

MARIAN E. BERRYHILL

UNIVERSITY OF PENNSYLVANIA
Center for Cognitive Neuroscience
3720 Walnut Street, B-51
Philadelphia, PA 19104
Phone: 215-209-9453
E-mail: berrihil@psych.upenn.edu

TEMPLE UNIVERSITY
Department of Psychology
1720 N. 13th Street
Philadelphia, PA 19122

ACADEMIC APPOINTMENTS

2007 – Present	Temple University	Postdoctoral Fellow (Sponsor: Ingrid R. Olson)
2006 – Present	University of Pennsylvania	Postdoctoral Fellow (Sponsor: Ingrid R. Olson)

EDUCATION

2006	Dartmouth College	Ph.D. Cognitive Neuroscience (Advisor: Howard C. Hughes)
1998	Hamilton College	B.A. <i>Magna Cum Laude</i> , Psychobiology (Honors) and French (Advisor: George A. Gescheider)

GRANT SUPPORT

2008 – 2010 Ruth L. Kirschstein NRSA individual postdoctoral fellowship:
The Nature of Parietal Involvement in Visual Short-Term Memory
Sponsors: Ingrid R. Olson, H. Branch Coslett

PUBLICATIONS

(Undergraduate co-authors in italics)

Drowos, D., **Berryhill, M.E.**, *André, J.*, & Olson, I.R. (2010). True memory, false memory and the subjective recollection deficits after focal bilateral parietal lobe lesions. *Neuropsychology, in press.*

Olson, I.R., **Berryhill, M.E.**, Drowos, D.B., Brown, L., & Chatterjee, A. (2010). Savant syndrome with episodic amnesia. *Neurocase, in press.*

Berryhill, M.E., Picasso, L., *Arnold, R.*, Drowos, D., & Olson, I.R. (2010). Similarities and differences between parietal and frontal patients in autobiographical and constructive memory tasks. *Neuropsychologia*, *48*, 1385-1393. PMID: PMC28437776

Simons, J.S., Peers, P.V., *Mazuz, Y.*, **Berryhill, M.E.**, Olson, I.R. (2010). Dissociation between memory accuracy and memory confidence following bilateral parietal lesions. *Cerebral Cortex*, *20*, 479-485. PMID: PMC 2803741

Berryhill, M.E., Drowos, D., & Olson, I.R. (2009). Bilateral parietal cortex damage does not impair associative memory for paired stimuli. *Cognitive Neuropsychology*, *26*, 606-619.

Berryhill, M.E., & Olson, I.R. (2009). The representation of object distance: Evidence from neuroimaging and neuropsychology. *Frontiers in Human Neuroscience*, *3*:43. PMID: PMC 2784298

Berryhill, M.E., & Hughes, H.C. (2009). On the minimization of task switch costs following long-term training. *Attention, Perception & Psychophysics*, *71*, 503-514.

Berryhill, M.E., Fendrich, R., & Olson, I.R. (2009). Impaired distance perception and size constancy following bilateral occipitoparietal damage. *Experimental Brain Research*, *194*, 381-393. PMID: PMC 2728930

Olson, I.R. & **Berryhill, M.** (2009). Some surprising findings on the involvement of the parietal lobe in human memory. *Neurobiology of Learning and Memory*, *91*, 155-165.

Berryhill, M.E., *Mazuz, Y.M.*, & Olson, I.R. (2008). Learning on the serial reaction time task is not affected by right parietal lobe damage. *Journal of Neuropsychology*, *2*, 509-514. PMID: PMC2600857

Berryhill, M.E., & Olson, I.R. (2008). Is the posterior parietal lobe involved in working memory retrieval?: Evidence from patients with bilateral parietal lobe damage. *Neuropsychologia*, *46*, 1775-1786. PMID: PMC2494709

Berryhill, M.E., & Olson, I.R. (2008). The right parietal lobe is critical for visual working memory. *Neuropsychologia*, *46*, 1767-1774. PMID: PMC2441642

Berryhill, M.E., *Phuong, L.*, *Picasso, L.*, Cabeza, R., & Olson, I.R. (2007). Parietal lobe and episodic memory: bilateral damage causes impaired free recall of autobiographical memory. *Journal of Neuroscience*, *27*, 14415-14423.

