Stephanie M Noble

Assistant Professor · Computational Neuroscience

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Academic Appointments

Assistant Professor, Northeastern University

Boston MA

Department of Psychology
Department of Bioengineering
Institute for Cognitive and Brain Health

July 2023 – present

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

PhD, Yale University

New Haven CT

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 – Dec 2024

- 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)

2012 – 2013

- Real-time EEG source estimation and neurofeedback software

Grants

ONGOING

2024 - 2025

CBH Seed Grant: Multimodal Superlearner Prediction of Suicidal Ideation
Principal 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
Principal 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

COMPLETED

2022 - 2023

NIH K99MH130894: Empirical Power Analysis Tool for fMRI
Principal 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
Principal 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
Principal 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
Principal Investigator: Stephanie Noble
Funding Source: National Science Foundation
Graduate Research Fellowship Program
Amount: $92,000

PENDING

2024 - 2025

Functional Communication Frontier Science Hub Anchor Project
Principal Investigators: Kristina Johnson & Meghan Swanson
Role: Co-Investigator ("Computational Neuroimaging Lead")
Funding Source: Aligning Research to Impact Autism

Honors & Awards

Research

2025	**Mutual Mentoring Advancement Program (M2AP)**, Northeastern University, $3,000
2025	**Early-Career Rigor Champions Prize**, National Institute of Neurological Disorders and Stroke, $10,000
2024, 2025	**Full Member Nomination**, Sigma Xi
2019	**Merit Abstract 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	**Neuroscience Scholars Program Fellowship**, 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	**TechStart Accelerator Program Fund Award,** Connecticut Innovations, $25,000 (exclusive award to 5 CT start-ups)
2012	**Private Investment**, Bridge Builders Collaborative, undisclosed

Publications

H-index=30, Accepted=56, First Author=9, Last Author=2, Google Scholar: https://scholar.google.com/citations?user=JxQdvn4AAAAJ

** = all authors contributed equally*

Accepted

1. Shearer, H., Rosenblatt, M., Ye, J., Jiang, R., Tejavibulya, L., Foster, M., … Nichols, T., Curtiss, J., Scheinost, D., **Noble, S**. 2025. BrainEffeX: A Web App for Exploring fMRI Effect Sizes. *Aperture Neuro.* (Preprint: https://osf.io/kryn4_v1)
2. Rodriguez, R.X., **Noble, S.,** Camp, C., Scheinost, D. 2025. Connectome caricatures remove large-amplitude co-activation patterns in resting-state fMRI to emphasize individual differences. *Nature Neuroscience.* (Preprint: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC11030410/pdf/nihpp-2024.04.08.588578v1.pdf)
3. Adkinson, B.D., Rosenblatt, M., Sun, H., Dadashkarimi, J., Tejavibulya, L., Horien, C., Westwater, M.L., **Noble, S.**, Scheinost, D. 2025. Feature selection leads to divergent neurobiological interpretations of brain-based machine learning biomarkers. *Nature Human Behavior*. (Preprint: https://www.biorxiv.org/content/10.1101/2025.03.12.642878.full.pdf)
4. Xu, T., Fischbach, A., Bridgeford, E.W., Bayrak, R.G., Vogelstein, J., **Noble, S.,** Anteraper, S. In press. Book Chapter in: Current limitations in functional connectivity assessment: suggestions for analysis improvements. In M.A. Rocca & M. Filippi (Eds.), Functional connectivity of the human brain: from mechanisms to clinical applications. Academic Press.
5. O'Neill, A. G., Pax, M., Sepulcre, J., Camprodon, J., Holt, D. J., **Noble, S.**, Roffman, J. L., Eryilmaz, H. 2025. Predicting cognitive functioning in early psychosis: factors supporting and limiting generalizability of connectome-based models. *NPP—Digital Psychiatry and Neuroscience.*
6. 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. 2025. When no answer is better than a wrong answer: a causal perspective on batch effects. *Imaging Neuroscience*. (Preprint: https://www.biorxiv.org/content/10.1101/2021.09.03.458920v4)
7. Shearer, H., Eilbott, J., Vila-Rodriguez, F., Xu, T., **Noble, S.,** Vanderwal, T. 2024. Comparing reliability-based measures of functional connectivity between movie and rest: an ROI-based approach. *Imaging Neuroscience.*
8. Adkinson, B.D., Rosenblatt, M., Dadashkarimi, J., Tejavibulya, L., Jiang, R., **Noble, S.,** Scheinost, D. 2024. Brain-phenotype predictions of language and executive function can survive across diverse real-world data: Dataset shifts in developmental populations. *Developmental Cognitive Neuroscience.*
9. Rosenblatt, M.., Tejavibulya, L., Camp, C., Jiang, R., Westwater, M., **Noble, S.**, Scheinost, D. 2024. Power and reproducibility in the external validation of brain-phenotype predictions. *Nature Human Behavior.*
10. 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. 2024. Trends in self-citation rates in neuroscience literature. *eLife*. (Preprint: https://www.biorxiv.org/content/10.1101/2022.09.27.509533v1)
11. Gell, M., **Noble, S.,** Laumann, T.O., Nelson, S.M., Tervo-Clemmens, B. 2024. Psychiatric Neuroimaging Designs for Individualised, Cohort, and Population Studies. Accepted. *Neuropsychopharmology*. (Preprint: https://osf.io/278ef/)
12. 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: https://osf.io/preprints/psyarxiv/dr5hg)
13. 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.*
14. **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: https://osf.io/preprints/psyarxiv/9eqh6)
15. Mansour, S., Seguin, C., Winkler, A., **Noble, S.,** Zalesky, A. Topological Cluster Statistic (TCS): Towards structural-connectivity-guided fMRI cluster enhancement. 2024. *Network Neuroscience*. (Preprint: https://www.researchsquare.com/article/rs-2059418/v1)
16. 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)

