# 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

*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

*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**
*Fellow*: Stephanie Noble
*Funding Source*: National Science Foundation
Graduate Research Fellowship Program
*Amount*: $92,000

# Honors & Awards

RESEARCH

*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*

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|---|---|
| | **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

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| *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

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|---|---|
| *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=29, Accepted=54, First Author=9, Last Author=1, Google Scholar: https://scholar.google.com/citations?user=JxQdvn4AAAAJ*

*\* = all authors contributed equally*

Accepted

1. Adkinson, B.D., Rosenblatt, M., Sun, H., Dadashkarimi, J., Tejavibulya, L., Horien, C., Westwater, M.L., **Noble, S.**, Scheinost, D. Accepted in principle. Feature selection leads to divergent neurobiological interpretations of brain-based machine learning biomarkers. *Nature Human Behavior*. (https://www.biorxiv.org/content/10.1101/2025.03.12.642878.full.pdf )

2. Xu, T., Fischbach, A., Bridgeford, E.W., Bayrak, R.G., Vogelstein, J., **Noble, S.,** Anteraper, S. In production. 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.

3. Rodriguez, R.X., **Noble, S.,** Camp, C., Scheinost, D. Accepted. 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 )

4. 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.*

5. 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)

6. 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.*

7. 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.*

8. 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.*

9. 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)

10. 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/)

11. 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)

12. 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.*

13. **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)

14. 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)

15. 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 )

16. 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.)

17. 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.*

18. 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 )

19. 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 )

20. 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)

21. 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*.

22. 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)

23. 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*.

24. 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*.

25. 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*.

26. Rodriguez, R., **Noble, S.,** Tejavibulya, L., Scheinost, D. 2022. Leveraging edge-centric networks complements existing network-level inference for functional connectomes. *NeuroImage*.

27. 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).*

28. 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*.

29. **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)

30. 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*.

31. 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*.

32. 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*.

33. 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.

34. 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*.

35. 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)

36. 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*.

37. 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)

38. 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)

39. **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*).

40. 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/)

41. 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)

42. 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*.

43. **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.

44. 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.

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

46. **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.

47. 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.

48. 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.

49. 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*.

50. 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*.

51. 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.

52. **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.

53. **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.

54. 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.

55. 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

56. 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. ([https://osf.io/kryn4_v1](https://osf.io/kryn4_v1))

In Preparation

57. Cravo, F., Fischbach, A., Shearer, H., **Noble, S**. PRISME: A MATLAB Toolbox for Multi-Method Statistical Power Analysis in Neuroimaging.

58. Cravo, F., **Noble, S.** Improving Efficiency with the Incremental Cluster Threshold-Free Cluster Enhancement.

59. Fischbach, A., Shearer, H., Theriault, J., Quigley, K., Barrett, L.F., Satpute, A.B., **Noble, S.** Deconfounding Subcortical Signals in fMRI by Modeling Region-Specific Cerebrospinal Fluid Noise.

60. 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. Precise maps of the brain's deepest corners are made. [https://cos.northeastern.edu/precise-maps-of-the-brains-deepest-corners-are-made-possible-through-tools-developed-by-these-northeastern-researchers/](https://cos.northeastern.edu/precise-maps-of-the-brains-deepest-corners-are-made-possible-through-tools-developed-by-these-northeastern-researchers/)

2. Jahn, A. 2024. Andy's BrainCast #002: Stephanie Noble. *Andy's BrainCast*. [https://www.youtube.com/watch?v=ALmwcecw7o8](https://www.youtube.com/watch?v=ALmwcecw7o8)

3. 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/](https://www.thetransmitter.org/community/data-access-changes-to-uk-biobank-stir-unease-in-neuroscientists/)

4. 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/](https://cos.northeastern.edu/news/psychology-professor-building-data-science-tool-to-increase-the-reliability-of-human-brain-research/)

5. 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](https://news.yale.edu/2022/08/04/better-understand-brain-look-bigger-picture)

6. 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/](https://whyy.org/segments/scientists-used-fmri-to-study-brain-activity-for-years-now-some-question-the-results-reliability/)

7. Proff, I., 2020. Can brain scans transform psychiatry? *Medium*. [https://medium.com/@irisproff/can-brain-scans-transform-psychiatry-963ff2e5fb4f](https://medium.com/@irisproff/can-brain-scans-transform-psychiatry-963ff2e5fb4f)

8. 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/](https://www.newhavenindependent.org/index.php/archives/entry/start-up_tries_to_tap_mind_power/)

Acknowledgements

9. 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").

