

# Zeynep Mevhibe Saygin

---

The Ohio State University  
Dept. of Psychology  
205 Psychology Bldg. 1835 Neil Ave  
Columbus, OH 43210

saygin.3@osu.edu  
zeynepsaygin.com

## Education and Work Experience

---

**The Ohio State University** 2017-present  
Assistant Professor  
Department of Psychology

**The Ohio State University** 2017-present  
Faculty Member, Neuroscience Graduate Studies Program

**The Ohio State University** 2017-present  
Faculty Member  
Chronic Brain Injury Program

**Massachusetts Institute of Technology** 2012-2017  
Postdoctoral Fellow  
Advised by Nancy Kanwisher

**Massachusetts General Hospital** 2012-2017  
Postdoctoral Fellow  
Advised by Bruce Fischl

**Massachusetts Institute of Technology** 2007-2012  
Ph.D. in Systems Neuroscience  
Thesis: "*Structure-Function Relationships in Human Brain Development.*"  
Advised by John D.E. Gabrieli & Rebecca R. Saxe

**Children's Hospital Boston** 2005-2007  
Technical Assistant  
Advised by Michael Rivkin

**Brown University** 2001-2005  
B.Sc. in Neuroscience  
Advised by David Sheinberg

## Awards and Honors (selected)

---

President's Research Excellence Catalyst Award (2022-2024)  
Alfred P. Sloan Research Fellow in Neuroscience (2018)  
NIH Postdoctoral National Research Award (2014-2017)  
Koch Institute Image Awards (2014)  
Wellcome Trust Image Awards (2014)  
MIT Postdoctoral Association Travel Award (2013)  
McGovern Institute Neurotechnology Program (2012-2013)  
Sheldon Razin Graduate Student Fellowship (2010-2011)  
Human Brain Mapping Trainee Abstract Travel Award (2010)  
Angus McDonald Award for Undergraduate Teaching (2010)

MIT Health Science and Technology Catalyst Fund (2010-2011)  
MGH Advanced Multimodal Neuroimaging Training Program, Predoctoral Fellow (2009-2010)  
Gordon Research Conference: Amygdala in Health & Disease Travel Award (2009)  
Presidential Graduate Fellowship (2007-2008)

## **Grants & Research Support**

---

### **Pending**

1. Jacobs Foundation Research Fellowship (2023-2025; \$160,000). "Diverse, inclusive, and testable computational models of the neurodevelopment of individual variability and academic success."
2. P20 HD109917-01 (2022-2026; \$3M). "Building diverse and inclusive neural models of early reading."
3. R01 (2022-2027; \$3.6M). "Understanding the neurodevelopmental effects of youth tackle football participation."
4. Wellcome Foundation Leap Award (2022-2025; \$14M). "Cross-cultural early predictors of executive function: bugs, brains, and behavior."
5. NSF Understanding Rules of Life; Emergent Networks (2022-2026; 3M). "Dynamics of Multi-Layer Networks in Infant Development"
6. R01 (2022-2027; \$2,700,000). "Understanding sensorimotor adaptations using virtual environments following mild traumatic brain injury."
7. NICHD R01 (2021-2026; \$3M): "The Development of Memory"

### **Active**

1. President's Research Excellence Catalyst award (2022-2024; \$199,990). "Brain Infrared Modulation of Pathways for Aging, Cognition, and movement (Brain IMPACT)"
2. Chronic Brain Injury Pilot Award (2021; \$25,000). "Understanding the neurodevelopmental effects of football-related neurotrauma across first year of tackle football participation"
3. Chronic Brain Injury Pilot Award (2019; \$25,000). "Effectiveness of a psychological intervention for children with post-concussion syndrome"
4. R01 NS109298 (2019-2024; subcontract budget \$180,210/ year). "Human Networks for Behaviors related to the Expectation of Pain".
5. FG-2018-10994: Saygin (PI). Alfred P. Sloan Research Fellow in Neuroscience (09/15/2018 - 08/30/2020; \$65,000 annual research support)

### **Completed**

1. Chronic Brain Injury Pilot Award (2018; \$24,750). "Longitudinal Assessment of Cognitive and Eye-related Symptoms in Youth Hockey Players - the LACES Youth Hockey Study".
2. OSU Equipment Grant for SCR (2018; \$6295).
3. F32HD079169: Saygin (PI). NIH Postdoctoral National Research Award (01/01/2014-12/31/2016 \$49,214 (Y1); \$52,190 (Y2); \$53,942 (Y3))

4. MIT MINT Program Grant: Co-PI (2012-2013). "Mapping the anatomical connectivity of functionally-defined regions in the human brain using the new MGH Connectom scanner."
5. MIT Health Science and Technology Catalyst Fund: PI (2010-2011). "Diffusion spectrum imaging in infants less than 1 year of age: a developmental network analysis of amygdala connectivity."
6. MGH/MIT/Harvard Advanced Multimodal Neuroimaging Training Program, Predoctoral Fellow: (2009-2010). "Parcellating the human amygdala based on structural and functional connectivity."

