# **CURRICULUM VITA**

# **TODD S. BRAVER**

# **PERSONAL**

Date / Place of Birth: December 21, 1968; Ann Arbor, MI, USA

Department of Psychological and Brain Sciences Mailing Address:

Washington University

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# **EDUCATION**

1986-1992	B.S. in Cognitive Science (Philosophy Minor), Univ. of California, San Diego
1992-1994	M.S. in Cognitive Neuroscience, Carnegie Mellon University
1994-1997	Ph.D. in Cognitive Neuroscience, Carnegie Mellon University
1997-1998	Postdoctoral Fellowship, University of Pittsburgh Medical School

# **ACADEMIC POSITION**

1998-2004	Assistant Professor, Psychology Department Washington University, St. Louis
2004-2009	Associate Professor, Psychology Department Washington University, St. Louis
2005-2006	Visiting Fellow, Institute for Advanced Studies (Clare Hall) University of Cambridge, Cambridge England
2009-present	Full Professor, Department of Psychological and Brain Sciences With Appointments in Radiology and Neuroscience Washington University, St. Louis

#### HONORS AND AWARDS

1986 1992	National Merit Scholarship Finalist Phi Beta Kappa, Magna Cum Laude, University of California, San Diego
1992-1994	Center for the Neural Basis of Cognition Training Fellowship
1993	National Defense Science and Engineering Fellowship, Honorable Mention
	National Science Foundation Fellowship, Honorable Mention
1994-1995	NIMH Training Fellowship
1995	Fellow, McDonnell Summer Institute in Cognitive Neuroscience, Davis, CA
1996	American Psychological Association Dissertation Research Award
1997	Junior Fellow, National Academy of Science Ninth Annual Frontiers of Science
	Conference
2005	Constance Lieber Independent Investigator Award NARSAD
2005	Clare Hall, Visiting Fellowship Award, Cambridge University
2006	F.J. McGuigan Young Investigator Award
	American Psychological Association, \$25,000 Prize
2007	Named "Rising Star" by Association for Psychological Science
2012	Fellow, APS
2013	National Institute of Health MERIT Award
2015	Fellow, Society of Experimental Psychologists
2019	Outstanding Faculty Mentor Award, WUSTL

#### RESEARCH GRANTS AND FELLOWSHIPS

# **Currently Funded**

National Institutes of Health – NIA (1 R21 AG067295)

2020-2022

Healthy aging and the cost of cognitive effort

PI: Todd Braver

Total Direct Costs: \$275,000

National Institutes of Health – NINDS (1 T32 NS115672)

2020-2025

Interdisciplinary training in Cognitive, Computational, and Systems Neuroscience

PIs: Todd Braver, Camillo Padoa-Schioppa

Total Direct Costs: \$2,430,000

National Institutes of Health – NIMH (2 R37 MH066078)

2018-2023

Dual Mechanisms of Cognitive Control

PI: Todd Braver

Total Direct Costs: \$2,500,000

National Science Foundation – NSF 1835209

2018-2022

NCS-FO: Modeling individual differences in cognitive control as variation in neural activation trajectories

PI: ShiNung Ching (Braver, Co-PI)

Total Direct Costs: \$450,000

National Institutes of Health – NIA (1 R01 AG070139-01)

2021-2026

Neural and motivational mechanisms of age-related change in emotion regulation

PIs: Tammy English & Renee Thompson (Braver, co-I)

Total Direct Costs: \$2,300,000

# **Pending**

National Institutes of Health – NIA (1 R21 AG0705590-01A1)

Age-related change in the neural coding of proactive and reactive control

PIs: Todd Braver & Julie Bugg Total Direct Costs: \$275,000

National Center for Complementary & Integrative Health – NCCIH (1 R13 AT011981)

M<sup>4</sup>: Mindfulness Mechanisms and Methods Meeting

PIs: Todd Braver

Total Direct Costs: \$30,000

# **Past**

National Institutes of Health – NIA (1 R21 AG058206)

2017-2020

Interactions of motivation and cognitive control in older-adult decision-making

PI: Todd Braver

Total Direct Costs: \$275,000

National Institutes of Health – NCCIH (1 R21 AT009483)

2017-2020

Neural mechanisms of mindfulness: A discordant twin design

PI: Todd Braver

Total Direct Costs: \$275,000

National Institutes of Health – NIA (1 R01 AG043461)

2014-2018

Neuroeconomics of aging and cognitive control: A discounting framework

PI: Todd Braver

Total Direct Costs: \$525,000

National Institutes of Health – NIMH (1 R37 MH066078)

2013-2018

Dual Mechanisms of Cognitive Control

PI: Todd Braver

Total Direct Costs: \$2,376,768

National Institutes of Health - NIMH (1 R21 MH105800)

2015-2017

Neuroeconomics of cognitive effort

PI: Todd Braver

Total Direct Costs: \$275,000

Binational Science Foundation (2011246)

2012-2016

Intention-based reflexivity in simple and complex novel action plans

PI: Todd Braver (Co-PI Nachshon Meiran)

Total Direct Costs: \$230,000

National Institutes of Health – NIA (1 R13 AG042291)

2011-2014

Mechanisms of Motivation, Cognition and Aging Interactions: Interdisciplinary Group

Meeting

PI: Todd Braver

Total Direct Costs: \$40,000

National Institutes of Health - NIMH (1 R21 MH097260)

2011-2014

Motivational state as a mechanism of cognitive self-regulation

PI: Todd Braver

Total Direct Costs: \$275,000

National Institutes of Health – NIDA (1 R21 DA027821)

2009-2012

Negative reinforcement effects on neural mechanisms of cognitive control

PI: Todd Braver

Total Direct Costs: \$275,000

National Institutes of Health – NIMH (1 RC1 MH088522)

2009-2012

Neural mechanisms of spatial working memory

PI: Larry Snyder (Braver, Co-I)

Total Direct Costs: \$678,000

National Institutes of Health – NIA (1 RC1 AG036258)

2009-2012

Neural mechanisms of age-related changes in prospective memory

PI: Mark McDaniel (Braver, Co-I)

Total Direct Costs: \$603,000

National Institutes of Health – NIMH (2 R01 MH066078)

2009-2012

Dual Mechanisms of Cognitive Control – Administrative Supplement

PI: Todd Braver

Total Direct Costs: \$248,000

National Institutes of Health – NIA (1 R21 AG030795)

2007-2010

Neuroeconomic studies of age-related changes in cognitive control

PI: Todd Braver

Total Direct Costs: \$210,000

National Alliance for Research in Schizophrenia and Depression

2005-2008

Improving Prefrontal Cortex Function in Schizophrenia

PI: Todd Braver

Total Direct Costs: \$100.000

National Institutes of Health (RO1 MH66078)

2002-2012

Dual Mechanisms of Cognitive Control

PI: Todd Braver

Total Direct Costs: \$2,500,000

National Institutes of Health (P50 MH64445)

2002-2007

Towards a Neurobiologically Constrained Framework for Modeling Human Cognition

Project PI: Jonathan Cohen Co-Investigator: Todd Braver

Total Direct Costs for Project: \$650,000

National Institutes of Health (RO1 MH66088)

2003-2006

Neural substrates of emotion-cognition interactions

PI: Jeremy Gray Co-Investigator: Todd Braver

Total Direct Costs: \$575,000

Office of Naval Research

2003-2006

Neural Network Simulations of Cognitive Control and Motivational Factors

PI: Todd Braver

Total Direct Costs: \$301,823

McDonnell Center for Higher Brain Function

2002-2004

Neural Substrates of Decision Making

PI: Len Green Co-Investigator: Todd Braver

Total Direct Costs: \$80,000

Office of Naval Research (N00014-00-1-0715)

2000-2003

Computational Modeling of Cognitive Control in a Neural Network Architecture

PI: Todd Braver

Total Direct Costs: \$277,496

National Science Foundation (BCS-0001908)

2000-2003

Mechanisms of Cognitive Control: Testing a Neurocomputational Model

PI: Todd Braver

Total Direct Costs: \$194,379

National Institutes of Health (RO3 MH61615)

2000-2003

FMRI Studies of Prefrontal Cortex Involvement in Working and Long-Term Memory

PI: Todd Braver

Total Direct Costs: \$100,000

National Institutes of Aging (RO3 AG18138)

2000-2001

A Computational Model of Cognitive Control Deficits in Healthy Aging

PI: Todd Braver

Total Direct Costs: \$50,000

National Institutes of Aging (P50 AG05681 Pilot Project)

2000-2001

Cognitive Control in Early-Stage Alzheimer's Disease

PI: Todd Braver

Total Direct Costs: \$26,750

National Alliance for Research in Schizophrenia and Depression

1999-2002

Cognitive Control Impairments in Schizophrenia

PI: Todd Braver

Total Direct Costs: \$60,000

# McDonnell Center for Higher Brain Function

1998-2001

Development, Validation, and Application of Novel Event-Related FMRI Methods Towards Studies of Higher Brain Function

PI: Randy Buckner Co-Investigator: Todd Braver

Total Direct Costs: \$255,000

#### **PUBLICATIONS**

# **Books**

Motivation and Cognitive Control (2015). Edited by Todd S. Braver. Psychology Press: New York, NY.

# Journal Articles (peer reviewed)

- 1. Cohen, J. D., Forman, S. D., Braver, T. S., Casey, B. J., Servan-Schreiber, D., and Noll, D. C. (1994). Activation of prefrontal cortex in a nonspatial working memory task with functional MRI. <u>Human Brain Mapping</u>, 1, 293-304.
- 2. Cohen, J.D., Braver, T.S., and O'Reilly, R.C. (1996). A computational approach to prefrontal cortex, cognitive control and schizophrenia: Recent developments and current challenges. <u>Philosophical Transactions of the Royal Society, Series B, 346</u>, 1515-1527.
- 3. Braver, T.S., Cohen, J.D., Nystrom, L.E., Jonides, J., Smith, E.E. and Noll, D.C. (1997). A parametric study of prefrontal cortex involvement in human working memory. NeuroImage, 5, 49-62.
- 4. Cohen, J.D., Perlstein, W.M., Braver, T.S., Nystrom, L.E., Jonides, J., Smith, E.E. and Noll, D.C. (1997). Temporal dynamics of brain activity during a working memory task. Nature, 386, 604-608.
- 5. Barch, D. M., Braver, T. S., Nystrom, L. E., Forman, S. D., Noll, D. C., and Cohen, J. D. (1997). Dissociating working memory from task difficulty in human prefrontal cortex. Neuropsychologia, 35,1373-1380.
- 6. Carter, C.S., Braver, T.S., Barch, D.M., Botvinick, M.M., Noll, D.C., and Cohen, J.D. (1998). Anterior cingulate cortex, error detection, and the online monitoring of

