Erin A. Scheessele (rhymes with Nestlé)

Education

2000 - 2007 Oregon State University Corvallis, Oregon

Ph.D. in Zoology with Political Science minor

1995 - 1999 Duke University Durham, North Carolina **B.S.** Biology with Chemistry and Classical Archaeology minors – *Cum Laude*

Fellowships & Grants

Graduate Assistance in Areas of National Need (GAANN) Fellowship, Oregon State University, 2000-2003.

Sigma Xi Grants In Aid of Research Award, 2003.

Declining Amphibian Population Task Force Seed Grant, 2002.

American Museum of Natural History Theodore Roosevelt Memorial Fund, 2002.

Oregon State University Department of Zoology Research Grant, 2002.

The Explorers Club Youth Activity Fund, 1998.

Research Interests

I investigated indirect effects of ambient UV-B on amphibian life history traits via trophic interactions. I hypothesized that increased levels of ambient UV-B may result in a poorer quality diet for amphibian larvae. A lower quality diet may result in a longer time to metamorphosis and a smaller size at metamorphosis, both results being disadvantageous. I conducted both laboratory and field experiments measuring the effect of UV-B on diet quality and diet composition as well as UV-B irradiated food on amphibian life history traits.

As a member of the Blaustein Lab at Oregon State University I participated in research involving: mesocosm and lab experiments investigating synergies between the chytrid fungus and UV-B radiation, laboratory behavioral trials looking at effects of urea contamination on feeding and survival of four amphibian species, molecular experiments measuring photolyase repair activity in salamanders, and long term censusing of Western Toads.

Teaching Philosophy

Memorization is not education. I believe my role as a teacher is to develop critical thinkers. Therefore I design my courses to produce people capable of constructively solving problems to arrive at an answer rather than emphasize memorization. By fostering a learning environment that stresses critical and analytical thought, my students will be able to extrapolate from the concepts learned in class to novel scenarios, both in class and in life.

My approach to teaching recognizes that people learn in different ways, and everyone learns more effectively when multiple learning styles are engaged. It is my responsibility as the instructor to share my enthusiasm for the course material, inspire the students to engage with the course, and provide a welcoming environment that is conducive to learning. I believe the best way to meet these responsibilities is to foster an intimate learning environment.

Teaching Positions

Substitute teaching in the Corvallis 509J District, January 2022-

Willamette University, Visiting Professor 2007-2008. Ecology, Evolution & Development (BIOL 125L), Cell Biology & Genetics lab (BIOL 130), Evolutionary Biology (BIOL 376), Special Topics: "Global Climate Change: Where Science & Society Meet" (BIOL 470).

Oregon State University, Instructor for **Human Ecology** (Z 348), Summers 2004, 2005.

Oregon State University, Instructor for **Animal Behavior** (Z/BI 350), Winter 2005.

Teaching Assistantships

Oregon State University, Teaching Assistant for **Advanced Human Anatomy and Physiology** (Z 443), Spring 2007.

Oregon State University, Teaching Assistant for **Human Anatomy and Physiology** (Z 341, Z 342, Z 343), Fall 2004, 2005, Winter and Spring 2006.

Oregon State University, Teaching Assistant for **Embryology and Development** (Z 425), Spring 2004.

Oregon State University, Teaching Assistant for Introductory Biology (BI 212), Winter 2004.

Duke University, Full-time Mentor/Teaching Assistant for Introductory Biology, 1999-2000.

Pedagogical Training

"Discover Your Teaching Philosophy" Workshop. Center for Teaching and Learning, Oregon State University. Fall 2007.

"Survival Skills for Faculty New to Teaching" Workshop. Center for Teaching and Learning, Oregon State University. Fall 2007.

Teaching in Life Sciences (BOT 508). Department of Botany, Oregon State University. Fall 2003.

Instructor Training and Learning Styles Workshop for Introductory Biology Mentors. Duke Univ., with funding from National Science Foundation. 1999.

Presentations at Professional Meetings & Invited Symposia

Effects of UVB on tadpole diets: choice tests and growth rates. **Conservation Biology**. 20th Annual Meeting. San Jose, California, June 2006.

Indirect effects of ultraviolet-B radiation on amphibians: using mesocosm experiments to examine UV-B effects on trophic level interactions. **Ecological Society of America**. 88th Annual Meeting. Savannah, Georgia, August 2003.

Effects of urea fertilizer on juvenile amphibians. **Animal Behavior Society**. 38th Annual Meeting. Corvallis, Oregon, July 2001.

Integrated Research Challenge in Environmental Biology (IRCEB): Host-pathogen biology and the global decline of amphibians. Arizona State University, February 2001.

