz, A.H. Altieri, M.E. Torchin. (2019) The biogeography of invasion in tropical and temperate seagrass beds: testing interactive effects of predation and propagule pressure. ***Diversity and Distributions*** 25:285-297.

19. Bible, J.M., **B.S. Cheng**, A.L. Chang, M.C. Ferner, K. Wasson, C.J. Zabin, M. Latta, E. Sanford, A. Deck, and E.D. Grosholz. (2017) Timing of stressors alters interactive effects on a coastal foundation species. ***Ecology*** 98:2468-2478

20. **Cheng, B.S.**, L.M. Komoroske, and E.D. Grosholz. (2017) Trophic sensitivity of invasive predator and native prey interactions: integrating environmental context and climate change. ***Functional Ecology*** doi: 10.1111/1365-2435.12759

    Featured on Capital Public Radio NPR | Discovery News | Grist

21. **Cheng, B.S.**, A.L. Chang, A. Deck, and M.C. Ferner. (2016) Atmospheric rivers and the mass mortality of wild oysters: insight into an extreme future? ***Proceedings of the Royal Society B*** 283:20161462

    Featured on NPR | LA Times | Science News | Motherboard VICE | Marin Independent | NRDC

22. **Cheng, B.S.** and E.D. Grosholz. (2016) Environmental stress mediates trophic cascade strength and resistance to invasion. ***Ecosphere*** 7(4):e01247.10.1002/ecs2.1247

23. **Cheng, B.S.**, J.M. Bible, A.L. Chang, M.C. Ferner, K. Wasson, C.J. Zabin, M. Latta, A. Deck, A.E. Todgham, and E.D. Grosholz. (2015) Testing local and global stressor impacts on a coastal foundation species using an ecologically realistic framework. ***Global Change Biology*** 21:2488-2499.

24. Williams, S.L., N. Janetski, S. Blankenhorn, J. Abbott, **B.S. Cheng**, E. Crafton, D. Trockel. (2014) Ornamental marine species culture in the coral triangle: seahorse demonstration project in the Spermonde Islands, Sulawesi, Indonesia. ***Environmental Management*** 10.1007/s00267-014-0343-6.

25. Komoroske, L.M., R. Connon, J. Lindberg, **B.S. Cheng**, G. Castillo, M. Hasenbein, N. Fangue. (2014) Ontogeny influences sensitivity to climate change stressors in an endangered fish. ***Conservation Physiology*** 2:cou008-cou008.

26. Kimbro, D.L., **B.S. Cheng**, and E.D. Grosholz. (2013) Biotic resistance in marine environments. ***Ecology Letters*** 16:821-833.

27. Woodson, C.B., J.A. Barth, O.M. Cheriton, M.A. McManus, J.P. Ryan, L. Washburn, K.N. Carden, **B.S. Cheng**, J. Fernandes, L.E. Garske, T.C. Gouhier, A.J. Haupt, K.T. Honey, M.F. Hubbard, A. Iles, L. Kara, M.C. Lynch, B. Mahoney, M. Pfaff, M.L. Pinsky, M.J. Robart, J.S. Stewart, S.J. Teck, A. True. (2011) Observations of internal wave packets propagating along-shelf in northern Monterey Bay. ***Geophysical Research Letters*** 38: L01605.

28. **Cheng, B.S.** and K.A. Hovel. (2010) Biotic resistance to invasion along an estuarine gradient. ***Oecologia*** 164:1049-1059.

