**STEPHANIE R. JONES, PHD**
Professor
Department of Neuroscience, Brown University
*https://sites.brown.edu/stephanie-r-jones-lab/*
Twitter: @drjstephjones @HNNsolver

## EDUCATION

| | |
|---|---|
| *Undergraduate:* | BA, Mathematics (Computer Science minor), *Magna Cum Laude* |
| 1993 | Boston College, Chestnut Hill, MA |
| *Graduate:* | MA, Mathematics |
| 1995 | Boston College, Chestnut Hill, MA |
| 2001 | PhD, Mathematics<br>Disciplines: Dynamical Systems Theory and Computational Neuroscience<br>Advisor: Nancy Kopell, Boston University, Boston, MA |
| *Research Fellow:* | Training in Neuroscience & Human Neurophysiology (MEG/EEG) |
| 2001-2005 | Athinola A. Martinos Center for Biomedical Imaging<br>Massachusetts General Hospital / Harvard Medical School, Boston, MA |

## PROFESSIONAL APPOINTMENTS

| | |
|---|---|
| 2023-present | Professor, Brown University, Providence, RI |
| 2016-2024 | Computational Neuroscientist, CfNN, Providence Veteran's Medical Center, RI |
| 2018-2023 | Associate Professor, Brown University, Providence, RI |
| 2016-2018 | Associate Research Professor, Brown University, Providence, RI |
| 2011-2016 | Assistant Research Professor, Brown University, Providence, RI |
| 2011-2013 | Associate Scientist, Newborn Medicine Boston Children's Hospital, Boston, MA |
| 2005-2013 | Assistant in Neuroscience, Martinos Center Mass. General Hosp., Boston, MA |
| 2005-2011 | Faculty, Harvard Medical School, Boston, MA |

## HONORS and AWARDS

| | |
|---|---|
| 2025 | NINDS Landis Award for Outstanding Mentorship |
| 2025 | Graduate School Faculty Award for Advising and Mentoring, Brown University |
| 2025 | Top 3 Innovations of the Year, Brown Technology Innovations |
| 2025 | Zimmerman Innovation Award, Carney Institute for Brain Science, Brown Univ. |
| 2024 | Brown Biomedical Innovations to Impact Award |
| 2023 | MIT/Brown Faculty Founders Competition Award |
| 2022 | Zimmerman Innovation Award, Carney Institute for Brain Science, Brown Univ. |
| 2020 | BIOMAG 2020 Mid-Career Award, Society for Biomagnetism |
| 2019 | Open-Source Technology Event SFN: Best Speed Dating Demonstration |
| 2016 | NIH BRAIN Initiative Award |
| 2014 | Dean's Emerging Areas of New Science (DEANS) Award, Brown Univ. BioMed |
| 2012 & 2013 | New Frontiers Award, Brown Univ. / Norman Prince Neuroscience Institute |
| 2012 | Harvard Catalyst Advanced Imaging Award, Harvard Translational Science Center |
| 2011 | Scholars in Medicine Dr. Lynne Reid /Shore Fellowship, Harvard Medical School |
| 2008 | Claflin Distinguished Scholar Award, Harvard Medical School |
| 1993-1995 | Dean's Fellowship, Dept. of Mathematics, Boston College |
| 1993 | Phi Beta Kappa, National Honor Society, Boston College |
| 1993 | Alfred A. Bennet Excellence in Mathematics Teaching Award, Boston College |

**ADMINISTRATIVE and SCIENTIFIC LEADERSHIP POSITIONS (past 5 years)**

| | |
|---|---|
| 2023-present | Science Advisory Board: NIMH CONTE Center: The Cognitive Thalamus |
| 2022-2024 | Brown University Neuroscience Graduate Program Admissions Committee |
| 2022 | Co-editor: Frontiers Special Issue "Understanding the Importance of Oscillatory Events: Methods, Characteristics and their Role in Information Coding" |
| 2022-present | Dept. of Neuroscience First Year Graduate Student Advisor |
| 2021-present | Dept. of Neuroscience Committee for Academic Reappointments & Promotions |
| 2021-present | Science Advisory Board: National Fragile X Center, Cincinnati Children's Hospital |
| 2019-present | Science Advisory Board: Neuroscience Gateway Portal |
| 2019-present | Science Advisory Board: Neuroelectromagnetic Data Archive & Tools Resource |
| 2019-present | Science Advisory Board: European R.C. Project: ConnectToBrain |
| 2019-present | Undergraduate Advisor Brown University Academic Advising |
| 2018-2024 | Director of Core for Decoding, Recording and Computational Neurosci. CfNN, Providence VA Medical Center |
| 2021 | Panel Advisor in NIH Workshop: BRAIN Initiative Transformative Non-Invasive Imaging Technology, Online |
| 2021 | Steering Committee: Brown U. Medical School Umbrella PhD Program |
| 2021 | Steering Committee: Brown U. Interdisciplinary Training in Comp. Neuroscience |

**GRANT REVIEW PANEL MEMERSHIP (past 5 years)**

| | |
|---|---|
| 2023 | NIH Review Panel: Integration and Analysis of BRAIN Initiative Data |
| 2022 | Medical Res. Council: Japan UK Research Collaboration in Neuroscience |
| 2022 | Carney Institute Innovator Award Review Committee |
| 2021 | NIH: U19 From Genomic Association to Causation |

**CONFERENCE and SYMPOSSIUM ORGANIZATION (past 5 years)**

| | |
|---|---|
| 2022-2026 | **Summer Workshop Co-Organizer** Bi-annual Joint Brown University and Ben Gurion University summer workshop on Neurotechnology, |
| 2021-2022 | **Conference Series Co-Organizer** Catherine Kerr Vital Energy in Health and Healing Series, Online |
| 2020 | **Scientific Committee Member** for 22nd International Conference on Biomagnetism |
| 2019-2022 | **Conference Organization Scientific Committee** International Conference on Biomagnetism (BIOMAG), Birmingham UK |

**ENTREPRENEURSHIP TRAINING**

| | |
|---|---|
| 2025 | Washington University<br>*Equalize Startups Award 2025 Cohort Member* |
| 2024 | Brown University: Biomedical Innovation to Impact (BBII)<br>*Steven J. Massarsky Biomedical Research Innovation Award* |
| 2023 | Massachusetts Institute of Technology (MIT)/Brown University<br>*Faculty Founder Initiative Award* |

## PATENTS and PATENT APPLICATIONS

Tolley, Nicholas and **Jones, Stephanie**. 2025. EEG-based treatment response prediction with dynamical systems foundational models. 63/922,482, filed November 21, 2025. Patent pending.

Sliva, Danielle and **Jones, Stephanie**. 2025. A Novel Approach to Designing Personalized Transcranial Magnetic Stimulation (TMS) Delivery Protocols Based on Computational Modeling of the Electromagnetic TMS-Evoked Response. 63/822,413, filed June 12, 2025. Patent pending.