Berryhill, M.E., Kveraga, K., *Webb, L.*, & Hughes, H.C. (2007). Multimodal access to verbal name codes. *Perception & Psychophysics*, *69*, 628 - 640.

Berryhill, M.E., *Chiu, T.* & Hughes, H.C. (2006). Smooth pursuit of non-visual motion. *Journal of Neurophysiology*, *96*, 461-465.

Kveraga, K., **Berryhill, M.**, & Hughes, H.C. (2006). Directional uncertainty in visually guided pointing. *Perceptual and Motor Skills*, *102*, 125-132.

Berryhill, M.E., Kveraga, K., *Webb, L.,* & Hughes, H.C. (2005). Effect of uncertainty on the time course for the selection of verbal name codes. *Perception & Psychophysics*, 67(8), 1437-1445.

Berryhill, M., Kveraga, K., & Hughes, H.C. (2005). Effects of directional uncertainty on visually-guided joystick pointing. *Perceptual and Motor Skills*, 100, 267-274.

Berryhill, M., Kveraga, K., Boucher, L., & Hughes, H.C. (2004). Smooth pursuit under stimulus-response uncertainty. *Cognitive Brain Research*, 19, 100-102.

Gescheider G.A., **Berryhill M.E.,** Verrillo R.T., & Bolanowski S.J. (1999). Vibrotactile temporal summation: probability summation or neural integration. *Somatosensory & Motor Research*, 16(3), 229-242.

MANUSCRIPTS UNDER REVIEW

Olson, I.R., Ezzyat, Y., **Berryhill, M.E.,** Rao, H., & Moore, K.S. The human posterior parietal lobe: Preparation for the future or working memory for the past? Evidence from fMRI and lesions. *in revision*

Berryhill, M.E., Chein, J., & Olson, I.R. At the intersection of attention and memory: the mechanistic role of the posterior parietal in working memory.

Berryhill, M.E., Wencil, E., Coslett, H.B., & Olson, I.R. A selective working memory impairment after transcranial direct stimulation to the right parietal lobe.

MANUSCRIPTS IN PREPARATION

Berryhill, M.E., Hoelscher, C., Shipley, T. Spatial vision.

Berryhill, M.E., *Shay, C.,* & Olson, I.R. Retro-cueing implicitly improves visual working memory performance.

Berryhill, M.E., Zelonis, S., Olson, I.R., & Smith, S.E. Visual working memory following pre- or post-natal stroke.

CONFERENCE PRESENTATIONS

* Poster, • Slide Presentation

Berryhill, M.E., Wencil, E.B., Coslett, H.B., Olson, I.R. Transcranial direct current stimulation to right inferior parietal affects working memory recognition but not recall. Cognitive Neuroscience Society (CNS), Montreal, 4/10 *

Berryhill, M.E., Shay, C. & Olson, I.R. Shifting attention in visual short-term memory: testing bottom-up and top-down accounts.
Object Perception and Memory (OPAM), Boston, MA 11/09 *

Olson, I.R., & **Berryhill, M.E.** A mechanistic role of attention in working memory in posterior parietal cortex.
Psychonomic Society, Boston, MA 11/09 *

Berryhill, M.E., & Olson, I.R.
The dorsal visual stream tracks changes in perceived viewing distance.
European Conference for Visual Perception, Regensburg, Germany 8/09 *

Berryhill, M.E., & Olson, I.R.
Parietal lobe memory retrieval mechanism: Is the episodic buffer hypothesis a feasible account?
Cognitive Neuroscience Society, San Francisco, CA 3/09 *
IMBES, Philadelphia, PA 5/09 *

