Stephanie M Noble

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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 _____

Source Signal Imaging

San Diego CA

INDEPENDENT CONSULTANT Oct. 2013 - Aug 2014

• Research and prototyping for EEG source estimation projects

New Haven CT goBlue Labs

FOUNDING CHIEF SCIENCE OFFICER (CSO)

Real-time EEG source estimation and neurofeedback software

Princeton University

SENIOR THESIS

Princeton NJ

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

JUNIOR INDEPENDENT WORK

- · Advisor: Clarence E. Schutt
- Topic: "A Search for Novel Interactions: h-Actin and Tropomyosin"

PRINCETON SIEBEL ENERGY GRAND CHALLENGES SUMMER FELLOWSHIP

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

Honors & Awards

FELLOWSHIPS & GRANTS

2019 - 2023 NIH 8K00MH122372-02: Constrained Network-Based Multiple Comparison Correction

Principle Investigator: Stephanie Noble

Funding Source: National Institute of Neurological Disorders and Stroke

NIH Blueprint Diversity Specialized Predoctoral to Postdoctoral Advancement in Neuroscience (DSPAN) 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 (DSPAN) 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

ACADEMIC HONORS & AWARDS

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

SCIENCE 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=11, Accepted=21, First Author=7, Google Scholar: https://scholar.google.com/citations?user=JxQdvn4AAAAJ
* = all authors contributed equally

Accepted

- 1. Ibrahim, K., **Noble, S.**, He, G., Lacadie, C., Crowley, M.J., McCarthy, G., Scheinost, D., and Sukhodolsky, D.G. 2021 (In press). Large-Scale Functional Brain Networks of Maladaptive Childhood Aggression Identified by Connectome-Based Predictive Modeling. Molecular Psychiatry.
- 2. Dufford, A.J., **Noble, S.**, Gao, S., Scheinost, D. 2021. Low Infant Functional Connectome-based Identification Rates Across the First Year of Life. Developmental Cognitive Neuroscience. (Preprint: https://doi.org/10.1101/2021.04.14.439877)
- 3. 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. In press. 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)
- 4. Levitis, E., Gould van Praag, C. D., Gau, R., Heunis, S., DuPre, E., Kiar, G., ... Noble, S., ... Maumet, C. In press. Centering inclusivity in the design of online conferences. Gigascience. (Preprint: https://doi.org/10.31234/osf.io/vj5tu)
- 5. **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).
- 6. 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/rvtig/)
- 7. 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)
- 8. 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.
- 9. **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.
- 10. 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.
- 11. **Noble, S.**, Scheinost, D., & Constable, R. T., 2020. Cluster failure or power failure? Evaluating sensitivity in cluster-level inference. NeuroImage 209, 116468.

- 12. **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.
- 13. 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.
- 14. 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.
- 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.
- 16. 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.
- 17. 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.
- 18. **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.
- 19. **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.
- 20. 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.
- 21. 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

- 22. Dai, W., **Noble, S.**, Scheinost, D. Submitted 2021. The semi-constrained network-based statistic (scNBS): a new statistical procedure for brain networks inference.
- 23. Horien, C., Floris, D.L., Greene, A.S., **Noble, S.**, Rolison, M., Tejavibulya, L., Scheinost, D., Chawarska, K., Lake, E.M., Constable, R.T. Submitted 2021. Functional connectome-based predictive modelling in autism spectrum disorder.
- 24. Shinn, M., Hu, A, Turner, L, **Noble, S**, Achard, S, Anticevic, A, Scheinost, D, Constable, RT, Lee, D, Bullmore, ET, Murray, JD. Submitted 2021. Spatial and temporal autocorrelation weave human brain networks. (Preprint: https://www.biorxiv.org/content/10.1101/2021.06.01.446561v1)
- 25. Tejavibulya, L., Peterson, H., Greene, A., gao, S., Rolison, M., **Noble, S.**, Scheinost, D. Submitted 2021. Large-scale differences in functional organization of left- and right-handed individuals using whole-brain, data-driven analysis of connectivity.
- 26. Dadashkarimi, J., Tejavibulya, L., Gao, S., Greene, A., **Noble, S.**, Constable, R.T., Scheinost, D., Submitted 2021. Combining task connectomes can emphasize or deemphasize group differences in predictive modeling.
- 27. 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. Submitted 2021. Predicting the future of neuroimaging predictive models in psychiatry.

