DEBRA S. FINN
Department of Biology
Missouri State University, Springfield, MO 65897
email: dfinn@missouristate.edu

EDUCATION

PhD Ecology (2006). Colorado State University
Dissertation: Dispersal limitation and the spatial organization of communities and populations in alpine headwater streams.

MS Zoology (2000). Colorado State University
MS thesis: Factors influencing the structure of benthic invertebrate communities in Colorado Rocky Mountain streams.

BS Aquatic Biology (1995). University of Texas at Austin

PROFESSIONAL EXPERIENCE + AFFILIATIONS

2022-present	Associate Professor, Department of Biology, Missouri State University
2017-2022	Assistant Professor, Department of Biology, Missouri State University
2009-2016	Courtesy Faculty, Department of Zoology, Oregon State University
2015-2016	Research Associate, Department of Forest Ecosystems and Society, Oregon State University
2014-2015	Prometeo Fellow, University of Cuenca (Ecuador)
2013-2014	Biology Instructor, Linn-Benton Community College (Albany, Oregon)
2010-2012	Marie Curie International Incoming Fellow, University of Birmingham (United Kingdom)
2009	Visiting Fellow, Australian Rivers Institute, Griffith University
2008-2009	Postdoctoral Researcher, EAWAG (Swiss Federal Institute of Aquatic Sciences and Technology)
2006-2008	Postdoctoral Research Associate, Department of Zoology, Oregon State University

FELLOWSHIPS, GRANTS AND AWARDS

2025	Arkansas State Wildlife Grant (SWG): Distribution and habitat associations of the Arkansas mudalia (*Leptoxis arkansenis*) in priority areas of the White River basin in Arkansas ($56,466, 2 years)
2025	City of Springfield (Missouri), Stormwater Services Division grant: Springfield Urban Stream Bioassessment II ($15,996, 1 year)
2024	Missouri State University College of Natural and Applied Sciences: Faculty Excellence in Teaching Award
2023	Missouri State University College of Natural and Applied Sciences: Atwood Research and Teaching Award ($5000)
2022	Teton Conservation District grant Long-term monitoring of alpine streams in the Teton Range (with Lusha Tronstad and Scott Hotaling) ($18,000, 3 years)
2022	University of Wyoming – National Park Service (UW-NPS) grant Building an integrative future for mountain research in the high Teton Range: Linking NPS geophysical research with long-term ecological monitoring of aquatic ecosystems (with Lusha Tronstad, Rebecca Bixby, Paul Frandsen, and Scott Hotaling,) ($4500, 1 year)

2021 Australian Research Council (ARC) Discovery Program grant Dispersal and recruitment of species across landscapes: a new synthesis (with Barbara Downes, University of Melbourne) (A$563,000, 3 years)

2021 Western North American Naturalist Natural History Research Grant Documenting little-known algal diversity in alpine streams from heterogeneous water sources (with Becky Bixby, University of New Mexico) ($2000, 1 year)

2021 University of Wyoming – National Park Service (UW-NPS) grant Moving beyond morphology: integrating molecular metabarcoding into long-term alpine stream research to better understand biodiversity change (with Lusha Tronstad, Scott Hotaling, Rebecca Bixby, Karen Jorgenson, Sarah Collins, and Paul Frandsen) ($5000, 1 year)

2021 Missouri State University College of Natural and Applied Sciences: Faculty Excellence in Research Award

2020 City of Springfield (Missouri), Stormwater Services Division grant Springfield Urban Stream Bioassessment ($12,123, 1 year)

2020 University of Wyoming – National Park Service (UW-NPS) grant Understanding food web structure in high-elevation streams of the Teton Range (with Lusha Tronstad, Joseph Giersch, Scott Hotaling, Sarah Collins, Lydia Zeglin, and Rebecca Bixby) ($5000, 1 year)

2019 University of Wyoming – National Park Service (UW-NPS) grant Five years of alpine stream monitoring in the Teton Range: disentangling longer-term signals from year-to-year variability (with Lusha Tronstad, Joseph Giersch, Scott Hotaling, Alisha Shah, Lydia Zeglin, Rebecca Bixby, and Arthur Woods) ($5000, 1 year)

2019 National Science Foundation (NSF) Research Opportunity Award (ROA) Role of the hyporheic zone in primary succession of stream ecosystems on Mount St Helens – supplement to EAGER grant #1836387 ($24,899, 1 year)

2019 Missouri State University College of Natural and Applied Sciences (CNAS) Summer Faculty Fellowship Bolstering a core ecological data set for long-term monitoring of alpine streams in Wyoming and Montana Rocky Mountains ($6000, 1 year)

2019 Missouri State University College of Natural and Applied Sciences: Student-Nominated Award for Faculty Excellence

2019 Missouri State University College of Natural and Applied Sciences: Faculty Excellence in Teaching Award

2018 Colorado State University Graduate Degree Program in Ecology: Distinguished Alumna

2018 Missouri Department of Conservation Cooperative Agreement Distributional survey of Ozark pyrg and Arkansas mudalia in Missouri ($6000, 1 year)

2018 University of Wyoming – National Park Service (UW-NPS) grant Assessing thermal tolerance of vulnerable alpine stream insects as part of a long-term monitoring project in the Teton Range, WY (with Lusha Tronstad, Joseph Giersch, Alisha Shah, Scott Hotaling, Lydia Zeglin, and Rebecca Bixby) ($5000, 1 year)

2018 Missouri State University Graduate College Faculty Research Grant Establishing a long-term monitoring program for Rocky Mountain alpine streams vulnerable to climate change ($7500, 1 year)

2017 University of Wyoming – National Park Service (UW-NPS) grant Establishing a long-term monitoring network for assessing potential climatic refugia in cold alpine stream types (with Lusha Tronstad, Joseph Giersch, Scott Hotaling, Lydia Zeglin, and Rebecca Bixby) ($5000, 1 year)

2016 University of Wyoming – National Park Service (UW-NPS) grant A unique “icy-seep” aquatic habitat in the high Tetons: potential refuge for biological assemblages imperiled

	by climate change (with Lusha Tronstad, Joseph Giersch, Scott Hotaling, and Lydia Zeglin) ($5000, 1 year)
2015	University of Wyoming – National Park Service (UW-NPS) grant Assessing alpine aquatic invertebrate assemblages in Grand Teton National Park, Wyoming (with Mark Andersen, Joseph Giersch, Scott Hotaling, and Lusha Tronstad) ($5000, 1 year)
2015	Teton Conservation District, match to 2015 UW-NPS grant (above) ($5000, 1 year)
2014	Ecuador Secretariat of Higher Education, Science, Technology, and Innovation (SENESCYT), Prometeo Grant Genetic and life-history assessment of the influence of glaciers on biodiversity in high-altitude Ecuadorian streams ($75,500, 1 year)
2013	Australian Center for Ecological Analysis and Synthesis (ACEAS) invited workshop: Tracing Spatial and Temporal Scales in Aquatic Connectivity
2011	Hynes Award for New Investigators, North American Benthological Society (now Society for Freshwater Science)
2010	Marie Curie International Incoming Fellowship, project SHIRMAN (Shifting Range Margins in Glacier-fed Streams, 173,241€, 2 years)
2009	Australian Rivers Institute Visiting Fellowship (A$10,000)
2008	ASLO Early Career Travel Award (US$1000)
2007	D.H. Smith Conservation Fellowship finalist
2005	North American Benthological Society 53rd Annual Meeting, Runner-Up Oral Presentation in Basic Research
2003	North American Benthological Society Presidents Award
2001	EPA-STAR Graduate Fellowship (#91597401-1, 3 years)
2001, 2004	Colorado Mountain Club Foundation small grants ($300-$700 yearly)
2000-2005	Colorado State University Department of Biology Student Awards for Travel to Academic Meetings ($600-$1000 yearly)
2000	Colorado State University Biology Symposium, Best Graduate Poster Presentation
1998	NSF Graduate Research Fellowship (3 years)
1994	I.F. Riggs Endowed Presidential Scholarship in Education, University of Texas at Austin

PEER-REVIEWED PUBLICATIONS

[Google Scholar profile: http://scholar.google.co.uk/citations?user=J6BERRwAAAAJ&hl=en]

*student lead author

Brighenti, S., C.I. Millar, S. Hotaling, A. Reato, T. Wiegand, M. Hayashi, L. Carturan, M. Morriss, F. Bearzot, V. Lencioni, A. Scotti, A. Janicke, A. Fischer, S. Larsen, A. Benech, A. Gschwentner, M. Tolotti, M.C. Bruno, D.S. Finn, M. Freppaz, D. Herbst, L.M. Tronstad, F. Comiti, and N. Colombo. 2025. Global evidence that cold rocky landforms support icy springs in warming mountains. Environmental Research Letters 20: 104001.