## **Publications**

---

1. "Intact reading ability in spite of a spatially distributed visual word form 'area' in an individual born without the left superior temporal lobe." Li J., Kean H., Fedorenko E., **Saygin Z.** (in review). <https://www.biorxiv.org/content/10.1101/2021.09.15.460550v1>
2. "Neural Evidence for Non-Orofacial Triggers in Misophonia." Hansen H.A., Stefancin P., Leber A.B., **Saygin Z.M.** (in review)
3. "Individual Variability in Functional Organization of the Neonatal Brain" Molloy, F., **Saygin Z.** (2022). *NeuroImage*. <https://doi.org/10.1016/j.neuroimage.2022.119101>
4. "What sound sources trigger misophonia? Not just chewing and breathing." Hansen, H., Leber, A., **Saygin, Z.M.** (2021). *Journal of Clinical Psychology*. doi: 10.1002/jclp.23196. <https://onlinelibrary.wiley.com/doi/10.1002/jclp.23196>
5. "Altered Age-Related Changes in the Structure of the Mentalizing Network in Children with Refractory Focal Epilepsy." Hung A., Morningstar M., Mattson W.I., **Saygin Z.M.**, Nelson, E. (2021). *Epilepsy Research*.
6. "The intrinsic neonatal hippocampal network: rsfMRI findings". Howell, A., Osher, D., Li, J., **Saygin Z.M.** (2020). *Journal of Neurophysiology*. <https://journals.physiology.org/doi/pdf/10.1152/jn.00362.2020>
7. "Innate connectivity patterns drive the development of the visual word form area". Li J., Osher D., Hansen H., **Saygin Z. M.** (2020). *Scientific Reports*. 10, 18039.
8. "Differentiation of functional connectivity between the basolateral amygdala and occipitotemporal cortex." Hansen H., Li, J., **Saygin Z. M.** (2020) *PLoS One*. 15(10): e0237204.
9. "Amygdala nuclei volume and shape in military veterans with posttraumatic stress disorder." Morey RA, Clarke EC, Haswell CC, Phillips RD, Clausen AN, Mufford MS, **Saygin Z**, Wagner HR, LaBar KS. (2019). *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*. ISSN 2451-9022, <https://doi.org/10.1016/j.bpsc.2019.11.016>.
10. "Facephenes and rainbows: Causal evidence for functional and anatomical specificity of face and color processing in the human brain." Schalk G., Kapeller C., Guger C., Ogawa H., Hiroshima S., Lafer-Sousa R., **Saygin Z.**, Kamada K., and Kanwisher N. (2017). *PNAS* doi: 10.1073/pnas.1713447114.
11. "Integration and Segregation of Default Mode Network Resting- state Functional Connectivity in Transition-age Males with High- functioning Autism Spectrum Disorder: A Proof of Concept Study."

- Joshi G., Anteraper S., Patil K., Semwal M., Goldin R., Furtak S., Chai X., **Saygin Z.**, Gabrieli J., Biederman J., and Whitfield-Gabrieli S. (2017). Brain Connectivity doi: 10.1089/brain.2016.0483.
12. "Impaired frontal-limbic white matter maturation in children at high risk for major depression." Hung Y., **Saygin Z.**, Biederman J., Hirshfeld-Becker D., Uchida M., Doehrmann O., Han M., Chai J., Kenworthy T., Yarmak P., Gaillard S., Whitfield-Gabrieli S., & Gabrieli J.D.E. (2017) Cerebral Cortex, doi: 10.1093/cercor/bhw250.
  13. "High-resolution magnetic resonance imaging reveals nuclei of the human amygdala: manual segmentation to automatic atlas." **Saygin Z. M.**, Kliemann D., Iglesias E., van der Kouwe, A.J.W., Boyd E., Reuter M., Stevens A., Van Leemput K., McKee A., Frosch M.P, Fischl B., Augustinack J. (2017) NeuroImage, doi: 10.1016/j.neuroimage.2017.04.046.
  14. "Connectivity precedes function in the development of the visual word form area." **Saygin, Z.M.**, Osher D.E., Norton E. S., Youssoufian D.A., Beach S., Feather J., Gaab, N., Gabrieli, J., Kanwisher N. (2016) Nature Neuroscience, doi:10.1038/nn.4354.
  15. "Brain Connectomics Predict Response to Treatment in Social Anxiety Disorder." Whitfield-Gabrieli S., Ghosh S., Nieto-Castanon A., **Saygin Z.**, Doehrmann O., Chai J., Reynolds G., Hofmann S., Pollack M., Gabrieli J. (2015). Molecular Psychiatry, doi:10.1038/mp.2015.109.
  16. "Structural connectivity fingerprints predict cortical selectivity for visual categories." Osher D., Saxe R., Koldewyn K., Gabrieli, J., Kanwisher N., **Saygin Z.** (2015). Cerebral Cortex, doi: 10.1093/cercor/bhu303.
  17. "Structural connectivity of the developing human amygdala". **Saygin Z.**, Osher D., Koldewyn K., Martin R., Finn A., Saxe R., Gabrieli J., Sheridan M. (2015). PLoS ONE, 10(4): e0125170. doi:10.1371/journal.pone.0125170.
  18. "Altered Resting-State Functional Connectivity of the Frontal-Striatal Reward System in Social Anxiety Disorder." Manning J., Reynolds G., **Saygin Z.**, Hofmann S., Pollack M., Gabrieli J., Whitfield-Gabrieli S. (2015) PLoS ONE, 10(4): e0125286. doi:10.1371/journal.pone.0125286.
  19. "Tracking the Roots of Reading Ability: White Matter Volume and Integrity Correlate with Phonological Awareness in Prereading and Early-Reading Kindergarten Children." **Saygin Z.**, Norton E., Osher D., Beach S., Cyr A., Ozranov-Palchik O., Yendiki A., Fischl B., Gaab N., Gabrieli J.D.E. (2013). Journal of Neuroscience, 33(33), 13251–13258.
  20. "Anatomical connectivity patterns predict face-selectivity in the fusiform gyrus." **Saygin Z.**, Osher D., Koldewyn K., Reynolds G., Gabrieli J., & Saxe R. (2012). Nature Neuroscience, 15(2), 321-327.
  21. "Predicting treatment response in social anxiety disorder from functional magnetic resonance imaging." Doehrmann O., Ghosh S., Polli F., Reynolds G., Horn, F., Keshavan A., Triantafyllou C., **Saygin Z.**, Whitfield-Gabrieli S., Hofmann S., Pollack M., Gabrieli J. (2012). JAMA Psychiatry, 70(1), 87-97.
  22. "Connectivity-based segmentation of human amygdala nuclei using probabilistic tractography." **Saygin Z.**, Osher D., Augustinack J., Fischl B., & Gabrieli J. (2011). NeuroImage, 56(3), 1353-1361.

