KATHERINE A. BARONOWSKI

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EDUCATION

In Progress PhD in Information Science
Primary Specialization: Information for Risk in Emergency Management & Security
Secondary Specialization: Information in Organizational Environments
State University of New York at Albany

Spring 2024 B.S. in Applied Psychology
B.T. in Canine Training and Management
Honors Program
State University of New York at Cobleskill

RESEARCH EXPERIENCE

Army Educational Outreach Program (AEOP) Fellowship
Host Lab (remote position): U.S. Army Combat Capabilities Development Command Chemical Biological Center
Advisors: Dr. Michele Maughan & Mrs. Jenna Gadberry
Building a canine noseprint dataset for canine intrinsic identification, developing solutions to temperature monitoring challenges, and creating a proposal to quantify the pressure and force exerted by different types of canine collars during handling and training.

Graduate Research Assistant
Mobile Sensor Lab
University at Albany
Advisor: Dr. Eric Best
Conducts research in the Mobile Sensor Lab, focusing on integrating unmanned aerial vehicles (UAVs) and K9 units for search and rescue, tracking, trailing, and other detection applications. Designed and coded an experimental task for an information behavior study that examines how participants search for information using large language models compared to traditional search engines, with washout tasks excluding tool access to assess independent critical thinking. The experiment uses controlled search scenarios that record participant responses and timing, storing the data for later analysis to evaluate differences in efficiency, accuracy, and strategy across conditions

Research Coordinator
Round Goby Detection K9 Project
State University of New York at Cobleskill
Advisor: Dr. Jennifer Essler
Served as the research coordinator for the Round Goby Detection K9 Project in collaboration with the United States Geological Survey, leading data collection and analysis using R to evaluate canine detection performance for invasive species monitoring.

Research Intern
Penn Vet Working Dog Center
University of Pennsylvania
Advisors: Dr. Cindy Otto, Dr. Amritha Mallikarjun, and Dr. Clara Wilson
Supported behavior and olfaction research using olfactometers and assisted in training and conducting studies with search and rescue and law enforcement K9s.

Honors Capstone
Discrimination of D-carvone and L-carvone
State University of New York at Cobleskill
Advisor: Dr. Jennifer Essler
Conducted an independent research project on canine discrimination of D-carvone and L-carvone enantiomers, including data collection, analysis, and authorship of capstone paper.

POSTER PRESENTATIONS   *Denotes presenter

*Baronowski, K., Sadekoski, T., Miller, K., Hefferon, B., Best, E., Cornwell, M., Essler, J. Round Goby Detection Dogs: A Proof-of-Concept Study. Joint Symposium for Working K9s. Penn Vet Working Dog Center, Auburn University Canine Performance Sciences, Florida International University, K9SciCon and Texas Tech University Canine Olfaction Research and Education Lab. 9 April. Atlanta, GA, USA.

*Miller, C., *Hensel, E., Sadekoski, T., **Baronowski, K.**, Hefferon, B., Holohan, K., MacWatters, M., Cornwell, Essler, J. L.Training Dogs to Detect Invasive Round Goby Fish Under Field Conditions. Joint Symposium for Working K9s. Penn Vet Working Dog Center, Auburn University Canine Performance Sciences, Florida International University, K9SciCon and Texas Tech University Canine Olfaction Research and Education Lab. 9 April. Atlanta, GA, USA.

*Baronowski, K., Best, E. Canine-assisted Therapy for Active Shooter Training Volunteers: Impacts on Perceived Anxiety Levels. University at Albany, College of Emergency Preparedness, Homeland Security, and Cybersecurity Showcase. 3 December. Albany, NY, USA.

*Best, E., **Baronowski, K.**, Venkatakrishnan, R. Low-Cost Environmental Monitoring Applications in Homeland Security. IEEE Systems and Technologies for Remote Sensing Applications Through Unmanned Aerial Systems (STRATUS). 21 May. Syracuse, NY, USA.

*Sadekoski, T., **Baronowski, K.**, Hefferon, B., Cornwell, M., Essler, J.E. Canine Discrimination of the Round Goby. SUNY Cobleskill Student Learning Showcase. 25 April. Cobleskill, NY, USA.

*Baronowski, K., Sadekoski, T., Hefferon, B., Cornwell, M., Essler, J.E. Detection Dogs as a Potential Tool to Document the Spread of the Round Goby. SUNY Undergraduate Research Conference. 15 April. Buffalo, NY, USA.

*Baronowski, K., *Brown, H., Essler, J.E. Discrimination of D-carvone and L-carvone. SUNY Undergraduate Research Conference. 14 April. Bronx, NY, USA.

*Baronowski, K., Corbet, A. Canine-Assisted Therapy in Occupational Therapy for Adolescents with Autism. SUNY Cobleskill Student Learning Showcase. 27 April. Cobleskill, NY, USA.

*Baronowski, K., *Brown, H., Essler, J.E. Investigating the perceptions of the enantiomers of carvone in canines. SUNY Cobleskill Student Learning Showcase. 27 April. Cobleskill, NY, USA.

ORAL PRESENTATIONS

Spring 2025   ***Baronowski, K.**, Best, E. Expanding the Horizons of Conservation Dogs. Oral presentation in panel "Canine Scientists and Collaborative Conservation: The Methods, Impacts, and Potential of Scent Detection Research Dogs" (Mullaney, E.G., Baronowski, K., Hamre, R., Mallikarjun, A., & Wilson, C.). American Association of Geographers. 26 March. Detroit, MI, USA.

AWARDS

Women in Technology, Initiatives for Women (University at Albany, 2025).
Outstanding Student in Applied Psychology (State University of New York at Cobleskill, 2024).
Excellence in Student Leadership (State University of New York at Cobleskill, 2024).

PROFESSIONAL DEVELOPMENT

Remote Pilot Certificate from the Federal Aviation Administration.
INTERSECT Research Software Engineering Bootcamp.
K9 Conservationists Retreat 2024.