

Prevention of infection-driven preterm birth through development of a universal diagnostic test to identify high-risk pregnancies

Research overview

Preterm birth is the leading cause of death and disability in children under the age of five years in the developed world. Bacterial infection is highly associated with the earliest preterm births and is typically present in ~40% of all preterm birth cases. Bacteria responsible for infection are believed to primarily reside in the vagina; they migrate from here to the uterus. We currently have no means of identifying women at risk of infection-driven preterm birth. The aim of this project is to use a women's vaginal microbiological profile to establish a diagnostic test, which combined with clinical risk factors, could be used to identify high-risk women and enable them access to suitable prophylactic treatment options.

Research highlights

- Ethics approved for the Predict1000 study
 - Collection of vaginal samples from 1000 women at 18-22 wks GA
 - Recruitment has begun and at present 24 women have been recruited
- Ethics approved for the maternal blood microbial biomarker arm of the project (MB study)
 - Recruitment has been underway since early 2015 and to date we have collected samples from one woman who met our highly stringent inclusion criteria

Progress Report

Ethics for the Predict1000 and maternal blood biomarker (MB) studies has been approved and sample collection has begun for both of these. We anticipate that sample collection for both studies will be completed by December 2016.



THE TEAM

Chief Investigator Dr Matthew Payne PhD

Associate Investigators Prof John Newnham AM FRANZCOG Prof Jeff Keelan PhD Sponsors Women and Infants Research Foundation

1

RESEARCH REPORT - 2015

WOMEN AND INFANTS RESEARCH FOUNDATION - WE CAN SHAPE THE FUTURE through RESEARCH • DISCOVERY • DEVELOPMENT