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## ACADEMIC APPOINTMENTS

2019–	Assistant Professor Member	Department of Psychology, The University of Chicago University of Chicago Neuroscience Institute Committee on Computational Neuroscience Committee on Neurobiology
2017–19	Postdoctoral Fellow	Department of Psychology, Yale University

## EDUCATION

2017	Ph.D. with distinction	Yale University, New Haven, CT Psychology (Cognitive Neuroscience)
2015	M.S., M.Phil.	Yale University, New Haven, CT Psychology (Cognitive Neuroscience)
2010	Sc.B. with honors	Brown University, Providence, RI Cognitive Neuroscience

## HONORS AND AWARDS

2021	<i>Rising Star Award</i> , Association for Psychological Science
2017	<i>Trainee Professional Development Award</i> , Society for Neuroscience
2017–18	<i>Theresa Seessel Postdoctoral Fellowship</i> , Yale University
2017	<i>30 Under 30: Science</i> , Forbes
2016	<i>Dissertation Research Award</i> , American Psychological Association
2016	<i>Best Talk Award</i> , Object Perception, Attention, & Memory meeting, Boston, MA
2016	<i>Brains, Minds, &amp; Machines Workshop Fellowship</i> , Marine Biology Laboratory
2014–17	<i>Graduate Research Fellowship</i> , National Science Foundation
2010	<i>Phi Beta Kappa</i> , Brown University

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

\*primary trainee, †trainee collaborator

Song, H.\*, Rosenberg, M. D. (2021). Predicting attention across time and contexts with functional brain connectivity. *Current Opinion in Behavioral Sciences*, 40: 30–44.

Sanchez-Alonso, S., Rosenberg, M. D., Aslin, R. N. (2021). Functional connectivity patterns predict naturalistic viewing versus rest across development. *NeuroImage*, 229: 117630.

Rapuano, K. M., Rosenberg, M. D., Maza, M. T., Dennis, N., Dorji, M., Greene, A. S., Horien, C., Scheinost, D., Constable, R. T., Casey, B. J. (2020). Behavioral and brain signatures of substance use vulnerability in childhood. *Developmental Cognitive Neuroscience*, 46: 100878.

Cardenas-Iniguez, C., Moore, T. M., Kaczurkin, A. N., Meyer, F. A. C., Satterthwaite, T. D., Fair, D. A., White, W., Blok, E., Applegate, B., Thompson, L. M., Rosenberg, M. D., Hedeker, D., Berman, M. G., Lahey, B. B. (in press). Criterion validity and relationships between alternative hierarchical dimensional models of general and specific psychopathology. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*.

- Frith, E., Elbich, D. B., Christensen, A. P., Rosenberg, M. D., Chen, Q., Silvia, P. J., Seli, P., Beaty, R. E. (in press). Intelligence and creativity share a common cognitive and neural basis. *Journal of Experimental Psychology: General*.
- Moore, T. M., Kaczurkin, A. N., Durham, E. L., Jeong, H. J., McDowell, M. G., Dupont, R. M., Applegate, B., Tackett, J. L., Cardenas-Iniguez, C., Kardan, O., Akcelik, G. N., Stier, A. J., Rosenberg, M. D., Hedeker, D., Berman, M. G., Lahey, B. B. (2020). Criterion validity and relationships between alternative hierarchical dimensional models of general and specific psychopathology. *Journal of Abnormal Psychology*, 129(7): 677–688.
- Conley, M. I.<sup>†</sup>, Hindley, I.<sup>†</sup>, Baskin-Sommers, A., Gee, D. G., Casey, B. J., Rosenberg, M. D. (2020). The importance of social factors in the association between physical activity and depression in children. *Child and Adolescent Psychiatry and Mental Health*, 14: 28.
- Rosenberg, M. D., Martinez, S. A.<sup>†</sup>, Rapuano, K. M., Conley, M. I.<sup>†</sup>, Cohen, A. O., Cornejo, M. D., Hagler, D. J., Meredith, W. J.\*, Anderson, K. M., Wager, T. D., Feczko, E., Earl, E., Fair, D. A., Barch, D. M., Watts, R., Casey, B. J. (2020). Behavioral and neural signatures of working memory in childhood. *Journal of Neuroscience*, 40(26): 5090–5104.
- Rosenberg, M. D., Song, H.\* (2020). Predicting post-stroke aphasia from brain imaging. *Nature Human Behaviour*, 4: 675–676. (News & Views).
- Goldfarb, E. V., Rosenberg, M. D., Seo, D., Constable, R. T., Sinha, R. (2020). Hippocampal seed connectome-based modeling predicts the feeling of stress. *Nature Communications*, 11: 2650.
- Anderson, K. M., Collins, M. A., Chin, R., Ge, T., Rosenberg, M. D., Holmes, A. J. (2020). Transcriptional and imaging-genetic association of cortical interneurons, brain function, and schizophrenia risk. *Nature Communications*, 11: 2889.
- Scheinost, D., Hsu, W.-T.<sup>†</sup>, Avery, E. W.<sup>†</sup>, Hampson, M., Constable, R. T., Chun, M. M., Rosenberg, M. D. (2020). Connectome-based neurofeedback: A pilot study to improve sustained attention. *NeuroImage*, 212: 116684.
- Rosenberg, M. D., Scheinost, D., Greene, A. S., Avery, E. W.,<sup>†</sup> Kwon, Y. H., Finn, E. S., Ramani, R., Qiu, M., Constable, R. T., Chun, M. M. (2020). Functional connectivity predicts changes in attention observed across minutes, days, and months. *Proceedings of the National Academy of Sciences*, 117(7): 3797–3807.
- Avery, E. W.<sup>†</sup>, Yoo, K., Rosenberg, M. D., Na, D. L., Greene, A. S., Gao, S., Scheinost, D., Constable, R. T., Chun, M. M. (2020). Distributed patterns of functional connectivity predict working memory performance in novel healthy and memory-impaired individuals. *Journal of Cognitive Neuroscience*, 32(2), 241–255.
- Wu, E. X. W., Liaw, G. J., Goh, R. Z., Chia, T. T. Y., Chee, A. M. J., Obana, T., Rosenberg, M. D., Yeo, B. T. T., Asplund, C. L. (2020). Overlapping attentional networks yield divergent behavioral predictions across tasks: Neuromarkers for diffuse and focused attention? *NeuroImage*, 209: 116535.
- Gruskin, D. C.<sup>†</sup>, Rosenberg, M. D., Holmes, A. J. (2020). Relationships between depressive symptoms and brain responses during emotional movie viewing emerge in adolescence. *NeuroImage*, 216: 116217.
- Hagler, D. J., Hatton, S. N., Makowski, C., Cornejo, M. D., Fair, D. A., .... (2019). Image processing and analysis methods for the Adolescent Brain Cognitive Development study. *NeuroImage*, 202: 116091.
- Yoo, K., Rosenberg, M. D., Noble, S., Scheinost, D., Constable RT, Chun, M. M. (2019). Multivariate approaches improve the reliability and validity of functional connectivity and prediction of individual behaviors. *NeuroImage*, 197: 212–223.
- Kumar, S.<sup>†</sup>, Yoo, K., Rosenberg, M. D., Scheinost, D., Constable, R. T., Zhang, S., Li, C.-S. R., Chun, M. M. (2019). An information network flow approach for measuring functional connectivity and predicting behavior. *Brain and Behavior*, 9(8): e01346.
- Scheinost, D., Noble, S., Horien, C., Greene, A. S., Lake, E. M. R., Salehi, M., Gao, S., Shen, X., O'Connor, D., Barron, D. S., Yip, S. W., Rosenberg, M. D., Constable, R. T. (2019). Ten simple rules for predictive modeling of individual differences in neuroimaging. *NeuroImage*, 193: 35–45.
- Lake, E. M. R., Finn, E. S., Noble, S. M., Vanderwal, T., Shen, X., Rosenberg, M. D., Spann, M. N., Chun, M. M., Scheinost, D., Constable, R. T. (2019). The functional brain organization of an individual allows prediction of measures

