**Allison M. Howard**

Department of Psychology

University of Georgia

Athens, GA

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**EDUCATION**

2014 Ph.D., Psychology, University of Georgia

2010 M.S., Psychology, University of Georgia

2003 B.A. Biology, Appalachian State University

2003 B.S. Spanish Education, Appalachian State University

**PROFESSIONAL APPOINTMENTS**

2017-present Lecturer, University of Georgia, Department of Psychology

2014–2016 Postdoctoral Researcher, University of Maryland, Department of Biology

2004-2008 Biology/Spanish Teacher, Ashbrook High School, Gastonia, North Carolina

**GRANTS AND FUNDING**

2013 American Society of Primatologists Research Grant, $1,500

2012 AmericaView Mini-grant: *“Augmenting AmericaView Earth Observation Day Materials and Advancing Education: The Development of MultiSpec© Remote Sensing Tutorials for K-12 Students and Educators”*, $10,000

2011 American Society of Photogrammetry and Remote Sensing, Travel Grant, $100

2011 University of Georgia, Graduate School Travel Grant, $750

2011 University of Georgia, Graduate School Travel Grant, $800

2010 University of Georgia, Latin American and Caribbean Studies Institute, Graduate Field Research Award, $1,300

2010 University of Georgia, Geography Department Travel Grant, $200

2010 University of Georgia, Graduate School Travel Grant, $250

2009 University of Georgia, Graduate School Travel Grant, $250

**AWARDS AND HONORS**

2015 University of Georgia, Graduate Student Excellence-in-Research Award

2014 University of Georgia, Psychology Department Herbert Zimmer Award

2012 Outstanding Teaching Assistant Award

2012 DigitalGlobe and ERDAS Geospatial Challenge Award

2011 University of Georgia, Graduate School Dean’s Award

2010 NSF Graduate Research Fellowship Honorable Mention

2009 NSF Graduate Research Fellowship Honorable Mention

2007–2008 Gaston County Schools Distinguished Advanced Placement Teacher

2004–2008 Gaston County Schools Pinnacle Leader

1999–2003 North Carolina Teaching Fellow, Appalachian State University

**TEACHING EXPERIENCE**

**Courses Taught – University of Georgia**

Fall 2018Comparative & Physiological Psychology; Sensation & Perception; Environmental Psychology: Behavior and Decision Making in a Changing World

Spring 2018 Comparative & Physiological Psychology; Elementary Psychology; Special Problems

Fall 2017 Comparative & Physiological Psychology; Sensation & Perception; Special Problems

Spring 2014 Elementary Psychology (Teaching Assistant)

Fall 2013 Graduate Teaching Assistant Seminar (Instructor of Record)

Spring 2013 Introductory Psychology, Portuguese Language Component (Portuguese Flagship Program Instructor & Teaching Assistant)

Fall 2012 Developmental Psychology (Teaching Assistant)

Summer 2012 Canine Cognition (Course Designer and Instructor of Record)

Spring 2012 Physiological and Comparative Psychology (Teaching Assistant)

Fall 2011 Developmental Psychology (Teaching Assistant)

Summer 2011 Canine Cognition (Course Designer and Instructor of Record)

Spring 2011 Abnormal Psychology (Teaching Assistant)

Fall 2010 Abnormal Psychology (Teaching Assistant)

Spring 2010 Abnormal Psychology (Teaching Assistant)

Fall 2009 Research Design in Psychology (Teaching Assistant)

Spring 2009 Research Design in Psychology (Teaching Assistant)

Fall 2008 Elementary Psychology (Teaching Assistant)

**Courses Taught – Ashbrook High School**

2006-2008 Biology, Biology Honors, Advanced Placement Biology (Classroom Teacher, Grades 9-12)

2004–2006 Spanish II, III, IV, V-Advanced Placement (Classroom Teacher, Grades 9-12)

**PEER-REVIEWED PUBLICATIONS**

(italics indicate undergraduate mentees)

**Howard, A.,** Mainali, K., Fagan, W., Visalberghi, E., Izar, P., Jones, C., & Fragaszy, D. (2018). Foraging and Within-Group Spatial Position of Bearded Capuchin Monkeys.

**Howard, A.,** & Mundry, R. (in press). Processing Geospatial Data in R: a primer. *GPS and GIS for Primatologists: A Practical Guide to Spatial Analysis.* Cambridge University Press.

 **Howard, A.,** (in press). Image Processing and Analysis Methods: Species Distribution Modeling and Remote Sensing. *Manual of Remote Sensing, 4th edition*.

