

Mariah H. Meek

Department of Integrative Biology
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PROFESSIONAL APPOINTMENTS

Assistant Professor, Dept of Integrative Biology, Michigan State University	2016 - present
Society for Conservation Biology David H. Smith Conservation Research Fellow, Cornell U.	2015-2016
Assistant Project Scientist, Dept. of Animal Science, University of California, Davis	2013-2015
Post-doctoral Researcher, Dept. of Animal Science, University of California, Davis	2010-2013
Environmental Scientist, Windward Environmental, Seattle, WA	2001-2003

EDUCATION

PhD in Ecology, University of California, Davis, Advising Professor: Dr. Bernie May Dissertation Title: Invasion biology of three species of hydrozoans in the upper San Francisco Estuary	2010
Bachelor of Science, Honors College, University of Washington, Seattle, WA Majors: Biology and Zoology, Minor: Fisheries	2000

HONORS

Society for Conservation Biology Early Career Conservationist Award	2020
Society for Conservation Biology David H. Smith Fellow	2015
University of California-Davis Hillyer Service Award	2010
Presidential Management Fellowship Finalist	2010
National Oceanic and Atmospheric Administration Dr. Nancy Foster Scholar	2006
National Science Foundation Graduate Research Fellowship Honorable Mention	2005
University of Washington Dean's List	1996-2000
Howard Hughes Medical Institute Research Fellowship	1998
Golden Key International Honour Society	1997
Women in Science, Math, and Technology Saturday Academy honoree	1994

RESEARCH GRANTS AND FELLOWSHIPS (total awarded= \$5,436,726)

Active grants

2023-2026	US Fish and Wildlife Service. "Assessing potential genomic impacts of splake on lake trout and brook trout in Lake Superior" PI: M. Meek; co-PI: N. Mamoozadeh	\$649,942
2022-2023	Minnesota Dept. of Natural Resources. "Understanding population genetic structure and diversity in Minnesota brook trout" PI: M. Meek	\$90,000
2021-2023	NSF-Convergence Accelerator. "Empowering stakeholders from ship to store--solving fishery management challenges with use-inspired genomic and artificial intelligence tools" https://www.icatch.app/ PI: M. Meek; co-PIs: N. Mahapatra, S. O'Leary, D. Portnoy, C. Hollenbeck	\$749,255
2022-2023	California Delta Science Program. "Estimating juvenile production and run timing of spring Chinook salmon leaving the Delta" PI: R. Perry (NOAA); co-PIs: M. Meek, B. Piper, and B. Mathias	\$451,033
2022-2024	California Dept of Water Resources.	\$212,528

	“Understanding the interactions between floodplain habitat use and life history diversity in Central Valley Chinook salmon” PI: M. Meek	
2022-2023	Yuba River Management Team. “Understanding the genetic basis for run timing and upstream passage in the Yuba River” PI: M. Meek	\$72,441
2021-2023	National Oceanographic and Atmospheric Administration. “Genotypic and phenotypic diversity in Yuba River Spring-run Chinook Salmon” PI: M. Willmes, co-PIs: F. Cordoleani, A. Sturrock, E. Palkovacs, M. Meek, N. Stauffer-Olsen, R. Johnson	\$98,472
2021-2023	Michigan State University Discretionary Funds Initiative. “Salmon Run Educational Video Game Prototype Pilot Study” PI: M. Meek, co-PI: Robert Pennock	\$50,000
2019-2023	Trout Unlimited. “Understanding the relationships between habitat and salmonid life history in the Yuba River, CA” PI: A. Sturrock, co-PI: M. Meek	\$52,964
<u>Previous external grants</u>		
2020-2022	Revive and Restore Wild Genomes. “A deep catalog of diversity for interrogating adaptive variation in Chinook salmon” PI: M. Meek	\$71,270
2020-2021	Minnesota Dept. of Natural Resources “Understanding genetic diversity in Minnesota’s brook trout” PI: M. Meek	\$14,268
2019-2022	California Delta Science Program “An improved genomic tool for characterizing life history diversity and promoting resilience in Central Valley Chinook salmon” PI: M. Meek	\$632,909
2017-2021	US Fish and Wildlife Service Great Lakes Restoration Initiative “Population genetic analysis of Lake Superior basin brook trout” PI: M. Meek	\$149,550
2018-2019	California Dept. of Water Resources “Development of SHERLOCK technology for Chinook salmon run-typing” PI: M. Baerwald, co-PIs: M. Meek and A. Schreier	\$497,905
2017-2018	USGS Climate Science Center “Population genomic analysis of brook trout across the native range to support climate adaptation” PI: M. Meek	\$44,928
2017-2021	US Fish and Wildlife Service Great Lakes Restoration Initiative. “Population genetic analysis of Lake Superior basin brook trout” PI: M. Meek	\$94,990
2016-2021	California Dept. of Water Resources “Evaluation of floodplain rearing of Chinook salmon” PI: M. Meek	\$25,461
2016-2017	National Fish and Wildlife Foundation Bring Back the Natives “Improving brook trout conservation by predicting responses to climate change” PI: M. Meek, co-PIs: C. Kraft and M. Hare	\$63,060
2016-2021	California Dept. of Water Resources “Evaluation of floodplain rearing of Chinook salmon” PI: M. Meek	\$188,374
2015-2016	Society for Conservation Biology David H. Smith Fellowship PI: M. Meek	\$222,096