- of social abilities trans-diagnostically in autism and attention/deficit and hyperactivity disorder. *Biological Psychiatry*, *86*(4): 315–326.
- Fong, A. H. C.<sup>†</sup>, Yoo, K., Rosenberg, M. D., Zhang, S., Li, C.-S. R., Scheinost, D., Constable, R. T., Chun, M. M. (2019). Dynamic functional connectivity during task performance and rest predicts individual differences in attention across studies. *NeuroImage*, *188*: 14–25.
- Fountain-Zaragoza, S.<sup>†</sup>, Samimy, S., Rosenberg, M. D., Prakash, R. S. (2019). Connectome-based models predict attentional control in aging adults. *NeuroImage*, *186*: 1–13.
- Rosenberg, M. D. (2018). Baby brains reflect maternal inflammation. *Nature Neuroscience*, *21*: 651–653. (News & Views).
- Rosenberg, M. D., Casey, B. J., Holmes, A. J. (2018). Prediction complements explanation in understanding the developing brain. *Nature Communications*, *9*: 589.
- Casey, B. J., Cannonier, T.<sup>†</sup>, Conley, M. I.<sup>†</sup>, Cohen, A. O., Barch, D. M., ..., the ABCD Imaging Acquisition Workgroup (2018). The Adolescent Brain Cognitive Development (ABCD) study: Imaging acquisition across 21 sites. *Developmental Cognitive Neuroscience*, *32*: 43–54.
- Lin, Q.<sup>†</sup>, Rosenberg, M. D., Yoo, K., Hsu, W.-T.<sup>†</sup>, O'Connell, T. P., Chun, M. M. (2018). Resting-state functional connectivity predicts cognitive impairment related to Alzheimer's disease. *Frontiers in Aging Neuroscience*, *10*: 94.
- Hsu, W.-T.<sup>†</sup>, Rosenberg, M. D., Scheinost, D., Constable, R. T., Chun, M. M. (2018). Resting-state functional connectivity in large-scale brain networks predicts neuroticism and extraversion in novel individuals. *Social Cognitive and Affective Neuroscience*, *13*(2): 224–232.
- Beatty, R. E., Kenett, Y. N., Christensen, A. P., Rosenberg, M. D., Benedek, M., Chen, Q., Fink, A., Qiu, J., Kwapil, T. R., Kane, M., Silvia, P. J. (2018). Robust prediction of individual creative ability from brain functional connectivity. *Proceedings of the National Academy of Sciences*, *115*(5): 1087–1092.
- Yoo, K., Rosenberg, M. D., Hsu, W.-T.<sup>†</sup>, Zhang, S., Li, C.-S. R., Scheinost, D., Constable, R. T., Chun, M. M. (2018). Connectome-based predictive modeling of attention: Comparing different functional connectivity measures and prediction methods across datasets. *NeuroImage*, *167*: 11–22.
- Jangraw, D. C., Gonzalez-Castillo, J., Handwerker, D. A., Ghane, M., Rosenberg, M. D., Panwar, P., Bandettini, P. A. (2018). A functional connectivity-based neuromarker of sustained attention generalizes to predict recall in a reading task. *NeuroImage*, *166*: 99–109.
- Rosenberg, M. D., Hsu, W.-T.<sup>†</sup>, Scheinost, D., Constable, R. T., Chun, M. M. (2018). Connectome-based models predict separable components of attention in novel individuals. *Journal of Cognitive Neuroscience*, *30*(2): 160–173.
- List, A., Rosenberg, M. D., Sherman, A., Esterman, M. (2017). Pattern classification of EEG signals reveals perceptual and attentional states. *PLoS ONE*, *12*(4): e0176349.
- Rosenberg, M. D., Finn, E. S., Scheinost, D., Constable, R. T., Chun, M. M. (2017). Characterizing attention with predictive network models. *Trends in Cognitive Sciences*, *21*(4): 290–302.
- Shen, X., Finn, E. S., Scheinost, D., Rosenberg, M. D., Chun, M. M., Papademetris, X., Constable, R. T. (2017). Using connectome-based predictive modeling to predict individual behavior from brain connectivity. *Nature Protocols*, *12*(3): 506–518.
- Rosenberg, M. D., Zhang, S., Hsu, W.-T.<sup>†</sup>, Scheinost, D., Finn, E. S., Shen, X., Constable, R. T., Li, C.-S. R., Chun, M. M. (2016). Methylphenidate modulates functional network connectivity to enhance attention. *Journal of Neuroscience*, *36*(37): 9547–9557.
- Chekroud, A. M., Ward, E. J., Rosenberg, M. D., Holmes, A. J. (2016). Patterns in the human brain mosaic discriminate males from females. *Proceedings of the National Academy of Sciences*, pii: 201523888. (Letter).
- Rosenberg, M. D., Finn, E. S., Scheinost, D., Papademetris, X., Shen, X., Constable, R. T., Chun, M. M. (2016). A neuromarker of sustained attention from whole-brain functional connectivity. *Nature Neuroscience*, *19*(1): 165–171. [Featured in *News and Views* by Smith (2016)]

