

Manish Saggar, Ph.D.

Department of Psychiatry & Behavioral Sciences
Stanford University School of Medicine, Stanford, CA 94305 USA
E-mail: saggar@stanford.edu | Web: <http://bdl.stanford.edu>

Education

2014	Postdoctoral Fellowship, Psychiatry & Behavioral Sciences, Stanford University
2011	PhD, Computer Science, University of Texas at Austin
2009	MS, Computer Science, University of Texas at Austin
2005	Bachelors in Technology, Information Technology, Indian Institute of Information Technology

Appointments

3/1/17-	Assistant Professor (NTL-R), Psychiatry & Behavioral Sciences, Stanford University
5/1/15-12/16	Instructor, Psychiatry & Behavioral Sciences, Stanford University School of Medicine
2013-	Faculty, Hasso Plattner Institute of Design (a.k.a. d.school), Stanford University
2014-2015	Research Associate, Psychiatry & Behavioral Sciences, Stanford University School of Medicine
2011-2014	Postdoctoral Scholar, Psychiatry & Behavioral Sciences, Stanford University School of Medicine
2006-2011	Research Assistant, Imaging Research Center, University of Texas at Austin
2006 & 2008	Software Engineer Intern, Google Inc.
2005-2006	Teaching Assistant, Computer Science, University of Texas at Austin
2005	Software Engineer Intern, Microsoft R&D Center, India

Teaching

2015-2018	Co-Instructor , Psychiatry and Behavioral Sciences, Stanford University Course: Neuroimaging Research Methods (PSYC 250)
2017	Co-Instructor , Hasso Plattner Institute of Design, Stanford University Course: Creative Gym (DESINST 366)
2013-2015	Co-Instructor , Hasso Plattner Institute of Design, Stanford University Course: Fail Faster (ME 379)
2005-2006	Teaching Assistant , Department of Computer Science, University of Texas at Austin Course: Software Engineering

Grants Awarded

2016-2018	NARSAD Young Investigator Award , Brain & Behavior Foundation <i>Role:</i> Principal Investigator <i>Goal:</i> Developing computational methods to capture and quantify transitions in resting state functional connectivity.
2015-2020	NIH Career Development Award (K99/R00) , National Institute of Mental Health <i>Role:</i> Principal Investigator <i>Goal:</i> Developing computational methods to quantify fluctuations in intrinsic brain activity using resting state fMRI data from individuals with fragile X syndrome (FXS) and healthy controls.
2017-2018	Hasso Plattner Design Thinking Research Program , Hasso Plattner Institute of Design <i>Role:</i> Principal Investigator <i>Goal:</i> Examining the brain dynamics associated with rumination and reflection during creative thinking

- 2016-2017 **Small Grant Program Award**, Department of Psychiatry & Behavioral Sciences, Stanford
Role: Principal Investigator
Goal: Deciphering “ongoing” cognition using continuous multitask experimental paradigm using multimodal neuroimaging (EEG and fMRI)
- 2014 **Media-X Grant**, Stanford University Media-X
Role: Lead & Co-investigator (PI: Allan Reiss)
Goal: Finding behavioral and neural signatures for collective creativity in groups
- 2014 **CNI-Seed Grant**, CNI, Stanford University
Role: Lead & Co-investigator (PI: Allan Reiss)
Goal: Examining neural correlates of team creativity using fMRI hyper-scanning
- 2013-2014 **Postdoctoral Fellowship**, Child Health & Research Institute (CHRI), Stanford University
Role: Principal Investigator
Goal: Using longitudinal cohort-sequential experimental design, examining neural correlates of creative capacity decline during middle childhood.
- 2011-2016 **Hasso Plattner Design Thinking Research Program**, Hasso Plattner Institute of Design
Role: Lead & Co-Investigator (PI: Allan Reiss)
Goal: Examining neural correlates of creative capacity enhancement using a randomized control experimental design
- 2006 **Francisco J. Varela Memorial Award**, Mind & Life Institute
Role: Principal Investigator
Goal: Developing computational methods to quantify changes in brain activity (EEG) associated with intensive meditation training (3mo; ~6hr/day)

