# HALVOR M. HALVORSON

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## **RESEARCH EXPERTISE:** Aquatic ecology, biogeochemistry, trophic ecology Ecological stoichiometry and nutrition of detritivorous animals Nutrient pollution and eutrophication in aquatic systems Significance and taxonomic diversity of animals in ecosystem functions Aquatic microbial ecology, particularly autotroph-heterotroph interactions

## **EDUCATION:**

- **2016** PhD. Biological Sciences, University of Arkansas Advisor: Dr. Michelle A. Evans-White
- 2011 B.A. Biology and Chemistry (cum laude), St. Olaf College

## **APPOINTMENTS:**

2019-present	Assistant Professor, University of Central Arkansas
2016-2019	Postdoctoral Research Associate, University of Southern Mississippi
2014-2016	Graduate Teaching Assistant, University of Arkansas
2011-2014	Graduate Research Assistant, University of Arkansas

<u>PUBLICATIONS (mentored \*undergraduate or ^graduate student co-author):</u> Google Scholar metrics as of August 11, 2022: citations=**560**, H-index=**14** 

[30] Redinger, J. M., **H. M. Halvorson**, and M. Gifford. 2022. Variable stoichiometric and macronutrient responses to lizard predation in Ozark glade grasshopper communities. *Oecologia*.

[29] Costello, D.M., S.D. Tiegs, L. Boyero, C. Canhoto, K.A. Capps, M. Danger, P.C. Frost, M.O. Gessner, N.A. Griffiths, **H.M. Halvorson**, et al. 2022. Global patterns and controls of nutrient immobilization on decomposing cellulose in riverine ecosystems. *Global Biogeochemical Cycles* 36: e2021GB007163.

[28] Ashberry, E.L., S.T. Rier, **H.M. Halvorson**, and K.A. Kuehn. 2021. Algal-driven priming of cellulose decomposition along a phosphorus gradient in stream mesocosms. *Freshwater Science* 40: 580-592.

[27] Atkinson, C.L., **H.M. Halvorson**, G.W. Hopper, M.A. Evans-White, and M.J. Vanni. In press. Ecological Stoichiometry in Streams. Chapter in *Encyclopedia of Inland Waters*, editor: N. LeRoy Poff.

[26] Lodato, M., J. Boyette, R. Smilo, C. Jackson, **H.M. Halvorson**, and K.A. Kuehn. 2021. Identity and contribution of saprotrophic fungi during standing litter decomposition of two perennial grass species, *Schizachyrium scoparium* and *Schizachyrium tenerum*. *Oecologia* 195: 499-512.

[25] ^Price, T.L., **H.M. Halvorson**, and K.A. Kuehn. 2021. Light and dissolved nutrient availability alter detritivore assimilation of microbial nutrients from leaf litter. *Ecology* 102: e03358.

[24] \*Hebert, T., **H.M. Halvorson**, and K.A. Kuehn. 2021. Stoichiometry, fungal dynamics, and decomposition of standing dead emergent macrophytes: A global synthesis of field studies. *Oikos* 130: 958-968.

[23] <sup>A</sup>Brady, C.M., **H.M. Halvorson**, S.N. Francoeur, and K.A. Kuehn. 2021. Contrasting effects of two consumer species on leaf litter microbial dynamics under light manipulation. *Freshwater Science* 40: 340-353.

[22] Atkinson, C.L., **H.M. Halvorson**, K.A. Kuehn, M. Winebarger, A. Hamid, and M.N. Waters. 2021. Filter-feeders have differential bottom-up impacts on green and brown food webs. *Oecologia* 195: 187-198.

[21] Evans-White, M.A., A. Smartt, **H.M. Halvorson**, S.A. Entrekin, and J.T. Scott. Leaflitter phosphatase activity, respiration, stoichiometry, and decomposition as phosphorus enrichment endpoints: a laboratory experiment. 2021. *Freshwater Science* 39: 665-679.

[20] **Halvorson, H.M.**, K.H. Wyatt, and K.A. Kuehn. 2020. Ecological significance of autotroph-heterotroph microbial interactions in freshwaters. *Freshwater Biology* 65: 1183-1188.

[19] Howard-Parker, B., B. White, **H.M. Halvorson**, and M.A. Evans-White. 2020. Light and dissolved nutrients mediate recalcitrant organic matter decomposition via microbial priming in experimental streams. *Freshwater Biology* 65: 1189-1199.

