Before Delivery Studies

Mother and infant antipsychotic study (R01 HD111117)

Principal Investigator: Thalia Robakis, MD, PhD

This study compares efficacy and outcomes for mothers and infants treated with antipsychotic medications compared with other agents or no medication. The study will not change participants' treatment, but will compare outcomes among individuals who select different options. It will help us better guide the selection of appropriate medications for pregnant individuals with mental health needs. Any pregnant individual planning to deliver at The Mount Sinai Hospital with a history of bipolar spectrum, schizophrenia/schizoaffective disorder, or any psychiatric hospitalization is eligible to enroll, regardless of current treatment.

Cerebrospinal fluid and peripheral markers of the neuropsychiatric sequelae of COVID-19: The generation cerebrospinal fluid pregnancy study (R01MH127315)

Principal Investigators: M. Mercedes Perez-Rodriguez, MD, PhD, and Lot de Witte MD, PhD

We aim to investigate the impact of the COVID-19 pandemic on maternal mental health during pregnancy, delivery, and the postnatal period. We seek to understand the link between COVID-19 exposure and inflammation in pregnancy as well as the development of mood disorders during the postpartum period. This study will have important implications for mental health in the vulnerable periods of pregnancy and postpartum. It may also identify targets for personalized treatment of the long-term neuropsychiatric symptoms of COVID-19 and other infections. You are eligible to participate in this study if you are pregnant and plan to deliver at The Mount Sinai Hospital.

Relapse after Antipsychotics Discontinuation during pregnancy (R01MH122869)

Principal Investigator: Veerle Bergink, MD, PhD

Approximately 50% of women with bipolar disorder discontinue their antipsychotic medication during pregnancy due to concerns for the fetus but this approach might put these women at high risk for relapse, which can have severe consequences. The proposed studies will investigate the risks and benefits of antipsychotic use during pregnancy using large and comprehensive Danish and Swedish population-based registers and will help to answer whether continuation or discontinuation of antipsychotics will present the least risk to both mothers and their offspring.

Infection and inflammation during pregnancy (R01MH124776)

Principal Investigator: Veerle Bergink, MD, PhD

The impact of maternal immune activation during pregnancy on brain development in humans is largely unknown. We propose to use the Generation R cohort database, which has a large sample size and a long follow-up period, to combine detailed clinical information on infections during pregnancy and inflammatory biomarkers with structural and functional brain imaging and detailed assessment of cognition, behavior, and psychopathology in the adolescent offspring. While a positive association could lead to targets for prevention and aggressive treatment of infections during pregnancy, negative findings or threshold effects could provide reassurance to pregnant people and their families.

After Delivery Studies

The Generation C Follow-Up Study (R01HD109613)

Principal Investigator: Anna-Sophie Rommel, PhD

This study aims to understand the effects of COVID-19, maternal inflammation, and vaccination against COVID-19 during pregnancy on the child's overall and brain development. We invite individuals who had participated in the Generation C study to take part in this follow-up study. Participation involves completing questionnaires about the child's cognitive, motor, and behavioral development, as well as measurement of the electrical activity of the child's brain using an electroencephalogram.

Risk architecture of postpartum psychosis (R21MH131933)

Principal Investigators: Behrang Mahjani, PhD

Postpartum psychosis is one of the most severe psychiatric conditions and, if left untreated, carries high risks of suicide and infanticide. It should be considered a medical emergency. Postpartum psychosis is generally considered a bipolar spectrum disorder, yet this disorder has not been classified in current disease classification systems because the underlying neurobiology and risk architecture is unclear. In particular, it is unknown how postpartum psychosis fits within the bipolar spectrum. For this reason prevention and treatment guidelines are lacking. The goal of this project is to identify the distinct risk architecture of postpartum psychosis.

Cohort study of first onset of postpartum psychosis in the Netherlands

Principal Investigator: Veerle Bergink, MD, PhD

This is a large prospective cohort of women with postpartum psychosis and mania. We collect detailed clinical phenotyping, blood samples, and imaging data during the acute phase, after remission, and during longer follow-up.

A Randomized Controlled Multi-Site Trial Evaluating Saint for Postpartum Depression (NCT07210255)

(Principal Investigators: Thalia Robakis, MD, PhD & Veerle Bergink, MD, PhD)

Postpartum depression (PPD) affects approximately one in five new mothers. We will soon be initiating a clinical trial evaluating SAINT – an advanced form of transcranial magnetic stimulation (TMS), a non-invasive brain stimulation therapy FDA-cleared for major depressive disorder. SAINT has shown significant promise in individuals with treatment-resistant depression, and this trial aims to assess its effectiveness in postpartum individuals diagnosed with major depressive disorder with peripartum onset. Given the profound impact of PPD on both maternal and infant health, we believe this study addresses a critical need in postpartum depression care by evaluating a rapid, non-pharmaceutical treatment option.