17. Rosenblatt, M.., Tejavibulya, L., Jiang, R., **Noble, S.**, Scheinost, D. 2024. Data leakage inflates prediction performance in connectome-based machine learning models. *Nature Communications.* (Preprint: https://osf.io/ptuwe.)
18. 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.*
19. 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: https://www.biorxiv.org/content/10.1101/2022.07.19.500642v2)
20. 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)
21. 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: https://osf.io/ptuwe)
22. 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*.
23. 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: https://www.biorxiv.org/content/10.1101/2021.06.01.446561v1)
24. 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*.
25. 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*.
26. 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*.
27. Rodriguez, R., **Noble, S.**, Tejavibulya, L., Scheinost, D. 2022. Leveraging edge-centric networks complements existing network-level inference for functional connectomes. *NeuroImage*.
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).*
29. 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*.
30. **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: https://www.biorxiv.org/content/10.1101/2021.09.23.461354v1)
31. 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*.
32. 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*.

33. 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*.

34. 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. NeuroImage.

35. 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*.

36. 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: https://doi.org/10.1101/2021.04.14.439877)

37. 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*.

38. 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: https://www.biorxiv.org/content/10.1101/802629v7)

39. 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: https://doi.org/10.31234/osf.io/vj5tu)

40. **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*).

41. 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: https://psyarxiv.com/rytjq/)

42. 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: https://www.biorxiv.org/content/10.1101/638825v1)

43. 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*.

44. **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.

45. 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.

46. **Noble, S.**, Scheinost, D., & Constable, R. T., 2020. Cluster failure or power failure? Evaluating sensitivity in cluster-level inference. *NeuroImage* 209, 116468.

47. **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.

48. 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.

49. 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.

50. 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*.
51. 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*.
52. 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.
53. **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.
54. **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.
55. 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.
56. 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.

In Preparation

57. Borovykh, A., Weissenbacher, M., **Noble, S.,** Shinn, M. A low-variance subspace underlies individual differences in resting state fMRI.
58. Christensen, E., Wiersch, L., Wang, M., McPherson, B., Shearer, H., **Noble, S.**, Lam, K., & *Poline., J.B., *Dhamala, E. Effect Sizes for Brain-Based Predictive Models of Cognition Across the Lifespan.
59. Cravo, F., Fischbach, A., Shearer, H., **Noble, S**. PRISME: A MATLAB Toolbox for Multi-Method Statistical Power Benchmarking in Neuroimaging.
60. Cravo, F., **Noble, S.** Improving efficiency with the incremental cluster threshold-free cluster enhancement.
61. **Noble, S.,** Shearer, H., Rosenblatt, M., Ye, J., … Mejia, A., Nichols, T., Curtiss, J., Scheinost, D. Effect sizes in human functional neuroimaging.
62. **Noble, S.,** Shearer, H., Bray, S., Xu, T., Vanderwal, T. Reliability and Data Quantity. Chapter in White Paper: Best practices when using movies and story-listening to study neural responses with fMRI.
63. Fischbach, A., Shearer, H., Handwerker, D., Lewis, L., Quigley, K., Theriault, J., Satpute, A.B., Barrett, L.F., **Noble, S.** Deconfounding Subcortical Signals in fMRI by Modeling Region-Specific Cerebrospinal Fluid Noise.
64. Doshvargar, F., Cravo, F., **Noble, S.** Mass univariate aggregation methods for machine learning in neuroscience.
65. Karamzadeh, M., Fischbach, A., **Noble, S.**, Loth, F. Machine Learning Classification of Asymptomatic Pediatric Chiari I Malformation from Resting-State fMRI.