Ross, L.A., **Berryhill, M.E.,** Drowos, D., Olson, I.R. Social processing in the anterior temporal lobes: Evidence from an overlapping task design.
Cognitive Neuroscience Society, San Francisco, CA 3/09 *

Berryhill, M.E., Cabeza, R., & Olson, I.R.
The parietal lobe is critical for memory retrieval under certain contexts.
Society for Neuroscience, Washington, DC 11/08 •

Mazuz, Y.S., Simons, J.S., Peers, P.V., **Berryhill, M.E.,** & Olson, I.R.
Parietal lobe may not be necessary for source memory
Society for Neuroscience, Washington, DC 11/08 •

Berryhill, M.E., Aguirre, G.K., & Olson, I.R.
Superior occipital regions track perceived viewing distance in two-dimensional images.
Vision Sciences Society Annual Meeting, Naples, FL 5/08 •

Berryhill, M.E., Fendrich, R., & Olson, I.R.
Determining size constancy after bilateral parietal damage.
European Conference on Visual Perception, Arezzo, IT 8/07 *
Perception, 36, ECVS Abstract Supplement

Olson, I.R., **Berryhill, M.E.** & Most, S.
The blinking emotional attentional blink and the parietal lobe.
Vision Sciences Society Annual Meeting, Sarasota, FL 5/07 *

Berryhill, M.E., & Olson, I.R.
Determining parietal involvement in visual working memory: Causal or Incidental?
Vision Sciences Society Annual Meeting, Sarasota, FL 5/07 •

Berryhill, M.E., & Olson, I.R.

Is the parietal lobe critical for visual working memory? Evidence from patients with unilateral and bilateral parietal lesions.

Society for Cognitive Neuroscience Annual Meeting, New York, NY 4/07 *

Berryhill, M.E., Chiu, T. & Hughes, H.C.

Following what you feel: proprioceptive smooth pursuit revisited

Vision Sciences Annual Meeting, Sarasota, FL 5/06 *

Berryhill, M.E. & Hughes, H.C.

Intermanual skill transfer in a long term manual response motor learning task.

Society for Neuroscience Annual Meeting, Washington, DC 11/05 *

Berryhill, M.E. & Hughes, H.C.

Empirical tests for a model of Hick's law.

Psychonomic Society Annual Meeting, Toronto, ON 11/05 *

Berryhill, M.E. & Hughes, H.C.

Color defined targets in gap and overlap conditions are not facilitated by visual pop-out.

Society for Cognitive Neuroscience Annual Meeting, New York, NY 4/05 *

Berryhill, M.E. & Hughes, H.C.

Pop out targets and saccadic attentional requirements.

Society for Neuroscience Annual Meeting, San Diego, CA 10/04 •

Berryhill, M.E., Kveraga, K., Copenhaver, B., Tse, P., Hughes, H.C.

Simple and choice reaction times modulated by attentional load.

Society for Neuroscience Annual Meeting, New Orleans, LA 11/03 *

Hughes, H.C., **Berryhill, M.E.**, Kveraga, K., Tse, P.U.

Effects of attentional load on saccadic eye movements.

European Society of Cognitive Psychology Conference, Granada, Spain 9/03 *

Kveraga, K., **Berryhill, M.E.**, Hughes, H.C.

Reaching with increasing stimulus-response uncertainty.

Society for Neuroscience Annual Meeting, Orlando, FL 11/02 *

Berryhill, M.E., Boucher, L., Kveraga, K. & Hughes, H.C.

Latency of smooth pursuit under conditions of stimulus-response uncertainty.

Vision Sciences Annual Meeting, Sarasota, FL 5/02 *

Gescheider, G.A., **Berryhill, M.E.**, Verrillo, R.T., Bolanowski, S.J.

