Psychiatry Trainee Grand Rounds

WCM Department of Psychiatry

Psychology CE Announcement

"Emotion regulation and affective psychopathology: Capturing context and flexibility."

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Teachers College, Columbia University
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"Reviving Glutamate Drug Discovery Though Toxicity Selection"

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Leon Levy Research Fellow, New York State Psychiatric Institute

Wednesday, May 29th, 2024
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 wcmpsychiatryce@med.cornell.edu for additional CE information

SPEAKER DISCLOSURE: Drs. Chen and Steinfeld have 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.

Mark Shuquan Chen, M.S., M.Phil is a sixth-year PhD candidate in Clinical Psychology at Teachers College, Columbia University. Before graduate school, he obtained his B.S. in Psychology from Tsinghua University in Beijing, China. His research focuses on adversity, emotion regulation processes, and affective psychopathology. Within this framework, he investigates how sociocultural factors shape emotion regulation and examines the role that emotion regulation flexibility plays in affective outcomes. His work has been published in prominent journals such as Nature Mental Health, American Psychologist, Journal of Psychopathology and Clinical Science, and Clinical Psychological Science. He has received several prestigious awards, including the Distinguished Student Dissertation Award from the Society of Clinical Psychology (APA Division 12), the Career Development Leadership Program Award from the Anxiety and Depression Association of America (ADAA), and the President's Award from the Society for Research in Psychopathology (SRP).

Abstract:
Emotion regulation is crucial for understanding and treating various forms of psychopathology. In this talk, I will present two studies that explore recent developments in emotion regulation and affective psychopathology, emphasizing the importance of context and flexibility of emotion regulation. First, I will present a meta-analysis examining how national culture, race, gender, and development timing shape the function of emotion regulation. This analysis highlights the critical need to consider sociocultural contexts when generalizing emotion regulation findings and proposes a shift from viewing emotion regulation strategies as uniformly adaptive or maladaptive to understanding their flexibility. Second, I will present a series of ecological momentary assessment (EMA) studies that formally test whether different components of emotion regulation flexibility have independent affective benefits. These studies use real-time data collection to examine how individuals regulate their emotions in various real-world situations. The presentation will conclude with a discussion on the potential applications of these findings in creating digital interventions that are tailored to the unique emotion regulation patterns of individuals.

Learning Objectives:
1. Identify sociocultural factors that may shape the function of emotion regulation.
2. Demonstrate how the effect of emotion regulation strategies differs across different sociocultural contexts.
3. Asses digital methods to study unique emotion regulation patterns of individuals.

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Justin Steinfeld, MD, PhD obtained a Bachelor of Science from Yale College with an honors in molecular biophysics and biochemistry in 2011, Dr. Justin Steinfeld entered the MD/PhD program at Columbia's Vagelos College of Physicians and Surgeons. His PhD work in Dr. Eric Greene's Lab was funded through a F31 NRSA award to characterize the mechanisms and biophysical properties of DNA repair. Dr. Steinfeld then entered and is currently completing a combined training program in child and general psychiatry residency at NYP/Columbia/Weill Cornell/New York State Psychiatric Institute and a research fellowship funded by a Leon Levy Foundation and the Shaffer Scholar Program. His research interests are focused on understanding the pharmacological properties of metabotropic glutamate receptor dimerization as it relates to the development of new treatments for schizophrenia and autism.

Abstract:
Neurodevelopmental disorders, such as autism spectrum disorder, Fragile X syndrome, and schizophrenia have limited pharmacological interventions, often centered around dopaminergic modulation via second generation antipsychotic medications such as aripiprazole and risperidone. However, these medications have notable side effects and limited efficacy in the treatment of these illnesses. Growing evidence has implicated the metabotropic glutamate (mGlu) receptor as a promising pharmacological target for schizophrenia and autism especially subtypes, mGlu1 and mGlu5, which are expressed in the brain from early development and play roles in synaptic plasticity. Furthermore, mGlu1 and mGlu5 receptors likely form both homodimers and heterodimers in vivo, and understanding how to target these dimers allow the possibility specifically and differentially for modulation of specific glutamatergic circuits as well as avoidance of potential off-target toxicity.

Learning Objectives:
1. Demonstrate the importance of the metabotropic glutamate receptor as a target for neuropsychiatric diseases.
2. Discuss the potential biological importance of metabotropic glutamate receptors to form homo- and heterodimers.
3. Assess how selective targeting of homodimer versus heterodimer activation may serve to reduce toxicity in preclinical drug Trials.

References:
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