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

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#### APRIL 9 RATIONAL DRUG DISCOVERY

Paul Ehrlich, "Chemotherapy," [1913] in <u>Collected Papers</u> of <u>Paul Ehrlich</u> (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," <u>Perspectives in Biology and Medicine</u> 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,"

<u>Bulletin of the History of Medicine</u> 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," <u>Southern</u> 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:

- Why are unsafe drugs used?
   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-

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," <u>Annals of Internal Medicine</u> 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-

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

- Study Questions:

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