- performance. Science, 280, 747-749.
- 7. Braver, T.S. and Cohen, J.D. (1999). Dopamine, cognitive control, and schizophrenia: The gating model. <u>Progress in Brain Research</u>, 121, 327-349.
- 8. Braver, T.S., Barch, D.M., and Cohen, J.D. (1999). Cognition and control in schizophrenia: A computational model of dopamine and prefrontal function. Biological Psychiatry, 46, 312-328.
- 9. Barch, D.M., Carter, C.S., Braver, T.S., Sabb, F.W., Noll, D.C. and Cohen, J.D. (1999). Overt verbal responding during fMRI scanning: Empirical investigations of problems and potential solutions. NeuroImage, 10, 642-657.
- 10. Barch D.M., Braver, T.S., and Noll D.C. (2000). Anterior cingulate and the monitoring of response conflict: Evidence from an fMRI study of overt verb generation. Journal of Cognitive Neuroscience 12, 298-309.
- 11. Nystrom, L.E., Braver, T.S., Sabb, F.W., Delgado, M.R., Noll, D.C., and Cohen, J.D. (2000). Working memory for letters, shapes, and locations: fMRI evidence against stimulus-based regional organization of human prefrontal cortex. NeuroImage, 11, 424-446
- 12. Barch D.M., Carter C.S., Braver T.S., MacDonald A., Sabb F.W., Noll D.C., and Cohen J.D. (2001). Prefrontal cortex and context processing in medication naive first-episode patients with schizophrenia. Archives of General Psychiatry, 58, 280-288.
- 13. Casey, B. J., Forman, S. D., Franzen, P., Berkowitz, A. Braver, T. S., Nystrom, L.E., Thomas, K.M. and Noll, D. C. (2001). Sensitivity of prefrontal cortex to changes in target probability: A functional MRI study. <u>Human Brain Mapping</u>, 13, 26-33.
- Braver, T.S., Barch, D.M., Kelley, W.M., Buckner, R.L., Cohen, N.J., Miezin, F.M., 14. Snyder, A.Z., Ollinger, J.M., Akbudak, E., Conturo, T.E., and Petersen, S.E. (2001). Direct comparison of prefrontal cortex regions engaged by working and long-term memory. NeuroImage, 14, 48-59.
- 15. Zacks, J. M., Braver, T.S., Sheridan, M.A., Donaldson, D.I., Snyder, A.Z., Ollinger, J.M., Buckner, R.L., Raichle, M.E. (20001). Human brain activity time-locked to perceptual event boundaries. Nature Neuroscience, 4, 651-655.
- 16. Braver, T.S. and Cohen, J.D. (2001). Working memory, cognitive control, and the prefrontal cortex: Computational and empirical studies. Cognitive Processing, 2, 25-55.
- 17. Botvinick, M.M., Braver, T.S., Carter, C.S., Barch, D.M., and Cohen, J.D. (2001). Conflict monitoring and cognitive control. <u>Psychological Review</u>, 108, 624-652.
- 18. Braver, T.S., Barch, D.M., Gray, J.R., Molfese, D.L., and Snyder, A.Z. (2001). Anterior

- cingulate and response conflict: Effects of frequency, inhibition, and errors. Cerebral Cortex, 11, 825-836.
- 19. Barch, D.M., Braver, T.S., Akbudak, E., Conturo, T.E., Ollinger, J.M. and Snyder, A.Z. (2001). Anterior cingulate and response conflict: Effects of response modality and processing domain. Cerebral Cortex, 11, 837-848.
- 20. Braver, T.S., Barch, D.M., Keys, B.A., Carter, C.S., Kaye, J.A., Janowsky, J.S., Taylor, S.F., Yesavage, J.A., Mumenthaler, M.S., Jagust, W.J., Reed, B.R. (2001). Context processing in older adults: Evidence for a theory relating cognitive control to neurobiology in healthy aging. Journal of Experimental Psychology: General, 130, 746-763.
- 21. Braver, T.S. and Bongiolatti, S.R. (2002). The role of frontopolar prefrontal cortex in subgoal processing during working memory. NeuroImage, 15, 523-536.
- 22. O'Reilly, R.C., Noelle, D.C., Braver, T.S., and Cohen, J.D. (2002). Prefrontal cortex and dynamic categorization tasks: Representational organization and neuromodulatory control. Cerebral Cortex, 12, 246-257.
- 23. Gray, J.R., Braver, T.S., and Raichle, M.E. (2002). Integration of emotion and cognition in lateral prefrontal cortex. Proceedings of the National Academy of Sciences, 99, 4115-4120.
- 24. Gray, J.R. and Braver, T.S. (2002). Personality predicts working-memory-related activation in caudal anterior cingulate cortex. Cognitive, Affective, and Behavioral Neuroscience, 2, 64-75.
- 25. Braver, T.S., and Barch, D.M. (2002). A theory of cognitive control, aging cognition and neuromodulation. Neuroscience and Biobehavioral Reviews, 26, 809-817.
- Jones, A.D., Cho, R., Nystrom, L.E., Cohen, J.D., and Braver, T.S. (2002). A 26. computational model of anterior cingulate function in speeded response tasks: Effects of frequency, sequence, and conflict. Cognitive, Affective, and Behavioral Neuroscience, 2, 300-317.
- 27. Cho, R., Nystrom, L.E., Brown, E., Jones, A.D., Braver, T.S., Holmes, P., and Cohen, J.D. (2002). Mechanisms underlying performance dependencies on sequential history in a two-alternative forced choice task. Cognitive, Affective, and Behavioral Neuroscience, 2, 283-289.
- 28. Gray, J.R., Chabris, C.F., and Braver, T.S. (2003). Neural mechanisms of general fluid intelligence. Nature Neuroscience, 6, 316-322.

- 29. Barch, D.M., Carter, C.S., MacDonald III, A., Braver, T.S., and Cohen, J.D. (2003). Context processing deficits in Schizophrenia: Diagnostic Specificity, 4-week Course, and Relationships to clinical symptoms. Journal of Abnormal Psychology, 112, 132-143.
- 30. Braver, T.S., Reynolds, J.R. and Donaldson, D.I. (2003). Neural mechanisms of transient and sustained cognitive control during task switching. Neuron, 39, 713-26.
- 31. Speer, N.K., Jacoby, L.L., and Braver, T.S. (2003). Strategy-dependent changes in memory: Effects on behavior and brain activity. Cognitive, Affective, and Behavioral Neuroscience, 3, 155-167.
- Swallow, K.M., Braver, T.S., Snyder, A.Z., Speer, N.K., and Zacks, J.M. (2003). 32. Reliability of functional localization using fMRI. NeuroImage, 20, 1561-1577.
- 33. Forman, S.D., Dougherty, G.G., Casey, B.J., Siegle, G.J., Braver, T.S., Barch, D.M., Stenger, A.V., Wick-Hull, C., Pisarov, L.A., Lorenson, E. (2004). Opiate addicts lack error-dependent activation of rostral anterior cingulate. Biological Psychiatry, 55, 231-237.
- 34. Reynolds, J.R., Donaldson, D.I., Wagner, A.D., and Braver, T.S. (2004). Item- and tasklevel processes in left inferior prefrontal cortex: Positive and negative correlates of encoding. NeuroImage, 21, 1472-1483.
- 35. Hershey, T., Black, K.J., Hartlein, J., Barch, D.M., Braver, T., Carl, J.L., Perlmutter, J.S. (2004). Cognitive-pharmacological fMRI in Tourette's Syndrome: A pilot study. Biological Psychiatry, 55, 916-925.
- 36. Hershey, T., Black, K.J., Hartlein, J., Braver, T., Barch, D.M., Carl, J.L., Perlmutter, J.S. (2004). Dopaminergic modulation of response inhibition: An fMRI study. Cognitive Brain Research, 20, 438-448.
- 37. Brown, J.W. and Braver, T.S. (2005). Learned predictions of error likelihood in the anterior cingulate cortex. Science, 307, 1118-1121.
- 38. Braver, T.S., Satpute, A.B., Rush, B.K., Racine, C.A and Barch, D.M. (2005). Context processing and context maintenance in healthy aging and early-stage dementia of the Alzheimer's type. Psychology & Aging, 20, 33-46.
- 39. Yarkoni, T., Gray, J.R., Chrastil, E.R., Barch, D.M., Green, L. and Braver, T.S. (2005). Sustained neural activity associated with cognitive control during temporally extended decision making. Cognitive Brain Research, 23, 71-84.
- Rougier, N.P., Noelle, D.C., Braver, T.S., Cohen, J.D., and O'Reilly, R.C. (2005). 40. Prefrontal cortex and flexible cognitive control: Rules without symbols. Proceedings of the National Academy of Sciences.

- 41. Gray, J.R., Burgess, G.C., Schaefer, A., Yarkoni, T., Larsen, R.J., and Braver, T.S. (2005). Personality differences in neural processing efficiency revealed using fMRI. Cognitive, Affective, and Behavioral Neuroscience, 5, 182-190.
- 42. Yarkoni, T. Braver, T.S., Gray, J.R. and Green, L. (2005). Prefrontal brain activity predicts temporally extended decision-making behavior. <u>Journal of the Experimental Analysis of Behavior</u>,84, 537-554.
- 43. Reynolds, J.R., McDermott, K.M., and Braver, T.S. (2006). A direct comparison of anterior prefrontal cortex involvement in episodic retrieval and integration. <u>Cerebral Cortex,16</u>, 519-528.
- 44. Reynolds, J.R., Braver, T.S., Brown, J.W., and van der Stigchel, S. (2006). Computational and neural mechanisms of task-switching. Neurocomputing, 69,1332-1336.
- 45. DePisapia, N. and Braver, T.S. (2006). A model of dual control mechanisms through anterior cingulate and prefrontal cortex interactions. <u>Neurocomputing</u>, 69, 1322-1326.
- 46. Racine, C.A., Barch, D.M., Noelle, D., and Braver, T.S. (2006). The effect of age on rule-based category learning. <u>Aging, Neuropsychology, and Cognition</u>, 13, 411-434
- 47. Rush, B.K., Barch, D.M., and Braver, T.S. (2006). Accounting for cognitive aging: Context processing, inhibition, or processing speed? <u>Aging, Neuropsychology, and Cognition, 13,</u> 588-610
- 48. Paxton, J.L., Barch, D.M., Storandt, M., and Braver, T.S. (2006). Effects of environmental support and strategy training on older adults' use of context. <u>Psychology and Aging</u>, 21, 499-509.
- 49. Schaefer, A., Braver, T.S., Reynolds, J.R., Burgess, G.C., Yarkoni, T., and Gray, J.R., (2006). Event-related amygdala activity predicts working memory performance. <u>Journal of Neuroscience</u>, 26,10120-10128.
- 50. Brown, J.W., Reynolds, J.R. and Braver, T.S. (2007). A computational model of fractionated conflict-control mechanisms in task-switching. <u>Cognitive Psychology</u>, 55, 37-85.
- 51. DePisapia, N., Slomski, J.A., and Braver, T.S. (2007). Functional specializations in lateral prefrontal cortex associated with the integration and segregation of information within working memory. <u>Cerebral Cortex</u>, 17, 993-1006.
- 52. Zacks, J.M., Speer, N.K., Swallow, K.M., Braver, T.S. and Reynolds, J.R. (2007). Event perception: A mind/brain perspective. <u>Psychological Bulletin</u>, 133, 273-293.
- 53. Reynolds, J.R., Zacks, J.M., and Braver, T.S. (2007). A computational model of event