Fagan W. F., Gurarie, E., Bewick, S., **Howard, A.,** Cantrell, S., & Cosner, C. (2017). Perceptual Ranges, Information Gathering, and Foraging Success in Dynamic Landscapes. The American Naturalist, 189(5): 000-000.

**Howard, A.,** Nibbelink, N., Bernardes, S., Madden, M., & Fragaszy, D. M. (2015). Remote sensing and habitat mapping for bearded capuchin monkeys (*Sapajus libidinosus*): Landscapes for the use of stone tools. *Journal of Applied Remote Sensing*. 9 *(1),*  096020-096020, doi:10.1117/1.JRS.9.096020.

**Howard, A.,** Nibbelink, N., *Young, L. A.*, Bernardes, S., Madden, M., & Fragaszy, D. M. (2015). Landscape influences on the natural and artificially manipulated movements of bearded capuchin monkeys. *Animal Behaviour*, *106*, 59-70.

**Howard, A.,** Fragaszy, D. M. (2014). Multi-step Routes of Capuchin Monkeys in a Laser Pointer Traveling Salesman Task. *American Journal of Primatology. 76:* 828-841*.*

**Howard, A.,** Fragaszy, D. M. (2013). Applying the bicoded spatial model to nonhuman primates in an arboreal multilayer environment. *Behavioral and Brain Sciences. 36(*5): 552-553.

**Howard, A.,** Bernardes, S., Nibbelink, N., Biondi, L., Presotto, A., Fragaszy, D.M. & Madden, M. (2012). A Maximum Entropy Model of the Bearded Capuchin Monkey Habitat in Northeastern Brazil Incorporating Topography and a Spectral Unmixing Analysis of Land Cover. *ISPRS* *Annals of Photogrammetry, Remote Sensing and Spatial Information Sciences*, *1-2*: 7-11.

**OTHER PUBLICATIONS**

Burnside, W. R., Randell, H., Beckman, N. G., Zambrano, J., **Howard, A.,** (2016). RE: A socio-environmental perspective on international migration. eLetter: *Science*.

**PUBLICATIONS IN PREPARATION**

**Howard, A.,** Fagan, W., Gurarie, E., Madden, M., & Fragaszy, D. M. (in preparation). Beyond changes in direction: Landscapes that predict movement geometry.

**CONFERENCE PRESENTATIONS**

(italics indicate undergraduate mentees, \* indicates an invited talk)

**\*Howard, A.,** Fagan, W., Gurarie, E., Madden, M., Fragaszy, D. M. (2015). Spatial and Temporal Nodes in the Paths of Bearded Capuchin Monkeys (*Sapajus libidinosus*) and the Effects of Landscape. VI International Conference on Spatial Cognition: Space and Situated Cognition. Rome, Italy

**Howard, A.,** Jones, C., Fagan, W., Fragaszy, D. M. (2015). Within-Group Spatial Position and Swath Geometry of Bearded Capuchin Monkeys (*Sapajus Libidinosus*). 38th Meeting of the American Society of Primatologists. Bend, Oregon

Madden, M., Jordan, T., Fragaszy, D.M., Bernardes, S., **Howard, A.,** Presotto, A., Remillard, C., Young, L.A., Salmi, R., Rodrigues dos Santos, R., Marques, K. (2014). Remote Sensing of Wildlife Habitat Quality and Geospatial Analysis of Animal Movements for Conservation. African Association of Remote Sensing of the Environment. Johannesburg, South Africa.

**Howard, A.,** Fragaszy, D. M., Madden, M., Nibbelink, N., *Young, L.A.* (2014). Efficiency of Movement: Evidence from Natural Observation and Field Experiments. 37th Meeting of the American Society of Primatologists. Decatur, Georgia.

Jordan, T., **Howard, A.**, Bernardes, S., *Schwob, N.* Madden, M. (2014). Structure from Motion and Bearded Capuchin Monkey Tool Use: ‘Casual’ Photogrammetry for Research and Field. American Society of Photogrammetry and Remote Sensing Annual Meeting. Louisville, Kentucky.

Madden, M., Jordan, T., Bernardes, S., Fragaszy, D.M., Presotto, A., **Howard, A.,** Young, L.A., Remillard, C., Rodrigues dos Santos, R., Marques, K. (2014) Geospatial Analysis of Animal Movement and Habitat Quality for Wildlife Conservation. American Society of Photogrammetry and Remote Sensing Annual Meeting. Louisville, Kentucky.

**Howard, A.,** Bernardes, S., Strother, C., Johnson, T., Lines, P., Biehl, L., Landenberger, R., Madden, M. (2013). Introducing Land Cover Classification in Middle and High School Classrooms. American Society of Photogrammetry and Remote Sensing Annual Meeting. Baltimore, Maryland.

