DBT-NIBMG team studying vaginal microbiome in preterm birth

New Delhi, April 05: Pregnancy is a complex process associated with successive changes in the female reproductive system. The reproductive tract is commonly flourished with a diverse community of bacterial taxa. Lactobacillus is the predominant bacteria which play a significant role in maintaining hygiene and pH of reproductive system.

Preterm birth is the second most important reason for children's mortality and morbidity after pneumonia. In India, every year approximately 3.5 million births are born as preterm, out of which 0.3 million babies die due to complications of preterm birth.

Identification of the complex aetiologies behind premature delivery is a big challenge worldwide. The vagina plays an important role in childbirth and is also home to a population of facultative and obligate anaerobic microorganisms that maintains the vaginal milieu. This polymicrobial community is difficult to characterise through conventional microbiological culture-based methods and are collectively termed as the Vaginal Microbiome.

At DBT- National Institute of Biomedical Genomics (DBT-NIBMG), researchers are investigating the change in composition and diversity of the Maternal Microbiome associated with Preterm birth in India. NIBMG is collaborating with the scientist of THSTI and RCB in collecting of samples from GARBH-Ini cohort, an interdisciplinary Group for Advanced Research in BirtH outcomes- DBT India Initiative. A multi-omics approach will be undertaken to dissect the host-microbiome interactions between host factors and differentially
enriched microbial gene families as well as functional pathways that ultimately lead to Preterm Birth.

**Contact Person & Contact Details:**

**Ms. Mousumi Sarkar, Email:** ms1@nibmg.ac.in  
**Dr. Arindam Maitra, Email:** am1@nibmg.ac.in

Link: https://www.nibmg.ac.in/