- segmentation from perceptual prediction. Cognitive Science, 31, 613-643.
- 54. Brown, J.W. and Braver, T.S. (2007). Risk prediction and aversion by anterior cingulate cortex. Cognitive, Affective, and Behavioral Neuroscience, 7, 266-277.
- Locke, H.S. and Braver, T.S. (2008). Motivational influences on cognitive control: 55. Behavior, brain activation, and individual differences. Cognitive, Affective, and Behavioral Neuroscience., 8, 99-112
- 56. Brown, J.W. and Braver, T.S. (2008). A computational model of risk, conflict, and individual difference effects in the anterior cingulate cortex. Brain Research, 1202, 99-108.
- 57. DePisapia, N. and Braver, T.S. (2008). Preparation for integration: The role of anterior prefrontal cortex in working memory. Neuroreport, 19,15-19.
- 58. Paxton, J.L., Barch, D.M., Racine, C.A., and Braver, T.S., (2008). Cognitive control, goal maintenance, and prefrontal function in healthy aging. Cerebral Cortex, 18, 1010-1028.
- 59. Emery, L.J., Heaven, T.J., Paxton, J.L., and Braver, T.S. (2008) Age-related changes in neural activity during performance-matched working memory manipulation. NeuroImage, <u>42</u>, 1577-1586.
- 60. Fales, C.L., Barch, D.M., Burgess, G.C., Schaefer, A., Mennin, D.S., Gray, J.R. and Braver, T.S. (2008). Anxiety and cognitive efficiency: Differential modulation of transient and sustained neural activity during a working memory task. Cognitive, Affective, and Behavioral Neuroscience, 8, 239-253.
- Rowe, J.B. Eckstein, D. Braver, T.S. and Owen, A.M. (2008). How reward expectation 61. influences cognition in the human brain. Journal of Cognitive Neuroscience, 20, 1980-1992.
- 62. Shamosh, N.A., DeYoung, A.E., Reis, D.L., Conway, A.R.A., Engle, R.W., Braver, T.S., and Gray, J.R. (2008). Individual differences in delay discounting: Relation to intelligence, working memory and frontopolar cortex. Psychological Science, 19, 904-911.
- 63. Kerns, J.G., Nuechterlein, K.H., Braver, T.S., Barch, D.M. (2008). Executive function component mechanisms and schizophrenia. Biological Psychiatry, 64, 26-33.
- 64. Barch, D.M., Braver, T.S., Carter, C.S., Poldrack, R.A., Robbins, T.W. (2009). CNTRICS final task selection: Executive control. Schizophrenia Bulletin, 35, 115-35.
- 65. Yarkoni, T., Barch, D.M., Gray, J.R., Conturo, T.E., and Braver, T.S. (2009). BOLD correlates of trial-by-trial response time variability in gray and white matter: A multistudy fMRI analysis. PLoS ONE, 4, e4257.

- 66. Reynolds, J.R., West, R., and Braver, T.S. (2009) Distinct neural circuits support transient and sustained processes in prospective memory and working memory. <u>Cerebral Cortex</u>, 19,1208-1221.
- 67. Ruge, H., Meiran, N, and Braver, T.S. (2009). Attention, intention, and strategy in preparatory task control. <u>Neuropsychologia</u>, 47, 1670-1685.
- 68. Braver, T.S., Paxton, J.L., Locke, H.S, and Barch, D.M. (2009). Flexible neural mechanisms of cognitive control within human prefrontal cortex. <u>Proceedings of the National Academy of Sciences</u>, 106, 7351-7356.
- 69. Ruge, H., Goschke, T. and Braver, T.S. (2009). Separating event-related BOLD components within trials: The partial-trial design revisited. Neuroimage, 47, 501-513.
- 70. DeYoung, C.G., Shamosh, N.A., Green, A.E., Braver, T.S. and Gray, J.R. (2009). Intellect as distinct from Openness: Differences revealed by fMRI of working memory. Journal of Personality and Social Psychology, 97, 883-892.
- 71. Jimura, K. and Braver, T.S. (2009). Age-related shifts in brain activity dynamics during task-switching. <u>Cerebral Cortex</u>, 20; 6, 1420-1431.
- 72. Jimura, K., Myerson, J., Hilgard, J., Braver, T.S., and Green, L. (2009). Are people really more patient than animals? Evidence from human discounting of real liquid rewards. <u>Psychonomic Bulletin and Review</u>, 16, 1071-1075.
- 73. Savine, A.C., Beck, S.M., Edwards, B.G., Chiew, K.S., and Braver, T.S. (2010). Enhancement of cognitive control by approach and avoidance motivational states. Cognition and Emotion, 24, 338-356.
- 74. Beck, S.M., Savine, A.C., Jimura, K., Locke, H.S., and Braver, T.S. (2010). Primary and secondary rewards differentially modulate neural activity dynamics during working memory. <u>PLoS ONE</u>, 5, e9251.
- 75. Edwards, B.G., Barch, D.M., and Braver, T.S. (2010). Improving prefrontal cortex function in schizophrenia through focused training of cognitive control. <u>Frontiers in Human Neuroscience: 4, 32</u>.
- 76. Jimura, K., Locke, H.S., and Braver, T.S. (2010). Prefrontal cortex mediation of cognitive enhancement in rewarding motivational contexts. <u>Proceedings of the National Academy of Sciences, 109</u>, 8871-8876.
- 77. Ruge, H. and Braver, T.S. (2010). Anticipating the consequences of action: An fMRI study of intention-based task preparation. <u>Psychophysiology</u>. 47(6):1019-27.
- 78. Chiew, K.S. and Braver, T.S (2010, November). Exploring emotional and cognitive

- conflict using speeded volitional facial expressions. <u>Emotion</u>. Advance online publication. Doi:10.1037/a00119704
- 79. Burgess, G. C. and Braver, T.S. (2010). Neural mechanisms of interference control in working memory: Effects of interference expectancy and fluid intelligence. <u>PLoS ONE</u>, 5(9): e12861.
- 80. Krawetz, A., Braver, T.S., Barch, D.M. and Brown, J.W. (2011). Impaired error-likelihood prediction in medial prefrontal cortex in schizophrenia. Neuroimage, 54,, 1506-1517.
- 81. Chiew, K.S. and Braver, T.S. (2011). Neural circuitry of emotional and cognitive conflict revealed through facial expressions. <u>PLoS ONE: e17635.</u>
- 82. Jimura, K., Myerson, J., Hilgard, J., Braver, T.S., and Green, L. (2011). Domain-independence and stability in younger and older adult discounting of delayed rewards. Behavioral Processes, 87, 253-259.
- 83. Burgess, G. C., Conway, A.R.A., Gray, J.R. and Braver, T.S. (2011). Neural mechanisms of interference control explain the relationship between fluid intelligence and working memory span. <u>Journal of Experimental Psychology: General</u>, 140, 674-692.
- 84. Bugg, J.M., McDaniel, M.A., Scullin, M.K., Braver, T.S. (2011). Revealing list-level control in the Stroop task by uncovering its benefits and a cost. <u>Journal of Experimental Psychology</u>: Human Perception and Performance, 37, 1595-1606.
- 85. Chiew, K.S. and Braver, T.S. (2011). Positive affect versus reward: Emotional and motivational influences on cognitive control. <u>Frontiers in Psychology</u>, 2, 279.
- 86. Cole, M.W., Etzel, J.A., Zacks, J.M., Schneider, W. and Braver, T.S. (2011). Rapid transfer of abstract rules to novel contexts in human lateral prefrontal cortex. Frontiers in Human Neuroscience, 5, 142.
- 87. Westbrook, A., Martins, B.S., Yarkoni, T., and Braver, T.S. (2012). Strategic insight and age-related goal neglect influence risky decision-making. Frontiers in Neuroscience, 6, 68.
- 88. Braver, T.S. (2012). The variable nature of cognitive control: A dual-mechanisms framework. <u>Trends in Cognitive Sciences</u>, 16, 106-113.
- 89. Reynolds, J.R., O'Reilly, R.C., Cohen, J.D., and Braver, T.S. (2012). The functional organization of lateral prefrontal cortex. A test of competing hypotheses. <u>PLoS ONE</u>, <u>7(2)</u>: e30284.
- 90. Cole, M.W., Yarkoni, T., Repovs, G., Anticevic, A., and Braver, T.S. (2012). Global connectivity of prefrontal cortex predicts cognitive control and intelligence. <u>Journal of Neuroscience</u>, 32, 8988-8999.

- 91. DePisapia, N., Sandrini, M., Braver, T.S., and Cattaneo, L. (2012). Integration in working memory: A magnetic stimulation study on the role of left anterior prefrontal cortex. PLoS ONE.
- 92. Jimura, K., Chushak, M.S., and Braver, T.S. (2013). Impulsivity and self-control during intertemporal decision making linked to the neural dynamics of reward value representation. Journal of Neuroscience, 33, 344-357.
- 93. Chiew, K.S. and Braver, T.S. (2013). Temporal dynamics of motivation-cognitive control interactions revealed by high-resolution pupillometry. <u>Frontiers in Psychology</u>, 4, 15.
- 94. Etzel, J.A., Zacks, J.M., and Braver, T.S. (2013). Searchlight analysis: Promise, pitfalls, and potential. <u>Neuroimage</u>, 78, 261-269.
- 95. Cole, M.W., Reynolds, J.R., Power, J.D., Repovs, G., Anticevic, A., and Braver, T.S. (2013). Multi-task connectivity reveals flexible hubs for adaptive task control. <u>Nature Neuroscience</u>, 16, 1348-1355.
- 96. Westbrook, A., Kester, D., and Braver, T.S. (2013). What is the subjective cost of cognitive effort? Load, trait, and aging effects revealed by economic preference. <u>PLoS ONE</u>, 8(7): e68210.
- 97. McDaniel, M.A., Lamontagne, P., Beck, S.M., Scullin, M.K., and Braver, T.S. (2013). Dissociable neural routes to successful prospective memory. <u>Psychological Science</u>, 23, 1791-1800.
- 98. Cole, M.W., Bassett, D.S., Power, J.D., Braver, T.S., and Petersen, S.E. (2014). Intrinsic and task-evoked network architectures of the human brain. Neuron, 83, 238-251.
- 99. Oksanen, K.M., Waldum, E.R., McDaniel, M.A., and Braver, T.S. (2014). Neural mechanisms of time-based prospective memory: Evidence for transient monitoring. <u>PLoS ONE</u>, 9(3): e92123.
- 100. Chiew, K.S., and Braver, T.S. (2014). Dissociable influences of reward motivation and positive emotion on cognitive control. <u>Cognitive, Affective, and Behavioral Neuroscience</u>, 14, 509-529.
- 101. Jonasson, L.S., Axelsson, J., Riklund, K., Braver, T.S., Ogren, M., Backman, L., and Nyberg, L. (2014). Dopamine release in nucleus accumbens during rewarded task-switching measured by <sup>11</sup>C raclopride. <u>Neuroimage</u>, 99, 357-364.
- 102. Braver, T.S., Krug, M.K., Chiew, K.S., Kool, W., Westbrook, J.A., Clement, N.J., Adcock, R.A., Barch, D.M., Botvinick, M.M., Carver, C.S., Cools, R., Custers, R., Dickinson, A., Dweck, C.S., Fishbach, A., Gollwitzer, P.M., Hess, T.M., Isaacowitz, D.M., Murayama, K., Pessoa, L., Samanez-Larkin, G.R., Somerville, L.H. (2014). Mechanisms of motivation-cognition interaction: challenges and opportunities. Cognitive,