In Review

1. Dwane, D.^, A. Rugila^, E. Rawson*, E. Clarke*, G. Nichols^{+}, M. Newbrey^{+}, J. Barley*, E. Bucari^{+}, L. McCarthy^{+}, C. Yan^{+}, R. Horrigan^{+}, N. Duncan^{+}, A. Stucker^{+}, A. Villeneuve*, B. Bentley^, L.M. Komoroske, **B.S. Cheng**. Adaptation to warm environments with a fast pace of life in a marine predatory snail. Preprint *In Review at Ecological Monographs*

2. Rugila, A.L.^, E. Bucari^{+}, E. Rawson*, A. Schlaug^{+}, L.M. Komoroske, **B.S. Cheng** (2025)Fast and slow-paced reproductive life history across native and invasive populations of a predatory marine snail. Preprint *In Review at Ecology*

In Preparation

(manuscripts with expected submission within 3-6 months)

1. Barley, J.M.*, E. Sanford, **B.S. Cheng**. Spatial sorting and accelerated larval development in a range expanding fiddler crab. *In preparation for American Naturalist*
2. Barley, J.M.* and **B.S. Cheng**. Range stability in a global warming hotspot: the purple marsh crab *Sesarma reticulatum*. *In preparation for Marine Ecology Progress Series*
3. Dwane, D.^, C. Yan^{+}, L.M. Komoroske, **B.S. Cheng**. High tolerance plasticity is an alternative to local adaptation of thermal limits across latitude in a predatory marine snail. *In preparation for Journal of Experimental Biology*
4. Jawad, W.A., A.L. Salgado, **B.S. Cheng**, S.A. Gignoux-Wolfsohn, C. Hays, M.M. Muñoz, M.C. Sasaki, M.W. Kelly. Limited intraspecific variation in thermal tolerance across aquatic and terrestrial ecosystems compared to current rate of climate warming. *In preparation for Ecology Letters*

Reports

Kahl, K.J., A. Jordaan, L. Komoroske, A. Bates, and **B.S. Cheng**. 2019. University of Massachusetts Amherst Gloucester Marine Station Strategic Plan 2020-2025.

Wasson, K., C. Zabin, J. Bible, E. Ceballos, A. Chang, **B.S. Cheng**, A. Deck, E.D. Grosholz, M. Latta, M. Ferner. 2014. A Guide to Olympia Oyster Restoration and Conservation.

Cheng, B.S. and E. Gaskin (editors). 2011. Climate Impacts to the Nearshore Marine Environment and Coastal Communities: American Samoa and Fagatele Bay National Marine Sanctuary. Marine Sanctuaries Conservation Series ONMS-11-05. U.S. Department of Commerce, NOAA, Office of National Marine Sanctuaries, Silver Spring, MD. 71 pp. (Peer reviewed NOAA Report)

Largier, J.L, **B.S. Cheng**, and K.D. Higgason (editors). 2010. Climate Change Impacts: Gulf of the Farallones and Cordell Bank National Marine Sanctuaries. Report of a Joint Working Group of the Gulf of the Farallones and Cordell Bank National Marine Sanctuaries Advisory Councils. Marine Sanctuaries Conservation Series ONMS-11-04. U.S. Department of Commerce, NOAA, Office of National Marine Sanctuaries, Silver Spring, MD. 121 pp. (Peer reviewed NOAA Report)

FUNDING

Awarded

National Science Foundation – Biological Oceanography # 2441063
PI: Brian Cheng Title: "CAREER: Integrating thermal physiology and species interactions to forecast community response to environmental change"
Duration: 2025-2030, Intended Award - $1,379,866, Awarded to Date - $738,152

University of Massachusetts, Amherst – Large-scale Integrative Research Award (LIRA)
PI: Adrian Jordaan, **Co-PIs: Brian Cheng**, Jynessa Dutka-Gianelli, Katie Kahl, Lisa Komoroske, Paige Warren Title: "Linking Ecological, Economic and Community Resilience within a Convergence Framework"
Duration: 2024 – 2025, $30,000

National Science Foundation – Biological Oceanography #2023571
PI: Brian Cheng, Co-PI: Lisa Komoroske Title: "Investigating mechanisms underlying

adaptive capacity to ocean warming"
Duration: 2021-2025, $859,709

Supplemental Award – Non-Academic Research Partnerships for Graduate Students (INTERN) **PI: Brian Cheng**, internship support for graduate student Jordanna Barley with The Nature Conservancy, Duration: 2023, $51,394

