
Interdisciplinary Teaching and Research in the Environmental and Health Sciences: A Dialogue for the 21st Century

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ABSTRACT

The Sixth Winter Meeting of the International Consortium for Interdisciplinary Education about Health and the Environment was held under the auspices of the University of Cologne's Institute of Biology and its Didactics December 8-9, 2012 in Cologne, Germany. Several presentations with follow-up discussions ensued. This paper reiterates the purpose and philosophy of the Consortium and the need for interdisciplinary thinking about the linkages between the environment and health and the persons who study these entities.

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The *International Consortium for Interdisciplinary Education about Health and the Environment* was founded in 2007 in recognition of the gap in interdisciplinary education and research about the vast topics of "health" and "environment" (McDermott, Klein, Ritzel, & Vamos, 2008). In its more than five-year existence, participants in the Consortium have met in Cologne, traveling from universities and other public and private entities in Europe, Asia, and North America. Their interests and expertise have spanned environmental health, health promotion and other areas of public health, other environmental sciences, including ecology, meteorology and climate change, other physical and natural sciences, the development and evaluation of environmental policy, the codification of legal and ethical practices related to the environment, geographical information systems, hazardous waste management, pollution of water, air, and other natural resources, occupational health, risk assessment, management, and communication and socio-psychological aspects of human behavior.

Prior to this two-day conference in 2012, the *Consortium* held five previous meetings to examine the potential of collaborations and cross-discipline "pollinations" that are both inter-institutional and international. As a previous paper indicates previously (Klein, McDermott, Ritzel, & Vamos, 2009) a benefit of the inaugural meeting was the re-establishment of

the journal *Umwelt und Gesundheit* formerly published in the 1980s and 1990s. Initially adopting the name, *Umwelt und Gesundheit Online*, the journal has been updated further in 2013 with a more descriptive name relating directly to its mission, *Health, Environment & Education*.

The 2012 meeting of the *Consortium* was held December 8-9 at the University of Cologne, in Germany, and sponsored by the Institute of Biology and its Didactics at the University of Cologne. Scholars representing several of the health, environmental, and educational sciences were invited conference presenters and panelists. The theme of the meeting was *Human Health, Environment Resources, and Water: Perspectives for the Future*.

Conference Topics and Presenters

The program for the conference included the following oral presentations:

****Why Localized Flooding Should Be a Global Concern: An Environmental Health Perspective from the 2010 Thai Flood* (Dhitinut Ratnapradipa, Department of Health Education and Recreation, Southern Illinois University, Carbondale, IL, USA)

****Repositioning Family Planning: Uganda's Experience with Community-Based Family Planning* (Mahmooda Khaliq, Florida Prevention Research Center, Tampa, FL, USA)

- ****Issues of Water, Heat, Drought, and Health in the Midwest Section of the United States of America* (Dale O. Ritzel, Department of Health Education and Recreation, Southern Illinois University, Carbondale, IL, USA)
- *** *Oceans of Plastic: On the Conceivable Risk of Cancer in Marine Wildlife and Humans* (Thomas C. Erren, Environmental and Occupational Medicine, University of Cologne, Germany)
- ****"Why won't they do what we say?" An Examination of Health and Environmental Messaging through a Cognitive Processing Perspective* (Tait J. Martin, The iNSIGHT Cooperative, Tallahassee, FL, USA)
- ****Making Children's Environments Safer (Inke Ruhe, Safe Kids Germany, Bonn Germany)*
- ****Environmental Contaminants Associated with Hookah Tobacco Smoking* (Mary P. Martinasek, University of Tampa, Tampa, FL, USA)
- ****Reducing Contaminants in Environmental Tobacco Smoke* (Elbert D. Glover, Department of Behavioral and Community Health, University of Maryland School of Public Health, College Park, MD, USA)
- ****Integrating Tobacco Cessation into Disaster Response Services* (Kenneth D. Ward, School of Public Health, University of Memphis, Memphis, TN, USA)
- ****Obesity: Individuals and their Social and Physical Environments* (Jen Nickelson, Department of Health Science, University of Alabama, Tuscaloosa, AL, USA)
- ****Peer Teaching Pilot Programme for Caries Prevention in Underprivileged Migrant Populations* (Claus Reinhardt, Centre for Dental Medicine, University of Cologne and Teacher Training Centre, Cologne, Germany)
- *** *Teaching Mendel's Laws with the Cotton Reel Model* (Kirsten Schlüter, Institute of Biology and its Didactics, University of Cologne, Cologne, Germany)
- ****Space, Context and Sexual Risk Behavior* (David W. Seal, School of Public Health and Tropical Medicine, New Orleans, LA, USA).

Discussions about health science and environment science must include methods and strategies for reducing or eliminating the negative effects of disciplinary "silos" (Klein et al, 2009). The future of planet earth and the health of its inhabitants may be dependent on international understanding and cooperation. One way to inspire cooperation and interdisciplinary exchange is to initiate these tasks before professional careers are firmly established.

The University of Cologne created the Interdisciplinary Master in Environmental Sciences (IMES) degree program in 2003 to bring together students from multiple countries and diverse fields that address environmental interests. The idea of this program is to enhance the handling of environmental problems and research on environmental issues by fostering multidisciplinary education and thinking (University of Cologne, 2013). The IMES students constitute a prime audience for the annual conference of the *Consortium*.

The Future of the Consortium and Conference

Will there be the Seventh Winter Meeting 2013? The discussion for continuing this event seems to be productive and positive, tentatively scheduled for December 7-8, 2013 with the theme - *Health, Environment, and Education - Equity for Planet Earth*.

References

- Klein, K., McDermott, R.J., Ritzel, D.O., & Vamos, S. (2009). International consortium for interdisciplinary education about health and the environment – founding purpose and philosophy. *Umwelt und Gesundheit Online*, 2, 1-2.
- McDermott, R.J., Klein, K., Ritzel, D.O., & Vamos, S. (2008). International consortium for interdisciplinary education about health and the environment – founding purpose and philosophy. *Umwelt und Gesundheit Online*, 1, 1-4.
- University of Cologne. (2013). *International master of environmental sciences*. Retrieved August 31, 2013 from <http://www.imes.uni-koeln.de/3517.html>.

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