Amanda Therese Rugenski

University of Georgia
Odum School of Ecology
Athens, GA
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EDUCATION

2013 Ph.D. Department of Zoology, Southern Illinois University, Carbondale, IL.

Advisor: Dr. Matt R. Whiles.

Dissertation Title: Influences of disease-driven amphibian declines on ecosystem

structure and function in Panamanian headwater streams

2006 M.S. Biology, Idaho State University, Department of Biological Sciences

Pocatello, ID. Advisor: Dr. G. Wayne Minshall

Thesis title: The effects of a riparian fertilization with a ¹⁵N-labeled tracer on stream

processes in two Idaho streams.

2001 B.S. Ecology, Idaho State University, Pocatello, ID

PROFESSIONAL EXPERIENCE

Undergraduate Program Coordinator , Odum School of Ecology, University of Georgia
Lecturer, Odum School of Ecology, University of Georgia
Affiliate Academic Coach , Division of Academic Enhancement, University of Georgia
Graduate Faculty, Odum School of Ecology, University of Georgia
Instructor, Office of International Education and Odum School of Ecology, University of Georgia
Postdoctoral Researcher , Department of Ecology and Evolutionary Biology, Cornell University
Supervisors: Drs. Alex Flecker and LeRoy Poff
Postdoctoral Researcher , School of Life Sciences, Arizona State University and Smithsonian Tropical Research Institute Supervisors: Drs. James Elser and Benjamin Turner
Graduate Research Assistant, Southern Illinois University
Supervisor: Dr. Matt R. Whiles
Research Analyst, EPSCOR Idaho and Department of Environmental Quality, Idaho State University
Supervisors: Drs. Richard Inouye and Colden Baxter
Biologist , Snake River Sockeye Salmon Habitat and Limnological Research, Biolines Environmental Consulting
Supervisors: Robert Griswold (Biolines) and Heather Ray (Shoshone Bannock Tribes)
Contract Researcher , Salmon carcass analog fertilization, Shoshone-Bannock Tribes

2001-2005	Research Assistant , Long-term effects of fire on aquatic systems in the Frank Church Wilderness Area of No Return, Idaho, Idaho State University
	Supervisor: Dr. G. Wayne Minshall
2001-2003	Graduate Research Assistant, Endangered Bruneau Hot Spring Springsnail,
	Idaho State University and US Fish and Wildlife Service
	Supervisor: Dr. G. Wayne Minshall
1999-2001	Research Technician, Stream Ecology Lab, Idaho State University
2000	Fisheries Technician (Crew Leader), Targhee Caribou National Forest, ID

TEACHING

2022	Instructor, Environmental Practicum (ECOL 4900S), University of Georgia (service-
	learning course taught every even fall)
2020	Co-instructor, <i>Professional Development for Careers in Ecology</i> (ECOL 3400), University
	of Georgia
2020	Direct reading (ECOL 3900; COVID classes); developed and taught 2 courses
2020-Present	Instructor, <i>Ecological Basis of Environmental Issues</i> (ECOL 1000), University of Georgia (variable)
2019-Present	Instructor, Field Program in Ecological Problem-Solving (ECOL 3300), University of
	Georgia (every Maymester, Spring 2021)
2019-Present	Instructor, General Ecology (ECOL 3500)
2018-Present	Instructor, General Ecology Laboratory (ECOL 3500L; University of Georgia Costa Rica fall
	program)
2019-2021	Co-Instructor, Communicating Science for Ecologist, University of Georgia (every spring
	semester)
2018-2019	Co-Instructor, Field Program in Ecological Problem-Solving (ECOL 3300), University of
	Georgia (Maymester)
2018-2020	Co-Instructor, Environmental Practicum (ECOL 4900S), University of Georgia (every
	spring semester)
2017-Present	Instructor, Tropical Field Ecology (ECOL 3100 and ECOL 3100L), University of Georgia
	Costa Rica (Fall semesters)
2017-Present	Instructor, Undergraduate Mentored Research (ECOL 4960), University of Georgia Costa
	Rica (Fall semester)
2017	Co-Instructor, Insect Natural History, (ENTO 3140), University of Georgia Costa Rica
2013	Workshop Instructor, Stream field sampling and introduction to freshwater
	invertebrates, for REU students, Southern Illinois University
2011	Co-Instructor, R and innovative statistical techniques, Southern Illinois University
2011	Guest Lecturer, Limnology, Southern Illinois University
2009-2011	Teaching Assistant, Limnology, Southern Illinois University
2010	Guest Lecturer, Tropical field ecology in Panama and field workshop on introduction to
	sampling in tropical streams, Truman State University
2005	Teaching Assistant, Stream Ecology Methods in Frank Church Wilderness of No Return,
	Idaho State University
2005	Teaching Assistant, Introductory Biology for Non-Majors (Biology 100), Idaho State
	University
2005-2006	Workshop instructor, <i>National Science Foundation GK-12 program</i> , implementing
	inquiry-based activities in high school classrooms, Idaho State University

2003 Guest Lecturer, Stream Ecology. Idaho State University

STUDENT RESEARCH MENTORING EXPERIENCE

Graduate Advising

2023-present: Carleisha Hanns, Graduate Thesis Committee (M.S.), University of Georgia

