

CHRISTINE WHITNEY MILLER

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ACADEMIC POSITIONS

2011 – Present. Assistant Professor, University of Florida
Affiliate Professor, University of Florida Genetics Institute
Affiliate Professor, School of Natural Resources and the Environment
Affiliate Professor, Tropical Conservation and Development Program
Affiliate Professor, Biology Department

2007 – 2011. Assistant Research Scientist, University of Florida

EDUCATION

The University of Montana – Missoula
Ph.D, Organismal Biology and Ecology. Advisor: Dr. Douglas J. Emlen.
Dissertation: “Maternal effects and sexual selection in the heliconia bug, *Leptoscelis tricolor*.”
Dissertation committee: Drs. Thomas E. Martin, John L. Maron, Erick P. Greene, John H. Christy, and Timothy A. Mousseau. Completion date: August 29, 2007.

Wesleyan University, Middletown, CT
B.A. Biology, May 1998. Research Advisor: Dr. Sonia E. Sultan

HONORS, FELLOWSHIPS, GRANTS, and AWARDS

University of Florida Excellence Award for Assistant Professors 2014, Nomination by Dr. John Hayes, Dean of Research, Institute of Agriculture and Life Sciences.

HHMI-UF Science for Life Distinguished Mentor Award 2013, \$10,000. Award for excellence in mentoring undergraduate students through authentic research.

University of Florida-IFAS Early-Career Seed Grant 2013, \$55,000. Title: Social networks in an agricultural pest, the squash bug.

Faculty Enhancement Opportunity Program 2013, University of Florida, \$5,317.

National Science Foundation, Behavioral Systems Program, \$325,394. September 2009 – September 2013. Title: Selection in heterogeneous environments: a multi-trait perspective. PI: Christine W. Miller.

Entomological Society of America Student and Young Professional Award, 2008.

National Evolutionary Synthesis Center (NESCent) Postdoctoral Fellowship, 2007-2009 (declined).

Bertha Morton Graduate Student Achievement Award, \$2000, 2007.

Outstanding Presentation Award, University of Montana Graduate Student and Faculty Research Conference, 2005.

National Science Foundation Research Experience for Undergraduates, achieved funding for an undergraduate intern to assist my research in Panama, \$6000, 2005.

Smithsonian Tropical Research Institute, Short Term Fellowship, \$1000, 2005; **Ernst Mayr Fellowship,** \$4850, 2004; **Research Award,** \$1138, 2004.

Summer Institute in Statistical Genetics, Tuition Scholarship, \$1650, 2004.

BRIN Program of the National Center for Research Resources, Travel Award for training in statistical genetics, \$1370, 2004.

NSF Graduate Research Fellowship Program Award Recipient, \$121,500. 2003. Honorable mention: 2000, 2001.

Smithsonian Graduate Student Fellowship, \$3700, 2003.

Sigma Xi Grant-in-Aid of Research, \$300, 2003.

NSF EPSCoR Graduate Fellowship, 2001-2003.

PEER-REVIEWED PUBLICATIONS

^UDenotes undergraduate author, ^GDenotes graduate student author, ^PDenotes postdoc. author

Miller, C.W. and E. Svensson. 2014. Sexual selection in complex environments. *Annual Review of Entomology* 59: 427-445.

Miller, C.W. and U. Somjee.^G 2014. Male-male competition. In **Oxford Bibliographies in Evolutionary Biology**. Ed. Jonathan Losos. New York: Oxford University Press.

Adesso, K.M.^P, K.A. Short^G, A.J. Moore, and **C.W. Miller**. 2014. Context-dependent female mate preferences in leaf-footed cactus bugs. *Behaviour* 151: 479-492.

Helmey-Hartman, W.^G and **C.W. Miller**. 2014. Context-dependent mating success in *Murgantia histrionica* (Hemiptera: Pentatomidae). *Annals of the Entomological Society of America*: 107: 264-273.

