Spring Term 2004 G8920 Disease, Public Health and Empire: Comparative Perspectives Professor Nancy Leys Stepan Department of History Columbia University

Time and place of colloquium: 2.10-4pm on Thursdays, in 301M Fayerweather Hall (mezzanine level)

Office hours: <u>Thursdays</u>, 4-6 pm, in my History Department Office, at 324 Fayerweather Hall (and by appointment at other times); and <u>every other Tuesday, starting Tuesday Feb.</u> <u>10th</u>, at my office at the Center for the History of Public Health, in Rm 940 (721 W. 168th St. at Mailman School of Public Health)

Telephone: 854- 8217 and e-mail: <u>nls1@columbia.edu</u>

Description of the Course:

The aim of this graduate colloquium is to provide a broad introduction to problems of disease and strategies of public health in colonial and post-colonial (or neo-colonial) contexts between 1880 and the present. Colonial Africa and neo-colonial Latin America are a special focus, but material from other areas (e.g. India) are included as well.

Colloquium Requirements:

The colloquium is open to all interested graduate students (advanced undergraduates by permission of instructor only). The course can also be used in developing the history of medicine as an oral examination field for the Ph.D. in the Department of History and/or the program in the History and Ethics of Public Health.

You will be expected to make <u>one or two oral presentations</u> during the course of the colloquium, as aids to classroom discussion. These will be short (usually no more than ten minutes), and based on shared weekly readings. The oral presentations <u>should be</u> <u>prepared in advance</u>. They will help organize and direct the discussions.

Each member of the colloquium will write a seminar paper. This can take a variety of forms (e.g. a critical review of a problem and its secondary literature, or a paper on a specific topic and involving primary source materials; it can even be a proposal for a dissertation). You should each meet me individually to discuss your interests and potential topics; this should be done by the fourth or fifth week of term. A <u>two-page</u> <u>statement</u> of the proposed paper topic, with a short annotated bibliography, is due in class on Week 7 (Mar. 11th). Completed papers will be due in class April 29th 2004.

The following books have been ordered for the colloquium at Labyrinth Books, 536 West 112th Street:

Farmer, Paul. <u>Infections and Inequalities</u> Siddiqi, Javed. <u>World Health and World Politics</u> Spielman, Andrew, and D'Antonio, M. <u>Mosquito!</u> Watts, Sheldon. <u>Epidemics and History</u>. Winston, Mark L. Nature Wars: People versus Pests

For those especially interested in the history of disease and public health in Latin America, I have ordered copies of a recent collection of essays, Diego Armus, ed., Disease in the History of Modern Latin America (2003); purchase is entirely optional.

In addition, readings will be taken from articles and selections from other books: a complete set of the readings, organized by week, is available on reserve in the History Department's Reading Room, 415 Fayerweather Hall (where you can request copies of articles you wish to purchase); another set is on reserve at the Health Sciences Library. Chapters from books on reserve are double starred (**) on the syllabus.

Some useful reference works:

David Arnold, ed., <u>Imperial Medicine and Indigenous Societies</u> (1988).
W.F. Bynum and Roy Porter, eds., <u>Companion Encyclopedia of the History of Medicine</u>, 2 vols (1993).
Roy Porter, <u>Cambridge Illustrated History of Medicine</u> (1996).
Kenneth F. Kiple, ed., <u>The Cambridge World History of Human Disease</u> (1993).

Please Note: I am running a series of guest lectures during the term on the theme of 'Globalization and the Fabric of Public Health in Historical Contexts'. The lectures will be held every two weeks, starting on February 10th, in the Mailman School of Public Health. Details will be given in class (you can register for the series for 1-credit).

WEEKLY TOPICS AND READINGS

Week 1 (Jan. 22nd): Introduction to Colloquium: Empire, Colonies, Post-Colonial Legacies and Disease

In this introductory session, I will raise issues of methods and approaches in the new history of medicine and colonial histories of disease. I will also address briefly the problem of exclusion -- how certain topics have historically been excluded or ignored in public health (e.g. malnutrition). When you have time, the following articles are worth reading for the conceptual questions they raise: *Warwick Anderson, 'Where is the Post-Colonial History of Medicine?,' <u>Bulletin of the History of Medicine</u> 72(3) (1998): 522-530; David Arnold, 'Introduction: Disease, Medicine and Empire", in Arnold, ed., <u>Imperial Medicine and Indigenous Societies (1988)</u>, pp. 1-26; *Shula Marks, 'What is Colonial about Colonial Medicine?,' <u>Social History of Medicine</u> 10(2) (1996): 207-219;

and *Megan Vaughan, 'Healing and Curing: Issues in the Social History and Anthropology of Medicine in Africa,' <u>Social History of Medicine</u> 7 (1994): 283-295.