2013-2015	UC Davis Center for Watershed Sciences “Understanding population structure of Fall River rainbow trout” PI: M. Meek, co-PI: M. Miller	\$10,408
2012-2015	CALFED Ecosystem Restoration Program Grant. “Evaluation of floodplain rearing and migration in the Yolo Bypass” PI: T. Sommer, co-PIs: L., Conrad and M. Meek	\$878,020
2006-2010	NOAA Dr. Nancy Foster Scholarship PI: M. Meek	\$128,000
2005	Achievement Rewards for College Scientists (ARCS) Foundation Grant PI: M. Meek	\$15,000

Previous internal grants

2022	MSU Ecology, Evolution, and Behavior Seed Grant “Empowering stakeholders from ship to store--solving fishery management challenges with use-inspired genomic and artificial intelligence tools” PI: M. Meek	\$10,000
2021	MSU Ecology, Evolution, and Behavior Seed Grant “The Conservation Genetics Coalition--Building international capacity and leading cultural change in applied genetics” PI: M. Meek	\$10,000
2018-2019	BEACON – NSF Center for the Study of Evolution in Action “Salmon Run: An evolutionary ecology educational game” PI: R. Pennock, co-PI: M. Meek	\$33,800
2015-2016	Cornell Atkinson Center for a Sustainable Future “Improving cold-water fish conservation by predicting responses to climate change with genomic profiling” PI: M. Meek, co-PIs: C. Kraft and M. Hare	\$20,052

PATENTS HELD

M. Meek, N. Mamoozadeh, N. Mahapatra, S. O’Leary, and D. Portnoy. iCatch: Smart Species Identification. Filed July 27, 2022. Patent #63392559

PEER REVIEWED PUBLICATIONS (* denotes mentee)

Submitted Publications

Mamoozadeh, N.*, C. Goldsworthy, L. Miller, N. Peterson, and **M. Meek**. Sources of coaster brook trout (*Salvelinus fontinalis*) revealed by genomic analysis along Minnesota’s shoreline with Lake Superior. In review at Journal of Great Lakes Research.

Mamoozadeh, N.*, A. Whiteley, B. Letcher, D. Kazyak, C. Tarsa*, and **M. Meek**. Evaluating genomic relationships across spatial and temporal scales to guide conservation and management of imperiled species. In revision at Molecular Ecology Resources.

Bertola, L. et al. (author list consists of 42 leading experts in conservation genetics). Conservation genetics needs accessibility and pragmatism for broad implementation in policy and practice. In review at Conservation Science and Practice.

Wade, M.*, K. Moore, S. Grosky, **M. Meek**. "Understanding the population genomic structure of rare desert species is vital in low-impact solar energy planning". In review at Conservation Science and Practice.

O’Leary, S.*, T. Thompson*, and **M. Meek**. Every cog and wheel: Unraveling biocomplexity at the genomic and phenotypic level in a population complex of Chinook salmon. In revision at Conservation Science and Practice.

Baerwald, M., E. Funk, A. Goodbla, M. Campbell, T. Thompson*, **M. Meek**, and A. Schreier. Rapid CRISPR-Cas13a genetic identification enables new opportunities for listed Chinook salmon management. In revision at Molecular Ecology Resources.

Accepted Publications

Meek, M., E. Beever, S. Barbosa, S. Fitzpatrick, N. Fletcher, C. Mittan*, B. Reid, S. Campbell-Staton, N. Green, and J. Hellmann. 2023. Understanding local adaptation to future-prep populations for climate change. Bioscience. <https://doi.org/10.1093/biosci/biac101> **Cover article**

Saunders, S., B. Bateman, J. Grand, **M. Meek**, C. Wilsey, N. Forstenaesler, E. Graham, R. Warren, and J. Price. 2023. A call for alignment of protected areas with climate change refugia in North America. *Frontiers in Ecology and the Environment*. DOI: <https://doi.org/10.1002/fee.2592>.

