

Xiaosi Gu, Ph.D.

POSITIONS

Academic Positions

Icahn School of Medicine at Mount Sinai (ISMMS), New York, NY

Director, Center for Computational Psychiatry (2021-present)

Associate Professor (with Tenure), Departments of Psychiatry & Neuroscience (2023-present)

Associate Professor (tenure-track), Department of Psychiatry & Neuroscience (2020-2023)

Assistant Professor (tenure-track), Department of Psychiatry & Neuroscience (2018-2020)

The University of Texas, Dallas, TX

Assistant Professor, School of Behavioral and Brain Sciences (2015-2018)

The University of Texas Southwest Medical Center, Dallas, TX

Adjunct Assistant Professor, Department of Psychiatry (2015-2018)

Other Positions

Chair, Organizing Committee, Computational Psychiatry Conference (2022 – present)

Scientific Advisor, Wellcome Trust (2022 – present)

Chair, Search Committee, ISMMS Faculty Position in Computational Psychiatry and Neuroscience (2021-2023)

Search Committee, Max Planck Institute for Human Cognitive and Brain Sciences (2023)

Admission Committee, ISMMS Neuroscience PhD Program (2022-present)

Editor-in-Chief, Computational Psychiatry (2021-present)

Founder and Lead Organizer, London Computational Psychiatry Course (2013-2022)

EDUCATION

Wellcome Trust Centre for Neuroimaging, University College London, London, UK

Postdoctoral Fellow (2012-2015)

Virginia Tech Carilion Research Institute, Roanoke VA

Postdoctoral Fellow (2011-2012)

Icahn School of Medicine at Mount Sinai, New York, NY

Ph.D. in Neuroscience (2007-2011)

Peking University, Beijing, China

B.S. in Economics, China Center for Economic Research (2006)

B.S. in Psychology, Department of Psychology (2006)

PUBLICATIONS ([Google Scholar](#); [PubMed](#))

Commissioned work:

Gu, X. Moran, R., Srivastava, D., Walton, M. Harnessing the potential of cellular, animal and computational neuroscience models for mental health ([link](#)). Commissioned by The Wellcome Trust.

Manuscripts Under Review

1. Banker S, Schafer M, Harrington M, Na S, Barkley S, Trayvick J, Peters A, Thinakaran A, Foss-Feig J, Schiller D, **Gu X.** Phenotypical divergence between self-reported and clinically ascertained autism (under review)
2. McLaughlin, C., Fu, Q., Na, S., Heflin, M., Fiore, V., **Gu, X.** Aberrant Neural Computations Underlying Forward Planning in Nicotine-Dependent Human Smokers (under revision).
3. Loosen, A.M., Kato A., **Gu, X.** Revisiting the role of computational neuroimaging in the era of integrative neuroscience (under revision)

Peer-Reviewed Publications (H index: 33; total citations > 5,500)

