## PREGNANCY GERMS: FRIEND OR FOE? HOW THE MATERNAL MICROBIOME INFLUENCES PREGNANCY HEALTH

WHITE PLAINS, N.Y., DEC. 11, 2014 – Some of the bacteria and other microorganisms that exist in a woman's mouth, digestive system, reproductive organs or other body parts may be essential for a healthy pregnancy, as well as to the development of the baby's own collection of microbes. But some – or too many of certain ones -- may lead to a premature birth.

The microbiome, a community of microorganisms on and in the body, is an unchartered area for research that may help explain health issues as different as preterm birth, asthma and arthritis.

Two experts in the microbiome, Kjersti Aagaard MD, PhD, Baylor College of Medicine and Jacques Ravel, PhD, Institute for Genomics Sciences, University of Maryland School of Medicine, discussed their latest research, how the placental and vaginal microbiome may affect the length of a pregnancy, and when those germs may be helpful or not at a March of Dimes luncheon today.

For more than a century, a pregnant woman's uterus and placenta were thought to be sterile environments that protected the fetus from bacteria elsewhere in the body. But research has recently determined that the human placenta has its own microbiome, and that the bacterial cells in the placenta likely came from other areas of the mother's body.

Understanding the role of the microbiome is of great interest to scientists seeking to learn what triggers labor in a preterm birth. There are differences in the bacteria found in the vagina of pregnant and non-pregnant women and the bacteria in the placenta are different at different weeks of pregnancy.

Although there may be a link between a woman's diet and lifestyle and her microbiome, the research has not yet yielded specific advice for patients beyond general guidelines to eat a healthy, low fat diet and make judicious use of antibiotics.

More than 450,000 babies are born too soon each year in the United State. Preterm birth is the leading cause of newborn death, and babies who survive an early birth often face serious and sometimes lifelong health challenges, such as breathing problems, jaundice, developmental delays, vision loss, and cerebral palsy. Even babies born just a few weeks too soon have higher rates of death and disability than full-term babies.

The March of Dimes is the leading nonprofit organization for pregnancy and baby health. Our mission is to improve the health of babies by preventing birth defects, premature birth and infant mortality. For the latest resources and health information, visit our websites marchofdimes.org and nacersano.org and learn more about the Prematurity Research Centers at prematurityresearch.org. Find us on Facebook or follow us on Twitter.

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