Exciting Opportunity for Multi-Disciplinary Research  
(NICHD Human Placenta Project; RFA-HD-15-034)

On February 26, 2015 the *Eunice Kennedy Shriver* NICHD, in conjunction with the National Institute of Biomedical Imaging and Bioengineering (NIBIB), announced the availability of up to $41.5 million dollars in FY15 to support paradigm-shifting innovations for in vivo human placental assessment in response to environmental influences. The RFA emphasizes the knowledge gaps in our ability to assess placental function across pregnancy as well as the recognized impact of environmental exposures on placental function and pregnancy outcomes. The overall **objective** of this funding opportunity is to develop tools for the safe and precise assessment of structure and function of the human placenta at a micro and macro level throughout gestation and the specific **purpose** is to identify specific technology gaps and to develop new technologies or new applications of current technologies that address them. The NIH is looking for interdisciplinary teams that will design and develop novel and innovative tools and technologies to expand the ways by which placental structure and function can be measured or otherwise assessed in humans across the span of pregnancy in real-time.

The research must address some aspect of environmental impact on placental function but the definition of environmental factors can range from readily quantified discrete physical entities (cigarette smoke, alcohol, medications, infection, air pollution, etc) or more general entities (such as exercise, diet, BMI, stress, etc).

Of specific interest to SMFM members is the requirement that all proposed teams must include at least one obstetric clinician to provide insights into current or potential clinical functional or safety limitations of the chosen technology(ies). Research teams are advised to have at least one expert in placental biology.

This represents a major funding commitment by the NIH that can address many of the compelling and persistent problems that all practicing maternal-fetal medicine specialists encounter on a daily basis. These will also be great opportunities to develop new, or expand existing, multidisciplinary research collaborations. The budget for each of the 8 or 9 proposed projects will be up to $3 million per year in direct costs and the applications are due on June 1, 2015.

The SMFM encourages all interested members to carefully review the RFA ([http://grants.nih.gov/grants/guide/rfa-files/RFA-HD-15-034.html](http://grants.nih.gov/grants/guide/rfa-files/RFA-HD-15-034.html)), to think about the opportunities for multidisciplinary collaboration either in your institution or elsewhere, and to consider preparing an application. Funding opportunities of this magnitude in our discipline are few and far between and this is a real opportunities for SMFM members to lead the development of new approaches that can provide significant and sustained improvements in pregnancy outcomes for our patients and their families.