

Geoffrey Brookshire
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Education

Current University of Chicago
 Ph.D. in psychology, integrative neuroscience track
 Cornell University – Visiting student
2013 The New School for Social Research
 M.A. in experimental psychology
2009 University of California – Berkeley
 B.A. with honors in psychology

Awards

2016 William Orr Dingwall Foundation Neurolinguistics Fellowship
2016 Center for Gesture, Sign and Language Research Grant
2014 Arts, Science, & Culture Graduate Collaboration Grant
2013 Norman H. Anderson Research Fund
2013 New School for Social Research Outstanding M.A. Graduate award
2011–2013 New School for Social Research Dean’s Scholarship
2012 National Science Foundation GRFP Honorable Mention
2011 Robert J. Glushko & Pamela Samuelson Foundation Student Travel Grant
2009 Highest distinction in general scholarship, UC Berkeley
2008–2009 Robert & Colleen Haas Scholar
2005 Flinn Foundation Scholarship Finalist

Publications

Brookshire, G. & Casasanto, D. (2018). Approach motivation in human cerebral cortex. *Philosophical Transactions of the Royal Society B*. DOI: 10.1098/rstb.2017-0141

Brookshire, G., Lu, J., Nusbaum, H. C., Goldin-Meadow, S., & Casasanto, D. (2017). Visual cortex entrains to sign language. *Proceedings of the National Academy of Sciences*, 114(24), 6352-6357.

Gray, S. J., **Brookshire, G.**, Casasanto, D., & Gallo, D. (2015). Electrically Stimulating Prefrontal Cortex at Retrieval Improves Recollection Accuracy. *Cortex*, 73, 188-194.

- Casasanto, D., **Brookshire, G.**, & Ivry, R. (2015). Meaning is not a reflex: Context dependence of motor-meaning congruity effects. *Cognitive Science*, 39(8), 1979-1986.
- Casasanto, D., Jasmin, K., **Brookshire, G.** & Gijssels, T. (2014). The QWERTY Effect: How typing shapes word meanings and baby names. In P. Bello, M. Guarini, M. McShane, & B. Scassellati (Eds.), *Proceedings of the 36th Annual Conference of the Cognitive Science Society* (pp. 296–301). Austin, TX: Cognitive Science Society.
- Brookshire, G.**, Graver, C., & Casasanto, D. (2013). Motor Asymmetries Predict Neural Organization of Emotion. In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.), *Proceedings of the 35th Annual Conference of the Cognitive Science Society* (pp. 245–250). Austin, TX: Cognitive Science Society.
- Brookshire, G.** & Casasanto, D. (2012). Motivation and Motor Control: Hemispheric Specialization for Approach Motivation Reverses with Handedness. *PLoS ONE* 7(4): e36036.
doi:10.1371/journal.pone.0036036
- Brookshire, G.** & Casasanto, D. (2011). Motivation and Motor Control: Hemispheric Specialization for Motivation Reverses with Handedness. In L. Carlson, C. Hölscher, & T. Shipley (Eds.), *Proceedings of the 33rd Annual Conference of the Cognitive Science Society* (pp. 2610-2615). Austin, TX: Cognitive Science Society.
- Brookshire, G.**, Ivry, R., & Casasanto, D. (2010). Modulation of motor-meaning congruity effects for valenced words. In S. Ohlsson & R. Catrambone (Eds.), *Proceedings of the 32nd Annual Conference of the Cognitive Science Society* (pp. 1940-1945). Austin, TX: Cognitive Science Society.

Talks

* Invited talks

- 2018 * Chang lab, UCSF
 * Meetings on Methodology for MEEG, University of Birmingham, UK
 * Speech and Language Consortium meeting, University of Westminster, UK
- 2017 89th annual meeting of the Midwestern Psychological Association, Chicago, IL
 Human Development Brown Bag talk, Cornell
- 2015 Art, Science and Culture Initiative at UChicago
 University of Chicago Neuroscience Annual Retreat
 Humanities Day at UChicago
- 2014 Cognitive Workshop, University of Chicago
 NEURO chats, University of Chicago
- 2013 35th annual meeting of the Cognitive Science Society, Berlin, Germany
- 2011 33rd annual meeting of the Cognitive Science Society, Boston, MA

