Maya L. Rosen
Department of Psychology
Harvard University
William James Hall
33 Kirkland St.
Cambridge, MA 02138

Phone. (518) 879-9429
Email. mayalrosen@fas.harvard.edu
Web. www.mayalrosen.com

Academic Appointments

2020-	Research Associate Department of Psychology Harvard University
2015-2020	Postdoctoral Research Fellow Department of Psychology University of Washington
2015	Instructor Department of Psychological & Brain Sciences Boston University

Education

2015	PhD, Psychological & Brain Sciences Boston University, Boston, MA
2007	Bachelor of Arts *magna cum laude,* Neuroscience & Spanish Skidmore College, Saratoga Springs, NY

Current Grant Support

2020-2025	National Institutes of Child Health and Human Development K99/R00 Pathway to Independence Award *The neurodevelopmental mechanisms linking environmental experience and executive function* Role: Principal Investigator

Completed Grants & Fellowships

2017-2020	National Institutes of Child Health and Human Development Ruth L. Kirschtein National Research Service Award *Long-term memory-guided attention: Development, environmental factors, and neural underpinnings* Role: Principal Investigator
2018-2019	Bezos Family Foundation *Neurodevelopmental mechanisms of memory-guided attention and in-group bias*: *Impacts of the early home environment.* Role: Principal Investigator Amount awarded: $81,000

Awards & Honors

2020	Postdoctoral Fellow Award *Cognitive Neuroscience Society*
2017	Early Career Research Prize *Developmental Science*
2017	Postdoctoral Mentoring Award Finalist *University of Washington*
2017	Early Career Travel Award *Society for Research in Child Development*
2017	Poster Award *Social and Affective Neuroscience Society*
2017	Postdoctoral Travel Award *University of Washington Office of Postdoctoral Affairs*
2015	Kavita Jain Dissertation Award for Best Dissertation *Department of Psychological and Brain Sciences, Boston University*
2014	People's Choice Poster Award *Cognitive Neuroscience Society*
2014	Felicia Sorembe Lambros Scholarship *Department of Psychological and Brain Sciences, Boston University*
2011	Outstanding Teaching Fellow Award *Department of Psychological and Brain Sciences, Boston University*
2007	The Hartnett Prize for Outstanding Research in Neuroscience *Skidmore College*
2007	*Phi Beta Kappa*
2007	*Sigma Delta Pi, The National Collegiate Hispanic Honors Society*
2007	*Periclean Honors Society*
2006	President's Team Award *Skidmore College*

Publications

[#] Undergraduate or post-baccalaureate research assistant co-author

23. Colich, N.L., **Rosen, M.L.**, Williams, E.S., & McLaughlin, K.A. Biological aging in childhood and adolescence following experiences of threat and deprivation: A systematic review and meta-analysis. (2020). *Psychological Bulletin.* Epub Ahead of print.

22. **Rosen, M.L**, Hagen, M.P.[#], Lurie, L.A.[#], Miles, Z.E.[#], Sheridan, M.A., Meltzoff, A.N., & McLaughlin, K.A. (2019). Cognitive stimulation as a mechanism linking socioeconomic status and executive function: A longitudinal investigation. *Child Development.* [Epub ahead of print] https://doi.org/10.1111/cdev.13315

21. **Rosen, M.L.**, Sheridan, M.A., Meltzoff, A.M., & McLaughlin, K.A. Distinct aspects of the early environment shape long-term memory, attention, and memory-guided attention: Implications for academic achievement. (2019). *Developmental Cognitive Neuroscience.* 40, 100731. https://doi.org/10.1016/j.dcn.2019.100731

20. **Rosen, M.L.**, Amso, D. & McLaughlin, K.A. The role of visual association cortex in scaffolding prefrontal cortex development: A novel mechanism linking socioeconomic status and executive

function (2019). *Developmental Cognitive Neuroscience.* 100699. [Epub ahead of print] https://doi.org/10.1016/j.dcn.2019

19. Devaney, K.J., **Rosen, M.L.**, Levin, E.J., & Somers, D.C. Visual attentional regions of the temporoparietal junction in individual subjects using a vivid, novel oddball paradigm. (2019). *Frontiers in Human Neuroscience.* https://doi.org/10.3389/fnhum.2019.00424

18. Lambert, H.K., Sambrook, K.A., Peverill, M., **Rosen, M.L**, Sheridan, M.A., & McLaughlin, K.A. (2019). Altered development of hippocampus-dependent associative learning following early life adversity. *Developmental Cognitive Neuroscience*. [Epub ahead of print] https://doi.org/10.1016/j.dcn.2019.100666

