

Spring Term 2002
G8604

Disease, Public Health and Empire: Comparative Perspectives

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Time and place of colloquium: Thursdays, 11 am-12.50pm, 513 Fayerweather Hall
Office hours: Tuesdays, 11-1pm, Center for the History of Public Health, Rm 940 (721 W. 168th St. at Mailman School of Public Health); and Thursdays, 1-2.30 pm at 324 Fayerweather Hall (and by appointment)
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Description of the Course

The aim of this graduate colloquium is to provide a broad introduction to disease, public health and medicine in imperial and neo-imperial contexts, with an emphasis on comparative history, and the modern period (c. 1860-present).

The surge of interest in disease, public health and medicine in developing (or third world) countries in recent years reflects in part the return of imperialism as an important category of analysis in research in modern history, and the development of post-colonial studies as a critical field. Interest in disease in countries outside the richer areas of Europe and North America is also spurred by the recognition that the burdens of disease are spread very unequally across the globe. In many post-colonial countries the 'mortality revolution' came very late, and even today the epidemiological transition away from preventable, infectious diseases is often fragile. The perennial dream of the complete conquest of communicable diseases is constantly challenged by the fact of their return. Cholera, which played such an important role in debates on public health in Europe in the nineteenth century, has reappeared in Peru; malaria infects millions of people each year in India and Africa, despite global campaigns to eradicate it. This is not even to mention new diseases, such as insect-born hemorrhagic fevers, or AIDS, which as we know has infected poor populations to devastating effect.

Underlying these conditions is the fact of poverty itself, and of unequal development; the neglect of tropical diseases in the research agendas in modern western medicine; the high costs of medical drugs; and the fragmented and frayed condition of public health systems in poor countries. Development itself often has huge health costs that are not adequately acknowledged.

This colloquium, then, looks at the historical impact of formal and informal empire on health and ill health between c. 1840 to the present. I am especially interested in Latin America, but material on Africa and India is also included.

Colloquium Registration and 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 the History of Public Health.

Colloquium requirements:

Each of you will be expected to write a term 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). You should make an appointment to see me individually, by the fourth or fifth week of term. A two-page statement of the your proposed paper topic, with a short annotated bibliography, will be due in class on Week 7 (March 7th); completed papers will be due in class May 2nd, if possible; but under no circumstances later than May 30th, 2002.

Criteria for grading:

Participation in weekly meetings will count for 30% of your grade. The other 70% will be based on the quality of your written work. You will be expected to make one or two oral presentations during the course of the colloquium, as aids to classroom discussion. These will be short (usually no more than ten minutes), but they should be prepared in advance.

Books ordered for course at Labyrinth Books, 536 West 112th Street:

Curtin, Philip. Death by Migration: Europe's Encounter with the Tropical World in the Nineteenth Century (1989)

Farmer, Paul. Infections and Inequalities: The Modern Plagues (new edition, 2001)

Hays, J.N. The Burdens of Disease: Epidemics and Human Response in Western History (2000)

Spielman, Andrew, and d'Antonio, Michael, Mosquito: A Natural History of our Most Persistent and Deadly Foe (2001)

Stepan, Nancy Leys, 'The Hour of Eugenics': Race, Gender and Nation in Latin America (1991)

Watts, Sheldon. Epidemics and History: Disease, Power and Imperialism (1997)

Required articles are starred (*); a complete set, 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.

WEEKLY TOPICS AND READINGS

Part I: Empire, Disease and Public Health in the Nineteenth Century

Week 1 (Jan. 24th): Introduction to Colloquium: Questions, Approaches

I will give a brief overview of some of recent approaches in the literature on disease and public health in imperial and neo-imperial contexts. These include: colonialism and its powers (colonial medicine as a tool of empire); center and colony in medicine; local and/or indigenous knowledge versus western biomedicine; political economy approaches to disease; social constructionism versus historical demography in the history of colonial disease; race, gender and class in colonial medicine. Those wishing to follow up on methodological issues can consult the references in bold in the supplementary bibliography I will circulate for the colloquium. To get a sense of comparative indicators of health and ill health globally, take a look at a recent World Development Report (published yearly by OUP). We will return to the issue of health inequalities and the unequal burdens of disease distribution across the globe in Week 10.