Preprints

- 28. Rosenblatt, M., Rodriguez, R., Westwater, M., **Noble, S.**, Scheinost, D. Can we trust machine learning in fMRI? Simple adversarial attacks break connectome-based predictive models.
- 29. **Noble, S.,** Mejia, M., Zalesky, A., Scheinost, D. 2021. Leveling up: improving power in fMRI by moving beyond cluster-level inference. *bioRxiv*. https://www.biorxiv.org/content/10.1101/2021.09.23.461354v1

Selected Media

- 1. 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/
- 2. Interviewed by Proff, I., 2020. Can brain scans transform psychiatry? Medium. https://medium.com/@irisproff/can-brain-scans-transform-psychiatry-963ff2e5fb4f
- 3. 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

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

Presentations _____

Talks & Symposia (*=Invited)

- 1. * Noble, S. (2021). Invited talk. Leveling Up: Improving power in functional connectivity by moving beyond cluster-level inference. BraiNets Lab, Institut de Neurosciences de la Timone.
- 2. * Noble, S. (2021). Invited talk. Leveling Up: Improving power in functional connectivity by moving beyond cluster-level inference. Systems Lab, Melbourne University.
- 3. **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.
- 4. **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.
- 5. **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. IEEE International Symposium on Biomedical Imaging. Organization for Human Brain Mapping Meeting. Speakers: Bertrand Thirion (organizer), Jeanette Mumford (moderator), Stephanie Noble, and Jonathan D. Rosenblatt.
- 6. * Noble, S. (2021). Invited talk. Leveling Up: Improving power in functional connectivity by moving beyond cluster-level inference. Neurostats Oxford group meeting, Oxford University.
- 7. **Noble, S.** (2021). Symposium: Functional Networks. Talk: Reliability and Inference in functional networks. IEEE International Symposium on Biomedical Imaging. Speakers: Danielle Bassett, Jingyuan Chen, Stephanie Noble, Maria Giulia Preti (coorganizer with Isik Karahanoglu), and Joana Cabral.
- 8. **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.

- 9. * Noble, S. (2021). Invited talk. Leveling Up: Improving power in functional connectivity by moving beyond cluster-level inference. Cognitive Development Lab, Columbia University.
- 10. * Noble, S. (2021). Invited talk. 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
- 11. * Noble, S. (2020). Invited talk. 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.
- 12. **Noble, S.**, Scheinost, D. (2020). Oral Session. The constrained network based statistic: A new level of inference for neuroimaging. Medical Image Computing and Computer Assisted Intervention.
- 13. * Noble, S., Scheinost, D., Constable, R.T. (2020). Invited talk. A decade of test-retest reliability of functional connectivity. Yale Appetitive Science Seminar Series.
- 14. **Noble, S.,** Dadashkarimi, J., Saltzman, Z., Lacadie, C., Garbus, H., Casetti, D., Onofrey, J., Papademetris, X., Scheinost, D. (2020). Tutorial. Try Biolmage Suite Web, a modern and powerful software for neuroscience. Brainhack NY 2020.
- 15. **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=9Xqn7Jq7ypo
- 16. **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).
- 17. 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.
- 18. (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
- 19. **Noble, S.,** Dadashkarimi, J., Saltzman, Z., Lacadie, C., Garbus, H., Casetti, D., Onofrey, J., Papademetris, X., Scheinost, D. (2019). Talk & Demo. Introducing Biolmage Suite Web. Organization for Human Brain Mapping Meeting: Open Science Room.
- 20. **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. Speakers: Stephanie Noble, Caterina Gratton (co-chair), Colin Hawco (chair), and Mac Shine.
- 21. **Noble, S.**, Saltzman, Z. (co-presenter), Dadashkarimi, J., Lacadie, C., Garbus, H., Casetti, D., Onofrey, J., Papademetris, X., Scheinost, D. (2019). Tutorial. Introducing Biolmage Suite Web. Brainhack Yale 2019.
- 22. Noble, S., O'Connor, D (co-presenter). (2018). Tutorial. Intro to Machine Learning for fMRI with Nilearn. Brainhack Yale 2018.
- 23. * Noble, S., Constable, R.T. Scheinost, D (2017). Invited talk. Factors influencing Reliability of Functional Connectivity. Yale Magnetic Resonance Seminar Series.
- 24. * Noble, S., Scheinost, D., Bookheimer, SY, Walshaw, P, Constable, R.T., Benjamin, C (2015). Invited talk. Initial validation of a novel method of presurgical fMRI language localization through functional connectivity. Yale Epilepsy Research Retreat 2015.
- 25. * Noble, S., Scheinost, D., Constable, R.T., Cannon, T.D. (2015). Invited talk. Reliability of Multisite Functional Connectivity. Yale NeuroDay 2015.

Posters

26. Tejavibulya, L., Peterson, H., Gao, S., **Noble, S.**, Rolison, M., Scheinost, D. (Submitted). Identifying differences in functional organization of left- and right-handed individuals using functional connectivity. Flux Congress.