NOAA National Sea Grant – American Lobster Research Program
PI: Adrian Jordaan, **Co-PIs: Brian Cheng**, Amanda Kinchla, Jynessa Dutka-Gianelli Title: "A socio-economic investigation engaging stakeholders in the development and evaluation of an alternative bait in the Gulf of Maine lobster fishery"
Duration: 2021-2024, $299,899

United States Department of Agriculture – National Institute of Food and Agriculture
PI: Brian Cheng, Co-PIs: Lisa Komoroske, Adrian Jordaan, Andy Danylchuk
Title: "Understanding the future of fisheries and aquaculture in the Gulf of Maine"
Duration: 2020-2024, $60,000,

Massachusetts Department of Agricultural Resources
PI: Andrew Danylchuk, **Co-PI: Brian Cheng**
Title: "Western Massachusetts Center for Sustainable Aquaculture"
Duration: 2019-2020, Award amount: $11,747

National Science Foundation – Facilities Improvement Field Stations and Marine Laboratories
PI: Brian Cheng, Co-PIs: Adrian Jordaan, Lisa Komoroske, Alison Bates, and Katie Kahl
Title: "Developing a Strategic Plan for Coastal Resilience and Sustainable Fisheries at the Gloucester Marine Station" Duration: 2018-2019, $24,986

California Coastal Conservancy
PI: Chela Zabin, **Co-PIs: Brian Cheng**, Andrew Chang, Matt Ferner, Greg Ruiz, John Takekawa, Karina Nielsen, Anson Hines, Sarah Ferner, Courtney Calkins
Title: "Community-based Research for Living Shorelines Design"
Duration: 2017-2018, $152,000

Pending

Woods Hole Oceanographic Institution Sea Grant
PI: Brian Cheng, Co-PI: Lisa Komoroske
Title: "*Building a sustainable and climate resilient black sea bass fishery in Massachusetts waters"*
Duration: 2026-2027, $249,954 (recommended for funding October 2025)

FELLOWSHIPS/SMALL GRANTS

University of Massachusetts Amherst, Student Centered Learning Fellowship, 2017	$1,000
Smithsonian MarineGEO Postdoctoral Fellowship, 2014-2016	$120,000
Bodega Marine Laboratory Fellowship, spring and summer 2010 and 2013	
Melbourne R. Carriker Student Research Grant, 2012	$1,250
Pacific Coast Science and Learning Center Grant, 2011-12	$5,000
UC Davis James P. Michelleti Research Fellowship, 2010	$2,425
George Melendez Wright National Park Fellowship, 2010	$11,245
Pacific Coast Science and Learning Center Grant, 2010	$5,100
National Science Foundation GK-12 Fellow, 2010-2011	$60,000

UC Davis Jastro Shields Research Fellowship, 2009	$3,000
UC Davis Graduate Group in Ecology – Block Grant 2009-10 (3 quarters)	
PADI Foundation Grant, 2009	$4,250
National Estuarine Research Reserve Graduate Research Fellowship, 2009 - 2012	$60,000
Western Society of Malacologists – Student Research Grant, 2007	$700
Robert L. Wiegel Scholarship for Coastal Studies, 2006	$1,000
San Diego State University – Edna Bailey Sussman Foundation, 2006	$5,880
San Diego State University – Mabel Myers Memorial Scholarship, 2006	$1,000

AWARDS

Ecological Society of America - Honorable Mention - Natural History Award, 2014
Western Society of Naturalists - Honorable Mention - Mia Tegner Award, 2013
International Conference on Marine Bioinvasions – Best Paper, 2013
California Estuarine Research Society – Honorable Mention, Best Paper, 2012
Western Society of Naturalists – Best Paper, Population Biology, 2008
National Science Foundation – Antarctic Service Medal, 2006

TEACHING & MENTORING EXPERIENCE

Instructor of Record

University of Massachusetts Amherst (4 regular courses taught 14 times, 1 seminar)

