

Amy A. Kalia

University of Minnesota, N218 Elliott Hall, 75 East River Road, Minneapolis, MN 55455
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Education

Ph.D., Psychology (Cognitive and Biological)
Minor in Statistics
University of Minnesota Twin-Cities, Minneapolis, Minnesota, 2003-2009
Advisors: Gordon E. Legge and Paul R. Schrater

Bachelor of Science, Psychology Honors
Bachelor of Arts, Plan II Liberal Arts Honors
University of Texas, Austin, Texas, 1999-2003
Advisor: Brian J. Stankiewicz

Research Interests

Spatial Cognition and Navigation with Normal and Low Vision
Statistical Models of Perception and Sensory Integration
Visually-guided Action
Object and Face Recognition with Visual Impairment

Research Experience

Research Associate, Minnesota Laboratory for Low-Vision Research. Dr. Gordon Legge, Director. Department of Psychology, University of Minnesota Twin-Cities, Minneapolis, Minnesota. July 2009 – December 2009.

- Project: Designing Visually Accessible Spaces

Research Assistant, Minnesota Laboratory for Low-Vision Research. Dr. Gordon Legge, Director. Department of Psychology, University of Minnesota Twin-Cities, Minneapolis, Minnesota. Fall 2003 – Summer 2004, Spring 2005, 2006.

- Projects: Object Recognition and Navigation, Wayfinding Technology for the Visually-Impaired

Research Assistant, Shape and Space Perception Laboratory. Dr. Brian Stankiewicz, Director. Department of Psychology, University of Texas, Austin, Texas. August 2001 – May 2003.

- Project: Acquisition and Retention of Landmark Information

Publications

Kalia, A.A., Schrater, P.R., & Legge, G.E. (in preparation). Integration of Visual and Walking Information for Localization Depends on the Congruence and Reliability of Cues.

Kalia, A.A., Legge, G.E., Roy, R., & Ogale, A. (in press). Assessment of Indoor Route-finding Technology for Visually-Impaired People. *Journal of Visual Impairment & Blindness*.

Kalia, A.A., Legge, G.E., & Giudice, N.A. (2008). Learning Building Layouts with Non-geometric Visual Information: The Effects of Visual Impairment and Age. *Perception*, 37(11), 1677-1699.

Stankiewicz, B.J. & **Kalia, A.A.** (2007). Acquisition of Structural versus Object Landmark Knowledge. *Journal of Experimental Psychology: Human Perception & Performance*, 33(2), 378-90.

Conference Presentations

Kalia, A.A., Schrater, P.R., & Legge, G.E. (2009, May). Comparing the reliability of vision and walking for target localization in a hallway. Poster presented at the Annual Meeting of the Vision Sciences Society, Naples, Florida.

Kalia, A.A., Schrater, P.R., Legge, G.E., & Kallie, C.S. (2008, May). Estimating Absolute Distances with Blurred Vision. Poster presented at the Annual Meeting of the Vision Sciences Society, Naples, Florida.

Kwon, M., **Kalia, A.A.**, & Legge, G.E. (2008, May). Blurry Faces are Sometimes Recognized Better than High-Resolution Faces. Poster presented at the Annual Meeting of the Vision Sciences Society, Naples, Florida.

Kalia, A.A., Legge, G.E., & Roy, R. (2008, April). Indoor Route-Finding Technology Increases Independence for the Visually-Impaired. Poster presented at the Annual Meeting of the Association for Research in Vision and Ophthalmology, Ft. Lauderdale, Florida.

Kalia, A.A., & Legge, G.E. (2007, April). Indoor Wayfinding Technology with Route Information for the Visually-Impaired. Talk presented at the Center for Cognitive Sciences Annual Research Day, Minneapolis, Minnesota.

Kalia, A., Legge, G.E., & Giudice, N.A. (2006, May). Learning Virtual Building Layouts: The Effects of Age on the Use of Geometric and Nongeometric Visual Information. Poster presented at the Annual Meeting of the Vision Sciences Society, Sarasota, Florida.

Kalia, A., Giudice, N., & Legge, G.E. (2005, April). Learning Building Layouts with Low Vision: Do Realistic Details Help or Hinder? Poster presented at the Vision 2005 Conference, London, United Kingdom.

Kalia, A., Giudice, N., & Legge, G.E. (2004, November). Learning Building Layouts: The Effects of Visual Information on Developing Global Knowledge. Poster presented at the Object Perception, Attention and Memory Conference, Minneapolis, MN.

Kalia, A. & Stankiewicz, B.J. (2002, November). Acquisition of Object and Structural Landmark Knowledge in Virtual Environment Navigation. Poster presented at the Object Perception, and Memory Conference, Kansas City, MO.

Teaching Experience

Co-Instructor, Perception. Department of Psychology, University of Minnesota Twin-Cities, Minneapolis, Minnesota. Fall 2009.

Guest Lecturer, Perceptual Issues in Visual Impairment. Taught by Gordon E. Legge, Ph.D. Department of Psychology, University of Minnesota Twin-Cities, Minneapolis, Minnesota. Fall 2008.

Preparing Future Faculty Program, Center for Teaching and Learning Services, University of Minnesota, Minneapolis, Minnesota. 2007-2008.

- A two course series emphasizing teaching experience, professional development and student learning.
- Included teaching three lectures for the course Sensation and Perception under the supervision of Cheryl Olman, Ph.D.

Teaching Assistant, Mathematical Models of Human Behavior. Taught by Paul R. Schrater, Ph.D. Department of Psychology, University of Minnesota Twin-Cities, Minneapolis, Minnesota. Spring 2007.

- This course explored the application of various mathematical models, such as decision theory, game theory, and Bayesian theory, to human perception and behavior.

Honors and Awards

NIH Visual Neuroscience Traineeship	Fall 2007 - present
Graduate Research Partnership Program Fellowship	Summer 2007
NICHHD Center for Cognitive Sciences Traineeship	2004 - 2007
College of Liberal Arts Travel Award	May 2006
Department of Psychology Gough Travel Award	May 2005, 2006
Graduate Women in Science Mary Haga Travel Award	May 2005
Gloria J. Randahl Cognitive and Biological Psychology Fellowship	Summer 2004
Department of Psychology Graduate Fellowship	2003 – 2004

Institutional Service

Elected Student Representative, Center for Cognitive Sciences	2006 - 2007
Lab Host, APA Summer Science Institute for Undergraduates	Summer 2006
Cognitive Area Student Representative, Prospective Student Weekend	March 2005
Academic Atmosphere Committee, Center for Cognitive Sciences	2004 - 2005
Spring Retreat Committee, Center for Cognitive Sciences	2003 - 2004

Professional Memberships

Vision Sciences Society	2006, 2008 – present
Association for Research in Vision and Ophthalmology	2008
Sigma Delta Epsilon, Graduate Women in Science, Xi Chapter Awards Committee Chair, 2005-2007.	2005 - 2008

References

Gordon E. Legge, Ph.D.
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Paul R. Schrater, Ph.D.
University of Minnesota Twin-Cities, Department of Psychology
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(612) 626-8638, schrater@umn.edu

Brian J. Stankiewicz, Ph.D.
3M, Software, Electronic & Mechanical Systems Laboratory
(651) 736-2678, bjstankiewicz@mmm.com