# **Matthew S. Schuler**

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## **Professional appointments**

2019-present	Assistant Professor
	Montclair State University. Montclair, NJ
2018-present	Adjunct Faculty
	Arizona State University. Tempe, AZ
2018-2019	Teaching Module Editor
	Macmillan Publishing. Raleigh, NC
2015-2019	Postdoctoral Researcher
	Rensselaer Polytechnic Institute. Troy, NY

# Education

2009-2015	Washington University in St. Louis
	Ph.D. Advisors – Tiffany Knight and Jon Chase
2007-2009	Indiana State University
	M.S. Advisor – Michael Angilletta
2002-2007	University of Wisconsin – Stevens Point
	B.S. Advisors – Eric Anderson and Emmet Judziewicz

# **Professional experience**

2010-2013	EPA STAR Graduate Research Fellow Washington University in St. Louis
2001-2009	Research Assistant
2005-2007	Undergraduate Advisor
	Student Success Center. University of Wisconsin – Stevens Point
2006-2007	Avian Rehabilitation Assistant
	Raptor Education Group Inc.
2006	Avian Research Assistant
	Long Range Mountains, Newfoundland. Acadia University
2005	Endangered Species Ecologist (Team Lead)
	Fort McCoy Military Reservation. Colorado State University
2003-2004	Executive Board Chairperson (Events and Fundraising)
	Residence Hall Association. University of Wisconsin – Stevens Point
2004	Teaching and Research Assistant
	Treehaven Field Station. University of Wisconsin – Stevens Point
2003	Environmental Educator
	Central Wisconsin Environmental Station.

#### **Research interests**

I study how anthropogenic stressors affect organisms, food webs, and ecosystem functions in freshwater environments. To fully investigate these questions, I use experimental manipulations, long-term field studies, modeling, and sensor networks. My research integrates physiology, community ecology, environmental policy, and resource management to address issues threatening the health of freshwater resources.

#### **Grants and fellowships**

Accessional and	
Awaraea	
2010-2013	"The importance of structural and thermal heterogeneity in maintaining species richness". Environmental Protection Agency Science To Achieve Results (STAR). Schuler, M.S. and J.L. Orrock. (\$111,000).
2007-2009	"Testing a spatially-explicit theory of thermoregulation". Travel and Research Grant. Indiana State University. Schuler, M.S. and M.J. Angilletta. (\$1,450).
2008	"Using optimality models to understand thermal adaptation in ectotherms". Technology Advancement Grant. Schuler, M.S. and M.J. Angilletta. (\$5600).
2007	"Natural history and survey of Costa Rica". International Travel and Research Grant. University of Wisconsin – Stevens Point. Schuler, M.S. (\$1000).
2006	"The effect of rat poison on an invasive slug at Hawai'i Volcanoes National Park" Student Research Grant. University of Wisconsin – Stevens Point. Schuler, M.S. and E.J. Judziewicz. (\$600).
Declined	
2017	"Aquatic invasive species in NY: Predicting invader success, distribution, and impacts on lake food webs and ecosystems". New York Sea Grant. Relyea, R.A., W.D. Hintz, M.S. Schuler, and A.B. Stoler.
2017	"The ecological and evolutionary consequences of road salt in freshwater habitats". National Science Foundation. Relyea, R.A., W.D. Hintz, M.S. Schuler, and A.B. Stoler.

#### Awards and certifications

2012	National Science Policy Award - Ecological Society of America
2007	State Biology Student of the Year Award – Wisconsin Wildlife Society
2007	Conservation Student of the Year – Portage County Wildlife Society
2007	Chancellor's Award for University Leadership – UWSP
2006	National Leadership Award – Rocky Mountain Elk Foundation
2006	Eric Munson Award for Conservation and Avian Studies – UWSP
2006	Chemical immobilization of animals training – UWSP
2005	University Leadership Award – UWSP
2004-present	Permitted bird bander – USGS (with Richard P. Thiel)

