

Amy Daum Rosemond rosemondlab.eology.uga.edu | [Google Scholar](#)

140 East Green Street | Athens, Georgia 30602 | 706.255.1677 | rosemond@uga.edu
ResearcherID I-2688-2018 ORCID 0000-0003-4299-9353

EDUCATION

- 1993 Ph.D. Biology Vanderbilt University | Advisors: Susan Brawley, Patrick J. Mulholland | (Oak Ridge National Laboratory)
- 1987 M.A. Biology, University of North Carolina, Chapel Hill | Advisor: Seth Reice
- 1982 B.S. Zoology, University of North Carolina, Chapel Hill

APPOINTMENTS

- 2023-present UGA Foundation Professor in Ecology
- 2022-present Distinguished Research Professor, Odum School of Ecology | University of Georgia | Athens, GA
- 2021-present Associate Director of Education, Equity, and Inclusion. Institute for Resilient Infrastructure Systems | University of Georgia | Athens, GA
- 2017-present Professor, Odum School of Ecology | University of Georgia | Athens, GA
- 2017 Interim Associate Dean of Administration and Research (March-December)
- 2011-2017 Associate Professor, Odum School of Ecology | University of Georgia | Athens, GA
- 2005-2011 Assistant Professor, Odum School of Ecology | University of Georgia | Athens, GA
- 1998-2005 Assistant Director, Institute of Ecology | University of Georgia | Athens, GA
- 1996-1998 Assistant Research Scientist, Institute of Ecology | University of Georgia | Athens, GA
- 1996-1997 Instructor, Institute of Ecology | University of Georgia | Athens, GA
- 1994-1997 National Science Foundation Postdoctoral Research Fellow, Institute of Ecology | University of Georgia | Athens, GA

AFFILIATIONS

- 2017-present UGA Institute for Resilient Infrastructure Systems, Member and Advisory Board
- 2015-present UGA River Basin Center Faculty, Member and Advisory Board
- 2014-present Center for Integrative Conservation Research Faculty Affiliate
- 2005-present UGA Water Faculty
- 2005-present Conservation Ecology Faculty

AREAS OF RESEARCH

Aquatic ecosystem ecology, biogeochemistry, global change effects on aquatic ecosystems, watershed urbanization, food webs, trophic ecology, nutrient effects in aquatic systems, ecological stoichiometry, detrital-based food webs, biodiversity and ecosystem function, headwater streams

EDITORIAL BOARDS

- *Ecology* (Subject Matter Editor: 2011-2018)
- *Freshwater Biology* (Editorial Board: 2001-2006)

HONORARY DISTINCTIONS AND LEADERSHIP

- 2023 UGA Foundation Professor in Ecology
- 2022 Distinguished Research Professor, University of Georgia
- 2020 Project Director, NSF-funded Emerge program, in collaboration with Society for Freshwater Science
- 2020-2021 Past-President, Society for Freshwater Science
- 2019-2020 President, Society for Freshwater Science
- 2018-2019 President-Elect, Society for Freshwater Science
- 2018 Creative Research Medal in Natural Sciences and Engineering, University of Georgia
- 2018 Fellow, Ecological Society of America. Citation: "Elected for creative and influential experimental research on the food web, microbial, and biogeochemical dynamics of aquatic ecosystems."
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JOURNAL PUBLICATIONS
(104 total publications, 92 total journal publications)

Peer-Reviewed Journal Publications
*Graduate student authors are underlined, postdocs^y, undergraduate authors**

- 2023** Tomczyk, N., L. Naslund, C. Cummins, E.V. Bell, P. Bumpers, and **A.D. Rosemond**. 2023. Nonpoint source pollution measures in the Clean Water Act have no detectable impact on decadal trends in nutrient concentrations in U.S. inland waters. *Ambio*, 1-13.
- Bumpers, P.M., **A.D. Rosemond**, D.W.P. Manning, J.S. Kominoski, J.P. Benstead, and L.M. Demi. 2023. Experimental nutrient enrichment of forest streams reduces ecosystem nitrogen and phosphorus storage. *Limnology and Oceanography*. <https://doi.org/10.1002/lno.12376>
- Jackson, C.R., S.J. Wenger, B.P. Bledsoe, J.M. Shepherd, K.A. Capps, **A.D. Rosemond**, M.J. Paul, M. Welch-Devine, K. Li, T. Stephens, T.C. Rasmussen. 2023. Water supply, waste assimilation, and low-flow issues facing the Southeast Piedmont Interstate-85 urban archipelago. *Journal of the American Water Resources Association*. <https://doi.org/10.1111/1752-1688.13130>
- Murray-Stoker, K.M., J.V. McHugh, A.C. Benke, K.A. Parsons, D. Murray-Stoker, **A.D. Rosemond**, S.J. Wenger, and D.P. Batzer. 2023. Long-term comparison of invertebrate communities in a blackwater river reveals taxon-specific biomass change. *Freshwater Biology* 68:632-644.
- Tomczyk, N.J., **A.D. Rosemond**, A.M. Whiteis*, J.P. Benstead, and V. Gulis. 2023. Temperature and interspecific interactions drive differences in carbon use efficiencies and biomass stoichiometry among aquatic fungi. *FEMS Microbiology Ecology* 99. <https://doi.org/10.1093/femsec/fiad021>
- Tomczyk, N.J., **A.D. Rosemond**, A. Kaz*, and J.P. Benstead. 2023. Contrasting activation energies of litter-associated respiration and P uptake drive lower cumulative P uptake at higher temperatures. *Biogeosciences* 20: 191-204.
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- 2022** Tomczyk, N.J., A.D. Rosemond, J.S. Kominoski, D.W.P. Manning, J.P. Benstead, V. Gulis, S.A. Thomas, E.R. Hotchkiss, and A.M. Helton. 2022. Nitrogen and phosphorus uptake stoichiometry tracks supply ratio during 2-year whole-ecosystem nutrient additions. *Ecosystems*, 1-15.
- Tomczyk, N.J., A.D. Rosemond, P.A. Rogers, and C.S. Cummins. 2022. Thermal traits of freshwater macroinvertebrates vary with feeding group and phylogeny. *Freshwater Biology* 67: 1994-2003.
- Tomczyk, N.J., A.D. Rosemond, P.M. Bumpers, C.S. Cummins, C. Yang and S.J. Wenger. 2022. Differences in respiration rates and abrasion losses may muddle attribution of breakdown to macroinvertebrates versus microbes in litterbag experiments. *River Research and Applications* 38:1721-1729.
- van Rees, C.B., L. Naslund, D.D. Hernandez-Abrams, S.K. McKay, C.B. Woodson, **A. Rosemond**, B. McFall, S. Altman, S.J. Wenger. 2022. A strategic monitoring approach for learning to improve natural infrastructure. *Science of the Total Environment* 832, 155078.
- Jackson, C.R., K.K. Cecala, S.J. Wenger, J.E. Kirsch, J.R. Webster, D.S. Leigh, J.M. Sanders, J.P. Love, J.D. Knoepp, J.M. Fraterrigo, **A.D. Rosemond**. 2022. Distinctive connectivities of near-stream and watershed-wide land uses differentially degrade rural aquatic ecosystems, *BioScience*, <https://doi.org/10.1093/biosci/biab098>
- 2021** Naslund, L.C., J.R. Gerson, A.C. Brooks, **A.D. Rosemond**, D.M. Walters, and E.S. Bernhardt. 2021. Ecosystem modification and network position impact insect-mediated contaminant fluxes from a mountain top mining-impacted river network. *Environmental Pollution* 292: 118257.
- Ardón, M. L.H. Zeglin, R.M. Utz, S.D. Cooper, W.K. Dodds, R.J. Bixby, A.S. Burdett, J. Follstad Shah, N.A. Griffiths, T.K. Harms, S.L. Johnson, J.B. Jones, J.S. Kominoski, W.H. McDowell, **A.D. Rosemond**, M.T. Trentman, D. Van Horn, A. Ward. 2021. Experimental nitrogen and phosphorus enrichment stimulates multiple trophic levels of algal and detrital-based food webs: a global meta-analysis from streams and rivers. *Biological Review*, 63:692-715.
- Benstead, J.P., W.F. Cross, V. Gulis, **A.D. Rosemond**. 2021. Combined carbon flows through detritus, microbes, and animals in reference and experimentally enriched stream ecosystems. *Ecology*, 102: e03279.
- 2020** Sullivan, S.M.P., M.C. Rains, A.D. Rodewald, W.W. Buzbee, and **A.D. Rosemond**. 2020. Distorting science, putting water at risk. *Science*, 369: 766-768.
- Prater, C., P.M. Bumpers, L.M. Demi, **A.D. Rosemond**, P.D. Jeyasingh. 2020. Differential responses of macroinvertebrate ionomes across experimental N: P gradients in detritus-based headwater streams. *Oecologia*, 193: 981-993.
- Anderson, C.B., M. Tagliaferro, A. Fisk, **A.D. Rosemond**, M.L. Sanchez, and M.T. Arts. 2020. Fatty acids elucidate sub-Antarctic stream benthic food web dynamics invaded by the North American beaver (*Castor Canadensis*). *Polar Biology*, 43: 423-433.
- Manning, D.W.P., **A.D. Rosemond**, J.P. Benstead, P.M. Bumpers, and J.S. Kominoski. 2020. Transport of N and P in U.S. streams and rivers differs with land use and between dissolved and particulate forms. *Ecological Applications*, 30: e02130.

Tomczyk, N.J., A. Rosemond, P.M. Bumpers, C.S. Cummins, S.J. Wenger, J.P. Benstead. 2020. Ignoring temperature variation leads to underestimation of the temperature sensitivity of plant litter decomposition. *Ecosphere*, 11(2):e03050.

L.M. Demi, J.P. Benstead, A.D. Rosemond, and J.C. Maerz. 2020. Experimental N and P additions relieve stoichiometric constraints on organic-matter flows through five stream food webs. *Journal of Animal Ecology*, 89: 1468-1481.

Usher*, R., J. Wood, P. Bumpers, S. Wenger, and **A. Rosemond.** 2020. Streamwater nutrients stimulate respiration and breakdown of standardized detrital substrates across a landscape gradient: effects of nitrogen, phosphorus, and carbon quality. *Freshwater Science*, 39:101-114.

2019 L.M. Demi, J.P. Benstead, A.D. Rosemond, and J.C. Maerz. 2019. Experimental N and P additions alter stream macroinvertebrate community composition via taxon-level responses to shifts in detrital resource stoichiometry. *Functional Ecology* 33:855-867.

2018 Song, C., W. Dodds, J. Rüegg, A. Argerich, C. Baker, W. Bowden, M. Douglas, K. Farrell, M. Flinn, E. Garcia, A. Helton, T. Harms, S. Jia, J. Jones, L. Koenig, J. Kominoski, W. McDowell, D. McMaster, S. Parker, A. Rosemond, C. Ruffing, K. Sheehan, M. Trentman, M. Whiles, W. Wollheim, and F. Ballantyne. 2018. Continental-scale decrease in net primary productivity in streams due to climate warming. *Nature Geoscience*. 11:415-420.

J.E. Allgeier, C.A. Layman, C.G. Montaña, E. Hensel, R. Appaldo, A.D. Rosemond. 2018. Anthropogenic versus fish-derived nutrient effects on seagrass community structure and function. *Ecology* 99: 1792-1801.

Farrell, K.J., A.D. Rosemond, J.S. Kominoski, S.M. Bonjour, J. Rüegg, L.E. Koenig, C.L. Baker, M.T. Trentman, T.K. Harms, W.H. McDowell. 2018. Variation in detrital resource stoichiometry signals differential carbon to nutrient limitation for stream consumers across biomes. *Ecosystems*. 21: 1676-1691.

Demi, L.M., J.P. Benstead, A.D. Rosemond, and J.C. Maerz. 2018. Litter P content drives consumer production in detritus-based streams spanning an experimental N:P gradient. *Ecology* 99:347-359.

Manning, D.W.P., A.D. Rosemond, V. Gulis, J.P. Benstead, and J.S. Kominoski. 2018. Nutrients and temperature additively increase stream microbial respiration. *Global Change Biology* 24:233-247.

Kominoski^v, J.S., **A.D. Rosemond**, J.P. Benstead, V. Gulis, and D.W.P. Manning. 2017. Experimental nitrogen and phosphorus additions increase rates of stream ecosystem respiration and carbon loss. *Limnology and Oceanography*. 63:22-36.

2017 Gulis, V., K.A. Kuehn, L.N. Schoettle, D. Leach, J.P. Benstead, and **A.D. Rosemond.** 2017. Changes in nutrient stoichiometry, elemental homeostasis and growth rate of aquatic litter-associated fungi in response to inorganic nutrient supply. *ISME Journal* 11:2729-2739.

Bumpers, P.M., A.D. Rosemond, J.C. Maerz, and J.P. Benstead. 2017. Experimental nutrient enrichment of forest streams increases energy flow to predators along greener food-web pathways. *Freshwater Biology*. 62: 1794-1805

Follstad Shah, J.J., J.S. Kominoski, M. Ardon, W.K., Dodds, M.O. Gessner, N.A. Griffiths, S.L. Johnson, A. Lecerf, C.J. LeRoy, D.W.P. Manning, **A.D. Rosemond**, R.L. Sinsabaugh, C.M. Swan, J.R. Webster, and L.H.

Zeglin. 2017. Global synthesis of the temperature sensitivity of leaf litter breakdown in streams and rivers. *Global Change Biology*. 23: 3064-3075.

2016 Manning, D.W.P., A.D. Rosemond, J.P. Benstead, J.S. Kominoski, V. Gulis, and J.C. Maerz. 2016. Convergence of detrital stoichiometry predicts thresholds of nutrient-stimulated breakdown in streams. *Ecological Applications* 26:1745-1757.

Sterling, J.L., A.D. Rosemond, and S.J. Wenger. 2016. Watershed urbanization reduces macroinvertebrate biomass, biotic integrity and alters community structure in southeastern U.S. streams. *Freshwater Science* 35: 676-688.

Rüegg, J., W.K. Dodds, M.D. Daniels, C.L. Baker, W.B. Bowden, K.J. Farrell, M.B. Flinn, T.K. Harms, J.B. Jones, L.E. Koenig, J.S. Kominoski, W.H. McDowell, S.P. Parker, **A.D. Rosemond**, K.R. Sheehan, M.T. Trentman, M.R. Whiles and W.M. Wollheim. 2016. Baseflow physical stream characteristics differ at multiple spatial scales in stream networks across diverse biomes. *Landscape Ecology* 31:119-136.

2015 **Rosemond, A.D.**, J.P. Benstead, P.M. Bumpers, V. Gulis, J.S. Kominoski, D.W.P. Manning, K. Suberkropp, and J.B. Wallace. 2015. Experimental nutrient additions accelerate terrestrial carbon loss from stream ecosystems. *Science* 347:1142-1145.

Trice, A.E., A.D. Rosemond, and J.C. Maerz. 2015. Diet composition of two larval headwater stream salamanders and spatial distribution of prey. *Freshwater Biology* 60:224-2434.

