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In search of stability

Hans Selye and the biology of stress

MARK JACKSON

In 1936, the Austrian–Hungarian doctor and scientist Hans Selye (1907–1982) described a syndrome characterised by non-specific physiological responses to harmful agents.

According to Selye, the syndrome developed in three stages: an initial alarm or shock phase; a second stage of adaptation to injury in which physiological resistance to prolonged exposure allowed normal function; and a final stage of exhaustion when adaptive mechanisms eventually failed, resulting in collapse and death. Selye initially termed this new syndrome the 'general adaptation syndrome', but in an extensive range of subsequent publications he gradually adopted the term 'stress' (or the 'wear and tear of life') to explain the broad range of non-specific physiological and pathological responses to injury. Although not routinely accepted by contemporary physiologists, Selye's theory of adaptation and disease was adopted particularly by clinicians in the fields of allergy, clinical ecology, military medicine, psychology and occupational health in order to explain the pathogenesis of a wide variety of conditions such as cancer, diabetes, heart disease, arthritis, allergies, gastro-intestinal ulcers and mental illness.

In spite of Selye's prominence in the intersecting histories of endocrinology, physiology and biochemistry, and his contributions to modern understandings of the shifting epidemiology of chronic diseases, and in spite of global public and political interest in the socioeconomic and psychological impacts of stress around the turn of the millennium, there have been few balanced assessments of Selye's role in late 20th-century formulations of stress and disease. Russell Viner's article on the strategies adopted by Selye to disseminate his findings offers a constructive overview of the clinical, intellectual and social context in which his theories were initially framed and received.[1] However, like the scattered, brief biographical accounts of Selye's life or more recent attempts to explore the history of stress within the field of psychology, Viner's study is based almost exclusively on a limited number of Selye's published sources – largely popular ones. Selye's immense intellectual output (amounting to over 50 books and approximately 1700 scientific articles) and his challenging contributions to biomedical science demand closer inspection.

Selye was born in Vienna in 1907, the son of a surgeon, and raised in the Hungarian town of Komárom. He studied medicine at the German University of Prague (with periods of study in Paris and Rome) before completing his PhD in organic chemistry at the same university. In the early 1930s, apparently disillusioned by the lack of opportunities for creative science in Europe, and funded by a Rockefeller Research Fellowship, Selye moved to the Department of Biochemical Hygiene at Johns Hopkins University. In 1933, Selye was appointed as a Lecturer (and in 1934 Assistant Professor) at McGill University in Montréal. Initially working in the Department of Biochemistry under James Bertram Collip, and subsequently in the Department of Anatomy, Selye focused on exploring hormonal pathways and activities, with a particular emphasis on the role of the glucocorticoids and mineralocorticoids in maintaining health and mediating inflammation. In 1945, partly pushed by professional and personal tensions at McGill and partly enticed by the prospect of greater autonomy, Selye moved to the less prestigious University of Montréal, where he founded the Institute of Experimental Medicine and Surgery, dedicated to elaborating the relationship between stress and disease.

Above:
Glucocorticoid-producing cell from the adrenal gland. Selye studied the role of glucocorticoids in health and stress.
University of Edinburgh

Cover:
Hans Selye in his laboratory. Montréal: Bazil Zarov.
Division des Archives, Université de Montréal. Fonds Bureau de l'information (D0037) 1FP03219

Selye's early scientific description of the general adaptation syndrome emerged from experiments conducted in the early 1930s at McGill, in which he was attempting to identify new hormones from ovarian and placental extracts. His subsequent exploration of the neuro-hormonal regulation of bodily processes, and his articulation of the role of adaptation or stress in health and disease, were clearly not entirely novel. Largely based on laboratory animal experiments, Selye's work drew explicitly on notions of the stability of the internal environment (*le milieu intérieur*) conceived by Claude Bernard in the 19th century, and on the concept of homoeostasis and physiological theories of emotion developed by the Harvard physiologist Walter B Cannon and others in the 1920s. In addition, Selye's ideas were influenced by the research, theories and practices of his Prague teachers (such as Professor Artur Biedl). While acknowledging these immediate intellectual precursors, Selye himself also often pointed to a much longer holistic tradition of explaining the maintenance of health and the prevention of disease in terms of bodily balance. In particular, he pointed to Hippocratic formulations of disease in terms of toil (*ponos*) and the ability of the body to restore itself to health (*vis medicatrix naturae*).

Selye's preoccupations with physiological stability, hormonal regulation, and the aetiology and pathogenesis of chronic disease were clearly framed not only by dominant epidemiological trends butalso by broader intellectual, social, political and cultural currents.

Right:
Selye's old house on rue Milton, Montréal.
M Jackson

At one level, his approach to stress and disease echoed arguments being developed within the fields of psychosomatic and psychosocial medicine, according to which chronic diseases were the product both of socioeconomic conditions and of complex interactions between mind and body. Selye's list of diseases caused by maladaptation, for example, matched almost precisely the paradigmatic psychosomatic diseases being studied by the Hungarian-born psychoanalyst Franz Alexander, the American psychiatrist Helen Flanders Dunbar and their colleagues in the American Psychosomatic Society during the 1930s and 1940s.

At another level, Selye's emphasis on regulatory processes was self-consciously informed by the growth of cybernetics, a field of research originally defined by the American mathematician Norbert Wiener and others in the late 1940s and dedicated to studying systems of communication and control in both animals and machines. Even more broadly, Selye's attempts to translate his biological theory of stress into a philosophy of life (which he referred to as 'altruistic egotism') not only echoed the notion of 'reciprocal altruism' being formulated by the sociobiologist Robert Trivers during the early 1970s, but also was perhaps driven by global concerns about international political instability during the Cold War and by growing anxieties in the wake of the immense social upheaval wrought by World War II.

He ensured that the relationship between stress and disease was mobilised and exploited by a variety of clinicians and scientists.

Significantly, Selye's approach to stress and disease was not routinely accepted by contemporary biomedical scientists, including one of his own scientific idols, Walter B Cannon. In particular, physiologists were unimpressed by the absence of evidence for the biological and biochemical pathways involved in stress reactions, concerned about the lack of a clear scientific definition of many of the terms, dismissive of his descriptive (rather than analytical) approach to physiological mechanisms, and worried that experimental laboratory findings could not be readily translated into clinical practice. In addition, assessments of Selye's contributions by both contemporary scientists and his biographers may perhaps have been clouded by his brash, overconfident and unflagging entrepreneurial personality, and by the tendency of historians to focus on his popular writings rather than on the vast range of his scholarly output.

To some extent marginalised from mainstream physiological investigations, Selye adroitly adopted an alternative strategy for furthering his career, expanding his empire and attracting funds for future research initiatives at his Montréal Institute. From the early 1950s, as well as presenting scores of papers at international conferences of scientists and clinicians, he talked extensively to a wide range of public groups, gave advice to military authorities on issues relating to combat stress, and appeared on radio and television promoting both his scientific research and his blueprint for global tolerance and individual harmony. In addition, he wrote a series of popular books aimed at educating general practitioners and informing an increasingly receptive public audience about the possible links between stress and disease. These included *The Story of the General Adaptation Syndrome* (1952), *The Stress of Life* (1956), *From Dream to Discovery* (1964), *Stress Without Distress* (1974) and his autobiography, *The Stress of My Life* (1977).

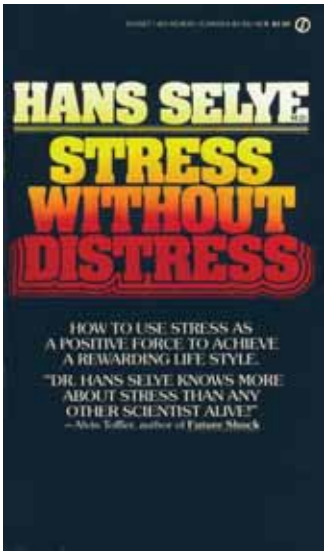
There was growing resistance to much of Selye's laboratory science, but his energetic attempts to

popularise his findings and the manner in which his arguments resonated with broader environmentalist critiques of modern civilised lifestyles ensured that the relationship between stress and disease was mobilised and exploited by a variety of clinicians and scientists working in diverse professional arenas and institutional locations. In particular, stress was adopted as an explanation for disease, and as a legitimate object of study, by military personnel keen to combat war neurosis and maximise operational efficiency during and after World War II, by psychologists and counsellors interested in charting the relationship between life events and organic diseases, by clinicians exploring the impact of stress on cardiovascular and respiratory diseases, by occupational health doctors concerned about stress and mental stability in the workplace, by endocrinologists eager to establish and map the neuronal and hormonal pathways involved in chronic diseases, and by clinical ecologists, such as Theron Randolph in the USA and Richard Mackarness in England, who were positing close causal associations between environmental pollutants and allergic and psychiatric diseases.

Although many of Selye's contributions to biomedical science were contested, his legacy was nevertheless immense.

During the second half of the 20th century, professional and public interest in (and indeed scepticism about) the role of stress in disease deepened. Stress became a focus of dedicated study for national and international organisations such as the American Institute of Stress (founded by Selye) and the International Stress Management Association (founded in the 1970s). Stress also became a particular focus of concern for the World Health Organization, which from the 1970s commissioned and organised symposia and seminars on occupational stress, funded and published research into the biological mechanisms of stress, and released specialist reports into stress and adaptation. During the same period, stress became a popular, but elastic and ill-defined, concept in both Western and non-Western cultures, serving to explain and critique the detrimental impact of contemporary lifestyles on physical and mental health. Thus, people were increasingly 'stressed' or 'stressy', and the hectic pace of modern life was routinely perceived as inherently 'stressful'. Tense and irritable workers sought refuge in relaxation or yoga classes in order to relieve stress, and a hungry market was created for both orthodox and alternative remedies for stress. By the turn of the millennium, stress and its multiple pathological consequences had emerged as an archetypal 'disease of civilisation'.

