

Cody Szuwalski

Curriculum vitae (as of 1/16/2024)

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EDUCATION

- 2014 Ph.D. School of Aquatic and Fishery Sciences (SAFS), University of Washington.
- 2006 M.A. Ecology and Evolutionary Biology (Aquatic Ecology), University of Kansas.
- 2004 Capital University of Economics and Business (首都经济贸易大学), Beijing, China.
- 2001 B.Sc. Environmental Science, University of Kansas.

PROFESSIONAL EXPERIENCE

- 2021-present University of Washington, Affiliate assistant professor
- 2018-present NOAA, Alaska Fishery Science Center, Research fishery biologist
- 2017-2018 University of California, Santa Barbara, Research faculty (Associate)
- 2015-2017 University of California, Santa Barbara, Research faculty (Assistant)
- 2014-2015 University of California, Santa Barbara, Fishery scientist
- 2013-2017 NOAA, Alaska Fishery Science Center, Stock assessment contractor

RESEARCH STATEMENT

My research centers on natural resource management, population dynamics modeling, and climate change impacts. I use quantitative methods to identify drivers of changes in ecological systems then use simulation to project plausible future scenarios and evaluate potential management responses under uncertainty.

PUBLICATIONS

Refereed journal articles (n= 56; see google scholar for links)

- 2023 Sellinger, E. et al. **Szuwalski, C.S.** The robustness of our assumptions about recruitment; A re-examination of marine recruitment dynamics with additional data and novel methods. *Fisheries Research*.
- Szuwalski, C.S.** et al. The collapse of eastern Bering Sea snow crab. *Science*.
- Overland, J., et al., **Szuwalski, C.S.** Transformative ecological and human impacts from climate change and diminished sea ice in the northern Bering Sea. *Weather, climate, and Society*
- Szuwalski, C.S.** et al. The collapse of eastern Bering Sea snow crab. *Science*.
- Mullowney, D. et al. **Szuwalski, C.S.** Sub-Arctic no more: short- and long-term global-scale prospects for snow crab (*Chionoecetes opilio*) under global warming. *Plos Climate*.
- Olmos, M., et al. **Szuwalski, C.S.** A step towards the integration of spatial dynamics in population dynamics models: Eastern Bering Sea snow crab as a case study. *Ecological Modeling*.
- Sun, M., et al. **Szuwalski, C.S.** Status and management of mixed fisheries: A global synthesis. *Reviews in Fisheries Science and Aquaculture*.
- Szuwalski, C.S. et al.** Unintended consequences of climate adaptive fisheries management targets. *Fish and Fisheries*.
- Ovando, D. et al. **Szuwalski, C.S.** Global effects of marine protected areas on food security are unknown. *Nature*.
- 2022 Punt, A.E. et al. **Szuwalski, C.S.** A framework for assessing harvest strategy choice when considering multiple interacting fisheries and a changing environment: The example of eastern Bering Sea crab stocks. *Fisheries Research*.
- Szuwalski, C.S.** Estimating time-variation in confounded processes in population dynamics modeling: a case study for snow crab in the eastern Bering Sea. *Fisheries Research*.