23. "Neuroimaging predictors of treatment response in social phobia." Pollack, M., Doehrmann, O., Ghosh, S., Polli, F., Reynolds, G., Horn, F., Keshavan, A., Triantafyllou, C., Saygin, Z., Whitfield-Gabrieli, S., Hofmann, S., Gabrieli, J. (2013). *European Neuropsychopharmacology*, 24 (S-142-S143).
24. "Use of fMRI to identify regional activation of cerebral cortex involved in successful performance of an incidental verbal memory task by children". Maril, A., Davis, P. E., **Saygin, Z. M.**, Koo, J., Mulkern, R., V., Waber, D. P., Rivkin, M. J. (2006). *Annals of Neurology*, 60, S141.

### **Manuscripts in Preparation**

---

"The selectivity and development of the frontotemporal language network in early childhood" Hiersche, K., Li, J., **Saygin, Z.M.** (in preparation)

"Development and functional relevance of word-selectivity and laterality" Li, J., Stefancin, P., **Saygin, Z.M.** (in preparation)

"Executive function in early childhood: selectivity of the Multiple Demand network" Schettini, E., Hiersche, K., **Saygin, Z.M.** (in preparation)

"Characterizing the Effect of Premature Birth on Adolescent Brain Network Organization" Molloy, F., Yu, E., Mattson, W., Taylor, G., Nelson, E., & **Saygin, Z.M.** (in preparation)

### **Refereed Conference Proceedings and Presentations**

---

"The selectivity and development of the visual word form area and frontotemporal language network in pre-readers and beginning readers." Hiersche KJ., Li J., **Saygin, ZM.** Vision Sciences Society Annual Meeting. (2022).

"Development and functional relevance of visual word-selectivity and laterality." Li, J., Stefancin, P., **Saygin, Z. M.** Vision Science Society Annual meeting. (2022).

"Comparison of selectivity of Multiple Demand network between children and adults." Schettini, E., Hiersche, K.J., **Saygin, Z.M.** Cognitive Neuroscience Society Annual Meeting. (2022).

"The selectivity and development of the visual word form area and longitudinal development of the frontotemporal language network in pre-readers and beginning readers." Hiersche KJ., Li J., **Saygin, ZM.** Chronic Brain Injury Research Day. (2022).

"Neural implications of the first season of tackle football." Stefancin P., Caccese JB. **Saygin, ZM.** Chronic Brain Injury Research Day. (2022).

"Location of Impacts Affects Head Impact Magnitude In Youth Football." Smith C., Edwards G., **Saygin, ZM,** Caccese JB. Chronic Brain Injury Research Day. (2022).

"Sensorimotor Processing Following Participation in Youth Tackle Football." Edwards G., Smith C., **Saygin, ZM,** Caccese JB. Chronic Brain Injury Research Day. (2022).

"The selectivity and development of the frontotemporal language network in early childhood" Hiersche, K., **Saygin, Z.M.** Center for Cognitive and Behavioral Brain Imaging (CCBBI) research day. (2021).

"Development and functional relevance of word-selectivity and laterality" Li, J., Stefancin, P., **Saygin, Z.M.** Center for Cognitive and Behavioral Brain Imaging (CCBBI) research day. (2021).

"Selectivity of the Multiple Demand network" Schettini, E., **Saygin, Z.M.** Center for Cognitive and Behavioral Brain Imaging (CCBBI) research day. (2021).

"Exploring neural origins of misophonia using resting-state connectivity" Hansen, H. A., Leber, A. B., **Saygin, Z.M.** CCBBI research day. (2021).

"Characterizing the Effect of Premature Birth on Adolescent Brain Network Organization" Yu, E., Molloy, F., Mattson, W., Taylor, G., Nelson, E., & **Saygin, Z.M.** CCBBI research day. (2021).

"Development of Phonemic Articulation" Gokcen, Y., Stefancin, P., **Saygin, Z.M.** Center for Cognitive and Behavioral Brain Imaging (CCBBI) research day. (2021).

"Innate organization of the human brain." Molloy, M.F. and **Saygin, Z.M.** Vision Sciences Society. (2021).

"Functional reorganization of the Visual Word Form Area in an individual born without the left superior temporal lobe." Li, J., Fedorenko, E., **Saygin, Z. M.** Organization for Human Brain Mapping (2021).

"Innate organization of the human brain." Molloy, M.F. and **Saygin, Z.M.** Chronic Brain Injury (CBI) Research Day. (2021) [poster and blitz talk]

"Functional reorganization of the Visual Word Form Area in an individual born without the left superior temporal lobe." Li, J., Fedorenko, E., **Saygin, Z. M.** Chronic Brain Injury Research Day (2021).