Finn, D.S., S.M. Claeson, I.J. Garthwaite, D. Fleshman, and C.J. LeRoy. 2025. Highly variable physical and biological characteristics of hyporheic zones among young streams undergoing primary succession at Mount St. Helens (USA). Freshwater Science 44: 16-30.

Milner, A.M., S.H. Sønderland, L.E. Brown, L.R. Clitherow, L. Eagle, I. Gloyne-Phillips, D.S. Finn, E. Flory, M.J. Klaar, E. Malone, K. Monaghan, A.L. Robertson, A.J. Veal, M.A. Wilkes, and F.M. Windsor. 2024. Looking forward: a synthesis of stream research undertaken in Glacier Bay. Advances in Ecological Research 71: 171-194.

Finn, D.S., S.H. Sønderland, and A.M. Milner. 2024. Relationship of diet breadth to population genetic patterns in juvenile coho salmon (*Oncorhychus kisutch*) along a stream-age gradient in Glacier Bay, Alaska. Advances in Ecological Research 71: 113-137.

*Jorgenson, K.L., S. Hotaling, L.M. Tronstad, D.S. Finn, and S.M. Collins. 2024. Hydrology and trophic flexibility structure alpine stream food webs in the Teton Range, Wyoming, USA. Ecosphere 15: e70039.

Lancaster, J., B.J. Downes, D.S. Finn, and R.M. St Clair. 2024. Connected headwaters: Indelible field evidence of dispersal by a diverse caddisfly assemblage up stream valleys to dry catchment boundaries. Freshwater Biology 69: 1-14.

LeRoy, C.J., S.M. Claeson, I.J. Garthwaite, M.A. Thompson, L.J. Thompson, B.K. Kamakawiwo'ole, A.M. Froedin-Morgensen, V. McConathy, J.M. Ramstack Hobbs, R. Stancheva, C.M. Albano, and D.S. Finn. 2023. Canopy development influences early successional ecosystem function but not biotic assemblages. Aquatic Sciences 85: 77.

*Cheri, C.R. and D.S. Finn. 2023. Odonata as indicators? Dragonflies and damselflies respond to riparian conditions in Ozark spring streams. Hydrobiology 2: 260-276.

*Priest, H.J. and D.S. Finn. 2023. Bucketloads of aquatic invertebrates present in a dry intermittent stream. Ecology 104: e3936.

Finn, D.S., S.L. Johnson, W.G. Gerth, I. Arismendi, and J.L. Li. 2022. Spatiotemporal patterns of emergence phenology reveal complex species-specific responses to temperature in aquatic insects. Diversity and Distributions 28: 1524-1541.

*Green, M.D., L.M. Tronstad, J.J. Giersch, A.A. Shah, C.E. Fallon, E. Blevins, T.R. Kai, C.C. Muhlfeld, D.S. Finn, and S. Hotaling. 2022. Mountain stoneflies in the genus *Lednia*: sentinels of climate change impacts on mountain stream biodiversity. Biodiversity and Conservation 31: 353-377.

Claeson, S.M., C.J. LeRoy, D.S. Finn, R.H. Stancheva, and E.R. Wolfe. 2021. Variation in riparian and stream assemblages across the primary succession landscape of Mount St. Helens, U.S.A. Freshwater Biology 66: 1002-1017.

Brighenti, S., S. Hotaling, D.S. Finn, A.G. Fountain, M. Hayashi, D. Herbst, J.E. Saros, L.M. Tronstad, and C.I. Millar. 2021. Rock glaciers and related cold rocky landforms: overlooked climate refugia for mountain biodiversity. Global Change Biology 27: 1504-1517.

Hotaling, S., A.A. Shah, M.E. Dillon, J.J. Giersch, L.M. Tronstad, D.S. Finn, H.A. Woods, and J.L. Kelley. 2021. Cold tolerance of mountain stoneflies (Plecoptera: Nemouridae) from the high Rocky Mountains. Western North American Naturalist 81: 54-62.

Tronstad, L.M., S. Hotaling, J.J. Giersch, O.J. Wilmot, and D.S. Finn. 2020. Headwaters fed by subterranean ice: potential climate refugia for mountain stream communities? Western North American Naturalist 80: 395-407.

Hotaling, S., A.A. Shah, K.L. McGowan, L.M. Tronstad, J.J. Giersch, D.S. Finn, H.A. Woods, M.E. Dillon, and J.L. Kelley. 2020. Mountain stoneflies may tolerate warming streams: evidence from organismal physiology and gene expression. Global Change Biology 26: 5524-5538.

*Williams, J.M., H.R. Dodd, and D.S. Finn. 2020. A low-water crossing impacts Northern Hog Sucker Hypentelium nigricans movement in an Ozark stream. Journal of Freshwater Ecology 35: 157-171.

*Dorff, N.C. and D.S. Finn. 2020. Hyporheic secondary production and life history of a common Ozark stonefly. Hydrobiologia 847: 443-456.

Hotaling, S., M.E. Foley, L.H. Zeglin, D.S. Finn, L.M. Tronstad, J.J. Giersch, C.C. Muhlfeld, and D.W. Weisrock. 2019. Microbial assemblages reflect environmental heterogeneity in alpine streams. Global Change Biology 25: 2576-2590.

Hotaling, S., J.J. Giersch, D.S. Finn, L.M. Tronstad, S. Jordan, L.E. Serpa, R.G. Call, C.C. Muhlfeld, and D.W. Weisrock. 2019. Congruent population genetic structure but differing depths of divergence for three alpine stoneflies with similar ecology and geographic distributions. Freshwater Biology 64: 335-347.

Tonkin, J.D., F. Altermatt, D.S. Finn, J. Heino, J.D. Olden, S.U. Pauls, and D.A. Lytle. 2018. The role of dispersal in river network metacommunities: patterns, processes, and pathways. Freshwater Biology 63: 141-163.

McCreadie, J.W., R.H. Williams, S. Stutsman, D.S. Finn, and P.H. Adler. 2018. The influence of habitat heterogeneity and latitude on gamma diversity of the Nearctic Simuliidae, a ubiquitous group of stream-dwelling insects. Insect Science 25: 712-720.

*Studholme, A.M., H. Hampel, D.S. Finn, and R.F. Vázquez. 2017. Secondary production of Helicopsyche spp reflects environmental heterogeneity among tropical Andean streams. Hydrobiologia 797: 231-246.

*Hotaling, S., D.S. Finn, J.J. Giersch, D.W. Weisrock, and D. Jacobsen. 2017. Climate change and alpine stream biology: progress, challenges, and opportunities for the future. Biological Reviews 92: 2024-2045.

Finn, D.S., A.C. Encalada, and H. Hampel. 2016. Genetic isolation among mountains but not between stream types in a tropical high-altitude mayfly. Freshwater Biology 61: 702-714.

Crook, D., W.H. Lowe, F.W. Allendorf, T. Erős, D.S. Finn, B.M. Gillanders, W.L. Hadwen, C. Harrod, V. Hermoso, S. Jennings, R.W. Kilada, A.I. Nagelkerken, M.M. Hansen, T.J. Page, C. Riginos, B. Fry, and J.M. Hughes. 2015. Human effects on ecological connectivity in aquatic ecosystems: integrating scientific approaches to support management and mitigation. Science of the Total Environment 534: 52-64.

*O'Callaghan, M.J., D.S. Finn, M. Williams, and J.P. Sadler. 2014. Development and characterisation of seven polymorphic microsatellite loci in the specialist riparian ground beetle, Bembidion atrocaeruleum. Journal of Insect Science 14: 10.1093/jisesa/ieu065.

Tullos, D.D., D.S. Finn, and C. Walter. 2014. Geomorphic and ecological disturbance and recovery from two small dams and their removal. PLoS ONE 9: e108091.

Pauls, S.U., M. Alp, M. Bálint, P. Bernabò, F. Čiampor, Z. Čiamporová-Zaťovičová, D.S. Finn, J. Kohout, F. Leese, V. Lencioni, I. Paz-Vinas, and M. T. Monaghan. 2014. Integrating molecular tools into freshwater ecology: developments and opportunities. Freshwater Biology 59: 1559-1576.

Finn, D.S., C. Zamora-Muñoz, C. Múrria, M. Sáinz-Bariáin, and J. Alba-Tercedor. 2014. Evidence from recently deglaciated mountain ranges that Baetis alpinus (Ephemeroptera) could lose significant genetic diversity as alpine glaciers disappear. Freshwater Science 33: 207-216.

Hughes, J.M., D.S. Finn, M.T. Monaghan, A. Schultheis, and B.W. Sweeney. 2014. Basic and applied uses of molecular approaches in freshwater ecology. Freshwater Science 33: 168-171.