#### **Publications**

#### In review

- Hintz, W.D., **M.S. Schuler**, J.J. Borrelli, L.W. Eichler, A.B. Stoler, V.W. Moriarty, L.E. Ahrens, C.W. Boylen, S.A. Nierzwicki-Bauer, and R.A. Relyea. Concurrent increases and decreases of epilimnetic water quality in an oligotrophic lake over 37 years. *Limnology and Oceanography*.
- Naghshineh, N.K., **M.S. Schuler**, E.M. Dow, T.R. Morgan, S.F. Jane, H.R. Kolar, and R.A. Relyea. Using high-resolution distribution models to estimate impacts of an invasive snail. *Ecology and Evolution*.
- García-Quismondo, M., W.D. Hintz, **M.S. Schuler**, and R.A. Relyea. Drivers of diel vertical migration in a changing climate. *Ecological complexity*.
- Schuler, M. S., W.D. Hintz, D.K. Jones, B.M. Mattes, A.B. Stoler, and R.A. Relyea. Context-dependent effects of invasive mollusks in experimental freshwater lakes. *Ecosphere.*
- Coldsnow, K.D., W.D. Hintz, **M.S. Schuler**, A.B. Stoler, R.A. Relyea. Calcium chloride pollution prohibits the negative effects of an invasive clam in experimental freshwater ponds. *Oecologia*.
- Kornecki, K.M., M.S. Schuler, M.E. Katz, R.A. Relyea, F.M.G. McCarthy, M.F. Schaller, D.P. Gillikin, J.C. Stager, C.W. Boylen, L. Eichler, and S. Nierzwicki-Bauer. The canary in the coal mine: testate amoebae record anthropogenic impacts in oligotrophic Lake George, NY sediments. *The Journal of Foraminiferal Research*.

#### Accepted/published

- 25. Hintz, W.D., **M.S. Schuler**, D.K. Jones, K.D. Coldsnow, A.B. Stoler, and R.A. Relyea. 2019. Multi-trophic impacts of an invasive species are influenced by bottom-up nutrient effects. Science of the Total Environment.
- Chase, J.M., L. Gooriah, F. May, W.A. Ryberg, M.S. Schuler, D. Craven, T.M. Knight. 2019. A framework for dissecting ecological mechanisms underlying the island species-area relationship. *Frontiers in Biogeography*. DOI:10.21425/F5FBG40844
- 23. **Schuler, M.S.**, M. Cañedo-Argüelles, W.D. Hintz, B. Dyack, S. Birk, and R.A. Relyea. 2019. Regulations are needed to protect freshwater ecosystems from salinization. *Philosophical Transactions of the Royal Society B.* DOI:10.1098/rstb.2018-0019.

- 22. DeWitt, P.D., D.R. Visscher, **M.S. Schuler**, and R.P. Thiel. 2019. Predation risk suppresses lifetime reproductive success in a wild mammal. *Oikos*. DOI:10.1111/oik.05935.
- Lind, L., M.S. Schuler, W.D.Hintz, D.K. Jones, B.M. Mattes, A.B. Stoler, and R.A. Relyea.
   2018. Salty fertile lakes: How salinization and eutrophication alter the structure of freshwater communities. *Ecosphere*. DOI:10.1002/ecs2.2383.
- Jones, D.K., E.K. Yates, B.M. Mattes, W.D. Hintz, M.S. Schuler, and R.A. Relyea. 2018. Timing and frequency of exposure modifies retention of induced tolerance to contaminants in amphibians. *Environmental Toxicology and Chemistry*. DOI:10.1002/etc.4177.
- 19. **Schuler, M.S.** and R.A. Relyea. 2018. A review of the combined threats of heavy metals and road salts to freshwater ecosystems. *Bioscience*. 68(5): 327-335.
- 18. **Schuler, M.S.** and R.A. Relyea. 2018. Road salts and organic additives affect mosquito recruitment: an emerging problem in wetlands. *Oikos*. 127(6): 866-874.
- 17. Jones, D.K., W.D. Hintz, **M.S. Schuler**, E.K. Yates, B.M. Mattes, and R.A. Relyea. 2018. Inducible tolerance to agrochemicals was paved by evolutionary responses to predators. *Environmental Science and Technology*. 51(23): 13913-13919.
- 16. DeWitt, P.D., **M.S. Schuler**, D.R. Visscher, and R.P. Thiel. 2017. Nutritional state reveals complex consequences of risk in a wild predator-prey community. *Proceedings of the Royal Society B.* 284(1858).
- 15. **Schuler, M.S.**, J.M. Chase, and T.M. Knight. 2017. Habitat size modulates the influence of heterogeneity on species diversity patterns in an experimental zooplankton community. *Ecology*. 98(6): 1651-1659.
- 14. **Schuler, M.S.**, J.M. Chase, and T.M. Knight. 2017. Habitat size alters the importance of dispersal for species diversity in a freshwater zooplankton community. *Ecology and Evolution*. 7(15): 5774-5783.
- Stoler, A.B., W.D. Hintz, D.K. Jones, L. Lind, B.M. Mattes, M.S. Schuler, R.A. Relyea. 2017. Leaf litter mediates the negative effect of road salt on forested wetland communities. *Freshwater Science*. 36(2): 415-426.
- Stoler, A.B., W.D. Hintz, D.K. Jones, L. Lind, B.M. Mattes, M.S. Schuler, R.A. Relyea. 2017. Effects of a common insecticide on wetland communities with varying quality of leaf litter inputs. *Environmental Pollution*. (226): 452-462.
- 11. **Schuler, M.S.**, W.D. Hintz, D.K. Jones, L. Lind, B.M. Mattes, A.B. Stoler, K. Sudol, and R.A. Relyea. 2017. In search of safer alternatives: How common road salts and organic