On his retirement in 1977, Selye established the International Institute of Stress in his own home on the edge of the McGill campus. His hope was that the Institute would enable him to continue the work that he had so energetically pioneered and promoted for nearly 50 years. The venture was short-lived. Hans Selye died in 1982, survived by his wife, Louise Drevet, and by two former wives and five children. Although many of Selye's contributions to biomedical science were contested, his legacy was nevertheless immense. He established and clarified the central role of the corticoids in health and disease, generated new understandings of neuro-hormonal regulatory processes, created a global language of disease, and supervised doctoral students and research fellows who subsequently became leading international scientists and clinicians (most notably Roger Guillemin, who obtained his PhD in Selye's Institute of Experimental Medicine and Surgery in 1953 and received the Nobel Prize for Medicine in 1977). In addition, Selye kept alive a critical tradition of recognising the impact of host defence mechanisms on clinical symptoms and of prioritising the dynamic interaction between organisms and their environments in the determination of health and disease. With his recent induction into the Canadian Medical Hall of Fame and the forthcoming centenary of his birth, the time is perhaps ripe for a more comprehensive evaluation of his life and work.



Right: Mass-market edition of Selye's *Stress Without Distress*, published by Penguin in 1975.

Mark Jackson is Professor of the History of Medicine and Director of the Centre for Medical History at the University of Exeter. His current project, drawing on Hans Selye's extensive academic and popular output and a range of previously unused archival sources, aims to evaluate the impact of Selye's theories of stress and society on modern understandings of disease.

1 Viner R. Putting stress in life: Hans Selye and the making of stress theory. Social Studies of Science 1999;29:391–410.

The Medical Officer of Health and health visiting as a comprehensive community health service, 1906–1974

PAMELA DALE

This project is a three-year Wellcome Research Fellowship in the History of Medicine designed to explore the role played by health visitors in the provision of community-based healthcare from 1906 to 1974.

These dates mark the first comprehensive municipal health visiting scheme pioneered in Huddersfield and the reorganisation of social work departments following the Seebohm Report in 1974. The objective is to use health visiting as a case study to examine the expansion of the Medical Officer of Health's (MOH) interests from the maintenance of public health to the provision of health and social care.

It has been argued that the policy context for the development of health visiting is relatively well defined. Yet while researchers from different disciplines have explored the work of health visitors, they have tended to concentrate on maternal and infant welfare work at the expense of other functions. I am examining controversial schemes to supervise midwives, develop birth control clinics and assume responsibility for child protection work in the inter-war period. In each case the deployment of health visitors by MOHs seems vital to understanding both their role and its limitations.

Existing literature, especially work by practitioners, suggests a fairly simple chronology in which health visiting emerged between 1860 and 1900, and was closely allied to sanitary inspection before the role became associated with infant welfare clinics during 1900–48. The creation of the National Health Service then apparently reestablished the preventative and social aspects of health visiting before competition with the emerging social work profession led to a reappraisal of the role in the 1960s and 1970s.

It is notable, however, that this analysis makes little allowance for continuity over time or changes within each period. It also suggests that forces external to the profession tended to define the health visitor role. Robert Dingwall attributes this to the influence of central government policies and the relationship between health visitors and other professional groups, especially doctors and social workers. This will be the starting-point for this project, but it can be argued that commentators have neglected the issue of gender and tend to regard the health visitor as a passive onlooker rather than a central actor in these developments.

This project is also designed to critique work originating in social policy and women's studies that still presents health visiting as both a service to mothers and infants and a form of surveillance over working-class communities. This account needs to be more sophisticated, encompassing both the aims of the profession and the local and national constraints.

Devon and West Yorkshire were the two largest counties in England during the period of this study and both have well-documented healthcare systems that will provide context for this project. More importantly, preliminary work has confirmed that both areas were very innovative in terms of services provided, although they developed quite different models of service delivery. In West Yorkshire, *Annual Reports of the Health of the Borough* compiled by the Halifax MOH confirm the priority given to reducing infant and maternal mortality rates, within a wider programme of initiatives aimed at "raising the standard of mothercraft". The service was originally limited to giving advice to parents of newborn babies, and relied heavily on volunteers, but by 1938 there were two dedicated infant welfare centres and a team of qualified health visitors whose work embraced a variety of client groups.

In Devon, services were slower to develop, but attention quickly shifted from infant survival to a concern with the 'normal' physical and mental development of children. Interest came to focus on emotional wellbeing and the quality of the mother–child relationship, especially where this was seen to 'cause' or 'prevent' various forms of juvenile delinquency. These concerns informed many programmes organised by Dr L M Davies, an inter-war Devon MOH, and allowed health visitors to develop a particularly wide remit, especially in their innovative partnerships with other welfare workers in the statutory and voluntary sectors. Crucially, the MOH was able to extend not only his personal influence but also a medical model of care into the emerging network of health and social workers, and exert his medical authority over other welfare professionals working for voluntary as well as municipal services. It is generally agreed that MOHs achieved an expanded role and improved status before 1948. This proved a useful umbrella to shelter the first health visitors, but over time some MOHs strategically deployed the health visitors in a way that put them at the vanguard of the advance of municipal medicine before and after 1948.

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Songs of misery from the cholera archive of 19th-century India

DHRUB KUMAR SINGH

My attempt in this ongoing research project is to write a brief biography of cholera epidemics in the 19th century so as to delineate some relatively neglected aspects of social history in the Indian subcontinent.

In this venture, I aim at setting out a short history of the evolution of ideas about cholera, its causes, its implications in the lives of the sufferers, ideas about its treatment and the role of the colonial state in the formulation of sanitary reforms. The inconsistencies of colonial intervention in the wake of recurring epidemic cholera, the public health policies forged to combat it, and comparison with the policies pursued in the cholera-stressed metropole in the 19th century may reveal some of the missing strands of colonialism – which, after all, was not a monolithic entity.

Deriving clues and inspiration from Norman Longmate's *King Cholera*,[1] this study will span the entire 19th and first half of the 20th centuries, taking into account the entire Indian subcontinent. I primarily aim to critically narrativise the evolving knowledge and intuitive recognition of 'cholera' along with the depiction of the choleric or diseased society by colonial medical men. From my five-year association with the cholera archive, I am directly confronted with three things that stand out about this disease in 19th-century colonial India.

First, cholera – the mysterious disease of the 19th century – at most times and by various ways of reasoning was made to emanate from the colony, particularly India. What is especially striking is that the oriental framing of the disease went on in simultaneity with the process of consolidation of the Empire.

Second, concomitant to the endeavour of historically attributing the origins of cholera to the colony, efforts were directed at singling out the sites at which the disease bred and wreaked devastation. The pilgrim site was easily the most discernible for the colonisers in which the disease touched epidemic proportions. The process of colonisation aided pilgrimages that in turn helped in the epidemicisation of cholera in India. Pilgrimages hence served to reinforce the prevalent Eurocentric delineation of cholera as being distinctly a disease of the colony. This depiction was accentuated by the racial turn in the post-mutiny phase, which squarely attributed the virulence of the disease to the natives and their filthy mode of existence. Colonial intervention, as a matter of fact, bolstered the process of structuring a disease such as cholera in the colonial milieu.

The problem of the management of cholera was inflated by the exoticised narrative of the pilgrim sites. The cholera problem was presented as a predicament associated with the prevention of pilgrimages, and the economic backing for the use of sanitary science was not to be employed to intervene in this instance.

One should not wonder why the cholera treatises and reports are so full of cultural connotations about the Indian body and landscape, because the helplessness of science – and the unwillingness to forge a sanitary agenda owing to economic imperatives – had to be masked by shifting the blame onto the colonised through cultural essentialisation. In this exercise, the contagionists were much ahead of the anti-contagionists. If the contagionists accorded uniqueness to the native body and landscape, the anti-contagionists argued for the uniqueness of cholera in the colony.

Cholera not only challenged the limits of 'heroic' and 'rational' medicine but also provided the context for the emergence of new alternatives.

Contrary to expectations, even the understanding of the disease that accrued in the metropole was given very late reception in the colony. Whenever the evolving scientific knowledge at the metropole provided a policy suggestion for the colony, the colonial state invoked the uniqueness of the disease and delayed the reception of those theories on which action-oriented sanitary plans had to be forged. The desire for science to succeed is one thing, but to carry forward the call of science is entirely another. In the metropole, both were done. In the colony, the former was sometimes expressed, but the colonial state did not initiate the action part until as late as the 1880s. Localist utopias of sanitary republics (which gelled with Cunningham's localist theory of cholera) were not to be achieved and could not be achieved by 'sanitary primers' alone. It needed sustained economic backing, which was never provided.

The third remarkable observation is that most of the otherwise voluminous cholera treatises and reports do not have much to say on the mode of treatment. This paucity of accounts points to a salient fact. It reflected, in more than one way, the anxieties of medical men both in the metropole and colony, in their search for a successful prophylactic breakthrough. It challenged the very limits of medicine. What needs to be reiterated is that the anxieties of this class were also an echo of the anxieties of the Empire as well as the expanding empire of scientific enquiry. The concerns of the 'embattled

Above:
Cholera vaccination of the Third Gurkhas in India. Reproduction of a wood engraving, 1894.

minority' outweighed those of the vast population. One can only attempt to subjectively capture the demographic consequences of cholera by depicting the use and implications of heroic therapies. Cholera not only challenged the limits of 'heroic' and 'rational' medicine but also provided the context for the emergence of new alternatives – in this case homoeopathy – in the choleric colony.

The social history of cholera becomes then an entry-point underlining the ruptures in the teleological progress of medicine in history. Through the instance of cholera in 19th-century India, it is possible to trace the inherent contradictions in the presumed positivist transition in the history of medicine. It allows for a shift in focus from the novelties of medicine and its practitioners to less glamorous matters, such as the impact on the vast majority who were subjected as laboratory specimens to various heroic therapies.

