

EDUCATION

University of Florida, Entomology and Nematology Department

Doctor of Philosophy: **Entomology and Nematology** 2012-2017

Dissertation title: "**Consequences of environmental and genetic stress on the male weapons of *Narnia femorata* (Hemiptera: Coreidae)**"

Adviser: Professor Christine W. Miller

University of Costa Rica (UCR) - Ciudad Universitaria Rodrigo Facio

Master of Science: **Biology** 2002-2007

Adviser: Professor Paul Hanson

Bachelor of Science: **Biology** 1996-2001

WORK/TEACHING EXPERIENCE

a. University of Florida

Postdoctoral associate 2017-2018

Scientific Engagement ENY2890 – Summer C 2017

Taught a Classroom-based Undergraduate Research course (CURE). Dr. Adam G. Dale supervisor.

Instructor

Nature of Science, ENY 4905 – Summer B 2015

Co-taught adapted CURE course with Dr. Christine W. Miller.

Teaching Assistant

Principles of Entomology, ENY 3005/5006 – Fall 2016

Principles of Entomology lab, ENY 3005L/5006L – Spring 2013, Fall 2014, Spring 2015.

b. Organization for Tropical Studies (OTS), undergraduate programs

Research Experience for Undergraduates (REU) Coordinator 2012+

At La Selva Biological Station, Costa Rica (English). This program included 12 US undergrads, two Costarrican undergrads, and one Jamaican undergrad. This program was aimed at women and minority students. At least two of the projects have resulted in peer-reviewed publications.

Co-Coordinator

Costa Rica Summer - Tropical Ecology (English-USAP) for US undergraduates 2011+

Resource person (invited professor)

Costa Rica Summer - Tropical Ecology (English) 2013-2016

Duke University TIP: Tropical Biology - Costa Rica (English) 2011

+ [I can provide course books at request]

c. Council on International Educational Exchange (CIEE) in Monteverde, Costa Rica

Instructor

Tropical Ecology and Conservation program 2009-2011

Aided two professors teaching Tropical Community Ecology and Tropical Diversity to undergraduate students from the USA in a semester long program. In addition, I was the independent project adviser for a third of the students; one of these projects resulted in a peer-reviewed publication. During my time working on this program I individually mentored more than 60 students.

Humans in the Tropics course (Agro-ecology) 2009-2011

I taught a course on the impact of humans on tropical ecosystems.

Teaching Assistant

Tropical Ecology and Conservation program 2007-2008

d. *Organization for Tropical Studies (OTS)*, graduate courses

Resource person (invited professor)

Tropical Biology: An Ecological Approach, OTS 3 (English) 2014, 2018

Tropical Ecology and Conservation, OTS 2 (Spanish) 2010

Teaching Assistant

Tropical Biology: An Ecological Approach, OTS 3 (English) 2003, 2005 & 2006

Tropical Ecology and Conservation, OTS 2 (Spanish) 2006

PUBLICATIONS

Allen, P.E., A.G. Dale, S.I. Diyaljee*, N.J. Ector*, D. Petit-Bois*, J.T. Quinn*, A.C. Ranieri*, J.A. Sanchez*, H.M. Smith*, D.X. Tran*, A.M. Winsor*, and C.W. Miller. **2018**. One and done: Long-term sperm storage in the cactus-feeding bug, *Narnia femorata* (Hemiptera: Coreidae). *Annals of the Entomological Society of America*. doi.org/10.1093/aesa/say017

Espin, J., S. Palmas-Perez, F. Carrasco-Rueda, K. Riemer, **P.E. Allen**, N. Berkebile, K. Hecht, R.K. Kastner-Wilcox, M. Nunez-Regueiro, C. Prince, M.C. Rios-Marin, E.P. Ross, B. Sangha, T. Tyler, J. Ungvari-Martin, M. Villegas, T. Cataldo, & E. Bruna. **2017**. A persistent lack of International representation on editorial boards in environmental biology. *Plos Biology*. doi.org/10.1371/journal.pbio.2002760

Allen, P.E., M.D. Barquero, E. Bermúdez, J.C. Calderón, B. Hilje, W. Pineda, G. Saborío-Rodríguez, V. Arguedas, & E. Chacón-Madrigal. **2017**. Calling for more accurate information in aquarium trade: analysis of live-fish import permits in Costa Rica. *Management of Biological Invasions* 8: 533–542.

Cirino, L.A., Z. Emberts, P.N. Joseph, **P.E. Allen**, D. Lopatto, & C.W. Miller. **2017**. Broadening the voice of science: promoting scientific communication in the undergraduate classroom. *Ecology and Evolution*. DOI: 10.1002/ece3.3501.

Allen, P.E., & C.W. Miller. **2017**. Novel host leads to the elimination of dimorphism in a sexually-selected male weapon. *Proceedings of the Royal Society of London (B)*. DOI: 10.1098/rspb.2017.1269.