Finn, D.S., K. Khamis, and A.M. Milner. 2013. Loss of small glaciers will diminish beta diversity in Pyrenean streams at two levels of biological organization. Global Ecology and Biogeography 22: 40-51.

Daly-Engel, T.S., R.L. Smith, D.S. Finn, M.E. Knoderbane, I.C. Phillipsen, and D.A. Lytle. 2012. 17 novel polymorphic microsatellite markers for the giant water bug, Abedus herberti (Belostomatidae). Conservation Genetics Resources 4: 979-981.

Finn, D.S., N. Bonada, C. Múrria, and J.M. Hughes. 2011. Small but mighty: headwaters are vital to stream network biodiversity at two levels of organization. Journal of the North American Benthological Society 30: 963-980. (Rosemary MacKay Fund paper)

Finn, D.S. and N.L. Poff. 2011. Examining spatial concordance of genetic and species diversity patterns to evaluate the role of dispersal limitation in structuring headwater metacommunities. Journal of the North American Benthological Society 30: 273-283.

Finn, D.S., K. Räsänen, and C.T. Robinson. 2010. Physical and biological changes to a lengthening stream gradient following a decade of rapid glacial recession. Global Change Biology 16: 3314-3326.

Finn, D.S., M.T. Bogan, and D.A. Lytle. 2009. Demographic stability metrics for conservation prioritization of isolated populations. Conservation Biology 23: 1185-1194.

Hughes, J.M, D.J. Schmidt, and D.S. Finn. 2009. Genes in streams: using DNA to understand movement of freshwater fauna and their riverine habitat. Bioscience 59: 573-583.

Finn, D.S. and N.L. Poff. 2008. Emergence and flight activity of alpine stream insects in two years with contrasting winter snowpack. Arctic, Antarctic and Alpine Research 40: 638-646.

Lytle, D.A., M.T. Bogan, and D.S. Finn. 2008. Evolution of aquatic insect behaviours across a gradient of disturbance predictability. Proceedings of the Royal Society B. Biological Sciences 275: 453-462.

Finn, D.S., M.S. Blouin, and D.A. Lytle. 2007. Population genetic structure reveals terrestrial affinities in a headwater stream insect. Freshwater Biology 52: 1881-1897.

Finn, D.S. and P.H. Adler. 2006. Population genetic structure of a rare high-elevation black fly Metacnephia coloradensis (Diptera: Simuliidae) occupying Colorado lake outlet streams. Freshwater Biology 51: 2240-2251.

Poff, N.L., J.D. Olden, N.K.M. Vieira, D.S. Finn, M.P. Simmons, and B.C. Kondratieff. 2006. Functional trait niches of North American lotic insects: traits-based ecological applications in light of phylogenetic relationships. Journal of the North American Benthological Society 25: 730-755. (Rosemary MacKay Fund paper)

Finn, D.S., D.M. Theobald, W.C. Black IV, and N.L. Poff. 2006. Spatial population genetic structure and limited dispersal in a Rocky Mountain alpine stream insect. Molecular Ecology 15: 3553-3566.

Finn, D.S. and N.L. Poff. 2005. Variability and convergence in benthic communities along the longitudinal gradients of four physically similar Rocky Mountain streams. Freshwater Biology 50: 243-261.

Cook, R.R., P.L. Angermeier, D.S. Finn, N.L. Poff, and K.L. Krueger. 2004. Geographic variation in patterns of nestedness among local stream fish assemblages in Virginia. Oecologia 140: 639-649.

BOOK CHAPTERS/SECTIONS

Finn, D.S. and D.M. Merritt. 2024. Streams as unique habitats. In: Foundations of Stream and River Ecology. Eds: W.F. Cross, J.P. Benstead, A.M. Marcarelli, and R.A. Sponseller. University of Chicago Press.

Finn, D.S. 2023. Topic box "Lessons from genetics: flightless giant water bugs and the Headwater Model". In: Giller, P. and A.G. Hildrew, The Biology and Ecology of Streams and Rivers. Oxford University Press, Oxford, United Kingdom.

Bonada, N., S.M. Carlson, T. Datry, D.S. Finn, C. Leigh, D.A. Lytle, M.T. Monaghan, and P.A. Tedesco. 2017. Genetic, evolutionary, and biogeographical processes in intermittent rivers and ephemeral streams. In: Intermittent River Ecology and Management. Eds: T. Datry, N. Bonada, and A.J. Boulton. Academic Press, London.

Finn, D.S. and J.B. Monroe. 2013. Ecological connectivity for river conservation. In: River Conservation: Challenges and Opportunities. Eds: S. Sabater, E. Elosegi, and D. Dudgeon. Fundación BBVA, Madrid, Spain.

Finn, D.S. 2011. Hanging on in the alpine tundra. In: Wading for Bugs: Exploring Streams with the Experts. Eds: J.L. Li and M.T. Barbour. OSU Press, Corvallis, OR.

PROFESSIONAL MEMBERSHIP

Society for Freshwater Science
Ecological Society of America
Great Plains Limnological Society

COMMUNITY / SERVICE

Associate Editor, Freshwater Science, The University of Chicago Press (Jan 2025 – present)

Peer reviewer: PNAS; Ecology; Global Change Biology; Communications Earth & Environment (Nature); Limnology & Oceanography; Ecological Applications; Frontiers in Ecology and the Environment;

Diversity and Distributions; Molecular Ecology; Freshwater Biology; Hydrobiologia; Freshwater Science; Arctic, Antarctic, and Alpine Research; Ecosphere; River Research & Applications; Global Ecology and Biogeography; Oecologia; Journal of Biogeography; Evolutionary Ecology; Marine and Freshwater Research; Ecoscience; New Zealand Journal of Marine and Freshwater Research; Aquatic Sciences; Western North American Naturalist; Northwest Science

Society for Freshwater Science 2024 annual meeting special session organizer (Exploring Interactions between Biogeochemistry and Biota in the Hyporheic Zone)

Society for Freshwater Science Publications Committee, 2022-present.

Missouri State University Graduate Council, Grad Curriculum Screening Committee, Jan 2022-present.

Missouri State University Department of Biology Graduate Committee, Jan 2022-present.

Senior personnel on USAID PEER grant to Tschering Dorji (2021) "Baseline data for freshwater biodiversity conservation in the face of climate change in Punatsangchhu basin in Bhutan"

NSF ad-hoc reviewer for EAR-Hydrological Sciences (2018), DEB-Population & Community Ecology (2021, 2022)

Freshwaters Illustrated, Secretary of the Board of Directors (current)

Freshwaters Illustrated, Treasurer of the Board of Directors, 2019-2021.

Missouri State University Proactive Advising Program, 2018-2021.

MSU Department of Biology Search Committee: Conservation Biologist (2021-2022)

MSU Department of Biology Search Committee: Fisheries Biologist (2018-2019)

Society for Freshwater Science Hynes Award Committee, 2017-2020. Chair: 2019-2020.

Society for Freshwater Science 2019 annual meeting special session organizer (Climate Change in High-Gradient Mountain Streams)

Faculty advisor, Missouri State University chapter of American Fisheries Society, 2017-2019.

Established the Andy Sheldon Fund for Field Ecology in Streams, Society for Freshwater Science, 2018.

Lead editor of *in the drift*: the Society for Freshwater Science newsletter, 2007-2017.

Academic editor, PeerJ, 2015-2017.

Society for Freshwater Science Public Information and Publicity Committee, 2007-2017

Freshwater Science special issue guest editor (Molecular approaches in freshwater ecology), 2013.

Society for Freshwater Science Board of Directors, 2010-2013.