Publications

Blaustein, A.R., J.M. Romansic, **E.A. Scheessele**. 2005. Ambient levels of ultraviolet-B radiation cause mortality in juvenile western toads, *Bufo boreas*. *American Midland Naturalist*, 154(2):375-382.

Blaustein, A.R., J.M. Romansic, **E.A. Scheessele**, B.A. Han, A.P. Pessier, J.E. Longchore. 2005. Interspecific variation in susceptibility of larval anuran amphibians to the pathogenic fungus, *Batrachochytrium dendrobatidis*. *Conservation Biology*, 19(5):1460-1468.

Blaustein, A.R., B. Han, B. Fasy, J. Romansic, **E.A. Scheessele**, R.G. Anthony, A. Marco, D.P. Chivers, L.K. Belden, J.M. Kiesecker, T. Garcia, M. Lizana, L.B. Kats. 2004. Variable breeding phenology affects the exposure of amphibian embryos to ultraviolet radiation and optical characteristics of natural waters protect amphibians from UV-Bin the US Pacific Northwest: Comment. *Ecology*, 85(6):1747-1754.

Blaustein, A.R., A.C. Hatch, L.K. Belden, **E.A. Scheessele**, J.M. Kiesecker. 2003. Global change: challenges facing amphibians. *In R. Semlitsch* (ed) *Amphibian Conservation*. Smithsonian Press.

Hatch, A.C., L.K. Belden, **E.A. Scheessele**, A.R. Blaustein. 2001. Juvenile amphibians do not avoid potentially lethal levels of urea. *Environmental Toxicology & Chemistry*, 20(10):2328-2335.

Gallione, C.J., **E.A. Scheessele**, D. Reinhardt, A.J. Duits, J.N. Berg, C.J.J. Westermann, D.A. Marchuk. 2000. Two common endoglin mutations in families with hereditary hemorrhagic telangiectasia in the Netherlands Antilles: evidence for a founder effect. *Human Genetics*, 107:40-44.

Research Experiences

Oregon State University, Department of Zoology. *Doctoral student.* Indirect effects of ultraviolet-B radiation on amphibian larvae mediated by trophic interactions. 2000-2007

Guri, Venezuela. Field researcher. Intragroup dynamics of Alouatta seniculus in fragmented habitat. Advised by Dr. John Terborgh. June-July 1998.

Baylor College of Medicine, SMART Program. *Summer Intern.* Department of Human and Molecular Genetics. Cystic Fibrosis gene therapy research. Summer 1997.

Duke University, Department of Genetics. *Lab intern, Research assistant, Independent research.* Mutation analysis of hereditary hemorrhagic telangiectasia in Dutch Antilles. 1996-1999.

Blue Creek, Belize. Archaeological field researcher. Excavated Mayan ruins. Summer 1996.

Duke University, Biology Department. Field research assistant, lab assistant. Maintenance of Mexican bean beetle colony and field observations with Dr. Bill Morris. 1995-1996.

Rob and Bessie Welder Wildlife Foundation, Texas. Research assistant, intern, librarian, tour guide. Field assistance included sampling vegetation and invertebrates, setting herbivore exclusion cages, data collection, bird censusing. 1994-1995.

Outreach

Girls Science Club, South Shore Elementary, Albany, Oregon. April-May 2003

4-H Wildlife Stewards. Oregon State University Extension Services. Annually 2002-2006

After the Ivory Tower

Substitute teacher. January 2022-

Orgelkids USA, Founder & Executive Director. 2015-

FIRST LEGO League, Coach. Teams earned Overall 2nd Place Champions both seasons. 2019-2021

Corvallis Montessori School, Board of Trustees. Vice President. 2014-2016. President 2016-2017

Corvallis Spring Roll, Committee. Bike & trike ride and fair for children. 2014-2019

First Congregational United Church of Christ, Board of Deacons. 2012-2015

Interests

Raising two kind and well-rounded boys: Peter has musical talent we are trying to keep up with and nurture. Simon has always given the world's greatest hugs and enjoys dissecting the occasional road kill with his mamma. Before boys: Photography, Reading, Knitting, SCUBA, Travel

References

These individuals can speak to my skills as an effective and engaging lecturer:

Dr. David Craig selected me to be his replacement at Willamette University for his year of sabbatical, 2007-2008.

Dr. David Craig Professor of Biology Willamette University

Contact information available upon request.

Dr. Tiffany Garcia is familiar with my teaching style and techniques I use to foster an active learning environment in a lecture setting:

Dr. Tiffany S. Garcia Associate Professor, Department of Fisheries and Wildlife Oregon State University 112 Nash Hall Corvallis, Oregon 97331

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E-mail: Tiffany.Garcia@oregonstate.edu