10. 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*      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.**, 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

*(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

(University = Northeastern University unless otherwise stated)

### Postdoctoral Researchers

*2024–*    Fabricio Cravo

### PhD Students
*2025 (incoming)–*  Fatemeh Doshvargar (Bioengineering)
*2023–*  Alexandra Fischbach (Psychology)

### Research Staff
*2023–*  Hallee Shearer

### PhD Thesis Committees
*2024–*  Emma Tinney (Psychology; Advisor: 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–*  Goretti España-Irla (Physical Therapy; Advisor: Timothy Morris): CCBH Graduate Student Fellowship
*2024–*  Emma Margolis (Psychology; Advisor: Laurel Gabard-Durnam): CCBH Graduate Student Fellowship
*2024–*  Hailey Smith (Psychology; Advisor: Jonathan Peelle): CCBH 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
*2024–*  Fatemeh Doshvargar (Postbaccalaureate)
*2024–*  Aneesh Baskaran (Masters student)
*2024–*  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"
With Shearer, H., Noble, S., Bray, S., Xu, T., Vanderwal, T.
OHBM 2025 Educational Course: "Best Practices in Naturalistic Neuroimaging"

*Virtual*
*2025*

**Guest Lecture: "Test-retest reliability; Integration and harmonization of multi-site fMRI data"**
HST 583: FMRI: DATA ACQUISITION AND ANALYSIS 2024

*Harvard-MIT*
*2024*

**Guest Lecture: "A guide to the measurement and interpretation of fMRI test-retest reliability"**
TRAINING IN ADVANCED METHODS IN NEUROIMAGING AND GENETICS 2022; 2023; 2024; 2025

*University of Utah*
*2022, 2023, 2024,*
*2025*

**Creator & Instructor: "PSYC 7250 / BIOE 7374: A Data Science Toolkit for Human Neuroscience Research"**
PSYCHOLOGY DEPARTMENT (2024-); BIOENGINEERING DEPARTMENT (2025-); INAUGURAL COURSE; 15-20 PHD STUDENTS

*Northeastern University*
*Spring 2024, 2025 (planned)*

**Lecture: "Cluster failure or power failure? Empirically evaluating sensitivity and specificity of classical fMRI inference"**
OHBM 2023 EDUCATIONAL COURSE: "BEYOND BLOBOLOGY: ADVANCES IN STATISTICAL INFERENCE FOR NEUROIMAGING"

*Montreal, Canada*
*2023*

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

*Glasgow, Scotland*
*2022*

**Workshop: "Try BioImage Suite Web, a modern and powerful software for neuroscience"**
BRAINHACK NY 2020

*New York University*
*2020*

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

*Yale University*
*2017 – 2020*

**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"**
BRAINHACK YALE 2018

*Yale University*
*2018*

**Teaching Fellow**
INTRODUCTION TO RELATIVITY (ASTR 180)

*Yale University*
*2018*

**Teaching Fellow**
NEUROBIOLOGY (MCDB/NSCI 320A/720A)

*Yale University*
*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 (PNAS), Nature Communications, Nature Methods, Nature Scientific Reports, Nature Communications Biology, Advanced Science, Science Advances, PLOS One, eLife, Cell Reports
*Neuroscience & Psychology*
  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
*Clinical*
  NeuroImage: Clinical, Psychiatry Research: Neuroimaging, Schizophrenia Bulletin, Behavior Change, Assessment, BMC Psychiatry

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

# Internal Leadership & Service

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

**Brainhack Northeastern (Part of Brainhack Global) '23, '24** Lead Organizer — *Winter 2024, Fall 2024*

**Boston Imaging Interest Group (BIIG) Journal Club** Co-organizer — *2024-*

**Psychology Colloquium Committee, Northeastern University** Co-chair — *2024, 2025*

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

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

**Center for Cognitive & Brain Health Computing Committee, Northeastern University** Founder; 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
Led four outreach events and two networking/career building events (panelist) — *2014-2017*

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

**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

**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*

**Brainhack Global 2023** Volunteer; Outreach Team        *Spring-Fall 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
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*

**OHBM 2020 Club Night Social** Lead Organizer        *Summer 2020*

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

**Neuroscience Scholars Program Leadership Meeting** Invited Panelist        *Summer 2019*

**Brainhack Networks 2019** Invited "Team of Experts"        *Winter 2019*

**NIH Blueprint D-SPAN F99/K00 Twitter Q&A** Panelist        *Fall 2018*

**Neuroscience Scholars Program Leadership Meeting** Invited Member        *Summer 2017*

**Connectionism Art Movement** Founder; Organizer        *2012-2014*


# 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** ◢MATLAB        *code*
        *2020*
https://github.com/neuroprismlab/Power_Calculator

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

        *data*

**Cluster-Based Inference Benchmarking Toolbox**                              *2018*

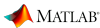https://github.com/sneuroble/cluster_power_failure                           *code*

**Yale Test-Retest Dataset**   CHILD MIND INSTITUTE | INDI International Neuroimaging Data-Sharing Initiative    *2018*

http://fcon_1000.projects.nitrc.org/indi/retro/yale_trt.html

**Multifactor ICC Toolbox**   MATLAB

https://github.com/neuroprismlab/Multifactor_ICC

BASH

# 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