Vibrotactile temporal summation. Fechner Day: Proceedings of the 13th Annual Meeting of the International Society for Psychophysics, Quebec, ON 6/98 *

SYMPOSIA ORGANIZATION

“Visual Memory and the Brain”

Vision Sciences Society Annual Meeting, Naples, FL 5/08

INVITED PRESENTATIONS

Moss Center for Neural Rehabilitation	Buxbaum Lab	11/06
Martinos Center for Neuroimaging	Bar Lab	3/07
Dartmouth College	Cognitive Brown Bag	11/07
University of Pennsylvania	Chatterjee/Aguirre Labs	3/06, 2/08, 4/09, 10/09, 3/10
University of Pennsylvania	Coslett Lab	2/07, 11/07, 11/09, 3/10
Temple University Spatial Intelligence and Learning Center (SILC)		4/08
Rutgers University-Camden		10/09

TEACHING EXPERIENCE

Bucknell University, Lewisburg, PA

Spring 2009 Guest Lecturer, *Advanced Perception*

University of Pennsylvania, Philadelphia, PA

Fall 2008 Guest Lecturer, *Cognitive Neuroscience*

Temple University, Philadelphia, PA

Spring 2008 Guest Lecturer, *Cognition*

Dartmouth College, Hanover, NH

2002-2003 Teaching Assistant

Methods in Psychological Science, Senior Lecturer: 2 trimesters

- Managed student sections including weekly lectures and laboratory demonstrations

Sensation & Perception

- Worked individually with students

Laboratory Methods in *Behavioral Neuroscience*

- Conducted laboratory sections including brain dissections and animal training
- Guest lectured, provided review sessions

Mill River Union High School, N. Clarendon, VT

2000-2001 Full-time French and Spanish Teacher

- Following Peace Corps service, taught grades 7-12

MENTORING EXPERIENCE

Dartmouth College (2001-2006)

Heather Kiefer, Jane Viner, Brittany Copenhaver, Ashley Donnenfeld,
Roselinde Kaiser, Lauren Botcheos, Priya Mitra, Tanya Chiu

University of Pennsylvania (2006-)

Yonatan Mazuz, Lisa Phuong, Lauren Picasso, Alan Plotzker, Youssef Ezzyat (RA)

Temple University (2007-)

Jessica André (graduate student), Robert Arnold, Kinnari Atit, Alexandra Giardino, Cara Shay, Laura Skipper (graduate student), Lauren Richmond (graduate student), David Drowos (RA), David McCoy (RA)

ACADEMIC AWARDS AND HONORS

- | | | |
|------|-------------------|---|
| 2008 | Rice University | NSF Workshop for Women in Science and Engineering:
<i>Negotiating the Ideal Faculty Position Workshop</i> <ul style="list-style-type: none">• 75 of 1000 applicants accepted |
| 2006 | Dartmouth College | Marie Center 1982 Research Award <ul style="list-style-type: none">• Department award, 1 awarded |
| 2004 | Dartmouth College | Summer Institute in Cognitive Neuroscience |
| 2004 | Dartmouth College | Filene Graduate Teaching Award <ul style="list-style-type: none">• 1 Departmental nominee, 1 of 3 awarded across university |
| 1998 | Hamilton College | B.F. Skinner Research Award |
| 1998 | Hamilton College | Phi Beta Kappa |
| 1997 | Hamilton College | Psi Chi |
| 1997 | Hamilton College | Bristol-Myers Summer Research Fellow |

DEPARTMENTAL SERVICE

- | | | |
|-----------|-------------------|--|
| 2004-2006 | Dartmouth College | Elected Graduate Student Representative |
| 2005-2006 | Dartmouth College | Organizer: Cognitive Neuroscience Journal Club |

PROFESSIONAL AFFILIATIONS

Psychonomic Society
Society for Cognitive Neuroscience
Society for Neuroscience
Vision Sciences Society
Women in Cognitive Science

REVIEWING

Attention, Perception & Psychophysics,
Brain Research,
European Journal of Cognitive Psychology,
Frontiers in Human Neuroscience (Review Editor),
Journal of Cognitive Neuroscience,

MARIAN BERRYHILL'S CV

Journal of Neuroscience,
Neuropsychologia,
Quarterly Journal of Experimental Psychology

Updated 2/10