Hoban, S. et al. 2023. Genetic diversity goals and targets have improved, but remain insufficient for clear implementation of the post 2020 Global Biodiversity Framework. *Conservation Genetics*. <https://doi.org/10.1007/s10592-022-01492-0>

Kershaw, F., M. Bruford, W.C. Funk, C. Grueber, S. Hoban, M. Hunter, L. Laikre, A. MacDonald, **M. Meek**, C. Mittan, D. O'Brien, R. Ogden, R. Shaw, C. Vernesi, and G. Segelbacher. 2022. The Coalition for Conservation Genetics - Working across organizations to build capacity and achieve change in policy and practice. *Conservation Science and Practice*. 4(4): e12635.

Bertho, S. et al. **M. Meek**, M. Scharl, and Y. Guiguen. 2022. A non-functional copy of the salmonid sex determining gene (*sdY*) is responsible for the "apparent" XY females in Chinook salmon, *Oncorhynchus tshawytscha*. *G3: Genes|Genomes|Genetics*. 12(2): jkab451.

Hoban, S., M. Bruford, M. Lopes-Fernandes, WC Funk, P. Galbusera, MP Griffith, C. Grueber, M. Heuertz, ME Hunter, C. Hvilsom, B. Kalamujic Stroil, F. Kershaw, CK Houry, L. Laikre, AJ MacDonald, J. Mergeay, **M. Meek**, C. Mittan, TA Mukassabi, D. O'Brien, R. Ogden, C. Palma da Silva, U. Ramakrishnan, G. Segelbacher, RE Shaw, P. Sjögren-Gulve, N. Velickovic, and C. Vernesi. 2021. Global commitments to conserving genetic diversity are now necessary and feasible. *Bioscience*. 71(9):964-976.

Newell, CL*. J. Durand, **M. Meek**, P. Moyle. 2021. Black sea jellyfish: shocking newcomers to Suisun Marsh. *Frontiers for Young Minds*. 9:609315. doi: 10.3389/frym.2021.609315

Anderson, S., P. Elsen, B. Hughes, R. Tonietto, M. Bletz, D. Gill, M. Hogerson, S. Kuebbing, C. McDonough MacKenzie, **M. Meek**, and D. Verissimo. 2021. Trends in ecology and conservation over eight decades. *Frontiers in Ecology and the Environment*. 19(5): 274-282. <https://doi.org/10.1002/fee.2320>

Taft, H., D. McCoskey, J. Miller, S. Pearson, M. Coleman, N. Fletcher, C. Mittan, **M. Meek**, S. Barbosa. 2020. Research-management partnerships: an opportunity to integrate genetics in conservation actions. *Conservation Science and Practice*. <https://doi.org/10.1111/csp2.218>.

Kasubinski, SF.*, J. Pechal, K. Smiles, C. Schmidt, H. Jordan, **M. Meek**, and M.E. Benbow. 2020. Dysbiosis in the dead: human postmortem microbiome beta-dispersion as an indicator of manner and cause of death. *Frontiers in Microbiology*. <https://doi.org/10.3389/fmicb.2020.555347>.

Meek, M.H. 2020. Linking gene expression patterns with survival studies elucidates adaptive potential in changing

