

Matthew Hunter Babb

M.A. Psychology

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Atlanta, GA

[Personal Website](#)

EDUCATION

- 2020 - Present **Ph.D. Student in Psychology - Cognitive Sciences**
Georgia State University
- Advisor: Dr. Sarah Brosnan
- 2016 - 2020 **B.S. in Biology**
University of North Carolina at Chapel Hill
- Minors in Neuroscience and Chemistry
 - Graduated with Honors and Highest Distinction






RESEARCH INTERESTS

Animal behavior, natural and social decision making, comparative cognition, evolution of prosociality, cooperation, inequity aversion, behavioral economics, and endocrinology

FELLOWSHIP AND AWARDS

- 2024-2025 **Rumbaugh Fellowship - \$12,000**
- 2025 **3-Minute Thesis – Second Place Finalist - \$350**
- 2024 **Dean’s Graduate Research Grant - \$1,000**
- 2023 **First Place Oral Presentation – American Society of Primatologist**
- 2022 **NSF Graduate Research Fellowship – Honorable Mention**
- 2020-2024 **2CI University Doctoral Fellowship - \$80,000**
- 2020 **Phi Beta Kappa Honor Society**
- 2020 **Carolina Research Scholar**
- 2019 **Tom and Elizabeth Long Research Award**
- 2019 **Office of Undergraduate Research Travel Award**

PUBLICATIONS

- 2024  **Babb**, M.H. & Brosnan, S.F. (in review). Social closeness affects prosocial behavior in capuchin monkey groups. *Proceedings of the Royal Society B: Biological Sciences*.
- 2024  **Babb**, M. H., Flammer, K.L., Spilker, C., Ford, K., Sadtler, E., D'Ambra, E., & Brosnan, S.F. (in review). Risk sensitivity in female beluga whales (*Delphinapterus leucas*). *Marine Mammal Science*.
- 2024  Martinez, M., **Babb**, M. H., Range, F., & Brosnan, S.F. (2024). The 'joint' Simon task in capuchins: Playing together, but yet alone. *Scientific Reports 14*, 5937. <https://doi.org/10.1038/s41598-024-55885-x>
- 2024  **Babb**, M. H., Prétôt, L., Bshary, R., & Brosnan, S.F. (2024). Capuchin monkeys' ability to choose beneficial options is inhibited by added complexity. *Animal Behaviour 210*, 303-313. <https://doi.org/10.1016/j.anbehav.2024.01.007>
- 2019  Davis, A. L., **Babb**, M. H., Lowe, M. C., Yeh, A. T., Lee, B. T., & Martin, C. H. (2019). Testing Darwin's hypothesis about the wonderful venus flytrap: marginal spikes form a "horrid prison" for moderate-sized insect prey. *The American Naturalist, 193*(2), 309-317.

PUBLICATIONS "IN PREP"

Expected Submission

- 2025 **Babb**, M.H., Lazareva, O.F., & Brosnan, S.F. (in prep.). Transitive inference in capuchin monkey sequence learning.
- 2025 Saldaña, J.M., **Babb**, M.H., Talbot, C.F., & Brosnan, S.F. (in prep.). Facial identification when features are masked in capuchin monkeys.
- 2025 **Babb**, M.H. & Brosnan, S.F. (in prep.). The role of oxytocin in primate social behavior, a review of method and context.
- 2025 Mayerhoff, S.R., **Babb**, M.H., & Brosnan, S.F. (in prep.). File, save, forget: Cognitive offloading in non-human primates.

PRESENTATIONS

Invited Talks

- 2024 **Emory National Primate Center Field Station**
Babb, M.H. Group Level Testing in Primates - An Aim to Increase Social Relevance

Presenter

- 2024 **American Society of Primatologists** - Talk
Babb, M.H. & Brosnan, S.F. Social closeness drives prosocial behavior in capuchin groups

- 2023 **International Primatological Society** - Talk
Babb, M.H. & Brosnan, S.F. Social closeness and dominance influence prosocial behavior in socially relevant contexts
- 2023 **American Society of Primatologists** - Talk
Babb, M.H. & Brosnan, S.F. Added complexity inhibits tufted capuchin monkeys' selection of ephemeral options in a dichotomous choice task
- 2023 **Cognitive Psychology Graduate Conference** – Talk
Babb, M.H. & Brosnan, S.F. How does oxytocin change prosocial behavior in socially relevant conditions?
- 2022 **Southeastern Evolution and Human Behavior Meeting** - Talk
Babb, M.H. & Brosnan, S.F. The effects of oxytocin on group-level prosocial behavior in tufted capuchin monkeys
- 2021 **American Society of Primatologists** – Poster
Babb, M.H. & Brosnan, S.F. Effects of configural learning on tufted capuchins' performance in a computerized foraging task
- 2020 **The Society for Integrative & Comparative Biology** – Poster
Babb, M.H., Goforth, K., & Lohmann, C.M.F. Spatial distributions and exhibit use of African lions (*Panthera leo*) and cougars (*Puma concolor*) between zoo and sanctuary
- 2020 **World Sea Turtle Day** – Talk
Babb, M.H., Goforth, K., & Lohmann, K.J. Geomagnetic imprinting in loggerhead sea turtles (*Caretta caretta*)
- Co-Author*
- 2024 **American Society of Primatologists** - Talk
Heller, C.G, **Babb**, M.H. & Brosnan, S.F. A Transverse Patterning Task in Captive Tufted Capuchin Monkeys
- 2023 **American Society of Primatologists** - Talk
Mayerhoff, S.R., **Babb**, M.H. & Brosnan, S.F. File, Save, Forget: Cognitive offloading in non-human primates
- 2023 **American Association of Biological Anthropologists** - Poster
Epstein, S., **Babb**, M.H. & Brosnan, S.F. Ecological Advantages of Color Vision in Capuchin Monkeys under Controlled Conditions
- 2022 **American Society of Primatologists** - Talk
Martinez, M., **Babb**, M.H. & Brosnan, S.F. Capuchin monkeys (*Sapajus [Cebus] apella*) do not show co-representation in a computer-based Joint Simon task