1. Ecosystems, Biodiversity and Global Change (ENVIRSCI 214) – spring 2018/2019/2023/2024/2025
   Enrollment 120-145 students, 3 credit course
2. Marine Ecology (NRC 590M) – fall 2018/2020/2022/2024
   Enrollment 18-23 students, 4 credit course with lab
3. Global Change Ecology (NRC 494GI) – fall 2019/2021
   Enrollment 40 students, 3 credit course
4. Ecology Graduate Core Course (OEB 617) – fall 2017/2019/2021
   Enrollment 15-23 graduate students, 4 credits co-taught (1 week section each year)
5. Evolution in Changing Seas Seminar (ECO 697CS) – spring 2019
   Enrollment 7 graduate students, 1 credit course

Shoals Marine Laboratory (1 intensive field course)

6. Co-instructor - Underwater Research (MEFB 730) - summer 2019
   Enrollment 7 students, 2-week intensive field course

Teaching Fellow

UMass Amherst Lilly Fellowship: The Lilly Fellowship for Teaching Excellence enables promising early-career faculty to cultivate teaching skills and leadership in a special yearlong collaboration. 6/2025- 5/2026

UMass Amherst Student Centered Teaching and Learning Fellow: Conducted yearlong fellowship to revise a course (ENVISCI 214). Constructed inclusive syllabus, presented course revision to working group, participated in 12 meetings over one year. 9/2017 – 8/2018

National Science Foundation GK-12: Mentor and teaching fellow under CAMEOS (Coastal, Atmospheric, Marine, Environmental Oceanography Science) at UC Davis. Mentored 2 high school biology and one AP Environmental Science classes in year-long independent inquiry projects that culminated in student presentations at a simulated scientific conference. 7/2010 - 7/2011

Supervisor/Mentor

Postdoctoral Fellows (2 as Supervisor)

- Dr. Allison Rugila, 2023-2025
- Dr. Christopher Dwane, 2022-2024

Graduate Students (4 as Chair)

- Chance Yan, M.S. Student (current)
- Emma Rawson, M.S. Student (current)
- Jordanna Barley, Ph.D. Candidate (graduated 12/2023)
- Andrew Villeneuve, M.S. Student (graduated 12/2021)

Graduate Students (5 as Committee Member)

- Riley Pena, Ph.D. Candidate at University of Connecticut
- Feipeng Huang, M.S. Student at UMass Amherst
- Ewaldo Leitao, Ph.D. Candidate at University of Connecticut (graduated 6/2024)
- June Arriens, M.S. Student at Smith College (graduated 6/2022)
- Ayla Skorupa, Ph.D. Candidate at UMass Amherst (graduated 12/2021)

Honors Undergraduates (6 as Chair, 2 as Committee Member)

- Amara Schlaug, Honors (Chair)
- Ryan Horrigan, Honors (Chair)
- Liam McCarthy, Honors (Chair)
- Emily Bucari (Chair, graduated 5/2024)
- Chance Yan, Honors (Chair, graduated 5/2024)
- Nicholas Duncan (Chair, graduated 5/2023)
- Emma Rawson, Mt. Holyoke College (Committee Member, graduated 5/2022)
- James Schultze, Honors (Committee Member, graduated 5/2022)

Undergraduate Interns/Five Colleges Coastal Certificate Students (15 interns)

- Julia Dansereau, Tyler Pelt, Jessica Schramm, Gillian Nichols, Lorelei Ing, Eli Salcedo, Ibuki Sugiura, Alex White, Woody Laui, Austin Peek, Nico Lorenzen, Chris Knight, Charlie Norton, Jessica Couture, Sarah Covello