- environments. *Invited at Molecular Ecology*. 29(6):1031-1034.
- Kasubinski, SF*, J. Pechal, C. Schmidt, H. Jordan, M. Benbow, and **M. Meek**. 2020. Evaluating bioinformatic pipeline performance for forensic microbiome analysis. *Journal of Forensic Sciences*. <https://doi.org/10.1111/1556-4029.14213>.
- Meek, M.**, M. Stephens, A. Goodbla, B. May, and M. Baerwald. 2019. Identifying hidden biocomplexity and genomic diversity in Chinook salmon, an imperiled species with a history of anthropogenic influence. *Canadian Journal of Fisheries and Aquatic Sciences*. <https://doi.org/10.1139/cjfas-2019-0171>.
- Euclide, P., G. McKinney, M. Bootsma, C. Tarsa*, **M. Meek**, and W. Larson. 2019. Attack of the PCR clones: Rates of clonality have little effect on RAD-seq genotype calls. *Molecular Ecology Resources*. 20:66–78.
- Meek, M.** and W. Larson. 2019. The future is now: amplicon sequencing and sequence capture usher in the conservation genomics era. *Molecular Ecology Resources*. 19(4): 795-803. ***In top 10% of most downloaded papers in 2018-2019 at MER.***
- Wetzel W. and **M. Meek**. 2019. Physical defenses and herbivory vary more within plants than among plants in the tropical understory shrub *Piper polytrichum*. *Botany*. DOI: 10.1139/cjb-2018-0160.
- Saglam, I., D. Prince, **M. Meek**, O. Ali, M. Miller, M. Peacock, H. Neville, C. Mellison, W. Somer, B. May, A. Finger. 2017. Genomic data reveals genetic distinctiveness of the Paiute cutthroat trout from the Lahontan cutthroat trout. *Transactions of the American Fisheries Society*. 146(6): 1291-1302.
- Winford, E., M. Wilkerson, L. Porensky, I. Lacher, K. Garbach, K. Deiner, J. Blickley, and **M. Meek**. 2017. An undergraduate student's guide to necessary skills for careers in wildlife science. *In* Krausman, P. and S. Henke (eds.) *Becoming a wildlife professional*. John Hopkins University Press and The Wildlife Society.
- Meek, M.**, M. Baerwald, M. Stephens, A. Goodbla, K. Tomalty, M. Miller, and B. May. 2016. Sequencing improves our ability to study threatened migratory species: genetic population assignment in California's Central Valley Chinook salmon. *Ecology and Evolution*. DOI: 10.1002/ece3.2493.
- Meek, M.**, C. Wells, K. Tomalty, J. Ashander, E. Cole, D. Gille, B. Putnam, J. Rose, M. Savoca, L. Yamane, J. Hull, D. Rogers, E. Rosenblum, J. Shogren, R. Swaisgood, and B. May. 2016. We should not be afraid to talk about the effects of the fear of failure on conservation. *Biological Conservation*. 194: 218-219.
- Ali, O., S. O'Rourke, S. Amish, **M. Meek**, G. Luikart, C. Jeffres, and M. Miller. 2016. RAD Capture (Rapture): Flexible and efficient sequence-based genotyping. *Genetics*. 202(2): 389-400.
- Baerwald, M., **M. Meek**, M. Stephens, R. Nagarajan, A. Goodbla, K. Tomalty, G. Thorgaard, B. May, and K. Nichols. 2016. Migratory phenotypic divergence is associated with epigenetic modifications in rainbow trout. *Molecular Ecology, Special Issue: Epigenetic Studies in Ecology and Evolution*. 25(8): 1785-1800. ***Cover story.***
- Meek, M.**, C. Wells, K. Tomalty, J. Ashander, E. Cole, D. Gille, B. Putnam, J. Rose, M. Savoca, L. Yamane, J. Hull, D. Rogers, E. Rosenblum, J. Shogren, R. Swaisgood, and B. May. 2015. Overcoming the fear of failure to improve the conservation of extremely small populations. *Biological Conservation*. 184: 209-217.
- Lew, R.*, A. Finger, M. Baerwald, A. Goodbla, B. May, and **M. Meek**. 2015. Using next-gen sequencing to assist a conservation hatchery: A SNP panel for the genetic management of endangered Delta Smelt. *Transactions of the American Fisheries Society*. 144(4): 767-779.
- Tomalty, K., **M. Meek**, M. Stephens, G. Rincón, N. Fague, B. May, and M. Baerwald. 2015. Transcriptional response to acute thermal stress in juvenile Chinook salmon, *Oncorhynchus tshawytscha*, determined by RNAseq. *G3: Genes, Genomes, Genetics*. 5(7): 1335-1349.

- Meek, M., M. Stephens, A. Wong, K. Tomalty, B. May, M. Baerwald. 2014a. Genetic characterization of California's Central Valley Chinook salmon. *Ecology*. 95(5):1431. <http://www.esapubs.org/archive/ecol/E095/125/metadata.php>
- Meek, M., M. Stephens, K. Tomalty, B. May, and M. Baerwald. 2014b. Genetic considerations for sourcing steelhead reintroductions: investigating possibilities for the San Joaquin River. *San Francisco Estuary and Watershed Science*. 12(1): jmie_sfews_16154. <http://www.escholarship.org/uc/item/6wn5q90h>
- Tomalty, K., M. Stephens, M. Baerwald, K. Bork, M. Meek, and B. May. 2014. Genetic considerations for fall-run Chinook salmon during the San Joaquin River Restoration. *San Francisco Estuary and Watershed Science*. 12(2): jmie_sfews_14880. <http://escholarship.org/uc/item/7bp9m8t9>
- Meek, M., A. Wintzer, N. Sheperd*, and B. May. 2013. Genetic diversity and reproductive mode in two non-native hydromedusae, *Maeotias marginata* and *Moerisia* sp., in the Upper San Francisco Estuary, California. *Biological Invasions*. 15(1): 199-212.
- Wintzer, A., M. Meek, and P. Moyle. 2013. Abundance, size, and diel feeding ecology of *Blackfordia virginica* (Mayer, 1910), a non-native hydrozoan in the lower Napa and Petaluma Rivers, California (USA). *Aquatic Invasions*. 8(2): 147-156.
- Blickley, J., K. Deiner, K. Garbach, I. Lacher, M. Meek*, L. Porensky, M. Wilkerson, E. Winford, and M. Schwartz. 2013. A graduate student's guide to necessary skill sets for conservation careers outside academia. *Conservation Biology*. 27(1): 24-34. *Order for first 8 authors determined alphabetically as all contributed equally.
- Meek, M. A. Wintzer, W. Wetzel, and B. May. 2012. Climate change likely to facilitate the invasion of the non-native hydroid, *Cordylophora caspia*, in the San Francisco Estuary, CA. *PLoS ONE*. 7(10): e46373. doi:10.1371/journal.pone.0046373.
- Wintzer, A., M. Meek, P. Moyle, and B. May. 2011a. Ecological insights into the polyp stage of non-native hydrozoans in the San Francisco Estuary. *Aquatic Ecology*. 5(2): 151-161.
- Wintzer, A., M. Meek, and P. Moyle. 2011b. Trophic ecology of two non-native hydrozoans in the upper San Francisco Estuary: implications for the Pelagic Organism Decline. *Marine and Freshwater Res.* 62(8): 952-961. **Cover story.**
- Wintzer, A., M. Meek, and P. Moyle. 2011c. Life history and population dynamics of *Moerisia* sp., a non-native hydrozoan in the upper San Francisco Estuary (U.S.A.). *Estuarine Coastal and Shelf Sci.* 94(1):48-55.
- Meek, M., M. Baerwald, A. Wintzer, and B. May. 2009. Isolation and characterization of microsatellite loci in two non-native hydromedusae in the San Francisco Estuary: *Maeotias marginata* and *Moerisia* sp. *Conservation Genetics Resources*. 1(1): 205-208.

