

American Association for the
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2010 Annual Meeting



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Cover image:

The collage of Mayo images depict (*top left*) St. Mary's Hospital, opened in 1889 with 27 beds and one 12-foot square operating room; (*middle left*) an exam room in the "1914" Mayo Clinic building; (*lower left*) the first Mayo Clinic building opened in 1914 with 98,550 square feet; (*top right*) the second Mayo Clinic [now Plummer] building opened in 1928 with 236,828 square feet; (*middle right*) Dr. William J. Mayo performing surgery with Sister Mary Joseph Dempsey as first assistant and Alice Magaw as the nurse anesthetist; and (*lower right*) Charles H. Mayo (1865-1939), William W. Mayo (1819-1911) and William J. Mayo (1865-1939).

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**Abstract
Booklet**

Rochester, Minnesota

Benevolence and Disgust: St. Rose's Home for Incurable Cancer

Emily Abel

UCLA School of Public Health, United States

Cancer sufferers had few sources of institutional care at the turn of the twentieth century. Like their nineteenth-century predecessors, most hospitals denied admission to people with "incurable" diseases, including cancer. Although New York City inhabitants boasted two major cancer institutions, both gave priority to cases considered operable, reserving just a small number of beds for the very sick. Most indigent patients with advanced disease went to Charity Hospital, a large, dismal, severely overcrowded, municipal institution on Blackwell's Island.

That was the situation when St. Rose's Home for Incurable Cancer opened its doors in 1899. The founder was Nathaniel Hawthorne's youngest daughter, Rose Hawthorne Lathrop, who had converted to Catholicism and was soon to join an order. By 1912, she and her staff cared for approximately eighty patients in the Lower East Side and an additional thirty in a Westchester County facility.

Like the leaders of the alternative organizations that flourished during the 1960s and 1970s, Lathrop sought to both critique mainstream institutions and provide a model of exemplary human service. At a time when most health providers celebrated their growing scientific prowess, she insisted her facility was more a home than a hospital, focusing on care for sufferers rather than cure for disease.

In one important respect, however, Lathrop reinforced rather than disrupted prevailing assumptions about terminal cancer. Although she forbade her staff to reveal disgust to patients, her published writings emphasized the "repulsive ugliness" of cancer sufferers. To some extent, it is hardly surprising that she recoiled from the bodies she tended. Because cancers typically were not treated early, many patients had sores that easily became infected. Although scholars disagree about the extent to which disgust is culturally determined, they agree that the sight and smell of open sores commonly engender that emotion. Moreover, Lathrop's language of disgust served to emphasize her self-abasement and self-sacrifice. But her rhetoric had a very different impact as well. Emphasizing the offensiveness of the people on whom she bestowed care, Lathrop maintained her place in the social hierarchy, undermining her humility even as she asserted it.

The paper concludes with a brief discussion of how the two facilities grew and changed throughout the twentieth century.

Learning Objectives:

1. To understand the type of care available to cancer patients at the turn of the twentieth century.
2. To learn about an early twentieth century facility for terminal cancer patients.
3. To gain an understanding of the place of "disgust" in medical history.

Constructing the “Refrigerator Mother”: Explaining the Rise and Power of an Autism Theory

Jeffrey Baker

Duke University, United States

The rise and fall of the “refrigerator mother” theory of autism represents one of the great morality tales of modern medicine. Between the 1940s and 1970s, child psychiatrists routinely blamed autism on parents. The disorder, they speculated, resulted from the infant’s response to emotional deprivation at the hands of a cold and detached mother. Parents were put into psychotherapy to force them to acknowledge their supposed anger and aggression toward their children. How did an idea that seems so repugnant today become authoritative, and why did it last so long?

Most historical narratives have focused on the role of the controversial champion of psychoanalysis. Dr. Bruno Bettelheim, whose 1967 book, *The Empty Fortress*, is often cited as the classic exposition of the psychogenic theory. By this argument, Americans after the Second World War, infatuated with both Freud and the cult of domestic motherhood, swallowed Bettelheim’s ideas uncritically.

Though these contextual factors were important, this paper will argue that three other factors played critical roles in the rise and persistence of the psychogenic theory of autism. First, autism had a strikingly different meaning in the 1950s than it does today. The diagnosis was rarely made unless the child possessed normal intelligence and had parents who were white, affluent and highly educated themselves. Such reasoning pervaded the writing of almost all early experts in the field, including vehement critics of Bettelheim. The main point of contention was whether such parents caused their infants to be autistic through their child-rearing style or their genes. Second, the psychogenic theory promised cure, even if the expectation ultimately proved to be unjustified. And third, the medical discovery of child abuse in the early 1960s fostered a climate receptive to Bettelheim’s message even as the authority of psychoanalysis began to wane. Bettelheim explicitly contrasted his therapeutic approach with the behavior modification program developed by Ivar Lovaas, notorious for its use of electric shock conditioning.

The history of the refrigerator mother hypothesis thus has more complex implications for autism research and clinical practice than generally acknowledged, a legacy that will be explored in the paper’s conclusion.

Learning Objectives:

1. Describe the psychogenic theory of autism that dominated how the disorder was perceived in the U.S. between 1943 and the 1970s.
2. Discuss the definition and meaning of autism before the 1970s, and how it played a role in the psychogenic theory.
3. Examine how controversies about the treatment of autistic children also help explain why parents became objects of blame.

A Most Unloved Institution: Quarantine and “Infection” in the Nineteenth Century

David Barnes

University of Pennsylvania, United States

Maritime quarantine was a fact of life in the nineteenth century. Ships’ passengers and crews endured it and, if lucky, survived it; merchants despised it; and doctors denounced it. Even those in charge of quarantine policy regarded it as at best a necessary evil, and continually bemoaned its oppressive and inefficient character. And yet quarantine persisted. Why?

A few possible explanations are rather banal. Bureaucratic inertia can be a powerful force against change, and quarantine provided a constant stream of revenue and patronage jobs for both local and state governments. An unspoken Pascalian logic might have sustained quarantine: if there were any chance whatsoever that disease might be introduced into a city by ship, then inaction would be inexcusable, whereas the worst result of overzealous enforcement was inconvenience. A kind of “9/11 effect” may also have played a role; yellow fever’s ravages in the 1790s and cholera’s menace beginning in 1832 deeply traumatized Americans for decades, leaving them permanently apprehensive about the next invasion. And then there’s the simplest explanation of all: quarantine worked. Or at least, many claimed to have seen it work. Defenders of quarantine in the medical world periodically cited instances in which deadly outbreaks were contained on board a vessel or within the bounds of a quarantine station, leaving nearby neighborhoods unscathed.

Less obvious answers to the question of quarantine’s survival require a shift in the terms of discussion. As long as historians continue to see quarantine through the lens of “contagion” and its nineteenth-century vicissitudes, the underlying logic that sustained preventive policies will remain obscured. Resurrecting bygone medical and lay vocabularies of disease, however, sheds new light on the complex reality of American maritime quarantine in the nineteenth century. The logic that undergirded quarantine in American seaports throughout the nineteenth century was not one of contagion, but rather of infection. Even ardent anticontagionists feared infection from abroad. This paper highlights the differences between contemporary bacteriological understandings of “infection” and its subtler nineteenth-century meanings. Only uncovering these lost meanings allows us to fully understand the longevity of quarantine as a pillar of public health policy.

Learning Objectives:

1. Diagnose the underlying factors that shaped public health policy in the 19th century.
2. Critically evaluate health policy options and the rationales behind them.
3. Probe the hidden linguistic and conceptual frameworks that shape medical and political debate.

The Role of Autonomy in the Development of the Special Forces Medic and Its Evolution into the Physician's Assistant

Justin Barr

Yale University, United States and University of Virginia, United States

The U.S. Special Forces (SF) emerged in 1952 at the dawn of the Cold War, designed to train guerrilla armies to fight behind Soviet lines. Cut off from Army hospitals, SF units required medics with sufficient training to keep their isolated forces healthy and functional. By the Vietnam War, the SF medic had established himself as a true physician substitute, running clinics and veritable emergency rooms deep in the jungle. Simultaneously, medical leaders in the United States searched for a solution to a perceived physician shortage. Seizing on the success of the SF medic, Duke cardiologist Eugene Stead and others looked to it as a model when creating an analogous civilian position, the physician's assistant (PA). Using SF medic training as a foundation for their curricula, the original PA programs sought and attracted former medics as both students and instructors.

Drawing on archives at Fort Bragg, NARA and Duke along with hundreds of interviews with medics, this paper fills several lacunae in medical and military history. While extensive scholarly work exists on the Special Forces, little focuses on SF medics, a surprising oversight given that a series of dualities in their development problematizes the concept of a medical professional. Receiving highly specialized training, SF medics practice mostly general medicine; they are both independent and highly dependent, both innovative and derivative. These dualities influenced the formation of the PA. While other authors have linked the PA to the military, this work traces PAs' origin specifically to the Special Forces medic.

As America's first two licensed physician-extendors, SF medics and PAs present an opportunity to investigate the boundaries between professions and semi-professions. Specifically, this paper explores two different notions of autonomy: practical autonomy, as exhibited by SF medics' unparalleled freedom to practice independently, and organizational autonomy, as evidenced by the PA's ability to control the structures of their profession. Drawing on the medical sociology of Friedson, Etzioni and Starr, this talk differentiates these two manifestations and identifies a clear trend from the practical to the organizational, as thousands of medics chose to forsake de facto autonomy for the professionalism of the PA.

Learning Objectives:

1. Describe the development of the Special Forces medic as an early physician-extender.
2. Understand how the SF medic served as an inspirational model for the PA.
3. Explore different notions of autonomy in the medical profession.

The Geopolitics of Malthusianism: Rethinking the Population Problem in the Early Twentieth Century

Alison Bashford

Harvard University, United States

Medical historians often assess “population” as primarily a socio-biological problem, one which called for health-based interventions into reproductive conduct. The Malthusians who formulated world population growth into a social and economic problem for the early twentieth century, are typically understood to be concerned with contraception and the regulation of sexual conduct, in the first instance. In this paper I question the historical accuracy of the historiographic centrality of health/sex in thinking about population. My argument is that Malthusians framed the population problem at least as much geopolitically, as biopolitically.

While world population came to be problematized within the health domain later in the twentieth century, earlier it was an economic and geopolitical issue in the first instance. Differential densities between nations and regions gave rise to questions of international relations, war, and peace. This was the reason — far more than concern over health, gendered power, or feminism — that many experts came to advocate birth control. Population raised other kinds of “geo” problems, too: it was as much about the fertility of soil as the fertility of women, for example. Moreover, insofar as “population” became a formal intergovernmental issue of health in the 1920s and 30s, it was over the issue of food and nutrition, more than sex.

In this paper, I will re-examine the work of Anglophone neo-Malthusians who wrote prolifically on world population growth after the First World War. Drawing from their monographs, articles, and participation in a series of post-First World War world population conferences, I analyze the spatial and “geo” aspects of Malthusian writers, as they turned the population problem from a local and national problem, into a global one.

Alison Bashford is author of “Griffith Taylor” (2008), “Imperial Hygiene” (2004), “Purity and Pollution” (1998) and editor of “Medicine at the Border” (2006), “Isolation” (2003), and “Contagion” (2001). With Philippa Levine, she has co-edited *The Oxford Handbook of the History of Eugenics*, forthcoming May 2010. She is currently professor of Australian studies, Department of History of Science, Harvard University.

Learning Objectives:

1. Summarize and question the analytic focus on sex, in historical work on population.
2. Re-examine neo-Malthusian writing.
3. Suggest the centrality of “geo” questions in the early twentieth century formation of the world population problem.

Career-shaping Mechanisms - the Importance of Finance to Renaissance Natural Philosophies and Medical Practice

Jakob Bek-Thomsen
Aarhus University, Denmark

This paper analyses the importance of finance to the development of natural and medical philosophy 1650-1680, by examining the impact of patronage on the Accademia del Cimento and the career of the Danish anatomist Nicolaus Steno (1638 – 1686).

Nicolaus Steno (or Niels Stensen) became a renowned anatomist in the Netherlands, where he studied under such notable teachers as Gerhard Blasius, Johannes van Horne and Francisco de le Boe Sylvius. As a student of Thomas Bartholin, Steno had easy access to many of the most respected physicians of his day and benefited from their knowledge and teachings. As part of his Grand Tour of Europe, he visited the medical 'hot spots' of Paris and Montpellier before he ended up in Tuscany and Florence. By then he had achieved the academic profile which allowed him to become enrolled in the Accademia del Cimento as court physician to the Medici family. Indeed, Steno's dependence on travelling, networks, patronage and connections highlights many of the mechanisms that characterised a 17th century scientific culture.

While some studies have explored the life of Steno and others have explored the nature and impact of patronage to science and medicine, this paper proposes a closer look on the transaction of money and knowledge in relation to Steno's work as a court physician. The paper examines the works of the Accademia del Cimento in this context and will try to show how the patronage from the Medici directly influenced Steno's scientific and career oriented choices. The paper builds upon the recent historiographies (Mario Biagioli, Paul A. David, and others) that have shown how networks, self-fashioning and monetary mechanisms have been an integral part of the development of medicine and natural philosophy in the early modern period and beyond.

Learning Objectives:

1. Summarize aspects of the production, use, practice, transaction and financing of science and medicine in the Early Modern period and shows the benefits of tracing the money in the history of medicine and science.
2. Explain the influence of the Medici family to science and medicine. While we know a great deal about their influence on Galileo's career, we know only a little about their influence following Galileo's death.
3. Describe the importance of networks and patronage to the Danish anatomist Nicolaus Steno's career.

The Artistry of Anatomy: The Use of Visual Displays to Teach Surgery in Early Nineteenth-Century London

Carin Berkowitz

Cornell University, United States and Philadelphia Area Center for History of Science, United States

The early nineteenth-century artist, anatomist and teacher Sir Charles Bell saw anatomy and art as closely related subjects. He taught anatomy to artists as well as to surgeons at his Great Windmill Street School of Anatomy in London; illustrated all of his own anatomical texts; and wrote a treatise on the use of anatomy in depicting the human form, “Essays on the Anatomy of Expression in Painting.” To Bell, the relationship between art and anatomy/surgery was a multifaceted one. In an era in which bodies for dissection were scarce, drawings, models, and preserved specimens provided important teaching tools. But historians, including Ludmilla Jordanova, have noted that the pieces produced by Bell and some of his contemporaries contain more than straightforward representations to be used in a classroom and are often not critical to the works that they illustrate: they are designed to be aesthetically pleasing, artistic objects unto themselves. Using Bell’s “Essays on the Anatomy of Expression in Painting” (1806), his “Institutes of Surgery” (1838), and articles from medical periodicals published between 1820 and 1840—a time when the argument from design could still be called upon to explain both the beauty and the purposefulness of the human structure—I explore the connections between visual objects representing human anatomy, aesthetics, and pedagogical practices for Bell and a particular group of British surgeon-anatomists. I conclude that creating anatomical models and drawings was thought to discipline the surgeon’s hand, while the study of anatomy and comparative anatomy would discipline the artist’s eye. Surgery, sculpting, and drawing were arts, all of which required that the practitioner develop related physical skills. In addition, Bell seems to have believed that because the world was created by God, it was necessarily beautiful, simple, and ‘readable.’ He therefore valued simplicity in his natural philosophical systems of anatomy, thinking that that which is true is simple; and he imparted beauty to his drawings, thinking them better teaching tools and more accurate reflections of the human body because they were aesthetically pleasing.

Learning Objectives:

1. Summarize that there was a close relationship between surgery and the fine arts (particularly sculpture and drawing), both of which were arts that required skills of the hand and eye, in early nineteenth-century London.
2. Argue that the relationship between the subjects of the fine arts and surgery was closest in the classroom, as a part of training.
3. Explore the aesthetic qualities of visual anatomy displays were considered by their creators to be important for establishing both the truthfulness and the pedagogical efficacy of the displays.

Burdened Hearts: Zhengchong as an Endemic Disease Among Intellectuals in Late Imperial China

He Bian

Harvard University, United States

Historians have long identified the association of mental activities to the Heart in traditional Chinese medicine. Rather than investigating the curious absence of the brain, this paper seeks to understand the importance of the Heart from another perspective, i.e., how did diseases related to mental activities make sense under a cardio-centric view of the body? Indeed, how did people act out their views of body and health in the actual copings of life, and what role did such medical ideas play in the functioning of key institutions at that time?

This study therefore investigates the conditions of late imperial Chinese society that fostered the concept of the Heart as the primary thinking organ, by focusing on the historical emergence of one particular disease—Zhengchong, a complaint caused by irregular heartbeats, and its endemic condition among one particular social group—literati/officials. Once a descriptive term of agitated minds, the usage of Zhengchong as a category of disease could be tracked back to the late 12th century. It gained currency among literati during the Ming Dynasty (1368-1644 CE), and reached the peak of its popularity under the highly bureaucratic regime of the Manchu Qing Dynasty (1644-1911 CE). The main body of the paper will show that Zhengchong has become one of the commonest health complaints among holders of civil offices in the Qing, based on its frequent appearance in government inspection reports of the health status of local officials on one hand, and on the other hand, its shared usage in petitions for retirement or sick leaves by the officials themselves.

In a society where public offices were assigned by civil examinations, intellectuals were likely to traverse the identity line between literati and official for more than once. For such persons, the condition of Zhengchong denoted an over-exhausted mind, a heart weakened under the double burden of intellectual pursuit as well as administrative duties. Yet the literati/official might well need the moral implications of the disease Zhengchong to justify his cause of failing health condition as natural and laudable, while maneuvering his career through the troubled sea of imperial politics.

Learning Objectives:

1. Examine the primacy of the Heart in Chinese medicine by investigating its actual use in certain social contexts.
2. Understand how medicine figured in late imperial Chinese society by looking at the bodily complaints of its elite members, i.e. the literati/official.
3. Ponder to what extent the social practices associated around a particular view of the body might persist even though the latter might have changed considerably, i.e. a comparison between bureaucratic personnel management of the Qing and the Republican period for future research.