Week 2 (Jan. 31st): Western Imperialism and Disease Impacts: The Long Nineteenth Century

Wherever Europeans travelled across the globe, they introduced diseases novel to indigenous populations (and encountered some novel to themselves). In the New World, the European conquest was followed by one of the largest kill-offs of native populations by disease in world history; but the effect of human colonization, alterations of the natural landscape, and economic activities, continually altered disease environments, for colonized and colonizers.

Here our focus is on the long nineteenth century, when European colonies were lost (in the independence movements in Latin America) and extended and gained (e.g. in India, Africa). In trying to understand diseases abroad, Europeans looked to physical factors in the environment that differentiated African, Latin American and Indian places from those in Europe. The distinction between temperate and tropical environments was mapped in disease terms.

Here we try to assess what picture of colonial health and ill health the colonists developed. How did European economic and other activities alter colonial environments, and thereby the disease environments overseas? What impact did the slave trade have on the disease exchange? Who were the agents of disease exploration (missionaries, colonial officers, travellers, the military?). Which diseases were believed to be most dangerous? Dangerous to whom? What did the miasmatic and broadly environmentalist approach to disease yield in relation to the understanding of disease causation? What did colonial and/or tropical countries contribute to the European pharmacopoeia (e.g. quinine)?

Required readings:

J.N. Hays, The Burdens of Disease, esp. chs. 4-9.

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

*Alfred Crosby, 'Hawaiian Depopulation as a Model for the Amerindian Experience', from his Germs, Seeds and Animals: Studies in Ecological History (1994), pp. 120-147.

*Mark Harrison, 'Introduction' to his Climates and Constitutions: Health, Race, Environment and British Imperialism, 1600-1850 (1999), pp. 1-24.

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

Week 3 (Feb 7): Sanitation and the State (1): Europe in the Nineteenth Century

In Weeks 3 and 4 we examine the emergence of state initiatives to manage the public health in Europe and Europe's colonies, with a view to assessing how empire affected the definition of "the public health" in European colonies.

Looking first at Europe, in the nineteenth century, starting in the northern industrializing countries, the state slowly took on more responsibility for regulating public health; also, starting in the second half of the 19th century, the wealthier countries began to experience a mortality revolution, marked by the reduction in deaths from infectious diseases, and an epidemiological transition to chronic diseases as the leading causes of mortality and morbidity.

The question is: what was the relation between these two transformations? 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, better nutrition) unrelated to public health per se primarily determinative (this is often referred to as the McKeown thesis)? Where does this debate now stand (using as our example Britain, the oldest industrial country, the largest colonial power, and the country with the best biostatistics)? Which diseases shaped public health initiatives, and what techniques of disease control were employed (quarantines, vaccination, notification of disease)?

This now-old debate about the causes of the mortality and morbidity revolution has been revisited and reformulated in recent years; it is important to this colloquium, because it provides a backdrop in examining the situation in the overseas European colonies, where the disease concerns, the populations protected, and the style of public health interventions used, were often distinctive.

Required readings:

J.N. Hays, The Burdens of Disease, chs. 10, 11.

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

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

*Dorothy Porter, 'Introduction', to The History of Public Health and the Modern State (1994), pp. 1-44; (and her Health, Civilization, and the State (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', Social History of Medicine 1, 1 (1988), pp. 1-38.

Week 4 (Feb 14th): Sanitation and the State (2): Colonial and Public Health Strategies in the Nineteenth Century

The previous session suggests some of the possibilities and limits to 19th century developments in public health (state and private) in Europe, and in doing so raises points of comparison between 'home' and 'abroad' in public health administration.

Were colonial physicians and/or colonial administrators 'agents of empire', or did their small numbers and budgets make them irrelevant to changes in health? 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?

