SOLOMON R. DAVID

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EDUCATION

Ph.D. 2012 **University of Michigan, Ann Arbor**
Natural Resources and Environment
Dissertation title: Life history, growth, and genetic diversity of the Spotted Gar (*Lepisosteus oculatus*) from peripheral and core populations

M.S. 2008 **University of Michigan, Ann Arbor**
Natural Resources and Environment
Thesis title: The Influence of physical habitat factors on a near-shore fish community in the lower Muskegon River, Michigan

B.S. 2000 **Ohio Northern University, Ada**
Biology
Thesis title: A survey of the salamanders of genus *Ambystoma* and macroinvertebrate species in two woodland vernal pools, Hardin County, Ohio

PROFESSIONAL EXPERIENCE

2023-present **Assistant Professor**, University of Minnesota Department of Fisheries, Wildlife, and Conservation Biology (Principal Investigator at GarLab; Aquatic Ecology, Freshwater Fish Conservation, Non-game & Ancient Fishes; Science Communication)

2017-2023 **Assistant Professor**, Nicholls State University Department of Biological Sciences (Principal Investigator at GarLab; Great Lakes, Migratory, and Ancient Fishes Ecology & Conservation; Science Communication)

2017 **Research Associate**, Michigan State University Department of Integrative Biology (Dr. Ingo Braasch; Evolution, Genomics, Ecology of Gars & Other Ancient Fishes)

2016-2017 **Research Scientist**, U.S. Geological Survey Great Lakes Science Center & John G. Shedd Aquarium (Dr. Kurt Newman; Great Lakes Native Fishes Restoration Ecology)

2012-2015 **Research Associate**, Daniel P. Haerther Center for Conservation & Research at John G. Shedd Aquarium and University of Wisconsin Center for Limnology (Drs. Peter McIntyre & Charles Knapp; Great Lakes Migratory Fishes Research)

2012 **Postdoctoral Research Fellow**, University of Michigan School of Natural Resources & Environment (Dr. James Diana; Aquaculture & Aquatic Ecology)

2010-2012 **Research Analyst**, University of Michigan School of Natural Resources & Environment (Dr. James Diana; Aquaculture & Aquatic Ecology)

2010 **Research Associate**, Michigan Sea Grant – University of Michigan (Dr. James Diana; Asian carp, Michigan native species & habitat conservation fact sheet publications & web content)

PUBLICATIONS

Peer-reviewed Publications

33. Ginez, A.N., **S.R. David**, A.R. Lackmann, B.J.E. Myers, T.J. Winter, R.A. Lusardi, and A.L. Rypel. 2026. Smoothing over "rough" mismanagement: establishing protective harvest limits for native nongame fishes. Fisheries https://doi.org/10.1093/fshmag/vuag052

32. Quade, A.H., A. Ferrara, Q. Fontenot, **S.R. David**, K.S. Boyle, and G. Rieucau. 2025. Spotting gar using imaging sonar: The effects of river-floodplain habitat connectivity on a lepisosteid assemblage. Transactions of the American Fisheries Society 154: 115-126.

31. Lackmann, A.R., D.A. Watkinson, **S.R. David**, D.L. Scarnecchia, and M.F. Docker. 2024. From neglect toward enlightenment: the conservation of native fishes in the twenty-first century. Environmental Biology of Fishes 107: 1305-1326.

30. Kelly, F. and **S.R. David**. 2024. Don't judge a nongame fish by its cover-age: An assessment of social media posts featuring Minnesota native fishes. Environmental Biology of Fishes 107: 1339-1353.

29. Doll, J.C., I. Fisher, A. Selby, S.J. Jacquemin, D. Sinopoli, and **S.R. David**. 2024. Ecomorphology of Longnose Gar (*Lepisosteus osseus*): on the influence of size, sex, and river location. Environmental Biology of Fishes 107: 1421-1440.

28. Sinopoli, D., T.J. Near, **S.R. David**, and P. Chakrabarty. 2024. Reassignment of a junior synonym of *Lepisosteus oculatus* Winchell 1864 to *L. platostomus* Rafinesque 1820. Zootaxa 5432: 139-144.

27. Brownstein, C.D., D.J. MacGuigan, D. Kim, O. Orr, L. Yang, **S.R. David**, B. Kreiser, T.J. Near. 2024. The genomic signatures of evolutionary stasis. Evolution 78: 821-834.

26. Branch, T.A., I.M. Cote, **S.R. David**, J.A. Drew, M. LaRue, M.C. Marquez, E.C.M. Parsons, D. Rabaiotti, D. Shiffman, D.A. Steen, A.L. Wild. 2024. Controlled experiment finds no detectable citation bump from Twitter promotion. PLOS One https://doi.org/10.1371/journal.pone.0292201.

