

Elizabeth A. Addis, Ph.D.

Assistant Professor of Biology, Gonzaga University, Spokane, WA 99258

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CURRENT POSITION

Assistant Professor, Biology Department, Gonzaga University 2012-present

EDUCATION

Doctorate of Philosophy, Zoology 2009
Department of Biology, University of Washington, Seattle, WA
Advisor: Dr. John Wingfield

Bachelor of Arts, Biology, *cum laude* 2002
Carleton College, Northfield, MN
Advisors: Dr. Matthew Rand, Dr. Susan Singer

POSITIONS HELD

HHMI Science Teaching Post-doctoral Fellow 2010-2012
(Position had a dual focus on biology education and traditional biology research)
Faculty Fellow, Biology Department, Colby College 2009-2010
Massachusetts Institute of Technology, Center for Cancer Research. 2002-03
Lab technician.

TEACHING EXPERIENCE

Biodiversity and Physiology (lecture; Gonzaga) 2013-present
Advanced Physiology (lecture and lab; Gonzaga) 2012-present
Seminar on behavioral endocrinology (Gonzaga) 2012-present
Animal Behavior (lecture and lab; Colby College) 2010
Biodiversity (Colby College) 2009
Comparative Vertebrate Endocrinology (Colby College) 2009
Our Human Impact on the Environment (UW) 2008
Vertebrate Endocrinology (UW) 2008
Vertebrate Endocrinology Discussion (UW) 2008

MENTORING EXPERIENCE

Erin Pazaski 2014
Katie Carr 2014
Kevin Ferriter, Gonzaga University 2013
Kirsten Price, Gonzaga University 2013
Chandler Jensen-Cody, Gonzaga University 2013-2014
Zach Damby, Gonzaga University 2013
HaLea Messersmith, graduate student, Iowa State University 2011-2012
Laurie McGee, high school teacher, Iowa State University 2011
Amanda Borchers, high school teacher, Iowa State University 2011
Olivia Lattanzi, undergraduate, Colby College 2009-2010
Paul Takamoto, undergraduate, University of Washington 2008-2009

PUBLICATIONS

Telemeco, R.S., and **E.A. Addis**. (accepted). Temperature has species-specific effects on corticosterone in alligator lizards. *General and Comparative Endocrinology*.
Warner, D.A., **E.A. Addis**, W. Du, T. Wibbels, and F.J. Janzen (2014). Exogenous application of

- estradiol to eggs unexpectedly induces male development in two turtle species with temperature-dependent sex determination. *General and Comparative Endocrinology*. In press.
- Quispe, R., C.P. Villavicencio, **E.A. Addis**, J.C. Wingfield, and R.A. Vasquez. (2014). Seasonal variations of basal cortisol and high stress response to captivity in *Octodon degus*, a mammalian model species. *General and Comparative Endocrinology*. 197: 65-72.
- Addis, E.A.**, A.D. Clark, R.A. Vasquez, and J.C. Wingfield. (2013) Seasonal modulation of testosterone during breeding in the Rufous-collared sparrow (*Zonotrichia capensis australis*) in Southern Patagonia. *Physiological and Biochemical Zoology*. 86: 782-790.
- Addis, E.A.**, K.M. Quardokus, D.C. Bassham, N.M. Boury, C.R. Coffman, J.A. Powell-Coffman. (2013) Implementing pedagogical change in introductory biology courses through faculty learning communities. *Journal of College Science Teaching*.
- Addis, E.A.**, A.D. Clark, and J.C. Wingfield. (2011) Modulation of testosterone in southern hemisphere temperate breeding sparrows (*Zonotrichia capensis*): An altitudinal comparison. *Hormones and Behavior*. 60: 195-201.
- Addis, E.A.**, J.E. Davis, B.E. Miner and J.C. Wingfield. (2011) Variation in circulating corticosterone levels is associated with range expansion in a passerine bird. *Oecologia*. 167: 369-378.
- Addis, E.A.**, D.S. Busch, A.D. Clark and J.C. Wingfield. (2010) Seasonal and social modulation of testosterone in the Costa Rican rufous-collared sparrow (*Zonotrichia capensis costaricensis*). *General and Comparative Endocrinology*. 166: 581-589.
- Busch, D.S., **E.A. Addis**, A.D. Clark and J.C. Wingfield. (2010) Modulation of the Hypothalamo-pituitary-adrenal cortex axis in Costa Rican Rufous-collared sparrows, *Zonotrichia capensis costaricensis*. *Physiological and Biochemical Zoology*. 83: 87-96.
- Wingfield, J.C., I.T. Moore, R.A. Vasquez, P. Sabat, S. Busch, A. Clark, **E.A. Addis**, F. Prado, H. Wada. (2008) Modulation of the adrenocortical responses to acute stress in northern and southern populations of *Zonotrichia*. *Ornitologia Neotropical*. 19 (Suppl.): 241–251.
- Wingfield, J.C., S.L. Meddle, I. Moore, S. Busch, D. Wacker, S. Lynn, A. Clark, R.A. Vasquez, **E.A. Addis**. (2007) Endocrine responsiveness to social challenges in northern and southern hemisphere populations of *Zonotrichia*. *Journal of Ornithology*. 148 (Suppl. 2): S435–S441.
- Andresen, J.M., J. Gayan, S.S. Cherny, D. Brocklebank, G. Alkorta-Aranburu, **E.A. Addis**, L.R. Cardon, D.E. Housman, N.S. Wexler. (2007) Replication of twelve association studies for Huntington's disease residual age of onset in large Venezuelan kindreds. *Journal of Medical Genetics*. 44: 44-50.
- Forbis, T., J. Lamore, and **E.A. Addis**. (2007) Temporal patterns in seedling establishment on pocket gopher disturbances. *Oecologia*. 138: 112-121.

