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### **EDUCATION:**

- 2013 Ph.D. Iowa State University, Ecology, Evolution and Organismal Biology  
Department, Ames, IA 50010.  
Dissertation: “Understanding biodiversity: the importance of sexual  
dimorphism in the micro- and macroevolution of hummingbirds”  
*Advisor:* Dean C. Adams, Ph.D.
- 2005 B.S. Zoology and Music. Colorado State University, Ft. Collins, CO.

### **PROFESSIONAL EXPERIENCE:**

- 2014-present Visiting Assistant Professor (3-year appointment)  
Department of Biology, Utica College, Utica, NY
- Teaching Experience:**
- Senior Research *Fall 2016*
  - Research Methods I *Spring 2015, 2016, 2017*
  - Research Methods II *Spring 2016, Spring 2017*
  - General Biology I Lectures *Fall and Spring 2014-2017*
  - General Biology I Laboratories *Spring 2015, 2016-2017*
  - Anatomy and Physiology Laboratories *Fall 2014*
- Mentoring:**
- Advisor to 18 students *Fall 2015-present*
  - Project: The Diversity of Hummingbirds, Sexual Dimorphism, and Beak Morphology: Mentor of nine undergraduates *2014-present*
  - Project: Tight versus Diffuse Coevolution Between Hummingbird Beak and Floral Morphology: Mentor of one undergraduate *2014-present*
- 2013-2014 Visiting Assistant Professor (1-year appointment)  
Department of Biology, Adams State University, Alamosa, CO
- Teaching Experience:**
- General Biology I Lecture *Fall 2013*
  - General Biology I Laboratories *Fall 2013*
  - Environmental Science Lecture *Fall 2013*
  - Anatomy and Physiology Laboratories *Fall 2013*
  - General Biology II Laboratories *Spring 2014*
  - Evolution Lectures *Spring 2014*
  - Human Anatomy Lectures *Spring 2014*

- Human Anatomy Laboratories *Spring 2014*
- Ecology and Evolution of Reproduction *Spring 2016*  
(Developed and Taught)

**Mentoring:**

- Peer-Led Team Learning: *Spring 2014*
- Mentor of two undergraduates

2013

Lecturer

Department of Ecology, Evolution and Organismal Biology, Iowa State University, Ames, IA

**Teaching Experience:**

- Evolution; online course *Summer 2013*

2007-2013

Teaching Assistant/Lab Coordinator

Department of Ecology, Evolution and Organismal Biology, Iowa State University, Ames, IA

**Teaching Experience:**

- Principles of Biology Laboratory *Spring 2013*
- Advanced Biostatistics *Spring 2013*  
(Laboratory Coordinator)
- The Ecology of Hummingbirds *Spring 2013*  
(Developed and Taught)
- Geometric Morphometrics *Spring 2012*  
(Laboratory Coordinator)
- Vertebrate Biology Laboratory *Fall 2008, 2012*

**Mentoring:**

- Peer Mentor *2011-2013*  
Mentor of two graduate students
- Project: Dissertation *2009-2013*  
Mentor of four undergraduates

2009-2012

National Science Foundation Graduate Research Fellow

Iowa State University, Ecology, Evolution and Organismal Biology Department, Ames, IA 50010.

**PUBLICATIONS:**

**Berns, C.M.** and D.C. Adams. Understanding biodiversity: The importance of sexual dimorphism in the micro- and macroevolution of hummingbirds. *In preparation.*

Cordero, G.A. and **Berns, C.M.** 2016. A test of Darwin's "lop-eared rabbit" hypothesis: trait covariance due to phenotypic accommodation? *Journal of Evolutionary Biology, in press.*

\*Highlighted in *The Scientific Explorer*, 8/22/16\*

Rocha, L. A. et al., and **C.M. Berns.** 2014. Specimen collection: an essential tool. *Science.* 334: 6186-6187.

**Berns, C.M.** and D.C. Adams. 2013. Becoming different but staying alike: patterns of sexual size and shape dimorphism in hummingbirds. *Evolutionary Biology.* 40: 246-260.

**Berns, C.M.** 2012. The evolution of sexual dimorphism: Understanding mechanisms of shape differences. Sexual Dimorphism. Prof. Hiroshi Moriyama (Ed.), ISBN: 978-953-51-1075-0, InTech.

- Worthington, A.M., **C.M. Berns**, and J.G. Swallow. **2012**. Size matters, but so does shape: Quantifying complex shape changes in a sexually selected trait in stalk-eyed flies (Diptera:Diosidae). *Biological Journal of the Linnean Society*. 106: 104-113.
- Berns, C.M.** and D.C. Adams. **2010**. Bill shape and sexual shape dimorphism between two species of temperate hummingbirds: Black-chinned Hummingbirds (*Archilochus alexandri*) and Ruby-throated Hummingbirds (*Archilochus colubris*). *Auk*. 12: 626-635.
- Adams, D. C., **C. M. Berns**, K. H. Kozak, and J. J. Wiens. **2009**. Rates of species diversification and morphological evolution are uncorrelated in plethodontid salamanders. *Proceedings of the Royal Society of London, B*. 276:2729-2738.