Society for Freshwater Science 2012 annual meeting special session organizer (Genetic tools in the study of biodiversity, ecology, and evolution of freshwater organisms)

North American Benthological Society (NABS) 2010 annual meeting special session co-organizer (Reaching out and making a difference: Innovative examples and resources for education and outreach)

Oregon State University Climate Change Workgroup, 2007

NABS Elections and Place Committee, 2006-2007

Student representative, NABS Student Awards Workgroup, 2004-2005

Student representative, Colorado State University (CSU) Department of Biology Ecological Theoretician faculty search committee, 2004

Co-founder and chair, NABS Mentor Community Development Committee, 2002-2004

Organizing committee co-chair, CSU 7th Annual Front Range Student Ecology Symposium, 2001

Student representative, CSU Graduate Degree Program in Ecology, 2000-2001

Vice-president, CSU Colloquium in the Life Sciences student-run seminar series,1999-2000

TEACHING + ADVISING

Missouri State University Department of Biology (2017-present):

Courses taught

Stream Ecology (BIO 509/609) – Spring 2017, 2018, 2019, 2020, 2022, 2023, 2025

Ecology of Flowing Waters (BIO 597/697) – Spring 2021
General Biology 2 for majors (BIO 122) – each Fall and Spring semester, Fall 2017 – Fall 2021; Spring 2023, Spring 2025
Aquatic Entomology (BIO 574/674) – Fall semesters 2017-2024
Scientific Writing (BIO 794) – Fall 2020, Spring 2021, Fall semesters 2021-2025
Essentials of Graduate Study in Biology (BIO 728) – Fall 2025 (full course build)
Foundations of Ecology graduate seminar (BIO 728) – Fall semesters 2018, 2022, 2023, 2025
Foundations of Ecology II graduate seminar (BIO 728) – Fall 2024
Recent Advances in Ecology graduate seminar (BIO 728) – Fall 2019
Service Learning in Biology (BIO 300, associated with BIO 122) – each Fall and Spring semester, Fall 2017 – Fall 2021; Spring 2023, Spring 2025

MS students supervised as major advisor
Jeff Williams – MS Biology May 2019
Nathan Dorff – MS Biology May 2019
Cameron Cheri – MS Biology May 2020
David Fleshman – MS Biology August 2022
Henry Jaxson Priest – MS Biology (all but thesis)
Jackson Winslow – MS Biology Dec 2024 (non-thesis)
Alexis Reifsteck (co-advised with La Toya Kissoon-Charles during first three semesters)
Tanner Conwell – MS Biology (planned May 2026)
Oluwatobiloba Adenola – MS Biology (planned May 2026)
Korinna Brandt – MS Biology (planned May 2027)

Graduate committee service (all Missouri State University MS Biology, unless noted)
Emily Beasley (MS Biology Dec 2017)
Michael Martin (MS Biology May 2018)
Stephanie Sickler (MS Biology May 2018)
David Johnson (MS Biology May 2018)
Colton Lynn (MS Biology August 2018)
Brandon Tappmeyer (MS Biology May 2019)
Katlyn Gardner (MS Biology May 2019)
Casey Adkins (MS Biology May 2019)
Kameron Voves (MS Biology August 2020)
Morgan Rodery (MS Biology May 2021)
Parker Golliglee (MS Biology May 2022)
Kylie Sterling (MS Biology May 2022)
Shannon Weld (MS Water Resources May 2022, University of New Mexico)
Leslie Hatch (MS Biology August 2022)
Sujan Thapa (MS Biology August 2022)
Garrett Frandson (MS May 2023, University of Missouri)
Zachary Vickers (defended July 2022)
Shannon Johnson (pending)
Indigo Tran (pending)
Nicholas Coppock (withdrew)
Parinaz Mohtasebi (MS August 2023)
Elaine Ewigman (current)
Jesse Krokower (MS May 2024)
Kieran Gething (Nottingham Trent University, PhD examiner, current)

Wade Boys (University of Arkansas Biological Sciences PhD student)
Kaitlyn Bebensee
Marxe Altman-Orbach (check sp!)

Undergraduates supervised in laboratory

Missouri Louis Stokes Alliance for Minority Participation (MoLSAMP) fellows: Brynn Kayhill (Fall 2023-present), Vanessa Morales (Spring 2019)

Work/study students: Keturah Logan (2017-2018), Patricia Blankenship (2018-2019), Arthur Ludwig (2019-2021), Abigail Harrison (2019-2020), Joshua Mills (2020), Hannah Robinson (2020-2022), Madison Glenk (2021-present), Chatman Pardoe (2021-2024), Janette Prather (Summer 2023), Alexus Shreckenberg (Fall 2024-present), Lauren Montgomery (Fall 2024-present), Cambo Leang (Summer 2025)

Independent research for academic credit: Chelsea Heath (Fall 2017), Parker Golliglee (Fall 2018), Carajill Campbell (Fall 2018), Robert Brewer (Spring 2019), Hailey Mallett (Fall 2021), Grace Minge (Spring 2022), Alexis Reifsteck (Spring 2022), Chatman Pardoe (Spring 2023), Mackenzie Childers (Spring 2023), Madison Glenk (Summer 2023)

Other undergraduate lab members (grant-funded or volunteers): Ryan Langer (Fall 2018), Jacob Means (2018-2019), Skyler Walrath (2019), Nicholas Coppock (2019-2020), Gage Smith (2019, 2021), Rakshya Bhatta (2019), Julianna Kolf (2020-2021), Alexis Reifsteck (2021-2023), Alexander Love (2021), Connor Bruemmer (2023-present), Lillian Alspaugh (2023-2025), Mackenzie Childers (2023-2024), Lily Smith (2025), Savannah Gibson (Fall 2025)

<u>Teaching and mentoring at prior institutions</u>

Supervisor in University of Cuenca (Ecuador) and Universidad San Francisco de Quito undergraduate internship programs, 2014-2015.

Guest instructor: "Designing Field Studies in Stream Ecology", Masters in Ecology Program, Universidad San Francisco de Quito, Ecuador, October 2014.

Instructor of record: General Biology Series for non-science majors, Linn-Benton Community College, Albany, Oregon, 2013-2014.

Instructor of record: Evolution (BI445), Oregon State University Department of Zoology, Fall 2012

Instructor: University of Birmingham School of Biosciences undergraduate ecology field module at Archbold Biological Station, Florida, Fall 2011

External European Examiner for the PhD thesis of Cesc Múrria, University of Barcelona, 2009

Stream ecology instructor for Ping Qiu, Swiss Artists in Labs program (also science advisor, script writer and narrator for Ping's film "Alpine Waters"), EAWAG, 2008

Guest lecturer:

Oregon State U. Aquatic Entomology, Winter 2007, 2008: stream insect population genetics

Colorado State U., Stream Ecology, Fall 2005:

- lotic food webs
- the longitudinal continuum

Colorado State U., Ecology, Fall 2003: social relations and behavioral ecology

Colorado State U., Ecology, Fall 2002:

- population genetics and natural selection
- population distribution and abundance
- species abundance and diversity

Colorado State U., Evolution, Spring 2002: evolution at homeotic loci

Colorado State U., Ecology, Summer 2000: stream community ecology

Colorado State University (CSU) Graduate Teaching Assistant, 1997-2005:
Biology of Organisms (LS103), Fall 2004
Ecology (BY320), Fall 2002 and Fall 2003
Evolution (BZ220), Spring 2002, Spring 2003, and Spring 2005
Basic Concepts of Plant Life Laboratory (BZCC105), Fall 2001
Stream Ecology (BZ472), Spring 1998, Fall 1999
Limnology (BZ474), Fall 1998
Attributes of Living Systems - honors (BY102H), Spring 1998
The Diversity of Life (BY103), Fall 1997

Supervisor, 7 CSU undergraduate work/study and independent study students, 1998-2004
Supervisor, CSU Water Center REU student (Adam Valenti, North Carolina State University), 2003
Colorado State University Outdoor Adventure Program, Ropes Course Facilitator, 2000-2005
Teaching Intern for undergraduate summer field courses (Limnology, Fish Ecology), University of Montana Flathead Lake Biological Station, 1995

INVITED PRESENTATIONS

Stream networks, dispersal traits, and connectivity in mountain stream headwaters. Keynote presentation, 18th International Symposium on Trichoptera, Universidad de las Américas, Quito, Ecuador, 1-5 July 2024.

Wow moments in science, with some examples from stream ecology. Atwood Award presentation, CNAS Undergraduate Research Symposium, Missouri State University, 25 April 2024.

Networks, headwaters, and what glacier-less Australian alpine streams might have to teach us. University Freshwater Ecology Field Course, Harrietville, Victoria (AUS), 19 February 2024.

Connectivity and habitat heterogeneity provide refugia and support diversity in stream networks faced with flow disturbance. Biological Sciences seminar series, University of Alabama, Tuscaloosa, 18 Nov 2022.

Tetons Alpine Stream Research (TASR) overview: Who? When? Where? Why? What? How? TASR All-Scientists Meeting, [virtual]. 13 May 2021.

Multi-scale connectivity and habitat heterogeneity promote diversity in natural stream networks. Southern Illinois University Edwardsville / Missouri University of Science and Technology Biological Sciences Seminar Series, [virtual]. 22 Feb 2021.

Multi-scale connectivity and habitat heterogeneity promote diversity in natural stream networks. Kansas State University Division of Biology weekly seminar series, Manhattan, KS. 29 March 2019.

Immense diversity of form, function, and habitat in stream-dwelling insects. Springfield Plateau Chapter Master Naturalists monthly meeting, Springfield, MO. 18 March 2019.

