

Debbie M. Yee

Curriculum Vitae

November 2017

Contact

Psychological & Brain Sciences
Washington University in St. Louis
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Saint Louis, MO, 63130

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Education

- 2013- Ph.D. Candidate in Psychological & Brain Sciences,
Washington University in St. Louis
Major Advisor: Prof. Todd Braver, Ph.D.
- 2013-2015 M.A. in Psychological & Brain Sciences, Washington University in St. Louis
Major Advisor: Prof. Todd Braver, Ph.D.
- 2007-2011 B.S. in Brain and Cognitive Sciences, Massachusetts Institute of Technology

Honors and Awards

- 2017 Reinforcement Learning & Decision Making Student Travel Fellowship
- 2017 Outstanding Teaching Assistant Award, Psychological & Brain Sciences, WashU
- 2017 Summer School In Social Neuroscience and Neuroeconomics Fellow
- 2017-2019 NIH National Research Service Award (NRSA) Pre-Doctoral Fellowship
- 2016 NIH Aging and Development Training Fellowship (T32)
- 2016 Kavli Summer Institute for Cognitive Neuroscience Fellow
- 2015 Reinforcement Learning & Decision-Making Student Travel Fellowship
- 2014, 2015 National Science Foundation Graduate Research Fellowship, *Honorable Mention*
- 2014-2016 Cognitive, Computational and Systems Neuroscience Training Fellowship (T32)
- 2010 MIT Undergraduate Research Opportunities Program Direct Funding
- 2008, 2009 MIT Sponsored Research

Research Grants

NIA/NIH Yee (PI) 6/1/2017–5/31/2018
Interactions of Motivational Incentives and Cognitive Control in Older Adult Decision-Making
Pilot project examining the role of motivation and cognitive control in mediating changes in the
psychological and neural mechanisms of older adult decision-making.
Role: Subaward PI (on Samanez-Larkin R24-AG054355)
Direct Costs: \$30,000

Publications

Yee, DM., Braver, TS. (2018). Interactions of Motivation and Cognitive Control. *Current Opinion in Behavioral Sciences*. 19:83-90.

Yee, DM., Krug, MK., Allen, AZ., Braver, TS. (2016). Monetary and Liquid Incentives Combine to Motivate Cognitive Task Performance. *Frontiers in Psychology*. 6:2037.

Solway, A., Diuk, C., Cordova, N., **Yee, D.**, Barto, A., Niv, Y., Botvinick, M. M. (2014). Optimal Behavioral Hierarchy. *PLoS Computational Biology*. 10(8)

Blackburne, L.K., Eddy, M., Kalra, P., **Yee, D.**, Sinha, P., Gabrieli, J.D.E. (2014). Neural Correlates of Letter Reversal in Children and Adults. *PLoS ONE*. 9(5)

Book Chapters

Yee, DM., Braver, TS. (in press). Computational Models of Cognitive Control: Past and Current Approaches. To appear in P. Series (Ed.), *Computational Psychiatry* (pp.??). MIT Press.

Posters

Yee, DM., Braver, TS. Reinforcement and Valence Effects on Incentive Integration and Motivated Cognitive Control. *Reinforcement Learning and Decision Making*. (Ann Arbor, MI, June 11-14, 2017)

Yee, DM., Adams, S., Weiss, J., Braver, TS. Motivation-Cognition Interactions in Older and Younger Adults. *Association for Psychological Science*. (Boston, MA, May 25-27, 2017)

Yee, DM., Adams, S., Weiss, J., Braver, TS. Motivation-Cognition Interactions in Older and Younger Adults. *The Society for Affective Science*. (Boston, MA, April 27, 2017)

Yee, D., Braver, T. Monetary and Liquid Incentives Combine to Modulate Cognitive Task Performance. *56th Annual Meeting of The Psychonomic Society*. (Chicago, IL, November 21, 2015)

Yee, D., Braver, T. Monetary and Liquid Incentives Combine to Modulate Cognitive Task Performance. *Society for Neuroeconomics Annual Meeting*. (Miami, FL, September 25, 2015)

Oksanen, K., **Yee, D.**, Koller, J., Black, K., Braver, T. Applying simultaneous PET/MR to Explore Relationships Between Task-Evoked BOLD Signals and Dopamine. *Organization of the Human Brain Mapping Meeting*. (Honolulu, HI, June 15, 2015).

Botvinick, M. M., Diuk, C., **Yee, D.**, Cheong, J., Weinstein, A., Niv, Y. & Barto, A. A general form for state-space representations in frontal and temporal cortex. *44th Annual Meeting of the Society for Neuroscience*. (Washington D.C., November 18, 2014).

