Stephanie M Noble

POSTDOCTORAL ASSOCIATE · COMPUTATIONAL NEUROSCIENCE

300 Cedar Street | New Haven CT 06519

stephanie.noble@yale.edu | 860 416 2384 | sneuroble.github.io | @sNeuroble | @sNeuroble

Education

Postdoctoral Associate, Yale University

New Haven CT

RADIOLOGY & BIOMEDICAL IMAGING

Aug. 2019 - Present

- Advisor: Dustin Scheinost

PhD, Yale University

New Haven CT

INTERDEPARTMENTAL NEUROSCIENCE PROGRAM (INP)

Sept. 2014 – May 2019

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

BSE, Princeton University

Princeton NJ

CHEMICAL & BIOLOGICAL ENGINEERING: BIOTECHNOLOGY & BIOINFORMATICS TRACK

Sept. 2008 – May 2012

- Honors Certificate: Neuroscience: Quantitative & Computational Neuroscience
- Certificate: Engineering Biology

Experience

Elite Warrior Identification, LLC

Arlington VA

INDEPENDENT CONSULTANT

Mar. 2022 – Present

- EEG connectivity analysis and machine learning

Source Signal Imaging, LLC

San Diego CA

INDEPENDENT CONSULTANT

Oct. 2013 – Aug 2014

- Research and prototyping for EEG source estimation projects

goBlue Labs, LLC

New Haven CT

FOUNDING CHIEF SCIENCE OFFICER (CSO)

2012 – 2013

- Real-time EEG source estimation and neurofeedback software

Princeton University

Princeton NJ

SENIOR THESIS

2012 – 2013

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

PRINCETON SIEBEL ENERGY GRAND CHALLENGES SUMMER FELLOWSHIP

2010 – 2011

- Advisor: Jay B. Benziger
- Topic: "Hydrogen Purification by Electrochemical Pumping" with Prof. Jay B Benziger

Grants

2022 - 2024
NIH 1K99MH130894-01: Empirical Power Analysis Tool for fMRI
Principle Investigator: Stephanie Noble
Funding Source: National Institute of Mental Health
BRAIN Initiative Advanced Postdoctoral Career Transition Award to Promote Diversity (K99/R00)
Amount: $122,677 / year

2019 - 2023
NIH 8K00MH122372-02: Constrained Network-Based Multiple Comparison Correction
Principle Investigator: Stephanie Noble
Funding Source: National Institute of Mental Health
NIH Blueprint Diversity Specialized Predoctoral to Postdoctoral Advancement in Neuroscience Award (F99/K00)
Amount: $73,168 / year

2018 - 2019
NIH 1F99NS108557-01: Improving Reliability and Validity of fMRI Statistical Methods
Principle Investigator: Stephanie Noble
Funding Source: National Institute of Neurological Disorders and Stroke
NIH Blueprint Diversity Specialized Predoctoral to Postdoctoral Advancement in Neuroscience Award (F99/K00)
Amount: $45,524 / year

2016 - 2018
NSF DGE1122492
Fellow: Stephanie Noble
Funding Source: National Science Foundation
Graduate Research Fellowship Program
Amount: $46,000 / year

Honors & Awards

SCIENCE

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

2019 **Associate Member Nomination**, Sigma Xi

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

2018 **Annie Le Fellowship**, Yale University (stipend & professional enrichment supplement; academic excellence and service to the community)

2017 **Qualified for Candidacy with Distinction**

2016 **Best Poster Award**, Yale Biomedical Engineering Retreat

2015 - 2017 **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=14, Accepted=30, First Author=8, Google Scholar: https://scholar.google.com/citations?user=JxQdvn4AAAAJ

