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Wellcome History



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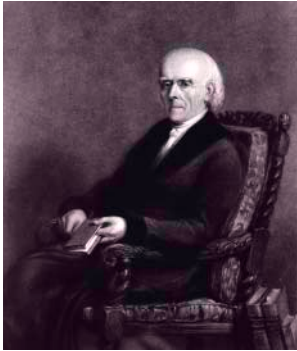
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Recovering homeopathic science



Recovering homeopathic science at the turn of the 20th century



The 'father' of homeopathy, Samuel Hahnemann.

One of the welcome hallmarks of 20th-century scholarship has been the revision of traditional history of science accounts. Whig historiography has given way to Prig and Tory historical narratives. Whereas the Whig writes history as a tale of inevitable progress leading to the glorious present, the Prig and Tory are far more concerned with the way history may have turned out but didn't. For the Prig such lost historical opportunities may be regrettable but irreversible, the historians task simply being to show

how each of the disputants make sense in their own terms, not 'taking sides'. The Tory on the other hand, wearing as she does her political heart on her sleeve, believes the historical figures under study got it right and remains ever hopeful of the restoration of this preferred outcome. The historian's task then becomes one of fully recovering this lost historical trajectory.¹

An area where the Prig and Tory impulse have been slower to catch on is the history of medicine. In this essay I will focus on the history of homeopathy in the USA and Britain at the turn of the 20th century in order to show how the Tory historiographical sensibility enables us to go further than the theses of Rothstein, Kaufman, Coulter and others who, at their most generous, attribute to homeopathy the power to produce changes in 'regular' medicine.² This keeps homeopathy at the margins of history;

Tory historiography, on the other hand, enables us to contemplate medicine developing differently since "the past contains the potential for many possible but often incompatible outcomes," and that such "possibilities do not simply disappear...[but] are actively repressed".³ This 'repression' further marginalizes homeopathy and its history as historians omit the achievements and discoveries of homeopaths, even though these were widely recognized at the time. This repression is especially seen in those histories dealing with the rise of 'scientific medicine'. It is the Tory historian's task, then, to bring this repressed memory trace into full historical consciousness.

An essential historiographical move for the Tory historian is the recovery (not invention) of similarity between two or more historical protagonists. Whereas difference enables the Whig to argue for necessity, that is no other historical outcome was possible, similarity underscores the Tory proclivity for contingency. Similarities between key individuals or groups in the historical field mean that at certain key moments they may have been able to switch places. Hence, I will show how homeopathy not only shared the 'scientific' characteristics of allopathy at the turn of the 20th century but contested what 'scientific medical practice' actually was.

Front cover: Two doctors fight over which method to use on a patient – a dramatization of the conflict between allopathy and homeopathy.

Homeopathy is a system of medicine formulated by Samuel Hahnemann (1755–1843) based upon the principle '*similia similibus curentur*' – let like be cured with like. Hahnemann taught that drug substances that caused a distinctive set of symptoms in healthy humans could cure a disease manifesting those same symptoms. Hence the drug-induced 'artificial disease' was able to drive out the natural one. Hahnemann coined the term 'allopath' to describe the practice of orthodox physicians of his day who prescribed drugs producing symptoms dissimilar and completely unrelated to the symptoms of the disease.

Allopathic medicine at this time was based upon the rationalistic system of Benjamin Rush (1745–1813). Rush taught all disease was the result of a deranged arterial system and recommended the stimulants alcohol, opium and mercury for debility and bleeding, and purging for excitability. In this article I will use Hahnemann's term 'allopathy' to describe the practice of 'orthodox' or 'regular' physicians both because it describes accurately their medical practice for much of the 19th century and because it overcomes the normative implications of the terms 'orthodox' and 'regular'.

Homeopathy spread to both the USA and the UK in the first half of the 19th century so that by the turn of the 20th century homeopathy was well established in both countries. By this time homeopaths were deploying both the rhetoric and content of science at two levels: first, to verify, explain and direct their clinical practice and experimentation (primarily to other homeopaths); and second, thereby to demonstrate the 'scientificity' of their practice (mainly to outsiders).

At the 52nd annual convention of the American Institute of Homeopathy in 1896 Richard Foster produced an example of this dualistic approach. Citing the *New York Therapeutic Review* of March 1895, published by the Pasteur Institute, Foster explained how experiments conducted by Roullin, Rokoruy and Leow showed how Hahnemann "is justified to the letter by the advance of science...". Roullin had demonstrated how nitrate of silver in the proportion of one part in 1 600 000 parts of water (about the third homeopathic centesimal dilution) inhibited the growth of *Aspergillus niger* (a species of wood



A ward at Hahnemann Hospital and Homeopathic Dispensaries, Liverpool, 1910.

fungus). Likewise, Naegeli found spirogyra died in three to four minutes in a solution of one part salt to 1 000 000 000 000 000 parts water (the homeopathic eighth centesimal or 16th decimal dilution) in which he admitted there could not be more than one or two molecules of the salt in each litre. Here was extraclinical evidence that substances in high dilution, and hence homeopathic medicines, could *act*.⁴

Homeopaths effortlessly fused their concept of high dilutions with material pathology. T G Stonham in his address to the British Homeopathic Society (BHS) in 1911 noted how sodium chloride's regulation of osmotic tension and the blood's specific gravity showed the similarity between the salt's physicochemical properties and its homeopathic action, proving both "...the truth of the Law of Similars and of the power elicited by dynamization".⁵ Pathology was also linked to therapeutics by means of the 'provings' – experimenting with dilute drugs on healthy humans.

Foster explained in 1897 how homeopathic provings demonstrated that drugs arouse different organs, or parts of an organ or even distinct functions. Foster claimed this as the anatomical demonstration of the law of similars, citing Constantine Hering's (1800–80) discovery of the action of nitroglycerine in threatened cardiac failure as an example.⁶ Even the 'high dilutionist' James Tyler Kent (1849–1916) saw the value in pathological and post-mortem findings for homeopathy since, on ethical grounds, provings could not be carried out on humans to the point of tissue damage. Consequently, the proper study of materia medica (drugs), Martin Deschere suggested, required a pharmacological laboratory where experiments on animals could determine a drug's point of attack.

Deschere further suggested the long-noted affinity of certain drugs for specific organs was best explained according to Ehrlich's hypothesis since the receptor theory showed certain drugs had an affinity with specific tissue. Further, this affinity was not simply chemical or mechanical, Deschere claimed, but involved some vital principle, one that according to Foster operated at the molecular level. Foster claimed "...when we consider the effects of molecular activity as known to science in many forms...No matter how much medicine we give...the 'cure' is effected by molecular forces."⁷

Indeed, homeopaths infused science into medicine in such a way that it began to change the way they practised. Charles Hayward surgeon to the ear, nose and throat department at the Hahnemann Hospital, Liverpool, UK, delivered a paper to the BHS in 1911 relating the use of ionization in the administering of the homeopathic drug. By placing a dilute drug solution-soaked pad on the skin and passing a current through it infinitesimal portions of the medicines were passed into the minutest cells in the body directly. Hayward claimed a one per cent solution of cocaine passed into the tissues in this way produced anaesthesia far beyond that attainable by hypodermic injection of even a maximum dose.⁸

Clinical practice was further altered by Wright's 'Opsonic Index', which homeopaths were using by 1907 to demonstrate the operation of the similimum and chart its progress. The Opsonic Index was a measure of immunity. It was made by taking the patient's serum, determining individual resistance compared to an 'average', producing an isopathic preparation from this serum and then injecting the serum back into the patient. Normally, an individual's opsonic index would fall, the negative phase or homeopathic 'aggravation' – then rise, the positive phase

accompanied by an improvement in the patient's overall condition. A declining opsonogenic score signalled the necessity of another dose until the opsonogenic index reached double the 'normal' by this means the reaction of the vital force to the remedy could be tracked.

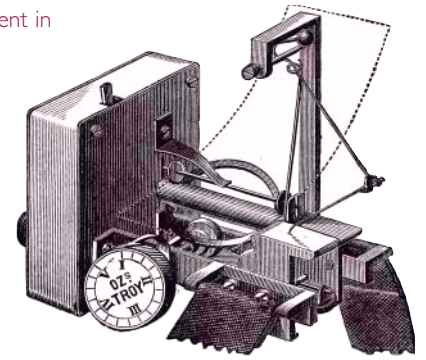
As a result of these developments homeopaths crystallized a vision of an international medical science research programme in the first decade of the 20th century. The major homeopathic national medical societies of the US, UK and Germany called for a "'proving' of drugs by the major homeopathic institutions" so that "...we should be able better to correlate pharmacodynamics with the ascertained pathology of the disease". Homeopaths now had at their disposal microscopical and chemical analyses as well as the stethoscope, X-ray and sphygmograph, a portable version of the latter winning first prize for its designer R E Dudgeon (a homeopath) at the 1881 Sanitary Exhibition. With such means at their disposal homeopaths considered their triumph over allopathy only a matter of time.

To conclude, homeopaths used the rhetoric and content of the 'new sciences' to legitimate and direct their practice and research while contesting what scientific medicine *actually was*. Medical language and theory were underdetermined by pathological, physiological and anatomical data and by bacteriology and the new medical technologies in a way that clinical *practice* was not. While homeopaths constructed a laboratory-based research programme to determine the site of drug action allopaths diluted their drugs. The 'scientificity' of homeopathy at the turn of the 20th century has been repressed by historians of medicine. Narratives in the early part of the 20th century were generally the work of retired allopaths concerned with legitimating their own success. Consequently, names like Dudgeon and Hering, rarely, if ever, appear in standard history of medicine texts. This paper is a small step in recovering one lost historical opportunity and returning the repressed to the collective consciousness.

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References

- 1 For a detailed discussion of the differences between these historiographical animals see Fuller S (2002) The pride of losers: A genealogy of the philosophy of science. *History and Theory* 41: 392–409.
- 2 I would prefer to see both 'alternative' and 'complementary' dropped from history of medicine narratives due to what John Blake calls their 'iatrocentric' quality. Blake J B (1981) Homeopathy in American history: A commentary. *Transactions and Studies: College of Physicians Philadelphia* 5: 83–92.
- 3 Fuller 'The Pride of Losers', p. 401.
- 4 *Transactions of the American Institute of Homeopathy* [hereafter, *AIH Transactions*], 1896, p. 147.
- 5 Stonham T G (1910/11) A study of Natrum Muriaticum. *Transactions of the British Homeopathic Society*: 105.
- 6 *AIH Transactions*, 1896, p. 155.
- 7 *AIH Transactions* 1896, p. 148.
- 8 *Transactions of the British Homeopathic Society*, 1911, p. 37.
- 9 *AIH Transactions* 1907.
- 10 *Monthly Homeopathic Review*, 2 January 1899, pp. 5, 9.



Homeopath R E Dudgeon's prize-winning sphygmograph.

The physiology of emotions in England c.1660–c.1820

The study of emotions is a major growth area in the discipline of history, as in anthropology, sociology and psychology. In recent decades historians of society, the family, gender and art have focused on the meanings of emotions over time and the language used to describe them. For medical historians, emotions are no less important considerations in analyses of the psychological trauma of illness and suffering.

Such concerns are echoed in histories of psychology and psychiatry, often with an emphasis on the rise of institutionalization and pathologization. In the main, therefore, the medical history of emotions has focused on their psychological effects and on the construction of 'abnormal' states of mind, most notably in the history of insanity. Although considerations of the passions were uppermost in 17th- and 18th-century medical and scientific debates (where they were variously described as conveyors of the animal spirits, evidence of materialism or the divine, and conduits between *psyche*, soul and *soma*), relatively little attention has been paid to them as physical or embodied occurrences.

In the history of physiology this neglect is also marked, perhaps as a result of its broader focus on transitions in understanding human anatomy and pathology under the Enlightenment's 'new science'. These include the decline of humoral theory and the rise of iatrochemical, mechanistic and nervous physiologies through research into the qualities of heat, irritability, sensibility and excitability by such scholars as Harvey, Descartes, Boerhaave, von Haller, Cullen and Stahl. Their combined investigations are understood to have redefined the 'animal economy' by supplanting traditional Aristotelian accounts of human nature and the mind–body relation. Yet evaluations of the physical role of emotions in this transition – as felt and communicated – have been overshadowed by historiographical concern for the life processes of breathing, circulation and generation.

My research, therefore, addresses the physiology of emotion as revealed through medical and scientific research, and social practice. For during the 17th and 18th centuries, medics, scientists and theologians considered and debated the role of the passions as psychological and bodily occurrences. Since authors of these texts ranged, chronologically and epistemologically, from Thomas Wright to Erasmus Darwin, their writings include many well-known scientific texts, but also lesser-known, popularized works.

What these had in common was an interest in emotion as related to intellectual ideas about the mind–body–soul relation and the origin of life, as well as more commonplace concerns for the role and function of emotional expressions and what psychologists today term 'display codes'. They puzzled, as we do, over how and why emotional feelings were etched on the body by the blush of shame, the pale skin and goose bumps of terror, or the flow of sorrow's tears. They speculated over the psychical and social purposes of such signs, and attempted to accommodate them in material or metaphysical systems. Moreover, theories of the physical effects of emotions were developed in and through medical practice, as seen in casebook entries by physicians like William Cullen into the diagnosis and treatment of such mental and

bodily afflictions as hysteria and hypochondriasis. It was not only medical theorists and practitioners who speculated over the meanings of emotion.