17. Jenness, J.L., Miller, A.B., **Rosen, M.L.,** & McLaughlin, K.A. (2018). Extinction learning as a potential mechanism linking high vagal tone with lower PTSD symptoms among abused youth. *Journal of Abnormal Child Psychology*. 47(4):659-670. https://doi.org/10.1007/s10802-018-0464-0

16. **Rosen, M.L.**, Sheridan, M.A., Sambrook, K.A., Meltzoff, A.N. & McLaughlin, K.A. (2018). Socioeconomic disparities in academic achievement: A multimodal investigation of neurodevelopmental mechanisms. *NeuroImage.* 173:298-310. http://doi.org/10.1016/j.neuroimage.2018.02.043

15. **Rosen, M.L.**, Sheridan, M.A., Sambrook, K.A., Meltzoff, A.N., Peverill, M.R., & McLaughlin, K.A. (2018). The role of visual association cortex in associative memory formation across development. *Journal of Cognitive Neuroscience.* 30(3):365-380. http://doi.org/10.1162/jocn_a_01202

14. **Rosen, M.L.**, Stern, C.E., Devaney, K.J., & Somers, D.C. (2018). Cortical and subcortical contributions to long-term memory-guided visuospatial attention. *Cerebral Cortex.* 28(8). 2935-2947. http://doi.org/10.1093/cercor/bhx172

13. Dennison M.J., **Rosen, M.L.**, Sambrook, K.A., Jenness J.L., Sheridan, M.A., & McLaughlin, K.A. (2017). Differential associations of distinct forms of childhood adversity with neural and behavioral measures of reward processing: Neurodevelopmental pathways to depression. *Child Development.* 90(1): e96-e113. https://doi.org/10.1111/cdev.13011

12. Jenness, J.L., **Rosen, M.L.**, Sambrook, K.A., Dennison, M.J., Lambert, H.K., Sheridan, M.A., & McLaughlin, K.A. (2017). Violence exposure and neural systems underlying working memory for emotional stimuli in youth. *Development and Psychopathology*. 16:1-12. https://doi.org/10.1017/S0954579417001638

11. **Rosen, M.L.**, Sheridan, M.A., Sambrook, K.A., Dennison, M.J., Jenness, J.L., Askren, M.K., Meltzoff, A.N. & McLaughlin, K.A. (2017). Salience network response to changes in emotional expressions of others is heightened during early adolescence: relevance for social functioning. *Developmental Science.* 21(3):e12571. http://doi.org/10.1111/desc.12571. ***Featured on journal cover.***

10. Lambert H., Sheridan, M.A., Sambrook, K.A., **Rosen, M.L.,** & McLaughlin, K.A. (2017). Hippocampal contribution to context encoding across development is disrupted following early-life adversity. *Journal of Neuroscience.* 37(7):1925-1934. http://doi.org/10.1523/jneurosci.2618-16.2017

9. Dennison, M.J., Sheridan, M.A., Busso, D.J., Jenness, J.L., Peverill, M., **Rosen, M.L.,** & McLaughlin, K.A. (2016). Neurobehavioral markers of resilience to depression amongst adolescents exposed to child abuse. *Journal of Abnormal Psychology*. 125(8). 1201-1212. http://doi.org/10.1037/abn0000215

8. **Rosen, M.L.**, Stern, C.E., Michalka, S.W., Devaney, K.J., & Somers, D.C. (2016). Cognitive control network contributions to memory-guided attention. *Cerebral Cortex*. 26(5):2059-2073. http://doi.org/10.1093/cercor/bhv028

7. Michalka, S.W., **Rosen, M.L.**, Kong L., Shinn-Cunningham, B.G., & Somers, D.C. (2016). Auditory spatial coding flexibly recruits anterior, but not posterior, visuotopic IPS. *Cerebral Cortex.* 26(3):1302-1308. http://doi.org/10.1093/cercor/bhv303

6. **Rosen, M.L.**, Stern, C.E., Michalka, S.W., Devaney, K.J., & Somers, D.C. (2015). Influences *of* long-term memory guided-attention and stimulus-guided attention on visuospatial representations within human intraparietal sulcus. *Journal of Neuroscience*. 35(32): 11358-11363. http://doi.org/10.1523/jneurosci.1055-15.2015