[18] Eckert, R., **H.M. Halvorson**, Kuehn, K.A., and Lamp, W.O. 2020. Macroinvertebrate community patterns in relation to leaf-associated periphyton under contrasting light and nutrient conditions in headwater streams. *Freshwater Biology* 65: 1270-1287.

[17] \*Pope, C.A., **H.M. Halvorson**, R.H. Findlay, S.N. Francoeur, and K.A. Kuehn. 2020. Light and temperature mediate algal stimulation of heterotrophic activity on decomposing leaf litter. *Freshwater Biology* 65: 1210-1222.

[16] **Halvorson, H.M.** and C.L. Atkinson. 2019. Egestion versus excretion: A metaanalysis examining nutrient release rates and ratios across freshwater fauna. *Diversity* 11: 189. [15] **Halvorson, H.M.,** C.L. Fuller, S.A. Entrekin, J.T. Scott, and M.A. Evans-White. 2019. Interspecific homeostatic regulation and growth across aquatic invertebrate detritivores: a test of ecological stoichiometry theory. *Oecologia* 190: 229-242.

[14] **Halvorson, H.M.**, S.N. Francoeur, R.H. Findlay, and K.A. Kuehn. 2019. Algalmediated priming effects on the ecological stoichiometry of leaf litter decomposition: a meta-analysis. *Frontiers in Earth Science* 7: 76.

[13] **Halvorson, H.M.**, J.R. Barry, M.B. Lodato, R.H. Findlay, S.N Francoeur, and K.A. Kuehn. 2019. Periphytic algae decouple fungal activity from litter decomposition via negative priming. *Functional Ecology* 33: 188-201.

[12] **Halvorson, H.M.**, C.L. Fuller, S.A. Entrekin, J.T. Scott, and M.A. Evans-White. 2018. Detrital nutrient content and leaf species differentially affect growth and nutritional regulation of detritivores. *Oikos* 127: 1471-1481.

[11] **Halvorson, H.M.**, E. Sperfeld, and M.A. Evans-White. 2017. Quantity and quality limit detritivore growth: mechanisms revealed by ecological stoichiometry and co-limitation theory. *Ecology* 98: 2995-3002.

[10] Evans-White, M.A., and **H.M. Halvorson**. 2017. Comparing the ecological stoichiometry in green versus brown food webs--a review and meta-analysis of freshwater food webs. *Frontiers in Aquatic Microbiology* (Special Topic on Ecological Stoichiometry). \*Both authors contributed equally to this work\*

[9] Meunier, C.L., M. Boersma, R. El-Sabaawi, **H.M. Halvorson**, E.M. Herstoff, D.B. Van de Waal, R.J. Vogt, and E. Litchman. 2017. From elements to function: Toward unifying ecological stoichiometry and trait-based ecology. *Frontiers in Environmental Science* (Special Topic on Ecological Stoichiometry).

[8] **Halvorson, H.M.**, D.J. Hall\*, and M.A. Evans-White. 2017. Long-term stoichiometry and fates highlight animal egestion as nutrient repackaging, not recycling, in aquatic ecosystems. *Functional Ecology* 31: 1802-1812.

[7] Sperfeld, E., N.D. Wagner, **H.M. Halvorson**, M. Malishev, and D. Raubenheimer. 2017. Bridging Ecological Stoichiometry and Nutritional Geometry with homeostasis concepts and integrative models of organism nutrition. *Functional Ecology* 31: 286-296.

[6] Sperfeld, E., **H.M. Halvorson**, F.J. Clissold, M. Malishev, and N.D. Wagner. 2016. Woodstoich III: Integrating tools of Nutritional Geometry and Ecological Stoichiometry to advance nutrient budgeting and the prediction of consumer-driven nutrient recycling. *Oikos* 125: 1539-1553.

[5] **Halvorson, H.M.** and G.E. Small. 2016. Observational field studies are not appropriate tests of consumer stoichiometric homeostasis. *Freshwater Science* 35: 1103-1116.

[4] **Halvorson, H.M.**, E.E. Scott, S.A. Entrekin, M.A. Evans-White, and J.T. Scott. 2016. Light and dissolved phosphorus interactively affect microbial metabolism, stoichiometry and decomposition of leaf litter. *Freshwater Biology* 61: 1006-1019.