In sources as diverse as diaries, autobiographies and legal trials from the 17th and 18th centuries, we find men and

women debating its form and function. One example is James Boswell's (infamous) series of journals that not only chart the writer's social development, but also reveal much detailed and self-conscious analyses of his emotional performances.

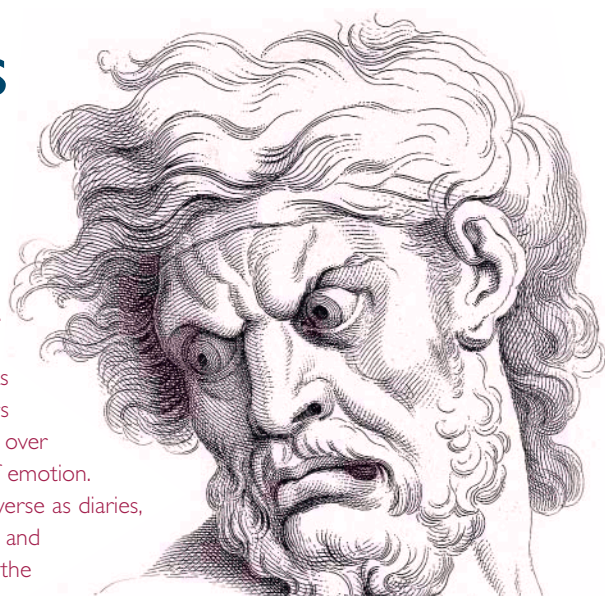
Unravelling the everyday discourses on emotions found in such works allows us to analyse subjective accounts of mental and bodily structures as well as the significance of emotion theory in the broader sociopolitical environment. In the case of court records and deposition material, for instance, I have argued that defining the emotional state of the defendant – in particular the existence of an 'angry and malicious mind' – was central to the assessment of culpability and responsibility in ecclesiastical slander suits.¹ In the courtroom, as in the diary, learned and colloquial medical beliefs about emotional physiology blended in the measurement and interpretation of individuals' inner feelings through facial expressions and bodily gestures.

The primary aim of this project is to chart and analyse the physiology of emotion as found in each of these realms at a time when early modern medicoscientific theories of mind and body were allegedly transformed into more recognizably 'modern' forms. It examines the interrelationships between medical and sociolegalistic interpretations of the passions, and between learned and popular understandings of emotions as psychological and bodily experiences. In so doing it evaluates shifts in emphases wrought by the 'new science' and the extent to which humoral and theological interpretations of emotion were superseded by (or accommodated within) mechanistic and nervous physiologies. More fundamentally, it examines the ways in which understandings of the relationship between mind and body, as demonstrated in emotional performances, revealed broader, politicized ideas about status and identity.

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References

- Bound F (forthcoming) 'An angry and malicious mind? Narratives of defamation at the church courts of York, c.1660 – c.1760. *History Workshop Journal*.



The face of a man in a state of anger. Engraving by J Tinney, c. 1730/40, after C Le Brun.

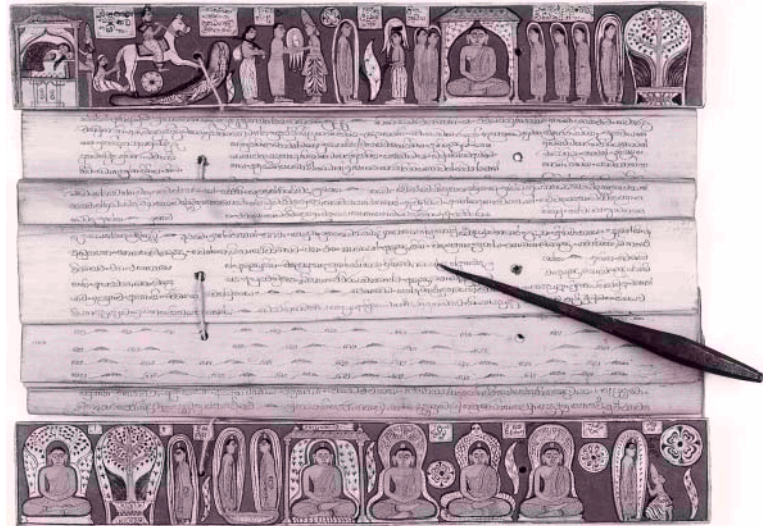
Exploring Asian medical knowledge: Need to contextualize the medical texts

Considerable progress has been made in recent years regarding understanding Ayurveda, Unani and Chinese medicine from philological, medical history and medical anthropology perspectives. Apart from cataloguing Asian medical texts distributed in various centres in Asia and Europe, some excellent translations of selected classical texts into European languages have helped promote scholarship on Asian medicine. There is also an expanding body of scholarly analysis of content of Asian medical texts. Medical anthropological field research on contemporary health beliefs and practices among lay people and traditional practitioners as well as historical research investigating the impact of colonial rule on indigenous medical systems have enriched our understanding of the importance of and challenges faced by Asian medicine.

In the case of Ayurveda the classical texts of Caraka, Suśruta and Vāgbhaṭa invariably provide deep insights into fundamentals of this medical tradition. Despite their antiquity, they are part of a living tradition in so far as thinking and therapy of some contemporary practitioners at least are informed by ideas germinated in these texts. As some anthropological field research clearly demonstrates these texts continue to influence the diagnosis made and therapies meted out by some contemporary practitioners (e.g. Obeyesekere 1998). There is also considerable evidence that the broader health culture in South Asian countries denotes widespread penetration of basic Ayurveda concepts and ideas such as *bhūta*, *dhātu* and *doṣa* (Obeyesekere 1976).

There are, however, several unresolved questions relating to the nature, dynamics and ultimate significance of medical knowledge represented by classical Ayurveda texts. For instance, what is the relationship between classical Ayurveda texts and hundreds of lesser-known medical texts distributed in various centres in Asia and Europe? Unlike classical Ayurveda texts, which are mainly in Sanskrit, these lesser-known indigenous medical texts are in various local languages such as Bengali, Malayalam, Sinhalese or Tamil (e.g. Liyanaratne 1999). Given the fact that Sanskrit was always a scholarly language used by a sophisticated intellectual elite, the medical texts in local languages can be expected to be less abstract and closer to the realities at the grass root level.

How far do these local medical texts represent subsidiary layers of medical knowledge in some ways closer to grass-level realities, better adaptation to locally available medicinal ingredients and relief for day-to-day suffering of people? How far do they elaborate, conform to or even contest Ayurveda fundamentals laid out in classical texts? Was this local knowledge invariably marginalized by classical Ayurveda or was it ever reflected upon, refined and fed into mainstream Ayurveda thinking? These are some questions that need to be addressed in future research.



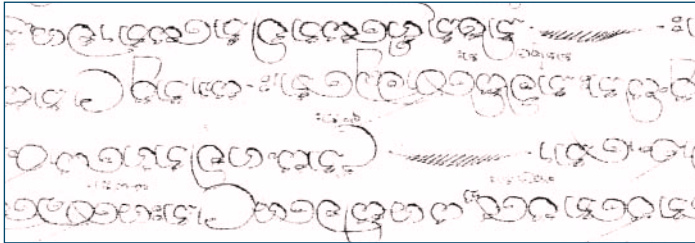
According to Charles Leslie and Allan Young, the key challenge faced by scholars working on Asian medical texts is to move away from a tendency to “concentrate on written texts abstracted from the stream of contemporary history and the context of everyday clinical practice”. Related to this challenge are additional medical history puzzles such as why did Ayurveda fail to catch up with the quantum jump that Western biomedicine has made since the latter part of the 19th century, and what is the nature and extent of colonial impact in shaping the evolution of Asian medicine over the past 500 years?

While it is important to recognize that Asian medicine has indeed demonstrated a degree of resilience as manifested in ‘New Age Ayurveda’, for instance, how far such developments are driven by a rather disturbing tendency to romanticize, fetishize and commodify Ayurveda must be examined. Finally which aspects of Asian medicine are resilient, adaptable and forward looking, and which are more vulnerable in the current environment of rapid globalization must be assessed.

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A fuller version of this article is available at www.wellcome.ac.uk/wellcomehistory.

Interactions between traditional and ‘Western’ medicine in colonial Ceylon



Long before the colonial era in Ceylon (Sri Lanka), which began in the 16th century, the country had its system of traditional medicine, largely of (Indian) Hindu (Ayurveda) and Islamic (Unani) origin, with an older indigenous component, Desiya Chikitsa. Rather elaborate hospitals were built from 340AC to the early 12th century AC; sanitation was practised, and surgical instruments used in the late 12th century are thought, by some contemporary scholars, to have been comparable with modern surgical instruments.

A major difference between traditional medicine and Western allopathic medicine, which underlies interactions between these systems, is that the former is seen as being ‘holistic’ in its bases and practice. Traditional medicine is a complex tradition and includes theory, herbal and mineral therapies, foods, as well as rituals, with a religious and cultural basis. Following the ancient origins of traditional medicine, little development took place in subsequent centuries, in Ceylon (as in India), given the absence of experimentation intended to develop – or even establish – the bases of these traditions. Instead, the utilitarian aspects of traditional medicine remained predominant.

The impact on traditional medicine of the Portuguese (1505–1658) and Dutch (1656–1796) colonial presence in Ceylon, which was restricted to the maritime regions, was less substantial than British colonial rule, which encompassed the entire country. There appear to be parallels between the Indian and Ceylonese contexts of traditional medicine, and the interaction between traditional and Western medical systems especially during the British colonial period, because of cultural, sociological and (colonial) administrative similarities between the two countries.

The British were, in the early decades of their rule, interested in the herbal therapeutics of traditional medicine rather than in its theory. In later decades, however, with advances in Western medicine, antagonism against indigenous medicine appears to have grown. The British promoted Western medicine, while traditional medicine received next to no state patronage. Western medicine was used for protecting the health of the British militia and administrative personnel. With the expansion of their plantations, the need to safeguard the health of the plantation workers also became important. In other instances, the indigenous population received greater attention due to their contact with the military personnel.

The relatively limited interest of the British colonial state in traditional medicine is reflected in the nature of the main official records – the Sessional Papers, which were reports submitted to the Legislative Council of Ceylon for consideration. Between 1855 and 1947, a period of 92 years, 133 papers were tabled. Only three were on ‘indigenous’ medicine, which was in direct contrast with the many papers dealing with Western medicine (83 papers), archaeology (42 papers), and agriculture and plantations (61 papers).

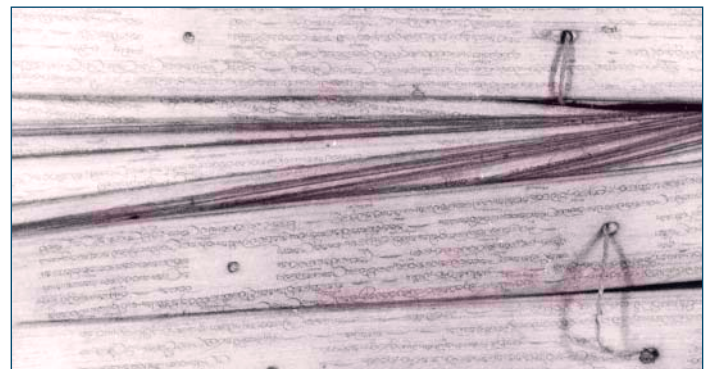
This negative view of traditional medicine was not restricted to the members of the colonial administration. The doctors of the Raj, many of whom survived on private practice, perceived traditional medicine as a threat. In addition, registered allopathic practitioners were prohibited from associating formally with traditional practitioners, both by the British General Medical Council and the Medical Council of India (interestingly, such prohibitions continue to operate in Sri Lanka today).

That said, the 20th-century revival of traditional medicine could not be stopped by the colonial authorities. This was partly due to the revival of indigenous culture, which was essentially Buddhist in orientation (a process closely associated to the growth of nationalism in the island). The survival of traditional medicine in Ceylon, despite hostile colonial attitudes, and its revival during the later stages of British rule illustrates that Western medical ideas and institutions could not operate in isolation from indigenous culture.

The revival of traditional medicine began in the early 1900s through the efforts of locals who organized the training of Ceylonese practitioners in India. Their motivation was not focused primarily on traditional medicine *per se*, but on a shared need to resuscitate their indigenous Ceylonese culture. The colonial government could not ignore such trends. It appointed a committee, which proposed the establishment of a college for traditional medicine. A Board of Indigenous Medicine was appointed in 1928, and the College of Indigenous Medicine opened in 1929.

However, the Ceylonese elites remained undecided as to whether they should adopt the Western medicine, resuscitate traditional medicine, or attempt to synthesize the two. Some attempts at a ‘synthesis’ – by which I mean a dual practice, with no intimate integration between the theoretical and practical aspects of each system – were made in the college of traditional medicine in Ceylon.

Generally speaking, these efforts were made on the initiative of the local intelligentsia. And yet, these efforts were not always successful. There were



several reasons for the failure of attempts at synthesis: there were no uniform training courses, and professional standards of education and practice; there were differences of opinion on the relative degrees of emphasis to be given to each system; and there were disagreements about the locations of the teaching of the components of traditional medicine and about the languages in which they should be taught.