Bumpers, P.M., J.C. Maerz, A.D. Rosemond, and J.P. Benstead. 2015. Salamander growth rates increase along an experimental stream phosphorus gradient. *Ecology* 96:2994-3004.

Tant, C.J., A.D. Rosemond, A.M. Helton, and M.R. First. 2015. Nutrient enrichment alters the magnitude and timing of fungal, bacterial, and detritivore contributions to litter breakdown. *Freshwater Science* 34:1259-1271.

Allgeier, J.E., S. Wenger, A.D. Rosemond, D.E. Schindler, and C.A. Layman. 2015. Metabolic theory and taxonomic identity predict nutrient recycling in a diverse food web. *Proceedings of the National Academy of Sciences* 112:E2640-E2647.

Archer, S.K., J.E. Allgeier, B.X. Semmens, S.A. Heppell, C.V. Pattengill-Semmens, **A.D. Rosemond**, P.G. Bush, C.M. McCoy, B.C. Johnson, and C.A. Layman. 2015. Hot moments in spawning aggregations: implications for ecosystem-scale nutrient cycling. *Coral Reefs* 3:19-23.

Milanovich, J.R., J.C. Maerz, and A.D. Rosemond. 2015. Stoichiometry and estimate of nutrient standing stock of larval salamanders within Appalachian headwater streams. *Freshwater Biology* 60:1340-1353.

Tant, C.J., A.D. Rosemond, A.S. Mehring, K.A. Kuehn, and J.M. Davis. 2015. The role of aquatic fungi in transformations of organic matter mediated by nutrients. *Freshwater Biology* 60:1354-1363.

Manning, D.W.P., A.D. Rosemond, J.S. Kominoski, V. Gulis, J.P. Benstead, and J.C. Maerz. 2015. Detrital stoichiometry as a critical nexus for the effects of streamwater nutrients on leaf litter breakdown rates. *Ecology* 96:2214-2224.

Mehring, A.S., K.A. Kuehn, A. Thompson, C. Pringle, A.D. Rosemond, M. First, R Lowrance, and G. Vellidis. 2015. Leaf litter nutrient uptake in an intermittent blackwater river: influence of tree species and

associated biotic and abiotic drivers. *Functional Ecology* 29:849-860.

Allgeier, J.E., C.A. Layman, P.J. Mumby, and **A.D. Rosemond**. 2015. Biogeochemical implications of biodiversity and community structure across multiple coastal ecosystems. *Ecological Monographs* 85:117-132.

Kominoski^V, J.K, **A.D. Rosemond**, J.P. Benstead, V. Gulis, J.C. Maerz, and D.W.P. Manning. 2015. Low-to-moderate nitrogen and phosphorus concentrations accelerate microbially driven litter breakdown rates. *Ecological Applications* 25:856-865.

- 2014** Allgeier, J.E., C.A. Layman, P.J. Mumby and **A.D. Rosemond**. 2014. Consistent nutrient storage and supply mediated by diverse fish communities in coral reef ecosystems. *Global Change Biology* 8: 2459-2472.
- 2013** Tant, C.J., **A.D. Rosemond** and M.R. First. 2013. Stream nutrient enrichment has a greater effect on coarse than on fine benthic organic matter. *Freshwater Science* 32:111-1121.
- 2012** Kominoski^V, J. S. and **A.D. Rosemond**. 2012. Conservation from the bottom up: forecasting effects of global change on dynamics of organic matter and management needs for river networks. *Freshwater Science* 31: 51-68.
- 2011** Davis, J.M., **Rosemond, A.D.**, and Small, G.E. 2011. Increasing donor ecosystem productivity decreases terrestrial consumer reliance on a stream resource subsidy. *Oecologia* 48:821-834.
- Allgeier, J.E., **A.D. Rosemond**, and C.A. Layman. 2011. The frequency and magnitude of non-additive responses to multiple nutrient enrichment. *Journal of Applied Ecology* 48:96-101.
- Layman, C.A, J.E. Allgeier, **A.D. Rosemond**, C.P. Dahlgren, and L. Yeager. 2011. Marine fisheries declines viewed upside down: human impacts on consumer-driven nutrient recycling. *Ecological Applications* 21:343–349.
- 2010** Allgeier, J.A., **A.D. Rosemond**, A.S. Mehring and C.A. Layman. 2010. Synergistic nutrient colimitation across a gradient of ecosystem fragmentation in subtropical mangrove-dominated wetlands. *Limnology and Oceanography* 55:2660-2668.
- Davis, J.M., **A.D. Rosemond**, S.L. Eggert, W.F. Cross and J.B. Wallace. 2010. Nutrient enrichment differentially affects body sizes of primary consumers and predators in a detritus-based stream. *Limnology and Oceanography* 55:2305-2316.
- Anderson, C.B. and **A.D. Rosemond**. 2010. Beaver invasion alters terrestrial subsidies to subantarctic stream food webs. *Hydrobiologia* 652:349-361.
- Suberkropp, K., V. Gulis, **A.D. Rosemond**, and J.P. Benstead. 2010. Ecosystem and physiological scales of microbial response to nutrients in a detritus-based stream: results of a 5-year continuous enrichment. *Limnology and Oceanography* 55:149-160.
- Davis, J.M., **A.D. Rosemond**, S.L. Eggert, W.F. Cross and J.B. Wallace. 2010. Long-term nutrient enrichment decouples predator and prey production. *Proceedings of the National Academy of Sciences* 107:121-126.
- Rosemond, A.D.**, C.M. Swan, J.S. Kominoski, and S.E. Dye. 2010. Non-additive effects of litter mixing are suppressed in a nutrient-enriched stream. *Oikos* 119:326-336.

- 2009** Wenger, S.J., A.H. Roy, C.R. Jackson, E.S. Bernhardt, T.L. Carter, S. Filoso, C.A. Gibson, N.B. Grimm, W.C. Hession, S.S. Kaushal, E. Marti, J.L. Meyer, M.A. Palmer, M.J. Paul, A.H. Purcell, A. Ramirez, **A.D. Rosemond**, K.A. Schofield, T.R. Schueler, E.B. Sudduth and C.J. Walsh. 2009. Twenty-six priority urban stream ecology research questions. *Journal of the North American Benthological Society* 28:1080-1098.
- Carter, T.L., C.R. Jackson, **A.D. Rosemond**, C.M. Pringle, D. Radcliffe, W. Tollner, J. Maerz, D. Leigh, and A. Trice. 2009. Beyond the urban gradient: barriers and opportunities for timely studies of urbanization effects on aquatic ecosystems. *Journal of the North American Benthological Society* 28:1038-1050.
- Benstead^v, J.P., **A.D. Rosemond**, W.F. Cross, J.B. Wallace, S.L. Eggert, K. Suberkropp, V. Gulis, J.L. Greenwood and C.J. Tant. 2009. Long-term nutrient enrichment alters organic matter dynamics in a headwater stream ecosystem. *Ecology* 90:2556-2566.
- Anderson, C.B., G.M. Pastur, M.V. Lencinas, P. Wallem, M.C. Moorman, and **A.D. Rosemond**. 2009. Do introduced North American Beavers engineer differently in southern South America? – An overview with implications for restoration. *Mammal Review* 39: 33-52.
- 2008** **Rosemond, A.D.**, W.F. Cross, J.L. Greenwood, V. Gulis, S.L. Eggert, K. Suberkropp, J.B. Wallace and S.E. Dye. 2008. Nitrogen versus phosphorus demand in a detritus-based headwater stream: what drives microbial to ecosystem response? *Verh. Internat. Verein. Limnol.* 30:651-655.
- Gulis, V., K. Suberkropp and **A.D. Rosemond**. 2008. Comparison of fungal activity on wood and leaf litter in unaltered and nutrient enriched headwater streams. *Applied Environmental Microbiology* 74:1094-1101.
- 2007** Anderson, C.B. and **A.D. Rosemond**. 2007. Ecosystem engineering by invasive exotic beavers reduces in-stream diversity and enhances ecosystem function in Cape Horn, Chile. *Oecologia* 154:141-153.
- Cross, W.F., J.B. Wallace and **A.D. Rosemond**. 2007. Nutrient enrichment reduces constraints on material flows in a detritus-based food web. *Ecology* 88:2563-2575.
- Greenwood, J.L., **A.D. Rosemond**, J.B. Wallace, W.F. Cross and H.S. Weyers. 2007. Nutrients stimulate leaf breakdown rates and detritivore biomass: bottom-up effects via heterotrophic pathways. *Oecologia* 151:637-649.
- 2006** Cross, W.F., J.B. Wallace, **A.D. Rosemond**, and S.L. Eggert. 2006. Whole-system nutrient enrichment increases secondary production in a detritus-based ecosystem. *Ecology* 87:1556-1565.
- Johnson, B.R., J.B. Wallace, **A.D. Rosemond** and W.F. Cross. 2006. Larval salamander growth responds to enrichment of a nutrient poor headwater stream. *Hydrobiologia* 573: 227-232.
- Anderson, C.B., R. Rozzi, J.C. Torres-Mura, S.M. McGehee, M.F. Sherriffs, E. Schuettler and **A.D. Rosemond**. 2006. Exotic vertebrate fauna in the remote and pristine sub-Antarctic Cape Horn Archipelago region of Chile. *Biodiversity and Conservation* 15:3295-3313.
- Anderson, C.B., C.R. Griffith, **A.D. Rosemond**, R. Rozzi and O. Dollenz. 2006. The effects of invasive North American beavers on riparian vegetation communities in Cape Horn, Chile. *Biological Conservation* 128: 467-474.

- 2005** Cross, W.F., B. Johnson, J.B. Wallace, and **A.D. Rosemond**. 2005. Contrasting response of two stream detritivores to long-term nutrient enrichment. *Limnology and Oceanography* 50:1730-1739.
- Greenwood, J.L. and **A.D. Rosemond**. 2005. Periphyton response to long-term nutrient enrichment in a shaded headwater stream. *Canadian Journal of Fisheries and Aquatic Sciences* 62:1-13.
- 2004** Moore, J.C., D. Callaway, D.C. Coleman, P. de Ruiter, Q. Dong, A. Hastings, N. Collins Johnson, K. McCann, K. Melville, P. Morin, K. Nadelhoffer, **A.D. Rosemond**, D. Post, K. Scow, M. Vanni, and D. Wall. 2004. Detritus, Trophic Dynamics, and Biodiversity. *Ecology Letters* 7:584-600.
- England, L.E. and **A.D. Rosemond**. 2004. Riparian deforestation alters the energy base of headwater stream food webs. *Freshwater Biology* 49:721-734.
- Gulis, V. **A.D. Rosemond**, K. Suberkropp, H.S. Weyers and J.P. Benstead. 2004. The effect of nutrient enrichment on the decomposition of wood and associated microbial activity in streams. *Freshwater Biology* 49: 1437-1447.
- 2003** Cross, W.F., J. P. Benstead, **A.D. Rosemond**, and J. B. Wallace. 2003. Consumer-resource stoichiometry in a detritus-based stream. *Ecology Letters* 6:721-732.
- Rosemond, A.D.** and C.B. Anderson. 2003. Engineering role models: Do non-human species have the answers? *Ecological Engineering* 20:379-388.
- Roy, A.H., **A.D. Rosemond**, M.J. Paul, D.S. Leigh and J.B. Wallace. 2003. Habitat-specific responses of stream insects to land cover disturbance: biological consequences and monitoring implications. *Journal of the North American Benthological Society* 22:292-307.
- Roy, A.H., **A.D. Rosemond**, M.J. Paul, D.S. Leigh, and J.B. Wallace. 2003. Stream macroinvertebrate response to catchment urbanisation (Georgia, U.S.A.). *Freshwater Biology* 48:329-346.
- 2002** **Rosemond, A.D.**, C.M. Pringle, A. Ramírez, M.J. Paul, and J.L. Meyer. 2002. Landscape variation in phosphorus concentration and effects on detritus-based tropical streams. *Limnology and Oceanography* 47:278-289.
- 2001** **Rosemond, A.D.**, C.M. Pringle, A. Ramirez, and M.J. Paul. 2001. A test of top-down and bottom-up control in a detritus-based food web. *Ecology* 82:2279-2293.
- 2000** **Rosemond, A.D.**, P.J. Mulholland, and S.H. Brawley. 2000. Seasonally shifting limitation of stream periphyton: response of algal populations and assemblage biomass and productivity to variation in light, nutrients, and herbivores. *Canadian Journal of Fisheries and Aquatic Sciences* 57:1-10.
- 1998** **Rosemond, A.D.**, C.M. Pringle, and A. Ramirez. 1998. Macroconsumer effects on insect detritivores and detrital processing in a tropical stream. *Freshwater Biology* 39:515-523.
- 1996** **Rosemond, A.D.** and S.H. Brawley. 1996. Species-specific characteristics explain the persistence of *Stigeoclonium tenue* (Chlorophyta) in a woodland stream. *Journal of Phycology* 32:54-63.
- 1994** **Rosemond, A.D.** 1994. Multiple factors limit seasonal variation in periphyton in a forest stream. *Journal of the North American Benthological Society* 13:333-344.

- 1993** **Rosemond, A.D.** 1993. Interactions among irradiance, nutrients, and herbivores constrain a stream algal community. *Oecologia* 94:585-594.
- Rosemond, A.D.**, P.J. Mulholland and J.W. Elwood. 1993. Top-down and bottom-up control of stream periphyton: effects of nutrients and herbivores. *Ecology* 74:1264-1280.
- 1992** Mulholland, P.J. and **A.D. Rosemond**. 1992. Periphyton response to longitudinal nutrient depletion in a woodland stream: evidence of upstream-downstream linkage. *Journal of the North American Benthological Society* 11:405-419.
- Mulholland, P.J., C.T. Driscoll, J.W. Elwood, M.P. Osgood, A.V. Palumbo, **A.D. Rosemond**, M.E. Smith, and C. Schofield. 1992. Relationships between stream acidity and bacteria, macroinvertebrates, and fish: a comparison of north temperate and south temperate mountain streams, USA. *Hydrobiologia* 239:7-24.
- Rosemond, A.D.**, S.R. Reice, J.W. Elwood and P.J. Mulholland. 1992. The effects of acidification on benthic invertebrate communities of montane streams in the southeast U.S. *Freshwater Biology* 27:193-209.
- 1987** Mulholland, P.J., A.V. Palumbo, J.W. Elwood, and **A.D. Rosemond**. 1987. Effects of acidification on leaf decomposition in streams. *Journal of the North American Benthological Society* 6:147-158.

Manuscripts in advanced stages

Three manuscripts in revision, one in review, one in preparation.

Naslund, L.C. and co-authors. Toward more accurate estimates of greenhouse gas emissions from small reservoirs. *Limnology and Oceanography*. In revision.

Cummins, C. and co-authors. Temperature dependence of leaf litter breakdown differs between microbial and invertebrate pathways and litter species in streams. *Ecology*. Revision submitted December 2023.

Hare, D. and co-authors. Leaf litter breakdown phenology in headwater stream networks is modulated by groundwater thermal inputs and litter type. *Limnology and Oceanography Letters*. Revision submitted December 2023.