So primarily the study is about the contradictions of various interpenetrative realms associated with cholera. There were contradictions at several levels, the most obvious being that between the real delivering capacity of dominant Western medicine and the triumphalist rhetoric with which it tried to colonise the body. On a different plane, contradictions are revealed in the anxieties of the colonial state about the fate of the Empire, and the survival concerns of the vast population in a famine-afflicted country who were doubly condemned, by the malady and by the heroic medicine of the age. Unfortunately, neither does the early census nor the cholera archive provide a proper assessment of the actual impact of those 'efficacious' drugs on the suffering majority. Can the two levels of anxieties be then read and justified on the same plane as some apologists of the Empire have done?

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1 Longmate N. King Cholera: The biography of a disease. London: Hamish Hamilton; 1966.

New publication

Expunging Variola: The control and eradication of smallpox in India, 1947–1977 by Sanjoy Bhattacharya.

As a crucial component of the global smallpox eradication programme, which has been widely hailed as one of the greatest public health successes in the 20th century, the Indian experience has some important stories to tell. *Expunging Variola* reveals these as it chronicles the last three decades of the anti-smallpox campaigns in India.

This wide-ranging study, based on extensive archival research in India, Britain, Switzerland and the USA, assesses the many complexities in the formulation and implementation of the smallpox eradication programme in the subcontinent. Rather than merely cataloguing the developments of this extremely complex exercise within the World Health Organization (WHO) headquarters in Geneva and the Indian central Government in New Delhi, this book adopts a much broader perspective; it makes a conscious effort to provide a detailed view by including the accounts of WHO, governmental and nongovernmental personnel on the ground. In this manner, nuanced descriptions of important – and often controversial – situations are provided. Thus, apart from acknowledging the influence of national-, state- and district-level political, economic and social structures in continually reshaping the contours of the smallpox campaigns, this work also emphasises the crucial role played by field workers in implementing and often reinterpreting health strategies proposed by Geneva and New Delhi.

Original not only in perspective but also in material, based as it is on a wide range of sources that have never been exploited by academics before, *Expunging Variola* breaks new ground in the historiography of smallpox eradication in the subcontinent.

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For purchases in the UK and Europe, contact Anthony de Souza (**E** sangambooksuk@gmail.com); for the rest of the world, contact Orient Longman Private Ltd (**E** cogeneral@orientlongman.com).

Recasting indigenous medicine in colonial Punjab

KAVITA SIVARAMAKRISHNAN

My work has examined the process by which traditional intellectuals, hereditary practitioners and religious specialists in 19th- and 20th-century colonial Punjab attempted to reorder the public status of their learning and began to emerge with a self-conscious, corporate identity. It traces the responses of Ayurvedic or 'indigenous' medical practitioners to the claims and assumptions inherent in the elaboration of scientific Western medicine and its validation of colonial rule.

My research shows that Ayurvedic practitioners (vaids) reconstructed a discourse on indigenous science in the public sphere in Punjab through the rhetoric of their mobilisation and print publicity. In their writings and rhetoric, the attributes of Ayurvedic learning were pieced together and recast in the political idiom amid claims of a tradition of indigenous science that in turn legitimated a unified, singular Hindu nation. These were the claims, of an indigenous science, that sustained and collapsed the impulses of science and religion to construct a 'different' modernity that validated a Hindu national identity.

I have explored the reconstruction of this discourse by vaids through the claims of vernacular languages and in the political, particularistic identities that they represented in the public sphere. Vaid ideas projecting Ayurvedic learning as an indigenous, rational-critical science drew upon this relationship between vernacular language and indigenous science, and were expressed in the political imaginings and interests represented by Hindi and Punjabi.

The representation of the claims of Ayurvedic learning within the ambit of a Hindu national identity was interpreted in the public sphere largely through the politicised claims of Hindi. Vaid publicists, even in their early writings and speeches, affirmed the role of Hindi in projecting and aligning Ayurvedic learning with the interests of the Hindu community. This study traces the founding and expansion of vaid corporate associations and vernacular health journals as being closely linked to the trajectory of constructing Hindi as an idiom for the Hindu nation in the making.

Right: Illustration of Dhavantari, god of Ayurvedic medicine.

However, the course of vaid campaigns to promote the translation of Ayurvedic texts into Hindi, and to legitimate Ayurvedic education in the medium of Hindi, also brings out some of the differences in priorities that emerged while linking Ayurveda as an indigenous, rational science with Hindi revival. While Hindi-based translation projects of emblematic Ayurvedic texts were projected as a device to recover the intrinsic scientific nature of Ayurveda and to validate the modernity of the Hindu nation, the support for Ayurveda also encountered specific challenges in the public sphere in Punjab. The history of Ayurveda as a part of the wider canon of Hindu Vedic science was also being recast by Sikh vaid publicists in Punjab, who redefined Ayurveda's historical origins and influences. Sikh vaid writing resisted the assumptions of the discourse on Hindu Ayurveda and its association with the Hindu religion. Sikh practitioners advanced a role for Punjabi in the Gurmukhi script to renegotiate the claims of a Hindu Ayurvedic science and to represent a provincial-level Sikh community identity.

Claims of a tradition of indigenous science legitimated a unified, singular Hindu nation.

My work has also explored the engagements between the Ayurvedic and Unani indigenous practices, thereby looking beyond the confining binaries of Asian and Western medical systems. It argues for an understanding of the contextual politics of indigenous medicine as a fluid and complex body of ideas as well as representations of religious identities and linguistic alignments. In showing this, it suggests new perspectives on Hindu reformist politics, its ambiguities and fractures. Patrons and publicists in the medical public sphere were forging, at one level, new forms of Sikh community identity and a Hindu nation in the making, even as they were, simultaneously and disparately, projecting an altered vocabulary of Ayurvedic learning and its claims to authority.

Dr Kavita Sivaramakrishnan is an independent scholar based in New Delhi, and has recently published a book titled *Old Potions, New Bottles: Recasting indigenous medicine in colonial Punjab (1850–1945)*, where she has examined many of these important issues (**E** siva.kavita@gmail.com).

Colonial civil society and the development of modern medicine in British Malaya

KAI KHIUN LIEW

The development of public health can be determined by two broad genealogies, namely the 'philanthropic-missionary' and the 'government-political'. Generally, the evolution of modern public health systems has been associated primarily with the state.

Government intervention in attempting to engender healthier workers and soldiers has seemingly eclipsed the limited provisions of the more localised parishes, charities and private medical practitioners. Such a view of the relationship between an advancing state and a receding society has dominated the historiography of medicine.

An examination of the case of British Malaya from the mid-19th century to the eve of World War II, however, points to a different picture. In the early stages of British rule in the mid-19th century, the merchants not only pressured the authorities to provide public health facilities for a burgeoning migrant labour population, but also took the lead in establishing their own hospitals and clinics. Similarly, plantation managers took their own initiatives to set up estate hospitals for their coolies in the commercial agriculture estates and tin mines long before government involvement. Medical missions supported by the Anglican Church were also responsible for being the vanguard of modern maternal healthcare in the colony. European women doctors and nurses managed to open a maternal clinic and two dispensaries in the Malay rural heartlands to promote the culture of Western obstetrics and antenatal care in the 1910s, a decade before the colonial health services took active measures. Meanwhile, inspired by the nationalist trends in China, which equated opium with national decline, anti-opium associations and rehabilitation clinics sprouted up in Malaya among the colony's ethnic Chinese population. The practices of these clinics were later incorporated by government hospitals.

By the 1920s, international health movements came onto the scene in British Malaya to complement and set forth new initiatives on colonial public health. The British Social Hygiene Council assisted the colonial authorities in opening up a venereal disease centre for sailors, and distributed sexual health pamphlets and booklets to the general public. At the same time, the Health Organisation of the League of Nations was also making its presence felt in the colony with its contribution of an Epidemiological Centre in Singapore to monitor and inform on the incidences of infectious diseases through wireless transmissions.

Accompanying the League was the International Health Board (IHB) of the Rockefeller Foundation. Aside from substantially funding local government health institutions, the IHB initiated pilot anti-hookworm campaigns with the colonial Government, promoting rural hygiene standards through mass medical treatment and education. Civil society played a role in public health even in times of emergencies. During the influenza pandemic of 1918, community and business leaders organised medical and financial relief efforts with the assistance of the local newspapers, which provided epidemiological updates and information on preventative measures. At the eve of World War II, the services of the St John's Ambulances in training volunteers to give basic treatment physical injuries became valued by the authorities.

Aside from medical services, the colonial civil society also shaped the direction of public health services and the local medical discourses in general. Through the platforms of the media, the local legislative assembly, various commissions and public meetings, individuals and groups raised concerns and protests over the inadequacies and inefficiencies of government health institutions or policies. There were however more contentious health policies splitting the opinion of the civil society, in particular between the regulationists and the abolitionists on the subjects of opium consumption and prostitution and venereal diseases.

It was civil society groups that preceded the state infrastructure in both providing basic medical facilities and advancing the modern notions of public health.

Participation in the colonial public culture of health policies was however not universal. Although civil society may be generally understood as the intermediary between state and society, the case of British Malaya was more exclusive. While presented as a mirror image of the democratic political culture in western Europe, underlying the articulation of interests was an acceptance of British hegemony and paternalism. Nonetheless, colonial civil society did not remain the domain of the European male middle-class trading community. Perhaps the more successful interest group in colonial health politics was the ethnic Chinese community. In addition to making financial contributions to medical institutions, the ethnic Chinese leaders were quick to learn the ropes of a

European-based civil society. To begin with, for access to crucial social networks and economic resources, European civil society in Malaya found it essential to engage the ethnic Chinese leadership into their fold. This community was also represented in colonial society by a Western-educated core who were able to move between different cultural strata. By the late 19th century, the more prominent community representatives on health issues were personalities trained in Western medicine. Among them were Dr Wu Lien The, Dr Lim Boon Keng and Dr Chen Su Lan. Collectively, they were influential voices in not just health issues, but also the colonial society at large.

