

## **David Ensminger**

Department of Ecosystem Science and Management  
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### **Education**

Anticipated: Spring 2019 Pennsylvania State University-State College, PA

- Doctor of Philosophy in Wildlife and Fisheries Science
- Supervisors: Dr. Tracy Langkilde

2014 Sonoma State University-Rohnert Park, CA

- Masters of Science in Biology
- Supervisor: Dr. Daniel Crocker

2012 University of California, Santa Cruz-Santa Cruz, CA

- Bachelors of Science in Marine Biology

### **Teaching Experience**

2017 **Instructor**, Department of Ecosystem Science and Management, Pennsylvania State University

- Directed Special Topics in Research course
- Mentored and assisted student with the research, design, implementation, data collection, analysis, and write up of an experiment

2017 **Teaching Associate**, Department of Ecosystem Science and Management, Pennsylvania State University

Supervisor: Dr. Michael Sheriff

- Directed Wildlife Health lab sessions
- Led undergraduate and graduate students in the design, implementation, and collection of experimental data from the field
- Directed students on proper lab safety and protocols for radioimmunoassays
- Administered and graded quizzes and exams

2016-2017 **Teaching Associate**, Department of Ecosystem Science and Management, Pennsylvania State University

Supervisor: Dr. Paola Ferrari

- Directed Vertebrate Anatomy lab sessions
- Led undergraduate students through dissections and worksheets
- Administered and graded quizzes and exams

2014 **Teaching Associate**, Department of Biology, Sonoma State University

Supervisor: Dr. Daniel Crocker

- Directed Animal Physiology lab sessions
- Led undergraduate students on field procedures collecting weanling seal morphometric data
- Directed Powerlab physiology experiments, Integrative Physiology computer exercises, and article discussions

2013 **Teaching Associate**, Department of Biology, Sonoma State University

Supervisor: Dr. Cory Champagne

- Directed Environmental Physiology lab sessions
- Led students on field procedures to collect blood from juvenile elephant seal
- Supervised undergraduate students as they completed colorimetric assays and radioimmunoassays

2012-2013 **Teaching Associate**, Department of Biology, Sonoma State University

Supervisor: Dr. Richard Whitkus

- Directed lab sessions for Introduction to Biology for non-major undergraduates
- Helped students during office hours with understanding lecture material
- Created quizzes to test relevant knowledge of lab

### **Publications**

- **Ensminger, D.**, Langkilde, T., Owen, D., MacLeod, K., Sheriff, M., Under Review, "Maternal stress effects in a wild-caught lizard", *Journal of Animal Ecology*.
- Somo, D., **Ensminger, D.**, Sharick, J., Kanatous, S., and Crocker, D. " Development of Dive Capacity in Northern Elephant Seals (*Mirounga angustirostris*): Reduced Body Reserves at Weaning Are Associated with

Elevated Body Oxygen Stores during the Postweaning Fast.” *Physiological and Biochemical Zoology*. Volume 88 (2015): 471-482.

- **Ensminger, D.**, Somo, D., Houser, D., and Crocker, D. "Metabolic responses to adrenocorticotrophic hormone (ACTH) vary with life-history stage in adult male northern elephant seals." *General and Comparative Endocrinology*. Volume 204 (2014): 150-157.

### **Research Experience**

2014-2018 **Graduate Research Assistant**, Wildlife and Fisheries Science, Pennsylvania State University

- Supervisor: Dr. Michael Sheriff and Dr. Tracy Langkilde

2012-2014 **Graduate Research Assistant**, Department of Biology, Sonoma State University

- Supervisor: Dr. Daniel Crocker, in collaboration with Shane Kanatous and Stephen Trumble

2011 **Research Intern**, United States Geological Society, Big Sur, CA

- Supervisor: Dr. Tim Tinker

### **Peer Reviewed Conference and Poster Presentations**

(\*Undergraduate student)

**Ensminger, D.**, Langkilde, T., MacLeod, K., Venable, C., Owen, D., Sheriff, M., “Effects of Maternal Glucocorticoids on Maternal Glucose and Egg Allocation in a Free Living Lizard”, Poster Presentation, Gordon Research Conference on Predator-Prey Interactions (2018), Ventura, CA.

**Ensminger, D.**, Langkilde, T., MacLeod, K., Venable, C., Owen, D., Sheriff, M., “Effects of Maternal Stress on Maternal and Offspring Behavior”, Oral Presentation, Society for Integrative and Comparative Biology (2018), San Francisco, CA.