** = all authors contributed equally*

Accepted

1. Dai, W., **Noble, S.**, Scheinost, D. 2022 (Accepted). The semi-constrained network-based statistic (scNBS): a new statistical procedure for brain networks inference. MICCAI.
2. Jiang, R., Westwater, M.L., **Noble, S.,** Rosenblatt, M., Dai, W., Sui, J., Calhoun, V.D., Scheinost, D. 2022 (In press). Examining the relationship between grip strength, brain structure, and mental health in >40,000 participants. BMC Medicine.
3. **Noble, S.,** Mejia, M., Zalesky, A., Scheinost, D. 2022. Improving power in functional magnetic resonance imaging by moving beyond cluster-level inference. PNAS. (Preprint: https://www.biorxiv.org/content/10.1101/2021.09.23.461354v1)
4. 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.
5. Jiang, R., Calhoun, V.D., **Noble, S.,** Sui, J., Liang, Q., Qi, S., Scheinost, D. 2022. Examining the relationship between grip strength, brain structure, and mental health in >40,000 participants. A functional connectome signature of blood pressure in> 30 000 participants from the UK biobank. BMC Medicine.
6. 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.
7. 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.
8. 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.
9. 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.
10. 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)

11. 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.
12. 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)
13. 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)
14. **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, 40, 27-32. (*Invited Review, Deep Imaging Special Issue*).
15. 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/rytjg/)
16. 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)
17. 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.
18. **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 2020: 23rd International Conference, Lima, Peru, October 4–8, 2020, Proceedings, Part VII 23, 458-468.
19. 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.
20. **Noble, S.**, Scheinost, D., & Constable, R. T., 2020. Cluster failure or power failure? Evaluating sensitivity in cluster-level inference. NeuroImage 209, 116468.
21. **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.
22. 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.
23. 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.
24. 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.
25. 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.
26. 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.
27. **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.

28. **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.
29. 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.
30. 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

31. Mansour, S., Seguin, C., Winkler, A., **Noble, S.,** Zalesky, A. Topological Cluster Statistic: Structural connectivity guided fMRI cluster enhancements.
32. Yang, G., Bozek, J., **Noble, S.**, Han, M., Ge, J., Cui, Z., Li, X. Ethnic diversity in individualized cortical network topography.
33. Rodriguez, R., **Noble, S.**, Tejavibulya, L., Scheinost, D. (Under Revision, NeuroImage). Leveraging edge-centric networks complements existing network-level inference for functional connectomes.
34. 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.* (Under Revision, Biological Psychiatry). Machine learning and prediction in fetal, infant, and toddler neuroimaging: a review and primer.
35. 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. (Under Revision, Nature Neuroscience). Spatial and temporal autocorrelation weave human brain networks. (Preprint: https://www.biorxiv.org/content/10.1101/2021.06.01.446561v1)
36. Dadashkarimi, J., Tejavibulya, L., Gao, S., Greene, A., **Noble, S.**, Constable, R.T., Scheinost, D. Combining task connectomes can emphasize or deemphasize group differences in predictive modeling.

Preprints

37. Rosenblatt, M.., Rodriguez, R., Westwater, M. Horien, C., Greene, A., Constable, R.T., **Noble, S.**, Scheinost, D. Connectome-based machine learning models are vulnerable to subtle data manipulations. *OSF*. https://osf.io/ptuwe

Selected Media

38. Interviewed by 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
39. Interviewed by Yu, A. 2021. Scientists have used fMRI to study brain activity for years. Now, some question the results' reliability. *The Pulse.* WHYY PBS NPR. https://whyy.org/segments/scientists-used-fmri-to-study-brain-activity-for-years-now-some-question-the-results-reliability/
40. Interviewed by Proff, I., 2020. Can brain scans transform psychiatry? Medium. https://medium.com/@irisproff/can-brain-scans-transform-psychiatry-963ff2e5fb4f
41. Interviewed by Macmillon, T., 2012. Start-Up seeks to tap mind power. New Haven Independent. https://www.newhavenindependent.org/index.php/archives/entry/start-up_tries_to_tap_mind_power/

Acknowledgements

42. 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").
43. Bzymek, Z.M., Vahidi, S., & Spottiswoode, H., 2007. Solutions of the 21st Century–Teaching Computer-Aided Conceptual Design. Computer-Aided Design and Applications, 4(1-4), 459-465.

