

# Laura Crothers

<https://lauracrothers.github.io/>

## EDUCATION

### UNIVERSITY OF TEXAS

PHD, INTEGRATIVE BIOLOGY

May 2014 | Austin, TX

Recruitment & Continuing Fellowships

Dean's Excellence Award

### UNIVERSITY OF CALIFORNIA

BS, ECOLOGY & EVOLUTION

BA, PSYCHOLOGY

Aug 2005 | Santa Cruz, CA

Biology Highest Honors

Psychology & Stevenson College Honors

Merit Scholarship (2001-2005)

## LINKS

LinkedIn:// [laurarosecrothers](#)

Google Scholar:// [lauracrothers](#)

## SKILLS

### SCIENTIFIC WRITING

Grants & Proposals • Reports

Journal Articles • Museum Materials

• Educational Materials

• Popular Science Articles

### DATA ANALYSIS

Regression • Generalized linear

& mixed models • Generalized estimating

equations • Analysis of variance •

Non-parametric analysis • Dimension

reduction • Visual system modeling

### VISUALIZATION

Infographics • Slide decks • Figures

• Display Panels • Websites

### SOFTWARE

R • Adobe Creative Suite

Tableau • LaTeX • HTML/CSS

• Windows • Mac • Microsoft Office

• Google Docs • Wordpress • Audio

Editing • Video Editing

## EXPERIENCE

### UNIV. OF CALIFORNIA, DAVIS | SENIOR WRITER & PROJECT MANAGER

Jan 2016 – current | Davis, CA

- Write and coordinate submission of major grant proposals to federal, state, and private sponsors focused on food, agriculture, and environmental issues.
- Plan, implement, and evaluate communications campaigns on topics such as climate-smart agriculture. Write articles, blog posts, and fact sheets, and develop infographics and websites.

### SAPLING LEARNING | BIOLOGY CONTENT DEVELOPER

May 2014 – Jun 2015 | Austin, TX

- Technical writer and editor of educational materials for college-level biology. Primary content developer of 7 educational digital labs.
- Worked on cross-functional teams with scientists, educators, artists, and marketers to plan and implement project goals, often under tight deadlines.

### TEXAS MEMORIAL MUSEUM | EXHIBIT DEVELOPER

Aug 2011 – Sept 2013 | Austin, TX

- Developed budget, designed layout, created graphics, researched content, and wrote copy for a science exhibit. Created additional virtual exhibit.
- Represented museum at outreach events. Liaised with museums, public, educators, and researchers to develop and evaluate exhibit and obtain funds.

### UNIV. OF CALIFORNIA, SAN FRANCISCO | LAB MANAGER

Nov 2005 – Aug 2008 | San Francisco, CA

- Managed a lab of 10+ people, trained students and scientists, wrote protocols, and planned, performed, and analyzed research.
- Maintained relationships with vendors, regulatory offices, and administrators.

## RESEARCH

### UNIVERSITY OF TEXAS | DISSERTATION

Aug 2008 – April 2014 | Austin, TX & Bocas del Toro, Panama

- Developed and ran a 6-year long international research project investigating physiological and ecological correlates of poison frog evolution and behavior.
- Managed 7 field assistants and created collaborations across 5 universities.
- Lead author of 5 articles published in peer-reviewed science journals.
- Obtained over \$50,000 in research grants from institutions such as the National Science Foundation, National Geographic, and the Smithsonian.

## TEACHING

### UNIVERSITY OF TEXAS | TEACHING ASSISTANT

2009 – 2014 | Austin, TX

- Supplemental instruction leader for introductory biology (2010).
- Teaching assistant for Texas Interdisciplinary Plan introductory biology (2011).

## VOLUNTEER

### STEM OUTREACH

2008 – 2014 | Austin, TX & Bocas del Toro, Panama

- Gave public talks in Panama (2008, 2014) and Texas (2014).
- Ran outreach booths at the Texas Memorial Museum (2010, 2014).
- Designed exhibit panels for the Texas Memorial Museum (2010, 2011).

### CITIZENS' CLIMATE LOBBY

2017-2018 | Davis, CA

- Designed featured infographic for the Energy Innovation Act website.
- Designed infographics and brochures for Northern California coordinator.

## OUTPUTS

### PUBLICATIONS | Scientific & Popular Articles

- Crothers, L.R., R. Saporito, J. Yeager, et al. 2016. Warning signal properties covary with toxicity but not testosterone or aggregate carotenoids in a poison frog. *Behavioral Ecology*. 30:601-621.
- Crothers, L.R., and M.E. Cummings. 2015. A multifunctional warning signal behaves as an agonistic status signal in a poison frog. *Evolutionary Ecology*. 26:560-568.
- Crothers, L.R. 2014. Vitruvian man had a hernia. *Slate Magazine*.
- Cummings, M.E. §, and L.R. Crothers§. 2013. Interacting selection diversifies warning signals in a polytypic frog: an examination with the strawberry poison frog. *Evolutionary Ecology*. 27:693–710. (§ Equal contribution)
- Crothers, L.R., and M.E. Cummings. 2013. Warning signal brightness variation: Sexual selection may work under the radar of natural selection in populations of a polytypic poison frog. *American Naturalist* 181:E116-E124.
- Crothers, L., E. Gering, and M. Cummings. 2011. Aposematic signal variation predicts male-male interactions in a polymorphic poison frog. *Evolution* 65: 599-605.

### PRESENTATIONS | Scientific Conferences

- Capturing student interest with digital interactivity (poster) - Gordon Research Conference, Visualization in Science & Education (2015).
- Sexual selection works under the radar of natural selection in populations of a poison dart frog (oral) – Evolution Meeting (2013)
- Is brighter better? (oral) — Society for Integrative & Comparative Biology (2012)

### EDUCATION MATERIALS | Selected Exhibits & Interactives

- Evolution in Action. Exhibit at Michigan State University Museum (2017)
- **Evolutionary Trees lab**. Digital lab developed for Sapling Learning (used by the company to advertise their products)
- **Diffusion in Cells lab**. Digital lab developed for Sapling Learning (used by the company to advertise their products)
- Evolution & You. Exhibit at Texas Memorial Museum (design completed 2013)