Peer-Reviewed Articles

- 20 Saggar, M., Sporns, O., Gonzalez-Castillo, J., Bandettini, P.A., Carlsson, G., Glover, G., Reiss, A.L. (2018) Towards a new approach to visualize and quantify brain’s dynamical organization using topological data analysis. **Nature Communications**
- 19 Green, T.*, Saggar, M.*, Ishak A., Hong D.S., Reiss A.L. (2017) X-Chromosome Effects on Attention Networks: Insights from imaging Resting State Networks in Turner Syndrome. **Cerebral Cortex**
**Authors contributed equally*
- 18 Leikauf, J.E., Griffiths, K.R., Saggar, M., Hong, D.S., Clarke, S., Efron, D., Tsang, T.W., Hermens, D.F., Kohn, M.R. & Williams, L.M. (2017). Identification of biotypes in Attention-Deficit/Hyperactivity Disorder, a report from a randomized, controlled trial. **Personalized Medicine in Psychiatry**.
<https://doi.org/10.1016/j.pmip.2017.02.001> ***Designed the machine learning method to find sub-types in the data. Also mentored author J.E.L.*
- 17 Saggar, M., Tsalikian, E., Mauras, N., Mazaika, P., White, N. H., Weinzimer, S., et al. (2017). Compensatory Hyper-Connectivity in Developing Brains of Young Children with Type 1 Diabetes. **Diabetes**. <http://doi.org/10.2337/db16-0414>
- 16 Saggar, M., Quintin, E.-M., Bott, N. T., Kienitz, E., Chien, Y.H., Hong, D.W.C., Lui, N., Royalty, A., Hawthorne, G., Reiss, A.L. (2016) Changes in brain activation associated with spontaneous improvisation and figural creativity after design thinking based training: a longitudinal fMRI study. **Cerebral Cortex**. DOI: 10.1093/cercor/bhw171

- 15 Bruno, J., Hosseini, S.M.H., Saggar, M., Reiss, A.L. (In Press) Altered brain network segregation in fragile X syndrome revealed by structural connectomics. **Cerebral Cortex**. DOI: 10.1093/cercor/bhw055
***Designed the study and ran graph theoretical analysis*
- 14 Liu, N., Baker, J.M., Cui, X., Vrticka P., Saggar, M., Hosseini, S.M.H., Reiss, A.L. (2016) Sex differences in neural and behavioral signatures of cooperation. **Scientific Reports**, 6, 26492.
***Designed the study and developed initial prototypes for the experimental paradigm*
- 13 Saggar, M., Vrticka, P., Reiss, A.L. (2016) Understanding the influence of personality on dynamic social gesture processing: an fMRI study. **Neuropsychologia**, 80, 1-8
- 12 Green T., Fierro K.C., Raman M., Saggar, M., Sheau K.S., Reiss A.L. (2016) Profiles of Brain Topography in Williams Syndrome. **Am. J. Med. Gene. Part B: Neuropsychiatric Genetics**, 171 (3), 402-13
***Developed computational methods for data processing*
- 11 Saggar, M., Hosseini, S. M. H., Bruno, J. L., Quintin, E.-M., Raman, M. M., Kesler, S. R., Reiss, A. L. (2015). Estimating individual contribution from group-based structural correlation networks. **NeuroImage**, 120, 274–284
- 10 Saggar, M., Quintin, E.-M., Kienitz, E., Bott, N. T., Sun, Z., Hong, D.W.C., Chien, Y.H., Liu, N., Dougherty, R.F., Royalty, A., Hawthorne, G., Reiss, A.L. (2015) Pictionary-based fMRI paradigm to study the neural correlates of spontaneous improvisation and figural creativity. **Scientific Reports**, 5, 10894
- 9 Saggar, M., Zanesco, A. P., King, B. G., Bridwell, D. A., MacLean, K. A., Aichele, S. R., Jacobs, T.L., Wallace, B.A., Saron, C.D., Miikkulainen, R. (2015) Mean-field thalamocortical modeling of longitudinal EEG acquired during intensive meditation training. **NeuroImage**, 114, 88–104
- 8 Klabunde, M., Saggar, M., Hustyi, K. M., Hammond, J. L., Reiss, A. L., Hall, S. S. (2015) Neural correlates of self-injurious behavior in Prader-Willi syndrome. **Human Brain Mapping**, 36(10), 4135–4143 ***Developed methods to reduce artifacts related to head movement and to analyze data. Also mentored author MK*
- 7 Klabunde, M., Saggar, M., Hustyi, K. M., Kelley, R. G., Reiss, A. L., Hall, S. S. (2015) Examining the neural correlates of emergent equivalence relations in fragile X syndrome. **Psychiatry Research: Neuroimaging**, 233(3), 373–379 ***Developed methods for data analyses and mentored author MK*
- 6 Saggar, M., Shelly, E. W., Lepage, J.-F., Hoefl, F., Reiss, A. L. (2014) Revealing the neural networks associated with processing of natural social interaction and the related effects of actor-orientation and face-visibility. **NeuroImage**, 84, 648–656
- 5 Singh, M., Chang, K. D., Kelley, R. G., Saggar, M., Reiss, A., Gotlib, I. H. (2014) Early signs of anomalous neural functional connectivity in healthy offspring of parents with bipolar disorder. **Bipolar Disorders**, 16, 77–77 ***Developed methods for analyzing resting state functional connectivity and mentored author RGK*
- 4 Bott, N., Quintin, E.-M., Saggar, M., Kienitz, E., Royalty, A., Hong, D. W.C., Liu, N., Chien, Y.H., Hawthorne, G., Reiss, A.L. (2014) Creativity training enhances goal-directed attention and information processing. **Thinking Skills and Creativity** 13, 120–128 ***Designed the study, collected data and helped with data analysis. Also mentored author NB*