- Kritzer, J.P. et al. **Szuwalski, C.S.** Advancing multispecies fishery management in China: Lessons from international experience. *Aquaculture and fisheries*.
- 2021 Ovando, D. et al. **Szuwalski, C.S.** Models of marine protected areas must explicitly address spatial dynamics. *PNAS*.
- Fredston, A. et al. **Szuwalski, C.S.** Range edges of North American marine species are tracking temperature over decades. *Global Change Biology*.
- Melnychuk, M. et al. **Szuwalski, C.S.** Identifying management actions that promote sustainable fisheries. *Nature Sustainability*.
- Szuwalski, C.S.** et al. Climate change and the future productivity and distribution of crab in the Bering Sea. *ICES Journal of Marine Science*.
- 2020 **Szuwalski, C.S.** et al. Marine seafood production via intense exploitation and cultivation in China: costs, benefits, and risks. *Plos ONE*.
- Hollowed, A.B. et al. **Szuwalski, C.S.** Integrated modeling to evaluate climate change impacts on coupled social-ecological systems in Alaska. *Frontiers in Marine Science*.
- Cao, J. et al. **Szuwalski, C.S.** A simulation comparison of spatiotemporal and spatially-implicit size-structured models for northern shrimp and snow crab. *Fish and Fisheries*.
- Lee, Q. et al. **Szuwalski, C.S.** Life history change and fisheries assessment performance: a case study for small yellow croaker. *ICES Journal of Marine Science*.
- Hilborn, R., et al. **Szuwalski, C.S.** Effective fisheries management instrumental in improving fish stock status. *Proceedings of the National Academy of Sciences*.
- 2019 Kurota, H., et al. **Szuwalski, C.S.** Drivers of recruitment dynamics in Japanese fisheries resources: effects of environmental conditions and spawner abundance. *Fisheries Research*.
- Gao, J. et al. **Szuwalski, C.S.** Historical dynamics of the demersal fish community in the East and South China Seas. *Marine and Freshwater Research*.
- Szuwalski, C.S.** Comment on “Impacts of historical warmings on marine fisheries production”. *Science*.
- Monnahan, C., et al. **Szuwalski, C.S.** Overcoming long Bayesian run times in integrated fisheries stock assessments.
- Szuwalski, C.S.** et al. Global forage fish recruitment dynamics: time-variation, reverse causality, and implications for management. *Fisheries Research*.
- Xu, Z. et al. **Szuwalski, C.S.** Effects of environmental change and exploitation on marine communities around the Zhoushan archipelago: a functional traits perspective. *Ocean and Coastal Management*.
- 2018 Wilson, J.R. et al., **Szuwalski, C.S.** Adaptive co-management to achieve ‘climate-ready’ fisheries management. *Conservation Letters*.
- Szuwalski, C.S.**, et al. Reducing retrospective patterns in stock assessments and impacts on management performance. *ICES Journal of Marine Science*.
- 2017 **Szuwalski, C.S.**, Thorson, J.T. Global fishery dynamics are poorly predicted by classical models. *Fish and Fisheries*.
- Hilborn, R. et al., **Szuwalski, C.S.** When does fishing forage fish impact their predators? *Fisheries Research*. 191: 211-221.
- Szuwalski, C.S.**, et al. High fisheries catches through trophic cascades in China. *Proceedings of the National Academy of Sciences*. 114(4): 717-721.
- Burgess, M. et al. **Szuwalski, C.S.** Describing ecosystem contexts with single-species models: A theoretical synthesis for fisheries. *Fish and Fisheries*. 18(2): 264-284.
- Lester, S. et al. **Szuwalski, C.S.** Impacts of TURFs and marine reserves on fisheries and conservation goals: theory, empirical evidence, and modeling. *Bulletin of Marine Science*. 93(1): 173-198.
- 2016 Thorson, J.T. et al., **Szuwalski, C.S.** Joint dynamic species distribution models: a tool for community ordination and spatiotemporal monitoring. *Global Ecology and Biogeography*. 25(9): 1144-1158.

