# Stephanie M Noble

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### **Academic Appointments**

#### **Assistant Professor, Northeastern University**

July 2023 - present

Boston MA

DEPARTMENT OF PSYCHOLOGY DEPARTMENT OF BIOENGINEERING CENTER FOR COGNITIVE AND BRAIN HEALTH

Research Affiliate, Yale University

New Haven CT

RADIOLOGY & BIOMEDICAL IMAGING

July 2023 - present

#### Postdoctoral Associate, Yale University

New Haven CT

RADIOLOGY & BIOMEDICAL IMAGING

Aug. 2019 - June 2023

· Advisor: Dustin Scheinost

### Education

New Haven CT PhD, Yale University

INTERDEPARTMENTAL NEUROSCIENCE PROGRAM (INP)

Sept. 2014 - May 2019

- Dissertation: Reliability & Validity of fMRI Mapping Methods (Qualified for Candidacy with Distinction)
- · Advisor: R. Todd Constable

#### **BSE, Princeton University**

Princeton NJ

CHEMICAL & BIOLOGICAL ENGINEERING: BIOTECHNOLOGY & BIOINFORMATICS TRACK HONORS CERTIFICATE IN QUANTITATIVE & COMPUTATIONAL NEUROSCIENCE CERTIFICATE IN ENGINEERING BIOLOGY

Sept. 2008 - May 2012

- Thesis: Muscle Contraction as a Markov Process
- · Advisor: Clarence E. Schutt

### Experience \_\_\_\_\_

#### **Elite Warrior Identification, LLC**

Arlington VA

INDEPENDENT CONSULTANT

Mar. 2022 - Present

· EEG connectivity analysis and machine learning

#### Source Signal Imaging, LLC

San Diego CA

INDEPENDENT CONSULTANT

Oct. 2013 - Aug 2014

• Research and prototyping for EEG source estimation projects

goBlue Labs, LLC

New Haven CT

FOUNDING CHIEF SCIENCE OFFICER (CSO)

· Real-time EEG source estimation and neurofeedback software

Grants

2024 - 2025 CBH Seed Grant: Multimodal Superlearner Prediction of Suicidal Ideation

Principle Investigators: Joshua Curtiss, Stephanie Noble

Co-Investigator: Susan Whitfield-Gabrieli

Funding Source: Northeastern University Center for Cognitive & Brain Health

Amount: \$75,000

2023 - 2026 NIH R00MH130894: Empirical Power Analysis Tool for fMRI

Principle Investigator: Stephanie Noble

Funding Source: National Institute of Mental Health

BRAIN Initiative Advanced Postdoctoral Career Transition Award to Promote Diversity (K99/R00)

Amount: \$249,000

2022 - 2023 NIH K99MH130894: Empirical Power Analysis Tool for fMRI

Principle Investigator: Stephanie Noble

Funding Source: National Institute of Mental Health

BRAIN Initiative Advanced Postdoctoral Career Transition Award to Promote Diversity (K99/R00)

Amount: \$122,677

2019 - 2022 NIH K00MH122372: Constrained Network-Based Multiple Comparison Correction

Principle Investigator: Stephanie Noble

Funding Source: National Institute of Mental Health

NIH Blueprint Diversity Specialized Predoctoral to Postdoctoral Advancement in Neuroscience Award (F99/K00)

Amount: \$241,540

2018 - 2019 NIH F99NS108557: Improving Reliability and Validity of fMRI Statistical Methods

Principle Investigator: Stephanie Noble

Funding Source: National Institute of Neurological Disorders and Stroke

NIH Blueprint Diversity Specialized Predoctoral to Postdoctoral Advancement in Neuroscience Award (F99/K00)

Amount: \$43,497

2016 - 2018 **NSF DGE1122492** 

Fellow: Stephanie Noble

Funding Source: National Science Foundation Graduate Research Fellowship Program

Amount: \$92,000

### Honors & Awards\_

#### RESEARCH

2019 **Abstract Merit Award,** Organization for Human Brain Mapping, \$2,000 (15 awardees)

2019 **Associate Member Nomination**, Sigma Xi

2018 - 2019 Program for Excellence in Science Fellowship, AAAS / Science

2018 Annie Le Fellowship, Yale University (stipend & professional enrichment supplement; academic

excellence and service to the community)

2017 Qualified for Candidacy with Distinction

2016	Best Poster Award, Yale Biomedical Engineering Retreat	
2015 - 2017	<b>Neuroscience Scholars Program Fellowship</b> , Society for Neuroscience (15 awardees, support for society meeting attendance, society membership, professional enrichment funds)	
2012	Honors Certification in Quantitative & Computational Neuroscience	
2010	Siebel Energy Grand Challenges Fellowship, Princeton University, \$4,500	
2009 - 2012	Howard Hunt Garmany Memorial Scholarship, Hartford Foundation for Public Giving (awarded annually)	
Outreach		
2016	WE16 Outreach Award, Society of Women Engineers (to Yale GradSWE; outreach co-chair)	
2016	Seton Elm-Ivy Award, The Community Foundation for Greater New Haven (to INP Outreach; co-chair)	
INDUSTRY		
2013	Innovation Fund Award, Yale Entrepreneurial Institute, \$100,000 (offered) (exclusive award to Yale start-up)	
2012	<b>TechStart Accelerator Program Fund Award,</b> Connecticut Innovations, \$25,000 (exclusive award to 5 CT start-ups)	
2012	Private Investment, Bridge Builders Collaborative, undisclosed	

### Publications \_

H-index=23, Accepted=46, First Author=9, Last Author=1, Google Scholar: <a href="https://scholar.google.com/citations?user=JxQdvn4AAAAJ">https://scholar.google.com/citations?user=JxQdvn4AAAAJ</a>
\* = all authors contributed equally

#### Accepted

- 1. Gell, M., **Noble, S.,** Laumann, T.O., Nelson, S.M., Tervo-Clemmens, B. Psychiatric Neuroimaging Designs for Individualised, Cohort, and Population Studies. Accepted. *Neuropsychopharmology*. Preprint: <a href="https://osf.io/278ef/">https://osf.io/278ef/</a>
- 2. Kam, J., Badhwar, A., Borghesani, V., Lee, K., **Noble, S.,** Raamana, P. R., ... & Tzovara, A. 2024. Creating Diverse and Inclusive Scientific Practices for Research Datasets and Dissemination. *Imaging Neuroscience*. Preprint: <a href="https://osf.io/preprints/psyarxiv/dr5hq">https://osf.io/preprints/psyarxiv/dr5hq</a>
- 3. Jiang, R., **Noble, S.,** Rosenblatt, M., Dai, W., Ye, J., Liu, S., Qi, S., Calhoun, V.D., Sui, J., Scheinost, D. 2024. The brain structure, inflammatory, and genetic mechanisms underlying the association between physical frailty and depression. *Nature Communications*.
- 4. **Noble, S.\*,** Curtiss, J.\*, Pessoa, L., Scheinost, D. 2024. The tip of the iceberg: a call to embrace anti-localizationism in human neuroscience research. *Imaging Neuroscience*. Preprint: <a href="https://osf.io/preprints/psyarxiv/9eqh6">https://osf.io/preprints/psyarxiv/9eqh6</a>
- Mansour, S., Seguin, C., Winkler, A., Noble, S., Zalesky, A. Topological Cluster Statistic (TCS): Towards structural-connectivityguided fMRI cluster enhancement. 2024. Network Neuroscience. Preprint: <a href="https://www.researchsquare.com/article/rs-2059418/v1">https://www.researchsquare.com/article/rs-2059418/v1</a>
- 6. Rosenblatt, M.., Tejavibulya, L., Jiang, R., **Noble, S.**, Scheinost, D. 2023. Data leakage inflates prediction performance in connectome-based machine learning models. *Nature Communications*. Preprint: https://osf.io/ptuwe.