RESEARCH EXPERIENCE

- 2020 - Present **Language Research Center** – Atlanta, GA
Graduate Student, CEBUS Lab
- Principle Investigator: Dr. Sarah Brosnan, GSU
 - Department of Psychology, Georgia State University
- 2023 - Present **Capuchinos de Taboga** – Taboga forest reserve, Cañas, Costa Rica
Visiting Researcher
- Director: Dr. Marcela Benítez
 - Department of Anthropology, Emory University
- 2022 - Present **Georgia Aquarium** – Atlanta, GA
Visiting Researcher
- 2019 - 2020 **North Carolina Zoo** – Asheboro, NC
Visiting Researcher
- 2019 - 2020 **Carolina Tiger Rescue** – Pittsboro, NC
Visiting Researcher
- 2018 - 2020 **Lohmann Geomagnetic Sensing Lab** – Chapel Hill, NC
Research Assistant – Sea Turtle Sensory Systems and Physiology
- Principle Investigator: Dr. Kenneth Lohmann, UNC
- 2017 - 2018 **Evolution of Novelty Lab** – Chapel Hill, NC
Undergraduate Research Assistant
- Principle Investigator: Dr. Chris Martin, University of California: Berkeley

TEACHING AND MENTORING

In-Person Courses

- 2025 **PSYC 3140 – Psychopathology and Abnormal Psychology**
75 students

Online Courses

- 2023-2024 **Coding Cognitive Tasks for Non-human Primates in Python**
<https://mhbabbb.com/coding-monkey-programs-in-python/>

Guest Lectures

- 2024 **PSYC 3140– Psychopathology and Abnormal Psychology**
“Eating Disorders”
- 2024 **PSYC 3530– Advanced Research Methods and Statistics**
“Comparing Means: The t-test”
- 2022 **PSYC 4560 – Animal Behavior**
“Animals on the Move: Animal Migration, Navigation, and Dispersal”

2021 **PSYC 4100 – Cognitive Psychology**
“How Human Are They? Methods and Principles of Comparative Cognition”

Teaching Assistant

2023, 2024 **PSYC 3530 - Advanced Research Methods and Statistics**

Mentored Students

2023 - 2024 Nutifafa Ayeke, *Psychology Undergraduate*, Georgia State University

2021-2023 Heaven Varner, *Neuroscience Undergraduate*, Georgia State University

2021 - 2022 Sedona Epstein, *Anthropology Undergraduate*, Emory University

2021 - 2022 CJ Andrews, *Neuroscience Undergraduate*, Georgia Tech

LEADERSHIP AND OUTREACH

2025 - Present **Georgia Aquarium Institutional Animal Care and Use Committee (IACUC)**
External Scientist

2023 - Present **Animal Welfare Committee - Georgia Aquarium**
External Scientist

2023 - Present **Graduate Association of Psychology Students**
Executive Member

2023 **Diving Deep with Stephen Mburu - Podcast Interview**
Episode 1

2023 **Dekalb County Magnet School - Science Night**
Volunteer Presenter

2021 - Present **Skype-A-Scientist**
Volunteer Presenter


2021 - 2022 **Georgia Psychological Association for Graduate Students**
Campus Representative







2017 - 2020 **Wildlife Information and Science Education**
Animal Handler and Presenter

2018 - 2020 **UNC Chapel Hill Athletic Department**
Mascot Coordinator

SOFTWARE PROGRAMMED

Click Icon to Access GitHub

2024  **Transitive Inference List Task**
[GitHub](#)
Babb, Lazareva, & Brosnan (in prep.)

- 2024  **Transverse Patterning Problem**
[GitHub](#)
Babb & Brosnan (in prep.)
- 2023  **Cooperative Prisoner's Dilemma**
[GitHub](#)
Simmons & Brosnan (in prep.)
- 2022  **Simon Effect Paradigm**
[GitHub](#)
Published: <https://doi.org/10.1038/s41598-024-55885-x>
- 2022  **Cognitive Offloading Paradigm**
[GitHub](#)
Mayerhoff, **Babb**, & Brosnan (in prep.)
- 2021  **Dot Probe Paradigm**
[GitHub](#)
Published: <https://doi.org/10.1037/com0000381>
- 2020  **Ephemeral Choice Task**
[GitHub](#)
Published: <https://doi.org/10.1016/j.anbehav.2024.01.007>

REFERENCES

Dr. Sarah Brosnan

Distinguished University Professor of Psychology, Philosophy & Neuroscience
Chair of Psychology Department

Dr. Michael Beran

Professor of Psychology & Neuroscience
Associate Chair of Psychology Department

Dr. Kenneth and Catherine Lohmann

Distinguished Professors at the University of North Carolina at Chapel Hill

Katie Lorenz Flammer

Associate Curator-Animal Training at the Georgia Aquarium in Atlanta, GA