**Howard, A.,** Bernardes, S. (2012).A Maximum Entropy and Least Cost Path Model of Bearded Capuchin Monkey Movement in Northeastern Brazil: Incorporating ERDAS Subpixel Classification Analysis of WorldView-2 Imagery. American Society of Photogrammetry and Remote Sensing Annual Meeting. Sacramento, California.

**Howard, A.,** Bernardes, S., Presotto, A., Madden, M. (2011).Characterization of capuchin monkey routes using fractional cover derived from spectral mixing modeling. 8th Southern Forestry and Natural Resource Management and GIS conference. Athens, Georgia.

**Howard Eury, A.,** Bernardes, S., Presotto, A., *Vogel, M.* (2011). Modeled Least Cost Paths compared with observed routes of capuchin monkeys (*Cebus libidinosus*). 34th Meeting of the American Society of Primatologists. Austin, Texas.

**Howard Eury, A.,** Bernardes, S., Presotto, A. (2011). Using GIS to model the energetic

costs of crossing steep slopes for capuchin monkeys. American Society of Photogrammetry and Remote Sensing 2011 Annual Conference. Milwaukee, Wisconsin.

Bernardes, S., Presotto, A., **Howard Eury, A.,** Madden, M., Fragaszy, D. M., Jordan, T., Izar, P., Tavares-Rocha, Y. (2011). Blending topography normalization and unmixing analysis to improve forest patch discrimination in Atlantic Forest, Brazil. American Society of Photogrammetry and Remote Sensing 2011 Annual Conference. Milwaukee, Wisconsin.

Bernardes, S., **Howard Eury, A.,** Presotto, A., Madden, M., Fragaszy, D. M., Jordan, T., Izar, P., Tavares-Rocha, Y. (2011). An agent-based modeling approach for representing capuchin (*Cebus* spp.) behavior in Brazil. American Society of Photogrammetry and Remote Sensing 2011 Annual Conference. Milwaukee, Wisconsin.

**Howard Eury, A.,** Presotto, A., Bernardes, S., Izar, P. (2010). A comparison of capuchin

monkey (*Cebus libidinosus*) route choice to a geospatial analysis of their least cost path. Special Joint Symposium of ISPRS Technical Commission IV and AutoCarto 2010; ASPRS/CaGIS Specialty Conference. Orlando, Florida.

Madden, M., Jordan, T., Hinley, A. J., Bernardes, S., Tavares-Rocha, Y., Izar, P., Presotto, A., **Howard Eury, A.,** Fragaszy, D. M. (2010). Geospatial modeling of factors predicting Bearded Capuchin tool use in Boa Vista and across the Cerrado of Brazil. International Primatological Society XXIII Congress. Kyoto, Japan.

**Howard Eury, A.,** Fragaszy, D. M. (2010). Capuchin monkeys choose efficient routes using a laser pointer apparatus. International Primatological Society XXIII Congress. Kyoto, Japan

**Howard Eury, A.** (2010). Capuchin monkeys (*Cebus apella*) choose efficient routes using a laser pointer apparatus. 17th Annual International Conference on Comparative Cognition. Melbourne Beach, Florida.

**SPECIALIZED TRAINING**

Introduction to Spatial Agent Based Modeling, National Socioenvironmental Synthesis Center

Bayesian Modeling Short Course, National Socioenvironmental Synthesis Center

IACUC 101, Staying Healthy While Working with Animals

University of Georgia Safe Space Training

NIMBioS Investigative Workshop: “Free-Roaming Cats and Rabies”

**PROFESSIONAL ROLES/SERVICE**

2015–2016 Postdoctoral Researcher in the Socio-Environmental Immersion Program at the National Socio-Environmental Synthesis Center, Annapolis, Maryland

2014–present Education Committee Member, American Society of Primatologists

2014–2015 Undergraduate Thesis Discussant, UMD Gemstone Honor Society

2013 Moderator, Graduate Student Association Interdisciplinary Research Conference

2013 Judge and Category Leader, Georgia Science and Engineering Fair

2013 Graduate School Emerging Leaders Program

2012–2014 Mentor, UGA Psychology Mentoring Program

2011–2014 Laboratory Manager, Primate Behavior Laboratory

2012–2013 Graduate School Future Faculty Program

2010–2011 Vice President, American Society of Photogrammetry and Remote Sensing, UGA chapter

ad hoc Reviewer: Journal of Comparative Psychology, Journal of Wildlife Management and Wildlife Monographs; Journal of Applied Remote Sensing

**PROFESSIONAL MEMBERSHIPS**

American Society of Photogrammetry and Remote Sensing

American Society of Primatologists

International Primatological Society