- 27. **Noble, S.**, Scheinost, D. (2021, Scheduled). Leveling up: How broader levels of inference improve power in functional connectivity. Organization for Human Brain Mapping Meeting.
- 28. Dufford, A., **Noble, S.**, Gao, S., Scheinost, D. (2021, Scheduled). Low Infant Functional Connectome-based Identification Accuracy Across the First Year of Life. Organization for Human Brain Mapping Meeting.
- 29. Greene, A.S., Shen, X., **Noble, S.**, Hahn, A., Arora, J., Tokoglu, F., Spann, M., Barron, D.S., Scheinost, D., Constable, R.T. (2021, Scheduled). Predictive modeling reveals subgroup-specific brain-phenotype relationships. Organization for Human Brain Mapping Meeting.
- 30. Dadashkarimi, J., Tejavibulya, L., Gao, S., Greene, A., **Noble, S.**, Constable, R.T., Scheinost, D. (2021, Scheduled). Combining task connectomes can emphasize or deemphasize group differences in predictive modeling. Organization for Human Brain Mapping Meeting.
- 31. Tejavibulya, L., Peterson, H., Gao, S., **Noble, S.**, Rolison, M., Scheinost, D. (2021, Scheduled). Identifying differences in functional organization of left- and right-handed individuals using functional connectivity. Organization for Human Brain Mapping Meeting.
- 32. **Noble, S.**, Dadashkarimi, J., Saltzman, Z., Lacadie, C., Garbus, H., Onofrey, J., Papademetris, X., Scheinost, D. (2021, accepted 2020 but postponed due to COVID19). Bioimage Suite Web: A Simple, Modern, & Powerful Software Suite. International Neuroinformatics Coordinating Facility Assembly.
- 33. Dadashkarimi, J., **Noble, S.**, Qu., A., Saltzman, Z., Shen, X., Lake, E., Constable, R.T., Papademetris, X., Scheinost, D. (2021, accepted 2020 but postponed due to COVID19). A web-based toolkit for visualizing and interpreting complex connectomic results in BISWeb. International Neuroinformatics Coordinating Facility Assembly.
- 34. **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.
- 35. 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.
- 36. 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.
- 37. **Noble, S.**, Dadashkarimi, J., Saltzman, Z., Lacadie, C., Garbus, H., Casetti, D., Onofrey, J., Papademetris, X., Scheinost, D. (2019). Introducing Biolmage Suite Web: A Simple, Modern, and Powerful Software Suite. Society for Neuroscience Meeting.
- 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. Organization for Human Brain Mapping Meeting.
- 39. **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.
- 40. 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.
- 41. **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.
- 42. **Noble, S.**, Scheinost, D., Constable, R.T. (2018). Cluster Failure or Power Failure? Balancing the Scale with Sensitivity. 2018 Society for Neuroscience Meeting.
- 43. **Noble, S.**, Scheinost, D., Constable, R.T. (2018). Cluster Failure or Power Failure? Balancing the Scale with Sensitivity. 2018 Yale Biomedical Imaging Research Retreat.
- 44. **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.

- 45. **Noble, S.**, Scheinost, D., Constable, R.T. (2016). Influences on Reliability of Functional Connectivity. 2016 Society for Neuroscience Meeting.
- 46. **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.
- 47. (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.
- 48. **Noble, S.**, Scheinost, D., Cannon, T.D., Constable, R.T. (2015). Reliability of Multisite Functional Connectivity. Society for Neuroscience Annual Meeting.
- 49. **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.
- 50. **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.
- 51. Noble, S., Schutt., C.E. (2012). Muscle Contraction as a Markov Process. Annual Princeton CBE Thesis Poster Presentations.
- 52. **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.
- 53. **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

- 54. Noble, S., Poeuv, S., Brewer, J.A. (2013, February). Private demo for popular media reporter (undisclosed). goBlue Labs.
- 55. Noble, S., Poeuv, S., Brewer, J.A. (2012, December). Public demo. TechStart Demo Day. Yale University.
- 56. **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.
- 57. Noble, S., Poeuv, S., Brewer, J.A. (2012, Sept). Private demo for New Haven Independent Reporter. goBlue Labs.

Industry Pitches

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

Teaching & Mentoring

Mentorship

Primary in-lab supervisor

Tracy Lu (high school student, 2018 - 2019)

Samantha Steinberg (high school student, 2016)

Assistant in-lab supervisor

- Javid Dadashkarimi (PhD student, Computer Science, 2019 present)
- Link Tejavibulya (PhD student, Interdepartmental Neuroscience Program, 2019 present)
- Wei Dai (PhD student, Biostatistics, 2020 present)
- Hannah Petersen (postgraduate fellow, 2019 present)

Extracurricular mentor

- Darlis Juvino (undergraduate, 2020 2021, via YBDIC-PATHS)
- Evelyn Soria (undergraduate, 2016 present)

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).

