## **DEREK EVAN NEE**

Curriculum Vitae

Florida State University 1107 W. Call St Tallahassee, FL 32306-4301 nee@psy.fsu.edu

## **ACADEMIC POSITIONS**

2023-	Scientific Director, Magnetic Resonance Imaging Facility
2022-	Associate Professor, Florida State University, Tallahassee, FL
2016-2022	Assistant Professor, Florida State University, Tallahassee, FL
	Department of Psychology, Program in Neuroscience
2015-2016	Assistant Project Scientist, University of California, Berkeley, CA
	Helen Wills Neuroscience Institute

## **EDUCATION AND TRAINING**

2012-2015	Post-Doctoral Fellow, University of California, Berkeley, CA
2008-2012	Post-Doctoral Fellow, Indiana University, Bloomington, IN
2008-2012	Post-Doctoral Fellow, University of Michigan, Ann Arbor, MI
2008	Ph.D., Psychology, University of Michigan, Ann Arbor, MI
2003	B.A., Computer Science, Cognitive Science, Dartmouth College, Hanover, NH

## **AWARDS AND HONORS**

2023	Florida State University Developing Scholar Award
2013	Association for Psychological Science "Rising Star"
2008	Patricia Gurin Distinguished Lecture Award
2007	Outstanding Graduate Student Instructor Award
2005	National Science Foundation Graduate Fellowship
2004	American Psychological Foundation and Council of Graduate Departments of
	Psychology Graduate Research Scholarship in Experimental Psychology
2003	Clyde H. Coombs Scholarship in Mathematical Psychology

### **CURRENT SUPPORT**

2024-2028	National Institute of Mental Health, R01 MH131678
	Controlling the Contents of Working Memory
	Pl. Brad Postle: Role: Co-l

PI: Brad Postle; Role: Co-\$64,887 (Sub-Award)