Given the multiplicity of players involved, the colonial state should not be regarded as the sole custodian of modern medicine. In many respects, it was civil society groups that preceded the state infrastructure in both providing basic medical facilities and advancing the modern notions of public health. And, rather than being an end in itself, modern medicine became appropriated by interest groups in colonial civil society to articulate larger political ideals. These ideals were healthy ports and plantations for merchants, disease-free utopias for the Rockefeller Foundation and the League of Nations, sexual morality for temperance movements and national strengthening for Chinese anti-opium societies. It is in this process that colonial civil society helped to open new dimensions in making medicine social.

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Western medicine in 19th-century China

SHANG-JEN LI

I am currently working on a book on Western medicine in 19th-century China based on my ongoing research and previous publications.

Although there are a few scholarly books on the history of hygiene with regard to some of the Chinese treaty ports, and some exceptional work on the history of tuberculosis and plague in 19th-century China, there has not been an adequate study that provides a general overview of Western medicine in China during this period.

The older general surveys of Chinese medicine, which contain an encyclopaedic amount of detail, were compiled chronologically and are now dated in light of current scholarship. By examining systematically Western medical practices and research in China, and the ways in which the Chinese people understood and used Western medicine, the book aims to provide a more nuanced account and subtle analysis of the exchanges and accommodations that took place in the efforts of disseminating Western medicine in China.

After the Opium War, an unprecedented number of Western medical practitioners came to China. Among them, three groups were most important in terms of their numbers and the nature and range of their activities: the Protestant medical missionaries, the surgeons of the British troops and fleets stationed in China, and the Medical Service of the Chinese Imperial Maritime Customs. Medical journals, hospital and sanitary reports, memoirs and monographs produced by these Western medical practitioners will be the major source material for my book project.

Conventional accounts of the introduction of Western medicine to the non-Western world have presented a progressive story of modernisation. On the other hand, recent historiography has placed more emphasis on the role of Western medicine in European colonialism. Due to China's unique relation with the West during this period, an in-depth study of Western medicine in 19th-century China provides a rare opportunity to revise the scholarship on Western medicine in Asia and to address relevant historiographical issues.

China was not a European colony and the treaty port system was a unique arrangement. European medical activities in China were, indeed, facilitated by European imperialism and some of them did serve the interests of foreign powers. It would, however, be an oversimplification to consider Western medicine in China as merely a tool of imperial domination. Many of the Western medical practitioners had interests and goals contradicting the policies of their governments. Without the support of a colonial government in China, moreover, Western medicine was not able to attain the kind of coercive power that it had in European colonies. My book will provide a broad but in-depth investigation of the character of Western medicine in 19th-century China by examining three types of activity: the clinical practice among the Chinese people, the investigations of the hygienic conditions of Chinese cities, and the research on diseases endemic in China.

I will examine the methods by which European practitioners attempted to win the trust of the Chinese patients and to establish the credibility of Western medicine. There is much evidence indicating that while Western medical men were contemptuous towards practitioners of traditional Chinese medicine, they nevertheless learned from the latter about such issues

as the proper manner of social intercourse with Chinese clients and the cultivation of patronage. Although many of the primary sources were written by European medical men, I argue that by scrutinising this material critically it is still possible to analyse the ways in which the Chinese understood and used Western medicine, especially as there are hospital reports and physicians' memoirs that contain records of their conversations and correspondence with Chinese patients. Furthermore, late 19th-century Chinese newspapers published advertisements and articles about Western medicine. These sources, though often brief and scattered, provide a valuable venue to explore Chinese understandings of Western medicine. This book will thus argue that Chinese patients, who were by no means passive recipients of Western medicine, made use of it in eclectic and creative manners.

Introducing Western medicine to China also brought to the fore the different social customs, religious ideas and medical theories of Europe and China. Nowhere were the contradictions and conflicts more manifest than the Chinese reactions to missionary medicine. The missionary use of medicine to facilitate the conversion of the Chinese will be examined, as will the ways the missionaries imbued their medical practices with religious meanings through rituals and discourse. I will also discuss their efforts of disseminating Western medical knowledge by translating medical books and training Chinese assistants, as well as the obstacles these efforts faced. The book will present a detailed analysis of Chinese anti-missionary propaganda, which repeatedly claimed that the missionaries gouged out the eyes of the Chinese for their practice of alchemy and took away bodily organs to produced magic pills and opium. I will also investigate how anti-missionary Chinese gentry perceived Western medical practice as a form of witchcraft through the filter of their cultural resources such as Chinese medical theories, literature and folklore.

Western medical research on Chinese environments will be another main theme. European medical men studied the climates, geological formations, water qualities and urban constructions of the treaty ports, analysing their influences on the health of the residents. They also investigated water supply, sewage treatment and other sanitary conditions of the Chinese cities. By researching this material, my book will also contribute to the urban and environmental history of treaty ports. Western medical practitioners in China were eager to study the culture, customs and hygienic practices of the Chinese, and they attempted to distil useful knowledge from their observations; the (un)healthiness of Chinese food, buildings and customs was extensively discussed.

Their views were more diverse than those of European medical men in India, whose attitudes towards indigenous customs became increasingly negative in the 19th century. For example, some European physicians claimed that the Chinese diet's nutritional deficiency caused the general, chronic anaemia among the Chinese population that was believed to have made them less innovative. On the other hand, some British medical men argued that Chinese food was healthier than the European diet because it rendered the Chinese less prone than Europeans to inflammation, fevers and gout. The moderate Chinese dietary practice, they argued, was worthy of European emulation because of the physical and moral benefits it brought about. I will analyse 19th-century Western medical views of diet, social customs and health in China and examine the links between the medical views and the nature of the Western presence in China.

Right: Amoy town and harbour, 1874. Patrick Manson, a British doctor, worked at local missionary hospitals.

Without downplaying the fact that many Western medical practitioners held condescending and even racist attitudes towards the Chinese people, or denying that some of them made genuine efforts to use modern medicine to help China, this book will demonstrate that simply seeing Western medicine as an imperial project of colonising the Chinese body, or as an enlightening project of modernising China, cannot provide a satisfactory account of this complicated history. By exploring the interplay of coercion, resistance, accommodation, exchange and hybridisation in China's encounter with modern Western medicine, I hope this book will increase our knowledge of this multifaceted history.

Dr Shang-Jen Li, who completed his doctorate at the Wellcome Trust Centre for the History of Medicine at UCL, UK, is an Assistant Research Fellow at the Institute of History and Philology, Academia Sinica, Taipei, Taiwan (**E** shangli@asihp.net).

Medicine, psychology and politics, 1294–1347: the case of Marsilius of Padua

FLORIANO JONAS CESAR

The years between the election of Pope Boniface VIII (1294) and the death of Emperor Ludwig of Bavaria (1347) witnessed some major political conflicts involving papacy, empire, kingdoms, and cities in Europe.

Around the same time, most of the surviving Aristotelian Opera had already been translated into Latin, the medical authority of Galen was being consolidated in the European universities, and a combination of Aristotelianism and Galenism had become a characteristic of scholastic medicine.

Marsilius of Padua (*c*.1280–*c*.1342) is a good example of how this Aristotelian–Galenic medicine entered the arena of political debate. He studied medicine, although exactly where and for how long are unknown. We do know that the famous Italian physician Pietro d'Abano was among his friends, and a document from 1328 reveals that Marsilius visited patients in Paris and had contacts in the medical profession. Finally, we hear about him practising in the imperial court later on.

There is abundant evidence of his involvement in politics. He once abandoned his studies and joined two of the most powerful enemies of the Pope in Italy, namely Can Grande della Scala and Matteo Visconti. In 1319, acting as emissary, Marsilius met Count Charles of La Marche and offered him the captaincy of the Ghibellines in Lombardy (who generally opposed the pontiff). Sometime between 1324 and 1326, Marsilius sided with another opponent of the Pope, Emperor Ludwig of Bavaria, whom he accompanied in an expedition to Italy in 1327, being appointed spiritual vicar of Rome in 1328. When the Emperor had to leave this city in August of the same year, Marsilius followed him back to Germany and probably stayed in the imperial court from then on.

An interesting point about Marsilius is the fact that psychology and medicine shaped his understanding of the religious and political situation in Europe at the time. Relying on a certain psychology of human action, the *Defensor Pacis*, his major work, affirms that the Pope's perverted desire for rulership and the papal false opinion of having plenitude of power caused social unrest and corruption in the Church. In order to sustain such views, Marsilius develops political and theological ideas that are also greatly influenced by scholastic medicine. The starting-point of his politics is the Aristotelian statement that the city resembles an animal. This resemblance is considerably explored in the *Defensor Pacis*. Benefiting from developments in medicine during the 13th century, the treatise defines social peace by analogy with health (conceived as the adequate disposition of the parts of the body), infers the political structure from the need to render natural life due proportion, and speaks about the constitution of the political community in embryological terms.

The Marsilian theology also draws on medicine. A medical conception of religion guides his reading of the Bible. He compares God to an expert physician who prescribes obedience to certain commands so as to counteract the disobedience of the first parents (just as a medieval doctor fought a disease through its opposite). Along the same lines, the Christian priest is considered a physician of the soul, who teaches religious precepts and gives the sacraments but has no coercive authority. This medical theology complements Marsilius's political theory and analysis of the papal actions. Together, they attest how medicine and psychology crossed borders and affected the way politics and religion were seen in 1294–1347.

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Stranger bodies: women, gender and missionary medicine in China, 1870s–1930s

HSIU-YUN WANG

The encroachment of imperial powers on China during the late 19th century brought about a contest of civilisations between China and the West. Chinese reformers and Western missionaries, among others, sought to renew or transform China on Western terms, and health began to assume a national significance as well as a modern outlook that would change Chinese history profoundly.