Rethinking Harlem Hospital: An Alternative Narrative for Desegregation in African-American History

Adam Biggs

Clafin University, United States

Although its major components already appear in two scholarly texts, the story of desegregation in Harlem Hospital is not yet complete. While other works have emphasized its place in the black hospital movement and greater campaign for integration, this paper explores the desegregation process as a reflection of endemic political tensions within the African-American medical profession over definitions of professional legitimacy, black medical professionalism, and the role of black doctors as representatives of racial progress. Focusing on the hospital's reorganization in 1930 and the events leading up to the controversial NAACP investigation of the hospital's staff and administration in 1933, this study uses newspaper articles, editorials, biographical and autobiographical accounts, medical journals and literary works, to demonstrate how African-American doctors split into rival factions—based largely on differences in their educational backgrounds, regional orientations, scientific training, and political affiliations—and employed coded racial tropes centered around the construct of the New (and Old) Negro to derogate their opposition and affirm their status as legitimate professionals and leading representatives of racial progress and respectability. Rather than an effort to achieve the ideal of integration through a debate over the viability of transforming the hospital into a separate or integrated medical facility, I submit, the heated exchanges that took place between African-American physicians during this historic episode functioned, effectively, as ends-in-themselves, with black doctors using their arguments to gain status and position—politically and professionally—within the African-American medical community and along the greater symbolic scale of African-American racial progress.

Learning Objectives:

1. Reconsider the motives behind the debate over integration and separatism during the desegregation of Harlem Hospital.
2. Examine the viability of alternative narratives for desegregation in medicine.
3. Explore the role of the New Negro as a model for black medical professionalism.

Spirometry, Race, and the Making of Scientific Objects

Lundy Braun

Brown University, United States

The spirometer is a precision instrument that measures different aspects of lung function, including forced vital capacity/vital capacity and forced expiratory volume in one second. Most of the devices in use “correct” for race and/or ethnicity. Tracking the processes by which race became embedded in the software and hardware of spirometers involves an examination of how the instrument became a scientific object. Drawing on archival work, extensive reading of scientific texts and nineteenth century textbooks, this paper examines how spirometry became culturally salient in mid-nineteenth century Britain, setting the stage for its racialization in US anthropometric studies. The central question is: was racialization integral or separate to the evolution of this device? In this paper I will argue that race became attached to the device in the mid-nineteenth century but only with time and transnational exchanges of technoscientific knowledge did race become deeply embedded in the machinery and its theoretical underpinnings.

With an aristocracy in crisis, labor in turmoil, and the spectre of revolution in France still poignant for the ruling classes, the first half of the nineteenth century was a period of cultural anxiety in Britain. Liberal and radical reformers focused their polemics on vague notions of vitality, health, physique, and degeneration. Into such a context entered the spirometer. With its potential for surveillance of the body, on which a rapidly industrializing economy had placed new and brutal demands, the spirometer emerged as a purportedly objective device to monitor vital processes and to mitigate the ravages of respiratory diseases, such as phthisis. It was not inevitable, though, that the spirometer would perform such socio-technoscientific functions. The spirometer became a culturally salient scientific object in this period for historically contingent reasons, including shifting rhetorical strategies deployed by John Hutchinson, who was credited by his contemporaries (and present day pulmonologists) as its “inventor,” the state of physiology in this period, technical features of the instrument, and the institutionalization and professionalization of statistics. By the end of the century, transnational exchanges in various knowledge domains between the US and Europe had established racial difference in lung capacity as a “fact of nature.”

Learning Objectives:

1. Summarize the history of scientific objects.
2. Describe how technoscientific innovation produces concepts of race.
3. Analyze the socio-political context of technoscientific innovation.

When Contingency Becomes Custom: The Case of Cardiac Arrest, CPR and DNR

Daniel J. Brauner

The University of Chicago, United States

The history of cardio-pulmonary resuscitation (CPR) provides an excellent example of how the historical responses to new technologies in medicine evolve into cultural customs that exert far-reaching consequences and which continue despite obvious inefficacy. The policy, evidence of which is seen in editorials in the early 1960's, that made CPR the universal default for all dying patients, dramatically impacted on the practice and goals of medicine and continues to provide the paradigm of care for gravely ill and dying patients. What became "policy" appears to have developed with minimal public discourse and a paucity of clinical outcomes data, most of which was extrapolated from the resounding success of closed-chest compression in the operating room. This policy not only dramatically altered the manner in which doctors treated dying patients, but also how we conceptualize our lives as the indication for CPR, cardiac arrest, which previously pertained only to stoppage of the heart in the operating room, became a new universal liminal condition for all dying patients.

The evolution of the mechanism for limiting the application of this technology, the Do Not Resuscitate (DNR) order, was influenced by a confluence of forces and became paradigmatic not only as the first codified limitation of therapy but also as the first "important" medical decision given to patients. This marked the beginning of the patient autonomy movement and the first generalized practice of negotiating therapy between patients and physicians. The irony of this practice is that the therapy being negotiated would not be beneficial to the vast majority of patients in whom the order is raised in earnest. Instead, the practice presents the illusion of a real choice about dying and perpetuates the miscommunication which distinguishes the doctor-patient interaction. In addition, the default status of CPR affected the application of other low yield treatments at the end of life, by setting the standard for evaluating therapeutic success so low that many of these also assumed a default status setting the stage for the current health care crisis in which patients often receive the majority of their medical care at the end of their lives.

Learning Objectives:

1. Describe how technological advances influence social policy and public expectations.
2. Summarize how major changes in therapeutic strategies can become institutionalized despite a lack of evidence to support them.
3. Explain why the invention of the concept of DNR was significant in the development of the patient autonomy movement.

Policy, Ideology, and Identity in the Nationalization of Peking Union Medical College, 1945-1956

Mary Augusta Brazelton
Yale University, United States

The Chinese Communist Party's rise to power in 1949 had powerful consequences for Beijing's most prominent medical school. Established by the Rockefeller Foundation in 1921, Peking Union Medical College (PUMC) was renowned as an elite institution of American medical science. But when the People's Liberation Army took over Beijing in 1949, the Rockefeller Foundation withdrew its personnel from PUMC and ceded the school to Chinese governmental agencies. In the process, the school's colonial past was fundamentally transformed.

In this paper, I argue that PUMC's nationalization illustrates the unique trajectory of Western medicine in Communist China. In its new formulation, the school maintained links with American medical practice while forging new connections to Chinese society. The paper draws on Chinese-language material from research at PUMC and the National Library of China, as well as archival sources on the school's history from the Rockefeller Archive Center.

Although interpretations of American participants have tended to describe PUMC's transition to Chinese leadership as the functional end of its existence, my research demonstrates that this period was critical in the school's ongoing history. Chinese officials aligned the school with Communist health policies, admitting students of traditional Chinese medicine and emphasizing preventive health in its curriculum, but also struggling to preserve practices previously endorsed by the school's American administrators.

Chinese officials consequently fought to separate American medicine from American culture at PUMC. They launched ideological campaigns against "cultural aggression" that connected research at the school to allegations of American bacteriological warfare in Korea. This perspective was presented in a public exhibit at the Forbidden City and in a drama at the Beijing People's Art Theatre. Furthermore, American-trained doctors at PUMC published self-repudiations as part of individual political rehabilitations. The public character of these events suggests that the school served as a symbol of a broader reformulation and possible integration of American medicine into a Chinese context.

Ultimately, PUMC's nationalization addressed key questions about the future of Western medicine in China. In assuming control over the "Johns Hopkins of China," Chinese officials used their newfound authority to redefine the meaning of American medicine in the People's Republic.

Learning Objectives:

1. Explain the influence of American biomedical science on Chinese medical education in the early twentieth century.
2. Discuss the effects of the founding of the People's Republic of China (PRC) upon medical education and health policy.
3. Examine the connections between medicine and society in the early years of the PRC.

The Researcher and the Baby: Developmental Psychology in Turn-of-the-Twentieth-Century Germany

Amanda Brian

Coastal Carolina University, United States

By the late nineteenth century, a “science of children,” or “baby science,” had emerged as a legitimate field of inquiry in Europe and North America. In this growing, transnational professional network that linked researchers engaged in “watching babies,” the baby biography became an important research method. Developmental psychologists adopted a biographical approach in order to assess child development, methodically recording on an almost daily basis a single baby’s activities and then mining these records—these baby diaries—to produce normative developmental timelines. The doyen of developmental psychology, William Preyer (1841-1897), modeled this approach, publishing in 1882 one of the most important works in developmental psychology, *Die Seele des Kindes* (The Mind of the Child). In consideration with the innovative husband-and-wife team William Stern (1871-1938) and Clara Stern née Josephy (1878-1945), who co-authored in the early twentieth century two monographs that went on to define the field, *Die Kindersprache* (Children’s Language, 1907) and *Erinnerung, Aussage und Lüge in der ersten Kindheit* (Recollection, Testimony, and Lying in Early Childhood, 1909), I explore the case study approach of turn-of-the-twentieth-century developmental psychologists in Imperial Germany. I argue that the baby biography was an obsessive study that produced an exemplary object; Preyer’s son and the Sterns’ three children came to define average, meaning normal and healthy, development. The babies of these scientific biographies were presented as the baseline for developmental timelines, which then became critical diagnostic tools for parents, pedagogues, and the state. Moreover, in creating their baby biographies, Preyer and the Sterns raised questions regarding how children were to be observed scientifically and who could make scientific observations. The middle-class home was posited as the best “laboratory” in which to chart early human growth, while medically and scientifically minded middle-class parents, both fathers and mothers, were best positioned to “pinpoint the psychological development of the young person,” as the Sterns wrote in 1907. The collaborative production of the baby biography in this milieu that insisted children needed piano lessons and Goethe to develop properly is an important aspect of nineteenth-century “baby science.”

Learning Objectives:

1. Explore the production of so-called baby biographies in the emergent field of developmental psychology in the Second German Empire.
2. Discuss the innovative works of developmental psychologists William Preyer, William Stern and Clara Stern.
3. Identify the operation of nineteenth-century middle-class values in early developmental timelines.

‘Special Provisions... for Patients of Colour’: Race, Shared Space, and Differential Diagnosis at the Government Hospital for the Insane, 1855-1870

Kathleen Brian

George Washington University, United States

This paper will argue that the historical experience of black patients in nineteenth-century insane asylums is better understood through the investigation of daily hospital practice than through the investigation of medical and psychiatric theory. It will investigate the patient population at the Government Hospital for the Insane in Washington, D.C., during the period between its founding in 1855 and 1870. This periodization allows for a consideration of the ways in which the Civil War, northern migration, and the emergence of the Freedman’s Bureau may have affected patient experience. Through statistical analysis of black patient admissions and diagnosis as well as qualitative analysis of extant case files of individual black patients, correspondence, and spatial arrangements, it becomes clear that the black patients received care and treatment that differed in fundamental ways from their white counterparts.

Citing psychiatric writings, medical historians have argued that alienists (asylum psychiatrists) who admitted black patients dealt with their black and white patients in nearly identical ways. They also claim, however, that these hospitals segregated their black patients from white patients. While true in many cases, the Government Hospital presents a useful anomaly that allows us to reconsider this narrative. At this hospital, where administrators intended to keep black and white patients separate, ad-hoc integration resulted from the piecemeal construction style that resulted from the chaos of the Civil War. Such pragmatic deviations from original intention indicate that the subtler effects of racialization on the daily practices of hospital personnel are central for historical understanding of the lived experience of black patients at mental institutions. The implications of these effects, such as inferior corporeal placement and greater likelihood of chronic diagnoses, continued well into the twentieth century. Understanding the intricate racialization at work will serve to elucidate the ways in which racialized thinking impacted hospital architecture, diagnostic understanding, and patient care during the hospital’s formative years.

Learning Objectives:

1. Describe the experience of black patients in nineteenth-century insane asylums.
2. Explore the differences between psychiatric theory and psychiatric practice.
3. Explore the ways in which racism affected psychiatric care beyond the point of access.

Representing the “New Biology”: The American Museum of Natural History in the Early Twentieth Century

Julie K. Brown

Independent Scholar - Research Associate National Museum of American History, United States

When Bruno Gephard M.D., director of the Cleveland Health Museum, laid out a scaffolding for the history of health museums and exhibitions at the AAHM meeting in 1958, it was his judgment that the exhibits of the American Museum of Natural History “really did not portray the current thinking on public health and was limited to models on water supply, disposal of municipal wastes, and insect-borne diseases.” Redressing this dismissal of the work of the American Museum of Natural History, the first institution in the United States (1909) to have a curatorial department dealing specifically with public health, is the purpose of this paper.

Juxtaposing the “new biology” beside and on an equal footing with the traditional natural sciences within the country’s leading natural history museum was an innovative and unique initiative in this period when biology in its applied forms in public health was revolutionizing the health sciences. As the museum’s first curator, Charles-Edward Winslow, a protégée of William Sedgwick’s M.I.T. Department of Biology and Public Health, embarked on an ambitious exhibit proposal for a series of seventeen exhibits covering a complete curriculum of health topics from infectious disease to urban sanitation, entitled appropriately, “the Natural History of Man.” While only a few of the proposed exhibits were realized, due in part to institutional challenges and the events of World War I, their examination bears greater attention in understanding more clearly the process of how the subjects of health and medicine were approached by museum professionals and reconstituted visually in exhibits for the public. The subsequent installation in 1932 of the Human Anatomy Exhibit in the “Hall of the Natural History of Man” suggests that Winslow’s proposed, although unrealized, exhibits were well in advance of their times.

This paper continues the work from my recent book, *Health and Medicine on Display* (MIT, 2009), and is based on a new research theme which draws on a broad range of original artifacts and primary resources in relevant archival, governmental, and institutional collections.

Learning Objectives:

1. Describe the American Museum of Natural History’s role in representing the “new biology” in its applied forms of public health.
2. Share examples of specific exhibits of the Museum’s Department of Public Health and in context with concurrent events.
3. Discuss some of the institutional processes that favored as well hindered the development of exhibitions on public health issues.

Ahmed Midhat Efendi and the Geopolitical Construction of Yersinia Pestis in the Late Ottoman Empire

Birsen Bulmus

Appalachian State University, United States

Ahmed Midhat Efendi (1844-1912), one of the most well-known and prolific Ottoman literary figures of the late nineteenth and early twentieth century, wrote significant work on the plague in the wake of Alexandre Yersin's discovery of the bacteriological cause of the bubonic plague in 1894. This work has often been ignored since most believed that bubonic plague was virtually nonexistent in the Ottoman Empire after the implementation of an international maritime quarantine in Istanbul and other major Middle Eastern port cities in 1838. Ahmed Midhat agreed with this assessment but took issue with the geopolitical ramifications of the quarantine, and not the biological cause of the disease. By the 1890s the European-dominated International Sanitary Board (ISB), which oversaw the Ottoman quarantine facilities, was increasingly alarmed at possible plague outbreaks in the Empire's Arab provinces, particularly the Hejaz—key to the annual Muslim pilgrimage to Mecca (Hajj). The British, French and Dutch also called for similar restrictions from their colonies in North Africa, India and Indonesia, claiming that plague was endemic in such places. These European powers feared the influence of current Sultan Abdulhamid II's calls for Islamic unity against impending Western colonial hegemony as seen in the anti-British and pro-Ottoman Muslim political unrest in Egypt and the Raj towards the end of the nineteenth century. Ahmed Midhat, writing in defense of his sovereign, countered that further ISB and European control over the overseas pilgrimage routes was highly damaging to the Empire's prestige and even its income revenue. Thus, Ahmed Midhat's work on plague reveals a highly ideologically charged discourse that went far beyond conveying Yersin's findings from distant Hong Kong. As this presentation will show, the politics of plague was unexceptionally local.

Learning Objectives:

1. Describe how quarantine measures affected religious traditions in addition to immigration.
2. Summarize how social factors influenced policies that affected travel and immigration.
3. Examine why bacteriology led to a better understanding of plague.

The Temporal and Spatial Diffusion of Plague in Late Medieval Milan

Ann G. Carmichael

Indiana University, United States

I use disaggregated mortality evidence from 1483-85 and 1522-24 – two great urban pestilences in late medieval Milan – to compare the incidence and geographical distribution of plague deaths in an urban setting. The Milanese public health office kept daily reports of deaths, identifying which cases and/or households were newly infected with something they called plague. The mortality records from each plague have lacunae, but are extensive enough to make such comparison feasible. In both cases the epidemic intervals extended over more than two years, and in both epidemics public health physicians identified the first plague death within a household as a “new case.” I derive spatial localization of deaths from the consistent features of all individual death entries: quarter of the city, the decedent’s parish church and whether the decedent lived within or outside the old city walls. Slight differences in the overall management approaches to these two plagues distinguish records of the earlier from those in the later plague interval, and provide unique features of each record set that cannot be strictly compared to the other. However, some of these differences in the bodies of evidence offer descriptive depth to epidemic-related questions about specific urban environments: why is plague concentrated in some areas of the city more than in other areas? Do environmental conditions in high plague areas suggest higher risk according to the social and economic characteristics of persons there, or to other factors, such as the material infrastructure or concentration of particular economic activities?

In this paper my connection to the larger debate about the microbial cause(s) of late medieval plagues focuses on the general question of “plague” transmission. Does the evidence better support a contagion model, or the diffusion of deaths from common environmental sources? To add usefully to ongoing debates about the causes and consequences of recurrent plagues in late medieval European cities, I believe that we need to compare mortality and morbidity experience during severe plague epidemics, paying close attention to such basic intra-urban epidemiological parameters.

Learning Objectives:

1. Describe new methodological strategies in the assessment of early modern European plagues.
2. Assess underlying urban environmental conditions that support recurrent epidemics.
3. Compare spatial/temporal progression of two epidemics that had similar demographic impacts on one late medieval city.

Agents of Change at Turrialba: Rural Extension Services and the Introduction of Family Planning in Costa Rica

María Carranza^{1,2}

¹Instituto Costarricense de Investigación y Enseñanza en Nutrición y Salud, Costa Rica; ²Centro Centroamericano de Población/University of Costa Rica, Costa Rica

Costa Rica has nowadays one of the strongest family planning programs in Latin America, with almost 80% of women using contraceptives mostly provided by the state. The distribution of the so called modern contraceptives started in Costa Rica in the early sixties at Turrialba, a small rural town 53 kms away from the capital. Although ordinary in many senses, this small rural town was also very particular. Turrialba was the seat of IICA (Interamerican Institute of Agricultural Sciences), an institution belonging to the Interamerican Union and dedicated to the teaching of agriculture. IICA's well-prepared teaching staff came from all over the world and students from all over Latin America and this gave Turrialba a cosmopolitan air. In this small town, forest engineers belonging to IICA and concerned with the negative effects of population growth on the environment set the pillars of what would later become the Costa Rican Family Planning Programme. They started distributing IUDs that they fabricated themselves and also the recently approved contraceptive pill. For this distribution, they used the established social networks between the institute of agriculture and the community.