2022-2025 National Institute of Mental Health, R21 MH129653

Manipulating the Reward Circuit with TMS Co-Pls: Derek Evan Nee, Greg Hajcak

\$413,197

2020-2025 National Institute of Mental Health, R01 MH121509

Hierarchical Interactions Supporting Cognitive Control

PI: Derek Evan Nee

\$1,909,994

#### **PAST SUPPORT**

2019-2021 FSU Office of Research and the College of Medicine

Translational Health Research Seed Grant Program

Using Reward-network Guided Transcranial Magnetic Stimulation to Increase Reward

Sensitivity

Co-Pls: Derek Evan Nee, Greg Hajcak

\$50,000

2019-2019 Council on Research and Creativity, Florida State University

Committee on Faculty Research Support Award

Directed Models Supporting Cognitive Control

PI: Derek Evan Nee

\$14,000

2017-2017 Council on Research and Creativity, Florida State University

First Year Assistant Professor Summer Award

Lateral and Medial Prefrontal Cortex Interactions Supporting Cognitive Control

PI: Derek Evan Nee

\$20,000

2012-2015 National Institute of Neurological Disorders and Stroke, F32 NS082069

Characterizing the Role of the Prefrontal Cortex in Cognitive Control

PI: Derek Evan Nee

\$176,682

2012-2014 National Institute of Mental Health, R21 MH098271

Neuroimaging Different Cognitive-Control Processes in Normals and Schizophrenics

Pl: Edward Smith and Chariklia Malapani; Role: Consultant

\$437,450

#### **PUBLICATIONS**

H-Index: 41 (Google Scholar), † indicates 100+ citations

\* denotes equal contributions

#### Refereed Research Articles and Reviews

- 1. Lee, H.J. Smith, D.M., Hauenstein, C., Dworetsky, A. Kraus, B.T., Dorn, M., Nee, D.E., & Gratton, C. (2025). Precise individual measures of inhibitory control. *Nature Human Behaviour*.
- 2. Vogelsang, D.A., Furman, D.J., **Nee, D.E.**, Pappas, I., White, R.L., Kayser, A.S., & D'Esposito, M. (2024). Dopamine modulates effective connectivity in frontal cortex. *Journal of Cognitive Neuroscience*, 36(1), 155-166.
- 3. Wood, J.L. & **Nee, D.E.** (2023). Cingulo-opercular subnetworks motivate fronto-parietal subnetworks during distinct cognitive control demands. *Journal of Neuroscience*, 43(7), 1225-1237.
- 4. Pitts, M. & Nee, D.E. (2022). Generalizing the control architecture of the lateral prefrontal cortex. *Neurobiology of Learning and Memory*, 195, 107688.
- 5. Ryan, J., Pouliot, J.J., Hajcak, G.\*, & **Nee, D.E.\*** (2022). Manipulating reward sensitivity using reward circuit-targeted transcranial magnetic stimulation. *Biological Psychiatry:* Cognitive Neuroscience and Neuroimaging, 7(8), 833-840.
- 6. **Nee, D.E.** (2021). Integrative frontal-parietal dynamics supporting cognitive control. *eLife*, 10, e57244.
- 7. Lorenc, E.S., Vandenbroucke, A.R.E., **Nee, D.E.**, de Lange, F.P., & D'Esposito, M. (2020). Dissociable neural mechanisms underlie currently-relevant, future-relevant, and discarded working memory representations. *Scientific Reports*, 10, 11195.
- 8. D'Mello, A.M., Gabrieli, J.D.E., & **Nee, D.E.** (2020). Evidence for hierarchical cognitive control in the human cerebellum. *Current Biology*, 30, 1-12.
- 9. Huang, X.Y., Rootes-Murdy, K., Bastidas, D.M., **Nee, D.E.\***, & Franklin, J.C.\* (2020). Brain activity associated with self-injurious thoughts and behaviors: A meta-analysis of neuroimaging studies. *Scientific Reports*, 10(1), 1-13.
- 10. † **Nee, D.E.** (2019). fMRI replicability depends upon sufficient individual-level data. *Communications Biology*, 2(130), 1-4.
- 11. † Tambini, A., **Nee, D.E.**, & D'Esposito, M. (2018). Hippocampal-targeted theta-burst stimulation enhances associative memory formation. *Journal of Cognitive Neuroscience*, 30(10), 1452-1472.
- 12. † Oberauer, K., Lewandowsky, S., Awh, A., Brown, G.D.A., Cowan, N., Donkin, C., Farrell, S., Hitch, G.J., Hurlstone, M., Ma, W., Morey, C.C., **Nee, D.E.**, Schweppe, J., Vergauwe, E., & Ward, G. (2018). Benchmarks for models of short-term and working memory. *Psychological Bulletin*, 144(9), 885-958.
- 13. † Lorenc, E.S., Sreenivasan, K., Vandenbroucke, A.R.E., **Nee, D.E.**, & D'Esposito, M. (2018). Flexible coding of visual working memory representations during distraction. *Journal of Neuroscience*, 38(23), 5267-5276.
- 14. Eich, T.S., Goncalves, B.M.M., **Nee, D.E.**, Razlighi, Q.R., Jonides, J., & Stern, Y. (2018). Attentional and memorial inhibitory selection mechanisms in clinically healthy older and younger adults. *Journal of Gerontology Series B: Psychological Sciences and Social Sciences*, 73(4), 612-621.
- 15. † Badre, D. & **Nee, D.E.** (2018). Frontal cortex and the hierarchical control of behavior. *Trends in Cognitive Sciences*, 22(2), 170-188.
- 16. **Nee, D.E.** & D'Esposito, M. (2017). Causal evidence for lateral prefrontal cortex dynamics supporting cognitive control. *eLife*, 6, e28040.