In looking at the history of this multifaceted encounter, one aspect of particular historical significance is the way in which women's health came to take centre stage as healthcare and gender together became implicated in the drive by many – reformers, revolutionaries, missionaries, imperialists – to change China's course. Western medicine, as a form of Western learning, was thought by many of these people to be a means by which to save Chinese women from their physical suffering. And standing at the fore of the practical endeavours to better Chinese women's lives through Western medicine were medical missionary women.

My research focuses on the encounter between Western medicine and Chinese society as it manifested itself at several levels in the interactions between American medical missionary women and their Chinese women patients, students, converts and neighbours. What brought these missionary women to China was a combination of personal aspiration, cross-cultural gender politics, the unequal exchange between China and the West, and their relatively marginal status at home. They positioned themselves as agents of progress, bringing science and rationality to China. What many Chinese commoners perceived, however, was rather different: foreign missionaries were those who possessed magical powers that could be applied toward evil or beneficial ends. Locally, Western medical practice was often shaped by Chinese customs, which were infused with gender and body politics. Nationally, the contest of civilisation helped give rise to China's 'new women', as exemplified by the lives of a number of Chinese Christian women doctors, well-educated and not burdened by so-called barbaric customs such as footbinding. Globally, the bound foot, as a collectible object, was medicalised and travelled across borders from the field to several metropoles, which quickened the hearts of future missionaries and intensified the sense of urgency about China's rehabilitation that many self-conscious – and anti-footbinding – Chinese reformers felt.

This project explores the global bound foot, body mutilation rumours hostile to foreigners, the gender and body politics of the American–Chinese medical–magical encounter, and the lives of American medical missionary women and Chinese Christian women doctors.

Dr Hsiu-yun Wang is an assistant professor at Kaohsiung Medical University, Taiwan. She received her doctoral degree from the Department of the History of Science at the University of Wisconsin-Madison in 2003 (**E** hsiuyun@kmu.edu.tw).

Top right: Chinese shoe for bound 'lily' feet, 19th century.

Right: Two Amoy women's feet, bound and unbound, 1871.

Nursing history teaching workshop at the Robert Bosch Foundation

CHRISTOPH SCHWEIKARDT

A project called 'Collection of Nursing History Sources for Teaching Purposes and the Development of Nursing History Teaching Units' was approved for funding by the Robert Bosch Foundation for the period September 2005 to August 2007. The first associated workshop took place on 11–12 November 2005 at the Foundation's Institute for the History of Medicine.

Sylvelyn Hähner-Rombach, Barbara Randzio and Christoph Schweikardt from the steering committee welcomed the participants. They outlined the endeavour to develop principles for a source collection suitable for nurse teachers.

The first speakers discussed characteristics of medieval and early modern primary sources. Kay Peter Jankrift (Bosch Foundation) gave examples of the large variety of medieval sources that, unfortunately, often do not enable the assessment of nursing practice. He outlined that monk communities held nursing in high esteem; clerics often idealised illness and nursing, and emphasised the importance of moral conduct to the religious life.

Christina Vanja (University of Kassel) contrasted the ample early modern archive source material on nursing with the little research done so far in this field. She emphasised characteristics such as Christian charity, dietetics, surgery, and the hospital as an integrated economic and social unit, and explained differences between tasks of hospital nurses then and now. Source interpretation could highlight topics with contemporary relevance, such as professionalisation, the development of hierarchies, medicalisation, specialisation and secularisation.

Norbert Friedrich, head of the Fliedner Foundation in Düsseldorf-Kaiserswerth, reported on sources in the deaconry archive, especially rules and guides for deaconesses, treaties, reports on work in hospitals and community nursing centres, personal files of nurses with biographical content, statements of religion and of crises of faith, as well as memories of deaconesses, with their religious reflections on nursing. He concluded that the religious ethos had been much more important than nursing standards.

The second topic covered by the meeting was teaching nursing history as part of nurse education. Sabine Braunschweig (University of Basel) took Switzerland as an example and asked how historians could support

Above:
A bandaging class. From *The History of Nursing in the British Empire* by Sarah Tooley, 1906.

nurse teachers in the handling and interpretation of relevant sources. She emphasised that nursing education reform underway in Switzerland was changing the setting for teaching, and presented the results of a survey on nursing history teaching at nursing schools in the German-speaking part of the country. She concluded that teaching in the near future would not be done by historians, and therefore a source collection should be particularly suitable for non-historians.

Ulrike Gaida reported from her experience in teaching nursing history at the Berlin Evangelical University of Applied Sciences. Teaching in chronological order from antiquity until the 20th century had not proved useful, so she had introduced themes with direct relation to the situation of nurses. She pleaded for the introduction of various perspectives from the history of concepts, social history, gender history and history of health systems. Nursing history should be included in examinations, so that the status of the subject, and student interest and commitment, would be enhanced. Finally, an invitation to dinner brought the first day to a close.

On the second day, suggestions for a collection concept and a teaching unit were broadly discussed. However, the limits imposed by the inadequate investigation of areas of nursing history made themselves felt. In the end, it was recommended to offer nursing history teachers a large variety of available sources to choose from and to arrange historical sources according to thematic topics, such as: areas of nursing care and everyday nursing; medicalisation and the relationship between nurses and patients in history; power, hierarchy and autonomy; nursing and eugenics; nursing and the National Socialist era; gender aspects in nursing; religiosity, charity, denomination and ethics in nursing history; health and social policy; professionalisation and professional organisations; and famous nurses as role models and icons in history. For each of the topics, workgroups are to be established and scholars invited to send in sources suitable for nursing history teaching. The collection should include texts, pictures, photographs and statistics, and represent the variety of source material. Finally,

the steering committee expressed its gratitude to the participants for their commitment and announced its plan to convene the next meeting in spring 2006.

In conclusion, the meeting was a further step forward in establishing a network of researchers and lecturers in the field of nursing history. The different perspectives provided a welcome contribution for the planning of the source collection. The cooperation with colleagues from Austria and Switzerland offered a variety of interesting comparative perspectives concerning the development of nursing in different health systems.

Dr Christoph Schweikardt is based at the Institute for Medical Ethics and the History of Medicine, Ruhr-University Bochum.

The history of medicine in South-east Asia

HAROLD J COOK

This two-day conference, held in Siem Reap, Cambodia, was, as far as we know, the first chance that Cambodians themselves have had to hear international scholarly presentations about the history of medicine of their region.

The conference was organised academically by Professor Laurence Monnais of the University of Montreal, Professor Harold J Cook of the Wellcome Trust Centre for the History of Medicine at UCL, and Professor Rethy Chhem of the University of Western Ontario, and supported locally by the Center for Khmer Studies in Siem Reap. The support of the Wellcome Trust made it possible to defray the expenses of 15 Cambodian medical students who attended.

This may have been the first such meeting on the topic since the historical section of the Far Eastern Association of Tropical Medicine met in Indonesia or its 4th Congress, aside from the 1982 conference on Death and Disease in Southeast Asia held at the Australian National University (which was not, strictly speaking, on the history of medicine).

Perhaps partly due to this novelty, the conference brought together a number of people well trained in the best historical methods who had not yet met one another, resulting in very lively discussions after the papers and during the pauses in the day, and at the social events afterwards.

Some 24 papers were delivered over the course of the conference. Many of the participants attended at their own expense, indicating their deep commitment to the subject area. Professors Cook and Monnais are currently planning an edited collection of selected papers from the conference, on the theme of medical exchanges between European and indigenous practitioners. We hope to reconvene in two or three years' time, perhaps in Malaya.

Professor Harold J Cook is Director of the Wellcome Trust Centre for the History of Medicine at UCL, UK (**E** hal.cook@ucl.ac.uk).

Right: Medicine Buddha statue from a temple in Taipei.
M de Fraeye

Women at the interface: science, technology and medicine

DEBBIE PALMER

This workshop for postdoctoral researchers and postgraduate students was designed to share ideas about the relationship between women, science, technology and medicine.

It was held on 24 February 2006, organised by the Centre for Medical History at the University of Exeter and sponsored by the Wellcome Trust. Through discussion of their own research, workshop organisers Catherine Mills, Helen Blackman and Pamela Dale identified the need for an opportunity for research students to reassess the theme of gender.

In the first paper, Pamela Dale discussed gender and class tensions in the infant welfare movement in Halifax and Bridgewater. Although women made a considerable contribution to the movement, it was within constraints imposed by men at both planning and service delivery levels. The paper demonstrated how geographical location determined different gender and class responses to infant welfare.

Debbie Palmer (Exeter) then introduced a study of the occupational health of general nurses from 1890 to 1919. She argued that, although nursing was identified as a health risk in 1890, nurse leaders and nurses chose to ignore the occupational hazard in a bid to support their case for professional status. Notions of class and gender not only shaped the image of the 'new nurse' but also had a detrimental effect on measures to improve nurses' working lives. Ali Haggett (Exeter) continued the theme of gender in her analysis of advertising for psychotropic drugs during the 1960s. She suggested that while representations of femininity and nervousness initially reflected traditional ideas related to the reproductive system, increasingly the marketing effects of the pharmaceutical industry were directed towards a much wider group of individuals than housewives. The feminist argument, developed in the USA, that women in particular were targeted fails to account for the facts not only that the industry wanted to exploit a variety of possible markets, including men, but also that women's roles depicted in advertising were much wider than domesticity.

Pamela Richardson (Exeter) discussed the role of Quaker women in relief work for civilian war victims in Germany in the aftermath of World War I. Focusing on Marion Fox, the women formed an important alliance with German Quaker women in providing practical help. Sarah Brady (Swansea) then introduced the South Wales Coalfield Collection, outlining its value as a resource for medical historians. In her task of recording and documenting the collection, Sarah had found that much of the material concerned women either directly or indirectly, and was a valuable primary source providing insight into the social context of healthcare in industrial South Wales.