Rogers, P. and co-authors. A whole-reach warming experiment suggests forest stream macroinvertebrate communities may be resilient to 2°C of warming. *Global Change Biology*. Submitted Dec 2023.

Wood, J.L., L.H. Dietterich, D. Leasure, T. Maddox, K. Loftis, S.J. Wenger, J.W. Skaggs, **A.D. Rosemond**, and M.C. Freeman. Elemental composition and potential toxicity of the riverine macrophyte *Podostemum ceratophyllum* Michx. Reflects land use in eastern North America. In prep for *Environmental Science and Technology*.

Books, edited volumes & dissertation (6 total, book chapters and dissertation)

- 2021** **Rosemond, A.D.**, P.M. Bumpers, S.L. Eggert, and M.J. Paul. 2021. Ecoregion 8.4.4 Blue Ridge: Coweeta Hydrologic Laboratory, North Carolina. In: Ryan, Douglas F. ed. *Biological Responses to Stream Nutrients: A*

Synthesis of Science from Experimental Forests and Ranges. Gen. Tech. Rep. PNW-GTR-981. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 522 p.

Manning, D.W.P., V. Ferreira, V. Gulis, **A.D. Rosemond**. 2021. Pathways, mechanisms, and consequences of nutrient-stimulated plant litter decomposition in streams. In: Swan C.M., L. Boyero, C. Canhoto (eds). *The Ecology of Plant Litter Decomposition in Stream Ecosystems*. Springer, Cham. https://doi.org/10.1007/978-3-030-72854-0_16

- 2005** Cross, W.F., **A.D. Rosemond**, J.P. Benstead, S.L. Eggert, and J.B. Wallace. 2005. Differential effects of consumers on C N and P dynamics: insights from longterm research. In: *Dynamic Food Webs: Multispecies Assemblages, Ecosystem Development and Environmental Change. A Volume in Theoretical Ecology* (eds P.C. de Ruiter & J.C. Moore), pp. 235–247. Elsevier, Amsterdam.
- 1996** DeAngelis, D.L., L. Persson, and **A.D. Rosemond**. 1996. Interaction of productivity and consumption. Pp. 109-113. In: *Food Webs: Integration of Patterns and Dynamics*. Polis, G.A. and K.L. Winemiller, eds. Chapman and Hall.
- Rosemond, A.D.** 1996. Indirect effects of herbivores modify predicted effects of resources and consumption on plant biomass. Pp. 149-160. In: *Food Webs: Integration of Patterns and Dynamics*. Polis, G.A. and K.L. Winemiller, eds. Chapman and Hall.
- 1993** **Rosemond, A.D.** 1993. Seasonality and control of a stream algal community: effects of nutrients, light, and herbivores. Ph.D. dissertation. Vanderbilt University.

Other publications (6 total, peer-reviewed conference proceedings, book review)

- 2009** **Rosemond, A.D.**, J. Sterling, and S. Wenger. 2009. Linkages among biotic structure, function and ecosystem services in urban streams. *Proceedings of the Georgia Water Resources Conference*, University of Georgia, Athens, GA.
- 2001** Leigh, D.S., B.J. Freeman, M.C. Freeman, E.A. Kramer, C.M. Pringle, **A.D. Rosemond**, M.J. Paul, D.M. Walters, and C.P. Lo. 2001. Overview of land cover and geomorphic indicators of biotic integrity in the Etowah River. Pp. 225-228. *Proceedings of the Georgia Water Resources Conference*, University of Georgia, Athens, GA.
- Roy, A.H., **A. D. Rosemond**, D.S. Leigh and M.J. Paul. 2001. Effects of changing land use on macroinvertebrate integrity: identifying indicators of water quality impairment. Pp. 229-232. *Proceedings of the Georgia Water Resources Conference*, University of Georgia, Athens, GA.
- Rosemond, A.D.**, H.S. Weyers, M.J. Paul, and J.L. Greenwood. 2001. Benthic algal biomass in the Etowah basin and implications to establishing nutrient criteria in streams. Pp. 237-240. *Proceedings of the Georgia Water Resources Conference*, University of Georgia, Athens, GA.
- 1999** **Rosemond, A.D.**, D.S. Leigh, B.J. Freeman, M.C. Freeman, E.A. Kramer, and C.M. Pringle. 1999. Development of a scientific understanding of the effects of changing land use on stream ecosystems. Pp. 187-189. *Proceedings of the Georgia Water Resources Conference*, University of Georgia, Athens, GA.
- 1995** **Rosemond, A.D.** and J.B. Wallace. 1995. Stream ecology. Structure and function of running waters (J. D. Allan). *Limnology and Oceanography* 40:1535- 1536. (Book review)

RESEARCH GRANTS

(Total awarded as lead PI: \$5,642,156; Total awarded collaboratively: \$13,487,644)

Recently submitted

2023

Oyster Reef Restoration on Sapelo Island for Coastal Hazard Protection and Multiple Benefits US

Department of Commerce, *October 1, 2024–September 30, 2027*

Proposed amount: \$ 2,763,948. Submitted November 2023. Role: Co-PI. Status: pending.

NRT: Graduate Training in Equitable and Resilient Natural Infrastructure (ERNI)

National Science Foundation, *July 1, 2024–June 30, 2029*

Proposed amount: \$ 2,999,623. Submitted November 2023. Role: Co-PI. Status: pending.

2022 National Science Foundation. C.B. Woodson, E.G. King, B.P. Bledsoe, S. Ferreira, E.G. King, C. Struthers, **A.D. Rosemond**. NRT: Graduate Training in Equitable and Resilient Infrastructure. \$2,999,994. Submitted September 2022. Role: Co-PI. (unsuccessful)

2021 National Science Foundation. **A.D. Rosemond** (PI/PD), B.P. Bledsoe, S. Ferreira, E.G. King, C. Struthers. NRT: Graduate Training in Equitable and Resilient Infrastructure. \$2,999,994. Submitted September 2021 (unsuccessful).

2023-Current support

National Science Foundation to **A.D. Rosemond** (PI/PD), and PIs Patina Mendez, Jose Colon-Gaud, Amanda Rugenski, and Daniel McGarvey. Emerge: Broadening participation and leadership in freshwater science. September 2020-2025. (Total Project \$2,006,746; UGA \$1,678,455, Role: Project Director/PI).

Department of Army to Brian Bledsoe (Lead), M.V. Bilskie, J. Calabria, S. Ferreira, C.R. Jackson, C.E. Landry, D.R. Nelson, N.P. Nibbelink, J.S. Pippen, L. M. Risse, **A.D. Rosemond**, J.M. Shepherd, M.L. Welch Devine, S. Wenger, C.B. Woodson. Engineering With Nature[®] Initiative. July 1, 2020 (Total project \$2.5 million (Role: Co-investigator)).

National Science Foundation to J. Benstead (Lead), V. Gulis, **A.D. Rosemond**, A. Helton, E. Hotchkiss; Senior Personnel: P. Johnson and S. Wenger. Collaborative Research: Headwater stream networks in a warming world: predicting heterotrophic ecosystem function using theory and multi-scale thermal manipulations. Full proposal funded December 2016. Start date July 1, 2017, final project date June 30, 2023. (Roles: Co-PI on whole grant, PI/PD on UGA portion; Total project \$1.2 million; UGA \$550,000).

Previous support

2022 Supplement to: Collaborative Research: Headwater stream networks in a warming world: predicting heterotrophic ecosystem function using theory and multi-scale thermal manipulations (NSF DEB Ecosystems to **A.D. Rosemond**, \$46,180; Role: PI). Funded in 2022, through June 30, 2023.

2021 Supplement to: Collaborative Research: Headwater stream networks in a warming world: predicting heterotrophic ecosystem function using theory and multi-scale thermal manipulations (NSF DEB Ecosystems, \$70,774; Role: PI).

- 2019** University of Georgia Presidential seed grant to B. Bledsoe, 13 others, including A.D. Rosemond. National Center of Excellence for Nature-based solutions and infrastructure. (\$143,532) June 2019-December 2020.
- 2017** Georgia Water Resource Institute. PI's: S. Wenger (Lead), **A.D. Rosemond**, J. Dowd, P.M. Bumpers. Project Title: Developing real-time sensor networks for monitoring stream water quality to improve water resource management. Submitted November 2016 (\$47,654).
- 2016** U.S. Department of Defense to S. Wenger (Lead), M. Freeman, **A.D. Rosemond**, T. Rasmussen, J. Schramski. (\$118,099), 2016-2018. Quantifying ecological outcomes of hydrologic variability.
- 2013** National Science Foundation to **A.D. Rosemond** (\$7000), 2013. Research Experience for Undergraduates supplement to Defining ecosystem heterotrophic responses to nutrient concentrations and ratios.
- National Science Foundation to **A.D. Rosemond** and J. Kominoski (\$8,466), 2013. Research Experience for Undergraduates supplement to Collaborative Research: Stream Consumers And Lotic Ecosystem Rates (SCALER): Scaling From Centimeters To Continents.
- 2012** National Science Foundation to **A.D. Rosemond** and J. Maerz (\$8,638), 2012. Research Experience for Undergraduates supplement to Defining ecosystem heterotrophic response to nutrient concentrations and ratios.
- Biological assessments used in support of Athens-Clarke County Watershed Management Program. Contract to UGA, Odum School of Ecology (PI. Rosemond) (\$21,844), 2012-2013. Focal systems: Shoal Creek, Turkey Creek, Carr Creek, Sandy Creek, Big Creek, Sulphur Springs.
- 2011** Biological assessments used in support of Athens-Clarke County Watershed Management Program. Contract to UGA, Odum School of Ecology (PI: Rosemond) (\$17,286), 2011-2012 Focal systems: McNutt Creek, Bear Creek.
- 2010** National Science Foundation to W. Dodds (Lead), K. Gido, F. Ballantyne, W. Wolheim, A. Helton, M. Whiles, **A.D. Rosemond**, J. Kominoski, W. Bowden, M. Flinn, J. Jones, T. Harms, W. McDowell (Total award, \$3.3 million; UGA Amount: \$ 253,000), 2010-2015. Collaborative Research: Stream Consumers And Lotic Ecosystem Rates (SCALER): Scaling From Centimeters To Continents. EF-1064998.
- National Science Foundation to **A.D. Rosemond** (Lead), J. Benstead, V. Gulis and J. Maerz (Total award \$1,180,427; \$676,411 to UGA), 2010-2013. Collaborative research: Defining ecosystem heterotrophic response to nutrient concentrations and ratios. DEB-9811894
- Biological assessments used in support of Athens-Clarke County Watershed Management Program. Contract to UGA, Odum School of Ecology (PI: Rosemond) (\$8,781), 2010-2011. Focal systems: Trail Creek, Cedar Creek and Tanyard Branch
- National Science Foundation to **A.D. Rosemond** and J. Maerz (\$7,213), 2010. Research Experience for Undergraduates supplement to Defining ecosystem heterotrophic response to nutrient concentrations and ratios.
- 2008** Environmental Protection Agency Section 319(h) FY08 grant. Watershed Improvement Program for Urban, Suburban and Transitional Watersheds in Athens-Clarke County, GA (Upper Oconee Watershed). Primary contact: Jason M. Peek, Engineering Administrator, ACC. (Total project funds: \$467,660, sub-contract to the University of Georgia: \$94,444), 2008-2010. Role: Sub-contract, helped develop and write proposal.

Environmental Protection Agency Section 319(h) FY08 grant. A Paired Watershed Approach to Evaluate Low Impact Development on Sensitive Aquatic Ecosystems. Primary contact: Timothy Carter, UGA River Basin Center. (Total project funds: \$53,681, work in Rosemond lab: \$11,955), 2008-2009. Role: Sub-contract, helped develop and write proposal.

- 2005** University of Georgia Research Foundation to A.D. Rosemond (\$10,300), 2005-2007. Development of microalgal pigment profiles to assess and predict water quality changes in southeastern rivers and reservoirs.
- 2004** United Negro College Fund to PI: **A.D. Rosemond**, Graduate assistant: Erinna Kinney (\$13,000), 2004. Thesis research: Nutrient enrichment effects on organic matter processing.
- 2003** National Science Foundation to **A.D. Rosemond** (Lead), K. Suberkropp, J.B. Wallace and M. Black (\$525,000), 2003-2007. The keystone role of heterotrophic microbes in driving ecosystem-level effects of nutrient enrichment. DEB-0318063.

National Science Foundation to **A.D. Rosemond**, K. Suberkropp, J.B. Wallace and M. Black (\$30,000), 2003-2004. Supplement to: The keystone role of heterotrophic microbes in driving ecosystem-level effects of nutrient enrichment.

University of Georgia Committee of Applied Instructional Technology to **A.D. Rosemond** (PI) (\$93,763), 2003-2004. Quantitative Analyses of Ecological Systems: Integration of Research and Instruction.

- 1999** National Science Foundation to **A.D. Rosemond** (Lead), J.B. Wallace, K. Suberkropp, and P.J. Mulholland (\$700,000), 1999-2002. Nutrient effects on a detritus-based stream ecosystem. DEB- 9806610

U.S. Environmental Protection Agency, Science to Achieve Results (STAR) to D.S. Leigh (Lead), B.J. Freeman, M.C. Freeman, E.A. Kramer, C.M. Pringle, and **A.D. Rosemond**. (\$832,000), 1999-2002. Land use and geomorphic indicators of biotic integrity in Piedmont streams.

- 1994** National Science Foundation Postdoctoral Fellowship in Environmental Biology. **A.D. Rosemond**. (\$69,600), 1994-1996. Effects of geothermal phosphorus inputs on microbes, litter decomposition and higher trophic levels in a tropical stream.

Fellowships and research grants to Rosemond graduate students

- 2023** National recognition of doctoral students N. Tomczyk, L. Naslund, and C. Cummins from U.S. EPA National Aquatic Resource Survey Data Analysis Innovation Challenge. <https://www.epa.gov/innovation/national-aquatic-resource-surveys-data-analysis-innovation-challenge>
- 2017** National Science Foundation Graduate Research Fellowship to PhD student. C. Conn (co-advised with S. Wenger), 2017.
- 2014** Global Lakes Observatory Network Graduate Fellowship Program to PhD student K.J. Farrell, Funded by National Science Foundation Macrosystems Biology
- 2013** University of Georgia PhD Scholars of Excellence Fellowship to PhD student K.J. Farrell (\$38,000), 2013-2014

- 2010** U.S. EPA Science to Achieve Results Fellowship to J.E. Allgeier, Faculty Mentor: **A. D Rosemond** (\$75,000), 2010-2013. Shifting Baselines? Investigating the interactive effects of overfishing and nutrient enrichment In Coastal Bahamian ecosystems.
- National Science Foundation to PhD student: J.E. Allgeier. PI: **A.D. Rosemond** (\$14,538), 2010-2012. Dissertation Research: Shifting Baselines? The ecological implications of simultaneous eutrophication and overfishing. Doctoral Dissertation Improvement Grant.
- 2004** National Science Foundation Graduate Research Fellowship to PhD student. J. Davis, 2004.
- National Science Foundation Doctoral Dissertation Improvement Grant to PhD student: C.B. Anderson. PI's: **A.D. Rosemond** (Lead), A.T. Fisk (\$12,600), 2004. Dissertation Research: Linking an invasive ecosystem engineer with community and ecosystem-level impacts: North American beaver effects on stream food webs of southern Chile.
- Fulbright Fellowship to PhD student C.B. Anderson, 2004 (\$18,000).
- Boren Fellowship, National Security Education Program, U.S. Defense Department, to PhD. Student C.B. Anderson, 2004 (\$20,000).
- 2001** U.S. EPA Science to Achieve Results Fellowship to L.E. England, Faculty Mentor: **A. D. Rosemond** (\$34,000), 2001-2003. Riparian forest buffers on mountain streams: effects of width, extent, and vegetative characteristics on buffer function.