Miller, CW, Hamel JA^P, Helmey-Hartman^G, W, Holmes, K^U, and D Lopatto. 2013. Expanding your research team: learning outcomes when a research laboratory partners with an undergraduate classroom. *Bioscience* 63: 754-762.

Miller, C.W., R.J. Fletcher, and S.R. Gillespie^U. 2013. Conspecific and heterospecific cues override habitat quality to influence egg production. *Plos One* 8 (7): e70268.

Miller, C.W. 2013. Sexual selection: Male-male competition. In: J. Losos, Editor, The *Princeton Guide to Evolution*. Princeton University Press.

Procter, D.S.^G, A.J. Moore, and **C.W. Miller**. 2012. The form of sexual selection arising from male-male competition depends on the presence of females in the social environment. *Journal of Evolutionary Biology* 25: 803-812.

Austin, J.D., **C.W. Miller**, and R.J. Fletcher, Jr. 2012. What role can natural selection and phenotypic plasticity play in wildlife adaptation to climate change? In: J. Brodie, E. Post, J. Berger, and D. Doak, Editors, *Conserving wildlife populations in a changing climate*. University of Chicago Press.

Miller, C.W., R.J. Fletcher, Jr., B.D. Anderson^U, and L.D. Nguyen^U. 2012. Natal social environment affects habitat selection later in life. *Animal Behaviour* 83: 473-477.

Miller, C.W. and D.J. Emlen. 2010. Dynamic effects of oviposition site on offspring sexually-selected traits and scaling relationships. *Evolutionary Ecology* 24: 375-390.

Miller, C.W. and D.J. Emlen. 2010. Across and within population differences in the scaling relationship of a sexually-selected trait. *Annals of the Entomological Society of America* 103: 209-215.

Miller, C.W. and S.D. Hollander^U. 2010. Predation on heliconia bugs, *Leptoscelis tricolor* (Hemiptera: Coreidae): examining the influences of crypsis and predator color preferences. *Canadian Journal of Zoology* 88: 122-128.

Nageon de Lestang, F.^U and **C.W. Miller**. 2009. Effects of diet on the development and survivorship of *Narnia femorata* nymphs (Hemiptera: Coreidae). *Florida Entomologist* 92: 511-512.

Miller, C.W. 2008. Seasonal effects on offspring reproductive traits through maternal oviposition behavior. *Behavioral Ecology* 19: 1297-1304.

Fletcher, R.J., Jr., and **Miller, C.W.** 2008. The type and timing of social information alters offspring production. *Biology Letters* 4: 482-485.

Miller, C.W. and A.J. Moore. 2007. A potential resolution to the lek paradox through indirect genetic effects. *Proceedings of the Royal Society (London) B*. 274: 1279-1286.

Fletcher, R.J. and **C.W. Miller**. 2006. On the evolution of hidden leks and implications for reproductive and habitat selection behaviours. *Animal Behaviour* 71: 1247-1251.

POPULAR PRESS AND OTHER PUBLICATIONS

Miller, C.W. 2013. Engage students in science. *The Gainesville Sun*. November 7, 2013.

Halbeck, D.H., F.D. Bennett, and **C.W. Miller**. 2012. The cactus moth, *Cactoblastis cactorum*. Featured Creatures, http://entomology.ifas.ufl.edu/creatures/BFLY/cactus_moth.htm

Miller, C.W. 2011. The heliconia bug, *Leptoscelis tricolor*. Featured Creatures, http://entnemdept.ufl.edu/creatures/misc/bugs/heliconia_bug.htm

TEACHING and LEADERSHIP EXPERIENCE

Principles of Entomology , Fall and Spring semesters Undergraduate/Graduate Course and Laboratory	2008-present
Classroom-based research experience Authentic undergraduate research in a classroom setting	Spring 2012
Behavioral Plasticity and Evolution Graduate seminar	Spring 2012
Continuing Teaching Education UF CALS Teacher's College, participant and graduate	Fall 2008
Sexual selection , University of Florida Graduate seminar	Spring 2008
Advances in Evolution , University of Montana Graduate/Undergraduate course	Fall 2006

MENTORING through RESEARCH

Graduate students in my laboratory: Pablo Allen, Ummat Somjee, Wendy Helmey-Hartman, Daniel Sasson, Scarlett Tudor (co-advised).