Finn, E. S., Shen, X., Scheinost, D., Rosenberg, M. D., Huang, J., Chun, M. M., Papademetris, X., Constable, R. T. (2015). Functional connectome fingerprinting: identifying individuals using patterns of brain connectivity. *Nature Neuroscience*, *18*(11): 1664–1671.

Rosenberg, M. D., Finn, E. S., Constable, R. T., Chun, M. M. (2015). Predicting moment-to-moment attentional state. *NeuroImage*, *114*: 249–256.

Esterman, M., Rosenberg, M. D., Noonan, S. (2014). Intrinsic fluctuations in sustained attention and distractor processing. *Journal of Neuroscience*, *34*(5): 1724–1730.

Rosenberg, M., Noonan, S., DeGutis, J., Esterman, M. (2013). Sustaining visual attention in the face of distraction: A novel gradual-onset continuous performance task. *Attention, Perception, & Psychophysics*, *75*(3): 426–439.

Esterman, M., Noonan, S., Rosenberg, M., DeGutis, J. (2013). In the zone or zoning out? Tracking neural and behavioral fluctuations in sustained visual attention. *Cerebral Cortex*, *23*(11): 2712–2723.

## BOOK CHAPTERS

Rosenberg, M. D. & Chun, M. M. (2020). Network models of attention and working memory. In M. Gazzaniga & D. Poeppel (Eds.), *The Cognitive Neurosciences VI*. MIT Press.

## PREPRINTS AND SUBMITTED MANUSCRIPTS

deBettencourt, M. T., Bainbridge, W. A., & Rosenberg, M. D. (under review). Functional neuroimaging. *APA Handbook of Research Methods in Psychology 2<sup>nd</sup> Edition*. American Psychological Association.

Hakim, N.<sup>†</sup>, Awh, E., Vogel, E. K., Rosenberg, M. D. (in revision). Predicting cognitive abilities across individuals using sparse EEG connectivity. *bioRxiv*, 10.1101/2020.07.22.216705.

Fountain-Zaragoza, S.<sup>†</sup>, Manglani, H. R., Rosenberg, M. D., Prakash, R. S. (in revision). Defining a connectome-based predictive model of attentional control in aging.

Kardan, O.\* Layden, E., Choe, K. W., Lyu, M., Zhang, X., Beilock, S. L., Rosenberg, M. D., Berman, M. G. (under review). Scale-invariance in brain activity predicts practice effects in cognitive performance.

Meredith W. J.\* Cardenas-Iniguez C.<sup>†</sup>, Berman M. G., Rosenberg M. D. (under review). Effects of the physical and social environment on youth cognitive performance. *PsyArXiv*, 10.31234/osf.io/3yq7w.

Song, H.\* Finn, E. S., Rosenberg, M. D. (in revision). Neural signatures of attentional engagement during narratives and its consequences for event memory. *bioRxiv*, doi.org/10.1101/2020.08.26.266320.

Salehi, M., Scheinost, D., Rosenberg, M. D., Finn, E. S., Chun, M. M., Constable, R. T. (in revision). Network connectivity changes between task and resting-state fMRI data reveal flexibility and generalize attention prediction.