Student Research Advising

Dissertations and theses directed, Major advisor

DOCTORAL STUDENTS

Laura Naslund (PhD 2019-present, ; co-advised w/ S. Wenger)
 Phillip Bumpers (PhD 2019-present; co-advised w/ S. Wenger)
 Carolyn Cummins (PhD 2017-present)
 Caitlin Conn (PhD 2015-present; co-advised w/ S. Wenger)

MASTERS STUDENTS

Carlos Vargas (MS ICAS 2022-present)

Doctoral students graduated (8):

Nathan Tomczyk (PhD 2029-2023), *The effects of temperature on processing of carbon and nutrients*
 Kaitlin Farrell (PhD 2012-2017), *Quantitative assessment of drivers of ecosystem functions in headwater stream networks*
 David Manning (PhD 2010-2015), *Linking the effects of nitrogen and phosphorus enrichment to controls of detrital carbon loss rates from streams*
 Jacob Allgeier (PhD 2006-2013), *Nutrient dynamics in coastal ecosystems of the Bahamas*
 Cynthia Tant (PhD 2004-2011), *Detrital carbon response to experimental enrichment and impacts on associated consumers in a headwater stream*
 John Davis (PhD 2004-2009), *Food web response to long-term experimental enrichment of a detritus-based stream ecosystem*
 Christopher Anderson (PhD 2001-2006), *Linking an invasive ecosystem engineer with its community and ecosystem effects: the role of introduced beavers in the Cape Horn Biosphere Reserve, Chile*

Jennifer Greenwood (PhD 1999-2004), *The response of detrital and autotrophic resources to long-term nutrient enrichment in a detritus-based headwater stream*

Masters students graduated (8):

Emily Johnson (MS 2016-2020; co-advised w/ S. Wenger), *Testing the Efficacy of Electrical Conductivity as an Indicator of Urban Watershed Disturbance*

John Spencer (MS 2014-2016, deceased, co-advised by S. Wenger). Degree awarded posthumously.

Phillip Bumpers (MS 2011-2014), *Headwater stream salamander response to experimental gradients of nutrient enrichment*

Jessica Sterling (MS 2008-2012), *Stream ecosystem response to urbanization in the Upper Oconee watershed, Georgia, USA*

Amy Trice (MS 2008-2011), *Investigating energy flow pathways through a headwater top predator: food webs, prey availability and individual variation*

Hugo Collantes (MS 2000-2006), *Conservation of ecosystem services in residential developments: lessons from conservation-oriented subdivisions in the United States and in Peru*

Laura England (MS 1999-2003), *Riparian forest cover at multiple scales: influences on instream habitat, aquatic assemblages, and food webs in headwater streams*

Allison Roy (MS 1998-2000), *Macroinvertebrate responses to watershed urbanization in the Etowah River Basin, Georgia*

Undergraduate Honors Theses

R. Usher (B.S. 2016)

W. M. Collier (B.S. 2006)

C. R. Griffith (B.S. 2005)

CURO Fellowship students

Ally Whities (2021-2023)

Olivia Allen (2021-2023)

Jessica Mitchell (2019-2022)

Charles Bond (2018)

Reagan Mahaley (2020)

Postdoctoral Associate mentoring

Jon Benstead, Professor, University of Alabama

John Kominoski, Associate Professor, Florida International University

Deanna Connors, Scientific writer and editor

Dissertations and theses directed, Committee member (50)

DOCTORAL STUDENTS

Kelsey Laymon (UGA, Department of Entomology, current)

Danielle Hare (University of Connecticut, Major advisor: A. Helton, 2022)

Meagan Hopson (UGA, Ecology, Major advisor: L. Fowler, 2022)

Holly Yaryan Hall (UGA, Engineering, Major advisor: B. Bledsoe, 2022)

Augustine Edegbene (Rhodes University, South Africa, PhD examiner, 2020)

Chao Song (UGA, Ecology, Major advisor: F. Ballantyne, 2018)

Linsey Haram (UGA, Ecology, Major advisor: J. Byers, 2018)

James Wood (UGA, Ecology, Major advisor: M. Freeman, 2017)

Jennifer Pahl (UGA, Ecology, Major advisor: R. Carroll)
 Markus Zokan, PhD (UGA, Ecology, Major advisor: J. Drake, 2015)
 Troy Simon, PhD (UGA, Ecology, Major advisor: C. Pringle, 2015)
 Carissa Ganong, PhD (UGA, Ecology, Major advisor: C. Pringle, 2015)
 Virginia Schutte, PhD (UGA, Ecology, Major advisor: J. Byers, 2014)
 Elizabeth Graham, PhD (University of Canterbury, NZ, PhD examiner, Major advisor: A. McIntosh, 2014)
 Tom Barnum, PhD (UGA, Ecology, Major advisor: C. Pringle, 2014)
 Bill McDowell, PhD (UGA, Ecology, Major advisor: J. Byers, 2014)
 Andrew Mehring, PhD (UGA, Ecology, Major advisor: C. Pringle, 2013)
 Marcia Snyder, PhD (UGA, Ecology, Major advisor: C. Pringle, 2012)
 Kristen Cecala, PhD (UGA, Forestry and Natural Resources, Major advisor: J. Maerz, 2012)
 Jane Shevtsov, PhD (UGA, Ecology Major advisor: B. Patten, 2011)
 Ashley Helton, PhD (UGA, Ecology, Major advisor: J. Meyer, 2011)
 Gaston Small, PhD (UGA, Ecology, Major advisor; C. Pringle, 2010)
 Joseph Milanovich, PhD (UGA, Forestry and Natural Resources, Major advisor: J. Maerz, 2010)
 Scott Connelly, PhD (UGA, Ecology, Major advisor: C. Pringle, 2009)
 John Kominoski, PhD (UGA, Ecology, Major advisor: C. Pringle, 2008)
 Brady Mattsson, PhD (UGA, Forestry and Natural Resources, Major advisor: B. Cooper, 2006)
 John Schramski, PhD (UGA, Ecology, Major advisor: B. Patten, 2006)
 Marcelo Sayao Ardon, PhD (UGA, Ecology, Major advisor: C. Pringle, 2006)
 Carmen Hall, PhD (UGA, Ecology, Major advisor: M. Hunter, 2005)
 Susan Eggert, PhD (UGA, Ecology, Major advisor: J. Wallace, 2003)
 David Walters, PhD (UGA, Ecology, Major advisor: G. Helfman, 2002)
 Alonso Ramirez, PhD (UGA, Ecology, Major advisor: C. Pringle, 2001)
 Jonathon Benstead, PhD (UGA, Ecology, Major advisor: C. Pringle, 2000)
 James March, PhD (UGA, Ecology, Major advisor: C. Pringle, 2000)

MASTERS STUDENTS

Emily Chalfin (UGA, Ecology, Major advisor S. Wenger, 2023-present)
 Madeline Carpenter (UGA, Civil and Environmental Engineering, Major advisor B. Bledsoe, 2023-present)
 Kyle Connelly (UGA, Major advisor K. Capps, 2019)
 Kelly Murray-Stoker (UGA, Entomology, Major advisor D. Batzer, 2019)
 Nathan Tomczyk (UGA, Ecology, Major advisor, K. Capps, 2017)
 John Frisch (UGA, Ecology, Major advisor: C. Pringle, 2013)
 Lindsey Sargent (UGA, Ecology, Major advisor: C. Pringle, 2008)
 Jennifer Pahl (UGA, Ecology, Major advisor: R. Carroll, 2008)
 Carla Atkinson (UGA, Ecology, Major advisor: A. Covich, 2008)
 Kauaoa Fraiola (UGA, Ecology, Major advisor: A. Covich, 2006)
 Clayton Brickett (UGA, Major advisor: B. Tolner; 2004)
 Lindsey Stallcup (UGA, Ecology, Major advisor: C. Pringle, 2004)
 Lara Panayoloff (Auburn University; Major advisor: J. Feminella, 2003)
 Natalie Powell (UGA, Ecology, Major advisor: C. Pringle, 2001)
 Pascal Rabeson (UGA, Ecology, Major advisor: C. Pringle, 2001)
 Alonso Ramirez (UGA, Ecology, Major advisor: C. Pringle, 1997)

RESEARCH PRESENTATIONS/PUBLISHED ABSTRACTS

Note: "" denotes undergraduate student as co-author
169 published abstracts since 1988, those listed are since 2006*

2023

Rosemond, A.D. Steps toward Long-term Sustainability of Stream Health in the Upper Oconee Watershed Require Engagement with the Upper Oconee Regional Water Plan Upper Oconee Science and Policy Summit, February 2023.

Rosemond, A.D., N. Tomczyk, J.P. Benstead, C.S. Cummins, P.M. Bumpers, P. Rogers, D. Hare, V. Gulis, A. Helton, E. Hotchkiss, S.J. Wenger. What will happen to stream carbon in a warming world? Freshwater Downunder, Brisbane, Australia, June 2023.

Rogers, P., J. Benstead, A. Rosemond. Size matters: Experimental warming differentially affects size-structure of a forest stream invertebrate community. Freshwater Downunder, Brisbane, Australia, June 2023.

Gulis, V. H. Pates, K. Natale, R. Hodgson, C. Hopkins, A. Rosemond, J. Benstead. Effects of temperature on microbial activity: insights from a 3-year whole-stream warming experiment. Freshwater Downunder, Brisbane, Australia, June 2023.

Rosemond, A.D., N. Tomczyk, J.P. Benstead, C.S. Cummins, P.M. Bumpers, P. Rogers, D. Hare, V. Gulis, A. Helton, E. Hotchkiss, S.J. Wenger. Detrital carbon fates in a warming world: Insights from a whole-stream warming experiment. First annual Southeast Chapter meeting, Society for Freshwater Science, Columbus, GA, November, 2023.

Rosemond, A.D. Cause for care and caution in water planning and systems-based solutions. Middle Chattahoochee Water council meeting. November 15, 2023 (via zoom)

Rosemond, A.D. Cause for care and caution in water planning and systems-based solutions. Lower Flint-Ochlockonee Water council meeting. November 17, 2023 (in person)

2022

Rosemond was lead author on 2 presentations and co-author of 9 presentations at the Joint Aquatic Science Meeting in Grand Rapids, MI in May 2022. The lead authors and titles are listed below.

Rosemond et al. From a Trickle, to a River, to an Ocean: The Future of Water Depends on Holistic Inclusion in the Aquatic Sciences. Joint Aquatic Science Meeting, Grand Rapids, MI, May 2022.

Rosemond et al. Whose Job is it? A Reevaluation of U.S. Policy and Governance to Address Declining Freshwater Ecosystems. Joint Aquatic Science Meeting, Grand Rapids, MI, May 2022.

Wenger et al. Re-envisioning infrastructure investments as an opportunity for aquatic biodiversity conservation. Joint Aquatic Science Meeting, Grand Rapids, MI, May 2022.

Hare et al. The Role of Groundwater in Stream Network Carbon Cycling Under a Changing Climate. Joint Aquatic Science Meeting, Grand Rapids, MI, May 2022.

Mendez et al. Learning and Community Building through Online Collaborative Projects in the SFS Emerge Program. Joint Aquatic Science Meeting, Grand Rapids, MI, May 2022.

- Naslund et al. A structured approach to dam removal decisions at multiple spatial scales. Joint Aquatic Science Meeting, Grand Rapids, MI, May 2022.
- Mitchell et al. Observing leaf pack-associated macroinvertebrate community shifts due to experimental stream warming. Joint Aquatic Science Meeting, Grand Rapids, MI, May 2022.
- Tomczyk et al. Temperature Effects on the Stoichiometry of Carbon: Phosphorus Fluxes in Heterotrophic Streams. Joint Aquatic Science Meeting, Grand Rapids, MI, May 2022.
- Wood et al. Land Use is Reflected in the Elemental Composition of the Widespread Macrophyte *Podostemum ceratophyllum*. Joint Aquatic Science Meeting, Grand Rapids, MI, May 2022.
- Rogers et al. Effects of Experimental Warming on Community Structure of Forest Stream Invertebrates. Joint Aquatic Science Meeting, Grand Rapids, MI, May 2022.
- Freeman et al. Are We Setting the Right Conservation Targets for Water Management? Joint Aquatic Science Meeting, Grand Rapids, MI, May 2022.
- Bumpers, P.M., S. Wenger, **A.D. Rosemond**, J.P. Benstead, M. Freeman, S. Eggert, J.B. Wallace. 2021. Climate-driven variation in a southern Appalachian stream invertebrate community differs by habitat type. Society for Freshwater Science Annual meeting.
- Cummins, C., **A.D. Rosemond**, H. Halvorson, A. Rugenski, S. Wenger, J. Benstead, V. Gulis, P. Bumpers, N. Tomczyk 2021. Testing the effects of temperature and carbon quality on shredder growth, survival, consumption, and development. Society for Freshwater Science Annual Meeting.
- Tomczyk, N., A. Kaz, E. Hotchkiss, V. Gulis, J. Benstead, **A.D. Rosemond**. 2021. Temperature effects on nutrient uptake in heterotrophic streams. Society for Freshwater Science Annual meeting.
- Rogers, P., J.P. Benstead, **A.D. Rosemond**. 2021. Predicting effects of warming on invertebrate community structure in forest streams. Society for Freshwater Science Annual meeting.
- *Fager, M., N. Tomczyk, **A.D. Rosemond**, J. Benstead. 2021. Do higher temperatures change the balance of carbon and nutrients in detrital food resources? Society for Freshwater Science virtual meeting
- Naslund, L. J. Gerson, A. Brooks, **A.D. Rosemond**, D. Walters, E. Bernhardt. 2021. Ecosystem modification and network position impact contaminant fluxes from a mountaintop mining-impacted river network. Society for Freshwater Science Annual meeting
- Rosemond, A.D.**, P. Mendez, C. Colon-Gaud, A. Rugenski, D. McGarvey, B. Ondich. 2021. Can't stop won't stop- Continuing the journey to full inclusivity in freshwater science with the Emerge program. Society for Freshwater Science Annual meeting
- Bumpers, P.M., S. Wenger, **A.D. Rosemond**, J.P. Benstead, M.C. Freeman, J.B. Wallace. 2020. Using long-term data to assess the effects of climate variation on stream invertebrate community structure. ASLO-SFS Joint Meeting 2020. Madison, WI. Cancelled due to COVID-19 Pandemic. Abstract published.