[3] **Halvorson, H.M.**, G. White\*, J.T. Scott, and M.A. Evans-White. 2016. Dietary and taxonomic controls on incorporation of microbial carbon and phosphorus by detritivorous caddisflies. *Oecologia* 180: 567-579.

[2] **Halvorson, H.M.**, C. Fuller, S.A. Entrekin, and M.A. Evans-White. 2015. Dietary influences on production, stoichiometry and decomposition of particulate wastes from shredders. *Freshwater Biology* 60: 466-478.

[1] **Halvorson, H.M.**, J.T. Scott, A.J. Sanders\*, and M.A. Evans-White. 2015. A stream insect detritivore violates common assumptions of threshold elemental ratio bioenergetics models. *Freshwater Science* 34: 508-518.

## **PUBLICATIONS IN REVIEW** (mentored \*undergraduate or ^graduate coauthor):

[1] <sup>^</sup>Hebert, T. A., K. A. Kuehn, and **H. M. Halvorson**. Land use alters detritivore feeding and microbial interactions during leaf decomposition in headwater streams. In revision. *Freshwater Biology*.

# **OTHER COMMUNICATIONS**

[1] "Breaking down leaves is basically hard work, so if the fungi have the option of an easier life, they take it?" Ken Thompson Interviews Hal Halvorson. Podcast for the official blog of *Functional Ecology*, a British Ecological Society journal. 27 Feb 2020. Link.

[2] "Living Openly" Blog post by Hal Halvorson for the official blog of *Functional Ecology* featuring openly LGBTQ+ ecologists. 30 June 2020. Link.

# **FUNDED GRANTS**

Grants Funded at UCA as Principle or co-Principle Investigator:

[1] **Arkansas Division of Environmental Quality** (2021-present). Data collection for the development and/or revision of water quality criteria for wadeable streams in the Eastern Gulf Coastal Plains Ecoregion Ouachita River Basin. PI: Ginny Adams; co-PIs: Hal Halvorson and Reid Adams – University of Central Arkansas. \$158,250.

[2] **National Science Foundation** (2021-present). NSF EPSCoR RII Track-2 FEC: From Ecosystems to Evolution: Harnessing elemental data to detect stoichiometric controlpoints and their consequences for organismal evolution. PI: Jessica Corman – University of Nebraska; co-PIs: Hal Halvorson – University of Central Arkansas, Eric Moody – Middlebury College, Amy Krist, and Catherine Wagner – University of Wyoming. \$5,987,352 (Total award); \$562,847 (UCA award). [3] **GBMc & Associates** (2021-present). Environmental Protection Agency 319: Water quality monitoring of White Oak Bayou, Arkansas. PI: Hal Halvorson; co-PI: Matthew Connolly – University of Central Arkansas. \$5,000.

[4] **Conway Corporation (**2019-present). Water quality monitoring of the drinking water reservoir of Conway, Arkansas. Hal Halvorson, Ginny Adams, Reid Adams, and Brent Hill (co-PIs) – University of Central Arkansas. \$240,236.

Grants Funded at UCA as Senior Personnel:

[1] **National Science Foundation** (2021-present). NSF REU Site: Assessment and sustainable management of ecosystems at the nexus of food, energy, and water systems. PIs: Michelle Evans-White, Kusum Naithani, and Marty Matlock – University of Arkansas. \$387,283.

[2] **National Science Foundation** (2021-present): Aquatic N<sub>2</sub>-Fixation Research Coordination Network. National Science Foundation. PIs: J. Thad Scott – Baylor University, Robinson W. Fulweiler – Boston University, and Amy Marcarelli – Michigan Technological University. \$499,700.

Grants Funded as co-PI, grant author, or primary project mentor before UCA:

[1] **National Science Foundation** (2019). NSF Research Experience for Teachers (RET) Summer Supplement. \$14,000.

[2] **University of Southern Mississippi** (2017 and 2018). Undergraduate SPUR grants. \$3,000.

[3] **National Science Foundation** (2017 and 2018). Research Experience for Undergraduates (REU) Summer Supplements. \$12,500.

[4] University of Southern Mississippi (2017). Undergraduate travel grant. \$2,200.