TECHNICAL REPORTS

- M. Meek** and T. Thompson*. 2022. An improved genomic tool for characterizing life history diversity and promoting resilience in Central Valley Chinook salmon. Prepared for Delta Stewardship Council. 14 p.
- M. Meek** and N. Mamoozadeh*. 2021. Genomic Analysis of Brook Trout Across the Minnesota Extent of the Lake Superior Basin. Prepared for Minnesota Dept. of Natural Resources. 30 p + Supplementary Data.
- M. Meek** and N. Mamoozadeh*. 2021. Population Genetic Analysis of Lake Superior Basin Brook Trout. Prepared for United States Fish and Wildlife Service. 49p + Supplementary Data.
- Stephens, M., B. Erickson, A. Schreier, K. Tomalty, M. Baerwald, B. May, and **M. Meek**. 2013. Genetic management plan for California Golden Trout. Prepared for US Fish and Wildlife Service. 73p.

Meek, M., M. Stephens, M. Baerwald, K. Tomalty, and B. May. 2012. San Joaquin River steelhead genetic considerations. Prepare for the San Joaquin River Restoration Program. 34 p.

Tomalty, K., M. Stephens, M. Baerwald, K. Bork, **M. Meek**, and B. May. 2012. Genetic considerations for fall-run Chinook salmon during the San Joaquin River Restoration. Prepared for the San Joaquin R Restoration Program. 31 p.

Baerwarld, M., M. Stephens, K. Bork, **M. Meek**, K. Tomalty, and B. May. 2011. Spring-run Chinook salmon genetic management plan. Prepared for the San Joaquin River Restoration Program. figshare. 124 p.
<http://dx.doi.org/10.6084/m9.figshare.801104>

Wintzer, A. and **M. Meek**. 2011. Notes on the morphology and ecology of non-native hydrozoa benthic stages in the brackish waters of the San Francisco Estuary. Interagency Ecological Program Newsletter. 24(3):12-16.
<http://www.water.ca.gov/iep/newsletters/2011/IEPNewsletterFinalSummer2011.pdf>

POPULAR PRESS

“Study Identifies Areas Most Likely to Sustain Biodiversity in a Changing Climate.” 2023.
<https://www.audubon.org/news/study-identifies-areas-most-likely-sustain-biodiversity-changing-climate-0>

“Cutting-edge SHERLOCK app will make fish sleuthing a snap.”2021. <https://natsci.msu.edu/news/cutting-edge-sherlock-app-will-make-fish-sleuthing-a-snap/>

Saunders, S. and M. Meek. 2021. “America can lead again in global conservation” Op-Ed in The Hill. Published Jan 8, 2021. <https://thehill.com/opinion/energy-environment/533139-america-can-lead-again-in-global-conservation>

Huffington Post: “Can Trout Evolve to Survive Climate Change? 5 Questions for Dr. Mariah Meek” Posted online 3/09/2016 http://www.huffingtonpost.com/tim-ward/can-trout-evolve-to-survi_b_9406796.html

“Mariah Meek Harnesses the Power of New Genomic Tools to Address a Real-world Conservation Problem” <https://integrativebiology.natsci.msu.edu/news/mariah-mEEK-harnesses-the-power-of-new-genomic-tools-to-address-a-real-world-conservation-problem/>