"Adults vs. neonates: Differentiation of functional connectivity between the basolateral amygdala and occipitotemporal cortex." Hansen, H. A., Li, J., **Saygin, Z. M.** 35th Annual Edward F. Hayes Graduate Research Forum (2021) [poster award: 2nd place].

"Cortical selectivity driven by connectivity: innate connectivity patterns of the visual word form area." **Z.M. Saygin.** Cognitive Neuroscience Society, Symposium (2020).

"Adults vs. neonates: Differentiation of functional connectivity between amygdala subnuclei and occipitotemporal cortex." H. Hansen, J. Li, **Z.M. Saygin.** Cognitive Neuroscience Society (2020).

"The developmental trajectory of the domain-general cortex." A. Howell, D. Osher, J. Li, **Z.M. Saygin.** Cognitive Neuroscience Society (2020).

"Innate connectivity patterns of the visual word form area." J. Li, D. E. Osher, H. A. Hansen, A. L. Howell, **Z. M. Saygin.** Society for Neuroscience, Nanosymposium (2019).

"Predicting pain regions in the cingulate cortex using functional connectivity." Flanagan, J., **Z. M. Saygin,** Lenz, F., D. E. Osher. Center for Cognitive Behavioral and Brain Sciences (CCBBI) Research Day (2019).

"The Developmental Trajectory of the Domain-General Cortex." Howell, A.L., Osher, D.E., Li, J, **Saygin, Z.M.** Center for Cognitive Behavioral and Brain Sciences (CCBBI) Research Day (2019).

Li, J., Osher, D. E., Hansen, H. A., **Saygin, Z. M.** "Cortical selectivity driven by connectivity: Innate connectivity patterns of the visual word form area." Center for Cognitive Behavioral and Brain Imaging Research Day. (2019). Oral Presentation. \*1<sup>st</sup> place award for oral presentations.

Hansen, H., Li, J., **Saygin, Z. M.** "Adults vs. neonates: Differentiation of functional connectivity between the amygdala subnuclei and occipitotemporal cortex." Center for Cognitive and Behavioral Brain Imaging Research Day. Poster Presentation. (2019).

"The intrinsic neonatal hippocampal network: rsfMRI findings." A. L. Howell, D. E. Osher, J. Li, **Z. M. Saygin.** Society for Neuroscience (2019).

"The connectivity fingerprinting toolbox." D. E. Osher, **Z.M. Saygin.** Society for Neuroscience, Nanosymposium (2019).

"Innate connectivity patterns of the visual word form area." Li, J., Osher, D. E., Hansen, H. A., **Saygin, Z. M.** Vision Sciences Society (2019).

"Connectivity Fingerprints for the Visual Brain and Behavior." Osher, D.E., **Saygin. Z.M.** Vision Sciences Society. (2019).

"Developmental changes in connectivity between the amygdala subnuclei and visual regions." Hansen, H., **Saygin, Z.M.** Vision Sciences Society. (2019).

"Predicting individual reading ability based on anatomical and functional neural connectivity." Nabb, C., Hansen, H., Petrill, S., **Saygin, Z.M.** Vision Sciences Society. (2019).

" Longitudinal MRI in Youth Hockey Players: The LACES Youth Hockey Study". Rhodes, Hartwick, **Saygin Z.M.** Chronic Brain Injury Research Day, OSU (2019).

"Developmental changes in connectivity between the amygdala subnuclei and ventral visual cortex." Hansen H., **Saygin Z.M.**, Talk and Poster at the Cognitive Brain Injury Research Day, OSU (2019).

"Innate connectivity patterns of the visual and non-visual brain." Li, J., Osher, D. E., Howell, A. L. **Saygin, Z. M.** Chronic Brain Injury Research Day, OSU (2019).

"Predicting individual reading ability based on anatomical and functional neural connectivity." Nabb, C., Hansen, H., Petrill, S., **Saygin Z.M.** Denman Undergraduate Research Forum (Denman award winner), The Ohio State University. (2019).

"Connectivity between visual and language systems in neonatal and adults brain." Li J., Rhodes, M.R., **Saygin Z.M.** Statewide Users Group Conference, Ohio Supercomputer Center. (2018).

"Adults vs. kids: Changes in connectivity between the amygdala subnuclei and occipitotemporal cortex." Hansen, H.A., **Saygin, Z.M.** Society for Neuroscience. (2018).

"Using the Ohio Supercomputer cluster to measure developmental changes in connectivity between the amygdala subnuclei and occipitotemporal cortex." Hansen, H.A., **Saygin, Z.M.** Ohio Supercomputer Center Statewide Users Group conference. (2018). [Poster contest: 2<sup>nd</sup> place]

"Functional Connectivity of the Infant Hippocampus." Howell, A.L., **Saygin, Z.M.** Ohio Supercomputer Center Statewide Users Group conference. (2018).

"Exploring the development of high-level visual connectivity in infants". Rhodes M.R. & **Saygin Z.M.** Poster presentation at the Ohio Supercomputer Center Statewide Users Group (SUG) conference, Columbus, OH. (2018).

"Predicting individual reading ability based on anatomical and functional neural connectivity." Nabb, C., Hansen, H., Petrill, S., **Saygin Z.M.** Ohio Supercomputer Center Statewide Users Group Conference. (2018).

"Adults vs. kids: Changes in connectivity between the amygdala subnuclei and occipitotemporal cortex." Hansen, H.A., **Saygin, Z.M.** Center for Cognitive and Brain Sciences retreat. (2018).