[5] University of Southern Mississippi (2017). Graduate travel grant. \$1,000.

[6] **National Science Foundation** (2015-2016). Doctoral Dissertation Improvement Grant (DDIG). \$19,000.

[7] Society for Freshwater Science (2015). General Endowment Award. \$1,000

[8] **National Science Foundation** (2014). Travel grant to attend Woodstoich workshop in Sydney, Australia. \$1,600.

[9] **University of Arkansas Graduate School** (2012-2016). Travel grants to attend Society for Freshwater Science meetings. \$5,500

## AWARDS and SCHOLARSHIPS:

**2020** British Ecological Society Haldane Prize - Shortlist

2016 Delbert Swartz Endowed Graduate Fellowship, U of Arkansas

2015 Volunteer of the Year Award, Beaver LakeSmart Program

2011-2015 Doctoral Academy Fellowship, University of Arkansas

**SELECTED PRESENTATIONS** (last 3 yrs only; \*undergrad or ^grad co-author):

[78] Bearden, K. C. Brucker, A. Zhu, **H.M. Halvorson**, S. Collins, A. Dycus\*, and C. Tolly\*. Literature survey results reflect priorities and gaps in organismal aquatic stoichiometry. American Fisheries Society (AFS) National Meeting, August 2022, Spokane, WA.

[77] Lehman, R., M. Wozniak<sup>^</sup>, **H.M. Halvorson**, G. Adams, and R. Adams. Fish assemblage patterns across the South Central Plains of Arkansas: A preliminary analysis. Joint Meeting of Ichthyology and Herpetology, July 2022, Spokane, WA.

[76] Everett, B., **H.M. Halvorson**, and M. Connolly. Land use effects on water quality in the rapidly urbanizing White Oak Bayou watershed, Arkansas. Arkansas Watersheds and Water Resources Conference, July 2022, Fayetteville, AR.

[75] ^Pignatelli, A., E. Cherry, E. Larson, E. Moody, M. Connolly, J. Corman, and **H.M. Halvorson**. Stoichiometry of leaf litter in Central Arkansas streams. Joint Aquatic Sciences Meeting, May 2022, Grand Rapids, MI.

[74] \*Everett, B., **H.M. Halvorson**, and M. Connolly. Land use effects on water quality in the rapidly urbanizing White Oak Bayou watershed, Arkansas. Joint Aquatic Sciences Meeting, May 2022, Grand Rapids, MI.

[73] <sup>^</sup>Hebert, T., M. Wozniak<sup>^</sup>, P. Cook<sup>\*</sup>, A. Dycus<sup>\*</sup>, D. Romine<sup>^</sup>, H. Strom<sup>\*</sup>, K. Kuehn, and **H.M. Halvorson**. Response of microbial vs. invertebrate-driven leaf decomposition to land use in Arkansas streams. Joint Aquatic Sciences Meeting, May 2022, Grand Rapids, MI.

[72] Brucker, C., **H.M. Halvorson**, S. Collins, and J. Corman. Collaborative solutions: The creation of an open source stoichiometry database (STOICH). Joint Aquatic Sciences Meeting, May 2022, Grand Rapids, MI.

[71] \*Embray, S., **H.M. Halvorson**, T. Hebert<sup>^</sup>, T. Voegele, and Z. Chowdhury. Seasonal variation in algae and relationships to drinking water quality in an Arkansas reservoir. Joint Aquatic Sciences Meeting, May 2022, Grand Rapids, MI.

[70] ^Bradshaw, L., **H.M. Halvorson**, T. Hebert<sup>^</sup>, T. Voegele, and Z. Chowdhury. Annual and seasonal nutrient dynamics in a Central Arkansas drinking water reservoir. Joint Aquatic Sciences Meeting, May 2022, Grand Rapids, MI. [69] <sup>^</sup>Wozniak, M., R. Lehman, G. Adams, R. Adams, and **H.M. Halvorson**. Land use impacts on water chemistry and macroinvertebrate communities in low-gradient Arkansas streams. Joint Aquatic Sciences Meeting, May 2022, Grand Rapids, MI.

[68] Cherry, E., **H.M. Halvorson**, E. Moody, A. Pignatelli<sup>^</sup>, J. Corman, and E. Larson. Impacts of land use change on freshwater systems of southcentral Alaska, using ecological stoichiometry and functional diversity approaches. Joint Aquatic Sciences Meeting, May 2022, Grand Rapids, MI.