- 3 Kienitz, E., Quintin, E.-M., Saggar, M., Bott, N. T., Royalty, A., Hong, D. W.-C., Liu, N., Chien, Y.H., Hawthorne, G., Reiss, A.L. (2014) Targeted intervention to increase creative capacity and performance: A randomized controlled pilot study. **Thinking Skills and Creativity**, 13(0), 57–66 ***Designed the study, collected data and helped with data analysis. Also mentored author EK*
- 2 Saggar, M., King, B. G., Zanesco, A. P., MacLean, K. A., Aichele, S. R., Jacobs, T. L., Bridwell, D.A., Shaver, P.R., Rosenberg, E.L., Sahdra, B.K., Ferrer, E., Tang, A.C., Mangun, G.R., Wallace, B.A., Miikkulainen, R., Saron, C.D. (2012) Intensive training induces longitudinal changes in meditation state-related EEG oscillatory activity. **Frontiers in Human Neuroscience**, 6, 256
- 1 Saggar, M., Miikkulainen, R., Schnyer, D. M. (2010) Behavioral, neuroimaging, and computational evidence for perceptual caching in repetition priming. **Brain Research**, 1315, 75–91

Peer-Reviewed Full-Length Published Conference Articles

- 5 Saggar, M., Miikkulainen, R., Schnyer, D. M. (2008) Memory Processes in Perceptual Decision Making. Proceedings of the 30th Annual Conference of the **Cognitive Science Society**
- 4 Saggar, M., Mericcli, T., Andoni, S., Miikkulainen, R. (2007) System identification for the Hodgkin-Huxley model using artificial neural networks. Proceedings of the **IEEE International Joint Conference on Neural Networks (IJCNN)**, 2239–2244
- 3 Saggar, M., D’Silva, T., Kohl, N., Stone, P. (2007) Autonomous learning of stable quadruped locomotion. **Lecture Notes in Computer Science**, 4434, pp 98-109
- 2 Saggar, M., Markman, A. B., Maddox, W. T., Miikkulainen, R. (2007) A computational model of the motivation-learning interface. Proceedings of the 29th Annual Conference of the **Cognitive Science Society**, Nashville, TN
- 1 Saggar, M., Agrawal, A. K., Lad, A. Optimization of Association Rule Mining using Improved Genetic Algorithms. Proceedings of the **IEEE Systems, Man and Cybernetics** conference, 4, 3725–29

Book Chapters

- 5 Mayseless, N., Saggar, M., Hawthorne, G., Reiss, A.L. (in-press). Creativity in the 21st Century: the added benefit of training and cooperation. **Design Thinking Research Understanding Innovation**. Springer Verlag Publishers
- 4 Saggar, M., Chromik LC, Royalty, A., Hawthorne, G., Reiss, AL. (2016) Developing novel neuroimaging paradigm to assess neural correlates of improvisation and creative thinking using fMRI. **Design Thinking Research Understanding Innovation**. Springer Verlag Publishers
- 3 Hawthorne G, Quintin EM, Saggar, M., Bott, N, Kienitz, E, Royalty, A, Hong, D, Liu, N, Chien, YH, Reiss, AL (2015) Designing a Creativity Assessment Tool for the Twenty-First Century: Preliminary Results and Insights from Developing a Design-Thinking Based Assessment of Creative Capacity. **Design Thinking Research Understanding Innovation**. Springer Verlag Publishers ***Designed the study and lead the project*