PRESENTATIONS

- Society for the Advancement of Biology Education Research, July 2014, poster: How important are process of science skills? Student and faculty views
- Society of Integrative and Comparative Biology, January 2014, oral presentation: The insulin-like signaling pathway (IIS) as a regulator of life histories in Western terrestrial garter snakes
- Society of Integrative and Comparative Biology, January 2013, oral presentation: Insulin-like signaling and life history trade-offs in garter snakes with divergent life histories
- Society of Integrative and Comparative Biology, January 2012, oral presentation: The insulin like growth factor axis as a mediator of life history trade-offs
- Society of Integrative and Comparative Biology, January 2012, poster: Scientific reasoning skills in introductory biology
- Center for the Integration of Research, Teaching, and Learning, October 2011, poster: Helping introductory biology students learn scientific reasoning skills
- Society for the Advancement of Biology Education Research, July 2011, poster: Scientific reasoning skills in introductory biology
- Society of Integrative and Comparative Biology, January 2009, poster: Breeding variation

of testosterone in the high latitude Rufous-collared sparrow, *Zonotrichia capensis australis*

- American Ornithological Union Conference, August 2008, oral presentation: Contrasting testosterone use during the breeding life history stage of two species of the genus *Zonotrichia*
- Cooper Ornithological Society Conference, June 2007, oral presentation: Seasonal breeding and territoriality in the Costa Rican rufous-collared sparrow
- Pacific Ecology and Evolution Conference, March 2007, oral presentation: Alpine range expansion in Puget Sound white-crowned sparrows (*Zonotrichia leucophrys pugetensis*)
- Society of Integrative and Comparative Biology, January 2007, oral presentation: Seasonal social modulation of testosterone in the Costa Rican rufous-collared sparrow (*Zonotrichia capensis costaricensis*)
- Society of Integrative and Comparative Biology, January 2005, poster: Influence of habitat condition on breeding in *Plectrophenax nivalis* and *Calcarius lapponicus*

INVITED TALKS

- Gonzaga University, 2012: Evolution of reproductive life-history mechanisms
- Carleton College, 2012: Breeding synchrony and testosterone
- Iowa State University, 2011: Reptilian mechanisms of reproductive life history trade-offs
- Iowa State University, 2010: Inquiry-based learning: The right approach?
- Colgate University, 2010: Investigating the role of testosterone as a mediator of reproductive trade-offs.
- Colby College, 2009: The importance of social cues in reproduction: A story of testosterone.

SERVICE ACTIVITIES

- Reviewer for *Nature Education*, *Journal of Chemical Education*, *The Auk*, *Journal of Field Ornithology*, *General and Comparative Endocrinology*, *Neuroscience and Neuroeconomics*, *Journal of College Science Teaching*, *Journal of Experimental Zoology, Part A*
- BioCareers Committee, Gonzaga 2012-present
- Education Committee, Society of Integrative and Comparative Biology 2012-present
- Iowa State University Postdoctoral Association 2010-2012
- Seminar Committee, Dept. of Biology, UW 2008-2009
- Faculty Search Committee, Dept. of Biology, UW 2007-08
- Graduate Education Program Committee, Dept. of Biology, UW 2006-07
- Science Committee, Seattle Audubon Society 2006-2008
- Carleton College Alumni Interviewer 2002-present

AWARDS, GRANTS AND FELLOWSHIPS

- Murdock Charitable Trust (\$43,000) 2014-2016
- Learning and Technology Grant, ISU (\$33,400) 2011
- National Science Foundation FIRST IV Post-doctoral Scholar 2011-2013
- HHMI Science Teaching Post-doctoral Fellowship 2010-2012
- Crary Distinguished Teaching Fellowship, Dept. of Biology, UW 2008
- Environmental Biology Grant, Dept. of Biology, UW 2008
- Snyder Research Grant, Dept. of Biology, UW 2007
- Huckabay Teaching Fellowship, UW 2006-07
- Dept. of Biology Recruitment Fellowship, UW 2003-08

SOCIETY MEMBERSHIPS

- Society for the Advancement of Biology Education Research
- Society of Integrative and Comparative Biology
- Sigma Xi