1. Qasim, S. E., Deswal, A., Saez, I. & **Gu, X.** Positive affect modulates memory by regulating the influence of reward prediction errors. **Communications Psychology** 2, 52 (2024).
2. Batten, SR, Bang, D, Kopell ,B, Davis, AN, ... **Gu X***, Montague PR* (joint contribution). Dopamine and serotonin in human substantia nigra track social context and value signals during economic exchange. **Nature Human Behavior**. <https://doi.org/10.1038/s41562-024-01831-w>.
3. Perl, O., Shuster, A., Heflin, M., Na, S., Kidwai A., Booker, N., Putnam W.C., Fiore, F.G., **Gu, X.** Nicotine-Related Beliefs Induce Dose-Dependent Responses in the Human Brain. **Nature Mental Health**, 2(2), 177-188.
4. Kulkarni, K. R., O'Brien, M. & **Gu, X.** Longing to Act: Bayesian Inference as a Framework for Craving in Behavioral Addiction. **Addictive Behaviors**, 107752, doi:<https://doi.org/10.1016/j.addbeh.2023.107752> (2023).
5. Ryu, J., Heisig, S., McLaughlin, C., Katz, M., Mayberg, H.S., **Gu, X.**, A natural language processing approach reveals first-person pronoun usage and non-fluency as markers of therapeutic alliance in psychotherapy, **iScience** (2023), doi: <https://doi.org/10.1016/j.isci.2023.106860>.
6. Na S, Rhoads SA, Yu ANC, Fiore VG, **Gu X.** Towards a neurocomputational account of social controllability: From models to mental health. **Neurosci Biobehav Rev**. 2023 May;148:105139. doi:10.1016/j.neubiorev.2023.105139.
7. Mehta MM, Na S, **Gu X**, Murrrough JW, Morris LS. Reward-related self-agency is disturbed in depression and anxiety. **PLoS One**. 2023;18(3):e0282727. doi: 10.1371/journal.pone.0282727. eCollection 2023. PubMed PMID: 36920973; PubMed Central PMCID: PMC10016695.
8. Saez I and **Gu X.** (2023) Invasive Computational Psychiatry. **Biological Psychiatry**. Biol Psychiatry. doi: 10.1016/j.biopsych.2022.09.032. Epub 2022 Oct 8.
9. Banker SM, Na S, Beltrán J, Koenigsberg HW, Foss-Feig JH, **Gu X**, et al. (2022): Disrupted computations of social control in individuals with obsessive-compulsive and misophonia symptoms. **iScience**. 25:104617.
10. Fiore VG, **Gu X** (2022): Similar network compositions, but distinct neural dynamics underlying belief updating in environments with and without explicit outcomes. **NeuroImage**. 247:118821.
11. Kulkarni KR, Schafer M, Berner LA, Fiore VG, Heflin M, Hutchison K, et al. **Gu X** (2022): An interpretable and predictive connectivity-based neural signature for chronic cannabis use. **Biological Psychiatry: Cognitive Neuroscience and Neuroimaging**.
12. Na S, Blackmore S, Chung D, O'Brien M, Banker SM, Heflin M, et al. **Gu X** (2022): Computational mechanisms underlying illusion of control in delusional individuals. **Schizophr Res**.
13. Na S, Chung D, Hula A, Perl O, Jung J, Heflin M, et al...**Gu X** (2021): Humans use forward thinking to exploit social controllability. **Elife**. 10.
14. Shuster A, O'Brien M, Luo Y, Berner LA, Perl O, Heflin M, et al. **Gu X** (2021): Emotional adaptation during a crisis: decline in anxiety and depression after the initial weeks of COVID-19 in the United States. **Transl Psychiatry**. 11:435.
15. Ryu J, Banthin DC, **Gu X** (2021). Modeling Therapeutic Alliance in the Age of Telepsychiatry. **Trends Cogn Sci** 25: 5-8
16. Banker SM, **Gu X**, Schiller D, Foss-Feig JH (2021): Hippocampal contributions to social and cognitive deficits in autism spectrum disorder. **Trends Neurosci**. 44:793-807.
17. Luo Y, Mendoza C, Pelfrey S, Lohrenz T, **Gu X**, Montague PR, McAdams CJ (2021). Elevated Neurobehavioral Responses to Negative Social Interactions in Women With Bulimia Nervosa. **Biological Psychiatry: Cognitive Neuroscience and Neuroimaging**.
18. Fiore VG, Guertler AV, Yu JC, Tatineni CC, **Gu X** (2021a). A change of mind: Globus pallidus activity and effective connectivity during changes in choice selections. **Eur J Neurosci** 53: 2774-87
19. Fiore VG, DeFelice N, Glicksberg BS, Perl O, Shuster A, Kulkarni K, O'Brien M, Pisauro MA, Chung D, **Gu X** (2021b). Containment of COVID-19: Simulating the impact of different policies and testing capacities for contact tracing, testing, and isolation. **PLoS One** 16: e0247614
20. Yu JC, Fiore VG, Briggs RW, Braud J, Rubia K, Adinoff B, **Gu X** (2020). An insula-driven network computes decision uncertainty and promotes abstinence in chronic cocaine users. **Eur J Neurosci** 52: 4923-36
21. Wang X, Wu Q, Egan L, **Gu X**, Liu P, Gu H, Yang Y, Luo J, Wu Y, Gao Z, Fan J (2019). Anterior insular cortex plays a critical role in interoceptive attention. **Elife** 8
22. Ognibene D, Fiore VG, **Gu X** (2019). Addiction beyond pharmacological effects: The role of environment complexity and bounded rationality. **Neural Netw** 116: 269-78
23. **Gu X**, FitzGerald THB, Friston KJ (2019). Modeling subjective belief states in computational psychiatry: interoceptive inference as a candidate framework. **Psychopharmacology (Berl)**