additives alter freshwater food webs. *Journal of Applied Ecology*. 54(5): 1353-1361.

- Hintz, W.D., B.M. Mattes, M.S. Schuler, D.K. Jones, A.B. Stoler, L. Lind, and R.A. Relyea.
   2017. Salinization triggers a trophic cascade in experimental freshwater communities with varying food-chain length. *Ecological Applications*. 27(3): 833-844.
- Jones, D.K., B.M. Mattes, W.D. Hintz, M.S. Schuler, A.B. Stoler, L. Lind, R.O. Cooper, and R.A. Relyea. 2017. Investigation of road salts and biotic stressors on freshwater wetland communities. *Environmental Pollution*. (221): 159-167.
- Stoler, A.B., B.M. Walker, W.D. Hintz, D.K. Jones, L. Lind, B. M. Mattes, M.S. Schuler, and R.A. Relyea. 2017. Combined effects of road salt and an insecticide on wetland communities. *Environmental Toxicology and Chemistry*. 36(3): 771-779.
- Sears, M.W., M.J. Angilletta, M.S. Schuler, J. Borchert, K.F. Dilliplane, M. Stegman, T. Rusch, and W.A. Mitchell. 2016. Configuration of the thermal landscape determines thermoregulatory performance of ectotherms. *Proceedings of the National Academy* of Sciences. 113(38): 10595-10600.
- 6. **Schuler, M.S.**, J.M. Chase, and T.M. Knight. 2015. More individuals drive the species energy-area relationship in a zooplankton community. *Oikos.* 124(8): 1065-1070.
- 5. Schuler, M.S. and J.L. Orrock. 2012. The maladaptive significance of maternal effects in plants. *Evolutionary Ecology*. 26(3): 475-481.
- 4. Schuler, M.S., M.W. Sears, and M.J. Angilletta. 2011. Food consumption does not affect the preferred body temperature of Yarrow's spiny lizard (*Sceloporus jarrovii*). *Journal of Thermal Biology*. 36(2): 112-115.
- 3. Schuler, M.S., J.J. Storm, B.C. Cooper, M.W. Sears, and M.J. Angilletta. 2011. Isopods failed to acclimate their thermal physiology of locomotor performance during predictable or stochastic cooling. *PloS ONE*. 6(6): e20905.
- 2. Angilletta, M.J., B.S. Cooper, **M.S. Schuler**, and J.G. Boyles. 2010. The evolution of thermal physiology in endotherms. *Frontiers in Bioscience E*. (2): 861-881.
- Schuler, M.S. and R.P. Thiel. 2008. Annual vs. multiple year home range sizes of individual Blanding's turtles *Emydoidea blandingii* in Central Wisconsin. *The Canadian Field-Naturalist*. 122(1): 61-64.