Select Media Coverage

1. Lloyd, N. 2026. How a 'caricature' of a brain scan could lead to better treatment outcomes. *Northeastern Global News*. https://news.northeastern.edu/2026/01/05/functional-mri-breakthrough/

2. Rix, K. 2025. Precise maps of the brain's deepest corners are made possible through tools developed by these Northeastern researchers. *Northeastern Global News*. https://news.northeastern.edu/2025/09/02/northeastern-neuroprism-tools-map-brain/
3. Jahn, A. 2024. Andy's BrainCast #002: Stephanie Noble. *Andy's BrainCast*. https://www.youtube.com/watch?v=ALmwcecw7o8
4. McMurray, C. 2024. Data access changes to UK Biobank stir unease in neuroscientists. *The Transmitter*. https://www.thetransmitter.org/community/data-access-changes-to-uk-biobank-stir-unease-in-neuroscientists/
5. Lloyd, N. 2023. Psychology professor building 'data science tool' to increase the reliability of human brain research. *Northeastern Global News*. https://cos.northeastern.edu/news/psychology-professor-building-data-science-tool-to-increase-the-reliability-of-human-brain-research/
6. Locklear, M. 2022. To better understand the brain, look at the bigger picture. *YaleNews*. https://news.yale.edu/2022/08/04/better-understand-brain-look-bigger-picture
7. Yu, A. 2021. Scientists have used fMRI to study brain activity for years. Now, some question the results' reliability. *The Pulse. WHYY PBS NPR*. https://whyy.org/segments/scientists-used-fmri-to-study-brain-activity-for-years-now-some-question-the-results-reliability/
8. Proff, I., 2020. Can brain scans transform psychiatry? *Medium*. https://medium.com/@irisproff/can-brain-scans-transform-psychiatry-963ff2e5fb4f
9. 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

1. 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").
2. 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 Seminars & Colloquia

2025 *ReproNim Webinar,* University of Massachusetts Chan Medical School

2025 *Northwestern University Interdepartmental Neuroscience Student Hosted Seminar Series,* Northwestern University

2024 *UCLA/BRI Neuroimaging Affinity Group Distinguished Colloquium Speaker,* University of California Los Angeles

2024 *Life Sciences Day,* Northeastern University

2023 *Developmental Cognition & Neuroimaging Lab, Masonic Institute for the Developing Brain,* University of Minnesota

2023 *COBRE Behavior and Neurodata Core,* Brown University

2022 *Department of Electrical and Computer Engineering* and *Emerging Scholars in Engineering,* Vanderbilt University

2021 *BraiNets Lab,* Institut de Neurosciences de la Timone

2021 *Systems Lab Meeting,* Melbourne University

2021 *Neurostats Oxford Meeting,* Oxford University

2021 *Innovators in Cognitive Neuroscience*. Recording: https://www.youtube.com/watch?v=lm80J8-dbS0

2021 *Cognitive Development Lab,* Columbia University

2020 *Appetitive Science Seminar Series,* Yale University

2017 *Magnetic Resonance Research Center Seminar Series,* Yale University

2015 *Yale Epilepsy Research Retreat 2015,* Yale University

2015 *NeuroDay 2015,* Yale University

Invited Conference Talks & Workshops

2025 (planned) Symposium: Academic Journeys in Open Science. *Organization for Human Brain Mapping Meeting: Open Science Room*. Bordeaux, FR.

2025 User-friendly web apps to facilitate fMRI study design and analysis. *Neurohackademy.* Seattle, WA.

2024 Symposium: Reproducibility crisis revisited. Speakers: Zhi-Yi Chen, Stephanie Noble, Martin Hebart. *MRI Together.* Virtual.

2024 User-friendly web apps to facilitate fMRI study design and analysis. *Neurohackademy.* Seattle, WA.

2023 Keynote: Making open science work for you. *Advanced Computational Neuroscience Network (ACNN) Big Data Neuroscience Workshop.* Columbus, Ohio.

2023 Workshop: Making open science work for you: Tools for Reproducible Neuroscience. *Advanced Computational Neuroscience Network (ACNN) Big Data Neuroscience Workshop.* Columbus, Ohio.

2023 Symposium: Paths to increased brain-behavior reproducibility. Speakers: Nico Dosenbach (organizer), Stephanie Noble, Scott Marek, Thomas Yeo, Russ Poldrack. *Cognitive Neuroscience Society Meeting*. San Francisco, CA.

2022 Symposium: Diversity, equity, and inclusion initiatives across the human brain mapping community. *TransMedTech Institute Grand Conference Series*. Virtual.