2018-present: Carol Yang, Graduate Thesis Committee (Ph.D.), University of Georgia

2018-present: Carolyn Cummins, Graduate Thesis Committee (Ph.D), University of Georgia

2018-2022: Kenneth Anderson, Graduate Thesis Committee (Ph.D), Florida International

University

2021-2022: Kaylyn Barnes, Graduate Thesis Committee (M.N.R.), Warnell School of Forestry, University

of Georgia

2020-2021: Cammie Caldwell, Graduate Thesis Committee (M.N.R.), Warnell School of Forestry,

University of Georgia

2019-2021: Emily "Madison" Monroe, Graduate Thesis Committee (M.S.), University of Georgia

<u>Undergraduate Students Mentored (internship and research) – 58 total</u> *Center for Undergraduate Research Opportunities Fellowship (CURO) recipient (\$19,000)

*Birkley Heynen, University of Georgia, Senior Thesis and UGA sustainability grant

*Birkley Heynen, University of Georgia, Independent Research

*Beckham Climie, University of Georgia, Independent Research

*Amelia Shugart, University of Georgia, Independent Research

Gabriel Stephenson, University of Georgia, Independent Research

Catherine, Hanks, University of Georgia, Independent Research

Reina Scott, University of Georgia, Independent Research

Mackenzie Kennelly, University of Georgia, Independent Research

*Isabella Pellicano, University of Georgia, Independent Research

*Skyler DeWitt, University of Georgia, Independent Research

Rose Barfield, University of Georgia, Internship with Oconnee Rivers Greenway Commission

*Satyatejas Gavva Reddy, University of Georgia, Independent Research

*Skye Remko, University of Georgia, Independent Research & Senior Thesis

Caroline Anscombe, University of Georgia, Independent Research

*Cody Whitlock, University of Georgia, Independent Research

Elizabeth Shaffer, University of Georgia, Independent Research

*Preston Harden, University of Georgia, Independent Research

Emma Rose Barfield, University of Georgia, Independent Research

Lindsey Jason, University of Georgia, Independent Research

*Juliet Eden, University of Georgia, Independent Research

*Sydney Wright, University of Georgia, Independent Research

Drew DiFrancesco, University of Georgia, Independent Research

Irene Wright, University of Georgia, Independent Research

Seth Carey, University of Georgia, Independent Research

Tarin Sule, University of Georgia, Independent Research

*Kayla Wagner, University of Georgia, Independent Research

*Hannah Mone, University of Georgia, Independent Research

Lucy Lewis, University of Georgia and Davidson College, Independent Research

Mary Grant Hall, University of Georgia, Independent Research

Addison Dennard, University of Georgia, Independent Research

Brooke Seitter, University of Georgia, Independent Research

Harrison Arnold, University of Georgia, Independent Research Luana Oliveira, University of Georgia, Independent Research Kiara Bussey, University of Georgia, Independent Research Ellie Duffy, University of Georgia, Independent Research Alizah Garvin, University of Georgia, Independent Research *Tommy Bui, University of Georgia, Independent Research Amanda Glatter, University of Georgia, Independent Research *Hannah Pike, University of Georgia, Independent Research James Parker, University of Georgia, Independent Research Andres Santana, University of Georgia, Independent Research *Callee Mana, University of Georgia, Independent Research Dominic Rudin, University of Georgia, Independent Research Joy Choi, University of Georgia, Independent Research Maisha Lucas, University of Georgia, Independent Research Noah Herrington, University of Georgia, Independent Research Eliza Gillispie, University of Georgia, Independent Research Grant Foster, University of Georgia, Honors Research Scott Brovarny, Arizona State University, Honors Thesis Ashley Sanders- Arizona State University, Independent Research Corey Ng, Cornell University, Independent Research Jake Sousa, Cornell University-Independent Research Vanessa Luzuriaga, University San Fransico de Quito Jacob Leiby, Cornell University Dalton Brower, Cornell University Carolyn Cummins, Colorado State University Eva Bacmeister, Colorado State University Logan Benedict, Southern Illinois University Rebecca Lira, Southern Illinois University

PUBLICATIONS

Peer-Reviewed Publications

- Landeira-Dabarca, A.; **A.T. Rugenski**, N. Poff, A. Flecker, S.Thomas, C.L. Atkinson, C.W. Funk, J.M. Guayasamin, C. Ghalambor, Cameron; N.Herrera, B. Kondratieff, A. Shah, K. Zamudio, A.Encalada. Temperate and tropical stream mayflies exhibit opposing vulnerability responses to experimental warming along elevation gradients *In review*. Global Change Biology
- Barnum T.R., Wootton J.T., Bixby R.J., Drake J.M., Murray-Stoker D, Colón-Gaud C, **Rugenski AT**, Frauendorf T.C., Connelly S, Kilham S.S., Whiles M.R. 2022. Mechanisms underlying lack of functional compensation by insect grazers after tadpole declines in a Neotropical stream. Limnology and Oceanography.