Tolley, Nicholas and **Jones, Stephanie**. 2024. Estimation Of Parameters in Biophysically Detailed Neural Models with Simulation Based Inference. 63/567,108, filed March 19, 2024. Patent pending.

Zhou, David and **Jones, Stephanie**. 2023. System and Method for Dissecting Beta Waveforms Using Convolutional Dictionary Learning. 63/464.340, filed May 6, 2024. Patent pending.

## CURRENT GRANTS (completed grants listed below after software contributions)

### Current Research and Training Grants as Principal Investigator or Co-Investigator

| | |
|---|---|
| 2025-2026 | **Landis Mentorship Award – Supplement to U24 NS129945 \| NINDS**<br>**Role: PI**<br>Dissemination of the Human Neocortical Neurosolver software for circuit level interpretation of human MEG/EEG |
| 2025-2030 | **IIS-242101 \| NSF**<br>**Role: PI** (Co-PI S. Haegens, Columbia U.)<br>Collaborative Research in Computational Neuroscience: Uncovering the mechanisms and meaning of brain rhythm frequency shifts during decision making |
| 2025-2026 | **Zimmerman Innovation Award, Carney Institute of Brain Science**<br>**Role: PI**<br>Discovering & interpreting novel biomarkers of Alzheimer's Disease (AD) Progression in longitudinal MEG data |
| 2025-2029 | **R01NS134948 \| NINDS**<br>**Role: Co-I** (PI A. Levin, Boston Children's Hospital)<br>Paradoxical Sensory Responses: A Clue Towards Understanding Biotypes in Autism Spectrum Disorder and Other Neurodevelopmental Disorders |
| 2024-2029 | **T32 MH115895 \| NIMH NIH Training Program in Interactionist Cognitive Neuroscience**<br>**Role: PI** (Co-PIs: C. Moore, M. Frank, D. Badre) |
| 2024-2029 | **P50 AA022534 \| NIAAA**<br>**Role: Co-I** (Project PI J. Stephens, University of New Mexico)<br>Fetal Ethanol-induced behavior deficit: Mechanisms, diagnosis and Intervention |
| 2024-2026 | **Brown Biomedical Innovations to Impact Award, Brown Tech. License Office**<br>**Role: PI**<br>Unlocking Neurotherapeuties with Predictive Brain Simulations |
| 2023-2028 | **R25 NS130655 \| NINDS Brown University Summer Scholars Program in Computational Brain Science**<br>**Role: PI** (Co-PIs: K. Webster & J. Ritt, Brown University) |
| 2023-2028 | **U24 NS129945 \| NINDS**<br>**Role: PI**<br>Dissemination of the Human Neocortical Neurosolver software for circuit level interpretation of human MEG/EEG |

| | |
|---|---|
| 2023-2028 | **P50 MH109429\| NIMH**<br>**Role: Project Leader** (Center PIs C. Schroder & M. Milham, Nathan Kline Inst.)<br>CONTE Center: Neurobiology and cognitive role of slow brain network fluctuations |
| 2023-2028 | **R01 HD108222 \| NICHD**<br>**Role: Co-I** (PI E. Pedapati, Cincinnati Children's Hosp.)<br>Perturbation of neurodynamics underlying sensory hyperarousal and statistical earning in youth with FXS |
| 2022-2026 | **R01 MH130415 \| NIMH**<br>**Role: PI**<br>Secondary analysis of resting state MEG data using the Human Neocortical Neurosolver software tool for cellular and circuit-level interpretation |

**Current Grants as Mentor or Trainer**

| | |
|---|---|
| 2022-2027 | **NIH: R35 Advancing the Research Careers of Women & PEERs in Brain Science**<br>**Role: Quantitative Methods Consultant** (PI: Lipscome) |
| 2021-2026 | **NIH: K23 Mentored Patient-Oriented Research Career**<br>**Role: Co-Mentor** (PI. B. Kavanaugh) |
| 2020-2026 | **NIH: Brown Postdoctoral Training Program in Computational Psychiatry**<br>**Role: Trainer** (PI: Frank/Serre/Rasmussen) |
| 2012-present | **NIH: T32 Training in Neuroscience**<br>**Role: Trainer** (PI: Lipscome/Sheinberg) |

## RESEARCH

### Journal Articles (reverse chronological)

A full list of my journal publications can be found at
https://scholar.google.com/citations?hl=en&user=H2lcpR0AAAAJ&view_op=list_works&sortby=pubdate

1. Waller DA, Carpenter LL, Jones SR (2026) Transient frontal spectral events from EEG predict antidepressant response to sertraline in depression. medRxiv
   doi: https://doi.org/10.64898/2026.01.26.26344862
2. Thorpe RV, Moore CI, **Jones SR** (2025). Ensemble priming via competitive inhibition: local mechanisms of sensory context storage and deviance detection in the neocortical column. bioRxiv https://doi.org/10.1101/2025.01.08.631952.
3. Pujol CF, Bruce J, Thorpe RV, **Jones SR**, Dykstra AR (2025). Neurophysiology of mismatch negativity generation: a biophysical modeling study. bioRxiv https://doi.org/10.1101/2025.11.08.687373
4. Shpakivska-Bilan D, Susi G, Zhou DW, Cabrera J, Carvajal BP, Pereda E, Lopez ME, Bruña R, Maestu F, **Jones SR** (2025). High power transient 12-29Hz beta event features as early biomarkers of Alzheimer's Disease conversion: a MEG study. Imaging Neuroscience https://doi.org/10.1162/IMAG.a.69
5. Mackey CA, Duecker K, Neymotin S, Dura-Bernal S, Haegens S, Barczak A, O'Connell MN, **Jones SR**, Ding M, Ghuman AS, Schroeder CE (2025). Is there a ubiquitous spectrolaminar motif of local field potential power across primate neocortex? Nature Neuroscience https://doi.org/10.1038/s41593-025-02167-y
6. Dykstra AR, Zhu Y, Fernandez CP, Zhou DW, **Jones SR**, Marvan T, Bonaiuto JJ (2025). Testing circuit-level theories of consciousness in humans. Trends in Cognitive Sciences https://doi.org/10.1016/j.tics.2025.08.012