25. Brownstein, C.D., D. Kim, O.D. Orr, G.M. Hogue, B.H. Tracy, M.W. Pugh, R. Singer, C. Myles-McBurney, J. M. Mollish, J.W. Simmons, **S.R. David**, G. Watkins-Colwell, E.A. Hoffman, and T.J. Near. 2022. Hidden species diversity in an iconic living fossil vertebrate. Biology Letters 18: doi.org/10.1098/rsbl.2022.0395.

24. Dean, E., A. Cooper, L. Wang, W. Daniel, **S.R. David**, K. Gido, E. Hale, T. Haxton, W. Kelso, N. Leonard, C. Lido, J. Margraf, M. Porter, C. Pennock, D. Propst, J. Ross, M. Staudinger, G. Whelan, D. Infante. 2022. The North American Freshwater Migratory Fish Database (NOMAD): Characterizing the migratory life histories of freshwater fishes of Canada, the United States, and Mexico. Journal of Biogeography 49: 1193-1203.

23. Fredrickson, A., G. Rieucau, Q. Fontenot, A. Lackmann, and **S.R. David**. 2021. Non-lethal fin clip model validation for stable isotope analysis of Spotted and Alligator Gar. Transactions of the American Fisheries Society 151: 72-80.

22. Rypel, A.L., P. Saffarinia, C.C. Vaughn, L. Nesper, K. O'Reilly, C.A. Parisek, M.L. Miller, P.B. Moyle, N.A. Fangue, M. Bell-Tilcock, D. Ayers, **S.R. David**. 2021. Goodbye to "rough fish": paradigm shift in the conservation of native fishes. Fisheries 46: 605-616.

21. Thompson, A.W., M.B. Hawkins, E. Parey, D.J. Wcisel, T. Ota, K. Kawasaki, E. Funk, M. Losilla, O.E. Fitch, Q. Pan, R. Feron, M. Milhes, B.L. Racicot, K.L. Childs, Q. Fontenot, A. Ferrara, **S.R. David**, A.R. McCune, A. Dornburg, J.A.Yoder, Y. Guiguen, H.R. Crollius, C. Berthelot, M.P. Harris, and I. Braasch. 2021. The genome of the bowfin (*Amia calva*) illuminates the developmental evolution of ray-finned fishes. Nature Genetics 53: 1373–1384.

20. Cottrell, A., **S.R. David**, and P.S. Forsythe. 2021. Production and outmigration of young-of-year northern pike *Esox lucius* from natural and modified waterways connected to Lower Green Bay, Wisconsin. Journal of Fish Biology 99: 364-372.

19. Smith, N.G., D.J. Daugherty, E.L. Brinkman, M.G. Wegener, B.R. Kreiser, A.M. Ferrara, K.D. Kimmel, and **S.R. David**. 2019. Advances in conservation and management of the Alligator Gar: a synthesis of current knowledge and introduction to a special section. North American Journal of Fisheries Management 40: 527-543.

18. Hollister, R., J. Hollister, **S.R. David**, and D.A. Steen. 2018. *Crotalus oreganus* (Western Rattlesnake) Predation. Herpetological Review 49: 751.

17. **David, S.R.**, S.M. King, and J.A. Stein. 2018. Introduction to a special section: Angling for dinosaurs – Status and future study of the ecology, conservation, and management of ancient fishes. Transactions of the American Fisheries Society 147: 623-625.

16. Claussen, J., **S.R. David**, K. O'Reilly, E. Henry, N. Sopinka. 2018. #Welcome: Introducing the Science Communication Section. Fisheries 43: 121-122.

15. King, S.M., **S.R. David**, J.A. Stein. 2018. Relative bias and precision and utility of hard structures used to age Longnose, Shortnose, and Spotted Gars. Transactions of the American Fisheries Society 147: 626-638.

14. Farley, N.J., A.A. Vasquez, R.S. Kik IV, **S.R. David**, A.S. Katailiha, J.L. Ram. 2018. Primer designs for identification and environmental DNA (eDNA) detection of gars (Lepisosteidae). Transactions of the American Fisheries Society 147: 687-695.

13. Loh, T.L., E.R. Larson, **S.R. David**, L.S. de Souza, R. Gericke, M. Gryzbek, A.S. Kough, P.W. Willink, C.R. Knapp. 2018. Quantifying the contribution of zoos and aquariums to peer-reviewed scientific research. FACETS 3: 287-299.

12. **David, S.R.** and J.J. Wright. 2017. Genetic variation and biogeography of the Spotted Gar *Lepisosteus oculatus* from core and peripheral populations. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution 328: 596-606.

11. Bronte, C.R., D.B. Bunnell, **S.R. David**, R. Gordon, D. Gorsky, M.J. Millard, J. Read, R.A. Stein, and L. Vaccaro. 2017. Report from the Workshop on Coregonine Restoration Science: U.S. Geological Survey Open-File Report 2017–1081, 23 p., https://doi.org/10.3133/ofr20171081.

