

## CARISSA N. GANONG

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### Education

- University of Georgia, Odum School of Ecology: Ph.D. Ecology (GPA 3.8/4.0) 2009-May 2015
- University of Central Arkansas, Department of Biology: MS Biology (GPA 3.95/4.0) 2006-2009
- Mansfield University (GPA 3.95/4.0) 2002-2006
  - Department of Biology: BS Biology
  - Department of Chemistry and Physics: BS Chemistry
  - Department of Languages and Literature: BA Spanish

### Honors and Awards

- University of Georgia University-Wide Fellowship 2009-2011
- Best Student Poster Award, Entomological Society of America (national meeting ) 2008
- Scholarship to attend Cary Institute of Ecosystem Studies graduate short course (Fundamentals of Ecosystem Ecology) 2010
- Arkansas Game & Fish Scholarship (\$3,000/year) 2007 and 2008
- Selected as Mansfield University's Outstanding Senior 2006
- Honors Program Awards, Mansfield University 2002-2006
- Achievement Awards in Biology, Chemistry, and Spanish, Mansfield University 2002-2006

### Teaching

- Assistant professor, Missouri Western State University August 2016-present
  - Lecture courses with labs: introductory biology, invertebrate zoology
- Visiting assistant professor, Northern Michigan University August 2015-May 2016
  - Lecture courses with labs: entomology, limnology, invertebrate zoology
  - Lecture course: stream ecology
- Coordinator of National Science Foundation/Organization for Tropical Studies Research Experience for Undergraduates (NSF REU), La Selva Biological Station, Costa Rica 2014-2016
- Teaching assistant for lab courses, University of Georgia 2011-2015
  - Freshman ecology/organismal biology: average student evaluation score 4.83/5.00
  - Ecology for non-science majors: average student evaluation score 4.06/5.00
  - Upper-division ecology for science majors
- Resource person for Organization for Tropical Studies Neotropical Rivers graduate course (La Selva Biological Station, Costa Rica) 2011 and 2013
- Teaching assistant for lab courses, University of Central Arkansas 2006-2009
  - Freshman cellular/molecular biology
  - Freshman ecology/organismal biology
- Tutor (chemistry and Spanish), Mansfield University Learning Center 2004-2006

### Mentoring

- Competitively selected as a mentor for the Instars program for minority students (Society for Freshwater Science annual national conference) 2015
- Competitively selected as a mentor for the Organization for Tropical Studies Research Experience for Undergraduates at La Selva Biological Station, Costa Rica 2013

- Mentor for a National Science Foundation Research Experience for Undergraduates student (in conjunction with NSF LTREB) at La Selva Biological Station, Costa Rica 2013
- Mentored an undergraduate independent study in tropical field research (Ellen Irwin, Dartmouth College) 2012
- Supervised three volunteer field assistants in conducting tropical aquatic ecology research at La Selva Biological Station
  - Earle Robbins, retired Penn State cooperative extension agent 2013
  - Ann Henderson, corporate public accountant 2012
  - Lynn Faust, University of Georgia biology lab coordinator 2011

## Publications

1. **Ganong, C.**, G. Small, M. Ardón, W. McDowell, D. Genereux, J. Duff, and C. Pringle. Interbasin flow of geothermally-modified groundwater stabilizes stream exports of biologically important solutes against variation in precipitation. *Freshwater Science* 34(1): 276-286.
2. **Ganong, C.**, and B. Folt. *Pristimantis cerasinus* (Clay-colored Rain Frog) Mortality. *Herpetological Review Notes*. *In press*.
3. Pringle, C., E. Anderson, M. Ardón, R. Bixby, J. Duff, A. Jackman, P. Paaby, A. Ramírez, G. Small, M. Snyder, F. Triska, and **C. Ganong**. *Rivers of Costa Rica*. In *Costa Rican Ecosystems* (ed. Maarten Kappelle), University of Chicago Press. *In press*.
4. **Ganong, C.**, D. E. Dussourd, and J.-D. Swanson. 2012. *Girdling by notodontid caterpillars: Distribution and occurrence*. *Arthropod-Plant Interactions* 6: 621-633.
5. Kiessling, A., **C. Ganong**, and A. Johnson. 2009. *Computational analysis of glycerol menthonide using Spartan '04*. *American Journal of Undergraduate Research* 8 (1): 1-5.
6. Boyle, W., **C. Ganong**, D. Clark, and M. Hast. 2008. *Density, distribution, and attributes of tree cavities in an old-growth tropical rain forest*. *Biotropica* 40 (2): 241-245.
7. **Ganong, C.**, G. Carson, and J. Kirby. 2007. *Using meiobenthic species as a measure of the impact of acid mine outflows on the Tioga River in north central Pennsylvania*. *American Journal of Undergraduate Research* 6 (3): 1-7.

## Publications in preparation

1. **Ganong, C.**, M. Hidalgo, and C. Pringle. *In prep*. Drought-driven acidification associated with climate change: how tolerant are stream macroinvertebrates? Target journal: *Freshwater Science*.
2. **Ganong, C.**, J. Duff, D. Markewitz, A. Thompson, G. Small, and C. Pringle. *In prep*. Carbon dioxide and iron oxidation as drivers of seasonal acidification in tropical streams. Target journal: *Biogeochemistry*.
3. **Ganong, C.**, T. Barnum, J. Duff, and C. Pringle. *In prep*. Predicting climate change effects in streams with differing groundwater input: comparing impacts of increasing temperatures and shifting precipitation regimes. Target journal: *Global Change Biology*.