24. **Gu X** (2018). Incubation of craving: A Bayesian Account **Neuropsychopharmacology**. (***Editor's Choice Award**)
25. Fiore VG, Ognibene D, Adinoff B, **Gu X** (2018a). A Multilevel Computational Characterization of Endophenotypes in Addiction. **eNeuro** 5
26. Fiore VG, Nolte T, Rigoli F, Smittenaar P, **Gu X**, Dolan RJ (2018b). Value encoding in the globus pallidus: fMRI reveals an interaction effect between reward and dopamine drive. **Neuroimage** 173: 249-57
27. Sui J, **Gu X** (2017). Self as Object: Emerging Trends in Self Research. **Trends Neurosci** 40: 643-53
28. Solway A, Gu X, Montague PR (2017). Forgetting to Be Addicted: Reconsolidation and the Disconnection of Things Past. **Biological Psychiatry** 82: 774-75
29. **Gu X**, Zhou TJ, Anagnostou E, Soorya L, Kolevzon A, Hof PR, Fan J (2017). Heightened Brain Response to Pain Anticipation in High-Functioning Adults with Autism Spectrum Disorder. **European Journal of Neuroscience**
30. **Gu X**, Filbey F (2017). A bayesian observer model of drug craving. **JAMA Psychiatry** 74: 419-20
31. Tian Y, Du J, Spagna A, Mackie MA, Gu X, Dong Y, Fan J, Wang K (2016). Venlafaxine treatment reduces the deficit of executive control of attention in patients with major depressive disorder. **Sci Rep** 6: 28028
32. Krishnan A, Woo C-W, Chang LJ, Ruzic L, **Gu X**, López-Solà M, Jackson PL, Pujol J, Fan J, Wager TD (2016). Somatic and vicarious pain are represented by dissociable multivariate brain patterns. **eLife** 5: e15166
33. Kirk U, **Gu X**, Sharp C, Hula A, Fonagy P, Montague PR (2016). Mindfulness training increases cooperative decision making in economic exchanges: Evidence from fMRI. **NeuroImage** 138: 274-83
34. **Gu X**, Lohrenz T, Salas R, Baldwin PR, Soltani A, Kirk U, Cinciripini PM, Montague PR (2016). Belief about Nicotine Modulates Subjective Craving and Insula Activity in Deprived Smokers. **Front Psychiatry** 7: 126
35. **Gu X**, Wang X, Hula A, Wang S, Xu S, Lohrenz TM, Knight RT, Gao Z, Dayan P, Montague PR (2015a). Necessary, yet dissociable contributions of the insular and ventromedial prefrontal cortices to norm adaptation: computational and lesion evidence in humans. **J Neurosci** 35: 467-73
36. **Gu X**, Lohrenz T, Salas R, Baldwin PR, Soltani A, Kirk U, Cinciripini PM, Montague PR (2015b). Belief about nicotine selectively modulates value and reward prediction error signals in smokers. **Proc Natl Acad Sci U S A** 112: 2539-44. (***Highlighted by NIDA director Dr. Nora Volkow's [commentary](#)**)
37. **Gu X**, Eilam-Stock T, Zhou T, Anagnostou E, Kolevzon A, Soorya L, Hof PR, Friston KJ, Fan J (2015c). Autonomic and brain responses associated with empathy deficits in autism spectrum disorder. **Hum Brain Mapp** 36: 3323-38
38. Wang X, **Gu X**, Fan J, Wang S, Zhao F, Hof PR, Liu P, Gao Z (2014). Recovery of empathetic function following resection of insular gliomas. **J Neurooncol** 117: 269-77
39. Kirk U, **Gu X**, Harvey AH, Fonagy P, Montague PR (2014). Mindfulness training modulates value signals in ventromedial prefrontal cortex through input from insular cortex. **Neuroimage** 100: 254-62
40. **Gu X**, Kirk U, Lohrenz TM, Montague PR (2014). Cognitive strategies regulate fictive, but not reward prediction error signals in a sequential investment task. **Hum Brain Mapp** 35: 3738-49
41. **Gu X**, FitzGerald TH (2014). Interoceptive inference: homeostasis and decision-making. **Trends Cogn Sci** 18: 269-70
42. Fan J, Van Dam NT, **Gu X**, Liu X, Wang H, Tang CY, Hof PR (2014). Quantitative Characterization of Functional Anatomical Contributions to Cognitive Control under Uncertainty. **J Cogn Neurosci** 26: 1490-506
43. Eilam-Stock T, Xu P, Cao M, **Gu X**, Van Dam NT, Anagnostou E, Kolevzon A, Soorya L, Park Y, Siller M, He Y, Hof PR, Fan J (2014). Abnormal autonomic and associated brain activities during rest in autism spectrum disorder. **Brain** 137: 153-71
44. Butti C, Ewan Fordyce R, Ann Raghanti M, **Gu X**, Bonar CJ, Wicinski BA, Wong EW, Roman J, Brake A, Eaves E, Spocter MA, Tang CY, Jacobs B, Sherwood CC, Hof PR (2014). The Cerebral Cortex of the Pygmy Hippopotamus, *Hexaprotodon liberiensis* (Cetartiodactyla, Hippopotamidae): MRI, Cytoarchitecture, and Neuronal Morphology. **Anat Rec (Hoboken)** 297: 670-700
45. Ahn WY, Kishida KT, **Gu X**, Lohrenz T, Harvey A, Alford JR, Smith KB, Yaffe G, Hibbing JR, Dayan P, Montague PR (2014). Nonpolitical images evoke neural predictors of political ideology. **Curr Biol** 24: 2693-9
46. Van Dam NT, Sano M, Mitsis EM, Grossman HT, **Gu X**, Park Y, Hof PR, Fan J (2013). Functional neural correlates of attentional deficits in amnesic mild cognitive impairment. **PLoS One** 8: e54035
47. Lockwood PL, Sebastian CL, McCrory EJ, Hyde ZH, **Gu X**, De Brito SA, Viding E (2013). Association of callous traits with reduced neural response to others' pain in children with conduct problems. **Curr Biol** 23: 901-5
48. **Gu X**, Liu X, Van Dam NT, Hof PR, Fan J (2013a). Cognition-emotion integration in the anterior insular cortex. **Cereb Cortex** 23: 20-7