- Affective, and Behavioral Neuroscience, 14, 443-472.
- 103. Botvinick, M.M. and Braver, T.S. (2015). Motivation and cognitive control: From behavior to neural mechanism. Annual Review of Psychology, 66, 83-113.
- Meiran, N., Pereg, M., Kessler, Y., Cole, M.W., and Braver, T.S. (2015). The power of 104. instructions: Proactive configuration of stimulus-response translation. Journal of Experimental Psychology: Learning, Memory, and Cognition, 41, 768-786.
- 105. Meiran, N., Pereg, M., Kessler, Y., Cole, M.W., Braver, T.S. (2015). Reflexive activation of newly instructed stimulus-response rules: Evidence from lateralized readiness potentials. Cognitive, Affective, and Behavioral Neuroscience, 15, 365-373.
- 106. Westbrook, A. and Braver, T.S. (2015). Cognitive effort: A neuroeconomic approach. Cognitive, Affective, and Behavioral Neuroscience, 15, 395-415.
- J.A., Cole, M.W., Zacks, J.M., Kay, K.N., and Braver, T.S. (2015). Reward motivation 107. enhances task coding in frontoparietal cortex. Cerebral Cortex. doi:10.1093/cercor/bhu327
- 108. Cole, M.W., Ito, T., and Braver, T.S. (2015). The behavioral relevance of task information in human prefrontal cortex. Cerebral Cortex. doi:10.1093/cercor/bhv072
- 109. Richmond, L.L., Redick, T.S., Braver, T.S. (2015). Remembering to prepare: The benefits (and costs) of high working memory capacity. <u>Journal of Experimental Psychology:</u> Learning, Memory, and Cognition, 41, 1764-1777. doi:10.1037/xlm0000122.
- Cole, M.W., Ito, T., and Braver, T.S. (2015). Lateral prefrontal cortex contributes to fluid 110. intelligence through multinetwork connectivity. Brain Connectivity, 5,497-504. doi: 10.1089/brain.2015.0357
- 111. Yee, D.M., Krug, M.K., Allen, A.Z, and Braver, T.S. (2016). Humans integrate monetary and liquid incentives to motivate cognitive task performance. Frontiers in Psychology, 6, 2037. doi:10.3389/fpsyg.2015.02037
- 112. Bugg, J.M. and Braver, T.S. (2016). Proactive control of irrelevant task rules during cued task-switching. Psychological Research, 80, 860-876.
- 113. Westbrook, J.A., and Braver, T.S. (2016). Dopamine does double duty in motivating cognitive effort. Neuron, 89, 695-710.
- Chiew, K.S. and Braver, T.S. (2016). Reward favors the prepared: Incentive and task-114. cues interact to enhance attentional control. Journal of Experimental Psychology: Human Perception and Performance, 42, 52-66.
- 115. Gonthier, C., Braver, T.S. and Bugg, J.M. (2016). Dissociating proactive and reactive

- control in the Stroop task. Memory and Cognition, 44: 778-788. doi:10.3758/s13421-016-0591-1
- 116. Gonthier, C., Macnamara, B.N., Chow, M., Conway, A.R., and Braver, T.S. (2016). Inducing Proactive Control Shifts in the AX-CPT. Frontiers in Psychology, 7: 1822. doi: 10.3389/fpsyg.2016.01822
- 117. Jimura, K., Chushak, M., Westbrook, J.A., Braver, T.S. (2017). Intertemporal decisionmaking involves prefrontal control mechanisms associated with working memory. Cerebral Cortex, 1-12. https://doi.org/10.1093/cercor/bhx015
- Cole, M.W., Braver, T.S., and Meiran, N. (2017). The task novelty paradox: Flexible 118. control of inflexible neural pathways during rapid instructed task learning. Neuroscience and Biobehavioral Reviews, 81, 4-15. https://doi.org/10.1016/j.neurobiorev.2017.02.009
- 119. Cooper, S.R., Gonthier, C. Barch, D.M., and Braver, T.S. (2017). The role of psychometrics in individual differences research in cognition: A case study of the AX-CPT. Frontiers in Psychology, 8:1482. doi: 10.3389/fpsyg.2017.01482
- 120. Yee, D.M. and Braver, T.S. (2018). Interactions of motivation and cognitive control. Current Opinion in Behavioral Sciences, 19, 83-90.
- 121. Lamichhane, B., McDaniel, M.A., Waldum, E.R., and Braver, T.S. (2018). Age-related changes in neural mechanisms of prospective memory. Cognitive, Affective, and Behavioral Neuroscience, 18, 982-999. doi.org/10.3758/s13415-018-0617-1
- Singh, M.F., Braver, T.S., Ching, S. (2018). Geometric classification of brain network 122. dynamics via conic derivative discriminatnts. Journal of Neuroscience Methods, 308, 88-105.
- 123. Cole, M.W., Patrick, L.M., Meiran, N., and Braver, T.S. (2018). A role for proactive control in rapid instructed task learning. Acta Psychologica, 184, 20-30. https://doi.org/10.1016/j.actpsy.2017.06.004
- 124. Wang, Y., Braver, T.S., Yin, S., Hu, X., Wang, X., and Chen, A. (2019). Reward improves response inhibition by enhancing attentional capture. Social, Cognitive, and Affective Neuroscience, 14, 35-45.
- 125. Cooper, S.R., Jackson, J.J., Barch, D.M., and Braver, T.S. (2019). Neuroimaging of individual differences: A latent variable modeling perspective. Neuroscience and Biobehavioral Reviews, 98, 29-46.
- 126. Westbrook, J.A., Lamichhane, B., and Braver, T.S. (2019). The subjective value of cognitive effort is encoded by a domain-general valuation network. Journal of Neuroscience, 3071-18. https://doi.org/10.1523/JNEUROSCI.3071-18.2019

- 127. Yee, D.M., Adams, S.L., Beck, A. and Braver, T.S. (2019). Age-related differences in motivational integration and cognitive control. <u>Cognitive</u>, <u>Affective</u>, and <u>Behavioral Neuroscience</u>, 19, 692-714. https://doi.org/10.3758/s13415-019-00713-3
- 128. Di Rosa, E., Brigadoi, S., Cutini, S., Tarantino, V., Dell'Acqua, R., Mapelli, D., Braver, T.S., and Vallesi, A. (2019). Reward motivationa and neurostimulation interact to improve working memory in healthy older adults: A simultaneous tDCS-fNIRS study. Neuroimage, 202, 116062.
- 129. Culbreth, A.J., Westbrook, J.A., Braver, T.S. and Barch, D.M. (2020). Effort in daily life: Relationships between experimental tasks and daily experience. <u>Motivation Science</u>, 6, 303. <a href="https://doi.org/10.1037/mot0000159">https://doi.org/10.1037/mot0000159</a>
- 130. Etzel, J.A., Courtney, Y., Carey, C.E., Agarwal, A., and Braver, T.S. (2020). Pattern similarity analysis of frontoparietal task coding: Individual variation and genetic influences. Cerebral Cortex, 30, 3167-3183. https://doi.org/10.1101/642397
- 131. Lamichhane, B., Westbrook, A., Cole, M.W., and Braver, T.S. (2020). Exploring brain-behavior relationships in the N-back task. <a href="Neuroimage.212">Neuroimage.212</a>, 116683. <a href="https://doi.org/10.1016/j.neuroimage.2020.116683">https://doi.org/10.1016/j.neuroimage.2020.116683</a>
- 132. Lamichhane, B., Di Rosa, E., Green, L., Myerson, J., and Braver, T.S. (2020). Examining delay of gratification in healthy aging. <u>Behavioral Processes</u>, 176, 104125. <a href="https://doi.org/10.1016/j.beproc.2020.104125">https://doi.org/10.1016/j.beproc.2020.104125</a>
- 133. Tang, R., and Braver, T.S. (2020). Towards an individual differences perspective in mindfulness training research: Theoretical and empirical considerations. <u>Frontiers in Psychology</u>, 11, 818. <a href="https://doi.org/10.3389/fpsyg.2020.0818">https://doi.org/10.3389/fpsyg.2020.0818</a>
- 134. Tang, R., and Braver, T.S. (2020). Predicting individual preferences in mindfulness techniques using personality traits. <u>Frontiers in Psychology</u>, 11, 1163. <a href="https://doi.org/10.3389/fpsyg.2020.01163">https://doi.org/10.3389/fpsyg.2020.01163</a>
- 135. Crawford, J.L., Yee, D.M., Hallenbeck, H.W., Naumann, A., Shapiro, K., Thompson, R.J., and Braver, T.S. (2020). Dissociable effects of monetary, liquid, and social incentives on motivation and cognitive control. <a href="https://doi.org/10.3389/fpsyg.2020.02212">Frontiers in Psychology, 11, 2212</a>. <a href="https://doi.org/10.3389/fpsyg.2020.02212">https://doi.org/10.3389/fpsyg.2020.02212</a>
- 136. Singh, M.F., Braver, T.S., Cole, M.W. and Ching, S. (2020). Estimation and validation of individualized dynamic brain models with resting state fMRI. Neuroimage, 221, 117046. https://doi.org/10.1016/j.neuroimage.2020.117046
- 137. Singh, M.F., Wang, A., Braver, T.S., and Ching, S. (2020). Scalable surrogate deconvolution for identification of partially-observable systems and brain modeling.