Here we examine such things as environmental clearings (e.g. drainage), housing and population segregation, removal and resettlement of populations (colonials versus indigenous). How does Curtin characterize the 19th century tropical medical revolution c. 1830-1880s; are there any general conclusions to be drawn from his work? What were colonial responses to epidemics? Were traditional (or indigenous) healing methods used? More generally, how useful do you find Sheldon Watts' distinction between yellow fever and 'construct yellow fever' (or between malaria and 'construct malaria').

It has been said it was the misfortune of many nineteenth-century colonial and/or post-colonial countries (e.g. those in independent Latin America) NOT to have had a miasmatic revolution, but to have begun instituting a sanitary state in the twentieth century era of microbiology. Comment.

Required readings:

Philip Curtin, Death by Migration, entire.

Sheldon Watts, Epidemics and History (1997), esp. chs. 4-5.

**David Arnold, Warm Climates and Western Medicine (1996), chs. 3,4,5 and 7.

*David Arnold, 'Smallpox: The Body of the Goddess', in his Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth-Century India (1993), pp. 116-158.

*Sidney Chalhoub, 'The Politics of Disease Control: Yellow Fever and Race in Nineteenth Century Rio de Janeiro', Journal of Latin American Studies 25(5) (1993), pp. 441-463.

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

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

*Nancy Leys Stepan, 'Essay Review: Tropical Medicine and Public Health in Latin America', Medical History 42 (January 1998), pp. 104-112.

Part 2: New Strategies in the Twentieth Century

**Please note: On Tuesday, Feb. 19th, I am giving a lecture on the historical origins of eradicationism as a public health philosophy, looking at the work of Fred Soper on yellow fever and malaria, and his role within the Rockefeller Foundation, the Pan American Health Organization, and WHO. Details and place will be announced in advance for those interested.

Week 5 (Feb. 21st): Colonialism and the New Tropical Medicine, 1880-1930

Between c. 1880 and the 1930s, medical understanding of colonial diseases underwent a fundamental shift as a result of the rise of 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 insitutionalization 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:

Spielman and D'Antonio, Mosquito, chs. 1-6.

**Arnold, ed. Warm Climates and Western Medicine: The Emergence of Tropical Medicine, 1500-1900 (1994), chs. 8,9.

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

**Stepan, 'The New Tropical Pathology', in Picturing Tropical Nature, ch. 5.

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

Week 6 (Feb. 28th): Tropical Medicine Applied: Colonial Public Health Campaigns

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. quarantine, segregation of populations); but in other respects, there was a turn to new methods focussed on the reduction or elimination of on the control or elimination of the biological vectors.

In the case of yellow fever, reduction of adult and larval mosquitoes plus isolation of infected individuals were the chief techniques; other methods against the vector were tried out to control malaria. The disease-specific, vertically organized, public campaigns came into existence (note the military terminology, and the association between colonialism and military medicine).

What kind of model of public health was 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 of failure? How is success defined? Choose one disease/public health campaign to concentrate on:

Required readings:

Spielman and d'Antonio, Mosquito, ch. 6.
Watts, Epidemics and History, ch. 6.

On malaria:

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

*Nancy Leys Stepan, '“The Only Serious Terror in the Regions”: Malaria Control in Amazônia, 100-1920s', in From Cholera to Aids: History and Disease in Modern Latin America, ed. Diego Armus (in press, 2002).

On yellow fever:

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

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

On sleeping sickness:

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

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

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

Week 7 (Mar 7th): Race, Gender and Disease

Race remained fundamental to the construction of colonial diseases, as did sex and gender (which intertwined with race). Here I have selected for particular attention two themes: the ways in which acclimatization and immunities to disease were used to construct concepts of racial difference between the colonizer and the colonized; and the uses made between c. 1900 and the 1930s of eugenics, the scientific movement of "race improvement", which in the Latin American contexts was adapted to and modified by local sexual/gender politics as well as public health issues. Which diseases were assumed to mark off races in inherent abilities to resist diseases, and why? How did colonial contexts shape the uses of eugenics?

