Pierce Hutton

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EDUCATION

2014-Present Biology PhD Student (Advisor: Dr. Kevin McGraw), Arizona State University, Tempe, AZ

Overall GPA: 4.0

2010-2014 B.S. Biological Sciences (Conservation Biology and Ecology), Arizona State University,

Tempe, AZ Senior GPA: 4.09 Overall GPA: 3.33

PROFESSIONAL & RELEVANT EXPERIENCES

2014 NSF Research Experience for Undergraduates (REU) (Advisor: Dr. Kevin McGraw),

Arizona State University, Tempe, AZ

2013-2014 Undergraduate Research Assistant (Advisor: Dr. Pierre Deviche), Arizona State

University, Tempe, AZ

2008 **High School Research Assistant** (Advisors: Dr. Shannon Hackett, Dr. John

Bates), Pritzker Laboratory for Molecular Systematics and Evolution, Field

Museum of Natural History, Chicago, IL

CONFERENCE TALKS

2015 **Hutton, P.** & McGraw, K.J. "Antioxidants and Animal Health: A Pigmentary Perspective

on Avian Dietary Variation in the City" International Urban Wildlife Conference, Chicago,

IL

SERVICE TALKS

2014 "Human alteration of animal phenotype and behavior", Madison Park Middle School,

Estrella Foothills High School & Kyrene Altadena Middle School, Phoenix, AZ

CONFERENCE POSTERS

Hutton, P. & McGraw, K.J. 2015. Hit the lights: How experimental artificial night-lighting influences sleep, disease and stress in a songbird. Animal Behavior Society meeting, Anchorage, AL

Bittner, S.B, **Hutton, P.**, and Deviche, P. 2015. Corticosterone and the regulation of parental care behavior in captive birds. North American Society for Comparative Endocrinology (NASCE) meeting, Ottawa, Canada

Hutton, P & & McGraw, K.J. 2015. Urbanization alters molt dynamics in a common desert songbird. CAP LTER All Scientists Meeting, Tempe, AZ

P. Deviche, S. Bittner, S. Davies, S. Gao, **P. Hutton**, and S. Valle. 2015. Food availability modulates the reproductive axis sensitivity to LH in a male songbird. Society for Integrative and Comparative Biology, West Palm Beach, FL

Hutton, P. 2014. Developing a cost-effective, hands-off approach for estimating fledgling body condition in the zebra finch (*Taeniopygia guttata*). Arizona State University's 21st Annual SOLUR Poster Symposium, Tempe, AZ

PROJECTS & PUBLISHED WORK

Popular media (non-peer reviewed)

2014 **Hutton, P.** 2014. Is A City Slicker Sicker? Ask-a-biologist website, Arizona State University School of Life Sciences (http://askabiologist.asu.edu/plosable/city-slicker-sicker)

In Review

- S. Davies, Gao S., Valle S., Bittner S., **Hutton P.**, Meddle S.L., and P. Deviche. *Journal of Experimental Biology*. Negative energy balance in a male songbird constrains the luteinizing hormone-induced release of testosterone
 - Role: Designed study, captured birds, performed hormone challenges/blood sample collection, performed food restriction treatment, collected data, helped draft the manuscript

In Preparation

Hutton, P., McKenna J.D. & McGraw, K.J. *In prep.* Suppressed molt of carotenoid-colored feathers in urban house finches (*Haemorhous mexicanus*).

- Role: Designed the experiment, captured birds, collected data, performed statistical analyses, writing the manuscript
- Expected submission: June 2015

Hutton, P. & McGraw, K.J. *In prep for submission to Proc B.* Physiological and behavioral responses of urban and rural house finches (*Haemorhous mexicanus*) to weak intensity night-lighting

- Role: Designed the experiment, captured birds, collected data, will perform statistical analyses, writing the manuscript
- Expected submission: August 2015

B.M. Seymoure*, Simpson R.K.*, **Hutton P.***, Ligon R. & K.J. McGraw. *Invited Review, in: Current Opinions in Behavioral Sciences*. Color communication in a changing world.

• Expected submission: May 1st 2015

Hutton, P. & McGraw K.J. *In prep for submission to Behavioral Ecology*. Multiple ornament components respond to environmental variation differently in male and female house finches.