Visiting International Students in my laboratory: Duncan Procter (University of Exeter, 2010), Grant McDonald (Oxford University, 2010), Katherine Short (University of Exeter, 2011), Iain Gordon (University of Exeter, 2011), Aitor Alvarez-Fernandez (Oxford University, 2011)

Undergraduate Mentor and Recipient of 2013 Howard Hughes Medical Institute Distinguished Mentor Award. I actively seek out talented undergraduates to assist in research. I have advised over 40 undergraduates in my laboratory in the past six years. Students have authored ten peer-reviewed publications, presented at nine local and national meetings (e.g. Animal Behavior, Society for Integrative and Comparative Biology, Evolution, and Entomological Society of America), won local and national awards (e.g. Animal Behavior Society Turner Award, UF Best Undergraduate Paper Award). I have hosted five UF University Scholars' Program students and one HHMI Science for Life student. In addition, I developed a new course that brought authentic research to a 25-person classroom of undergraduate students (see *Bioscience* publication above).

INVITED SEMINARS

- University of Minnesota**, Department of Ecology, Evolution and Behavior, Invited Colloquium Speaker 2014.
- University of Kentucky Symposium in Ecology, Evolution and Behavior.** Keynote Speaker, 2014.
- Winter Animal Behavior Conference 2014, 2013, 2010, 2009.** Steamboat Springs, CO. Invited Speaker.
- UF College of Liberal Arts and Sciences Teaching Enhancement Symposium 2013, 2012.** Gainesville, FL. Invited presentation on designing a research-oriented course.
- University of South Florida**, Department of Biology, Invited Seminar Speaker, 2012.
- University of Central Florida**, Department of Biology, Invited Seminar Speaker, 2011.
- Entomological Society of America Annual Meeting**, Invited Symposium Speaker, 2010.
- University of Missouri**, Evolution and Ecology Seminar Series, Invited Speaker, 2010.
- Gordon Conference – Genes and Behavior**, Italy. Invited “Data blitz” Speaker, 2008.
- University of Florida**, Department of Biology, Invited Seminar Speaker, 2007, 2013.
- Montana State University**, Entomology Program. Invited Seminar Speaker, 2006.
- Smithsonian Tropical Research Institute**, Tupper Seminar Series. Seminar Speaker, 2004.

MEMBERSHIP in PROFESSIONAL SOCIETIES

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| Society for the Study of Evolution | American Society of Naturalists |
| Entomological Society of America | Animal Behavior Society |
| European Society for Evolutionary Biology | Florida Entomological Society |
| Society for Integrative and Comparative Biology | |

SERVICE to UNIVERSITY and SCIENTIFIC COMMUNITY

- 2012 – Present** **Graduate Admissions Committee**, University of Florida, Entomology and Nematology Department.
- 2012 – Present** **Administrative Committee**, University of Florida, Entomology and Nematology Department.
- 2011- Present** **Editorial Board Member and Reviewing Editor** for the Journal of Evolutionary Biology
- 2009 – Present** **Seminar Committee Director.** Organize the University of Florida Entomology and Nematology Departmental Seminar Series and mentor students on the Graduate Student Seminar Committee.
- 2007 – Present** **Graduate Committee Member** for 17 graduate students

2010, 2012

Served on panels at the National Science Foundation

2010 – Present

Ad hoc grant proposal reviewer for the National Science Foundation

Manuscript Reviewer for multiple journals including: *Evolution*; *Evolutionary Ecology*; *Nature Communications*; *Biology Letters*; *Animal Behaviour*; and *American Naturalist*.

Judge, Graduate Student Talk Competitions: Society for Integrative and Comparative Biology 2009 & 2011, Entomological Society of America 2008.

Session Moderator, Society for Integrative and Comparative Biology 2011, Evolution Annual Meeting 2005.