  Journal of Neural Engineering, 17, 046025. https://doi.org/10.1088/1741-2552/aba07d

- 138. Tang, R., Broderick, P., Bono, T., Dvorakova, K. and Braver, T.S. (2021). A college firstyear mindfulness seminar to enhance psychological well-being and cognitive function. Journal of Student Affairs Research and Practice, 58, 437-4581. https://doi.org/10.1080/19496591.2020.1740719
- 139. McLaughlin, D.J., Peelle, J.E., Braver, T.S. (2021). Measuring the subjective cost of listening effort using a discounting task. Journal of Speech, Language, and Hearing Research, 64, 337-347. https://doi.org/10.1044/2020 JSLHR-20-00086
- 140. Crawford, J. L., Eisenstein, S.A., Peelle, J.A., and Braver, T.S. (2021). Domain-general cognitive motivation: Evidence from economic decision-making. Cognitive Research: Principles and Implications, 6, 1-9. https://doi.org/10.1186/s41235-021-00272-7
- 141. Freund, M.C., Etzel, J.A., and Braver, T.S. (2021). Neural coding of cognitive control: The representational similarity analysis approach. Trends in Cognitive Sciences, 25, 622-638. https://doi.org/10.1016/j.tics.2021.03.011
- 142. Yee, D.M., Crawford, J.L., Lamichhane, B., and Braver, T.S. (2021). Dorsal anterior cingulate cortex encodes the integrative incentive motivational value of cognitive task performance. Journal of Neuroscience, 41, 3707-3720. https://doi.org/10.1523/JNEUROSCI.2550-20.2021
- 143. Braver, T.S., Kizhner, A., Tang, R., Freund, M.C., and Etzel, J.A. (2021). The dual mechanisms of cognitive control project. Journal of Cognitive Neuroscience, 33, 1990-2015. https://doi.org/10.1162/jocn\_a\_01768
- Freund, M.C., Bugg, J.M., and Braver, T.S. (2021). A representational similarity analysis 144. of cognitive control during color-word Stroop. Journal of Neuroscience, 41, 7388-7402. https://doi.org/10.1523/JNEUROSCI.2956-20.2021
- 145. Tang, R., Etzel, J.A., Kizhner, A. & Braver, T.S. (2021). Frontoparietal similarity analysis of cognitive control in monozygotic twins. Neuroimage, 118415. https://doi.org/10.1016/j.neuroimage.2021.118415
- 146. Li, Y.P., Cooper, S.R., and Braver, T.S. (2021). The role of neural load effects in predicting individual differences in working memory function. Neuroimage, 118656. https://doi.org/10.1016/j.neuroimage.2021.118656
- Lin, Y., Tang, R., and Braver, T.S. (2021). Investigating mindfulness influences on 147. cognitive function: On the promise and potential of converging research strategies. Psychonomic Bulletin & Review, 1-25. https://doi.org/10.3758/s13423-021-02008-6
- 148. Crawford, J.C., English, T., Braver, T.S. (in press). Incorporating ecological momentary assessment into multi-level investigations of adult development and aging: Promise and practical considerations. Psychology and Aging.

149. Singh, M.F., Wang, A., Cole, M.W., Ching, S.N., and Braver, T.S. (in press). Enhancing task fMRI preprocessing via individualized model-based filtering of intrinsic activity dynamics. Neuroimage.

# **Book Chapters**

- 1. Braver, T. S., Cohen, J. D., and Servan-Schreiber, D. (1995). A computational model of prefrontal cortex function. In D. S. Touretzky, G. Tesauro, and T. K. Leen (Eds.)

  <u>Advances in Neural Information Processing Systems</u>, (Vol. 7, pp. 141-148). MIT Press: Cambridge, MA.
- 2. O'Reilly, R.C., Braver, T.S., and Cohen, J.D. (1999). A biologically-based computational model of working memory. In Miyake, A. and Shah, P. (Eds.) <u>Models of Working Memory: Mechanisms of active maintenance and executive control.</u> (pp. 102-134). Cambridge, U.K.: Cambridge University Press.
- 3. Buckner, R. L. and Braver, T.S. (1999). Event-related functional MRI. In Bandettini, P. and Moonen, C. (Eds.) <u>Functional MRI.</u> (pp. 441-452). Springer-Verlag: Germany.
- 4. Braver, T.S., and Cohen, J.D. (2000). On the control of control: The role of dopamine in regulating prefrontal function and working memory. In Monsell, S. and Driver, J. (Eds.) <a href="Attention and Performance XVIII.">Attention and Performance XVIII.</a> (pp. 713-737). Cambridge, MA: MIT Press.
- 5. Braver, T.S., Barch, D.M., and Cohen, J.D. (2002). The role of prefrontal cortex in normal and disordered cognitive control: A cognitive neuroscience perspective. In Stuss, D.T. and Knight, R.T. (Eds.) <u>Principles of Frontal Lobe Function.</u> (pp. 428-448). Oxford: Oxford University Press.
- 6. Gray, J. R., and Braver, T. S. (2002). Integration of emotion and cognitive control in lateral prefrontal cortex: A neurocomputational hypothesis. In S. C. Moore and M. R. Oaksford (Eds.) Emotional cognition (pp. 289-316). Amsterdam/Philadelphia: John Benjamins.
- 7. Braver, T.S. (2003). Working memory. In Byrne, J.H. (Ed.) <u>Learning and Memory</u>, <u>Second Edition</u>. New York: Macmillan Reference USA.
- 8. McDermott, K.B. and Braver, T.S. (2004). The next step: Faculty position or postdoctoral fellowship? In M. Zanna, J.Darley, and H.L. Roediger (Eds.) <u>The Compleat Academic: A Practical Guide for the Beginning Social Scientist, 2nd Edition</u> (pp.17-30). Washington DC: APA Press.
- 9. Botvinick, M.M., Braver, T.S., Yeung, N., Ullsperger, M., Carter, C.S., Cohen, J.D.

- (2004). Conflict monitoring: Computational and empirical studies. In Posner, M.I. (Ed.), Cognitive Neuroscience of Attention. (pp. 91-102). New York: Guilford Press.
- 10. Gray, J.R., Schaefer, A., Braver, T.S., and Most, S.B. (2005). Affect and the resolution of cognitive control dilemmas. In Feldman-Barrett, L., Niedenthal, P., Winkielman, P. (Eds.) Emotion: Conscious and unconscious. (pp. 67-94). New York: Guildford Press.
- Barch, D.M. and Braver, T.S. (2005). Cognitive control in schizophrenia: Psychological 11. and neural mechanisms. In Engle, R. W., Sedek, G., von Hecker, U., & McIntosh, D. N. (Eds). Cognitive Limitations in Aging and Psychopathology: Attention, Working Memory, and Executive Functions. Cambridge, U.K.: Cambridge University Press.
- 12. Braver, T.S. and Ruge, H. (2006) Functional neuroimaging of executive functions. In Cabeza, R. and Kingstone, A. (Eds.) Handbook of Functional Neuroimaging of Cognition. (pp. 307-347). Cambridge, MA: MIT Press.
- 13. Braver, T.S. (2007). Working memory. In Smith, E.E. and Kosslyn, S.M. (Eds.) Cognition: Mind and Brain. (pp.239-297). New York: Prentice Hall.
- 14. Braver, T.S., Gray, J.R., Burgess, G.C. (2007). Explaining the many varieties of working memory variation: Dual mechanisms of cognitive control. In Conway, A., Jarrold, C., Kane, M., Miyake, A., Towse, J. (Eds.) Variation in Working Memory. (pp. 76-106). Oxford: Oxford University Press.
- 15. Ruge, H. and Braver, T.S. (2007). Neural mechanisms of cognitive control in taskswitching: Preparation, representation, and rules. In Bunge, S.A. and Wallis, J.D. (Eds.). The Neuroscience of Rule-Guided Behavior (pp.255-283). Oxford University Press: New York, NY.
- Braver, T.S. and West, R.L. (2008). Working memory, executive processes, and aging. 16. In Craik, F. I., and Salthouse, T.L. (Eds.). Handbook of Aging and Cognition, 3rd Edition (pp.311-372). Lawrence Erlbaum Associates.: New York, NY.
- 17. Braver, T.S., DePisapia, N., and Repovs. G. (2008). Computational models of attention and cognitive control. In Sun, R. (Eds.) Cambridge Handbook of Computational Cognitive Modeling (pp.422-450). Cambridge University Press: Cambridge, MA.
- 18. Locke, H.S. and Braver, T.S. (2010). Motivational influences on cognitive control: A cognitive neuroscience perspective. In, Hassin, R., Ochsner, K. and Trope, Y. (Eds.). From Society to Brain: The New Sciences of Self Control (pp.114-140). Oxford University Press: Oxford UK.
- Yarkoni, T. and Braver, T.S. (2010). Cognitive neuroscience approaches to individual 19. differences in executive control: Conceptual and methodological issues. In Mathews, G., Szymura, B. and Gruszka, A. (Eds.) The Handbook of Individual Differences in Cognition: Attention, Memory, and Cognitive Control (pp. 87-107). Springer Press: New

- 20. Meiran, N., Cole, M.W., and Braver, T.S. (2013). When planning results in loss of control: Intention-based reflexivity and proactive control. In Seebab, G., Schmitz, M., and Gollwitzer, P.M. (Eds.). <u>Acting Intentionally and Its Limits: Individuals, Groups, Institutions.</u> Walter de Gruyter GmbH: Berlin, Germany.
- 21. Krug, M.K. and Braver, T.S. (2014). Motivation and cognitive control: Going beyond monetary incentives. In Bijleveld, E. and Aarts, H. (Eds.) <u>The Psychological Science of Money</u>. Springer Press: New York, NY.
- 22. Chiew, K.S. and Braver, T.S. (2017). Context processing and cognitive control: From gating models to dual mechanisms. In Egner, T. (Eds.) <u>Wiley Handbook of Cognitive Control (pp. 143-166)</u>. J.S. Wiley and Sons: Chichester, U.K.
- 23. Yee, D.M. and Braver, T.S. (2020). Computational models of cognitive control: Past and current approaches. In Series, P. (Ed.) <u>Computational Psychiatry (pp. 83-104)</u>. MIT Press: Boston, MA.
- 24. Yee, D.M. and Braver, T.S. (in press). Neurocomputational models of cognitive control. In Sun, R. (Eds.) <u>Cambridge Handbook of Computational Cognitive Modeling.</u>

# **Invited Reviews, Editorials and Commentaries**

- 1. Cohen, J.D., Dunbar, K., Barch, D.M. and Braver, T.S. (1997). Issues concerning relative speed of processing hypotheses, schizophrenic performance deficits, and prefrontal function: Comment on Schooler et al. (1997): <u>Journal of Experimental Psychology</u>: General, 126, 37-41.
- 2. Barch, D.M., Braver, T.S., Cohen, J.D. and Servan-Schreiber, D. (1998). Context processing deficits in schizophrenia: A reply to Strata, et al. <u>Archives of General Psychiatry</u>, 55, 187-188.
- 3. Cohen, J.D., Braver, T.S., and Brown, J.W. (2002). Computational perspectives on dopamine function in prefrontal cortex. <u>Current Opinion in Neurobiology</u>, 12, 223-229.
- 4. Gray, J.R., and Braver, T.S. (2002). Cognitive control in altruism and self-control: A social cognitive neuroscience perspective. Commentary on Rachlin. <u>Brain and Behavioral Sciences</u>, 25, 260.
- 5. Braver, T.S. and Brown, J.W. (2003). Principles of pleasure prediction: Specifying the neural dynamics of human reward learning. <u>Neuron</u>, 38, 150-152.
- 6. Barch, D.M. and Braver, T.S. (2003). When the rubber meets the road: The importance