- 17. Cyr, M., Nee, D.E., Nelson, E., Senger, T., Jonides, J., & Malapani, C. (2017). Effects of proactive interference on non-verbal working memory. *Cognitive Processing*, 18(1), 1-12.
- 18. Jahn, A., Nee, D.E., Alexander, W.H., & Brown, J.W. (2016). Distinct regions within medial prefrontal cortex process pain and cognition. *Journal of Neuroscience*, 36(49), 12385-12392.
- 19. † Rahnev, D., Nee, D.E., Riddle, J., Larson, A., & D'Esposito, M. (2016). Causal evidence for frontal cortex organization for perceptual decision-making. *Proceedings of the National Academy of Sciences of the United States of America*, 113(21), 6059-6064.
- 20. † **Nee, D.E.** & D'Esposito, M. (2016). The hierarchical organization of the lateral prefrontal cortex. eLife, 5, e12112.
- 21. **Nee, D.E.**, Jahn, A., & Brown, J.W. (2014). Prefrontal cortex organization: Dissociating effects of temporal abstraction, relational abstraction, and integration with fMRI. *Cerebral Cortex*, 24(9), 2377-2387.
- 22. Eich, T.S., **Nee, D.E.**, Insel, C., Malapani, C., & Smith, E.E. (2014). Neural correlates of impaired control over working memory in schizophrenia. *Biological Psychiatry*, 76(2), 146-153.
- 23. **Nee, D.E.** & Jonides, J. (2014). Frontal-medial temporal interactions mediate transitions among representational states in short-term memory. *Journal of Neuroscience*, 34(23), 7964-7975.
- 24. Jahn, A., **Nee, D.E.**, Alexander, W.H., & Brown, J.W. (2014). Distinct regions of anterior cingulate cortex signal prediction and outcome evaluation. *NeuroImage*, 95, 80-89.
- 25. **Nee, D.E.** & Jonides, J. (2013). Trisecting representational states in short-term memory. *Frontiers in Human Neuroscience*, 7, 796.
- 26. † **Nee, D.E.** & Brown, J.W. (2013). Dissociable frontal-striatal and frontal-parietal networks involved in updating hierarchical contexts in working memory. *Cerebral Cortex*, 23(9), 2146-2158.
- 27. **Nee, D.E.** & Jonides, J. (2013). Neural evidence for a 3-state model of visual short-term memory. *NeuroImage*, 74, 1-11.
- 28. † Nee, D.E., Brown, J.W., Askren, M.K., Berman, M.G., Demiralp, E., Krawitz, A., & Jonides, J. (2013). A meta-analysis of executive components of working memory. *Cerebral Cortex*, 23(2), 264-282.
- 29. † Nee, D.E. & Brown, J.W. (2012). Rostral-caudal gradients of abstraction revealed by multi-variate pattern analysis of working memory. *Neurolmage*, 63, 1285-1294.
- 30. Barch, D.M., Moore, H., Nee, D.E., Manoach, D., & Luck, S. (2012). CNTRICS imaging biomarkers selection: Working memory. *Schizophrenia Bulletin*, 38(1), 43-52.
- 31. Jahn, A., Nee, D.E., & Brown, J.W. (2011). The neural basis of predicting outcomes of planned actions. *Frontiers in Neuroscience*, 5, 128.
- 32. † Berman, M.G., Peltier, S., **Nee, D.E.**, Kross, E., Deldin, P.J., & Jonides, J. (2011). Depression, rumination, and the default network. *Social, Cognitive, and Affective Neuroscience*, 6(5), 548-555.
- 33. † Berman, M.G., Nee, D.E., Casement, M., Kim, H.S., Deldin, P., Kross, E., Gonzalez, R., Demiralp, E., Gotlib, I.H., Hamilton, P., Joormann, J., Waugh, C., & Jonides, J. (2011). Neural and behavioral effects of interference resolution in depression and rumination. *Cognitive, Affective, and Behavioral Neuroscience*, 11(1), 85-96.

- 34. † Nee, D.E. & Jonides, J. (2011). Dissociable contributions of prefrontal cortex and the hippocampus to short-term memory: Evidence for a 3-state model of memory. *NeuroImage*, 54, 1540-1548.
- 35. † Nee, D.E., Kastner, S., & Brown, J.W. (2011). Functional heterogeneity of conflict, error, task-switching, and unexpectedness effects within medial prefrontal cortex. *NeuroImage*, 54, 528-540.
- 36. † Joormann, J., **Nee, D.E.**, Berman, M.G., Jonides, J., & Gotlib, I.H. (2010). Interference resolution in major depression. *Cognitive, Affective, and Behavioral Neuroscience*, 10(1), 21-33.
- 37. Xu, L., Johnson, T.D., Nichols, T.E., & **Nee, D.E.** (2009). Modeling inter-subject variability in fMRI activation location: A Bayesian hierarchical spatial model. *Biometrics*, 65(4), 1041-1051.
- 38. † Barch, D.M., Berman, M.G., Engle, R., Jones, J.H., Jonides, J., Macdonald, A. 3<sup>rd</sup>., **Nee. D.E.**, Redick, T.S., Sponheim, S.R. (2009). CNTRICS final task selection: working memory. *Schizophrenia Bulletin*, 35(1), 136-152.
- 39. Bissett, P.G., **Nee, D.E.**, & Jonides, J. (2009). Dissociating interference-control processes between memory and response. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 35(5), 1306-1316.
- 40. † **Nee, D.E.** & Jonides, J. (2009). Common and distinct neural correlates of perceptual and memorial selection. *Neurolmage*, 45, 963-975.
- 41. **Nee, D.E.**, Berman, M.G., Moore, K.S., & Jonides, J. (2008). Neuroscientific evidence on the distinction between short- and long-term memory. *Current Directions in Psychological Science*, 17, 102-106.
- 42. † Jonides, J., Lewis, R.L., **Nee, D.E.**, Lustig, C.A., Berman, M.G., & Moore, K.S. (2008). The mind and brain of short-term memory. *Annual Review of Psychology*, 59, 193-224.
- 43. † Nee, D.E. & Jonides, J. (2008). Neural correlates of access to short-term memory. Proceedings of the National Academy of Sciences of the United States of America, 105, 14228-14233.
- 44. **Nee, D.E.** & Jonides, J. (2008). Dissociable interference-control processes in perception and memory. *Psychological Science*, 19, 490-500.
- 45. † **Nee, D.E.**, Jonides, J., & Berman, M.G. (2007). Neural mechanisms of proactive interference-resolution. *Neurolmage*, 38, 740-751.
- 46. † **Nee, D.E.**, Wager, T.D., & Jonides, J. (2007). Interference resolution: Insights from a meta-analysis of neuroimaging tasks. *Cognitive, Affective, & Behavioral Neuroscience*, 7(1), 1-17.
- 47. † Jonides, J. & Nee, D.E. (2006). Brain mechanisms of proactive interference in working memory. *Neuroscience*, 139, 181-193.
- 48. Berman, M.G., Jonides, J., & **Nee, D.E.** (2006). Studying the mind and brain with fMRI. Social, Cognitive, & Affective Neuroscience, I, 158-161.
- 49. † Wager, T.D., Sylvester, C.Y., Lacey, S., **Nee, D.E.**, Franklin, M., & Jonides, J. (2005). Common and unique components of inhibition revealed by fMRI. *NeuroImage*, 27, 323-340.
- 50. † Jonides, J., Lacey, S., & **Nee, D.E.** (2005). Processes of working memory in mind and brain. *Current Directions in Psychological Science*, 14, 2-5.
- 51. Jonides, J. & **Nee, D.E.** (2005). Assessing dysfunction using refined cognitive methods. *Schizophrenia Bulletin*, 31, 823-829.