Multi-scale connectivity and habitat heterogeneity promote diversity in natural stream networks. Colorado State University Graduate Degree Program in Ecology Distinguished Alumna Seminar, Fort Collins, CO. 10 October 2018.

Beneath the surface: fabulous diversity in flowing waters. Armchair Science Talk, Springfield Library Center, Springfield, MO. 28 Nov 2017.

Tetons alpine streams: unsung heroes of diversity and vulnerability. Harlow Seminar Series, University of Wyoming – National Park Service Research Station, Grand Teton National Park, WY. 27 July 2017.

Citizen science for river lovers. Ozark Mountain Paddling Club monthly meeting, Springfield, MO. 13 April 2017.

Headwater heterogeneity, biodiversity, and environmental change in high-altitude and –latitude stream networks. Division of Biological Sciences, University of Montana, Missoula, MT. 24 March 2016.

Population and community diversity in high-altitude streams, temperate to tropical. Adams State University Lunchtime Talks in Science & Mathematics, Alamosa, CO. 3 Feb. 2016.

Headwaters at the "ex-stream": habitat heterogeneity, biodiversity distribution, and rapid environmental change. Missouri State University Department of Biology, Springfield, Missouri. 11 January 2016.

How much do glacier-fed streams contribute to regional aquatic biodiversity in high-altitude regions like the Ecuadorian páramo? Universidad San Francisco de Quito Ecology Seminar series, Quito, Ecuador. 1 December 2014.

Diversity in alpine glacier-fed streams: Presenting some data from Europe, a proposal for Ecuador, and some developing ideas for the Pacific Northwest. Oregon State University Stream Team, Corvallis, OR. 24 Feb. 2014.

Habitat loss, habitat gain, and biodiversity response at three levels (populations, communities, ecosystems) in streams influenced by shrinking glaciers. University of Maine School of Biology and Ecology, Orono, ME, 27 November 2012.

Two years in Birmingham studying glacial streams: what is happening at expanding species range margins in streams influenced by shrinking glaciers in Europe and Alaska. Oregon State University Fisheries & Wildlife Department seminar, Corvallis, OR, 26 Sept 2012.

Habitat loss, habitat gain, and biodiversity response at three levels (genetic, community, ecosystem) in streams influenced by shrinking glaciers. Leibniz-Intsitute of Freshwater Ecology and Inland Fisheries (IGB), Berlin, Germany, 7 June 2012.

Tales of habitat loss, habitat gain, and biodiversity response at three levels (genetic, community, ecosystem) in streams influenced by shrinking glaciers. Water Sciences Seminar, School of Geography, Earth and Environmental Sciences, University of Birmingham, UK, 16 April 2012.

Genes in streams: intro to how molecular genetic approaches can help us understand ecology and evolution in aquatic systems. Water Sciences Seminar, School of Geography, Earth and Environmental Sciences, University of Birmingham, UK, 24 March 2011.

Potential for local adaptation to disturbance in streams: rainfall response behaviour in a giant water bug (Belostomatidae). Freshwater Biological Association annual meeting, University of Leeds, United Kingdom, 22 September 2010.

Stream network structure, beta diversity, and an approach to setting conservation priorities in isolated headwater streams. University of Wyoming Departments of Botany and Zoology/Physiology, Laramie, WY, 1 Feb. 2010.

Stream network structure and the conservation importance of headwaters. Australian Rivers Institute, Griffith University, Nathan, Queensland, 6 October 2009.

Alpine streams as "islands" of unique gene and species diversity sensitive to global climate change. University of Birmingham, School of Geography, Earth & Environmental Sciences, Birmingham, UK, 14 May 2009.

Stream network structure and the conservation importance of headwaters. Portland State University Environmental Sciences and Management Program, Portland, OR, 24 April 2009.

Giant water bugs in small streams: lengthy evolutionary history and prospects for the future. Ecology Department seminar, University of Barcelona, Barcelona, Catalonia/Spain, 12 March 2009.

Chronicles of desert stream giant water bugs: maintaining a long-standing evolutionary saga under increasing drought risk. Aquatic Ecology Department seminar, EAWAG, Dübendorf, Switzerland, 11 Dec. 2008.

Life in the tips of the network: importance and conservation of headwater stream biodiversity. Aquatic Ecology and Macroevolution seminar series, EAWAG Kastanienbaum Lab, Kastanienbaum, Switzerland, 5 November 2008.

If you build it, will they come? Population genetic models to predict restoration success for stream invertebrates. University of Montana Department of Ecosystem and Conservation Sciences, Missoula, MT, 4 March 2008.

Chronicles of desert stream giant water bugs: maintaining a long-standing evolutionary saga in the face of extreme drought. University of Montana Department of Ecosystem and Conservation Sciences, Missoula, MT, 3 March 2008.

Dispersal and persistence of mountain headwater stream insects in a changing environment. Hatfield Marine Science Center weekly seminar, Newport, OR. 15 February 2007.

Dispersal limitation and the spatial organization of alpine stream communities and populations. Department of Zoology weekly seminar, Oregon State University, Corvallis, OR. 15 May 2006.

Dispersal limitation and the spatial organization of communities and populations in alpine headwater streams. Oregon State University Stream Team, Corvallis, OR. 3 April 2006.

Alpine streams as isolated "islands" of unique biodiversity: some evidence at the community and population levels. Rocky Mountain National Park Research Conference, Estes Park, CO. 5-7 April 2004.

The insular nature of alpine streams - with a specific discussion of the lateral dispersal potential of their insect component. GDPE seminar series, Colorado State University, Fort Collins, CO. 19 November 2003.

Pattern and process in the benthic communities of Rocky Mountain streams: a synthesis of four years of research. Rocky Mountain National Park Research Conference, Estes Park, CO. 9-11 April 2002.

OTHER RESEARCH PRESENTATIONS (my own only)

*student co-author (since 2017 only)

Finn, D.S., T.L. *Conwell, O.S. *Adenola, and H.J. *Priest. Quantifying the underappreciated diversity of Ozark intermittent streams. Great Plains Limnology Conference, Konza Prairie Biological Station, KS. 3-4 October 2025.

Finn, D.S., S.M. Claeson, I.J. *Garthwaite, D. *Fleshman, and C.J. LeRoy. Highly variable physical and biological characteristics of hyporheic zones among young Pumice Plain streams. Mount St Helens Science Pulse 2025, Coldwater Science and Learning Center, Mount St Helens National Volcanic Monument. 18-22 July 2025.

Finn, D.S., J. Lancaster, B.J. Downes, and R.M. St Clair. Wing morphometry does not predict dispersal in co-occurring caddisflies. Great Plains Limnology Conference, Omaha, NE. 18-20 October 2024.

Malison, R., D.S. Finn (co-presenter), A. DelVecchia, and A. Argerich. Introduction to special sessions S21 (Hyporheic and Alluvial River Floodplain Ecology and S20 (Exploring the Interactions Between Biogeochemistry and Biota in the Hyporheic Zone). Society for Freshwater Science annual meeting, Philadelphia, PA. 2-6 June 2024.

Finn, D.S., J. Lancaster, B.J. Downes, and R.M. St Clair. Wing size and shape do not predict population-genetic structure among five co-occurring caddisfly species. Society for Freshwater Science annual meeting, Philadelphia, PA. 2-6 June 2024.

Finn, D.S. What have awesome aquatic insects taught us about the ecological role of sediments in Ozark stream beds? Ozark Studies Association Annual Conference, Talequah, OK. 24 May 2024.

Finn, D.S., C.J. LeRoy, and S.M. Claeson (presenter) Hyporheic macroinvertebrate assemblages in early successional streams on Mount St. Helens. Society for Freshwater Science Pacific Northwest Chapter Annual Meeting, Hood River, OR. 6-8 November 2023.

Finn, D.S., N.C. *Dorff, D. *Fleshman, J.W. *Winslow, C.L. *Pardoe, M. *Childers, and A.G. *Cannizzaro. Insights on hyporheic-zone invertebrates from six years of work in Ozark streams. Texas Groundwater Invertebrate Forum, [virtual], 20 October 2023.

Finn, D.S., S.M. Claeson, I.J. *Garthwaite, D. *Fleshman, and C.J. LeRoy. Hydrology and geomorphic setting as prevailing drivers of hyporheic assemblages in young streams undergoing primary succession. Freshwater Sciences 2023, Brisbane, Australia. 3-7 June 2023.

Finn, D.S., N.C. *Dorff and D. *Fleshman. Hyporheic-zone ecology: progress and perspectives from Missouri Ozark streams. Texas Groundwater Invertebrate Forum, [virtual], 29 October 2021.

Finn, D.S., N.C. *Dorff and D. *Fleshman. Connectivity and unique life-history traits bolster diversity in Ozark streams despite massive flow extremes. Great Plains Limnology Conference, [virtual]. 24 October 2021.