https://doi.org/10.1002/lno.11904

- Beck, W. S., **Rugenski, A. T.**, & Poff, N. L. 2021. Limiting nutrients drive mountain stream ecosystem processes along an elevation gradient. *Freshwater Science*, *40*(2), 368-381.
- Crumsey Forde, J. M., and **A.T Rugenski**. 2020. Using student perceptions and cooperative learning to unpack primary literature on global change. CourseSource https://doi.org/10.24918/cs.2020.35
- Yang, C., S.J. Wenger, A.T. Rugenski, I.S. Wehrtmann, S. Connelly, and M.C. Freeman. 2020. Freshwater crabs (Decapoda: Pseudothelphusidae) increase rates of leaf breakdown in a neotropical headwater stream. *Freshwater Biology* 65(10):1683-1684

- Yang, C., I.S. Wehrtmann, I.S. S.J. Wenger, A.T. Rugenski. 2020. Neotropical freshwater crabs (Decapoda: Pseudothelphusidae) shred leaves. *Nauplius* 28 e2020020 https://doi.org/10.1590/2358-2936e2020020
- Atkinson, C.L., A. Encalanda, **A.T. Rugenski**, S.A. Thomas, A. Landeir-Dabarca, L. Poff, A.S. Flecker. 2018. Determinants of food resource assimilation by stream insects along a tropical elevation gradient. *Oecologia* 187(3):731-744
- Beck, W.S., **A.T. Rugenski**, L.N Poff. 2017. Influence of Experimental, Environmental, and Geographic Factors on Nutrient Diffusing Substrate Experiments in Running Waters. *Freshwater Biology* 62(10):1667-1680.
- Atkinson, C.L., K.A., Capps, **A.T. Rugenski** and M.J. Vanni. 2017. Consumer-driven nutrient dynamics in freshwater ecosystems: from individuals to ecosystems. *Biological Reviews* 92(4):2003-2023.
- Vanni, M.J., P.J. McIntyre and others. 2017. A global database of nitrogen and phosphorus excretion rates of aquatic animals. *Ecology* 98(5): 1475-1475.
- Moody, E.K., **A.T. Rugenski**, J.L. Sabo, B.L. Turner, and J.J. Elser. 2017. Does the growth rate hypothesis apply across temperatures? Variation in the growth rate and body phosphorus content of Neotropical benthic grazers. *Frontiers in Environmental Science, section Aquatic Microbiology* 5:14 doi: 10.3389/fenvs.2017.00014
- DiRenzo, G., C. Che-Castaldo, **A.T. Rugenski**, R. Brenes, M.R. Whiles, C.M. Pringle, S. Kilham, K.R. Lips. 2017. Community disassembly of tadpole community by a multi-host fungal pathogen with limited evidence of community recovery. *Ecological Applications* 27(1):309-320.
- Murria, C., **A.T. Rugenski**, M.R, Whiles, and A.P. Volger. 2015. Long-term isolation and endemicity of neotropical aquatic insects limit the community responses to recent amphibian decline. *Diversity and Distribution* 21(8):938-949.
- Barnum, T.R., J,M. Drake, J.C. Colón-Gaud, **A.T. Rugenski**, T.C. Frauendorf, S. Connelly, S.S. Kilham, M.R. Whiles. K.R. Lips, and C.M. Pringle 2015. Evidence for the persistence of foodweb structure after amphibian extirpation in a Neotropical stream. *Ecology* 96(8):2106-2116.
- Capps, K.A., C.L. Atkinson, **A. T. Rugenski**. 2015. Consumer-driven nutrient dynamics in freshwaters: an Introduction. *Freshwater Biology* 60(3):439-442.
- Rantala, H.M., A.M. Nelson, M.R. Whiles, R.O. Hall, Jr., W.K. Dodds, P. Verburg, A.D. Huryn, C.M. Pringle, S.S. Kilham, C. Colon-Gaud, **A.T. Rugenski**, S.D. Peterson, K. Fritz, S. Connelly, and K.R. Lips. 2015. Long-term changes in structure and function of a tropical headwater stream following a disease-driven amphibian decline. *Freshwater Biology* 60(3):575-589.
- Capps, K. A., C.L. Atkinson, **A.T Rugenski**. 2015. Implications of species addition and decline on nutrient dynamics in freshwaters. *Freshwater Science* 34(2):485-496.
- **Rugenski, A.T.** and G.W. Minshall 2014. Climate-moderated responses to wildfire by macroinvertebrates and basal food resources in montane wilderness streams. *Ecosphere* 5(3):art25. http://dx.doi.org/10.1890/ES13-00236.1.
- Whiles, M.R., R.O. Hall, Jr., W.K. Dodds, P. Verburg, A.D. Huryn, C.M. Pringle, K.R. Lips, S.S. Kilham, C. Colón-Gaud, **A.T. Rugenski**, S. Peterson, and S. Connelly. 2013. Disease-driven amphibian declines alter ecosystem processes in a tropical stream. *Ecosystems* 16:146-157.
- **Rugenski**, A.T., C. Murria, and M.R. Whiles. 2012. Tadpoles enhance microbial activity and leaf decomposition in a neotropical headwater stream. *Freshwater Biology* 57(9): 1904-1913.
- Marcarelli, A.M., H.A. Bechtold, **A.T. Rugenski**, and R.S. Inouye. 2009. Nutrient limitation of biofilm biomass and metabolism in the Upper Snake River basin, southeast Idaho, USA. *Hydrobiologia* 620:63-26.
- Kohler, A.E., A.T. Rugenski, and D. Taki. 2008. Stream food web responses to a salmon carcass

analog addition in two central Idaho, U.S.A. streams. Freshwater Biology 53:446-460.