Yoo, K., Rosenberg, M. D., Kwon, Y. H., Avery, E. W., Lin, Q., Constable, R. T., Chun, M. M. (under review). A brain-based universal measure of attention: predicting task-general and task-specific attention performance and their underlying neural mechanisms from task and resting state fMRI. *bioRxiv*, doi.org/10.1101/2021.02.13.431091.

Yoo, K., Rosenberg, M. D., Kwon, Y. H., Scheinost, D., Constable, R. T., Chun, M. M. (under review). A cognitive state transformation model for task-general and task-specific subsystems of the brain connectome. *bioRxiv*, doi.org/10.1101/2020.12.23.424176.

Yousif, S. R., Rosenberg, M. D., Keil, F. C. (in revision). Using space to remember: Short-term spatial structure spontaneously improves working memory.

## INVITED COLLOQUIA

- 2021 *Keynote Address*, Australian Chapter of the Organization for Human Brain Mapping  
2021 *Cognitive Science Colloquium*, Cognitive Science Program, Indiana University, Bloomington  
2020 *Seminar Series*, Behavioral Pharmacology Research Unit, Johns Hopkins University School of Medicine  
2020 *Neuro@Noon Seminar*, Department of Biomedical Engineering, Sungkyunkwan University, and the Center for Neuroscience Imaging Research, Institute for Basic Science  
2020 *Cognitive Area Brown Bag Series*, Department of Psychology, University of Virginia  
2020 *Neuroscience Institute Seminar*, The University of Chicago  
2020 *Neuroscience Research Seminar*, Department of Neuroscience, School of Medicine at the University of Texas Rio Grande Valley  
2019 *Vision Seminar*, Department of Psychological and Brain Sciences, Johns Hopkins University  
2019 *Computational Social Sciences Workshop*, The University of Chicago  
2018 *Cognitive Brown Bag*, Department of Psychological and Brain Sciences, Dartmouth College  
2018 *Patrick Holden Lecture*, UT Health San Antonio  
2018 *Center for Cognitive and Behavioral Brain Imaging Seminar*, The Ohio State University  
2018 *Clinical Psychology Brown Bag*, The Ohio State University  
2018 *Psychology Department Seminar*, The University of Chicago  
2017 *Computational Biology Seminar Series*, IBM Research  
2016 *Psychology Department Seminar*, Columbia University  
2015 *Yale Institute for Network Science/Kavli Institute for Neuroscience Lecture*, Yale University  
2015 *Methods & Tutorial Series*, VA Boston Neuroimaging Research Center  
2014 *Current Works in Cognitive Psychology*, Yale University  
2014 *Magnetic Resonance Research Center fMRI Seminar*, Yale University School of Medicine  
2013 *Current Works in Cognitive Psychology*, Yale University

## INVITED CONFERENCE AND WORKSHOP PRESENTATIONS

- 2020 *Annual Meeting of the International Society for Research on Impulsivity* (virtual)  
2019 *Brain Health Across the Lifespan*, National Academies of Sciences, Engineering, and Medicine, Washington, D.C.  
2018 *Neuroimaging Workshop*, Bill & Melinda Gates Foundation, Seattle, WA  
2018 *Summer Institute in Cognitive Neuroscience*, Tahoe, CA  
2017 *Flux: The International Congress for Integrative Developmental Cognitive Neuroscience*, Portland, Oregon  
2017 *Brainhack NYC* (Keynote), Child Mind Institute, New York, NY  
2016 *Young European Scientist Meeting*, Faculty of Medicine of University of Porto, Portugal  
2016 *3rd Biennial Brain Function Workshop*, Whistler, BC, Canada  
2014 *2nd Biennial Brain Function Workshop*, Whistler, BC, Canada

## CONTRIBUTED CONFERENCE PRESENTATIONS (selected)

\*primary trainee, †trainee collaborator

Kardan O\*, Stier AJ, Cardenas-Iniguez C, Pruijn J, Deng Y, Chamberlain T, Meredith WJ, Schertz KE, Zhang X, Bowman JE, Lakhtakia T, Tindel L, Berman MG, Rosenberg MD. (2021). Neuromarkers of attention and working memory distinguish these processes in children. *Organization for Human Brain Mapping*.

Corriveau A\*, Yoo K, Kwon YH, Chun MM, Rosenberg MD. (2021). Functional connectome stability as a marker of cognitive performance. *Organization for Human Brain Mapping*.

Chamberlain T\*, Rosenberg MD. (2021). Propofol modulates functional connectivity signatures of attention: A preregistered replication. *Organization for Human Brain Mapping*.

Wakeland-Hart CD\*, deBettencourt MT, Cao S, Bainbridge WA, Rosenberg MD. (2021). Building a comprehensive model of visual memory from images and individuals. *Vision Sciences Society*.

Rosenberg, MD. (2021). Building connectome-based predictive models in infancy and toddlerhood. *Society for Research in Child Development*.