This work looks at the influence that rural extension services and a rural sociology particularly interested in generating social change, both of which were of central importance in IICA's academic curricula, exerted in the introduction of family planning. Turrialba had turned since the creation of IICA into the experimental laboratory of rural sociology; its people, practices and soils, among others, had been subject to meticulous study and intervention. This analysis proposes that in a context in which it was common and almost a mandate to "intervene", it became "natural" for engineers at IICA to approach the new subject of family planning and promote the adoption and use of new and experimental contraceptive methods among the population.

The work uses information mostly obtained by means of interviews to IICA's teaching staff and student body (including the engineers who introduced the contraceptives), and the revision of IICA's scientific production.

Learning Objectives:

1. Establish the importance of extension services and rural sociology at IICA.
2. Show the impact of rural sociology and extension services at Turrialba.
3. Illustrate the way in which extension services and rural sociology's mandate to imprint social change set the propitious conditions for the introduction of family planning.

Practicing Biomedical Science in an Age of Scientific Decline: Government Funding, Private Foundations and Biomedical Science

David Caruso

The Chemical Heritage Foundation, Philadelphia, PA, United States

Biomedical researchers in the United States rely heavily upon funds from the National Institutes of Health (NIH) in order to conduct their studies. Awards from the NIH, however, fluctuate with broader social, cultural and political trends. Since the turn of the twenty-first century, biomedical researchers have suffered from government cutbacks; the boom of the late twentieth century, in which the NIH almost doubled its number of awardees, has declined quickly. Basic science, the pursuit of scientific knowledge for the sake of knowing, has been, effectively, written out of U.S. national pursuits. Private foundations, however, have been playing a much more active role in the funding of biomedical scientists pursuing basic science.

My paper looks at the contemporary history of biomedical science and the institutional transformations taking place in the mid- to late-twentieth century within the NIH and within the Pew Charitable Trusts, a specific private foundation that provides young biomedical investigators with much needed start-up packages and an opportunity to produce data critical in requesting NIH grants. Using oral histories conducted with the Pew awardees taken a few years after the end of the four-year award and with the Pew advisory committee members (who chose the awardees) taken at various points throughout their careers, as well as NIH guidelines and policy papers, I compare medical researchers' perceptions of private and governmental funding in the biomedical sciences, focusing particularly on researchers' views regarding utility and therapeutic potential in their research.

I will show that since the middle of the twentieth century, more and more private foundations have been taking a prominent role in the production of new and innovative medical knowledge. What these foundations typically term 'risky' science, that is, science that is not usually funded by governmental sources due to its unproven (untested) nature, has become the central paradigm for biomedical transformations within the United States; the NIH, these awardees and advisory committee members argue, has stagnated and is no longer the central force it used to be in medical science. Understanding the modern history of biomedical science is completely intertwined with the rise in prominence of non-governmental agencies.

Learning Objectives:

1. Describe the transformation in biomedical funding in the United States since 1950 and the role that private foundations are now playing in constructing biomedical knowledge.
2. Summarize the ways in which biomedical science has been redefined in the past 60 years and how that impacts biomedical scientific practice.
3. List the impact that U.S. social and cultural transformations have had on the science being pursued in the United States in the twentieth century.

Putting Certainty on Trial: Popular Health Books, Commerce and Free Speech in Federal Trade Action Against the Rodale Press, 1950-1968

Andrew Case

University of Wisconsin-Madison, United States

In 1954, J. I. Rodale published the first volume of *The Health Finder*, a nine-hundred page “encyclopedia of health information from the preventive point-of-view.” Rodale’s book drew its contents entirely from articles in the monthly magazine, “*Prevention*,” which Rodale first published in 1950. Covering everything from automobile accidents to polio, the book replicated “*Prevention*’s” method of combining Rodale’s personal experience, cribbed medical research, and reader testimony into a critique of modern health and society.

But the book was also something new for the Rodale Press. Using techniques of direct-mail marketing, the press advertised the book to millions of Americans – well beyond the subscribers of “*Prevention*.” From small index cards to eight-page color foldouts, the Rodale Press blanketed certain areas of the country with advertising materials for this book and others in the late 1950s. The effect of these techniques was twofold. On one hand, it brought Rodale’s message to more potential buyers and subscribers. But on the other, it raised Rodale’s profile for medical and commercial regulators. As the Rodale Press sold only words and not products, there was little medical authorities could do to stifle Rodale’s health ideas. However, as direct mail fell under the province of the Federal Trade Commission, the press’ health claims were open to commercial regulation.

In proceeding with a complaint against the press in 1964, the FTC accused Rodale of advertising for *The Health Finder* with deceptive claims that guaranteed the book provided infallible ways of avoiding illness and disease. Although the case was ostensibly about advertising, it scrutinized not just Rodale’s business practices, but the larger set of ideas about health, the body and medical certainty that the press circulated. In exploring the case, this paper argues that commercial networks were central to both distributing and challenging health ideas in postwar America. The paper is based on primary sources from archives at the Rodale Press and the American Medical Association.

Learning Objectives:

1. Describe the role of J. I. Rodale in popularizing controversial health ideas.
2. Explore how marketing practices shaped the growth of Rodale’s influence.
3. Investigate conflicting ideas about health and healing in postwar America.

“In consequence of enemy action”: British Medical Students in North American Medical Schools, 1939-1945

Stephen Casper
Clarkson University, United States

Between 1940 and 1945, the Rockefeller Foundation provided fellowships for undergraduate medical students from Britain to complete their medical training in North America. The need for such fellowships arose both from the fact that aerial bombardment had damaged some British hospitals and medical schools and from a growing shortage of qualified faculty to train students. The medical schools that participated in this project spanned North America’s geography: students found homes in variety of places, ranging from British Columbia to Quebec, California to Maryland, to Minnesota and Louisiana.

To the American Committee at the Rockefeller Foundation charged with providing their fellowships for tuition and support, these medical students became one more thread in the ever-growing fabric of the “Special Relationship” between Anglo-America. To the British Committee charged with selecting them, these students represented the promise of a last line of defence: if Britain were invaded and fell, then this contingent of students could serve as medical officers to those forces that remained loyal to the occupied nation.

Very few of these students ever participated in combat – although one lost all of his possessions when a German submarine torpedoed the passenger ship bringing him to Canada. Nine were women; three were Jewish. A few suffered from depression and mental illness; one committed suicide. Twelve had addresses in the United States by 1960; some never ultimately qualified in medicine. Alone their story – captured in a vast and rich collection of letters, telegrams, and accounts from their time – would be worth telling. Yet this transnational narrative transcends that social history of expatriated students and provides through the perspective of outsiders a valuable glimpse into medical education in Second World War America.

Learning Objectives:

1. Explain how a transnational perspective can deepen historical understanding of American medical education.
2. Develop an understanding of the experiences of medical students in Second World War America.
3. Describe the broader political circumstances that brought medical students to the United States and Canada.

“Keepers of the Path”: The Lusts’ Naturopathic “Health Empire,” 1896-1925

Susan Cayleff

San Diego State University, United States

Eighteenth- and nineteenth-century healing sects have been chronicled at length, yet naturopathy, still influential and vibrant today, has not been explored in detail. It became a distinct healing system by 1896, based upon Euro-American predecessors in botanics, hydrotherapy, eclecticism, air and climate cures, chiropractic, homeopathy, osteopathy and vegetarianism. While emphasizing different modalities, all practitioners promoted strict self-moderation and removal from urban life and its attendant stresses. Therapeutics included stream plunges, nudity and sunbathing, lectures, mud baths, vegetarianism, walks, sports and health naps.

Two individuals were most responsible for coalescing diverse philosophies and therapeutics to create Naturopathy: Benedict Lust (1872-1945) and Louisa (Stroeble) Lust (1868-1925). During their partnership and marriage, they succeeded in finding common ground, gaining some allopathic allies, and persisting in a public battle for legitimacy with the American Medical Association. The Lusts expanded Louisa’s Bellevue Sanitarium in Butler, New Jersey, where Benedict provided water-cure treatments modeled after the popular German hydrotherapist Sebastian Kneipp. From their headquarters in Manhattan the Lusts founded the American School of Naturopathy (1901-1924) and in 1905 conferred the Doctor of Naturopathy (N.D) degree. Benedict, fueled by Louisa’s finances, published the “Naturopath and Herald of Health” and “Nature’s Path” (1925). They and their zealous colleagues penned an impressive body of literature. The Lusts bolstered acceptance of naturopathy with cookbooks, highly successful vegetarian restaurants, a healthy bakery and “Dr. Benedict Lust’s Radio Health Talks.” In 1902 the American Naturopathic Association formed, absorbing eighteen complementary state organizations.

Naturopaths staunchly opposed mandatory vaccinations, antibiotics, dental amalgam fillings, toxins used in everyday life and the authority of Public Health and allopathic medicine. This opposition--naturopaths’ critique of new uses of biochemistry in medicine and consumer products--led the American Medical Association and local medical authorities to prosecute the Lusts and others. Benedict was arrested 19 times.

Naturopathy survived despite internal strife, external condemnation and shifting cultural landscapes that devalued agrarian retreat and personal self-control. Yet the relevance of naturopathy today reflects the Lusts’ legacy: four accredited Naturopathic schools in the U.S., insurance reimbursement in fourteen States (with more pending) and complete acceptance in the Canadian medical system.

Learning Objectives:

1. Explain the role of Benedict and Louisa Lust in forming Naturopathy.
2. Distinguish the diverse philosophies and therapeutics that contributed to Naturopathy.
3. Analyze the controversies and challenges facing naturopaths by established medical authorities.

“Looking as Little Like Patients as Persons Well Could”: Hypnotism, Medicine and the Problem of the Suggestible Subject in Turn-of-the-Century Britain

Teri Chettiar

Northwestern University, United States

On March 28 1890, more than sixty leading British medical men gathered in a surgical theatre in Leeds to observe Dr. J. Milne Bramwell operate on seven hypnotized patients. Audience members were both astonished and gratified that none of the patients—men and women of varying ages and suffering from different complaints—appeared to experience pain either during or after surgery. The physicians in attendance considered the demonstration so “marvelously successful” that when an esteemed Fellow of the Royal Society, Pidgin Teale, proclaimed that he felt “sure that the time has now come when we shall have to recognize hypnotism as a necessary part of our study,” his vote “was carried by loud acclamations.” [cited in *The Lancet*, April 5 1890]

This paper examines the vexed question of why hypnotism was not taken up as either a therapeutic or anesthetic practice by the British medical profession by focusing on the decisive medical debate at the turn of the century. For, given the abundant evidence for hypnotism’s wide-ranging therapeutic effects, objections to its adoption by physicians rarely took issue with its supposed effectiveness in producing genuine therapeutic and anesthetic results. Instead, as this paper will argue, critics’ objections were centered upon a host of social and moral concerns regarding the patient’s state of suggestibility and weakened “will-power” while under the physician’s hypnotic “spell.” Furthermore, a close examination of physicians’ discussion of hypnotism published in medical journals and textbooks reveals that their concerns about the nature and effects of hypnotic suggestibility were embedded in a specific set of middle-class anxieties about what was increasingly referred to as “modern” life. The problematic question of precisely how far hypnotic “rapport” and suggestibility might depart from (and even subvert) the Victorian liberal ideal of rational individual autonomy—widely held up as the basis for harmonious collective existence—lay at the heart of these concerns. As this paper will demonstrate, the hypnotism debate was characterized by a tension between physicians’ attempts to balance their commitment to restore patients to health and pervasive middle-class concerns about the rapid and ongoing changes transforming British society at the turn of the century.

Learning Objectives:

1. Explain why hypnotism was not taken up as an accepted anesthetic or therapeutic practice, despite abundant medical evidence attesting to both its anesthetic and therapeutic value.
2. Discuss the changing public role of the physician in Britain at the turn of the twentieth century.
3. Identify key reasons explaining why the Freudian version of the unconscious mind held more explanatory value for British physicians than competing versions put forth by contemporary Anglo-American psychologists and members of the eminent Society for Psychological Research.

Social Justice and Public Health: Community Mobilization and Health Care in New York City (1961-1975)

Merlin Chowkwanyun

University of Pennsylvania, United States

Throughout the early 1960s and into the mid-1970s, New York City was the site of a vibrant community health social movement. This paper examines two pitched conflicts that arose out of this political milieu: one around the South Bronx's Lincoln Hospital, the other around the Lower East Side's Gouverneur Clinic – both located in two of most economically deprived, racially segregated and neglected urban neighborhoods in the country. Health activists employed a number of confrontational tactics and fought for a range of issues, including quality of patient care in public health care facilities, changes in practitioner conduct, worker and community participation in administration and re-allocation of public funds to dilapidated facilities.

I contextualize this story within two major changes in American health care delivery that occurred in the 1960s. The first was American cities' increasing administrative sub-contracting of public health care facilities (like Lincoln) to private academic medical centers (AMCs). The second was War on Poverty legislation allocating millions of dollars for the funding of community health centers (like Gouverneur), again mostly administered by private AMCs as well. In both the South Bronx and the Lower East Side, reports of AMC abuses, misuse of funds and negligence by newspapers and official commissions escalated. I explore the subsequent rise of oppositional coalitions – hardly free of internal strife themselves – that formed among radical medical students, community organizations, hospital workers, and patients over conditions at both these facilities. I conclude by analyzing the eventual dissolution of this activism after the New York City fiscal crisis of 1975 and consider the achievements – but also very real limits – of community-based neighborhood medical radicalism.

This paper is a contribution to the growing history of what Walter Lear has labeled the “health left” and expands on recent work by Naomi Rogers and John Dittmer. It also engages with the work of Steven Epstein, Robert Bullard, and David Rosner and Gerald Markowitz on community and citizen efforts to influence HIV/AIDS, environmental, and public health policy and emerging work on community activism around schools and welfare policy during the War on Poverty era.

Learning Objectives:

1. Explore how the 1960s and 1970s political milieu affected the medical sector.
2. Analyze the achievements and limits of non-professional efforts by community activists to influence health policy and facility protocol.
3. Identify sweeping changes in health services delivery during the War on Poverty era and its consequences.

Shifting Responsibilities: California's Movement to Deinstitutionalize the Mental Health System in the 1960s

Stephanie Clayton

University of Southern California, United States

In 1967, the Lanterman-Petris-Short Act was signed into law by Ronald Reagan, ending a century of involuntary commitment of the mentally ill. Touted as "Civil Rights" for the mentally ill, the bill stripped state officials of their authority to institutionalize people without their consent and opened the way for patients to challenge commitments. This dismantled the elaborate system of institutional care the state had laboriously built and was a response to what Californians perceived as a bloated welfare system. California broke with the past and paved the way for the future of mental health care as the first state in the country to abolish involuntary commitment and champion community treatment.

This was not the original intent of the politicians of the mental health care review committee, nor was it a partisan bill. The plight of the mentally ill in California was a real concern for both parties. Nor was the shift to county and local treatment imposed upon the Department of Mental Hygiene by the Legislature. In fact, the act built upon a program that had been developing since the 1930s. Failures of the shift from state to county-run services were due to factors outside of the Department of Mental Hygiene's control and were a direct result of political interference in medical health decisions.

Attacks of the antipsychiatrists did not dismantle the state mental institutions. It was public acknowledgement that these hospitals were invariably and historically overcrowded, understaffed and underfunded. Californians believed that change was necessary for concrete reasons. The media's portrayal of hospitals as holding cells, along with accusations of wrongful commitment motivated politicians. Although the argument was made that services could be better provided to the mentally ill in their own communities, concerns regarding California's national image played a large role in deinstitutionalization.

My paper is based upon Frank D. Lanterman Papers located in the Special Collection of the University of Southern California, reports from the Department of Mental Hygiene and legislature located in the Sacramento State Archives and Claremont Colleges Library and coverage of mental institutions in Los Angeles and San Francisco newspapers.

Learning Objectives:

1. Analyze the arguments in favor of deinstitutionalization can guide 21st century reformers.
2. Summarize why decisions regarding the running of California's mental health programs were greatly influenced by a desire to protect California's image as a medically progressive state.
3. Explain why the lack of financial support for county programs marked the abandonment of the mentally ill as "the deserving poor."

Through the Open Window: The Legislation of Hepatitis B Vaccine Mandates in the U.S.

Elena Conis

University of California, San Francisco, United States

Federal guidelines stipulating who should receive the hepatitis B vaccine were first released in 1982, shortly after the new plasma-based vaccine was approved in the U.S. In the decade that followed, health officials issued evolving guidelines on who should receive the vaccine: first, it was recommended for gay men, injection drug users, and health care workers; later, the children of hepatitis B-positive women; and in 1991, in the context of still-growing prevalence of the disease, health officials issued guidelines recommending universal infant vaccination against hepatitis B.

Today, public health officials often lament that anti-vaccination sentiment has been mounting for the past two decades, and historians have dated the origins of the current anti-vaccination movement to the early 1980s. But between 1994 and 2004, 47 states responded to the new hepatitis B vaccine guidelines by making the vaccination mandatory for schoolchildren—and met with little popular resistance in the process.

Anti-vaccination sentiment would eventually come to target the hepatitis B vaccine: in 1999, the vaccine was the focus of congressional hearings on vaccine safety; by 2009, it became a popular symbol of the excesses of vaccination policies in the U.S. for anti-vaccine groups, who asked why newborns should be vaccinated against a sexually transmitted infection. This paper looks back over the hepatitis B vaccine's lifespan to identify the factors that secured its quiet acceptance in the early and mid-1990s. Three key factors emerge: lay perception of a link between hepatitis B and AIDS; the distinction of becoming, in 1986, the first genetically engineered vaccine; and the socio-political context of a nation fleetingly inspired to reform its health care system. In a nation whose history has been characterized by constant ebb and flow of resistance to compulsory immunization, the laws mandating hepatitis B vaccines, it seemed, had found a temporarily open window.

Learning Objectives:

1. To explore how vaccine acceptance may be influenced by the framing of a vaccine's disease target.
2. To gain insight into the evolution and nuances of what has been labeled the contemporary anti-vaccination movement.
3. To investigate a set of social and political factors dictating popular responses to a particular vaccine and vaccine-preventable disease.