#### **Commentaries**

- 1. Wood, J.L., Clark, D.E., & **Nee, D.E.** (2022). Hippocampal activity supporting working memory is contingent upon specific task demands. *Cognitive Neuroscience*, 1-2.
- 2. Oberauer, K., Lewandowsky, S., Awh, A., Brown, G.D.A., Cowan, N., Donkin, C., Farrell, S., Hitch, G.J., Hurlstone, M., Ma, W., Morey, C.C., **Nee, D.E.**, Schweppe, J., Vergauwe, E., & Ward, G. (2018). Benchmarks provide common ground for model development: Reply to Logie (2018) and Vandierendonck (2018). *Psychological Bulletin*, 144(9), 972-977.
- 3. Jonides, J., **Nee, D.E.**, & Berman, M.G. (2006). What has functional imaging told us about the mind? So many examples, so little space. *Cortex*, 42, 414-417.
- 4. Jonides, J. & **Nee, D.E.** (2004). Resolving conflict in mind and brain. *Psychological Science Agenda*, 18(5).

### **Book Chapters**

- 1. **Nee, D.E.** & Pitts, M. (2025). Lateral prefrontal cortex and rule-based control. In. J. Grafman (Ed.), *Encyclopedia of the Human Brain, 2<sup>nd</sup> Edition*, vol. 3, pp. 127-144. USA: Elsevier.
- 2. **Nee, D.E.** & D'Esposito, M. (2018). Working memory: An evolving concept. In J.T. Wixted (Ed.), Stevens' Handbook of Experimental Psychology and Cognitive Neuroscience, Fourth Edition. John Wiley and Sons.
- 3. **Nee, D.E.** & D'Esposito, M. (2016). The representational basis of working memory. In S. Martin & R.E. Clark (Eds.), *Current Topics in Behavioral Neuroscience*, vol 37. Springer, Cham.
- 4. **Nee, D.E.** & D'Esposito, M. (2015). Working memory. In A.W. Toga (Ed.), *Brain Mapping:* An Encyclopedic Reference. Academic Press: Elsevier.
- 5. Brown, J.W. & **Nee, D.E.** (2012) Executive control of cognitive search. In P.M. Todd, T.T. Hills, & T.W. Robbins (Eds.), *Cognitive Search: Evolution, Algorithms, and the Brain.* Cambridge: MIT Press.
- 6. Lustig, C.A., Lewis, R.L., Berman, M.G., **Nee, D.E.**, Moore, K.S., & Jonides, J. (2009). Psychological and neural mechanisms of short-term memory. In J.T. Cacioppo & G.G. Berntson (Eds.), *Handbook of Neuroscience for the Behavioral Sciences*. New York: John Wiley and Sons.

## **Under Review and In Preparation**

- 1. Lee, J., De Vito, D., Miller, J.A., **Nee, D.E.** (preprint). Evidence for abstract codes in parietal cortex guiding prospective working memory, *bioRxiv*, 2025.02.17.638684.
- 2. Ladwig, Z., Kermani, K.Z., Dworetsky, A., Labora, N., Hernandez, J.J., Dorn, M., Smith, D.M., **Nee, D.E.**, Petersen, S.E., Braga, R.M., & Gratton, C. (preprint). Precision fMRI reveals densely interdigitated network patches with conserved motifs in the lateral prefrontal cortex, *bioRxiv*, 2025.07.24.666468.

