Winter 2013 Online Interactive Course PHPM 507



OMPH Program Track Elective (3 credits)

Genomics and Public Health:

Current Issues and Future Trends in Healthcare and Policy

Overview of the Course Framework

Weeks 1-8 of the course will consist of:

- 1) Assigned readings drawn from a background essay for each of the six teaching modules, primary research (and review-type) papers and a wide spectrum of professional and popular "resource" articles and electronic tools (videos, web/podcasts) in genome science, clinical application, ethics and health policy;
- 2) A weekly "critically-reflective" Weblog of questions drawn from required readings in each teaching module;
- 3) Two interactive weekly (cyber-) sessions with 1) course instructors to frame the week's work and 2) leading-edge research and clinical faculty to discuss student-generated questions.

Together these learning tools will be designed to introduce students to the emerging field of public health genomics, with particular focus on:

- Genomics and P4 Medicine (Weeks 1 & 2; January 7-18)
- Social Epidemiology and Health Care Disparities (Week 3; January 21-25)
- Genetic Epidemiology, Pre-Natal and Newborn Screening (Week 4; January 28-February 1)
- Genetic Testing and Privacy (Weeks 5 & 6; February 4-15)
- Full Genome Sequencing and Personalized Medicine (Week 7; February 18-22)
- Epigenomics and Nutrition (Week 8; February 25-March 1)

Course Deliverable

Working together in teams, Weeks 9 and 10 (March 4-15) will be dedicated to preparing and facilitating an (invited) "Genomics Forum" targeting a broad spectrum of health care providers and policy makers to be convened sometime during finals week.

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