

# Psychiatry Grand Rounds

WCM Department of Psychiatry  
Psychology CE Announcement



**Weill Cornell  
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## *Neuroimaging Markers of Antipsychotic Treatment & Functional Outcomes*

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**Live Online**

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11:00am – 12:00pm

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

Meeting ID: 928 1203 6154

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1 CE credit available to WCM Department of Psychiatry full time and voluntary faculty Psychologists, Social Workers and LMHCs, 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 [wcmpsychiatryce@med.cornell.edu](mailto:wcmpsychiatryce@med.cornell.edu) for additional CE information

### **Speaker**

Dr. Sarpal completed residency training in psychiatry at The Zucker Hillside Hospital. He is currently an Associate Professor in the Department of Psychiatry at the University of Pittsburgh School of Medicine where he also serves as Medical Director of the Services for the Treatment of Early Psychosis (STEP) clinic at UPMC Western Psychiatric Hospital. His research focuses on characterizing and understanding mechanisms underlying clinical outcomes of psychotic disorders. His work has been supported by the National Institute of Mental Health, Brain & Behavior Research Foundation, and the Pittsburgh Foundation.

*Financial Disclosure: Dr. Sarpal 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.*

### **Abstract**

Schizophrenia spectrum disorders (SSD) are characterized by heterogeneous clinical outcomes. A large portion of individual with SSD experience treatment-refractory psychosis and poor functional outcomes, which contribute to large amount of burden on individuals, communities, and healthcare systems. Treatment options for both refractory psychosis and community-based functioning are limited, warranting a broader effort to understand mechanisms underlying these clinical outcomes. In recent years, there has been an accumulation of studies that characterize mechanisms related to antipsychotic treatment response, predominantly in first-episode or early course illness. This includes findings describing changes in large-scale functional circuits associated with successful treatment, including corticostriatal, default mode, and salience networks. Related spectroscopy studies have characterized glutamatergic mechanisms underlying treatment response. A growing number of neuroimaging studies have also focused on clozapine response and treatment refractory psychosis. Finally, a separate literature has examined neuroimaging markers of functional outcomes of SSD, largely focusing on interactions between cortical and subcortical systems. Overall, this line of work aims to parse that clinical heterogeneity of SSD and optimize outcomes via the elucidation of therapeutic targets and the development of mechanistically informed treatments.

### **Learning Objectives**

1. Review neural and molecular correlates of antipsychotic treatment in early-phase schizophrenia.
2. Describe emerging neuroimaging correlates of clozapine treatment.
3. Identify neural markers associated with functional outcomes of schizophrenia.

### **References**

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