

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

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**EDUCATION**

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- 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**

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- 2017-present* Professor, Odum School of Ecology | University of Georgia | Athens, GA  
Interim Associate Dean of Administration
- 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

**AFFILIATIONS**

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- 2017-present* UGA Institute for Resilient Infrastructure Systems
- 2015-present* UGA River Basin Faculty
- 2014-present* Center for Integrative Conservation Research Faculty Affiliate
- 2005-present* UGA Water Faculty
- 2005-present* Conservation Ecology Faculty

**AREAS OF RESEARCH**

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Aquatic ecosystem ecology, 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**

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

## PUBLICATIONS (75 total)

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### *Peer-Reviewed Journal Publications*

*Graduate student authors are underlined, postdocs□, undergraduate authors\**

- 2018** 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*. 00:000-000
- 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*. 00:000-000.
- 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* 00:000-000.
- 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
- Kominoski□, 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*. doi:10.1002/lno.10610.
- 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. 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. 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. 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□, 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□, 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, 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 Ruyter, 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.

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### Articles in review or revision

Demi, L., J. Benstead, **A. Rosemond**, J. Maerz. Experimental whole-stream nutrient additions reveal phosphorus limitation of invertebrate production. In review, *Ecology*.

### Planned submissions

Manning, D.W.P., **A.D. Rosemond**, J.P. Benstead, P.M. Bumpers, and J.S. Kominoski. Watershed size and land use effects on coupled nitrogen and phosphorus relationships in U.S. streams and rivers.

Helton, A.M., **A.D. Rosemond**, P.M. Bumpers, and J.P. Benstead. Effects of nutrients on autotrophic and heterotrophic pathways in a river network.

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### Books, edited volumes & dissertation (5 total, book chapters and dissertation)

- 2018** **Rosemond, A.D.**, P.M. Bumpers, S.L. Eggert, and M.J. Paul. Coweeta Hydrologic Laboratory Chapter in Synthesis of Biological Responses to Stream Nutrients. Book chapter. National Council for Air and Stream Improvement, Inc., *in press*.
- 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.
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- 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: \$3,628,000; Total awarded collaboratively: \$7,217,000)**

### Recently funded

- 2017** 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. (Total project \$1.2 million; UGA \$550,000).

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).

### Active

- 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.

### Previous support

- 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

**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.

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## STUDENT RESEARCH ADVISING

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*Dissertations and theses directed, Major advisor*

### **DOCTORAL STUDENTS**

Caitlin Conn (PhD 2015-present; co-advised w/ S. Wenger)

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**

Carolyn Cummins (MS 2017-present)

Emily Johnson (MS 2016- present; co-advised w/ S. Wenger)

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

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)

### **Dissertations and theses directed, Committee member**

#### **DOCTORAL STUDENTS**

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

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

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

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, 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**

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)  
 Kaugoa Fraiola (UGA, Ecology, Major advisor: A. Covich, 2006)  
 Clayton Brickett (UGA, Major advisor: B. Tolner; 2004)  
 Lindsey Stalcup (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)

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**RESEARCH PRESENTATIONS/PUBLISHED ABSTRACTS**

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

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. 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. 63<sup>rd</sup> 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. 63<sup>rd</sup> 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. 63<sup>rd</sup> 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. 63<sup>rd</sup> 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. 63<sup>rd</sup> 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. 63<sup>rd</sup> 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. 63<sup>rd</sup> 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. 63<sup>rd</sup> Annual Society for Freshwater Science Annual meeting, Raleigh, NC, USA.
- Song, C. W.K. Dodds, J. Rüegg, 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. 63<sup>rd</sup> 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. 62<sup>nd</sup> 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. 62<sup>nd</sup> 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. 62<sup>nd</sup> 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. 62<sup>nd</sup> 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. 62<sup>nd</sup> 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. 100<sup>th</sup> 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. 61<sup>st</sup> Annual Society for Freshwater Science Meeting, Milwaukee, WI, USA

- Manning, D. **A.D. Rosemond**, J.P. Benstead, J. Kominoski, P.M Bumpers. 2015. Watershed landused effects on coupled nitrogen and phosphorus relationships in U.S. streams and rivers. 61<sup>st</sup> 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. 61<sup>st</sup> 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. 61<sup>st</sup> 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. 61<sup>st</sup> 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. 61<sup>st</sup> 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. 61<sup>st</sup> 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. 61<sup>st</sup> 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. 61<sup>st</sup> 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. 61<sup>st</sup> 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. 61<sup>st</sup> 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. 61<sup>st</sup> 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. 61<sup>st</sup> 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. 61<sup>st</sup> 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. 61<sup>st</sup> 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. 61<sup>st</sup> 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. 61<sup>st</sup> 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? 30<sup>th</sup> 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

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## TEACHING

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- Freshwater Ecosystems (ECOL/FISH/WASR 4310/6310 and 4310L/6310L) (Fall 2014, Fall 2015, Fall 2016, Fall 2017).
  - 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 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 Wurzburger, Co-taught in 2015 and 2017 with Nina Wurzburger 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.
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## AWARDS, SCHOLARSHIPS, AND FELLOWSHIPS

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- 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)
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## PROFESSIONAL ACTIVITIES & COMMUNITY SERVICE

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### Service to the Discipline

- Subject matter Editor, *Ecology* (2011-present)
- 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

- Presentations made at the Upper Oconee Watershed Network Science and Policy Summit. September 2016.
- 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

- Institute for Resilient Infrastructure Systems, UGA, Advisory Board (2017-present)
- University Council Executive Committee (2016-present)
- River Basin Center Advisory Committee (2016-present)
- Watershed UGA Campus Monitoring Committee (2015-present)
- Sustainability Summit Planning Committee (2015-2016)
- Odum School of Ecology Executive Committee member (2009-2013; 2015-present)
- University Council, member (2008-2011; 2011-present)
- Human resources subcommittee to University Council (2011-present)
- 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)
- 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)

## Collaborative working groups

- Stream nutrient effects synthesis group (LTER), funded by the National Science Foundation (2013-present).
- MASS LOSS LTER working group participant, funded by the National Science Foundation. Coweeta Hydrologic Laboratory, Franklin, NC. (2011-present).
- 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

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 finds 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](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](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

- Grant review for NSF Ecosystems (1) 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

**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.*



## INVITED SEMINARS, PUBLIC LECTURES

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### Webinars

**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

### Meetings and conferences

**Rosemond, A.** 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.,** 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? 30<sup>th</sup> 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.

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

### Invited presentations at Universities and Research Laboratories

**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.