Guest Lecturer University of Utah 2022 (Scheduled)

TRAINING IN ADVANCED METHODS IN NEUROIMAGING AND GENETICS 2022

Workshop: "Try Biolmage Suite Web, a modern and powerful software for neuroscience" New York University BRAINHACK NY 2020

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

Workshop: "Introduction to BioImage Suite Web" Yale University

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

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

BRAINHACK YALE 2018

BRAINHACK YALE 2019

Teaching Fellow Yale University

INTRODUCTION TO RELATIVITY (ASTR 180)

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

Ad Hoc Review & Editorial Membership

Publons: https://publons.com/researcher/4240950/stephanie-noble/peer-review/

Reviewer: NeuroImage, NeuroImage: Clinical, Network Neuroscience, Cerebral Cortex, Human Brain Mapping, Proceedings of the National Academy of Sciences, eLife, eNeuro, Nature Communications, Nature Scientific Reports, Social Cognitive and Affective Neuroscience, Psychiatry Research: Neuroimaging, Schizophrenia Bulletin, Behavior Change, Assessment

Editor (Incoming): OHBM Aperture

Leadership & Service _____

Harvard Medical School Professional Dev't Seminar Invited Speaker: "Creating an Online Presence" OHBM Open Science Special Interest Group (OSSIG) 2022 Inclusivity Officer

Brainhack Global 2021 Diversity, Equity, & Inclusion Team Lead; Outreach Team; Onboarding Team

Spring 2022 (sched.) 2021-2022

Yale University

| 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 https://www.ninds.nih.gov/News-Events/Events-Proceedings/Events/NIH-Blueprint-D-SPAN-F99K00-Webinar | Winter 2019 |
| Brainhack Yale 2019 Lead Organizer and Workshop Instructor | Spring 2019 |
| Neuroscience Scholars Program Leadership Meeting Panelist | Summer 2019 |
| Yale Annie Le Fellowship Selection Committee Member | Spring 2019 |
| INP Diversity Recruitment Panel Panelist and SWE Representative | Spring 2019 |
| Brainhack Networks 2019 Team of Experts | Winter 2019 |
| Yale Minority Scientists Research Network Board Member | Fall 2018 |
| NIH Blueprint D-SPAN F99/K00 Twitter Q&A Panelist | Fall 2018 |
| Brainhack Yale 2018: Lead Organizer and Workshop Instructor | Spring 2018 |
| Neuroscience Scholars Program Neuroscience Leadership Conference Invited Member | Summer 2017 |
| INP Speaker Seminar Committee Member | Spring 2017 |
| She Started It "Women in Entrepreneurship" Panelist | Spring 2017 |
| McDougal Center Communications Assistant (paid position managing student communications) | Spring 2016 |
| Yale Graduate Society of Women Engineers Outreach Chair ('15-'17), Mentor, Volunteer, Panelist Led four outreach events, two networking/career building events (panelist) | 2014-2017 |
| Mind Matters "Race and Mental Health" Panelist | Spring 2016 |
| Women in Science at Yale Mentor and "Career Strategy" Panelist ('14-'16) | 2014-2018 |
| INP Outreach Committee Chair ('15-'16), Volunteer ('14-'17), Speaker ('16, '18 NIH BP-Endure) Six outreach events per year (30-60 students per event) | 2014-2016 |
| Yale Graduate Visual Artists Society Founder ('14) and Leader | 2014-2016 |
| Yale Office for Graduate Student Development and Diversity Mentor | 2014-2017 |
| La Casa Cultural Mentor | 2014-2015 |
| ManyMentors / New Haven Science Fair Mentor | 2014-2015 |
| Connectionism Art Movement Founder and Event Organizer | 2012-2014 |
| Princeton Biomedical Engineering Society President ('11-'12), VP ('10-'11), Cofounder | 2010-2012 |

Open Science Contributions _____

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

Network-Based Statistic Extensions and Benchmarking Toolbox ◆ MATLAB

https://github.com/SNeuroble/NBS_benchmarking

Cluster-Based Inference Benchmarking Toolbox

code

code

Yale Test-Retest Dataset



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

data 2018

Multifactor ICC Toolbox

MATLAB

https://github.com/SNeuroble/Multifactor_ICC

code

2018

Skills____

Programming Languages

Data Analysis (intermediate-advanced): Matlab, bash, R, Python

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

Other Languages (basic-intermediate): Latin, Spanish

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