2020 Kappe Lecture: Transprofessional Environmental Wellness: GRoWES – Global Research on WaSH (water, sanitation and hygiene) to Eliminate Childhood Stunting

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Abstract

UNICEF estimates that one quarter of all children less than five years of age are stunted, globally. Stunting correlates to short-, medium- and long-term outcomes including a poverty trap where short-of-stature adults with diminished cognitive and physical development are unable to provide for improved economic conditions for their children. Stunting is closely linked to inadequate nutrition during the first 1,000-days of a child’s life, which starts when a mother learns she is pregnant. Solutions to stunting include antenatal nutrition, perinatal healthcare, maternal hydration supporting exclusive breastfeeding for at least six months after birth and access to clean water and safe food through age five years old. GRoWES – Global Research on WaSH (water, sanitation and hygiene) to Eliminate childhood Stunting – aims to achieve four goals, namely:

1. improving our basic understanding of the relationship between stunting and WaSH;
2. eliminating stunting at pilot sites through targeted interventions;
3. replicating and scaling-up sustainable solutions to stunting; and
4. influencing global policy on nutrition

In this talk, the audience will learn how the ambitious goals of GRoWES are accomplished through convergence – where deep integration across disciplines – including nursing, engineering, and public policy – is used to solve a pressing societal need – in this case, childhood stunting.

Background

Professor Daniel B. Oerther (pronounced O’ thur) is renowned for interprofessional education and community based participatory research improving access to clean water and nutritious food worldwide. Dr. Oerther joined the Missouri University of Science and Technology in 2010 as the John A. and Susan Mathes Endowed Chair of Civil Engineering after ten years on the faculty of the University of Cincinnati. He is an adjunct professor at the Institute of Science and Technology for Advanced Studies and Research (India), Manipal Academy of Higher Education (India), University of Western Para (Brazil), Future University (Egypt), and King’s College London (United Kingdom). In the UK, Dr. Oerther is a Chartered Engineer, a Chartered Environmentalist, and a Fellow of four learned societies. In the U.S., he is an AAEES board certified Engineer and Scientist, a Diplomat of the American Academy of Sanitarians, a Lifetime Honorary Member of Sigma Theta Tau (the International Honor Society of Nursing), a Lifetime Honorary Fellow of the American Academy of Nursing, and a Lifetime Honorary Fellow of the Academy of Nursing Education. Dr. Oerther’s service to the profession includes: membership on the boards of directors of AEESP, AAEES and CIEH, editorial duties for three respected journals, and service as a Senior Agricultural Policy Advisor for the U.S. Secretary of State.