AMANDA J. GELLIS

Department of Psychology | Language Research Center | Georgia State University
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Education

Ph.D. Student in Psychology – Cognitive Sciences *2022-present*
Georgia State University, Atlanta, GA
- Advisor: Dr. Sarah Brosnan
- GPA: 4.09

B.S. in Biology and Psychology *2018*
St. Lawrence University, Canton, NY
Graduated with Honors in Biology & Psychology, *Summa cum laude, minor in Statistics*
- Advisor: Dr. Erika Barthelmess
- GPA: 3.89/4.00

Off-Campus Study
- **University of Otago**, Dunedin, New Zealand *2017*
- **Danish Institute for Study Abroad**, Copenhagen, Denmark *2015*

Research Interests

Comparative cognition, primate social behavior, economic decision-making, wildlife conservation, animal welfare

Fellowships, Honors, and Scholarships

- 2CI University Doctoral Fellowship in Primate Social Cognition, Evolution & Behavior *2022-present*
- Phi Beta Kappa National Honor Society *2018*
- Chi Alpha Sigma National College Athlete Honor Society *2018*
- TriBeta National Biological Honor Society *2016-2018*
- Psi Chi International Honor Society in Psychology *2016-2018*
- Omicron Delta Kappa National Leadership Honor Society *2016-2018*
- St. Lawrence University Academic Dean's List *2015-2018*
- Momentum Merit Scholarship Recipient *2014-2018*

Publications

- Marshall JD, Klibaite U, **Gellis A**, Aldarondo DE, Ölveczky B, Dunn T. The PAIR-R24M Dataset for Multi-animal 3D Pose Estimation. *NeurIPS Datasets and Benchmarks*. 2021.
- Dunn TW, Marshall JD, Severson KS, Aldarondo DE, Hildebrand DGC, Chettih SN, Wang WL, **Gellis AJ**, Carlson DE, Aronov D, et al. Geometric deep learning enables 3D kinematic profiling across species and environments. *Nature Methods*. 2021. May;18(5):564-573.

Presentations

- Festival of Science. Poster presentation: "Using cortisol levels to measure stress in the North American porcupine (*Erethizon* dorsatum)." St. Lawrence University, Canton, NY; April 2018.
- Festival of Science. Poster presentation: "Functional Analysis and Reduction of Horse Pawing." St. Lawrence University, Canton, NY; April 2018.
- Conservation Biology Symposium. Oral presentation: "Pollinator decline: A case study of the effects of invertebrate pollinator population decline in Northern New York." St. Lawrence University, Canton, NY; May 2018.

Research Experience

Language Research Center, Georgia State University, Atlanta, GA
Graduate Research Assistant *2022-present*
- Principal Investigator: Dr. Sarah Brosnan

Department of Organismic and Evolutionary Biology, Harvard University, Cambridge, MA
Research Assistant *2020-2022*

- Principal Investigator: Dr. Bence Ölveczky
  - Project: Understanding the neural basis of movement through next generation behavioral tracking

The Alex Foundation, Somerville, MA
Research Assistant *2022*

- Principal Investigator: Dr. Irene Pepperberg
  - Project: Understanding African grey parrot cognition and communication

Department of Psychology, St. Lawrence University, Canton, NY
Senior Honors Thesis in Psychology *2017-2018*

- Advisor: Dr. Adam Fox
  - Project: Functional analysis and reduction of horse pawing

Department of Biology, St. Lawrence University, Canton, NY
Senior Honors Thesis in Biology *2017-2018*

- Advisor: Dr. Erika Barthelmess
  - Project: Using cortisol levels to measure stress in the North American porcupine

Senior Thesis in Conservation Biology *2018*

- Advisor: Dr. Erika Barthelmess
  - Project: Pollinator decline: A case study of the effects of invertebrate pollinator population decline in Northern New York

Volunteer Research Assistant *2016*

- Advisor: Dr. Erika Barthelmess
  - Projects: The effect of competition and prey density on the predatory behavior of the praying mantid, classical music as stress reducing enrichment for stabled horses, and understanding the population ecology and natural history of porcupines

Teaching Experience

Teaching Assistant, General Biology, St. Lawrence University, Canton, NY *2015-2018*

- Led weekly study groups to provide extra practice with the lecture material and answer questions, assisted in the lab portion of the course by presenting material and helping the students with tasks, graded weekly lecture quizzes, and attended a weekly seminar to discuss teaching techniques and ways to overcome challenges.

Additional Work Experience

Clinical Research Coordinator, Ora Inc., Andover, MA *2020*

- Traveled to ophthalmic research sites across the country to assist in running clinical trials by organizing research information and ensuring compliance with protocol and overall clinical objectives.

Intern, Gordini U.S.A. Inc., Essex Junction, VT *2015, 2016, 2019*

- Learned how a ski glove and goggle manufacturing company (family owned and operated) functions by assisting the CEO and shadowing employees in the marketing, logistics, and customer service departments.
- Completed internal and store audits, created adjustment journals, performed quality control, tracked inventory and shipments, and contacted customers regarding backorders of the company's Carhartt licensed products.

Education Intern, Loggerhead Marinelife Center, Juno Beach, FL *2014-2015*

- Helped the employees in the education department by completing various tasks such as making crafts for educational activities with kids and maintaining Excel spreadsheets.
- Enriched knowledge of marine life by preparing food for and feeding the fish in the museum.

Skills & Certifications

- **Computer:** MATLAB, Python, RStudio, GIS, MS Office, Minitab, SPSS
- **Lab:** rat craniotomy, histology, microdrive construction, enzyme immunoassay
- **Field:** small animal trapping, fecal tracking, forest and wetland data collection processes
- **Certifications:** CITI Program, PADI Open Water Diver

Outreach

Volunteer science presenter, Science Night, Kittredge Magnet School, Atlanta, GA 2023

- Used discoid cockroaches as a model species to teach behavior and the scientific method to middle school aged children.

Activities

Equestrian, Ronnie Andersen Show Stables, Marshfield, MA *2013-2022*

- Participated in national competitions and maintained a rigorous training schedule, leading to numerous championships and first place finishes.

Athlete, Varsity Equestrian Team, St. Lawrence University, Canton, NY *2016-2018*

- Learned excellent time management skills by balancing a rigorous training and competition schedule with academics and other extracurriculars.

Undergraduate Leadership

- Secretary, Omicron Delta Kappa *2017-2018*
- Treasurer, Psi Chi Honor Society *2017-2018*
- Historian, TriBeta Honor Society *2017-2018*

Professional Development

Fundamentals of Neuroscience, Part 1: Electrical Properties of the Neuron, **Harvard University,** edX *2020*

- Developed a foundation in neuroscience by gaining a full understanding of the fundamental concepts, including: bioelectricity, the importance of resting potential, the passive properties of membranes, and the role of action potentials in the nervous system.

References

Dr. Sarah Brosnan
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Georgia State University
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Dr. Bence Ölveczky
Professor of Organismic and Evolutionary Biology
Harvard University
52 Oxford Street, Room 226
Cambridge, MA 02138
617-496-9114 | olveczky@fas.harvard.edu

Dr. Erika Barthelmess
Piskor Professor of Biology
St. Lawrence University
Johnson Hall of Science,
Room 122
Canton, NY 13617
315-229-5712 | barthelmess@stlawu.edu