- Liu, O. et al., **Szuwalski**, C.S. An evaluation of harvest control methods for fishery management. *Reviews in Fisheries Science and Aquaculture*. 24(3): 244-263.
- Costello, C., et al. **Szuwalski**, C.S. Global fishery prospects under contrasting management regimes. *Proceedings of the National Academy of Sciences*. 113(18): 5125-5129.
- Szuwalski**, C.S. Changing fisheries productivity and food security. *Proceedings of the National Academy of Sciences*. 113(13): E1773-1774.
- Campbell, S.W., **Szuwalski**, C.S., et al. Challenges to reintroduction of a captive population of Topeka Shiner (*Notropis topeka*) into form habitats in Kansas. *Transactions of the Kansas Academy of Science*. 119(1): 83-92.
- Szuwalski**, C.S., et al. A stock assessment for the spiny lobster around the Galapagos Islands. *Fisheries Research*. 177: 82-94.
- Szuwalski**, C.S. and Hollowed, A.B. Climate change and non-stationary processes in fisheries management. *ICES*. 73(5): 1297-1305.
- 2015 Kell, L., Nash, R. Dickey-Collas, M. Mosquera, I., **Szuwalski**, C.S. Is spawning stock biomass a robust proxy for reproductive potential? *Fish and Fisheries*. 17(3): 596-616.
- Szuwalski**, C.S. and Hilborn, R. Environment drives forage fish productivity. *Proceedings of the National Academy of Sciences*. 112(26), E3314-3315.
- Szuwalski**, C.S. Biases in biomass and selection of bin size in size-structure stock assessment methods. *Fisheries Research*. 180: 169-176.
- Szuwalski**, C.S. and Punt, A.E. Can single species assessments capture dynamics of spatially structured populations? Snow crab in the eastern Bering Sea as a case study. *Fisheries Research*. 164: 135-142.
- Johnson, K. F., **Szuwalski**, C.S. et al. Time-varying natural mortality in fisheries stock assessment models: Identifying a default approach. *ICES Journal of Marine Science*. 72(1): 137-150.
- Ono, K et al., **Szuwalski**, C.S., et al. Data quality and performance of stock assessment methods. *ICES Journal of Marine Science*. 72(1): 31-43.
- Hurtado-Ferro, F., **Szuwalski**, C.S., et al. Looking in the rearview mirror: reflections on bias and retrospective patterns from a fisheries assessment simulation study. *ICES Journal of Marine Science*. 72(1): 99-110.
- Szuwalski**, C.S., Vert-Pre, K.A., Punt, A.E, Hilborn, R. Branch, T. Examining common assumptions about recruitment: a meta-analysis of world-wide recruitment dynamics. *Fish and Fisheries*. 16(4): 633-648.
- 2014 Punt, A.E., **Szuwalski**, C.S. and Stockhausen, W. An Evaluation of Stock-Recruitment Proxies and Environmental Change Points for Implementing the US Sustainable Fisheries Act. *Fisheries Research*. 157: 28-40.
- Punt, A.E., A'Mar, T., Bond, N., Butterworth, D.S., DeMoor, C., Haltuch, M.A., Hollowed, A.B., and **Szuwalski**, C.S. Management under climate and environmental uncertainty: Control rules and performance simulation. *ICES Journal of Marine Science*. 71(8): 2208-2220.
- Anderson, S.C., et al., **Szuwalski**, C.S. ss3sim: Fisheries stock assessment simulation testing with stock synthesis. R package.
- 2013 **Szuwalski**, C.S. and Punt, A.E. Regime shifts and recruitment dynamics of snow crab recruitment (*Chionoecetes opilio*) in the eastern Bering Sea. *Fisheries Oceanography*. 22(5): 345-354.
- Szuwalski**, C.S. Production is a poor metric for identifying regimes in marine stocks. *Proceedings of the National Academy of Science*. 110(16): E1436.
- 2012 **Szuwalski**, C.S. and Punt, A.E. Fisheries management for regime-based systems: a management strategy evaluation of the snow crab fishery in the eastern Bering Sea. *ICES Journal of Marine Science*. 70(5): 955-967.

Szuwalski, C.S. and Punt, A.E. Identifying research priorities under uncertainty: the estimation ability of the stock assessment method for the eastern Bering Sea snow crab. Fisheries Research. 134-136: 82-94.

Punt, A.E. and **Szuwalski**, C.S. How well can F_{MSY} and B_{MSY} for Alaska crab stocks be estimated using empirical measures of surplus production? Fisheries Research. 134-136: 113-124.

Book chapters (peer-reviewed; n = 2)

2016 **Szuwalski**, C.S. Punt, A.E. Fisheries management for regime-based recruitment: a management strategy evaluation for the fishery for snow crab in the eastern Bering Sea (Chapter in “Management science in fisheries: a practical introduction to simulation-based methods”).

2016 Dowling, N. et al. **Szuwalski**, C.S. FishPath: A decision support system for assessing and managing data- and capacity-limited fisheries. (Chapter in “Assessing and Managing Data-Limited Fish Stocks”).