Week 2 (Jan. 29th): European Public Health Around 1900

In order to assess how colonial strategies towards disease and public health were developed, we need to have a snapshot view of how public health was organized in Europe around 1900, when the European empires were at their zenith. Was public health an active field of social concern and were practices well established for controlling and preventing diseases (e.g. quarantines, vaccination, notification of diseases, isolation, environmental cleanup and sanitation etc.)? How was 'the public health' defined? How important was the new scientific medicine (e.g. bacteriology) to public health policies before 1900?

In particular, we have to assess the current status of the debate about the contributions of public health and medicine to the mortality and morbidity revolution that occurred in the richer countries of Europe in the late nineteenth century. Did specific public health and/or medical interventions bring about the declines in mortality and morbidity? Or were broader social changes (e.g. the rise in the standard of living, improved housing, or better nutrition) unrelated to public health <u>per se</u> primarily determinative (this is often referred to as the McKeown thesis)? Where does this debate now stand (we will use as our main example Britain, the oldest industrial nation and the largest colonial power).

<u>Required readings</u>:

**J.N. Hays, The Burdens of Disease, chs. 8-11.

*Richard J. Evans, 'Epidemics and Revolutions: Cholera in Nineteenth-Century Europe', in <u>E pidemics and Ideas</u> (1994), eds. T.O. Ranger and P. Slack, pp. 149-173.

*Abdel Omran, 'The Epidemiological Transition: A Theory of the Epidemiology of Population Change', <u>The Milbank Quarterly</u> 49 (1971), pp. 509-538.

*Dorothy Porter, 'Introduction', to <u>The History of Public Health and the Modern</u> <u>State</u> (1994), pp. 1-44; (and her <u>Health, Civilization, and the State</u> (1999), chs. 4-9).

*Simon Szreter, 'The Importance of Social Interventions in Britain's Mortality Decline c. 1850-1914: A Reinterpretation of the Role of Public Health', <u>Social History of Medicine</u> 1, 1 (1988), pp. 1-38.

Week 3 (February 5th): Mapping Empire: Disease in Colonial Environments

Turning now to the European colonies, we begin in this week to evaluate to what extent there was the intention, or the means, to make public health a strategic part of the colonial enterprise in the last third of the nineteenth century; to ask whether medicine was a strategic tool of empire. Or did the small numbers of European physicians and colonial officers in the colonies make them irrelevant to improving the health conditions, of Europeans or the indigenous populations? The general model of disease interpretation at the time was broadly speaking 'environmental'. Here we look at how colonial disease environments were mapped and interpreted; how the idea of colonial difference (often expressed in terms of a temperate versus tropical climate) helped determine colonial policies. Who were the agents of empire in the process (missionaries, naturalists, colonial administrators, military officers)? Which diseases were seen as especially threatening in the colonies, and why? To whom? What were the technologies of public health, and how were they applied? A second and closely inter-related theme is how the processes of economic colonization, especially the commercialization and exploitation of tropical products (e.g. coffee, tropical woods, sugar, rubber, cotton) altered the disease environment in the colonies, causing old diseases to flourish and spread, and new diseases to erupt. Topics addressed this week include slavery and its epidemiological impact, and famine in India and its possible causes in the late nineteenth century; many other processes of economic change in colonial environments will be considered as the semester proceeds. A final theme that needs to be discussed is whether, when, and why particularly dangerous colonial areas (e.g. West Africa) ceased to be a 'white man's grave' by the end of the nineteenth century.

Along more general lines, how useful do you find Sheldon Watts' distinction between 'construct yellow fever', and 'yellow fever' (or between malaria, and 'construct malaria') in understanding the experience of disease in the colonial world?

Required readings:

Sheldon Watts, <u>Epidemics and History</u> (1997), as much as possible, but esp. chs. 4-5 (an interesting if highly polemical work)

*David Arnold, 'The Place of "The Tropics" in Western Medical Ideas since 1750', <u>Tropical Medicine and International Health</u> 24 (1997), pp. 303-313.

*William B. Cohen, 'Malaria and French Imperialism', <u>Journal of African History</u> 24 (1983), pp. 23-36.