Rugenski, **A.T.**, A.M. Marcarelli H.A. Bechtold, and R.S. Inouye. 2008. Effects of temperature and concentration on nutrient release rates from nutrient diffusing substrates. *Journal of the North American Benthological Society* 27(1):52-57.

Book Chapters

Rugenski, A.T., G.W. Minshall, F.R. Hauer. 2017. Riparian processes and interactions. *In* Methods in Stream Ecology. Editors. R. Hauer and G. Lamberti. Academic Press. 3rd Edition.

Minshall, G.W. and **A.T. Rugenski**. 2006. Riparian processes and interactions. *In* Methods in Stream Ecology. Editors. R. Hauer and G. Lamberti. Academic Press.

Other Publications

Capps, K.A, C.L Atkinson, **A.T. Rugenski**, C.V. Baxter, K.S. Boersma, C.C. Carey, P.B. McIntyre, J.W. Moore, W. Nowlin, and C. Vaughn. 2012. Organized oral session: Impacts of species addition and species loss on ecosystem function in freshwater systems. *Bulletin of the Ecological Society of America* 93:402-408.

Technical Reports

- Minshall, G.W. and **A.T. Rugenski.** 2006. Monitoring of Streams in the Payette National Forest 1988-2005: Big Creek and South Fork Salmon Tributaries Pre- and Post Fire. Final Report (2005) Payette National Forest, McCall, Idaho.
- Minshall, G.W., A.T. Rugenski, and C. Relyea. 2005. Monitoring of Streams in the Payette National Forest 1988-2004: Big Creek and South Fork Salmon Tributaries Pre- and Post Fire. Final Report (2004) Payette National Forest, McCall, Idaho.
- Minshall, G.W., K.E. Bowman, **A.T. Rugenski**, and C. Relyea. 2004.

 Monitoring of Streams in the Payette National Forest 1988-2003: Big Creek and South Fork Salmon Tributaries Pre- and Post Fire. Final Report (2003) Payette National Forest, McCall, Idaho.
- **Rugenski, A.T.** and G.W. Minshall. 2001. Investigation of 21 long-term monitoring sites the Bruneau hot-spring Springsnail (*Pyrgulopsis bruneauensis*). Final Report (2001). US Fish and Wildlife Service, Boise Idaho.
- **Rugenski, A.T.** and G.W. Minshall. 2000. Annual Monitoring Report: Bruneau hotspring springsnail (*Pyrgulopsis bruneauensis*). Final Report (2000) US Fish and Wildlife Service and BLM, Boise Idaho.

GRANTSMANSHIP

- 2023 University of Georgia, Campus Sustainability Grant. How do trash traps affect organic matter dynamics in urban streams? Birkley Heynen and Amanda Rugenski. \$1,970
- 2022 UGA Learning Technologies Grant. Capps K., Zhai X., Rugenski A.T. \$25,000
- 2020 Emerge: Broadening Participation and Leadership in Freshwater Science. NSF. Pl's Rosemond, A.D. McGarvey, J.C. Colon-Gaud, P. Mendez, A.T. Rugenski. Awarded \$2,006,746

- 2019 RCN-UBE Incubator: Building a framework for the River-based ImmersiVe Education and Research (RIVER) Field Studies Network. NSF. PI James Vonesh \$74,968 Awarded, Rugenski-Senior Personnel
- 2014 **Rugenski, A.T.** and J.J, Elser. MacroSystems proposal working group: project development of a new collaborative research proposal. Arizona State University SOLS (\$3,845.00)
- 2013 Elser J.J, J.Sabo, B.L.Turner, *A.T. Rugenski, E.K.Moody, and M.R.Whiles. Arizona State University and Smithsonian Tropical Research Institute (STRI). Ecological stoichiometry in neotropical stream food webs: consequences of changing biodiversity on ecosystem function. (\$211,800). (*Wrote grant under guidance of PIs)
- Murria, C., **A.T. Rugenski**, S.V. Pinzón Navarro, W.O. McMillian, B.L. Turner, and M.R. Whiles. Patrones de diversidad de insectos aquaticos a lo largo de un gradiente latitudinal y altitudinal de parques nacionales de Panamá (Proyecto EcoRIOS). Patterns of aquatic insect diversity along latitudinal and altitudinal gradient in Panama national parks (Project EcoRIOS). SENACYT, Panamanian government. (\$60,000)
- 2011 Conservation Award: Long-term consequences of amphibian declines on ecosystem structure and function in Panamanian headwater streams and the roles of amphibians in nutrient cycling. North American Benthological Society. (\$1,000)
- 2005 Research Award, Weyerhaeuser Corporation, Boise Idaho. (\$5,000)
- 2002 Minshall, G.W. and **A.T. Rugenski.** The effects of a riparian fertilization with a ¹⁵N tracer on stream processes. Boise Corporation. (\$50,000)
- 2001 **Rugenski, A.T**. Bruneau hot-spring springsnail habitat and population monitoring work plan. US Fish and Wildlife Service. (\$3,000)