Finn, D.S., N.C. *Dorff and D. *Fleshman. Surface/subsurface connectivity promotes high diversity in a flashy Ozark stream. Ozark Studies Association Annual Conference, West Plains, MO. 23 September 2021.

Finn, D.S., S.M. Claeson, I.J. *Garthwaite, D. *Fleshman, and C.J. LeRoy. Differential hyporheic zone development among young stream channels on the Pumice Plain of Mount St. Helens (Cascade Range, USA). Society for Freshwater Science annual meeting, [virtual], 23-27 May 2021.

Finn, D.S., N.C. *Dorff and D. *Fleshman. What lurks beneath: illuminating biological pattern and process in the hyporheic underworld. Great Plains Limnology Conference, Ames, IA. 18-19 October 2019.

Finn, D.S. and S. Hotaling. Climate change in high-gradient mountain streams: searching for refugia in a heterogeneous landscape. Society for Freshwater Science annual meeting, Salt Lake City, UT. 19-23 May 2019.

*Dorff, N.C. and D.S. Finn (presenter). Surface/subsurface connectivity bolsters macroinvertebrate diversity in flashy Ozark streams. Great Plains Limnological Society meeting, Lawrence, KS. 5-6 October 2018.

Finn, D.S., R. Acosta, H. Hampel, R. Vázquez, L.M. Tronstad, S. Hotaling, J.J. Giersch, and A.C. Encalada. Vulnerability of high-altitude macroinvertebrates to climate change in tropical and temperate zones. Congreso "Aquatrop" (Tropical Aquatic Ecosystems in the Anthropocene), Quito, Ecuador. 23-26 July 2018. (special session invitee)

Finn, D.S, L.M. Tronstad, S. Hotaling, J.J. Giersch, R. Bixby, and L.H. Zeglin. Alpine streams fed by subterranean ice as potential climate refugia for temperature-sensitive taxa. Society for Freshwater Science annual meeting, Detroit, MI. 20-24 May 2018.

Finn, D.S. Introductory research overview (new member). Great Plains Limnological Society meeting, Columbia, MO. 13-14 October 2017.

Finn, D.S., W. Gerth, I. Arismendi, J. Li, and S.L. Johnson. Insect phenological responses to spatiotemporal temperature variability in headwaters of Lookout Creek, Oregon. Society for Freshwater Science annual meeting, Raleigh, NC. 4-8 June 2017.

Finn, D.S., H. Hampel, R.F. Vázquez and A.C. Encalada. Climate change could increase mayfly life-history mismatch between runoff- and groundwater-dominated alpine streams. Society for Freshwater Science annual meeting, Sacramento, CA. 21-26 May 2016. (special session invitee)

Finn, D.S., H. Hampel, and A.C. Encalada. Persistence and stability of páramo macroinvertebrate communities in streams with contrasting natural disturbance regimes. Society for Freshwater Science annual meeting, Milwaukee, WI. 17-21 May 2015.

Finn, D.S. and A.C. Encalada. A role for life-history differentiation in driving intraspecific genetic diversity in glacierized alpine basins. Joint Aquatic Sciences Meeting, Portland, OR. 18-23 May 2014. (special session invitee)

Robinson, C.T. and D.S. Finn (co-leads). Impacts of glacier reduction on biodiversity and ecosystem function in alpine streams. American Geophysical Union Fall Meeting, San Francisco. 9-13 December 2013. (special session invitee)

Finn, D.S., C. Zamora-Muñoz, M. Sáinz-Bariáin, C. Múrria, A.M. Milner, K. Khamis, and J. Alba-Tercedor. Baetis alpinus (Ephemeroptera) could lose significant genetic diversity as alpine glaciers disappear. Society for Freshwater Science annual meeting, Jacksonville, FL. 19-23 May 2013.

Finn, D.S. Linking O. kisutsch population stability to isotope-inferred diet breadth along a stream-age gradient in Glacier Bay (AK). (Or: Can this sort of "snapshot" information be useful in monitoring?). Oregon Chapter of the American Fisheries Society annual meeting, Bend, OR. 19-22 February, 2013. (special session invitee)

Finn, D.S., S.H. Sønderland, and A.M. Milner. Coho salmon population genetics and food-web complexity along a stream-age gradient in Glacier Bay National Park, Alaska. Ecological Society of America annual meeting, Portland, OR. 5-10 August 2012.

Finn, D.S., S.H. Sønderland, and A.M. Milner. Links between predator genetic diversity and food-web complexity along a stream-age gradient in Glacier Bay (Alaska, USA). Society for Freshwater Science annual meeting, Louisville, KY. 20-24 May 2012.

Finn, D.S., K. Khamis, and A.M. Milner. Loss of Pyrenean glaciers likely will have a strong negative effect on regional population-genetic diversity of Baetis alpinus (Ephemeroptera). Symposium for European Freshwater Sciences, Girona, Catalonia/Spain. 27 June – 1 July 2011. (special session invitee)

Finn, D.S., K. Khamis, and A.M. Milner. Negative biodiversity trends expected in streams following loss of small glaciers in the French Pyrénées. North American Benthological Society 59th annual meeting, Providence, RI. 22-26 May, 2011. (special session invitee)

Finn, D.S., N. Bonada, C. Múrria, and J.M. Hughes. Evidence that the smallest branches (headwaters) are vital to basin-scale diversity. North American Benthological Society / ASLO joint meeting, Santa Fe, NM. 6-11 June, 2010. (special session invitee)

Finn, D.S., K. Räsänen, and C.T. Robinson. Physical and biological changes along a glacial stream gradient after a decade of climate change induced "lengthening." North American Benthological Society 57th annual meeting, Grand Rapids, MI. 17-21 May, 2009.

Finn, D.S. Streams are branching continua, and smallest branches (headwaters) are vital to basin-scale diversity. ASLO Aquatic Sciences Meeting, Nice, France. 25-30 January, 2009. (special session invitee)

Finn, D.S., C.T. Robinson, K. Räsänen, P. Reichert, and R. Siber. Aquatic biodiversity in rapidly-changing alpine landscapes. Stage 1: broad-scale changes in zoobenthic composition and distribution in the Val Roseg. Actionfield Aquatic Ecosystems Symposium, EAWAG, Dübendorf, Switzerland. 16 Sept, 2008.

Finn, D.S., M.T. Bogan, and D.A. Lytle. A composite demographic stability metric for isolated headwater populations. North American Benthological Society 56th annual meeting, Salt Lake City, UT. 25-30 May, 2008.

Finn, D.S., D.A. Lytle, and M.T. Bogan. Varying degrees of demographic instability among populations of a desert headwater stream species. North American Benthological Society 55th annual meeting, Columbia, SC. 3-7 June, 2007.

Finn, D.S. and D.A. Lytle. Dispersal and phylogeography of a Madrean Sky Island aquatic insect, *Abedus herberti* (Hemiptera: Belostomatidae). Entomological Society of America Pacific Branch 91st annual meeting, Portland, OR. 25-28 March, 2007. (special session invitee)

Finn, D.S., D.M. Theobald, N.L. Poff, and W.C. Black IV. Phylogeography of a Rocky Mountain alpine stream insect: limited dispersal among mountaintop islands in a sea of trees. North American Benthological Society 54th annual meeting, Anchorage, AK. 4-9 June, 2006. (special session invitee)

Finn, D.S. and N.L. Poff. Looking for evidence of neutral processes in Rocky Mountain alpine stream communities: a novel approach using population genetics. North American Benthological Society/American Geophysical Union joint meeting, New Orleans, LA. 23-27 May, 2005.

Finn, D.S. and N.L. Poff. Neutral processes in alpine stream insect communities: evaluating evidence from the community and population levels. Ecological Society of America annual meeting, Portland, OR. 1-6 August 2004.

Finn, D.S., W.C. Black IV, and N.L. Poff. Population genetic structure of two alpine blackfly (Simuliidae) species in high-elevation headwater streams of the Colorado Rocky Mountains. North American Benthological Society 52nd annual meeting, Vancouver, BC. 6-10 June 2004.

Finn, D.S. and N.L. Poff. Lateral dispersal and weather-mediated flight activity of adult alpine stream insects. North American Benthological Society 51st annual meeting, Athens, GA. 27-31 May 2003.

Finn, D.S. and N.L. Poff. Temporal variability and the effects of habitat characteristics on community structure in Colorado alpine streams. North American Benthological Society 50th annual meeting, Pittsburgh, PA. 27 May – 1 June 2002.

Finn, D.S. and N.L. Poff. The influence of isolation on benthic community structure in Colorado alpine streams. North American Benthological Society 49th annual meeting, LaCrosse, WI. 3-8 June, 2001.