49. **Gu X**, Kirk U, Lohrenz TM, Montague PR (2013b). Cognitive strategies regulate fictive, but not reward prediction error signals in a sequential investment task. **Hum Brain Mapp**
50. **Gu X**, Hof PR, Friston KJ, Fan J (2013c). Anterior insular cortex and emotional awareness. **J Comp Neurol** 521: 3371-88
51. **Gu X**, Gao Z, Wang X, Liu X, Knight RT, Hof PR, Fan J (2012). Anterior insular cortex is necessary for empathetic pain perception. **Brain** 135: 2726-35
52. Fan J, Xu P, Van Dam NT, Eilam-Stock T, **Gu X**, Luo YJ, Hof PR (2012a). Spontaneous brain activity relates to autonomic arousal. **J Neurosci** 32: 11176-86
53. Fan J, Bernardi S, Dam NT, Anagnostou E, Gu X, Martin L, Park Y, Liu X, Kolevzon A, Soorya L, Grodberg D, Hollander E, Hof PR (2012b). Functional deficits of the attentional networks in autism. **Brain Behav** 2: 647-60
54. Fan J, **Gu X**, Liu X, Guise KG, Park Y, Martin L, de Marchena A, Tang CY, Minzenberg MJ, Hof PR (2011). Involvement of the anterior cingulate and fronto-insular cortices in rapid processing of salient facial emotional information. **Neuroimage** 54: 2539-46
55. Liu X, Park Y, **Gu X**, Fan J (2010). Dimensional overlap accounts for independence and integration of stimulus-response compatibility effects. **Atten Percept Psychophys** 72: 1710-20
56. Han S, **Gu X**, Mao L, Ge J, Wang G, Ma Y (2010). Neural substrates of self-referential processing in Chinese Buddhists. **Soc Cogn Affect Neurosci** 5: 332-9
57. **Gu X**, Liu X, Guise KG, Naidich TP, Hof PR, Fan J (2010). Functional dissociation of the fronto-insular and anterior cingulate cortices in empathy for pain. **J Neurosci** 30: 3739-44
58. Ge J, **Gu X**, Ji M, Han S (2009). Neurocognitive processes of the religious leader in Christians. **Hum Brain Mapp** 30: 4012-24
59. Fan J, **Gu X**, Guise KG, Liu X, Fossella J, Wang H, Posner MI (2009). Testing the behavioral interaction and integration of attentional networks. **Brain Cogn** 70: 209-20
60. Han S, Mao L, **Gu X**, Zhu Y, Ge J, Ma Y (2008). Neural consequences of religious belief on self-referential processing. **Soc Neurosci** 3: 1-15
61. **Gu X**, Liu X, Guise KG, Fossella J, Wang K, Fan J (2008). Alexithymic trait and voluntary control in healthy adults. **PLoS One** 3: e3702
62. **Gu X**, Han S (2007a). Attention and reality constraints on the neural processes of empathy for pain. **Neuroimage** 36: 256-67
63. **Gu X**, Han S (2007b). Neural substrates underlying evaluation of pain in actions depicted in words. **Behav Brain Res** 181: 218-23