## Conference Presentations

1. **Ganong, C.**, M. Hidalgo, and C. Pringle. 2015. *How tolerant are tropical stream macroinvertebrates to drought-driven acidification associated with climate change?* Society for Freshwater Science, Milwaukee, WI.
2. **Ganong, C.**, G. Small, J. Duff, M. Ardón, A. Ramírez, F. Triska, and C. Pringle. 2014. *Consequences of climate-driven changes in precipitation: shifts in seasonal pH regime and nutrient concentrations in Neotropical rainforest streams*. Society for Freshwater Science, Portland, OR.
3. **Ganong, C.**, J. Duff, and C. Pringle. 2013. *Biogenic carbon dioxide in local groundwater as a contributor to seasonal decreases in pH in Neotropical rainforest streams, Costa Rica*. Society for Freshwater Science, Jacksonville, FL.

4. **Ganong, C.**, J. Duff, and C. Pringle. 2013. *Consequences of climate change in Neotropical streams: differential effects of CO<sub>2</sub> on pH declines in well-buffered vs. poorly-buffered streams.* Association of Tropical Biology and Conservation, San José, Costa Rica.
5. Pringle, C., G. Small, R. Bixby, A. Ramírez, J. Duff, M. Ardón, A. Jackman, M. Snyder, **C. Ganong**, P. Gutierrez, and F. Triska. *Ecological effects of climate-driven acidification in lowland Neotropical streams: Insights from a 25-year dataset.* Ecological Society of America, Minneapolis, MN.
6. **Ganong, C.**, J. Duff, and C. Pringle. 2012. *Carbon dioxide as a contributor to seasonal pH shifts in Neotropical rainforest streams.* Ecological Society of America, Portland, OR.
7. **Ganong, C.**, J. Duff, and C. Pringle. 2011. *Spatial variation in groundwater and stream water carbon chemistry in a Neotropical rainforest.* Ecological Society of America, Pittsburgh, PA.
8. **Ganong, C.**, D. Dussourd, and J.-D. Swanson. 2008. *Taxonomic distribution and ecological function of girdling in prominent moth caterpillars (Lepidoptera: Notodontidae).* Entomological Society of America, Reno, NV.
9. **Ganong, C.**, J. Kirby, and G. Carson. 2006. *Biology and chemistry of an acid mineshaft pool.* Pennsylvania Academy of Sciences.
10. **Ganong, C.**, A. Boyle, D. Clark, M. Hast, and S. Stein. 2006. *Abundance and distribution of cavities in an old-growth tropical rainforest.* Commonwealth of Pennsylvania University Biologists.
11. **Ganong, C.**, and A. Kiessling. 2006. *Computational analysis of glycerol menthonide using Spartan '04.* American Chemical Society Mid-Atlantic Regional Meeting, Hershey, PA.

#### Internal Presentations

1. **Ganong, C.**, and C. Pringle. 2013. *Biogenic carbon dioxide as a contributor to seasonal pH shifts in Neotropical rainforest streams.* Odum School of Ecology Graduate Student Symposium.
2. **Ganong, C.**, and C. Pringle. 2011. *Landscape patterns of seasonal acidification in lowland Neotropical streams: effects on macroinvertebrates.* Odum School of Ecology Graduate Student Symposium.
3. **Ganong, C.**, and D. Dussourd. 2008. *Taxonomic distribution and function of girdling behavior in notodontid caterpillars.* University of Central Arkansas College of Natural Sciences Chalk Talk Series.

#### Past Grants

- Emily Foster Memorial Fellowship (Organization for Tropical Studies research fellowship): *Linking biogeochemical cycles in tropical streams: Effects of phosphorus concentration on stream DOC uptake.* 2013 (\$3,100).
- Odum School of Ecology Small Grant: *Causes of natural episodic acidification in Neotropical rainforest streams: comparing streamwater ionic charge balances between dry and wet seasons.* 2012 (\$415).
- Organization for Tropical Studies Pilot Research Fellowship: *Temporal and spatial landscape patterns of seasonal acidification in lowland Neotropical streams and effects on macroinvertebrates.* 2011 (\$2,075).
- Odum School of Ecology Small Grant: *Effects of episodic acidification on Neotropical stream macroinvertebrates.* 2011.
- Tinker Foundation Fieldwork Grant: *Investigating interactions between biogeochemical cycles to understand eutrophication.* 2010 (\$700).
- Organization for Tropical Studies Post-course Grant: *Effects of phosphorus availability on aquatic insect emergence and riparian predators in tropical streams.* 2010 (\$650).

### **Professional Experience**

- Organization for Tropical Studies Tropical Biology graduate course (Costa Rica) 2010
- Fundamentals of Ecosystem Ecology graduate short course, Cary Institute of Ecosystem Studies, Millbrook, NY 2010
- Organization for Tropical Studies summer Research Experience for Undergraduates at La Selva Biological Station, Costa Rica 2005

### **Leadership and Service**

- Herpetology workshops (with live reptiles/amphibians) at Benton Elementary School 2012-2014
- Crew leader for Rivers Alive (annual Georgia stream cleanup effort) 2011
- Graduate student representative on University of Central Arkansas Nature Reserve Committee 2008-2009
- President of University of Central Arkansas Shotokan Karate Club 2007-2008
- Teaching English as a second language 2006-2008
- President of Mansfield University Chemistry Club 2004-2006
- 4H volunteer leader in entomology, forestry, wildlife ecology/management 2004-2006
- Team coach for state and national 4H Forestry Invitational 2004