

Using Technology to Improve the Future for Mothers and Children



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How can we improve the lives of mothers and their children, even before birth? This is the question Dr. Timothy Dye, an anthropologist-epidemiologist specializing in applied public health, hopes to answer. His most recent work targets the use and integration of biological and public health information systems to address the social and medical determinants of high-risk conditions of pregnancy and infancy.

“I’ve always been interested in how the continuum of life is affected by different factors,” said Dr. Dye. “It has become critical to consider all the things that happened that precede conception, pregnancy, birth, infancy, and childhood, to understand how those elements impact adult health.”

Dating back to the early 1990’s, there was a lack of data needed to study specific kinds of epidemiology in maternal and child health. With a grant from the New York State Health Department, Dr. Dye and his colleagues built an information system which helped establish birth and immunization registries in New York State and provided a foundation for his interest in integrating genetic, molecular, electronic, and public health information.

Dr. Dye’s work now spans more

than 20 countries and focuses on improving the use of technological innovation to improve health, both locally and around the globe.

In October 2014, the University of Rochester was named by the Centers for Disease Control as the Coordinating Center for the Global and Territorial Health Research Network. “This designation builds upon Rochester’s strong global health connections and track record and expertise in prevention research,” said Dr. Dye, the principal investigator and director of the new Coordinating Center. “Our goal is not only to help communities in the U.S.-associated Caribbean and Pacific Islands address their own chronic disease challenges, but also to take lessons that are learned and apply them to public health problems closer to home.”

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