*Philip Curtin, 'Epidemiology and the Slave Trade', <u>Political Science Quarterly</u> 83 (1968): 190-216 (specially pp. 190-199); and his 'The End of the "White Man's Grave"? Nineteenth –Century Mortality in West Africa,' <u>J. Interdisciplinary History</u> xxi (Summer 1990): 63-88.

Mike Davis, 'Victoria's Ghosts', in Davis, <u>Late Victorian Holocausts: El Niño</u> and the Making of the Third World (2001), pp. 25-59.

**Nancy Leys Stepan, 'Going to the Tropics', and 'An Evolutionist's Tropics', from <u>Picturing Tropical Nature</u> (2001), chs. 1 and 2.

Week 4 (Feb. 12th): The New Tropical Medicine, 1890-1930s

Between c. 1880 and the 1930s, medical understanding of colonial diseases were influenced by the new laboratory and experimental medicine. Parasites and vectors were

identified for some of the most important diseases (e.g. the role of the mosquito in the transmission of malaria and yellow fever, and the tsetse fly in African sleeping sickness). Colonial and/or tropical countries provided both the locales, and the occasions, for scientific discovery and experiments in therapeutics and methods of prevention. These developments were reflected in the institutionalization of the new medical specialty of tropical medicine in the major capitals and/or port cities of Europe, and in the US.

Here we examine which diseases were included in the new medical specialty, and why. How did the laboratory change disease conceptualisation? Who were the practitioners of tropical medicine? Was tropical medicine simply colonial medicine, or vice versa? Finally, how did the new discipline of tropical medicine alter expectations and practices concerning public health in overseas colonies and/or tropical areas of the world that were increasingly being drawn into an international system of world trade (e.g. Brazil)?

Required reading:

**Stepan, Picturing Tropical Nature, chs. 5 and 6.

*Andrew Cunningham, 'Transforming Plague: The Laboratory and the Identity of Infectious Diseases', in <u>The Laboratory Revolution in Medicine</u>, eds. Cunningham and P. Williams (1992), pp., 209-244.

** David Arnold, ed. <u>Warm Climates and Western Medicine: The Emergence of</u> <u>Tropical Medicine, 1500-1900</u> (1994), article by Anne Marie Moulin, 'Tropical Without the Tropics: The Turning Point of Pastorian Medicine in North Africa, pp. 160-180.

*Stepan, 'Tropical Medicine and Public Health in Latin America,' <u>Medical</u> <u>History</u> 42 (January 1998): 104-112.

*Michael Worboys, 'Tropical Diseases', in <u>Companion Encyclopaedia in the</u> <u>History of Medicine</u>, eds. William F. Bynum and Roy Porter (1993), vol. 1, pp. 512-536.

Week 5 (Feb. 19th): Applying the new Tropical Medicine in the Colonies

Many of the nineteenth century techniques of disease control and public health continued to be employed in the new era of tropical medicine (e.g. quarantines). And of course, on the contrary, the existing technique of smallpox vaccination was applied selectively or not at all. But in other respects, as science and medicine became increasingly important in defining the colonial environments, economies, peoples, and their health, new methods were devised specifically for colonial diseases, many of them derived from the new laboratory-based tropical medicine. Indeed, overseas colonies offered Europeans rich arenas for discovery and disease control. In regard to the latter, note the use of military metaphors, especially in public health work (e.g. the 'war' against disease, the 'campaigns', the anti-vector 'brigades), and the actual association between colonialism and military medicine or military occupation (e.g. Cuba, the Philippines).

What kinds of public health models were implicit in these campaigns? Did the campaigns result in reductions of disease incidence? Where? How were the colonized or indigenous populations positioned in the new medical/public health paradigm?

Here I have selected readings on colonial campaigns against three different diseases: malaria, yellow fever, and African sleeping sickness. What accounts for success or failure? How is success defined? Choose one disease/public health campaign to concentrate on:

Required readings:

Watts, Epidemics and History, chs. on yellow fever and malaria.

<u>On malaria:</u>

*W.F. Bynum, 'An Experiment that Failed: Malaria Control at Mian Mir', <u>Parassitologia</u> 36 (1994), pp. 107-120.

*Aran S. MacKinnon, 'Of Oxford Bags and Twirling Canes: The State, Popular Response, and Zulu Anti-Malarial Assistants in the Early Twentieth-Century Zulululand Malaria Campaigns,' <u>Radical History Review</u> 80 (2001): 76-100.