- 2 Saggar, M., Hawthorne, G., Quintin E.M., Kienitz, E., Bott, N.T., Hong, D., Chien, Y.H., Liu, N., Royalty, A., Reiss, A.L. (2014). Developing novel methods to assess long-term sustainability of creative capacity building and applied creativity. **Design Thinking Research Understanding Innovation**. Springer Verlag Publishers
- 1 Hawthorne G, Quintin EM, Saggar, M., Bott, N, Kienitz, E, Royalty, A, Hong, D, Liu, N, Chien, YH, Reiss, AL (2013). Impact and Sustainability of Creative Capacity Building: The Cognitive, Behavioral, and Neural Correlates of Increasing Creative Capacity. **Design Thinking Research Understanding Innovation**, Springer Verlag Publishers ***Designed the study and lead the project*

Other Conference Presentations and Published Abstracts

- 26 Saggar, M., Sporns, O., Carlsson, G., Glover, G., Reiss, A.L., Hall S., (2018) Using Topological Data Analysis to Reveal the Intrinsic Dynamical Organization of the Brain in Individuals with Fragile X Syndrome. **Late-breaking poster presentation** at the *Society for Biological Psychiatry Meeting in May 2018, NY*.
- 25 Saggar, M., Stankov, A., Schreier, M., Reiss, A.L. (2017). Finding the behavioral and neural correlates of middle childhood “slump” in creativity. **Oral and poster presentation** at the *Society for Neuroscience of Creativity (SFNC) annual meeting*, San Francisco.
- 24 Saggar, M., Sporns, O., Carlsson, G., Glover, G., Reiss, A.L. (2017). (Only) time will tell: Revealing the Shape of Brain Dynamics during Ongoing Cognition. **Poster presentation** at the *Stanford Bio-X IIP Symposium*, Stanford.
- 23 Saggar, M., Sporns, O., Carlsson, G., Glover, G., Reiss, A.L. (2017) Revealing the Shape of Brain Dynamics during “Ongoing” Cognition. **Oral presentation** at the *Keystone Symposium on Connectomics (X2)*, Santa Fe, New Mexico
- 22 Saggar, M., Sporns, O., Carlsson, G., Glover, G., Reiss, A.L. (2016). (Only) time will tell: Revealing the Shape of Brain Dynamics during Ongoing Cognition. **Poster presentation** at the *Stanford Neurosciences Institute (SNI) Annual symposium*, Stanford.
- 21 Saggar, M., Sporns, O., Carlsson, G., Glover, G., Reiss, AL. (2016) Revealing the shape of brain dynamics during ongoing cognition. **Oral Presentation** at the *Neural Information Processing Systems (NIPS) workshop on Connectomics*, Barcelona, Spain.
- 20 Saggar, M., Glover, G., Carlsson, G., Reiss, AL. (2016) Quantifying fluctuations in intrinsic brain activity without spatial or temporal averaging using topology. **Oral Presentation** at the 3rd Biennial Whistler Scientific Workshop on Brain Functional Organization, Connectivity and Behavior, Whistler, Canada
- 19 Saggar, M., Stankov, A., Schreier, M., Reiss, AL. (2016) Finding the neural correlates of middle childhood “slump” in creativity using functional near-infrared spectroscopy. The 46th annual **Society for Neuroscience (SFN)** meeting, San Diego, CA
- 18 Saggar, M., Quintin, E.-M., Kienitz, E., Bott, N. T., Chien, Y.H., Hong, D.W.C., Lui, N., Royalty, A., Hawthorne, G., Reiss, A.L. (2015) Finding the neural correlates of creativity and its enhancement. Annual meeting of the Organization of **Human Brain Mapping (HBM)**, Honolulu, Hawaii