Radiation in Sickness and in Health

Angela Creager

Princeton University, United States

The atomic bombs dropped over Hiroshima and Nagasaki had devastating effects on the city's residents. Yet in the wake of World War II, and despite the publication of accounts such as John Hersey's "Hiroshima" (1946), the American government presented a positive image of the consequences of developing atomic energy for the health of its citizens. This paper will examine this apparent paradox. In the late 1940s and 1950s, the U.S. Atomic Energy Commission (AEC) sought to harness atomic energy for humanitarian uses, including advancing cancer research, therapy, and diagnosis. This objective picked up on hopes articulated in the 1930s by E. O. Lawrence and others that artificial radioisotopes would transform the treatment of cancer. While the dangers of radiation had been documented since the earliest days of x-rays and radium use, so had the power of radiation to kill tumor cells. In addition, health physicists tended to assume that the occupational risks associated with radiation could be rendered negligible by carefully limiting exposure. Radiation sickness was understood in terms of acute effects to a relatively high dose. However, knowledge emerging in the 1950s about the adverse health effects of exposure to low-level radiation, including William Moloney's findings of leukemia incidence among Japanese survivors of the bomb, brought to light potential drawbacks of the growing clinical uses of radioactivity. In a classic 1958 paper in *Science*, E. B. Lewis showed that the probability of leukemia attributable per dose of exposure was roughly the same across four exposed populations of doctors, patients and Japanese survivors. He estimated that radioactivity from continued hydrogen bomb tests could increase the leukemia incidence in the U.S. population by 10%. The increasing clinical reliance on radioisotopes in the 1950s, seen in the burgeoning field of nuclear medicine, was thus accompanied by a broader conception of radiation's hazards, even at low levels. Moreover, the fear of cancer, which in the 1940s could be exploited by the AEC to justify its status as a civilian agency bringing medical benefits to the citizenry, was by the 1960s a threat to viability of the agency's other long-term benefit prospect, nuclear energy.

Learning Objectives:

1. Summarize the more hopeful view of the use of atomic energy in medicine right after World War II, which is often forgotten because of the fears of radioactivity that dominated public understanding after the fallout debates.
2. Describe the use of radioisotopes as well as studies of the biological effects of radioactivity in terms of the cultural history of cancer.
3. Explain the importance of the U.S. Atomic Energy Commission to developments in medical practice and research in the mid- to late-twentieth century.

Reading Slavery, Smallpox, and Inoculation in the “Pennsylvania Gazette,” 1730-1800

Dayle DeLancey

University of Wisconsin, United States

The nature and extent of eighteenth-century enslaved Africans’ access to smallpox inoculation – and the impact of this access or lack thereof upon slavery in the Atlantic world – are open questions. Despite the scarcity of direct historical evidence that inoculation was a common practice among enslaved Africans, scholars as disparate as Perry Miller and Harriet Washington posit widespread knowledge and implementation of the technique among black slaves on the basis of Cotton Mather’s 1721 and 1727 accounts that he learned of inoculation from ‘his’ North African slave, Onesimus. In contrast, Donald R. Hopkins and Larry Stewart cite trading company and garrison records to argue not only that inoculation was uncommon in the sub-Saharan African regions from which most North American slaves hailed, but also that unchecked smallpox, aided by mistrust of inoculation among European and North American ‘traders’ and ‘owners,’ was one of the Atlantic slavery’s markers until the late eighteenth century.

Focusing upon Philadelphia, this presentation explores the uncertainty surrounding the question of African-American inoculation through the slave sale and runaway advertisements that appeared regularly in the Pennsylvania Gazette, eighteenth-century America’s foremost periodical. Building upon a survey of the newspaper from inoculation’s arrival in Philadelphia in 1730 until the Gazette ceased publication in 1800, I juxtapose ‘close readings’ of the adverts’ formalized descriptions of enslaved bodies with municipal statistics, trade records, medical treatises and accounts of epidemics and inoculation practices. While references to the distinctive, cutting-tool scars of inoculation appeared in fewer than five of 2,000 advertisements, smallpox scars figured prominently in hundreds – simultaneously suggesting absent, hidden or under-valued inoculation. The announcements also reflected a market in which visible scars or verbal claims of past smallpox infection increased the market value of the enslaved – but did so within an eighteenth-century milieu in which moderate smallpox scarring and the notation “has had the smallpox” connoted both inoculation and smallpox “taken the natural way.” Additionally, the notices indicated that an escaped slave’s smallpox scars made him easier to apprehend – whether these scars arose from inoculation-induced or “natural” smallpox. In these ways, the advertisements underscore the persistent difficulty of ‘reading’ eighteenth-century African-American inoculation.

Learning Objectives:

1. Explain the persistent historiographic problem of the uncertain nature, extent and impact of enslaved Africans’ access to smallpox inoculation in the 18th century.
2. Explain the ways in which advertisements that appeared in the Pennsylvania Gazette from 1730 through 1800 underscore the historiographic difficulty of interpreting the nature, extent and impact of enslaved Africans’ access to smallpox inoculation definitively.
3. Explain and compare conflicting interpretations of the nature, extent, and impact of enslaved Africans’ access to smallpox inoculation in 18th-century Philadelphia.

The Impact of Single-Payer Health Care on Medical Income in Canada

Jacalyn Duffin

Queen's University, Canada

In autumn 2009, as the Obama administration struggles to implement election promises about health care, Canadians watch with a mix of fascination and horror at the outpouring of myths about their health-care system. Some American physicians worry about what might happen to their freedoms and incomes in a “Canadian-style” system. But the threat is unknown, because no historian has yet addressed the long view of physician income in Canada.

In this paper, I will trace the average net income (before tax) of Canadian physicians, from the mid-nineteenth century to 2005 with particular attention to the period from the early 1960s to the late 1980s. During that time, Canada gradually shifted to a universal, single-payer health-care system with remuneration for medical services coming from the taxpayer. I will compare doctors’ income to that of average Canadians, other professionals and American physicians. I will also examine medical reaction to these changes at crucial moments during the process.

The apparent indecency of deriving high incomes from the treatment and suffering of others has made payment one of the most awkward aspects of medical practice in all places and times; physicians have not always been forthcoming about their earnings. Consequently, reliable sources on net medical income are difficult to find. In Canada, good information is available on gross earnings from provincial governments, but those figures do not reflect actual income.

My sources include the relevant secondary literature, especially historical, philosophical and economic analyses of medical income, the Canada Census from 1931 to 1961 and 1991 to 2006, government reports on physician earnings from 1957 to 1972 and the Taxation Statistics from 1946 until 1992. Data from the Organization for Economic Cooperation and Development sets these findings in context.

This study demonstrates that Canadian doctors have always been well paid and their remuneration increased with the onset of Medicare. After a brief, relative decline during Medicare’s second decade (1970s), it then rose steadily to outpace income of other professionals and ordinary citizens. The universal, single-payer system has been good not only for Canadians, but also for their doctors—at least it did no harm.

Learning Objectives:

1. To analyze the relationship of physician income to health care delivery.
2. To recognize the relationship of medical charity to health care fees and expenses.
3. To identify the major sources and amounts of physician remuneration in twentieth-century Canada.

“Please do not try to make your own rules”: Compliance, Autonomy and 1960’s Contraceptive Pill Compliance Packages

Carrie Eisert

Princeton University, United States

Over the course of the 1960s, the act of taking a pill every day increasingly became a routine part of many American women’s lives. In the first years of contraceptive pill use, however, the on-again, off-again pill regimen posed challenges for both physicians and patients. In 1963, an engineer patented a special dispenser called a “Dialpak” in order to help patients make sure that they adhered to their pill regimen. Historians have since considered this iconic, round dispenser to be the first “compliance package” for a prescription drug. In this paper, I will consider contraceptive pill compliance packages and their accompanying instructional and advertising materials as a way of exploring how daily pill-taking was integrated into domestic life, and how physicians managed concerns over patient autonomy, compliance and forgetfulness.

Though aesthetically reminiscent of earlier rhythm method calendars, clocks and meters, contraceptive pill packages were not based on the assumption that women were used to keeping good track of the days of their menstrual cycles. Instead, the pill dispensers operated based on a variety of supposedly foolproof calendar-like systems that conceptualized pill-taking as fitting into domestic routines and responsibilities. The dispensers were intended to help routinize and domesticate the act of pill-taking, while simultaneously standing in for the absent physician through behavioral interventions like “remembering” for the patient and “bringing” her back on time for 6-month checkups.

Advertisements directed toward physicians painted the picture of an anxious and ambivalent, even childlike, patient who was apt to forget to take the Pill and become easily panicked and confused. For those physicians concerned with the “psychology of family planning” such forgetfulness among patients took on a deeper meaning indicating psychological conflict.

Just as the “Dialpak” was being patented, research into the concept of patient compliance was also emerging. In 1963, a “pill clock” with a radioactive emitter and photographic film was designed to measure adherence to an outpatient antibiotic regimen for treating tuberculosis. Thus, oral contraceptive compliance dispensers reflected a larger transition concerning patient autonomy and compliance that occurred as routine medication increasingly became part of domestic life.

Learning Objectives:

1. To understand how the act of remembering to take a pill became integrated into women’s lives.
2. To analyze how psychological ideas about patient forgetfulness were reflected in compliance packages.
3. To explore how compliance packages helped physicians manage concerns about their patients.

The Caribbean Model: Cuba, Puerto Rico and the Origins of U.S. National Public Health

Mariola Espinosa

Yale University, United States

After 1898, the U.S. experience with disease in its new empire of islands led to a major shift in the administration of public health within the United States. Previously, public health had been viewed as a quintessentially local matter and, as such, was the domain of the states rather than the federal government. In this paper, I describe two stunning successes in disease control achieved by U.S. colonial authorities in the Caribbean--over yellow fever in Cuba and hookworm in Puerto Rico--and how they undercut arguments that public health is determined by local conditions alone and greatly increased the legitimacy of federal control. I conclude by discussing how these two experiences of empire contributed to the expansion of the duties of the Marine-Hospital Service from a strictly international quarantine and gunboat health agency into the Public Health and Marine-Hospital Service of the United States in 1902, which could address the health needs of regions and the nation as a whole. The experiences on the islands of Cuba and Puerto Rico then served as a model for federal campaigns against yellow fever and hookworm that had been affecting the southern states for decades.

Learning Objectives:

1. Describe how U.S. public health policies have roots in its colonial experience in the Caribbean.
2. Examine the role of colonial laboratories in the development of U.S. health advancements.
3. Summarize the way in which the United States changed the places it occupied, to show how colonies changed the imperial state at home.

Disciplining Sex and Gender in Medicine: Male Physicians and Their Female Colleagues and Patients in Socialist China, 1949-1976

Xiaoping Fang

University of Technology, Australia

Between the years 1949-1976, often called the Maoist period, sex was a taboo topic. People's personal lives were subject to state and work unit scrutiny with puritanical interventions common. Records from the medical sector provide us with remarkable evidence of the mechanisms for disciplining individuals engaged in extramarital affairs, adultery, premarital sex, premarital cohabitation and sexual harassment. In the event of sexual indiscretions between male physicians and their female colleagues (doctors, nurses and pharmacists, etc.) and patients, the male physicians would be severely punished. They would variously be subject to public criticism, dismissal and criminal sentencing. This paper discusses the significance of sexual indiscretions in the history of medicine in China with an eye to unpacking its gendered significance.

In imperial China, men undertook the training and practice of professional orthodox medicine rather than women. Female healers performed 'marginal' and 'non-professional' medical work, such as midwifery and sorcery. The elite male physicians and the female healers did not share the institutional medical settings and did not cooperate in the medical practice either. Meanwhile, the medical encounters between male physicians and the female patients occurred at home accompanied by members of the patient's family.

Since the late nineteenth century, the modern hospitals, which adopted proficiency hierarchy and bureaucratic management, started to emerge in China. The male physicians, female colleagues and female patients met in an institutional medical setting for the first time. After 1949, these encounters became regularized and institutionalized with the development of the modern medical system. In hospitals, the females usually undertook the junior and auxiliary positions and were subordinated to the male physicians, while female patients were frequently alone with male physicians because of new hospitalization and examination procedures. Understandably, this context enabled the so-called deviant sexual encounters to occur. However, an important feature of the disciplining surrounding the management of these encounters was the focus on the male physicians. Male physicians were severely penalized, while their female colleagues and patients went unpunished and received lighter, if any, penalties. This paper argues that the punishment of male physicians reflected an attempt to counter-balance the male-dominated medical hierarchy and fulfil the aspirations for gender equality that were integral to the socialist ideological program since the 1950s.

Learning Objectives:

1. Address the male physicians' relationships with female healers and patients in the history of medicine prior to 1949.
2. Discuss the encounters of female medical staff and patients with male physicians in post-1949 institutional medical settings and examine the nature of their subordination to male physicians.
3. Explore how the punishment of male physicians reflected the relationship between gender equality and medical hierarchy under socialism.

Diagrams of Disorder and Difference: American Psychiatry's Technical Illustrations and Disciplinary Assumptions About Race, 1900-1940

Andrew Fearnley

University of Cambridge, United Kingdom

In what they thought about disease, and in the views they expressed about patients, American psychiatrists left their most revealing record of how they understood the concept of race. This paper examines the technical diagrams that practitioners produced between 1900 and 1940 to show how thinking about psychiatric epistemology was a practice governed by assumptions of race and races. In fact the concept was crucial to the discipline, pace and the work of previous scholars.

This paper examines technical drawings produced by Smith Jelliffe, Nolan Lewis, Adolf Meyer and William White. These diagrams served a number of functions: didactic, argumentative and aesthetic. Accordingly, designs differed markedly; some to be shown here were hastily scribbled, stuffed in between lecture notes, and today only found in practitioners' personal papers; others were inked and reprinted in textbooks and journals.

For all their eclecticism, the diagrams illuminated a number of common disciplinary assumptions. Each drawing referenced the unit within which mental disease was thought to operate. Overwhelmingly, that unit was the individual—those autonomous, independent and rational figures of political and biological imaginations. Individuals were the single patients that psychiatrists saw, but individuals also represented a node within an evolutionary grid. Diagrams like White's "Regions of Consciousness" (1924) showed both these features, placing individuals at the opposite end of a spectrum from races. It followed that those described through collective-culture shapes—like races—fell outside the discipline's purview, the preserve instead of anthropologists. Similarly, these diagrams also made arguments about the cause and course of mental disease. Drawing on neo-Lamarckian ideas long thought to have receded from the life sciences, psychiatrists equated mental disease with primitivism, a process they illustrated with the cascade of units from individual to group consciousness. If the recovery from such ailments was also presented as the return of this individuality, it followed that those people whose identities were delineated solely through collective shapes were equally located outside psychiatry's therapeutic armoury.

The paper ultimately insists that recovering the pertinence of thinking about race within medical precincts is best done with reference to the epistemological priorities of disciplines, rather than recourse to cavalier arguments about the vagaries of scientific racism.

Learning Objectives:

1. Examine psychiatrists' technical drawings in the context of the discipline's broader etiological, prognostic and therapeutic modes of thinking.
2. Explain how American psychiatrists thought about race and races between c.1900-c.1940.
3. Provide a means of gauging the significance of the concept of race within medical and scientific thought that does not rely solely on the pursuit of racial monikers.

Guinea Pigs in the Penthouse! William Firth Wells, Richard Riley and the Nature of Droplet Nucleus-borne TB, 1954-1958

Gerard Fitzgerald

New York University, United States

The modern twentieth century hospital, a space designed primarily for diagnosis and patient care, is also a dual use site that can readily and simultaneously accommodate experimentation and knowledge production. Studies on the specific relationship between hospital architecture, design, the built environment and medicine by Annmarie Adams, Thomas Schlich, Lindsey Allan, David Brandt, and David C. Sloan, among others, demonstrate that the hospital is a rich, if somewhat neglected space, worthy of additional study by historians of architecture and medicine.

In this paper, the epidemiological nature of pulmonary tuberculosis will be examined through a series of experiments conducted by William Firth Wells and Dr. Richard Riley between 1954 and 1958 at the newly completed Baltimore Veterans Hospital in Baltimore, Maryland. Carried out under the auspices of the Johns Hopkins University School of Hygiene and Public Health, the Veterans Administration and the Maryland Tuberculosis Association, the study, conducted in two parts, examined whether tuberculosis is transmitted by single tubercle bacilli carried aloft by airborne droplet nuclei. The research involved the construction of a specially modified experimental isolation ward, completely separate from the rest of the hospital, on the top floor of the building. Consisting of six single rooms along a common corridor, each containing an infectious TB patient, these rooms were in turn connected to a guinea pig "penthouse" one floor above through a closed ventilation system involving filtered air and UV radiation light curtains. Air from the rooms of human test subjects was used to successfully infect experimental animals in the first set of studies. UV radiation was used as an experimental check to further disinfect the air used in the second round of studies. The final results of the experiment demonstrated the viability of the droplet nuclei transmission hypothesis. The culmination of more than twenty-five years of research conducted by Wells at both Harvard and the Henry Philpps Institute at the University of Pennsylvania on the nature of airborne disease and tuberculosis transmission, this work also provides a unique case study of the manipulation of hospital space for biomedical experimentation.

Learning Objectives:

1. Demonstrate the importance of the architectural design aspects of the built environment within the 20th century hospital and the flexibility of space within as a site for knowledge production and experimentation.
2. Demonstrate the importance of William Firth Well's research program on droplet nuclei and airborne contagion from the first half of the last century and the continued relevance of his work to our current understanding of airborne disease transmission.
3. Examine the place of human subject research within the VA hospital system during the last century and possible cost of these types of studies.

“Overseas and Overweight: Climate, Corpulence and Race in Nineteenth-Century Views of Obesity”

Christopher Forth

University of Kansas, United States

The long nineteenth century provides an instructive background to our modern obsessions with obesity, less as a problem of “epidemic” proportions than as a matter of aesthetics and racial difference. While it is widely recognized that classical models of beauty have long exerted an influence over Western bodily ideals, the extent to which the relative corpulence of non-Western peoples was invoked as a contrast to these ideals has not received much notice. From the eighteenth century through the early twentieth, the moral and physical “softness” of Africans, Chinese and Indians was often associated with the obesity and ugliness frequently attributed to such peoples. This association survived the environmentalist explanations proffered in the eighteenth century and persisted through the hereditarian claims that gained momentum from the mid-nineteenth century onward. The framework for such generalizations was constructed out of travel reports, ethnographic observations and medical studies, and representations of overseas fat were disseminated to the wider public through popular texts educating readers about the peoples of the world. By the early twentieth century, when the anti-obesity campaigns were really heating up in the West, the link between obesity, ugliness, softness and “savagery” was nearly iron-clad.

This paper argues that some of the contempt heaped upon obesity by the early twentieth century may be attributed to the ongoing connection that European and American authorities made between corpulence and people they deemed “semi-” or “uncivilized.” Yet it also contends that “civilization” itself was not a stable basis from which to make such assertions. Even as classical statues were cited as paragons of Western physical excellence, male elites often associated a full belly with male success and widely remarked that it was the conditions of modern life that contributed to the formation of corpulence. Nevertheless they almost unanimously derided the excessive corpulence of women, a “deformation” they often described with reference to African fattening rituals or the sensual indolence of the Chinese and Indians. By 1900 such quasi-racial lines were also being drawn within the West itself as elites criticized their lower orders for succumbing to the same “savage” tendencies.

