

Psychiatry Grand Rounds

WCM Department of Psychiatry
Psychology CE Announcement
Klerman Award

“The Enduring Relationship of Early Life Social Disadvantage to Brain Development and Risk for Mental Health Conditions”

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Wednesday, September 13th, 2023

11:00am – 12:30pm

<https://weillcornell.zoom.us/j/92812036154>

Meeting ID: 928 1203 6154

Password: 12345

1.5 CE credit available to WCM Department of Psychiatry full time and voluntary faculty Psychologists and Social Workers who sign in with their full name, attend the majority of the lecture and complete a survey which will be emailed following the completion of the lecture. Note the survey must be completed within 30 days of the lecture. Please contact Stephanie Harper at sth4009@med.cornell.edu for additional CE information

SPEAKER DISCLOSURE:

Drs. Barch has no relevant financial relationship(s) with ineligible companies to disclose and DO NOT INTEND to discuss off-label or investigational use of products or services.

Bio:

Deanna Barch is a clinical scientist whose research focuses on understanding normative pattern's cognitive function and brain connectivity and the mechanisms that give rise to the challenges in behavior and cognition found in illnesses such as schizophrenia and depression, utilizing psychological, neuroimaging and computational approaches across the lifespan. She is the Vice Dean of Research in Arts & Sciences at Washington University. She is also the Couch Professor of Psychiatry and a Professor of Radiology. She is Deputy Editor at Biological Psychiatry and Editor-in-Chief of Biological Psychiatry: Global Open Science. She is also the President of the Psychology Section of the American Association for the Advancement of Science. Dr. Barch is on the scientific boards of the Brain and Behavior Research Foundation, the One Mind Foundation, and the Stanley Foundation. Dr. Barch was on the Executive Committee of the Association for Psychological Science and the Scientific Council of the National Institute of Mental Health. She is a Fellow of both the Association for Psychological Science and the American College of Neuropsychopharmacology, a member of the Society for Experimental Psychology, and a member of the National Academy of Medicine and the American Academy of Arts & Sciences.

Abstract:

This talk will present results from a line of developmental research examining the relationship of early childhood poverty and early adversity to the development of the structure and functional connectivity of the human brain. The results highlight the important role of disruptions to subcortical brain structure and function. Further, this talk will evaluate the relative contributions of neighborhood versus the individual family, how such relationships evolve over the course of development, the mediating role of parenting, and their relationships to depression and cognitive function but early in life and at the transition to adulthood. Many of the findings in humans parallel more experimental research in animal models and highlight the critical need to address childhood poverty to enhance adaptive outcomes across the lifespan.

Learning Objectives:

- 1) Identify how early poverty relates to brain development and cognitive outcomes
- 2) List the mediating factors between poverty and brain development
- 3) Discuss what aspects of brain development are most strongly related to poverty

References:

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2. Deanna, M., Shirliff, E. A., Elsayed, N. M., Whalen, D. J., Gilbert, K., Vogel, A. C., Tillman, R., & Luby, J. L. (2020b). Testosterone and hippocampal trajectories mediate relationship of poverty to emotion dysregulation and depression. *Proceedings of the National Academy of Sciences of the United States of America*, 117(36), 22015–22023. <https://doi.org/10.1073/pnas.2004363117>
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4. Barch, D. M., Donohue, M. R., Elsayed, N. M., Gilbert, K., Harms, M. P., Hennefeld, L., Herzberg, M., Kandala, S., Karcher, N. R., Jackson, J. J., Luking, K. R., Rappaport, B. I., Sanders, A., Taylor, R., Tillman, R., Vogel, A. C., Whalen, D., & Luby, J. L. (2022). Early Childhood Socioeconomic Status and Cognitive and Adaptive Outcomes at the Transition to Adulthood: The Mediating Role of Gray Matter Development Across Five Scan Waves. *Biological psychiatry: Cognitive neuroscience and neuroimaging*, 7(1), 34–44. <https://doi.org/10.1016/j.bpsc.2021.07.002>
5. Triplett, R. L., Lean, R. E., Parikh, A., Miller, J. P., Alexopoulos, D., Kaplan, S., Meyer, D., Adamson, C., Smyser, T. A., Rogers, C. E., Barch, D. M., Warner, B., Luby, J. L., & Smyser, C. D. (2022). Association of Prenatal Exposure to Early-Life Adversity With Neonatal Brain Volumes at Birth. *JAMA network open*, 5(4), e227045. <https://doi.org/10.1001/jamanetworkopen.2022.7045>