5. Michalka, S.W., Kong L., **Rosen, M.L.**, Shinn-Cunningham, B.G., & Somers, D.C. (2015). Short-term memory for space and time flexibly recruit complementary sensory-biased frontal lobe attention networks. *Neuron.* 87(4): 882-892. http://doi.org/10:1016/j.neuron.2015.07.028

4. Putcha, D., Ross, R., **Rosen, M.L.**, Norton, D., Cronin-Golomb, A, Somers, D.C., & Stern, C.E. (2014). Functional correlates of optic flow motion processing in Parkinson's disease. *Frontiers in Integrative Neuroscience*. 8(57). http://doi.org/10.3389/fnint.2014.00057

3. **Rosen, M.L.,** Stern, C.E., & Somers, D.C. (2014). Long-term memory guidance of visuospatial attention in a change detection paradigm. *Frontiers in Psychology.* 5(266). http://doi.org/10.3389/fpsyg.2014.00266

2. Kong, L., Michalka, S.W., **Rosen, M.L.**, Sheremata, S.L., Swisher, J.D., Shinn-Cunningham, B.G., & Somers, D.C. (2014). Auditory spatial attention representations in the human cerebral cortex. *Cerebral Cortex.* 24(3): 773-784. http://doi.org/10.1093/cercor/bhs359

1. **Rosen, M.L.** & Lopez, H.H. (2009). Menstrual cycle shifts in attentional bias for courtship language. *Evolution and Human Behavior.* 30(2):131-140. http://doi.org/10.1016/j.evolhumbehav.2008.09.007

Manuscripts Under Review or In Revision (available on request)

Lurie, L. A.[#], Hagen, M. P.[#], McLaughlin, K. A., Sheridan, M. A., Meltzoff, A. N., & **Rosen, M. L.** Mechanisms linking socioeconomic status and academic achievement: Cognitive stimulation and language. *Under Review*.

Rosen, M. L., Lurie, L. A.[#], Sambrook, K. A., Meltzoff, A. N., & McLaughlin, K. A. Neural mechanisms underlying the income-achievement gap: the role of the ventral visual stream. *Under Review*.

Heleniak, C., Bolden, C.[#], Lambert, H.K., **Rosen, M.L.,** King, K.M., Monahan, K.C., & McLaughlin, K.A. Distress tolerance as a mechanism linking violence exposure to problematic alcohol use in adolescence. *Under Review.*

Selected Conference Presentations

[#] Undergraduate or post-baccalaureate research assistant co-author

Rosen, M.L. & McLaughlin, K.A. Neuroscience of Adversity: Implications for Education. *Learning & the Brain: Educating Anxious Minds.* San Francisco, CA. February, 2020. [Talk]

Rosen, M.L. & McLaughlin, K.A. Dimensions of early life adversity: Neurodevelopmental mechanisms linking childhood adversity with psychopathology. *International Society for Developmental Origins of Health and Disease*. Melbourne, VIC, Australia. October, 2019. [Talk]

Rosen, M.L., Sambrook, K.A., Meltzoff, A.M., & McLaughlin, K. A. Neural networks supporting memory-guided and cued attention in children: Associations with socioeconomic status. *Flux Congress*. New York, NY. September, 2019. [Poster]

Rosen, M.L., Hagen, M.P.[#], Miles, Z.E.[#], Sheridan, M.A., Meltzoff, A.N., & McLaughlin, K.A. Socioeconomic status and executive function: The role of cognitive stimulation in the early home environment. *Society for Research in Child Development.* Baltimore, MD. March, 2019 [Talk]

Rosen, M.L. & McLaughlin, K. A. Childhood adversity and motivation for learning. *Mindset Scholars Network*. Seattle, WA. November, 2018. [Talk]

Rosen, M.L., Sheridan, M.A., Sambrook, K.A., Meltzoff, A.N. & McLaughlin, K.A. Socioeconomic status and developmental variation in intrinsic connectivity across childhood and adolescence. *Big Data, Little Brains: Flux Congress.* Chapel Hill, NC. May, 2018. [Poster]

Rosen, M.L., Sheridan, M.A., Sambrook, K.A., Meltzoff, A.N. & McLaughlin, K.A. Socioeconomic status and the brain across development: Implications for academic achievement. *Flux Congress.* Portland, OR. September, 2017. [Poster]

Rosen, M.L., Sheridan, M.A., Sambrook, K.A., Meltzoff, A.N. & McLaughlin, K.A. Socioeconomic status and the brain across development: a multimodal investigation. *Association for Psychological Science.* Boston, MA. May, 2017. [Talk]

