History and Philosophy of Epidemiology (EPID 891)
Fall 2015, Wednesdays 1:25-3:15pm, 1303 McGavran-Greenberg Hall

1 August 19    Introduction: History & philosophy of epidemiology

Krieger, Chapter 1: Does Epidemiologic Theory Exist? On Science, Data, and Explaining Disease Distribution

2 August 26    From 19th Century Origins to 20th Century Debates: Classification and causation


Krieger, Chapter 3: Epidemiology Emerges: Early Theories and Debating Determinants of Disease Distribution – Poison, Filth, Class, & Race (1600-1900)

For further reading:


Krieger, Chapter 2: Health in the Balance: Early Theories about Patterns of Disease Occurrence


3 September 2    Epidemiology in the Early 20th Century: Epidemiology and public health activism


Krieger, Chapter 4: Epidemiology Expands: Germs, Genes, and the (Social) Environment (1900-1950)

For further reading:


4 September 9  Statistical Imprinting: Shaping of science and society


5 September 16  Reification in Science: Randomization as a tool, chance as a cause


For further reading:

6 September 23  Modern Epidemiology: Individuals and populations


Kreiger, Chapter 5: Contemporary Mainstream Epidemiologic Theory: Biomedical and Lifestyle

For further reading:


7 September 30 Philosophy of Science: Demarcation and change in science and epidemiology

Maxwell SE, Delaney HD. Chapter 1: The logic of experimental design. In: Designing Experiments and Analysing Data: A Model Comparison Perspective. Belmont, CA: Wadsworth Publishing Co, 1990:3-24. (Although the remainder of the chapter, “Threats to the Validity of Inferences from Experiments” (pp 25-35) is also included in the online excerpt and is a good introduction to how validity is addressed in the field of psychology, we will not focus on this in class)


(Revisit Krieger, Chapter 1, for this class)

For further reading:


8 October 7 Objectivity in Science and Epidemiology: Construction of scientific knowledge


For further reading:


9 October 14 Epidemiologic Transitions: Transformation of disease in populations


For further reading:

10 October 21 Biomedical vs. Population Approaches to Public Health: The causes of cases and the causes of incidence; Guest speaker: Beverly Rockhill


Case study: genetic testing


For further reading:

11 October 28 Epidemiology in court

Dryer N. An epidemiologic view of causation and how it differs from the legal. International Association of Defense Counsel, Frontline, PBS.


12 November 4 Global Public Health: Epidemiology in low-resource settings


Commentary topic title and abstract due Friday, November 8

13 November 11 Peer Review and Authorship: Theory and practice of creating the scientific literature


Further reading:


14 November 18 Funding and Scientific Knowledge: Conflicts of interest in epidemiology


For further reading:


15 December 2 Epidemiology, Policy and Advocacy: Epidemiology in practice