Posters

- Brookshire, G.** & Casasanto, D. (2018). Cortex can entrain to predictable sequences even in the absence of periodicity. Poster presented at the 25th annual meeting of the Cognitive Neuroscience Society in Boston, MA.
- Lucero, C., **Brookshire, G.**, Quirk, C., Goldin-Meadow, S., Vogel, E., & Casasanto, D. (2018). Unconscious number discrimination in the human visual system. Poster presented at the 25th annual meeting of the Cognitive Neuroscience Society, Boston, MA.
- Brookshire, G.** & Casasanto, D. (2018). Cortical phase-locking to predictable temporal sequences in the absence of periodicity. Poster presented at the 31st annual CUNY Sentence Processing Conference, Davis, CA.
- Yap, D. F., **Brookshire, G.**, & Casasanto, D. (2018). Beat gestures encode spatial semantics. Poster presented at the 31st annual CUNY Sentence Processing Conference, Davis, CA.
- Brookshire, G.** & Casasanto, D. (2017). Cortical entrainment depends on temporal predictability, not periodicity. Poster presented at the 9th annual meeting of the Society for the Neurobiology of Language, Baltimore, MD. (Selected for presentation as a poster slam.)
- Brookshire, G.**, Lu, J., Nusbaum, H., Goldin-Meadow, S., & Casasanto, D. (2017). Visual cortex entrains to low-frequency amplitude variability in sign language. Poster presented at the 24th annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.
- Brookshire, G.**, Turk-Browne, N.B., & Casasanto, D. (2016). Top-down predictions in statistical learning carried by alpha oscillations. Poster presented at the 8th annual meeting for the Society for the Neurobiology of Language, London.
- Brookshire, G.** & Casasanto, D. (2016). Top-down predictions in statistical learning are carried by alpha oscillations. Poster presented at the 28th annual convention of the Association for Psychological Science, Chicago, IL.
- Brookshire, G.** & Casasanto, D. (2015). Associative networks learn grammatical categories from sequential order alone. Poster presented at the 56th annual meeting of the Psychonomic Society, Chicago, IL.
- Brookshire, G.** & Casasanto, D. (2015). Associative networks learn abstract grammatical categories. Poster presented at the 7th annual meeting of the Society for the Neurobiology of Language, Chicago, IL.
- Brookshire, G.** & Casasanto, D. (2013). Manual motor asymmetries predict hemispheric lateralization of emotion. Poster presented at the 3rd annual meeting of the Society for Social Neuroscience (S4SN), San Diego, CA.
- Brookshire, G.** & Casasanto, D. (2013). Brief Motor Experience Reverses Visual Hemifield Effects for Emotional Faces. Poster presented at the 25th annual convention of the Association for

Psychological Science, Washington, DC.

Brookshire, G. & Casasanto, D. (2013). Manual motor asymmetries predict neural organization of emotion. Poster presented at the 20th annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.

Brookshire, G. & Casasanto, D. (2011). Brief motor experience reverses visual hemifield effects. Poster presented at the 18th annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.

Brookshire, G. & Casasanto, D. (2010). Motor Fluency Predicts Space-Valence Associations. Poster presented at The Embodied Mind: Perspectives & Limitations, Nijmegen, Netherlands.

Brookshire, G., Ivry, R., & Casasanto, D. (2010). Modulation of motor-meaning congruity effects for valenced words. Poster presented at the FENS Forum of European Neuroscience, Amsterdam, Netherlands.

Service and memberships

Ad hoc reviewer: Acta Psychologica; Attention, Perception & Psychophysics; Brain and Language; Cerebral Cortex; Cognition; Cognitive Processing; Cognitive Science; Cognitive Science Society conference proceedings; Emotion; Frontiers in Psychology; Journal of Cognitive Psychology; Journal of Neuroscience; NeuroImage; Proceedings of the National Academy of Sciences; Psychological Research; Psychological Science

Memberships: Association for Psychological Science, Cognitive Neuroscience Society, Cognitive Science Society, Psychonomic Society, Society for the Neurobiology of Language, Society for Neuroscience

Departmental service: Committee to select departmental colloquium speakers (2014–2015); Host visiting prospective students (2014–2017); Student mentor for a first-year PhD student (2014–2017)

Outreach and community: Judge for the Chicago Area Undergraduate Research Symposium (2016–17); Presentations for the general public at the UChicago Humanities Day (2015) and Art, Science and Culture Initiative (2015); Cognitive science demonstrations for college students with the Think Tank (2016, thinktank.uchicago.edu).