AWARDS AND HONORS

- 2022 University of Georgia, Creative Teaching Award
- 2020 University of Georgia, Teaching Academy Fellows Program
- 2020 University of Georgia Outstanding Teaching Faculty
- 2012 Dissertation Research Award, Southern Illinois University (tuition and stipend for summer and fall 2012).
- 2012 Presidents Endowment Award, Society for Freshwater Science. (\$1,000)
- 2012 Richard E. Blackwelder Award in Zoology for outstanding student scholar for dedication to research and outstanding performance as a teaching assistant, Department of Zoology, Southern Illinois University.
- 2006 Presidents Endowment Award, North American Benthological Society. (\$600)
- 2004 Travel Award, Idaho State University, Biological Sciences. (\$1,000)
- Fisher Scientific Award for best oral presentation in basic research, North American Benthological Society. (\$200)
- 2003 Research Award, Department of Biology, Idaho State University.
- 2003 Travel Award, Department of Biology, Idaho State University. (\$500)

INVITED SEMINARS

University of Alabama, Tuscaloosa, AL. 2022. College of Education. Framework for guiding students in developing solutions for real world social-ecological and sustainability challenges in the classroom and the field.

Florida International University, Miami, FL. 2019. Department of Biological Sciences. Departmental Seminar. Global change effects on stream consumers: implications for ecosystem function.

Colorado State University, Fort Collins, CO. Department of Fish, Wildlife, and Conservation. Departmental seminar series. Disease-driven amphibian declines alter ecosystem structure and function in neotropical streams.

Universidad San Francisco de Qutio, Quito, Ecuador. Colegio de Ciencias Biológicas y Ambientales. 2016. Disease-driven amphibian declines alter ecosystem structure and function in neotropical streams.

Arizona State University, Tempe, AZ. School of Life Sciences, Hugh Hanson ecology seminar series. 2014. Disease-driven amphibian declines alter ecosystem structure and function in neotropical streams.

University of Kentucky, Lexington, KY. Ecology seminar series, Department of Biology. 2011. Ecological consequences of amphibian declines in Neotropical streams.

Smithsonian Tropical Research Institute, Panama City, Panama. Gamboa seminar series, 2011. Ecological consequences of amphibian declines in Neotropical streams.

Truman State University, Tropical Biology Class, La Mica Biological Station, El Cope, Panama. 2010. Are amphibian declines altering stream ecosystem processes?

Pocatello High School Senior Biology Class. 2006. Effects of a riparian fertilization on stream processes and What do ecologist do and how can you become one?

PRESENTATIONS (*Award for best presentation, † poster presentation, ^undergraduate, # graduate student)

- *I have had 28 undergraduate students present at the Odum School of Ecology Graduate student symposium poster session from 2018-2023. Each year a student has received best research poster award.
- [†]Cummins, C., **Rugenski, A.T.**, Farrell, K. 2022. Effects of instructional technique on student perception and comprehension of scientific literature. University of Georgia Center for Teaching and Learning Spring Teaching Symposium.
- ^Remko S., **Rugenski A.T.**, Hernandez Abrams D., Wenger S.J. 2022. 4 Years After Tropical Storm Nate: The Recovery of Macroinvertebrate Community Composition in a Neotropical Stream in Costa Rica. Joint Aquatic Sciences Meeting, Grand Rapids MI.
- **Rugenski, A.T.,** Crumsey-Forde J.C., Yang, C. 2022. Framework for guiding students in developing solutions for real world social-ecological and sustainability challenges in the classroom and the field. University of Alabama, College of Education.
- Rosemond, A. Mendez, P., Colón-Gaud, J.C., **Rugenski, A.T**, McGarvey, D., Ondich, B. 2021 Can't stop, won't stop—Continuing the journey to full inclusivity in freshwater science with the Emerge Program.
- ^Wanger, Kayla, **Rugenski, A.T**. 2020. Canopy Cover influences arthropod communities in tank bromeliads in the Monteverde Cloud Forest, Costa Rica. Society for Freshwater Science. Online annual meeting.