Book Chapters

1. **Gu X.**, Adinoff B. A Computational Psychiatry Approach Towards Addiction. **The Cognitive Neurosciences**, 6/e. Edited by Gazzaniga, Mangun and Poeppel, MIT Press.
2. **Gu X.** Computational Models of Emotion. **Routledge Handbook of the Computational Mind**. Edited by Matteo Colombo, Tilburg Center for Logic and Philosophy of Science and Mark Sprevak, University of Edinburgh.
3. Fan J, **Gu X**, Liu X (2008). Attention, Chapter 7 in **Experimental Psychology**, Peking University Press.

GRANTS AND AWARDS

Active grants (selected)

NIDA R01DA043695 (Gu) Role: PI Title: Computational and Neural Modeling of Cue Reactivity in Addiction	09/01/2018 - 06/30/2024
NIMH R01MH122611 (Foss-Feig, Gu, Schiller) Role: MPI Title: Neurocomputational mechanisms of proactive social behavior deficits in autism spectrum disorder	09/15/2020 - 06/30/2025
NIMH R01MH124115 (Montague, Gu, Kishida) Role: MPI Title: Computational and electrochemical substrates of social decision-making in humans	08/01/2020 - 06/30/2025
NIMH R01MH123069 (Schiller, Gu, Koenigsberg) Role: MPI	05/01/2021 - 02/28/2026

Title: Neural, computational and behavioral characterization of dynamic social behavior in borderline and avoidant personality disorder

Simons Foundation (Foss-Feig, Gu, Schiller) 12/01/2021 - 11/30/2024
 Role: MPI
 SFARI: A neuroscience-inspired digital platform for measuring social functions to parse heterogeneity and predict outcome in ASD

Philip Leverhulme Prize (Hauser) 10/01/2022 - 09/30/2024
 Role: Site PI
 Title: Intracranial signatures of effort-based decision-making

Wellcome Leap (Gu, Mayberg) 11/01/2021 - 10/31/2024
 Role: MPI
 Title: Computational Roles of Dopamine and Serotonin Transients in Anhedonia in Humans with Treatment Resistant Depression

NIMH R01MH123542 (Choi, Figeo) 05/01/2021 - 02/28/2026
 Role: Co-I
 Title: Connectomic Deep Brain Stimulation for Obsessive Compulsive Disorder

NIMH R01MH133625 (Fiore) 06/10/2024 - 06/09/2029
 Role: Co-I
 Title: Neurocomputational mechanisms and connectivity dynamics underlying obsessive-compulsive disorder and phenotypical differentiations

NIMH R01MH132786 (Berner) 03/15/2023 - 12/31/2027
 Role: Co-I
 Title: Dynamic Neural Computations Underlying Cognitive Control in Bulimia Nervosa

Misophonia Research Fund (Schiller) 10/1/2021 - 9/30/2024
 Role: Co-I
 Title: Modifying emotional learning and memory in misophonia

Completed grants

NIDA R21DA049243 (Gu) 07/01/2019-06/30/2022
 Role: Principal Investigator
 Title: Neurocomputational Mechanisms for Addiction Heterogeneity, Impulsivity and Perseverance

NIMH R21 MH120789 (Gu, Schiller) 08/15/2019-05/31/2022
 Role: Principal Investigator
 Title: Delineating proactive social behaviors in dynamic and multidimensional social space