- 7. Camp, C.C., **Noble, S.**, Scheinost, D, Stringaris, A., Nielson, D.M. 2024. Test-retest reliability of functional connectivity in depressed adolescents. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*. Preprint: https://www.medrxiv.org/content/10.1101/2022.10.11.22280962v1
- 8. Sun, H., Jiang, R., Dai, W., Dufford, A.J., **Noble, S.,** Gu, S., Spann, M., Scheinost, D. 2023. Network controllability of structural connectomes in the neonatal brain. *Nature Communications*.
- 9. Dadashkarimi, J., Karbasi, A. Liang, Q., Rosenblatt, M., **Noble, S.**, Foster, M., Rodriguez, R., Adkinson, B., Ye, J., Sun, H., Camp, C., Farruggia, M., Tejavibulya, L., Dai, W., Jiang, R., Pollatou, A., Scheinost, D. 2023. Cross Atlas Remapping via Optimal Transport (CAROT): Creating connectomes for any atlas when raw data is not available. *Medical Image Analysis (MEDIA)*. Preprint: <a href="https://www.biorxiv.org/content/10.1101/2022.07.19.500642v2">https://www.biorxiv.org/content/10.1101/2022.07.19.500642v2</a>
- Ye, J., Sun, H., Gao, S., Dadashkarimi, J., Rosenblatt, M., Rodriguez, R.X., Mehta, S., Jiang, R., Noble, S., Westwater, M.L., Scheinost, D., 2023. Altered Brain Dynamics across Bipolar Disorder and Schizophrenia during Rest and Task-switching Revealed by Overlapping Brain States. *Biological Psychiatry*. Preprint: https://www.medrxiv.org/content/10.1101/2022.10.07.22280835v1
- 11. Rosenblatt, M.., Rodriguez, R., Westwater, M. Horien, C., Greene, A., Constable, R.T., **Noble, S.**, Scheinost, D., 2023. Connectome-based machine learning models are vulnerable to subtle data manipulations. *Cell Patterns*. Preprint: <a href="https://osf.io/ptuwe">https://osf.io/ptuwe</a>
- 12. Jiang, R., **Noble, S.,** Sui, J., Yoo, K., Rosenblatt, M., Horien, C., Qi, S., Liang, Q., Sun, H., Calhoun, V.D., Scheinost, D. 2023. Associations of physical frailty with health outcomes and brain structure in 483,033 middle-aged and older adults from the UK Biobank. *The Lancet Digital Health*.
- 13. Shinn, M., Hu, A., Turner, L., **Noble, S.**, Achard, S., Anticevic, A., Scheinost, D., Constable, R.T., Lee, D., Bullmore, E.T., Murray, J.D. 2023. Functional brain networks reflect spatial and temporal autocorrelation. *Nature Neuroscience*. Preprint: <a href="https://www.biorxiv.org/content/10.1101/2021.06.01.446561v1">https://www.biorxiv.org/content/10.1101/2021.06.01.446561v1</a>
- 14. Yang, G., Bozek, J., **Noble, S.**, Han, M., Wu, X., Xue, M., Kang, J., Jia, T., Fu, J., Ge, J., Cui, Z., Li, X., Feng, J., Gao, J. 2023. Global diversity in individualized cortical network topography. *Cerebral Cortex*.
- 15. Jiang, R., Calhoun, V.D., **Noble, S.,** Sui, J., Liang, Q., Qi, S., Scheinost, D. 2023. A functional connectome signature of blood pressure in> 30 000 participants from the UK biobank. *Cardiovascular Research*.
- 16. Scheinost, D., Pollatou, A., Dufford, A.J., Jiang, R., Farruggia, M.C., Rosenblatt, M., Peterson, H., Rodriguez, R.X., Dadashkarimi, J., Liang, Q., Dai, W., Foster, M.L., Camp, C.C., Tejavibulya, L., Adkinson, B.D., Sun, H., Ye, J., Cheng, Q., Spann, M.N., Rolison, M., Noble, S.\*, Westwater, M.L.\* 2023. Machine learning and prediction in fetal, infant, and toddler neuroimaging: a review and primer. *Biological Psychiatry*.
- 17. Rodriguez, R., **Noble, S.**, Tejavibulya, L., Scheinost, D. 2022. Leveraging edge-centric networks complements existing network-level inference for functional connectomes. *NeuroImage*.
- 18. Dai, W., **Noble, S.**, & Scheinost, D. 2022. The Semi-constrained Network-Based Statistic (scNBS): Integrating Local and Global Information for Brain Network Inference. *Medical Image Computing and Computer Assisted Intervention (MICCAI)*.
- 19. Jiang, R., Westwater, M.L., **Noble, S.,** Rosenblatt, M., Dai, W., Qi, S., Sui, J., Calhoun, V.D., Scheinost, D. 2022. Associations between grip strength, brain structure, and mental health in> 40,000 participants from the UK Biobank. *BMC Medicine*.
- 20. **Noble, S.,** Mejia, M., Zalesky, A., Scheinost, D. 2022. Improving power in functional magnetic resonance imaging by moving beyond cluster-level inference. *Proceedings of the National Academy of Sciences*. Preprint: <a href="https://www.biorxiv.org/content/10.1101/2021.09.23.461354v1">https://www.biorxiv.org/content/10.1101/2021.09.23.461354v1</a>
- 21. Greene, A.S., Shen, X., **Noble, S.**, Hahn, A., Arora, J., Tokoglu, F., Spann, M.N., Barron, D.S., Sanacora, G., Srihari, V.H., Woods, S.W., Scheinost, D., Constable, R.T. 2022. Individuals who defy stereotypical profiles require distinct brain-phenotype models. *Nature*.
- 22. Tejavibulya, L., Rolison, M., Gao, S., Liang, Q. Peterson, H., Dadashkarimi, J., Farruggia, M., Hahn, A.C., **Noble, S.**, Lichenstein, S.D., Pollatou, A., Dufford, A.J., Scheinost, D. 2022. Predicting the future of neuroimaging predictive models in psychiatry. *Molecular Psychiatry*.