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*. Virtual.

Contributed Conference Talks, Panels, & Symposia

Noble, S. (Submitted). Symposium: Precision Mental Health with Intensive Longitudinal Data and Machine Learning: From Neuroimaging to Ecological Behavior. Talk: Integrating Group-Level Patterns for Individual-Level Inference: A Framework for Idionomic Approaches In Psychological Science. *Association for Psychological Science Meeting*. Speakers: Stephanie Noble, Joshua Curtiss, Natalia Van Doren, Nur Hani Zainal (organizer).

Noble, S. (Submitted). Symposium: Big Data for Precision Psychology: Leveraging Large Datasets for Individual-Level Modeling & Small Sample Studies. Talk: Empirical power benchmarking: Toward data-driven power analysis in fMRI. *Organization for Human Brain Mapping Meeting*. Speakers: Amanda Mejia, Thomas Yeo, Stephanie Noble (organizer), Joshua Curtiss (organizer).

Noble, S. (Submitted). Symposium: Balancing Sample Size and Sensitivity: Emerging Methods and Tools for Optimal Inference & Power Analysis. *Organization for Human Brain Mapping Meeting*. Speakers: Stephanie Noble, Hallee Shearer, Selena Wang, Nick Yao Larsen. Organizers: Martin Lindquist, Sina Mansour, Stephanie Noble, Camille Maumet.

Curtiss, J., Noble, S. (2025). A Formalization of an IdioNomo Perspective for Psychological Models. *Boston Precision Brain & Mental Health Hack*.

Noble, S., Shearer, H. (2024). Mapping the Landscape of Effect Sizes in fMRI: Insights from Large Publicly Available Datasets. *Brainhack Global: Northeastern*.

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.

Curtiss, J.E., **Noble, S**. (2024). Invited talk: Precision mental and cognitive health using time-series and neuroimaging methodology. Life Sciences Day, Northeastern University, Boston.

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.

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.

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.

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.

Noble, S. (2022). RoundTable Discussion: Best practices for promoting diversity and inclusivity across OHBM organizations. *Organization for Human Brain Mapping Meeting*. Panelist.

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.

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.

Noble, S., Scheinost, D. (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.

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 (co-organizer with Isik Karahanoglu), and Joana Cabral.

Noble, S., Scheinost, D. (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*.

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*.

Noble, S., Dadashkarimi, J., Saltzman, Z., Lacadie, C., Garbus, H., Casetti, D., Onofrey, J., Papademetris, X., Scheinost, D. (2020). Tutorial: Try BioImage Suite Web, a modern and powerful software for neuroscience. *Brainhack NY 2020*.

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: https://www.youtube.com/watch?v=9Xgn7Jg7ypo

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).

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*.

(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

Noble, S., Dadashkarimi, J., Saltzman, Z., Lacadie, C., Garbus, H., Casetti, D., Onofrey, J., Papademetris, X., Scheinost, D. (2019). Talk & Demo. Introducing BioImage Suite Web. *Organization for Human Brain Mapping Meeting: Open Science Room*.

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.

Noble, S.*, Saltzman, Z.*, Dadashkarimi, J., Lacadie, C., Garbus, H., Casetti, D., Onofrey, J., Papademetris, X., Scheinost, D. (2019). Tutorial. Introducing BioImage Suite Web. *Brainhack Yale 2019*.

Noble, S.*, O'Connor, D*. (2018). Tutorial. Intro to Machine Learning for fMRI with Nilearn. *Brainhack Yale 2018*.

Select Posters

Cravo, F., Fischbach, A., Shearer, H., Noble S. Submitted. PRISME: A MATLAB Toolbox For Large Data-Driven Multimodal Power Benchmarking. Organization for Human Brain Mapping Meeting.

Shearer, H., Rosenblatt, M., Ye, J., … Mejia, A., Nichols, T., Curtiss, J., Scheinost, D., Noble, S. Submitted. What effect sizes can we expect in fMRI? Modeling effect sizes distributions across the brain. Organization for Human Brain Mapping Meeting.

Fischbach, A., Shearer, H., Handwerker, D., Lewis, L., Quigley, K.S., Theriault, J.E., Satpute, A.B., Feldman Barrett, L., Noble, S. Submitted. Deconfounding Subcortical Signals in fMRI by Modeling Region-Specific CSF Noise. Organization for Human Brain Mapping Meeting.

Olafsson, V., Noble, S., Reid, B., Gabard-Durnam, L., Peelle, J. Submitted. Preliminary examination of the test-retest stability of subcortical iron imaging via R2'. Organization for Human Brain Mapping Meeting.

