MARGARET M. GULLICK

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EDUCATION

DARTMOUTH COLLEGE, **Ph.D. Candidate,** Hanover, NH *Expected Graduation: June 2012*
Department of Psychological and Brain Sciences: Cognitive Neuroscience
Adviser: Dr. Elise Temple
Qualifying Committee Members: Dr. Donna Coch; Dr. David Bucci

WESLEYAN UNIVERSITY, **Bachelor of Arts,** Middletown, CT *2003-May 2007*
Double Major: Psychology and History
Member: ΨΧ (Psi Chi), Psychology Honors Society; Psychology Major's Committee
GPA: 3.78/4.00 *Psychology GPA:* 4.13/4.00 *GRE:* 730V/770Q/6.0AW

UNIVERSITY COLLEGE LONDON, **Semester Abroad,** London, England *Spring 2006*
Affiliate Student: Phonetics and Linguistics Department *GPA:* 3.83/4.00

HONORS AND AWARDS

Dartmouth College, **Marie A. Center Award for Excellence in Teaching** *2009*

National Science Foundation, **Graduate Research Fellowship** *2008-2011*

Wesleyan University, **Walkley Prize** for Outstanding Original Research *2007*

RESEARCH INTERESTS

Functional neuroimaging of educational skill development with age and experience using fMRI, focusing on reading comprehension and mathematics, in combination with behavioral testing. Experience with orthography, phonology, and reading comprehension ERP work. Additional interests in developmental learning disorders, including dyslexia and dyscalculia.

PUBLICATIONS AND PRESENTATIONS

Gullick, M. M. & Temple, E. (under review) Timelines and number lines: Are historic years understood as numbers or events?

Gullick, M. M., Sprute, L., & Temple, E. (under review) Individual differences in working memory ability and brain mechanisms associated with symbolic and non-symbolic number processing.

Juhasz, B. J., Yap, M. J., Dicke, J., Taylor, S. C., & **Gullick, M. M.** (under review) Meaning is grounded in our sensory and perceptual systems: Evidence from Sensory Experience Ratings (SER) with words.

Juhasz, B. J., **Gullick, M. M.**, & Shesler, L. W. (accepted, under revision) The Effects of Age-of-Acquisition on Ambiguity Resolution: Evidence from Eye Movements. *Journal of Eye Movement Research.*

Coch, D. & **Gullick, M. M**. (in press) *Event-related potentials and development.* In: S.J. Luck & E.S. Kappenman (Eds.) The Oxford Handbook of Event-Related Potential Components.

Gullick, M. M. & Juhasz, B. J. (2008). Age of Acquisition's role in memory for semantically associated word-pairs. *Quarterly Journal of Experimental Psychology, 61*(8), 1177-1185.

Gullick, M. (2007). Incomplete input as evidence for Poverty of the Stimulus. *Mind Matters: The Wesleyan Journal of Psychology, 2,* 37-47.

PRESENTATIONS:

Coch, D., George, E., Mitra, P., Berger, N., & **Gullick, M. M**. (2009, April) *An ERP letter-name rhyming effect as a measure of phonological processing in children*. Poster session presented at the Biennial Meeting of the Society for Research in Child Development, Denver, CO.

Juhasz, B. J., Taylor, S., & **Gullick, M. M**. (2008, November*) Sensory experience ratings: A new word recognition variable.* Poster presented at the annual meeting of the Psychonomics Society, Chicago, IL.

Gullick, M. M., George, E., Mitra, P., & Coch, D. (2008, April) *The N200 as an index of orthographic processing in a Reicher-Wheeler paradigm.* Poster session presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.

Juhasz, B. J. & **Gullick, M. M**. (2007, November) *Late semantic Age-of-Acquisition effects in reading: Evidence from eye movements*. Poster session presented at the annual meeting of the Psychonomics Society, Long Beach, CA.

IN PREPARATION:

Gullick, M. M. & Temple, E. Timelines and number lines: Is the brain function supporting the understanding of historic years similar to that for numbers or events?

Juhasz, B. J. & **Gullick, M. M**. Investigations of the effects of Age of Acquisition in patient populations.

