Harry M. Marks, Ph.D.
The Johns Hopkins School of Medicine

**CURING DISEASE WITH DRUGS**
**PHYSICIAN & SOCIETY SELECTIVE YEAR ONE**
**SPRING 2003**

Harry M. Marks
Institute of the History of Medicine
Welch 324
955-4899
hmarks@jhmi.edu

**APRIL 9 RATIONAL DRUG DISCOVERY**

Paul Ehrlich, "Chemotherapy," [1913] in Collected Papers of Paul Ehrlich (Pergamon Press, 1960), v 3, pp. 505-518.

Ronald Hare, "New Light on the History of Penicillin," Medical History 26 (1982), 1-24.

Study Questions:
1) How are new drugs discovered?
2) Why are new drugs missed?

Recommended Reading:
Vos R, Bodewitz H., "Pharmacological and therapeutic profiling in drug innovation: the early history of the beta blockers," Perspectives in Biology and Medicine 31 (1988), 469-80.

**APRIL 16 THE MIRACLE OF INSULIN**

Chris Feudtner, "The Want of Control: Ideas, Innovations and Ideals in the Modern Management of Diabetes Mellitus," Bulletin of the History of Medicine 69 (Spring, 1995), 66-90.

The Diabetes Control and Complications Trial Research Group, "The Effect of Intensive Treatment of Diabetes on the Development and Progression of Long-term Complications in Insulin-Dependent Diabetes," New England Journal of Medicine 329 (September 30, 1993), 977-986.

Study Questions:
1) What "problems" does insulin solve? What problems does it not solve?
2) Does insulin "cure" diabetes, from the physicians' perspective? from the patient's?

**APRIL 23 THE DANGERS OF DRUGS**

Melody Petersen and Alex Berenson, "Papers Indicate that Bayer Knew of Dangers of Its Cholesterol Drugs," New York Times, February 23, 2003, A1.

Herbert O. Calvery & Theodore G. Klumpp, "The Toxicity for Human Beings of Diethylene Glycol with Sulfanilamide," Southern Medical Journal 32 (November, 1939),

Timothy Brewer and Graham A. Colditz, "Postmarketing Surveillance and Adverse Drug Reactions. Current Perspectives and Future Needs," JAMA 281 (March 3, 1999), 824-829.

Study Questions:

1) Why are unsafe drugs used?
2) How do you tell when a drug is unsafe?
3) Who is responsible for drug safety?

Recommended Reading:

Harry M. Marks, The Progress of Experiment. Science and Therapeutic Reform in the United States, 1900-1990 (Cambridge University Press, 2000), pp. 71-97.

**APRIL 30 WHO CONTROLS KNOWLEDGE?**

Drummond Rennie, "Thyroid Storm," JAMA 277 (April 6, 1997), 1238-1243 and "Correspondence," 278 (September 17, 1997), 895-898.

Arnold S. Relman and Marcia Angell, "America's Other Drug Problem," The New Republic (December 16, 2002), 27-41.

CD Furberg, BM Psaty, M Pahor and MH ALderman, "Clinical Implications of Recent Findings from the Antiphypertensive and Lipid-Lowering Treatment to Prevent heart Attack Trial (ALLHAT) and Other Studies of Hypertension," Annals of Internal Medicine 135 (December 18, 2001), 1074-1078.

Study Questions:

1) Who controls knowledge about drugs? What does it mean to say someone/something/some group "controls" knowledge?
2) What would it mean for universities to prevent conflicts of interest?

**MAY 7 ANTIBIOTIC RESISTANCE**

Helena Seppala, Timo Klaukka et al. "The Effect of Changes in the Consumption of Macrolide Antibiotics on Erythromycin Resistance in Group A Streptococci in Finland," NEJM 337 (August 14, 1997), 441-446.

Parvathi Tiruviluamala and Lee B. Reichman, "Tuberculosis," Annual Review of Public Health 23 (2002), 403-426, **read pp. 411-418.**

Denise Grady, "Quick Change Pathogens Gain an Evolutionary Edge," Science 274 (15 November 1996), 108?.

Study Questions:

1) How and why does antibiotic resistance occur?
2) What can physicians do about antibiotic resistance?