PRESENTATIONS

Invited talks and seminars

2024. Department of Biological Science, University of New Hampshire, NH.
**Graduate Student - Invited Speaker*

2024. Gordon Research Conference on Predator-Prey Interactions, Ventura, CA.

2023. Department of Biological Science, Mount Holyoke College, MA.

2023. Marine Science Center, Northeastern University, MA.
**Graduate Student - Invited Speaker*

2023. School of Life Sciences, University of Hawai'i at Manoa, HI.

2023. Department of Biology, University of Vermont, VT.

2021. Department of Biology, California Polytechnic University San Luis Obispo, CA. (virtual)

2020. Shoals Marine Laboratory, University of New Hampshire/Cornell University. (virtual)

2020. Smithsonian MarineGEO, Smithsonian Environmental Research Center, MD. (virtual)

2020. School of Marine Sciences, University of Maine, Orono, ME.

2019. Department of Biology, Bowdoin College, Brunswick, ME.

2018. Department of Marine Science, University of Connecticut, Avery Point, CT.

2017. Department of Biology, University of Massachusetts, Boston, MA.

2017. Department of Environmental Conservation, University of Massachusetts, Amherst, MA.

2016. Department of Biology, East Carolina University, NC.

2016. School of Marine and Atmospheric Sciences, State University of New York, Stony Brook, NY.

2016. Department of Biology, Reed College, OR.

2010. Romberg Tiburon Center, San Francisco State University, CA.

Selected contributed talks

Highlights for *postdocs* or graduate students in my lab or that I mentored.

Cheng, B.S., A. R. Villeneuve, and L.M. Komoroske. Climate warming threatens native but not invasive populations of the predatory Atlantic oyster drill. 2024. Benthic Ecology Meeting, Charleston, SC.

Cheng, B.S. The long and the short of it: Honoring Ted Grosholz. 2023. Western Society of Naturalists, Monterey, CA. USA.

Cheng, B.S. and A. R. Villeneuve. Climate warming threatens native but not invasive populations of the predatory Atlantic oyster drill. 2023. International Conference on Marine Bioinvasions XI. Baltimore, MD. USA.

Cheng, B.S., *Sasaki, M.*, J.M. Barley, S. Gignoux-Wolfsohn, C.G. Hays, M.W. Kelly, A.B. Putnam, S.N. Sheeth, A.R. Villeneueve. 2023. Greater local adaptation of thermal limits within marine than terrestrial species. Benthic Ecology Meeting, Miami, FL.

Barley, J.M., **B.S. Cheng**. 2021. Mechanisms underlying range limits of an estuarine crab in an ocean warming hotspot. National Shellfisheries Association, oral presentation, virtual conference.

Villeneuve, A.R., L.M. Komoroske, **B.S. Cheng.** Environment and phenology shape local adaptation in thermal performance. 2021. Western Society of Naturalists, oral presentation, virtual conference.

Cheng, B.S., A.L. Chang, A. Deck, M.C. Ferner. Atmospheric rivers and the mass mortality of wild oysters: insight into an extreme future? 2017. Coastal & Estuarine Research Federation, Providence, RI.

Cheng, B.S., A.L. Chang, A. Deck, M.C. Ferner. Atmospheric rivers and the mass mortality of wild oysters: insight into an extreme future? 2016. Western Society of Naturalists, Monterey, CA.

Cheng, B.S. and E.D. Grosholz. The enemy of my enemy is my friend: cascading effects of biotic resistance and the creation of predator free space. 2014. Ecological Society of America, Sacramento, CA. **(Honorable Mention – ESA Natural History Award)**

Cheng, B.S., J. Bible, A. Chang, M.C. Ferner, K. Wasson et al. Local environmental stress can outweigh climate change: multiple stressors over ecologically relevant time reveal additive effects. 2014. Ocean Sciences Meeting, Honolulu, HI.

Cheng, B.S., J. Bible, A. Chang, M.C. Ferner, K. Wasson, et al. Current environmental stress can outweigh climate change stressors. 2013. Western Society of Naturalists, Oxnard, CA. **(Honorable Mention – Mia Tegner Conservation Award)**

Cheng, B.S., J. Bible, A. Chang, M.C. Ferner, K. Wasson, et al. Additive and opposing effects of multiple stressors across realistic time scales. 2013. Coastal & Estuarine Research Federation, San Diego, CA.