Wakeland-Hart CD\*, deBettencourt MT, Bainbridge WA, Rosenberg MD. (2020). Predicting memory from individual attentional state and image memorability. *61st Annual Meeting of the Psychonomic Society*. (virtual)

Song H\*, Finn ES, Rosenberg MD. (2020). Changes in attentional engagement during narrative comprehension. *61st Annual Meeting of the Psychonomic Society*. (virtual)

Hakim N†, Awh E, Vogel EK, Rosenberg MD. (2020). Predicting cognitive abilities across individuals using sparse EEG connectivity. *61st Annual Meeting of the Psychonomic Society*. (virtual)

Song H\*, Finn ES, Rosenberg MD. (2020). Characterizing engagement dynamics during narrative comprehension. *28th Annual Workshop on Object Perception, Attention, and Memory*. (virtual)

Hakim N†, Awh E, Vogel EK, Rosenberg MD. (2020). Sparse EEG connectivity predicts cognitive ability in humans. *28th Annual Workshop on Object Perception, Attention, and Memory*. (virtual)

Kardan O\*, Kaplan S, Wheelock MD, Meyer D, Eggebrecht AT, Moore LA, Earl E, Feczko E, Miranda-Domínguez O, Snyder K, Graham A, Berman MG, Sung S, Uğurbil K, Yacoub E, Elison JT, Smyser CD, Fair DA, Rosenberg MD. (2020). Predicting age in 8-to-24-month-olds using resting-state functional connectivity MRI. *International Society for Developmental Psychobiology*. (virtual) (*Winner, Student/Postdoc Abstract Award*)

Meredith WJ\*, Cardenas-Iniguez C, Berman MG, Rosenberg MD. (2020). Characterizing relationships between the environment and aspects of youth cognition. *Flux Congress*. (virtual)

Hakim N†, Awh E, Vogel EK, Rosenberg MD. (2020). EEG connectivity identifies individuals and predicts behavior across data sets. *Virtual Working Memory Symposium*. (virtual)

Hakim N†, Awh E, Vogel EK, Rosenberg MD. (2020). EEG connectivity identifies individuals and predicts behavior across data sets. *Neuromatch 2.0*. (virtual)

Sanchez-Alonso S, Rosenberg MD, Aslin DN. (2020). Brain-wide functional connectivity differences during movie-watching and rest across development. *Organization for Human Brain Mapping*. (virtual)

Manglani HR†, Fountain-Zaragoza S, Rosenberg MD, Prakash RS. Characterizing the generalizability of an attention neuromarker in healthy aging. *Organization for Human Brain Mapping*. (virtual)

Meredith WJ\*, Cardenas-Iniguez C, Berman MG, Rosenberg MD. (2019). Characterizing relationships between working memory and the environment in childhood. *Mind Bytes Research Computing Expo and Symposium*, Chicago, IL. (*Winner, Data Science Poster Award*)

Rosenberg MD•, Martinez SA†, Rapuano KM, Conley MI†, Cohen AO, Cornejo MD, Hagler DJ, Meredith WJ\*, Anderson KM, Wager TD, Feczko E, Earl E, Fair DA, Barch DM, Watts R, Casey BJ. (2019). Characterizing behavioral and neural signatures of working memory in childhood. *Society For Neuroscience*, Chicago, IL. (*• Nanosymposium co-organizer and chair*)

Rapuano KM, Rosenberg MD, Horien C, Greene AS, Scheinost D, Constable RT, Casey BJ. (2019). Behavioral and neural predictors of vulnerability for risky behaviors in childhood. *Society For Neuroscience*, Chicago, IL.

Sanchez-Alonso S, Rosenberg MD, Aslin RN. (2019). Neuro-developmental differences in functional connectivity across task and rest. *Flux Congress*, New York, NY.

Hoyos P†, Kim NY†, Igelstrom K, Pecsok M, Pinsk M, Rosenberg MD, Kastner S. (2019). Establishing a neural basis for the high frequency of comorbidity amongst ADHD and DCD. *Flux Congress*, New York, NY.

Rapuano KM, Rosenberg MD, Horien C, Greene AS, Scheinost D, Constable RT, Casey BJ. (2019). Predicting vulnerability to risk behaviors in a large cohort of children. *Flux Congress*, New York, NY.

Rosenberg MD, Martinez SA†, Rapuano KM, Conley MI†, Cohen AO, Cornejo MD, Hagler DJ, Meredith WJ\*, Anderson KM, Wager TD, Feczko E, Earl E, Fair DA, Barch DM, Watts R, Casey BJ. (2019). Behavioral and neural signatures of working memory in childhood. *Flux Congress*, New York, NY.

Rapuano KM, Rosenberg MD, Watts R, Casey BJ. (2019). Characterizing the emergence of circuitry underlying cognitive control and reward motivation in youth. *Organization for Human Brain Mapping*, Rome, Italy.

Anderson KM, Collins M, Chin R, Ge T, Rosenberg MD, Holmes AJ. (2019). Parvalbumin interneurons underlie in-vivo brain function and schizophrenia risk. Talk at *Organization for Human Brain Mapping*, Rome, Italy.

Rosenberg MD, Martinez SA<sup>†</sup>, Rapuano KM, Conley MI<sup>†</sup>, Cohen AO, Cornejo MD, Hagler DJ, Anderson KM, Wager TD, Feczko E, Earl E, Fair DA, Barch DM, Watts R, Casey BJ. (2019). Task-specific neural signatures of working memory in childhood. *Organization for Human Brain Mapping*, Rome, Italy.

Conley MI<sup>†</sup>, Oh A<sup>†</sup>, Hadis S<sup>†</sup>, Watts R, Casey BJ, Rosenberg MD. (2019). Neural signatures of resource insecurity and overlapping child psychopathology symptoms. *Social & Affective Neuroscience Society*, Miami, FL.

