

## **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
- 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 genus *Onthophagus*; 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.**, Moczek, A.P. The promise and limits of an agency perspective in evolutionary developmental biology. *Evolution & Development*. <https://doi.org/10.1111/ede.12432>

### **In preparation**

Davidson, P.,\* **Nadolski, E.**,\* Moczek, A.P. Condition-dependent chromatin remodeling in the evolution and development of insect plasticity. (in preparation for a special issue of *Current Opinion in Insect Science*) \* co-first authors

Harper, A. R., McCrory, J., **Nadolski, E.**, 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**

- |      |  |
|------|--|
| 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. <b>Talk</b> .                        |
| 2020 | A novel gene specifies species-specific morphology of a sexually-selected trait in <i>Drosophila</i> . The Allied Genetics Conference. <b>Poster</b> . |
| 2020 | The Genetics of Sex-Specific Reproductive Traits in <i>Drosophila</i> . The Allied Genetics Conference. <b>Talk</b> .                                  |

## **GRANTS AND FELLOWSHIPS**

- |         |   |
|---------|---|
| 2023-24 | IU-NIH “Common Themes in Reproductive Diversity” Predoctoral Fellowship |
| 2022-23 | IU College of Arts and Sciences Kindig 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 Kolodziejewski 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**

2022	<b>"Eco Evo Devo: Thinking about Evolution,"</b> Journal Club organizer and Facilitator, BIOL-Z620
2022	<b>"Introductory Biology: The Biology of the Senses,"</b> Teaching Assistant, BIOL-L 104; Prof. Laura Mojonier
2022	<b>Guest Lecture "From candidate gene to functional analysis using RNAi,"</b> ABEH-A 501 'Techniques in reproductive diversity'

## **SERVICE**

### **Departmental**

2022-Present	Biology Department Diversity, Equity, and Inclusion Committee, Student Rep.
2021-Present	GCDB Graduate Student Association, Secretary
2021-2022	Biology Department Graduate Recruitment Weekend Activities Committee
2020-Present	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. 6<sup>th</sup> Bloomington, IN; 6 students
- 2022 **Science Fest**  
“Mammalian Skull Evolution” outreach module displayed at IU event. Oct. 22<sup>nd</sup> Bloomington, IN
- 2022 **Mammalian Skull Evolution**  
Outreach module taught to a 5<sup>th</sup> grade class at Templeton Elementary School. Oct. 11<sup>th</sup>. Bloomington, IN; 22 students
- 2022 **BugFest 2022.** Oct. 1<sup>st</sup>. Presented on horned beetle biology and diversity in Bloomington, IN.
- 2021 **Introduction to the Scientific Method using Termite Behavior**  
Outreach module taught to a 3<sup>rd</sup> 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 undergraduate, Biology major
- 2022 Sukhmani Gill  
IU GROUPS Summer Research Experience, High school student

## **PROFESSIONAL AFFILIATIONS**

Genetics Society of America