

Anna Isabel Bautista

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EDUCATION

- August 2024-
Present **PhD in Psychology**
Behavioral and Systems Neuroscience Concentration
Emory University, Atlanta GA 30322
- August 2022 **B.S. in Zoology**, minor in Anthropology
Honors, *magna cum laude*, GPA 3.98
Colorado State University, Fort Collins CO 80523

Relevant Coursework

Bioinformatics and Genomics	Molecular and General Genetics
Cellular and Molecular Biology	Principles of Biochemistry
Comparative Animal Physiology	Writing in the Disciplines (Science)
Introduction to Statistical Methods	

RESEARCH EXPERIENCE

- Aug. 2024-
Present **Kelly Lab**
Advisors: Dr. Aubrey Kelly
Emory University, Atlanta GA 30322
- July 2022-
June 2024 **Wilsterman-Williams Lab**, Laboratory Manager
Advisors: Dr. Kate Wilsterman and Dr. Cory Williams
Colorado State University, Fort Collins, CO
- Assist PIs, graduate students, and technicians by performing assays, aiding in immunostaining, and quantifying cells on studies of physiological mechanisms regulating reproductive function and neuroendocrine control of seasonality.
 - Train lab members on daily lab tasks and protocols such as IHC, cryostat tissue sectioning, imaging, ELISAs, and more.
 - Prepare manuscripts for publication by visualizing data, performing statistical analyses, and preliminary writing on projects reviewing the literature on the hormones involved in pregnancy across eutherian mammals, as well as the use of compound specific stable isotopes to assess the trophic ecology of Arctic raptors.
- Jan. 2021-
May 2022 **Social Behavior Lab**, Undergraduate Research Assistant
Advisor: Dr. Dhruva Naug
Colorado State University, Fort Collins, CO
- Designed and developed honors thesis investigating the effects of stress on associative learning in European honeybees.
 - Evaluated and criticized research and review papers on personality in the context of learning and pace of life syndrome at weekly laboratory meetings.
 - Coordinated maintenance of honeybee colonies.
- Jan. 2020-
May 2022 **Handa-Tobet Lab**, Undergraduate Research Assistant
Advisor: Dr. Robert Handa and Dr. Stuart Tobet
Colorado State University, Fort Collins, CO
- Evaluated the effect of stress on estrogen-receptor beta in oxytocin neurons in the context of understanding sex differences underlying the circuitry of the HPA axis.
 - Participated in the review and editing process of an academic review paper.

PUBLICATIONS AND BOOK CHAPTERS (reverse chronological order)

§ Indicates in prep or submitted

1. §**Bautista, A. I.**, Johnson, D. L., Henderson, M. T., Anderson, D. L., Booms, T. L., Williams, C. T. Trophic discrimination of amino acid-specific nitrogen stable isotopes in raptor nestlings: implications for estimating trophic position.
2. **Bautista, A. I.**, Butler, C. E., Larson, A. M., Wilsterman, K. E. (2024). Hormones and pregnancy in eutherian mammals. In *Hormones and reproduction of vertebrates* (pp. 93-112). Academic Press.
3. Wilsterman, K.E., **Bautista, A. I.**, Butler, C. E., Juergens, M. Y., Larson, A. M. (2024) Evolution of Litter Size: Proximate and Ultimate determinants of a core reproductive trait. *Integrative and Comparative Biology*. <https://doi.org/10.1093/icb/icae052>.
4. Sheng, J.A., Bales, N. J., Myers, S. A., **Bautista, A. I.**, Roueifar, M., Hale, T. M., Handa, R. J. (2021). The hypothalamic-pituitary-adrenal axis: development, programming actions of hormones, and maternal-fetal interactions. *Frontiers in Neuroscience*, 14. <https://doi.org/10.3389/fnbeh.2020.601939>.

CONTRIBUTED PRESENTATIONS (reverse chronological order)

- Apr. 2024 Hannah Butkus, **Anna Bautista**, Kathryn Wilsterman. *Expression and hypoxia sensitivity of ZOI in the deer mouse placenta*. Celebrate Undergraduate Research & Creativity Showcase, Fort Collins, CO.
- Jan. 2024 **Anna I. Bautista**, Devin L. Johnson, Michael T. Henderson, David L. Anderson, Travis L. Booms & Cory T. Williams. *Trophic discrimination of amino acid-specific nitrogen stable isotopes in raptor nestlings: implications for estimating trophic position*. Society for Integrative and Comparative Biology, Seattle, WA.
- June 2023 Megan Hemmerlein, **Anna Bautista**, Ashley Larson, Jeffrey M. Good, Zachary A. Cheviron, & Kathryn Wilsterman. *Using adaptation to high elevations to understand how gene networks mediate hypoxia responses in the placenta*. Society for Integrative and Comparative Biology, Seattle, WA.
- Mar. 2023 Mya Voightsberger, Ellery Myers, **Anna Bautista**, and Kathryn Wilsterman. *Hypoxia, pregnancy, and the spleen: physiology underlying fetal growth trajectories in high elevation environments*. Multicultural Undergraduate Research Art and Leadership Symposium, Fort Collins, CO.
- Jan. 2022 **Anna I. Bautista**, Julietta A. Sheng, Sarah M. Tan, Renata M. Daniels, Alex M. Miller & Robert J. Handa. *Estrogen receptor beta in oxytocin neurons has an implicated role in HPA axis regulation*. College of Veterinary Medicine and Biomedical Sciences Research Day, Fort Collins, CO.

TEACHING AND MENTORING EXPERIENCE

- Jan. 2022-
May 2022 **Undergraduate Teaching Assistant**, LIFE 102 Lab
Colorado State University, Fort Collins CO
- Assist students in the hands-on learning in a life science laboratory section in collaboration with a graduate student teaching assistant.
 - Attend weekly meetings to prepare material and content for exploration in upcoming labs.
 - Taught an entire lab section to accommodate a variety of learning styles.
- Jan. 2020-
Dec. 2020 **Learning Assistant**, LIFE 102 Lecture
Colorado State University, Fort Collins CO
- Created and prepared educational activities to enrich student learning.
 - Attended and engaged in weekly meetings to discuss teaching techniques for the following classes.

Mentees (†- denotes honors student and ‡- denotes high school student, else undergraduate mentee)

2023- 2024	Hannah Butkus†	2022- 2023	Ellery Myers
2023- 2024	Elizabeth Osterhoudt	2022- 2023	Mo Sherrier†
2023	Gabe Koubek	2022	Aria Fischer

2021 Jordan Basset‡

HONORS AND AWARDS (reverse chronological order)

Fall 2019, **Dean's List**
Fall 2020, Colorado State University, Fort Collins, CO
2021,
Spring 2022

Spring 2019 **Dean's List**
University of Vermont, Burlington, VT

SKILLS

Laboratory: PCR, IHC, gel electrophoresis, cryosectioning, mouse handling, vaginal lavage and identification of cytologic smears, ELISA assay, tissue dissection, PER/associative learning assays, colony management and maintenance, field work, microscopy

Software and Programming Languages: R/R Studio, Imaris, BORIS, Image J/FIJI, Adobe Illustrator

Languages: English (proficient) and Spanish (intermediate competency)