

**Postdoctoral studies at Department of Obstetrics and Gynecology,  
Oregon Health and Science University (OHSU), Portland, Oregon, U.S.  
Studies on preeclampsia prediction**

**Report for NFOG Funds for September 2019**

**Anna Sandström**

Since September 1<sup>st</sup> I am working as a visiting Scholar/ Postdoc in the Department of Obstetrics and Gynecology, Oregon Health and Science University (OHSU), Portland, Oregon, USA. The post-doc visit is planned until July 31, 2020. I am very grateful for the received funding from the NFOG Funds to enable this stay.

My post-doc at OHSU has started off well with my mentor Jonathan Snowden, Associate Professor, epidemiologist and collaborations with Aaron Caughey, Professor in Obstetrics and Gynecology, Ellen Tilden, midwife, PhD and two statisticians. I am also supervising Abigail Newby-Kew, a PhD student in Epidemiology.

Together with Dr Snowden, we have several projects within perinatal epidemiology including preeclampsia prediction, long-term follow-up in women with preeclampsia and labor progression studies. The first study on preeclampsia prediction we have done together "*Clinical risk assessment in early pregnancy for preeclampsia in nulliparous women: A population based cohort study*" (that was conducted before I arrived) is submitted to PLOS One. We have been working on responses to reviewers and submitted those in the end of October. Our study on longitudinal prediction for preeclampsia is ongoing. We have result and I am writing on the manuscript. We are starting up several new studies with different collaborations at OHSU, with both Swedish and US data from the State of Oregon. We are planning an application for US National Institutes of Health (NIH) funding and Swedish funding on collaborative projects.

Our inter-disciplinary work within obstetrics and birth outcomes has exposed me to advanced epidemiologic methods as applied to obstetrics. I have learned a lot about advanced quantitative methods (e.g., machine learning) and causal inference (e.g., causal diagrams, propensity score analysis, instrumental variables) as applied to obstetrics. I have also got to comprehend the American health system within Obstetrics and Gynecology. Last week I attended a conference by the Oregon Perinatal Collaborative for improved maternal and neonatal outcomes. It was clear that a lot of our clinical practice within Obstetrics in Sweden is similar but there are also vast differences!

My office is at the Department of Obstetrics and Gynecology at the Marquam Hill campus, where I meet department faculty and trainees, and join "Grand rounds" at the clinic. I will also present my research for clinicians, the research group and at the Public Health Department during the fall.

I am truly grateful for getting this opportunity to collaborate with skilled researchers within perinatal epidemiology, to gain new knowledge and to experience a new health and research system.

Best regards,

Anna Sandström  
Specialist in Obstetrics and Gynecology, PhD