**Nancy Leys Stepan, ' "The Only Serious Terror in the Regions": Malaria Control in Amazônia, 1900-1920s', in D. Armus, ed., <u>Disease in the History of Modern</u> Latin America: From Malaria to AIDS (2003, pp. 25-50.

On yellow fever:

*Marcos Cueto, 'Sanitation from Above: Yellow Fever and Foreign Intervention in Peru, 1919-1922,' <u>Hispanic American Historical Review</u> 72 (1) (1992).

*Nancy Leys Stepan, 'The Interplay between Socio-Economic Factors and Medical Research: Yellow Fever Research, Cuba and the United States,' <u>Social Studies</u> <u>of Science</u> 8(4) (Nov. 1978), pp. 397-423.

On sleeping sickness:

*Heather Bell, 'Sleeping Sickness and the Ordering of the South', in <u>Frontiers of</u> <u>Medicine in the Anglo-Egyptian Sudan (1999)</u>, pp. 127-162.

*Maryinez Lyons, 'Public Health in Colonial Africa: The Belgian Congo', in <u>History of Public Health and the Modern State</u> ed. D. Porter (1994), ch. 10.

*Michael Worboys, 'The Comparative History of Sleeping Sickness in East and Central Africa, 1900-1914', <u>Hist. of Science</u> 23 (1994), pp. 89-102.

Week 6 (Feb. 26th) : Race and Disease in Colonial Contexts

Race was a fundamental category of twentieth century European thought. Here we will look at how the new colonial medicine relied on, and also constructed, concepts of racial difference in the colonies. Especially important was the concept of 'racial immunity', an expansive idea which was applied differentially to diseases and to different populations of people, and employed in the formulation of approaches to public health. Another issue concerns the connections between race, disease and urban segregation as a public health strategy in the colonies. We will look at this in relation to West Africa and malaria, on which several authors have written. Some of you might select to read these latter articles and lead the discussion in class.

Required reading:

*Warwick Anderson, 'Immunities of Empire: Race, Disease and the New Tropical Medicine, 1900-1920', <u>Bull. Hist. Med.</u> 70, n. 1 (1996): 98-118.

*Warwick Anderson, 'The Making of the Tropical White Man', in his <u>The</u> <u>Cultivation of Whiteness: Science, Health, and Racial Destiny in Australia</u> (2003), pp. 95-124.

**Nancy Leys Stepan, 'The New Tropical Pathology', and 'Appearances and Disappearances', chs. 5 and 6 of <u>Picturing Tropical Nature</u> (2001).

*Philip Curtin, 'Medical Knowledge and Urban Planning in Tropical Africa", <u>American Historical Review</u> 90, n. 3 (1985):

*John W. Cell, 'Anglo-Indian Medical Theory and the Origins of Segregation in West Africa,' <u>AHR</u> 91, n. 2 (April 1986):

* Leo Spitzer, 'The Mosquito and Segregation in Sierra Leone,' <u>Canadian Journal</u> of African History 2 (1968): 49-61.

Week 7 (Mar 4th): New Missionaries of Medicine: Rockefeller Philanthropy and Colonialism

After World War I, health in empire became the focus of more international concern, with new international organizations (e.g. the League of Nations, the Rockefeller Foundation) becoming involved in preventive public health. Answers to how to control diseases independently of tackling such issues such as underlying colonial poverty, or the development projects (e.g. in agricultural products) pursued by the European powers, were, however, hard to find.

Of the new international organizations, the Rockefeller Foundation (RF) was by far the most significant before World War II. Spurred by the new imperial reach of the United States (in Cuba, Puerto Rico, the Philippines), and by empire more generally (hence the RF's great interest in funding colonial medicine in Britain, as a gateway to Britain's vast empire), the RF entered the international arena of public health in 1913. Here we examine the style of public health activism pursued by the RF in various colonial, neo-colonial and overseas settings, addressing the issue of its lasting legacy to colonial health.

Cueto has called the Rockefeller men 'missionaries' of science; Franco-Agudelo says the RF was more dominating than 'donating' in its public health work; Steven Palmer prefers the idea of 'colonial encounters' to describe the RF's work in Central America. Discuss.

Required reading:

*Heather Bell, 'The International Construction of Yellow Fever,' in her <u>Frontiers</u> of <u>Medicine</u>, pp.163-197.