- 17 Saggar, M., Schreier, M., Reiss, AL. (2014) Using functional Near-infrared Spectroscopy (fNIRS) to examine the neural correlates of spontaneous improvisation and creativity in a word-guessing game of Pictionary. Oral Presentation, The **functional Near-infrared Spectroscopy Conference (fNIRS)**, Montreal, Canada
- 16 Saggar, M., Schreier M, Baker JM, Reiss, AL (2014). Creativity and brain development: using functional near-infrared spectroscopy to investigate the neural correlates of middle childhood slump in creativity. Oral Presentation, The 44th annual **Society for Neuroscience (SFN)** meeting, Washington, DC
- 15 Saggar, M., Hosseini, H., Bruno, JL, Quintin EM, Kesler, S, Reiss, AL. (2013) Estimating individual contribution from group-based structural covariance networks in patients with fragile x syndrome and typically developing controls. The 1st **Computational Psychiatry conference**, Miami, Florida
- 14 Rezazadeh, IM, Viera, FG, Takarae, Y, Schneider, A, Saggar, M., Huynh, NH, Colby, AE, Huffman, SG, O'Neill, A, Isayeva, A, Rivera, SM, Saron, CD (2013). Single trial event-related potential analyses in relation to behavioral measures of unisensory processing and multisensory integration in autism spectrum disorders. The 43rd annual **Society for Neuroscience (SFN)** meeting, San Diego, CA ***Designed and developed motion correction tool for EEG data*
- 13 Bruno, J, Hosseini, SMH, Saggar, M., Quintin, EM, Raman, MM, Reiss, AL (2013). Structural brain network topology in fragile X syndrome. **Human Brain Mapping**, Seattle, WA ***Designed the study and ran graph theoretical analysis*
- 12 Bott, NT, Quintin, EM, Saggar, M., Kienitz, E, Royalty, A, Hong, D, Liu, N, Chien, YH, Hawthorne, G, Reiss, AL (2013). Creativity training enhances goal-directed attention and information processing. **Cognitive Neuroscience Society** meeting, San Francisco, CA ***Designed the study, collected & analyzed data. Mentored graduate student author NB*
- 11 Kienitz, E, Quintin, EM, Saggar, M., Bott, NT, Royalty, A, Hong, D, Liu, N, Chien, YH, Hawthorne, G, Reiss, AL (2013). Targeted Intervention to Increase Creative Capacity and Performance: A Randomized Controlled Pilot Study. **Cognitive Neuroscience Society** meeting, San Francisco, CA ***Designed the study, collected data and helped with data analysis. Also mentored graduate student author EK*
- 10 Saggar, M. Lepage, J-F, Shelly, E. W., Quintin, E. M., Reiss, A. L. (2012) Effect of sociability, body orientation and face visibility on brain activation in individuals with fragile X syndrome, developmental disability and healthy adults: a novel paradigm (393.06/DDD18). The 42nd annual **Society for Neuroscience (SFN)** meeting, New Orleans LA.
- 9 Saggar, M., Maclean, K.A., Sahdra, B.K., Aichele, S.R., Jacobs, T.L., Zanesco, A.P., Bridwell, D.A., King, B.A., Rosenberg, E.L., Mangun, G.R., Shaver, P.R., Ferrer, E., Wallace, B., Saron, C.D., Miikkulainen, R. (2011) A computational model to understand longitudinal changes in EEG associated with intensive meditation training (930.16/WW42). The 41st annual **Society for Neuroscience (SFN)** meeting, Washington D.C.
- 8 Saggar, M., MacLean, K.A., Aichele, S.R., Jacobs, T.L., Zanesco, A.P., Bridwell, D.A., King, B.G., Sahdra, B.K., Rosenberg, E.L., Shaver, P.R., Ferrer, E., Wallace, B.A., Mangun, G.R., Miikkulainen, R., Saron, C.D. (2011) Cortical activation changes associated with intensive meditation training are related to vigilance performance. **Cognitive Neuroscience Society** meeting, San Francisco, CA