10. Rypel, A.L., **S.R. David**. 2017. Pattern and scale in latitude-production relationships for freshwater fishes. Ecosphere 8:e01660. doi: 10.1002/ecs2.1660

9. **David, S.R.**, R.S. Kik IV, J.S. Diana, E.S. Rutherford, and M.J Wiley. 2015. Evidence of countergradient variation in growth of Spotted Gar *Lepisosteus oculatus* from core and peripheral populations. Transactions of the American Fisheries Society 144: 837-850.

8. Madenjian, C.P., R.R. Rediske, J.P. O'Keefe, and **S.R. David**. 2014. Laboratory estimation of net trophic transfer efficiencies of PCB congeners to lake trout (*Salvelinus namaycush*) from its prey. Journal of Visualized Experiments 90: e51496 doi: 10.3791/51496.

7. Madenjian, C.P., **S.R. David**, R.R. Rediske, and J.P. O'Keefe. 2012. Net trophic transfer efficiencies of polychlorinated biphenyl congeners to lake trout (*Salvelinus namaycush*) from its prey. Environmental Toxicology and Chemistry 31: 2821-2827.

6. Madenjian, C.P., **S.R. David**, and S.A. Pothoven. 2012. Effects of activity and energy budget balancing algorithm on laboratory performance of fish bioenergetics models. Transactions of the American Fisheries Society 141: 1328-1337.

5. Wright, J.J., **S.R. David**, and T.J. Near. 2012. Gene trees, species trees, and morphology converge on a similar phylogeny of living gars (Actinopterygii: Holostei: Lepisosteidae), an ancient clade of ray-finned fishes. Molecular Phylogenetics and Evolution 63: 848-856.

4. Madenjian, C.P., **S.R. David**, and D.P. Krabbenhoft. 2012. Trophic transfer efficiency of methylmercury and inorganic mercury to lake trout *Salvelinus namaycush* from its prey. Archives of Environmental Contamination and Toxicology 63: 262-269.

3. Kwon, S.Y., J.D. Blum, M.J. Carvan, N. Basu, J.A. Head, C.P. Madenjian, and **S.R. David**. 2012. Absence of fractionation of mercury isotopes during trophic transfer of methylmercury to freshwater fish in captivity. Environmental Science and Technology 46: 7527-7534.

2. **David, S.R.** 2011. [Review of] An empirical synthetic pattern study of gars (Lepisosteiformes) and closely related species, based mostly on skeletal anatomy. The resurrection of holostei. Grande, L. Copeia 4: 612-613.

1. Bunnell, D.B., **S.R. David**, and C.P. Madenjian. 2009. A decline in bloater fecundity between 1981 and 2006: the role of adult condition. Journal of Great Lakes Research 35: 45-49.

GRANTS AND RESEARCH SUPPORT

2027-2029 Restoring and Enhancing Hydrology at St. Catherine Creek National Wildlife Refuge ($132,000); National Fish and Wildlife Foundation (co-PI with W. Prevost, The Nature Conservancy).

2027-2028 Impacts of Common Carp control on native fishes II ($182,037); Minnesota Aquatic Invasive Species Research Center, Environment and Natural Resources Trust Fund

2026-2028 Regarding Native Fish: Outreach, Engagement, and Citizen Science ($270,000); Environmental and Natural Resources Trust Fund

2026-2027 Variation in Ecology and Life History of Minnesota Catostomid and Holostean Fishes ($199,672); Minnesota Sea Grant (co-PI with M. Clark, A. Lackmann, K. Schreiner)