Stock assessments

2016-present **Szuwalski**, C.S. A stock assessment for snow crab in the eastern Bering Sea. (annual)

2014-present **Szuwalski**, C.S. A stock assessment for Pribilof Island red king crab. (biannual)

2021-present **Szuwalski**, C.S. Bering Sea and Gulf of Alaska forage fish report. (annual)

AWARDS AND HONORS

2013 UW School of Aquatic and Fishery Science Faculty Merit Award

2012 National Marine Fisheries Service/SeaGrant Joint Graduate Fellowship in Population Dynamics

2004 Foreign Language Area Studies grant used to study Chinese in Beijing

2004 Outstanding Teaching Assistant, University of Kansas

GRANTS

2023 Funder: NOAA

Project: Alaska Climate Linked Modeling project

Dates: FY23-25

Funding: \$1,200,000 (co-PI)

2021 Funder: NOAA

Project: Identifying tele-connected distributions with machine learning

Dates: FY21

Funding: \$125,000 (PI)

2021 Funder: NOAA

Project: Development and application of a size-structured spatiotemporal model for invertebrates: individual growth, size-transitions, and natural and fishing mortality

Dates: FY21

Funding: \$120,000 (co-PI)

2020 Funder: NOAA

Project: Alaska Climate Linked Modeling project

Dates: FY20-23

Funding: \$1,500,000 (co-PI)

2020 Funder: NOAA

Project: Development and application of a size-structured spatiotemporal model for invertebrates: individual growth, size-transitions, and natural and fishing mortality

Dates: FY20

Funding: \$120,000 (co-PI)

2019 Funder: NOAA

- Project: A generalized age-structured model to evaluate management implication of climate change impacts on recruitment and life history of marine fish populations
 Dates: FY19
 Funding: \$101,000 (co-PI)
- 2019 Funder: Packard Foundation/NOAA
 Project: Promoting China-US collaborative research on assessment and management of Chinese fisheries
 Dates: 9/2019-9/2020
 Funding: \$150,000 (co -PI)
- 2019 Funder: NOAA, Magnuson Stevens Act
 Project: Mapping a fishery
 Dates: 9/2019-9/2020
 Funding: \$115,715 (PI)
- 2017 Funder: NOAA, Stock Assessment Analytical Methods
 Project: Development and application of a size-structured spatiotemporal model for invertebrates: individual growth, size-transitions, and natural and fishing mortality
 Dates: 9/2017-9/2019
 Funding: \$177,981 (co -PI)
- 2016 Funder: The Packard Foundation
 Project: Capacity building in China through collaborative marine research
 Dates: 10/2016-11/2018
 Funding: \$500,000 (PI)
- 2016 Funder: The North Pacific Research Board
 Project: Spatial modelling of eastern Bering Sea Snow crab under climate change
 Dates: 9/2016-8/2017
 Funding: \$90,000 (subaward)
- 2016 Funder: The Pacific States Research Council
 Project: Eastern Bering Sea Snow Crab Assessment
 Dates: 4/2016-9/2016
 Funding: \$60,000 (PI)
- 2015 Funder: National Atmospheric and Oceanic Administration, Stock Assessment Methods
 Project: “Fixing” retrospective biases in stock assessment and implications for management
 Dates: 7/2015-6/2016
 Funding: \$98,830 (PI)
- 2012 Funder: National Marine Fisheries Service Population Dynamics Sea Grant Fellowship
 Project: An evaluation of the stock assessment method for eastern Bering Sea snow crab incorporating spatial heterogeneity in fishing pressure, recruitment processes, and distribution of spawning biomass
 Dates: 6/2012-6/2014
 Funding: \$77,015 (funded my dissertation)

PRESENTATIONS

- 2024 The collapse of snow crab. Pacific Northwest Crab Research Group. Kingston, WA.
- 2023 Sustainable seafood in a changing climate. Sun Yat Sen University.
 Sustainable seafood in a changing climate. National Kaohsiung University of Science and Tech.
 Fish grow to smaller sizes under intense fishing and warming waters in China. PICES.
 Population feedback can modulate climate impacts. PICES.
 The collapse of eastern Bering Sea snow crab. CSIRO.
 Focused crustacean modeling. SSC/CPT.
 Collapse of eastern Bering Sea snow crab. University of Washington Think Tank.
 Collapse of eastern Bering Sea snow crab. Homer, AK. JPA meeting.