Solway, A., Diuk, C., Cordova, N., **Yee, D.**, Barto, A., Niv, Y., Botvinick, M. Optimal Task Decomposition. *Reinforcement Learning and Decision Making Meeting*, (Princeton, NJ, October 25, 2013).

Diuk, C., **Yee, D.**, Ribas-Fernandes, J, Cordova, N., Schapiro A., Niv, Y., Botvinick., M. Divide and Conquer: Task Decomposition in Humans. *42nd Annual Meeting of the Society for Neuroscience*, (New Orleans, LA, October 16, 2012).

Blackburne, L.K., Eddy, M., Kalra, P., **Yee, D.**, Del Tufo, S., Sinha, P., Gabrieli, J.D.E. Neural Correlates of Letter Reversal in Children and Adults. *19th Annual Cognitive Neuroscience Society Meeting*, (Chicago, IL, April 2, 2012).

Blackburne, L.K., Palti, D., Perea, M., Kim, J., Huang, C., **Yee, D.**, Gabrieli, J.D.E. Attention and Reading Skill Modulate Selectivity of the Left Occipitotemporal Region. *Organization of Human Brain Mapping Meeting*, (Barcelona, Spain, June 6, 2010).

Blackburne, L.K., Palta, D., Perea, M., Kim, J., Huang, C., Yee, D., Gabrieli, J.D.E. Functional Connectivity of Left Fusiform to Phonological Processing Regions Increases with Reading Skill. *39th Annual Meeting of the Society for Neuroscience*, (Chicago, IL, October 20, 2009).

Invited Articles

Weston, S.J. and Yee, D. Why You Should Become a User: A Brief Introduction to R. *The Observer* (29)3, Association for Psychological Science. (March 2017).

Talks

Shenhav Lab Meeting, Brown University (Providence, RI, November 2017)
“Interactions of Motivation and Cognitive Control”

Washington University Neuroscience Retreat (St. Louis, MO, October 2017)
“Reinforcement and Valence Effects on Incentive Integration & Motivated Cognitive Control”

Teaching Experience

2014-2017 Co-Instructor, Annual Introductory R & Advanced R workshops
Developed programming for and co-taught two-day workshop to introduce basics of R-Statistical programming language to students, postdoctoral fellows, and faculty in the Psychological and Brain Sciences Department. Additionally presented monthly 1-hour workshops to Psych department on relevant packages and tools, including R-markdown, psych, ggplot2, dplyr, tidyr, and yaRrr. Workshop materials can be found here: <https://debyeeneuro.com/r-tutorials/>

2016 Fall Teaching Assistant, Psych 5066: Graduate Quantitative Methods I
Guest Lecturer, Graduate Quantitative Methods I

2017 Spring Teaching Assistant, Psych 5067: Graduate Quantitative Methods II
Guest Lecturer, Graduate Quantitative Methods II
NOTE: Quantitative Methods I and II are the requisite graduate level statistics courses for first year Psychological & Brain Sciences PhD students

Undergraduate Mentoring

2014-2015 Harold Lee, *Washington University in St. Louis*
2015-2016 Jessica Weiss, *Washington University in St. Louis*
2015-2016 Carolyn Dean Wolf, *Washington University in St. Louis*
2015-2016 Rachel Lilenbaum, *Washington University in St. Louis*
2015- Katie Shapiro, *Washington University in St. Louis*
2016-2017 Marisa Gong, *Washington University in St. Louis*
2016- Aaditya Manirajan, *Washington University in St. Louis*
2017 Sarah Finlay, *Dartmouth University*
2018- Casey Mason, *Washington University in St. Louis*

Pre-Doctoral Research Experiences

2011-2013 Research Specialist, Princeton University
PI: Matthew Botvinick M.D., Ph.D.

2009-2010 Research Assistant, Massachusetts Institute of Technology
PI: John Gabrieli, Ph.D.

2008 Research Assistant, Massachusetts Institute of Technology
PI: Edward Boyden, Ph.D

Professional Memberships

Association for Psychological Science
Association for Women in Science, *St. Louis Chapter Co-President (2014-2017)*
Cognitive Neuroscience Society
Psychonomics
Society for Affective Science
Society for Neuroeconomics
Society for Neuroscience

Additional Training

2016 Computational Psychiatry Course, *Translational Neuromodeling Unit, Zurich, CH*
2017 AFNI Bootcamp

Service

WashU NIH Fellowship Writing Workshop Mentor (2017)
Cognitive, Computational Systems Neuroscience, *Steering Committee (2015-)*
Psychology Grad Student Association, *Diversity Committee (2014-2016)*
Association for Women in Science – St. Louis Chapter, *President (2014-2017)*