- Gulis, V., J. Bogdanoff, M. Cevasco, J.P. Benstead, **A.D. Rosemond**. 2020. Effects of dissolved nutrients and substrate type on stream fungal communities: Microscopy vs. next-generation sequencing. ASLO-SFS Joint Meeting 2020. Madison, WI. Cancelled due to COVID-19 Pandemic. Abstract published.
- Madoni, K. J.P. Benstead, **A.D. Rosemond**. 2020. Temperature dependence of metabolic responses (consumption, growth, and respiration) in larval Chironomidae (Diptera). ASLO-SFS Joint Meeting 2020. Madison, WI. Cancelled due to COVID-19 Pandemic. Abstract published.
- Benstead, J.P., W.F. Cross, V. Gulis, **A.D. Rosemond**. 2020. Quantifying carbon transformation by microorganisms and metazoans in forest stream ecosystems in response to experimental nitrogen and phosphorus enrichment. ASLO-SFS Joint Meeting 2020. Madison, WI. Cancelled due to COVID-19 Pandemic. Abstract published.
- Naslund, L. J. Gerson, A. Brooks, **A.D. Rosemond**, D. Walters. 2020. Spatial patterns in contaminant flux from a mountaintop mining-impacted river network. ASLO-SFS Joint Meeting 2020. Madison, WI. Cancelled due to COVID-19 Pandemic. Abstract published.
- Tomczyk, N.J., **A.D. Rosemond**, E.R. Hotchkiss, S.A. Thomas, A.M. Helton, J.S. Kominoski, V. Gulis, D.W.P Manning, J.P. Benstead. 2020. Stoichiometry of net nutrient uptake in forested headwaters streams. Society for Freshwater Science Summer of Science. Online conference due to COVID-19 Pandemic.
- Cummins, C.S., **A.D. Rosemond**, H.M. Halvorson, A.T. Rugenski, S.J. Wenger, J.P. Benstead, V. Gulis, P. Bumpers, N. Tomczyk, P. Rogers. 2020. Thermal responses in growth, survival, and development of the stream shredder *Tallaperla*: implications for carbon processing under climate change. Society for Freshwater Science Summer of Science. Online conference due to COVID-19 Pandemic.
- Rosemond, A.D.**, P.M. Bumpers, S.J. Wenger, V. Gulis, J.P. Benstead. 2019. Beyond blooms: the critical role of terrestrial carbon uptake and retention of streamwater nutrients. Ecological Society of America Annual Meeting. Louisville, KY.
- Rogers, P. J. Benstead, **A.D. Rosemond**. 2019. Predicting effects of warming on secondary production in stream food webs with fixed detrital resource supply. Society for Freshwater Science Annual Meeting. Salt Lake City, UT.
- *Evelyn, I. M.C. Freeman, C. Conn, **A.D. Rosemond**. 2019. One fish, two fish, low stream...full fish? An exploration of the effects of drought on stream darters and their prey. Society for Freshwater Science Annual Meeting. Salt Lake City, UT.
- Tomczyk, N.J., **A.D. Rosemond**, P.M. Bumpers, C.C. Cummins, S.J. Wenger, J.P. Benstead. 2019. Temperature variance leads to underestimation of the temperature sensitivity of plant litter decomposition. Society for Freshwater Science Annual Meeting. Salt Lake City, UT.
- Conn, C.C., P.M. Bumpers, **A.D. Rosemond**, S.K. McKay, M.C. Freeman, T.C. Rasmussen, S.J. Wenger. 2019. Abiotic drivers of spatial and temporal patterns of primary producers in a mid-sized river. Society for Freshwater Science Annual Meeting, Salt Lake City, UT.
- Cummins, C.S., **A.D. Rosemond**, P.M. Bumpers, N.J. Tomczyk, J.P. Benstead, S.J. Wenger, V. Gulis. 2019. Temperature effects on shredder and microbial processing of leaf litter in streams depend on season and litter type. Society for Freshwater Science Annual Meeting. Salt Lake City, UT.

- Gulis, V., H. Pates, N. Bautz, **A. Rosemond**, J.P. Benstead. 2019. Effects of temperature on activity of microorganisms associated with decaying leaf litter. Society for Freshwater Science Annual Meeting. Salt Lake City, UT.
- Zeglin, L. M. Ardon, R. Utz, S. Cooper, W. Dodds, R. Bixby, A. Burdett, J. Follstad-Shah, N. Griffiths, T. Harms, L. Johnson, S. Johnson, J. Jones, J. Kominoski, W.H. McDowell, **A. Rosemond**, M. Trentman, D. Van Horn, A. Ward. 2019. Experimental nutrient enrichment stimulates multiple trophic levels through algal and detrital food web pathways: A global meta-analysis from streams and rivers. Society for Freshwater Science Annual Meeting. Salt Lake City, UT.
- Demi, L., J.P. Benstead, **A.D. Rosemond**, V. Gulis, J.C. Maerz. 2019. Experimental N and P additions relieve stoichiometric constraints on organic-matter flows through five stream food webs. Society for Freshwater Science Annual Meeting. Salt Lake City, UT.
- Conn, C.C., P.M. Bumpers, **A.D. Rosemond**, S.K. McKay, M.C. Freeman, T.C. Rasmussen, S.J. Wenger. 2019. Predicting resistance and resilience of river ecosystem function to altered hydrology. Georgia Water Resources Conference, Athens, GA.
- Rosemond, A.D.**, S.J. Wenger, P.M. Bumpers. 2019. Planning for future generations in the Upper Oconee watershed by engaging scenario development for desired outcomes in 2080. Georgia Water Resources Conference. Athens, GA.
- Rosemond, A.D.**, P.M. Bumpers, D.W.P. Manning, J.S. Kominoski, J.P. Benstead, V. Gulis, J. Maerz. 2018. Loaded but leaky: Chronic nutrient enrichment results in reduced and seasonally variable nutrient storage in detritus-based streams. Ecological Society of America Annual Meeting. New Orleans, LA.
- Rosemond, A.D.**, D.W.P. Manning, P.M. Bumpers, J.S. Kominoski, V. Gulis, J.P. Benstead. 2018. Nutrient-stimulated loss rates from litterbags are predictive of losses at stream reach scales. Society for Freshwater Science Annual meeting, Detroit, MI, USA.
- Bumpers, P.M, R. Usher, **A.D. Rosemond**, J. Wood, S.J. Wenger. 2018. Stoichiometry of standardized wood substrates is an effective tool for detecting nutrient pollution in streams. Society for Freshwater Science Annual meeting, Detroit, MI, USA. Poster
- Cummins, C., A.D. Rosemond, P.M. Bumpers, J.P. Benstead, V. Gulis. Microorganisms, but not shredders, respond to temperature according to the metabolic theory of ecology. Society for Freshwater Science Annual meeting, Detroit, MI, USA. Poster
- Song, C., W.K. Dodds, A. Argerich, C. Baker, W.B. Bowden, M. Douglas, K.J. Farrell, M.B. Flinn, E. Garcia, A. Helton, T. Harms, S. Jia, J. Jones, L. Koenig, J.S. Kominoski, W.H. McDowell, D. McMaster, S.P. Parker, **A.D. Rosemond**, C. Ruffing, K. Sheehan, M.T. Trentman, M. Whiles, W. Wollheim, & F. Ballantyne. Warming induces asymmetric convergence of stream metabolic balance. Society for Freshwater Science. Detroit, MI, May 2018. Oral presentation.
- Farrell, K.J., **A.D. Rosemond**, F. Ballantyne, J.S. Kominoski, S.M. Bonjour, J. Ruegg, L.E. Koenig, C.L. Baker, M.T. Trentman, T.K. Harms, K.R. Sheehan. 2017. Variation in resource stoichiometry signals differential carbon to nutrient limitation for stream consumers across biomes. Ecological Society of America Annual meeting, Portland, OR, USA.

- Rosemond, A.D.**, J.P. Benstead, J.C. Maerz, V. Gulis, P.M. Bumpers, D.W.P. Manning, J.S. Kominoski, L. Demi. 2017. Nitrogen and phosphorus have different effects at the top and bottom of stream food webs. 63rd Annual Society for Freshwater Science Annual meeting, Raleigh, NC, USA.
- Ballantyne, F., C. Song, J. Ruegg, **A.D. Rosemond**, W.K. Dodds. 2017. Thermal performance curves for whole ecosystem metabolism reveal pronounced thermal optima. 63rd Annual Society for Freshwater Science Annual meeting, Raleigh, NC, USA.
- Bumpers, P.M., **A.D. Rosemond**, J.P. Benstead, L. Demi, J.S. Kominoski, J.C. Maerz, D.W.P. Manning. 2017. A little bit of algae goes a long way: Nutrient enrichment stimulates algal growth in heavily shaded streams. 63rd Annual Society for Freshwater Science Annual meeting, Raleigh, NC, USA.
- Conn, C., **A.D. Rosemond**, P.M. Bumpers, M.C. Freeman, K. McKay, S.J. Wenger. 2017. Dramatic seasonal shifts in primary producers in a mid-sized piedmont river. 63rd Annual Society for Freshwater Science Annual meeting, Raleigh, NC, USA.
- Farrell, K.J., **A.D. Rosemond**, J. Ruegg, K. Gido, M.B. Flinn, M. Whiles, E. Garcia, Al. Argerich, B. Penaluna, M. Douglas. 2017. Testing effects of large consumers on stream ecosystem structure and function: Synthesis across the SCALER project. 63rd Annual Society for Freshwater Science Annual meeting, Raleigh, NC, USA.
- *Frandsen, G., **A.D. Rosemond**, P.M. Bumpers. 2017. Predicting warming effects on litter breakdown rates using forested and urban streams. 63rd Annual Society for Freshwater Science Annual meeting, Raleigh, NC, USA.
- Gulis, V., K. Harrington, J.P. Benstead, **A.D. Rosemond**. 2017. Effects of temperature on activity of aquatic fungi and leaf litter decomposition. 63rd Annual Society for Freshwater Science Annual meeting, Raleigh, NC, USA.
- Johnson, E.M., S.J. Wenger, **A.D. Rosemond**, P.M. Bumpers. 2017. Testing the efficacy of patterns in conductivity as a tool for watershed management. 63rd Annual Society for Freshwater Science Annual meeting, Raleigh, NC, USA.
- Song, C. W.K. Dodds, J. Ruegg, A. Argerich, C. Baker, W.B. Bowden, M. Douglas, K.J. Farrell, M.B. Flinn, E. Garcia, K. Gido, T. Harms, A. Helton, S. Jia, J. Jones, L. Koenig, J.S. Kominoski, W. H. McDowell, D. McMaster, S.P. Parker, **A.D. Rosemond**, K. Sheehan, M.T. Trentman, M. Whiles, W. Wollheim, F. Ballantyne. 2017. Interaction between physiology and environmental heterogeneity determines discrepancy in stream metabolism across spatial scales. 63rd Annual Society for Freshwater Science Annual meeting, Raleigh, NC, USA.
- Farrell, K.J., **A.D. Rosemond**, F. Ballantyne IV, J.S. Kominoski. 2016. Go big or go home: can we predict whole-stream ecosystem functions from small-scale measurements? Ecological Society of America Annual Meeting, Ft. Lauderdale, FL, USA.
- *Usher, R. **A.D. Rosemond**, J. Wood, P.M. Bumpers. 2016. Determining how streams “work” in cities: nutrients associated with watershed urbanization stimulated microbial respiration and breakdown of C. 62nd Annual Society for Freshwater Science meeting, Sacramento, CA, USA.
- Demi, L.M., J.P. Benstead, **A.D. Rosemond**, J. Maerz, V. Gulis, W.F. Cross. 2016. Resource quality, not quantity, drives consumer production in headwater streams: results from multiple N and P enrichment experiments at Coweeta. 62nd Annual Society for Freshwater Science meeting, Sacramento, CA, USA.

- Rosemond, A.D.**, D.W.P. Manning, P.M. Bumpers, J.S. Kominoski, V. Gulis, J.P. Benstead, J. Maerz. 2016. Nutrient enrichment flips nitrogen:phosphorus ratios of diverse detrital resources. 62nd Annual Society for Freshwater Science meeting, Sacramento, CA, USA.
- Bumpers, P.M. J. Spencer, S. Wenger, **A.D. Rosemond**. 2016. Temporal patterns and drivers of conductivity in urban Piedmont streams of Georgia, USA. 62nd Annual Society for Freshwater Science meeting, Sacramento, CA, USA.
- Farrell, K.J., **A.D. Rosemond**, F. Ballantyne, C. Song, J.S. Kominoski. 2016. Scaling of metabolism and nutrient uptake in a headwater stream network: What drives ecosystem processes at multiple measurement scales. 62nd Annual Society for Freshwater Science meeting, Sacramento, CA, USA.
- Kominoski, J.S., **A.D. Rosemond**, K.J. Farrell, D. Manning. 2015. Rivers without headwaters are like trees without branches: Integrating network-level ecological connectivity to enhance conservation. 100th Ecological Society of America Annual Meeting, Baltimore, MD, USA
- Rosemond, A.D.**, A.M. Helton, P.M. Bumpers, J.P. Benstead. 2015. Response of autotrophic and heterotrophic pathways to nutrients along stream networks. 61st Annual Society for Freshwater Science Meeting, Milwaukee, WI, USA
- Manning, D. **A.D. Rosemond**, J.P. Benstead, J. Kominoski, P.M. Bumpers. 2015. Watershed landuse effects on coupled nitrogen and phosphorus relationships in U.S. streams and rivers. 61st Annual Society for Freshwater Science Meeting, Milwaukee, WI, USA
- Bumpers, P.M., **A. D. Rosemond**, J.C. Maerz, J. P. Benstead. 2015. Experimental nutrient enrichment of headwater streams alters foodweb pathways to larval salamanders. 61st Annual Society for Freshwater Science Meeting, Milwaukee, WI, USA
- Farrell, K.J., **A.D. Rosemond**, J.C. Maerz, P.M. Bumpers. 2015. Assessing the effects of altered larval salamander density on ecosystem process in a headwater stream. 61st Annual Society for Freshwater Science Meeting, Milwaukee, WI, USA
- Follstad Shah, J., J. Kominoski, M. Ardon-Sayao, W. Dodds, M. Gessner, N. A. Griffiths, S. Johnson, A. Lecerf, C. LeRoy, D. Manning, **A.D. Rosemond**, C. Swan, J. Webster, L. Zeglin. 2015. Global meta-analysis of temperature effect on leaf litter breakdown rates in streams. 61st Annual Society for Freshwater Science Meeting, Milwaukee, WI, USA
- Sheehan, K., W. Wolheim, K. Farrell, C. Song, J. Kominoski, M. Trentman, W. Dodds, **A.D. Rosemond**, F. Ballantyne, J. Rueegg. 2015. Beyond our reach? Extrapolating network-scale aquatic metabolism from reach-scale observation. 61st Annual Society for Freshwater Science Meeting, Milwaukee, WI, USA
- Zeglin, L., S. Cooper, R. Utz, M. Ardon-Sayao, R. Bixby, A. Burdett, W. Dodds, N.A. Griffiths, T. Harms, L. Johnson, S. Johnson, J. Jones, J. Kominoski, W.H. McDowell, **A.D. Rosemond**, M. Trentman, J. Follstad Shah, D. Van Horn, A. Ward. 2015. Synthesis of stream ecosystem responses to nutrient enrichment at multiple trophic levels. 61st Annual Society for Freshwater Science Meeting, Milwaukee, WI, USA
- Demi, L.M., J.P. Benstead, **A.D. Rosemond**, J.C. Maerz, V. Gulis. 2015. Experimental N and P fertilization of five detritus-based headwater streams reveals effects of resource stoichiometry on consumer biomass and production. 61st Annual Society for Freshwater Science Meeting, Milwaukee, WI, USA