"Adults vs. kids: Changes in connectivity between the amygdala subnuclei and occipitotemporal cortex." Hansen, H.A., **Saygin, Z.M.** Emory Mechanisms of Learning Forum. (2018).

"Neonatal brain organization and connectivity". Rhodes M.R. & **Saygin Z.M.** Poster presentation at the Center for Cognitive and Brain Sciences Fall Retreat, Mt. Sterling, OH. (2018).

Norton E.S., **Saygin Z.M.**, Beach S., Ozernov-Palchik O., Gaab N., Gabrieli J.D.E. (2017). The Utility of EEG and MRI Brain Measures for Predicting Future Reading Difficulties. Society for the Scientific Study of Reading.

Norton, E. S., Beach, S. D., **Saygin, Z. M.**, Ozranov-Palchik, O., Park, A., Robinson, S., Gaab, N., & Gabrieli, J. D. E. (2016). Brain measures identify which kindergartners at risk for reading difficulties go on to develop dyslexia. Society for the Scientific Study of Reading.

"Connectivity precedes function in the development of the visual word form area." **Saygin Z.M.**, Osher D.E., Norton E. S., Youssoufian D.A., Beach S., Feather J., Gaab, N., Gabrieli, J., Kanwisher N. Society for Neuroscience. (2016).

"Connectivity precedes function in the development of the visual word form area." Kanwisher N., Osher D.E., Norton E. S., Youssoufian D.A., Beach S., Feather J., Gaab, N., Gabrieli, J., **Saygin Z.M.** Vision Sciences Society. (2016).

"Function and connectivity of the VWFA and FFA." **Saygin Z.M.**, Scott T., Feather J., Fedorenko E., Kanwisher, N. Organization for Human Brain Mapping (2015).

"COMA: A registration approach specifically for subcortical structures." Osher D., **Saygin Z.**, Tobyne S., Somers D. Organization for Human Brain Mapping (2015).

"The VWFA and FFA have sharply contrasting functional selectivities and patterns of connectivity." **Saygin Z.M.**, Scott T., Feather J., Fedorenko E., Kanwisher, N. Journal of Vision 15(12):914  
DOI: 10.1167/15.12.914



“Structural and functional connectivity fingerprints for face, body, scene, and object perception.” **Saygin, Z.M.**, Kanwisher, N. (2014). Journal of Vision 14(10): 603; doi:10.1167/14.10.603

“Structural and functional connectivity fingerprints for face, body, scene, and object perception.” **Saygin Z.M.**, Kanwisher, N. *Brain Connectivity* (2014).

“Words and Faces: The relation of the Visual Word Form Area and Fusiform Face Area.”  
Youssofian, D.A., Scott, T., Kanwisher, N., **Saygin, Z.M.** MIT (2014).

“Structural and functional connectivity fingerprints for face perception.” **Saygin, Z.M.**, Kanwisher, N. *Cognitive Neuroscience Society* (2014).

“Linking reading abilities with brain structure and function: The ERP mismatch negativity response, left arcuate fasciculus structure, and reading-related skills in kindergarten and 1st grade”. Norton E., Beach S., **Saygin Z.M.**, Ozernov-Palchik O., Cyr, A., Halverson K., Hudson M., Guerrero S., Gaab N., Gabrieli J. *Society for the Scientific Study of Reading* (2013).

“Neuroimaging predictors of treatment response in social phobia.” Pollack, M., Doehrmann, O., Ghosh, S., Polli, F., Reynolds, G., Horn, F., Keshavan, A., Triantafyllou, C., Saygin, Z., Whitfield-Gabrieli, S., Hofmann, S., Gabrieli, J. (2013). *European Neuropsychopharmacology*, 24 (S-142-S143).

“The functional connectomics underlying dyslexic adaptation deficits”. Osher D.E., **Saygin Z.M.**, Perrachione T., Gabrieli J.D.E. *Society for Neuroscience* (2012).

“Structural connectivity predicts risk for dyslexia in kindergarteners”. **Saygin Z.M.**, Norton E.S., Osher D.E., Beach S. B., Cyr A.B., Ozranov-Palchik O., Yendiki A., Fischl B., Gaab N., Gabrieli J.D.E. *Society for Neuroscience* (2012).

“Registration of Histology and MRI using Blockface as Intermediate Space”. Reuter M., Sand P., Huber K., Nguyen K., **Saygin ZM**, Augustinack J., Fischl B. *Human Brain Mapping* (2012).

“Examining Structural Connectivity in Young Adults with Autism Spectrum Disorders”. Joshi, G., **Saygin Z.M.** Biederman, J., Sheridan, M., Reynolds, G., Sabhlok, S., Goldin, R., Gabrieli, J.D.E. *American Academy of Child and Adolescent Psychiatry* (2011).

“Predicting functional activity from structural connectivity.” Osher D.E., **Saygin Z.M.**, Gabrieli J.D.E. (2011). Frontiers in Neuroinformatics Conference Abstract: 4th INCF Congress of Neuroinformatics. doi: 10.3389/conf.fninf.2011.08.00010.

“Connectivity-based segmentation of human amygdala nuclei using probabilistic tractography”. **Saygin ZM**, Osher DE, van der Kouwe A, Gabrieli JDE. *Human Brain Mapping* (2010).

“Neural responses to emotional faces and scenes in social anxiety disorder”. Doehrmann O, Hofmann SG, Pollack MT, **Saygin ZM**, Reynolds GO, Sabhlok SR, Gabrieli JDE, Polli FE. *American Psychological Society Meeting* (2010).

