

Call for Letters of Intent (LOI) on Placental Research

Background

Fetal growth and development is regulated in a very complex manner and critically hinges on the growth and development of placenta. This unique organ of fetal origin has been indicated to predict not only the outcome of a pregnancy, but also the long term health of the baby. Difficulties in real time assessment in pregnancy due to largely inaccessible position of the placenta have hampered studies and it is thus called the 'least understood' human organ. Existing data/samples can be utilized to identify newer markers/molecular signatures for understanding the biology of normal and adverse pregnancy outcomes.

The goal of this advertisement is to support studies on this least understood organ. This opportunity is open to those working on placenta and also basic and clinical researchers desirous of developing and honing their skills in placental research.

LOI s for Competitive Grant mechanism - Broad Areas of Interest

-) Detailed Biology of Placental development and function across pregnancy-studies on disease sub-clusters including profiles without any complications with an aim to develop novel biomarkers.
-) Study Placental reflection of maternal morbidity/adverse pregnancy outcome including preterm birth, fetal growth restriction, and preeclampsia.
-) Imprints of future aberrations in growth and development and disease risk (Developmental Origins of Health & Disease, DOHaD)
-) Development and evaluation of minimally invasive/ non-invasive markers/diagnostics (structural and functional, including imaging techniques and circulating biomarkers) for predicting pregnancy outcome

In vitro and *in vivo* model system in the above identified priorities.

LOIs will be screened based on clarity of questions asked/ hypothesis, relevance and innovative approaches, ability to implement the approaches, background of the investigator and feasibility of doing rigorous research in his present setting. While experience in the area will be valued but will not be limiting for the right proposal

Letter of Intent (LOI) for Grand Challenges

-) To improve current methods and develop new technology for real time assessment of human placenta in the field of non-invasive imaging techniques of placental structure and function.

- J) Large scale “omic” studies on placental specimens (different types of cells, secretory vesicles) to provide insights into normal placental development and function and allow identification of key gestational stage signatures.

For this programme, LOI will only help in identifying investigators (both clinicians and scientists) who study the placenta and also those who have never previously applied their approaches to the placenta but are desirous of delving into this area.

A networking meeting of all the selected participants would then be facilitated by DBT to develop multi-approach, multi-disciplinary programme towards an identified goal with both short term and long term objectives clearly defining the scientific approaches.

How to Apply: Interested investigators/scientists/clinical researchers working in recognized R & D Institutions can submit the LoIs through email as per details given below. Two hard copies of the same should be sent to **Dr. Anamika Gambhir [Joint Director (DBT)], Department of Biotechnology**, Block-2, Room no.610, CGO Complex, Lodhi Road, New Delhi-110003, bearing the Advertisement No. and Title of the call for LoIs **by 31st July, 2016.** (Email: anamika.dbt@nic.in / medbio2.hddb@nic.in)

Proforma

Component ‘A’	Component ‘B’
i. Project/ Programme Title ii. Broad Area iii. Specific Area of your specialization iv. Single or Multi-centric v. Names(s) of the Investigator(s), Institute address, Contact numbers etc.	i. Scientific Hypothesis and key questions to be addressed and Primary Objectives (100 words) ii. How will you test the hypothesis or approach towards development of technology and solutions? (500 Words)? iii. What is the novelty in your approach? iv. Why is the research a high Priority? v. Feasibility of doing the study in your present institution/workplace. vi. Best 3 publications in the last 3 years in relevant areas. vii. A one page CV of the investigators

This advertisement is also available in Hindi.