*Anne-Emmanuelle Birn, 'Public Health or Public Menace? The Rockefeller Foundation and Public Health in Mexico, 1920-1950', <u>Voluntas</u> 7(1) (1996), pp. 35-56. *Marcus Cueto, 'The Cycles of Eradication: The Rockefeller Foundation and Latin American Public Health, 1918-1940', in P. Weindling, ed. <u>International Health</u> Organisations and Movements, 1918-1939 (1995), pp. 222-243.

*S. Franco-Agudelo, 'The Rockefeller Foundation's Antimalarial Program in Latin America: Donating or Dominating?', <u>Internat. J. Health Services</u>13 (1983), pp. 51-67.

*Steven Palmer, 'Central American Encounters with Rockefeller Public Health, 1914-1921', in <u>Close Encounters of Empire: Writing the Cultural History of U.S.-Latin</u> <u>American Relations</u>, ed. Gilbert M. Joseph et al (1998), pp. 311-322.

Week 8 (Mar 11th): Fred Soper and the Origins of Eradicationism

As public health problems were increasingly seen in international terms (rather than as separate problems of separate colonies), a new idea or philosophy of public health began to emerge in the 1930s and 1940s: that of the complete eradication of disease, rather than control, or the reduction in incidence. Based on the growing confidence on the technical and chemical approaches to disease vectors in colonial and neo-colonial settings, eradication became an absolute -- the absolute elimination of a biological species (vector, virus, parasite). The key proponent of eradication before the post-World WarII and post-colonial period was an American public health expert, Fred L. Soper, who had spent years working on diseases in Latin America, and then, during World War II, in North Africa and Italy. His ideas about the possibility of eradication were highly influential in later WHO campaigns. Yet is interesting that Soper developed his ideas initially in regard to diseases that today are not considered candidates for complete eradication. How do we explain this apparent paradox?

Since I am writing a study of Soper, I will make a presentation on this topic.

Required reading:

*F. Fenner et al, 'What is Eradication'?, in W.R. Dowdle and D. R. Hopkins, eds. <u>The Eradication of Infectious Diseases</u> (1998), pp. 3-19; and 'How is Eradication to be Defined and What are the Biological Criteria?,' pp. 47-59.

*Malcolm Gladwell, 'Annals of Public Health: The Mosquito Killer,' <u>New</u> <u>Yorker</u> (July 2nd, 2001), pp. 42-51 (in praise of Soper).

* Fred Soper, "Rehabilitation of the Eradication Concept in the Prevention of Communicable Diseases," <u>Public Health Reports</u> 80 (1996): pp. 854-869.

Spring Break (no class Mar 18th)

Week 9 (Mar. 25th): The World Health Organization and Public Health: The Case of Malaria, 1955-1972

The post-World II period was marked by the need to reconstruct Europe, and by the processes of European de-colonization. Public health in the ex-colonies became the responsibility of usually under-funded national systems of public health, with little priority in the political agenda. It also saw the arrival of new international organizations in public health, notably the World Health Organization (founded in 1948). Some of the most ambitious programs ever undertaken in the world originated in WHO; here we examine the mix of motives -- post-war devastation in Europe itself as well as in newly independent nations, Cold War rivalries, 'development' and 'under-development' concerns, the drive by professional experts, and faith in new medical technologies -- that gave confidence to public health agendas in the international arena.

Our case study is WHO's Malaria Eradication Campaign (MEP), which was based on the systematic use of a new insecticide, DDT (itself a product of World War II). First announced as a goal in 1955, the MEP was launched in the late 1950s, but abandoned less than 20 years later. Why? What successes did the MEP have, and what defeats? How did these post-war campaigns differ from their predecessors (e.g., how was malaria virtually eliminated in the southern areas of the US before the war)? What legacy have the post-war campaigns left in international health organizations? Were biological factors (nature of pathogen, vector) and epidemiological characteristics decisive, or social, political and economic ones? What position does Watts take on strategies for dealing with disease in ex-colonial countries?

Required reading:

Javed Siddiqi, <u>World Health and World Politics</u> (1995), esp. Pt III, , pp. 123-192. Spielman and d'Antonio, <u>Mosquito</u>, ch. 1-6. Watts, <u>Epidemics and History</u>, ch. 3, and his conclusion.

*S. Litsios, <u>The Tomorrow of Malaria</u> (1996), pp. 73-126. *R.M. Packard, 'Malaria Dreams: Postwar Visions of Health and Development in

the Third World', <u>Medical Anthropology</u> 17 (1997), pp. 279-296.

