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Title of project: Improving care for gestational diabetes mellitus in Denmark – new strategies for diagnosis, management and post pregnancy care to improve the health of mothers and babies

ABSTRACT

My proposed visit to Denmark aims to improve care for women with gestational diabetes (GDM) in Denmark. There are three major parts to this research, all of which are designed to build on the solid foundation of research collaborations already established during my previous funded DDA Visiting Professor Fellowship (2017 – 2019).

Firstly, I wish to collaborate with Danish researchers to find the best possible approach to **GDM diagnosis** in Denmark. We have already shown that GDM women in Denmark differ from those in other parts of the world and that “global” GDM diagnostic test cutoffs are not suitable for Denmark. Therefore, a locally appropriate solution is needed. Plans are now well advanced for a major project to provide up to date evidence to guide the best approach for the future. I shall also bring new approaches to considering not only blood glucose levels, but also other important features of the mother, such as obesity and previous pregnancy history, into the decision-making process for diagnosing and treating GDM.

The second aim is to provide the **best possible care for Danish women with GDM** after diagnosis. We will consider specific high-risk groups including obese women, those who have had previous weight loss (bariatric) surgery and those with severe insulin resistance, who require very large doses of insulin to control their GDM during pregnancy.

The third major aim is to **improve care for women with GDM after their pregnancy**. Although many people think that GDM finishes after the delivery of the baby, in fact the health risks to the mother and child are lifelong. For the mother, the main risks are later development of diabetes and obesity, but also include high blood pressure and heart disease. The children of GDM women are also at risk of diabetes and obesity, meaning that a family based, whole of life approach is likely to bring the best outcomes.