There was another reason for the continuing resilience of Western medicine. Innovations in public health contributed to the view that Western medicine was more effective. It also did not help that many traditional medicine practitioners could not diagnose and curtail the spread of infectious disease. Thus it was especially during the later decades of British colonial rule, when Western medicine achieved great advances in theoretical knowledge, that the confrontation between the two systems became most acute. The changes in morbidity pattern ensuing from colonial ingress, especially the import of new diseases with immigrant labour – yaws, smallpox, venereal diseases and cholera – with which traditional medicine practitioners were not familiar; would have accentuated the contrast between the two systems.

There were, however, occasional official views that were appreciative of traditional medicine, especially its therapeutics with plants; a further reason was the occurrence of diseases, which the British population could have contracted, with which the traditional medicine practitioners were more familiar. Thus, innovations in preventive medicine helped Western medicine win numerous supporters among Ceylon's Western-educated local elites. Strikingly, these classes were also very active in a nationalist movement that was keen to revitalize indigenous cultural/medical traditions. The resultant contradictions – and their complex effects on medical policy in Ceylon – need to be examined in far greater detail than has yet been attempted.

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WORK IN PROGRESS

Sarah Talbot



The Hospitals of Angkor

“As in our country, drugs can be bought in the market of these, with their strange names, I have no knowledge. There are also sorcerers who practise their arts on the Cambodians. How utterly absurd!”¹

Although some seven centuries have passed since the Chinese emissary Chou Ta-Kuan visited Angkor, outside knowledge of Angkorian medicine has scarcely increased. The great civilization of Angkor (AD802–1431) dominated Cambodia, Thailand and Laos for centuries. Since European ‘re-discovery’ in the 1860s, most scholarly attention has been paid to the deservedly famous temples such as Angkor Wat: very little attention has yet been paid to other threads that bound the empire together.

Although little known, medical systems focusing on state-constructed ‘hospitals’ and traditional plant-based medicines seem to have been important components of Angkorian society. This is most apparent in the reign of Jayavarman VII (1181–1220), who instituted unprecedented construction in the region immediately to the north of the Great Lake of Cambodia and across his empire. He also converted the state religion to Buddhism and built a network of 102 ‘hospitals’ (*arogysala*) based at the temple complex of Ta Prohm in the city of Angkor Thom.

Contemporary inscriptions refer to hospitals and medical practices, and provide some clues to social context. According to one inscription, some 81 640 men and women from 838 villages supplied Ta Prohm with rice, clothing, honey, wax and fruit. Staff included physicians, cooks, nurses, water-boilers and pharmacists. Mustard seed, sandalwood, coriander, cardamom, nutmeg, saffron and camphor comprised some of the plant-

based medicines used.² Only a handful of the 102 hospital sites have been identified, although several small hospital chapels still stand. My research focused on north-east Thailand from late prehistory to Angkor and included an excavation at the Prasat Hin Phimai, home temple for Jayavarman VII's Mahidrapura dynasty. An ancient highway connected Phimai to Angkor Thom, and was lined with hospitals and rest houses for pilgrims. Early European explorers recorded the remains of many Angkorian structures during field surveying in north-east Thailand a century ago. The current research project, funded by the Evans Fund of Cambridge University, considers these structures, and will address such basic questions as the survival of such sites in the modern landscape.

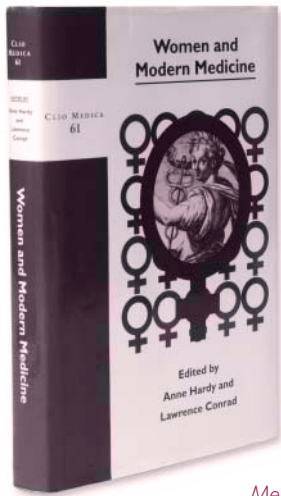
The early history of South-East Asia is often overlooked in favour of its neighbours, India and China, and the history of medicine in the region is no exception. The nature of medicine of Angkor largely remains unknown. What was the nature, organization and role of the ‘hospitals’ within the empire? How did Indian, Chinese and local medical traditions interact, and how did notions of Khmer leadership influence medical practices? My current project aims to begin answering some of the most basic questions concerning this important but enigmatic early non-Western medical system.

Dr Sarah Talbot recently completed her PhD in anthropology at the University of Otago, New Zealand (E-mail: stalbot@xtra.co.nz).

References

- 1 Chou Ta-Kuan (1993) *The Customs of Cambodia*.
- 2 Higham C F W (2001) *The Civilisation of Angkor*. Cambridge: Cambridge University Press. See also Chhem R K (2003) Historiography of Khmer medicine. *Wellcome History* 22: 11–13.

Women and Modern Medicine



The heritage of women in medical spaces spans ancient history to the present. From being burnt as witches, through being regarded as intruders into the male medical establishment, to being respected as colleagues they have travelled far. Yet how have women responded to the challenges and opportunities, and sought to use the power of modernizing Western medicine to further their individual and gender interests?

A collection of papers first presented at a symposium, *Women and Modern Medicine* attempts to examine these issues.

The book straddles various themes – institutional history, historiography of pharmacy and hormonal research, medicine in colonial context, struggle for reproductive rights and so on.

Ann Dally's contribution, 'Women and macho medicine', focuses on defining machismo as an attitude to women, life and medicine. She points out that macho medicine is macho not only in treatment but also in the methods of scientific investigation. Most evident in invasive treatments, these raise questions of autonomy of the patient more than anything else. Reared on 'the doctor knows best' principle, for doctors, machismo is more of a way of practising medicine. Nevertheless, despite its pejorative connotations, she also points out that macho medicine leads to progress.

Nowhere is this better reflected than in the penultimate article 'Pioneers of infertility treatment' by Naomi Pfeffer. Pfeffer shows that the research culture in Sweden with its privileging of the collective good vs individual interests always enabled overlooking of ethical considerations. Gemzell, the pioneer in research on pituitary gonadotrophins decided what risks could be taken, when he pumped women with hormones resulting in multiple pregnancies. The thrust of Pfeffer's article is however to show how Sweden could steal a march over the rest of the nations as circumstances of time and place were favourable, and social taboos almost nonexistent. Bringing in Dally's argument, therefore, macho medicine actually enabled a number of infertile women to conceive and also resulted in an advancement of medical knowledge. Interestingly, Dally does not write as to whether women resist practising macho medicine. After all, modern medicine was developed and practised by men and still largely is.

The lead article thereby enables us to engage closely with the theme of this book and also think about the unique location of women as both doctors and women. Did women speak in different voices or was there a woman doctor's voice? How far their gender interests affected their medical practice? Was there a privileging of professional over gender interests? What was their stand on reproductive rights and was it articulated differently from that of the male practitioners? Does a glass

ceiling for professional women in academic establishments exist? The essays in this volume attempt to answer some of these questions, give new perspectives and a few frankly revisionist arguments.

Significantly though, women as doctors were uniquely empowered to speak on a range of subjects concerning women. Women's nurturing capabilities were used as an argument for entry of women in the medical profession, first as nurses then as doctors. Practising medicine has had a tremendous liberatory potential as is evident from Bridie Andrews's piece on Qui Jin's advocacy of nursing for the tradition-bound Chinese women.

The essay 'Run by women, (mainly) for women: Medical women's hospitals in Britain, 1866–1948' by Mary Ann Elston traces the history of the women's hospital movement in Britain. What is striking about Elston's article is her argument that the social maternalist argument for women-only institutions was part of the ideology of the time. She focuses, instead, on the significance of these institutions for the advancement of women's professional interests as well as the training grounds for a new generation of professional women.

Anne Witz writes about the movement for supplying female medical aid in colonial India. She persuasively argues that these British women actually opened the secluded zenana to the imperial gaze. Anne Marie Rafferty refers to the "voices of the zenana themselves being silent" (p. 3). However, ignored too are the voices of a growing body of Indian women trained in Western medicine in this period.

One of the most interesting of essays is by Lara Marks. One of the points made is that male and female attitudes about birth control cannot be generalized and that doctors' responses were conditioned by the links with the pharmaceutical companies as well as by their nationality. Marks points out that the whole research was built up on biological knowledge of the historical understanding of the female body. There were attempts to formulate a universal female body in terms of the hormonal cycles and their responses to the pill. This essay also shows that lay women were not passive agents and actually demanded contraception and spurred research into the field.

The entire birth control movement can be a fascinating subject of study in itself with its links with the feminist movement and the implications of reproductive rights for women's empowerment *per se*. Also related are questions of incorporation of birth control in the curriculum and policy framework at the level of the state. The promotion of contraception within the curriculum itself was a revolutionary step as evident in the essay by Lesley Hall. She teases out generational differences in the advocacy of birth control by women doctors. Women doctors themselves felt increasingly handicapped as they, by virtue of their being female and therefore more approachable, were bombarded with queries on birth control.

The strong identification of women with the birth control movement is even clearer in the stand adopted by women doctors in Weimar Germany, who argued for more rights of women in this regard. Women were also regarded as better spokespersons on such issues and their voices carried weight. However, these women adopted a different position on issues of eugenics and quackery as their professional interests would be clearly threatened if they did not do so. Cornelia Usbourne

shows in her essay that women chose to identify with their professional interests in these cases. Of the three issues dealt with in the article, two (eugenics and abortion) have direct continuities in the post-Weimar period. Nazi Germany with its glorification of eugenics and the cult of motherhood perhaps offered a different type of challenge to women doctors and can become an independent subject of inquiry.

The dangers of looking for a uniquely women's response is highlighted by Hilary Marland's piece on Dutch midwives. She analyses their appropriation of child birth technology to advance their own interests. Midwives not only successfully safeguarded their position in the provision of healthcare but in fact carved a niche for themselves. Marland suggests that midwives in The Netherlands were not subjected to the vitriolic attacks seen by their counterparts in the USA and have an autonomous realm to this day.

With a growing number of women participating in modern medicine as medical practitioners, academicians, consumers of health products and health policy formulators it remains to be seen as to how effectively they can use the power of modern medicine to further their individual and gender interests.

Hardy A and Lawrence C (2001) *Women and Modern Medicine*. *Clio Medica* 61.

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BOOK REVIEW

Jennifer Keelan

Designs for Life: Molecular biology after World War II

In his article, 'Who cares about the double helix?', the historian Bruno Strasser challenges the many commentaries appearing in scientific journals which portray the complete sequencing of the human genome as the natural completion of Watson and Crick's work on the double helix. It was, as one scientist put it, "the most significant event in biology since the 1953 publication of the Watson and Crick paper describing the structure of DNA..." (Strasser, *Nature* 422 p. 804). Soraya de Chadarevian's *Designs for Life: Molecular biology after World War II* adds to an ever increasing body of literature that is attempting to revise and contextualize the origin and evolution of molecular biology.

She does so by explicitly localizing her study to one particular institution: the Cambridge Laboratory of Molecular Biology, and though hardly a narrow prism (more like the fountainhead), this allows her to follow the intricacies of the political, cultural, social and scientific events that led to the creation of a separate discipline self-styled as molecular biology, and through this limited geography, mine the data that makes for better 'big histories'.

De Chadarevian, a senior research associate in the Department of History and Philosophy of Science at the University of Cambridge, re-frames what is described as the *annus mirabilis* of 1953 during which the Queen was crowned, Everest was climbed, and DNA was solved. De Chadarevian argues that the discovery of the structure of DNA did not give birth to molecular biology and she points out that the original

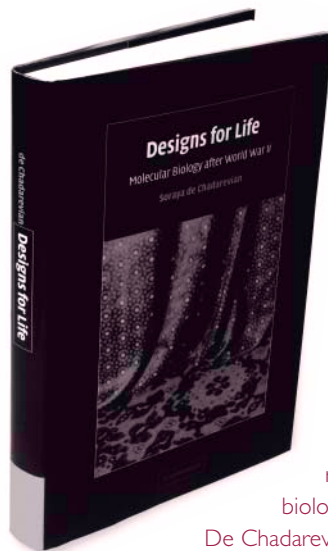
model of DNA appears to have been left to rot and a copy was only dusted off and displayed years after the discovery. The Cambridge laboratory itself carried the name 'biophysics' until 1957 when it became the first institute to have 'molecular biology' in its title.

The origins of the field of molecular biology, de Chadarevian argues, had more to do with an institutional crises at the Cambridge Biophysics Laboratory which forced resident scientists to redefine their territory as they were shuffled out of the physics department. The move to create a new discipline did not rest on any one single discovery or even on one particular intellectual programme.

Molecular biology, as biophysics before it, was a true hybrid science formed by the particular expertise and interests of a group of scientists. It did, however, formalize the claim to a specific authority over diverse techniques from chemistry, physical chemistry, X-ray crystallography, biochemistry and genetics. The founding of molecular biology sparked serious controversy with older institutions representing established fields, especially as molecular biology seized territory traditionally held by biochemists.

De Chadarevian shows how this controversy was important in shaping the new field, in the choice and location of its physical infrastructure as well as intellectual moorings: both buildings and funding developed a particular arms-length relationship with the university.

