1. EPIDEMIOLOGY
Facilitators - Juan Manual Nardin, MD, PhD and Karla Damus, PhD

Objectives:

- To evaluate the different strategies (MANAGEMENT) currently in use in each country and region, to develop STUDIES OF INTERVENTIONS (Tocolytics, Community-based Interventions).
- To assess the relationship and effects of the different interventions for the PREVENTION of threatened preterm birth on maternal, fetal and neonatal outcomes, based on the previous Systematic Review of Interventions for Treatment of Preterm Labour, to develop new SYSTEMATIC REVIEWS.
- To further develop PREBIC/WHO CLINICAL GUIDELINES for diagnosis, prevention and treatment of preterm birth.

2. PATHWAYS OF PRETERM BIRTH
Facilitator – Stephen J Fortunato, MD
Objectives:

- Systematic review of literature for viral infections and spontaneous preterm birth
- Designing experiments to examine the pathways and biomarkers of viral infections in preterm birth

3. SYSTEMS BIOLOGY
Facilitators: Michael G. Gravett, MD and Craig Pennell, MD
Preterm birth represents a complex, multi-factorial endpoint with many unique risk factors, causes, and mechanisms. The Systems Biology workgroup is comprised of scientists and clinicians interested in utilizing cutting edge high throughput technology to characterize these factors in the investigation of preterm birth.

Objectives:

- Establish minimal and optimal guidelines for the collection of biological specimens that facilitate high-throughput analysis including
  - Genomics
  - Transcriptomics
  - Proteomics
  - Metabolomics

- Utilize systems biology to describe specific biologic pathways leading to preterm birth that can guide rational clinical interventions
- Integrate systems biology into phenotypic classification schema for preterm birth
- Develop multi-institutional study protocols that prospectively incorporate a systems biology approach

4. BIOMARKERS
Facilitator – Ramkumar Menon, MS, PhD

Preterm birth (PTB) presents a major clinical and diagnostic dilemma. Several biomarkers are routinely used clinically for diagnosis of preterm labor and most of these markers are either non-specific or detected too late. This working group has systematically reviewed all published reports on PTB biomarkers in the last 25 years to map out the existing knowledge and gaps in this area. The data will be presented and future research ideas will be developed.

Objectives:

- Assess current status of biomarkers and biomarker testing in preterm birth based on the recently concluded systematic review of biomarkers (literatures from 1965 – 2008).
- Discussion on new strategies for biomarker testing for preterm labor risk status assessment.
- Discussion and development of a new panel of biomarkers for preterm labor.
- Design prospective clinical trials for testing new panel of biomarkers.
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5. IMMUNOBIOLOGY AND ANIMANL MODELS IN PRETERM BIRTH
Facilitator – Elizabeth A Bonney. MD
Objectives:

- Review last year's plan
- Work on draft of first review.
- Begin work on web-platform data base.

6. INTERNATIONAL STUDIES AND GLOBAL PARTNERSHIPS IN PRETERM BIRTH
Facilitators – Calvin J. Hobel, MD; Chander Arora and PhD Christopher P. Howson, PhD
Objectives:

- Facilitate the development of a Global Report on Preterm Birth

- Define the Global impact of preterm birth based upon definition, incidence and cause

- Identify the Global source(s) for the prevention of preterm birth
  - What can be done at a Local, Regional and Global level?
  - What approach should be considered?