Tik, N., Bernstein-Eliav, M., Noble, S., … Madar, A., Tavor, I. Submitted. Functional connectivity predicts stable components of task-evoked brain activity. Organization for Human Brain Mapping Meeting.

(Postdoctoral Award) Cravo, F., Fischbach, A., Shearer, H., Noble S. 2026 (Planned). PRISME: A MATLAB Toolbox for Multi-Method Statistical Power Analysis in Neuroimaging. Cognitive Neuroscience Society Meeting.

Shearer, H., Rosenblatt, M., Ye, J., … Mejia, A., Nichols, T., Curtiss, J., Scheinost, D., Noble, S. 2026 (Planned). What effect sizes can we expect in functional neuroimaging? Cognitive Neuroscience Society Meeting.

Fischbach, A., Shearer, H., Handwerker, D., Lewis, L., Quigley, K.S., Theriault, J.E., Satpute, A.B., Feldman Barrett, L., Noble, S. 2026 (planned). Validation of a Region-Specific Approach to CSF Artifact Correction in Subcortical 7T fMRI. Cognitive Neuroscience Society Meeting.

(Selected for Oral Session) Shearer, H., Noble S. (2025). BrainEffeX: An interactive web application for exploring typical fMRI effect size estimates. Organization for Human Brain Mapping Meeting.

Fischbach, A., Shearer, H., Satpute, A.B., Quigley, K.S., Theriault, J.E., Feldman Barrett, L., Noble, S. (2025). Targeting Region-Specific Cerebrospinal Fluid Noise to Enhance Subcortical Neural Estimates in fMRI. Organization for Human Brain Mapping Meeting.

(Abstract Award, Selected for Talk) Cravo, F., Noble S. (2025). BrainPowerX - A New Empirical Algorithm for Power Calculation for fMRI. SACNAS Meeting.

Cravo, F., Noble S. (2025). BrainPowerX - A New Empirical Algorithm for Power Calculation for fMRI. Cognitive Neuroscience Society Meeting.

(Selected for Data Blitz) Shearer, H., Noble S. (2025). BrainEffeX: A web app for exploring fMRI effect sizes. Cognitive Neuroscience Society Meeting.

Fischbach, A., Shearer, H., Satpute, A.B., Quigley, K.S., Theriault, J.E., Feldman Barrett, L., Noble, S. (2025). Targeting Region-Specific Cerebrospinal Fluid Noise to Enhance Subcortical Neural Estimates in fMRI. Cognitive Neuroscience Society Meeting.

(Abstract Award, Selected for Talk) Cravo, F., Noble S. (2024). A Preliminary Empirical Web-Based fMRI Power Calculator for Increased Reliability. MRI Together.

Fischbach, A., Shearer, H., Satpute, A.J., Quigley, K.S., Theriault, J.E., Feldman Barrett, L., Noble, S. (2024). Assessing the impact of subject-specific masks on reliability of subcortical connectivity. Cognitive Neuroscience Society Meeting.

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.** (2024). BrainEffeX: A Shiny app to explore typical effect sizes in functional neuroimaging research. Cognitive Neuroscience Society Meeting.

Fischbach, A., Shearer, H., Satpute, A.J., Quigley, K.S., Theriault, J.E., Feldman Barrett, L., **Noble, S.** (2024). Assessing the impact of subject-specific masks on reliability of subcortical connectivity. Research, Innovation, Scholarship and Entrepreneurship Expo.

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.

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.

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.

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.

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.

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.

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.

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.

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.

Noble, S., Scheinost, D. (2021). Leveling up: How broader levels of inference improve power in functional connectivity. Organization for Human Brain Mapping Meeting.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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. Society for Neuroscience Meeting.

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.

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.

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.

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.

Noble, S., Scheinost, D., Constable, R.T. (2018). Cluster Failure or Power Failure? Balancing the Scale with Sensitivity. 2018 Society for Neuroscience Meeting.

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.

Noble, S., Scheinost, D., Constable, R.T. (2016). Influences on Reliability of Functional Connectivity. 2016 Society for Neuroscience Meeting.

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.

(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.

Noble, S., Scheinost, D., Cannon, T.D., Constable, R.T. (2015). Reliability of Multisite Functional Connectivity. Society for Neuroscience Annual Meeting.

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.

Noble, S., Schutt., C.E. (2012). Muscle Contraction as a Markov Process. Annual Princeton CBE Thesis Poster Presentations.

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

Noble, S., Poeuv, S., Brewer, J.A. (2013). Private demo, undisclosed media outlet. goBlue Labs.

Noble, S., Poeuv, S., Brewer, J.A. (2012). Public demo, TechStart Demo Day. Yale University.