- 2022 Size-based stock assessment. Guest lecture at University of Maryland
U.S. fisheries management and assessment. Guest lecture at University of Newfoundland.
Rebuilding of snow crab in the eastern Bering Sea. SSC. Anchorage, AK
Collapse of snow crab in the eastern Bering Sea. PICES. Busan, Korea
Collapse of snow crab in the eastern Bering Sea. BSFRF symposium for industry. Seattle, WA
Canaries of the Arctic: collapse of Bering Sea snow crab. SCS7. Sitka, AK
Selecting assessment methodology for Bohai Sea mantis shrimp. Lenfast Crustacean Taskforce.
- 2021 Multiple stressors in the collapse of Bering Sea snow crab. BSFRF symposium to industry.
U.S. fisheries management and assessment. Guest lecture at University of Newfoundland.
Challenges and opportunities of crustacean fisheries in top production nations. Lenfest webinar.
(invited)
Non-stationarity in fisheries management. National Academy of Sciences. (invited)
Estimation of time-variation in confounded processes in stock assessment. CAPAM workshop
(virtual)
Climate change impacts for Bering Sea crab and management implications. BSFRF symposium
on snow crab for industry. (virtual invite)
Simulating worlds to inform expectations for reality. Canada DFO workshop on simulation in
ecology and resource management. (virtual invited keynote)
Great expectations: A snow crab story. Conference on snow crab in the Bering Sea. (virtual
invited keynote)
- 2019 Shellfish: Invaders of the North. Challenges in managing Bering Sea crab fisheries. Tromso,
Norway. (Invited keynote)
University of Washington, Departmental Seminar. China's fisheries: the largest fishing
experiment since the World Wars. (invited)
Science and Statistical Committee meeting. Homer, AK. An assessment for eastern Bering Sea
snow crab.
Crab Plan Team Meeting. Seattle, WA. An assessment for eastern Bering Sea snow crab.
University of Washington, Quantitative Seminar. Global fisheries reform and climate change
impacts: what can we ignore? (invited)
- 2018 China Funder's Association. Webinar. Seafood security strategies in China: costs, benefits, and
risks. (invited)
PICES International Climate Change Symposium. Washington, DC. The future of crab in the
Bering Sea.
PICES International Climate Change Symposium. Washington, DC. Seafood security strategies
in China.
Fujian Marine Research Institute. Xiamen, China. Quota baskets and multispecies fisheries
management. (Invited)
Zhejiang Marine Research Institute. Zhoushan, China. Managing marine resources. (Invited: in
Chinese)
Qingdao National Marine Science Laboratory Annual Meeting. Qingdao, China. Marine resource
management. (invited: in Chinese)
- 2017 PICES Annual meeting. Vladivostok, Russia. Managing modified ecosystems. (Invited plenary)
Crab Plan Team Meeting. Seattle, WA. An assessment for eastern Bering Sea snow crab.
Wakefield symposium. Anchorage, AK. Tools for evaluating management strategies under
climate change. (Invited)
Crab Plan Team Meeting, Juneau, AK. Estimating survey selectivity, growth, and natural
mortality in the assessment for snow crab in the eastern Bering Sea.
- 2016 Shanghai Ocean University, Shanghai, China. "Managing under uncertainty: assessments,
evaluation, and outcomes" (Invited: in Chinese)
Zhejiang Ocean University, Zhoushan, China. "Managing under uncertainty: assessments,
evaluation, and outcomes" (Invited: in Chinese)