7. Citarella J, Siekierski P, Ethridge L, Westerkamp G, Liu Y, Blank E, Voorhees L, Batterink L, **Jones SR**, Smith E, Reisinger DL, Nelson M, Binder DK, Razak KA, Miyakoshi M, Wu S, Gilbert D, Horn PS, De Stefano LA, Pedapati EV (2025). FX ENTRAIN: Scientific context, study design, and biomarker driven brain-computer interfaces in neurodevelopmental conditions. Frontiers in Neuroscience https://doi.org/10.3389/fnins.2025.1618804
8. Kavanaugh BC, Vigne MM, Gamble I, Legere C, DePamphilis G, Acuff WL, Tirrell E, Vaughan N, Thorpe R, Festa EK, Spirito A, **Jones SR**, Carpenter LL (2025). Dysfunctional oscillatory bursting patterns linked to working memory in adolescents with attention deficit hyperactivity disorder. Cogn Affect Behav Neurosci. https://doi.org/10.3758/s13415-025-01361-6
9. Kavanaugh BC, Vigne MM, Thorpe R, Legere C, Acuff WL, Vaughan N, Tirrell E, Haegens S, Carpenter LL, **Jones SR** (2025). The association between oscillatory burst features and human working memory accuracy. Journal of Cognitive Neuroscience https://doi.org/10.1162/jocn.a.87
10. Kavanaugh BC, Vigne MM, Tirrell E, Luke Acuff W, Fukuda AM, Thorpe R, Sherman A, **Jones SR**, Carpenter LL, Tyrka AR (2024). Frontoparietal beta event characteristics are associated with early life stress and psychiatric symptoms in adults. Brain and cognition. 177:106164. doi: 10.1016/j.bandc.2024.106164
11. Diesburg DA, Wessel JR, **Jones SR** (2024) Biophysical Modeling of Frontocentral ERP Generation Links Circuit-Level Mechanisms of Action-Stopping to a Behavioral Race Model. The Journal of Neuroscience. 44(20):e2016232024. doi: 10.1523/JNEUROSCI.2016-23.2024
12. Tolley N, Rodrigues PLC, Gramfort A, **Jones SR**. (2024). Methods and considerations for estimating parameters in biophysically detailed neural models with simulation based inference. *PLoS Computational Biology*, *20*(2), e1011108. https://doi.org/10.1371/journal.pcbi.1011108
13. Thorpe RV, Black CJ, Borton DA, Hu L, Saab CY, **Jones SR** (2024) Distinct neocortical mechanisms underlie human SI responses to median nerve and laser evoked peripheral activation. Imaging Neuroscience. 2:1–29.
14. Mainak Jas, Ryan Thorpe, Nicholas Tolley, Christopher Bailey, Steven Brandt, Blake Caldwell, Huzi Cheng, Dylan Daniels, … **Jones SR** (2023) HNN-core: A python software for cellular and circuit-level interpretation of human MEG/EEG Journal of Open-Source Software 8 (92), 5848
15. Kavanaugh BC, Fukuda AM, Gemelli ZT, Thorpe R, Tirrell E, Vigne M, ... **Jones SR** (2023) Pre-treatment frontal beta events are associated with executive dysfunction improvement after repetitive transcranial magnetic stimulation for depression: A preliminary Report Journal of Psychiatric Research 168, 71-81
16. SD McKeon, F Calabro, RV Thorpe, A de la Fuente, W Foran, AC Parr, ... **Jones SR** (2023) Age-related differences in transient gamma band activity during working memory maintenance through adolescence NeuroImage 274, 120112
17. CS Zimmerman, S Temereanca, D Daniels, C Penner, T Cannonier, ... **Jones SR** (2023) A Randomized Controlled Pilot Trial Comparing Effects of Qigong and Exercise/Nutrition Training on Fatigue and Other Outcomes in Female Cancer Survivors. Integrative Cancer Therapies 22, 15347354231162584
18. Morris S, Temereanca S, Zandvakili A, Thorpe, R, Sliva D, Greenberg BD, Carpenter LL, Philip NS, **Jones SR** (2023) Fronto-central resting-state 15-29Hz transient beta event features change with therapeutic transcranial magnetic stimulation for posttraumatic stress disorder and major depressive disorder. Scientific Reports, 2023; 13 (1), 6366.
19. Zimmerman C, Temereanca S, Daniels D, Penner C, Cannonier T, **Jones SR**** and Kerr C[+] (2022) The Vitality Project: A Randomized Control Trial Comparing Qigong and

Exercise/Nutrition Training on Fatigue, Emotional Health, and Stress in Fatigued Female Cancer Survivors. Journal of Integrative Cancer Therapies. 2023 15347354231162584

+ In memorium of Catherine Kerr ** Co-Senior author

20. Neymotin S, Tal I, Barczak A, O'Connell M, McGinnis T, Markowitz N, Espinal E, Griffith E, Anwar H, Dura-Bernal S, Schroeder C, Lytton W, **Jones SR**, Bickel S, Lakatos P (2022) Detecting spontaneous neural oscillation events in primary auditory cortex. eNeuro ENEURO.0281-21.2022.doi: 10.1523/ENEURO.0281-21.2022.
21. Moolchand P, **Jones SR**** and Frank MJ (2022) Biophysical and Architectural Mechanisms of Subthalamic Theta under Response Conflict. J. Neuroscience 10.1523/JNEUROSCI.2433-19.2022 https://doi.org/10.1523/JNEUROSCI.2433-19.2022

    ** Co-Senior author, senior contribution on computational neural modeling component
22. Thorpe RV, Black CJ, Borton DA, Hu L, Saab, CY Jones SR Distinct neocortical mechanisms underlie human SI responses to median nerve and laser evoked peripheral activation. (2021) bioRxiv https://doi.org/10.1101/2021.10.11.463545
23. Bonaiuto JJ, Little S, Neymotin SA, **Jones SR**, R Barnes GR, Bestmann S (2021) Laminar dynamics of beta bursts in human motor cortex. Neuroimage 242:118479. https://doi.org/10.1016/j.neuroimage.2021.118479 .

    ** Senior author contribution on computational neural modeling component
24. Law RG, Pugliese S, Shin H, Sliva DD, Lee S, Neymotin SA, Moore CI, **Jones SR** (2021) Thalamocortical mechanisms regulating the relationship between transient beta events and human tactile perception. Cerebral Cortex, 00:1-21, doi: https://doi.org/10.1093/cercor/bhab221
25. Jas M, **Jones SR**, Hämäläinen MS (2021) Whole-head OPM-MEG enables noninvasive assessment of functional connectivity. Trends in Neurosciences ISSN 0166-2236. doi.org/10.1016/j.tins.2021.04.006.
26. Kohl C, Parviainen T & **Jones, SR** (2021) Neural Mechanisms Underlying Human Auditory Evoked Responses Revealed By Human Neocortical Neurosolver. Brain Topogr. https://doi.org/10.1007/s10548-021-00838-0
27. Powell M, Anso J, Gilron R, Provenza N, Allawala A, Silva D, Bijanki K, Oswalt D, Adkinson J, Pouratian N, Sheth S, Goodman W, **Jones SR**, Starr PA, Borton D (2020) NeuroDAC: An open-source arbitrary biosignal waveform generator. J Neural Eng. Nov 5:10.1088/1741-2552/abc7f0. doi: 10.1088/1741-2552/abc7f0. Epub ahead of print. PMID: 33152715; PMCID: PMC8096859.
28. Levitt J, Edhi MM, Thorpe RV, Leung JW, Michishita M, Koyama S, Yoshikawa SScarfo KA, Carayannopoulos AG Gu W, Srivastava KH, Clark BA, Rosana Esteller R, Borton DA, **Jones SR**, Saab CY (2020) Pain phenotypes classified by machine learning using electroencephalography features. NeuroImage, Volume 223, 117256. ISSN 1053-8119. doi.org/10.1016/j.neuroimage.2020.117256.