This study focuses on the great post-war expansion in government support of civil science but extends into the recession of the 1970s, a critical period of retraction in government expenditure on science. She deals with a bewildering array of discoveries, technologies, and scientists that graced the halls of the Cambridge laboratories and their interrelationships. The discoveries, the intellectual programme, the scientists, the institutions, the MRC funding decisions and the outside political realities all form a recursively referential environment through which the discipline developed.



While the reader is introduced to the bun shop where notables like Watson and Crick snacked, unlike traditional biographies, or even strict institutional histories, de Chadarevian's chary selection of detail highlights connections between the social, cultural and technical milieu without overwhelming the reader with localism (p. 3). De Chadarevian moves easily from the institutional and biographical histories that dominate the work to an analysis of the material culture of molecular biology. It is this continuous interleaving of the physical, institutional, cultural and political narratives that make this work so groundbreaking.

She describes in detail how the Cambridge group's physical models of molecules became the stars of the BBC science programme *Eye on Research*, broadcast in May of 1960. In a refreshing departure from what is largely a scientist-centred history, she includes a fascinating but brief discussion of the impact of the artist Irving Geis.

Geis, the self-styled Vesalius of molecular biology, created 3D drawings of myoglobin and other molecules that influenced a whole generation of scientists. De Chadarevian's work on models (chapter 5) and the pre-

history of molecular biology (chapter 3) would both serve as valuable cutting-edge teaching tools to complement undergraduate course material on the subject of the discovery of the double helix.

As de Chadarevian herself has pointed out, by engaging in 'recent history' she has the rare advantage to be able to collect autobiographical accounts of events, interview the actors themselves and go beyond textual sources. She has the unusual opportunity to challenge the narrative of the standard history as it is still unfolding. What will be interesting is to see how her own careful accounting for the origins of molecular biology will reflect back on the parallel development of the identity of the science itself in the never-ending process of self-definition and negotiation of scientific specialities.

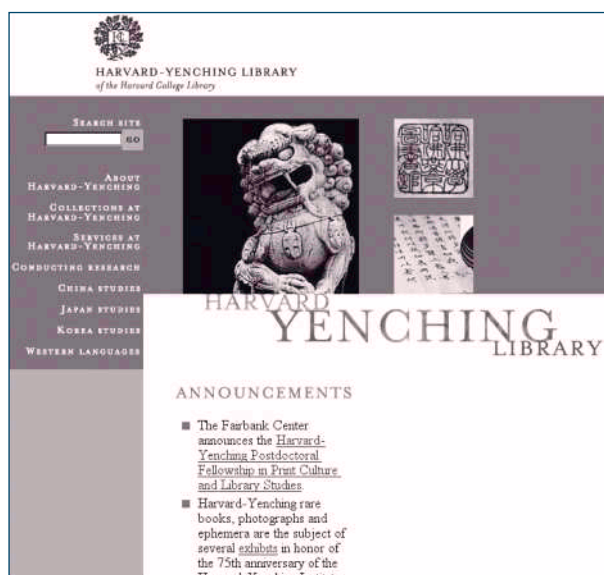
De Chadarevian S (2002) *Designs for Life: Molecular biology after World War II*. Cambridge: Cambridge University Press. ISBN 0 521570 78 6

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RESEARCH RESOURCES

Jong-Chan Lee

The Harvard-Yenching Library in the making of East Asian history of medicine



The Harvard-Yenching Library is the largest university library for East Asian research in the West. Although it institutionally dates from 1928, the collection can trace its beginnings back to 1879, when Chinese was first provided as part of Harvard University's education curriculum. To celebrate its 75th anniversary this year, an international conference and special exhibitions will be hosted.

The library resources have exerted a pivotal role in supporting East Asian studies at Harvard and scholars from East Asian countries. The library is a significant information centre of East Asian studies at Harvard, closely associated with, among others, Harvard Asia Center, John K Fairbank Center for East Asian Research and Edwin O Reischauer Institute of Japanese Studies.

The collections are strikingly rich in number, academic variety and depth, covering nearly a thousand years of East Asian history. Today, there are over a million volumes stored in the library, in East Asian as well as Western languages. More than 86 000 titles belong to microform holdings, which include many newspapers, journals and rare books. The library's rare books collection is one of the largest outside of East Asia.

The Western languages collection acquires all Western language scholarly journals (primarily in English), historical newspapers (in microformats) and academic titles, and has particularly strong holdings of newspapers and association publications.

The salient features of the library lie in its enormous collection of research materials about East Asian history of medicine, written in Chinese, Japanese, Korean and Vietnamese. It is very useful for examining the East Asian medical encounter with Western medicine during the imperial and colonial era. Along with the Widener Library, Andover-Harvard Theological Library and Countway Library of Medicine at Harvard, the Harvard-Yenching Library shares huge records that

Western medical missionaries had written about their activities in East Asian countries.

The Chinese collection of the library is strong in traditional Chinese medical rare books written by prominent medical practitioners of the Sung, Yuan, Ming and Ch'ing periods. It also has primary and secondary sources for the study of history of modern and contemporary Chinese medicine. The collection also includes archives of influential figures who were intensively involved in political and cultural debates between neo-conservatives and modernists in the modern making of Chinese medicine, among whom were Ding Fubao (1874–1952), Yan Xishan (1883–1960) and Wu Lien-Teh (1879–1960), who all affected leaders of the Kuomintang and the Chinese Communist Party.

The Japanese Collection includes primary works on hygiene and medicine during Japan's modern and postwar transformation, as well as a number of books published in the Edo period and some manuscripts dating from the 14th century. Japanese works about Chinese medicine are also well represented. A good collection of printed books of the Meiji period is the only complete set available in the USA. Furthermore, modern medical works such as *Katai shinsho*, the first translation of Western medicine by Sugita Genpaku (1733–1817) and his colleagues,

and personal writings of Fukuzawa Yukichi (1835–1901) who displayed an enormous intellectual leadership in Meiji era are a must for anyone who wants to know how Western medicine was introduced into pre-modern and modern Japan. This collection also shows government-general records in Korea and Taiwan in relation to hygiene and medicine.

The Korean Collection is considered as the premier collection for Korean medical studies in the USA. At present, the collection consists of traditional medical treatises written in Yi dynasty and primary materials during modern and colonial era. In addition, a variety of medical missionary journals are well organized in English. The collection must be a valuable site for any scholar to investigate the dynamic relation between medicine and modernity in Korea's colonial period.

The Harvard-Yenching Library website is accessible at: <http://hcl.harvard.edu/harvard-yenching>. To search for resources, click into the Hollis Catalogue at <http://lib.harvard.edu>. Users can search for research materials, keyboarding any bibliographical information in Chinese, Japanese and Korean as well as in English.

Professor Jong-Chan Lee is a Visiting Scholar at Harvard University (E-mail: lee3@fas.harvard.edu).

RESEARCH RESOURCES

Forensic Medicine Archives Project

Appeal for information

The University of Glasgow has recently begun a project to survey, process and make available local and national sources relating to the University's achievements in forensic medicine and science.

The Forensic Medicine Archives Project (FMAP) is funded through the British Library and the Wellcome Trust's Research Resources in the History of Medicine will deliver a web-based catalogue, accessible through its own dedicated portal. This will be an invaluable resource to researchers working in a variety of fields, including the history of medicine, forensic pathology, clinical forensic medicine, law enforcement and medical ethics. One of the main objectives of the project is therefore, to contribute to a greater understanding, and improve access to, sources relating to the history of forensic medicine and science.

The largest single accumulation of archival material to be surveyed by the project staff (Paula Summerly and Monica Greenan) relates to the former Regius Professors of Forensic Medicine, John Glaister Senior (1856–1932) and John Glaister Junior (1892–1971). The archive contains their detailed case notes, correspondence, lecture notes, press cuttings and photographs. Details of these local and related national sources will be made accessible on the web-based catalogue, along with comprehensive bibliographies and bibliographic histories of the professors and staff of the University's Department of Forensic Medicine and Science since its opening in 1839.

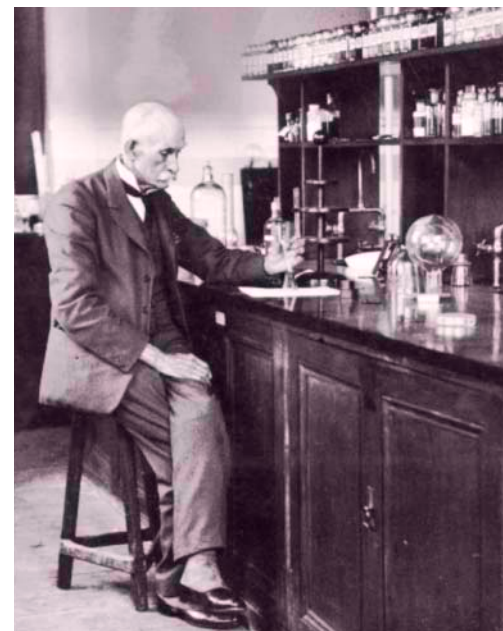
We would therefore, be very grateful to hear from anyone who might have information or additional material related to the work of the

Glaisters or details relating to the history of Glasgow University's Department of Forensic Medicine and Science. This information will greatly enhance the scope of the project, enabling us to provide links from the FMAP site to additional resources. Please contact:

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Professor John Glaister Senior.

Devices and Designs: Medical innovation in historical perspective

While some think that the 'golden age' of modern medicine may be over, universities make great efforts to connect the production of knowledge with the production of commodities. It has become fashionable to think about new technologies as innovations, as products for a market. But how new is this perspective, and how specific to current debates? These were some of the issues raised at this conference which took place in Manchester over a long weekend in July 2003.

'Device and Designs' was impressive for the range and sheer number of papers – about 80 altogether. Papers were organized thematically into parallel streams and perhaps the most difficult aspect was deciding which to attend.

As well as bringing the richness of new ideas, the range of disciplines kept everyone on their toes. Some of the most interesting discussions were sparked by input from speakers with a medical background that forced everyone present to reflect upon their own discipline and personal assumptions about evidence, epistemology and knowledge. The nature of evidence was not only debated between disciplines, but also used to map developments in the history of medicine. Many papers returned to questions about the types of evidence used and tensions in the practice of medicine between scientific, clinical and experiential accounts in interesting sessions on risk, cultures of biomedicine and medical science, trials and evidence.

In the first plenary, 'How might the histories of medicine and of technology learn more from each other?', John Pickstone discussed the case of orthopaedics and offered some notes of caution. It was important for historians of medicine to recognize that medical academe was not necessarily the same as clinical practice. Many papers fulfilled this hope across the conference, which attempted to get beyond high-profile debates between politicians, clinicians and scientists to capture the myriad differences in medical practice at local level.

John also stressed the need to adequately deal with industrial intervention. "Most medicine is in some sense a commercial activity," he stated. In the case of orthopaedics, he argued that past medical technologies had often been the result of a contingent coming together of individuals and groups with diverse expertise. However, we must also develop ways of capturing the development of medical technologies in organizations and institutions where there was much less contingency – such as modern pharmaceutical companies. He suggested that we could learn from business history to address the 'techne' of profit and the place of technology and scientific goods in economic systems.

In her keynote speech on the second afternoon, 'For want of a horse the kingdom was lost', Ruth Schwartz Cowan also discussed the dangers of losing a meaningful history (the kingdom) for lack of the material

(horse). She suggested that we must still work to explain and address the 'technophobia' that she identified in much recent historical writing. She offered the example of her recent work on thalassaemia in Cyprus, arguing that the decision to have mandatory genetic testing could only be understood if one paid proper attention to the nature of the disease itself and the (emotional and economic) cost of the treatments that had been developed.

We must develop ways of capturing the development of medical technologies in organizations and institutions.

Ruth found the source of technophobia not only in personal fear or lack of skills in dealing with technical accounts, but also in the recent development of 'history' as a discipline, the generations of young scholars who 'angrily pummelled' the privileged accounts of medicine, patriarchy and science. Further discussion picked up on this to mention the specific experiences of the Vietnam War and of the antinuclear movement, which also had emerged as an important issue in a paper on the public perceptions of risks of xenotransplantation by Amy Fletcher and Bronwen Morrell. Stuart Blume suggested that we might also consider why historians and sociologists had suffered from 'sociophilia,' which encouraged further reflection on our own practice.

The conference worked well to put 'material' objects into the picture – and particular devices were frequently used to organize the stories that were being told. These devices ranged from different drugs such as penicillin or L-dopa, surgical techniques and medical appliances, such as the artificial heart or hip replacements to statistical methods. However, in making sense of these technologies the presenters repeatedly had to return also to the individual biographies of inventors, innovators and clinicians, as well as issues of professional development and prestige.

An interesting session on the second day covered issues of trials and evidence in medicine. Sejal Patel suggested that the spread of evidence-based medicine should be linked to the need for internal medicine specialists to establish a clinical and research identity, while Gerald Kutcher argued that despite attempts to create robust breast cancer trials and consensus statements on the best treatment, clinical treatment remained uneven in practice, and local decisions did not map easily onto national debates. Iain Chalmers's paper on systematic review in medical research sparked a lively debate, which drew on the other presentations to consider the nature of scientific practice and evidence, as well as the reasons that medics or scientists publish.