- Crab Plan Team Meeting, Seattle, WA. "Assessment for the east Bering Sea snow crab."
- Crab Plan Team Meeting, Anchorage, AK. "Assessment for the Pribilof Island red king crab."
- Confucius Institute presents: "The Environment: Issues and strategies in China and the US".
- Santa Barbara, CA. "Engineered ecosystems: trade-offs in fisheries management reform in China". (invited)
- State Ocean Administration. Beijing, China. "Managing ocean resources: spatial tools and tradeoffs". (invited; in Chinese)
- East China Sea Fisheries Research Institute. Shanghai, China. "Engineering the East China Sea". (invited)
- 2015 Northwest Fisheries Science Center (NOAA): Monster Jams. Seattle, WA. "Engineered ecosystems: trade-offs in fisheries management reform in China". (invited)
- Roundtable on Strengthening International Partnerships for Sustainable Fisheries and Coastal Conservation in China. Shanghai, China. "Impacts of management reform in China."
- Roundtable on Strengthening International Partnerships for Sustainable Fisheries and Coastal Conservation in China. Qingdao, China. "Impacts of management reform in China."
- PICES Climate Change and Fisheries. Sao Paulo, Brazil. "Setting management targets under a changing climate."
- Crab Plan Team Meeting, Juneau, AK. "Assessment for the Pribilof Island red king crab."
- Yantai Institute of Coastal Resources, Yantai, China. "Stock assessment and tradeoff analysis." (invited; in Chinese)
- Zhejiang Marine Fisheries Research Institution, Zhoushan, China. "Stock assessment and cost/benefit analysis." (invited; in Chinese)
- East China Sea Research Institute, Shanghai, China. "Assessment of marine resources." (invited; in Chinese)
- NCEAS, Santa Barbara, CA. "Fisheries sandbox: A simulation framework for cost/benefit analysis in data-poor fisheries."
- NCEAS, Santa Barbara, CA. "Chinese fisheries: seeing through the haze."
- 2014 Crab Plan Team Meeting, Juneau, AK. "Assessment for the Pribilof Island red king crab."
- Center for Advancement of Population Assessment Methodology, San Diego, CA. "Bias in estimates of biomass and selection of bin size in length-based assessment methods."
- American Fisheries Society, Quebec, Canada. "Predictability and recruitment dynamics for world-wide marine fisheries." (invited)
- 2013 PICES Annual Meeting. Nanaimo, Canada. "Examining common assumptions about recruitment using the RAM Legacy Stock Assessment Database."
- PICES Annual Meeting. Nanaimo, Canada. "Setting biological reference points under climate change."
- Program on Climate Change, UW Summer Institute. Friday Harbor, WA. "Ecosystem changes influence fish productivity."
- World Conference on Stock Assessment Methods. Boston, MA. "Examining common assumptions about recruitment using the RAM Legacy Stock Assessment Database."
- World Conference on Stock Assessment Methods. Boston, MA. "A spatial assessment for eastern Bering Sea snow crab."
- UW quantitative seminar. Seattle, WA. "Spawning biomass, environment and recruitment: Synchronies and implications for target biomasses."
- Alaska Marine Science Symposium. Anchorage, AK. "Climate, recruitment and fisheries management: a management strategy evaluation for the eastern Bering Sea snow crab."
- 2012 Crab Symposium for the fishing industry. (invited) Seattle, WA. "Alternative modeling and management strategies under uncertainty in climate."
- PICES 2nd International Symposium on Climate Change. Yeosu, Korea. "Reaching management goals under a changing climate."

- ICES ‘Oceans of Change’ Early career scientist conference. Palma de Mallorca, Spain. “Snow crab recruitment in the EBS: regime shifts and oscillating control”.
- Alaska Fisheries Science Center (invited). Seattle, WA. “Identification and management of systems with regime based recruitment.”
- North Pacific Marine Fisheries Council, Science and Statistical Committee. (invited) Seattle, WA. “Recruitment regimes and B_{MSY} proxies.”
- West Coast Groundfish Conference. Seattle, WA. “Changing recruitment regimes and specification of B_{MSY} proxies.”
- 2011 University of Washington Graduate Student Symposium. Seattle, WA. “Snow crab recruitment in the EBS: regime shifts and oscillating control”.
- 2010 Snow crab symposium and workshop. (invited) Seattle, WA. “Estimation ability of the stock assessment method used for snow crab in the eastern Bering Sea.”
- Alaska Marine Science Symposium, Anchorage, AK. “Estimation ability of the stock assessment method used for snow crab in the eastern Bering Sea.”
- National Stock Assessment Workshop, St. Petersburg, FL. “Incorporating environmental indices into the stock assessment for snow crab in the eastern Bering Sea.”
- 2009 Alaska Marine Science Symposium, Anchorage, AK. “Incorporating environmental indices into the stock assessment for snow crab in the eastern Bering Sea.”