- Role: Designed the experiment, collected data, performed outreach activities, analyzed data, wrote the manuscript
- Expected submission: June 2015

Hutton, P. & McGraw K.J. *In prep.* Urban/rural variation in site fidelity, sex ratio, and morphological variables.

- Role: Designed the experiment, collected data, performed outreach activities, analyzed data, wrote the manuscript
- Expected submission: July 2015

Bittner, S.B., **Hutton P.** & Deviche, P. *In prep.* Corticosterone and the regulation of parental care behavior in captive birds.

Role: Assisted with experimental design, collected data, will assist with manuscript drafting

COURSES TAUGHT

2015 BIO 370: Vertebrate Zoology (Lab)

• Led weekly dissections with an emphasis on the anatomical, functional and evolutionary features of vertebrates and close relatives of vertebrates

GRANTS

2015 McGraw, K.J and **Hutton, P.** "Up All Night To Get Lucky: Stress, sex, survival and sleep in the city". Research and Training Initiatives Bold Initiatives Grant, Arizona State University (\$5000)

2014 **Hutton, P.** "Hot Night on the Town: Does the urban heat island affect how well birds sleep?" National Sigma Xi Grants In Aid of Research (\$400)

Hutton, P. "Colorful plumage: an indicator of sleep health" GPSA JumpStart Research Grant, Arizona State University (\$500)

Hutton, P. SOLS Undergraduate Research Grant (\$250), Arizona State University

TRAVEL AWARDS

2015 Central Arizona-Phoenix Long-Term Ecological Research (CAP LTER) Travel Grant (\$475)

SOLS Travel Award for Animal Behavior Society Meeting, Arizona State University, (\$400)

AWARDS & ACHIEVEMENTS

2015 School of Life Sciences Graduate Student Scholarship, Arizona State University (\$1000)

F 2010, 13 CLAS Dean's List, Arizona State University & S 14

2010 Ronella K. Marshall Jones Scholarship, Arizona State University (\$2000)

ACADEMIC SERVICE

2015 **Volunteer,** Night of the Open Door, Arizona State University

Graduate and Professional Students Association (GPSA) Interview Travel Grant Committee

Outreach Coordinator, "Analayzing Bird Color in a Desert Environment: the ABC's of an ecological citizen science outreach project in Phoenix"

• Role: Designed the program, visited local schools to develop hypotheses, collected data and tested student hypotheses, coordinated student poster symposium

Reviewer, School of Life Sciences Undergraduate Research Fellowship Applications

2014 **Judge,** Sigma Xi International Student Research Conference

SOCIETY MEMBERSHIPS

2015-Present **Member,** Animal Behavior Society

2014-2015 **Member,** Sigma Xi

2014-Present Member, Central Arizona-Phoenix Long-Term Ecological Research (CAP LTER)

NON-ACADEMIC VOLUNTEER ACTIVITIES

Volunteer, Rock & Roll Paint-a-thon, Mesa, AZ
 Volunteer, Wild at Heart, Phoenix, AZ
 Volunteer, Audubon Society, Phoenix, AZ
 Volunteer, Soil Adventures, Field Museum of Natural History, Chicago, IL

GENERAL QUALIFICATIONS AND SKILLS

- ❖ Statistical analysis in R
- ❖ Microsoft Office: PowerPoint, Word, and Excel
- ❖ Lab safety liaison for the McGraw Lab
- Leadership and organization: trained and lead 12 undergraduate students for work on various projects;
 - Jennifer Bruening (graduated), Jennifer McKenna (Senior), Steffanie Jordan (Senior), Mariel Piechowicz (Senior, Barrett Honors College), Samantha Taubel (Sophomore, Barrett Honors College), Farhan Iqbal (Senior), Nathan Munoz (Junior), Kyle Glew (Senior), Spencer Cahalan (Senior), Cole Dellisanti (Senior), Josh Raiffe (Freshman, Barrett Honors College), Aidan Schneider (Freshman), Ryan Call, Jake Besch-Stokes (Freshman, Barrett Honors College)
- * Training from Arizona State University:
 - o Laboratory Safety
 - Compressed gas
 - o Fire Safety
 - o Hazardous Waste Management
 - o Biosafety and Blood-borne Pathogens
 - o Defensive Driving
 - o IACUC Clearance Levels I, II: Birds, and III: Blood collection, euthanasia