Finn, D.S. A GIS model to predict the relative functional connectivity of Colorado alpine stream communities. Front Range Student Ecology Symposium, Colorado State University, Fort Collins, CO. 14-15 March 2001.

Finn, D.S. and N.L. Poff. Regional influences on local community structure: are stream benthic communities saturated? North American Benthological Society 48th annual meeting, Keystone, CO. 28 May – 1 June 2000.

Finn, D.S. and N.L. Poff. Investigating the species-area relationship in stream invertebrate assemblages colonizing patches of different size and substrate complexity. North American Benthological Society 47th annual meeting, Duluth, MN. 25-28 May 1999.

OTHER RESEARCH PRESENTATIONS (student mentee as lead presenter)

Conwell, T.L. and D.S. Finn. Ecological connectivity and emergent insects: potential subsidies from two Ozark non-perennial streams. Society for Freshwater Science annual meeting, San Juan, Puerto Rico, 17-22 May 2025.

Adenola, O., H.J. Priest, and D.S. Finn. The role of fish in structuring macroinvertebrate communities in non-perennial streams. Society for Freshwater Science annual meeting, San Juan, Puerto Rico, 17-22 May 2025.

Kayhill, B.E., A.C. Encalada, and D.S. Finn. Water source influences stream macroinvertebrate communities of the tropical high Andes. Society for Freshwater Science annual meeting, San Juan, Puerto Rico, 17-22 May 2025.

Bruemmer, C., C. Pardoe, and D.S. Finn. Does Bou-Rouch sample timing affect observed community structure of hyporheic invertebrates? Society for Freshwater Science annual meeting, San Juan, Puerto Rico, 17-22 May 2025.

Bruemmer, C., C. Pardoe, and D.S. Finn. Sample timing does not affect invertebrate community structure in hyporheic samples from Ozark streams. Missouri State University Undergraduate Research Symposium, 24 April 2025.

Kayhill, B.E., A.C. Encalada, and D.S. Finn. Water source influences stream macroinvertebrate communities of the tropical high Andes. Missouri State University Undergraduate Research Symposium, 24 April 2025.

Kayhill, B.E., A.C. Encalada, and D.S. Finn. Effects of water source on stream macroinvertebrate communities of the tropical high Andes. Emerging Researchers National Conference in STEM, Atlanta, GA. 19-21 March 2025.

Bruemmer, C., C. Pardoe, and D.S. Finn. Hyporheic community sampling in Ozark streams: determining if well installation is a disturbance. Missouri Natural Resources Conference, 19-21 February 2025.

Kayhill, B.E., A.C. Encalada, and D.S. Finn. Diversity and stability of macroinvertebrate communities in streams of the tropical high Andes. AAAS Emerging Researchers National Conference in Science, Technology, Engineering and Mathematics. Washington, D.C. 24-25 October 2024.

Bruemmer, C., C. Pardoe, and D.S. Finn. Methods for sampling hyporheic communities: Is well installation a disturbance? Great Plains Limnology Conference, Omaha, NE. 18-20 October 2024.

Kayhill, B.E., A.C. Encalada, and D.S. Finn. Diversity and stability of macroinvertebrate communities in streams of the tropical high Andes. Great Plains Limnology Conference, Omaha, NE. 18-20 October 2024.

Childers, M., A. Reifsteck, J.W. Winslow, and D.S. Finn. Evaluating the relationship between fine sediments and hyporheic insect biomass in gravel-bedded streams. Society for Freshwater Science annual meeting, Philadelphia, PA. 2-6 June 2024.

Kayhill, B.E., A.C. Encalada, and D.S. Finn. Water sources affects abundance, diversity, and temporal stability of macroinvertebrate communities in the high Andes. Society for Freshwater Science annual meeting, Philadelphia, PA. 2-6 June 2024.

Kayhill, B.E., A.C. Encalada, and D.S. Finn. Stream source affects aquatic macroinvertebrate community structure and biodiversity in the tropical High Andes. Missouri State University Undergraduate Research Symposium, 25 April 2024.

Bruemmer, C., C. Pardoe, and D.S. Finn. Evaluating variables for characterizing hyporheic invertebrate communities in Ozark streams. Missouri State University Undergraduate Research Symposium, 25 April 2024.

Childers, M., A. Reifsteck, J.W. Winslow, and D.S. Finn. Evaluating the relationship between hyporheic insect biomass and fine sediments in gravel-bedded streams. Missouri State University Undergraduate Research Symposium, 25 April 2024.

Childers, M., J.W. Winslow, A. Reifsteck, and D.S. Finn. Fine sediments restrict hyporheic insect biomass in Ozark streams. Missouri Natural Resources Conference, 6-8 Feb 2024.

Reifsteck, A., L.M. Bowe, L.T. Kissoon-Charles, and D.S. Finn. Macrophytes as ecosystem engineers: Role of *Justicia americana* in disturbance-prone Ozark streams. Society for Freshwater Science annual meeting, Philadelphia, PA. 2-6 June 2024.

Childers, M., J.W. Winslow, and D.S. Finn. Fine sediments restrict hyporheic insect biomass in Ozark streams. Missouri Natural Resources Conference, 6-8 Feb 2024.

Reifsteck, A., L.T. Kissoon-Charles, L.M. Bowe, and D.S. Finn. Unexpected roles of a native macrophyte: *Justicia americana* as an ecosystem engineer in flashy Ozark streams. Missouri Botanical Symposium, Rolla, MO. 3 Nov 2023.

Winslow, J.W. and D.S. Finn. Insect community response to fine sediments in the hyporheic zone of six Ozark streams. Missouri State University Einhellig Interdisciplinary Forum, 29 April 2023.

Pardoe, C.L., J.W. Winslow, and D.S. Finn. Narrowing in on methods for assessing hyporheic communities in Ozark streams. Missouri State University Undergraduate Research Symposium, 28 April 2023.

Childers, M., J.W. Winslow, and D.S. Finn. Increased fine sediments means decreased biomass of hyporheic insects in Ozark streams. Missouri State University Undergraduate Research Symposium, 28 April 2023.

Winslow, J.W. and D.S. Finn. Insect community response to fine sediments in the hyporheic zone of six Ozark streams. Joint Annual Meeting of the North Central Branch and Southwestern Branch of the Entomological Society of America, Oklahoma City, OK. 16-19 April 2023.

Reifsteck, A., J.W. Winslow, and D.S. Finn. Aquatic plants affect insect diversity in frequently disturbed Ozark streams. 95th Annual Meeting of the Southeastern Branch of the Entomological Society of America, Little Rock, AR. 12-15 March 2023.

Pardoe, C.L., J.W. Winslow, and D.S. Finn. Methods for assessing hyporheic invertebrate assemblages in Ozark streams. Missouri Natural Resources Conference, 7-9 Feb 2023.

Winslow, J.W., C.L. Pardoe and D.S. Finn. How long should we wait after driving wells to pump representative Bou-Rouch samples? Texas Groundwater Invertebrate Forum, [virtual], 21 October 2022.

Priest, H.J. and D.S. Finn. Should I stay or should I go: macroinvertebrate resistance and resilience traits in an intermittent Ozark stream. Joint Aquatic Sciences Meeting, Grand Rapids, MI. 14-20 May 2022.

Reifsteck, A., J.W. Winslow, L.M. Bowe, L.T. Kissoon-Charles, and D.S. Finn. Water willow (*Justicia americana*): Driver or passenger of its Ozark stream ecosystem? Joint Aquatic Sciences Meeting, Grand Rapids, MI. 14-20 May 2022.

Winslow, J.W. and D.S. Finn. Towards standardized sampling of the hyporheos: How do assemblages differ when collected immediately vs several days after driving wells? Joint Aquatic Sciences Meeting, Grand Rapids, MI. 14-20 May 2022.

Priest, H.J. and D.S. Finn. Should I stay or should I go: macroinvertebrate resistance and resilience traits in an intermittent Ozark stream. Missouri State University Einhellig Interdisciplinary Forum, 7 May 2022.

Minge, G.M., H.J. Priest, and D.S. Finn. Food or flight: fish affect mayfly emergence and community composition in intermittent Ozark streams. Missouri State University Undergraduate Research Symposium, 5 May 2022.

Reifsteck, A., J.W. Winslow, L.M. Bowe, L.T. Kissoon-Charles, and D.S. Finn. Is water willow (*Justicia americana*) a driver or passenger in its Ozark stream ecosystem? Missouri State University Undergraduate Research Symposium, 5 May 2022.

Robinson, H.N., H.J. Priest, and D.S. Finn. Life history of a grazing caddisfly in an intermittent Ozark stream. Missouri State University Undergraduate Research Symposium, 5 May 2022.