    ** Senior author contribution on computational methods
29. Eaton E, Swearingen HR, Zand Vakili A, **Jones SR,** Greenberg BD (2020) A Brief Report on an 8-Week Course of Mindfulness-based Care for Chronic Pain in the Treatment of Veterans With Back Pain. Medical Care: September 2020 - Volume 58 - Issue - p S94-S100. doi: 10.1097/MLR.0000000000001377
30. Sliva DD and **Jones SR** (2020) Is Alpha Asymmetry a Byproduct or Cause of Spatial Attention? New Evidence Alpha Neurofeedback Controls Measures of Spatial Attention. Neuron. Volume 105, Issue 3, Pages 404-406, ISSN 0896-6273. doi.org/10.1016/j.neuron.2019.12.033.

31. Sahin M, Sweeney JA, **Jones SR** (2020) Editorial: Biomarkers to Enable Therapeutics Development in Neurodevelopmental Disorders. Frontiers in Integrative Neuroscience, vol. 14, p. 57, 2020, doi: 10.3389/fnint.2020.616641.
32. Neymotin SA, Daniels DS, Caldwell B, McDougal RA, Carnevale NT, Jas M, Moore CI, Hines ML, Hämäläinen M, **Jones SR** (2020) Human Neocortical Neurosolver (HNN), a new software tool for interpreting the cellular and network origin of human MEG/EEG data. eLife 2020;9:e51214 DOI: 10.7554/eLife.51214 (https://doi.org/10.7554/eLife.51214)
33. Zandvakili A, Philip NS, **Jones SR**, Tyrka AR, Greenberg BD, Carpenter LL (2019) Use of Machine Learning in Predicting Clinical Response to Transcranial Magnetic Stimulation in comorbid Posttraumatic Stress Disorder and Major Depression: A Resting State Electroencephalography Study. J. Affective Disorders. 2019: 252:47-54. doi: 10.1016/j.jad.2019.03.077.
34. Sliva DD, Black CJ, Bowary P. Agrawal U, Santoyo JF, Philip N, Greenberg, BD, Moore CI, **Jones SR** (2018) A prospective study of the impact of transcranial alternating current stimulation on EEG correlates of somatosensory perception. Front. Psych. Nov 20;9:2117. doi: 10.3389/fpsyg.2018.02117
35. *Sahin M, ***Jones SR**, *Sweeney JA, Berry-Kravis E, Connors BW, Ewens, JB, Hartman AL, Levin AR, Potter WZ, Mamounas LA, on behalf of the Biomarker Workshop Faculty (2018) Discovering translational biomarkers in neurodevelopmental disorders. Nature Reviews, https://doi.org/10.1038/ d41573-018-00010-7

    ** Co-First author
36. Shin H, Law R, Tsutsui S, Moore CI, **Jones SR** (2017) The rate of transient beta frequency events predicts behavior across tasks and species. eLife 6:e29086
37. Lee S, Asaad W, **Jones SR** (2017) Computational modeling to improve treatments for Essential Tremor. Drug Discovery Today. Volume 19, Pages 19-25.
38. Black CJ, Voights J, Agrawal U, Ladow M, Santoyo J, Moore CI, **Jones SR** (2017) Open Ephys. Electroencephalography: A modular, low-cost, open-source solution to human neural recordings. J. Neural Engineering. 14(3):035002
39. **Jones SR** (2016) When brain rhythms aren't 'rhythmic': implications for their mechanisms and meaning. Curr. Opin. Neurobiol.; 40:72-80
40. Sherman M, Lee S, Law R, Haegens S, Thorn C, Hamalainen M, Moore CI, **Jones SR** (2016) Neural mechanisms of transient neocortical beta rhythms: Converging evidence from humans, computational modeling, monkeys, and mice. Proc. Natl. Acad. Sci.; 113(33):E4885-94
41. Law R and **Jones SR** (2016) Membrane state diagrams make electrophysiological models simple. bioRxiv doi: https://doi.org/10.1101/051839
42. Hwang K, Ghuman AS, Dara S. Manoach DS, **Jones SR**, Luna B (2016) Frontal preparatory neural oscillations associated with cognitive control: A developmental study comparing young adults and adolescents. Adolescent immaturities in frontal preparatory neural oscillations associated with inhibitory control Neuroimage; 136:139-48.
43. Sacchet M, LaPlante R, Wan Q, Pritchett D, Lee A K-C, Hamalainen M, Moore CI, Kerr CE and **Jones SR**.(2015) Attention drives synchronization of alpha and beta rhythms between right inferior frontal and primary sensory cortex. J. Neurosci.; 35(5):2074-20
44. Ahlfors SP, **Jones SR**, Ahveninen J, Hamalainen MS, Bar M (2015) Direction of magnetoencephalography sources associated with feedback and feedforward contributions in a visual object recognition task. Neurosci. Lett.; 585:149-54

45. Hwang Kai, Ghuman Avniel S, Manoach Dara S, **Jones SR**, Luna B (2014) Cortical neurodynamics of inhibitory control. J. Neurosci.; 34(29):9551-61.

46. Lee S and **Jones SR** (2013) Distinguishing mechanisms of gamma frequency oscillations in human current source signals using a computational model of a laminar neocortical network. Frontiers in Human Neurosci.; Dec 18; 867:869

47. Kerr CE, Sacchet M, Lazar S, Moore CI, **Jones SR** (2013) Mindfulness starts with the body: somatosensory attention and top-down modulation of cortical alpha rhythms in mindfulness meditation. Frontiers in Human Neurosci.; Feb 13:7-12

48. Carlen M, Konstantinos M, Siegle JH, Cardin JA, Fatai F, Vierling-Claassen D, Ruhlmann C, **Jones SR****, Deissertoth K, Sheng M, Moore CI, Tsai LH (2012) A critical role for NMDAR parvalbumin interneurons for gamma rhythm induction and cognitive function. Molecular Psych.; 17(5):537-48
** Senior author contribution on computational neural modeling component

49. Wan Q, Kerr CE, Pritchett D, Hamalainen M, Moore CI, **Jones SR** (2011) Dynamics of dynamics within a single data acquisition session: variation in neocortical alpha oscillations in human MEG. PLoS ONE.;6(9):e24941.