2025-2028	Understanding Minnesota's Priority Native Rough Fish: Gars & Bowfin ($568,000); Environmental and Natural Resources Trust Fund
2025-2026	Impacts of Common Carp control on native fishes ($229,500); Minnesota Aquatic Invasive Species Research Center, Environment and Natural Resources Trust Fund
2023-2026	The Past, Present and Future of Lower Mississippi River Restoration: Adaptive Management for Floodplain Restoration; Improving Aquatic Connectivity and Reforesting the River; Charting a Course for Future River Restoration ($199,999); National Fish and Wildlife Foundation (co-PI with A. Rodgers, G. Rieucau; habitat restoration & fish ecology)
2021-2023	Ecological and Social Ridge Dynamics in the Barataria-Terrebonne Basins ($495,368); RESTORE Act Louisiana Center of Excellence (co-PI with J. Willis, Q. Fontenot, J. Whitaker, C. Bonvillain, G. McClenachan, B. Ramachandra, S. Walton, J. Doucet; coastal habitat restoration)
2020-2026	Functional Genomics in Gar - Discovery Tools for Major Vertebrate Transitions ($1,621,944); National Science Foundation (co-PI with I. Braasch, A. Ferrara; gar genomics & culture)
2020-2023	Restoring Hydrology and Monitoring Species Response in the Blackhawk Scar Lakes Ecosystem ($400,000); National Fish & Wildlife Foundation (co-PI with A. Rodgers, G. Rieucau; habitat restoration & fish ecology)
2020-2021	Variation in species diversity, life history, and trophic ecology of a restored Mississippi River floodplain fish community with a focus on gars Lepisosteidae ($50,000); The Nature Conservancy (PI)
2019-2023	Monitoring the fauna of a restored coastal wetland ($245,503); Resource Environmental Solutions (co-PI with Q. Fontenot, G. LaFleur; habitat restoration & fish ecology)
2015-2017	Great Lakes Research ($450,000); ArcelorMittal Corporation (co-PI with M. Parker, L. Joyce; dam removal & habitat restoration)
2015	Great Lakes Fishes Research ($20,000); Abra Prentice Foundation (co-PI with P.Willink; dam removal & habitat restoration)
2014	Dam Removal & Habitat Restoration ($7,500); James E. Dutton Foundation (PI)
2013-2015	Dam Removal & Habitat Restoration ($30,000); Herrick Foundation (PI)
2013-2015	Great Lakes Research & Sustainability ($120,000); HSBC Foundation (co-PI with P. Willink, M. Parker, L. Joyce)
2013-2015	Great Lakes Research & Sustainability ($121,000); Institute of Museum and Library Sciences Grant (co-PI with J. Sandor, M. Parker, D. Rizzo)
2013	Dam Removal & Habitat Restoration ($15,000); The Nature Conservancy Wisconsin (co-PI with P. Forsythe)

2012-2014	Great Lakes Research & Sustainability ($375,000); ArcelorMittal Corporation (co-PI with M. Parker, L. Joyce)
2011-2012	Air-breathing Fishes Aquaculture Research Grant ($61,400); AquaFish Collaborative Research Support Program (co-PI with J.S. Diana)
2010	Rackham Graduate School Spring/Summer Research Grant ($6,000)
2009	School of Natural Resources & Environment Research Grant ($4,000)
2009	Rackham Graduate Student Research Grant ($3,000)
2009	Conservation Research Grant ($750) North American Native Fishes Association
2008-2010	Travel Grants ($2,950); Awarded for presentations at research meetings such as 2nd and 3rd International Meetings on Lepisosteid Research & Management, Midwest Fish & Wildlife Meeting, Southern Division American Fisheries Society, American Fisheries Society Annual Meeting.

PRESENTATIONS AND SEMINARS

Invited Presentations (abridged)

2026 American Fisheries Society, Columbus, Ohio
2026 Speaking Science University of Minnesota, Minneapolis
2026 Southern Division of the American Fisheries Society, New Orleans
2026 University of Minnesota Conservation Sciences Seminar Series
2026 Minnesota Department of Natural Resources Roundtable, Brooklyn Center
2025 Aquatic Invasive Species Research and Management Showcase, St. Paul
2025 American Fisheries Society, San Antonio
2025 National Wildlife Federation 89th Annual Meeting, Minneapolis
2024 University of Maine, Department of Wildlife, Fisheries, and Conservation Biology Seminar Series, Orono
2024 North American Paleontological Society, Ann Arbor
2023 American Fisheries Society, Grand Rapids, Michigan
2023 Midwest Fish & Wildlife Conference, Overland Park (Keynote)
2023 Grand Valley State University Department of Biology Seminar Series, Allendale
2022 Ohio State University Evolution, Ecology, and Organismal Biology Seminar Series, Columbus
2022 University of Tennessee Institute of Agriculture Seminar Series, Knoxville
2022 University of Louisiana at Lafayette Biology Colloquium, Lafayette
2022 California Academy of Sciences, San Francisco
2022 American Fisheries Society, Spokane (Keynote)
2021 American Fisheries Society, Baltimore
2021 Diverse Voices in Fisheries Science, UC-Santa Barbara