# **Teaching experience**

2018	<ul> <li>Instructor – Introduction to Ecology (online)</li> <li>Arizona State University <ul> <li>I lead the online course, interacting with students through Blackboard, email, and online conference review sessions using Zoom. I also modify and help develop course materials for CogBooks, edit the exams, write grading rubrics, and work with the Teaching Assistant to grade exams and student participation.</li> </ul></li></ul>
2018	<ul> <li>Evaluation and assessment contributor – Evolution: Making Sense of Life</li> <li>Content editor and assessment contributor – Ecology: The Economy of Nature</li> <li>Macmillan Publishing. Raleigh, NC</li> <li>I write and edit scripts that are used to create educational videos that are used as teaching modules to help students comprehend difficult ecological concepts. I also write and edit assessment questions to help students understand ecological and evolutionary concepts, and classify each question by the level of expected difficulty or by using Bloom's Taxonomy.</li> </ul>
2016-2018	Guest Lecturer – Principles of Ecology Rensselaer Polytechnic Institute. Troy, NY I developed the lecture materials and taught ecological concepts from Ricklefs and Relyea (2017) Ecology: The Economy of Nature. I teach using the Socratic Method, leading a discussion and debate with students. I then use peer-reviewed literature, videos, and book materials to explain concepts.
2016	Guest Instructor – Introduction to Ecology Siena College. Loudonville, NY I led an 8-hour exploratory lab, teaching students about lake ecology, stream ecology, and food webs at the Darrin Freshwater Institute. A large focus of this lab was to identify the macro-invertebrate species from different habitat types in lakes and streams, to understand how habitat structure relates to the ecological function and morphology of species in freshwater communities.
2014	<ul> <li>Teaching Assistant – Introduction to Environmental Biology</li> <li>Washington University in St. Louis. St. Louis, MO</li> <li>I helped students develop group research projects on major topics in environmental science that each group presented on at the end of the semester (poster presentation). I also helped students with course content during office hours, and I graded assignments and exams.</li> </ul>

2011-2014	<ul> <li>Teaching Assistant – Experimental Ecology</li> <li>Washington University in St. Louis. St. Louis, MO         <ul> <li>I worked with four to six students each semester to design and implement independent research projects, collect and analyze data, and present results. I also taught students how to use R for statistical analyses and modeling.</li> </ul> </li> </ul>
2013	<ul> <li>Teaching Assistant – Population Ecology</li> <li>Washington University in St. Louis. St. Louis, MO</li> <li>I organized and led small group discussions using the CREATE method to discuss peer-reviewed literature, helped develop and translate population dynamics models from Matlab to R, and graded assignments and exams.</li> </ul>
2011	<ul> <li>Teaching Assistant – Introduction to Ecology</li> <li>Washington University in St. Louis. St. Louis, MO</li> <li>I worked with students to develop final independent research projects, led group discussions of primary literature, helped students understand course content during office hours, and wrote and graded exams.</li> </ul>
2009	<ul> <li>Teaching Assistant – Human Physiology</li> <li>Indiana State University. Terre Haute, IN</li> <li>I designed all labs for the course, developed each lecture and lectured on concepts relevant to lab exercises each week (16 lectures), purchased lab equipment, wrote and graded exams, trained three other teaching assistants on lab methods and lectures, and led small group discussions.</li> </ul>
2008	Teaching Assistant – Introductory Biology Indiana State University. Terre Haute, IN I led interactive discussions, conducted lab experiments, and graded assignments and exams.
2008	<ul> <li>Teaching Assistant – Ornithology</li> <li>Indiana State University. Terre Haute, IN</li> <li>I helped students observe and identify birds on lab trips, led netting and banding sessions, and led group review sessions and discussions of peer-reviewed literature.</li> </ul>
2004	<ul> <li>Teaching Assistant – Wildlife Techniques</li> <li>Treehaven Field Station. Tomahawk, WI</li> <li>I introduced students to wildlife management techniques, including small mammal trapping, bird banding, deer trapping, chemical immobilization, mark-recapture, and radio telemetry. I also graded exams, and maintained research equipment.</li> </ul>

# 2004 Teaching Assistant – Plant Taxonomy Treehaven Field Station. Tomahawk, WI I helped students identify 250 species of common Wisconsin plants, by taking 140 students (8 groups) on daily walking tours to help students identify plants.