- 23. Horien, C., Floris, D.L., Greene, A.S., **Noble, S.**, Rolison, M., Tejavibulya, L., O'Connor, D., McPartland, J.C., Scheinost, D., Chawarska, K., Lake, E.M., Constable, R.T. 2022. Functional connectome-based predictive modelling in autism. *Biological Psychiatry*.
- 24. Tejavibulya, L., Peterson, H., Greene, A., Gao, S., Rolison, M., **Noble, S.**, Scheinost, D. 2022. Large-scale differences in functional organization of left- and right-handed individuals using whole-brain, data-driven analysis of connectivity. Neurolmage.
- 25. Horien, C., Lee, K., Westwater, M., **Noble, S.**, Tejavibulya, L., Kayani, T., Constable, R.T., Scheinost, D. 2021. A protocol for working with open-source neuroimaging datasets. *STAR Protocols*.
- 26. Dufford, A.J., **Noble, S.**, Gao, S., Scheinost, D. 2022. The instability of functional connectomes across the first year of life. *Developmental Cognitive Neuroscience*. Preprint: <a href="https://doi.org/10.1101/2021.04.14.439877">https://doi.org/10.1101/2021.04.14.439877</a>
- 27. Ibrahim, K., **Noble, S.**, He, G., Lacadie, C., Crowley, M.J., McCarthy, G., Scheinost, D., and Sukhodolsky, D.G. 2021. Large-Scale Functional Brain Networks of Maladaptive Childhood Aggression Identified by Connectome-Based Predictive Modeling. *Molecular Psychiatry*.
- 28. Bridgeford, E. W., Wang, S., Yang, Z., Wang, Z., Xu, T., Craddock, C., ... **Noble, S.**, Priebe, C.E., Caffo, B., Milham, M., Zuo, X., Consortium for Reliability and Reproducibility, Vogelstein, J. T. 2021. Eliminating accidental deviations to minimize generalization error and maximize reliability: applications in connectomics and genomics. *PLOS Computational Biology*. Preprint: <a href="https://www.biorxiv.org/content/10.1101/802629v7">https://www.biorxiv.org/content/10.1101/802629v7</a>
- 29. Levitis, E., Gould van Praag, C. D., Gau, R., Heunis, S., DuPre, E., Kiar, G., ... **Noble, S.**, ... Maumet, C. 2021. Centering inclusivity in the design of online conferences. *Gigascience*. (Preprint: <a href="https://doi.org/10.31234/osf.io/vi5tu">https://doi.org/10.31234/osf.io/vi5tu</a>)
- 30. **Noble, S.**, Scheinost, D., Constable, R.T., 2021. A guide to the measurement and interpretation of fMRI test-retest reliability. *Current Opinion in Behavioral Sciences*. (*Invited Review, Deep Imaging Special Issue*).
- 31. Gau, R.\*, **Noble, S.\*,** Heuer, K.\*, Bottenhorn, K.\*, Bilgin, I.P.\*, Yang, Y.\*, Huntenburg, J.\*, Bayer, J.M.M.\*, Bethlehem, R.\*, ... Brainhack community. 2021. Brainhack: developing a culture of open, inclusive, community-driven neuroscience. *Neuron*. Preprint: <a href="https://psyarxiv.com/rytjq/">https://psyarxiv.com/rytjq/</a>
- 32. Barron, D.S., Gao, S., Dadashkarimi, J., Greene, A.S., Spann, M.N., **Noble, S.**, Lake, E., Krystal, J.H., Constable, R.T., Scheinost, D., 2020. Transdiagnostic, Connectome-Based Prediction of Memory Constructs Across Psychiatric Disorders. *Cerebral Cortex*.
  - Preprint: <a href="https://www.biorxiv.org/content/10.1101/638825v1">https://www.biorxiv.org/content/10.1101/638825v1</a>
- 33. Horien, C., **Noble, S.**, Greene, A.S., Lee, K., Barron, D.S., Gao, S., O'Connor, D., Salehi, M., Dadashkarimi, J., Shen, X., Lake, E.M., Constable, R.T., Scheinost, D., 2020. A Hitchhiker's Guide to Working with Large, Open-Source Neuroimaging Datasets. *Nature Human Behavior*.
- 34. **Noble, S.**, Scheinost, D., 2020. The Constrained Network-Based Statistic: A New Level of Inference for Neuroimaging. *Medical Image Computing and Computer Assisted Intervention (MICCAI)*, Proceedings, Part VII 23, 458-468.
- 35. Greene, A.S., Gao, S., **Noble, S.**, Scheinost, D., Constable, R.T., 2020. How Tasks Change Whole-Brain Functional Organization to Reveal Brain-Phenotype Relationships. *Cell Reports* 32, 108066.
- 36. **Noble, S.**, Scheinost, D., & Constable, R. T., 2020. Cluster failure or power failure? Evaluating sensitivity in cluster-level inference. *NeuroImage* 209, 116468.
- 37. **Noble, S.**, Scheinost, D., Constable, R.T., 2019. A decade of test-retest reliability of functional connectivity: A systematic review and meta-analysis. *NeuroImage* 203, 116157.
- 38. Dadashkarimi, J., Gao, S., Yeagle, E., **Noble, S.**, Scheinost, D., 2019. A Mass Multivariate Edge-wise Approach for Combining Multiple Connectomes to Improve the Detection of Group Differences. *International Workshop on Connectomics in Neuroimaging*. Springer, Cham, 64-73.

- 39. Yoo, K., Rosenberg, M.D., **Noble, S.**, Scheinost, D., Constable, R.T., Chun, M.M., 2019. Multivariate approaches improve the reliability and validity of functional connectivity and prediction of individual behaviors. *NeuroImage* 197, 212-223.
- 40. Scheinost, D., **Noble, S.**, Horien, C., Greene, A.S., Lake, E.M., Salehi, M., Gao, S., Shen, X., O'Connor, D., Barron, D.S., Yip SW., Rosenberg, M.D., Constable, R.T., 2019. Ten simple rules for predictive modeling of individual differences in neuroimaging. *NeuroImage*.
- 41. Lake, E.M., Finn, E.S., **Noble, S.M.**, Vanderwal, T., Shen, X., Rosenberg, M.D., Spann, M.N., Chun, M.M., Scheinost, D., Constable, R.T., 2019. The Functional Brain Organization of an Individual Allows Prediction of Measures of Social Abilities Transdiagnostically in Autism and Attention-Deficit/Hyperactivity Disorder. *Biological Psychiatry*.
- 42. Horien, C., **Noble, S.**, Finn, E.S., Shen, X., Scheinost, D., Constable, R.T., 2018. Considering factors affecting the connectome-based identification process: Comment on Waller et al. *NeuroImage* 169, 172-175.
- 43. **Noble, S.**, Spann, M.N., Tokoglu, F., Shen, X., Constable, R.T., Scheinost, D., 2017a. Influences on the test–retest reliability of functional connectivity MRI and its relationship with behavioral utility. *Cerebral Cortex* 27, 5415-5429.
- 44. **Noble, S.**, Scheinost, D., Finn, E.S., Shen, X., Papademetris, X., McEwen, S.C., Bearden, C.E., Addington, J., Goodyear, B., ... Cannon, T.D., Constable, R.T., 2017b. Multisite reliability of MR-based functional connectivity. *NeuroImage* 146, 959-970.
- 45. Benjamin, C.F., Walshaw, P.D., Hale, K., Gaillard, W.D., Baxter, L.C., Berl, M.M., Polczynska, M., **Noble, S.**, Alkawadri, R., Hirsch, L.J., Constable, R.T., Bookheimer, S.Y., 2017. Presurgical language fMRI: mapping of six critical regions. *Human Brain Mapping* 38, 4239-4255.
- 46. Scheinost, D., Tokoglu, F., Shen, X., Finn, E.S., **Noble, S.**, Papademetris, X., Constable, R.T., 2016. Fluctuations in global brain activity are associated with changes in whole-brain connectivity of functional networks. *IEEE Transactions on Biomedical Engineering* 63, 2540-2549.

