

BEN DEEN

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ACADEMIC POSITIONS

Tulane University	<i>Assistant Professor of Psychology</i>	2022 – Present
Rockefeller University	<i>Postdoctoral Fellow in Neuroscience</i>	2016 – 2022

EDUCATION & TRAINING

MIT	<i>Ph.D. in Neuroscience</i>	2010 – 2016
Yale University	<i>B.S. in Physics and Cognitive Science</i> Magna cum laude, distinction in both majors	2005 – 2009

AWARDS & FELLOWSHIPS

Human Brain Mapping Editor's Choice Award	2020
Leon Levy Fellowship	2020 – 2022
Kavli Neural Systems Institute Pilot Grant	2019
Helen Hay Whitney Fellowship	2017 – 2020
Vision Sciences Society Travel Award	2016
National Science Foundation Graduate Research Fellowship	2012 – 2015 (awarded 2010)
MIT Presidential Fellowship	2010 – 2011

GRANTS

Extramural

<i>Understanding the functional organization of the anterior temporal lobe using multi-echo precision fMRI</i>	2026 – 2030
National Science Foundation (\$964,177). Role: PI. Co-I: Evelina Fedorenko	
<i>Probing the functional organization of the anterior temporal lobe with precision fMRI</i>	2024 – 2027
Louisiana Board of Regents RCS Grant (\$159,543). Role: PI	
<i>Investigating the neural mechanisms of theory of mind using human electrocorticography</i>	2020 – 2022
NIH R21. Role: Postdoc, primary author (PIs: Adeen Flinker, Winrich Freiwald)	

Intramural

<i>Studying the neural basis of infant social understanding using fMRI</i> Tulane Brain Institute Priddy Family Spark Research Award (\$50,000). Role: PI	2023 – 2024
<i>Using infant fMRI to study the early development of social cognition</i> Lavin-Bernick Center Research & Scholarly Activities Grant (\$8,000). Role: PI	2023 – 2024
<i>Probing the functional organization of the anterior temporal lobe with precision fMRI</i> Tulane COR Resesarch Fellowship (\$6,500). Role: PI	2023 – 2024
<i>Probing the neural mechanisms of uniquely human social cognition with high-resolution intracranial electrocorticography</i> Kavli Neural Systems Institute Pilot Grant, Rockefeller University (\$25,000). Role: PI	2019 – 2020

PUBLICATIONS

Preprints

Shen, C., **Deen, B.** (2026). Three distinct profiles of visual category preference within the anterior temporal lobe. *bioRxiv*, doi: 10.64898/2026.03.11.711089

Faul, I., Agarwal, A., Graziose, S., Nwacha, A., Park, J., Sahibul, A., Tong, K., **Deen, B.** (2025). The MTL200: a surface-based, probabilistic atlas of the medial temporal lobe. *bioRxiv* doi: 10.64898/2025.12.04.692420

Peer-reviewed Journal Articles

Behm, L., Yates, T.S., Trach, J.E., Choi, D., Du, H., Osumah, C., **Deen, B.**, Kosakowski, H.L., Chen, E.M., Kamps, F.S., Olson, H.A., Ellis, C.T., Saxe, R., Turk-Browne, N.B. (2026). Awake infant fMRI: Insights from more than 750 scanning sessions. *Infancy*

Deen, B., Freiwald, W.A. (2025). Parallel systems for social and spatial cognition reaching the cortical apex. *PNAS*, 122 (44), e2520067122

Deen, B., Husain, G., Freiwald, W.A. (2024). A familiar face and person processing area in the human temporal pole. *PNAS*, 121(28), e2321346121

Deen, B.*, Schwiedrzik, C.*, Sliwa, J.*, Freiwald, W.A. (2023). Specialized Networks for Social Cognition in the Primate Brain. *Annual Review of Neuroscience*, 46, 381-401. *equal contribution

Deen, B., Saxe, R., Kanwisher, N.G. (2020). Processing communicative facial and vocal cues in the superior temporal sulcus. *NeuroImage*, 221(1), 117191.

Deen, B., Saxe, R. (2019). Parts-based representations of perceived face movements in the superior temporal sulcus. *Human Brain Mapping*, 40(8), 2499-2510.