Teaching and supervision

Teaching

2017 Teaching assistant, Cognitive psychology (undergrad), UChicago
 TA, Cognitive diversity (undergrad), UChicago
 Guest lecture for Cognitive Diversity: Bodily relativity of affective motivation

- 2016 Guest lectures Experimental Methods in Linguistics: Mixed effects models in R
Workshop: Cognitive science for American Sign Language interpreters
TA, Biological psychology (undergrad), UChicago
TA, Sensation and perception (undergrad), UChicago
- 2012 TA, Body and cognition (graduate), The New School
- Supervision*
- 2017-present Cornell University: Research supervisor for undergraduates (Rachel Mattessich)
- 2014–2017 University of Chicago: Research supervisor for masters students (Srishti Goel),
undergraduates (Chelsea Rapoport, Amritpal Singh, Jahn Madlangbayan, Clara Sava-
Segal, Varun Joshi), and high-schoolers (Ben Grobman, Juliana Berlin).
- 2011–2013 The New School for Social Research: Research supervisor for undergraduates (Heila
Paulino, Rose Hendricks, Tyler Alterman) and masters students (Cleve Graver, Daisy
Burr; co-advised with Roberto Bottini & Daniel Casasanto)

Research Experience

- 2013–Present The University of Chicago
PI: Daniel Casasanto
- 2011–2013 The New School for Social Research
PI: Daniel Casasanto
- 2009–2011 Max Planck Institute for Psycholinguistics, Nijmegen, NL
Research assistant
PIs: Peter Hagoort, Jos van Berkum, and Daniel Casasanto
- 2007–2009 University of California - Berkeley
Research assistant
PI: Richard Ivry
- 2006 University of California - Berkeley
Research assistant
PI: Laura Sterponi

Press

NSF.gov, The Rhythms of Sign Language, July 14, 2017. Stanley Dambroski & Madeline Beal,
https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=242300&WT.mc_id=USNSF_1

ScienceDaily.com, Human brain tunes into visual rhythms in sign language, June 8, 2017. Tina A. Cormier, <https://www.sciencedaily.com/releases/2017/06/170608145521.htm>

HuffingtonPost.com, How Left-Handed People Think And Feel Differently, November 30, 2016. Carolyn Gregoire, http://www.huffingtonpost.com/entry/left-handed-personality-psychology_us_58331757e4b058ce7aac163a

ScienceMag.com, *Brain-zapping therapies might be hitting lefties on the wrong side of the head*, February 29, 2016. Nala Rogers, <http://www.sciencemag.org/news/2016/02/brain-zapping-therapies-might-be-hitting-lefties-wrong-side-head>

PopularScience.com, *The Keyboard's Strange Impact On Your Baby's Name*, September 11, 2014. Kate Gammon, <http://www.popsci.com/blog-network/kinderlab/keyboard%E2%80%99s-strange-impact-your-baby%E2%80%99s-name>

Time.com, *Study: Keyboards Are Influencing What You Name Your Baby*, May 10, 2014. Katy Steinmetz. <http://time.com/94945/keyboards-baby-names/>

ScienceDaily.com, *Emotion reversed in left-handers' brains*, May 2, 2012. <http://www.sciencedaily.com/releases/2012/05/120502184836.htm>

PsychologyToday.com, *Emotion Is Reversed in Left-Handers' Brains*, May 3, 2012. Daniel Casasanto. <http://www.psychologytoday.com/blog/malleable-mind/201205/emotion-is-reversed-in-left-handers-brains>

Technical skills

Programming in Matlab, Python, and R
Designing, running, and analyzing experiments using EEG and behavioral methods
Linear mixed-effects modeling
Non-parametric statistics
Multivariate pattern analyses (MVPA)
Frequency-domain analyses and signal processing