- 7 Saggar, M., Aichele, S.R., Jacobs, T.L., Zanesco, A.P., Bridwell, D.A., Maclean, K.A., King, B.A., Sahdra, B.K., Rosenberg, E.L., Shaver, P.R., Ferrer, E., Wallace, B., Mangun, G.R., Saron, C.D., Miikkulainen, R. (2010) A computational approach to understanding the longitudinal changes in cortical activity associated with intensive meditation training. **Oral Presentation at the Computational Neuroscience Society (CNS) meeting**, San Antonio, TX. *** In this computational conference, the acceptance rate for an oral presentations is less than 9%*
- 6 Saggar, M., Aichele, S.R., Jacobs, T.L., Zanesco, A.P., Bridwell, D.A., Maclean, K.A., King, B.A., Sahdra, B.K., Rosenberg, E.L., Shaver, P.R., Ferrer, E., Tang, A.C., Wallace, B., Mangun, G.R., Miikkulainen, R., Saron, C.D. (2009) Longitudinal changes in cortical activity associated with intensive meditation training (871.2/DD18). The 39th annual **Society for Neuroscience (SFN) meeting**, Chicago.
- 5 Maclean, K.A., Aichele, S.R., Bridwell, D.A., Jacobs, T.L., Zanesco, A.P., King, B.A., Saggar, M., Mazaheri, A., Ferrer, E., Rosenberg, E.L., Sahdra, B.K., Shaver, P.R., Wallace, B., Mangun, G.R., Saron, C.D. (2009) Effects of intensive meditation training on sustained attention: Changes in visual event-related potentials, ongoing EEG and behavioral performance (871.3/DD19). The 39th annual **Society for Neuroscience (SFN) meeting**, Chicago. ***Designed and developed motion correction tool for EEG data*
- 4 Schnyer, D., Zeithamova, D., Saggar, M. Williams, V., Trujillo, L., Kornguth, S. (2007) *The neural basis of compromised executive control: An fMRI examination of vigilance, assessment, and decision making under conditions of sleep deprivation.* **Sustaining Performance Under Stress Symposium**, Austin ***Designed the study and developed the experimental paradigm*
- 3 Saggar, M., Satish Kumar, M., Schnyer, D. (2007) Repetition priming in a response learning task using novel objects. Oral Presentation at the 37th annual **Society for Neuroscience (SFN) meeting**, San Diego.
- 2 Andoni, S., Saggar, M., Mericli, T., Miikkulainen, R. (2007). Extracting the Dynamics of the Hodgkin-Huxley Model using Recurrent Neural Networks. **Computational Neuroscience Society (CNS) meeting**, Toronto. ***Designed the study and implemented Artificial Neural Network code*
- 1 Saggar, M. Miikkulainen, R. (2006) A computational approach to meditation. 28th Annual Conference of the **Cognitive Science Society**, Vancouver.

Invited Talks

- *Examining the role of design reflection and associated brain dynamics in creativity.* HPDTRP Semi-annual meeting, Stanford University (2018)
- *Capturing & quantifying transitions in whole-brain activation maps using TDA.* Topological Neuroscience Meeting, Princeton University (2018)
- *(only) time will tell: modeling temporal transitions in brain activation patterns as a “lens” towards developing better diagnostic nosology for psychiatric illness.* Mini-symposium - Computational Psychiatry: Multiscale Models of Mental Illnesses, Society for Neuroscience Annual Meeting (2017)
- *Creative capacity enhancement & associated changes in the brain.* Experiential Technology Conference & Expo (X-Tech), San Francisco (2017)
- *Revealing the brain’s dynamical organization.* Selective Vulnerability Research Lab, UCSF Memory & Aging Center (MAC) (2017)
- *Understanding Brain Dynamics.* The brainLENS Lab, UCSF (2017)
- *The Resting Brain and its dynamics.* Clinical Neuroscience Course for the Child and Adolescent Psychiatry Fellows at the UCSF (2016)

- *Extracting computational insights from brain dynamics*. Feinberg School of Medicine, Northwestern University, IL (2016)
- *Extracting insights from brain dynamics*. Department of Bio-engineering, University of California, Riverside CA (2016)
- *Quantifying brain dynamics in healthy and clinical populations*. Department of Psychology, Utah State University, UT (2016)
- *A Zen Priest and a Neuroscientist - On the Future of Awakening*. Consciousness Hacking Meet-up, San Francisco, CA (2015)
- *Finding the neural correlates of creativity and its enhancement across lifespan*. Center for Childhood Creativity, Bay Area Discovery Museum, Sausalito, CA (2014)
- *Finding the neural correlates of creativity and its enhancement*. Conference on Well-being and Productivity, mediaX, Stanford CA (2014)
- *Impact and sustainability of creative capacity building*. HPI & Stanford Design Thinking Research Program Workshop, Stanford CA (2014)
- *Collective Creativity*. Intellectual Disability and Development Center, Stanford University, Stanford CA (2014)
- *Oh Creativity whence art thou & how can thou be enhanced?* Roundtable on Well-Being and Productivity, mediaX, Stanford CA (2014)
- *Unleashing Creativity*. Department of Psychology, Stanford University, Stanford, CA (2013)
- *Unleashing Creativity: Longitudinal changes in neural activity and behavioral measures associated with creativity training*. Department of Psychiatry Grand Rounds, Stanford University, Stanford, CA (2013)
- *A computational analysis of meditation*. International Computer Science Institute, University of California at Berkeley, Berkeley, CA (2011)
- *A computational analysis of meditation*. Department of Neurology, University of California at Irvine, Irvine, CA (2011).
- *Longitudinal analysis of cortical activity associated with intensive meditation training*. Texas Interdisciplinary Plan (TIP) Fellows, University of Texas at Austin, Austin, TX (2011).
- *Meditation and the brain*. Turing Scholars Student Association, University of Texas at Austin, Austin, TX (2011).