Powell, L. J., **Deen, B.**, Saxe, R. (2018). Using individual functional channels of interest to study cortical development with fNIRS. *Developmental Science*, 21(e12595).

Deen, B., Richardson, H., Dilks, D., Takahashi, A., Keil, B., Wald, L., Kanwisher, N.G., Saxe, R. (2017). Organization of high-level visual cortex in human infants. *Nature Communications* 8, 13995.

Deen, B., Koldewyn, K., Kanwisher, N.G., Saxe, R. (2015). Functional organization of social perception and cognition in the superior temporal sulcus. *Cerebral Cortex*, 25(11), 4596-4609.

Deen, B., Saxe, R., Bedny, M. (2015). Occipital cortex of blind individuals is functionally coupled with executive-control areas of frontal cortex. *Journal of Cognitive Neuroscience*, 27(8), 1633-1647.

Di Martino, A., Yan, C.-G., Li, Q., Denio, E., Castellanos, F.X., Alaerts, K., Anderson, J.-S., Assaf, M., Berhmann, M., Bookheimer, S.Y., Dapretto, M., **Deen, B.**, Delmonte, S., Dinstein, I., Ertl-Wagner, D., Fair, D.A., Gallagher, L., Kennedy, D.P., Keown, C.L., Keysers, C., Lainhart, J.E., Lord, C., Luna, B., Menon, V., Minshew, N.J., Monk, C.S., Müller, R.-A., Nebel, M.B., Nigg, J.T., O’Hearn, K., Pelphrey, K.A., Peltier, S.J., Rudie, J.D., Sunaert, S., Thioux, M., Tyszka, J.M., Uddin, L.Q., Verhoeven, J.S., Wenderoth, N., Wiggins, J.L., Mostofsky, S.H., Milham, M.P. (2013). The autism brain imaging data exchange: towards a large-scale evaluation of the intrinsic brain architecture in autism. *Molecular Psychiatry*, 19(6), 659-667.

Bolling, D.Z., Pitskel, N.B., **Deen, B.**, Crowley, M.J., Mayes, L.C., Pelphrey, K.A. (2011). Development of neural systems for processing social exclusion from childhood to adolescence. *Developmental Science*, 14(6), 1431-1444.

Bolling, D.Z., Pitskel, N.B., **Deen, B.**, Crowley, M.J., McPartland, J.C., Kaiser, M.D., Vander Wyk, B.C., Wu, J., Mayes, L.C., Pelphrey, K.A. (2011). Enhanced neural responses to rule violation in children with autism: a comparison to social exclusion. *Developmental Cognitive Neuroscience*, 1(3), 280-294.

Deen, B., Pitskel, N.B., Pelphrey, K.A. (2011). Three systems of insular functional connectivity identified with cluster analysis. *Cerebral Cortex*, 21(7), 1489-1506.

Kaiser, M.D., Hudac, C.M., Shultz, S., Lee, S.M., Cheung, C., Berken, A.M., **Deen, B.**, Pitskel, N.B., Sugrue, D.R., Voos, A.C., Saulnier, C.A., Ventola, P., Wolf, J.M., Klin, A., Vander Wyk, B.C., Pelphrey, K.A. (2011). Neural signatures of autism. *Proceedings of the National Academy of Sciences of the USA*, 107(49), 21223-21228.

Bolling, D.Z., Pitskel, N.B., **Deen, B.**, Crowley, M.J., McPartland, J.C., Mayes, L.C., Pelphrey, K.A. (2011). Dissociable brain mechanisms for processing social exclusion and rule violation. *NeuroImage*, 54(3), 2462-2471.

Deen, B., McCarthy, G. (2010). Reading about the actions of others: biological motion imagery and action congruency influence brain activity. *Neuropsychologia*, 48(6), 1607-1615.

INVITED TALKS

Deen, B. Parallel systems for social and spatial reasoning within the cortical apex. Center for Biomedical Informatics and Genomics, Tulane University, October 2023.

Deen, B. Parallel systems for social and spatial reasoning within the cortical apex. Grand Rounds in Neurology, Tulane University, October 2023.

Deen, B. Parallel systems for social and spatial reasoning within the cortical apex. Psychology Colloquium, Loyola University New Orleans, September 2023.

Deen, B. Organization of systems for social cognition in the brain: implications for autism. Grand Rounds in Child Psychiatry, Tulane University, September 2023.