#### **Under Review**

- 47. Rodriquez, R.X., **Noble, S.,** Camp, C., Scheinost, D. Connectome caricatures: removing large-amplitude co-activation patterns in resting-state fMRI emphasizes individual differences. (Preprint: <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC11030410/pdf/nihpp-2024.04.08.588578v1.pdf">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC11030410/pdf/nihpp-2024.04.08.588578v1.pdf</a>)
- 48. Shearer, H., Eilbott, J., Vila-Rodriguez, F., Xu, T., **Noble, S.,** Vanderwal, T. Comparing reliability of functional connectivity between movie and rest in psychiatric regions of interest.
- 49. Rosenblatt, M., Tejavibulya, L., Camp, C., Jiang, R., Westwater, M., **Noble, S.**, Scheinost, D. Power and reproducibility in the external validation of brain-phenotype predictions.
- 50. Adkinson, B.D., Rosenblatt, M., Dadashkarimi, J., Tejavibulya, L., Jiang, R., **Noble, S.,** Scheinost, D. Brain-phenotype predictions can survive across diverse real-world data.
- 51. Bridgeford, E. W., Powell, M., Kiar, G., **Noble, S.**, Chung, J., Panda, S., Lawrence, R., Priebe, C.E., Caffo, B., Xu, T., Milham, M., Vogelstein, J. T. When no answer is better than a wrong answer: a causal perspective on batch effects (Preprint: <a href="https://www.biorxiv.org/content/10.1101/2021.09.03.458920v4">https://www.biorxiv.org/content/10.1101/2021.09.03.458920v4</a>)
- 52. Rosenblatt, M., Mehta, S., Peterson, H., Dadashkarimi, J., Rodriguez, R.X., Foster, M.L., Adkinson, B.D., Liang, Q., Kimble, V.M., Ye, J., McCusker, M.C., Farruggia, M.C., Rolison, M., Westwater, M.L., Jiang, R., **Noble, S.,** Scheinost, D. Trends in self-citation rates in neuroscience literature. (Preprint: <a href="https://www.biorxiv.org/content/10.1101/2022.09.27.509533v1">https://www.biorxiv.org/content/10.1101/2022.09.27.509533v1</a>)

#### Selected Media

53. Interviewed by Lloyd, N. 2023. Psychology professor building 'data science tool' to increase the reliability of human brain research. Northeastern Global News. <a href="https://cos.northeastern.edu/news/psychology-professor-building-data-science-tool-to-increase-the-reliability-of-human-brain-research/">https://cos.northeastern.edu/news/psychology-professor-building-data-science-tool-to-increase-the-reliability-of-human-brain-research/</a>

- 54. Interviewed by Locklear, M. 2022. To better understand the brain, look at the bigger picture. YaleNews. https://news.vale.edu/2022/08/04/better-understand-brain-look-bigger-picture
- 55. Interviewed by Yu, A. 2021. Scientists have used fMRI to study brain activity for years. Now, some question the results' reliability. *The Pulse*. WHYY PBS NPR. <a href="https://whyy.org/segments/scientists-used-fmri-to-study-brain-activity-for-years-now-some-question-the-results-reliability/">https://whyy.org/segments/scientists-used-fmri-to-study-brain-activity-for-years-now-some-question-the-results-reliability/</a>
- 56. Interviewed by Proff, I., 2020. Can brain scans transform psychiatry? Medium. <a href="https://medium.com/@irisproff/can-brain-scans-transform-psychiatry-963ff2e5fb4f">https://medium.com/@irisproff/can-brain-scans-transform-psychiatry-963ff2e5fb4f</a>
- 57. Interviewed by Macmillon, T., 2012. Start-Up seeks to tap mind power. New Haven Independent. https://www.newhavenindependent.org/index.php/archives/entry/start-up\_tries\_to\_tap\_mind\_power/

#### Acknowledgements

- 58. Kim, J.S., Greene, M.J., Zlateski, A., Lee, K., Richardson, M., Turaga, S.C., ... & Campos M., 2014. Space–time wiring specificity supports direction selectivity in the retina. Nature, 509(7500), 331. (listed as "curiousimbroglio" in "the Eyewirers").
- 59. Bzymek, Z.M., Vahidi, S., & Spottiswoode, H., 2007. Solutions of the 21st Century—Teaching Computer-Aided Conceptual Design. Computer-Aided Design and Applications, 4(1-4), 459-465.

### Presentations \_\_\_\_

Invited Conference Talks & Symposia

- 1. **Noble, S.**, (2024, planned). Invited Lecture: User-friendly web apps to facilitate fMRI study design and analysis. *Neurohackademy.*
- 2. **Noble, S.**, (2023). Invited Keynote: Making open science work for you. *Advanced Computational Neuroscience Network (ACNN) Big Data Neuroscience Workshop.*
- 3. **Noble, S.**, (2023). Invited Workshop: Making open science work for you: Tools for Reproducible Neuroscience. *Advanced Computational Neuroscience Network (ACNN) Big Data Neuroscience Workshop.*
- 4. **Noble, S.**, (2023). Invited Symposium: Paths to increased brain-behavior reproducibility. Speakers: Nico Dosenbach (organizer), Stephanie Noble, Scott Marek, Thomas Yeo, Russ Poldrack. *Cognitive Neuroscience Society Meeting*.
- 5. **Noble, S.** (2022). Diversity, equity, and inclusion initiatives across the human brain mapping community. *TransMedTech Institute Grand Conference Series*.
- 6. **Noble, S.** (2021). Leveling Up: Improving power in functional connectivity by moving beyond cluster-level inference. *Innovators in Cognitive Neuroscience*. Recording: <a href="https://www.youtube.com/watch?v=lm80J8-dbS0">https://www.youtube.com/watch?v=lm80J8-dbS0</a>
- 7. **Noble, S.** (2020). The constrained network-based statistic: A new level of inference for neuroimaging. *NIH BRAIN Initiative Alliance's Tools, Tech, Theory and Trainee Series* and *Neuromatch Conference 3.0*.

#### **Invited Seminars**

- 1. **Noble, S.** (2024). Towards more reliable and valid human brain mapping research. *UCLA/BRI Neuroimaging Affinity Group Distinguished Colloquium Speaker, University of California Los Angeles*.
- 2. **Noble, S.** (2023). Empirical effect size guidelines for typical fMRI studies. *Developmental Cognition & Neuroimaging Lab, Masonic Institute for the Developing Brain, University of Minnesota.*
- 3. **Noble, S.** (2023). Empirical effect size guidelines for typical fMRI studies. *COBRE Behavior and Neurodata Core, Brown University*.

- 4. **Noble, S.** (2022). From fundamental principles towards precision neuroscience. *Department of Electrical and Computer Engineering* and *Emerging Scholars in Engineering*, *Vanderbilt*.
- 5. **Noble, S.** (2021). Leveling Up: Improving power in functional connectivity by moving beyond cluster-level inference. *BraiNets Lab, Institut de Neurosciences de la Timone*.
- 6. **Noble, S.** (2021). Leveling Up: Improving power in functional connectivity by moving beyond cluster-level inference. *Systems Lab, Melbourne University*.
- 7. **Noble, S.** (2021). Leveling Up: Improving power in functional connectivity by moving beyond cluster-level inference. *Neurostats Oxford group meeting, Oxford University.*
- 8. **Noble, S.** (2021). Leveling Up: Improving power in functional connectivity by moving beyond cluster-level inference. *Cognitive Development Lab, Columbia University*.
- 9. **Noble, S.**, Scheinost, D., Constable, R.T. (2020). A decade of test-retest reliability of functional connectivity. *Yale Appetitive Science Seminar Series*.
- 10. **Noble, S.**, Constable, R.T. Scheinost, D (2017). Factors influencing Reliability of Functional Connectivity. *Yale Magnetic Resonance Seminar Series*.
- 11. **Noble, S.**, Scheinost, D., Bookheimer, SY, Walshaw, P, Constable, R.T., Benjamin, C (2015). Initial validation of a novel method of presurgical fMRI language localization through functional connectivity. *Yale Epilepsy Research Retreat 2015*.
- 12. **Noble, S.**, Scheinost, D., Constable, R.T., Cannon, T.D. (2015). Reliability of Multisite Functional Connectivity. *Yale NeuroDay* 2015.