2021 Michigan State University Graduate Student Symposium, East Lansing (Keynote)
2020 Global Change Limnology Lab DEI Series, Miami, Ohio
2019 University of Miami Science Communication Workshop, Miami
2019 Louisiana State University Museum of Natural History Seminar, Baton Rouge
2018 Louisiana State University Aquaculture and Fisheries Club, Baton Rouge
2018 OceanDotComm18, Louisiana Universities Marine Consortium, Cocodrie
2017 International Association for Great Lakes Research, Detroit
2016 American Fisheries Society, Kansas City
2015 Alliance for the Great Lakes Seminar, Chicago
2015 State of Lake Michigan, Traverse City
2015 Department of Biology Seminar, North Central College, Naperville, Illinois
2015 Department of Biology Seminar, Loyola University, Chicago
2015 National Science Teachers Association Meeting, Chicago
2015 University of Michigan School of Natural Resources & Environment Job Trek Panel, Chicago
2015 University of Wisconsin-Madison Center for Limnology Seminar
2014 Shedd Aquarium Trustees Leadership Series, Chicago
2014 University of Wisconsin-Green Bay American Fisheries Society
2014 Biology Department, Ohio Northern University Nature Center, Stone Creek
2014 Pacific Coast Cichlid Association, San Francisco
2014 East Coast Monster Fish Konvention 2, Parsippany, New Jersey
2014 Shedd Aquarium Science Pub, Chicago
2014 Upper Mississippi River Conservation Committee, La Crosse, Wisconsin
2013 Elliott Donnelley Chapter of Trout Unlimited, Chicago
2013 East Coast Monster Fish Konvention, Parsippany, New Jersey
2013 American Fisheries Society, Little Rock
2013 Alliance for the Great Lakes, Chicago
2013 Wildlife Conservation Club, University of Illinois Urbana-Champaign
2012 University of Michigan Hooper Aquatic Seminar Series, Ann Arbor
2012 4th Meeting of the International Network for Lepisosteid Research & Management, Villahermosa, Mexico
2011 NOAA Scientific Advisory Board, Ann Arbor
2010 3rd Meeting of the International Network for Lepisosteid Research & Management, Thibodaux, Louisiana
2010 Stewardship Network Webcast, Ann Arbor
2008 2nd Meeting of the International Network for Lepisosteid Research & Management, Heredia, Costa Rica

Symposia and Workshops Organized

2026 Advances in Conservation and Management of Nongame Native Fishes; American Fisheries Society, Columbus, Ohio
2026 Strong Science, Weak Signals: How the status quo in how we communicate is undermining our goals; American Fisheries Society, Columbus, Ohio
2026 Advances in Conservation and Management of Gars and Bowfins; Southern Division American Fisheries Society, New Orleans

2025 Management of De Facto Game Fishes – Understanding/Conservation of Native Nongame Fishes; American Fisheries Society, San Antonio
2023 NONGAME: Underappreciated Fishes and their management in the United States; American Fisheries Society, Grand Rapids
2021 SciComm Conversations: Leaning from the past, acting in the present, and preparing for the future; American Fisheries Society, Baltimore
2020 Storytelling Your Science: Five Minutes, Five Slides; American Fisheries Society, Virtual Meeting
2019 SciComm Your Story: More than One Way to Skin a Cat(fish); American Fisheries Society, Reno
2019 Beyond the publication: science communication strategies to increase the impact of your research; American Fisheries Society, Reno
2018 One Size Does Not Fit All: Tailoring Science Communication for Diverse Audiences; American Fisheries Society, Atlantic City
2017 From the Field to The Hill: Science Communication with Policymakers; American Fisheries Society, Tampa
2017 #SocialGreatLakes: Communicating Great Lakes science through social media; International Association for Great Lakes Research, Detroit
2017 A tribute to Jim Diana and his influence on Great Lakes research and management; International Association for Great Lakes Research, Detroit
2016 Department of Interior Coregonine Restoration Science Workshop, Ann Arbor
2016 Angling for Dinosaurs: Status and future study of the ecology, conservation and management of ancient fishes; American Fisheries Society, Kansas City

TEACHING EXPERIENCE

Assistant Professor

2023-present Principles of Fisheries Science & Management (FWCB 4107), University of Minnesota
Introduction to Marine Biology (FWCB 2003), University of Minnesota

2017-2023 Basic Biology for Non-majors (BIOL 105), Nicholls State University
General Biology (BIOL 155), Nicholls State University
Biology of Fishes (BIOL 348), Nicholls State University
Evolution & Ecology (BIOL 370), Nicholls State University
Teaching Internship (BIOL 500), Nicholls State University
Aquatic Conservation (BIOL 474), Nicholls State University
Aquatic Conservation & Mgmt. (BIOL 577), Nicholls State University
Preparing Research Proposals for Wildlife Biologists (FWCB 4603), University of Minnesota
Communicating Science for Conservation (FWCB 3480), University of Minnesota

Lecturer

2015	Ichthyology (BIO 368), Ohio Northern University, fall semester
2012	Biology of Fishes (EEB 440), University of Michigan, fall semester
2011	Ichthyology (BIO 482, 582), Eastern Michigan University, fall semester

Invited Guest Lecturer (abridged)

