

Topics in Public Health and Geosciences

George Washington University

(Public Health 290.52)

6 July to 11 August 2004

Tuesdays 3:00 – 5:30 pm

Human beings interact with the natural world in complex ways that may affect their health. This course will explore the connection between human health and the earth sciences, including exposure to natural sources of toxic substances such as arsenic, groundwater movement and pollution, health issues associated with hydrocarbon fuels, how mineralogy helps us understand toxic effects of dusts like silica and asbestos, the use of techniques pioneered in the geosciences to map infectious disease and many other phenomena. Case studies will be used to illustrate principles of the budding new discipline of "medical geology" and public health and geosciences. Particular emphasis will be placed on opportunities for advancing the science and developing solutions to problems through the collaboration of investigators from public health and biomedical science, on the one hand and geoscientists on the other.

Who should attend: The Topics Course is intended for students interested in geology, ecology, chemistry, biology, occupational and environmental health, as well as medical professionals, toxicologists, epidemiologists, pathologists and other public health, environmental and geo-sciences professionals with an interest in the effect of earth materials and processes on environmental and human health. An important aim of the Course is to provide the opportunity for forming contacts and cross-discipline networks between professionals working in different disciplines, but working towards common understanding and of and solutions to complex health problems.

Public Health and Geosciences Overview

Natural and Anthropogenic Sources of Minerals and Elements

Health Impacts of Trace Elements and Mineral Dust

Case Studies of Trace Element Health Impacts

Tools of the Trade: Analytical Methods, GIS

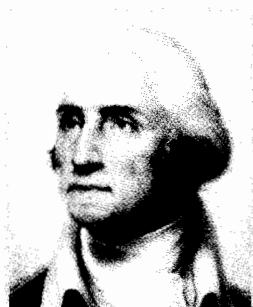
Student Oral Presentations

Course Instructors:

Robert B. Finkelman, PhD
U.S. Geological Survey
Tel. 703-648-6412
E-mail rbf@usgs.gov

Jose A. Centeno, PhD
Armed Forces Institute
of Pathology
Tel. 202-782-2839
E-mail centeno@afip.osd.mil

Joseph Bunnell, PhD
U.S. Geological Survey
Tel. 703-648-6497
E-mail jbunnell@usgs.gov



THE GEORGE
WASHINGTON
UNIVERSITY

WASHINGTON DC