#### **INVITED TALKS**

2025	The Role of Abstraction in Working Memory and Cognitive Control Psychology Colloquium Series, Tulane University, New Orleans, LA
2025	The Role of Abstraction in Working Memory and Cognitive Control Cognitive Neuroscience Seminar Series, University of Illinois, Urbana-Champaign, IL
2023	From Sensation to Affect: Probing the External-Internal Prefrontal Axis with TMS Center for Neuromodulation in Depression and Stress Speaker Series, University of Pennsylvania, Virtual
2022	Cortical Dynamics Supporting Cognitive Control Exploring the Mind Speaker Series, <i>University of California, Davis, CA</i>
2019	Prefrontal Cortex Dynamics Supporting Cognitive Control Biomedical Sciences Seminar Series, Florida State University, Tallahassee, FL
2018	Prefrontal Cortex Dynamics Supporting Cognitive Control New Frontiers in Biomedical Research, Louisiana Tech University, Ruston, LA
2018	Prefrontal Cortex Dynamics Supporting Cognitive Control Neuroscience Seminar Series, Florida Atlantic University, Boca Raton, FL
2017	Early Visual Suppression Distinguishes Unattended and Discarded Visual Working Memory Representations Visual Working Memory Symposium, New York University Abu Dhabi Institute, United Arab Emirates
2014	The Functional Organization of the Lateral Prefrontal Cortex Florida State University, Tallahassee, FL
2014	The Functional Organization of the Lateral Prefrontal Cortex University of Illinois, Urbana-Champaign, IL
2014	The Functional Organization of the Lateral Prefrontal Cortex Texas A&M University, College Station, TX
2014	Trisecting Representational States in Short-Term Memory University of California, Davis, CA
2013	Trisecting Representational States in Working Memory University of Oregon, Eugene, OR
2011	Neural Correlates of Interference-Control In and Out of Working Memory Columbia University, New York, NY
2010	Neural Basis of Working Memory: Goal Maintenance and Interference Control Cognitive Neuroscience Treatment Research to Improve Cognition in Schizophrenia (CNTRICS), University of California, Davis, CA
2008	Neural Mechanisms of Access to Short-term Memory fMRI Symposium, University of Michigan, Ann Arbor, MI
2008	Neural Mechanisms of Short-Term Memory Patricia Gurin Distinguished Lecture Series, <i>University of Michigan, Ann Arbor, MI</i>

## **CONFERENCE PROCEEDINGS**

## **Talks**

Nee, D.E., Thompson, B., Gallyer, A., Ryan, J., Fletcher, N., Kozel, F.A., & Hajcak, G. Reward-circuit targeting intermittent theta-burst stimulation increases the reward positivity in individuals with anhedonia. *Annual Meeting of the Society for Psychophysiological Research*; Prague, Czech Republic, October, 2024.

- Nee, D.E. Cortical interactions supporting present- and future-oriented control. Annual Meeting of the Florida Consortium for the Neurobiology of Cognition; Jupiter, FL, May, 2023.
- Nee, D.E. Dynamic interactions supporting cognitive control. 43<sup>rd</sup> Annual Meeting of the Japan Neuroscience Society; Virtual, August, 2020.
- De Vito, D., Miller, J.A., & **Nee, D.E.** Prospection in working memory. *Virtual Working Memory Symposium*; Virtual.
- Nee, D.E. & D'Esposito, M. Causal evidence for the organization of the lateral prefrontal cortex by content and control. Annual Meeting of the Society for Neuroscience; Chicago, IL, October, 2015.
- Nee, D.E. & Jonides, J. Neural correlates of shifting representational states in short-term memory. *Annual Meeting of the Society for Neuroscience*; San Diego, CA, November 2013.
- Nee, D.E. & Jonides, J. Neural evidence for a 3-state model of visual short-term memory. Annual Meeting of the Society for Neuroscience; New Orleans, LA, October 2012.