Required readings:

Stepan, 'The Hour of Eugenics': Race, Gender and Nation in Latin America (1991), esp. Introduction and chs.3-5

*Warwick Anderson, 'Immunities of Empire: Race, Disease, and the New Tropical Medicine, 1900-1920', Bulletin of the History of Medicine 70 (1996), pp. 94-118.

*Heather Bell, 'Disease, Quarantine and Racial Categories in the Gezira Irrigation Scheme', in her Frontiers of Medicine in the Anglo-Egyptian Sudan, 1899-1940 (1999), pp. 90-126.

*Donna Guy, 'Medical Imperialism: The Campaign Against Legalized Prostitution in Latin America', in Science, Medicine, and Cultural Imperialism, eds. T. Meade and M. Walker (1991), pp. 75-94.

**Stepan, Picturing Tropical Nature, chs 3-4, 6.

Week 8 (Mar 14th): The New Internationalism in Public Health (1): The Rockefeller Foundation and Empire

Between the two world wars, health in empire (and ex-colonies in tropical regions) became the focus of international concern; new international organizations (e.g. the League of Nations, the Rockefeller Foundation) became involved in assessing the burdens of diseases such as malaria, and in thinking through strategies to reduce or even eradicate them. Answers to how to control diseases independently of tackling such issues such as underlying colonial poverty, or the colonial "development" agricultural projects pursued by the European powers, were, however, hard to find.

Of the new international organizations, the Rockefeller Foundation was the most significant in public health before World War II. Spurred by the new imperial reach of the United States, and by empire more generally (hence the RF's great interest 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 settings, addressing the issue of its lasting legacy to overseas and 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. Discuss.

Required reading:

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

*Anne-Emmanuelle Birn, 'Public Health or Public Menace? The Rockefeller Foundation and Public Health in Mexico, 1920-1950', Voluntas 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. International Health Organisations and Movements, 1918-1939 (1995), pp. 222-243.

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

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

SPRING BREAK (no class Thursday March 21st)

Again **please note: the week of your return, on Tuesday, March 26th, Professor Marcus Cueto is lecturing on the global anti-malaria campaign of WHO and its aftermath. Details will be announced in class. Time: 1.30-3pm, Place: Clark Conference Center, School of Public Health.

Week 9 (Mar 28th): The New Internationalism in Public Health (2): Post World II Campaigns against Malaria, Smallpox

Eradicationism, meaning the complete elimination of a human disease by deliberate public health interventions, came into its own as a public health strategy after World War II. Following the discovery of new insecticides (e.g. DDT), and new drugs (e.g. chloroquine for malaria), both discoveries of the war itself, global campaigns aimed at eradicating specific diseases, one at a time, were launched by the newly founded World Health Organization (WHO). Many of these campaigns were focused on poor countries.

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? We look especially at the ambitious WHO plan to eradicate malaria worldwide, a goal announced in 1955 but abandoned less than 20 years later. How can we explain the failure of the malaria

campaign, and the success of the smallpox eradication program (the complete disappearance of smallpox was achieved in 1979)? Were biological factors (nature of pathogen, vector) and epidemiological characteristics decisive, or social, political and economic ones? Where do single-disease, global eradication campaigns stand now (i.e. what are the lessons learned from failures and successes)? What position does Watts take on strategies for dealing with disease in ex-colonial countries?

Required reading:

Spielman and d'Antonio, Mosquito, ch. 7.

Watts, Epidemics and History, ch. 3, and his conclusion.

*F. Fenner et al, 'What is Eradication'? and 'Lessons from Previous Eradication Programs', in The Eradication of Infectious Diseases, eds. W.R. Dowdle and D. R. Hopkins (1998), pp. 3-31.

*S. Litsios, The Tomorrow of Malaria (1996), pp. 73-126.

*R.M. Packard, 'Malaria Dreams: Postwar Visions of Health and Development in the Third World', Medical Anthropology 17 (1997), pp. 279-296.