Deen, B. Parallel systems for social and spatial reasoning within the cortical apex. Psychology Seminar, University of New Orleans, March 2023.

Deen, B. Parallel systems for social and spatial reasoning within the cortical apex. Cognitive Neuroscience Seminar, Johns Hopkins University, June 2022.

Deen, B. Functional organization of social perception and cognition in the human brain. Psychology Colloquium, Tulane University, February 2022.

Deen, B. Parallel systems for social and spatial reasoning within the cortical apex. Leon Levy Neuroscience Seminar, The Rockefeller University, November 2021.

Deen, B. Separate pathways for person and face processing in the anterior temporal lobe. Object Cognition Workshop, Yale University, June 2021.

Deen, B. Parallel systems for social and spatial reasoning within the brain's apex network. Frontiers in Neuropsychiatry Seminar, Weill Cornell Department of Psychiatry, May 2021.

Deen, B. Studying high-level social cognition with human electrocorticography. Intracranial EEG Meeting, New York University, May 2021.

Deen, B. Parallel systems for social and spatial reasoning within the brain's apex network. Center for Brains, Minds, and Machines Research Meeting, MIT, April 2021.

Deen, B. Probing the neural basis of high-level social cognition using human electrocorticography. Intracranial EEG Meeting, New York University, October 2019.

Deen, B. fMRI investigations of social perception in the superior temporal sulcus. Center for Brains, Minds, and Machines Research Meeting, MIT, May 2014.

Deen, B. Selectivity and multifunctionality in the superior temporal sulcus. Social Neuroscience Workshop, Harvard University, March 2012.

CONFERENCE TALKS

Underlined = Tulane mentee author (student, postdoc, or lab manager)

Deen, B., Nicholson, I. Understanding the development of neural systems supporting social cognition using infant fMRI. International Congress for Infant Studies, July 2026.

Deen, B., Freiwald, W. A familiar face and person processing area in the human temporal pole. Society for Neuroscience, November 2023.

Deen, B., Freiwald, W. A familiar face and person processing area in the human temporal pole. Vision Sciences Society, May 2023.

Deen, B., Freiwald, W. Parallel systems for social and spatial reasoning within the cortical apex. Organization for Human Brain Mapping, June 2022.

Deen, B., Freiwald, W. Parallel systems for social and spatial reasoning within the cortical apex. Cognitive Neuroscience Society, April 2022.

Deen, B., Freiwald, W. Parallel systems for social and spatial reasoning within the cortical apex. Society for Neuroscience, November 2021.

Deen, B., Landi, S., Freiwald, W. Social memory responses in macaque medial prefrontal cortex. neuromatch 3.0, October 2020.

Deen, B., Richardson, H., Dilks, D., Takahashi, A., Keil, B., Wald, L., Kanwisher, N.G., Saxe, R. Organization of high-level visual cortex in human infants. Society for Neuroscience, November 2016.

Deen, B., Richardson, H., Dilks, D., Takahashi, A., Keil, B., Wald, L., Kanwisher, N.G., Saxe, R. Category-selective visual regions in human infants. Vision Sciences Society, May 2016.

Deen, B., Saxe, R. Parts-based representations of perceived face movements in the superior temporal sulcus. Society for Neuroscience, October 2015.

Deen, B., Saxe, R. Neural correlates of social perception: the posterior superior temporal sulcus is modulated by action rationality but not animacy. Cognitive Science Society, August 2012.

Deen, B., Pelphrey, K.A. Large-scale functional connectivity in children with Autism Spectrum Disorders. International Meeting for Autism Research, May 2012.

CONFERENCE POSTERS

Underlined = Tulane mentee author (student, postdoc, or lab manager)

Gantz, A., **Deen, B.** The temporal pole as the cortical endpoint of the lateral face processing stream. Vision Sciences Society, May 2025.

Nicholson, I., **Deen, B.** Understanding the functional organization of the infant brain using precision fMRI. Society for Neuroscience, November 2025.

Agarwal, A., **Deen, B.** Separate regions supporting language and social cognition in the anterior temporal lobe. Society for Neuroscience, November 2025.

Faul, I., Tong, K., Graziose, S., Park, J., Nwacha, A., Sahibul, A., Agarwal, A., **Deen, B.** The AMTL200: a surface-based probabilistic atlas of the anterior and medial temporal lobe. NeuroFrance, May 2025.