50. Kerr CE**, **Jones SR****, Wan Q, Pritchett DL, Wasserman RH, Wexler A, Villanueva JJ, Shaw JR, Kaptchuk TJ, Littenberg R, Hamalainen MS, Moore CI (2011) Effects of mindfulness meditation training on cortical dynamics: A MEG study of alpha rhythm modulation in SI. Brain Research Bulletin. 85(3-4):96-103.
** Joint first author contributions

51. Vierling-Claassen D, Cardin JA, Moore CI, **Jones SR** (2010) Computational modeling of neocortical oscillations driven by cell-type selective optogentic drive: resonant circuits controlled by low-threshold spiking and fast-spiking interneurons. Front. Human Neurosci. Nov 22, 4:198.

52. **Jones SR**, Kerr CE, Wan Q, Pritchett DL, Hamalainen MS, Moore CI (2010) Cued spatial attention drives representation-specific modulation of the alpha rhythm in primary somatosensory cortex. Journal of Neurosci. ;30(41):13760-5.

53. Ziegler DA, Pritchett DL, Hosseini-V. P, Corkin S, Hamalainen MS, Moore CI, **Jones SR** (2010) Transformations in oscillatory activity and evoked responses in primary somatosensory cortex in middle age: A combined comput. neur. modeling & MEG study. Neuroimage; 52(3):897:912.

54. **Jones SR**, Pritchett DL, Stufflebeam SM, Sikora M, Hamalainen MS, Moore CI (2009) Quantitative analysis and biophysically-realistic modeling of the MEG mu rhythm: rhythmogenesis and modulation of sensory evoked responses. J. of Neurophys; 102(6):3554-72.

55. Boas DA, **Jones SR**, Devor A, Huppert TJ, Dunn AK, Dale AM (2008) A vascular anatomical network model of the spatio-temporal response to brain activation. Neuroimage; 40(3):1116-29.

56. **Jones SR**, Pritchett DL, Stufflebeam SM, Hamalainen, M, Moore CI (2007) Neural correlates of tactile detection: A combined MEG and biophysically based computational modeling study. Journal of Neurosci.; 27(40):10751-10764.

57. **Jones SR**, Kopell N (2006) Local network parameters can affect inter-network phase lags in central pattern generators. Journal of Math Biology; 52(1):115-40.

58. Devor A, Ulbert I, Dunn AK, Narayanan SN, **Jones SR**, Andermann ML, Boas DA, Dale AM (2005) Coupling of the cortical hemodynamic response to cortical and thalamic neuronal activity. Proc. Natl. Acad. Sci. 2005;102(10):3822-7.

59. Pinto DJ, **Jones SR**, Kaper TJ, Kopell N (2003) Analysis of state-dependent transitions in frequency and long-distance coordination in a model oscillatory cortical circuit. Journal of Computational Neurosci.; 15(2):283-98.
60. Garabedian CE, **Jones SR****, Merzenich MM, Dale A, Moore CI (2003) Band-pass response properties of rat SI neurons. Journal of Neurophysiolog.; 90(3):1379-91.
**First author contribution on computational neural modeling component
61. **Jones SR**, Mulloney B, Kaper TJ, Kopell N (2003) Coordination of cellular pattern-generating circuits that control limb movements: the sources of stable differences in intersegmental phases. Journal of Neurosci.; 23(8):3457-68.
62. **Jones SR**, Pinto DJ, Kaper TJ, Kopell N (2000) Alpha-frequency rhythms desynchronize over long cortical distances: a modeling study. Journal of Computational Neurosci.; 9(3):271-91.

### Professional Educational Materials and Chapters in Books (reverse chronological)

1. Vierling-Claassen N and **Jones SR** (2016) "Neural Rhythms". Chapter in Computational Neuroscience Textbook: From Neurons to Cognition: Computational Neuroscience MIT Press; Editor: M. Arbib
2. **Jones SR** (2015) "The Puzzle of Brain Rhythms", contributed Path of Discovery Box, in Neuroscience: Exploring the Brain, 4th edition; MF. Bear, BW. Connors, & M. Paradiso
3. **Jones SR** (2015) "Local Field Potential: Relationship to Electroencephalography (EEG) and Magnetoencephalography (MEG)". Chapter in Encyclopedia of Computation Neuroscience Springer Reference; Editors: D. Jaeger and R. Jung. Springer-Verlag Berlin Heidelberg.
4. **Jones SR** (2011) "Biophysically principled computational neural modeling of magneto-/electro-encephalography measured human brain oscillations". Chapter in Springer Neuromethods Textbook Series Neuronal Network Analysis; Editors: T. Fellin & M. Hallasa

## MAJOR SOFTWARE CONTRIBUTIONS

| | |
|---|---|
| 2018-present | ***Human Neocortical Neurosolver (HNN):*** *An open-source software tool for circuit-level interpretation of MEG/EEG data.* HNN is a first-of-its-kind software tool for researcher to develop and test hypotheses on the cellular- and circuit-level origin of their data. HNN is distributed with a user-friendly GUI and Python interface (https://hnn.brown.edu; https://github.com/jonescompneurolab/hnn-core). |
| 2018-present | ***Spectral Events Toolbox:*** *A series of MATLAB & Python functions that find and analyze transient high-power spectral events on a trial-by-trial basis.* Tools to quantify features of such events such as rate, duration, amplitude, frequency span are also provided. See *https://github.com/jonescompneurolab/SpectralEvents* |

## COMPLETED RESEARCH GRANTS

### Completed Grants as Principal or Co-Principal Investigator

| | |
|---|---|
| 2023-2025 | UG3 EB034696 \| NIBIB<br>Role: Co-I (PI G. Xiao, Brown University)<br>"Development of Quantum Magnetic Tunneling Junction Sensor Arrays for Brain Magnetoencephalography under Natural Settings" |