Lesley Hall (Wellcome Library) gave the keynote address, which examined how assumptions about the male-as-norm differed over time. She found evidence to suggest that the male has been upheld as the standard measurement from which the female is acknowledged as different. Many women, including Stella Browne, have interpreted this model of 'normality' as an instrument for the oppression of women.

Right: Women have had complex and changing relationships with science, medicine and technology.

Mary Carter (Exeter) outlined her participation in a national audit of the work of consultant diabetologists, which will be used to improve current models of diabetes care. Of particular interest were the methods used to collect and analyse data related to oral history. Maddy Morgan (Exeter) made the case that the notion of gender played little part in shaping the Contagious Diseases Acts of 1864 and 1866, interpreting them as a pragmatic response to the public health problem of venereal disease. She suggested that the work of William Acton did not represent a double standard of sexuality, but reflected contemporary thought on contagion and venereal disease. Sarah Hayes (Exeter) discussed the value of the pioneering work of psychologist Augusta Bronner and British psychiatric social worker Clare Britton in aiding and formulating the framework of approaches to maladjusted children, attributed historically to their internationally renowned partners, psychiatrist William Healy and psychoanalyst Donald Winnicott.

The workshop concluded with an interesting round-table discussion that explored the role of gender in history, and developed into a debate about the relevance of motherhood and domesticity to the way we see women's lives in both the past and the present. Many of the participants who were not mothers felt that the notion of motherhood dominates women's history and detracts from their many other important

roles. Single women, and those married without children, felt it was important to recognise that they still have domestic responsibilities to fulfil. Some of the mothers within the group suggested that families, and children in particular, had a significant effect in shaping women's lives by introducing an unparalleled sense of responsibility, domestic commitment and a different perception of life from that held beforehand, and that such factors were difficult to ignore.

The discussion, and the papers given during the workshop, illustrated the diversity of women's lives. The workshop was of great value, leaving participants with the conviction that any study incorporating the notion of gender must reflect the fact that women's lives come in all shapes and sizes.

Debbie Palmer is a doctoral student at the Centre for Medical History at the University of Exeter.

Social history of health and healthcare

JAMES MILLS

With over 40 participants and delegates arriving from across the UK, the USA, South America, Asia and Australia, the 'From the Cradle to the Grave: Future perspectives on the social history of health and healthcare' conference in Glasgow kicked off the UK's 2006 history of medicine calendar of events with a diverse and innovative programme of papers.

Organised by the new Centre for the Social History of Health and Healthcare (CSHHH) at Glasgow, a research collaboration between Glasgow Caledonian and Strathclyde Universities (see www.gcal.ac.uk/historyofhealth), the event was funded by the CSHHH, the Society for the Social History of Medicine and the Wellcome Trust. With its objective of placing the UK at the heart of the international research community in the subject area, the event developed into the largest meeting ever organised for postgraduates working on history of medicine and health projects. This success was down to the conference organisers, Sue Morrison, Angela Turner and David Walker, themselves postgraduates at the CSHHH.

Papers spanned the full range of topics covered in the subject area. The first parallel sessions brought together papers on 'Institutionalisation and Modern Medicine' and 'Public Health' respectively. Among the presentations at the former was that by Despo Kritsotaki (University of Crete), who drew out parallels between mental health institutions in early 20th-century Greece and Scotland; at the latter, the programme began with Lenita Cunha e Silva (University of São Paulo), who considered the experiences of working-class communities at the hands of public health officials in São Paolo between 1920 and 1950. Among the subsequent presentations on the first day was work as varied as Chris Bonfield's (University of East Anglia) analysis of the *Regimen Sanitatis* and its dissemination in late medieval England, and Isabelle Mity's (University Lille III) paper from her recently completed PhD on 'Health and Ideology in Germany from 1880 to 1914'. Panels covered topics that included disability, discourses of health and illness, obstetrics, studies from Africa and Asia, perspectives on medieval and early modern medicine, and 20th-century Britain.

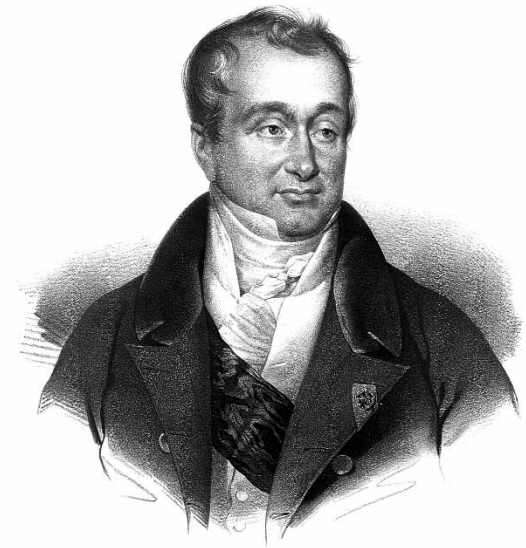
The presentations of the second day were no less varied or stimulating. It opened with parallel panels on 'Death and the Body' and the 'History of Nursing', and included Joel Tannenbaum (University of Hawaii) on the social history of organ trafficking and Alison O'Donnell (University of Dundee) on nurses in National Socialist Germany. The conference worked its way through plague, the construction of medical knowledge and the final panel on skeletons and bones, which Annie Jamieson (University of Leeds) concluded with 'Dr Octopus and the Roentgen Rays'. Carsten Timmermann and Ronnie Johnston closed the event as representatives of the Society for the Social History of Medicine and the CSHHH respectively.

The conference succeeded in providing a snapshot of the state of the field and of the directions in which research is heading in the near future. It achieved more than this, however, as it brought together emerging scholars from across the globe to encourage collaborative relationships and to stimulate dialogue that spans institutional and national boundaries. Indeed, plans to establish a formal international network for postgraduates working in the field of the history of health and healthcare were discussed at the meeting, and the proposal to stage the event again in 2008 is under consideration by the Society for the Social History of Medicine. For more details about the event, with the full list of papers and presenters, see www.strath.ac.uk/Departments/History/conf/home.htm.

Dr James Mills is Director of the Centre for the Social History of Health and Healthcare at Glasgow.

The Dupuytren Museum of pathology

M C VACHER-LAVENU, R ABELANET AND R K CHHEM



Guillaume Dupuytren (1777–1835) was a French anatomist and surgeon. He was born in Pierre-Buffière, a small town near Limoges, France.

He moved to Paris to attend the Collège de la Marche when the French revolution started in 1789. After completing his high school, at the age of 16, he studied medicine at the Hôpital de la Charité. Because of his interest in anatomy and his skills in dissecting cadavers, he was nominated 'prosector' in anatomy, then a very competitive job for a young doctor. Later, in 1803, he was appointed assistant surgeon at the Hôtel-Dieu Hôpital in Paris. In 1815, he became professor in 'operative' medicine at the Faculty of Medicine of Paris.

Dupuytren was interested not only in human anatomy but also in comparative anatomy. He attended classes taught by the famous naturalist and founder of vertebrate paleontology Georges Cuvier at the Museum of Natural History, founded in 1793, soon after the start of the Revolution. Along with Gaspard Laurent Bayle and René Théophile Hyacinthe Laennec, Dupuytren founded the 'Société Anatomique' in 1803. Very soon, he turned to pathological anatomy, then an emerging and promising scientific field. With the help of his assistants, Dupuytren started a systematic collection of pathological bone specimens selected from anatomy laboratories. During the next 30 years, he practised surgery at Hôtel-Dieu, where he established the clinical-anatomy correlation method as the foundation for surgical practice.

Dupuytren had intended to bequeath 200 000 francs to the Faculty of Medicine of Paris in order to endow a chair in pathological anatomy. But following the advice of Matteo-José-Bonaventure Orfila, dean of medicine, Dupuytren altered his will and agreed instead to donate his fortune for the establishment of a museum of pathology, while the Government endowed the Dupuytren Memorial Chair. After Dupuytren's death of an unidentified disease in 1835, his trainee Jean Cruveilhier became the founding chair.

The Dupuytren Museum was founded that year, initially located at the old refectory of the Convent des Cordeliers in Paris. The collections made of skeletons and other anatomical specimens gathered from different laboratories of the medical school, the École Pratique of the faculty of medicine, the Collège Royal de Chirurgie and the Société d'Anatomie, as well as from physicians' private collections.

Over almost a century, the Museum became the attraction for a large public, both medical and non-medical. Its first catalogue, containing approximately 1000 specimens, was edited and published in 1842 by the faculty of medicine, with the collaboration of Charles-Pierre Denonvilliers and Lacroix. The Museum grew, and at the height of its fame, it contained about 6000 specimens, some of them dating from the late 18th century. In 1877, Dr Charles-Nicolas Houel, Cruveilhier's student, published a five volume-catalogue of that rich pathology collection.

Unfortunately, neglect and a lack of funding resulted in the 1937 decision by Gustave Roussy, pathologist and dean of the faculty of medicine, to abandon the Museum. The specimens were dispatched and stored, inappropriately, in the faculty basement. It took 30 years before the Museum was relocated in one hall of the École Pratique, while the refectory of the Convent des Cordeliers was left in ruin.

Dupuytren started a systematic collection of pathological bone specimens selected from anatomy laboratories.

The collection is made of three main categories: dry bones, wet specimens and wax duplicates. Among these rare specimens, the most famous is the brain that the French pathologist, neurosurgeon and anthropologist Pierre Paul Broca (1824–1880) used to establish his theory of localisation and lateralisation of the brain cortex – a milestone in the history of brain mapping. Many of the Museum's bone tumour specimens have been studied by one of the authors (Vacher-Lavenu), who had attempted to establish the ideal diagnostic method, in the absence of a reliable gold standard. Numerous other specimens remain dormant, awaiting the visit of pathologists, palaeopathologists, palaeoradiologists, and historians of anatomy, medicine, surgery and diseases.