Cheng, B.S. and E.D. Grosholz. Divergent responses to climate change: differing sensitivities among invasive predators and native prey. 2013. International Conference on Marine Bioinvasions, Vancouver, Canada. **(Best Paper)**

Cheng, B.S., J. Bible, A. Todgham, N. Miller, A. Chang, et al. A test of multiple stressors and latent effects on a foundational estuarine species, the Olympia oyster (*Ostrea lurida*). 2013. Society for Int. & Comp. Bio., San Francisco, CA.

Cheng, B.S., J. Bible, A. Chang, M. Ferner, K. Wasson, et al. Multiple stressors and latent effects on Olympia oysters. 2012. California Estuarine Research Society, Long Beach, CA. **(Honorable Mention – Best Paper)**

Cheng, B.S. and E.D. Grosholz. Thermal performance of an invasive predator and native prey interaction: Implications for Climate Change. 2011. Western Society of Naturalists, Vancouver, WA.

Cheng, B.S. Climate Change and Nearshore Subtidal and Rocky Intertidal Biological Responses. 2010. California and the World Oceans, San Francisco, CA.

Cheng, B.S. and K.A. Hovel. Biotic resistance by an exploited native species: consequences for predator loss. 2008. Western Society of Naturalists, Vancouver, Canada. **(Best Paper – Population Biology)**

SERVICE

Professional Service

Subject-matter Editor: Ecology (2024-2027)

Panel reviewer (3 panels):
National Science Foundation, Division of Ocean Sciences - OCE (1)
National Science Foundation, Division of Integrated Organismal Systems – IOS (1)
California Sea Grant – Graduate Research Fellowship (1)

Grants Ad hoc reviewer (5 reviews):
Graduate Women in Science (1)
National Geographic Society (1)
National Science Foundation, Division of Ocean Sciences – OCE (2)
National Science Foundation, Division of Environmental Biology – DEB (1)

Journal Ad hoc reviewer (42 reviews, 27 journals): Global Change Biology (5), Marine Biology (4), Marine Ecology Progress Series (4), Biological Invasions (3), Ecology (2), Global

Ecology & Biogeography (2), Limnology & Oceanography (2), American Naturalist (1), Biological Conservation (1), Conservation Physiology (1), Diversity & Distributions (1), Ecology & Evolution (1), Ecology Letters (1), Ecosphere (1), Estuaries & Coasts (1), Estuarine Coastal & Shelf Science (1), Hydrobiologia (1), Journal of Experimental Marine Biology & Ecology (1), Marine Ecology (1), Marine Environmental Research (1), Neobiota (1), Oecologia (1), Oikos (1), PLoS ONE (1), Proceedings of the Royal Society B (1), Scientific Reports (1), San Francisco Estuary & Watershed Science (1)

University Service

Director, Five Colleges Coastal Marine Science Certificate Program 2023 – current
UMass System Wide Diving Control Board – Amherst representative, 2024 – current
UMass Environmental Science – Curriculum Steering Committee 2023 – current
UMass NRC Fisheries Ecology and Conservation Coordinator 2022 – current
UMass Gloucester Marine Station Steering Committee 2017 – current
UMass ECO Wildlife Ecologist Faculty Search Committee 2023-2024
UMass OEB Admissions Committee 2020-2021
UMass School of Earth and Sustainability (SES) Steering Committee 2019-2021
UMass OEB Darwin Postdoctoral Fellow Search Committee 2018-2019
UMass ECO Quantitative Sciences Group 2017-2021
UMass NRC Marine Science Curriculum Committee 2017-2018

Diversity, Equity, & Inclusion

UMass ECO Unveil Mentor 2023 – current
Mentor for 4 under-represented postdoctoral scholars per year to improve faculty job application materials and simulate on campus interview process
UMass ECO Pathways Advisory Committee 2022 – current
Benthic Ecology Meeting – DEI Advisory Committee 2022 - 2024
UMass OEB DEI Committee 2022 - 2023
UMass OEB DEI Task Force 2020 - 2021

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