There was comparatively little explicit theorizing in the conference – although the broad selection of 'stories' told offered some fascinating pointers to developing broader questions and themes. In particular, the international spread of the papers was impressive – covering the UK, Germany, the former Soviet Union, the USA, Canada and South American countries among others. These papers often hinted at sets of contrasts and comparisons between national experiences. In his final

We might consider why historians and sociologists had suffered from 'sociophilia'.



Professor Ruth Schwartz Cowan during her keynote speech. Image courtesy of Carsten Timmermann.

paper, 'The politics of end points', Stuart Blume called for this kind of 'difference' to be explored and used as a basis for local stories about science and medicine.

Stuart introduced two theoretical themes – 'jurisdiction' and 'empirical slippery slope'. With the first, he offered a way to draw together the historical examples of the contestation of evidence and the importance of professional and political dynamics in explaining the development and acceptance of new medical technologies. The second concept pointed conversely to the way in which a technology once developed might spread despite attempts to regulate or restrict its use. He suggested that

"evidence is almost always interpreted in such a way as to preserve the status quo" and that ideas about institutional convergence, path dependency or 'lock-in' were important in explaining the process of accepting a technology. In the ensuing discussion, an important point was also raised by John Pickstone and Iain Chalmers, stressing the importance of the drug industry in 'universalizing' medical practice and driving innovation – this had been relatively little explored in the papers offered to the conference. Perhaps while historians of medicine have endeavoured to combat technophobia, helped by events like this, there is still some way to go before they pay enough attention to the economics.

The conference ended with further reflexive debate on what medical history might try to offer. Questions were raised about the extent to which medical historians might take a position on their subjects. Despite a clear lack of agreement, the conference could I think unite around a quote by the theorist Jacques Ellul that Ruth included in her lecture, that "technologies are neither good, nor bad, nor neutral" and that social contexts matter in explaining them.

The Wellcome Trust, the Economic and Social Research Council and the Society for the Social History of Medicine generously sponsored the conference. Special thanks must go to everyone in the Manchester Centre for the History of Science, Technology and Medicine particularly to Julie Anderson and Carsten Timmermann for fine organization, energy and enthusiasm.

Catherine Will, University of Essex, with thanks to Wendy Churchill, McMaster University, and Julie Anderson.

NEW EXHIBITION

Pain: Passion, compassion, sensibility

13 February – 20 June 2004, Science Museum, London

"To relieve pain is divine."

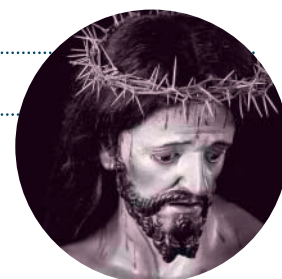
We all know pain – first and foremost through our own personal experiences. But we also think we recognize it in the signs and gestures of others.

The physical, psychological and social aspects of pain are universal. Its bounds – which are those of language and of identity – are also the bounds of the world. Pain is not, however, unchanging and its universality has not always put it at the center of the human condition. It has a history – of those who suffer, contemplate and study, as well as those who produce and alleviate it. Pain has variously been seen as a means of salvation, as the sign of injury and illness, as an essential aspect of apprenticeship or as a condition of economic development. This exhibition is about the cultural place of pain and the role of science in shaping our beliefs, our understanding and our ability to control it."

Javier Moscoso

Curated by Spanish philosopher Javier Moscoso, 'Pain' features over 170 objects and artworks – many rare and unseen – from the original collections of Sir Henry Wellcome, including the tooth of an Egyptian ghoull said to cure neck pain, a Victorian head perforator and Lord Lister's apparatus for application per rectum as well as contemporary pieces by renowned artists such as Anish Kapoor and Bill Viola.

Admission is free.
www.wellcome.ac.uk/pain



Towards a history of medico-scientific communication

Since 1955, the beautiful city of Fermo in the Italian Marches has hosted a meeting every two years devoted to the history of medicine. It is an appropriate setting, for Fermo's Biblioteca Comunale is an unknown treasury of old and rare medical books, most of them given in the early 18th century by Romolo Spezioli (1642–1723), Professor of Medical Practice at the University of Rome and a papal physician.

A native and a graduate of Fermo, Spezioli intended his gift to serve as a resource for medical students at the town's university. His books, more than 12 000 volumes in all, still in their original order on their original shelves in the library's main room, must, for the moment, still be consulted via Spezioli's original catalogues, although a handlist will shortly be made available on the web. It is clear that this is a remarkable collection, larger than that of Spezioli's colleague, Lancisi, in Rome and containing many books from northern Europe, including England, which perhaps came to Spezioli through one of his most famous patients, Queen Christina of Sweden.

As a means of publicizing the holdings of the library, the 2003 conference of the Studio Firmano, held on 18–20 September, was devoted to the transmission of medical and scientific knowledge, from manuscript to print, in the 15th and 16th centuries. It was also organized as part of a wider project on the history of medical communication being carried out by the Sezione di Storia della Medicina of the University of Rome.

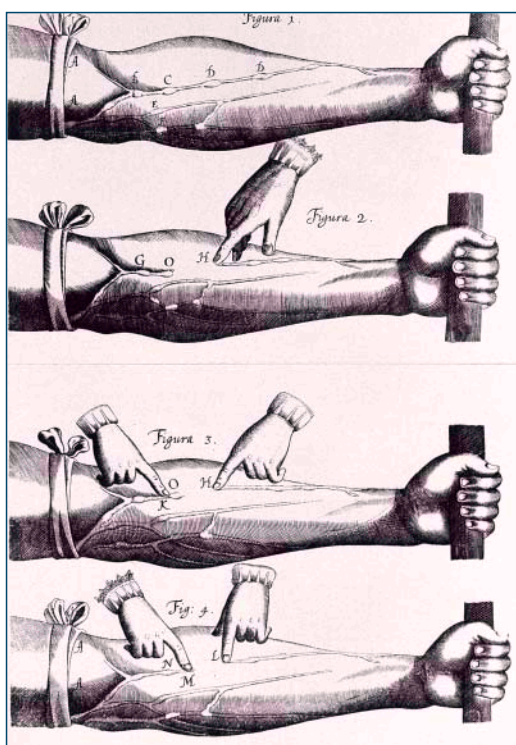
The keynote speech was delivered by Vivian Nutton (London), who emphasized the importance of collections like that of Spezioli in giving an insight into the acquisition and use of books. His wide-ranging survey looked at the impact of printing not only in preserving and fixing the past, but also in eliding the boundaries between public and private spheres of medicine. Although manuscripts of lectures, letters of advice, and medical correspondence were copied and circulated in the Middle Ages, printing allowed for a speedier and a wider distribution and led to new forms of medical publication. The final part of this lecture was devoted to plague tracts, and to what this, often ephemeral, literature revealed about the process of communication and the growth of a print culture around Europe. Attention was drawn to the substantial differences between the printing of plague tracts in England and in Germany, as well as to the extreme rarity of many tracts even in major libraries. As an example of such publications, Professor Nutton chose a recent acquisition by the Wellcome Library,

a collection of French tracts owned and heavily annotated by Pierre Costan, a doctor at Rodez in the 1550s and 1560s. Many of the points in this opening lecture were taken up by the international speakers who followed on the second day. The importance of choice and availability in the process of transfer from manuscript to print was stressed by Massimo Menna (Rome), whose comments on the new opportunities offered by the technology of print were echoed by Pietro Corsi (Paris) in his survey of the ways in which the Internet can change historians' ways of working, and reflecting, on the past.

The formation of library collections was the subject of two contrasting papers. That of Laura De Barbieri, the Librarian of the Lobkowitz library in the Czech Republic, described the formation of one of great princely collections of Renaissance Central Europe, which throws light on the role of medicine and science in renaissance court culture. By contrast, Marisa Borracini used the 60 volumes of a 1596 papal inquiry into the books held in 9500 monastic and convent libraries in Italy to identify books on medicine and pharmacy. With a few exceptions, the only religious order to show a consistent presence of such books and of monastic druggists or infirmarers was that of the Observant Franciscans. These books were frequently kept separate from the rest of the community's books. Most were antidotaries, like the *Luminare maius* of G G Manlio, and Matthioli's commentary on *Dioscorides*, in a variety of editions, was the most common 'academic' text.

Stefania Fortuna (Ancona) and Thomas Rütten (Newcastle) discussed the different fortunes of Galen and Hippocrates respectively. Fortuna described the early *Opera Omnia* editions of the Latin Galen, including her discovery of an unknown edition in the nearby library at Samano, concentrating on the ways in which new translations from the Greek were introduced alongside or instead of the older medieval versions. Rütten, by contrast, studied the ways in which scholars commented upon Hippocrates during the later 16th century. His demonstration of new forms of commentary was echoed by Daniela Mugnai Carrara (Florence) in her survey of a new Renaissance genre, medical epistles, and of one of its main representatives, the Ferrarese Professor Giovanni Mainardi.

Another new type of medical book, the anatomical fugitive sheet, was the starting point for Andrea Carlino (Geneva), whose provocative analysis of the exchange of information in anonymous or pseudonymous writings challenged standard ideas about medical authorship. The final paper of the day, by Carmen Caballero Navas (London),



Harvey's demonstration of the function of the valves in the veins in *De Motu Cordis*, 1628.

looked at renaissance Jewish communities and their almost total reliance on nonprinted medical texts during this period.

The last day was taken up with a variety of shorter papers and reports, some dealing with rare imprints, others with the formation of collections or with their survival in little-known or used libraries in Genoa, Split, Ravenna and Urbania (which still houses a large part of the scientific collections of the Dukes of Urbino). Great interest was shown in two presentations by scholars at Padova working on a collection of coloured illustrations (now in Venice) prepared by Girolamo Fabrizio d'Acquapendente but never published. These include what must surely have been the original drawing of ligated veins that was used by Harvey in the 1628 edition of *De Motu Cordis*. The often vigorous discussion added considerably to the scientific interest of the conference, which showed the advantages of bringing together librarians and historians. In addition to the lectures and tours of the Biblioteca Comunale,

the regional Soprintendenza of the Beni Culturali had organized a small exhibition detailing some of the work carried out recently to conserve historic scientific material preserved in the many ancient libraries of the Marches. Although the highlight of the display was undoubtedly the hand-coloured copy of the 1543 *Fabrica* of Vesalius from Fermo, the range of books and libraries represented was impressive. They show the scale of the problems facing those who wish to conserve the historical heritage of science and medicine, as well as the many opportunities for historical discoveries in this beautiful and long neglected region of Italy. Further information on the Fermo library can be obtained from its website, from its Director, Dr Maria Chiara Leonori, or from Dr Fabiola Zurlini, who is in charge of the Spezioli collection and who was the secretary of the conference.

Professor Vivian Nutton, Wellcome Trust Centre at UCL
(E-mail: v.nutton.ac.uk).

National Health Policies in Context

Earlier this year, ten participants met in Bergen, Norway, to compare the development of health policies in different national contexts, in particular Britain, Norway and Sweden.

Organized by Svanaug Fjær and colleagues at the Stein Rokkan Centre for Social Studies, Bergen University, this workshop brought public health historians from London School of Hygiene and Tropical Medicine (LSHTM) to meet a Norwegian group of political scientists, a psychiatrist and a literature specialist.

With overlapping interests in psychoactive drugs, psychiatry, psychology and reproduction during the 20th century, the participants were keen to discuss their research. The formation of health policy involving these subjects and disciplines also revealed the recurring themes of professionalization, the role of technology and expertise and the importance of language.

As a valuable introduction Nina Berven set out the bases for comparison and the need for conceptual tools which would 'travel' across settings. Virginia Berridge, Ornella Moscucci and Sarah Mars, from the LSHTM History Group, Svanaug Fjaer at the Stein Rokkan Centre and Asmund Arup Seip from the Fafo Institute for Applied Social Science, Oslo, presented work relating to prescribing psychoactive drugs. Debates about abortion and childbirth were considered by Ornella Moscucci, Thorwald Simes and Merethe Flatseth. Kari Ludvigsen and Asmund Arup Seip addressed psychological and psychiatric policy responses to troublesome children. Stuart Anderson, historian and pharmacist, considered the dynamic relationship between pharmacists and the British state.

As the participants looked at the various influences on health policy within and across countries, their juxtapositions began to throw light

on the question 'What shapes health policy?'. Is it determined by the population's health and behaviour, by developments in scientific knowledge and technology or by the process of policy making and opinion forming?

Thorwald's comparison of British and Norwegian abortion debates showed that contrasting definitions of the fetus could divide emerging policies in the two countries. Measurement and classification could be influential, yet we then saw that two countries sharing the same underlying model could develop quite different policies: Svanaug described the rise of epidemiology and the infectious disease model which underpinned Norwegian illicit drug policies in the 1960s, but this model resulted in both a drug-free approach to treating Norway's addicts and a British policy of heroin prescribing.

Kari, Stuart, Asmund and Sarah showed the influence of the health professions, their structures and relationships with the state. As well as these structural explanations, the familiar theme of significant individuals remained strong, particularly amid small circles of policy actors. Patients and the 'public', activism and consumerism as forces emerged from Ornella, Merethe and Virginia. Through their use of literary approaches to historical material, Merethe and Ornella showed the power of the metaphor in colouring responses. Technological innovation and its take-up also brought perceived problems and solutions for health policy. Virginia's overview of levers of change drew out all these factors as playing a part.