Above: Portrait of Guillaume Dupuytren by Nicolas-Eustache Maurin, *c.*1842.

M C Vacher-Lavenu is Professor of Pathology at the Musée Dupuytren; R Abelanet is Curator of the Musée Dupuytren; R K Chhem is Professor of Radiology and Anthropology, University of Western Ontario.

Conference: Sexual Histories – Bodies and desires uncovered

XfI Centre, University of Exeter, 23–25 July 2007

Histories of bodies and sexuality remain dominated by categories of analysis drawn from contemporary Western society despite awareness that to do so is potentially misleading, Eurocentric and anachronistic. Narratives of change about sexual histories are dominated by ideas about repression and liberation, and historical investigations continue to be framed by modern concepts such as homosexuality and pornography.

This conference (with keynote speakers including Professor Joan Cadden of UC Davis and Professor Philippa Levine, University of Southern California) seeks papers on a wide range of topics across all time periods and disciplines, addressing issues to do with both practice and representation. It is hoped that through such interdisciplinary exchange we can discuss and develop strategies for approaching the study of sex, bodies and desires, which are both sensitive to the nuances and complexities of past sexual cultures and able to speak to contemporary concerns and non-specialist audiences.

We would especially like to encourage discussion of the following topics:

- sexuality and the life cycle
- body shape, presentation and desire
- transsexuality and intersex
- unusual sexual practices
- rape and sexual violence
- pornography and its politics
- non-European perspectives.

If you are interested in presenting a paper at this conference, please send a title and abstract by 31 October 2006.

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Right: Photograph of a moustached man dressed in women's clothing, *c*.1896.

Visitors to the Wellcome Trust Centre

Visitors to the Wellcome Trust Centre for the History of Medicine at UCL from July to November 2006 include:

Annika Berg (University of Uppsala), A new day is dawning: home, society, and world in the life project of Signe and Axel Höjer, *c*.1919–65.

Dr Marguerite Dupree (Glasgow University), Medical careers in the age of surgical revolution, and the history of the implementation of the National Health Service 1948–74.

Ximo Guillem Llobat (University of Valencia), The history of food production and its controls.

Dr Alexandra Lembert (University of Leipzig), Psychology, criminology, and British psychic detective fiction, 1880–1930.

Dr Hans Pols (University of Sydney), War, psychiatry and rehabilitation: the army, psychiatry, and World War II and the history of colonial medicine in the former Dutch East Indies.

Dr Lisa Wynne Smith (University of Saskatchewan), Gendered consultations: women's healthcare in England and France (1680–1780).

(All are at the Centre at the time of publication.)

Sally Bragg, Affiliation and Programmes Administrator (with apologies to those of our visitors whose plans were not finalised at the time of writing).

Food Poisoning, Policy and Politics: Corned beef and typhoid in Britain in the 1960s

RICHARD BARNETT

There can scarcely have been a week since the end of World War II when a new work on the history of food scares would not have appeared to possess immediate contemporary relevance.

Salmonella, listeria, *E. coli* O157, vCJD, avian flu, Sudan 1, TB in milk, growth hormones in beef, mercury in fish: the persistence of these scares in the public mind is (sometimes) astonishing. The subject of this book – four typhoid outbreaks in 1963 and 1964 associated with badly canned corned beef – has been remembered both in the historiography of public health and in the memories of those who recall the last and largest outbreak in Aberdeen in 1964.

For the authors, the significance of these outbreaks lies in their impact on government health policy and – crucially – the way that this policy and the official response to outbreaks of food poisoning were presented to the public via the media. They begin with an account of policy making processes at the time of the first three scares and the (seldom productive) encounters between national bodies such as the Ministry of Agriculture, Fisheries and Food, and local officials, journalists and members of the public. However, the major part of the book is taken up with an analysis of the Aberdeen outbreak almost a year later.

Using a range of sources – oral testimony from typhoid victims, Ministry of Health circulars, situation reports from local Medical Officers of Health – the authors give a short but detailed narrative of the origins, progression and eventual eradication of the Aberdeen outbreak. Subsequent chapters provide thematic analyses of these events, placing the outbreak in (for example) the context of the centralisation and regulation of public health and food safety in the late 1950s, along with the shortages of the period that to a great extent placed the quality of the British diet in the hands of overseas food producers.

A continuous theme in this book is the problem of integrating scientific advice and health policy with the wider concerns of international relations.

In the first three outbreaks it was quickly established that the beef in question had been imported from Argentina, where it had been contaminated by unchlorinated cooling water in the process of canning. This was later found to be the cause of the Aberdeen outbreak, but the authors argue convincingly that concerns over the effect this information would have on British trade with Argentina ensured that it was 'unevenly distributed' in British governmental circles, where it was seen as more of a theoretical than a practical concern.

Two conclusions emerge from this analysis. First, that the elaboration of health and food safety policy in this period was far from straightforward, and this complexity was due to the sheer number of voices that had to be taken into consideration when making it. Second, that in the case of food safety, political concerns took clear priority over scientific or technical advice. This is particularly clear in the aftermath of the Aberdeen outbreak. The Milne Committee, appointed to investigate the source, recommended that all suspect canned beef should be reprocessed and sterilised. In practice, and under pressure from British food manufacturers, most of it was simply exported or added to governmental stockpiles for use after a nuclear war when, in the words of one official, any risk would be "infinitesimal compared with all other risks to the survivors".

In their conclusion, the authors are quick to point out that this book is not intended as a model for current or future health policy. They do, however, draw direct comparisons between the events they have described and the current state of food safety legislation. New Labour's emphasis on 'openness' (as embodied in the Food Standards Agency) is singled out for praise, but the tendency for health scares to focus on longer-term problems such as obesity rather than food safety and hygiene could, they claim, lead to a serious decline in dietary standards. It is neither the official structures nor the pathogens that have changed since 1964, but rather our cultural attitudes to what constitutes 'safe' food.

Smith DF, Diack HL, Pennington TH, Russell EM. Food Poisoning, Policy and Politics: Corned beef and typhoid in Britain in the 1960s. Woodbridge: The Boydell Press; 2005.

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Care and Treatment of the Mentally Ill in North Wales 1800–2000

KEITH WILLIAMS

You don't have to be Welsh, or have any knowledge of the history of the treatment of mental illness, to appreciate this otherwise fascinating little book by Pamela Michael, but both would be useful in order to get to grips with some of its more erudite points.

As its title suggests, this is very much a case study of the care of the mentally ill in an area that, as readers will come to appreciate, is distinguished by a unique culture and dominated by a Welsh-speaking population, something as true today as it was 200 years ago. Although the focus is firmly on the institution at Denbigh that was originally named the North Wales Lunatic Asylum, from its opening in 1848, its absorption within the NHS a hundred years later, to its closure in 1995, the book faithfully charts the changes in the patterns of care of the mentally ill in the region – coming full circle with the return to the policy of care in the community at the end of the 20th century.

The first two chapters review the system of community care in the early 19th century and the gradual appreciation of the need for the region to have its own asylum. In this, the Welsh language played a key role, for before 1848, dangerous lunatics (and pauper lunatics) could be treated only in English institutions – in Cheshire, Lancashire or Gloucester. Apart from the hardships this posed for family visits, there was also the problem of communication between doctors and nurses who had no knowledge of Welsh and patients who had little or no knowledge of English. The extent of the problem is revealed by the 1891 language census, showing that over 70 per cent of the population of Merioneth and Caernarvonshire were monoglot Welsh, a figure that remained comparatively high, at 20 per cent, as late as 1931. Given this, and the growing emphasis on institutional provision for the insane in an age of increasing social awareness, the need for a local asylum with Welsh-speaking staff was palpable.

The two chapters that deal with the founding of the asylum are perhaps the most interesting, since it was to serve the needs of, and be funded largely by, five of the six counties of north Wales. Here, the sometimes bitter politics involved is spellbinding, with local petty jealousies and vested interests rapidly coming to the fore. Caernarvonshire, for example, pushed hard for an asylum within its own boundaries to serve the needs of the three western counties, but eventually had little option but to support the Denbigh asylum. This was not an altogether happy solution, and 1893 saw Caernarvonshire trying, without success, to withdraw from the alliance.

The influence of the gentry and other local elites, with press support, was important in giving impetus to the project and in gathering initial funds, particularly since much had to be achieved through public subscription. Here, Michael demonstrates how widely based was support for the asylum. However, as its *raison d'être* was the provision of care in the Welsh language, it was somewhat paradoxical that English-speaking elites – otherwise unsympathetic to the Welsh language – played a vital part. Indeed, the 20 acres on which the asylum was built were donated by Joseph Ablett, a local landowner who fined his own domestic servants 1d every time they were heard speaking Welsh!

The remaining chapters of the book are more mundane, covering the operation of the asylum, and some of the influences on it, from its opening to its eventual closure. However, Denbigh did not operate in a vacuum, and the accounts of the relationships that developed with other asylums, particularly the Claybury asylum in Essex, are interesting illustrations of the professional networks that seem to have existed. Interestingly, little is said about any links between Denbigh and the other Welsh asylums, which raises the question of why this was so; whether, for example, this might have stemmed from the discord that traditionally has marked the relationship between north Wales and south Wales.

Finally, while the Denbigh asylum was hardly noted for its contribution to advances in treatment, it was not slow to experiment with, and adopt, some of the latest methods, and the book provides a useful summary of such techniques as hydrotherapy, electroconvulsive therapy, leucotomy, insulin shock therapy, and malarial treatment. While many of these are now rightly regarded as barbaric, it has to be noted that before the pharmaceutical revolution the medical profession, perhaps as much out of despair as of hope, had little choice but to use such treatments, and that they could take comfort in the fact that if only some patients showed improvement then such methods were justified.

