# ERIC R. SCOTT

### Eco-metabolomics, multivariate statistics, teaching

# **EDUCATION**

2014-2019 **Tufts University** PhD Candidate in Biology

Medford, MA

2007-2010 University of Illinois at Urbana-Champaign

M.S. in Ecology, Evolution, and Conservation Biology

O Urbana, IL

2002-2006 Whitman College

B.A. in Biology

Walla Walla. WA



# BESEARCH EXPERIENCE

2014-2019 **Graduate Research Assistant** 

**Tufts University** Medford, MA

- Designed and carried out multiple field experiments in China and the US
- Developed a strong understanding of multivariate approaches to analyzing metabolomics datasets
- Provided statistics consulting to Tufts researchers

2007-2010

#### **Graduate Research Assistant**

University of Illinois at Urbana-Champaign

O Urbana, IL

- Designed and conducted a multi-year field experiment
- Analyzed data using generalized linear models and mixed effects models



# **♣** SELECTED TEACHING EXPERIENCE

2016-2018

### Biostatistics using R

**Tufts University** 

Medford, MA

- Created companion recitation section to Biostatistics course to teach introductory R with a focus on the Tidyverse
- · Converted homework assignments from SPSS to R, making use of R Markdown documents

Oct 2018

#### Reproducible Workflows for Ecology Research

Workshop presented at Tufts University

- Medford, MA
- Developed workshop on reproducibility in data analysis for ecologists
- Demonstrated use of R projects, project organization, authoring R packages, GitHub, and data archiving

Jan 2018

## R Notebooks: Richly annotate your statistical analyses and produce dynamic reports

Workshop presented at Tufts University

Medford, MA

- Demonstrated uses of R Notebooks for biological research
- Discussed value of readable, annotated code for reproducibility and collaboration



PhD student specializing in multivariate data analysis, metabolomics, reproducible analyses, and teaching. On the market for data science and postdoc positions.

### **CONTACT INFO**

github.com/aariq

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### **SKILLS**

Multivariate data analysis

Expert in R and R Studio with emphasis on the Tidyverse.

Expert in communicating to scientific and general public

Webscraping and data wrangling

Package development

Github

Some Python and SQL

Last updated on 2019-02-17.

# SELECTED PRESENTATIONS

Nov 2018 Can pests rescue tea quality from climate change?

First place winning talk for Entomological Society of America Joint Meeting, Plant-Insect Ecosystems student competition

♦ Vancouver, BC

ER Scott, CM Orians

Aug 2017 Generating and analyzing metabolomic data from tea plant volatiles

Poster for Data Intensive Studies Center (DISC) Symposium at Tufts University

Medford, MA

ER Scott, N Kfoury

### SELECTED PUBLICATIONS

2019 • Combined impacts of prolonged drought and warming on plant size and foliar chemistry

Ann. Bot. (2019). doi:10.1093/aob/mcz004 CM Orians, R Schweiger, J Dukes, **ER Scott**, C Müller

Interactive effects of drought severity and simulated herbivory on tea (Camellia sinensis) volatile and non-volatile metabolites

Environ. Exp. Bot. 157, 283–292 (2019). doi:10.1016/j.envexpbot.2018.10.025 **ER Scott**, X Li, N Kfoury, J Morimoto, WY Han, S Ahmed, SB Cash, TS Griffin, JR Stepp, A Robbat, CM Orians

Striking changes in tea metabolites due to elevational effects
Food Chem. 264, 334–341 (2018). doi:10.1007/978-981-13-2140-5
N Kfoury, J Morimoto, A Kern, ER Scott, CM Orians, S Ahmed, TS Griffin,
SB Cash, JR Stepp, D-Y Xue, C-L Long, A Robbat

Direct Contact Sorptive Extraction: A Robust Method for Sampling Plant Volatiles in the Field

J. Agric. Food Chem. 65, 8501–8509 (2017). doi:10.1016/j.foodchem.2018.05.040 N Kfoury, **ER Scott**, CM Orians, A Robbat