

Psychiatry Grand Rounds

WCM Department of Psychiatry

Psychology CE Announcement

Updates on the Immune System and Perinatal Mental Health: Advances and Challenges

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Weill Cornell Medicine

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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 wempsychiatryce@med.cornell.edu for additional CE information

SPEAKER: Dr. Osborne 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.

Lauren M. Osborne, MD, graduated from Weill Cornell Medical College and received her psychiatric training at Columbia University/New York State Psychiatric Institute. She completed both clinical and research fellowships in women's mental health and is an expert on the diagnosis and treatment of mood and anxiety disorders during pregnancy, the postpartum, the premenstrual period, and perimenopause. She serves as the Vice Chair of Clinical Research in the Department of Obstetrics & Gynecology at Weill Cornell Medicine. Her research on perinatal mental illness focuses on models of care and on biological mechanisms and biomarkers, with a focus on neurosteroids and the immune system, and she runs the PIPPI Lab – Psychoneuroimmunology in Pregnancy and Postpartum – at Weill Cornell. Dr. Osborne's clinical work consists of collaborative care for perinatal mental health within OB/GYN. She is also the chair of the Education Committee for Marcé of North America; founder and chair of the National Curriculum in Reproductive Psychiatry, a free web-based standardized curriculum; and an editor of *The APA Textbook of Women's Reproductive Mental Health*. Her work has been supported by the Brain and Behavior Foundation, the Doris Duke Foundation, the American Board of Psychiatry and Neurology, the NIMH, and the NICHD.

Abstract:

Perinatal Mood and Anxiety Disorders (PMADs) affect 1 in 7 pregnant and postpartum women nationally. PMADs affect not only the birthing parent but also the fetus, child, and family, and mental health conditions are the leading cause of pregnancy-related death. Despite this public health significance, our knowledge base about biological factors contributing to PMADs remains rudimentary. HPA axis activity, neuroendocrine changes, and GABA receptor plasticity may all play a role. There is also growing evidence of a role for the immune system. Immune functioning shifts radically across pregnancy, as the body changes to support implantation, keep foreign pathogens out while protecting the one (the fetus) already inside, and allow parturition. A number of studies show that further immune dysregulation is associated with PMAD symptoms, but lack of consistent measures and goals across studies has made it challenging to understand the exact role of these immune system shifts. This presentation will cover recent data on the psychoneuroimmunology of pregnancy, including new data from Dr. Osborne's lab, and will point out both opportunities and challenges for future research.

Learning Objectives:

1. Discuss perinatal mood and anxiety disorders: prevalence and effects.
2. Analyze the complexities of immune functioning in pregnancy.
3. Explain pertinent data and information on immune mechanisms linked to perinatal mood and anxiety disorders.
4. Demonstrate a critical reflection on current study designs, assess and discuss areas of improvement and potential pitfalls in current research approaches.

References:

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2. Sherer, M. L., Voegtline, K., Park, H., Miller, K. N., Shuffrey, L. C., Klein, S. L., & Osborne, L. M. (2022). The immune phenotype of perinatal anxiety. *Brain, Behavior, and Immunity*, 106, 280–288. <https://doi.org/10.1016/j.bbi.2022.09.005>
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