Week 10 (Apr 1st): The War on Nature: The Critique of the New Environmentalists

The lasting dangers to the environment and to public health arising from the widespread use of insecticides to eliminate organisms considered pests to humans (ranging from harmless domestic insects, to agricultural pests, to vectors responsible for transmitting sometimes lethal diseases) was brought to public consciousness in the 1960s. The seminal work by Rachel Carson, <u>Silent Spring</u> (1962) dealt primarily with the over-use of pesticides in agriculture, but raised issues of public health uses as well. Her work pitted environmentalist values against the technocratic values of much public health (the use of

DDT was banned in the USA in 1973). In addition, a number of critics attacked the whole idea of species eradication in the name of public health (see Dubos below). This dispute was not one pitting colonists against anti-colonists, since some of the best work on ecology and disease was done by colonial scientists in the colonies themselves in the 1930s. One effect of the change in perspectives, though, was to cast doubt on the 'one solution suits all' program of WHO. The failure (and termination) of the MEP, and WHO's declaration (in 1978) of the primacy of Primary Health Care in its future public health work, meant new approaches in dealing with poverty and disease in post-colonial countries would have to be devised.

Required reading:

Mark L. Winston, <u>Nature's Wars: People versus Pests</u> (entire, but esp. chs. 2-3, 8-10).

*Rachel Carson, <u>Silent Spring: 40th Anniversary Edition</u> (2002), pp. 245-275. *R.M. Packard and Paulo Gadelha, 'A Land Filled with Mosquitoes: Fred L.

Soper, the Rockefeller Foundation, and the *Anopheles gambiae* Invasion of Brazil', <u>Parassitologia</u> 36 (1994), pp. 197-213.

*Socrates Litsios, 'Rene Dubos and Fred L. Soper: Their Contrasting Views of Vectors and Disease Eradication,' <u>Perspectives in Biology and Medicine</u> 41 (1) (Autumn 1997): 138-149.

Week 11 (April 8th): Public Health Strategies in a Globalized World: Historical Legacies

Today, resources for dealing with health in poor countries are inadequate; public health systems are frayed; the burdens of disease across countries are extremely unevenly unequally distributed. At the same time, globalization of the world threatens even the richest countries with new diseases (e.g. SARS). What new ideas do we have for dealing with the unequal legacies of the past in health and disease? Farmer's book offers a trenchant critique and an interesting approach towards disease and poverty in the global world.

To give further focus to what is a potentially vast terrain of inquiry, we will look at one great success in the field of global public health, namely WHO's eradication of smallpox. Why did this campaign (the last case of smallpox was certified in 1979 in Africa) succeed where others failed? Should the last remaining stocks of smallpox held in (supposedly) safe laboratories also be eradicated? What other eradication campaigns are underway (e.g. polio). Where does Primary Care fit into vertically-organized, single disease campaigns organized by the rich countries for the benefit of the poor? Is it a reasonable use of poor country's national resources to direct them towards such campaigns?

Required reading:

Paul Farmer, Infections and Inequalities (entire)

*Paul Greenough, 'Intimidation, Coercion and Resistance in the Final Stages of South Asian Smallpox Eradication Campaign, 1973-1975,' <u>Social Science and Medicine</u> 41(5) (1995): 633-645.

*Donald A. Henderson, 'The History of Smallpox Eradication', in Abraham A. Lilienfeld, ed., <u>Times, Places and Persons: Aspects of the History of Epidemiology</u> (1980), pp. 99-114.

*A.R. Hinman and D.R. Hopkins, 'Lessons from Previous Eradication Programs,' in <u>The Eradication of Infectious Diseases</u>, eds. Dowdle and Hopkins (1998), pp. 19-31.

*Jeffrey Sachs and Pia Malaney, 'The Economic and Social Burden of Malaria,' <u>Nature</u> v. 415 (7 Feb 2002): 680-685.

Weeks 12 (April 15th): AIDS and the Collapse of Public Health

No disease encapsulates more clearly the global divide between rich and poor than the distribution and impact of HIV/AIDS. This topic offers any number of possibilities for discussion. I have indicated one interesting source, the relatively successful efforts in Brazil to deal with AIDS; other aspects can be added according to student interests. Alternative topics may also be suggested by members of the class.

Suggested reading:

*Richard Parker, 'Building the Foundations for the Response to HIV/AIDS in Brazil: The Development of HIV/AIDS Policy, 1982-1996', paper.

13 and 14 (April 15th, 22nd and 29^{th)}

I have left these weeks open for presentations of papers.