

Child & Adolescent Psychiatry Grand Rounds

WCM Department of Psychiatry
Psychology CE Announcement
Karmason Award

Targeting the Brain to Treat Youth Anxiety Disorders and OCD: Can Cognitive Control Help Kids Grow Out of Illness?

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Wednesday, November 15th, 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:

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

Dr. Fitzgerald recently moved from the University of Michigan Medical School where she was the Phil F. Jenkins Research Professor of Depression to the Columbia University College of Physicians & Surgeons and New York State Psychiatric Institute (NYSPI) to assume the Ruane Professorship of Child and Adolescent Psychiatry. At Columbia University/NYSPI, she serves as Director of Pediatric Clinical Studies in the Center for OCD and Related Disorders, and Director of Research in the Children's Day Unit. She also co-leads NIMH-funded T32 and R25 training grants to cultivate the next generation of child and adolescent psychiatry researchers. Nationally, she serves on several boards, including the Board of Scientific Counselors for NIMH intramural program review. Dr. Fitzgerald is a child psychiatrist with clinical expertise in pediatric obsessive compulsive and anxiety disorders. Her research has implicated alterations of neural substrate for task control in affected children, adolescents and adults. Currently, she is conducting research to elucidate developmentally sensitive mechanisms of cognitive behavioral therapy (CBT) for patients at different ages. Dr. Fitzgerald is also studying a cognitive training strategy designed to reduce early childhood anxiety by increasing neural capacity for cognitive control. She has published extensively on these topics in general and child psychiatric journals.

Abstract:

Early intervention with cognitive behavioral therapy is recommended for pediatric OCD and anxiety disorders, but young patients often remain symptomatic even after treatment. To guide the development of novel, mechanistically targeted treatments to better resolve OCD and anxiety symptoms, the identification of neural circuits underlying psychological constructs with relevance across categorical diagnoses has been recommended (i.e., NIMH Research Domain Criteria initiative). One construct of relevance for understanding pediatric OCD and anxiety disorders is cognitive control, given that young patients have trouble dismissing obsessions, compulsions, and worry despite insight that these symptoms are excessive and unreasonable. This Grand Rounds lecture will present findings from a growing body of literature implicating brain-behavioral markers of cognitive control in pediatric OCD and anxiety disorders, including before and after treatment with cognitive behavioral therapy. It will conclude by presenting emerging evidence that interventions designed to enhance the functioning of the task control circuits underlying cognitive control may facilitate brain maturation to help affected youth to overcome symptoms.

Learning Objectives:

1. Describe research implicating cognitive control and task control networks in pediatric anxiety and obsessive compulsive disorders
2. Discuss conceptual models linking cognitive control processes and task control network abnormalities to symptom expression
3. Explain how neuroimaging and clinical trials can be combined to probe the relation between task control network function and symptom expression

References:

1. Schroder, H. S., Ip, K. I., Hruschak, J. L., Horbatch, F., Hall, M., Liu, Y., Mannella, K., Muzik, M., Rosenblum, K. L., Moser, J. S., & Fitzgerald, K. D. (2022). Targeting cognitive control to reduce anxiety in very young children: A proof of concept study. *Depression and anxiety*, 39(8-9), 646–656. <https://doi.org/10.1002/da.23270>
2. Fitzgerald, K. D., Schroder, H. S., & Marsh, R. (2021). Cognitive Control in Pediatric Obsessive-Compulsive and Anxiety Disorders: Brain-Behavioral Targets for Early Intervention. *Biological psychiatry*, 89(7), 697–706. <https://doi.org/10.1016/j.biopsych.2020.11.012>
3. Norman, L. J., Mannella, K. A., Yang, H., Angstadt, M., Abelson, J. L., Himle, J. A., Fitzgerald, K. D., & Taylor, S. F. (2021). Treatment-Specific Associations Between Brain Activation and Symptom Reduction in OCD Following CBT: A Randomized fMRI Trial. *The American journal of psychiatry*, 178(1), 39–47. <https://doi.org/10.1176/appi.ajp.2020.19080886>
4. Russman Block, S., Norman, L. J., Zhang, X., Mannella, K. A., Yang, H., Angstadt, M., Abelson, J. L., Himle, J. A., Taylor, S. F., & Fitzgerald, K. D. (2023). Resting-State Connectivity and Response to Psychotherapy Treatment in Adolescents and Adults With OCD: A Randomized Clinical Trial. *The American journal of psychiatry*, 180(1), 89–99. <https://doi.org/10.1176/appi.ajp.21111173>
5. Pagliaccio, D., Wengler, K., Durham, K., Fontaine, M., Rueppel, M., Becker, H., Bilek, E., Pieper, S., Risdon, C., Horga, G., Fitzgerald, K. D., & Marsh, R. (2023). Probing midbrain dopamine function in pediatric obsessive-compulsive disorder via neuromelanin-sensitive magnetic resonance imaging. *Molecular psychiatry*, 1–8. Advance online publication. <https://doi.org/10.1038/s41380-023-02105-z>