TEACHING EXPERIENCE

- 2002-2006 University of Kansas, Teaching assistant: Introduction to biology, Microbial and organismal biology, Organismal biology
- 2006 MCAT Biology teacher
- 2016 UCSB: Stock assessment short course

BENCH AND FIELDWORK

- 2024 Bering Sea bottom trawl survey (3 weeks at sea).
- 2009-2014 University of Washington, Research Assistant.
- 2013 University of Washington, mid-water trawls on Lake Washington.
- 2012 Northwest Fishery Science Center, snorkel surveys on the Cedar River.
- 2009 Washington Department of Fish and Wildlife, Biological technician II. Smolt trapping.
- 2009 University of Washington Hatchery, Hatchery technician.
- 2006-2008 Identigen, Statistical analyst and high throughput genotyping laboratory technician.
- 2003-2006 University of Kansas, Research Assistant. Fish reproductive behavior in mesocosms.

SERVICE

Reviewer

- Crab Plan Team member (2018-present): First level of peer review for science used in management of Bering Sea crab fisheries
- Journals: Proceedings for the National Academy of Sciences, Fish and Fisheries, Ecology, Ecology Letters, Marine Ecology Progress Series, Fisheries Research, Deep Sea Research II, Journal of Marine Systems, Fisheries Oceanography, Canadian Journal of Aquatic and Fishery Science, ICES Journal of Marine Science, PLoS ONE, Acta Sinica, Marine and Coastal Fisheries
- Proposals: SeaGrant Population Dynamics Fellowship, Graduate Women in Science
- Fishery management plans: CA Pacific herring (via California Ocean Science Trust: 2018)
- STAR panel at NWFSC (2019) for skate assessments
- Gulf of St. Lawrence, Canadian snow crab assessment reviewer (2022)
- IATTC bigeye and yellowfin tuna assessment data reviewer (2023)

Working groups

Science for Nature and People, National Center for Ecological Analysis and Synthesis, Data-poor fisheries management. 2014-2016
Science for Nature and People, National Center for Ecological Analysis and Synthesis, Measuring the status of fisheries and factors leading to success. 2014-2016.
ICES/PICES Working group on impacts of warming on growth rates and fishery yields (WGGRIFY). ToR Champion. 2020-present.
Collaborative snow crab research steering committee member 2020-present
Crustacean task force. Lenfest, EDF, Rutgers, and U of Maine. 2020-2022.
AFSC Aquaculture working group. 2020-2022.

Students and postdocs advised

Cole Morokovich – Master’s student 2023-present, University of Washington
Samuel Comeau – Master’s student 2023-present, University of Alaska
Baptiste Algave – NOAA Postdoc, 2022-2023
Madison Shipley – PhD student, 2022-present, University of Washington
Maxime Olmos – NOAA Postdoc 2019-2022
Matthieu Veron – NOAA Postdoc 2021-2022
Jaehon Kim – Master’s student 2018-present, University of Maine
Emily Sellinger – Master’s student, 2020-2022, University of Washington
Terrance Wang – Master’s student, 2020-present, University of Washington
Laurinne Balstad – PhD Student at UC Davis, interned at NOAA 2022
Owen Liu – PhD student 2015-2019, UCSB
Li Weiwen – PhD student, 2014-2017, Shanghai Ocean University
Patricia Faundez Baez – PhD student, 2017-current
Wang Rui – PhD student, 2017-2018, Shanghai Ocean University

WORKFLOW

ADMB (C++)
R
Github
Rmarkdown

FOREIGN LANGUAGES

Mandarin Chinese