- of implementation. Commentary on Phillips and Silverstein. <u>Brain and Behavioral Sciences</u>, 26, 83-84.
- 7. Thompson-Schill, S.L, Braver, T.S., and Jonides, J. (2005). Individual differences. Editorial to Special Issue. <u>Cognitive, Affective and Behavioral Neuroscience</u>, 5, 115-116.
- 8. Burgess, G.C., Braver, T.S., and Gray, J.R. (2006). Exactly how are fluid intelligence, working memory, and executive function related? Cognitive neuroscience approaches to investigating the mechanisms of fluid cognition. Commentary on Blair. <u>Brain and Behavioral Sciences</u>, 29,128-129.
- 9. Braver, T.S. and Barch, D.M. (2006). Extracting core components of cognitive control. <u>Trends in Cognitive Sciences</u>, 10, 529-532.
- 10. Ridderinkhof, K.R., Nieuwenhuis, S. and Braver, T.S.. (2007). Medial frontal cortex function: An introduction and overview. Editorial to Special Issue. <u>Cognitive</u>, <u>Affective and Behavioral Neuroscience</u>, 7, 261-265.
- 11. Braver, T.S., Cole, M.W. and Yarkoni, T. (2010). Vive les differences! Individual variation in the neural mechanisms of executive control. <u>Current Opinion in Neurobiology</u>, 20, 242-250.
- 12. Chiew, K.S. and Braver, T.S. (2011). Monetary incentives improve performance, sometimes: Speed and accuracy matter, and so might preparation. <u>Frontiers in Human Neuroscience</u>, 2, 325.
- 13. Westbrook, J.A., and Braver, T.S. (2013). The economics of cognitive effort. Commentary on Kurzban et al. <u>Brain and Behavioral Sciences</u>, 36, 704-705.
- 14. Westbrook, J.A., Cools, R. and Braver, T.S. (2019). Editorial to Special Issue on Cognitive Effort. Neuropsychologia, 123, 1-4.
- 15. Di Rosa, E., Braver, T.S., Mapelli, D. & Edelstyn, N. (2021). Motivation-cognition interaction: From neurocognitive models to clinical applications. Editorial to Research Topic. Frontiers in Psychology, 12.
- 16. Braver, T.S., and Braver, S.L. (in press). We must be Braver about the generalizability crisis. Commentary on Yarkoni. <u>Brain and Behavioral Sciences</u>

#### **Preprints (Submitted)**

1. Crawford, J., English, T., Braver, T.S. (2020). Incorporating ecological momentary assessment into multi-level investigations of adult development and aging: Promise and practical considerations. <a href="https://doi.org/10.31234/osf.io/pc8tj">PsyArXiv. https://doi.org/10.31234/osf.io/pc8tj</a>

- 2. Singh, M.F., Wang, A., Cole, M.W., Ching, S., Braver, T.S. (2020). Enhancing task fMRI preprocessing via individualized model-based filtering of intrinsic activity dynamics. bioRxiv. https://doi.org/10.1101/2020.12.10.420273
- 3. Etzel, J.A., Brough, R., Freund, M.C., Kizhner, A., Lin, Y., Singh, M.F., Tay, A., Wang, A., and Braver, T.S. (2021). The dual mechanisms of cognitive control dataset: A theoretically-guided within-subject task fMRI battery. <u>bioRxiv</u>.
- 4. Yee, D.M., Leng, X., Shenhav, A., and Braver, T.S. (2021). Aversive motivation and cognitive control: Neural, monaminergic, and computational mechanisms. <u>PsyArXiv.</u>

#### MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

Cognitive Neuroscience Society
Society for Neuroscience
Association for Psychological Science
American Psychological Association
Psychonomic Society
Organization for Human Brain Mapping

#### PROFESSIONAL EXPERIENCE

# **Editorial Board**

Cognitive, Affective, and Behavioral Neuroscience - Consulting Editor 2000-2007

Cognitive, Affective, and Behavioral Neuroscience – Guest Editor, Special Issue on Individual Differences, 2005

Cognitive, Affective, and Behavioral Neuroscience – Guest Editor, Special Issue on Medial Frontal Cortex Function, 2007

Cognitive, Affective, and Behavioral Neuroscience - Associate Editor, 2007-2014

Cognitive, Affective, and Behavioral Neuroscience – Consulting Editor, 2014-Present

Frontiers in Computational Neuroscience – Editorial Board, 2012-Present

Motivation Science - Editorial Board, 2014-Present

Neuropsychologia – Guest Editor, Special Issue on Cognitive Effort, 2019

Cognitive, Affective, and Behavioral Neuroscience – New Editor Search Committee Chair, 2020

Frontiers in Neuroimaging - Speciality Chief Editor, 2021-Present

#### **Grant Reviews**

National Institutes of Health - NCCIH Scientific Advisory Council 2019-2023

National Institutes of Health - Multi-Council Working Group (BRAIN Initiative) 2019-2023

National Institutes of Health – F02B (NRSA), Ad Hoc Reviewer

National Institutes of Health – IFCN-8 (COG), Ad Hoc Reviewer, 2003, 2004 <u>Study Section Member 2006-2010</u>

National Institutes of Health - NCCIH Scientific Advisory Council 2019-2023

National Science Foundation - Cognitive Neuroscience Section, Ad Hoc Reviewer

National Institutes of Health – Cognition and Perception (CP) Ad Hoc Reviewer

National Institutes of Health – Special Emphasis Fellowship Panel (Cognition and Perception), Ad Hoc Reviewer 2005

National Institutes of Aging – Special Emphasis Panel (Aging, Neuroimaging and Cognition)

National Institute of Mental Health – Ad Hoc Reviewer, 2010-Present (2-4 reviews / year)

McGuigan Dissertation Research Award – Review Committee (2012-Present)

Netherlands Organization for Scientific Research (NWO), Outside Expert Reviewer 2003-Present

(2-3 reviews / year)

Israeli Science Foundation, Outside Expert Reviewer, 2012-Present (1-2 reviews / year)

FWO (Belgian Science Foundation), Outside Expert Reviewer, 2013-Present (2-3 reviews / year)

FNRS (French Science Foundation), Outside Expert Reviewer, 2014-Present (1-2 reviews / year)

# **Journal Reviewer**

American Journal of Psychiatry, Biological Psychiatry, Brain Research, Behavioral Neuroscience, Cognitive, Affective & Behavioral Neuroscience, Cognitive Brain Research, Cerebral Cortex, Current Opinion, Frontiers, Journal of Cognitive Neuroscience, Journal of Experimental Psychology: General, Journal of Experimental Psychology: Learning, Memory, and Cognition, Journal of Personality and Social Psychology, Journal of Neuroscience, Journal of Neurophysiology, Journal of Neuropsychiatry and Clinical Neurosciences, Human Brain Mapping, Memory and Cognition, Nature Human Behavior, Nature Reviews Neuroscience, Nature Neuroscience, Neural Networks, NeuroImage, Neuron, Neuropsychologia, Neuropsychology, Proceedings of the National Academy of Sciences, Psychonomic Bulletin and Review, Psychological Bulletin, Psychological Review, Psychological Science, Psychophysiology, Psychology & Aging, Science, Scientific Reports, Trends in Cognitive Sciences

# **Professional Organization**

American Psychological Society Program Committee, Neuroscience Division 2004-2007

#### **DEPARTMENTAL/ UNIVERSITY SERVICE:**

Cognitive Search Committee	1998-1999
Image Analysis Center Committee	1998-Present
Undergraduate Advising	1998-Present
Functional Neuroimaging Brown Bag, Co-Organizer	1999-2000
Graduate Recruiting Committee	2001-Present
Graduate Student Admissions Interviews, Neuroscience Program	2002-Present
Faculty Associate, Residential Life Program	2003-2004
Common Reading Program, Faculty Leader	2004-Present
Steering Committee, Cognitive Computational & Systems Neuroscience	2004-2017
Behavioral Neuroscience Search Committee	2006-2007
Image Analysis Center, Director	2007-2012
Neuroscience Strategic Planning Committee	2007-2008
PERCSS Task Force	2008-2011
Neuroscience Qualifying Exam Committee	2009-Present
BJC / ICTS Grant Review Panel	2013-Present
Psychology Department Undergraduate Committee	2014-Present
WUSTL Strategic Planning Committee	2015-2018
WUSTL Faculty Fellow	2015-2019
Co-Director, Cognitive Computational & Systems Neuroscience	2018-Present
WUSTL Prison Education Program	2018-Present
WUSTL Cognitive Neuroscience Search Committee	2018-2019
Undergraduate Cognitive Neuroscience Major Coordinator	2015-Present
P & BS Diversity, Equity & Inclusion Committee	2019-Present
WUSTL Research Advisory Board	2020-Present
WUSTL Mindfulness Working Group	2019-Present

# TALKS & PRESENTATIONS

# **Invited Colloquia**

1996	University of Pittsburgh, Medical School
1997	State University of New York, Stony Brook Washington University University of Texas University of Colorado University of California, Santa Barbara University of Minnesota Stanford University
2003	University of Missouri, Columbia University of Illinois, Urbana-Champaign
2004	University of California, San Diego Arizona State University University of Pittsburgh, Center for Neural Basis of Cognition
2005	University of Michigan, Ann Arbor (fMRI Center) Yale University CNRS, Lyon France Trinity University, Dublin Ireland
2006	MRC Cognition and Brain Unit, Cambridge England University College London, England University of Cardiff, Wales University of Amsterdam, Netherlands Oxford University, England University of Cambridge, England University of Paris, France Johns Hopkins University Gatsby Institute of Computational Neuroscience, London
2007	Washington University, Medical School University of Greifswald, Germany Dresden University, Germany
2008	University of Arizona University of Newcastle, Australia New York University

2009	Princeton University University of California, Davis
2010	Duke University University of Maryland (Keynote Address) NIDA-IRB
2011	Washington University, St. Louis Neurobiology Colloquium MIT
2012	University of Pennsylvania, CIRNA Washington University, St. Louis, ADRC
2013	University of California San Diego University of Texas, Dallas
2014	Vanderbilt University Ben Gurion University, Israel Dresden University, Germany Johns Hopkins University Indiana University University of Grenoble, France
2015	New York University Princeton University Southern Illinois University
2016	University of Southern California Northwestern University University of Toronto McMaster University (Hamilton, CA)
2017	University of Texas, Austin University of Maryland, College Park UC Davis, Psychiatry Hong Kong Polytechnic University University of Alabama Medical School (Grand Rounds)
2018	University College, London VA Medical Center, Columbia Missouri Washington University, St. Louis (BBC Colloquium) Washington University, Medical Resident Training
2019	San Diego State University Washington University Medical School (Grand Rounds) Purdue University, CEREBRAL Keynote Speaker

Southwest University, Chongqing China UT Dallas, Center for Vital Longevity Washington University, Women's Society Lecture

