

## Seminar Series

**Presents** 

## Determining the Magnitude, Burden, and Cost of Waterborne Disease in the U.S.



Julia Warner Gargano, PhD

Waterborne Disease Prevention Branch Centers for Disease Control and Prevention

February 28, 2013 12:00 pm - 1:00 pm Claudia Nance Rollins Building - 2001

CDC's foodborne disease estimates drove an expanded national discussion about preventing foodborne infections resulting in improved partnerships, policymaker support, and increased resources for developing a science-driven foodborne disease prevention effort. CDC is developing a waterborne disease estimate that should help drive a similar national dialog about the importance of building stronger scientific and policy support for waterborne disease prevention. This talk will describe our vision for the ideal waterborne disease estimate, outline concrete steps we are taking toward that goal, describe work in progress on estimating mortality from selected waterborne pathogens, and discuss challenges in attributing cases to water versus other modes of transmission.

Dr. Julia Gargano is a drinking water epidemiologist at the Centers for Disease Control and Prevention in Atlanta, Georgia, where her branch focuses on domestic and global drinking water and sanitation. Dr. Gargano is leading CDC's effort to estimate the burden of waterborne disease in the United States, and is the principal investigator of the planned Epidemiologic Study of Health Effects Associated with Low Pressure Events in Drinking Water Distribution Systems. Dr. Gargano served as a CDC Epidemic Intelligence Service Officer in Atlanta in the Chronic Viral Diseases Branch, and became interested in domestic drinking water and distribution systems while leading an Epi-Aid investigation of a water service interruption in rural Alabama. Dr. Gargano earned her M.S. and Ph.D. degrees in Epidemiology from the College of Human Medicine at Michigan State University in East Lansing, Michigan.



## Seminar Series

Presents

## "We can't attend the class if we have menstruation, there is no water here and the latrine ...we can't use it"

Multi-country investigation of Menstruation, WASH and Impacts on Girls' Education

### Presented by:

Bethany Caruso, MPH, Research Project Coordinator, CGSW, PhD student, BSHE

Jeanne Long, MPH, Research Fellow, Bolivia

Jacqueline Haver, MSc, Research Fellow, Philippines

Gauthami Penakalapati, MPH Candidate, GHI Scholar, Rwanda

## Tuesday, March 26, 2013 12:00 pm-1:30 pm / CNR - 6001

Educating adolescent girls at the secondary level has implications for development, poverty alleviation, civic engagement, personal health, and the health of children.

The onset of menstruations poses multiple challenges for girls, especially at schools in low-income settings, and may put their learning potential at risk. Challenges related to menstrual management at school have been linked to absenteeism, distraction, decreased school participation, and falling behind in course work, though robust research is scarce. Many girls are uneducated about menstruation prior to their first period, lack support or resources needed for management, and attend schools with inadequate water, sanitation, and hygiene facilities.

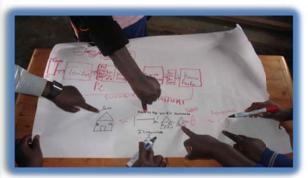
This talk presents methods and preliminary findings from an EMORY-UNICEF collaboration aimed at understanding the scope of education impacts and challenges girls face during menstruation in Bolivia, the Philippines, and Rwanda. Data collected will inform programs and strategies for UNICEF and partners, with particular attention to the role of water, sanitation and hygiene.



Philippines: photo credit: Jacqueline Haver



Bolivia: Photo: Jeanne Long



Rwanda: Drawing the ideal latrine Photo: Sarah Yerian



### Brown Bag Seminar Series Presents:

## Water, Sanitation and Hygiene and Neglected Tropical Diseases



Hygiene behaviors can prevent against NTDs.

A boy in Ethiopia demonstrates face-washing, which protects against the blinding disease trachoma

Kerry Gallo, MPH
Tuesday, April 15, 2013
12:00 pm - 1:00 pm
Claudia Nance Rollins Building - 2001

The neglected tropical diseases (NTDs) affect more than a billion of the world's poorest people. Control and elimination of many NTDs depend upon availability of improved water, sanitation and hygiene (WASH) in affected communities. Despite this link, collaboration between the WASH and NTD sectors has historically been low, resulting in missed opportunities for greater impact on health and development. This seminar will describe the links between WASH and the NTDs and share new progress towards increasing collaboration and coordination between the sectors.

Kerry Gallo is a Sr. Program Associate at Children Without Worms, a program of The Task Force for Global Health, where she works to promote comprehensive strategies including WASH for controlling NTDs. For more Information:





#### **CGSW Seminar Series Presents:**

## WaSH activities at the Water Institute at UNC

Friday, October 25, 2013 11:00 am – 12:00 pm Claudia Nance Rollins Building Rm. 6001





Dr. Jamie Bartram and Dr. Peter Kolsky

Don & Jennifer Holzworth
Distinguished Professor
Environmental Sciences & Engineering
Director, The Water Institute at UNC

Professor of the Practice
Environmental Sciences & Engineering
Associate Director, Water Institute

The Water Institute at the University of North Carolina started in 2010, and has become a globally recognized academic center at the heart of WaSH, Health, and Development. The Water Institute at UNC is built upon four pillars: Research, Knowledge Management, Partnership Building, and Teaching & Learning. Based at UNC's Gillings School of Global Public Health, (and part of the only U.S. department of Environmental Sciences & Engineering within a school of public health), the Water Institute is a natural focus for inter-disciplinary work spanning such diverse areas as water sector policy & planning, laboratory research, distance learning and practical professional support in areas such as Water Safety Planning; Community-Led Total Sanitation; Monitoring, Evaluation and Learning at Global, National and Project levels; and the interplay between climate change, water, food, and energy. The fourth annual Water and Health conference held in Chapel Hill last week attracted 493 participants from 47 countries, representing 45 international collaborating organizations including 5 universities (with Emory particularly strongly represented!). This talk describes the approach and some of the work undertaken by the Water Institute at UNC.

