

ERICA NADOLSKI

Department of Biology
Indiana University - Bloomington
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EDUCATION

- 2020-Present **Ph.D. in Genome, Cell, and Developmental Biology**
Indiana University Bloomington
Minors in (i) Evolution and (ii) History & Philosophy of Science
In progress
Advisor: Dr. Armin Moczek; Committee Members: Drs. Ryan Bracewell,
Luke Nikolov, Erik Ragsdale, Ann Sophie Barwich
- 2016-2020 **B.S. with Honors, *summa cum laude***
University of Oklahoma, Department of Biology
Minors in (i) Chemistry and (ii) History of Science
Advisor: Dr. J. P. Masly
Thesis: The Genetic Basis of a Newly-Evolved Reproductive Structure in
Drosophila

RESEARCH EXPERIENCE

- 2020-Present **IU Department of Biology, Genome, Cell, and Developmental Biology**
Research: The evolutionary developmental biology of sexual dimorphisms and evolutionary innovations in the beetle tribe Onthophagini; ongoing
PI: Dr. Armin Moczek, Professor of Biology, IU, Bloomington, IN
- 2018-2020 **OU Department of Biology, Honors Undergraduate Research**
Research: Investigated the genetic basis of the origin and evolution of novel secondary sexual reproductive structures in *Drosophila*
PI: Dr. J. P. Masly, Professor of Biology, OU, Norman, OK
- 2017-2020 **Oklahoma Biological Survey, Undergraduate Research Assistant**
Research: Studied phylogenetic relationships among groups of native and invasive species subject to priority effects and along drought gradients
PI: Dr. Lara Souza, Director of the Oklahoma Biological Survey, Norman, OK

PUBLICATIONS

In press

Nadolski, E.M., Moczek, A.P. The promise and limits of an agency perspective in evolutionary developmental biology. *Evolution & Development*. <https://doi.org/10.1111/ede.12432>

Nadolski, E.M.,* Davidson, P. L.,* Moczek, A.P. Condition-dependent chromatin remodeling in the evolution and development of insect plasticity. (in press, *Current Opinion in Insect Science*) * co-first authors

In preparation

Harper, A. R., McCrory, J., **Nadolski, E.M.**, Afkhami, M., Masly, J.P. A novel gene specifies species-specific morphology of a sexually selected trait in *Drosophila* (aimed for submission to *PLoS Biology*)

CONFERENCE PRESENTATIONS

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|------|--|
| 2023 | EMBO/FEBS Venice summer school in evolutionary developmental biology: The future of evo devo systems biology. <i>Invited participant</i> . |
| 2022 | EMBO/FEBS Venice summer school: The character concept in metabolic, physiological, and developmental evolution. <i>Invited participant</i> . |
| 2022 | Agency in Living Systems workshop. Konrad Lorenz Institute for Evolution and Cognition Research, Austria. <i>Invited participant</i> . |
| 2020 | The Genetic Basis of a Newly-Evolved Reproductive Structure in <i>Drosophila</i> . OU Undergraduate Research Day. Talk . |
| 2020 | A novel gene specifies species-specific morphology of a sexually-selected trait in <i>Drosophila</i> . The Allied Genetics Conference. Poster . |
| 2020 | The Genetics of Sex-Specific Reproductive Traits in <i>Drosophila</i> . The Allied Genetics Conference. Talk . |

GRANTS AND FELLOWSHIPS

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|---------|---|
| 2023-24 | IU-NIH “Common Themes in Reproductive Diversity” Predoctoral Fellowship |
| 2022-23 | IU College of Arts and Sciences Kindig Research Fellowship |
| 2021 | NSF Graduate Research Fellowship – Honorable Mention |
| 2020-21 | IU College of Arts and Sciences Graduate Fellowship |
| 2019 | OU Honors College Undergraduate Research Grant |

AWARDS

2023	IU CISAB Hanna Kolodziejski fellowship award
2022	IU Provost's Travel Award for Women in Science
2020	Genetics Society of America TAGC 2020 Undergraduate Travel Award
2020	OU Undergraduate Research Day 2020 Distinguished Presenter Award
2020	OU Honors College Dean's Leadership Award for Reading Group Moderators
2019	OU Nominee for the University of Cambridge Churchill Scholarship
2017-2020	OU College of Arts and Sciences Dean's List, President's Honor Roll
2016	National Merit Scholar

TEACHING EXPERIENCE

2023	"Entomology," Associate Instructor, BIOL-Z373; with Prof. Armin Moczek
2022	"Eco Evo Devo: Thinking about Evolution," Journal Club organizer and Facilitator, BIOL-Z620
2022	"Introductory Biology: The Biology of the Senses," Associate Instructor, BIOL-L 104; with Prof. Laura Mojonnier
2022	Guest Lecture "From candidate gene to functional analysis using RNAi," ABEH-A 501 'Techniques in reproductive diversity'

SERVICE

Departmental

2022-Present	Biology Department Diversity, Equity, and Inclusion Committee, Student Rep.
2022-2023	Biology Department Graduate Recruitment Weekend, Food Committee Chair
2021-2022	GCDB Graduate Student Association, Secretary
2021-2022	Biology Department Graduate Recruitment Weekend, Activities Committee
2020-2023	BioLGBTQ Student Association, member
2021	Created the BioLGBTQ Safe Space Training workshop for the Biology department, ran training during orientation

Professional

2023	Manuscript Review – Evolution & Development
2022	Manuscript Review – Evolution & Development
2021	Manuscript Review – Seminars in Cell and Developmental Biology

Community Outreach

- 2023 **Reconstructing 6 million years of human evolution using diverse data sets**
Outreach module with five AP Biology class periods at Bloomington High School South; 240 participants
- 2022 **Mammalian Skull Evolution**
Outreach module taught to teens from the Bloomington Youth Shelter. Dec. 6th Bloomington, IN; 6 students
- 2022 **Science Fest**
“Mammalian Skull Evolution” outreach module displayed at IU event. Oct. 22nd Bloomington, IN
- 2022 **Mammalian Skull Evolution**
Outreach module taught to a 5th grade class at Templeton Elementary School. Oct. 11th. Bloomington, IN; 22 students
- 2022 **BugFest 2022**. Oct. 1st. Presented on horned beetle biology and diversity in Bloomington, IN.
- 2021 **Introduction to the Scientific Method using Termite Behavior**
Outreach module taught to a 3rd grade class at Childs Elementary School. Bloomington, IN; ~20 students
- 2021 **Reconstructing 6 million years of human evolution using diverse data sets**
Outreach module with two AP Biology classes at Bloomington High School South; 60 participants
- 2021 **BugFest 2021**. Presented on horned beetle biology and diversity in Bloomington, IN.
- 2020 **Tiny Fruit Flies Answer Big Scientific Questions**
Animated video describing Masly Lab research at a grade-school level
<https://www.youtube.com/watch?v=zJB7bortvOw&t=58s>

MENTORING EXPERIENCE

- 2023 **Isabel Manley**, IU student - Bachelor of Science in Biology
Undergraduate research project (2 semesters)
- 2023 **Gabriel Ruiz**, high school student
IU James Holland Summer Programs - Research Program (1 week)
- 2023 **Cohort** of 9 high school students
IU James Holland Summer Programs - Research Exposure (1 day)
- 2022 **Sukhmani Gill**, high school student
IU GROUPS Summer Research Experience (6 weeks)