| | |
|---|---|
| 2023-2025 | MIT/Brown Faculty Founders Competition Award<br>Role: PI<br>"Innovations in Neurotechnology" |
| 2021-2025 | R01 AG076227 \| NIA<br>Role: PI (Co-PI: F. Maestu, Complutense U. Madrid)<br>"CRCNS: US-Spain Research Proposal: Interpreting MEG Biomarkers of Alzheimer's Progression with Human Neocortical Neurosolver" |
| 2017-2025 | Berkman-Landis Family Fund Gift<br>Role: PI in stewardship for late Dr. Catherine Kerr<br>"Supporting Research in Patient Healing, Self Efficacy, and Vitality" |
| 2022 - 2023 | Zimmerman Innovator Award, Carney Institute for Brain Sciences<br>Role: PI<br>"Discovering novel biomarkers of aging & cognitive decline in large-scale open access human MEG data" |
| 2018 – 2023 | R01 NS108414 \| NINDS<br>Role: Co-Investigator. (PI: C. Saab, Cleveland Clinic)<br>"Spatiotemporal Coding in the Pain Circuit Along the Spine-Brain Continuum" |
| 2018 – 2022 | P20GM103645 COBRE Center for Central Nervous System Phase II<br>Role: Project Leader (PI: J. Sanes)<br>"The Causal Role of Neocortical Beta Events in Human Sensory Perception" |
| 2020 - 2022 | NSF IIS-1912280<br>Role: Co-Investigator. (PI: T. Serre, Brown U.)<br>"CRCNS: US-France Research Proposal: Oscillatory processes for visual reasoning in deep neural networks" |
| 2018 - 2019 | Medtronic Inc. - Brown Joint Research Project<br>Role: Co-PI (Co-PIs D. Borton and C. Saab)<br>"Physical and Computational Modeling of Sensory Relay" |
| 2016 - 2019 | NIBIB RO1 EB022889 & -02SI BRAIN Award in Theories, Models and Analysis<br>Role: Contact PI (Co-PIs M. Hamalainen and M. Hines) "Human Neocortical Neurosolver" |
| 2014 - 2019 | NIMH RO1 MH106174 Collaborative Research in Computat. Neurosci. (CRCNS)<br>Role: Contact PI (Co-PIs M. Hamalainen and A. Gramfort)<br>"US-France Research: Revealing thalamocortical interactions in humans with MEG/EEG, intracranial recordings and computational neural modeling" |
| 2015-2017 | Providence VA Center for Excellence in Neurorestoration and Neurorehabilitation<br>"Non-Invasive Approach to Alleviate Pain: Integrated tACS and Mindfulness" |
| 2013-2016 | Brown Inst. for Brain Sciences / Norman Prince Neurosci. Inst.: New Frontiers Fund<br>"Effects of tACS in Tactile Perception and Acute Pain" |
| 2016 | NIH SBIR with Chin Chinglu Pharmaceutical Research<br>"NMDA Receptor NR2D for the Treatment of IM" |
| 2014-2015 | Brown Univ. BioMed Dean's Emerging Areas of New Science Award (DEANS)<br>"DBS to Reduce Beta Rhythms in Parkinon's disease Guided by Neural Modeling" |
| 2011-2014 | NSF Collaborative Research in Computational Neuroscience (CRCNS)<br>"Contributions of thalamus and basal ganglia to neocortical beta oscillations" |
| 2012-2013 | Brown Inst. for Brain Sciences / Norman Prince Neuroscience Inst.: New Frontiers Fund<br>"Targeting Deep Brain Stimulation to minimize cortical beta rhythms in PD" |
| 2012-2013 | Harvard Catalyst Boston Children's Hospital Pilot Research Grant<br>"Electrophysiological cortical abnormality in encephalopathy of prematurity" |

2011-2012 Harvard Med. Sch., Scholars in Medicine Dr. Reid Fellowship
"Making Beta Waves: Integrating Methods to Rescue Parkinsonian Brain Activity"
2008-2010 Harvard Medical School, Claflin Distinguished Scholar Award
"Computational Modeling of Hemo-Neural Interactions Relevant to Epilepsy"
2005-2010 NIH K25 Mentored Career Award
"Neurodynamics of Attention MEG, EEG and Modeling"

**INVITED KEYNOTE, SEMINAR & SYMPOSIUM SPEAKER (past 5 years)**

2026 ***Keynote Speaker*** Women in Neuroscience Conference
Providence, RI (in person, planned for April 2026)
Organizer: T. Desrochers
***Invited Symposium Speaker*** National Research Center Cincinnati Children's Hospital
Cincinnati, OH (in person, April 2026)
Organizer: Center for Mathematical Research Scientific Advisory Team
***Keynote Speaker*** Annual Computational Neuroscience Meeting
Halifax, NS (in person, planned for July 2026)
Organizer: Organization for Computational Neuroscience
2025 ***Invited Symposium Speaker*** Society for Neuroscience Annual Meeting
San Diego, CA (in person, Nov 2025)
Organizer: S. Palva
***HNN Workshop*** Practical MEEG 2025
(Online, Oct 2025)
Organizer: CuttingEEG Association
***Invited Symposium Speaker*** International Conference on Mathematical Neuroscience
Barcelona, Spain (in person, June 2025)
Organizer: Center for Mathematical Research Scientific Advisory Team
***Invited Seminar Speaker*** BrainWorks Seminar, Wu Tsai Institute, Yale University
New Haven, CT (in person, April, 2025)
Organizer: K. Nobre
***Invited Seminar Speaker*** National Center for Neuromodulation for Rehabilitation, MUSC
(online, April 2025)
Organizer: L. McTeague
***HNN Workshop***
(online, Aug April 2025)
Organizer: S.R. jones
***Invited Symposium Speaker*** Cognitive Neuroscience Meeting
Boston, MA (in person, April 2025)
Organizer: K. Hwuang, U Iowa
***Invited Seminar Speaker*** University of San Diego, Neuroscience Graduate Program
San Diego, CA (in person, March 2025)
Organizer: R. Lozoya
***Invited Seminar Speaker*** Global Research Initiative on Neurophysiology of Schizophrenia
(online, March 2025)
Organizer: J. Pan, Broad Institute
***Invited Seminar Speaker*** National Fragile X Consortium
(online, Feb 2025)
Organizer: K. Huber, UT Southwestern

2024 ***Invited Symposium Speaker*** International Pharmaco-EEG Society
Izmir, Turkey (online, Nov. 2024)
Organizer: Steven Leister, Abbvie Pharmaceuticals
***HNN Workshop*** Society for Neuroscience Annual Meeting 2024
Chicago, IL (in person, Oct 2024)
Organizer: S.R. Jones
***HNN Workshop*** BIOMAG 2024
Sydney, Australia (online, Aug 2024)
Organizer: S.R. Jones
***HNN Workshop*** Association for the Scientific Study of Consciousness
Tokyo, Japan (in person, July 2024)
Organizer: A. Dykstra
***HNN Workshop*** NEURON summer Course at Brown University
Providence, RI (in person, June 2024)
Organizer: R. McDougal; T. Carnevale
***Keynote Speaker*** International Conference on Bioelectromagnetism
Helsinki, Finland (in person, May 2024)
Organizer: R. Ilmoniemi
***HNN Workshop*** (Online, May 2024)
Organizer: S.R. Jones
***Invited Seminar*** Emory University Sense and Salience Conference
Atlanta, GA (in person, May 2024)
Organizer: R. Liu & B. Haider
***Invited Seminar*** Broad Institute Stanley Center for Psychiatric Research
Boston MA (in person, Feb 2024)
Organizer: J. Pan
***Invited Seminar*** McGill University QLS/CAMBAM Seminar Series
Montreal, Canada (online, Jan 2024)
Organizer: S. Krishna