#### **Undergraduate mentoring**

#### **Rensselaer Polytechnic Institute**

I have recruited 56 undergraduate researchers to the Relyea Lab. I have supervised 16 students and conducted independent research with 6 students. I also lead weekly lab journal discussions and help students with presentations from their research at RPI.

2018	Zan Koenig – Modeling how spatial and temporal autocorrelation affect patterns of macroinvertebrate abundance and diversity.
2017	Audrey Boraski – Testing the effects of invasive species and climate change on freshwater food webs. Audrey is currently an intern at the Center for Conservation Biology.
2017	David Nesich – Testing the effects of invasive species and climate change on freshwater food webs.
2016	Hannah Barrett – Understanding the consequences of multiple stressors on the structure of freshwater food webs. Hannah is currently an intern at Regeneron.
2016	Reilly Cooper – The effects of salt alternatives and additives on freshwater ecosystems. Reilly is currently a PhD student at the University of Nebraska.
2015	Kelsey Sudol – The effects of interacting invasive mollusks in freshwater ecosystems. Kelsey is currently an intern at the Northwest Conservation District office in Connecticut.

#### Washington University in Saint Louis and Tyson Research Center

The internship program at Tyson Research Center allows students to rotate with mentors and gain experience in experimental and theoretical ecology. I worked with 22 students, directly supervised 12 students, and conducted independent research with 3 students.

- 2012 Kelly Muething Zooplankton diversity affected by timing and magnitude of spring warming events. Kelly is currently a graduate student at OSU.
- 2011 Kyle Vickstrom The effects of habitat area and dispersal on patterns of species richness. Kyle is currently an Environmental Engineer at CDM Smith.

2011 Eric Dougherty – How habitat area interacts with environmental factors to affect species richness patterns. Eric is currently a PhD student at UC – Berkeley.

Indiana State University and Sevilleta Long Term Ecological Research Station I mentored students through the Sevilleta LTER summer internship and the NSF REU program, I led weekly paper discussions, showed students common field methods in ecology, and introduced students to behavioral and physiological ecology.

2009	Monica Stegman – Thermoregulatory costs of heterogeneous environments for lizards. Monica is currently a research associate at Algenol.
2009	Kathy Dilliplane – Measuring thermal heterogeneity using copper models and iButton thermocrons. Kathy is currently a PhD student at Fordham University.
2008	Travis Rusch – The costs of thermoregulation under the risk of predation. Travis is currently a postdoctoral researcher at Texas A&M.
2007	Ben Williams – Understanding how organisms acclimate in variable environments. Ben graduated from IUPUI Medical School.
2007	Jamison Mize – Thermoregulation and behavior of lizards in heterogeneous environments. Jamison is currently a Product Specialist at Malvern Instruments.

#### Sandhill Outdoor Skills Center – Wisconsin Department of Natural Resources Working with Richard Thiel, I helped to mentor dozens of undergraduate and high school students from 2002-2007. I helped students develop independent projects, publish reports for the DNR, and taught basic wildlife techniques.

#### Outreach

2015-present	As part of the Jefferson Project, I present and discuss the importance of protecting freshwater resources with members of the public at open house events. Additionally, I meet with government and industry representatives to discuss the ecological and economic importance of our research. I also assist with the RPI First Year Experience and the Harlem Academy Experience, to inform students about ecological research opportunities, and the importance of protecting freshwater resources.
2002-2009	Through the Wisconsin Department of Natural Resources and the Timber Wolf Information Network, I gave presentations to members of the public about natural resource management. I also volunteered to conduct research with high school students from Wisconsin schools, to show the importance of environmental stewardship.