Service

- Editorial Board Member for the journal Scientific Reports (Nature Publishing Journal)
- Serving as Executive Board Member for the Society of Neuroscience of Creativity
- Served as a member of the departmental committee on Reimagining Mental Health Care (2017)
- Served as a member of the annual departmental Faculty Retreat Planning Committee (2015)
- Volunteered at the Clinical Neuroscience Internship Experience (CNI-X) for high-school students (2015-2017)
- Organizer for a brainstorming workshop at the inaugural symposium of Stanford's Intellectual Disability and Development Center (2014)
- Co-organizer for the Machine Learning journal club at the Center for Interdisciplinary Brain Sciences Research (2011-2012).
- Ad-hoc reviewer for the journals of Proceedings of the National Academy of Sciences, Neuroscience Letters, Clinical EEG and Neuroscience, Neuropsychologia, Neuroimage, Frontiers in Human Neuroscience, and IEEE Transaction on Education.
- Reviewed abstracts for the Human Brain Mapping (2013), Cognitive Science Society's meetings (CogSci 2006-2010), Human Robot Interaction (HRI 2011), and International Conference on Robotics and Automation (ICRA 2011).

- Member of the Society for Neuroscience (since 2007), IEEE student association (2005-2008), Cognitive Science Society (2005-2009), and Graduate Representative Association of Computer Sciences (GRACS) (2006)
- Google Ambassador for the University of Texas at Austin, (2006 - 2008)

Mentees

- Supervised following Research Assistants in experimental paradigm design, data collection and statistical analysis:
 - Amber Howell, BS (currently supervising)
 - Sahar Jahanikia, MS (currently supervising)
 - Meredith Schreier, MS (Currently working at Apple Inc.)
 - Atanas Stankov, MS (Currently working at Stanford)
 - Lindsay Chromik, MS (Currently working at Stanford)
 - Ryan Kelly, MS (Currently working at Stanford as a Registered Nurse Practitioner)
- Supervised following graduate students:
 - Caleb Geniesse (2nd year PhD student; Biophysics Program)
 - Rafi Ayub (1st year PhD student; Bio-Engineering Program)
- Supervised following undergraduate students:
 - Emily Nguyen (Major: HumBio; Summer 2015)
 - Soumeya Kerrar (Major: Mathematics; Summer 2015)
 - Michelle Xu (Major: HumBio; Summer 2014)
- Assisted Dr. Allan Reiss in mentoring following graduate students,
 - Nicholas T. Bott, PhD (Currently Neuropsychology Intern at VA Palo Alto Health Care System)
 - Eliza Kienitz PhD (Currently Psychology Fellow at Eastern Colorado VAMC)
- Assisted Dr. Allan Reiss in mentoring postdoctoral scholar, Tamar Green MD, in the area of neuroimaging data analysis and data visualization (Currently Tamar is an Instructor in Psychiatry)
- Assisted Dr. Scott Hall in mentoring postdoctoral scholar, Megan Klabunde PhD, in the area of neuroimaging data analysis and data visualization (Currently Megan is an Instructor in Psychiatry)

Awards

- Selected as the Bio-design Faculty Fellow (2017) for health technology innovation.
- Awarded merit scholarship by the Indian Institute of Information Technology (IIIT) for outstanding academic performance during all four years of undergraduate study (2001-2005)
- All India Rank 96 among 72,000 candidates in IIIT entrance examination
- Travel Award from the Department of Computer Science and Artificial Intelligence Lab to attend conferences in USA (2006-2010)
- Travel Award from the Computational Neuroscience Society for presenting at their annual meeting in San Antonio, TX (OCNS 2010)
- Travel Award from the Computational Intelligence Society for presenting at IEEE International Joint Conference on Neural Networks, Orlando, FL (IJCNN 2007)
- Travel Award from the Mind and Life Institute for attending summer research institute in Garrison, NY (MLSRI 2006)