- †^*Bui,Tommy, Ron Carroll, **A.T. Rugenski.** 2019. Disease Vectors and biodigestors: Aedes aegypti in effluent ponds. Graduate Student Symposium. University of Georgia, Odum School of Ecology, Athens GA.
- † ^*Manna, Callee, **A.T. Rugenski**, C.R. Carroll. 2018. Relationship between bromeliads and their arthropod communities in the Monteverde Cloud Forest, Costa Rica. Graduate Student Symposium. University of Georgia, Odum School of Ecology, Athens GA.
- Rugenski, A.T., C. A. Atkinson, A. Landeira-Dabarca, J.P Sousa, A. Encalada, S.A Thomas, L. Poff, A.S. Flecker. 2017. Reciprocal transplants display contrasting responses of mayfly growth and body phosphorus in temperate and tropical streams. Society for Freshwater Science, Raleigh NC.
- *Beck, W., A.T. Rugenski, L. Poff. 2017. Meta-analysis of nutrient diffusing substrate experiments in running waters: influence of experimental design, environmental factors, and geography. Society for Freshwater Science, Raleigh NC.
- Landeira-Dabarca, A., **A.T. Rugenski,** C. A. Atkinson, A. Encalada, S.A Thomas, L. Poff, A.S. Flecker. 2017. Experimental stream warming effects on mayfly growth rates across elevation gradients: a temperate-tropical comparison. Society for Freshwater Science, Raleigh NC.
- *Hernandez Abrams D., S.C. Connelly, **A.T. Rugenski**, S.J. Wenger. 2017. Macroinvertebrate response to changes in flow regime in tropical headwater streams of Costa Rica. Society for Freshwater Science, Raleigh NC.
- Rugenski, A.T., C. A. Atkinson, A. Landeira-Dabarca, ^J.P Sousa, A. Encalada, S.A Thomas, L. Poff, A.S. Flecker. 2016. Contrasting responses of mayfly growth to experimental warming across elevation gradients in temperate and tropical streams. Society for Freshwater Science. Sacramento, CA.
- **Rugenski, A.T.**, E.K. Moody, B.L. Turner, J.J. Elser. 2015. Consumer–resource interactions: Expanding ecological stoichiometry beyond C:N:P across environmental gradients in neotropical streams. Ecological Society of America. Baltimore, MD.
- †Rugenski, A.T. M.R. Whiles, M.J. Vanni and J.J. Elser. 2014. Variation in invertebrate community structure and stoichiometric homeostasis alters consumer driven nutrient recycling in pre- and post-amphibian decline tropical streams. Gordon Research Conference on Unifying Ecology Across Scales.
- **Rugenski, A.T.**, M.R.Whiles, and M.J, Vanni. 2014. Variation in invertebrate community structure and stoichiometric homeostasis in pre- and post-amphibian decline tropical. Joint Aquatic Sciences Meeting (JASM). Portland, OR.
- Minshall, G.W and **A.T. Rugenski.** 2014. Climate-moderated responses to wildfire by macroinvertebrates and basal food resources in montane wilderness streams. Joint Aquatic Sciences Meeting (JASM). Portland, OR.
- **Rugenski, AT** and M.R. Whiles. 2014. Influences of disease-driven amphibian declines in Panamanian headwater streams. Smithsonian Fellows Symposium, Panama City, Panama.
- Rugenski, A.T., M.R.Whiles, M.J, Vanni, K.R.Lips, C.M. Pringle, and S.S. Kilham. 2013.

 Amphibian declines alter nutrient supply and storage in neotropical stream food webs. Society of Freshwater Science, Jacksonville, FL.
- Capps, K., C.A. Atkinson, and **A.T. Rugenski**. Summarizing patterns of consumer-driven nutrient dynamics in freshwater ecosystems. 2013. Society of Freshwater Science, Jacksonville, FL.
- Rugenski, A.T., M.R.Whiles, M.J., Vanni, K.R.Lips, C.M. Pringle, and S.S. Kilham. 2012. Influence of amphibian declines in Panamanian headwater streams on leaf decomposition processes and consumer-resource stoichiometry. North American Benthological Society Meeting, Louisville, KY.
- *†Frauendorf, T.C, A.T. Rugenski, C. Colón-Gaud, and M.R. Whiles. 2012. Ontogenetic shifts

- in diet of aquatic neotropical macroinvertebrates. North American Benthological Society Meeting, Louisville, KY.
- **Rugenski, A.T.**, K.A. Capps, and C.A. Atkinson. 2012. Building a framework for predicting the effects of species addition and species loss on nutrient dynamics in freshwater ecosystems. Ecological Society of America, Portland, OR.
- Atkinson, C.A., K.A. Capps, and **A.T. Rugenski**. 2012. The effects of species gain and species loss on nutrient storage and cycling in freshwater ecosystems: Summarizing patterns across ecosystems. Ecological Society of America, Portland, OR.
- **Rugenski, A.T.** and M.R. Whiles. 2011. Are amphibian declines altering stream ecosystem processes? Student Conference on Conservation Science (SCCS). New York, New York.
- Rugenski, A.T., M.R.Whiles, M.J., Vanni, K.R.Lips, C.M. Pringle, and S.S. Kilham. 2011. Ecological stoichiometry of macroinvertebrates in neotropical streams before and after amphibian declines: Are biodiversity losses altering stream ecosystem processes? North American Benthological Society Meeting, Providence, RI.
- **Rugenski, A.T.**, M.R.Whiles, K.R.Lips, C.M. Pringle, M.J. Vanni and S.S. Kilham. 2010.

 Quantifying the roles of larval amphibians in tropical stream nutrient cycling: are amphibian declines altering ecosystem processes? North American Benthological Society Meeting, Santa Fe, NM.
- Whiles, M.R., P. Verburg, W.K. Dodds, R.O. Hall, A.D. Huryn, **A.T. Rugenski**, S. Peterson, S.S. Kilham, K.R. Lips, C.M. Pringle. 2010. Use of a ¹⁵n tracer to quantify changes in nitrogen cycling associated with a massive amphibian decline in a tropical headwater stream. North American Benthological Society Meeting, Santa Fe, NM.
- †Peterson, S.D., **A.T. Rugenski**, J.C. Colon-Gaud, M.R.Whiles, S.S. Kilham, K.R. Lips, C.M. Pringle. 2010. Influences of catastrophic amphibian declines on storage and export of fine particulate organic matter in neotropical headwater streams. North American Benthological Society Meeting, Santa Fe, NM.
- †Cornell, J.J., J.M. Davis, G.W. Minshall, C.V. Baxter, **A.T. Rugenski**, N. Olson, B.T. Crosby. 2010. Effects of earlier spring snow melt on periphyton biomass: potential climate change implications from a 20-year study of a wilderness stream ecosystem. North American Benthological Society Meeting, Santa Fe, NM.
- Rugenski, A.T., M.R.Whiles, K.R.Lips, C.M. Pringle, S.S. Kilham, M.J. Vanni. 2009.