*R.M. Packard and Paulo Gadelha, 'A Land Filled with Mosquitoes: Fred L. Soper, the Rockefeller Foundation, and the *Anopheles gambiae* Invasion of Brazil', Parassitologia 36 (1994), pp. 197-213.

*Javed Siddiqi, 'The Malaria Eradication Programme', in his World Health and World Politics (1995), Pt III, , pp. 123-192.

Part 3: Some Contemporary Issues

Week 10 (Apr 4th): Health and Contemporary 'Development': The Unequal Burdens of Disease

****Please note** the special seminar on 'Brazil's Aid Project: Lessons for the World', by Richard Parker, Dean of the Sociomedical Division, Mailman School of Public Health on Wednesday, April 3rd, (6-8pm, 1512 SIPA). Brazil's approach to AIDS control has been very successful and is considered a possible model for other countries.

In recent years, WHO has based its public health principles on the concept of Primary Health Care, and declared its goal as 'health for All in the Year 2000'. That year has passed and health for all is far from being achieved; in many countries, the situation today is worse than it was in the immediate post-World War II decades. Why? What political, economic and other factors are primarily responsible (e.g. civil war, absence of a state)? How does 'development' alter the health of populations in specific regions of the world? Why has malaria increased rather than decreased in Africa and Latin America. And what should be done? Are there any examples of successful re-thinking of public health strategies?

How, in particular, should the burdens of AIDS be shared between rich and poor countries? Are there any successful models for dealing with AIDS in poor countries? What are their ingredients?

Required readings:

Paul Farmer, Infections and Inequalities, entire.

*D.J. Bradley, 'Malaria: Old Infections, Changing Epidemiology', Health Transition Review 2, supp. Issue (1992), pp. 137-153.

*John Garrison and Anabela Abreu, 'Government and Civil Society in the Fight Against HIV and AIDS in Brazil', by the World Bank (2000).

* 'Researchers' Mathematical Model Provides Chagas Disease Insights', Rockefeller University News Bulletin, July 24, 2001.

*D. Sawyer, 'Economic and Social Consequences of Malaria in New Colonizing Projects in Brazil', Social Science and Medicine 37 (1993), pp. 1131-1136.

*Fred C. Tenover and James M. Hughes, 'The Challenges of Emerging Infectious Diseases: Development and Spread of Multiply-Resistant Bacterial Pathogens', J. American Medical Assn 275(4) (Jan 24/31 1996), pp. 300-304.

Week 11 (Apr 11th): NO CLASS. Individual meetings to discuss papers

This week I will meet members of the colloquium individually, to discuss the papers and class presentations. Please contact me by email in advance to set up times.

Week 12 (Apr 18th): Disease in a Borderless World?

Please note: open session of a conference, 'The "Brazilian Model" for HIV/AIDS Prevention and Control: Analyzing its Components and Assessing its Transferability'. Time: Friday, April 19th, Place: SIPA 1501, 2-5pm.

In a global economy and a world of instant communication, travel, migration, and immigration, the diseases of one place can quickly become the diseases of another. What measures are necessary to protect countries against the spread of disease? Which diseases are of greatest concern in a borderless world? Are the costs of disease in a borderless world shared by all? Or is a borderless world in fact a divided world in public health terms?

Required reading:

Spielman and d'Antonio, chs. 8, 9.

*David A. Leon and Gill Walt, 'Poverty, Inequality, and Health in International Perspective: A Divided World?', in their edited book, Poverty, Inequality and Health: An International Perspective (2001), pp. 1-16.

*Douglas W. MacPherson and Brian D. Gushulak, 'Human Mobility and Population Health: New Approaches in a Globalizing World', Perspectives in Biology and Medicine 44(3) (2001), pp. 390-401.

Weeks 13 and 14 (Apr 25th and May 2nd) : Presentations and/or additional topics
(e.g. indigenous knowledge and western biomedicine; pharmaceuticals, drug research and drug costs in a globalized economy).