ANDREW G JOHNSON

4537 Spruce Street ◇ Philadelphia, PA 19104
(910) 261 3153 ◇ anjohns@sas.upenn.edu

EDUCATION

University of Pennsylvania — August 2017 - Present
Department of Biology — *Doctoral Candidate*

North Carolina State University — August 2008 - December 2012
Department of Animal Science — *Bachelor of Science*

RELEVANT EXPERIENCE

Evolution and Ecology of Disease Systems Laboratory — April 2018 - Present
Doctoral Candidate — *Philadelphia, PA*

- Working to understand ecological assembly and invasion dynamics of the gut microbiome
- Adapting existing ecological theory to novel systems

Host-Microorganism Interaction Laboratory — February 2020
Visiting Scholar — *Oeiras, Portugal*

- Performed gnotobiotic microbiome experiments using *D. melanogaster*
- Helped to establish an international collaboration between three laboratories

Plotkin Research Group in Mathematical Biology — January 2018 - May 2018
Rotation Student — *Philadelphia, PA*

- Developed a series of computational Wright-Fisher models to simulate the competitive dynamics of hashtags on Twitter

Akçay Lab — August 2017 - December 2017
Rotation Student — *Philadelphia, PA*

- Studied the intersection between ecological theory, multi-layer network analysis, and urban planning

Duke Network Analysis Center (DNAC) — February 2017 - July 2017
Associate in Research — *Durham, NC*

- Cleaned and analyzed empirical network data
- Coordinated the annual Social Networks and Health workshop as well as weekly seminars

Zoonotic Disease Research Center — October 2016 - January 2017
Field Research Assistant — *Arequipa, Peru*

- Led a team to collect GPS data of free-roaming dog movement to infer correlations between the built environment and rabies dynamics
- Collected insect vectors of Chagas disease and assisted with the development of a disease prevalence forecasting app for the Peruvian Ministry of Health

PUBLICATIONS

Raynor, B., De la Puente-Len, M., **Johnson, A.**, Daz, E. W., Levy, M. Z., Recuenco, S. E., & Castillo-Neyra, R. (2020). Movement patterns of free-roaming dogs on heterogeneous urban landscapes: implications for rabies control. *Preventive Veterinary Medicine*, 104978.

AWARDS AND FELLOWSHIPS

Teece Dissertation Research Fellowship 2020

SASGov Research Student Grant 2020

GAPSA-Provost Fellowship for Interdisciplinary Innovation 2021

TEACHING EXPERIENCE

Statistics for Biologists (BIOL 446) Fall 2018 & Fall 2021
University of Pennsylvania *Teaching Assistant*

Evolutionary Biology (BIOL 230) Spring 2019
University of Pennsylvania *Teaching Assistant*

DEPARTMENTAL SERVICE

President, Biology Graduate Group 2020-2021

MENTORSHIP

Graduate
Will Gaines, masters student 2020-2021

Post-Baccalaureate
Jake Hira, post-bacc researcher 2021-2022

Undergraduate
Dietrich Nigh, undergraduate researcher 2019-2020
Will Gaines, undergraduate researcher 2019-2020

RELEVANT COURSEWORK

Core Courses
Advanced Evolution
Genetic Analysis
Animal Physiology & Population Ecology

Other Courses
Probability Theory
Statistics for Biologists
Introduction to Programming - Java

TECHNICAL STRENGTHS

Languages R, Java, Python
Software & Tools LaTeX, RStudio, NetLogo, Eclipse

ORGANIZATIONS AND VOLUNTEERING

University of Pennsylvania Judo Club August 2019 - Present
Member *Philadelphia, PA*

NASA JPL Solar System Ambassador Program January 2017 - December 2019
Member *Raleigh, NC & Philadelphia, PA*

North Carolina One Health Collaborative August 2012 - July 2017
Member *Research Triangle Park, NC*

Triangle Linux Users Group (TriLUG) July 2015 - July 2017
Member *Raleigh, NC*