**Ensminger, D.**, Langkilde, T., MacLeod, K., Owen, D., Sheriff, M., “Effects of Maternal Stress on Offspring HPA-Axis in Wild Caught *Sceloporus undulatus*”, Poster Presentation, Three Rivers Evolution Event (2017), Pittsburgh, PA.

Owen, D., Sheriff, M., Heppner, J.\*, Gerke, H.\*, **Ensminger, D.**, MacLeod, K., Langkilde, T., “Hot and bothered: Maternal stress alters thermal sensitivity of heart rate in lizard embryos”, Poster Presentation, Three Rivers Evolution Event (2017), Pittsburgh, PA.

**Ensminger, D.**, Langkilde, T., MacLeod, K., Venable, C., Owen, D., Sheriff, M., “Effects of Maternal Stress on Offspring HPA-Axis and Size”, Oral Presentation, Society for Integrative and Comparative Biology (2017), New Orleans, LA.

MacLeod K, Sheriff, M., Owen, O., **Ensminger, D.**, Langkilde, T., “Stress kills: Maternal stress reduces female survival and hatching success, but not hatching survival, in eastern fence lizards”, Oral Presentation, Society for Integrative & Comparative Biology (2017), New Orleans, LA.

Owen, D., Sheriff, M., Heppner, J. \*, Gerke, H. \*, **Ensminger, D.**, MacLeod, K., Langkilde, T., “Hot and bothered: Maternal stress alters thermal sensitivity of metabolic rate in lizard embryos”, Oral Presentation, Society for Integrative & Comparative Biology (2017), New Orleans, LA.

Riehl, L. \*, **Ensminger, D.**, Langkilde, T., Sheriff, M., “Mother Knows Best: Understanding the Mechanisms of How Maternal Stress Influences Offspring Phenotype in Eastern Fence Lizards (*Sceloporus undulatus*)”, Poster Presentation, Penn State Undergrad Research Exhibition (2015), State College, PA

**Ensminger, D.**, Somo, D., Sharick, J., Houser, D., and Crocker, D., "Metabolic impacts of an ACTH challenge vary with life-history stage in adult male Northern Elephant Seals (*Mirounga angustirostris*)", Poster Presentation, Experimental Biology (2014), San Diego, CA

**Ensminger, D.**, Somo, D., Sharick, J., Houser, D., and Crocker, D., "Hormonal impacts of an ACTH challenge vary with life-history stage in adult male Northern Elephant Seals (*Mirounga angustirostris*)", Poster Presentation, Society for Integrative and Comparative Biology (2014), Austin, TX

**Ensminger, D.**, Somo, D., Sharick, J., Houser, D., and Crocker, D., "Effects of an acute stimulation of the HPA axis on sex and stress hormones in male northern elephant seals", Poster Presentation, Marine Mammal Society (2013), Santa Cruz, CA

### **Invited Talks**

- Society for Integrative and Comparative Biology, DCE Data Blitz, “Effects of Maternal Stress on Offspring HPA-Axis and Morphology” (2017)
- Penn State Altoona, Brain Awareness Week "The effects of prenatal stress on offspring phenotype in fence lizards" (2015)

### **Guest Lecturer**

- 2014-2018, Mammalogy, Penn State University
- 2014-2016, Wildlife Practicum, Auburn University
- 2015-2016, Conservation Biology, Penn State University

### **Professional Society Affiliations**

- 2014-2018 Society for Integrative and Comparative Biology
- 2018 Gordon Research Conference
- 2017 The Institute for Teaching and Mentoring

### **Outreach**

- 2012, 2014, 2016, 7<sup>th</sup> Grade, St. Peter Martyr School
- 2014-2016, Ranger Presentations, Blakely State Park
- 2016, Arbor Day, Penn State University
- 2015, STEM Fair, Park Forest Middle School

### **Grants, Scholarships, and Fellowships**

- 2018 Carl Storm Underrepresented Minority Fellowship, \$600
- 2017 UCEM Alfred P. Sloan Scholar, \$40,000
- 2017 Charlotte Magnum Student Support Award, \$150
- 2016 Henry Sahakian Travel Award, \$300
- 2014 Graduate Entry Fellowship, \$25,000
- 2014 McKenna Scholarship, \$2,000

## **References**

### **Dr. Tracy Langkilde**

- Head of Department and Professor, Department of Biology
- Pennsylvania State University, State College, Pennsylvania
- Tel: office (814) 863-4530
- Email: tl130@psu.edu

### **Dr. Daniel Crocker**

- Professor, Department of Biology
- Sonoma State University, Rohnert Park, California
- Tel: office (707) 664-2995
- Fax: (707) 664-4046
- Email: crocker@sonoma.edu