Presentations

Invited Conference Talks & Symposia

1. **Noble, S.** (2022). Diversity, equity, and inclusion initiatives across the human brain mapping community. TransMedTech Institute Grand Conference Series.
2. **Noble, S.** (2021). Leveling Up: Improving power in functional connectivity by moving beyond cluster-level inference. Innovators in Cognitive Neuroscience. Recording: https://www.youtube.com/watch?v=lm80J8-dbS0
3. **Noble, S.** (2020). The constrained network based statistic: A new level of inference for neuroimaging. NIH BRAIN Initiative Alliance's Tools, Tech, Theory and Trainee Series. Neuromatch Conference 3.0.
4. **Noble, S.**, Scheinost, D., Constable, R.T. (2020). A decade of test-retest reliability of functional connectivity. Yale Appetitive Science Seminar Series.
5. **Noble, S.**, Constable, R.T. Scheinost, D (2017). Factors influencing Reliability of Functional Connectivity. Yale Magnetic Resonance Seminar Series.
6. **Noble, S.**, Scheinost, D., Bookheimer, SY, Walshaw, P, Constable, R.T., Benjamin, C (2015). Initial validation of a novel method of presurgical fMRI language localization through functional connectivity. Yale Epilepsy Research Retreat 2015.
7. **Noble, S.**, Scheinost, D., Constable, R.T., Cannon, T.D. (2015). Reliability of Multisite Functional Connectivity. Yale NeuroDay 2015.

Invited Seminars

1. **Noble, S.** (2022). Title TBD. Vanderbilt Department of Electrical and Computer Engineering and Emerging Scholars in Engineering.
2. **Noble, S.** (2021). Leveling Up: Improving power in functional connectivity by moving beyond cluster-level inference. BraiNets Lab.
3. **Noble, S.** (2021). Leveling Up: Improving power in functional connectivity by moving beyond cluster-level inference. Systems Lab, Melbourne University.
4. **Noble, S.** (2021). Leveling Up: Improving power in functional connectivity by moving beyond cluster-level inference. Neurostats Oxford group meeting, Oxford University.
5. **Noble, S.** (2021). Leveling Up: Improving power in functional connectivity by moving beyond cluster-level inference. Cognitive Development Lab, Columbia University.

Contributed Conference Talks, Panels, & Symposia

6. **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.
7. **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.

8. **Noble, S.** (2022). RoundTable Discussion: Best practices for promoting diversity and inclusivity across OHBM organizations. Organization for Human Brain Mapping Meeting. Panelist.
9. **Noble, S.** (2021). Panel: Aperture and Open Science Roundtable. Organization for Human Brain Mapping Meeting. Speakers: Aki Nikolaidis (moderator), JB Poline (moderator), Ilona Lipp, Stephanie Noble.
10. **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.
11. **Noble, S.** (2021). Symposium: Current frontiers in statistical inference for neuroimaging data. Talk: Cluster failure or power failure? Towards a new level of inference for neuroimaging. Organization for Human Brain Mapping Meeting. Speakers: Bertrand Thirion (organizer), Jeanette Mumford (moderator), Stephanie Noble, and Jonathan D. Rosenblatt.
12. **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.
13. **Noble, S.** (2021). Lightning talk. Leveling Up: Improving power in functional connectivity by moving beyond cluster-level inference. Writing Your Own Blueprint: The NIH Blueprint Diversity Conference.
14. **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.
15. **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.
16. **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
17. **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).
18. 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.
19. ***(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
20. **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.
21. **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.
22. **Noble, S.**, Saltzman, Z. (co-presenter), Dadashkarimi, J., Lacadie, C., Garbus, H., Casetti, D., Onofrey, J., Papademetris, X., Scheinost, D. (2019). Tutorial. Introducing BioImage Suite Web. Brainhack Yale 2019.
23. **Noble, S.**, O'Connor, D (co-presenter). (2018). Tutorial. Intro to Machine Learning for fMRI with Nilearn. Brainhack Yale 2018.

Posters

24. 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.

25. **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.
26. **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.
27. 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.
28. **Noble, S.**, Scheinost, D. (2021). Leveling up: How broader levels of inference improve power in functional connectivity. Organization for Human Brain Mapping Meeting.
29. 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.
30. 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.
31. 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.
32. 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.
33. **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.
34. 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.
35. **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.
36. 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.
37. 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.
38. **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.
39. **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.
40. **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.
41. 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.
42. **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.