[67] Bearden, K., C. Brucker, A. Zhu, **H.M. Halvorson**, S. Collins, A. Dycus\*, and C. Tolly\*. Literature survey results reflect priorities and gaps in organismal aquatic stoichiometry. Joint Aquatic Sciences Meeting, May 2022, Grand Rapids, MI.

[66] Kuehn, K., E. Nettleton, **H.M. Halvorson**, S. Koury, and S. Francoeur. A test of algal priming effects on wood decomposition in a lentic ecosystem. Joint Aquatic Sciences Meeting, May 2022, Grand Rapids, MI.

[65] \*Everett, B., M. Connolly, and **H.M. Halvorson**. UCA monitoring of water quality in White Oak Bayou. White Oak Bayou Wetland Conservancy, April 2022, Maumelle, AR.

[64] **Halvorson, H.M.** Mentorship can break down barriers for diversity in STEM. UCA Faculty Research Symposium: Diversity, Belonging, Inclusion, and Equity, March 2022, Conway, AR (virtual).

[63] Lehman, R., M. Wozniak<sup>^</sup>, **H.M. Halvorson**, G. Adams, and R. Adams. The influence of land-use on fish assemblage patterns across the Gulf Coastal Plains of Arkansas. Southeastern Fishes Council, November 2021, Columbus, GA.

[62] Chowdhury, Z., T. Voegele, and **H.M. Halvorson**. Understanding the factors affecting algal blooms for better management of taste and odor compounds and cyanotoxins. Southwest American Water Works Association conference, October 2021, Tulsa, OK.

[61] Chowdhury, Z., T. Voegele, T. Hebert<sup>^</sup>, and **H.M. Halvorson**. Understanding the factors affecting algal blooms for better management of taste and odor compounds and cyanotoxins. Southwest American Water Works Association conference, August 2021, Mobile, AL.

[60] <sup>^</sup>Hebert, T., **H.M. Halvorson**, and K. Kuehn. Land use effects on nutrient limitation and priming effects in an Arkansas watershed. Oral presentation at the Society for Freshwater Science Meeting, May 2021 (virtual).

[59] Cummins, C., A. Rosemond, **H.M. Halvorson**, A. Rugenski, S. Wenger, J. Benstead, V. Gulis, P. Bumpers, and N. Tomczyk. Testing the effects of temperature and carbon

quality on shredder growth, survival, consumption, and development. Oral presentation at the Society for Freshwater Science Meeting, May 2021 (virtual).

[58] Cross, D., K. Capps, **H.M. Halvorson**, and S. Tiegs. Influence of watershed- and reach-scale variables on organic matter processing in an urban watershed (Atlanta, GA). Poster presentation at the Society for Freshwater Science Meeting, May 2021 (virtual).

[57] **Halvorson, H.M.**, K. Kuehn, S. Francoeur, T. Grandjean\*, and P. Jarman. Light and dissolved N:P availability affect degradative enzyme activity during leaf litter decomposition. Oral presentation at the Society for Freshwater Science Meeting, May 2021 (virtual).

[56] Robbins, C., **H.M. Halvorson**, D. Manning, E. Bastias, C. Biasi, A. Dodd, R. Eckert, A. Gossiaux, J. Jabiol, A. Mehring, B. Norman, and A. Pastor. A global synthesis of nutrient content dynamics in freshwater detritus. Oral presentation at the Society for Freshwater Science Meeting, May 2021 (virtual).

[55] Tiegs, S., L. Boyero, C. Canhoto, K. Capps, M. Danger, P. Frost, M. Gessner, N. Griffiths, **H.M. Halvorson**, K. Kuehn, A. Marcarelli, D. Mathie, T. Royer, and D. Costello. Global-scale controls of nutrient immobilization in streams and riparian zones. Oral presentation at the Society for Freshwater Science Meeting, May 2021 (virtual).

[54] Harper, J., K. Kuehn, **H.M. Halvorson**, R. Findlay, and S. Francoeur. Oxygen, pH, and labile organic carbon as possible mechanisms for algal stimulation of bacterial and fungal production in periphyton. Poster presentation at the Society for Freshwater Science Meeting, May 2021 (virtual).