While historical factors cannot be 'controlled' for, cross-national comparisons can help to test hypotheses and sometimes lend a new sight on contextual factors with which we have become overly familiar.

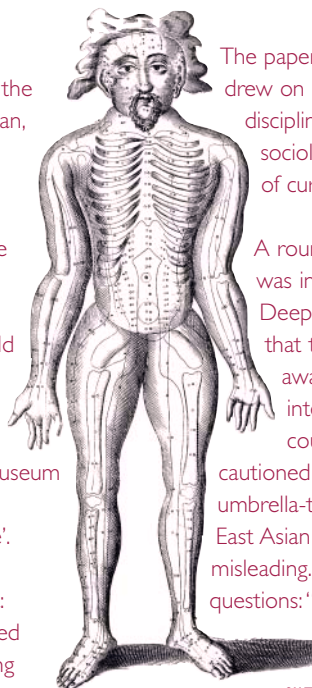
Ms Sarah Mars, Honorary Research Fellow, London School of Hygiene and Tropical Medicine (E-mail: marssarah@hotmail.com).

Symposium on the History of Medicine in Asia: Past achievements, current research and future directions

The symposium and the first bi-annual meeting of the Asian Society for the History of Medicine (ASHM) were held at the Institute of History and Philology (IHP), Academia Sinica in Taiwan, in November 2003. The symposium began with an opening ceremony in which Shizu Sakai, the President of the Society, delivered the opening speech and the President of Academia Sinica Yuan-Tseh Lee and the Director of IHP Fan-sen Wag gave congratulatory remarks.

Three keynote speeches were delivered. On the first day, Harold Cook (Director of the Wellcome Trust Centre for the History of Medicine at UCL) spoke on 'Communication in the first global age: Willem ten Rhijne in Japan, 1674–76'. On the second day, Cheng-Sheng Tu, Director of the National Palace Museum and Member of Academia Sinica, delivered his keynote speech 'The comprehensive understanding of history through medicine'. On the third day, Deepak Kumar (Jawaharlal Nehru University) gave the last keynote speech 'History of medicine in South Asia: Some concerns, some questions'. In all 19 papers were presented in nine panels. The first two panels consisted of papers reviewing historiography of medicine in China, Japan, Taiwan and Turkey.

One of the issues highlighted in the papers and subsequent discussion was the close but complicated relations between nationalism, the process of 'modernization' and the early historiography of medicine in these countries. The rest of the papers covered a variety of issues, including hygiene in Meiji Japan, missionary leprosy work in colonial Taiwan, 19th Japanese health manuals, sexual arts and recipes for aphrodisiacs in Chinese medicine, the popularization of electrotherapy in Japan, body and spirit in classical Chinese medical theories, the history of smallpox in India and in China and Chinese medicine in the 20th century.



Acupuncture chart of a Chinese figure, 1683.

The papers not only covered a wide range of topics but also drew on an impressive array of research tools and findings from disciplines such as archaeology, philology, anthropology and sociology. They amply demonstrated the vitality and diversity of current research on the history of medicine in Asia.

A roundtable discussion exploring future research directions was introduced by Sean Hsiang-lin Lei, Harold Cook, Deepak Kumar and Shigehisa Kuriyama. Cook pointed out that the health of the seafaring population is an area awaiting further research. Kumar suggested that the integration of medical history and environmental history could turn out to be a fruitful approach. Kuriyama cautioned against the use of 'traditional Chinese medicine' as an umbrella-term to describe various medical traditions in other East Asian countries, which he characterized as inaccurate and misleading. Lei invited the participants to reflect on the following questions: "if we recognize Chinese medicine to be a living tradition in our contemporary world, do we write its history differently? If the answer is yes, then in what ways?" The importance and difficulties of maintaining dialogues between historians of medicine and medical scientists were highlighted. The conference ended with a tour to the National

Palace Museum where one of the largest and finest collections of Chinese art was on display. The Museum Director, conference participant Cheng-Sheng Tu, welcomed the symposium participants with a banquet.

Shang-Jen Li is an assistant research fellow at the Institute of History and Philology, Academia Sinica, and the Press Secretary of the Asian Society for the History of Medicine

(Web: www.ihp.sinica.edu.tw/~medicine/ashm)

FORTHCOMING EVENTS

Call for Papers

Joseph Priestley, Universal Catalyst: A bicentennial celebration of his life

This is an international symposium celebrating the life of Joseph Priestley (1733–1804), at the National Meeting of the American Chemical Society (ACS), Philadelphia, during the week of 22–26 August 2004. It is sponsored by the Society's Division of the History of Chemistry. An American chemical icon, Priestley's Pennsylvania home has been described by ACS President Edgar Fahs Smith as a mecca for American chemists and his name graces the highest award given by the ACS. The Philadelphia ACS meeting brings together the unique conjuncture of the bicentennial of Priestley's death and the city in which his influence was so strongly felt, far beyond the realm of



his science. As the capital of the USA in 1794, when Priestley arrived upon being driven from England for his heterodox views, advocacy of separation of church and state, and early support of the French Revolution, Philadelphia provides a singular setting for this symposium. Here Priestley met President George Washington, preached to John Adams, became a friend and educational adviser to Thomas Jefferson (his most prominent political disciple), and discussed medicine and chemistry with Benjamin Rush. The First Unitarian Church of Philadelphia originated in sermons Priestley gave there. Priestley's quest for universal truth indelibly imprinted his time – and our own – not only in science but in education, theology and political philosophy.

This symposium intends to provide context for these achievements and show how broadly Priestley has impacted our culture, using Philadelphia – home of his close friend Benjamin Franklin and birthplace of our nation – as the historic setting.

Contact Professor Roy Olofson at The Pennsylvania State University (E-mail: rao3@psu.edu) for further information.

Ayurvedic Identities Past and Present: The case of modern and global Ayurveda

2–3 July 2004

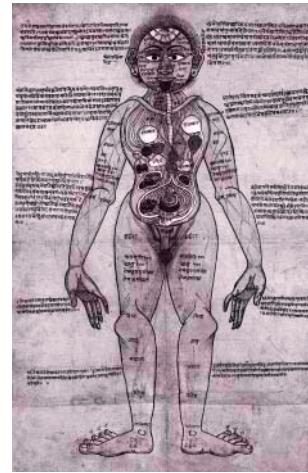
The Dharam Hinduja Institute of Indic Research (DHIR), based at the Faculty of Divinity, University of Cambridge, will host its eighth International Conference. The conference will discuss the case of modern and global Ayurveda as part of a larger project, the Indic Health and Medicine Research Programme (IHMRP), which has been the focus of DHIR study since October 2000.

This innovative programme has been developed to explore the nature, history and practical applicability of yoga- and Ayurveda-inspired approaches to health, medicine and wellbeing in the context of modern and developed societies. The IHMRP's main object is to contextualize and clarify – and make explicit – the contributions that Indic traditions have made in the fields of modern health, medicine and wellbeing, and how these contributions have been altered, enriched, developed and (re)interpreted during such processes of propagation and acculturation. The programme's practical aim is to gather, critically evaluate and eventually disseminate knowledge about how yogic and Ayurvedic traditions have been, are being and can be adapted to modern needs and conditions, so as to be used efficiently and in discerning fashion for fostering human health and wellbeing.

The first part of the IHMRP (2000–02) focused on studies relating to the emergence and growth of modern yoga and research in this area is still ongoing. Part II (2002–04) is dedicated to research on the history and development of modern and global Ayurveda. 'Modern Ayurveda' is here understood to start with the processes of professionalization and institutionalisation brought about in India by what has been called the 19th century revivalism of Ayurveda. 'Global Ayurveda', on the other hand, refers to the more cosmopolitan and geographically widespread processes of popularisation and acculturation set in motion in the 1980s. Ayurvedic approaches to health and wellbeing are just starting to be

recognized and, to a lesser extent, integrated in the context of modern medical sciences and healthcare outside of India. Assimilation at the level of complementary or integrative forms of medicine and self-care has however been more widespread, and this phenomenon deserves scholarly attention as symptomatic of needs and aspirations felt by a sizeable number of individuals in developed communities worldwide.

An international network of scholars, practitioners and experts (most of whom already took part in a specialists' workshop organized by the DHIR in December 2003) will present their research at the 2004 Conference. Their presentations will cover a wide range of methodological points of view, discussing the case of Modern and Global Ayurveda from historical, textual, philosophical, anthropological, sociopolitical, economic, biomedical and pharmacological perspectives.



Ayurveda man.

For up to date information on the conference please see www.divinity.cam.ac.uk/CARTS/dhiir/indic/conf04.html
Please contact:

DHIR, Faculty of Divinity
University of Cambridge
West Road, Cambridge CB3 9BS
Tel: +44 (0)1223 763 013
Fax: +44 (0)1223 763014
E-mail: dhiir@divinity.cam.ac.uk

Call for papers: Medicine Across Cultures: 600–1600

The 19th Barnard Medieval and Renaissance Conference

Saturday 4 December 2004

Call for papers centered on medieval and renaissance medical theory and practice from around the world. Possible topics include: theories of the body and its workings; signs and cures of sickness; definitions of health; ideas on the circulation of fluids; notions of equilibrium; pharmacological theory; connections between medicine and empirical science; the relationship of medicine to theology and psychology; medical education and practitioners; medicine and the arts. Papers centred on a comparative analysis of two or more cultures/traditions are particularly welcome.

Send abstracts to:

Joel Kaye, Dept of History, Barnard College, 3009 Broadway, New York, NY 10027, USA; E-mail: jkaye@barnard.edu.

Deadline for abstracts: 15 April 2004

Singapore's battles against SARS

It came close at the heels of the outbreak of Gulf War II. No one took notice initially, as public attention was firmly fixed on the invasion of Iraq. The public was more interested in the war; wondering how long it would last and whether the conflict would bring about global economic disruptions, from which Singapore would certainly not be spared. But slowly, news coverage of the war shifted to reports of increasing cases of people being struck down by a disease which has yet to be given a name. News of Singaporeans contracting what was then called atypical pneumonia soon dominated media coverage and caught the public's attention.

A young woman had evidently caught the virus while in Hong Kong, and had unsuspectingly brought it back to Singapore in early March 2003. She was later described as a 'super-spreader' who had passed the virus to several friends and relatives. Soon, news of the first deaths arising from this virus broke. The World Health Organization raised a global alert and gave the disease a name. By the end of March, SARS, or severe acute respiratory syndrome, as the new disease caused by a virus yet unidentified came to be called, had claimed its first victims in Singapore.

As the number of infections, and deaths, in Singapore grew, the country was gripped with panic. People avoided public places for fear of catching the virus; travel to SARS-affected countries like China and Hong Kong virtually ceased and anxious parents stopped sending their children to schools. The Government of Singapore, realizing that a national panic was imminent, took a series of quick, decisive actions. To arrest the spread of the virus, identified as a mutant strain of the corona virus, and to allay public fears, schools across the island were closed and children urged to stay at home. Home quarantine orders were issued to several hundred people who were believed to have had contact with infected persons. All suspected SARS patients (suspected, as diagnosis kits were unavailable to confirm if indeed someone had actually contracted the disease) were channelled to one dedicated public hospital in Singapore. The Tan Tock Seng Hospital, where the first cases were sent, became Singapore's 'SARS battlefield'.

Despite such quick actions, the infection rates showed no signs of abating, while the death toll gradually rose. Hospitals came under pressure when a cluster of infection emerged in one of Singapore's largest public hospitals, the Singapore General Hospital. In mid-April, fears of a community spread were increased when another cluster of infection was discovered at a major fruit and vegetable market centre in mid-April. The fear in the public was palpable. People stayed at home; taxi drivers avoided hospitals and refused to ferry medical workers. Taxis, in turn, were shunned by people seeking to stay away from confined places. Shopping malls and restaurants lost their customers and the travel industry was especially hard hit as tourist arrivals began falling drastically, hitting an all time low. By the end of April, SARS had virtually brought the country and its economy to its knees.

The outbreak of SARS had presented Singapore with much more than a medical situation. As it turned out, it became a grave national threat to the public health system, economy and social confidence. Consequently, the approach to tackling the SARS crisis took on the rhetoric of war:

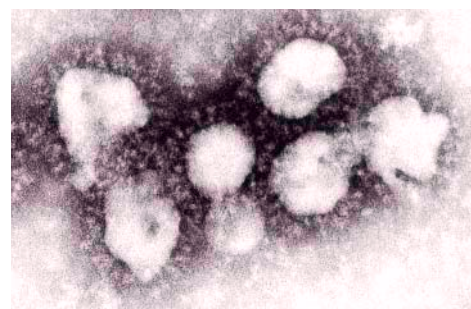
A high-level ministerial taskforce was set up to direct a concerted, national response to the problem. 'Combat teams' were set up to ensure that hospitals geared themselves well to fight the disease. Strategies were

developed and national resources mobilized for the battle. Indeed, the Deputy Prime Minister of Singapore likened the war against SARS as a "test of [Singapore's] total defence capability". The overall strategy, as the government explained, was to "detect, isolate and contain".