2024	Introduction to Careers in the Life Sciences (BIOL 1021), Rachel Perlin, University of Minnesota
2023-2024	Ichthyology (FW 4136), Dr. Kassandra Ford, University of Minnesota Orientation in Fisheries, Wildlife, and Conservation Biology (FW 1001), Dr. Elena West, University of Minnesota
2022	The People Vs. The Sea (ANST-GA 2500), Paul Greenberg, New York University
2020	Fish, Fishing, and Conservation (FiW 2234), Dr. Donald Orth, Virginia Tech Ichthyology (EEB 474), Dr. Benjamin Keck, University of Tennessee-Knoxville
2018	Vertebrate Biodiversity and Conservation (BI458), Levi Moore, Wilfred Laurier University
2017	Honors Colloquium in Biological Sciences (BIOL 406), Dr. Gary LaFleur, Nicholls State University
2015	Molecular Aquatic Ecology (BIO 5180), Dr. Jeff Ram, Wayne State University
2014-2015	Ecology of Fishes (ZOO 510), Dr. Peter McIntyre, University of Wisconsin-Madison
2014	Ichthyology (BIO 341) Field Lab, Dr. Patrick Forsythe, University of Wisconsin-Green Bay
2005	Ecology of Fishes (EEB 487), Dr. James Diana, University of Michigan
2003-2004	Ecology of Fishes (EEB 487), Dr. Edward Rutherford, University of Michigan

Teaching Assistant

2001-2008	Parasitology (EEB 341), Dr. Barry OConnor, University of Michigan
2003-2004	Biology of Fishes (EEB 440), Dr. Kevin Wehrly, University of Michigan
2000	Biological Photography (BIO 290), Dr. Erik Nelson, Ohio Northern University
1999	Invertebrate Zoology (BIO 223), Dr. Erik Nelson, Ohio Northern University
1998-1999	Biology/Zoology/Botany (BIO 121,122,123), All Sections, Ohio Northern University
1998-1999	Developmental Anatomy (BIO 301), Dr. Nelson Moore, Ohio Northern University

Student Mentorship

2026-present Griffin Blegen, Graduate Advisor (PhD, technician)
University of Minnesota
2026-present Jeffrey Hughes, Graduate Advisor (MS)
University of Minnesota
2025-present Gabrielle Gonzales, Graduate Advisor (PhD)
University of Minnesota
2025-present Luxia Feyereisen, Graduate Advisor (MS)
University of Minnesota
2026-present Mason Reinke, Undergraduate Research
University of Minnesota
2026-present Avi Prager, UROP Advisor
University of Minnesota
2026-present Shelby Snow, Undergraduate Research
University of Minnesota
2024-2025 Alyssa Rausch, Graduate Advisor (PhD)
University of Minnesota
2024-2025 Ella Chmielewski, Undergraduate Research
University of Minnesota
2024-2026 Griffin Blegen, Graduate Committee (MS)
Bemidji State University
2024-present Charles Vaughan, Graduate Committee (MS)
University of Minnesota-Duluth
2024-2025 Jenna Pearson, Undergraduate Research
University of Minnesota
2024 Jacob Wilson, Undergraduate Research
University of Minnesota
2023-2024 Faith Kelly, Graduate Advisor (MBS)
University of Minnesota
2023-2024 Aaron Featherstone, Undergraduate Research
University of Minnesota
2023-2026 Raine Flynn, Undergraduate Research
University of Minnesota
2023-2025 Jonathan Wilson-Thieroff, UROP Advisor
University of Minnesota
2022-2023 Michelle Lignieres, Graduate Committee (MS)
Nicholls State University
2022-2024 Katherine Wright, Graduate Advisor (MS)
Nicholls State University
2021-2023 Elizabeth Myers, Graduate Co-advisor (MS)
Nicholls State University
2021-2023 Haleigh Sever, Graduate Committee (MS)
Nicholls State University
2021-2024 Emily Ott, Graduate Committee (MS)
Nicholls State University

2021-2023	Dinah Cador, Graduate Advisor (MS) *Nicholls State University*
2020-2021	Ridge Arceneaux, Undergraduate Honors Thesis Mentor *Nicholls State University*
2020-2023	Audrey Baetz, Graduate Advisor (MS) *Nicholls State University*
2020-2022	Derek Sallmann, Graduate Advisor (MS) *Nicholls State University*
2020-2021	Austin Ortman, Graduate Committee (MS) *Nicholls State University*
2019-2021	KristieRae Ellis, Graduate Advisor (MS) *Nicholls State University*
2019-2021	Katie Gray, Research Assistantship Supervisor (MS) *Nicholls State University*
2019-2021	April Simmons, Graduate Committee (MS) *Nicholls State University*
2019-2020	Aimee Bertrand, Ross Candies, Katelynn Starkey, Undergraduate Research Thesis; *Nicholls State University*
2018-2020	Anthea Fredrickson, Graduate Advisor (MS) *Nicholls State University*
2018-2020	Sarah Fontana, Graduate Advisor (MS) *Nicholls State University*
2018-2020	Andrew Cumberland, Graduate Committee (MS) *Nicholls State University*
2017	Sarah Rogers, Undergraduate Seminar *Nicholls State University*
2015	Olivia King, Conservation Research Intern *North Central College*
2014-2015	Amy Cottrell, Field and Lab Research Assistant *University of Wisconsin-Green Bay, Auburn University*
2014	Kayla Obremski, Aquatic Ecology Term Research Project *University of Wisconsin-Green Bay*
2013-2015	Rachel Van Dam, Graduate Committee (MS) *University of Wisconsin-Green Bay*
2013	Jon Bitner, Conservation Research Intern *North Central College*
2012	Jayme Wagner, AquaFish Collaborative Research Support Program *Eastern Michigan University*
2009-2010	Madison Schaeffer, Howard Hughes Medical Foundation Fellow *Bryn Mawr College*
2009	Amy Poopat, Creative Scientific Inquiry Experience Program *Eastern Michigan University*