 Quantifying the roles of larval amphibians in nutrient cycling in neotropical headwater streams.

 North American Benthological Society Meeting, Grand Rapids, MI.
- **Rugenski, A.T.** and G.W. Minshall. 2008. Macroinvertebrate response to wildfire in Central Idaho wilderness streams 1988-2005. North American Benthological Society Meeting, Salt Lake City, Utah.
- Whiles M.R. et al. Use of a 15N tracer addition to assess the ecosystem-level significance of amphibians and their extirpations in neotropical headwater streams. 2008. North American Benthological Society Meeting, Salt Lake City, Utah.
- †Rugenski, A.T., A.M. Marcarelli, H.A., Bechtold, and R.S. Inouye. 2007. Effects of temperature and concentration on nutrient release rates from nutrient diffusing substrates. North American Benthological Society Meeting, Columbia, SC.
- Marcarelli A.M., H.A.Bechtold, R.S. Inouye, **A.T. Rugenski**, and C.V. Baxter. 2007.

 Concordance (or lack thereof) between water chemistry and ecosystem function in a eutrophic river. North American Benthological Society Meeting, Columbia, SC.
- Marcarelli A.M., A.T. Rugenski, H.A. Bechtold, R.S. Inouye, and C.V. Baxter. 2007.

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- Nutrients differentially affect biomass accrual, production, and activity of biofilm communities in a eutrophic Southeast Idaho river. Presentation, American Society of Limnology and Oceanography Meeting, Santa Fe, NM.
- **Rugenski, A.T.**, G.W. Minshall, and R.J. Danehy. Macroinvertebrate biomass and food resources following riparian fertilization with a ¹⁵N- tracer. 2006. North American Benthological Society, Anchorage, Alaska.
- †Rugenski, A.T., A.E. Kohler, G.W. Minshall, and R.J. Danehy Effect of a ¹⁵N- labeled riparian fertilization and salmon carcass analog addition on food web dynamics and productivity in four Idaho streams. North American Benthological Society, New Orleans, Louisiana.
- **Rugenski, A.T.**, G.W. Minshall, and R.J. Danehy. 2004. The Effects of a Reach-Scale Riparian Fertilization with a Labeled 15N Tracer on Stream Processes in Two Idaho Streams. Nonpoint Source pollution workshop, Boise, Idaho.
- **Rugenski, A.T.**, G.W. Minshall, and R.J. Danehy. 2004. Effect of riparian fertilization on instream leaf breakdown rates and macroinvertebrates in two Idaho streams. North American Benthological Society, Vancouver, BC.
- **Rugenski, A.T.**, G.W. Minshall, and R.J. Danehy. 2003. The Effects of a Reach-Scale Riparian Fertilization with a Labeled 15N Tracer on Stream Processes in Two Idaho Streams: One year after fertilization. Boise Corporation, Boise, Idaho.
- *Rugenski, A.T., G.W. Minshall, and R.J. Danehy. 2003. The effect of a riparian fertilization on primary production in two Idaho streams using a 15N labeled tracer. North American Benthological Society, Athens, GA.
- Danhey, R.J. and **A.T. Rugenski.** 2003. Periphyton as a diagnostic tool for salmon recovery. American Fisheries Society, Special Session. Boise, Idaho.
- **Rugenski, A.T.** 2002. The effects of a reach-scale riparian fertilization with a labeled ¹⁵N tracer on stream processes in two Idaho Streams. Proposal Seminar, Idaho State University Department of Biological Sciences.
- **Rugenski**, A.T., G.W. Minshall, and R.J. Danehy. 2002. The effects of a riparian fertilization with a ¹⁵N tracer on stream processes. Boise Cascade Corporation, Boise, Idaho.
- **Rugenski**, A.T. and G.W. Minshall. 1999. Leaf Decomposition in five southeastern Idaho streams. National Conference on Undergraduate Research, Missoula Montana.

PROFESSIONAL SERVICE AND OUTREACH

Affiliate Academic Coach, University of Georgia

Address the holistic needs of undergraduate students that impact their academic success. Mainly work with students on academic warning.

Special edition organization/editing

Capps, K.A., C.L. Atkinson, **A.T. Rugenski**. Synthesizing ecosystem-level effects of consumer-driven nutrient dynamics in freshwaters. *Freshwater Biology,* March 2015

Symposium and Seminar Organization

Society of Freshwater Science. Session title: More than just P in a bag: using consumer-driven nutrient dynamics to understand community interactions and ecosystem processes. May 2013. Organized with Krista Capps and Carla Atkinson

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Ecological Society of America. Session title: Impacts of Species Addition and Species Loss on Ecosystem Function in Freshwater Systems. August 2012. Organized with Krista Capps and Carla Atkinson

Society of Freshwater Science. Session title: Species addition and loss: effects on ecosystem processes. Society for Freshwater Science Meeting, May 2012. Organized with Krista Capps and Carla Atkinson