It was a comprehensive strategy that entailed concerted and coordinated operations on a number of fronts. All necessary measures were taken to stop the spread of illness from spreading in the community as well as to medical workers treating the disease. Within the hospitals, stringent precautions are taken to prevent patients from spreading the virus and healthcare workers were required to wear protective gear. To prevent spread from patients to visitors, a strict no-visitor rule kicked in at public hospitals towards the end of April. Special attention was given to public areas with heavy human traffic and mass institutions such as schools and military bases. In these places, close monitoring of cleanliness and hygiene were adopted to minimize the risk of environmental transmission of the virus.

In schools and work places, daily monitoring of individual body temperatures were observed to ensure that persons suspected having contracted the virus were quickly isolated and quarantined. All school students, for example, were issued with personal thermometers to enable schools to carry out twice daily temperature monitoring. The plan to stop the disease required detailed and accurate contact-tracing to identify the chain of spread and then to effect an enforceable and watertight quarantine system. Army personnel were mobilized to provide the much-needed manpower for the painstaking work of contact-tracing, while the law (through an amendment in the Infectious Disease Act) was brought to bear on those who flouted quarantine orders. There was a 'carrot-and stick' approach in all this. While the government dealt firmly with those who flouted its quarantine orders, it offered monetary assistance to mitigate the financial burden of quarantined persons, thereby reducing the motivation for people to breach quarantine orders. Attempts were made to 'humanize' the home quarantine process by mobilizing community volunteers (instead of the police) to help serve stay home orders so that affected individuals and families would not be stigmatized by neighbours.

To get the economy back on its feet again, national leaders exhorted the public to get on with life, and not to be cowed by the disease. The Gulf War had not affected the economy as adversely as many people had



The SARS virus with its distinctive outer corona.

By the end of April, SARS had virtually brought the country and its economy to its knees.

feared but SARS had proven to be more deadly, adversely affecting the tourism and transport-related industries such as hotel, restaurant, retail, airline and taxi services. At the height of the SARS outbreak in the first half of April, tourist arrivals fell by 61 per cent. To help the battered economy, the government introduced a relief package worth about S\$230 million, aimed primarily at alleviating the hardships and disruptions – particularly to the tourism and transport-related sectors – caused by the outbreak.

The public was subjected to a constant media blitz, and was kept in full view of the SARS episode. The Ministry of Health held nightly press conferences to provide updates, and websites and television channels were created as additional channels of communication. The full exposure was aimed at creating an atmosphere of transparency, assuring the public that the government had no intention of concealing the problem but would respond as strenuously as needed. Nevertheless, the constant barrage of news relating to SARS pushed the disease to, and kept it at, the forefront of national consciousness, which in turn could have inadvertently exaggerated the virulence of the virus and increased the public sense of vulnerability. It was nonetheless a tremendous effort (and a successful one) in risk communication, as experts later explained, in which the government “successfully harnessed the public’s fear instead of trying to squelch it”.

SARS came to Singapore in early March 2003. In the ensuing two months, it had the entire country in its grip. The infection and death rates were not high: by the time Singapore was declared SARS-free by the WHO on 31 May 2003, the disease had infected a total of 238 persons and claimed 33 lives. With this relatively low rate of infections and deaths, SARS clearly did not turn out to be an epidemic of disastrous proportions. Its repercussions, however, were felt most severely in society and economy, where national confidence took a severe battering. The government realized very early on that the virus had caused a national crisis. It challenged the government and its people, who, after a period of



An open street meat market in southern China – a possible source of SARS?

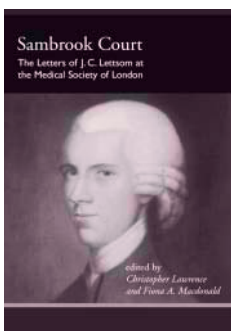
uncertainty and paranoia, responded in equal measure. Tributes poured forth for the selfless dedication of the country’s healthcare workers, and a ‘Courage Fund’ that had been set up for those affected by the virus went on to raise millions of dollars, way beyond initial expectations.

Singapore’s actions against SARS had won praise and drawn criticism. Health experts and international economic organizations lauded the decisive and robust actions taken to combat and contain the disease. On the other hand, some of the measures implemented – home quarantine orders, for example – have been described as draconian and were seen as an infringement of civil liberties. The SARS outbreak has been described as Singapore’s worst crisis in its 38 years as a nation-state. And while it provided a severe test of the country’s crisis management capabilities, it offered, at the same time, an unexpected opportunity for the government to galvanize the population amid a time of uncertainty and change.

Dr Tai Yong Tan, Head, Department of History, National University of Singapore, 10 Kent Ridge Crescent, Singapore 119260 (E-mail: tantaiyong@nus.edu.sg). Dr Tan was a British Academy Visiting Professor at the Wellcome Trust Centre in July 2003.

NEW PUBLICATION

Sambrook Court: The letters of J C Lettsom at the Medical Society of London



The eminent Quaker physician John Coakley Lettsom (1744–1815), perhaps the most prominent figure in the London medical scene in the late 18th and early 19th century, was involved in a vast range of medical, natural philosophical and philanthropic activities. He was a prolific letter writer. Sadly after his death his correspondence was dispersed. Much of what remains, however, is held by the Medical Society of London, an institution of which he was a founder member.

This correspondence now transcribed and published for the first time is testimony to Lettsom’s indefatigable energies. There are letters both to and from Lettsom. They include medical consultations, advice on prison reform and details of the activities of the Royal Humane Society, and

correspondence with North American physicians. There are also more private letters and a large correspondence from his married nephew and niece living in war-torn Switzerland. In addition the volume contains a complete transcription of Lettsom’s recollections of his life until 1767.

About the editors

Christopher Lawrence is Professor of the History of Medicine at the Wellcome Centre for the History of Medicine at University College London. He works on the history of clinical and laboratory medicine since around 1600. Fiona Macdonald is writing a book on the development of Scottish medical journals, 1733 to c.1832.

Wellcome Trust Centre for the History of Medicine at UCL, Occasional Publication, No. 3, 2003, 320 pages, paperback. Price £15.00/US\$24.00. ISBN 0 85484 083 4.

Orders to: Mrs Tracy Tillotson, Wellcome Library, The Wellcome Trust, 183 Euston Road, London NW1 2BE, UK (E-mail: t.tillotson@wellcome.ac.uk).

New Centre for the History of Medicine in the North of England

With the support of a Wellcome Trust Enhancement Award, the medical historians at the Universities of Newcastle and Durham have formed a joint new Centre for the History of Medicine. The activities of the Centre comprise a coordinated research programme, a Master's training programme in the history of medicine, a number of PhD projects, a series of seminars/workshops/conferences, teaching initiatives within the medical curriculum, and a series of public engagement activities.

Building on the close historical ties between the two universities and on their international reputation for research in the history of medicine and science, one of the Centre's particular strengths is its coverage of the whole Western medical tradition from antiquity until the 20th century. A further characteristic is its strong interest in the history of medical ideas and the cultural history of medicine (from a comparative perspective), in particular in the epistemological, ethical and historiographical justifications of medical theory and practice offered through time. A related point of common interest is in the history of the communication of medical knowledge to wider audiences. Accordingly, the Centre's five-year research strategy is concerned with the theme 'Justifying medicine: Historical perspectives', focusing on three specific sub-areas: (1) The justification of medicine as a science; (2) The ethical justification of medical research and practice; (3) The self-presentation of the medical profession and the dissemination of medical ideas.

The core members of the Centre currently are:

- **Philip van der Eijk** (Professor of Greek at Newcastle), whose research interests are in ancient medicine, in particular the relationship between medicine and philosophy in the classical world (Hippocrates, Aristotle, Diocles, Galen, Methodism); the history of medical historiography; the communication and dissemination of medical ideas in antiquity; the comparative history of medicine in the eastern Mediterranean; and the history of melancholy and mental illness. His main current work is concerned with the role of Aristotelianism in the development of medical science in antiquity, the middle ages and the early modern period, for which he earlier received a separate Wellcome Trust project grant.
- **Andreas-Holger Maehle** (Professor of History of Medicine and Medical Ethics at Durham), whose research interests are in the history of medicine after 1700, in particular the history of medical ethics, the historical relations between law and professional ethics in informed consent, the history and ethics of animal experimentation, and the history of pharmacology and pharmacotherapy. He is currently completing a book on the historical development of the drug receptor concept (final outcome of a Wellcome Trust project grant), and will then turn to a comparative study on the interaction between law and ethics in the issue of medical confidentiality in England and Germany between 1871 and 1933.
- **Thomas Rütten** (Wellcome Trust University Award Holder at Newcastle), whose research interests are in classical, medieval and early modern medicine, in particular the reception of Hippocratic medicine and the history of medical ethics; Hippocratism in the early modern period; the history and iconography of melancholy; the history of medical historiography; the genres of medical writing; and the role of medicine in the work of Thomas Mann. His current

research is devoted to Hippocratism in the early modern period as expressed in the Hippocrates commentaries written in the 16th and early 17th centuries.

- **Lutz Sauerteig** (Wellcome Trust University Award holder at Durham), whose research interests are in the comparative history of medicine in the 19th and 20th centuries, in particular in the history of sexuality and the body, the history of venereal disease, the history of medical ethics and the history of public health policy. He is currently working on a comparative history of sex education in England and Germany (1880s to 1970s).

In addition, Maehle directs the Centre for the History of Medicine and Disease (CHMD) in the Wolfson Research Institute at Durham University, Queen's Campus in Stockton on Tees. He currently works here with Sauerteig (see above) and Iona McCleery (temporary Wellcome Lecturer in History of Medicine) who has research interests in medieval Portuguese medicine. The history of medicine at Durham benefits further from staff in various university departments, including:

- **Charlotte Roberts** (Reader in Archaeology), who has research interests in palaeopathology and the history of disease;
- **Peter Atkins** (Reader in Geography), who has research interests in the history of nutrition and tuberculosis;
- **David Knight** (Emeritus Professor of History and Philosophy of Science), who has research interests in the history of science and religion, and in the history of chemistry;
- **Alison Todd** (Lecturer in Anthropology), who has research interests in the history of asthma;
- **Carmen Pena** (Lecturer in Spanish), who has research interests in medieval Hispano-Arabic medicine.

At Newcastle, the Centre's activities benefit from the presence of:

- the research in bioarchaeology that takes place in the Centre for Bioarchaeological Science, in which staff from the School of Historical Studies (Professor Geoff Bailey and Dr Nicki Milner) cooperate with researchers in the Department of Fossil Fuels and Environmental Geochemistry (Dr Brendan Derham);
- the research in the history of botany carried out by Dr Gavin Hardy in the Marine Biology Department;
- the research in the early medieval history of healing conducted by Dr Scott Ashley in the School of Historical Studies;
- the research in the history of science and knowledge systems that takes place in the Centre for Research in Knowledge Science and Society (KNOSSOS) directed by Professor Milan Jaros (Physics);
- the research of the University's Medicinal Plants Research Centre directed by Professor Elaine Perry, which draws on the knowledge of historical medical remedies for modern application, esp. in the area of neurochemicals;
- and the research carried out in the Policy, Ethics and Life Sciences Research Institute (PEALS) directed by Erica Haines (Professor of Sociology and Social Policy) and chaired by Durham's Vice-Chancellor, Professor Sir Kenneth Calman.

The wide range of areas, periods and methodologies covered by this cluster of researchers makes the Centre ideally suited and situated for

the training of Master's and PhD students in the history of medicine. MLitt/MPhil/PhD projects currently being supervised range from the role of medicine in Aristotle's ethics, dreams in ancient medicine, music and medicine in antiquity, 18th-century mercury treatments, to the history and ethics of genetic databases. Moreover, the library holdings of Durham and Newcastle are very conveniently complementary in this respect. Newcastle's Robinson Library houses an excellent history of medicine research collection and has two special collections related to medical history: the Pybus Collection (a rich collection of historical medical works from the 16th century onwards, engravings, letters, portraits and busts), and the Medical Collection (a large collection of 18th- and 19th-century medical works). Durham University Library has up-to-date research collections in history of medicine, and in history and philosophy of science, holds all major journals in the field, and houses the Kellett Collection on early modern anatomy and surgery.

Seminars, conferences, visiting fellowships

The Centre runs a number of seminars and workshops, such as the Pybus History of Medicine Seminar series and the biennial 'Approaches to Ancient Medicine' conference. Activities planned for the near future include an international conference on the history of sex education and the mediation of sexual and medical knowledge of the body in spring 2005. Building on its very wide circle of international contacts in the USA and on the continent, the Centre will further be awarding a number of visiting fellowships.

History of medicine in the medical curriculum

A major objective of the Centre is the strengthening of the provision of History of Medicine teaching to students in the medical curriculum, especially by means of the so-called Special Study Modules. In the Newcastle Medical School, van der Eijk teaches Medicine in the Classical World at stage 4 of the medical curriculum, while at Durham's School for Health Maehle teaches Medical Ethics within the Personal and Professional Development strand at stage 1. With the presence of Rütten and Sauerteig (whose appointment is in the Durham School for Health), the number of options offered to medical students will be increased, thus contributing to a greater role of History of Medicine in the medical curriculum of both universities.