#### Invited talks and presentations

2019	Daemen College. Amherst, NY. From pollution to policy: Understanding and mitigating the effects of road salts in fresh waters.
2019	Montclair University. Montclair, NJ. From pollution to policy: Understanding and mitigating human impacts on freshwater environments.
2018	Wellesley College. Wellesley, MA. From pollution to policy: Understanding and mitigating human impacts on freshwater environments.
2018	Massachusetts Institute of Technology. Boston, MA. Using artificial intelligence to model lake dynamics and food webs. With: Eli Dow and Mike Kelly (equal presenter contribution).
2018	Union College. Schenectady, NY. <i>The Jefferson Project: Experiments and models used to understand lake</i> <i>dynamics.</i> With Campbell Watson and Mike Kelly (equal presenter contribution).
2017	State University of New York – Binghamton. Binghamton, NY. Understanding how heterogeneity affects patterns of species richness and diversity.
2017	Union College. Schenectady, NY. <i>The Jefferson Project: An initiative to make lakes smarter</i> . With Jeremy Farrell, Mike Henderson, and Mike Kelly (equal presenter contribution).
2016	Siena College. Loudonville, NY. In search of safer alternatives: How common road salts and organic additives alter freshwater food webs.
2016	Union College. Schenectady, NY. The Jefferson Project: An initiative to make lakes smarter. With Jeremy Farrell and Mike Kelly (equal presenter contribution).
2016	Rensselaer Polytechnic Institute. Troy, NY. The Jefferson Project: An initiative to make lakes smarter. Earth Day Celebration Seminar Series.
2013	University of Missouri – Saint Louis. Saint Louis, MO. More individuals drive the species energy-area relationship.
2008	University of Wisconsin – Stevens Point. Stevens Point, WI. Developing a spatially-explicit theory of behavioral thermoregulation.

# **Oral presentations** (contributed presentations not shown)

2019 <u>Schuler, M.S.</u>, et al. (Co-organizer of session on freshwater salinization). From pollution to policy: Understanding and mitigating human impacts on freshwater environments. Ecological Society of America Annual Meeting. Louisville, KY

2018	<u>Schuler, M.S.</u> , et al. Understanding how common road salts and organic additives alter freshwater food webs. New York State Federation of Lake Associations
	Annual Meeting. Lake George, NY
2017	Schuler, M.S., et al. In search of safe alternatives: How common road salts and
	organic additives alter freshwater food webs. Ecological Society of America
	Annual Meeting. Portland, OR
2015	Schuler, M.S., et al. Habitat size modulates the influence of heterogeneity on
	species diversity patterns in an experimental zooplankton community. Ecological
	Society of America Annual Meeting. Baltimore, MD
2014	Schuler, M.S., et al. Habitat size mediates the importance of dispersal for
	patterns of species diversity. Ecological Society of America Annual Meeting.
	Sacramento, CA
2010	Schuler, M.S. and R.P. Thiel. Evidence of the hydra effect in a terrestrial mammal.
	Washington University in St. Louis. Saint Louis, MO
2008	Schuler, M.S. and M.J. Angilletta. Testing models of behavioral thermoregulation
	and acclimation in ectotherms. Indiana State University. Terre Haute, IN
2007	Schuler, M.S. and R.P. Thiel. Annual vs. multiple year home range sizes of
	individual Blanding's turtles in Central Wisconsin. Wisconsin Wildlife Society.
	Madison, WI
2007	Schuler, M.S. and E.J. Judziewicz. Impact of rat removal on leopard slug feeding
	habits in tropical forests on the Big Island, HI. UWSP Research Symposium.
	Stevens Point, WI
2007	Schuler, M.S. and R.P. Thiel. Life range analysis of Blanding's turtles in Sandhill
	Wildlife Area. UWSP College of Natural Resources Research Symposium. Stevens
	Point, WI
2006	Schuler, M.S. and R.P. Thiel. Annual vs. multiple year home range sizes of
	individual Blanding's turtles in Central Wisconsin. National Wildlife Society.
	Anchorage, AK
2006	Schuler, M.S. and R.P. Thiel. Home range, habitat use, and food selection of
	recolonizing fishers in the Central Forest Region of Wisconsin. UWSP College of
	Natural Resources Research Symposium. Stevens Point, WI