Noble, S., Poeuv, S., Brewer, J.A. (2012). Private demo, Professional Golfer's Association (PGA): Metropolitan Section. Metropolitan PGA Golf Central Offices, Elmsford, NY.

Noble, S., Poeuv, S., Brewer, J.A. (2012). Private demo, New Haven Independent Reporter. goBlue Labs.

Industry Pitches

Poeuv, S., **Noble, S.**, Pal, P., Brewer, J.A. (2013). YEI Innovation Fund Pitch. Yale University.

Poeuv, S., **Noble, S.**, Brewer, J.A. (2013). CI Pre-Seed Program Pitch. Connecticut Innovations, Rocky Hill, CT.

Poeuv, S., **Noble, S.**, Brewer, J.A. (2012). New Haven Start-up Competition Pitch. Yale University (anonymous investor).

Poeuv, S., **Noble, S.**, Brewer, J.A. (2012). TechStart Demo Day Pitch. Yale University.

Poeuv, S., **Noble, S.**, Brewer, J.A. (2012). TechStart Accelerator Competition Pitch. Connecticut Innovations.

Mentorship

(Affiliation = Northeastern University unless otherwise stated)

Postdoctoral Researchers

2024– Fabricio Cravo

Doctoral Students

2025– Hallee Shearer (Psychology)
2023– Alexandra Fischbach (Psychology)

Research Staff

2023–25 Hallee Shearer

Doctoral Thesis Committees

2025– Alex Fischbach (Psychology; Advisors: Susan Whitfield-Gabrieli & Lisa Feldman-Barrett)
2025– Claire Shaffer (Psychology; Advisors: Susan Whitfield-Gabrieli & Lisa Feldman-Barrett)
2025– Trevor Kline (Psychology; Advisors: Aaron Seitz & Susanne Jaeggi)
2024– Jinyu Wang (Interdisciplinary Design and Media; Advisor: Psyche Loui)
2024– Emma Tinney (Psychology; Advisors: Charles Hillman & Timothy Morris)
2023– Chris Camp (Yale University Interdepartmental Neuroscience Program; Advisor: Dustin Scheinost)

Fellowship Mentorship Teams

2024– Luis Ramirez (UCSD Psychology; Advisor: John Serences): NIH DSPAN F99/K00
2024–25 Goretti España-Irla (Physical Therapy; Advisor: Timothy Morris): CBH Postdoctoral Fellowship
2024–25 Emma Margolis (Psychology; Advisor: Laurel Gabard-Durnam): CBH Graduate Student Fellowship
2024–25 Hailey Smith (Psychology; Advisor: Jonathan Peelle): CBH Graduate Student Fellowship

Masters Thesis Advisor

2025– Chan Cha Hong (Bioengineering)

Co-op Program Adviser

Spring 2024 Catherine Cahill (Bioengineering)

Undergraduate Capstone Advisor

2023–24 Jennifer Field (Mathematics & Physics)

Volunteers & Interns

2025– Ngozi Nnaeto (Postbaccalaureate)
2024– Fatemeh Doshvargar (Postbaccalaureate)
2024–25 Aneesh Baskaran (Masters student)
2024–25 Samuel Joseph (Undergraduate student)
2018–19 Tracy Lu (High school student)
2016 Samantha Steinberg (High school student)

Assisted in the supervision of:

Visiting NeuroPRISM Lab PhD Students
2024– Raimundo Rodriguez (Yale University Interdepartmental Neuroscience Program, Advisor: Dustin Scheinost)
MINDS Lab PhD Students (Yale University; Advisor: Dustin Scheinost):
2022–23 Maya Foster (Biomedical Engineering)
2022–23 Chris Camp (Interdepartmental Neuroscience Program)
2022–23 Jean Ye (Interdepartmental Neuroscience Program)
2021–23 Raimundo Rodriguez (Interdepartmental Neuroscience Program)
2021–23 Matthew Rosenblatt (Biomedical Engineering)
2020–22 Wei Dai (Biostatistics)
2019–21 Javid Dadashkarimi (Computer Science)
2019–20 Link Tejavibulya (Interdepartmental Neuroscience Program)

MINDS Lab Research Staff (Yale University; Advisor: Dustin Scheinost):
2021–22 Iris Cheng
2019–22 Hannah Petersen

Extracurricular Mentorship
2016– Evelyn Soria-Goyzueta (now an American International College BSN graduate)
2020–23 YBDIC-PATHS mentor: Darlis Juvino (now a University of Connecticut PhD student)
2014-15 Women in Science at Yale mentor: 2 undergraduate students
2015 ManyMentors mentor: 1 high school student
2013–14 goBlue mentor: 3 undergraduate students; 1 high school student

