

## Guest Lecture by Associate Professor Carlos Salomon (The University of Queensland) Translating Science from Bench to Bedside – A Case for Extracellular Vesicles



Prof. Carlos Salomon is the head of the Translational Extracellular Vesicles in Obstetrics and Gynaecology Group, NHMRC Investigator Fellow (EL2) and is considered the worldwide authority on biomarkers for complications of pregnancies and ovarian cancer.

In the last 10 years, Prof. Salomon's primary research and commercialisation activities have focused on the identification and validation of biomarkers, and development of In Vitro Multivariate Index Assays for clinically relevant complications (including ovarian cancers, and obstetrical syndromes) and their translation into clinical applications. He is a pioneer on investigation the release of extracellular vesicles (EVs) by the placenta and tumour cells and their utility as a biomarker for a wide range of pregnancy complications and ovarian cancer (OC). He has optimised methods to isolate total and placenta and tumour-derived EVs present in circulation, and profiled their content by quantitative proteomic analysis, and miRNA sequencing; identifying for the first time, molecules within EVs associated with different complications of pregnancies, and at early stages of oncogenic transformation in OC. One of the most significant contributions of his research program has been the development of a test for early detection of ovarian cancer, OCF-7, that displayed a classification efficiency of 98%. These outcomes of the research program provide a novel conceptual basis, and evidence for translation, resulting in changes in clinical practice and management.

Friday, 06 October 2023, 14:00  
Seminar room SR 57, MC2.P.01.019