“Abnormal amygdala and FFA response to face and object novelty in social anxiety disorder”. **Saygin ZM**, Reynolds GO, Sabhlok SR, Richey JA, Hofmann S, Pollack M, Schwartz C, Gabrieli JDE, Polli FE. *Society for Neuroscience Meeting* (2009).

“Brain Regions Supporting Fast-Latency Spatial Detection of Angry Faces: An Event-Related fMRI Study”. Richey JA, Polli FE, **Saygin ZM**, Reynolds GO, Sabhlok SR, Hofmann S, Pollack M, Gabrieli JDE. Society for Neuroscience Meeting (2009).

“Default mode abnormalities in social anxiety disorder” Polli FE, **Saygin ZM**, Reynolds GO, Sabhlok SR, Whitfield-Gabrieli S, Hofmann S, Pollack M, Gabrieli JDE. Society for Neuroscience Meeting (2009).

“Novelty processing in social anxiety disorder: BOLD response of amygdala and emotional FFA voxels”. **Saygin ZM**, Reynolds GO, Sabhlok SR, Richey JA, Hofmann SG, Pollack MT, Schwartz CE, Gabrieli JDE, Polli FE. Gordon Research Conference: Amygdala in Health & Disease (2009).

“Abnormal amygdala response to face and object novelty in Social Anxiety Disorder” **Saygin ZM**, Sabhlok SR, Reynolds GO, Richey JA, Song SS, Shah AM, Hofmann SG, Pollack MT, Schwartz CE, Gabrieli JDE, Polli FE. Human Brain Mapping (2009).

“Personality Correlates of Amygdala Response to Masked Fear and Novelty” Reynolds GO, **Saygin ZM**, Sabhlok SR, Richey JA, Song SS, Shah AM, Hofmann SG, Pollack MT, Schwartz CE, Gabrieli JDE, Polli FE. Human Brain Mapping (2009).

“Use of fMRI to Identify Regional Activation of Cerebral Cortex Involved in Successful Performance of an Incidental Verbal Memory Task by Children” Maril A, Davis PE, **Saygin ZM**, Koo J, Mulkern RV, Waber DP, Rivkin MJ. Annals of Neurology (2006).

## Invited Talks

---

1. Trends in Psychology Summit, Harvard University (11/12/2021)
2. Department of Psychology, OSU (10/27/2021)
3. Translational Data Analytics Institute, Data Science for Women (07/14/2021)
4. NIMH Neonatal & Infant Imaging (6/23/2021)
5. Carnegie Mellon University, Dept. of Psychology (5/3/2021)
6. Center for Cognitive and Behavioral Brain Imaging, OSU (2/9/2021)
7. Department of Psychology, OSU (9/30/2020)
8. Salon Series, Dept. of Psychology, OSU (9/28/2020)
9. Neuro Trauma-Research In Progress Seminars, Columbus, Ohio (9/11/2020)
10. Data Science for Women Summer Camp, Columbus, Ohio (07/13/2020)
11. Development and Plasticity of High-level Vision and Cognition, Cognitive Neuroscience Symposium (5/3/2020)
12. Nationwide Children’s Hospital, Columbus, Ohio (03/06/2020)
13. Emory University (12/9/2019)
14. CCBBI Research Day, Columbus, Ohio (12/6/2019)
15. Nationwide Children’s Hospital, Columbus, Ohio (6/25/2019)
16. TEDx OSU, Columbus, Ohio (2/23/2019)
17. Temple University (10/24/2018)
18. Developmental Seminar Series, Department of Psychology, OSU (09/21/2018)

- 19.The Ohio State Center for Cognitive and Brain Sciences Fall Retreat, OSU (09/15/2018)
- 20.Mathematical Biological Institute & Chronic Brain Injury Minisymposium on Quantitative Neuroscience, OSU (Sept. 13 2018)
- 21.The Ohio State Center for Cognitive & Brain Sciences Undergraduate Summer Institute (07/16/2018).
- 22.Emory University (April 21 2018)
- 23.Cognitive Seminar series, Department of Psychology, OSU (10/25/2017)
- 24.Ohio State University (Apr. 11 2016)
- 25.Ohio State University (Feb. 12 2016)
- 26.Boston University (Jan. 28 2016)
- 27.Johns Hopkins (Apr. 16 2015)
- 28.The Social Brain Minisymposium, Cognitive Neuroscience Society, (Mar. 31 2015)
- 29.Wiring the Brain, Cold Spring Harbor Laboratory (Mar. 25 2015)
- 30.Tulane University (Jan. 22 2015)
- 31.Fetal-Neonatal Neuroimag. & Dev. Science Center, Harvard Medical School (Sept. 30 2014)
- 32.The Social Neuroscience of Autism Minisymposium, Freie Universitat Berlin (July 1 2014)
- 33.Vision Sciences Society (May 18 2014)
- 34.Harvard University (Feb. 25 2014)
- 35.Johns Hopkins (Dec. 9 2013)
- 36.Society for Neuroscience (Nov. 12 2013)
- 37.CLPS/Neuroscience Seminar, Brown University (Aug. 16 2013)
- 38.Rockefeller University (Aug. 13 2013)
- 39.University of Maryland (Aug. 9 2013)
- 40.Laboratory for Brain and Cognition, NIMH (Aug. 8 2013)
- 41.Center for Cognitive Neuroscience, University of Pennsylvania (Aug. 7 2013)
- 42.Computational Radiology Laboratory, Children's Hospital Boston (Mar. 7 2012)
- 43.Society for Neuroscience (Nov. 2011)
- 44.Laboratories of Cognitive Neuroscience, Children's Hospital Boston/Harvard Medical School (Nov. 2011)
- 45.Development and Affective Neuroscience/ Mood and Anxiety Disorders Program, NIMH (Oct. 18 2011)
- 46.Society for Neuroscience (Nov. 2010)
- 47.Association for Behavioral and Cognitive Therapies Convention (Nov. 17 2010)
- 48.Human Brain Mapping Conference (Jun. 2010)
- 49.Laboratories of Cognitive Neuroscience, Children's Hospital Boston/Harvard Medical School (2010)
- 50.McGovern Institute Retreat, MIT (Jun. 2 2010)
- 51.McGovern Institute 10<sup>th</sup> Anniversary, MIT (Oct. 14 2010)
- 52.The Alan and Lorraine Bressler Clinical and Research, Program for Autism Spectrum Disorders. MGH/Harvard Medical School (Feb. 23 2009)