Adirondack Explorer magazine: “Climate matters: Will the trout be saved?” November/December 2015

TEACHING

Instructor, Environmental Issues and Public Policy, Michigan State University <ul style="list-style-type: none"> • Enrollment: 40 undergraduate students 	2023
Instructor, Professional development for graduate students in science, Michigan State University <ul style="list-style-type: none"> • Enrollment: 10 graduate students 	2019, 2022
Instructor, Fundamentals of Genetics, Michigan State University <ul style="list-style-type: none"> • Enrollment: 190 undergraduate students 	2018-2022
Instructor, First Year Seminar: Half the Sky: Gender Equity, Society and You, University of CA, Davis <ul style="list-style-type: none"> • Enrollment: 15 undergraduate students 	2014
Instructor, Graduate seminar: Conservation of extremely small populations, University of CA, Davis <ul style="list-style-type: none"> • Enrollment: 12 graduate students 	2011
Invited Lectures: <ul style="list-style-type: none"> • Genomics to improve our ability to conserve imperiled fishes. Marine Ecology Class 	2018

- Michigan State University, East Lansing, MI
- Understanding the genomics of plasticity. Ecology and Evolution Graduate Student Core Course 2015
Cornell University, Ithaca, NY
- Studying respiration and metabolism in fishes. Stream Ecology Lab. Cornell University, Ithaca, NY 2015
- Restoring the San Joaquin River's salmon populations. Introduction to the Marine Environment, 2012
American River College, Sacramento, CA
- Cnidarians. Introduction to the Marine Environment, American River College, Sacramento, CA 2009

Teaching Assistant, Introductory Biology (BIS 1B), University of CA, Davis 2005-2006
Elementary Science Teacher, San Diego State University, San Diego, CA 2003-2004

MENTORING

Postdoc mentees (3 current, 5 total)

Dr. Erin Collins 2023-present
Dr. Cinnamon Mittan (EEB Presidential Postdoctoral Fellow) 2021-present
Dr. Nadya Mamoozadeh 2018-present
Dr. Tasha Thompson (now Fellow at Wild Salmon Center) 2020-2022
Dr. Shannon O'Leary (now an Assistant Professor at St. Anselm College) 2019-2020

Graduate student mentees (4 current, 6 total)

Ben Kline, PhD student 2021-present
Isaac Paredes, PhD student 2021-present
Sara Hugentobler, PhD student 2017-present
Miranda Wade, PhD student 2017-present
Sierra Kaszubinski, Masters student 2018-2020
Ryan Lew, Masters student, University of California-Davis 2012-2015

Undergraduate student mentees (2 current, 6 total)

Emily Bardwell, Department of Integrative Biology 2022-present
Allie Zhang, Department of Integrative Biology 2020-present
Arianna Troia, Department of Integrative Biology 2018-2021
Gregorio Martinez, Department of Integrative Biology 2019-2020
Torel Beard, Department of Integrative Biology 2018-2019
Keith Shane, Undergraduate Honors Thesis, Cornell University 2015-2016

Graduate student committees (5 current, 7 total)

Steven Fong, PhD, Dept of Fisheries and Wildlife, MSU 2021-present
Kyle Brumm, PhD, Dept of Fisheries and Wildlife, MSU 2021-present
Kyle Jaynes, PhD, Dept of Integrative Biology, MSU 2020-present
Scott Jackson, School for the Environment and Sustainability, U of Michigan 2020-present
Emily Dean, PhD, Dept of Fisheries and Wildlife, MSU 2019-present
Seth Smith, PhD, Dept of Fisheries and Wildlife, MSU 2019-2021
Sean Griffin, PhD, Kellogg Biological Station, MSU 2017-2019

SERVICE

Contributions to the Profession

Editorial Board for *Conservation Science and Practice*

Vice President: Society for Conservation Biology Conservation Genetics Working Group

Co-founder: Coalition for Conservation Genetics—The CCG is a coalition of the world's biggest organizations focused on the practice and application of genomics to conservation.

Guest editor: *Evolutionary Applications*, special issue on salmonid genomics (scheduled for late 2023)

Genome Canada Research Oversight Committee member—Genome Canada is an independent, Canadian government funded not-for-profit organization that invests in, and coordinates, genomics research, innovation, data and talent to generate solutions to today's biggest challenges.