Learning Objectives:

1. To discuss links between corpulence and race that have not received much historical attention.
2. To reveal how medical understanding of the relationship between climate, character and physique changed from the eighteenth century through the early twentieth century.
3. To engage with the unstable relationship between concepts of “civilization” and bodily ideals in the West.

The Things Themselves: Intellectual Property Rights, Globalization and the Transformation of the American Pharmaceutical Industry, 1877-1911

Joseph Gabriel

Florida State University College of Medicine, United States

This paper examines disputes over intellectual property rights in the pharmaceutical industry in the years between the collapse of Reconstruction and World War I. I suggest that a complex series of legal, economic, and moral transformations took place in which a new type of liquidity was created as a basic component of the corporatization of drug manufacturing. In earlier years, I argue, intellectual property rights were widely understood as a means of restricting knowledge about manufactured goods in order to protect industry profits; as such, they were conceptualized as a form of monopoly over conceptually distinct substances and widely critiqued by reformers as contrary to the norms of open science. Patents were thus conflated with other monopolistic practices, most notably the restriction of knowledge about product ingredients through secrecy, while trademarks on drug names were assumed to monopolize control of the substance in question indefinitely. By the first decade of the twentieth century, however, intellectual property rights had begun to be reconceptualized as an important means of promoting scientific progress by ensuring both corporate investment in drug development and the free circulation of information about drugs within the scientific community; patents were thus redefined as a necessary and ethical component of the scientific process, while trademarks were detached from the common name of the item in question and rendered ethically and legally legitimate. In doing so, the redefinition of intellectual property rights made possible the circulation and standardization of knowledge about goods across a variety of intellectual and geographical boundaries. As Andrew Lakoff has argued, to be liquid an asset must “lose its specificity and locality” through a process of standardization in which disparate goods are rendered equivalent by the development of classificatory mechanisms. This paper suggests that complicated transformations in the legal, economic and ethical significance of intellectual property rights underlay the creation of this type of liquidity in the pharmaceutical industry during the period under question.

Learning Objectives:

1. Provide an overview of the pharmaceutical industry in the years between the collapse of Reconstruction and the outbreak of World War I.
2. Discuss the changing role of intellectual property rights in relation to drug development during this period.
3. Discuss the concept of liquidity and examine how it relates to changing ideas about intellectual property rights in the pharmaceutical industry during this period.

“Surgery and Humbug”: EA Codman’s End Result System and the Negotiation of Objectivity in Progressive Era American Medicine

Caitjan Gainty

University of Chicago, United States

In 1910, Ernest Amory Codman, a surgeon and medical reformer, announced the birth of his End Result System. Though Codman was not alone in believing that the existing system of medical care was makeshift and ineffectual, his proposed reform was distinctive from those of his peers. He intended not only that his End Result System would entirely replace, rather than repair, the existing system, but also, most importantly, that this reform would be driven entirely by data.

Codman’s reliance on data reflected his fanatical devotion to objectivity as the crucial antidote to what he felt was the shockingly subjective and grossly experiential nature of medical practice at that time. In this way, Codman’s system would seem to be a period piece, reflecting the classic Progressive preference for objectivity, as constitutive of modernity, over subjectivity, as deceptive and anti-modern.

Recent analyses have presumed that Codman’s colleagues unilaterally rejected his system precisely because of this presumed antithetical relationship between subjective and objective knowledge (e.g., the authoritative power of objectivity threatened the subjectively derived authority of the profession). But, as Ted Porter has pointed out in his “Trust in Numbers,” this is a response that may only evidence our “modern” instinct that objectivity does indeed denote “things as they really are.”

A more thorough analysis of Codman’s system reveals no such rejection. Instead, it provides an important historical study of how objectivity has been constituted as a culturally, professionally and individually contingent entity. I show this in two ways. First, I focus on Codman’s system itself, which so often fundamentally conflated “data” with personal experiences that the very distinctions between objective and subjective that purportedly grounded Codman’s system slipped into a continuum. Second, the reception of Codman’s colleagues reflected not a tension between ways of knowing, but, instead, a flexible, negotiated process of knowledge production. Following Sarah Igo’s study of public responses to quantification in “The Averaged American,” I position this negotiation both as central to professional and individual identity formation in general and view it as an important corrective to our accounts of how medicine as a “modern” entity was historically constituted.

Learning Objectives:

1. To describe EA Codman’s End Result System, focusing both on its shape, intent and functionality.
2. To describe the reception of Codman’s colleagues to his system by contextualizing them within the Progressive era’s movement toward efficiency and objectivity.
3. To provide an analysis of this important period in American medicine, by focusing on what I call the “negotiated objectivity” exemplified in Codman’s project and in its reception, in order to expose the historical roots of medicine’s modern identity construction.

Women and Healing as seen in Catalan Miracle Stories

Michelle Garceau

College of Charleston, United States

In the late 1270s a woman brought her daughter and granddaughter to the tomb of Ramon de Penyafort in Barcelona. Prompted by an earlier visit to the tomb, the older woman wanted them to pray at the tomb for the young girl who was suffering from an oozing wound on her face. For over a year they had been trying to medically treat the affliction to no avail. At Ramon's tomb one of the women applied some of the dirt from his burial place to the pus-filled wound and the young girl was cured. In another miracle, a woman had a tumor and corrosion in her mouth and teeth. Upon the advice of another woman, the sick woman invoked Ramon's help, applied dirt from his tomb to the 'sick place' (*infirmio loco*), and drank more of it mixed with water. Finally, a wealthy merchant, having been unsuccessfully treated by surgeons, recovered from a mortal illness after his family – primarily his female relatives – turned towards Ramon's tomb and prayed. A number of thirteenth- and fourteenth-century miracle narratives from Catalunya include visits to saints' tombs, prayers physically directed at such places or the use of items from tombs or shrines. This paper is an exploration of the healing practices seen in these accounts, focusing in particular on the care of women. The various healing actions, all of which were predominantly performed by women, varied from the application of medicines to the offering of prayers. I will argue that, to expand on the terminology of Mary Fissell, this 'bodywork' was the responsibility of women. Moreover, miracle narratives reveal that the treatments offered to the sick and injured that have traditionally been seen as either secular (medical) or religious (spiritual) were, in fact, part of a continuum of remedies available to the men and women of Catalunya.

Learning Objectives:

1. Describe the role of women as caretakers of the sick.
2. Explain 'bodywork' of Mary Fissell to include not only physical treatments, but also spiritual, in the form of prayers.
3. Summarize the spectrum of healing available in the medieval Crown of Aragon.

“What Price Deodorant?” Hexachlorophene and the Allure of Germ-Killing Soap, 1941-1972

Martha N. Gardner

Massachusetts College of Pharmacy and Health Sciences, United States

Scientist William S. Gump of the Givaudin-Delawanna chemical company synthesized the chemical compound hexachlorophene in the early 1940s. A germicide with the ability to kill infectious microbes when added to soaps, the chemical decreased the amount of time necessary to clean hands and also remained on the hands after washing, continuing to destroy germs. Existing fears of the potential spread of recalcitrant infections prompted its widespread use in surgical washes and in solutions used to wash babies in hospital nurseries throughout the United States. Soon after the initial invention and patenting of the compound, inventor William Gump also called for its use beyond the hospital, asking, “Why should not every person be using this germ-killing soap every time he washes his hands?” In the 1940s, scientists and marketers rode the wave of public confidence in the curative powers of emerging antibiotics and found consumers eager to use antimicrobials in other settings as well. First marketed to consumers in 1948, Dial soap contained hexachlorophene, and advertisements for the new product emphasized the effectiveness of the product in killing a particular kind of bacteria—the kind that made human perspiration stink. Already by 1953, Dial had gained the #1 position in the soap market, and deodorant soaps had become the new norm.

This paper traces the rise and fall of hexachlorophene, both in the consumer and the hospital markets. Risks associated with hexachlorophene ultimately led to its removal from the consumer market and its restriction in hospitals. Although the use of this antimicrobial agent had in fact proved successful in preventing infection in hospitals, it lacked safety protocols, and in higher concentrations had proved dangerous. By the early 1970s, it had become clear that the chemical was causing neurological damage in infants. As a result, the FDA ruled that hexachlorophene could only be used with a prescription, and even then at lower concentrations than had been standard. Makers of Dial Soap protested that the ban on hexachlorophene was “hysterical.” Even in light of the risks, the appeal of a germ killer—especially one that deodorized—continued to resonate strongly.

Learning Objectives:

1. Describe the use of hexachlorophene in hospital and consumer hygiene products, 1940s-1970s.
2. Consider the connections between the use of germicidal hygiene products in hospital and in home settings.
3. Explore the cultural place of antimicrobial hygiene products in the antibiotic age.

The History of Pain Without Lesion in Mid-to-Late 19th Century America

Daniel Goldberg

Baylor College of Medicine, United States

The central claim of this paper is that physicians in mid-to-late 19th century America generally denied the possibility that pain could exist in the absence of material lesion. There is ongoing debate over the medical status of pain sufferers in mid-to-late 19th century America, with some arguing that what we might now term “chronic pain” became invisible during the period; others assert that physicians of the time were acutely aware of and sensitive to the suffering of their patients from a variety of pain experiences. Drawing on prior work related to the social and cultural efficacy produced in fin-de-siècle American culture by imaging the visible lesion, I argue that these apparently divergent views are both correct. On the one hand, there is little support in patient narratives for the idea that mid-to-late 19th century American physicians ignored or trivialized the pain experiences of their patients. Indeed, given the Victorian emphasis on suffering and sympathy, such behavior would have been especially taboo, at least with regards to socially privileged patients. On the other hand, the fact that American physicians of the time were aware of and sensitive to their patients’ pain does not imply that the physicians allowed that such pain could exist in the absence of a material (morbid) lesion. I contend that American physicians followed their European counterparts in repeatedly insisting that if the patient experiences pain, then such a lesion must perforce exist, even if imaging techniques of the time simply did not permit discernment of the lesion itself. This finding has several implications. First, it fills a gap in the relevant literature inasmuch as there is little sustained historical analysis of the attitudes, practices, and beliefs of mid-to-late 19th century American physicians regarding pain without lesion. Second, it contributes to the historiography demonstrating the power and significance that the increasing emphasis on discrete objects of disease had in mid-to-late 19th century America. Third, it suggests some possible lessons for thinking about the continuing importance of the visible lesion in the widespread undertreatment of pain in the contemporary U.S.

Learning Objectives:

1. Understand that while physicians in mid-to-late 19th c. America neither trivialized nor ignored their patients’ invisible pain, they nevertheless tended to deny the possibility that their patients’ pain could exist in the absence of material, morbid lesion.
2. Locate this finding in context of the increasing emphasis on discrete, visible objects of disease in mid-to-late 19th c. American medical and scientific culture.
3. Comprehend the possible links between the historical inability to countenance lesionless pain and the contemporary undertreatment of chronic pain in the U.S.

Medicalization and Infant Care: What the Baby Books Tell Us

Janet Golden
Rutgers, United States

Examinations of medicalization and particularly of scientific motherhood have focused extensively on medical literature and the diffusion of medical authority via popular publications. My examination of approximately 1000 baby books from the 20th century United States (books with preprinted entry pages in which a variety of information about an infant was recorded) suggests that reception of medical authority and the practice of scientific motherhood was more complex than previously acknowledged. Child health practices are rooted in folklore, interpretations of serious illness are understood in religious terms and core ideas in 20th century developmental psychology are absent in these volumes well into the late 20th century. At the same time, the rise of hospital births, the incorporation into these publications of increasing numbers of pages devoted to medical information and the shifting messages in the advertisements in many of the baby books show the growing presence of medical science in everyday life and in the nursery over the century. The synergy between manufacturers of nursery items and medical authorities and the degree to which family income shaped nursery health practices is made clear in baby books, along with the individual variations of infant care practices. A close reading of these sources presents a more nuanced account of medicalization, argues for more analysis of religion and health and asserts that the growth of advertising and the commodification of everyday life were as critical to medicalization process as the rise of scientific authority and the organization of medicine and health care.

My paper will discuss these themes with particular attention to baby books kept by working class families--as determined by information in the volumes. I make extensive use of *The Book of Baby Mine*--an advertisement-filled baby book given away by local merchants that remained in print from 1915 to 1974. I have examined a large collection of these books (over 300) in the UCLA biomedical library and have used baby book collections from numerous archives throughout the United States. My work is grounded in the existing historiography of 20th century American medicine and of medicalization.

Learning Objectives:

1. Define the medicalization of 20th century American life and understanding its complexity.
2. Explore baby books as sources for 20th century medical history.
3. Analyze how developments in advertising, marketing and manufacturing shaped the ways families cared for their healthy (and sick) children.

Medicine, Modernity and Visual Culture in Brazil's First Vargas Era

Melissa Gormley

University of Wisconsin-Platteville, United States

Between 1930 and 1945 the corporatist Brazilian state under the Vargas Administration implemented a series of far-reaching social and economic reforms aimed at modernizing the nation. Public health initiatives, with the improvement of the well being of society as its main goal, were an essential component of the government's new focus. Institutional policies, developed by the medical community and politicians, are obvious sources essential to foster a broader understanding of the dramatic changes that occurred during this period. In addition to these sources, a more refined historical study of the medical imagery and visual culture that was being produced is an exciting innovative line of inquiry and can provoke new questions and provide a more nuanced analysis of the state's modernization project and its relationship with Brazilian society.

This research analyzes how the discourse of modernity, which is explicitly played out in state sources, also became part of the visual economy in Brazilian society during this period. Images from medical journals and scientific expeditions, which emphasized Brazil's "backwardness," are examined in relationship to popular photographs in which the state attempted to set an example of what modernity should look like. It is in this analytical context that society's ties to the past are juxtaposed against what the state sought to redress in a desire to move Brazil from an unhealthy to healthy society, hence moving from traditional to modern.

Learning Objectives:

1. To examine the complexities of state sponsored modernizing projects within the sphere of public health.
2. To place Brazilian medicine into a larger global context.
3. To more fully analyze the relationship between medical discourse and popular culture.

Unbranding Medicines: Generic Pharmaceuticals and the Problem of Therapeutic Equivalence

Jeremy Greene

Harvard University, United States

Each prescription drug in the 20th century came to possess at least two distinct identities—one generic and one branded—with divergent biographical trajectories. Typically, the generic drug-as-chemical is ascribed material properties like efficacy, safety, pharmacokinetics and pharmacodynamics, while the trademarked drug-as-brand is granted social properties of advertising budget, market share, prescriptions sold and return on investment. Colloquially, this distinction fits familiar dichotomies of biological vs. social, science vs. commerce and professional vs. industrial.

But this sharp divide elides the complex role that branding and market logics have played in the standardization of medical products and medical practice over the 20th century. What made a generic drug generic in the second half of the 20th century—and by extension, what made a ‘nonproprietary’ not proprietary in the first half—was simultaneously dependent on the changing nature of drug branding, evolving ideals of evidence in clinical practice and mobile laboratory and regulatory demarcations of pharmacological similarity. In this paper, I use clinical, popular, policy and trade literatures, archival records from the FDA, WHO and key reformers, lobbyists and regulators, to explore the contested history of generic pharmaceuticals and the comparative role of the market and the state in guaranteeing the therapeutic quality and proper use of prescription drugs.

This talk maps three periods in the shifting dialectic of branded and generic claims of therapeutic standards in the United States: (1) an era of ethical marketing—here used as an actor’s term—extending from before the Pure Food and Drug Act of 1906 into roughly the 1930s, when producers of ethical drugs compared the U.S. Pharmacopoeia-based standardization of their products versus the proprietary basis of patent-medicines; (2) an era of ascendant brand-name pharmaceutical prescribing from the 1930s until roughly the 1960s, as manufacturers of innovative and patent-protected ‘specialty’ drugs depicted generic production as a form of counterfeiting; and (3) a growing backlash against the brand centering on the interchangeability of branded and generic drugs from 1960s onwards. By positioning normative and exceptional cases within this framework, this paper will explore enduring roles of brand-logic and embattled claims of generic and therapeutic equivalence in American clinical practice and health policy.

Learning Objectives:

1. Explore the evolving and mutually-defining relationship between branded and generic pharmaceuticals in the 20th century.
2. Analyze the conflicting claims of pharmaceutical firms, drug regulators, clinical pharmacologists, and physicians groups regarding what structures (the drug firm, the FDA, or the individual physician) can determine the therapeutic equivalence of any two medicines.
3. Use historical analysis to understand the endurance of brand-name pharmaceutical use by physicians and patients even when generic options are available.

‘For the convenience and comfort of the persons employed by them’: The Lowell Corporation Hospital, 1840-1930

Janet Greenlees

Glasgow Caledonian University, United Kingdom

On May 10, 1840, the first industrial hospital in America opened in the country’s principle cotton textile manufacturing town of Lowell, Massachusetts. The hospital was intended ‘for the convenience and comfort of the persons employed by them respectively when sick or needing medical or surgical treatment.’ To this end, the employers provided the hospital’s operating costs, with individual firms contributing funds in proportion to their employee numbers. Patients only paid their room and board and according to some accounts, if they could not afford this, then their employer provided a surety. Workers were then responsible for this money to their employer. The Lowell Corporation Hospital operated on this same basis until 1930, when the Corporation essentially gave the hospital to the Boston Archdiocese for \$1. While other American employers provided medical services for their employees, none provided such an extensive provision for such a long period.

This paper incorporates business and medical history to analyze the reasons behind the Lowell Corporation’s sustained, ninety-year investment in the hospital. It argues that traditional historical arguments that hospitals either symbolized medical progress or were a form of social control are too simplistic. Instead, while the initial investment in the hospital was partly social control, it incorporated paternalism and corporate and community responsibility. After the mid-nineteenth century, paternalism faded as the hospital gained a national reputation for clinical excellence and as hospital contributions became custom – or a seemingly undisputed corporate expense. However, the belief in corporate social responsibility never entirely faded, even as the industry declined. Rather than simply close the hospital when the textile industry left New England during the 1920s, the corporation sought a buyer. When one could not be found, they essentially gave the hospital away to ensure its continuation as part of the Lowell healthcare system. Moreover, an unintended outcome of the Lowell Corporation’s hospital investment was that they essentially invented what is now known as a corporate health care plan – albeit a simplistic model.