**Referee/Reviewer**

---

Science, PNAS, Nature Neuroscience, Nature Communications, Neuron, Journal of Neuroscience, NeuroImage, NeuroImage Clinical, Cortex, Human Brain Mapping, Brain, Brain Imaging and Behavior, Brain Structure and Function, JINS, Brain Imaging and Behavior, Neuropsychologia, Neuroscience, Pediatrics, Biological Psychiatry, Clinical Psychology

---

### **Professional Memberships**

---

Vision Sciences Society (2012-present)  
American Association for the Advancement of Science (2008-present)  
Cognitive Neuroscience Society (2008-present)  
Organization for Human Brain Mapping (2008-present)  
Society for Neuroscience (2008-present)

---

### **Service**

---

OSU, Chair, CCBBI Outreach and Talk Series Committee (2019-present)  
OSU, Judge, Center for Cognitive and Behavioral Brain Imaging Research Day (2021)  
OSU, Member, Outreach Committee (2020-present)  
OSU, Member, Speakers Committee (2020-present)  
OSU, Reviewer, Chronic Brain Injury Program Pilot award (2019)  
OSU, Cognitive Neuroscience Area Planning Committee (2019-2020)  
OSU, Member, CCBBI Users Planning Committee (2018-2019)  
OSU, Member, Neuroscience Graduate Admissions Committee (2018-2022)  
OSU, Member, Diversity, Recruitment, & Retention Committee (2018-2020)  
OSU, Member, Research Experiments Committee (2018-2019)  
MIT, Interview Weekend Panel Member (2009-2011)  
MIT, Cambridge Science Festival (2010)  
Chalk on the Walk Harvard Square, Artist (2010)  
Organization for Human Brain Mapping, Abstract reviewer (2010)  
Massachusetts Institute of Technology, Chair of Cognitive Lunch Talks (2008-2009)  
Brown University, Brown Alumni Schools Committees (BASC) interviewer (2007-2010)

---

### **Teaching**

---

Introduction to Cognitive Neuroscience, OSU (2019-present)  
Developmental Cognitive Neuroscience, Psych 5628, OSU (2018-present)  
Cognitive Neuroscience Proseminar, Psych 8860, OSU (2020-2021)  
Cognitive Proseminar, Psych 7894, OSU (2018-2020)  
Neuroimaging Bootcamp, OSU (2019)  
Introduction to Psychology, MIT (2010)  
Introduction to Psychology, MIT (2010)  
Introduction to Psychology, MIT, Professor John Gabrieli (2009)  
Principles of Neurobiology, Brown University (2005)

---

### **Mentoring Experience**

---

#### *Graduate Students*

Elana Schettini (2021-current)  
Kelly Hiersche (2021-current)  
Fiona Molloy (2020- current)  
Jin Li (2018- current)  
Heather Hansen (2017- current)  
Athena Howell (2018- 2021)

*Undergraduate Students*

Shirin Kasturia (2008)  
Lauren Kazmierski (2009)  
William Morejon (2009)  
Geena Márquez (2009)  
Ray Gonzalez (2009)  
Breanna Berry (2009-2010)  
Michelle Garber (2009)  
May Chen (2010)  
Amber Li (2011)  
Elisha Gray (2011)  
Nathan Arce (2011)  
Heather Acuff (2012)  
Jean Yu (2013)  
Osheiza Otori (2013)  
Deanna Arpi Youssoufian (2013-2017)  
Eshwar Madishetti (2017-2019)  
Justin Flanagan (2017-2020)  
Carver Nabb (2018-2020)  
Yasemin Gokcen (2019-present)  
Lilly Lin (2019-2021)  
Amanie Rasul (2019-2021)  
Kyle Moon (2020-2021, student in U Notre Dame)  
Luke Wisniewski (2020-present)  
Emily Yu (2020-present)  
Divya Gopal (2021-present)  
Brenden Dalton (2021-present)  
Emmanuela Ezekwemba (2022-present)  
Andrew Sarmir (2022-present)  
Nyeka Sangster (2022-present)

*Research Assistants*

Gretchen Reynolds (2008-2011)  
Sandeep Sabhlok (2008-2010)  
Jenelle Feather (2014-2016)  
Terri Scott (2014-2016)  
Harris Hoke (2015-2017)  
David Beeler (2016-2017)  
Micah Rhodes (2017-2019)  
Carver Nabb (2019-2020)  
Arman Bordbar (2019-2021)  
Maggie Beard (2019-present)  
Patricia Stefancin (2020-present)