- Rüegg, J., K. Sheehan, C. Baker, M. Daniels, W. Dodds, K.J. Farrell, M. Flinn, K. Gido, T. Harms, J. Jones, L. Koenig, J. Kominoski, W.H. McDowell, W. Bowden, **A.D. Rosemond**, M. Trentman, M. Whiles, W. Wolheim, S.P. Parker. 2015. Baseflow patterns of geomorphic heterogeneity in stream networks across biomes. 61st Annual Society for Freshwater Science Meeting, Milwaukee, WI, USA
- Bumpers, P.M, **A.D. Rosemond**, J.C. Maerz, J. P. Benstead. 2014. Larval salamanders shift diet in Response to experimental nutrient enrichment. Joint Aquatic Sciences Meeting, Portland, OR, USA
- Farrell, K.J., **A.D. Rosemond**, F. Ballantyne, *S.M. Bonjour, J.S. Kominoski. 2014. Spatial dynamics in organic matter stoichiometry in stream networks. Joint Aquatic Sciences Meeting, Portland, OR, USA
- Paul, M.J., **A.D. Rosemond**, J. Davis. 2014. Brown is the new green: Enrichment effects on Invertebrates through detrital pathways. Joint Aquatic Sciences Meeting, Portland, OR, USA
- Rosemond, A.D.**, J.P. Benstead, J.C. Maerz, V. Gulis, J.S. Kominoski, D.W. Manning, K.G. Norris. 2014. Whole-stream carbon retention decreases with nitrogen and phosphorus concentrations. Joint Aquatic Sciences Meeting, Portland, OR, USA
- Rosemond, A.D.** 2014. Non-point source pollutants in aquatic ecosystems: Investigations that can drive cycles of inquiry, research, teaching, and training. Joint Aquatic Sciences Meeting, Portland, OR, USA
- Manning, D.W., **A.D. Rosemond**, J.S. Kominoski, V. Gulis, J.P. Benstead, J.C. Maerz. 2014. Nitrogen and phosphorus increase litter breakdown via different mechanistic pathways. Joint Aquatic Sciences Meeting, Portland, OR, USA
- Wood, J.L., **A.D. Rosemond**, *K. Kinek. 2014. Autotrophic and heterotrophic responses to nutrients and landuse gradients in southeastern montane streams. Joint Aquatic Sciences Meeting, Portland, OR, USA
- Gulis, V., T.P. Burns, J. Fitzgerald, C.R. Barrett, J.S. Kominoski, J.P. Benstead, **A.D. Rosemond**. 2014. Dissolved nutrients drive microbial activity while fungi control decomposition and nutrient stoichiometry of submerged leaf litter and wood. Joint Aquatic Sciences Meeting, Portland, OR, USA
- Demi, L.M., J.P. Benstead, **A.D. Rosemond**, J.C. Maerz, V. Gulis. 2014. Consumer biomass and production in five detritus-based stream ecosystems in response to an experimental dissolved N:P gradient. Joint Aquatic Sciences Meeting, Portland, OR, USA
- Farrell, K. J., **Rosemond, A. D.**, Kominoski, J. S., Ballantyne, F. 2013. Effects of consumer community composition and feeding strategy on ecosystem-level processes: comparing streams within the Scaler project. 61st Annual Society for Freshwater Science Meeting, Jacksonville, FL, USA
- McDowell, W. G., **Rosemond, A. D.**, W.H. McDowell, J.E. Byers. 2013. Impacts, dead or alive: effects of mass mortality of an abundant invasive species on ecosystem function. 61st Annual Society for Freshwater Science Meeting, Jacksonville, FL, USA
- Kominoski, J. S., Benstead, J. P., *Kinek, K. C., **Rosemond, A. D.**, Maerz, J. C., Manning, D. P. 2013. Comparing stream ecosystem respiration along experimental and anthropogenic N:P gradients in a single catchment. 61st Annual Society for Freshwater Science Meeting, Jacksonville, FL, USA

- Bumpers, P. M., Maerz, J. C., **Rosemond, A. D.**, Benstead, J. P., Kominoski, J. S. 2013. Nutrient enrichment of detritus-based headwater streams stimulates growth of a vertebrate top predator. 61st Annual Society for Freshwater Science Meeting, Jacksonville, FL, USA
- Burns, T. P., Gulis, V., Kominoski, J. S., **Rosemond, A. D.**, Benstead, J. P. 2013. Effects Of Dissolved nutrient ratios and concentrations on microbial activity associated with submerged leaf litter and wood. 61st Annual Society for Freshwater Science Meeting, Jacksonville, FL, USA
- Demi L.M., Benstead J.P., **Rosemond A.D.**, Maerz J.C. 2013. Consumer biomass and production in five detritus-based stream ecosystems: response to experimental gradients in dissolved N:P ratios. Ecological Society of America annual meeting, New Orleans, LA, USA
- Demi L.M., Benstead J.P., **Rosemond A.D.**, Maerz J.C. 2013. Consumer response to experimental gradients in dissolved N:P across five headwater streams. *Association for the Sciences of Limnology and Oceanography* annual meeting.
- *Kinek, K. C., Kominoski, J. S., **Rosemond, A.D.** 2013. Landscape variation in dissolved nutrients and substrate stability differentially affect primary production and respiration In streams. 61st Annual Society for Freshwater Science Meeting, Jacksonville, FL, USA
- Manning, D. W., **Rosemond, A.D.**, Kominoski, J. S., Gulis, V., Benstead, J. P., Maerz, J. C. 2013. Dissolved N:P ratios differentially affect breakdown of contrasting litter species. 61st Annual Society for Freshwater Science Meeting, Jacksonville, FL, USA
- Song, C., Ballantyne, F., **Rosemond, A.D.**, Kominoski, J. S. 2013. Modeling carbon dynamics in a hypothetical uniform stream. 61st Annual Society for Freshwater Science Meeting, Jacksonville, FL, USA
- Kominoski, J.S., J.P. Benstead, **A.D. Rosemond**, D.W.P. Manning. 2012. Balancing stream metabolic demands for carbon and nutrients: N:P enrichment stimulates whole-stream heterotrophic metabolism despite a reduced carbon base. 60th Annual Society for Freshwater Science Meeting, Louisville, KY, USA
- Rosemond, A.D.**, J.S. Kominoski, V. Gulis, J.P. Benstead. 2012. Thresholds in N and P concentration and ratio defined by carbon loss in streams. 60th Annual Society for Freshwater Science Meeting, Louisville, KY, USA
- Sterling, J., **A.D. Rosemond**, S.J. Wenger. 2012. The role of biofilms in nutrient storage and retention across an urban land use gradient. 60th Annual Society for Freshwater Science Meeting, Louisville, KY, USA
- Manning, D.W.P., J.S. Kominoski, **A.D. Rosemond**, V. Gulis, J.P. Benstead. 2012. How do dissolved N:P ratios affect substrate-specific respiration rates in streams? 60th Annual Society for Freshwater Science Meeting, Louisville, KY, USA
- Bumpers, P.M., **A.D. Rosemond**, J.C. Maerz, J.S. Kominoski, J.P. Benstead. 2012. Predicting effects of differing N:P enrichment ratios on two larval salamander species based on diet composition, life history, and stoichiometry. 60th Annual Society for Freshwater Science Meeting, Louisville, KY, USA

- Follstad Shah, J., M. Ardon, J.S. Kominoski, W.K. Dodds, M.O. Gessner, N.A. Griffiths, S. Johnson, A. Lecerf, D.W.P. Manning, **A.D. Rosemond**. 2012. MASS LOSS: A quantitative synthesis of leaf decomposition in streams. 60th Annual Society for Freshwater Science Meeting, Louisville, KY, USA
- Cecala, K.K. and **A.D. Rosemond**. 2011. Efficacy of peer-review to improve student performance in scientific writing. Annual meeting of the Ecological Society of America, Austin, TX, USA
- Rosemond, A.D.**, J.M. Davis, S. Eggert, W. Cross and J.B. Wallace. 2011. Stealing the crackers and spreading the peanut butter: insights into carbon vs. nutrient limitation of macroinvertebrates from whole-stream experiments. Annual meeting of the North American Benthological Society, Providence, RI, USA
- Kominoski, J.S., J.P. Benstead, D.W. Manning and **A.D. Rosemond**. 2011. Baseline trophic state and stream ecosystem metabolism: predicting heterotrophic response to nutrient enrichment. Annual meeting of the North American Benthological Society, Providence, RI, USA
- Manning, D.W., J.S. Kominoski and **A.D. Rosemond**. 2011. Substrate carbon to nutrient stoichiometry as a driver of microbial respiration in streams. Annual meeting of the North American Benthological Society, Providence, RI, USA
- Rosemond, A.D.**, J.B. Wallace, K. Suberkropp, V. Gulis, S.L. Eggert, J.P. Benstead, W.F. Cross, J.L. Greenwood, J.M. Davis and C.J. Tant. 2010. Synthesizing results from a long-term nutrient addition to a detritus-based ecosystem: food web and carbon flow consequences. Joint meeting of the American Society of Limnology and Oceanography and the North American Benthological Society, Santa Fe, NM, USA
- Tant, C.J., **A.D. Rosemond** and J.P. Benstead. 2010. Not all detritivores are created equal: functional group-specific threshold elemental ratios and effects of nutrient enrichment on resource quality. Joint meeting of the American Society of Limnology and Oceanography and the North American Benthological Society, Santa Fe, NM, USA
- Sterling, J.L., **A.D. Rosemond** and R.D. Brown. 2010. Variation in ecosystem function may be more telling than the mean: evidence from wood breakdown rates in urban streams. Joint meeting of the American Society of Limnology and Oceanography and the North American Benthological Society, Santa Fe, NM, USA
- Trice, A.E., **A.D. Rosemond**, J.R. Milanovich and J.C. Maerz. 2010. Assessing the trophic role of salamanders in stream ecosystems: seasonal, species-specific and individual variation. Joint meeting of the American Society of Limnology and Oceanography and the North American Benthological Society, Santa Fe, NM, USA
- Allgeier, J.A., **A.D. Rosemond** and C.A. Layman. Are humans decreasing the frequency and/or magnitude of ecological synergies? A review and case study employing multiple nutrient enrichment in Bahamian wetlands. Annual meeting of the Ecological Society of America, Pittsburg, PA, USA
- Rosemond, A.D.** and J.S. Kominoski. 2009. Predicting alterations in organic matter dynamics due to global change in freshwater ecosystems. Annual Meeting of the North American Benthological Society, Grand Rapids, MI, USA
- Davis, J.M., **A.D. Rosemond**, S.L. Eggert, W.F. Cross and J.B. Wallace. 2009. Body size alters consumer response to long-term nutrient enrichment. Annual Meeting of the North American Benthological Society, Grand Rapids, MI, USA

- Tant, C.J., **A.D. Rosemond**, A.S. Mehring, K.A. Kuehn, and J.M. Davis. 2009. The keystone role of fungi in nutrient-mediated organic matter transformations. Annual Meeting of the North American Benthological Society, Grand Rapids, MI, USA
- Allgeier, J.E., **A.D. Rosemond** and C.A. Layman. 2009. Significant nutrient co-limitation across diversity of mangrove-dominated estuaries in the Bahamas. Annual Meeting of the North American Benthological Society, Grand Rapids, MI, USA
- Tant, C.J. and **A.D. Rosemond**. 2008. Response to nutrient enrichment by microbial colonizers of detrital resources. Annual Meeting of the North American Benthological Society, Salt Lake City, UT, USA
- Rosemond, A.D.**, C.M. Swan and J.S. Kominoski. 2008. Biodiversity, global change and ecosystem function: the need for understanding relationships and potential synergies. Annual Meeting of the North American Benthological Society, Salt Lake City, UT, USA
- Mehring, A.S., G. Vellidis, C.M. Pringle, K.A. Kuehn, R.R. Lowrance and **A.D. Rosemond**. 2008. Does riparian forest composition affect in-stream oxygen demand? Annual Meeting of the North American Benthological Society, Salt Lake City, UT, USA
- Davis, J.M., **A.D. Rosemond**, J.B. Wallace and S.L. Eggert. 2008. Long-term nutrient enrichment results in redirection of energy flow in a detrital-based headwater stream. Annual Meeting of the North American Benthological Society, Salt Lake City, UT, USA
- Sargent, L.W., S.W. Golladay, A.P. Covich, S.P. Opsahl and **A.D. Rosemond**. 2008. Predicting invasion success of a lotic crayfish from physiochemical habitat variables and predator-avoidance behavior. Annual Meeting of the North American Benthological Society, Salt Lake City, UT, USA
- Findlay, R.H., J. J. Mosher and **A.D. Rosemond**. 2008. Substrate-specific responses of microbial assemblages to nutrients and fungicide in a headwater stream. American Society of Microbiology annual meeting, Boston, MA, USA
- Rosemond, A.D.**, W.F. Cross, J.L. Greenwood, V. Gulis, S.L. Eggert, K. Suberkropp, J.B. Wallace and S.E. Dye. 2007. Nitrogen versus phosphorus demand in a detritus-based headwater stream: what drives microbial to ecosystem response? 30th Congress of the International Association of Theoretical and Applied Limnology, Montreal, Canada
- Mehring, A.S. G. Vellidis, C. Pringle, K.A. Kuehn, R.R. Lowrance and **A.D. Rosemond**. 2007. Effects of leaf litter species on microbial respiration: Implications of riparian forest composition on in stream oxygen demand in a coastal plain blackwater stream. Annual Meeting of the North American Benthological Society, Columbia, SC, USA
- Rosemond, A.D.**, S. Dye, S.L. Eggert, J.P. Benstead, J.M. Davis and J. B. Wallace. 2007. Can nutrient enriched aquatic systems lose carbon? Export of particulate C in response to enrichment in a detritus-based headwater stream. Annual Meeting of the North American Benthological Society, Columbia, SC, USA
- Wright, M.S., **A.D. Rosemond** and J.V. McArthur. 2007. Who's inside the black box of ammonia oxidation in forested headwater streams as assessed by taxon-specific quantitative PCR. Annual Meeting of the North American Benthological Society, Columbia, SC, USA