Learning Objectives:

1. Explain the changes and continuities in one corporation’s provision of healthcare over a 90 year period.
2. Explore the relationship of this hospital to traditional hospital histories.
3. Discuss the changing interface between business, health and welfare in America between 1840-1930.

Hybrid Identities, Hybrid Institutions: Clinician-Scientists and the University of Minnesota-Mayo Graduate School of Medicine

Jennifer Gunn

University of Minnesota, United States

In 1915 the University of Minnesota and the Mayo Clinic formed a joint Graduate School of Medicine. Coming in the wake of undergraduate medical education reform, the new school was in part a response to the national need to create academic medical faculty with hybrid identities as clinician-scientist-teacher-researchers, and in part a response to Mayo's desire to distinguish its fellows as competent, trained specialists. The Mayo Graduate School of Medicine offered traditional M.Sc. and Ph.D. degrees in clinical and basic science fields under the auspices of the University's Graduate School.

Conflict emerged almost immediately between the two partner institutions over requirements for graduate degrees, the basic science education necessary, qualifications for faculty appointments and the role of research in graduate medical education. The University of Minnesota denied faculty appointments to local physicians and Mayo Clinic staff who did not meet the Graduate School's standards for supervising graduate students. William Mayo protested the "academic frills" and claimed the Ph.D. represented "the time and inclination to carefully learn unnecessary things." The real conflict was between academic and clinical demands, between the University's vision of research-centered education to train "productive scholars" for academic medical careers and Mayo's practice-centered conception of graduate medical education as technical preparation for the clinical specialties.

The archival records of the University of Minnesota-Mayo Graduate School of Medicine, national specialty organizations and the published medical literature demonstrate that the tensions within the University of Minnesota-Mayo Graduate School of Medicine foreshadowed national debates over the meaning of scientific medicine, how clinician-scientists would be trained and the production of translational research to overcome the separation of research and practice inherent in the structure of American medicine. These concerns—still largely unresolved—were exacerbated by the ascendance of hospital residency as the dominant model of specialty training and the location of graduate medical education in medical care delivery rather than in academic institutions. Specialty boards, the federal Medical Scientist Training Program and national commissions have drawn upon aspects of the UM-Mayo models to redress on-going issues in training scientific specialists and physician-scientists.

Learning Objectives:

1. Identify key issues for graduate medical education in educating specialists and clinician-scientists for academic medical careers in the period after the Flexner Report.
2. Understand how tensions arose between clinical, practice-centered and academic, research-centered goals for graduate medical education in a university graduate medical school setting.
3. Understand why various educational measures emerged to address the need for physician-researchers and to redress the shortcomings of rooting graduate medical education in medical care delivery.

A Fountain of Indignity: Germs and the Infrastructure of Racial Segregation, 1905-1925

Matt Gunterman

Yale University, United States

This paper examines the emergence of “bubbler” water fountains as instruments of sanitary public drinking and racial segregation in the United States. These fountains take their name from the bubbler mechanism, whereby water bubbles up to be consumed.

To briefly review the historical development of the implements of public drinking: By the mid nineteenth century many American cities had codified the provision of communal drinking cups at public water sources into municipal law (with hefty fines issued for their theft and destruction). Around the turn of the century reformers began agitating for the installation of public drinking fountains as means to combat alcohol-related intemperance. They reasoned that these fountains would offer working men a free alternative to the enticements of the saloon. By the first decade of the twentieth century, germ-related concerns were also a significant factor in the growing urgency surrounding public fountains.

Before the articulation of germ theory there is ample evidence that Americans of all races shared both public drinking cups and bubbler fountains: the drinking of water, one after another, was an unsentimental and utilitarian act.

Knowledge of the germ, however, complicated this situation, as users were understood to leave behind them imperceptible and dangerous remnants. The germ provoked a flurry of innovation of the bubbler mechanism around 1910 because existing models were deemed “unsanitary” as unconsumed water touched the mouth, then fell immediately back onto the nozzle, contaminating it for the next user.

In this paper I briefly explore the development of bubbler water fountains through analysis of patents and advertisements. I identify within these advertisements an explicit and recurring theme of “dignity,” wherein various fountains were upheld as viable and dignified drinking alternatives for the public consumption of water. I conclude by considering how these fountains, shaped by market forces to preserve the dignity of their users, were subsequently fitted into an infrastructure of racial segregation that had solidified in the American South by 1910, one designed to deny dignity to a group of Americans.

This paper draws from primary source materials located in the Hugh Moore/Dixie Cup Company archival collection at Lafayette College.

Learning Objectives:

1. Explain the projection of germ consciousness into material culture as evidenced in the bubbler drinking fountain.
2. Discuss the influence of germ awareness on ideas and practices of racial interaction.
3. Explore the interweaving of germ theory into beliefs and practices of racial segregation.

Iconographic Models of the Doctor Hero in American Fine Art and Popular Graphics from 1860 to 1960

Bert Hansen

Baruch College of CUNY, United States

Prior to the 1880s, painters and engravers rarely pictured doctors and scientists actively engaged at their work in either clinical or research settings. For generations, notable doctors had been portrayed only as gentlemen or scholars with no visible accoutrements of professional activity. Without a label, a viewer could not distinguish by his appearance a physician from a naturalist, statesman or land owner. Humorous genre scenes of doctors — and of alchemists — often did include patients or chemical equipment in the painting, but these were generic images, not portraits of specific individuals.

This long-standing tradition was first challenged by realist artists in France, under a banner of painting the “heroism of modern life.” Familiar American examples of the new approach are two surgeons’ portraits by Thomas Eakins after he returned from study in France (the “Gross Clinic” and the “Agnew Clinic”). A less familiar, but far more influential painting in American popular culture was “Pasteur in His Laboratory” (1885) by Albert Edelfelt, a Finnish artist working in Paris. Out of these developments arose a new iconography, which then moved from expensive oil paintings on canvas into a variety of popular media, first in magazines and newspaper illustrations and, later, into movies, comic books and photo-dominated magazines like LIFE and LOOK.

This paper examines a number of examples, arguing that one particular figurative trope, as introduced by Edelfelt, became the single most common way to visualize the great scientist in popular graphic art. For several decades, it shaped how the general public expected a heroic scientist to look.

Learning Objectives:

1. Observe how the medical profession, the artistic community and the general public have imagined the heroic doctor.
2. Examine significant examples of medical portraits, potentially useful in teaching medical humanities and the history of medicine.
3. Understand a major transformation in medical iconography.

Health Activism and the Mobilization of the Nuclear Legacies of the Marshall Islands

Laura Harkewicz

University of California, San Diego, United States

The Bravo Medical Program (BMP) was developed in response to the exposure of over 200 Marshall Islanders to radioactive fallout from the 1954 Bravo hydrogen bomb test – the largest nuclear device ever tested by the U.S. The BMP had two, often conflicting goals: medical care for the exposed and research into the human biological effects of radiation exposure. By the 1970s, lingering scientific uncertainty about radiation effects, and society's lack of trust in figures of authority, in particular, radiation scientists responsible for public health via federal radiation standards, provided an audience for activists who supported – some say created – Marshallese claims of human experimentation at the hands of BMP doctors. Activists drove publicity, linking events - like the 1979 Three Mile Island accident - to the nuclear histories of the Islands, making them part of the larger American atomic history, a history that often focused on victimization, uncertainty and fear.

In response to publicity, BMP doctors and administrators attempted to incorporate wide-ranging changes into the Program, including expanding the medical care to the Islanders. This paper examines the ways that various activists mobilized the nuclear legacies of the Marshall Islands to focus attention on the agenda they were promoting. Through an emphasis on publicized issues, it explores how events inside and outside the Islands propelled actions and reactions that impacted the Program for years to come.

Four activists (or activist groups) are considered: Giff Johnson, journalist and founding member of the Micronesia Support Committee, former Peace Corps volunteer and medical anthropologist Glen Alcalay, BMP doctor Konrad Kotrady, and Greenpeace. Activism focused on two issues: politics and health. Health issues and political issues often became conflated, making them inseparable. In the hands of activists, scientific uncertainty became error, and scientific error became a political problem.

Learning Objectives:

1. Explain how activists used the nuclear histories of the Marshall Islands to promote political and scientific independence.
2. Explore the relationships between activists, Islanders, and BMP doctors.
3. Discuss the interplay between publicity and Medical Program accommodations.

The History of American In Vitro Fertilization (IVF) – A Case Study in Stratified Reproduction

Lisa Harris

University of Michigan, United States

This study documents the history of American IVF, from the period leading up to the 1981 birth of Elizabeth Carr to the present. I answer the question, “How did IVF move from contested science fiction to medical standard of care in twenty-five years?” I focus on the rise of treatment paradoxes, including: increasing IVF use in older women despite poor success rates, and persistently higher use among white women compared to black women (even controlling for cost/access), despite higher infertility rates in blacks. I conducted oral histories and archival work at the Jones Institute for Reproductive Medicine, where the first US IVF baby was conceived. I analyzed national IVF clinical databases, medical literature, government reports and popular media depictions of infertility/IVF. I argue that IVF came to life in the US not only because of the technical innovations achieved by scientists, but also because of the ways in which reproduction intersected with American social ideologies and political structures. Specifically, IVF was built upon a trio of US cultural phenomena: delayed childbearing, as women entered the professional workforce in increasing numbers in the 1970s and 1980s; capitalism and consumer culture, including the fee-for-service health care system; and the complex political impasse on abortion that arose in response to Roe v. Wade. Anti-abortion activists argued that IVF killed embryos and was equivalent to abortion. Therefore, the federal government banned public funding of IVF research, limiting government’s role in the regulation of IVF to consumer protection. IVF was expensive, and an affluent consumer group emerged as professional, largely white, women delayed childbearing and the media created false panic about infertility in this group. Simultaneously, tubal infertility rates among young black women were rising. Though IVF treated tubal disease well, its costs, and media representations of infertility as a white disease, contributed to racial disparities in IVF treatment. I conclude that IVF’s ties to US social narratives led to cultural and clinical triaging of IVF toward older women who could afford it, but in whom it worked poorly, and away from young, poor women of color who may have most benefited from it.

Learning Objectives:

1. List three key social narratives that impacted the course of IVF development.
2. Describe the ways in which ideas of race and class were woven into popular media depictions of in vitro fertilization.
3. Recognize contemporary paradoxes in patterns of IVF care.

The Beauty of the Gorgon's Head: Red Coral as an Obstetric and Pediatric Drug in Medieval and Early Modern Europe

Nichola Harris

SUNY Ulster, United States

My proposed paper traces the development and dissemination of one aspect of lapidary medicine in medieval and early modern Europe; in particular, the idea that red coral possesses healing properties that can be employed to combat various ailments specifically related to childbirth and the health of infants. "Lapidary Medicine" is a term that I coined in my recent dissertation, "The Idea of Lapidary Medicine: Its Circulation and Practical Applications in Medieval and Early Modern England, 1000-1750" (Rutgers 2009) to describe the therapeutic application of healing "virtues" thought to reside naturally in gemstones. My submission will argue that from its roots in classical mineralogy, the idea that red coral could heal found widespread acceptance and application throughout medieval and early modern Europe. I begin by exploring the origins of the medicinal use of red coral in Western Europe, an idea found within the mineralogical and medicinal treatises of the classical world, including the works of Theophrastus, Dioscorides, and Pliny the Elder. These texts, which represent the authority upon which medieval and early modern scholars and healthcare practitioners later built their systems of belief about the efficacy of lapidary healing, established the medicinal value of red coral, particularly as prophylactic amulets for children. My paper then follows the development and dissemination of this idea in the oral and manuscript cultures of the middle ages, documenting how coral began to be widely employed in gynecological, obstetric and pediatric therapies at a time when a widespread system of medicinal thought and practice based on the healing properties of gemstones emerged in Western Europe. Finally, my submission explores how sixteenth- and seventeenth-century popular advice manuals based on Galenic and Paracelsian theories exposed an even wider audience and readership to the idea that coral was an effective pharmaceutical. In addition to lapidaries and popular advice manuals, my study draws upon a wide variety of archival sources including wills, legal documents, jeweler's manuals, trade manifests, travel narratives and apothecary inventories, combined with material culture evidence in the form of paintings and surviving articles of jewelry to demonstrate a shared medical tradition spanning nearly two millennia in the West.

Learning Objectives:

1. Understand the beliefs and practices related to the use of red coral in healing.
2. Identify specific techniques and treatments related to pre-modern midwifery and childcare.
3. Recognize the origin of many modern-day medical preparations as well as the development of the western pharmaceutical industry.

Eugenics, Medicine and the Political Process in the United States and Great Britain, 1900-1950

Bradley Hart

Cambridge University, United Kingdom

The eugenics movement of the late 19th and early 20th century has long been of interest to historians. While the eugenics practiced by the Nazi government after 1933 has provided the best-known example of eugenics ideology in practice, historians have relatively recently begun to realize that Francis Galton's ideas were widely influential outside Germany as well. While recent histories have expanded our knowledge of eugenics outside the Western World, it remains the case that perhaps the most striking examples of eugenics in practice were the United States, where immigration and state sterilization laws were frequently derived from eugenic principles and concerns, and Great Britain, where eugenicists fought an unsuccessful campaign for sterilization of the mentally unsound in the 1930s. This paper will focus on the reasons why the United States was able to pass laws directly derived from, and appealing to, eugenic sentiments while Britain was not, with special reference to the role of medical practitioners in both eugenics research and the application of its ideas.

To achieve this, I will first examine the general demographics of the eugenics movement in both the U.S. and Britain, with special reference being paid to the doctors who embraced its ideas as a public health measure. The novelty of this argument is found in the fact that this analysis essentially rejects the traditional suppositions of earlier historians such as G.R. Searle who argued that the failure of British eugenics was due to an increasing challenge from the scientific/political left wing. Instead, I will argue that the primary determinant of success for the eugenicists in these national contexts was the degree of support the ideology received from medical practitioners themselves. Finally, I shall evaluate the reasons why medical experts either embraced or rejected eugenics to conclude that it was a British distrust of eugenics advocates themselves, not the underlying science, which led to its lukewarm reception in the medical community. The sources for this argument will be derived from my continuing research into the unpublished and often hitherto unexamined correspondence of eugenicists from around the world along with their scientific and political writings.

Learning Objectives:

1. Summarize the early history of eugenics, its relationship to Darwinian evolution, and its influence on policy making in the United States and Britain.
2. Examine the origins of the eugenic sterilization movement and the reasons for its comparative popularity in elite circles of the interwar years.
3. Consider the relative importance of medical support, or lack thereof, for eugenics in the legislative process of Britain and the United States and the reasons why various medical practitioners tended to support or oppose its ideas.

Chinese Patients and the Public Psychiatric Institution in Nineteenth-Century Pacific Settler Communities

Angela Hawk

University of California, Irvine, United States

In the late nineteenth century, large populations of Chinese migrants settled overseas in the major mining boom regions of California, British Columbia and Victoria, Australia. It is well known that Chinese immigration spurred, in each case, a wave of discriminatory legislation and violence intended to keep Chinese migrants economically, politically and socially isolated from white communities. What is less understood is the impact of such marginalization on one of the most vulnerable segments of the Chinese immigrant population: the so-called "lunatics" committed to publicly-funded psychiatric institutions. Although a combination of Chinese cultural customs and racial hostility from the host society prevented most Chinese communities from seeking recourse in public institutions, hundreds and perhaps thousands of Chinese patients nevertheless passed through the wards of local insane asylums in the latter half of the nineteenth-century.

Transnational and comparative in methodology, my paper examines the lived experience of Chinese psychiatric patients in the major Pacific mining boom regions where their demographic presence was the most significant. Using a wide variety of sources from each region, including institutional reports, government inquiries and personal correspondence, I demonstrate that day-to-day interactions between asylum staff and Chinese patients never conformed to narrow, simplistic dichotomies of oppressor/oppressed or doctor/patient. Chinese patients lived in unequal but contested relationships with a diverse range of asylum employees -- from doctors to attendants and staff -- who held correspondingly diverse positions of power and authority. Conversely, asylum employees acted from a variety of motivations and considerations that resist easy generalization and that cannot be reduced to "oppression." Moreover, while pervasive racial stereotypes and cultural barriers clearly influenced the type and quality of treatment received by Chinese patients, the totality of their experience was informed by numerous additional factors, including their relationships with other patients, the nature of their debility, contact with friends and family outside the institution and region-specific lunacy laws and practices.

I conclude my overview of the experiences of Chinese patients by situating them within the broader context of the trans-Pacific anti-Chinese movement and the role of "the Chinese lunatic" in the rhetoric of calls for immigration regulation and restriction.

Learning Objectives:

1. Demonstrate the utility of trans-Pacific framework for comparing the treatment and experiences of Chinese psychiatric patients.
2. Explain the complex web of factors comprising the "lived experiences" of Chinese psychiatric patients in nineteenth-century settler communities.
3. Discuss the impact of the transnational anti-Chinese movement on psychiatric discourses and treatment.

‘Luding Out: Quaaludes, Consumer Demand and American Pharmaceuticals in the Postwar Era

David Herzberg

University at Buffalo (SUNY), United States

My paper uses the rise and fall of Quaalude (methaqualone, a sedative) to examine the role of consumer demand in modern American pharmaceutical history. Quaalude was introduced in the U.S. in 1965, a successful latecomer to a decade of savvy marketing that had helped create lively popular markets for prescription tranquilizers and sedatives. Although it made medical authorities uncomfortable, consumer demand was a crucial ingredient of Quaalude’s success, as it was for the postwar pharmaceutical boom more generally. By the late 1960s and 1970s, however, Quaalude had become an infamous example of a new and dangerous corruption of consumer demand: drug abuse and/or addiction. Out-of-control consumer demand helped spur new regulation that restricted and eventually criminalized all use of the sedative.

Quaalude was not the only medicine criminalized at this time. The 1960s and 1970s saw many sedatives, stimulants and painkillers fall by the wayside amidst America’s first major wave of drug prohibitions since the early 20th century. Because the perceived problem was nonmedical demand for Quaalude and other drugs, reformers initially sought only to strengthen physicians’ gatekeeper authority. But stamping out medical gray markets like Quaalude “scrip mills”—where unscrupulous physicians met and benefited from consumer demand—ultimately required strict new prescribing limits and even outright bans on many medicines. Just as had happened at the turn of the century, this effort to manage unwanted consumer demand spelled the end for a generation of psychotropic medicines, setting the stage for new drugs (e.g., antidepressants) to be pushed, in part by consumer demand, to “blockbuster” status.

