

Eden W. McQueen

Curriculum Vitae

Department of Molecular, Cellular, and Developmental Biology

University of Michigan, Ann Arbor, MI 48109

Email: eden.mcqueen@gmail.com

Education & Training

- 2021- Postdoctoral Fellow, Department of Molecular, Cellular, and Developmental Biology, University of Michigan, Ann Arbor, MI
Mentor: Patricia Wittkopp
- 12/2020 Ph.D., Department of Biological Sciences, University of Pittsburgh, Pittsburgh, PA
Graduate thesis advisor: Mark Rebeiz
- 05/2009 B.A., *Summa cum Laude* in Chemistry, Bryn Mawr College, Bryn Mawr, PA
Undergraduate thesis advisor: Jonas Goldsmith

Professional Experience

- 2009-2013 **Research Chromatographer**, Merck & Co., West Point, PA
- 2010-2011 **Lecturer, Organic Chemistry**, Bryn Athyn College, Bryn Athyn, PA.

Publications

- Carson, W., Kuebbing, S., Betras, T., Campbell, A., **McQueen, E. W.**, Moore, C., Olmsted, C., Roberts, L., & N. Washington. 2021. "Advice on applying to graduate school in ecology and evolutionary biology: how to prepare and a step-by-step guide." *The Bulletin of the Ecological Society of America*. 10.1002/bes2.1917 —In Production
- Echeverri, S. A., Miller, A. E., Chen, J., **McQueen, E. W.**, Plakke, M., Spicer, M., Hoke, K. L., Stoddard, M. C., & N. I. Morehouse. 2021. "How signaling geometry shapes the efficacy and evolution of animal communication systems." *Integrative and Comparative Biology*. icab090
- **McQueen, E. W.** and M. Rebeiz. 2020. "On the individuality of gene regulatory networks: how does network re-use affect subsequent evolution?" *Current Topics in Developmental Biology*. 139:375-405.
- Novick, A., Currie, A. M., **McQueen, E. W.**, & N. L. Brouwer. 2020 "Kon-Tiki Experiments." *Philosophy of Science*. Volume 87, Issue 2.
- **McQueen, E. W.**, & N. I. Morehouse. 2018. Rapid divergence of pheromone profiles between subspecies of the butterfly *Pieris rapae*. *Journal of Insect Science*. Volume 18, Issue 2.
- **McQueen, E. W.**, & J. I. Goldsmith. 2009. Electrochemical analysis of single-walled carbon nanotubes functionalized with pyrene-pendant transition metal complexes. *Journal of the American Chemical Society*. 131:17554–17556.
- Smith, H. L., Usala, R. L., **E. W. McQueen**, & J. I. Goldsmith. 2009. Novel polyaromatic terminated transition metal complexes for the functionalization of carbon surfaces.