[53] Brucker, C., S. Collins, J. Corman, **H.M. Halvorson**, and A. Krist. Building a broadscale ecological stoichiometry database. Poster presentation at the Society for Freshwater Science Meeting, May 2021 (virtual).

[52] ^Romine, D., T. Hebert<sup>^</sup>, H. Strom<sup>\*</sup>, and **H.M. Halvorson**. Land use and light effects on leaf litter decomposition in the Point Remove watershed, Arkansas. Oral presentation at the CNSM Annual Symposium, April 2021 (virtual).

[51] \*Strom, H., D. Romine<sup>^</sup>, T. Hebert<sup>^</sup>, and **H.M. Halvorson**. Land use effects on stream invertebrate colonization of leaf litter in the Point Remove watershed, Arkansas. Oral presentation at the CNSM Annual Symposium, April 2021 (virtual).

[50] **Halvorson, H.M.** Interactions between green and brown energy flow pathways in aquatic ecosystems. Biology Department Seminar Series, Eastern Michigan University, April 2021 (virtual).

[49] **Halvorson, H.M.**, P. Jarman, and K. Kuehn. Algal influences on litter decomposition across experimental dissolved N and P gradients. Poster presentation at the Great Plains Limnology Conference, October 2020 (virtual).

[48] **Halvorson, H.M.**, P. Jarman, and K. Kuehn. Experimental tests of algal priming effects during litter decomposition across dissolved N:P gradients. Poster presentation at the Society for Freshwater Science Meeting, June 2020 (virtual).

[47] **Halvorson, H.M.** Opportunities to harness the environmental data revolution. Computer/Engineer/Information Science Program Seminar, University of Arkansas – Little Rock, April 2020 (virtual).

[46] **Halvorson, H.M.** Interactions between green and brown energy flow pathways at the base of aquatic ecosystems. Hendrix College Department of Biology Seminar in Conway, AR; March 2020.

[45] **Halvorson, H.M.** Interactions between "green" and "brown" pathways of energy flow at the base of aquatic ecosystems. University of Central Arkansas Department of Biology Seminar in Conway, AR; Nov 2019.

# **TEACHING EXPERIENCE:**

Instructor of Record:

**BIOL 6102: Grad Seminar: Science Ethics**, University of Central Arkansas, Spring 2020 **ENVR 4410: Environmental Practicum**, University of Central Arkansas, Spring 2020; Spring 2022

BIOL 4195: Biology capstone, Fall 2022

**BIOL 4V90: Special Topics: Freshwater Ecology**, Spring 2021; Spring 2022 (w/ F. Osburn)

**BIOL 3404: General Ecology**, University of Central Arkansas, Fall 2019; Fall 2020; Spring 2021; Fall 2021; Spring 2022 (w/ F. Osburn)

BSC 340: Introductory Ecology, University of Southern Mississippi, Fall 2017

Guest Lecturer:

Environmental Theory and Applications, University of Central Arkansas, Fall 2019 Introductory Ecology, University of Southern Mississippi, Spring 2019 Ecology, Centenary College of Louisiana, Fall 2018 Evolution, Organisms, and Ecology, DePauw University, Fall 2018 Introductory Ecology, University of Southern Mississippi, Fall 2018 Microbial Ecology, University of Southern Mississippi, Spring 2018 Introductory Ecology, University of Southern Mississippi, Fall 2016 Honors Principles of Biology, University of Southern Mississippi, Fall 2016 Introduction to Water Quality, University of Arkansas, Fall 2015 Introduction to Water Quality, University of Arkansas, Fall 2012

*Laboratory Teaching Assistant:* **General Ecology Laboratory**, University of Arkansas, Fall 2014

**General Ecology Laboratory**, University of Arkansas, Fall 2015 **General Ecology Laboratory**, University of Arkansas, Spring 2016 **Population Ecology Laboratory**, University of Arkansas, Spring 2015

## PROFESSIONAL DEVELOPMENT:

Participant, STOICH mentor training workshop series, 2021-2022 Panelist and participant, Society for Freshwater Science Justice, Equity, Diversity, and Inclusion Mentorship workshop, May 2021

Participant, UCA College of Education Centering Equity Conference, May 2021 Participant, UCA CETAL Student Lived Experiences: LGBTQ+ Lived Experiences, October 2021

