

Public Health Seminar Series

Date: Friday, November 2, 2012

Time: 12:00 PM - 1:00 PM, refreshments served at 11:30 AM

Location: Portland State University, URBN 303

(506 SW Mill Street, Portland, Oregon 97201)



The Human Genomics Landscape Circa 2012



Greg Fowler, PhD

Dr. Fowler is a Senior Research Associate in the Center for Health Policy Studies, School of Community Health, at PSU, and Affiliate Associate Professor in the Department of Public Health and Preventive Medicine at OHSU. In 1998 he co-founded Geneforum, a non-profit organization committed to promoting dialogue at the intersection of genetics, ethics, and public values. His interest areas include science education, the societal and ethical implications of science and technology, and deliberative democracy.

In 1953, two young scientists published the structure of DNA, a Nobel Prize winning discovery that gave birth to the interdisciplinary field of genomics. Beginning in 1990, scientists around the world embarked upon the Human Genome Project (HGP) with the goal of determining the composition of the entire genome—a mass of genetic and environmental information essential to the proper development of an organism, from humans to the flu virus. How is that virtual "tsunami of knowledge" assembled to ultimately realize the promise of the "genomic revolution" and "personalized medicine"? And what are the implications of genomics for addressing the overarching goal of public health to promote population health and prevent disease?

Dr. Fowler will explore these questions from a "30,000-foot view" of genomic science in 2012: Where have we been? Where are we going? And how will we get there?

To ensure that future scientists, physicians, policy makers, and consumers are educated about the genomic revolution, the National Research Council calls upon academic institutions to begin developing undergrad and graduate curricula with a focus on public health genomics. Toward that end, a 3-credit OMPH online elective will be offered in the winter-term 2013. The course, *Genomics and Public Health: Current Issues and Future Trends In Healthcare and Policy*, seeks to better understand the rapidly-evolving field of genomics and to translate that knowledge into actions and practices reflected in the core functions of public health.

"The biggest bottleneck to the realization of the 'genomic revolution' in health care is the capacity of health professionals—and their patients—to make meaningful use of these new tools."

-- Eric Green, Director, National Human Genome Research Institute