### PRESENTATIONS

\*Student researcher

- Zvornicanin, J. E.\*, and **C. M. Berns**. 2016. Tight and diffuse coevolution: Exploration of hummingbird beak and floral morphology. North American Ornithological Conference 2016, Washington D. C. Poster presentation.
- Worthington, A.M., **C.M. Berns**, and J.G. Swallow. 2012. Size matters, but so does shape: Quantifying complex shape changes in a sexually selected trait in stalk-eyed flies (Diptera:Diosidae). Society for Integrative and Comparative Biology, Charleston, South Carolina. Poster presentation.
- Berns, C.M.** and D.C. Adams. 2011. Phenotypic evolution of sexual size and shape dimorphism in hummingbird hills. Society for Integrative and Comparative Biology. Salt Lake City, Utah. Oral presentation.
- Berns, C.M.** 2011. Sexual dimorphism of bill morphology in the bee clade of hummingbirds. Evolution Meeting. Norman, Oklahoma. Oral presentation.
- Berns, C.M.** 2010. Environmental pressures or shared evolutionary history? A quantification of sexual shape dimorphism in hummingbird bills in a phylogenetic context. Cooper Ornithological Society/American Ornithologist's Union/Society of Canadian Ornithologists Joint Meeting. San Diego, California. Oral presentation.
- Berns, C.M.** 2010. Environmental pressures or shared evolutionary history? A quantification of sexual shape dimorphism in hummingbird bills in a phylogenetic context. Evolution Meeting. Portland, Oregon. Oral presentation.
- Berns, C.M.** 2010. Ecological and evolutionary implications of phenotypic diversity. Graduate Research in Evolutionary Biology and Ecology program, Iowa State University. Oral presentation.
- Berns, C.M.** 2009. Patterns of sexual shape dimorphism in two hummingbirds. Cooper Ornithological Society. Tucson, Arizona. Oral presentation.
- Berns, C.M.** 2009. Geometric Morphometrics of hummingbird bill morphology. Graduate Research in Evolutionary Biology and Ecology program, Iowa State University. Oral presentation.
- Berns, C.M.** 2009. Implications of sexual shape dimorphism in two temperate species of hummingbirds. EEB Spring Symposium, Iowa State University. Oral presentation.

## **INVITED PRESENTATIONS**

- Berns, C.M.** 2011. Understanding rates of phenotypic evolution and species diversification in hummingbird bills using landmark-based geometric morphometric methods. Louisiana State University, Museum of Natural Sciences, Baton Rouge, LA. Oral presentation.
- Berns, C.M.** 2010. Understanding phenotypic evolution in hummingbird bills: application of landmark-based geometric morphometric methods. Smithsonian Museum of Natural History, Washington DC.
- Berns, C.M.** 2008. Making a difference in your community: Citizens in Science. Rocky Mountain Raptor Center, Fort Collins, Colorado.
- Berns, C.M.** 2007. The power of determination. Graduation Ceremony. Colorado Arapaho Community College.

## **GRANTS AND AWARDS (C. M. BERNS PRINCIPLE INVESTIGATOR)**

- C. M. Berns and Zvornicanin, J. E.\* Utica College Small Grants for Students, 2016: \$200.00.
- C. M. Berns and Zvornicanin, J. E.\* Utica College Student Travel Grant, 2016: \$650.00.
- C. M. Berns and Zvornicanin, J. E.\* Travel Award, North American Ornithology Conference, 2016: \$250.00.
- Utica College Faculty Leadership Fund, 2016: \$1,349.00.
- Excellence in Teaching Award, Iowa State University Graduate College, 2012.
- Excellence in Research Award, Iowa State University Graduate College, 2012.
- ‘Graduate Teaching Assistant Learning Community’ funding, Howard Hughes Medical Institute, 2013: \$500.00.
- Travel funds for R statistical programming course, 2012: \$1,000.00.
- National Science Foundation Graduate Research Fellowship Program, 2009-2012: \$121,500.
- Funds for Professional Advancement Grant, Iowa State University Graduate College, 2009-2011: \$1,050.00.
- American Society of Naturalists Travel Grant, 2011: \$500.00.
- Rosemary Grant Award, Society for the Study of Evolution, 2010: \$2,500.00.
- Collections Study Grant, American Museum of Natural History, 2010: \$1,500.
- Myrle Burke Ornithology Scholarship, 2009: \$750.
- Graduate College Fellowship, Iowa State University, Ecology, Evolution and Organismal Biology Department, 2007-2007: \$20,719.

## **COLLEGE AND UNIVERSITY SERVICE**

- Faculty Resources Committee (Elected): Recommends awards including sabbatical leave, summer fellowships, small grants, and small grants to students, Utica College, present.
- Asa Gray Biological Society Faculty Mentor: Leading students in organization of seminar series, field trips, community service, fund raising, and Asa Gray Growers Group, Utica College, present.
- Facilitator and director of Annual Teaching Day focused on non-apparent disabilities, Utica College, 2016.

- Steering Committee for Adapting Curriculum for Student Success (ACSSibility): Study and implementation of teaching practices to improve quality of higher education for students with disabilities, Utica College, 2015-present.
- Science Fair Judge, Utica College, 2015, 2016.
- NSSE Committee: Campus-wide assessment using the National Survey of Student Engagement, Utica College, 2014-present.
- Campus Theme Committee: Hosting campus-wide activities based on the College theme “Breaking Barriers”, allocation of funds to campus organizations, selective funding of research proposals, Utica College, 2014-present.
- Outreach volunteer for recruitment and retention, Adams State University, 2013.
- Outreach volunteer, Ryan Geology Museum, Adams State University, 2013.

### **COMMUNITY AND PROFESSIONAL SERVICE**

- Manuscript Reviews 2010-present:
  - The American Naturalist
  - International Journal of Zoology
  - BMC Evolutionary Biology
  - The Auk
  - The Condor
  - Journal of Avian Biology
  - The Wilson Journal of Ornithology
  - Tropical Zoology
  - African Journal of Biotechnology
- Science Fair Judge, Academy of Science Charter School, 2015.
- Science Fair Judge, Clinton High School in Utica, 2014.
- Writing Competition Judge, Mohawk Valley Community College, 2014.