Training

- Rivers Network Field Course Assessment Training, 2022
- Policies for Inclusive Teaching, *University of Georgia* 2022
- Dossier Learning Community, *University of Georgia* 2022
- High Impact Practices, University of Georgia 2022 and 2023
- Active Learning Summer Institute, University of Georgia 2022
- Talking the Talk and Walking the Walk: Revolutionizing Course Design using DEI Practices, University of Georgia Spring 2022
- What Inclusive Instructors Do: Principles & Practices for Excellence in College Teaching, University of Georgia 2022
- Reflective Structured Dialog Training, 2021
- Setting the stage for an Engaged Semester, 2021
- Embracing Diversity to Increase Inclusivity in the Classroom, 2021
- Insidetrack, Foundational Student Coaching Training, 2020
- Science Writers Workshop, University of Georgia, 2018
- Sustainability Workshop, *University of Georgia*, 2018
- Transforming Teaching Moments, Center for Teaching Excellence, Cornell University, 2017
- Strategies to Incorporate High Impact Teaching Practices, Center for Teaching Excellence, Cornell University, 2017
- Tropical Biology: An ecological Approach. Organization for Tropical Studies. Costa Rica, 2009

Odum School of Ecology Undergraduate Administration

- Administration of the undergraduate degree programs
- Oversight of the evaluation and modification of the undergraduate curriculum
- Collect and submit data for Student Learning Outcomes
- Chair the Undergraduate Program committee and is therefore responsible for the charges assigned to that committee and leading monthly committee meetings
- Oversee undergraduate advisement
- Assist the undergraduate advisor with the development and implementation of student recruitment and orientation
- Coordinate efforts to provide undergraduates with research and professional experience
- Coordinate undergraduate student awards
- Collaborative oversight of OSE's Double Dawgs programs
- Review transfer course equivalencies
- Review and submit CAPA course proposals and make changes for UGA bulletin
- Coordinate special programs associated with Ecology's undergraduate degree programs
- Supervise OSE academic advisor and academic support staff

Service and Administrative Duties

2023 Al Academic Faculty Affairs Symposium, Office of the Senior Vice President for Academic Affairs and Provost, University of Georgia

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2023 2022-present 2022-present	Odum School of Ecology Peer-Peer mentoring program faculty advisor Administration of Odum School of Ecology Undergraduate Student Awards Experiential Learning Committee, University Curriculum Committee, University of Georgia
2022-present	Active Learning Advisory Committee, University of Georgia
2020-present	Chair, Undergraduate Committee, Odum School of Ecology, University of Georgia
2020-present	Chair, Endowment committee, Society for Freshwater Science
2020-present	Executive Committee, Odum School of Ecology, University of Georgia
2020-present	Environmental Awareness Curriculum Committee, University of Georgia
2020-Present	Study Away committee, University Curriculum Committee, University of Georgia
2021	Hybrid and Online Teaching Subcommittee, University of Georgia
2021	Teaching Task Force, University of Georgia
2019-2021	University Council, University of Georgia
2019-present	University Curriculum Committee, University of Georgia
2020-2021	Hybird, Study Away, and Environmental Awareness subcommittees for University
	Curriculum Committee, University of Georgia
2020-present	Student Learning Outcome Assessor and Reporter, Odum School of Ecology, University
2020	of Georgia
2020-present	Double Dawg pathway advisor and approver, Odum School of Ecology, University of Georgia
2020-present	Coordinator of undergraduate student awards, Odum School of Ecology,
	University of Georgia
2020	Lecturer Search Committee, Odum School of Ecology, University of Georgia
2020-present	Manage and facilitate internship credit hours and courses
2018-present	Undergraduate recruitment and orientation, Odum School of Ecology, University of Georgia
2019-present	Journal Endowment Committee, Society for Freshwater Science
2018-2019	Undergraduate Committee, Odum School of Ecology, University of Georgia
2018-present	Manage and coordinate undergraduates with research and professional experience,
	Odum School of Ecology, University of Georgia
2018-Present	Academic Programs Committee, Odum School of Ecology, University of Georgia
2018	Student Fee Allocation Committee, Odum School of Ecology, University of Georgia

Graduate student service

Ecology advisory committee, Department of Zoology, Southern Illinois University Graduate student welcoming committee, Department of Zoology, Southern Illinois University Graduate Professional Student Council, Southern Illinois University Live auction committee, Society of Freshwater Science

Outreach

2017-Present	InStars, Society for Freshwater Science. Supervised review committee and reviewed
	applicants for program
2010-2012	Day on the river- Discovering the natural wonders of the mighty Mississippi
2008	Volunteer, El Valle Amphibian and Conservation Center (EVACC) center, El Valle Panama
2005-2007	Volunteer Scientist, Portneuf River Monthly Monitoring
2005-2007	Volunteer and co-organizer, Portneuf River Clean Up

2005-2007 Coordinator, Idaho State University Stream Ecology lab and Idaho EPSCOR for

community outreach

Reviewer

Aquatic Sciences, Ecosphere, Freshwater Biology, Functional Ecology, Ecology, Journal of the North American Benthological Society, Freshwater Science, Oecologia, Hydrobiologia, Biotropica

PROFESSIONAL MEMBERSHIPS

Society for Freshwater Science Ecological Society of America American Society of Limnology and Oceanography