Teaching

Lecture (co-presenter): "Reliability and Data Quality" — *Virtual, 2025*
With Shearer, H., Noble, S., Bray, S., Xu, T., Vanderwal, T.
OHBM 2025 Educational Course: "Best Practices in Naturalistic Neuroimaging"

Guest Lecture: "Test-retest reliability; Integration and harmonization of multi-site fMRI data" — *Harvard-MIT, 2024*
HST 583: fMRI: Data Acquisition and Analysis 2024

Guest Lecture: "A guide to the measurement and interpretation of fMRI test-retest reliability" — *University of Utah, Spring 2022, 2023, 2024. 2025, 2026 (planned)*
Training in Advanced Methods in Neuroimaging and Genetics 2022; 2023; 2024; 2025; 2026 (planned)

Creator & Instructor: "PSYC 7250 / BIOE 7374: A Data Science Toolkit for Human Neuroscience Research" — *Northeastern University, Spring 2024, 2025, 2026*
Psychology Department (2024-); Bioengineering Department (2025-); Inaugural Course; 15-20 PhD Students

Lecture: "Cluster failure or power failure? Empirically evaluating sensitivity and specificity of classical fMRI inference" — *Montreal, Canada, 2023*
OHBM 2023 Educational Course: "Beyond blobology: advances in statistical inference for neuroimaging"

Organizer: "Cultivating open science practices in academic research and culture" — *Glasgow, Scotland, 2022*
OHBM 2022 Educational Course

Workshop: "Try BioImage Suite Web, a modern and powerful software for neuroscience" — *New York University, 2020*
Brainhack NY 2020

Private Tutor: Basic Statistics & Data Science (1 student), Introduction to R (1 student) — *Yale University, 2017 – 2020*

Workshop: "Introduction to BioImage Suite Web" — *Yale University, 2019*
Brainhack Yale 2019

Workshop: Connectome-based Predictive Modeling Working Group — *Yale University, 2019 (Monthly)*
Magnetic Resonance Research Center

Workshop: "Intro to Machine Learning for fMRI with Nilearn" — *Yale University, 2018*
Brainhack Yale 2018

Teaching Fellow — *Yale University, 2018*
Introduction to Relativity (ASTR 180)

Teaching Fellow — *Yale University, 2015*
Neurobiology (MCDB/NSCI 320a/720a)

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 2024 Special Issue "Methodological and analytic advances in developmental neuroscience"

Ad Hoc Review

General Science

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

Neuroscience & Psychology

Aperture, Imaging Neuroscience, Human Brain Mapping, Cerebral Cortex, Network Neuroscience, Nature Neuroscience, Nature Human Behavior, Nature Mental Health, Neuron, 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, F1000

Clinical

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

Grant Review: Deutsche Forschungsgemeinschaft (DFG)

Internal Leadership & Service

Boston Precision Brain & Mental Health Hack '25 Co-creator & Organizer — *Fall 2025*

Northeastern University Biomedical Imaging Center Search Committee Member — *2025-*

Psychology Social Committee, Northeastern University Co-chair — *2025-*

Institute for Cognitive & Brain Health Social Committee, Northeastern University Co-chair — *2025-*

Pre-Proposal Grant Review, Northeastern University Ad Hoc Reviewer (2 Mechanisms) — *2025-*

College of Engineering PhD Council Wellness Coffee Hour Invited Speaker: "Beyond the Degree: Career Paths, Networking, and Media Presence" — *Summer 2025*

Brainhack Northeastern (Branch of Brainhack Global) '23, '24 Creator & Organizer — *Winter 2024, Fall 2024*

Boston Imaging Interest Group (BIIG) Journal Club Co-creator & Organizer — *2024-*

Psychology Colloquium Committee, Northeastern University Co-chair — *2024-*

Psychologists for Equity and Inclusion (PIE) Committee, Northeastern University — *2024 -*

Diversity, Equity, Inclusivity in Bioengineering (DEIB) Committee, Northeastern University — *2023 -*

Institute for Cognitive & Brain Health Computing Committee, Northeastern University Founder; Co-chair — *2023 -*

YBDIC-PATHS Mentoring Program Mentor — *2020-2021*

Brainhack Yale 2019 Lead Organizer; Workshop Instructor — *Spring 2019*

Annie Le Fellowship Selection Committee, Yale University — *Spring 2019*

INP Diversity Recruitment Panel, Yale University Panelist; SWE Representative — *Spring 2019*

Brainhack Yale 2018: Lead Organizer; Workshop Instructor — *Fall 2018*

Yale Minority Scientists Research Network Board Member — *Spring 2018*

INP Speaker Seminar Committee, Yale University — *Spring 2017*

She Started It, Yale University Invited Panelist: "Women in Entrepreneurship" — *Spring 2017*