2023 ***HNN Workshop*** North America MEG Meeting
Washington DC (in person, Nov 2023)
Organizer: S.R. Jones
***HNN Workshop*** Annual Society for Neuroscience Meeting
Washington DC (in person, Nov 2023)
Organizer: S.R. Jones
***Invited Speaker*** ICERM Workshop Mathematical Neuroscience
Providence, RI (in person, Oct 2023)
Organizer: C. Curto
***Invited Speaker*** Boston University Medical School Anatomy & Neurobiol. Seminar Series
Boston, MA (in person, Oct 2023)
Organizer: M. Medalla
***Invited Speaker*** Neurotechnology Summer Workshop Seminar Speaker
Ben Gurion University, Ben Gurion, Isreal (in person, Aug 2023)
Organizer: O. Shreiki
***Invited Speaker*** University of Minnesota, NeuroPRSMH Seminar Series (online, May 2023)
Organizer: S. Sponheim
***Invited Speaker*** MetaCell Webinar: Maximize Your Research with Cloud Workspaces
(online, March 2023)
Organizer: M. Cantarelli

***Keynote Speaker*** Max Planck Institute 10th Mind Brain Body Symposium
Berlin, Germany (in person, March. 2023)
Organizer: A. Peterchev
***Invited Symposium Speaker*** 5th International Brain Stimulation Conference
Lisbon, Portugal (in person, Feb 2023)
Organizer: A. Babayan

2022 ***Keynote Speaker*** India EMBO Lecture Course: Noninvasive Brain Stimulation – Advances in Research and Clinical Practice
Gujarat, India (hybrid, Dec. 2022)
Organizer: N. Thirugnanasambandam
***Invited HNN Workshop Presentation*** @PracticalM/EEG Toolbox Bouquet, Aix-en-Provence, France (online workshop, Dec. 2022)
Organizer: M. Chaumon
***Invited Speaker*** Neuroscience Gatway Portal Workshop at Society for Neuroscience Meeting
San Diego CA (online workshop, Nov, . 2022)
Organizer: A. Majumdar
***Keynote Speaker*** Ann. Meeting Society for Psychophysiological Research,
Vancouver, BC, Canada (in person, Oct. 2022)
Organizer: J. Wessel
***Invited HNN Workshop Presentation*** BIOMAG 2022, University of Birmingham, Birmingham, UK (in person, Aug. 2022)
Organizer: O. Jensen
***Invited Speaker*** University of Chicago Neuroscience Institute
Chicago, Il (virtual, March. 2022)
Organizer: B. Doiron
***Invited Speaker*** University of Miami Biomedical Engineering
Miami, Florida (in person, Feb. 2022)
Organizer: A. Dykstra

2021 ***Invited Speaker*** Complutense University of Madrid Center for BioTech.
Madrid, Spain (in person)
Organizer: F. Maestu
***Invited Speaker & HNN Workshop*** CuttingEEG: International Symp. for Cutting-Edge Methods for EEG, Aix-en-Provence, France (moved to online)
Organizer: M. Chaumon
***Invited Speaker*** Bernstein Center for Computational Neuroscience
Berlin, Germany (moved to online)
Organizers: J. Neumann and M. Brecht
***Invited Symposium Speaker*** 20th World Congress of Psychphysiology
Chengdu, China (moved to online)
Organizer: J. Schall and J. Riera-Diaz
***Invited Speaker*** Transcontinental Computational Psychiatry
London, UK (moved to online)
Organizer: Q. Huys, M. Browning, M. Paulus
***Invited Speaker*** U. Minnesota NIBS Workshop
Minneapolis, MN (moved to online)
Organizer: A. Opitz and I Alekseichuk
***Invited Speaker*** U. Iowa Neuroscience Institute
Iowa City, IA (moved to online)
Organizers: J. Wessel and K. Hwang

***Invited Speaker*** NetPyNe Modelling Workshop
Suny Downstate, NY (moved to online)
Organizer: S. Dura-Bernal
***Invited Speaker*** Brain Week RI Mindfulness Panel
Providence, RI (moved to online)
Organizer: B. Greenberg
***Invited Speaker*** U. Utah Biomedical Engineering
Salt Lake City, Utah (moved to online)
Organizer: C. Cornelssen
***Invited Symposium Speaker*** Cognitive Neurosci. Society Annual Meeting Online
Organizer: J. Lefebvre
***Invited Panel Advisor Presentation*** NIH BRAIN Initiative Transformative Non-Invasive Imaging Technology Workshop
Online
Organizer: S. Wang
***Invited Speaker*** NIH BRAIN Initiative SFN Connectome Toolmakers Public Social, Online
Organizer: M. Olenick
***Invited Symposium Speaker*** 7th International Conf. on NIBS,
Baden Baden, Germany (moved to online)
Organizer: G. Ruffini

2020 ***Invited Speaker*** Inst. of Cog, Neurosci, National Research U. Higher School of Economics
Moscow, Russia (moved to online)
Organizer: A. Ossadtch
***Keynote Speaker (Mid-Career Award Presentation)*** BIOMAG 2020 Meeting of the International Sociaty for Biomagnetism
Birmingham, UK (moved to online)
Organizer: O. Jensen
***Invited Speaker*** Allen Institute Workshop: Toward Multipurpose Models of Cortical Circuits,
Seattle, WA (moved to online)
Organizers: A. Arkhipov, G. Einevoll
***Keynote Speaker*** BrainSTIM 2020 Helsinki Finland (moved to online)
Organizers: R. Ilmoniemi and V. Clark
***Invited Speaker*** University of Oregon Institute for Neuroscience
Bend, OR (moved to online)
Organizer: N. Swann
***Invited Speaker*** NYC Neuromodulation Conference
NY, NY (moved to online)
Organizer: G. Ruffini
***Invited Speaker*** European Inst. of Theoretical Neurosci. Workshop: Modeling Brain Signals
Paris, France (in person)
Organizers: A. Destexhe, G. Einevoll, V. Jirsa

**TEACHING**

| | |
|---|---|
| 2022 - 2026 | Co-Organizer and Instructor in Joint Brown University and Ben Gurion University Summer Workshop on Embodied Neurotechnologies |
| 2019-present | "Mechanisms and Meaning of Neural Dynamics" |
| | Dept. of Neuroscience (NEUR 1440), Brown University, Providence RI |
| 2018 | Faculty Leader and Instructor in Wyss - Brown Neuroeng. Summer Workshop |

| | |
|---|---|
| 2015-2017 | "Neural Dynamics: Theory and Modeling." Graduate Course.<br>Dept. of Applied Mathematics (APMA 2821V), Brown University, Providence, RI |
| 2012-2015 | Co-Instructor in "Neural Dynamics". Undergraduate Course (Instructor: Moore)<br>Dept. of Neuroscience (NEURO 1440) Brown University, Providence, RI |
| 2008 | Lecturer in Neuroscience Graduate Course (Neural Dynamics)<br>Brain and Cognitive Science Dept, MIT, Cambridge, MA |
| 1998-1999 | Part-time Faculty Instructor (Multivariate Calculus)<br>Dept. of Mathematics, Boston College, Chestnut Hill, MA |
| 1995-1997 | Summer-Term Faculty Instructor (Algebra, Pre-Calculus, Calculus)<br>AHANA Student Programs Mathematics, Boston College, Chestnut Hill, MA |
| 1996-1998 | Teaching Fellow (Differential Equations)<br>Dept. of Mathematics, Boston University, Boston, MA |
| 1993-1995 | Teaching Fellow (Calculus, Multivariate Calculus)<br>Dept. of Mathematics, Boston College, Chestnut Hill, MA |