Drawing from popular and medical literature, Congressional hearings, drug advertisements and documents from the criminal prosecution of a Quaalude “scrip mill,” my paper links pharmaceutical history and the history of illicit drugs by re-imagining drug criminalization as one part of a broader effort by medical and regulatory authorities to manage consumer demand. As they sought to balance physicians’ authority, consumer desire and public health, they created and ended drug booms; altered the balance between “therapy” and “abuse” (or between medical need and consumer demand); and affirmed the continuing centrality of sedatives and stimulants in American medical practice.

Learning Objectives:

1. Learn about the second wave of drug criminalization in 1960s/1970s, which has received relatively little attention compared to substantial scholarship on the first wave (centered around 1914 Harrison Anti-Narcotics Act).
2. Learn about the importance of consumer demand in pharmaceutical history, both as a force in itself and as something to be managed by industry, professional medicine and the state.
3. Learn about how the definition and boundaries of medical therapy continued to change over time in response to political struggles to maintain crucial distinctions between licit and illicit drug use.

“Boring But Banned”: Representing Medical Legitimacy in 1930s American Nudist Films

Brian Hoffman

University of California, San Francisco, United States

This paper examines the 1933 nudist film *Elysia* and the way it used the respectability of modern medicine to avoid censorship and to introduce the nudist movement’s therapeutic principles to the public. Scholars have examined the social, legal and moral challenges of representing medical practice in film and on television, but they have largely neglected to analyze the way alternative health movements, like American nudism, used the defining characteristics of health education films to legitimate their natural healing methods while also benefiting from the commercial appeal of the body. An analysis of archival documents from the New York State Archives and the American Nudist Research Library, as well as film reviews, advertisements and newspaper articles, shows that medical films influenced the production of sexually explicit movies and, as a result, caused censors to associate the genre with the commercialization of sex.

In the early 1930s, nudists asserted that the exposure of the body to the sun, light and air corrected the ills of modern society and produced physical, mental and moral benefits. Questioning American assumptions that tied the body to shame, eroticism and immorality, the movement attempted to avoid confrontations with police, censors and hostile community leaders through films that projected the authority of formal medicine and offered to correct the racial weaknesses of depression era society. One of the earliest nudist films screened in the United States, *Elysia*, introduced nudism to audiences through a reporter’s efforts to investigate the headline grabbing nudist phenomenon and his interview with a respectable elderly male physician. Guided by the doctor and the reporter, the film made a case for nudism with an anthropological documentary style collection of film clips exhibiting the “fine physical attributes” of the exotic naked bodies of “dark Africa” and through a voyeuristic tour of a nudist park that showed naked men and women participating in nudist activities designed to strengthen their bodies and improve their health. I argue that *Elysia* used actors, a fabricated plot, a written script and constructed sets, along with documentary footage and historical facts, to blur the line separating entertainment and education.

Learning Objectives:

1. Explore the intersections between the history of alternative medicine, the commercialization of sex and the representation of medical practice in film.
2. Examine the ways in which *Elysia* blurred the line separating entertainment and education.

Getting Under the Skin: The Realities of Race in Caribbean Military Hospitals in the Early Nineteenth Century

Rana Hogarth

Yale University, United States

“The fever has been confined altogether to the whites and never affected the Blacks, whose disease has been entirely dysentery that ran a very different course...”

-William Fergusson, 26th September 1815

In 1815 William Fergusson, Inspector General of the British Army Hospitals, informed General Sir James Leith of the events surrounding the arrival in Barbados of 800 sickened African recruits. Although medical officers and high ranking military officers routinely corresponded about the health of Britain’s troops in the West Indies, Fergusson’s report provides a rare glimpse into the ways in which race became a metric for explaining health in slave-holding societies of the Atlantic world.

In the early 19th century, British army surgeons stationed in the West Indies recorded the differential effect of the tropical climate on black and white troops and consistently attributed blacks’ resistance to certain diseases to innate factors. Nevertheless, theories that differentiated the physiologies of blacks and whites had surprisingly little influence in the everyday practice of medicine amongst the racially integrated populations in the West Indies. Drawing on evidence from British military medical and surgical journals, inspection logbooks and case reports from convalescent hospitals in the British West Indies, I argue that British medical officers viewed blacks and whites as physiologically similar, if symptomatically distinct. Physicians like Fergusson concluded that differences in black and white mortality stemmed from variations in behavior and diet rather than innate physiological traits. Nonetheless, the combined effects of race and external habits allowed British medical officers to construct black bodies as ideal for the tropics to suit the broader colonial project of subjugation and control. Emphasizing the particularities of the black body’s response to disease and diet provided the foundation on which medical generalizations surrounding racial differences flourished. By framing the potential for black bodies to thrive in the tropics through proper medical expertise, management and maintenance, these practitioners were able to elevate and secure their authority in the British West Indies.

Learning Objectives:

1. Illustrate the significance of medicine in constructing racial identity in the Atlantic World.
2. Analyze relationships between black patients and white physicians in slave holding societies.
3. Highlight the interplay between medicine and British colonial aims in the 19th century.

Influenza in an American Military Hospital in France in 1918

*Frederick Holmes, Grace Holmes, Francis Cuppage
University of Kansas Medical Center, United States*

Military medicine in the First World War is generally perceived to reflect practices and results of the nineteenth rather than the twentieth century. This perception is mistaken as the experience of one American military hospital handling the influenza pandemic of 1918 makes clear.

In late summer and autumn of 1918, the influenza pandemic swept through military installations in France. At this time there were over 100 large base hospitals supporting the American Expeditionary Forces in France, many formed in American cities by physicians and surgeons associated with medical schools. These base hospitals were capable of handling very large numbers of admissions quickly and efficiently. The recent availability of the clinical records of US Army Base Hospital #28 from the archives of the National World War I Museum at Liberty Memorial in Kansas City presents the picture of a well-organized, 2,500 bed American military hospital in Limoges, France, staffed by seasoned specialists, trained Red Cross nurses and with state-of-the-art x-ray and laboratory facilities. The bacteriology laboratory was especially sophisticated for this time, having the capacity to culture and identify even anaerobes. Between its opening in July 1918 and its closure in January 1919, there were a grand total of 9,954 patients admitted. Extant records show this hospital was capable of admitting and treating hundreds of medical and surgical patients in a single day, the record being 1,100. Of these admissions 1,295 were for influenza (13%), with a distribution as follows: July – 18; August – 16; September – 280; October – 578; November – 221; and December – 182. There were 24 deaths from influenza, with 22 autopsied (92%). The typed reports of these influenza autopsies show careful gross examinations with bacterial cultures in every case.

This hospital competently handled an unforeseen, serious influenza epidemic as it simultaneously dealt with an expected large volume of battle casualties. Its death rate of less than two percent of admitted influenza patients is impressive. These facts reflect a well-organized hospital providing excellent patient care. Further, the influenza death autopsy rate of 92%, with bacteriology included, is clearly of the twentieth century.

Learning Objectives:

1. Describe the course of the influenza pandemic in France in 1918.
2. Explain the concept of the “base hospital” in US Army medical practice in France in 1918.
3. Discuss the importance of the autopsy in understanding influenza in 1918.

Changing the History of Tobacco Control: The Minnesota Tobacco Trial

Richard Hurt¹, Jon Ebbert¹, Monique Muggli¹, Channing Robertson²

¹Mayo Clinic, Rochester, MN, United States; ²Stanford University, United States

The Minnesota Tobacco Trial of 1998 has been recognized as one of the most important public health events for tobacco control of the second half of the 20th century. The litigation exposed the tobacco industry's long history of deceptive marketing, advertising and research through the release of now over 70 million pages of previously secret internal tobacco industry documents. During the past 10 years, more than 500 publications related to the tobacco documents have been published across diverse disciplines, with over 450 of these publications in peer-reviewed journals. There is general agreement that many of the advances of tobacco control during the past 10 years have their roots in Minnesota. Tobacco control advocates, researchers and litigants working outside the United States have made extensive use of the documents to support their own health policy efforts. The WHO launched a landmark inquiry into the tobacco industry's efforts to undermine global tobacco control and, as stated by the WHO, the documents were instrumental in developing the WHO Framework Convention on Tobacco Control (FCTC), a public health treaty that has now been ratified by over 160 nations. The documents have also paved the way for holding the companies accountable for their role in the global illicit (smuggling) tobacco trade market and provided information that has proved crucial to the development of effective counter strategies against illicit trade. Thus, few single events in the history of public health have had as dramatic an effect on global tobacco control as the public release of the tobacco industry's internal documents in the Minnesota Tobacco Trial. The tobacco industry's own words have reverberated through court rooms, public hearings and media outlets across the globe, and this decade of truth has forever affected health policy worldwide. In the words of one author, "quite simply, when the history of tobacco is written, there is going to be before the Minnesota case and after the Minnesota case."

Learning Objectives:

1. Understand the basis for the Minnesota Tobacco Trial was deception by the tobacco industry surrounding the health risks and the addictive nature of their products.
2. Understand the global impact of the Minnesota Tobacco Trial on tobacco control policy, particularly the WHO Framework Convention on Tobacco Control.
3. Understand the tobacco industry's complicity in smuggling their product.

The 1908 Plague Epidemic in Accra, Gold Coast (Ghana): Local Responses in Global Perspective

Ryan Johnson

University of Strathclyde, United Kingdom

In January 1908 the Gold Coast (Ghana) was struck with an epidemic of plague, first hitting Accra and thereafter spreading to nearby coastal towns. The epidemic claimed over 250 lives — none of which were white European — by the time it was eradicated in August of the same year. The outbreak was part of the third pandemic that killed over 12 million in India and China alone. By 1908 the pandemic was on the decline; however, along with Accra, outbreaks occurred in Trinidad, Venezuela, Peru, Ecuador, Bolivia and Brazil.

In response to the epidemic, the British government sent William J. R. Simpson, specialist in plague and Professor at Kings College, London, and lecturer at the London School of Tropical Medicine. Prior to Accra, Simpson had been instrumental in fighting plague in India; and, in addition to supplying his 'expertise,' Simpson had brought a substantial amount of plague fighting equipment, including: 5,000 doses of Haffkine prophylactic, two disinfecting machines, two tons of sulphur and numerous drums of the disinfectant cyllin. After Simpson's arrival, the outbreak — which had gone pneumonic — was, in a relatively short time, eradicated in Accra and surrounding areas.

This paper investigates the manner in which the outbreak was dealt with in Accra, and argues that it was only through the combined efforts of the colonial state and local rulers that plague was effectively dealt with. More importantly, the measures enacted in Accra were the result of lessons learned through an epidemic that was global in scope for some time; however, these 'lessons' generally emphasised the emergence and role of Western 'experts' and medical commodities, not the important part played by local men and women, demonstrating the uneven material and political power of the colonial state and the construction and fixing of knowledge through Western medical and scientific authority. Nonetheless, placing the plague epidemic in Accra in global perspective demonstrates that the successful eradication of plague was not simply the result of Western medicine and its concomitant medical commodities but of local initiatives and healing traditions from all parts of the world.

Learning Objectives:

1. Chart the rise of global uniformity and interconnectedness during this period through medical policy and disease control.
2. Recognize the relationship to current day programmes of disease control and eradication in the global South.
3. Analyze the relevance to current day concepts of 'development', 'expertise' and processes of globalisation.

Can You Forget How to Stay Alive? Alzheimer's and Dementias as Causes of Death in the US, 1949-2009

Carla Keirns

Stony Brook University, United States

In 2007, the prevalence of Alzheimer's Disease and other dementias in the US population topped 5 million, and by 2005, Alzheimer's Disease was responsible for 71,599 deaths in the United States, making it the 7th leading cause of death. Since 1979, deaths from Alzheimer's Disease in the United States have increased from 0.432 per 100,000 population to 22.877 (age adjusted to the 2000 population), for an 83-fold increase. The rise in prevalence, morbidity and mortality has led many to decry a growing demographic catastrophe. While all of these trends have been attributed to the aging of the population, the US population over 85 has grown 2.3 fold since 1978, while their age-specific risk of having their deaths attributed to Alzheimer's has increased 200-fold.

In 1978 no one died of Alzheimer's Disease. The International Classification of Diseases, which has served as the statistical arbiter of mortality since 1900, did not have a code for Alzheimer's before ICD-9, which was published in 1975. While there were other codes for dementias and chronic degenerative diseases of the brain in prior editions of the ICD, there has been little attempt to understand the classification of deaths due to dementia before 1979 and to construct a more plausible historical time trend.

This paper is based on vital statistics, population trends, medical literature and popular accounts, and seeks to explore changes in mortality from Alzheimer's and dementias since 1949, exploring changes in population health and aging, technologies of diagnosis and practices of death certification. In particular, this paper seeks to contextualize recent statistics, exploring the changing demographics of mortality in the United States, changing conceptions of aging and brain diseases, shifting technologies of diagnosis (especially brain imaging with CT and MRI), changing landscapes of illness (particularly declines in competing risks of mortality from conditions such as coronary disease), and finally to the challenge faced by the physicians who complete the individual death certificates that are aggregated into mortality statistics.

Learning Objectives:

1. Participants will understand the changing prevalence and mortality from dementias.
2. Participants will be able to explain multiple factors that contribute to historical trends in mortality.
3. Participants will be able to apply the patterns found in mortality from Alzheimer's and other dementias to the critical evaluation of other epidemiologic trends.

“The Battle of Chicago”: The American Medical Association, the College of Surgeons, and the Mayo Brothers

Peter J. Kernahan

University of Minnesota, United States

The dominance of the American Medical Association as the representative of “organized medicine” in the twentieth century is often taken for granted. If anything, historians and other writers have tended to focus on the AMA’s conflicts with proprietary medical schools, alternative providers, and, later, advocates for health insurance. Significant challenges from within the medical profession itself have received less attention.

In 1912 Franklin Martin, a Chicago gynecologic surgeon and medical reformer, led the formation of the American College of Surgeons and became its first Director-General. Three other Mid-Western surgeons, Charles and William Mayo of Rochester and George Crile of Cleveland, remained his close allies in this endeavor until Martin’s death in 1935. Intended to improve the practice of surgery by, in Rosemary Stevens’ words, drawing a recognizable distinction between surgeon and non-surgeon, the new college posed a direct challenge to the AMA’s project to be the sole representative of American medicine. Martin’s success as an institutional entrepreneur—particularly in the mobilization of medical manpower during the Great War and the standardization program for hospitals—exacerbated a long-standing personal animosity between Martin and AMA leaders like Arthur Bevan and George Simmons, rooted in turn-of-the-century Chicago medical politics.

Recognizing the need both for professional unity and standards in surgery, the Mayos attempted to find a via media by mediating between the two organizations and their leadership. Drawing from institutional archives and personal papers, this paper will argue that they were only partially successful. Martin and the College, for example, would break decisively with the AMA over the question of health insurance. In other words, the AMA’s dominance in mid-twentieth century American health policy was a highly contingent one. Ultimately, only Martin’s death and the decision not to name a new Director-General of the college would resolve the conflict and allow the AMA to become for a time the face and voice of organized medicine.

Learning Objectives:

1. Identify and explain the sources of conflict between the AMA and the ACS.
2. Identify the ways in which this conflict helped shape health policy and organized medicine.
3. Examine the roles of contingency and personality in early twentieth century medical politics.

Crafting a Science of Illegitimacy: Social Workers and Unmarried Mothers During the Interwar Period

Cara Kinzelman

University of Minnesota, United States

In October 1932 seventeen-year-old Evelyn gave birth to a son she named John. Her case was handled by the county child welfare board. Social workers initiated paternity proceedings against the alleged father, Samuel, who later offered marriage to Evelyn. Their union was initially approved, but when a standard background check revealed that Samuel had a criminal record Evelyn's case worker strongly cautioned her against pursuing the match. In love and hoping to make a home for her new son, Evelyn married Samuel anyway. The social worker petitioned the county court to declare Evelyn feeble-minded by "virtue of her poor judgment" and recommended commitment to the state psychiatric hospital. John was later placed for adoption by the state.

Evelyn's experience is representative of a fundamental shift in policy toward unmarried mothers during the interwar period. At the state reformatory school where Evelyn gave birth, 83 percent of mothers retained custody of their children in 1920. By 1940 this figure was reduced to a scant 20 percent. This decline was due to a sharp increase in the number of mothers deemed unfit for the task of motherhood.

The child welfare movement during the interwar period was united by the belief that illegitimate children had an innate right to the same standards of health and happiness as legitimate children. Using an array of methodologies from the social and medical sciences, social workers studied the perceived handicaps of illegitimate birth in order to systematize their response to unmarried mothers. During the course of the interwar period, the focus of these studies shifted from traditional concerns of infant mortality and legitimation to studies of social adjustment, developmental normalcy and psychological stability. The combined weight of these studies resulted in changed perceptions of the desirability of keeping mother and baby together. By the end of this period, the mere act of becoming pregnant out of wedlock was construed as a pathological condition indicative of future maternal failings. For most social workers, these studies suggested that a happy baby was an adopted baby.

Learning Objectives:

1. Examine the progression of illegitimacy research during the interwar era and the associated evolving definition of child welfare.
2. Explain the appeal of science and scientific studies to social workers in the latter stages of professionalization.
3. Examine the impact of this research on mother and baby.

How Size Matters: Height and the Economy of Desire

Aimee Klask Medeiros
UCSF, United States

In 1977 the CDC (Centers for Disease Control and Prevention) distributed the first national growth chart to pediatricians throughout the United States. Based on data collected by public health officials, the CDC chart consisted of a series of percentile curves that illustrated the distribution of selected body measurements in children. While its cross-sectional approach gave public health officials a sense of national averages allowing them to assess the overall health of the country's children, the chart proved problematic in clinical use when compared to other charts that used longitudinal data. Even so, physicians used the CDC chart as a means to track the growth of their pediatric patients. Any child whose vertical growth was perceived as abnormal was referred to a pediatric endocrinologist where further tests were conducted. In some cases human growth hormone (HGH) was given to patients to reverse pathological growth. As the use of HGH in treating short stature grew into a growth hormone industry, pharmaceutical companies' interest in the framing of normal and pathological height intensified. In 2000, Eli Lilly worked with the CDC to revamp the 1977 growth chart and the result was a new chart, which included a cutoff point for normal height that mirrors the height at which the FDA approved the use of HGH in the treatment for Idiopathic Short Stature (ISS).

My paper aims to show how the emergence of the modern pharmaceutical industry has influenced what is considered normal and pathological, as in the case of the use of growth charts in the diagnosis of children and the treatment of short stature. I also plan to demonstrate how modern medicine, in particular the pharmaceutical industry, establishes physical norms by using the language of productive labor and manufactures desire by establishing and treating deficits.