McDougal Center, Yale University Communications Assistant *Spring 2016*

Mind Matters, Yale University Invited Panelist: "Race and Mental Health" *Spring 2016*

Women in Science at Yale Mentor; "Career Strategy" Panelist ('14-'16) *2014-2018*

Yale Graduate Society of Women Engineers Outreach Chair ('15-'17); Mentor; Volunteer; Panelist *2014-2017*
Led four outreach events and two networking/career building events (panelist)

INP Outreach Committee, Yale University Chair ('15-16); Volunteer ('14-17); Speaker ('16, '18 NIH BP-Endure) *2014-2016*
Led six outreach events per year (30-60 students per event)

La Casa Cultural, Yale University Mentor *2014-2015*

Yale Office for Graduate Student Development and Diversity Mentor *2014-2017*

Yale Graduate Visual Artists Society Founder ('14); Organizer *2014-2016*

ManyMentors / New Haven Science Fair, Yale University Mentor *2014-2015*

Princeton Biomedical Engineering Society President ('11-'12), VP ('10-'11), Cofounder *2010-2012*

External Leadership & Service

Brainhack Global 2025 Web Volunteer *2025*

Columbia University POR Colloquium Invited Talk: "Career Paths, Networking, & Social Media Presence" *Fall 2025*

Neurohackademy Invited Panelist: "Careers in neuroimaging and data science" *Summer 2024, 2025*

NIH DSPAN Annual Meeting 2024 Invited Panelist: "Navigating the road to faculty" *Fall 2024*

NIH DSPAN BrainTrust 2023 Invited Panelist: "Mechanisms towards Independence" *Fall 2023*

OHBM Naturalistic Imaging Best Practices Working Group Member (Chairs: Tamara Vanderwal & Einat Liebenthal) *2024-*

Brainhack Global 2023 Volunteer; Outreach Team *2023*

Harvard Med / MGH Postdoc Fellowship Seminar Invited Speaker: "Having an online presence" *Fall 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 created 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 (poster networking program created by Sarah Goodale) *Summer 2022*

WINRepo Volunteer *2021-present*

OHBM Open Science Special Interest Group (OSSIG) 2022 Inclusivity Officer *2021-2022*
Co-organized Open Science Room panels and events

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 *Summer 2020*

OHBM 2020 Club Night Social Lead Organizer *Winter 2019*

NIH Blueprint D-SPAN F99/K00 Webinar Invited Panelist
https://www.ninds.nih.gov/News-Events/Events-Proceedings/Events/NIH-Blueprint-D-SPAN-F99K00-Webinar — *Summer 2019*

Neuroscience Scholars Program Leadership Meeting Invited Panelist — *Winter 2019*

Brainhack Networks 2019 Invited "Team of Experts" — *Fall 2018*

NIH Blueprint D-SPAN F99/K00 Twitter Q&A Panelist — *Summer 2017*

Neuroscience Scholars Program Leadership Meeting Invited Member — *2012-2014*

Connectionism Art Movement Founder; Organizer

Open Science Contributions

Selected contributions (for full list, see https://github.com/neuroprismlab?tab=repositories)

BrainEffeX — *code* — *2024*
https://neuroprismlab.shinyapps.io/effect_size_shiny/

Power Calculator Benchmarking Toolbox — *code* — *2020*
https://github.com/neuroprismlab/Power_Calculator

Network-Based Inferential Procedures and Benchmarking Toolbox — *code* — *2019*
https://github.com/neuroprismlab/NBS_benchmarking

Cluster-Based Inference Benchmarking Toolbox — *data* — *2018*
https://github.com/sneuroble/cluster_power_failure

Yale Test-Retest Dataset — *code* — *2018*
http://fcon_1000.projects.nitrc.org/indi/retro/yale_trt.html

Multifactor ICC Toolbox
https://github.com/neuroprismlab/Multifactor_ICC

Professional Memberships

Organization for Human Brain Mapping (2015–present)
Cognitive Neuroscience Society (2019, 2022—present)
Association for Psychological Science (2024)
Association for Behavioral and Cognitive Therapy (2023)
Society for Neuroscience (2014–2022)
International Symposium on Biomedical Imaging (2021)
Medical Image Computing and Computer Assisted Intervention (2020)

Skills

Programming Languages
Data Analysis (proficient): Matlab, R
Data Analysis (intermediate): bash, Python
Software / Web Development (basic): C++, JavaScript, CSS, HTML5, Qt

Other
Languages (advanced): Latin, Spanish
Visual Art (advanced): Graphic design & various media (watercolor, gouache, oil, pastel)
- *Digital art includes*: BioImage Suite Web logo, Fetal Infant & Toddler Neuroimaging Group logo