- Davis, J.M., V. Patel, **A.D. Rosemond**, and C. J. Tant. 2007. The role of consumption rates and assimilation efficiencies in maintaining detritivore elemental composition: an experimental test of stoichiometric principles. Annual Meeting of the North American Benthological Society, Columbia, SC, USA
- Gulis V., K. Suberkropp and **A.D. Rosemond**. 2007. Comparison of fungal importance on submerged wood and leaf litter in two headwater streams. Annual Meeting of the North American Benthological Society, Columbia, SC, USA
- Tant, C.J., and **A.D. Rosemond**. 2007. Predicting responses to nutrient enrichment in detritus-based Systems: contrast of effects on fine vs. coarse organic matter fractions. Annual Meeting of the North American Benthological Society, Columbia, SC, USA
- Davis, J.M., **A.D. Rosemond**, W.F. Cross, S.L. Eggert and J.B. Wallace. 2006. Effects of long-term nutrient enrichment on macroinvertebrate biomass, abundance, and community composition of a detrital-based system. North American Benthological Society annual meeting, Anchorage, AK, USA
- Davis, J.M., **A.D. Rosemond**, W.F. Cross, S.L. Eggert and J.B. Wallace. 2006. Long-term nutrient enrichment of a detrital-based system: effects on macroinvertebrate biomass, abundance, and community composition. Ecological Society of America annual meeting, Memphis, TN, USA
- Rosemond, A.D.**, V.I. Gulis, J.L. Greenwood, W.F. Cross, J.M. Davis, K. Suberkropp and J.B. Wallace. 2006. Consequences of nutrient enrichment to biodiversity in headwater streams: an assessment of effects on multiple taxonomic groups. North American Benthological Society annual meeting, Anchorage, AK, USA
- Tant, C.J., **A.D. Rosemond** and D.E. Conners. 2006. Quantifying the role of microbes in running the world: response to nutrient enrichment and effects on ecosystem processes. North American Benthological Society annual meeting, Anchorage, AK, USA

TEACHING

- Honors college book discussion, Fall 2023.
- Honors capstone, HONS 4800H, Sam Dilly, summer 2023.
- Water sustainability in the Anthropocene Fall 2020, Fall 2021, Fall 2022.
- Special topics in Ecology (Water sustainability in the Anthropocene) Spring 2019
- Freshwater Ecosystems (ECOL/FISH/WASR 4310/6310 and 4310L/6310L) (Fall 2014, Fall 2015, Fall 2016, Fall 2017, Fall 2019 and Fall 2020 with Alan Covich). Co-taught with Alex Strauss Fall 2021. Co-taught with Krista Capps Fall 2022.
- Limnology (ECOL/FISH/WASR 4310/6310 and 4310L/6310L) (Fall 2006, Fall 2007, Fall 2008, Fall 2009, Fall 2010, Fall 2011, Fall 2012, Fall 2013).
- Senior Seminar in Ecology ECOL 4950. Spring 2018. Spring 2016. Spring 2015 w/ Craig Osenberg.
- Concepts and Approaches in Ecosystems Ecology ECOL/WILD 8322. (Spring 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2015, 2017) Co-taught in 2007, 2008, 2009 with Mark Bradford. Co-taught in 2011, 2012, 2013 with Nina Wurzbarger, Co-taught in 2015 and 2017 with Nina Wurzbarger and Ford Ballantyne.
- Special topics in Ecology ECOL 8990. Biodiversity and Ecosystem Function. Spring 2006.
- Freshman Odyssey Seminar FYOS 1001. Take Me to the River! The Ecology and Conservation Needs of Aquatic Ecosystems. Spring 2014. Fall 2014, Fall 2015, Fall 2016 w/ Seth Wenger and Scott Connelly.

AWARDS, SCHOLARSHIPS, AND FELLOWSHIPS

- Outstanding Teaching Faculty Award, Odum School of Ecology, University of Georgia (2021)
- Fellow, Ecological Society of America (elected 2018)
- Creative Research Medal in Natural Sciences and Engineering, University of Georgia (2018)
- Outstanding Teaching Faculty Award, College of Environment and Design, University of Georgia (2007)
- National Science Foundation Postdoctoral Fellowship in Environmental Biology. \$69,600. (1994-1996)
- E. Lucy Braun Award. Best student poster, Ecological Society of America annual meeting, San Antonio, TX. (1991)
- Oral presentation in basic research, honorable mention. North American Benthological Society annual meeting, Santa Fe, NM. (1991)
- Oral presentation in basic research, honorable mention. North American Benthological Society annual meeting, Blacksburg, VA. (1990)
- Oak Ridge Associated Universities Graduate Fellowship. \$9,000. (1990-1991)
- Oak Ridge Associated Universities Graduate Fellowship. \$12,000. (1989-1990)
- University of Michigan Biological Station Naturalist/Ecologist Training Program Fellowship. \$2,000. (1989)

PROFESSIONAL ACTIVITIES & COMMUNITY SERVICE

Service to the Discipline

2023-2024

- Panel member NSF Leading Culture Change Through Professional Societies of Biology (BIO-LEAPS) August 2023
- Grant review – Swiss National Science Foundation January 2023

2022-2023

- Co-organizer, Exploring Race and Ethnicity in the Aquatic Sciences. With Mazeika Sullivan and Denzel Cross. Event at the Joint Aquatic Science Meeting, Grand Rapids, MI, May 2022.
- Co-organizer, Multicultural networking event. With Vanessa Loughheed. Event at the Joint Aquatic Science Meeting, Grand Rapids, MI, May 2022.
- Member, Elections and Place committee, Society for Freshwater Science.
- Member, Career Awards committee, Society for Freshwater Science.

2021-2022

- Chair, Elections and Place committee, Society for Freshwater Science.
- Member, Career Awards committee, Society for Freshwater Science.

2020-2021

- Chair, organizational team, Society for Freshwater Science “Summer of Science” online event. Four weeks of programming, June 9-July 3, 2020.
- Past-President, Society for Freshwater Science (2020-2021). Duties include member, Board of Directors, member, Executive Committee, Member, Finance Committee, Member, Board of Trustees of the Endowment, Chair, Elections and Place Committee.
- President, Society for Freshwater Science (2019-2020). Duties include Chair, Board of Directors, Chair, Executive Committee, Member, Finance Committee, Member, Board of Trustees of the Endowment. Duties: overall responsibility for the business of the Society, exercises primary responsibility for the orderly implementation of the Annual Meeting, Leads fundraising efforts, represents the Society to outside parties.
- Contributed significantly to the Society for Freshwater Science 2020-2025 Strategic Plan.

Previous

- President-Elect, Society for Freshwater Science (2018-2019). Associated committee service includes 1) Awards Committee, chair (oversight and management for four Career Awards, Hynes (young investigator) Award, Student presentation Awards, and Society Fellows, 2) Board of Directors, 3) Executive Committee, 4) ad hoc Membership Committee, 5) Finance Committee, and 6) Long-range Planning Committee.
- Subject matter Editor, *Ecology* (2011-2018)
- National Ecological Observatory Network, Stream Experimental Observatory Network (STREON) advisory group participant (2009-2015).
- Phycological Society of America Prescott Award selection committee member (2011-2015)
- Board of Directors, Society for Freshwater Science (2010-2013)
- Georgia Nutrient Technical Advisory Group (TAG), GA Environmental Protection Division, Elizabeth Booth Director (2013-present)
- Scientific and Engineering Advisory Panel (SEAP) to Georgia's State Water Plan (2009-2012).
- Research Frontiers in Ecosystem Science. Contributed to project via interview. March 2014.
- Co-organizer of symposium "Global Change Effects on Aquatic Ecosystems: Insights Into Controls on Ecosystem Functions and Implications to Their Protection, Conservation and Restoration" (A Symposium Inspired by the Work of Patrick J. Mulholland, with Brian Roberts (Louisiana Universities Marine Consortium) and Natalie Griffiths (Oak Ridge National Laboratory). American Museum of Science and Energy, Oak Ridge, TN. November 2011.
- Co-organizer of a special session with S. Eggert "A Bug's Life. Stream Macroinvertebrates as Mediators of Stream Ecosystem Processes: Insights Gained from the Work of J. Bruce Wallace". Special Session. North American Benthological Society annual meeting, Providence, RI. May 2011
- Chair, North American Benthological Society, Hynes Award selection committee (2007-2010)
- North American Benthological Society, Chair, Long-range Planning Committee (1999-2004)
- Co-organizer of special session "Changing Land Use Effects on Aquatic Food Webs", North American Benthological Society annual meeting, Athens, GA. May 2003.
- Co-organizer of special session "Autotrophy and Heterotrophy in Freshwater and Marine Food Webs", with Michael Pace. ASLO/ESA annual meeting, St. Louis, MO. June 1998

Outreach/Public engagement

- Invited speaker, Regional water council meeting. Rosemond, A.D. Cause for care and caution in water planning and systems-based solutions. Middle Chattahoochee Water council meeting. November 15, 2023 (via zoom)
- Invited speaker, Regional water council meeting. Rosemond, A.D. Cause for care and caution in water planning and systems-based solutions. Lower Flint-Ochlockonee Water council meeting. November 17, 2023 (in person)
- Speaker and Panelist, Georgia Climate Conference. 'What does a changing climate mean for Georgia's ecosystems: Aquatic ecosystems', November 2019.
- Speaker, Georgia Water Resources Conference presentation. 'Planning for future generations in the Upper Oconee Watershed', (with S.J. Wenger and P.M. Bumpers), April 2019.
- Presentation and panel at the Upper Oconee Watershed Network Science and Policy Summit. September 2018.
- Oconee River Greenway Commission member, Athens Clarke County (2013- 2014)
- Board member, Georgia Museum of Natural History (2010-present)
- Stream walk. Harris Shoals education stream walk for community outreach (July 2010)
- Presentation to Athens, GA Mayor and commission regarding biological assessment of Athens area streams (January 2010)
- Athens-Clarke County Partner in Education, Hilsman Middle School. Gave presentations each month at Hilsman Middle School on careers in ecology and science (2009-2010)

- Project established with Athens-Clarke County office of the Department of Transportation and Public Works to determine the ecological health of Athens, GA area streams. This project is funded by a U.S. EPA 319 grant with the goal of developing the county's its first watershed improvement plans. Rosemond's lab assisted in quantifying ecological condition in ACC streams and providing guidance on water quality assessment and urban stream research. (2008-2015.)
- Presentation: *Jump in: to the Altamaha River*, Franklin College of Arts and Sciences public outreach seminar series, Darien Public Library, Darien, GA. (2000)
- Guest scientist. Super Science Day/ Science Olympiad Day/ Science Night, Barrow Elementary School, Athens, GA. 2000-2013. Approximately 120 students/year in groups of 10-12 explore microscopic life. Total students served = ca. 1420. (2000-2013)
- Upper Chattahoochee Riverkeeper Scientific Advisory Board (1998-2000)

University Service

2023-2024

Distinguished Research Professor selection committee, December 2023

2021-2022

- University Council Executive committee

2020-2021

- Program review team University of Georgia Marine Institute (2020-2021)
- University Council Executive Committee ad hoc subcommittee on Baldwin Hall (Fall 2020-present)
- River Basin Center, Advisory Board (2016-present)
- Institute for Resilient Infrastructure Systems, Advisory Board (2017-present)
- University Council Executive Committee (2016-present)
- Watershed UGA Campus Monitoring Committee (2015-present)

Previous

- Human resources subcommittee to University Council (2011-2019)
- University Council, member (2008-2011; 2011-2020)
- Sustainability Summit Planning Committee (2015-2016)
- Co-organizer of Aquatic Conservation Science: Merging Theory and Application, October 2008, University of Georgia.
- College of Environment and Design Executive committee, faculty representative (2005-2006)

Odum School of Ecology Service

2023-2024

- Graduate Programs Committee (2021-present)
- Faculty mentor to Sechindra Vallury
- Faculty mentor to Tamika Lunn

2022-2023

- Graduate Programs Committee (2021-present)
- Faculty mentor to Sechindra Vallury

2021-2022

- Member, search committee for River Basin Center co-Director (2021-2022).
- Member, search committee for Teaching postdoc
- Graduate Programs Committee (2021-present)

2020-2021

- Strategic Planning Committee, co-chair with Pej Rohani (2018-2020; plan was accepted by OSE faculty February 2020)
- Member, search committee for River Basin Center co-Director (2020-2021).

Recent previous service

- Bylaws and Governance Committee, chair (2017-2018)
- Odum 50/10 planning committee (2017-2018)
- Promotion and Tenure committee (2015-2018)
- Teaching postdoc selection committee (2018)

Some examples of previous service

- Odum School of Ecology Executive Committee member (2009-2013; 2015-2018)
- University of Georgia Faculty Honors Network Mentor (2007-present)
- Odum School of Ecology Analytical Chemistry Laboratory oversight committee (2009-2015)
- Engaging the Public workshop, UGA OVPR. Workshop participant (March 2014)
- Odum School of Ecology Search Committee Ecosystem Scientist co-chair (2011)

Collaborative working groups

- Stream nutrient effects synthesis group (LTER), funded by the National Science Foundation (2013-2017).
- MASS LOSS LTER working group participant, funded by the National Science Foundation. Coweeta Hydrologic Laboratory, Franklin, NC. (2011-2016).
- Cross-site LTER working group participant, funded by the National Science Foundation. Predicting the influence of inland climate change on continental-scale carbon and nutrient processing in river networks. Santa Fe, NM May 2010.
- STREON planning meeting participant, Boulder, CO, February 2008.
- Cross-site LTER working group participant, funded by the National Science Foundation. The importance of consumer-driven nutrient recycling in streams across a climatic gradient. Culebra, PR, September 2005.
- National Center for Ecological Analysis and Synthesis. Detritus and the dynamics of populations, food webs and communities. Working group participant, (2002-2010).

MEDIA

2023

Atlanta Magazine, March 2023. Interviewed regarding Okefenokee swamp.

<https://www.atlantamagazine.com/news-culture-articles/a-bipartisan-bill-would-ban-future-mining-around-georgias-okefenokee-swamp/>

Eos. 15 November 2023. Jones, E.M. Provided expertise for scientific article on treated sewage effects on ecosystems <https://eos.org/articles/even-treated-sewage-harms-freshwater-ecosystems>.

Georgia Magazine, November 2023. Parts of the Clean Water Act not effective in controlling nutrient pollution. <https://www.newswise.com/articles/parts-of-clean-water-act-not-effective-in-controlling-nutrient-pollution>.

Prior to 2023

The Hill. Trump's deregulatory disregard for law and science. W.W. Buzbee and M.P. Sullivan with co-authors M. Rains, A. Rosemond, and A. Rodewald. August 2020. <https://thehill.com/opinion/energy-environment/514401-trumps-deregulatory-disregard-for-law-and-science>

President's Environment, Society for Freshwater Science. A watershed moment for social change in SFS: action required. A.D. Rosemond. June 2020. <https://freshwater-science.org/news/presidents-environment-watershed-moment-social-change-in-sfs-action-required-0>

President's Environment, Society for Freshwater Science. Coping with COVID-19. A.D. Rosemond. March 2020. <https://freshwater-science.org/news/presidents-environment-coping-covid-19>

President's Environment, Society for Freshwater Science. SFS committed to inclusion. A.D. Rosemond. August 2019. <https://freshwater-science.org/news/presidents-environment-sfs-committed-inclusion>

UGA Today, Focus on Faculty. Amy Rosemond. February 2020. <https://news.uga.edu/focus-on-faculty-amy-rosemond/>

Expert Interview: Nutrient Pollution in Flowing Waters: Q&A with Amy Rosemond and Ryan King. Nutrient Scientific Technical Exchange Partnership and Support (N-STEPS) Circular, U.S. Environmental Protection Agency, July 2017.