#### Contributed Conference Talks, Panels, & Symposia

- 1. **Noble, S.** (2024). Symposium: Increasing International Collaboration Opportunities for Early Career Researchers. *Organization for Human Brain Mapping Meeting*. Speakers: Katie Moran (organizer), Brendan Williams (organizer), Joseph Chen (organizer), Patcharaporn Srisaikaew (organizer), Michael Milham, Stephanie Noble, and Mac Shine.
- 2. **Noble, S.** (2023). Symposium: Advances in Individual-Level Modeling. *Organization for Human Brain Mapping Meeting*. Speakers: Mandy Mejia (organizer), Stephanie Noble (organizer), Gang Chen (organizer), Catie Chang, and Aihuiping Xue.
- 3. **Noble, S.** (2023). Symposium: Inference on the Brain: advances and practices in brain activity inference. *Organization for Human Brain Mapping Meeting*. Speakers: Sina Mansour (organizer), Andrew Zalesky (organizer), Stephanie Noble, Chris Rorden, and Sara Larivière.
- 4. **Noble, S.** (2022). Panel: Emerging topics in promoting reproducible research from a statistical perspective. *Organization for Human Brain Mapping Meeting: Open Science Room.* Speakers: Stephanie Noble (moderator), Johanna Bayer (moderator), Amanda Mejia, Bertrand Thirion, Catie Chang, Gang Chen, and Wesley Thompson.
- 5. **Noble, S.** (2022). Symposium: The ups and downs of open science perspectives from early-career and established researchers. Talk: Making open science work for you as an ECR. *Organization for Human Brain Mapping Meeting*. Speakers: Benjamin de Leener (organizer, speaker), Johanna Bayer (organizer), Stefano Moia (organizer), Linden Parkes (organizer), Priya Suppiah, Cassandra Gould van Praag, and Stephanie Noble.
- 6. **Noble, S.** (2022). RoundTable Discussion: Best practices for promoting diversity and inclusivity across OHBM organizations. *Organization for Human Brain Mapping Meeting*. Panelist.
- 7. **Noble, S.** (2021). Panel: Aperture and Open Science Roundtable. *Organization for Human Brain Mapping Meeting*. Speakers: Aki Nikolaidis (moderator), JB Poline (moderator), Ilona Lipp, and Stephanie Noble.
- 8. **Noble, S.** (2021). Panel: Ensuring open science is accessible. *Organization for Human Brain Mapping Meeting: Open Science Room.* Speakers: Stephanie Noble (moderator), Stephen Klusza, Syreeta Nolan, Amanda Klinger, and Alyssa Paparella.

- 9. **Noble, S.** (2021). Symposium: Current frontiers in statistical inference for neuroimaging data. Talk: Cluster failure or power failure? Towards a new level of inference for neuroimaging. *Organization for Human Brain Mapping Meeting*. Speakers: Bertrand Thirion (organizer), Jeanette Mumford (moderator), Stephanie Noble, and Jonathan D. Rosenblatt.
- 10. **Noble, S.** (2021). Symposium: Functional Networks. Talk: Reliability and Inference in functional networks. *IEEE International Symposium on Biomedical Imaging*. Speakers: Danielle Bassett, Jingyuan Chen, Stephanie Noble, Maria Giulia Preti (coorganizer with Isik Karahanoglu), and Joana Cabral.
- 11. **Noble, S.** (2021). Lightning talk. Leveling Up: Improving power in functional connectivity by moving beyond cluster-level inference. Writing Your Own Blueprint: *The NIH Blueprint Diversity Conference*.
- 12. **Noble, S.**, Scheinost, D. (2020). Oral Session. The constrained network based statistic: A new level of inference for neuroimaging. *Medical Image Computing and Computer Assisted Intervention*.
- 13. **Noble, S.,** Dadashkarimi, J., Saltzman, Z., Lacadie, C., Garbus, H., Casetti, D., Onofrey, J., Papademetris, X., Scheinost, D. (2020). Tutorial. Try Biolmage Suite Web, a modern and powerful software for neuroscience. *Brainhack NY 2020*.
- 14. **Noble, S.**, Dadashkarimi, J., Papademetris, X., Scheinost, D., (2020). Talk & Demo. Web native data analysis with WebAssembly: a BISWeb demo and conversation. *Organization for Human Brain Mapping Meeting: Open Science Room*. Recording: <a href="https://www.youtube.com/watch?v=9Xqn7Jq7ypo">https://www.youtube.com/watch?v=9Xqn7Jq7ypo</a>
- 15. **Noble, S.**, Scheinost, D., Constable, R.T. (2020). Symposium: Measuring the Individual: Understanding sources of variability in task and resting fMRI. Talk 1: Factors influencing the test-retest reliability of functional connectivity. *Organization for Human Brain Mapping Meeting*. Speakers: Stephanie Noble, Erin Dickie, Caterina Gratton, and Colin Hawco (organizer).
- 16. Dadashkarimi, J., **Noble, S.**, Greene, A., Constable, R.T., Papademetris, X., Scheinost, D. (2020). Software demo. On Visualization and Interpretation of Complex Connectomic Results. *Organization for Human Brain Mapping Meeting*.
- 17. (Merit Abstract Award) Noble, S., Scheinost, D., Constable, R.T. (2019). Oral Session. Cluster Failure or Power Failure? Evaluating Sensitivity in Cluster-Level Inference. Organization for Human Brain Mapping Meeting. Recording: https://www.pathlms.com/ohbm/courses/12238/sections/15843/video\_presentations/138325
- 18. **Noble, S.,** Dadashkarimi, J., Saltzman, Z., Lacadie, C., Garbus, H., Casetti, D., Onofrey, J., Papademetris, X., Scheinost, D. (2019). Talk & Demo. Introducing Biolmage Suite Web. *Organization for Human Brain Mapping Meeting: Open Science Room*.
- 19. **Noble, S.**, Scheinost, D., Constable, R.T. (2019). Symposium: Towards Understanding Individual Variability with Functional Neuroimaging: Big data and deep data perspectives. Talk 1: Factors influencing the test-retest reliability of functional connectivity. *Cognitive Neuroscience Society Meeting*. Speakers: Stephanie Noble, Caterina Gratton (co-chair), Colin Hawco (chair), and Mac Shine.
- 20. **Noble, S.\***, Saltzman, Z.\*, Dadashkarimi, J., Lacadie, C., Garbus, H., Casetti, D., Onofrey, J., Papademetris, X., Scheinost, D. (2019). Tutorial. Introducing Biolmage Suite Web. *Brainhack Yale 2019*.
- 21. Noble, S.\*, O'Connor, D\*. (2018). Tutorial. Intro to Machine Learning for fMRI with Nilearn. Brainhack Yale 2018.

#### Select Posters

- 22. Fischbach, A., Shearer, H., Satpute, A.J., Quigley, K.S., Theriault, J.E., Feldman Barrett, L., **Noble, S.** (accepted for 2024). Assessing the impact of subject-specific masks on reliability of subcortical connectivity. Cognitive Neuroscience Society Meeting.
- 23. Shearer, H., Rosenblatt, M. Ye, J., Jiang, R., Tejavibulya, L., Liang, Q., Dadashkarimi, J., Westwater, M., Cheng, I., Rolison, M., Peterson, H., Adkinson, B., Mehta, S., Camp, C., Curtiss, J. Scheinost, D., **Noble, S.** (accepted for 2024). BrainEffeX: A Shiny app to explore typical effect sizes in functional neuroimaging research. Cognitive Neuroscience Society Meeting.
- 24. Fischbach, A., Shearer, H., Satpute, A.J., Quigley, K.S., Theriault, J.E., Feldman Barrett, L., **Noble, S.** (accepted for 2024). Assessing the impact of subject-specific masks on reliability of subcortical connectivity. Research, Innovation, Scholarship and Entrepreneurship Expo.

