

# Rayna M. Harris

<http://raynamharris.github.io>  
rayna.harris@gmail.com | 512.657.2964

## EDUCATION

### THE UNIVERSITY OF TEXAS AT AUSTIN

PH.D. CELL & MOLECULAR BIOLOGY  
Expected Dec. 2017

### THE UNIVERSITY OF TEXAS AT AUSTIN

B.S. BIOCHEMISTRY  
Dec. 2006

## LINKS

GitHub: [raynamharris](#)  
LinkedIn: [Rayna Harris](#)  
SlideShare: [Rayna Harris](#)  
Google Scholar: [Rayna M Harris](#)  
ImpactStory: [Rayna Harris](#)  
YouTube: [Rayna Harris](#)  
Twitter: [@raynamharris](#)  
Medium: [@raynamharris](#)

## CERTIFICATIONS

Software Carpentry Instructor Trainer  
Software Carpentry Instructor  
Data Carpentry Instructor

## COURSES TAUGHT

### DATA SCIENCE

Integrative Molecular Neuroethology  
Introduction to UNIX  
Introduction to R  
Introduction to RNA-seq Analysis  
Next Generation Sequencing Analysis  
Research using Jupyter Notebooks  
Version Control with Git & GitHub

### OTHER TOPICS

Problems in Modern Biology  
Organic Chemistry Laboratory  
Introduction to Spanish

## PROGRAMMING

Git • Jupyter Notebooks •  $\LaTeX$   
Python • R • R Markdown • Unix

## EXPERIENCE

### SOFTWARE CARPENTRY & DATA CARPENTRY

INSTRUCTOR • MENTOR • TRAINER • BOARD MEMBER

January 2015 – present

- Teach computational skills for researchers in two-day workshops
- Develop curricula for R, Python, UNIX, Git, instructor training workshops
- Host on-line discussion sessions for community members around the globe
- Mentor new instructors
- Develop and implement strategic goals for the organization

### THE UNIVERSITY OF TEXAS AT AUSTIN SCIENTIST • EDUCATOR

Oct 2008 – present | Austin, TX

- Conduct interdisciplinary research to understand how learning works
- Utilize high-performance computing, UNIX, and R for reproducible data analysis and visualization
- Communicate science through scientific journals, social media, and public talks
- Coordinate the Annual Big Data in Biology Summer School and Symposia

### MARINE BIOLOGICAL LABORATORIES RESEARCH EDUCATOR

Summer 2013 – present | Woods Hole, MA

- Develop new curricula for teaching molecular biology and data science to neurobiologists
- Teach molecular biology and data science
- Supervise independent student research projects
- Manage the Neural Systems & Behavior Facebook and Twitter accounts

## RESEARCH

### NEUROGENOMICS OF AVOIDANCE LEARNING PH.D. THESIS

My thesis research goal is to understand how animals learn to avoid aversive stimuli. I integrated data from animal behavior, neural circuit dynamics, neuromolecular function, and genetic levels of analyses. This scope of integration is the first of its kind in learning and memory neuroscience research. I developed a reproducible analytic workflow combining UNIX, R, and Git. All data are open access under creative commons license.

### VARIATION IN ANIMAL BEHAVIOR RESEARCH SCIENTIST

Lots of research on animal behavior. 14 publications. Many poster presentations.

## HONORS & AWARDS

2017	Berkeley Data Science Institute Fellowship
2016	University Graduate Continuing Fellowship
2016	Outstanding Graduate Student Academic Employee Award
2015	Grant in Aid of Research
2014,15,16	Academic Enrichment Fund Award
2004	International Education Scholarship