## MENTORSHIP

### Current Mentees

| | |
|---|---|
| Junior Faculty | Leenoy Mechulam, Assistant Professor Neuroscience/Physics, Brown University<br>Julio Hernandez Pavlon, Assistant Professor Psychological Sci, Kansas State Univ. |
| Clinical Faculty | Brian Kavanaugh, Assistant Professor Psychiatry & Human Behavior, Bradley Hosp<br>Laura Korthauer, Assistant Professor Psychiatry & Human Behavior, RIH |
| Post-doctoral | Darcy Diesburg<br>Katharina Duecker<br>Carolina Pujol Fernandez<br>Danielle Sliva<br>Nicholas Tolley<br>David Zhou |
| Professional Staff | Dylan Daniels (research science data scientist)<br>Austin Soplata (research science software engineer) |
| Graduate | Pran Chanthrakumar (PhD candidate in Neuroscience)<br>Danylyna Shpakiska (PhD candidate University of Madrid; co-mentor F. Maestu)<br>Jacob Tajchman (MS candidate in Biomedical Engineering) |
| Undergrad. | Anel Zhussubali (Cognitive Neuroscience)<br>Phillip Meader Yetter (Neuroscience) |
| Research Technicians | Joyce Gao (Brown B.S. Cognitive Neuroscience ('24)) |

### Past Students (mentorship location; next position)

| | |
|---|---|
| Post-doctoral | Mainak Jas (MGH, Co-Mentor with Matti Hamailainen; Research Scientist, MGH)<br>Carmen Khol, PhD (Brown Neuroscience; Industry Data Scientist London)<br>Blake Caldwell, PhD (Brown Neuroscience; Columbia Medical School)<br>Robert Law, PhD (Brown Neuroscience; Research Scientist Broad Institute)<br>Shane Lee, PhD (Brown Neuroscience; Research Fellow, RIH) |

| | |
|---|---|
| | Nathan Vierling-Claassen (MGH/Brown Neuroscience; Industry Data Science)<br>Paul Bowary (Brown Neuroscience; Neuropsych. Resident, Brown Med. Sch.) |
| Graduate & Co-Mentored Graduate | Nicholas Tolley (Brown Neuroscience PhD; Post-doc, Brown U.)<br>Danielle Sliva (Brown Neuroscience PhD; Post-doc, Brown U.))<br>Chloe Zimmerman (Brown Neuroscience PhD; Post-doc, Brown U.)<br>Ryan Thorpe (Brown Neuroscience; Post-doc U .Colorado).<br>Adrianna Hohil (Brown Biotechnology MS; Industry position)<br>Christopher Black (Brown Biomedical Engineering PhD; Post-doc, UCL)<br>Prannath Moolchand (Brown Neuroscience PhD; Post-doc Stanford)<br>Hyeyoung Shin (Brown Neuroscience; Post-doc Berkley)<br>Elvira Pirondini (EPFL; Grant Sponsored Visiting Graduate Student)<br>Dominique Pritchett (MIT / Brown Neurosci.; Faculty Howard University)<br>David Ziegler (MIT Brain and Cog Sci.; Post-doc UCSD) |
| Undergrad. | Rachel Thomson (Neuroscience)<br>Nova Chen (Neuroscience)<br>Julia Ostrowski (Brown Computational Neuroscience: Honors Thesis Advisor)<br>Juan Santoyo (Brown Neuroscience: Research Project Advisor)<br>Cooper Penner (Brown Neuroscience: Capstone Thesis Advisor; ENP, Paris)<br>Shawn Tsutsui (Brown Applied Math: Honors Thesis Advisor; UVA Med. School)<br>Carolina Santiago (Brown Neuroscience: Honors Thesis Advisor; Neuroelectrics)<br>Uday Agrawal (Brown Applied Math: Honors Thesis Advisor; Harvard Med. Sch.)<br>Maxwell Sherman (Brown Applied Math: Honors Advisor; Park Lab, Harvard)<br>Roan LaPlante (Brown Computer Science; MGH Technician)<br>Nikolas Baya (Brown Applied Math: Summer UTRA Research; Class of 2018)<br>Nikolai Rogalinski (Neuroscience)<br>Gnaneswari (Esha) Karayi (Contemplative Studies) |
| Technicians | Qian Wan (MGH/MIT; Graduate Student Harvard)<br>Matthew Sacchet (MGH/MIT; Graduate Student Stanford)<br>Elizabeth Kaplan (Brown Neuroscience: Graduate Student UCSD) |

## Graduate Student Advisory Committees (since 2015)

### Graduate Students Dissertation Committee at Brown University

Caroline Mclauglin (Brown Neuroscience, expected 2028)
Nicole Dusang (Brown Electrical and Computer Engineer, expected 2026)
Aneri Soni (Brown Neuroscience, PhD 2025)
Eric Klein (Brown Neuroscience, PhD 2025)
Ki-Soo Jeung (Brown MME, PhD 2025)
Seth Akers-Campbell (Brown Neuroscience, PhD 2022)
James Wilmott (Brown CLPS, PhD 2021)
Valerie Estela (Brown Neuroscience, PhD 2020)
Heysol Bermudez Cabrera (Brown Neuroscience NIH-GPP, PhD 2018)
Radu Darie (Brown BME, PhD 2018)
Brent Cross (Brown BME, MA 2015)

### Graduate Students Dissertation Committee Outside of Brown University

Frank Mazza (Univ. of Toronto, Department of Physiology, PhD 2024; Advisor; Etay Hay)
Josep-Maria Balaguer Serra (Univ. of Pittsburg, Bioengin., PhD 2024; Advisor: Marco Capogrosso

Solveig Naess Univ. of Oslo, Norway, Math. & Natural Science, PhD 2021; Advisor: Gaute Einevoll
Alexandros Gelastopoulos Boston University, Dept. of Math., PhD 2019; Advisor: Nancy Kopell

**Other Mentorship**

Google Summer of Code Mentor (Summer 2022 - 2025)
Carnery Summer Scholars in Computational Neuroscience Advisor (Summers 2024-2025)
Leadership Alliance and BP-Endure Program Advisor (Summers 2019-2024)
Brown UTRA Advisor (Summers 2013-present)

## PROFESSIONAL SOCIETIES

1997-present Society of Neuroscience
2014-present Organization of Computational Neuroscience

*Date Prepared: January 2026*