Working group member:

International Union for Conservation of Nature (IUCN) North America Conservation Genetics Specialist Group, IUCN Species Survival Commission member, Inter-agency Ecological Program Genetic Project Work Team, San Joaquin River Restoration Program Subgroups: Genetics, Conservation Facility, and Reintroduction Monitoring

Meeting Organizer:

Coastwide Salmonid Genetics Meeting, University of CA, Davis. July 2012

Conservation of Extremely Small Populations Symposium, University of CA, Davis. February 2012

Society for Conservation Biology Meeting Abstract Review Committee. 2006

Workshop and Session Organizer:

What does adaptive capacity mean to you? Integrating perspectives on adaptive potential for climate change planning, North American Congress for Conservation Biology, Denver, CO. July 2020

Incorporating local adaptation into conservation: connecting science to practice, North American Congress for Conservation Biology, Toronto, Canada. July 2018

Risk and Reward: Learning from past failures and mistakes to achieve conservation success, International Congress for Conservation Biology, Montpellier, France. August 2015

Genetics and Molecular Techniques, Ecological Society of America Meeting, Baltimore, MD August 2015

The Power of Genetics to Advance Fisheries Science, California-Nevada Chapter of the American Fisheries Society Annual Meeting, Sacramento, CA. April 2014

Inside Peer-Review Workshop, University of CA, Davis. May 2012

Training Conservation Scientists and Practitioners for 21st Century Global Challenges, 4th International Ecosummit, Columbus, OH. Sept. 2012

How Filmmakers and Conservationists Connect People, Nature, and Climate, Society for Conservation Biology North American Congress for Conservation Biology, Oakland, CA. July 2012

Journal Review: Molecular Ecology, Molecular Ecology Resources, Conservation Letters, Conservation Genetics, Evolutionary Biology, Canadian Journal of Fisheries and Aquatic Sciences, PLoS ONE, Genome Biology and Evolution, Journal of Great Lakes Research, Heredity, Frontiers in Ecology and Evolution, Nature Climate Change, Ecosphere, Journal of Thermal Biology, American Naturalist, Biological Conservation, Frontiers in Ecology and the Environment, Proceedings of the National Academy of Sciences, Marine Genomics, Trends in Ecology and Evolution, Conservation Physiology

Proposal Review: NSF Division of Environmental Biology, Washington Sea Grant, North Pacific Research Board, Arctic-Yukon-Kuskokwim Sustainable Salmon Initiative, Great Lakes Fishery Commission, Genome Canada, Israel Science Foundation, David H. Smith Conservation Research Fellowship

Contributions to the University

Dept of Integrative Biology chair search committee. 2022-present

Dept of Integrative Biology Teaching Faculty search committee. 2022

Michigan State University Genomics Core Advisory Committee. 2021-present

MSU Ecology, Evolution, and Behavior Program Presidential Postdoctoral Fellow search committee. 2021

Dept. of Integrative Biology Diversity, Equity, and Inclusion Reading Group. Michigan State University. 2020-2021

Dept. of Integrative Biology Graduate Affairs Committee. Michigan State University. 2019-2020

Dept. of Integrative Biology Diversity, Equity, and Inclusion Committee. Michigan State University. 2019-present

Dept. of Integrative Biology Code of Conduct committee. Michigan State University. 2018

Academic Federation Merit Review Committee. UC Davis. 2013-2014

Graduate Group in Ecology Awards Committee. UC Davis. 2008-2009

Graduate Group in Ecology Chair Search Committee. UC Davis. 2008-2009

Graduate Group in Ecology Admissions Committee. UC Davis. 2007

Graduate Student Association Student Representative. UC Davis. 2006-2007

College of Agriculture and Environmental Science Faculty Hiring Committee. UC Davis. 2006

Ecology Graduate Student Association Committee Chair. UC Davis. 2005-2006

Contributions to the Community

Student and Landowner Education and Watershed Stewardship Mentor, Davis, CA. 2007-2015
Hatchery tour for UC Davis chapter of Strategies for Ecology, Education, Diversity, and Sustainability, 2014
Save Our Watersheds Science Fair Judge. 2013
Davis Junior High School Global Warming Project, Davis, CA. 2007
Science Fair Judge - Brookfield Elementary School, Sacramento, CA. 2006

SEMINARS AND PRESENTATIONS

Invited Seminars

- 2023 Department of Natural Resources, Cornell University (*scheduled*)
2021 Landscape transcriptomics seminar series, Pennsylvania State University
Botany Department, University of Wyoming
2019 School for Environment and Sustainability, University of Michigan
School of Aquatic and Fisheries Sciences, University of Washington
Ecology, Evolutionary Biology, and Behavior Program, Michigan State University
Watershed Sciences Department, Utah State University
Kellogg Biological Station K-12 Partnership Summer Institute, Plenary Speaker
2018 Department of Forestry and Natural Resources, Purdue University
Department of Ecology and Evolutionary Biology, University of Toronto
2017 Michigan Natural Features Inventory
Kellogg Biological Station, Michigan State University
Department of Biological Sciences, Western Michigan University
2016 Department of Integrative Biology, Michigan State University
EvoDay, Cornell University
2015 College of Forestry and Conservation, Montana State University
EvoGroup, Cornell University
Watershed, Fish, and Wildlife Program, USDA Forest Service
2009 Conservation Science Program, World Wildlife Fund