Martinez SA<sup>†</sup>, Rapuano KM, Conley MI<sup>†</sup>, Cohen AO, Barch DM, Watts R, Casey BJ, Rosenberg MD. (2019) Behavioral and neural signatures of working memory in childhood. *Cognitive Neuroscience Society*, San Francisco, CA.

Sanchez-Alonso S, Rosenberg MD, Aslin DN. (2019). Characterizing the whole-brain functional connectivity signature of bilingualism. *Cognitive Neuroscience Society*, San Francisco, CA.

Rosenberg MD, Gruskin DC<sup>†</sup>, Finn ES, Holmes AJ. (2018). Inter-subject dynamic functional connectivity: Tracking functional network fluctuations during movie watching. *Society For Neuroscience*, San Diego, CA.

Avery EW<sup>†</sup>, Yoo K, Rosenberg MD, Na DL, Greene AS, Gao S, Scheinost D, Constable RT, Chun MM. (2018). Whole-brain functional connectivity predicts working memory performance in novel healthy and memory-impaired individuals. *Society For Neuroscience*, San Diego, CA.

Yoo K, Rosenberg MD, Noble S, Scheinost D, Constable RT, Chun MM. (2018). Multivariate distance correlation features of functional connectivity improve the reliability and power of connectome-based predictive modeling. *Society For Neuroscience*, San Diego, CA.

Rosenberg MD, Gruskin DC<sup>†</sup>, Finn ES, Holmes AJ. (2018). Tracking network fluctuations during movie watching with inter-subject dynamic functional connectivity. *Resting State and Brain Connectivity*, Montreal, Canada.

Gruskin DC<sup>†</sup>, Rosenberg MD, Holmes AJ. (2018). Altered inter-subject correlation scales with depressive symptom severity in children and adolescents. *Resting State and Brain Connectivity*, Montreal, Canada.

Joëssel A<sup>†</sup>, Magontier M, Rosenberg MD, Pichon S, Chun MM, Bavelier D. (2018). Investigating the neural correlates of flow in fMRI. *Lemanic Neuroscience Annual Meeting*, Les Diablerets, Switzerland.

Jangraw DC, Finn ES, Gonzalez-Castillo J, Handwerker DA, Ghane M, Rosenberg MD, Panwar P, Bandettini PA. (2018). Functional connectivity-based predictor of reading recall generalizes to multi-task data. Talk at *Organization for Human Brain Mapping*, Singapore.

Fountain-Zaragoza S<sup>†</sup>, Samimy S, Rosenberg MD, Wolfe T, Prakash RS. (2018). Investigation of a functional connectivity-based neuromarker of attention in older and younger adults. *Global Brain Health and Performance Summit*, Columbus, OH.

Fong AHC<sup>†</sup>, Yoo K, Rosenberg MD, Scheinost D, Constable RT, Chun MM. (2018). Dynamic functional connectivity predicts individual differences in attention. *Cognitive Neuroscience Society*, Boston, MA.

Kumar S<sup>†</sup>, Rosenberg MD, Yoo K, Scheinost D, Constable RT, Chun MM. (2018). An information network flow approach to measuring functional connectivity and predicting behavior. *Cognitive Neuroscience Society*, Boston, MA.

Rosenberg MD, Scheinost D, Hsu W-T<sup>†</sup>, Avery EW<sup>†</sup>, Hampson M, Constable RT, Chun MM. (2018). Real-time neurofeedback of large-scale brain networks predicting attention. Talk at *Alpine Brain Imaging Meeting*, Champéry, Switzerland.

Rosenberg MD, Scheinost D, Hsu W-T<sup>†</sup>, Constable RT, Chun MM. (2017). Real-time neurofeedback of functional connectivity in large-scale brain networks that predict attention. Talk at *Society for Neuroscience*, Washington, D.C.

Yoo K, Rosenberg MD, Hsu W-T<sup>†</sup>, Zhang S, Li C-SR, Scheinost D, Constable RT, Chun MM. (2017). Connectome-based predictive modeling (CPM) of sustained attention: Comparing different methods for feature selection and prediction. Talk at *Society for Neuroscience*, Washington, D.C.

Lin Q, Rosenberg MD, Yoo K, Hsu W-T<sup>†</sup>, O'Connell TP, Chun MM. (2017). Resting-state functional connectivity in large-scale brain networks predicts Alzheimer's disease symptom severity in novel individuals. *Society for Neuroscience*, Washington, D.C.

Jangraw DC, Gonzalez-Castillo J, Handwerker DA, Ghane M, Rosenberg MD, Panwar P, Bandettini PA. (2017). Functional connectivity-based neuromarker outperforms gaze, pupillary, and fMRI activation-based markers in predicting reading comprehension. Talk at *Society for Neuroscience*, Washington, D.C.

Rosenberg MD<sup>•</sup>, Scheinost D, Hsu W-T<sup>†</sup>, Finn ES<sup>•</sup>, Constable RT, Chun MM. (2017). Large-scale functional connectivity networks predict individual differences and fluctuations in attention. Talk at *Organization for Human Brain Mapping*, Vancouver, BC, Canada. (<sup>•</sup> *Symposium organizers*)

Rosenberg MD, Scheinost D, Hsu W-T<sup>†</sup>, Finn ES, Constable RT, Chun MM. (2017). Large-scale functional connectivity networks predict attention fluctuations. *Organization for Human Brain Mapping*, Vancouver, BC, Canada.