43. **Noble, S.**, Scheinost, D., Constable, R.T. (2018). Cluster Failure or Power Failure? Balancing the Scale with Sensitivity. 2018 Society for Neuroscience Meeting.
44. **Noble, S.**, Scheinost, D., Constable, R.T. (2018). Cluster Failure or Power Failure? Balancing the Scale with Sensitivity. 2018 Yale Biomedical Imaging Research Retreat.
45. **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.
46. **Noble, S.**, Scheinost, D., Constable, R.T. (2016). Influences on Reliability of Functional Connectivity. 2016 Society for Neuroscience Meeting.
47. **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.
48. ***(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.
49. **Noble, S.**, Scheinost, D., Cannon, T.D., Constable, R.T. (2015). Reliability of Multisite Functional Connectivity. Society for Neuroscience Annual Meeting.
50. **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.
51. **Noble, S.**, Scheinost, D., Bookheimer, S.Y., Walshaw, P., Constable, R.T., Benjamin, C. (2015). Initial validation of a novel method of presurgical fMRI language localization through functional connectivity. 2015 Yale Day of Data 2015.
52. **Noble, S.**, Schutt., C.E. (2012). Muscle Contraction as a Markov Process. Annual Princeton CBE Thesis Poster Presentations.
53. **Noble, S.**, Bonetti, C.E., Benziger, J.B. (2010). Hydrogen Purification by Electrochemical Pumping. Symposium talk at Princeton Environmental Institute Seibel Energy Grand Challenge Summer of Learning Symposium.
54. **Noble, S.**, Bonetti, C.E., Benziger, J.B. (2010). Building a Multi-Stage Hydrogen Pump. Symposium talk at PRISM/PCCM Research Experience for Undergraduates Presentation Session. http://www.princeton.edu/grandchallenges/energy/internships/meet-our-interns/interns-2010/Noble_Stephanie_sol.pptx

Industry Demonstrations

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

Industry Pitches

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

63. Poeuv, S., **Noble, S.**, Brewer, J.A. (2012, July). goBlue Labs TechStart Accelerator Competition Pitch. Presentation given at Connecticut Innovations.

Teaching & Mentoring

Mentorship

Primary supervisor:

- Tracy Lu (high school student, 2018 – 2019): advised during internship
- Samantha Steinberg (high school student, 2016): advised during internship

Assisted in the supervision of:

- Wei Dai (PhD student, Biostatistics, 2020 – present): advised on project
- Matthew Rosenblatt (PhD student, Biomedical Engineering, 2021 – present): advised on project
- Raimundo Rodriguez (PhD student, INP, 2021 – present): advised on project
- Jean Ye (PhD student, INP, 2021 – present): advised on project
- Javid Dadashkarimi (PhD student, Computer Science, 2019 – 2021): general support
- Link Tejavibulya (PhD student, Interdepartmental Neuroscience Program, 2019 – 2020): general support
- Hannah Petersen (postgraduate fellow, 2019 – 2022): advised on project

Extracurricular mentor:

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

Prior extracurricular mentorship:

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

Teaching

Course Organizer: Cultivating open science practices in academic research and culture. — *Glasgow, Scotland*
ORGANIZATION FOR HUMAN BRAIN MAPPING 2022 — *2022*

Guest Lecture: "A guide to the measurement and interpretation of fMRI test-retest reliability" — *University of Utah*
TRAINING IN ADVANCED METHODS IN NEUROIMAGING AND GENETICS 2022 — *2022*

Workshop: "Try BioImage Suite Web, a modern and powerful software for neuroscience" — *New York University*
BRAINHACK NY 2020 — *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*
BRAINHACK YALE 2019 — *2019*

Workshop: Connectome-based Predictive Modeling Working Group — *Yale University*
2019 (Monthly)

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

Teaching Fellow — *Yale University*
INTRODUCTION TO RELATIVITY (ASTR 180) — *2018*