RESEARCH EXPERIENCE

2010	Research Assistant, USGS Great Lakes Science Center (Dr. Charles Madenjian; Lake Trout Bioenergetics Modeling)
2009	Research Assistant, University of Michigan (Dr. David Jude; Great Lakes Larval Fishes Analyses)
2008	Research Assistant, USGS Great Lakes Science Center (Dr. Kurt Kowalski; DIDSON Analysis of Fishes Movement in Crane Creek, high-resolution acoustics)
2007	Research Assistant, NOAA Great Lakes Environmental Research Laboratory (Dr. Carlo DeMarchi; Water Quality Modeling)
2006	Research Assistant, USGS Great Lakes Science Center (Dr. David Bunnell; Bloater Condition & Fecundity Project)
2005	Research Assistant (Crew Leader), University of Michigan (Dr. Michael Wiley; Muskegon River Project, Crane Creek Wetlands Project)
2001-2004	Research Assistant (Crew Leader), University of Michigan (Drs. Michael Wiley & Edward Rutherford; Muskegon River Projects, salmonid, fish community, and habitat assessment)
2000	Research Assistant, University of Michigan (Dr. Edward Rutherford; Muskegon River Steelhead Parr Assessment)

PROFESSIONAL MEMBERSHIPS

Alpha Lambda Delta Honor Society
American Fisheries Society
American Society of Ichthyologists and Herpetologists
International Association for Great Lakes Research
International Network for Lepisosteid Research and Management
International Union for Conservation of Nature Freshwater Fish Specialist Group
Lepisosteid Research and Management Committee/Alligator Gar Technical Committee
North American Native Fishes Association
World Fish Migration Foundation

SERVICE, SCIENCE COMMUNICATION, AND AWARDS (abridged)

2026	The Science Communication Blueprint, presentation and panel discussion at the Speaking Science Conference at the University of Minnesota
2026	In Pursuit of Alligator Gar, the Ancient Giant of the Shallows, Garden & Gun Magazine, also April/May 2026 in-print
2025	The Mysteries of Gar Fish, MeatEater Podcast
2025	Why Gars Deserve a Week of Their Own, Great Lakes Now
2025	The World's Oldest Fish, Alveus Adventures featuring GarLab
2025	Award of Merit, Fisheries Management Section of the American Fisheries Society
2025	Resilient Rivers Keynote, annual fundraiser for Conservation Fisheries

2024	All About Gars!, U.S. Fish and Wildlife Service Fish of the Week Podcast
2024	The Rough Fish Revolution, bioGraphic Magazine
2024	CFANS at the 2024 Minnesota State Fair | Get hooked on gar: A fresh look at an ancient fish, University of Minnesota
2024	These fish are 'living fossils' – among the most primitive animals on Earth, National Geographic
2024	A Strange-Looking Fish, Frozen In Time, Science Friday
2023	'True rarity': Gigantic alligator gar caught and released in Texas reservoir could break 2 world records, Live Science
2023	Toothy, ancient gar fish get new protections in Minnesota, Minnesota Public Radio
2022-present	Contributing Wildlife Expert, BBC Wildlife Magazine
2022-present	"Gar Week" with Oklahoma Department of Wildlife Conservation
2022	Q&A with Gar Expert Solomon David, Field & Stream Magazine
2022	A new discovery could help save this 10-foot-long 'living fossil' fish, National Geographic
2021	Trudy Farrand and John Strohm Magazine Writing Award, National Wildlife Federation, articles on gar and sturgeon
2021-2023	Co-Chair, Diversity, Equity, and Inclusion Committee of the American Fisheries Society
2021-2024	Advisory Editor, Environmental Biology of Fishes
2021	Alligator Gar, Fish of the Week! USFWS podcast guest
2021	What if fish had legs?, Tumble Science Podcast for Kids guest
2020	Member, Diversity, Equity, and Inclusion Committee of the American Fisheries Society
2020	Garology, Ologies science podcast guest
2020	The Gar Guy, Ranger Rick Magazine, National Wildlife Federation
2020	Why Native Fish Matter, Science Friday, NPR
2019	Presenter, Skype-a-Scientist LIVE
2018	Search Committee Member, Department of Biological Sciences tenure-track Faculty Search
2017-2020	Biology Department Representative and Social Media for Give-N-Day fundraising through Nicholls Foundation
2019-present	Executive Committee, Science Communication Section of the American Fisheries Society
2017-2019	President, Science Communication Section of American Fisheries Society
2017	Science Party – Guest Host of Twitter chat on Science Communication for Conservation Underdogs
2017	Zoology for Kids – Q & A on Ancient Fish and Freshwater Biodiversity
2016-present	Fisheries Science Communication The Fisheries Blog, Southern Fried Science
2016	World Fish Migration Day Presentation, Beaumont Middle School, Lexington, Kentucky
2016	University of Michigan School of Natural Resources & Environment Alumni Career Panel
2015-present	Conservation Research Blogger