- 25. **Noble, S.,** Rosenblatt, M., Tejavibulya, L., Ye, J., Jiang, R., Rolison, M., Peterson, H., Dadashkarimi, J., Horien, C., Greene, A., Scheinost, D. (2022). Preliminary empirical effect size guidelines for typical fMRI studies. Society for Neuroscience Meeting.
- 26. Ye, J., Sun, H., Gao, S., Dadashkarimi, J., Rosenblatt, M., Rodriguez, R.X., Mehta, S., Jiang, R., **Noble, S.**, Westwater, M.L., Scheinost, D. (2022). Altered Brain Dynamics across Bipolar Disorder and Schizophrenia during Rest and Task-switching Revealed by Overlapping Brain States. Society for Neuroscience Meeting.
- 27. Foster, M., **Noble, S.**, & Scheinost, D. (2022). A Transdiagnostic Analysis Reveals Brain Edge Motifs in Manic Patients Versus Non-Manic Patients. Society for Neuroscience Meeting.
- 28. Dai, W., Noble, S., & Scheinost, D. (2022). The Semi-constrained Network-Based Statistic (scNBS): Integrating Local and Global Information for Brain Network Inference. Medical Image Computing and Computer Assisted Intervention (MICCAI) Meeting.
- 29. Mansour, S., Winkler, A., **Noble, S.,** Seguin, C., Zalesky, A. (2022). Topological Cluster Statistic: Structural connectivity guided fMRI cluster enhancements. Organization for Human Brain Mapping Meeting.
- 30. **Noble, S.,** Mejia, M., Zalesky, A., Scheinost, D. (2022). Improving sensitivity with broader-scale inference—is it worth the reduction in specificity? Organization for Human Brain Mapping Meeting.
- 31. Camp, C.C., Eisner, L., **Noble, S.**, Scheinost, D, Stringaris, A., Nielson, D.M., 2023. Reliability of resting state functional connectomes in depressed adolescents. Society of Biological Psychiatry Meeting.
- 32. **Noble, S.,** Mejia, M., Zalesky, A., Scheinost, D. (2022). Improving sensitivity with broader-scale inference—is it worth the reduction in specificity? Cognitive Neuroscience Society Meeting.
- 33. Tejavibulya, L., Peterson, H., Gao, S., **Noble, S.**, Rolison, M., Scheinost, D. (2021). Identifying differences in functional organization of left- and right-handed individuals using functional connectivity. Flux Congress.
- 34. **Noble, S.**, Scheinost, D. (2021). Leveling up: How broader levels of inference improve power in functional connectivity. Organization for Human Brain Mapping Meeting.
- 35. Dufford, A., **Noble, S.**, Gao, S., Scheinost, D. (2021). Low Infant Functional Connectome-based Identification Accuracy Across the First Year of Life. Organization for Human Brain Mapping Meeting.
- 36. Greene, A.S., Shen, X., **Noble, S.**, Hahn, A., Arora, J., Tokoglu, F., Spann, M., Barron, D.S., Scheinost, D., Constable, R.T. (2021). Predictive modeling reveals subgroup-specific brain-phenotype relationships. Organization for Human Brain Mapping Meeting.
- 37. Dadashkarimi, J., Tejavibulya, L., Gao, S., Greene, A., **Noble, S.**, Constable, R.T., Scheinost, D. (2021). Combining task connectomes can emphasize or deemphasize group differences in predictive modeling. Organization for Human Brain Mapping Meeting.
- 38. Tejavibulya, L., Peterson, H., Gao, S., **Noble, S.**, Rolison, M., Scheinost, D. (2021). Identifying differences in functional organization of left- and right-handed individuals using functional connectivity. Organization for Human Brain Mapping Meeting.
- 39. **Noble, S.**, Dadashkarimi, J., Saltzman, Z., Lacadie, C., Garbus, H., Onofrey, J., Papademetris, X., Scheinost, D. (2021, accepted 2020 and postponed due to COVID19). Bioimage Suite Web: A Simple, Modern, & Powerful Software Suite. International Neuroinformatics Coordinating Facility Assembly.
- 40. Dadashkarimi, J., **Noble, S.**, Qu., A., Saltzman, Z., Shen, X., Lake, E., Constable, R.T., Papademetris, X., Scheinost, D. (2021, accepted 2020 and postponed due to COVID19). A web-based toolkit for visualizing and interpreting complex connectomic results in BISWeb. International Neuroinformatics Coordinating Facility Assembly.
- 41. **Noble, S.**, Scheinost, D. (2020). The Constrained Network-Based Statistic: A New Level of Inference for Neuroimaging. In Medical Image Computing and Computer Assisted Intervention (MICCAI) Meeting.
- 42. Dadashkarimi, J., **Noble, S.**, Greene, A., Constable, R.T., Papademetris, X., Scheinost, D. (2020). On Visualization and Interpretation of Complex Connectomic Results. Brain Initiative Investigators Meeting.

- 43. Dadashkarimi, J., **Noble, S.**, Greene, A., Constable, R.T., Papademetris, X., Scheinost, D. (2020). On Visualization and Interpretation of Complex Connectomic Results. Organization for Human Brain Mapping Meeting.
- 44. **Noble, S.**, Dadashkarimi, J., Saltzman, Z., Lacadie, C., Garbus, H., Casetti, D., Onofrey, J., Papademetris, X., Scheinost, D. (2019). Introducing Biolmage Suite Web: A Simple, Modern, and Powerful Software Suite. Society for Neuroscience Meeting.
- 45. **Noble, S.**, Dadashkarimi, J., Saltzman, Z., Lacadie, C., Garbus, H., Casetti, D., Onofrey, J., Papademetris, X., Scheinost, D. (2019). Introducing BioImage Suite Web: A Simple, Modern, and Powerful Software Suite. Organization for Human Brain Mapping Meeting.
- 46. **Noble, S.**, Scheinost, D., Constable, R.T. (2019). Cluster Failure or Power Failure? Evaluating the Sensitivity of Cluster-Level Inference. Organization for Human Brain Mapping Meeting.
- 47. Greene, A., Gao, S., **Noble, S.**, Scheinost, D., Constable, R.T. (2019). Task activation and functional connectivity offer distinct insight into brain-behavior relationships. Organization for Human Brain Mapping Meeting.
- 48. **Noble, S.**, Dadashkarimi, J., Saltzman, Z., Lacadie, C., Garbus, H., Casetti, D., Onofrey, J., Papademetris, X., Scheinost, D. (2019). Introducing BioImage Suite Web: A Simple, Modern, and Powerful Software Suite. BRAIN Initiative Investigator's Meeting.
- 49. **Noble, S.**, Scheinost, D., Constable, R.T. (2018). Cluster Failure or Power Failure? Balancing the Scale with Sensitivity. 2018 Society for Neuroscience Meeting.
- 50. **Noble, S.**, Scheinost, D., Constable, R.T. (2018). Cluster Failure or Power Failure? Balancing the Scale with Sensitivity. 2018 Brain Functional Connectivity and Organization Meeting.
- 51. **Noble, S.**, Scheinost, D., Constable, R.T. (2016). Influences on Reliability of Functional Connectivity. 2016 Society for Neuroscience Meeting.
- 52. **Noble, S.**, Scheinost, D., Bookheimer, SY, Walshaw, P, Hirsch, LJ, Spencer, DD, Constable, R.T., Benjamin, C (2016, Feb). Preliminary Support for Presurgical fMRI Language Localization through Functional Connectivity Permutation Testing. 2016 International Neuropsychology Society Meeting.
- 53. (Best Poster Award) Noble, S., Scheinost, D., Cannon, T.D., Constable, R.T. (2015). Reliability of Multisite Functional Connectivity. 2015 Yale Biomedical Imaging Research Retreat.
- 54. **Noble, S.**, Scheinost, D., Cannon, T.D., Constable, R.T. (2015). Reliability of Multisite Functional Connectivity. Society for Neuroscience Annual Meeting.
- 55. **Noble, S.**, Scheinost, D., Cannon, T.D., Constable, R.T. (2015). Reliability of Multisite Functional Connectivity. Society for Neuroscience Annual Meeting: Neuroscience Scholars Program Poster Session.
- 56. Noble, S., Schutt., C.E. (2012). Muscle Contraction as a Markov Process. Annual Princeton CBE Thesis Poster Presentations.
- 57. **Noble, S.**, Bonetti, C.E., Benziger, J.B. (2010). Hydrogen Purification by Electrochemical Pumping. Talk at Princeton Environmental Institute Seibel Energy Grand Challenge Summer of Learning Symposium. http://www.princeton.edu/grandchallenges/energy/internships/meet-our-interns/interns-2010/Noble\_Stephanie\_sol.pptx