This interesting and useful book sadly suffers from a number of disappointing features. The index is lacking in terms of entries, and references are not organised into a bibliography. It is also irritating to find quotations in Welsh, the English translations of which are only in the endnotes. While the book gives some fascinating archival photographs, it would have been useful to have a plan of the asylum, and a map of the area. No doubt such shortcomings will be corrected in future editions.

Michael P. Care and Treatment of the Mentally Ill in North Wales 1800–2000. Cardiff: University of Wales Press; 2003.

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Drugs and Theater in Early Modern England

NUSHAN GUNAWARDANA

Thomas Dekker, the early modern English playwright and pamphleteer, suggested that mirth engendered by his writings had a physical effect in preventing the plague, one of the more obvious instances of the interconnectedness of bodies and texts in the period.

Tanya Pollard's *Drugs and Theater in Early Modern England* takes an altogether more highbrow approach to the same problem. Incorporating plays from Ben Jonson's *Volpone* to no less than four of Shakespeare's efforts, culminating in *Hamlet*, we learn that not only could words heal the body, but also that the idea of a drug itself was steeped in theatrical ambiguity, an ambiguity welcomed by early modern playwrights. For drugs, Pollard argues, were double-edged swords, with multiple effects – they were, variably, soporifics, poisons, love potions, panaceas, agents of pleasure and seduction, or of illness – dramatic devices if you will, not necessarily following user intention.

We are at first treated to more concrete notions of simple drugs and how their purgative, cathartic and soporific effects are paralleled in their respective plays, before the book takes a twist, entering into the much more abstract world of masques and necrophilia. Drugs become representative of the problems and anxieties inherent in theatre itself, revealing political, gender-related and religious concerns. This culminates in the poisonings in *Hamlet*, which provide an ultimately rhetorical and self-aware commentary, where the drug comes to represent the semiotic unreliability of language. Pollard believes that the point of convergence is in the interlinking of mind and body; as she puts it, "the body is constructed by the imaginative fantasies it consumes, and the theater defines itself, in large part, by its power over spectators bodies and mind". Drugs, in this sense, are metatheatrical devices.

Combining literature and drama with medicine is at best problematic. It used to be the case that they were seen to be irreconcilably opposite poles; that the image each had of the other was mired in simply realistic representation. Of course, it is now increasingly fashionable to see how both merge and define the reality of each other. Pollard shows a great sensitivity for the issues involved. She approaches primarily from the viewpoint of a dramatist, but this is no bad thing. Her handling of the plays is second to none, and reveals an impressive knowledge and subtlety of thought. She is clearly an expert, not only in the dramatic material, but also in how the popular imagery of drugs affected their theatrical purpose. Her use of medical sources from Paracelsus to Paré does well to show how physical substances could alter the mind and therefore the multiplicity of dramatic representation. Characters themselves become a "powerful but volatile medicine, intimately invasive, with dangerous side effects".

The theatre too has these dangerous side-effects, and yet the force of her argument here is limited by her stance on the playwrights. In trying to forge the idea of theatre as a physical drug she has accepted the criticisms of the antitheatricals. They insisted that theatre was a poison, both moral and religious, a pollution that could physically affect the imagination and therefore adversely, the behaviour of individuals. She then goes on to suggest that the authors viewed these criticisms unproblematically and that "playwrights themselves were often deeply suspicious towards the theater". Indeed, she believes that this opinion led them to prescribe their own plays as a form of social catharsis with irreverence to the audience.

But were the authors themselves so ambiguously inclined? This undermines the fundamental point that playwrights themselves believed in the potent physically beneficial and/or harmful effect of their own words, and the audience's ability to engage on this level. This is the time, after all, that Thomas Dekker and William Bullein were writing drama specifically to heal the plague sick. In the climate these plays were being written in, authors could perhaps be less than equivocal about their own work, and play a more defining role in both how drugs were represented and in how their plays interacted with the masses. She does flirt briefly with this point in the concluding chapter in which she discusses the play as social antidote, but stops short of giving it the treatment it deserves.

Ultimately, however, Pollard has come up with a genuinely original book in terms of subject matter, despite its relatively conventional method. More than anything she adds valuable weight to the notion that drama, literature and medicine in early modern England were at times often indistinguishably intertwined.

Pollard T. Drugs and Theater in Early Modern England. Oxford: Oxford University Press; 2005.

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The Science We Have Loved and Taught: Dartmouth Medical School's first two centuries

STEPHEN CASPER

Institutional histories are often produced with a specific agenda and audience in mind. A cursory glance at this book might make it tempting to characterise it as a basic commemorative history project – a book that, while useful for gleaning basic information, might not be deemed particularly thought-provoking by historians.

In this case, such a characterisation would be a careless mistake. Constance Putnam's *The Science We Have Loved And Taught* is rich in its historical details, comprehensive in its scope, and ambitious in its aims. The book begins with the story of how Nathan Smith, a rather unexpected pioneer in medical education, founded Dartmouth Medical School in the rural wilderness of Hanover, New Hampshire, in 1797. What follows is a mainly chronological narrative of the School's history through the next two centuries, ending on a contemplative note by pondering how Dartmouth's past might shape its future.

Striking a balance between the School's institutional history and its college culture in the 19th century, Putnam's narrative describes Dartmouth's landmark events and analyses how these events slowly transformed student life and created almost continual challenges for the faculty. She simultaneously contextualises her narrative with broader discussions about, for example, the difficulties of delivering a sound medical education in the rural America of this period. This point raises a number of interesting questions for future research: how were patients found for medical schools in sparsely populated regions? Were there real disparities between the training students received in rural and in urban institutions? Did faculty of urban institutions exaggerate the inadequacy of a rural education?

By the turn of the century, Dartmouth's rural location had become a serious disadvantage in the competitive environment of American medical education. Despite producing physicians with an almost unmatched training in the clinical and basic sciences, the School could do little to provide its students with comparable access to the broad range of clinical material available in urban schools. Increasingly the American medical culture of the late 19th and early 20th centuries was becoming more dogmatic in its insistence that such experience was important for medical students. By the time of the Flexner Report in 1910, faculty at Dartmouth were aware of the problem, but they were nonetheless surprised and infuriated by the Report's conclusion that Dartmouth was simply incapable of producing quality physicians. The result was inevitable and almost immediate. The School relinquished its degree-granting authority, and became a two-year medical school that transferred third- and fourth-year students to other schools for their clinical training.

The journey back to the four-year programme was long and convoluted, but finally succeeded (if somewhat tentatively) in 1968. That Dartmouth recovered from this debacle at all is rather surprising. Here there might have been room in the book for further analysis. Why exactly did the concept of the medical school remain viable after such struggles? Dartmouth's long tradition is admittedly one answer Putnam proposes, but other events such as the 1927 establishment of the Hitchcock Clinic are implicated as well. There is seemingly another story in this period of Dartmouth's history, about personal agendas and ambitions, that might have explained more fully why a non-degree-granting two-year medical school survived so long.

Nonetheless the events occurring throughout its long period as a two-year school are remarkable. Particularly fascinating is Putnam's discussion about whether the School's primary purpose was to produce physicians or scientists; likewise, the discussion of the rise and subsequent collapse of molecular biology at Dartmouth adds much to our understanding about the tensions that can be created when real (or imagined) paradigm shifts in science occur, producing new disciplines. Clearly, as this case shows, the potential siphoning of available resources away from the faculty of other disciplines can be perceived as a dramatically threatening problem.

The major strength of this book is that it manages to speak to multiple audiences. General readers familiar with Dartmouth College will find its narrative style appealing. Medical historians will be interested in the way it contextualises the School's history with well-known themes, including the rise of scientific medicine and the effects of greater patronage for science in a college setting. Finally, the staff of Dartmouth may find it a useful guide for understanding the complex history of their institution.

Putnam CE. The Science We Have Loved And Taught: Dartmouth Medical School's first two centuries. Hanover and London: University Press of New England; 2004.

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Calendar of events

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AUGUST 2006

18–19 **International Conference on the History of Suicide**
McMaster University, Hamilton, Canada
Contact: David Wright (**E** dwright@mcmaster.ca)
www.fhs.mcmaster.ca/histmed/conferences.htm

26–30 **International Congress on the History of Medicine**
Budapest, Hungary
Contact: Klara Papp (**E** info@ishm2006.hu)
www.ishm2006.hu

SEPTEMBER 2006

8–9 **Astrology and the Body 1100–1800**
Department of History and Philosophy of Science, Cambridge
Contact: Lauren Kassell (**E** ltk21@cam.ac.uk)

18–19 **Importance of Place in Medical Practice**
Centre for Medical History, University of Exeter
Contact: Claire Keyte (**E** cfmhmail@exeter.ac.uk)

NOVEMBER 2006

17–18 **Economic and Social History Society of Ireland Annual Conference: Medicine, Science and Society in Ireland**
Queen's University of Belfast
Contact: Marie Coleman (**E** m.coleman@qub.ac.uk)

29 **AIDS Relief and Global Biomedicine Today: The re-emergence of a military–therapeutic complex in Africa?**
Public lecture by Dr Vinh-Kim Nguyen,
Clinique Médicale l'Actuel, Montréal, Canada
Contact: Carol Bowen (**E** c.bowen@ucl.ac.uk)
www.ucl.ac.uk/histmed

APRIL 2007

12–13 **Securing the Ultimate Victory**
Army Medical Services Museum, Mytchett, Surrey
Contact: armymedicalmuseum@btinternet.com

JUNE 2007

21–22 **Pollution and Propriety: Dirt, disease and hygiene in Rome, from antiquity to modernity**
British School in Rome
Contact: Richard Wrigley (**E** richard.wrigley@nottingham.ac.uk)

JULY 2007

23–25 **Sexual Histories: Bodies and desires uncovered**
Xfl Centre, University of Exeter
Contact: Sarah Toulalan (**E** s.d.toulalan@ex.ac.uk)

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