#### Please join

Dr. James W. Curran James W. Curran Dean of Public Health

at a lecture celebrating the appointment of

Thomas F. Clasen. PhD, JD

to the

Rose Salamone Gangarosa Chair in Sanitation and Safe Water

"The Global Sanitation Scandal and the Challenge to Public Health Professionals"

Thursday, November 21, 2013

4:30 pm

Lawrence P. and Ann Estes Klamon Room

Claudia Nance Rollins Building Rollins School of Public Health

Reception immediately following the lecture

Parking available in the Michael Street Deck Please RSVP to Sonia D'Avilar by November 14 404-727-3739 sdavila@emory.edu



#### **CGSW Seminar Series Presents:**

Dr. Karen Levy

### **Climatic Drivers of Diarrheal Disease**



Tuesday, January 28, 2014 12:00 -1:00 p.m.

Claudia Nance Rollins Building Rm. 6001

### **Refreshments Provided**

In this talk, Dr. Levy will describe the mechanisms connecting diarrheal diseases and climatic phenomena, and summarize the epidemiological evidence behind these relationships. She will also discuss the results of a case study in Ecuador recently published by my research group that examines the impact of heavy rainfall on diarrhea incidence, and explores interactions between heavy rainfall and biophysical and social factors.

Karen Levy is an assistant professor in the departments of Environmental and Occupational Health and Epidemiology at the Rollins School of Public Health at Emory University. She received her BA from Stanford University; as well as her MPH in Epidemiology and MSc and PhD in Environmental Science, Policy, and Management from the University of California, Berkeley. Dr. Levy's research interests include antibiotic resistance; rural health; infectious disease; and safe water. She is currently engaged in research on the epidemiology of waterborne disease with an emphasis on household water quality, transmission of enteric waterborne pathogens, and the impacts of climate on the incidence of waterborne disease. The Levy Research Group is engaged in several studies of the seasonality of enteric diseases and the impact of climate on disease incidence. With funding from the NIH Fogarty International Center, she and her research team are exploring how social vulnerability mediates relationships between climate and disease incidence under current and future climatic conditions, using diarrheal diseases in rural Ecuador as a case study. For more information visit: <a href="http://klevyresearch.weebly.com/research.html">http://klevyresearch.weebly.com/research.html</a>





### **CGSW Seminar Series Presents:**

Evan A. Thomas, Ph.D., P.E. Portland State University

Proving Sustainability: Technology and Business Methods to Improve Accountability in Global Development Programs



Friday, February 21, 2014
12:00 -1:00 p.m.
Claudia Nance Rollins Building Rm. 2001
Refreshments Provided

**Evan A. Thomas, Ph.D., P.E.,** is an Assistant Professor and Director of the Sweet (Sustainable Water, Energy and Environmental Technologies) Laboratory, and a Faculty Fellow in the Institute for Sustainable Solutions at Portland State University. Evan works at the interface of engineering, environmental health and social business, with professional experience working in government, industry, non-profits and academia. Evan holds a Ph.D. in Aerospace Engineering Sciences from the University of Colorado at Boulder and is a registered Professional Engineer (P.E.) in Environmental Engineering in the State of Texas.

At Portland State, the SweetLab designs and tests sustainable life support technologies for spacecraft and developing countries. The SweetLab's current primary focus is developing and implementing remotely accessible instrumented monitoring technologies designed to improve the collection of effectiveness evidence in global health programs, including high efficiency cookstoves, water pumps, household water filters, sanitation systems, pedestrian footbridges and other developing world appropriate technologies. The SweetLab has projects in India, Nepal, Indonesia, the Philippines, Rwanda, Kenya, Uganda, Haiti and other countries with partners including the Gates Foundation, USAID, Mercy Corps, the Lemelson Foundation, the Global Alliance for Clean Cookstoves, and DelAgua. The SweetLab also has on-going work with the NASA-Johnson Space Center on microgravity fluid management systems.



### Seminar Series Presents:

# Shared sanitation and health in urban Maputo



Joe Brown, PhD
Assistant Professor, Environmental Engineering, Georgia Institute of Technology
Friday, April 18, 2014
CNR 6001
12:00-1:00 pm

This presentation is an overview of the rationale, design, and potential implications of a planned controlled before-and-after (CBA) study of shared sanitation in urban Maputo, Mozambique (July 2014 - July 2016). In this study, we will measure sanitation access and function, microbial exposure indicators, and health outcome measures in children under 5 years of age at two time points: immediately before the intervention, and at one follow-up 12 months post-intervention (children with household access to new shared latrines as constructed by partner Water and Sanitation for the Urban Poor, controls from eligible site not receiving the intervention). Outcome measures include soil transmitted helminth (STH) reinfection following baseline de-worming, infection by key pathogens (from stool samples), markers of environmental enteropathy, and a range of secondary outcomes. Localized population density is a particular focus of the study.