#### **Industry Demonstrations**

- 58. Noble, S., Poeuv, S., Brewer, J.A. (2013, February). Private demo for popular media reporter (undisclosed). goBlue Labs.
- 59. Noble, S., Poeuv, S., Brewer, J.A. (2012, December). Public demo. TechStart Demo Day. Yale University.
- 60. **Noble, S.**, Poeuv, S., Brewer, J.A. (2012, July). Private demo. Professional Golfer's Association (PGA): Metropolitan Section. Metropolitan PGA Golf Central Offices, Elmsford, NY.
- 61. Noble, S., Poeuv, S., Brewer, J.A. (2012, Sept). Private demo for New Haven Independent Reporter. goBlue Labs.

#### Industry Pitches

- 62. Poeuv, S., **Noble, S.**, Pal, P., Brewer, J.A. (2013, October). goBlue Labs YEI Innovation Fund Pitch. Presentation given at Yale University.
- 63. Poeuv, S., **Noble, S.**, Brewer, J.A. (2013, August). goBlue Labs CI Pre-Seed Program Pitch. Presentation given at Connecticut Innovations in Rocky Hill.
- 64. Poeuv, S., **Noble, S.**, Brewer, J.A. (2012, December). goBlue Labs New Haven Start-up Competition Pitch. Presentation given at Yale University for an anonymous investor.
- 65. Poeuv, S., Noble, S., Brewer, J.A. (2012, December). goBlue Labs TechStart Demo Day Pitch. Presentation given at Yale.
- 66. Poeuv, S., **Noble, S.**, Brewer, J.A. (2012, July). goBlue Labs TechStart Accelerator Competition Pitch. Presentation given at Connecticut Innovations.

### Mentorship \_\_\_\_\_

#### Primary supervisor:

- Alexandra Fischbach (PhD student, Psychology, 2023 present): advisor
- Hallee Shearer (Research Assistant, 2023 present): advisor
- Tracy Lu (high school student, 2018 2019): internship advisor
- Samantha Steinberg (high school student, 2016): internship advisor

#### PhD Thesis Committee:

- Chris Camp (Interdepartmental Neuroscience Program, Yale University; Primary Mentor: Dustin Scheinost): 2023 present
- Clare Shaffer (Psychology; Primary Mentor: Susan Whitfield-Gabrieli): planned

#### Fellowship Mentorship Team:

- Luis Ramirez (Psychology, UCSD; Primary Mentor: John Serences): NIH DSPAN F99/K00
- Emma Margolis (Psychology; Primary Mentor: Laurel Gabard-Durnam): CCBH Interdisciplinary Graduate Student Fellowship
- Hailey Smith (Psychology; Primary Mentor: Jonathan Peelle): CCBH Interdisciplinary Graduate Student Fellowship

#### Assisted in the supervision of:

- MINDS Lab Members (Primary Mentor: Dustin Scheinost; 2019-2023):
- Maya Foster (PhD student, Biomedical Engineering, 2022 2023): advised on project
- Chris Camp (PhD student, Interdepartmental Neuroscience Program, 2022 2023): advised on projects
- Jean Ye (PhD student, Interdepartmental Neuroscience Program, 2022 2023): advised on project
- Matthew Rosenblatt (PhD student, Biomedical Engineering, 2021 2023); advised on projects
- Raimundo Rodriguez (PhD student, INP, 2021 2023): advised on project
- Wei Dai (PhD student, Biostatistics, 2020 2022): advised on project
- Javid Dadashkarimi (PhD student, Computer Science, 2019 2021): general support
- Link Tejavibulya (PhD student, Interdepartmental Neuroscience Program, 2019 2020): general support
- Iris Cheng (postgraduate fellow, 2021 2022): advised on project
- Hannah Petersen (postgraduate fellow, 2019 2022): advised on project

#### Extracurricular mentor:

- Darlis Juvino (PhD student, 2020 2023, via YBDIC-PATHS): mentored through successful PhD program application
- Evelyn Soria (BSN, 2016 present): mentored through successful nursing school graduation

#### Prior extracurricular mentorship:

• five undergraduates (two via Women in Science at Yale, 2014; three via goBlue, 2012 – 2014) and two high school students (one via ManyMentors, 2015; one via goBlue. 2013 - 2014).

### **Teaching**

Guest Lecture: "Test-retest reliability; Integration and harmonization of multi-site fMRI data"
HST 583 FMRI: DATA ACQUISITION & ANALYSIS

MGH Martinos Center 2024 (planned)

Guest Lecture: "A guide to the measurement and interpretation of fMRI test-retest reliability"

University of Utah

Instructor: "PSYC 7250: Seminar in Clinical Neuroscience: A Data Science Toolkit for Human Neuroscience Research"

Northeastern University
Spring 2024

DEPARTMENT OF PSYCHOLOGY; 15 PHD STUDENTS; NEW COURSE

Speaker: "Cluster failure or power failure? Empirically evaluating sensitivity and specificity of classical fMRI inference"

Montreal, Canada

OHBM 2023 EDUCATIONAL COURSE: "BEYOND BLOBOLOGY: ADVANCES IN STATISTICAL INFERENCE FOR NEUROIMAGING"

Guest Lecture: "A guide to the measurement and interpretation of fMRI test-retest reliability"

Training in Advanced Methods in Neuroimaging and Genetics 2023

University of Utah

Glasgow, Scotland

Organizer: "Cultivating open science practices in academic research and culture" OHBM 2022 EDUCATIONAL COURSE

2022

Guest Lecture: "A guide to the measurement and interpretation of fMRI test-retest reliability"

Training in Advanced Methods in Neuroimaging and Genetics 2022

University of Utah

Workshop: "Try Biolmage Suite Web, a modern and powerful software for neuroscience"

Brainhack NY 2020

New York University

Private Tutor: Basic Statistics & Data Science (1 student), Introduction to R (1 student)

Yale University

Workshop: "Introduction to BioImage Suite Web"

BRAINHACK YALE 2019

Yale University

2019

Workshop: Connectome-based Predictive Modeling Working Group

MAGNETIC RESONANCE RESEARCH CENTER

Yale University 2019 (Monthly)

Workshop: "Intro to Machine Learning for fMRI with Nilearn"

Yale University

BRAINHACK YALE 2018

2018

Teaching Fellow
Introduction to Relativity (ASTR 180)

Yale University 2018

Teaching Fellow

Yale University

NEUROBIOLOGY (MCDB/NSCI 320A/720A)

2015

### **Ad Hoc Review & Editorial Membership**

Publons: https://www.webofscience.com/wos/author/rid/AEE-8968-2022

Editorial Board: Aperture (OHBM); Imaging Neuroscience, NeuroImage: Reports (2022—2023)

Guest Editor: Developmental Cognitive Neuroscience (Planned 2024 Special Issue "Methodological and analytic advances in developmental neuroscience")