Presentations

- 2021** Poster presentation at *Predicting Evolution Workshop*, European Molecular Biology Laboratory. Title: "Surprising overlap in genetic architecture between male and female genital structures suggests involvement of pleiotropic linkage in their correlated evolution." *Virtual conference*.
- 2019** 15-minute oral presentation at Conference of Pan American Society for Evolutionary Developmental Biology, 2019 (August 2019) Title: "Dissecting the shared and divergent genetic architectures of a novel male genital structure and a novel female genital structure."
- 2019** Poster presentation at Drosophila Research Conference (March 2019). Title: "Dissecting the shared and divergent genetic architectures of a novel male genital structure and a novel female genital structure."
- 2018** 15-minute oral presentation at Three Rivers Evolution Event (September 2018). Title: "The developmental gene network of a novel male genital feature also patterns a female genital trait."
- 2018** Poster presentation at Evolution Conference (August, 2018) Title: "A Gene Network Involved in the Origin of a Novel Male Genital Structure also Patterns a Novel Genital Feature in Females."
- 2018** Guest seminar at Jacques-Monod Institute (August, 2018)
- 2018** 15-minute oral presentation at Drosophila Research Conference (April 2018), Title: "A Gene Network Involved in the Origin of a Novel Male Genital Structure also Patterns a Novel Genital Feature in Females."
- 2018** Poster presentation, University of Pittsburgh Grad Expo. Title: "A Gene Network Involved in the Origin of a Novel Male Genital Structure also Patterns a Novel Genital Feature in Females."
- 2018** Poster presentation at Pittsburgh Women in Science and Engineering Conference (February 2018) Title: "A Gene Network Involved in the Origin of a Novel Male Genital Structure also Patterns a Novel Genital Feature in Females."
- 2017** Poster presentation at the Society for Integrative and Comparative Biology Annual Meeting (January, 2017). Title: "A Gene Network Involved in the Origin of a Novel Male Genital Structure also Patterns a Novel Genital Feature in Females."
- 2016** 15-minute oral presentation at the Society for Integrative and Comparative Biology Annual Meeting (January, 2016). Title: "Using genetically induced variation in genitalia to examine functional effects of trait variation."
- 2015** Presented poster at Animal Behavior Society Annual Conference. Title: "Using genetically induced variation in genitalia to examine functional effects of trait variation."

Teaching Experience

- 2018 **Teaching assistant for Genetics Laboratory**, University of Pittsburgh
- 2014 **Teaching assistant for Biology 101 Laboratory**, University of Pittsburgh

2010-2011 **Lecturer, Organic Chemistry**, Bryn Athyn College, Bryn Athyn, PA.

Awards and Honors

- 2019 **Travel Grant**, Pan American Society for Evolutionary Developmental Biology conference, 2019
- 2019 **Second place award for best talk by a graduate student**, Pan American Society for Evolutionary Developmental Biology conference, 2019
- 2018 **TREE Travel Grant**, University of Pittsburgh
- 2018 **Outstanding Presenter Award**, University of Pittsburgh Grad Expo
- 2018 **ESEB Congress Attendance Aid Grant**
- 2015 **Sigma Xi Grants-in-Aid of Research grant awarded**
- 2014-2017 **National Science Foundation Graduate Research Fellowship**
- 2013-2014 **University of Pittsburgh Recruiting Fellowship**
- 2006-2009 **Student Research Fellowships**, during summer terms. Bryn Mawr Chemistry Department, Bryn Mawr, PA
- 2009 **American Chemical Society Philadelphia Section's Scholastic Achievement Award**, for Bryn Mawr College
- 2008 **Honorable Mention, Barry M. Goldwater Scholarship**

Professional Activities

Manuscript Review: *PNAS, Plos Genetics, Chemoecology, Ethology, European Journal of Entomology*

Outreach

Lecture and Workshop (4/2019): "What is CRISPR, and Why is it Important?" Trafford High School, Pittsburgh, PA.

Lecture and Workshop (3/2019): "What is CRISPR, and Why is it Important?" Carnegie Science Center, Pittsburgh, PA.

Lecture and Workshop (11/2018): "What is CRISPR, and Why is it Important?" Carnegie Science Center, Pittsburgh, PA.

Grand Awards Judge (5/2018): INTEL International Science and Engineering Fair 2018.

Volunteer instructor (11/2017): High school outreach through University of Pittsburgh and the Pittsburgh Science and Technology Academy

Volunteer instructor (1/2017): "What is a Scientist?" program, outreach to 7th and 8th grade classrooms prior to conference attendance at Society for Integrative and Comparative Biology in New Orleans, 2017.

Science Fair Judge (3/2016): Norwin School District district-wide K-8 science fair.

Volunteer at "Meet a Scientist" Event (6/2015): Alaska Museum of Science and Nature, in collaboration with presenters at the Animal Behavior Society Conference, 2015.

Volunteer at Pittsburgh Frick Environmental Center (2014-2018): Educational Outreach with Frick Environmental Center for K-12 students. Volunteering for programs that educate children and young adults in the areas of ecology, evolution, and conservation.