# Poster presentations (contributed presentations not shown)

2017	Schuler, M.S., et al. Modeling niches and food webs using machine learning.			
	Global Lake Ecological Observatory Network Annual Meeting. New Paltz, NY.			
2013	Schuler, M.S. More individuals drive the species energy-area relationship. Saint			
	Louis Ecology, Evolution and Conservation Conference. Saint Louis, MO			
2013	Schuler, M.S. More individuals drive the species energy-area relationship.			
	Ecological Society of America Annual Meeting. Minneapolis, MN			
2013	Schuler, M.S., et al. The influence of habitat area on mechanisms of diversity.			
	International Biogeography Society. Miami, FL			
2012	Schuler, M.S. Mechanisms that affect diversity in aquatic systems. Ecological			
	Society of America Annual Meeting. Portland, OR			

2011	Schuler, M.S. The maladaptive significance of maternal effects for plants.
	Environmental Protection Agency. Washington, DC
2011	Schuler, M.S. and J.L. Orrock. The maladaptive significance of maternal effects
	for plants. Saint Louis Ecology and Evolution Meeting. Tyson Research Center,
	Eureka, MO
2009	Schuler, M.S. and S.L. Lima. Why spring's song is winter's new friend: effects of
	urbanization on the American robin (Turdus migritorius). Society of Integrative
	and Comparative Biology. Boston, MA
2009	Schuler, M.S., et al. Acclimation of thermal physiology in predictable and
	stochastic environments: a test of optimality theory. Society of Integrative and
	Comparative Biology. Boston, MA
2008	Schuler, M.S. and R.P. Thiel. Long-term vs. short-term studies: a life range
	analysis of Blanding's turtles in Central Wisconsin. Society of Integrative and
	Comparative Biology. San Antonio, TX

#### Popular media

#### Popular media coverage

Science Magazine, PNAS, National Public Radio, Smithsonian Magazine, Motherboard Magazine, The European Commission, The Science Media Centre of Canada, The Wildlife Society, Science Daily, and The Environmental News Network.

#### University sponsored blog posts

2018	Road salt,	organic add	ditives, and	d mosquitoes.	The Approach	Blog at RPI.
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- 2016 Jefferson Project Macro-invertebrates. *The Approach Blog at RPI*.
- 2015 Wiring food webs at Lake George. *Ecological Society of America Blog.*

#### **Professional service**

#### The Jefferson Project at Lake George (Rensselaer Polytechnic Institute)

2019	Grant reviewer – Society of Wetland Scientists
2019	Co-organizer special session on freshwater salinization at ESA 2019
2015-present	Recruit and supervise all undergraduate researchers
2015-present	Hire, supervise, and manage payroll for all summer interns

#### Washington University in St. Louis

- 2012-2013 Ecology Faculty Search Committee
- 2012-2013 EEPB Seminar Series Coordinator
- 2010-2011 EEPB Seminar Series Coordinator

#### **University of Wisconsin – Stevens Point**

- 2006-2007 Student Research Symposium Chairperson
- 2006-2007 UWSP Representative to the Wisconsin Wildlife Federation
- 2004-2007 Timber Wolf Information Network member
- 2004-2005 UWSP Environmental Health and Safety Committee Board Member

#### Journal reviews

Ecology Letters, Science of the Total Environment, Ecological Applications, Ecology, Environmental Pollution, Aquatic Ecology, Freshwater Biology, Ecography, Hydrobiologia, Evolutionary Ecology, Journal of Herpetology, Auk, Israeli Journal of Ecology, Journal of Thermal Biology, Journal of Comparative Physiology, South American Journal of Herpetology, Source Code for Biology and Medicine, Ecology and Evolution, Fundamental and Applied Limnology

#### Associated field stations and organizations

Darrin Fresh Water Institute. Bolton Landing, NY Tyson Research Center. St. Louis, MO Sevilleta National Wildlife Refuge (NSF Field Station). Socorro, NM Sandhill Wildlife Area. Babcock, WI

#### Associated organizations

Ecological Society of America (ESA) Global Lake Ecological Observatory Network (GLEON) Society of Integrative and Comparative Biology (SICB) International Biogeography Society (IBS)