Nolen Z.J.* , **P.E. Allen**, & C.W. Miller. **2017**. Seasonal resource value and male size influence male aggressive interactions in the leaf footed cactus bug, *Narnia femorata*. *Behavioural Processes* 138: 1-6. DOI: 10.1016/j.beproc.2017.01.020.

Joseph, P., D. Sasson, **P.E. Allen**, U. Somjee, & C.W. Miller. **2016**. Adult nutrition, but not inbreeding, affects male primary sexual traits in the leaf-footed cactus bug *Narnia femorata* (Hemiptera: Coreidae). *Ecology and Evolution* 6:4792-4799.

Somjee, U., **P.E. Allen**, & C.W. Miller. **2015**. Different environments lead to a reversal in the expression of weapons and testes in the heliconia bug, *Leptoscelis tricolor* (Hemiptera: Coreidae). *Biological Journal of the Linnean Society* 115:802-809.

Allen, P.E. **2012**. Survival patterns under Costa Rican field conditions of the gregarious caterpillar *Euselasia chrysippe* (Lepidoptera: Riodinidae), a potential biological control agent for *Miconia calvescens* (Melastomataceae) in Hawaii. *The Journal of Research on the Lepidoptera* 45:77-84.

Kosiba*, S., **P.E. Allen**, & G. Barrantes. **2012**. Feeding effectiveness of *Brachypelma smithi* (Araneae, Theraphosidae) on two prey types. *Bulletin of the British Arachnological Society* 15:228-230.

Allen, P.E. **2010**. Group size effects on survivorship and adult development in the gregarious larvae of *Euselasia chrysippe* (Lepidoptera, Riodinidae). *Insectes Sociaux* 57:199-204.

*undergraduate researcher

FELLOWSHIPS, AWARDS AND GRANTS

University of Florida Graduate School Fellowship 2012-2016.

CONFERENCE PRESENTATIONS AND INVITED SEMINARS

Allen, P.E. & C.W. Miller. 2018. Phenotypic plasticity and population differences in beak length in a cactus-feeding bug. "International Society of Behavioral Ecology 2018 meeting, Minneapolis, MN, August 11-16."

Allen, P.E., L. Laforest, & A.G. Dale. 2018. Long-term changes in body size associated with enemy-free space and a novel range. "Ecological Society of America meeting 2018, New Orleans, LA, August 5-10."

Allen, P.E., C.W. Miller, & A.G. Dale. 2017. From conception to submission: Course-based Undergraduate Research Experience using insects. "Entomological Society of America meeting 2017, Denver, CO, November 5-8."

Allen, P.E. & C.W. Miller. 2017. Consequences of inbreeding and environmental stress on a species with sexually selected weaponry. "Evolution 2017 meeting, Portland, OR, June 23-27."

Allen, P.E. & C.W. Miller. 2017. Phenotypic and genetic divergence in weaponry across a broad landscape in a cactus-feeding bug. "Evolution 2017 meeting, Portland, OR, June 23-27."

Allen, P.E. & C.W. Miller. 2017. Diet-by-temperature interactions on a sexually selected trait and sexual dimorphism. "SICB 2017 meeting, New Orleans, LA, January 4-8."

Allen, P.E. & C.W. Miller. 2016. Longer is better: Mouthpart plasticity in a novel environment. "International Congress of Entomology, Orlando, FL, September 25-30."

Allen, P.E. & C.W. Miller. 2016. Sex-specific consequences of a novel environment on male weapons. "Evolution 2016 meeting, Austin, TX, June 17-21."

Allen, P.E. & C.W. Miller. 2015. Adaptive plasticity of mouthparts and its potential consequences for sexually selected traits. "SICB 2015 meeting, West Palm Beach, FL, January 3-7."

Allen, P.E. & C.W. Miller. 2014. Sexual dimorphism disrupted in a novel environment. "Evolution conference, Raleigh Convention Center, NC, June 20-24."

Allen, P.E., V. Arguedas, M.D. Barquero, E. Bermúdez-Rodríguez, J.C. Calderón-Ulloa, E. Chacón-Madrigal, B. Hilje, W. Pineda L. y G. Saborío-R. 2010. Importación de peces en Costa Rica: problemas técnicos y riesgos ambientales asociados. "XIV Congreso de la Sociedad Mesoamericana para la Biología y la Conservación, San José, Costa Rica, Noviembre 8-12".

PROFESSIONAL SERVICE

Reviewer for manuscripts submitted to the following journals: *Animal Behaviour, Behavioral Ecology and Sociobiology, Ecological Entomology, Ecology and Evolution, Evolution, Journal of Evolutionary Biology, Journal of Experimental Zoology A, and PloS One.*