K- and F-awarded mentees

K99/R00: Salman Qasim (Postdoc, ISMMS)
 K99/R00: Jacqueline-Marie Ferland (Instructor, ISMMS)
 K01: Laurel Morris (Assistant Professor, ISMMS)
 K08: Suky Martinez (Postdoc, Johns Hopkins University)
 K23: Laura Berner (Assistant Professor, ISMMS)
 K23: Andrew Smith (Assistant Professor, ISMMS)
 K23: Jose Rubio-Lorente (Assistant Professor, Feinstein Institutes for Medical Research, Northwell Health)
 F30: Arianna Davis (MD/PhD student, ISMMS)
 F30: Temidayo Orederu (MD/PhD student, ISMMS)
 F30: Matt Schafer (Postdoc at Columbia University)
 F31: Carina Brown (PhD student at San Diego State University)
 F99/K00: Joseph Simon (PhD student, ISMMS)

Honors and Awards

Presidential Early Career Award for Scientists and Engineers (PECASE nominee)
 Neustein Mid-Career Women Faculty Award, Icahn School of Medicine at Mount Sinai
 Editor's Choice Paper Award: Neuropsychopharmacology: The Official Journal of American College of
 Neuropsychopharmacology for Gu X. 2018. Incubation of craving: a Bayesian account.
 Presentation Award, Organization of Human Brain Mapping, San Francisco, CA

SELECTED TALKS AND PRESENTATIONS

Selected scientific talks (*: as keynote or plenary speaker)

BRAIN initiative workshop (June 2024)
 Center for Neuroeconomics, University of Zurich, Switzerland (May 2024)
 IOWA Computational Psychiatry Symposium, University of Iowa (April 2024)
 New York Academy of Sciences, AI & Society Program (February 2024)
 McKnight Foundation Annual Meeting, Aspen, CO (June 2023)
 Computational Psychiatry Program, NYU School of Medicine (May 2023)
 Weinberg Computational Psychiatry Symposium, University of Michigan, Ann Arbor (March 2023)
 Virtual Seminar, Riken Institute, Japan (March 2023)
 Department of Psychology, Harvard University (January 2023)
 Secret Science Club, Dana Foundation (December 2022)
 NeuroMatch Conference (September 2022)
 Max Planck Institute for Human Cognitive and Brain Sciences (June 2022)
 Reinforcement Learning and Decision Making (RLDM) (June 2022)
 Social and Affective Neuroscience Society (SANS) Annual Conference (May 2022)
 Society of Biological Psychiatry (SOBP) Annual Conference (April 2022)
 Computational Properties of the Prefrontal Cortex (CPPC), Oxford University (March 2022)
 UCL-Max Planck Center on Computational Psychiatry and Ageing, London (March 2022)
 Current Work Series, Yale University (October 2021)
 Stanley Center for Psychiatric Research, Broad Institute (September 2021)
 Swartz Computational Neuroscience Series, NYU (September 2021)
 Neural Dynamics Forum, Bristol University (September 2021)
 Institute of Brain-Inspired Intelligence, Fudan University (June 2021)
 Chinese Computational and Cognitive Neuroscience Conference (June 2021)
 Society for Interdisciplinary Placebo Studies (SIPS) Annual Conference (May 2021)
 Society of Biological Psychiatry (SOBP) Annual Conference (April 2021)
 *Friedman Brain Institute Retreat Keynote, ISMMS (April 2021)
 Neuroimaging Seminar Series, King's College London (December 2020)
 Neuroscience Seminar Series, City University of New York (October 2020)
 Psychiatry Grand Rounds, ISMMS (September 2020)
 Open Talks Virtual Forum (August 2020)
 Department of Psychiatry, Yale University (December 2020)
 Transcontinental Computational Psychiatry Workgroup, Virtual Talk (March 2020)
 Australian Society for Neuroscience, Adelaide, Australia (December 2019)
 *Australian Cognitive Neuroscience Society, Tasmania, Australia (November 2019)
 Society for Social Neuroscience, Chicago, IL (October 2019)
 Neuroeconomics Colloquium, New York University, New York, NY (September 2019)
 Division on Substance Use Disorders, Columbia University Medical Center, New York, NY (April 2019)
 *Netherlands National Psychiatry Association (Nvvp), Maastricht, Netherlands (April 2019)
 *Anxiety and Depression Association of America Annual Conference, Chicago, IL (March 2019)
 New York Society of Addiction Medicine (NYSAM) Annual Conference (February 2019)
 Department of Psychology Colloquium, UC Berkeley, Berkeley, CA (December 2018)
 Rutgers-Princeton Center for Computational Cognitive Neuroscience (November 2018)
 EBPS Workshop: Computational Approaches on Animal & Human Behavior, Cambridge, UK (July 2018)
 Kavli Summer Institute 2018, Lake Tahoe, CA (June 2018)
 American Psychological Association (May 2018, Panel Chair)
 Division of the Humanities and Social Sciences, Caltech (March 2018)
 American College of Neuropsychopharmacology, Palm Springs, CA (December 2017)
 Society for Neuroscience Annual Meeting, Washington, DC (November 2017)
 Laureate Institute for Brain Research, Tulsa, OK (October 2017)