Shearer, L. 2016. Health of Athens streams declining, monitor finds (2 October 2016). <http://onlineathens.com/local-news/2016-10-02/health-athens-clarke-streams-declining-monitors-find>

Making Waves Podcast. Interview with the Society for Freshwater Science about nutrient effects on detrital stream food webs (18 September 2015). <http://www.freshwater-science.org/Education-and-Outreach/Media/Podcast/MW15---Amy-Rosemond.cfm>

The Freshwater Blog. Nutrient pollution can harm stream ecosystems in previous unknown ways (17 April 2015). <http://freshwaterblog.net/2015/04/17/nutrient-pollution-can-harm-stream-ecosystems-in-previous-unknown-ways/>

Shearer, L. 2015. UGA ecologists find another way fertilizer damages streams. Athens Banner-Herald (16 March 2015). <http://onlineathens.com/uga/2015-03-15/uga-ecologists-find-another-way-fertilizer-damages-streams>

University of Georgia Press Release: Nutrient pollution damages streams in ways previously unknown, ecologists find. (5 March 2015) <http://news.uga.edu/releases/article/nutrient-pollution-damages-streams-in-ways-previously-unknown-0315/>. Reposted at Phys Org file://localhost/. <http://phys.org/news/2015-03-nutrient-pollution-streams-ways-previously.html>.

Laboratory Equipment <http://www.laboratoryequipment.com/news/2015/03/stream-pollution-killing-aquatic-life>.

National Science Foundation Press Release: Nutrient pollution from nitrogen and phosphorus reduces streams' ability to support aquatic life. (5 March 2015). http://www.nsf.gov/news/news_summ.jsp?cntn_id=134174&org=NSF&from=news

Ridley, A. 2015. UGA researchers discover excess nutrients hurt streams. Interview on WUGA. <http://www.wuga.org/index.php?/News/newsstory/uga-researchers-discover-excess-nutrients-hurt-streams>

Anonymous. 2015. Environment: Nutrient pollution disrupts stream carbon cycle. Summit County Citizens Voice (6 March 2015). <http://summitcountyvoice.com/2015/03/06/environment-nutrient-pollution-disrupts-stream-carbon-cycle/>

University of Alabama Press Release: Nutrient pollution damages streams in ways previously unknown, UA co-authored research shows. (5 March 2015). <http://uanews.ua.edu/2015/03/nutrient-pollution-damages-streams-in-ways-previously-unknown-ua-co-authored-research-shows/>

Anonymous. 2015. Nutrient pollution reducing streams' ability to support aquatic life. Kansas City infoZine (6 March 2015). <http://www.infozine.com/news/stories/op/storiesView/sid/61280/>

Gavrilles, B. 2015. Nutrient pollution damages streams in ways previously unknown, ecologists find. Science Daily (5 March 2015). <http://www.sciencedaily.com/releases/2015/03/150305152101.htm>

Enoch, Ed. 2015. Study: Excess nutrients affect stream's ecosystem. Tuscaloosa News (5 March 2015). <http://www.tuscaloosaneews.com/article/20150305/NEWS/150309700>. Reposted at Al.com http://www.al.com/news/tuscaloosa/index.ssf/2015/03/alabama_professor_explores_eco.html

Kalaugher, L. 2015. Nutrients boost forest-carbon loss from streams. Environmental Research Web (6 March 2015). <http://environmentalresearchweb.org/cws/article/news/60446>

Perez, E. 2015. Florida International University Press Release. Nutrients could reduce streams' ability to support aquatic life, researchers find. (6 March 2015). <http://news.fiu.edu/2015/03/nutrients-could-reduce-streams-ability-to-support-aquatic-life-researchers-find/85902>

University of Georgia Press Release. Study: Predators don't benefit from increased insect biomass (9 April 2011). <http://news.uga.edu/releases/article/study-predators-dont-benefit-from-increased-insect-biomass/>

PROFESSIONAL MEMBERSHIPS

- Society for Freshwater Science (SFS)
- Ecological Society of America (ESA)
- American Institute for Biological Sciences (AIBS)
- Association for the Sciences of Limnology and Oceanography (ASLO)
- Sigma Xi

REVIEWER FOR JOURNALS, PUBLISHERS, AND FUNDING ORGANIZATIONS

Grant Review and Panel Service

- Panel member NSF Leading Culture Change Through Professional Societies of Biology (BIO-LEAPS) 2023
- Grant review – Swiss National Science Foundation 2023
- Grant review for NSF Geoscience panel 2018
- Grant review for NSF Ecosystems panel 2017
- Grant review for NSF Ecology (1) and Ecosystems (1) panels. 2016.
- Grant proposal panel, Waters and Watersheds Program (joint between NSF/EPA/USDA (1996-1997)
- Grant proposal panel, NSF Career Program (1997)
- Grant proposal panel, NSF Graduate Fellowship Program (2000)
- Grant proposal panel, National Science Foundation Division of Environmental Biology Ecosystem Science (2003-2006)
- Grant proposal panel, National Science Foundation Division of Environmental Biology Ecosystem Science

(Fall 2010)

- Grant proposal reviewer National Science Foundation Division of Environmental Biology Ecosystem Science panel (2011-2014)
- Grant Proposal panel, North Carolina Water Resources grants panel, proposal review and panel service (Fall 2012, 2013)

Journals – manuscript review

2023 Freshwater Biology (1)

2022 Freshwater Biology (2)

2017-2021 *Science*; *Nature*; *Science Advances*; *Oiko*; *Science of the Total Environment*; *Ecology Letters*; *Ecosystems*.

2011-2016 *Nature Communications*; *Ecology*; *Ecological Monographs*; *Limnology and Oceanography*; *Journal of Applied Ecology*; *Freshwater Science*; *Georgia Water Resources*; *Freshwater Biology*.

Prior to 2011 *Ecology*; *Limnology and Oceanography*; *Freshwater Science*; *Freshwater Biology*; *Journal of Phycology*; *Biotropica*; *Oecologia*; *Oikos*; *Trends in Ecology and Evolution*; *Biogeochemistry*; *Ecology Letters*; *Journal of Biological Invasions*; *Canadian Journal of Fisheries and Aquatic Sciences*; *American Naturalist*.

Professional development

- Participant, 31st Academic Affairs Faculty Symposium: “Embracing Diversity, Equity, and Inclusion in Teaching and Learning at UGA. March 26-29, 2021.

INVITED PLENARIES, SEMINARS, PUBLIC LECTURES

Invited Keynote and Plenary Addresses

36th Congress of the International Society of Limnology, Berlin, Germany. **A.D. Rosemond**. Ecological surprises and insights from large-scale stream experiments. August 2022.

9th Congress of Plant Litter Processing in Freshwater. University of Minho, Braga, Portugal. Plenary address (given virtually) **A.D. Rosemond**. Quantifying global change stressor effects on the rates and fates of terrestrial breakdown in streams. May 2022.

Rosemond, A.D. National trends and updates: a ‘connected’ view of SFS (and science) from ‘the bottom’! Pacific Northwest Chapter, Society for Freshwater Science keynote. Newport Beach, OR (participated remotely). November 2019.

Rosemond, A.D. Keynote speaker. A critique of nutrient assessment strategies. Freshwater Biological Association annual meeting, Birmingham, England. 2000.

Public Addresses

Armitage Lectures, Kansas University, Department of Ecology and Evolutionary Biology and Armitage Education Center and Kansas Biological Survey (KBS). Invited in 2020 and 2021, cancelled due to Covid. Presentations, April 2022.

Presentation #1: **A.D. Rosemond**. Global change effects on stream ecosystems: stories of loss and recovery (Dept of Ecology and Evolutionary Biology, April 21, 2022); Presentation #2: **A.D. Rosemond**. Surprises and insights from long-term stream ecological experiments (KBS, April 22, 2022).

Rosemond, A.D. Emergence: a Freshwater Science Imperative. Presidential address to the Society for Freshwater Science, June 2020.

Webinars

Rosemond, A.D., panelist. What does a changing climate mean for Georgia's water resources?: Impacts on Ecosystems/overlapping stressors. A webinar presented by the Georgia Climate Project. December 2020.

Rosemond, A.D. and D. Bronk. Women's Aquatic Network; Presidential Leadership in Aquatic Sciences. November 2020.

Rosemond, A.D. Nutrient enrichment effects on brown carbon pathways: Experimental evidence of detrital carbon loss and altered food web structure in headwater streams. National Numeric Nutrient Criteria Webinar Series. U.S. EPA. April 2017

Invited talks at meetings and conferences

Rosemond, A.D. 'What does a changing climate mean for Georgia's ecosystems: Aquatic ecosystems', Georgia Climate Conference, November 2019.

Rosemond, A.D. President-elect address. Society for Freshwater Science Annual meeting, Salt Lake City, UT. May 2019.

Rosemond, A.D. (and co-authors). Global change effects on stream carbon dynamics and food webs: insights from whole stream experiments at Coweeta. 2019 Coweeta LTER Retrospective Symposium, Dillard House, Dillard, GA. May 2019.

Rosemond, A.D., S.J. Wenger, and P.M. Bumpers. 'Planning for future generations in the Upper Oconee Watershed', (with S.J. Wenger and P.M. Bumpers). Georgia Water Resources Conference. April 2019.

Rosemond, A., J. Sterling, P. Bumpers and S. Wenger. Both pollutants and altered hydrology negatively affect stream life in the Upper Oconee Watershed. UOWN Science and Policy Summit, Athens, GA. September 2016.

Bumpers, P.M., D.W.P. Manning, R. Brown, **A. Rosemond** and B. Giri. Long-term trends in the Upper Oconee Watershed using the Upper Oconee Watershed Network's (UOWN) citizen-science data. UOWN Science and Policy Summit, Athens, GA. September 2016.

Rosemond, A.D., V. Gulis, J.P. Benstead, J.C. Maerz, J.S. Kominoski, and D.W.P. Manning. Metabolically driven carbon transformations in streams: Nutrient enrichment effects and the pivotal role of supply and substrate stoichiometry. Gordon Research Conference: The Metabolic Basis of Ecology and Evolution in a Changing World, University of New England, Biddeford, Maine, USA. 2012.

Rosemond, A.D. Nitrogen versus phosphorus demand in a detritus-based headwater stream: what drives microbial to ecosystem response? 30th Congress of the International Association of Theoretical and Applied Limnology, Montreal, Canada (also listed under published abstracts). 2007.

Rosemond, A.D. Engineering role models: organisms that create changes in material physical state and retain species-rich, functioning environments. State of the art conference on Ecological Engineering, University of Georgia Center for Continuing Education, Athens, GA. 2001.

Invited presentations at Universities and Research Laboratories

- Rosemond, A.D.** Invited scholar to contribute to Socio-Ecological Synthesis Center workshop for early career scholars. Contributed to workshop planning and implementation. Presentation: "What's the problem? A human-natural systems approach to understanding causes and effects of stressors on freshwater ecosystems. Baltimore, MD. February 2020.
- Rosemond, A.D.** "Global change effects on stream food webs require conservation from the bottom up" Virginia Polytechnic University (Virginia Tech), February 2019.
- Rosemond, A.D. (and co-authors)** "Beyond the Green: new insights into negative effects of nutrient pollution through brown (detritus-based) pathways". North Carolina State University, November 2018.
- Rosemond, A.D. (and co-authors)** "Reading the leaves" to Assess Nutrient Enrichment Effects on Stream Health. UGA River Basin Center 3rd Wednesday Symposium. February 2018.
- Rosemond, A.D. (and co-authors)** How well do patch-scale litter breakdown rates predict effects of excess nutrients on terrestrial carbon loss from whole streams? Symposium for European Freshwater Sciences, Olomouc, CZ, July 2017.
- Rosemond, A.D.** Global change, carbon loss and a road map for improved stream health. UGA Geography Colloquium, Athens, GA, February 2017.
- Rosemond, A.D.** In sickness and in health: committing to a (better) future with streams. Odum School of Ecology, Athens, GA, March 2016.
- Rosemond, A.D.** Global change, watershed forest cover and stream ecosystem function in the Southern Appalachians. Coweeta LTER and US Forest Service winter meeting, Otto, NC, January 2016.
- Rosemond, A.D.** Invisible – but critical – effects of excess nutrients in aquatic ecosystems. Cary Institute of Ecosystem Studies, Millbrook, NY, April 2014.
- Rosemond, A.D.** Promoting aquatic ecosystem health in an age of global change – challenges and recommendations for action. University of Tennessee-Chattanooga, September 2013.
- Rosemond, A.D., A. Steinman and W. Hill.** Nutrient loading and interactions with other global change stressors. Global change effects on aquatic ecosystems: insights into controls on ecosystem functions and implications to their protection, conservation and restoration. Oak Ridge Museum of Science and Energy, Oak Ridge, TN. 2011.
- Rosemond, A.D.** Aquatic ecosystems at a crossroads: multiple stressors, interactions and tipping points associated with global change. University of Georgia, Athens, GA, Odum School of Ecology. 2010.
- Rosemond, A.D.** Ecology is not all green: Fundamental changes in carbon and nutrient flux result from experimental enrichment of a detritus-based stream. Cornell University, Ithaca, NY, Department of Biology, Seminar series in Biocomplexity and Biogeochemistry. 2009.
- Rosemond, A.D.** Carbon and food web consequences of nutrient enrichment via detrital pathways. Virginia Polytechnic Institute and State University, Blacksburg, VA. 2007.
- Rosemond, A.D.** Effects of resources on consumers, food webs and ecosystem function in detritus-based ecosystems. Duke University, Durham, NC, Department of Biology and Nicholas School of the Environment. 2005.

Rosemond, A.D. Why bottoms matter: Effects of resources on consumers, food webs and ecosystem function. University of Georgia, Athens, GA, Institute of Ecology. 2004.

Rosemond, A.D. Nutrient limitation and consumer control in tropical stream food webs, Appalachian State University, Boone, NC, Department of Biology. 2000.

Rosemond, A.D. Towards prediction of environmental stressor effects in aquatic food webs, University of Maine, Orono, ME, Department of Biology. 2000.

Rosemond, A.D. Effects of nutrients and consumers in detrital food webs, Universidade Federal Rural de Pernambuco, Recife, Brazil. 1999.

Rosemond, A.D. What can aquatic food webs tell us about the world? Savannah River Ecology Laboratory, Aiken, SC. 1999.

Rosemond, A.D. Effects of resources and consumers in stream food webs, Auburn University, Auburn, AL, Department of Biology. 1996.

Rosemond, A.D. Effects of variation in phosphorus concentration in food webs of streams at La Selva, La Selva Biological Station, Costa Rica. 1996.