Priest, H.J. and D.S. Finn. The power of pools: macroinvertebrate resilience in an intermittent Ozark stream. Missouri Natural Resources Conference, 31 Jan - 2 Feb 2022.

Robinson, H.N., H.J. Priest, and D.S. Finn. Life history of a grazing caddisfly in an intermittent stream. Missouri Natural Resources Conference, 31 Jan - 2 Feb 2022.

Winslow, J.W. and D.S. Finn. Searching the hyporheic zone: does immediate pump sampling give an accurate picture of the invertebrate community? Missouri Natural Resources Conference, 31 Jan - 2 Feb 2022.

Priest, H.J. and D.S. Finn. The creation of biodiversity post-drying in intermittent Ozark streams. Ozark Studies Symposium, West Plains, MO. 25 Sept. 2021.

Fleshman, D. and D.S. Finn. Go with the flow: downwelling zones support more hyporheic invertebrates than upwelling zones in an Ozark stream. Society for Freshwater Science annual meeting, [virtual], 23-27 May 2021.

Priest, H.J., H.N. Robinson, and D.S. Finn. An ongoing study into macroinvertebrate community recolonization in an intermittent Ozark stream. Society for Freshwater Science annual meeting, [virtual], 23-27 May 2021.

Weld, S., D.S. Finn, L.M. Tronstad, S. Hotaling, and R. Bixby. Environmental variables influence algal communities in alpine streams with different hydrologic sources. Society for Freshwater Science annual meeting, [virtual], 23-27 May 2021.

Fleshman, D. and D.S. Finn. Downwelling zones support greater density and diversity of hyporheic invertebrates than upwelling zones in an Ozark stream. Missouri State University Einhellig Interdisciplinary Forum, [virtual], 1 May 2021.

Kolf, J., A. Reifsteck, and D.S. Finn. Biomonitoring of Springfield urban streams. Missouri State University Undergraduate Research Symposium, [virtual], 30 April 2021.

Ludwig, A. and D.S. Finn. Temperature regimes in Ozark streams. Missouri State University Undergraduate Research Symposium, [virtual], 30 April 2021.

Fleshman, D. and D.S. Finn. Seasonal variation in hyporheic invertebrate communities between upwelling and downwelling zones of an Ozark stream. Missouri Natural Resources Conference, [virtual], 2-4 Feb 2021.

Fleshman, D. and D.S. Finn. Variation in hyporheic invertebrate communities between upwelling and downwelling zones of a gravel-bed Ozark stream. Society for Freshwater Science virtual "Summer of Science", 9-12 June 2020.

Cheri, C.R. and D.S. Finn. Odonate communities in Ozark springs respond strongly across a steep riparian gradient. Great Plains Limnology Conference, Ames, IA. 18-19 October 2019.

Coppock, N., P. Blankenship, A.C. Encalada, H. Hampel, and D.S. Finn. Effect of a multi-month volcanic eruption on macroinvertebrate communities and populations in high-elevation Ecuadorian streams. Great Plains Limnology Conference, Ames, IA. 18-19 October 2019.

Williams, J.M., H.R. Dodd, and D.S. Finn. A low-water crossing impacts movement behavior of Northern Hog Suckers in an Ozark stream. American Fisheries Society 149th Annual Meeting, Reno, NV. 29 Sept – 3 Oct 2019.

Cheri, C.R. and D.S. Finn. Riparian effects on odonate assemblages in Ozark spring streams. Society for Freshwater Science annual meeting, Salt Lake City, UT. 19-23 May 2019.

Dorff, N.C. and D.S. Finn. Hyporheic secondary production and life history of a common stonefly in an Ozark stream. Society for Freshwater Science annual meeting, Salt Lake City, UT. 19-23 May 2019.

Cheri, C.R. and D.S. Finn. Riparian effects on odonate assemblages in Ozark spring streams. Missouri State University Einhellig Interdisciplinary Forum, 4 May 2019.

Dorff, N.C. and D.S. Finn. Hyporheic secondary production and life history of a common stonefly in the Ozarks. Missouri State University Einhellig Interdisciplinary Forum, 4 May 2019.

Blankenship, P., N. Coppock, A.C. Encalada, H. Hampel, and D.S. Finn. Effect of a large volcanic eruption on macroinvertebrates in high elevation Ecuadorian streams. Missouri State University Undergraduate Research Symposium, 3 May 2019.

Means, J.P. and D.S. Finn. Morphological variation of the snail Pleurocera acuta across a 6th-order stream network. Missouri State University Undergraduate Research Symposium, 3 May 2019.

Morales, V.L. and D.S. Finn. Size distributions of the snail *Elimia potosiensis* in response to flash floods in an Ozark stream. Missouri State University Undergraduate Research Symposium, 3 May 2019.

Morales, V.L. and D.S. Finn. Recolonization of snails in an Ozark stream with flashy flows. Emerging Researchers National Conference in STEM (through Missouri LSAMP program), Washington, D.C. 21-23 Feb 2019.

Williams, J.M., H.R. Dodd, and D.S. Finn. A low-water crossing impacts Northern Hog Sucker (*Hypentelium nigricans*) movement in an Ozark stream. Missouri Natural Resources Conference, 5-7 Feb 2019.

Cheri, C.R. An odonate survey of the Buffalo National River. Great Plains Limnological Society meeting, Lawrence, KS. 5-6 October 2018.

Dorff, N.C. and D.S. Finn. Variable response to flood disturbance in benthic and hyporheic invertebrate communities in an Ozark groundwater-flashy stream. American Fisheries Society 148th Annual Meeting, Atlantic City, NJ. 19-24 Aug 2018.

Williams, J.M., H.R. Dodd, and D.S. Finn. A low-water crossing impacts longitudinal movement behavior of Northern Hog Sucker (*Hypentelium nigricans*) and Knobfin Sculpin (*Cottus immaculatus*) in an Ozark river. American Fisheries Society 148th Annual Meeting, Atlantic City, NJ. 19-24 Aug 2018.

Dorff, N.C. and D.S. Finn. Aquatic invertebrate communities vary between streambed habitats with variable connection to the hyporheic zone in an Ozark gravel-bed stream. Society for Freshwater Science annual meeting, Detroit, MI. 20-24 May 2018.

Williams, J.M., H.R. Dodd, and D.S. Finn. A low-water crossing impacts longitudinal movement behavior of two fish species in an Ozark river. Society for Freshwater Science annual meeting, Detroit, MI. 20-24 May 2018.

Williams, J.M., H.R. Dodd, and D.S. Finn. A low-water crossing impacts longitudinal movement behavior of two fish species in an Ozark stream. Missouri State University Einhellig Interdisciplinary Forum, 5 May 2018.

Williams, J.M., H.R. Dodd, and D.S. Finn. The impacts of a low-water crossing on fish movement in an Ozark stream. Missouri Natural Resources Conference, 31 Jan - 2 Feb 2018.

EXAMPLES OF RESEARCH-RELATED MEDIA ATTENTION

Wyoming Public Radio, 2018: Scientists Race to Research Stonefly Species Threatened by Climate Change. https://tinyurl.com/y27rla9s

The Standard (MSU student newspaper), 2018: What's the Buzz with Stoneflies? https://tinyurl.com/y45ppxnm

Ozarks Public Radio, 2019: Seeing Global Warming Up Close. https://tinyurl.com/y3zecm3w

Mountain Views, Newsletter of the Consortium for Integrated Climate Research in Western Mountains (CIRMOUNT), 2019: Voices in the Wind. https://www.fs.fed.us/psw/cirmount/publications/pdf/Mtn_Views_dec_19.pdf

The Daily News (Longview, WA), 2020: Sex and the Volcano: Researcher Learns Nature Favors Females in New Creeks. https://tinyurl.com/y4ataeo

MSU College of Natural and Applied Sciences NewsWatch, 2020: A summer of (mostly virtual) science. https://tinyurl.com/y2zsp86h

HJ Andrews Experimental Forest Research Highlights, 2022: Stream temperature and insect emergence. https://andrewsforest.oregonstate.edu/research/highlights/stream-temperature-and-insect-emergence

University of Melbourne "Pursuit" column by collaborator Barbara Downes, 2022: Saving aquatic insects: we may be looking in the wrong place. https://pursuit.unimelb.edu.au/articles/saving-aquatic-insects-we-may-be-looking-in-the-wrong-place

Community Foundation of the Ozarks, 2022: Preserving Bull Mills, Bob & Barb Kipfer. https://www.cfozarks.org/resources/bull-mills-video

Mind's Eye, Missouri State University, 2024: Deciphering the Disturbances. https://blogs.missouristate.edu/mindseye/deciphering-the-disturbances/