RESEARCH EXPERIENCE

Educational Neuroscience Lab, **Graduate Researcher,** Dartmouth College *2009-Present*
Working in Dr. Elise Temple's mathematics and development lab in the Department of Education. Training on fMRI methodology and techniques, including SPM8. Designing several experimental paradigms for use with college students; in developmental studies (ages 5-18); and with learning-disabled populations (math learning disability, low math performance subject groups).

Reading Brains Lab, **Graduate Researcher,** Dartmouth College *Fall 2007-2008*
Worked in Dr. Donna Coch's ERP and reading lab in the Department of Education. Completed project on abstract and concrete word comprehension through visualization, from stimuli creation through data collection and analysis. Trained to administer ERP experimental sessions for multiple age groups (6-28 years), including electrode "capping." Analyzed data using ERPSS through Unix. Involved with area elementary-school teachers in educating students about neuroscience and the brain.

Eye Movement Lab, **Lab Manager, Research Assistant,** Wesleyan University *Fall 2006-Summer 2007*
Worked in Dr. Barbara Juhasz's eyetracking and reading lab in the Psychology Department. Lead data collection efforts including research proposal writing and stimulus creation, individual experimental session administration, analysis, and resultant writing. Acted as Lab Manager in experimental session coordination and planning; helped train new research assistants. Trained on EyeLink1000 eyetracker. Continued collaboration on multiple articles and projects.

Cognitive Development Lab, **Independent Research Assistant,** Wesleyan University *Spring 2007*
Worked in Dr. Hilary Barth's child development lab in the Psychology Department. Ran experimental sessions on local elementary-school kindergarteners, first-graders, and college students to assess numerical, quantitative knowledge; recoded, entered, and analyzed data. Created stimulus sets with other lab members for multiple experiments.

TEACHING EXPERIENCE

PBS 65: Physiology of Behavior, **Teaching Assistant,** Dartmouth College *Spring 2009, 2010 (expected)*
Instructor: Dr. Jeffrey Taube
Responsible for administering weekly lab sessions, including sheep brain dissections and investigations of multiple neuroscience techniques (e.g., behavioral neuroscience, ERP, psychophysiology) with co-teaching assistant. Created lab exam. Lectured both lab sections and full class.

PBS 65: Physiology of Behavior, **Guest Lecturer,** Dartmouth College *Fall 2009*
Guest lecture on Language and the Brain.

PBS 11: Laboratory in Psychological Science, **Teaching Assistant,** Dartmouth College
Instructor: Dr. Paul Whalen *Winter 2009*
Instructor: Dr. David Bucci *Summer 2008*
Responsible for running small lab section, administering lab activities; lectured both section and full class. Guided small-group research project idea generation, experimental design, analysis, and presentation.

Teacher Training Series, **Participant**, Dartmouth Center for the Advancement of Learning *Summer 2008*
Participated in 5-week workshop on effective education, learning styles, teaching, and course design.

Related Professional Experiences

Cognitive Brown Bag Series, **Co-Organizer**, Dartmouth College *Summer 2008-Present*
Invite and host researchers, from Dartmouth and other regional schools, for informal departmental talks on topics related to cognitive neuroscience, psychology at biweekly meetings. Created talk series website.

Graduate Student Council, **Department Representative,** Dartmouth College *Fall 2007-Present*
Attend council meetings, help plan events, discuss issues of concern to graduate student population.

Fishkill Plains Elementary School, **Volunteer,** Wappingers Falls, NY *Spring, Fall 2007*
Assisted school reading teacher in assessing all incoming first-graders' knowledge of letter names, sounds; helped determine appropriate reading group placement using results. Served as a reading assistant, aiding low-ability children to read and sound out simple texts and reinforcing decoding skills.

Alpha Delta Phi Literary Society, **Treasurer, Vice President**, Middletown Chapter *Fall 2006-Spring 2007*
Responsible for managing annual budget of more than $200,000. Calculated, designed, and submitted year-end funding reimbursement requests of over $20,000 to parent organization; determined upcoming year's budget. Worked on transition from paper records to computerized system. Trained new Junior Treasurer. Coordinated all activities and banquets for Reunion & Commencement Weekend for alumni, current members, and families. Oversaw committee chairs, managed budgets.

Computer Skills

Proficient in use of: Adobe Photoshop; Microsoft Excel, PowerPoint, Quicken, Word; SPSS.
Basic knowledge of: Adobe Dreamweaver; E-Prime; ERPSS; Linux/Unix; SPM8.

References

Available upon request.