Participant, UCA CTE Diversity, Belonging, Inclusion, and Equity summer session, July 2020

Participant, UCA CTE New Faculty Learning Community, Fall 2019 Participant, UCA CTE Mini-conference: Barriers & Breakthroughs in Student Learning, August 2019

## **SERVICE:**

UCA Biology Department Service:

Member, Undergraduate Research and Student Research Funds committee, 2019present

Member, Graduate committee, 2020-present

UCA College of Natural Science and Mathematics Service:

At-large member, CNSM Research committee, 2021-present

Reviewer, UCA Foundation Scholarships, 2020

Faculty advisor, Allies in STEM Registered Student Organization, 2020-present

Professional Activities and Affiliations:

Peer reviewer for >30 academic journals including PLoS ONE (4), Freshwater Science (4), Freshwater Biology (3), Hydrobiologia (3), Limnology & Oceanography (3), Ecology (3), Functional Ecology (2), Ecological Applications (1), Global Ecology and Biogeography (1), Oecologia (1), Proceedings of the Royal Society B (1), Ecosystems (1) Oikos (1), Journal of Animal Ecology (1), Environmental Science & Technology (1), Fundamental and Applied Limnology (1), Aquatic Ecology (1), Aquatic Toxicology (1), Frontiers in Ecology & Evolution (1), Frontiers in Microbiology (1), Frontiers in Zoology (1), Marine & Freshwater Research (1), Biotropica (1), Aquatic Sciences (1), Wetlands (1), Wetlands Ecology & Management (1), Science of the Total Environment (1), Scientific Reports (1), The Prairie Naturalist (1), Aquatic Invasions (1), Water (1), Journal of Ecology and the Natural Environment (1)

Co-organizer of the 2<sup>nd</sup> Conference on Biological Stoichiometry; Lincoln, NE; March 2023

Co-organizer of workshop titled "Communicating data through graphics and visualization" at the Joint Aquatic Sciences Meeting (JASM) in Grand Rapids, MI; May 2022

Chair of special session on autotroph-heterotroph interactions at the Society for Freshwater Science (SFS) meeting in Detroit, MI; May 2018

Guest Editor and lead organizer of Special Issue on autotroph-heterotroph interactions, published in *Freshwater Biology* July 2020.

Member of Society for Freshwater Science (SFS)

#### Student mentorship:

#### Graduate student primary advisor (4 total):

Tori Hebert, M.S. student at University of Central Arkansas; 2019-2021 Molly Wozniak, M.S. student at University of Central Arkansas; 2021-present Anthony Pignatelli, M.S. student at University of Central Arkansas; 2021-present Lydia Bradshaw, M.S. student at University of Central Arkansas; 2021-present

*Graduate student co-advisor with Dr. Kevin Kuehn (2 total):* Cheyenne Brady, M.S. student at University of Southern Mississippi; 2016-2019 Taylor Price, M.S. student at University of Southern Mississippi; 2016-2018

#### Graduate committee member (10 total):

Ethan Nettleton, M.S. student at University of Southern Mississippi; 2019-present Saysha Sebren, Ph.D. student at University of Southern Mississippi; 2019-present Jaclyn Everly, Ph.D. student at Illinois State University; 2020-present Matthew Lodato, Ph.D. student at University of Alabama; 2021-present Joseph Redinger, M.S. student at University of Central Arkansas; 2019-2021 Chance Garrett, M.S. student at University of Central Arkansas; 2019-present Ben O'Connell, M.S. student at University of Central Arkansas; 2020-2022 Jackson Renfroe, M.S. student at University of Central Arkansas; 2020-2022 Ryne Lehman, M.S. student at University of Central Arkansas; 2021-present Tanner Senti, M.S. student at University of Central Arkansas; 2021-present

*Undergraduate Honors thesis committee member (3 total):* 

Emiley Sorge, Environmental Science student at University of Central Arkansas; 2022 Mackenzie Hoogshagen, Biology student at University of Central Arkansas; 2020 James DuBose, Biology student at University of Central Arkansas; 2020

*Undergraduate student research mentor while at UCA:* Madison Allen, 2022-present (University of Central Arkansas Honors student)