Virginia Tech Carilion Research Institute, Roanoke, VA (September 2017)
 Computational Psychiatry Course, ETH Zurich and University of Zurich, Zurich (August 2017)
 Association for the Study of Consciousness, Beijing (June 2017)
 Department of Psychology, Peking University, Beijing (September 2015)
 Department of Psychology, UCL, London (September 2014)
 Department of Psychology, Queens College, City University of New York, NY (April 2014)
 Wellcome Trust Centre for Neuroimaging, UCL, London (February 2014)
 LabEx Cortex Conference, Universite de Lyon, Lyon, France (December 2013)
 Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany (December 2013)
 Institute of Psychology, Chinese Academy of Sciences, Beijing (November 2012)
 McDonnell Foundation Annual Conference, UCSF, San Francisco, CA (August 2012)
 Duke University, Durham, NC (May 2012)
 Organization of Human Brain Mapping annual meeting, San Francisco, CA (June 2009)

Outreach

Global Partnerships in Brain Research, Science Summit at the 77th UN General Assembly (September 2022)
 Guest speaker on brain development, Parent Advocacy Group, Essence Global (October 2022)
 Innovation Café, Mount Sinai Innovation Partners (MSIP) (October 2022)
 Guest on podcast “Specifically for Seniors” (August 2022)
 Guest “brain” speaker to kindergarteners, Public School PS198 (June 2022)
 Personalizing Mental Healthcare, Mentoring in Neuroscience Discovery at Sinai (MiNDS) (December 2021)
 Confronting Addiction: Science, Policy, and Care. New York Academy of Sciences, NY (October 2019)
 Tedx conference, Plano TX (April 2018)

TEACHING

Fundamentals in Computational Psychiatry (graduate level), ISMMS, New York, NY (2022 Fall)
Social Neuroscience (graduate level), ISMMS, New York, NY (2021 Fall)
Neuro Core 3 (graduate level), ISMMS, New York, NY (2019 Spring)
Introduction to Neuroscience (undergraduate level), The University of Texas, Dallas, TX (2015-2018)
Computational Psychiatry Course (all levels), London & New York (2013-2022)

REVIEWER ROLES

Journal reviews:

American Journal of Psychiatry
 Biological Psychiatry
 Biological Psychiatry: Cognitive Neuroscience and Neuroimaging
 British Journal of Psychiatry
 Cerebral Cortex
 eLife
 Human Brain Mapping
 JAMA Psychiatry
 Journal of Neuroscience
 Nature Human Behavior
 Nature Communications
 Nature Neuroscience

NeuroImage
 Neuroscience & Biobehavioral Reviews
 Neuroscience Letters.
 Neuropsychologia
 Philosophical Transactions of the Royal Society B.
 PLoS Biology
 PLoS ONE
 Proc Natl Acad Sci U S A (PNAS)
 Science Advances
 Social, Cognitive and Affective Neuroscience
 Translational Psychiatry

Grant reviews and study sections

National Institute of Mental Health (NIMH), USA
 National Institute on Drug Abuse (NIDA), USA
 National Science Foundation (NSF), USA
 Wellcome Trust, UK

Medical Research Council (MRC), UK
 Canada Foundation for Innovation, Canada
 German Research Foundation (DFG), Germany
 Neurological Foundation of New Zealand