#### **Posters**

- Lee, J., Meyer, A., Gladhill, K.A., Dorfman, A., Gould, S., & **Nee, D.E.** Causal fractionation of the contribution of the lateral prefrontal cortex to cognitive control. *Annual Meeting of the Cognitive Neuroscience Society*; Boston, MA, April, 2025.
- Lee, J., De Vito., D., Miller, J.A., & **Nee, D.E.** Abstract codes guide prospective working memory. *Annual Meeting of the Society for Neuroscience*; Chicago, IL, October 2024.
- Thompson, B., Fletcher, N., Gallyer, A., Ryan, J., Kozel, F.A., Hajcak, G., & Nee, D.E. The effects of multiple sessions of iTBS to the rmPFC on anhedonic symptoms and reward processing. *Annual Meeting of the Society for Biological Psychiatry*; Austin, Texas, May 2024.
- Pitts, M., Connolly, C., & **Nee, D.E.** Gradients of time, action and memory in frontal, parietal and temporal cortices supporting cognitive control. *Annual Meeting of the Cognitive Neuroscience Society*; Toronto, Canada, April 2024.
- Lee, J., De Vito, D., Miller, J.A., & **Nee, D.E.** Tracking the emergence of concrete and abstract working memory representations guiding future cognition in the intra parietal sulcus and visual cortex. *Annual Meeting of the Cognitive Neuroscience Society*; Toronto, Canada, April 2024.
- Meyer, A. & **Nee, D.E.** Causal evidence of directed network interactions supporting cognitive control via transcranial magnetic stimulation of the lateral prefrontal cortex. *Annual Meeting of the Society for Neuroscience*; Washington, D.C., November, 2023.
- Wood, J.L., Meyer, A., & **Nee, D.E.** Causal evidence for hierarchical predictive coding among cingulo-opercular and frontoparietal networks supporting cognitive control. *Annual Meeting of the Society for Neuroscience*; Washington, D.C., November, 2023.

- Meyer, A. & Nee, D.E. Examining effects of cTBS on network dynamics in the prefrontal cortex. *Annual Meeting of the Cognitive Neuroscience Society*; San Francisco, CA, March 2023.
- Pitts, M. & Nee, D.E. Investigating the control organization of the lateral prefrontal cortex by timescale and focus. *Annual Meeting of the Cognitive Neuroscience Society*; San Francisco, CA, March 2023.
- Meyer, A. & **Nee, D.E.** Causal evidence supports hierarchical organization in prefrontal cortex. *Annual Meeting of the Cognitive Neuroscience Society*; San Francisco, CA, April 2022.
- Pitts, M. & **Nee, D.E.** Investigating the generalizability of a mid-LPFC centered apex of cognitive control. *Annual Meeting of the Cognitive Neuroscience Society*; San Francisco, CA, April 2022.
- Wood, J.L. & **Nee, D.E.** Interactions among frontal-parietal and cinguloopercular networks supporting cognitive control. *Annual Meeting of the Society for Neuroscience*; Virtual, November, 2021.
- Ryan, J., Pouliot, J.J., Hajcak, G., & **Nee, D.E.** Manipulating reward sensitivity using reward circuit-targeted transcranial magnetic stimulation. *Annual Meeting of the Society for Neuroscience*; Virtual, November, 2021.
- 2021 Wood, J.L. & **Nee, D.E.** Parcellating cognitive control demands within the cingulo-opercular network. *Annual Meeting of the Cognitive Neuroscience Society*; Virtual, March, 2021.
- Pitts, M.T. & **Nee, D.E.** Examining interdependence and independence among processes supporting hierarchical cognitive control. *Annual Meeting of the Cognitive Neuroscience Society*; Virtual, March, 2021.
- Ryan, J., Hajcak, G., & **Nee, D.E.** Intermittent Theta-Burst Stimulation to the Rostromedial Prefrontal Cortex Modulates the Reward Positivity. 2021 Southeast Regional Clinical and Translational Science Conference; Virtual, March, 2021.
- De Vito, D., Miller, J.A., & **Nee, D.E.** Visual working memory representations reflect the identity of prospectively-relevant visual stimuli. *Vision Sciences Society Annual Meeting*; Virtual, June, 2020.
- De Vito, D., Miller, J.A., & **Nee, D.E.** Working memory representations are reformatted to match the identity of upcoming test stimuli. *Annual Meeting of the Cognitive Neuroscience Society*; Virtual, May, 2020.
- Nee, D.E. Characterizing frontal-parietal sub-networks supporting cognitive control. Annual Meeting of the Organization for Human Brain Mapping, Rome, Italy, June, 2019.
- Rootes-Murdy, K., Huang, X.Y., Franklin, J.C., & **Nee, D.E.** Brain activity associated with self-injurious thoughts and behaviors: A Meta-analysis of neuroimaging studies. *Annual Meeting of the Cognitive Neuroscience Society*, Boston, MA, March, 2018.
- Nee, D.E. & D'Esposito, M. Causal evidence for lateral prefrontal cortex dynamics supporting cognitive control. Annual Meeting of the Society for Neuroscience, Washington, D.C., November, 2017.
- Vandenbroucke, A.R., **Nee, D.E.**, Lorenc, E.S., & D'Esposito, M. Revealing unattended working memory representations with fMRI. *Annual Meeting of the Cognitive Neuroscience Society*, San Francisco, CA, March, 2017.