Invited presentations at scientific meetings

- 2021 Symposium: Using indicators of ecological resilience to inform conservation and management of freshwater ecosystems, fisheries, and fishes, American Fisheries Society Annual Meeting, Baltimore, MD
Lake Superior Technical Committee Meeting, Online
Symposium: Success at different trophic levels: Gaining insights from nutrients to otoliths, Bay-Delta Science Annual Meeting, Online
American Genetics Association President's symposium. Snowbird, UT
Symposium: How to improve biodiversity monitoring and conservation using DNA technologies, from genes to communities, IUCN World Conservation Congress, Marseille, France
Chesapeake Bay Program Scientific and Technical Advisory Committee Workshop, Online
2020 Symposium: Using Genomics to Explore Adaptation and Improve Management, American Fisheries Society Annual Meeting, Online
2019 Symposium: Brook Trout: The Scourge and the Saint. Applying Lessons Learned from Both Eradication and Reintroduction Efforts Across the West and East to Better Manage this Char, American Fisheries Society Annual Meeting, Reno, NV
2018 Symposium: Advancing conservation genetics and genomics: From discovery to application, American Association for the Advancement of Science, Austin, TX
2017 Symposium: Advances in Molecular Methods and their Impact on Management of the Great Lakes, International Association for Great Lakes Research, Detroit, MI
2016 Special Symposium: Communicating Genetics for Improved Conservation Action, North American Congress for Conservation Biology, Madison, WI

Contributed presentations at scientific meetings

Ethology and Evolutionary Biology of Fishes: 2021
Interagency Ecological Program Annual Meeting: 2017, 2018
Ecological Society of America Annual Meeting: 2012, 2015, 2017
Bay-Delta Science Conference: 2008, 2014

American Fisheries Society Annual Meeting: 2011, 2014
 American Genetics Association Meeting: 2014
 Evolution Meeting: 2014
 International Congress for Conservation Biology: 2015
 North American Congress for Conservation Biology: 2012
 Plant and Animal Genome Conference: 2012
 Salmonid Restoration Federation Conference: 2012
 Coastal and Estuarine Research Federation Biennial Conference: 2009

Select Meek Lab presentations at scientific meetings

Kline, B. Joint Aquatic Sciences Meeting	2022
Wade, M. Joint Aquatic Sciences Meeting	2022
Zhang, A. Joint Aquatic Sciences Meeting	2022
Mamoozadeh, N. American Fisheries Society Annual Meeting	2022
Wade, M. North American Congress for Conservation Biology	2022
Hugentobler, S. Ethology and Evolutionary Biology of Fishes	2021
Wade, M. Evolution Annual Meeting	2021
Hugentobler, S. Bay-Delta Science Conference	2021
Mamoozadeh, N. American Fisheries Society Annual Meeting	2020
Kaszubinski, S. American Forensics Society	2020
Wade, M. American Fisheries Society Annual Meeting	2019
Wade, M. Mid-west Population Genetics Annual Meeting	2019
Tarsa, C. Mid-west Population Genetics Annual Meeting	2019
Mamoozadeh, N. International Association for Great Lakes Research Annual Meeting	2019
Mamoozadeh, N. International Charr Symposium	2019
Hugentobler, S. Coastwide Salmonid Genetics Meeting	2018
Wade, M. Michigan State University Ecology, Evolutionary Biology, and Behavior Symposium	2018

PROFESSIONAL DEVELOPMENT

How to talk about race in college classrooms, Online 4 week class	2021
Faculty Mentoring Workshop, Kellogg Biological Station, Hickory Corners, MI	2020
Storytelling, Intermedia Communications Training, The Leopold Center, Baraboo, WI	2018
Smith Fellows Implicit Bias Training, The Leopold Center, Baraboo, WI	2018
Smith Fellows Facilitation Training, Dovetail Consulting Group, Detroit, MI	2017
Media Expertise, Intermedia Communications Training, Arlington, VA	2016
Smith Fellows Policy and Government Training, Washington, DC	2016
Smith Fellows Diversity in Conservation Workshop, Boulder, CO	2016
Smith Fellows Leadership Training, Raquette Lake, NY	2016
Cornell University Center for Teaching Excellence Professional Development workshops:	
• Course Design: Integrated Course Design	2016
• Teaching Research Skills: Enhance Students' Research Skills Using Library Resources	2016
• Course Design: Creating a Learning-centered Syllabus	2015
• Course Design: Designing Learning Outcomes for Your Course	2015

PROFESSIONAL AFFILIATIONS

Society for Conservation Biology-Lifetime Member
 American Fisheries Society
 American Genetics Association