Faul, I., Aymond, E., Conner-Bennett, Z., Graziose, S., Kolluru, R., Nwacha, A., Park, J., Sahibul, A., & Deen, B. A surface-based probabilistic atlas of the anterior medial temporal lobes: temporopolar, entorhinal, perirhinal, and parahippocampal cortices. Society for Neuroscience, October 2024.

Ross, D.L., & **Deen, B.** A novel behavioral measure of long-term memory for naturalistic social content. Society for Neuroscience, October 2024.

Deen, B., Shen, C. Functional organization of visual responses in the anterior temporal lobe. Vision Sciences Society, May 2025.

Shen, C., Sahibul, A., & **Deen, B.** Two functionally distinct areas for face processing in the anterior temporal lobe. Society for Neuroscience, October 2024.

Deen, B., Freiwald, W. Parallel systems for social and spatial reasoning within the cortical apex. Organization for Human Brain Mapping, June 2022.

Deen, B., Kanwisher, N., Saxe, R. Functional organization of the human superior temporal sulcus. Organization for Human Brain Mapping, June 2015.

Powell, L.J., **Deen, B.**, Guo, L., Saxe, R. Using fNIRS to map functional specificity in the infant brain: An fROI approach. Society for Research in Child Development, March 2015.

Deen, B., Kanwisher, N., Saxe, R. Exploring the functional organization of the superior temporal sulcus with a broad set of naturalistic stimuli. Vision Sciences Society, May 2014.

Deen, B., Kanwisher, N., Saxe, R. Exploring superior temporal sulcus responses and patterns with a broad set of naturalistic stimuli. Society for Neuroscience, November 2013.

Deen, B., Bedny, M., Saxe, R. Functional connectivity of frontal and occipital cortex in congenitally blind adults. Organization for Human Brain Mapping, June 2013.

Deen, B., Koldewyn, K., Weigelt, S., Kanwisher, N., Saxe, R. Selectivity and multifunctionality in the superior temporal sulcus. Cognitive Neuroscience Society, April 2012.

Deen, B., Pelphrey, K.A. Functional connectivity of the ventromedial prefrontal cortex in children with Autism Spectrum Disorders. International Meeting for Autism Research, May 2011.

Deen, B., Pitskel, N.B., Pelphrey, K.A. Parcellating the human insula using resting-state functional connectivity. Society for Neuroscience, November 2010.

ESSAYS & OPINION

Deen, B. (2020). How to Fix Science's Diversity Problem. *Scientific American*.

Deen, B., Pelphrey, K.A. (2012). Perspective: Brain scans need a rethink. *Nature* 491, S20.

RESEARCH MENTORING

Postdocs:

- Taylor Marcus, PhD (Summer 2025 – Spring 2026). Currently Professor of Practice in Psychology, Tulane University

PhD students:

- Isabel Nichoson (Neuroscience, Fall 2023 – present)
- Abigail Gantz (Psychology, 2024 – present)
- Clara Steeby (Psychology, 2025 – present)

MS students:

- Marta Nahorniuk (Neuroscience, Fall 2025 – present)
- Elizabeth Neal (Neuroscience, Fall 2025 – Spring 2026)
- Stephen Graziose (Neuroscience, Fall 2025 – Spring 2026)
- Tony Shen (Neuroscience, Fall 2024 – Spring 2025)

MD students:

- Janis Park (2023 – present)

Undergraduate students:

