Luke Reding

Section of Integrative Biology, University of Texas at Austin
lukereding@utexas.edu
lukereding.github.io

Education

University of Texas at Austin
Ecology, Evolution, and Behavior, Ph.D. Candidate
GPA: 3.9

College of William and Mary
B.S. Biology with Honors. Minor: Mathematics
Departmental Honors, *Summa Cum Laude*, Phi Beta Kappa
GPA: 3.8

Publications

Reding, L. and M. E. Cummings. 2015. Does sensory expansion benefit asexual species? An olfactory discrimination test in Amazon mollies. Behavioral Ecology. doi: 10.1093/beheco/arv168

Reding, L. 2015. Increased hatching success as a direct benefit of polyandry in birds. Evolution. doi: 10.1111/evo.12553

Reding, L. P., H. A. Murphy & J. P. Swaddle. 2013. Sexual selection hinders adaptation in experimental populations of yeast. Biology Letters 9:20121202. doi: 10.1098/rsbl.2012.1202

Awards and Fellowships

National Science Foundation Graduate Research Fellowship (2013): $96,000
Dean's Prestigious Supplemental Award (2014): $1,000
Center for Perceptual Studies Conference Travel Grant (2014): $500
Preemptive Recruitment Fellowship, UT Austin (2012): $41,000 (tuition and stipend)
Turner Award, Animal Behavior Society (2011)
Student Conference Travel Award, funded by a HHMI grant through the College of William & Mary (2011), $300

Reviewer For

Journal of Animal Ecology

Research Funding

UT EEB DDIG-like grant (2016): $8000
Animal Behavior Society Student Research Award (2016): $1000
Texas EcoLab Grant (2012): $1600
UT EEB Startup Grant (2012): $2000
Dintersmith Fellowship, William and Mary (2011), $6000
Bruce Grant Award (2011), $1000
HHMI Freshman Research Project , through William and Mary (2009), $500

Teaching Experience

Teaching Assistant for Bio 311D: Introductory Biology for science majors

- 4.4/5 Instructor Rating, Fall 2013
- 4.5/5 Instructor Rating, Spring 2014
- 4.8/5 Instructor Rating, Summer 2014

Computer skills

Statistics: R
Programming: R, Python, bash (in that order)
Video analyses: ffmpeg
Illustration: GIMP, Inkscape
Animation: Blender

Graduate coursework

Biology: Introduction to Ecology, Evolution & Behavior; Sexual Selection and the Brain; Population Genetics; Supervised Teaching in the Biological Sciences, Methods in Ecological Genomics
Statistics: Introduction to Statistical Methods I & II; Data Analysis

Outreach

- GK-12 Program Associate
  - This program pairs graduate students in the sciences with teachers in local school districts teaching STEM disciplines with the goal of educating young people about science and bolstering ties between the university and the community
  - Through this program I have:
    - 7 March 2015. Helped orchestrate a dinosaur puppet show for young children at *Explore UT* day.
    - 28 February 2015. Helped ~150 4th and 5th grade girls learn about spectroscopy and light for UT's *Introduce a Girl to Engineering Day.* Photos here.
    - 4 February 2015. Served as a science fair judge at Burnet Middle School.
    - 15 January 2015. Served as a science fair judge at Blackland Prairie Elementary.
    - The Cummings lab hosted a group of middle schoolers through the *GirlAdvocates!* program in 2014. We designed a series of hands-on activities to expose them to the sorts of work scientists do.
- Undergraduate mentoring
  - Luke Allen Stahl (Fall 2013 - Fall 2014)
  - Lynette Strickland (Summer 2014, minority)
  - Mitch Anderson (Spring - Fall 2015)
  - Joseph Xin (Spring - Spring 2016, minority)
  - Mariana Canek (Spring - Fall 2015, minority)
  - Avery Trudell (Spring -Summer 2015)
  - Aurelia Allen (Spring 2016)
- Mentoring of high school students

  Fall 2015 - Spring 2016 I mentored a high school student in our lab who devised and completed an independent project on her own.
- Middle school tutoring

  I tutor 8th grade students weekly in science and math weekly at Webb Middle School in Austin. The student body of Webb is 86% Hispanic and 97% economically disadvantaged.

Presentations

Brain, Behavior, and Evolution Seminar, UT Austin, October 2015
"Decision rules and mate choice in swordtails"

Animal Behavior Society, August 2014
"Do asexual mollies use chemical cues to avoid associating with infected individuals?"

Graduate Seminar in Brain, Behavior, & Evolution, UT Austin (Talk), October 2012
"Can sexual selection drive extinction processes? An examination from birds to yeast"

Honors Colloquium, College of William and Mary (Talk), February 2012
"Sexual selection and extinction in yeast"'

Southeastern Population Ecology and Evolutionary Genetics Meeting (Poster Presentation), October 2011
"Does sexual selection drive extinction and speciation processes in yeast?"

Biology Homecoming Reception, Biology Department, William and Mary (Poster Presentation), October 2011
"Does sexual selection drive extinction and speciation processes in yeast?"

William and Mary Summer Research Showcase (Poster Presentation), September 2011
"Does sexual selection drive extinction and speciation processes in yeast?"

Joint Meeting of the Animal Behavior Society and the International Ethological Conference (Contributed Talk), July 2011
"Does sexual selection predict extinction threat risk in African birds?"