- Eich T.S., Razlighi, Q.R., **Nee, D.E.**, Jonides, J., & Stern, Y. Doubly dissociable neuromorphological correlates of memory and perceptual inhibition in healthy aging. *Annual Meeting of the Cognitive Neuroscience Society*, San Francisco, CA, March, 2017.
- 2016 **Nee, D.E.**, Vandenbroucke, A.R., Lorenc, E.S., & D'Esposito, M. Forward modeling in fMRI: Efficacy and limits. *Annual Meeting of the Society for Neuroscience*, San Diego, CA, November, 2016.
- Tambini, A., **Nee, D.E.**, & D'Esposito, M. Hippocampal-targeted theta-burst transcranial magnetic stimulation enhances associative memory. *Annual Meeting of the Society for Neuroscience*, San Diego, CA, November, 2016.
- Lorenc, E.S., Sreenivasan, K.K., Nee, D.E., Vandenbroucke, A.R., & D'Esposito,
   M. Distractor resistance for precise visual working memory. Annual Meeting of the Society for Neuroscience; Chicago, IL, October, 2015.
- Vandenbroucke, A.R., Lorenc, E.S., **Nee, D.E.**, De Lange, F.P., & D'Esposito, M. The neural correlates of unattended working memory representations. *Annual Meeting of the Society for Neuroscience*; Chicago, IL, October, 2015.
- Nee, D.E. & D'Esposito, M. Evidence for a hierarchical functional organization of the lateral prefrontal cortex. Annual Meeting of the Organization for Human Brain Mapping; Honolulu, HI, June, 2015.
- Jahn, A., Alexander, W., **Nee, D.E.**, & Brown, J.W. Pain, congruency, and surprise: Prediction violation across domains in the anterior cingulate cortex. *Annual Meeting of the Society for Neuroscience*; Washington, DC, November, 2014.
- Nee, D.E. & D'Esposito, M. The organization of prefrontal cortex by content and control. Annual Meeting of the Cognitive Neuroscience Society; Boston, MA, April 2014.
- Jahn, A., **Nee, D.E.**, Alexander, W., & Brown, J.W. Distinct regions of anterior cingulate cortex signal prediction and outcome evaluation. *Annual Meeting of the Society for Neuroscience*; San Diego, CA, November 2013.
- Nee, D.E., Jahn, A., & Brown, J.W. Prefrontal cortex organization: Dissociating effects of temporal abstraction, relational abstraction, and integration with fMRI. Annual Meeting of the Cognitive Neuroscience Society; San Francisco, CA, April 2013.
- Jahn, A., Alexander, W., **Nee, D.E.**, & Brown, J.W. Pain, congruency, and surprise: Prediction violation across domains in the anterior cingulate cortex. *Annual Meeting of the Cognitive Neuroscience Society*; San Francisco, CA, April 2013.
- Nee, D.E., Brown, J.W., Askren, M.K., Berman, M.G., Demiralp, E., Krawitz, A., & Jonides, J. A meta-analysis of executive components of working memory.

  Annual Meeting of the Cognitive Neuroscience Society; Chicago, IL, April 2012.
- 2012 Eich, T.S., **Nee, D.E.**, Insel, C., Malapani, C., & Smith, E.E. Neural correlates of cognitive control over working memory in schizophrenia. Poster presented at the *Annual Meeting of the Cognitive Neuroscience Society*; Chicago, IL, April 2012.
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- Nee, D.E., Kastner, S., & Brown, J.W. Neural evidence for a retrieval-based model of conflict adaptation. *Annual Meeting of the Cognitive Neuroscience Society*; San Francisco, CA, April 2011.
- Nee, D.E., & Jonides, J. Short-term memory: Distinguishing the region of direct access from the activated portion of long-term memory. Annual Meeting of the Cognitive Neuroscience Society; Montreal, Canada, April 2010.
- Berman, M.G., Peltier, S., **Nee, D.E.**, Kross, E., Deldin, P., & Jonides J. Depression, rumination, and the default network. *Annual Meeting of the Cognitive Neuroscience Society*; Montreal, Canada, April 2010.
- 2009 **Nee, D.E.**, Kastner, S., & Brown, J.W. Functional heterogeneity of conflict, error, and task-switching effects within medial prefrontal cortex. *Annual Meeting of the Society for Neuroscience*; Chicago, IL, October, 2009.
- Nee, D.E., & Brown, J.W. Shared control mechanisms of conflict adaptation and switching in the intra-parietal sulcus. *Annual Meeting of the Cognitive Neuroscience Society*; San Francisco, CA, April 2009.
- Berman, M.G., **Nee, D.E.**, Deldin, P., Casement, M., Kim, H.S., Jaeggi, S., Buschkuehl, M., Behnke, C., Bissett, P., & Jonides, J. (2009). A chronometric analysis of cognition in depression. *Annual Meeting of the Cognitive Neuroscience Society*; San Francisco, CA, April 2009.
- 2008 **Nee, D.E.**, & Jonides, J. Attentionally-mediated visual suppression produces object-specific inhibition. *Annual Meeting of the Society for Neuroscience*; Washington, D.C., November, 2008.
- 2008 **Nee, D.E.,** & Jonides, J. Neural mechanisms of retrieval from short-term memory. *Annual Meeting of the Cognitive Neuroscience Society*; San Francisco, CA, April 2008.
- 2007 **Nee, D.E.**, & Jonides, J. Dissociable neural mechanisms of interference-resolution: Perception and memory. *Annual Meeting of the Cognitive Neuroscience Society*; New York, NY, May 2007.
- Bissett, P., **Nee, D.E.**, Jonides, J. Interference mechanisms for response production and memory representations. *Annual Meeting of the Psychonomic Society*; Houston, Texas, November, 2006.
- Nee, D.E., Berman, M.G., & Jonides, J. The role of the left inferior frontal gyrus in resolving proactive interference as revealed by fMRI. Annual Meeting of the Cognitive Neuroscience Society; San Francisco, CA, April 2006.
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2004	Nee, D.E., & Jonides, J. Dissociating information-suppression during encoding
	versus working memory. Annual Meeting of the Psychonomic Society; Minneapolis,
	MN, November 2004.
2004	Wager, T.D., Sylvester, C.Y.C., Lacey, S.C., Nee, D.E., Franklin, M., & Jonides, J.
	Common and unique components in resolving response conflict revealed by
	fMRI. Annual Meeting of the Organization for Human Brain Mapping, June 2004.
2004	Nee, D.E., Jonides, J., & Wager, T.D. A meta-analysis of interference-resolution
	tasks. Annual Meeting of the Cognitive Neuroscience Society; San Francisco CA, April
	2004.