Odina Beckett, 2022-present (University of Central Arkansas) Blessing Onisemo-Ibrahim, 2022 (University of Rochester - Arkansas NSF REU student) Rachel Wilcox, 2021-present (University of Central Arkansas) Colton Dillon, 2021-present (University of Central Arkansas) Noah Davis, 2021-2022 (University of Central Arkansas) Celeste Johnson, 2021-2022 (University of Central Arkansas) Peyton Cook, 2021 (University of Central Arkansas) Beka Bradford, 2021-2022 (University of Central Arkansas) Connor Tolly, 2021 (University of Central Arkansas) Skye Embray, 2021-2022 (Trinity College – Arkansas NSF REU student) Aimee Dycus, 2021-2022 (University of Central Arkansas) Brittany Krug, 2021 (University of Central Arkansas) Brandy Everett, 2021-2022 (University of Central Arkansas) Eli Kemp, 2020 (Lyon College) Elliott Short, 2020 (University of Central Arkansas) Tyler Grandjean, 2020-present (University of Central Arkansas) Hunter Strom, 2019-2021 (University of Central Arkansas) Megan Harsh, 2020-2021 (U of Central Arkansas) Taylor Coulson, 2019-2020 (U of Central Arkansas) Jackson Deese, 2019-2020 (U of Central Arkansas)

Undergraduate student mentor while at Southern Miss: Abby Rankin, 2018-2019 (University of Alabama) Lucas Glisson, 2018-2019 (University of Alabama) Gabriella Dickinson, 2018 (University of Alabama) Ethan Nettleton; 2018-2019 (University of Southern Miss) Brody Keys; 2017-2018 (University of Southern Miss) Cody Pope, Honors and NSF-REU Student; 2016-2019 (University of Southern Miss) Tori Hebert, Honors and NSF-REU Student; 2016-2019 (University of Southern Miss) Savannah Underwood, Honors Student; 2016-present (University of Southern Miss) Taylor Sims; Honors Student; 2017-2018 (University of Southern Miss) Elizabeth Moore; 2017-2018 (University of Southern Miss) Joshua Wilkinson; 2016-2017 (University of Southern Miss)

Undergraduate student mentor while at Arkansas: Ross Shierry; 2015-2016 (University of Arkansas) Delaney Hall; 2012-2016 (University of Arkansas) Rachel Moore, Honors Student; 2014-2016 (University of Arkansas) Grant White, Honors Student; 2012-2014 (University of Arkansas) Andrew Sanders, NSF-REU Student; 2011-2014 (University of Arkansas) Amanda Eddy; 2011-2012 (University of Arkansas) Katharine Stewart, NSF-REU Student; 2012 (University of Arkansas)

Other professional service: Panelist, Arkansas watersheds and water resources conference, July 2022 Co-organizer, STOICH Data Training and Analysis workshop, 2021 Co-organizer, Society for Freshwater Science special session on detrital nutrient dynamics, 2021 Poster judge, Great Plains Limnology virtual Conference, 2020 SFS Graduate student presentation judge, 2018, 2020, 2021, 2022 USM Undergraduate Research Symposium student presentation judge, 2018 Society for Freshwater Science Instars Program – Application Reviewer; 2015 and 2016 SFS Undergraduate Presentation Judge, 2012-2015, 2017 SFS Student Resources Social Media Committee, 2015-2016 President, University of Arkansas Biology Graduate Student Association, 2014-2015 Organizer of University of Arkansas Ecology Journal Club, 2014-2015 Co-organizer of SFS Student Workshop in Milwaukee, WI; 2015 Treasurer, University of Arkansas Biology Graduate Student Association, 2012-2013

## Community outreach and visibility:

Judge, Arkansas State Science Fair, Environmental Science section, April 2022

Judge, Arkansas State Science Fair, Animal Science section, April 2021

Presenter, STEM @ Arkansas Hall Research Talks: Environmental Science & Geography, March 2021

Participant, STEM @ Arkansas Hall Networking Event, Nachos & Networking, March 2020

Member, Allies in STEM organization at University of Central Arkansas, 2019-present Member of 500 Queer Scientists visibility campaign, 2018-present

Hattiesburg Public High School Biology outreach, 2018-2019

Bioblitz volunteer, City Park of New Orleans, 2017

Ozarks Water Watch StreamSmart volunteer, 2015-2016