## Public Media

---

OSU <https://news.osu.edu/human--brains-pre-wired-for-words-is-coolest-science-story-of-2020/>

USA Today <https://www.usatoday.com/videos/tech/2020/10/23/newborns-see-words-birth-according-new-study/3740898001/>

MSN <https://www.msn.com/en-us/health/medical/new-study-reveals-newborns-see-words-from-birth/vp-BB1akvyT>

Current Science Daily: <https://currentsciencedaily.com/stories/563509915-infant-brains-are-prewired-for-reading-study-finds>

AAAS: [https://www.eurekalert.org/pub\\_releases/2020-10/osu-hab102220.php](https://www.eurekalert.org/pub_releases/2020-10/osu-hab102220.php)

AAAS: [https://www.eurekalert.org/pub\\_releases/2020-10/osu-nbl101920.php](https://www.eurekalert.org/pub_releases/2020-10/osu-nbl101920.php)

DE24 News <https://www.de24.news/2020/10/according-to-one-study-childrens-brains-are-pre-wired-to-see-words.html>

OSU News <https://news.osu.edu/humans-are-born-with-brains-prewired-to-see-words>

[https://www.eurekalert.org/pub\\_releases/2020-10/osu-nbl101920.php](https://www.eurekalert.org/pub_releases/2020-10/osu-nbl101920.php)

OSU News <https://news.osu.edu/newborn-brains-lack-maturity-to-process-emotions-as-adults-do/>

TEDx OSU <https://www.youtube.com/watch?v=dcWMH20INUw>

Nature Reviews Neuroscience Highlights  
<http://www.nature.com/nrn/journal/v17/n10/full/nrn.2016.123.html>

MIT <http://news.mit.edu/2016/brain-connections-key-reading-0808>

Dana Foundation [http://www.dana.org/News/Targeting\\_Dyslexia/](http://www.dana.org/News/Targeting_Dyslexia/)

BYU Radio <http://www.byuradio.org/episode/50b30dec-bb77-4efa-acd3-8e6bd60afe9c/top-of-mind-with-julie-rose-sexual-assault-long-term-effects-of-bullying-aging-facebook?playhead=3597&autoplay=true>

MIT <http://newsoffice.mit.edu/2015/toward-smarter-selection-therapy-psychiatric-disorders-0811>

WBUR Boston <http://www.wbur.org/2014/06/12/brain-images>

Koch Institute <http://ki-galleries.mit.edu/2014/saygin>

Wellcome Trust <http://www.wellcomeimageawards.org/2014/wiring-of-the-human-brain>

The Guardian <http://www.theguardian.com/science/gallery/2014/mar/09/wellcome-image-awards-2014-life-in-extreme-close-up-in-pictures>

Independent <http://www.independent.co.uk/news/pictures/wellcome-image-awards-2014-shortlist-announcement-9182439.html>

Telegraph <http://www.telegraph.co.uk/science/picture-galleries/10689850/The-winning-entries-in-the-Wellcome-Image-Awards-2014.html#?frame=2848384>

Cell Picture Show ([http://www.cell.com/cell\\_picture\\_show-koch2014winners](http://www.cell.com/cell_picture_show-koch2014winners))

MIT Technology Review <http://www.technologyreview.com/article/524216/the-art-of-science/>

Boston Magazine 09/16/13 <http://www.bostonmagazine.com/health/blog/2013/09/16/dyslexia-brain-scans-mit-boston/>

NPR news WBUR 08/14/13. <http://commonhealth.wbur.org/2013/08/tracking-dyslexia-in-the-preschool-brain>

CBS news 08/14/13. [http://www.cbsnews.com/8301-204\\_162-57598512/brain-scans-may-diagnose-dyslexia-before-kids-can-even-read](http://www.cbsnews.com/8301-204_162-57598512/brain-scans-may-diagnose-dyslexia-before-kids-can-even-read)

FOX news 08/14/13. <http://www.foxnews.com/health/2013/08/14/can-mri-brain-scans-identify-children-with-dyslexia/>

MIT News 08/13/13 <http://web.mit.edu/newsoffice/2013/brain-scans-may-help-diagnose-dyslexia-0813.html>

US News and World Report 08/13/13 <http://health.usnews.com/health-news/news/articles/2013/08/13/mri-might-allow-earlier-diagnosis-of-dyslexia-study>

BBC News 08/13/13. <http://www.bbc.co.uk/news/health-23679363>

Simons Foundation Autism Research Initiative 02/09/12. <http://sfari.org/news-and-opinion/news/2012/brain-imaging-study-links-structure-and-function-in-face-area>

MIT News 01/03/12. <http://web.mit.edu/newsoffice/2012/face-recognition-0103.html>

Simons Foundation Autism Research Initiative 11/15/11. <http://sfari.org/news-and-opinion/conference-news/2011/society-for-neuroscience-2011/amygdalas-links-to-other-brain-regions-wane-with-age>

German Public Broadcasting 07/21/2011. <http://www.br-online.de/podcast/mp3-download/bayern2/mp3-download-podcast-iq.shtml>

Simons Foundation Autism Research Initiative 05/18/11. [https://sfari.org/news-and-commentary/open-article/-/asset\\_publisher/6Tog/content/imaging-tool-maps-regions-within-amygdala](https://sfari.org/news-and-commentary/open-article/-/asset_publisher/6Tog/content/imaging-tool-maps-regions-within-amygdala)