#### Ad Hoc Review

General Science

Proceedings of the National Academy of Sciences, Nature Communications, Nature Methods, Nature Scientific Reports, Neuron, Communications Biology, Advanced Science, Science Advances, PLOS One, eLife, Cell Reports

Neuroscience

Imaging Neuroscience, Human Brain Mapping, Cerebral Cortex, Network Neuroscience, Nature Neuroscience, Nature Human Behavior, Nature Mental Health, Journal for Reproducibility in Neuroscience, Journal of Neuroscience Research, NeuroImage (2016-

2023), eNeuro, Social Cognitive and Affective Neuroscience, Psychophysiology, Social Cognitive and Affective Neuroscience, Developmental and Cognitive Neuroscience, Trends in Cognitive Sciences

Technical

Advanced Intelligent Systems, PLOS Computational Biology, MICCAI Medical Image Analysis, Multivariate Behavioral Research, IEEE Transactions in Biomedical Engineering, Computers in Biology & Medicine Clinical

NeuroImage: Clinical, Psychiatry Research: Neuroimaging, Schizophrenia Bulletin, Behavior Change, Assessment, BMC Psychiatry

**Grant Review:** Deutsche Forschungsgemeinschaft (DFG)

## Leadership & Service \_\_\_\_\_

Brainhack Boston:Northeastern "2023" (Part of Brainhack Global 2023) Lead Organizer	Winter 2024
NIH DSPAN Braintrust 2023 Invited Panelist: "Mechanisms towards Independence"	Fall 2023
Brainhack Global 2023 Volunteer; Outreach Team	Spring-Fall 2023
Harvard Med / MGH Postdoc Fellowship Seminar Invited Speaker: "Having an Online Presence"	2022, 2023
NIH Blueprint-ENDURE 2022 Invited Panelist: "Pathways and Perspectives on Advancing Your Career"	Fall 2022
WINRepo Chat 2022 Invited Moderator: "Grants & Fellowships" (prof dev program started by Vale Borghesani)	Fall 2022
Brainhack Global 2022 Diversity, Equity, & Inclusion Team Lead; Outreach Team; Onboarding Team	Fall 2022
OHBM OSSIG 2022 Table Talks Facilitator: "Reproducible Science and my role in it (Thomas Nichols)"	Summer 2022
OHBM OSSIG 2022 Poster Pals Organizer (inaugural poster networking program led by Sarah Goodale)	Summer 2022
WINRepo Volunteer	2021-present
OHBM Open Science Special Interest Group (OSSIG) 2022 Inclusivity Officer Co-organized Open Science Room panels and events	2021-2022
OHBM Diversity Inclusivity Committee (DIC) 2022 OSSIG-DIC Liason	2021-2022
Científico Latino Graduate School Mentorship Initiative Application Reviewer (2 students)	Fall 2021
Brainhack Global 2021 Diversity, Equity, & Inclusion Team Lead; Outreach Team; Onboarding Team	Fall 2021
Brainhack OHBM 2021 Brainhack Diversity, Equity, & Justice Team Lead; Social Media Lead; Mentor	Spring 2021
Brainhack Global 2020 Social Lead Organizer	Fall 2020
Neuromatch Conference 3.0 Moderator (4 traditional symposia, 1 interactive symposium)	Fall 2020
Columbia University POR Colloquium Invited Talk: Grant Funding Seminar	Fall 2020
FIT'NG Flux Preconference Workshop Moderator: "Data Sharing" Breakout Session	Fall 2020
YBDIC-PATHS Mentoring Program Mentor	2020-2021
OHBM 2020 Club Night Social Lead Organizer	Summer 2020
NIH Blueprint D-SPAN F99/K00 Webinar Panelist <a href="https://www.ninds.nih.gov/News-Events/Events-Proceedings/Events/NIH-Blueprint-D-SPAN-F99K00-Webinar">https://www.ninds.nih.gov/News-Events/Events-Proceedings/Events/NIH-Blueprint-D-SPAN-F99K00-Webinar</a>	Winter 2019
Brainhack Yale 2019 Lead Organizer and Workshop Instructor	Spring 2019
Neuroscience Scholars Program Leadership Meeting Panelist	Summer 2019
Yale Annie Le Fellowship Selection Committee Member	Spring 2019
INP Diversity Recruitment Panel Panelist and SWE Representative	Spring 2019
Brainhack Networks 2019 Team of Experts	Winter 2019
Yale Minority Scientists Research Network Board Member	Fall 2018
NIH Blueprint D-SPAN F99/K00 Twitter Q&A Panelist	Fall 2018

Brainhack Yale 2018: Lead Organizer and Workshop Instructor	Spring 2018
Neuroscience Scholars Program Neuroscience Leadership Conference Invited Member	Summer 2017
INP Speaker Seminar Committee Member	Spring 2017
She Started It "Women in Entrepreneurship" Panelist	Spring 2017
McDougal Center Communications Assistant (paid position managing student communications)	Spring 2016
Yale Graduate Society of Women Engineers Outreach Chair ('15-'17), Mentor, Volunteer, Panelist Led four outreach events, two networking/career building events (panelist)	2014-2017
Mind Matters "Race and Mental Health" Panelist	Spring 2016
Women in Science at Yale Mentor and "Career Strategy" Panelist ('14-'16)	2014-2018
INP Outreach Committee Chair ('15-'16), Volunteer ('14-'17), Speaker ('16, '18 NIH BP-Endure) Six outreach events per year (30-60 students per event)	2014-2016
Yale Graduate Visual Artists Society Founder ('14) and Leader	2014-2016
Yale Office for Graduate Student Development and Diversity Mentor	2014-2017
La Casa Cultural Mentor	2014-2015
ManyMentors / New Haven Science Fair Mentor	2014-2015
Connectionism Art Movement Founder and Event Organizer	2012-2014
Princeton Biomedical Engineering Society President ('11-'12), VP ('10-'11), Cofounder	2010-2012
Open Science Contributions	
Selected contributions (for full list, see <a href="https://github.com/SNeuroble?tab=repositories">https://github.com/SNeuroble?tab=repositories</a> )	
Brain EffeX Share	code
harmony than a section of the first and the	2024

Brain EffeX 

https://neuroprismlab.shinyapps.io/effect\_size\_shiny/

Network-Based Inferential Procedures and Benchmarking Toolbox 

https://github.com/SNeuroble/NBS\_benchmarking

Cluster-Based Inference Benchmarking Toolbox 

BASH

Code

https://github.com/SNeuroble/cluster\_power\_failure

Yale Test-Retest Dataset

State May 1 | NO |
State May 2 | NO |
State May 2 | NO |
State May 3 | NO |
State May 3 | NO |
State May 4 | NO |
State May 5 | NO |
State May 6 | NO |
May 1 | NO |
State May 6 | NO |
May 1 | NO |
Multifactor ICC Toolbox 

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May 1 | May 1 | NO |
May 1 | May 1 | NO |
Multifactor ICC Toolbox 

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### **Professional Memberships**

Association for Psychological Science (2024)
Organization for Human Brain Mapping (2015–present)
Medical Image Computing and Computer Assisted Intervention (2020)
International Symposium on Biomedical Imaging (2021)
Society for Neuroscience (2014–present)
Cognitive Neuroscience Society (2019, 2022–present)

### Skills\_\_\_\_\_

**Programming** Data Analysis (proficient): Matlab

**Languages** Data Analysis (intermediate): bash, R, Python

Software / Web Development (basic): C++, JavaScript, CSS, HTML5, Qt

**Other** Languages (basic-intermediate): Latin, Spanish

Visual Art (advanced): Graphic design & various media (watercolor, gouache, oil, pastel)

- Digital art includes: Biolmage Suite Web logo, Fetal Infant & Toddler Neuroimaging Group logo