	The Nature Conservancy – Cool Green Science Blog
2014-2016	World Fish Migration Day – Team Leader at Shedd Aquarium
2014	Television Special Guest – Great Lakes Native Fisheries
	Great Lakes Now – The Nature Conservancy & Detroit Public TV
2013-2016	Guest Blogger
	Huffington Post – Shedd Aquarium
2012-present	Science Communicator – Twitter
	@SolomonRDavid (verified account), @PrimitiveFishes, @FisheriesBlog
2012-2016	Conservation Research Blogger
	National Geographic Voices – Shedd Aquarium
2011	Alumni War Memorial Award
	School of Natural Resources & Environment,
	Michigan Natural Resources Society
2011-present	Reviewer, Biological Reviews, American Midland Naturalist, Copeia, Fisheries, Journal of Great Lakes Research, Ecology of Freshwater Fish, Transactions of the American Fisheries Society, North American Journal of Fisheries Management
2010	James S. Diana Aquatic Ecology Scholarship
	School of Natural Resources & Environment
2010	Reviewer, Fishes of the greater Mekong River ecosystem, University of Michigan Museum of Zoology, Miscellaneous Publications.
2009	Graduate Student Representative on Conservation Ecology Faculty Search Committee, School of Natural Resources & Environment
2009	Karl F. Lagler Award for Outstanding Scholar in Aquatic Sciences
	School of Natural Resources & Environment
2009-2010	Doctoral Student Representative
	School of Natural Resources & Environment Student Government
2009-2011	Co-founder, Co-editor, Writer for School of Natural Resources & Environment Aquatics Student Newsletter "The Water Column"
	http://sitemaker.umich.edu/srdavid/files/thewatercolumn_vol2_issue1.pdf
2009-present	Founder, Creator, Designer of Lepisosteid Research & Resource Website
	http://lepisosteidae.net
2008-2012	Primary Consultant & Guest Lecturer
	Great Lakes Ecology and Habitat display for Saline Elementary Schools
2008-2011	Student Representative for the Aquatics Field of Study
	School of Natural Resources & Environment
2008-2012	Orientation Leader, Aquatics Representative
	School of Natural Resources & Environment new student orientation
2007-2011	Aquatic Sciences Track Leader
	School of Natural Resources & Environment
2007	SNRE Representative
	Recruitment event at Howard University, Washington DC.
2004-2009	Co-Founder and Executive Member
	Aquarium Society of Ann Arbor
2003-present	Founder, Creator, and Designer
	http://primitivefishes.com

Biological Photography (abridged)

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David, S.R. 2011. Spotted Gar (cover). *In* A. Amores, J. Catchen, A. Ferrara, Q. Fontenot, and J.H. Postlethwait, authors. Genome evolution and meiotic maps by massively parallel DNA sequencing: spotted gar, an outgroup for the teleost genome duplication. Genetics 188: 799-808.

David, S.R. 2010. Spotted Gar, Longnose Gar. *In* L.D. Corkum, author. Fishes of Essex County and surrounding waters. Essex County Field Naturalists' Club. Windsor.

David, S.R. 2009. Spotted Gar, Florida Gar, Bowfin. *In* E. Holm, N. Mandrak, and M. Burridge, authors. The Royal Ontario Museum Field Guide to Freshwater Fishes of Ontario. Royal Ontario Museum. Toronto.

David, S.R. 2007. Rope Fish series. *In* P. Purser, author. Understanding the Reedfish (*Erpetoichthys calabaricus*). Tropical Fish Hobbyist 55: 118-125.

David, S.R. 2007. Australian Lungfish, *Polypterus endlicheri congicus*, Crocodile Gar, Alligator Gar, Bowfin, African Lungfish. *In* A. Kwasniak, author. Ancient fishes: how have they survived? Nasze Akwarium (Poland) 85: 5-12.

David, S.R. 2007. South American Lungfish series. *In* J. Topfer, author. Sir John Graham Kerr and the South American Lungfish (*Lepidosiren paradoxa*). Der Makropode (Germany) 29: 5-24.

David, S.R. 2006. South American Lungfish. *In* D. Rojat and J. Perol, editors. Fishes with lungs? Sciences de la Vie et de la Terre. Editions Nathan, Paris.