Teaching Fellow — *Yale University*
NEUROBIOLOGY (MCDB/NSCI 320A/720A) — *2015*

Ad Hoc Review & Editorial Membership

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

Editor (Incoming): Aperture (OHBM), NeuroImage Reports

Ad Hoc Review: NeuroImage, NeuroImage: Clinical, Network Neuroscience, Cerebral Cortex, Human Brain Mapping, Proceedings of the National Academy of Sciences, Journal for Reproducibility in Neuroscience, Medical Image Analysis (MICCAI MEDIA), Multivariate Behavioral Research, eLife, eNeuro, PLOS ONE, PLOS Computational Biology, Nature Communications, Nature Scientific Reports, Science Advances, Social Cognitive and Affective Neuroscience, Psychophysiology, Psychiatry Research: Neuroimaging, Schizophrenia Bulletin, Behavior Change, Assessment

Grant Review: Deutsche Forschungsgemeinschaft (DFG)

Leadership & Service

Harvard Med / MGH Postdoc Fellowship Seminar 2023 Invited Speaker: "Having an Online Presence" *Spring 2023*

NIH Blueprint-ENDURE 2022 Invited Panelist, "Pathways and Perspectives on Advancing Your Career" *Fall 2022*

WINRepo Chat 2022 Moderator: "Grants & Fellowships" (inaugural prof dev't program led by Vale Borghesani) *Fall 2022*

Brainhack Global 2022 Diversity, Equity, & Inclusion Team Lead; Outreach Team; Onboarding Team *Fall 2022*

OHBM OSSIG 2022 Table Talks Facilitator: "Reproducible Science and my role in it (Thomas Nichols)" *Summer 2022*

OHBM OSSIG 2022 Poster Pals Organizer (inaugural poster networking program led by Sarah Goodale) *Summer 2022*

Harvard Med / MGH Postdoc Fellowship Seminar 2022 Invited Speaker: "Having an Online Presence" *Spring 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 *Fall 2020*

YBDIC-PATHS Mentoring Program Mentor *2020-2021*

OHBM 2020 Club Night Social Lead Organizer *Summer 2020*

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

Brainhack Yale 2019 Lead Organizer and Workshop Instructor *Spring 2019*

Neuroscience Scholars Program Leadership Meeting Panelist *Summer 2019*

Yale Annie Le Fellowship Selection Committee Member *Spring 2019*

INP Diversity Recruitment Panel Panelist and SWE Representative *Spring 2019*

Brainhack Networks 2019 Team of Experts *Winter 2019*

Yale Minority Scientists Research Network Board Member *Fall 2018*

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

Brainhack Yale 2018: Lead Organizer and Workshop Instructor — *Spring 2018*

Neuroscience Scholars Program Neuroscience Leadership Conference Invited Member — *Summer 2017*

INP Speaker Seminar Committee Member — *Spring 2017*

She Started It "Women in Entrepreneurship" Panelist — *Spring 2017*

McDougal Center Communications Assistant (paid position managing student communications) — *Spring 2016*

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

Mind Matters "Race and Mental Health" Panelist — *Spring 2016*

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

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

Yale Graduate Visual Artists Society Founder ('14) and Leader — *2014-2016*

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

La Casa Cultural Mentor — *2014-2015*

ManyMentors / New Haven Science Fair Mentor — *2014-2015*

Connectionism Art Movement Founder and Event Organizer — *2012-2014*

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

Open Science Contributions

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

Network-Based Inferential Procedures and Benchmarking Toolbox MATLAB — *code*

https://github.com/SNeuroble/NBS_benchmarking — *2020*

Cluster-Based Inference Benchmarking Toolbox BASH — *code*

https://github.com/SNeuroble/cluster_power_failure — *2019*

Yale Test-Retest Dataset Child Mind Institute big data analytics | INDI International Neuroimaging Data-Sharing Initiative — *data*

http://fcon_1000.projects.nitrc.org/indi/retro/yale_trt.html — *2018*

Multifactor ICC Toolbox MATLAB — *code*

https://github.com/SNeuroble/Multifactor_ICC — *2018*

Skills

Programming Languages

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

Other

Languages (basic-intermediate): Latin, Spanish

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