Jangraw DC, Gonzalez-Castillo J, Handwerker DA, Ghane M, Rosenberg MD, Panwar P, Gutierrez B, Bandettini PA. (2017) Functional connectivity-based predictors of naturalistic reading comprehension. *Organization for Human Brain Mapping*, Vancouver, BC, Canada.

Hsu W-T<sup>†</sup>, Rosenberg MD, Scheinost D, Finn ES, Constable RT, Chun MM. (2017). Resting-state functional connectivity in large-scale brain networks predicts neuroticism and extraversion in novel individuals. *Cognitive Neuroscience Society*, San Francisco, CA.

Rosenberg MD, Hsu W-T<sup>†</sup>, Scheinost D, Finn ES, Constable RT, Chun MM. (2016). Connectome-based fMRI models predict separable components of attention in novel individuals. Talk at *Object Perception, Attention, & Memory*, Boston, MA.

Salehi M, Scheinost D, Finn ES, Rosenberg MD, Chun MM, Constable RT. (2016). Network changes between task- and resting-state functional connectivity predict behavior across datasets. *Society for Neuroscience*, San Diego, CA.

Rosenberg MD, Zhang S, Hsu W-T<sup>†</sup>, Scheinost D, Finn ES, Shen X, Constable RT, Li C-SR, Chun MM. (2016). Methylphenidate modulates attention network strength. *Resting State and Brain Connectivity*, Vienna, Austria.

Rosenberg MD, Finn ES, Scheinost D, Papademetris X, Shen X, Constable RT, Chun MM. (2015). Resting-state brain connectivity predicts ADHD symptom severity in individual children. *Organization for Human Brain Mapping*, Honolulu, HI.

Rosenberg MD, Finn ES, Shen X, Scheinost D, Papademetris X, Constable RT, Chun MM. (2014). Strength of task-relevant networks at rest predicts sustained attention performance. *Society for Neuroscience*, Washington, D.C.

Rosenberg MD, Finn ES, Constable RT, Chun MM. (2014). Predicting moment-to-moment attentional state. *Vision Sciences Society*, St. Pete Beach, FL.

Finn ES, Rosenberg MD, Shen X, Scheinost D, Papademetris X, Chun MM, Constable RT. (2014). Predicting working memory and attentional performance from complex networks during task and at rest. *Organization for Human Brain Mapping*, Hamburg, Germany.

Rosenberg MD, Finn ES, Chun MM. (2013). Tracking fluctuations in sustained attention under varying degrees and types of task load. *Society for Neuroscience*, San Diego, CA.

Finn ES, Rosenberg MD, Shen X, Constable RT, Chun MM. (2013). Predicting attention and performance across varying task loads from complex networks during task and at rest. *Society for Neuroscience*, San Diego, CA.

Noonan S, Esterman M, Rosenberg M. (2013). Neural signatures of individual differences in sustained attention. *Organization for Human Brain Mapping*, Seattle, WA.



List A, Rosenberg M, Sherman A, Grabowecky M, Suzuki S, Esterman M. (2013). EEG pattern classification reveals the scope of local vs. global attention. *Vision Sciences Society*, Naples, FL.

List A, Rosenberg M, Sherman A, Grabowecky M, Suzuki S, Esterman M. (2013). Neural correlates of local vs. global attentional scope revealed via EEG pattern classification. *Cognitive Neuroscience Society*, San Francisco, CA.

Rosenberg M, List A, Sherman A, Grabowecky M, Suzuki S, Esterman M. (2012). Decoding EEG data reveals dynamic spatiotemporal patterns in perceptual processing. *Vision Sciences Society*, Naples, FL.

Esterman M, Noonan S, Rosenberg M. (2012). In the zone or zoning out? Behavioral and neural evidence for distinct attentional states. *Vision Sciences Society*, Naples, FL.

Rosenberg M, List A, Sherman A, Grabowecky M, Suzuki S, Esterman M. (2012). Classifying visual perception on a trial-by-trial basis using EEG signals. *Cognitive Neuroscience Society*, Chicago, IL.

Rosenberg M, Noonan S, DeGutis J, Esterman M. (2011). Sustaining visual attention in the face of distraction: A novel gradual onset continuous performance task. *Vision Sciences Society*, Naples, FL.

Esterman M, Noonan S, Rosenberg M, DeGutis J. (2011). In the zone or zoning out? Tracking neural and behavioral fluctuations in sustained visual attention. *Vision Sciences Society*, Naples, FL.

Noonan S, Rosenberg M, DeGutis J, Esterman M. (2011). In the zone or zoned out? Performance variability and BOLD fluctuations in the default-mode network. *Organization for Human Brain Mapping*, Québec City, Canada.

## RESEARCH SUPPORT

2021–24 National Science Foundation Research Grant (Role: PI)  
*Predicting attention fluctuations and their consequences for memory from functional brain connectivity*

2020–22 Bill & Melinda Gates Foundation Grant (Role: PI)  
*Predicting developmental outcomes with MRI functional connectivity*

2020–21 The University of Chicago College Curricular Innovation Fund (Role: PI)  
*Characterizing interactions between sustained attention and memory*

2019–20 Bill & Melinda Gates Foundation Grant (Role: PI)  
*Connectome-based predictive modeling of fMRI, fNIRS, and EEG data in infancy and early childhood*

## TEACHING AND ADVISING

### PHD STUDENTS

Hayoung Song, B.A., M.S. (The University of Chicago Neubauer Family Foundation Distinguished Scholar)  
Ziwei Zhang, B.S.  
Anna Corriveau, B.A.

