

Silent infections may play role in preterm birth

April 26 2011, By Diane Duke Williams

(Medical Xpress) -- Every day, 1,500 babies in the United States are born too early, according to the March of Dimes. Even babies born just a few weeks too soon can face serious health problems and are at risk of lifelong disabilities, such as cerebral palsy, blindness and hearing loss.

“Preterm birth is a major health problem,” says Indira Mysorekar, PhD, assistant professor of obstetrics and gynecology at Washington University School of Medicine in St. Louis. “Little is known about the mechanisms of birth, and even less is known about what causes preterm birth.”

Mysorekar is a recipient of a four-year grant from the Burroughs Wellcome Fund. The grant is one of five nationwide that will explore the biological mechanisms and causes of preterm birth.

Mysorekar and a team of researchers at the School of Medicine are studying asymptomatic infections in the placenta and uterine lining to see if they may play a role in preterm birth.

Specifically, the scientists are looking for new mechanisms by which microorganisms are harbored in these tissues and potentially induce women to deliver [babies](#) before 37 weeks.

Mysorekar, who studies recurrent urinary tract infections (UTIs), has determined that bacteria hiding in the bladder lining can cause recurrent UTIs.

She will bring her expertise on the urinary tract to bear on similar issues in the placenta and uterine lining.

“I decided to see if bacteria during pregnancy could act in a related way and trigger preterm birth,” Mysorekar says.

Mysorekar will be working with a team of other experts on this initiative, including George Macones, MD, the Mitchell and Elaine Yanow Professor and chair of the Department of Obstetrics and Gynecology, an expert in the prediction and prevention of preterm birth; D. Michael Nelson, MD, PhD, the Virginia Lang Professor of Obstetrics and Gynecology, who researches how human placental dysfunction contributes to abnormal pregnancy outcomes; Herbert “Skip” Virgin, MD, PhD, the Mallinckrodt Professor and chair of the Department of Pathology and Immunology, who directs a Center for Pathogen Discovery to identify new pathogens.

“[Preterm birth](#) is the most pressing issue in perinatal medicine, and we have made little progress over the past 20 years in understanding its etiology,” Macones says. “Indira Mysorekar brings a fresh perspective and brilliant mind to this issue, and I think this research will be a major contribution.”

Provided by Washington University School of Medicine in St. Louis

Citation: Silent infections may play role in preterm birth (2011, April 26) retrieved 24 April 2024 from <https://medicalxpress.com/news/2011-04-silent-infections-role-preterm-birth.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.