2020 WUSTL ADRC Noon Seminar

2021 Univ. of Colorado, Boulder, Cognitive Science Colloquium

Univ. of California, Davis, Psychotic Disorders Research Conference

# **Invited Symposia and Conference Talks**

Cognitive Science Society Pittsburgh, PA	July, 1995
10th Annual Rotman Research Conference, "The Frontal Lobes" Rotman Research Center, Toronto, ON	March, 2000
Executive Control, Errors, and the Brain, Invited Conference Jena, Germany	September, 2000
Integrated Psychological Science, Invited Conference Indiana University, Bloomington IN	April, 2002
Systems Level Neural Modeling, Invited Conference Ohio State University, Columbus OH	October, 2002
Dopamine and Memory, Invited Conference Rutgers University, Newark NJ	March, 2003
Organization for Human Brain Mapping, Education Course New York, NY	June, 2003
Organization for Human Brain Mapping, Presidential Symposium New York, NY	June, 2003
Computational Neuroscience Society Annual Meeting, Workshops Alicante, Spain	July, 2003
Variation in Working Memory, Invited Conference University of Illinois, Chicago IL	July, 2003
Multidisciplinary Approaches to Prefrontal Cortex Function, Invited Conference, LORIA, Nancy, France	October, 2003

Controlling Thought, Action and Emotion in the Brain Invited Symposium, AERA San Diego	April, 2004
Midwestern Psychological Association Invited Presentation	May, 2004
Adaptive Representation and Control in Vision, Invited Conference University of Rochester	June, 2004
Neurocognitive Bases of Task-Control, Invited Workshop Max Planck Institute, Leipzig Germany	June, 2004
Summer School on Cognitive Neuroscience of Working Memory Invited Speaker, Bled, Slovenia	July, 2004
American Psychological Association Invited Speaker, Honolulu Hawaii	July, 2004
Society for Neuroscience, Chair of Invited Symposium San Diego, CA	October, 2004
Betty Behrens Conference on Self-Regulation Invited Speaker, Cambridge, England	August, 2005
First Annual Conference, Slovenia Neuroscience Association Invited Speaker, Ljubljana Slovenia	November, 2005
Anterior Prefrontal Cortex Function Invited Symposium, Experimental Psychology Society, London En	January, 2006 ngland
Invited Conference on Learning Processes in Schizophrenia Invited Speaker, London England	March, 2006
Flexible Remembering: From Aging and Memory to Thinking Invited Symposium, American Psychological Science Conference	May, 2006 New York City
International Society for Behavioral Neuroscience Invited Speaker, Bath England	July, 2006
CNTRICS Conference on Cognition in Schizophrenia Invited Speaker: Executive Control, Washington D.C.	February, 2007
Tsinghua University – Washington University Joint Conference On Philosophy-Neuroscience-Psychology Invited Speaker, Beijing China	July, 2007

Insights from memory studies into basic functions of anterior PFC Invited Symposium, MDRS Cambridge England	September, 2007
CNTRICS Third Conference on Cognition in Schizophrenia Invited Speaker: Executive Control, Sacramento, CA	March, 2008
Neurocognitive approaches to control and working memory Invited Speaker, Leiden Netherlands	May, 2008
Context processing in older adults: Neural mechanisms and potential for enhancement Invited Symposium, MDRS St. Louis, MO	September, 2008
NIA Workshop on Neuroeconomics of Aging Invited Speaker, Evanston, IL	September, 2009
NIDA Workshop on Aging, Motivation and Addiction Invited Speaker, Washington D.C.	October, 2009
Nordic Brain Science Annual Meeting Keynote Speaker, Saint Petersburg Russia	June, 2010
Utah Symposium on Extraordinary Multi-tasking Ability Invited Speaker, Salt Lake City Utah	March, 2011
• • • • • • • • • • • • • • • • • • • •	March, 2011 May, 2011
Invited Speaker, Salt Lake City Utah  5th Annual "Conflicts as Signals" Conference	
Invited Speaker, Salt Lake City Utah  5th Annual "Conflicts as Signals" Conference Invited Speaker, Berlin Germany  Summer Institute for Cognitive Neuroscience	May, 2011
Invited Speaker, Salt Lake City Utah  5th Annual "Conflicts as Signals" Conference Invited Speaker, Berlin Germany  Summer Institute for Cognitive Neuroscience Invited Speaker, Santa Barbara CA  Mechanisms of Motivation, Cognition and Aging Interactions	May, 2011  June, 2011
Invited Speaker, Salt Lake City Utah  5th Annual "Conflicts as Signals" Conference Invited Speaker, Berlin Germany  Summer Institute for Cognitive Neuroscience Invited Speaker, Santa Barbara CA  Mechanisms of Motivation, Cognition and Aging Interactions Panel Leader, Organizer  International Conference on Cognitive and Neural Systems.	May, 2011  June, 2011  May, 2013
Invited Speaker, Salt Lake City Utah  5th Annual "Conflicts as Signals" Conference Invited Speaker, Berlin Germany  Summer Institute for Cognitive Neuroscience Invited Speaker, Santa Barbara CA  Mechanisms of Motivation, Cognition and Aging Interactions Panel Leader, Organizer  International Conference on Cognitive and Neural Systems. Invited Speaker, Boston University  SiNAPSA Neuroscience conference	May, 2011  June, 2011  May, 2013  June, 2013

Psychonomic Society Invited Symposium Speaker, Chicago, IL	November, 2015
Society for Experimental Psychology New Member, Invited Inaugural Talk, New York, NY	April, 2016
Attention & Performance Annual Meeting Invited Speaker, Corsendonk, Belgium	June, 2016
Control Processes, First Annual Meeting Invited Symposium Speaker, San Diego CA	November, 2016
Association for Psychological Science Invited Symposium Organizer and Discussant, Boston MA	May, 2017
Canadian Psychological Association Master Lecture, Toronto CA	June, 2017
Swiss Summer School on Cognitive Control & Consciousness Invited Instructor & Lecturer, Weggis Switzerland	June, 2017
Cognitive Neuroscience of Executive Functions Invited Conference Speaker	September, 2017
Society for Experimental Psychology Invited Talk, Tucson AZ	April, 2018
Psychonomic Society, International Meeting Invited Symposium Speaker, Amsterdam	May, 2018
American Bar Association, Leadership Meeting Invited Symposium Speaker, St. Louis	July, 2018
International Society for Contemplative Research Invited Speaker, Phoenix	November, 2018
National Academies, Social & Affective Neuroscience Workshop Invited Speaker, Washington D.C.	November, 2019

# RECENT MEDIA APPEARANCES

The Source, WUSTL: Who's in cognitive control (September, 2021) <a href="https://source.wustl.edu/2021/09/whos-in-cognitive-control/">https://source.wustl.edu/2021/09/whos-in-cognitive-control/</a>

TIME Health (August 2020)

https://time.com/5878780/how-to-focus-covid-19-pandemic/

NPR Morning Edition (September, 2019)

https://www.npr.org/sections/health-shots/2019/09/26/764604968/too-much-training-cantax-athletes-brains

Ampersand, WUSTL (February, 2019)

https://artsci.wustl.edu/ampersand/three-reasons-take-trip-michael-pollan

Saint Louis Post-Dispatch (November, 2018)

https://www.stltoday.com/news/local/govt-and-politics/get-ready-for-the-longest-election-dayballot-of-all/article 0c0c8c90-f2cb-5277-9006-4b6f398f0a51.html

Charlie Brennan Radio Show, KMOX: Brain Basis of Self-Control (September, 2018) https://kmox.radio.com/media/audio-channel/september-4th-2018-10-11am

Ampersand, WUSTL: Investigating Mindfulness – A Story in Three Parts (October, 2017) https://artsci.wustl.edu/ampersand/investigating-mindfulness-story-three-parts

The Source, WUSTL: Why did I do that? (August, 2017) https://source.wustl.edu/2017/08/why-did-i-do-that/

Hold That Thought Podcast (March, 2016)

https://thought.artsci.wustl.edu/podcasts/success-motivation-brain

People Behind By The Science Podcast (August, 2014)

http://www.peoplebehindthescience.com/dr-todd-braver/

St. Louis Post Dispatch Interview (March, 2013)

http://www.stltoday.com/lifestyles/health-med-fit/health/health-matters/washingtonuniversity-student-accused-of-faking-research/article\_c366b458-7849-5613-81b6-478c228cb4e4.html

WUSTL News Release (April, 2013)

http://news.wustl.edu/news/Pages/25168.aspx

WUSTL News Release (July, 2012)

http://news.wustl.edu/news/Pages/24068.aspx

NY Times Article (August, 2010)

http://www.nytimes.com/2010/08/16/technology/16brain.html

WUSTL News Release (April, 2010)

http://news.wustl.edu/news/Pages/20657.aspx

#### **TEACHING**

Cognitive Neuroscience (3604/4604), 1998-2009, 2015-Present

Introductory Statistics (300), 1999, 2000

Biological Psychology (3401), 2003, 2004, 2005, 2008

Working Memory and Executive Control (5082), 2000, 2003

Functional Neuroimaging Methods (4450), 2004, 2006, 2007, 2009, 2012, 2015

Computational Modeling in Cognitive Neuroscience (4418), 2001

Advanced Cognitive, Computational and Cognitive Neuroscience (519), 2004-Present

Advanced Cognitive Neuroscience (4413), 2009-Present

Mindfulness: Science and Practice (111; First-Year Seminar), 2016-Present

Mind, Brain & Behavior (120; First-Year Seminar), 2020-Present

#### INTER-DISCIPLINARY ACTIVITIES

Cognitive, Computational, and Systems Neuroscience Graduate Pathway

Founding Member, Steering Committee, Course Organizer, Co-Director

Philosophy, Neuroscience and Psychology Program Course Instructor, Advisory Board 2000-Present

#### STUDENT SUPERVISION

#### **Postdoctoral Fellows**

Jeremy Gray (1999-2003): Currently Associate Professor, Michigan State University Alexandre Schaefer (2003-2006); Currently Lecturer, University of Leeds, England Joshua Brown (2001-2006); NRSA Fellowship; Currently Professor, Indiana University Hannes Ruge (2003-2007); Currently Associate Professor, Dresden University, Germany Nicola de Pisapia (2003-2007); Currently Research Fellow, Center for Mind/Brain Sciences, Trento, Italy

Candice Morey (2007-2008); NRSA Fellowship; Currently Assistant Professor, Experimental and Work Psychology, University of Groningen, Netherlands

Jordan Taylor (2007-2008); Postdoctoral Fellow, University of California Berkeley

Koji Jimura (2008-2010); Uehara Fellowship, Japan; Currently Research Associate Professor, Tokyo Institute of Technology

Mike Cole (2009-2013); K99 Fellowship; Currently Associate Professor at Rutgers University Marie Krug (2010-2013); Currently Staff Scientist, UC Davis

Pamela LaMontagne (2010-2012); Currently Senior Clinical Research Coordinator, Washington University School of Medicine

Bidhan Lamicchane (2015-2019); Currently Staff Scientist, Washington University School of Medicine

Elisa Di Rosa (2018-2019); Marie Curie Fellow, Currently Assistant Professor at University of Padova, Italy