### MASTER'S STUDENTS

Steven Cao (MA Program in the Social Sciences)  
Julia Priun (MA Program in the Social Sciences)  
Alfred Chao (Masters in Computational Social Science)

### POSTDOCTORAL FELLOWS

Omid Kardan, Ph.D.

### PHD COMMITTEES

2021 Nicole Hakim (The University of Chicago)

- 2020 Stephanie Fountain-Zaragoza (The Ohio State University), Victoria Okuneye (University of Chicago Pritzker School of Medicine)
- 2019 Carlos Cardenas-Iniguez, Omid Kardan, Elliot Layden (The University of Chicago)

## TRIAL RESEARCH COMMITTEES

- 2019- Gabrielle Akcelik, Sunny Lee, Andrew Stier, William Thyer (The University of Chicago)

## RESEARCH STAFF

- 2020- Taylor Chamberlain, B.A.
- 2019-20 Wesley Meredith, B.S., M.A.

## UNDERGRADUATE RESEARCHERS

- Current Henrique Caldas, Yuting (Jassmin) Deng, Deniz Eracar, Anthony James, Anurima Mummaneni, Lucy Tindel, Cheyenne Wakeland-Hart

## TEACHING

- 2020- Advanced Topics in Human Neuroimaging, The University of Chicago
- 2020- Cognitive Psychology, The University of Chicago
- 2019- Mind, The University of Chicago
- 2014 The Human Brain, Yale University, Teaching Fellow
- 2014 Introduction to Psychology, Yale University, Teaching Fellow
- 2013 Introduction to Cognitive Science, Yale University, Teaching Fellow

## PROFESSIONAL SERVICE AND ACTIVITIES

### AD HOC REVIEWING ([Publons](#))

- |   |   |
|---|---|
| <i>Acta Neuropsychiatrica</i>   | <i>Journal of Experimental Psychology: General</i>                            |
| <i>The American Journal of Psychiatry</i>                             | <i>Journal of Experimental Psychology: Human Perception &amp; Performance</i> |
| <i>Applied Cognitive Psychology</i>                                   | <i>The Journal of Neuroscience</i>  |
| <i>Attention, Perception, &amp; Psychophysics</i>                     | <i>Journal of Neurophysiology</i>   |
| <i>Biological Psychiatry</i>  | <i>Journal of Psychiatric Research</i>  |
| <i>Biological Psychiatry: Cognitive Neuroscience and Neuroimaging</i> | <i>Medical Research Council (United Kingdom)</i>                              |
| <i>Brain and Cognition</i>  | <i>Molecular Psychiatry</i>   |
| <i>Brain Connectivity</i>   | <i>National Science Foundation</i>  |
| <i>Cerebral Cortex</i>  | <i>Nature Communications</i>  |
| <i>Cognition</i>  | <i>Nature Human Behaviour</i>   |
| <i>Cognitive, Affective, &amp; Behavioral Neuroscience</i>            | <i>Nature Neuroscience</i>  |
| <i>Cognitive Research: Principles and Implications</i>                | <i>Nature Protocols</i>   |
| <i>Current Biology</i>  | <i>NeuroImage</i>   |
| <i>Current Directions in Psychological Science</i>                    | <i>NeuroImage: Clinical</i>   |
| <i>Current Opinion in Behavioral Sciences</i>                         | <i>PLOS Biology</i>   |
| <i>Developmental Cognitive Neuroscience</i>                           | <i>Proceedings of the National Academy of Sciences</i>                        |
| <i>eLife</i>  | <i>Progress in Neurobiology</i>   |
| <i>International Journal of Psychiatry in Clinical Practice</i>       | <i>Progress in Neuro-Psychopharmacology &amp; Biological Psychiatry</i>       |
| <i>iScience</i>   | <i>Psychological Medicine</i>   |
| <i>Journal of Clinical Child &amp; Adolescent Psychology</i>          | <i>Scientific Reports</i>   |
| <i>Journal of Cognitive Neuroscience</i>                              |   |

## **EDITORIAL BOARD**

2021– *Aperture*  
2018– *NeuroImage*

## **PROGRAM COMMITTEES**

2020 *Whistler Workshop on Brain Function*, Whistler, BC, Canada  
2017 *Flux Congress*, Portland, Oregon

## **UNIVERSITY AND DEPARTMENTAL COMMITTEES**

2020– Member, Department of Psychology Diversity & Inclusion Committee, The University of Chicago  
2019– Faculty Sponsor, Cognition Workshop, The University of Chicago  
2015–16 Psychology Department Representative, Graduate Student Assembly (GSA), Yale University  
2015–16 Co-Chair, GSA Committee on Campus Climate & Sexual Misconduct, Yale University  
2013–14 Student Representative, Psychology Department Colloquium Committee, Yale University  
2012–13 Co-Chair, Psychology Department Interview Organizing Committee, Yale University

## **OUTREACH**

2021 Neuroscience and AI lecture, University of Chicago Collegiate Scholars Program  
2020–21 College Day lectures, University of Chicago Bridge to College Program

## **MEDIA COVERAGE**

BBC News, CBS News, Connecticut Post, The Conversation, Discover Magazine, Forbes Magazine, Forge, The Guardian, Nature News, NBC News, Newsweek, NPR, PBS News, Popular Science, Science Magazine, Scientific American, South by Southwest, UChicago News, Wired, Yale Daily News