Rosen, M.L., Sheridan, M.A., Sambrook, K.A., Dennison, M.J., Jenness, J.L., Meltzoff, A.N. & McLaughlin, K.A. Early adolescent specific recruitment of the salience network for changes in emotional expression in a working memory paradigm. *Society for Research in Child Development.* Austin, TX. April, 2017. [Talk]

Rosen, M.L., Sheridan, M.A., Sambrook, K.A., Miles, Z.E., Dennison, M.J., Jenness, J.L., Meltzoff, A.N. & McLaughlin, K.A. Neural mechanisms underlying working memory for emotional faces across development. *Society for Research in Child Development.* Austin, TX/ April, 2017. [Poster]

Rosen, M.L., Sheridan, M.A., Sambrook, K.A., Dennison, M.J., Jenness, J.L., Meltzoff, A.N. & McLaughlin, K.A. Identifying Changes in the Emotional Expressions of Others: Adolescent-specific salience network recruitment that predicts social behavior. *Social and Affective Neuroscience Society.* Los Angeles, CA. March, 2017. [Poster]

Rosen, M.L., Sheridan, M.A., Sambrook, K.A., Dennison, M.J., Jenness, J.L., Meltzoff, A.N. & McLaughlin, K.A. Neural mechanisms underlying working memory for emotional faces across development. *Flux.* St. Louis, MO. September, 2016. [Poster]

Somers, D.C., Stern, C.E., Devaney, K.J., and **Rosen, M.L.** Cognitive Control Network Contributions to Long-Term Memory-Guided Attention in the Human Cerebral Cortex, Cerebellum, Striatum, and Thalamus. *Society for Neuroscience*. Chicago, IL. November, 2015. [Talk]

Rosen, M.L., Stern, C.E., Devaney, K.J., and Somers, D.C. Functional MRI reveals a cognitive control subnetwork supporting long-term memory-guided visuospatial attention. *Vision Sciences Society.* St. Petersburg, FL. June, 2015. [Poster]

Brissenden, J., Levin, E.[#], Osher, D., **Rosen, M.L.**, Halko, M., and Somers, D.C. Cerebellar contributions to visual attention and visual working memory revealed by functional MRI and intrinsic functional connectivity. *Vision Sciences Society.* St. Petersburg, FL. June, 2015. [Poster]

Devaney, K.J., Levin, E.[#], **Rosen, M.L.,** Michalka, S.W., and Somers, D.C. fMRI-based functional localization of the ventral attention network in individual subjects. *Vision Sciences Society*. St. Petersburg, FL. June, 2015. [Poster]

Rosen, M.L., Stern, C.E., Michalka, S.W., Devaney, K.J., Kong, L., and Somers, D.C. Memory-guided attention and stimulus guided attention networks in the human parietal lobe. *Society for Neuroscience*. Washington, DC. November, 2014. [Talk]

Michalka, S.W**., Rosen, M.L.**, Stern, C.E., Kong, L., Shinn-Cunningham, B.G., and Somers, D.C. Auditory short-term memory for space but not for time recruits anterior visuotopic parietal maps. *Society for Neuroscience*. Washington, DC. November, 2014. [Talk]

Rosen, M.L., Stern, C.E., Michalka, S.W., Devaney, K.J., Kong, L., and Somers, D.C. Cognitive Control Network contributions to long-term memory guidance of visual spatial attention. *Cognitive Neuroscience Society*. Boston, MA. April, 2014. [Poster]

Bireley, J.D. [#], **Rosen, M.L.**, and Somers, D.C. Change-detection based investigations of mechanisms for attending to single and multiple locations in complex visual scenes. *Cognitive Neuroscience Society*. Boston, MA. April, 2014. [Poster]

Rosen, M.L., Stern, C.E., Bireley, J.D. [#], Michalka, S.W., Devaney, K.J., Kong, L., and Somers, D.C. Differential hemispheric asymmetries in posterior parietal cortex during long-term memory guided attention and visually guided attention. *Society for Neuroscience*. San Diego, CA. November, 2013. [Poster]

Rosen, M.L., Stern, C.E., Devaney, K.J., Michalka. S.W., Kong, L., and Somers, D.C. Long-term memory guidance of visuospatial attention in a change-detection paradigm. *Society for Neuroscience*. New Orleans, LA. October, 2012. [Poster]