Jeff (Yanli) Lin (2020-Present); NRSA Fellow

# **Graduate Students**

Beth Keys (1998-2001): Currently Staff Neuropsychologist, Mayo Clinic, Jacksonville Florida Nicole Speer (1999-2002); NSF Fellowship; Currently Director of Operations • Intermountain Neuroimaging Consortium, University of Colorado, Boulder

Jeremy Reynolds (2000-2005); NDSEG Fellowship, Currently Global Lead Data Scientist, Microsoft

Greg Burgess (2002-2005); Currently Research Scientist, Washington University School of Medicine

Hannah Sypher (2002-2008); Olin Fellowship, Currently Senior Health Program Analyst, Government Accountability Office

Tal Yarkoni (2003-2009); Currently Research Associate Professor, University of Texas at Austin Jessica Paxton (2003-2009; co-supervised with Deanna Barch & Martha Storandt) Currently Assistant Professor, Roosevelt University

Kimberly Chiew (2007-2013) NSERC Fellowship, Currently Assistant Professor, University of Denver

Andrew Westbrook (2010-2016) NRSA Fellowship, Currently Postdoctoral Research Fellow, Brown University

Debbie Yee (2013-2019); NRSA Fellowship, Currently Postdoctoral Research Fellow, Brown University

Shelly Cooper (2014-2019); Currently Course Instructor, Washington University in St. Louis Matthew Singh (2016-2020); Currently Postdoctoral Research Fellow, WUSTL

Rongxiang Tang (2015-2021) NRSA Fellowship; Currently Postdoctoral Research Fellow, UCSD

Michael Freund (2017-current)

Jenny Crawford (2017-current)

Anxu (Ben) Wang (2021-current)

#### **Doctoral Thesis Committees**

Joe Simpson (2000; Neuroscience Program MSTP)

Beth Keys (2001; Co-Chaired with Professor Deanna Barch)

Rich Hartman (2001)

Dan Weiskopf (2002; PNP Program) Meredith Dodge Melinder (2003)

Lisa Emery (2005)]

Jeremy Reynolds (2005; Chair)

Caroline Racine (2005)

Greg Burgess (2005; Chair)

Clare Kelly (2006; External Examiner, Trinity University, Dublin Ireland) Rosalyn Cowell (2006; External Examiner, Oxford University, England) Jordan Taylor (2007; CCSN Program)

Shefali Brahmbatt (2008)

Hannah Locke (2008; Chair)

Jessica Paxton (2009; Co-Chair with Deanna Barch)

Tal Yarkoni (2009; Chair)

Patrick Brown (2009)

Feng Du (2010)

Alan Anticevic (2010)

Beth Mulligan (2011)

Karla Becerril (2012; Neuroscience Program)

Erin Dowd (2013; Neuroscience Program)

Alan Ceaser (2014)

Yu-Sun Chung (2014)

Katherine Luking (2015; Neuroscience Program)

Joe Dubis (2013, Chair, Neuroscience Program)

Kimberley Chiew (2013; Chair)

Elise Mansfield (2013; University of Newcastle, Australia)

Justin Cox (2014)

Luis Oliveira (2014)

Corentin Gonthier (2014; University of Grenoble, France)

Andrew Westbrook (2016; Chair)

Harry Papadimitriou (2015; Neuroscience Program)

Laura Hennefield (2015)

Vynn Huh (2015)

Arianna Vanderveldt (2016)

Andy Aschenbrenner (2016)

Jue Xie (2016; Neuroscience Program)

Michelle Eisenberg (2017)

Ravi Kudesia (2017)

Julia Sheffield (2017)

Qiuhua Yu (2017; Hong Kong Polytechnic University)

Hank Chen (2018)

Nate Diede (2018)

Adam Culbreth (2018)

Katie Conen (2018; Neuroscience Program)

Matthew Singh (current; Neuroscience Program)

Kael White (2019; Neuroscience Program)

Debbie Yee (2019, chair)

Lindsay Michalski (2019)

Robyn Husa (2020; Saint Louis University)

Montana McKewen (2020; University of Newcastle)

Matthew Singh (2020, chair)

Shelly Cooper (2020, chair)

Katherine Helsey (2020, Neuroscience Program)

Elizabeth Hawkey (2021)

Catherine (Rongxiang) Tang (2021, chair)

Emily Streeper (2021)

Wilbur Shi (current; Neuroscience Program)

Chuck Holmes (current, Neuroscience Program)

Tzvia Pinkhasov (current, Neuroscience Program, chair)

Michael Freund (current, chair)

Jenny Crawford (current, chair)

Jackson Colvett (current)

Abishek Dey (current)

# **Masters Thesis Committees**

Nicole Speer (2000)

Meredith Dodge Melinder (2000)

Jennifer Burbridge (2000)

Carrie Racine (2001)

Jeremy Reynolds (2002)

Stefan van der Stigchel (2003; University of Utrecht)

Hannah Locke (2005)

Tal Yarkoni (2005)

Jessica Paxton (2005)

Adam Savine (2008)

Kimberly Chiew (2008)

Justin Cox (2010)

Andrew Westbrook (2011)

Michelle Eisenberg (2013)

Julia Sheffield (2014)

Adam Culbreth (2015)

Debbie Yee (2015; Chair)

Haijing Wu (2016)

Annette Mankus (2016)

Shelly Cooper (2016; Chair)

Catherine Tang (2017; Chair)

Abishek Dev (2018)

Mary Hermann (2019)

Jackson Colvett (2019)

Michael Freund (2019; Chair)

Jenny Crawford (2019; Chair)

Tan Nguyen (current)

Jack Dolgin (current)

# **Subject Matter Orals / Qualifying Committees**

Beth Keys (1999)

Carrie Racine (2001)

Nicole Speer (2002)

Lisa Emery (2002)

Jeremy Reynolds (2003)

Greg Burgess (2004)

Khena Swallow (2004)

Tara McAuley (2005)

Hannah Locke (2005)

Tal Yarkoni (2007)

Jessica Paxton (2007)

Alan Anticevic (2008)

Ben Anderson (2008)

Ronny Dosenbach (2009; Neuroscience Program)

Katherine Luking (2009; Neuroscience Program)

Jonathan Power (2009; Neuroscience Program)

Heather Wilkins (2010; Neuroscience Program)

Adam Savine (2010)

Kimberly Chiew (2010)

Michael Scullin (2010)

Jonathan Jackson (2011)

Michelle Eisenberg (2013)

Andrew Westbrook (2013; Chair)

Grace Hwang (2015)

Debbie Yee (2016; Chair)

Nathan Diede (2017)

Lindsay Michalski (2017)

Shelly Cooper (2017; Chair)

Aahana Bajracharya (2017; Neuroscience Program; Chair)

Wilbur Shi (2017; Neuroscience Program)

Lauren Koenig (2017; Neuroscience Program)

Shelly Cooper (2017; Chair)

Catherine Tang (2018; Chair)

Marina Gross (2019)

Jenny Crawford (2020, Chair)

Abishek Dev (2020)

Emily Streeper (2020)

Jackson Colvett (2020)

Michael Freund (2021, Chair)

#### **Undergraduate Honors Theses**

Shawn Goozh (1999)

Seema Sikka (2000; PNP Program)

Andrew Jones (2000)

Lisa Rogo (2002; PNP Program)

Julia Keighley (2010; PNP Program)

Lauren Patrick (2014)

Noah Eby (2015)

Jessica Weiss (2015)

Aditya Manirajan (2017; PNP Program)

Roderick Seow (2018; PNP Program)

Peeta Li (2019)

Arvin Sarkissian (2021)

# **Undergraduate Independent Study**

Joshua Bedwell (1999)

Michael Orland (1999)

Debra Sawyer (1999)

Jessica Fivecoat (2000)

Andrew Jones (2000-2002)

Sarah Noonan (2000)

Seema Sikka (2000)

Eric Stokka (2000)

Michael Lawler (2000)

Lisa Rogo (2000-2002)

Bryan Tilton (2000)

Erika Eisenberg (2001)

Mitchell Dornfeld (2001)

Radha Duggal (2001)

Tom Joseph (2001,2002)

Stephanie Hanson (2001)

Amy Kung (2002)

Stefan van der Stigchel (2002)

Jessica Slomski (2003)

Tara Lohr (2003-2005)

Sara Klayton (2004)

Michael Sherling (2004)

Michael Trakhtenbroit (2004)

David Borton (2005)

Joshua Lawrence (2006)

Jacob Greenberg (2007-2008)

Jordan Livingston (2007-2008)

Matthew Smith (2008)

Shayna Makaron (2008)

Sam Moore (2010)

Shoko Otake (2010)

Julie Zhou (2010)

Cameron Smith (2010)

Takuya Ito (2011)

Kevin Oksanen (2011)

Lauren Patrick (2011, 2013)

John Freeman (2011)

Ariel Allen (2013-2014)

Noah Eby (2014)

Harold Lee (2014-2015)

Adam Cohen-Nowak (2014)

Miriam Zawadzki (2014-2015)

Carolyn Dean Wolf (2015-2016)

Asad Beck (2016)

Ya'el Courtney (2016-2017)

Vivek Shah (2016-2018)

Roderick Seow (2016-2017)

Marisa Gong (2016-2017)

Maria Gehred (2017)

Jeremy Delgadillo (2017)

Tyler Kellett (2017)

Katie Shapiro (2016-2018)

Casey Mason (2017-2018)

Monet Davis (2018)

Karen Chen (2018)

Alexa Rakusin (2018)

Gautam Ramanathan (2018-2019)

Issie Davis (2018-2019)

Peter McManus (2019)

Christian Anyawahu (2019)

Jadyn Park (2019)

Matt Witzerman (2019)

Scott Massey (2019-2020)

Quinn Wai Wong (2020-current)

Robert Kimelman (2020-2021, current)

Jada Smith (2020-2021, current)

Alexandra Dram (2021-current)

Deanna Wu (2021-current)

Audra Stump (2021-current)

Usma Rizvi (2021-current)

#### **Full-Time Research Assistants**

David Molfese (1998-2000; shared with Professor Kathleen McDermott)

Sarah Lageman (1998-2001; shared with Professor Kathleen McDermott)

Susan Bongiolatti (1999-2001)

Ajay Satpute (2000-2002)

Andrew Jones (2001-2002)

Christine Hoyer (2001-2004)

Liz Chrastil (2002-2004)

Adrianne Casagrand (2004-2007)

Tim Heaven (2004-2007)

Bethany Edwards (2007-2009)

Joe Hilgard (2007-2009)

Bruna Martins (2009-2011)

Maria Chushak (2009-2011)

Jordan Livingston (2010-2012)

Kevin Oksanen (2011-2017)

Ben Acland (2013-2014)

Sarah Adams (2014-2017)

Leah Newcomer (2015-2017)

Jessica Weiss (2016-2017)

Erin Gourley (2015-2019)

Maria Gehred (2017-2019)

Alex Kizhner (2017-2020)

Anxu Wang (2019-2021)

Allison Tay (2019-current)

Anxu Wang (2019-2021)

Rachel Brough (2020-current)

Becca Feldman (2021-current)