- Ayse Ece Altan (Spring 2026 – present)
- Isabel Eisinger (Spring 2026 – present)
- Noa Richman (Fall 2025 – present)
- Elena Paces-Wiles (Summer 2025 – present)
- Erica Moon (Fall 2025 – Spring 2026)
- Ella Fulling (Spring 2025 – Fall 2025)
- Roma Kolluru (Spring 2024 – Spring 2026). Tulane 34 Award
- Ian Faul (Fall 2023 – Spring 2026). Honors Thesis; Senior Scholar Award in Psychology; Tulane 34 Award; Peery Society
- Stephen Graziose (Spring 2024 – Spring 2026)
- Morgan Tessler (Spring 2024 – Spring 2025)
- Katie Tong (Summer 2024 – Spring 2025)
- Tony Shen (Spring 2024)
- Laci Carpenos (Spring 2024 – Fall 2024)
- Camille Bucker (Spring 2023 – Spring 2025). Faculty Award for Research in Psychological Science
- Zoe Conner-Bennett (Spring 2023 – Spring 2025). Neuroscience 4.0 Award
- Talia Lurie (Spring 2023 – Spring 2024). Honors Thesis; Senior Scholar Award in Psychology; Arnold Gerall Award for Neuroscience
- Andrew Nwacha (Fall 2023 – Spring 2024)
- Emily Aymond (Fall 2023 – Fall 2024)
- Yiran Gong (Spring 2023 – Fall 2023)
- Alaina Moskovitz (Fall 2022 – Spring 2025). Honors Thesis; Senior Scholar Award in Neuroscience; Arnold Gerrall Prize for Neuroscience
- Dylan (Didi) Ross (Fall 2022 – Spring 2025)
- Chloe Friedman (Fall 2022 – Spring 2023)
- Rockefeller University: Gazi Husain (student at Hunter College; 2019-2021), Yorkiris Marmol (student at Vassar College; Summer 2018, Tri-I Gateways to Lab Program), Petr Filipenko (student at Hunter College, Summer 2016, MIT CBMM Summer Internship)

TEACHING

Courses taught:

Tulane PSYC/NSCI 4380/6380 Cognitive Neuroscience (Spring 2023* – 2026)

* Taught as PSYC/NSCI 4380 in Spring 2023

Tulane PSYC/NSCI 4260/6260 Methods for Functional MRI (Fall 2023*, 2025)

* Taught as 4660/6660 (Special Topics) in Fall 2023

Guest lectures:

Tulane NSCI 6170 Psychedelics (“Structure and Function of the Default Network”; Spring 2024)

Hunter SCI 111 Brains, Minds, and Machines (“The Neural Basis of Face Perception”; Fall 2019)

MIT 9.65 Cognitive Processes (“Face Perception and Theory of Mind”; Spring 2014)

LEADERSHIP AND SERVICE

Tulane University

- Cognitive Studies Program Committee (2023 – present)
- Search Committee, Professor of Practice in Data (2022 – 2023)

Tulane University School of Science and Engineering

- Artificial Intelligence for All Task Force (2024 – present)
- Dean’s Computing Committee (2025)

Tulane University Department of Psychology

- PhD Admissions Committee (2022 – 2023, 2024 – present)
- Task Force on Psychological Science Preliminary Exam (2026 – 2027)
- Colloquium Committee (2023 – 2024)
- Equity, Diversity, and Inclusion Council (2023 – 2025)
- Search Committee, Professor and Chair of Psychology (2025 – 2026)
- Search Committee, Assistant Professor in Developmental Science (2023 – 2024; 2024 – 2025)
- Dissertation, Thesis, or Qualifying Exam committee member (excluding my students):
 - Brooke Montgomery (Psychology MS Thesis, 2025)
 - Taylor Marcus (Neuroscience Qualifying Exam 2022; PhD Dissertation 2023-2025)
 - Dehan Elcin (Psychology MS Thesis 2023; Qualifying Exam 2024; PhD Dissertation 2024 – 2026)
 - Miguel Vasquez (Psychology PhD Dissertation 2024)
 - Annabelle Reese (Psychology MS Thesis, 2022 – 2023)
 - Giselle Yao (Psychology MS Thesis, 2023)

Rockefeller University

- Rockefeller Inclusive Science Initiative (RiSI) (2020 – 2022)
- Rockefeller Chief Diversity Officer Task Force (2020)

Extramural

- Reviewer for NIH Human Complex Mental Function study section (June 2026)
- Ad hoc reviewer for National Science Foundation (2024 – present)
- Reviewer for Graduate Women in Science National Fellowship (2021)

Ad hoc reviewer: Nature, Nature Neuroscience, Nature Communications, Science Advances, Molecular Psychiatry, Proceedings of the National Academy of Sciences, Current Biology, eLife, Trends in Cognitive Sciences, Perspectives on Psychological Science, Psychological Review, Journal of Neuroscience, Cerebral Cortex, Imaging Neuroscience, NeuroImage, Cognition, Neuropsychologia, Network Neuroscience, Neuroscience and Biobehavioral Reviews