Devaney, K.J., **Rosen, M.L.**, Michalka, S.W., and Somers, D.C. The temporoparietal junction: functional localization and functional connectivity in individual subjects. *Society for Neuroscience.* New Orleans, LA. October, 2012. [Poster]

Michalka, S.W., **Rosen, M.L.**, Kong, L., Shinn-Cunningham, B.G., and Somers, D.C. fMRI investigation of temporal sequence processing visual short-term memory of humans. *Society for Neuroscience.* New Orleans, LA. October, 2012. [Poster]

Rosen, M.L., Bachewski, S., Stern, C.E., and Somers, D.C. An examination of long-term memory guidance of visuospatial attention to multiple locations. *Cognitive Neuroscience Society*. Chicago, IL. April, 2012. [Poster]

Thomas, C.P., Fenske, M., Shepherd, K., **Rosen, M.**, Frederico, M., Denninger, J., Matthews, J., Fava, M., and Bar, M. A cognitive neuroscience framework for understanding mood II: Empirical evidence and clinical applications. *Society for Neuroscience*. Chicago, IL. November, 2009. [Poster]

Rosen, M.L., & Lopez, H.H. Menstrual cycle shifts in attentional bias for courtship language. *Human Behavior and Evolution Society.* Williamsburg, VA. June 2007. [Poster]

Chaired Conference Symposia

2019

Socioeconomic Status, Brain, and Cognitive Development: Environmental Mechanisms and Individual Differences. Society for Research in Child Development. Paper Symposium.

2017

Neural and Behavioral Underpinnings of Adaptive Behavior in Adolescence. Society for Research in Child Development. Paper Symposium.

Teaching Experience

2015

Instructor, PS 101, Introduction to Psychology (Boston University)
Average Rating: 4.7/5
25 undergraduates

2009-2012

Teaching Fellow, PS 231 Physiological Psychology (Boston University)
Average Rating: 4.6/5. ***Received Outstanding Teaching Fellow Award***
80-100 undergraduates

2011

Teaching Fellow, PS 336, Cognitive Psychology (Boston University)
Average Rating: 4.5/5
60 undergraduates

Outside Lectures by Invitation

2020

Mind, Brain, and Behavior Symposium
Harvard University

Child Development and Developmental Psychopathology
Harvard Medical School, Department of Psychiatry

Shenhav Lab,
Brown University

2019

Building Blocks of Cognition Lab,
University of California, Berkeley

Stanford Neurodevelopment, Affect, and Psychopathology Lab,
Stanford University

2018

Department of Psychology and Neuroscience,
University of North Carolina, Chapel Hill

2017

Center for Child and Youth Justice,
Seattle, WA

Developmental Cognitive Neuroscience Laboratory,
Brown University

2014

Laboratories for Cognitive Neuroscience
Children's Hospital Boston

Neuroscience Seminar
Skidmore College

2011

Neuroscience Seminar
Skidmore College

Undergraduate Mentoring

2019-2021

Malila Freeman, Harvard University
Honors Thesis: "Connection with nature as a protective factor against adverse outcomes associated with violence exposure in young children"

2017-2018

McKenzie Hagen, University of Washington
Honors Thesis: "Parental language as a mediator of the association between socioeconomic status and executive function in five-year-olds."
Won the Guthrie Prize for the Best Thesis in the Psychology Department

2012-2014

Daniel Bireley, Boston University
Honors Thesis: "Cognitive Control and Dorsal Attention Network Contributions to Context Dependent Spatial Navigation"

Media Coverage

2018

"What Teenagers Gain from Fine-Tuned Social Radar: Scientists Now See Adolescence as Time of Both Risk and Unusual Capacities" *Wall Street Journal.* Alison Gopnik

Predoctoral Research Experience

2009

Volunteer Research Assistant
Harvard Medical School. PI: Moshe Bar

2007-2008

Staff Research Associate
University of California, San Francisco. PI: Robert Messing

2006

Research Assistant
Skidmore College. PI: Hassan López

2002

Summer Research Assistant
University of California, San Francisco. PI: Patricia Janak

Society Memberships

Society for Neuroscience
Cognitive Neuroscience Society
Flux International Society for Developmental Cognitive Neuroscience
Social & Affective Neuroscience Society
Vision Sciences Society
Association for Psychological Scien*ce*

Ad Hoc Reviewer

Cerebral Cortex
Cognitive Development
Child Development
Current Opinion in Behavioral Science
Developmental Science
Developmental Cognitive Neuroscience
Emotion
Journal of Neurodevelopmental Disorders
NeuroImage
Neuropsychologia
Psychological Science