# **Teaching Experience**

2024	Cognition and Cognitive Neuroscience Survey II, Florida State University
2019-2024	Introduction to fMRI, Florida State University
2017-2023	MATLAB for Experimental Psychologists, Florida State University
2016-2022	Cognitive Psychology, Florida State University
2021, 2023	Working Memory and Cognitive Control, Florida State University
2013, 2015	Introduction to fMRI (Co-Instructor), University of Michigan
2005	Introduction to Experiment Programming, University of Michigan

# Mentorship

# **Undergraduate Honors Thesis Committee**

2024	Isha Majid
2024	Natalie Bardin (Chair)
2021	Lauren Daley
2019	Carly Hitchcock
2018	Olivia Bockler

## **Master's Thesis Committee**

2023	Jessica Maier (Chair)
2022	Carter Bedford
2022	Alexa Meyer (Chair)
2022	McKinney Pitts (Chair)

## **Doctoral Thesis Committee**

202 <del>4</del>	McKinney Pitts (Chair)
202 <del>4</del>	Alexa Meyer (Chair)
202 <del>4</del>	Michael Long
202 <del>4</del>	Qiushan Liu
202 <del>4</del>	Carter Bedford
2023	Austin Gallyer
2022	Jonathan Ryan
202 I	Yue Meng (Chair)
2017	Jane Komsky

### **Graduate Students**

2025- Joshua Rhilinger
2022- Jongmin Lee
2021-2024 Danielle Clark
2020-2023 Jessica Wood Maier
2019-2024 McKinney Pitts
2019-2024 Alexa Meyer
2016-2017 Brendan Clark

#### **Post-Doctoral Scholars**

2023-2024 Keri Gladhill 2018-2020 David De Vito

## **Professional Memberships**

Association for Psychological Science
Cognitive Neuroscience Society
Organization for Human Brain Mapping
Society for Neuroscience
American Association for the Advancement of Science

### **Professional Service**

2024- Standing Member: Human Complex Mental Function Study Section, NIH Section Editor: Executive Function & Cognitive Control, Neuropsychologia

#### **Ad-hoc Reviewer**

Biological Psychiatry
Brain Structure & Function

Cerebral Cortex Cognition

Cognitive, Affective, & Behavioral Neuroscience

Cortex

**Current Biology** 

eLife

Hippocampus

Human Brain Mapping

Journal of Cognitive Neuroscience

Journal of Experimental Psychology: General Journal of Experimental Psychology: Human

Perception and Performance

Journal of Experimental Psychology: Learning,

Memory, & Cognition Journal of Neurophysiology Journal of Neuroscience Nature Communications

Neurolmage Neuropsychologia

Proceedings of the National Academy of

Sciences

Psychological Bulletin Psychological Science

Psychonomic Bulletin & Review

Quarterly Journal of Experimental Psychology

Schizophrenia Bulletin Schizophrenia Research

Science

Scientific Reports

Social, Cognitive, & Affective Neuroscience

Trends in Cognitive Sciences

## **References**

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