Outreach, public understanding and engagement

The Centre is contributing to the promotion of the public engagement with medicine and its history by means of a number of events (e.g. public lectures/debates) based on a confrontation between past and present in medical theory and practice. In this area, the Centre cooperates with Newcastle University's Public Lectures Programme, 'Insights', the Policy, Ethics and Life Sciences Research Institute (PEALS), and the International Centre for Life. The activities include a series of public lectures such as 'The Hippocratic Oath and the History of Doctoring', 'Blood and the Heart: Transfusion, transplantation and the sanctity of the body', 'Drugs, Policy and Society', 'When Physicians Err – Historical responses to medical failure' etc., each topic being approached both by a medical historian and a contemporary medical expert.

Postgraduate opportunities

Each year, the Centre awards a number of postgraduate studentships in the history of medicine. For further information on this, and on other activities of the Centre, please contact:

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Web: www.dur.ac.uk/chmd

Centre for History in Public Health

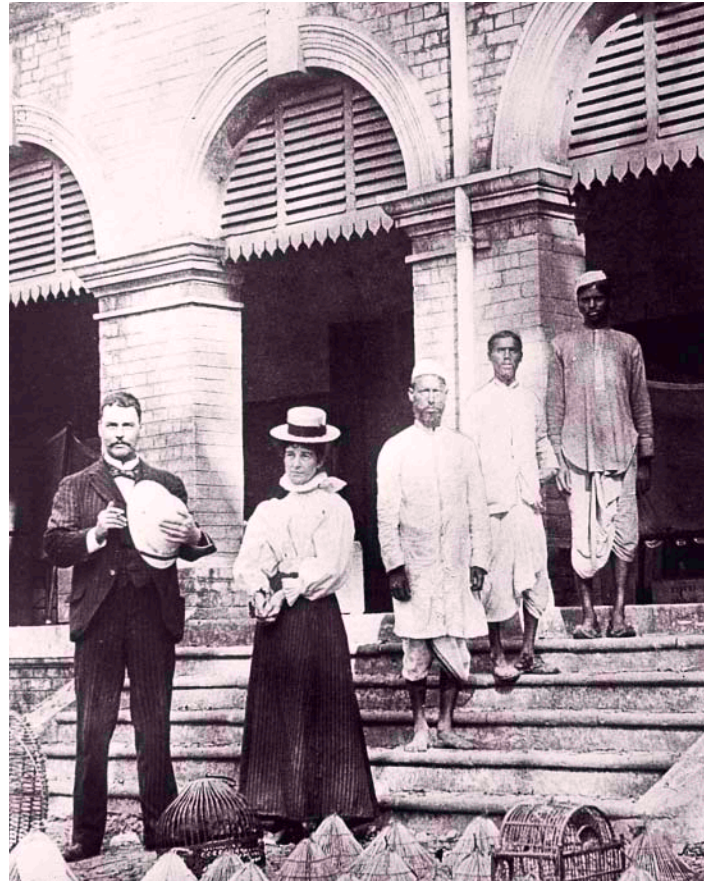
The London School of Hygiene and Tropical Medicine has recently approved the establishment of the Centre for History in Public Health. A School Centre is a cross-institutional set-up drawing together research interests which do not fit simply within departmental boundaries. Historical interests are evident across the School and the Centre will also facilitate links with public health scientists who want to develop historical work.

The Centre has a management committee and has produced its first newsletter for its internal supporters group. Its official launch was on 27 November 2003, when Simon Szreter spoke on 'Public health and security in an age of globalizing economic growth: The awkward lessons of history'.

The School's archivist, Victoria Killick, mounted an exhibition entitled 'Treasures from the Archives' for Archive Awareness Month in September and the archives were featured on ITV's *London Tonight* news programme. Victoria's work on the archive has been enhanced by funding from the Wellcome Trust Research Resources in Medical History scheme. This will enable her to preserve and catalogue to archival standards the archives of Sir Ronald Ross. Use of the School archive is expanding with an increased number of researchers accessing the collections.



Sir Ronald Ross, 1898. His archives are being catalogued and preserved by Victoria Killick at LSHTM, with Wellcome Trust funding.



Sir Ronald Ross and his wife on the steps of his Calcutta laboratory with Mahmoud Bux and two lab assistants; in the foreground are cages for malarial birds, 1898.

The Centre's two seminar series – 'History in Public Health' and 'Drugs and Alcohol' (funded by Wellcome and the Joseph Rowntree Trust respectively) – continue to thrive. The drugs seminar had the eminent US historian of drug policy, David Musto, speaking in December:

The Centre builds on the research of the history group in the Department of Public Health and Policy. This group has recently been joined by Dr Martin Gorsky from the University of Wolverhampton. His Wellcome University Award research is entitled 'A mass of separate expedients? Hospitals, integration and the British health system, c. 1930–65' looking at the issue of 'joined-up working' and the role of voluntarism both pre- and post- the coming of the NHS.

Dr Gorsky's recent work with Professor John Mohan of the University of Portsmouth and Tim Willis on hospital cash plans was the subject of a joint conference with the Society for the Social History of Medicine held at the Institute of Historical Research in October. This aimed to disseminate both to cash plan officials and to interested academics the results of an ESRC-funded project on the history of hospital contributory schemes in the 20th century. Subjects included their early development, their marginalization with the advent of the NHS and their transformation into providers of low-cost health insurance since 1948. The conference ended with a lively panel discussion on the future role of health cash plans. The speakers, who mapped out a range of competing visions, included Graham Moore, the Chief Executive of the Westfield Health Scheme, one of the largest of the cash plans,

Ken Purchase, the Labour MP who represents their interests in the Commons, Calum Paton, Professor of Health Policy at the University of Keele, and Dr Tim Evans, of the liberal think-tank Centre for the New Europe. John Greenway, the Conservative MP who represents the cash plans was also present.

Future plans for the Centre include a joint event with the group of School anthropologists; a witness seminar on drug policy (funded by the Royal Society for the Promotion of Health); and a conference in late 2004 on urban health to celebrate the foundation of the Health of Towns Association in 1844. We plan a lunchtime briefing session for School Centre supporters and those interested in historical research. We have also been invited to partner the Cambridge-based history and policy website, which shares our interests in the policy use of history (www.historyandpolicy.org).

Our own website (www.lshtm.ac.uk/history) is up and running thanks to Sue Taylor, a member of the history group. Here you will find details of the Centre and also the transcript of the Wellcome-funded witness seminar on the 1952 London fog, organized by the history group in December 2002 at the School's conference of European environmental epidemiologists (see www.lshtm.ac.uk/history/bigsmoke.html for more details).

Virginia Berridge is Professor of History at the London School of Hygiene and Tropical Medicine.

Visitors at the Wellcome Trust Centre at UCL

New Fellows from October through February include:

Penny Barrett* is working as a translator on Vivienne Lo's Trust-funded project, 'Chinese medicine: A visual history'.

Dr Manuela Tecusan* has a Wellcome Trust project grant (coapplicant Vivian Nutton) to work on the notion of pneumatism in ancient medicine. Manuela took up her award at the beginning of January but joined us in October 2003

Barbara Zipser has been awarded a three-year Wellcome Trust Fellowship to work on an edition of a medical manual attributed to John Archiatrus and studies of MSL 14 in the Wellcome Library.

Visitors to the Centre from October through February include:

Dr Poonam Bala (Case Western Reserve University, USA) 'Medicine in Bombay: Policies and perspectives in 18th- and 19th-century British India.'

Dr Kari Tove Elvbakken (Director of Research, Rokkan Centre, University of Bergen) 'The veterinary profession in Norway and a comparative study of food control in four European countries'.

Professor Shigehisa Kuriyama (International Research Centre for Japanese Studies, Kyoto). Prof. Kuriyama gave a number of lectures at the Centre, including the Anatomy Lecture. He also held informal discussions with Centre members.

Dr Efraim Lev (Haifa University), the materia medica of the Genizah project.

Prof. Stanton Linden (Professor Emeritus, Washington State University, USA) 'The Ripley scrolls'.

Dr Harish Naraindas (University of Delhi, India) 'Of orthodoxy and heterodoxy: A comparative history of smallpox in India and Britain'.

Dr Judy Miller (independent scholar) 'Ancient Egyptian dentistry'.

Dr Ernst Prets (Austrian Academy of Sciences) 'The publication history of the Sanskrit medical classic, *The Compendium of Caraka* – and its meaning for the reception of the text in 19th-century India'.

Dr John Queenan (Prof Emeritus, Georgetown University School of Medicine, Washington) 'The Chamberlen family and the invention of obstetrical forceps'.

Dr Kapil Raj (Alexander Koyre Centre for the History of Science, Paris, France) 'Intercultural encounters and the construction of knowledge in the field sciences, India and Europe, 17th to 19th centuries'.

*At the Wellcome Trust Centre at the time of publication. Apologies to those of our visitors whose plans were not finalized at the time of providing copy.

Sally Bragg, Visitor and Programmes Administrator
(E-mail: s.bragg@ucl.ac.uk).

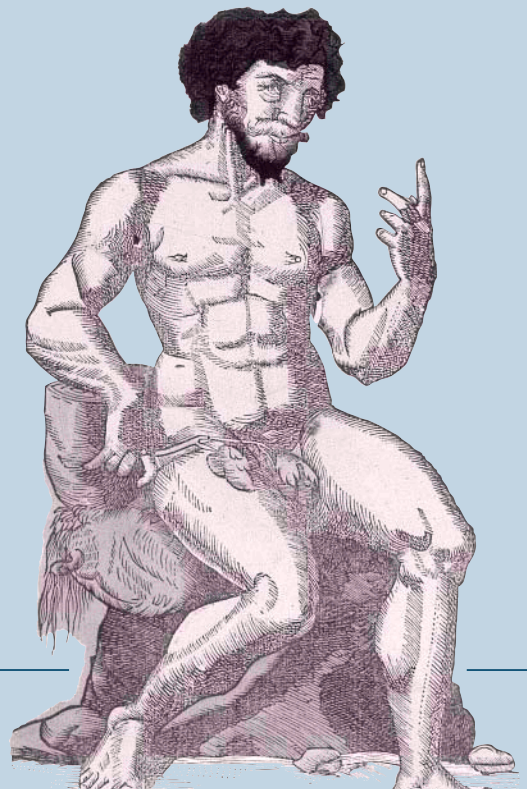
The Wellcome Library for the History and Understanding of Medicine

The Wellcome Library is moving...

From August 2004, the Wellcome Library will be temporarily located at 210 Euston Road, while the Wellcome Building undergoes refurbishment work.

Further information at <http://library.wellcome.ac.uk>

WellcomeLibrary



CALENDAR OF EVENTS

To add an event to the calendar page, please send details to the Editor (sanjoy.bhattacharya@ucl.ac.uk).

March 2004

3 Alice Stewart: A life in epidemiology
Friends Meeting House, London
Contact: Robert Arnott (E-mail: R.G.Arnott@bham.ac.uk)

24–27 5th European Social Science History Conference
Humboldt-Universität zu Berlin, Germany
Contact: esshc@iisg.nl

April 2004

5–7 Masculinity, Patriarchy and Power: An interdisciplinary conference
University of Southampton
Contact: Trish Skinner (p.skinner@soton.ac.uk)

May 2004

13–16 International Conference on the History of Drugs and Alcohol
Huron University College, London, Ontario, Canada
Contact: Dr Greg Marquis (gmarquis@unbsj.ca)

June 2004

16–19 Anatomical Knowledge in the Ancient World: From prehistory to antiquity (Society for Ancient Medicine Conference)
University of Birmingham Medical School
Contact: R.G.Arnott@bham.ac.uk

25–27 British Society for the History of Science Conference
Liverpool Hope University College
Contact: Dr Geoff Bunn (bunng@hope.ac.uk)

July 2004

1–3 Medicine at the Border: The history, culture and politics of global health
University of Sydney, Australia
Contact: alison.bashford@history.usyd.edu.au

2–3 Ayurvedic Identities Past and Present: The case of modern and global Ayurveda
University of Cambridge

August 2004

5–7 Fifth British-North American Joint Meeting of the BSHS, CSHPS and HSS
Halifax, Nova Scotia, Canada
Contact: info@hssonline.org

November 2004

History of Cancer
National Library of Medicine (NLM), Bethesda, Maryland, USA
Contact: David Cantor (E-mail: cantord@mail.nih.gov)

December 2004

4 Medicine Across Cultures, 600–1600
Contact: Joel Kaye (jkaye@barnard.edu)

For a fuller listing of lectures, seminars, conferences and other events relating to the history of medicine, visit <http://medhist.ac.uk/events>.

Submissions to *Wellcome History*

The next issue of *Wellcome History* is due out in summer 2004. Please send your contributions to Sanjoy Bhattacharya at the address shown. Preferably, contributions should be pasted into an e-mail and sent to the Editor (sanjoy.bhattacharya@ucl.ac.uk). Alternatively send the Editor a disk with a paper copy of the article. For more detailed instructions, visit the *Wellcome History* web pages at www.wellcome.ac.uk/wellcomehistory.

DEADLINE FOR SUBMISSIONS: 10 MARCH 2004

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