Learning Objectives:

1. Understand how the rise of industrial capitalism influenced medical notions of normal and pathological.
2. Explore the interesection of the histories of public health, private medicine and the pharmaceutical industry.
3. Describe the efforts behind the 1977 and 2000 Centers for Disease Control (CDC) national growth charts.

“Into the Byways as well as the Highways”: The Advent of the Health Train in the Early Twentieth Century

Jennifer Koslow

Florida State University, United States

Oscar Dowling, the president of the Louisiana State Board of Health, transformed the nature of traveling health exhibits when he retrofitted two railroad cars in 1910. Instead of transporting an exhibit to a limited number of locations (schools and fairs) that could accommodate the displays and visitors, and instead of spending time and money on installation and deinstallation, this new cost efficient method brought the same exhibit to every small town in Louisiana. Dowling argued that it allowed him to “carry the gospel of disease prevention into the byways as well as the highways.” His larger goal remained the same. Exhibits justified civic expenditures on health. Yet, the health train also brought something new to public health education. Just like the circus, an aura of spectacle surrounded its arrival. Powered by electricity, the exhibits provided mass entertainment during the day and at night the train functioned like a drive-in movie theater. Louisiana’s experiment led Michigan and Florida to follow suit. In each location, officials combined mass media with the art of exhibition to articulate an argument about the importance of disease prevention and sanitation to engender financial and moral support across their states for public health. As a result, the health train interconnected reform movements in urban and rural areas. Officials argued that urban and rural health could be improved using this mode of modern transportation to promote modern scientific medicine. Despite their initial heralding, the cost of the trains made them vulnerable in times of political turmoil.

This paper draws on newspapers and printed health reports from Louisiana, Michigan and Florida, and archival records from the Florida State Archives to analyze the creation, contents and cessation of health trains for public health education. It analyzes why these trains were of only limited success in achieving health officials’ goals.

Learning Objectives:

1. Explain the creation and composition of health trains for public health education.
2. Explain the use of health exhibits for garnering support for public health policy in rural areas in the early twentieth century.
3. Discuss the historical use of the visual for public health education.

Public Health Rising: Thomas Parran, Lowell Reed and the Expansion of Public Health Education in the 1940s

Karen Kruse Thomas

Johns Hopkins University, United States

In 1947 the U.S. State Department Information Agency produced the Oscar-nominated documentary film, *Journey Into Medicine* to educate foreign audiences about the American medical and public health systems. Filmed on location at the Johns Hopkins School of Hygiene and Public Health, the film's climactic event is a diphtheria outbreak in Baltimore that convinces the protagonist that he belongs on the front lines of public health rather than in a medical research lab or on a hospital ward treating individual patients. The film was screened at annual professional conferences, such as the American Public Health Association and the International Congress of Pediatrics, and was also translated into a variety of languages for audiences abroad. *Journey Into Medicine* symbolized both the allure of public health at the height of its status during the 1940s and the magnitude of the efforts by academic, professional and government organizations to draw even more health professionals into a field that was deemed essential to the nation's welfare and defense. The deanship of Lowell Reed at the School of Hygiene from 1938 to 1946 paralleled Thomas Parran's tenure as U.S. Surgeon General from 1936 to 1948, and the two men collaborated closely to steer the professional and educational reform efforts of the U.S. Public Health Service, the American Public Health Association, the Association of Schools of Public Health and the Rockefeller Foundation. Reed and Parran lobbied actively and successfully to implement the recommendations of the 1939 Report to the Rockefeller Foundation on the Education of Public Health Personnel, which recommended that schools of public health should 1) facilitate the interdisciplinary training of public health professionals from a variety of backgrounds to work together harmoniously, 2) include opportunities for field study and practical experience, and 3) improve undergraduate teaching of preventive medicine to all medical students. But at Hopkins, the Department of Preventive Medicine and the Eastern Health District Field Training and Research Laboratory, upheld by Parran and Reed as complementary ideals for the future of public health education, became rivals in practice due to competing visions of population health versus patient-oriented clinical medicine.

Learning Objectives:

1. To understand the historical context of the professionalization of public health in the United States.
2. To analyze the relationships between federal agencies, philanthropies, professional organizations and academic medical centers in promoting public health as a career that was critical to national welfare and defense.
3. To understand the benefits and obstacles in collaborative educational programs between medical schools and schools of public health.

Dueling Cyclotrons: The Battle Between Hammersmith and Edinburgh Over the Value of Neutrons in Treating Cancer

Gerald Kutcher

Binghamton University, United States

Shortly following the end of the World War II and the disastrous results of Robert Stone's neutron therapy trial at Lawrence Livermore Laboratory, where patients suffered severe toxicity from the treatments, the Medical Research Council of the UK agreed to provide financial support for the development of a cyclotron at the Hammersmith Hospital in London. The initial purpose of the unit was to support experiments in radiobiology, to produce radionuclides and to investigate the potential use of neutrons in treating cancer. By the late 1960s, after a series of bitter internal battles, the cyclotron was committed primarily to cancer therapy even though the machine had been primarily designed to meet radiobiological needs. Following the early use of neutron therapy in humans, including a series of clinical trials, the clinical leader of the project, Mary Catterall, reported that neutrons provided advantages over conventional x-rays, particularly for cancers of the head and neck region. During this same period, the MRC also built a second unit in Edinburgh, and in a series of papers the Edinburgh group reported that neutrons had little or no advantage over x-rays and in some cases had higher complication rates. A battle ensued between the two groups in the medical literature, as well as the popular press, over the value of neutrons in cancer therapy. Mary Catterall and associates argued, among other things, that the Edinburgh team's poor results reflected their inability to properly deliver neutron therapy, while the Edinburgh group countered that it was neutron therapy itself that was in question. The argument had ramifications beyond the UK since many institutions, particularly in the US, had committed substantial financial and medical resources towards developing neutron therapy, which was, in part, a consequence of the positive results reported by the Hammersmith team. While the final outcome of this controversy has been the demise of neutron therapy, this case study has much to reveal about the character of medical research practices, and particularly the important role played by social and political considerations in the production of medical knowledge.

Learning Objectives:

1. Outline the history of an attempt to introduce a major new technology in post-war cancer therapy.
2. Explain why clinical trials of new therapies are often subject to controversy and are not easily settled.
3. Consider the role of social and political interests in the production of medical knowledge.

Sex, Psychiatry and Panic: Minnesota's Psychopathic Personalities Law of 1939

Molly Ladd-Taylor
York University, Canada

In 2007, twenty U.S. states had sex offender civil commitment laws allowing the indefinite detention of persons shown to have a "mental abnormality." This paper analyzes the development and early operation of one of the nation's earliest sex offender civil commitment laws, Minnesota's Psychopathic Personalities Act of 1939. The first person committed under the law, a 53-year old man accused of taking "indecent liberties" with two young teenage girls, challenged its constitutionality, and in 1940 the U.S. Supreme Court ruled in *Minnesota ex. Rel Pearson v. Probate Court of Ramsey County* that states had the right to place persons who constituted "a dangerous element in the community...under appropriate control."

Minnesota's psychopathic personalities law grew out of the convergence of eugenics and psychiatry, and a moral panic over the apparent rise in sex crimes in the 1930s. After the high-profile murder of an eighteen-year old beauty student in 1937, Minneapolis formed a committee of civic leaders, who were influenced by the work of Bernard and Sheldon Glueck, to see sex crime as a "psychiatric problem which must be solved by government action in the courts." The Minnesota Psychopathic Personalities law extended a compulsory commitment law for persons adjudged "feeble-minded" and "insane" to "sexually irresponsible" persons with normal IQs, and appears to have had eugenic as well as crime-prevention objectives. Despite abstract claims of a cure, at least five hundred men, many of them gay, were institutionalized indefinitely in state mental hospitals or correctional facilities. Some were surgically sterilized. The early history of Minnesota's psychopathic personalities law reveals the medicalization of sexual "abnormality," the popular influence of psychiatry on the law and the fragility of citizenship rights. Given the current reliance on civil commitment for sex offenders, the need to balance between social protection and civil rights is still relevant today.

Learning Objectives:

1. Describe the development and early operation of Minnesota's Psychopathic Personalities Act.
2. Analyze how the psychiatric and legal concept of psychopathy justified both political exclusion and bodily interventions.
3. Assess the popular influence of psychiatry on the law.

Cadavers: The Demographics of the Dissecting Room, 1890-1990

Susan Lawrence

University of Nebraska-Lincoln, United States

The broad outlines of the history of the source of cadavers for American medical schools are well known. First came body snatching and grave robbing, those Frankensteinian moments of illicit plunder. Evidence suggests that the bodies of slaves and of the very poor provided the most dissecting material, while the robbed graves of enough respectable folk provided the most headlines and community outrage. Next came the era of the classic anatomy acts, where the unclaimed bodies of those who died in state institutions were sent to medical schools. When and how these laws were enacted varied state by state, as did the detailed provisions of how the process should work, but such laws generally managed to meet the demand for cadavers without overly offending social sensibilities. Finally came the era, our era, of body donation. Between the late 1950s and late 1970s, at least some Americans became convinced that giving their bodies “to science” after death was a good thing to do, and gross anatomy classes relied less and less on anatomy-act cadavers and more and more on donated ones. Today, most (but not all) cadavers come from donations to specific medical school programs.

The broad outline may be clear, but the details of how the system worked under the anatomy acts are not. Equally fuzzy is how, where, when and why body donation took over, although hypotheses about the prestige of medical science, the concurrent possibilities of organ transplantation, a contemporary backlash against the funeral industry, and the increasing popularity of cremation have all been proposed. My study focuses on what can be gleaned about this transition from an analysis of cadaver records from three Midwestern states, Michigan, Iowa and Missouri. I argue that the shift from a largely institutionalized to a disseminated population as the source of cadavers occurred partly due to larger social trends and partly due to specific actions taken by anatomy departments and/or state anatomical boards. As much as the shift may have been precipitated by national trends, the initial response was, and had to be, local, as anatomists struggled with what state laws allowed, serious resistance from funeral directors, and the challenge of getting publicity for donor programs after decades of trying to avoid publicity for the use of unclaimed bodies.

Learning Objectives:

1. Explain how the anatomy acts in three Midwestern states worked, in practice as well as in principle.
2. Outline the trends that led to a decline in bodies from institutionalized sources.
3. Discuss how anatomists started donor programs at their medical schools.

Paying for Healthy Mothers and Babies: Elizabeth Putnam, Parental Care, and the Middle Class, 1908-1923

Cheryl Lemus

Northern Illinois University, United States

On June 22, 1917, conservative Boston philanthropist Elizabeth Putnam wrote to a Dr. Sherwood, declining his invitation for her to submit an article on whether or not the state should provide prenatal medical care for poor mothers. She wrote, "I have no views on the subject - paupers are not in my line..." Historians have viewed the quest to improve maternal and infant mortality rates during the Progressive period as one that focused on working-class and poor women, citing the federal Children's Bureau as the driving force behind the growing nationwide acceptance of prenatal care. The Bureau's importance cannot be understated, but the attention paid to its maternalist role misses another important component of the prenatal care movement. My research into Putnam's papers, as well as other medical journals and advice books, reveals that medical discussions of prenatal care centered around the maternity needs of the middle-class, not the working-class or poor.

Putnam's work in Boston was a reflection of larger discussions among obstetricians regarding the management of pregnancy. Prenatal care became a cornerstone to lessen medical complications, which in turn expanded obstetric therapeutics and contributed to the growth of the profession. Discussion of prenatal care in obstetric journals focused not on state efforts to lessen maternal and infant mortality, but on private physicians' role in improving pregnancy outcomes for the white middle class. In Boston, Putnam and local obstetricians opened the nation's first prenatal pay clinic, directed at women of "moderate means" rather than the poor. Putnam's efforts showcase a different strain of the prenatal care movement, one that envisioned prenatal care as a private rather than a state obligation.

Learning Objectives:

1. Identify how discussion of prenatal care among obstetricians differed from that of maternalist reformers.
2. Examine how prenatal pay care was put into practice by focusing on Elizabeth Putnam's work in Boston.
3. Summarize the importance of Putnam's efforts to the overall history of prenatal care and medical economics.

Doctors “Discover” Diet: Therapeutic Diets for Pregnant Women, 1880-1940

Deborah Levine

Providence College, United States

Manipulation of diet is one of the oldest therapeutic tools available to physicians; diet, of course, was one of the six non-naturals that was a cornerstone element of Galenic medical theory. Historians have generally traced a rapid decline in dietetic medicine over the course of the long nineteenth century concurrent with the rise of biomedical models for understanding the body and disease. Because of this narrative, successful physicians who researched or employed therapeutic diets for the treatment of disease in the late nineteenth or twentieth centuries are often represented in the historical, medical and popular literatures as “discoverers” or, less often, “rediscoverers” of diet’s role in medicine. This rhetoric of discovery obscures the many important aspects of continuity in scrutinizing diet amongst physicians and other health care providers.

This paper will examine the phenomenon of dietetic “discovery” and the prominence of diet as a therapeutic intervention through the case study of diet advice to pregnant women made by physicians over the course of the mid-nineteenth to mid-twentieth centuries. Using case records, correspondence and materials from professional medical literature, I demonstrate that many physicians were actively engaged with prescribing specific diets for their pregnant patients during this period. These diets were rarely designed only to affect a more pleasant pregnancy; more often physicians were concerned with avoiding or alleviating specific conditions, ensuring better outcomes and improving the health of their patients. In short, diet was a tool in these physicians’ arsenals employed much the same way as they employed pharmaceuticals or even surgical intervention. Examining the prescription of specific therapeutic diets by physicians over the course of this period offers new insights on the role of diet in medicine, the history of obstetrics and the ongoing “discovery” of diet amongst doctors in all specialties.

Learning Objectives:

1. Explain the role of diet as a therapeutic technique in medicine.
2. Identify common features of prescribed diets for pregnant women during this period.
3. Discuss the history of diet in obstetric medicine.

“Patient Trade” in Germany: A Conflict at the Practitioner-Clinician Interface 1909 and 2009

Andreas-Holger Maehle
Durham University, United Kingdom

In August 2009 the “Frankfurter Allgemeine Zeitung” reported about allegations that hospitals paid medical practitioners a “premium” for referrals in order to increase their in-patient numbers and thus the funding they can claim from the health insurances. A wave of media features on this “patient trade” followed. As commentators pointed out, such practices violated the official ethics code for German doctors. In a commercialized medical world, doctors’ traditional “code of honor” no longer held. Patients would have to ask themselves now whether their doctor referred them to the most appropriate hospital or the one that paid the highest bonus. What was not noted, however, was that 100 years earlier the German capital, Berlin, had already been shaken by a similar scandal.

In my paper I will analyze the “patient trade” affair of 1908/09 in which four clinical professors of Berlin University, Ernst von Leyden, Hermann Senator, Karl Anton Ewald and Carl Posner, were accused of paying middlemen for bringing them lucrative Russian patients who visited the capital. In the centre of the allegations was the Russian Institute for Medical Consultations, run by Doctors Semjon Lipliawsky and Siegfried Weissbein, but there were further “institutes” and agents in Berlin, who likewise arranged consultations for their Russian clients. These middlemen were not only paid by the patients, but allegedly also by the consulted clinicians. Fearing a loss of private patients, the medical practitioners of Berlin-Schoeneberg started investigations in autumn 1908, with the help of a key figure in local medical politics, the neurologist Albert Moll. The subsequent scandal included two libel trials, several disciplinary hearings of Berlin University at the instigation of the Ministry of Education and courts of honor proceedings of the Berlin-Brandenburg medical chamber. Drawing upon the rich documentation in the Prussian State Archives, and the medical and lay press, my paper will elucidate the divergent assumptions about ethical medical practice and the practitioner-clinician conflicts that were behind this public scandal and which may fuel present concerns as well.

Learning Objectives:

1. Appreciate historical contexts and precedents in the discussion of medical professional ethics.
2. Learn about practitioner-clinician conflicts in the history of medicine.
3. Learn about the institutional framework of medical discipline in Imperial Germany.

“The Basic Missing Ingredient”: Multiphasic Screening from 1949-1970

Stephen Martin¹, Sara Dubow²

¹University of Massachusetts Medical School, United States; ²Williams College, United States

Contemporary health care debate has placed increasing emphasis on disease prevention as a way to both save costs and improve quality. This is not a new claim, and it has always had its skeptics. What is new is the codification and approval of the American patient’s right to a robust set of technical methods of prevention. This paper will examine the debates about multiphasic screening from 1949-1970 in order to put current debates about prevention in a larger historical context.

The idea for multiphasic screening, “rapid, highly technical diagnostic facilities for large groups of adults,” was articulated as early as 1949. Batteries of exams including blood tests, cervical cytology, a chest x-ray, urinalysis and blood pressure were designed to alleviate the burden of chronic disease. By 1952, a Presidential commission identified as many as 12 tests being done at a cost of “\$5 per person.” Arguments for multiphasic screening cut a deep rift in the medical and policy fields, as they imagined a public health unit conducting the exams on the American public and then referring “testees” to new or established personal physicians. Through the 1950s, embedding this testing in the public health sector was still thought to be the rational approach given the limitations of the physician labor force. But by 1970, involvement of public health in this screening had waned. In anticipation of National Health Insurance, the physician co-founder of Kaiser Permanente instead argued for multiphasic health testing to be “the heart of a new medical-care delivery system.”

The goals of such a health care system – separate sick from well, save costs with prevention and accommodate patient demand for care – remain with us. Over the past forty years, however, study after study began to dismantle not only the cost-saving argument for prevention but have also generally found little impact on health. While screening tests from chest x-rays to urinalyses has been discredited, policymakers, clinicians and the public continue to hold firm to the hope of prevention. Exploring the history and active residue of multiphasic screening shows how prevention became politically useful and persuasive, if medically questionable.

Learning Objectives:

1. Explain the origins of “multiphasic” screening.
2. Identify the tensions between the public and private sector in developing this practice.
3. Consider current manifestations of this historical practice.

‘Baby and I Did the Best We Could’: The Role of the Nurse in the History of Breastfeeding Since WWII

Jessica Martucci

University of Pennsylvania, United States

“The first time my baby was brought in at six A.M., the nurse poured out a rapid fire of instructions and left the room before I could ask her any questions.” – *Ladies’ Home Journal* (1950)

In published infant-feeding narratives, many post-war mothers highlighted the maternity nurse as a critically important figure in their early motherhood experience. It was not uncommon for stories such as these to highlight the nurse as having a unique and lasting impact on a mother’s ‘choice’ to breast- or bottle-feed her baby. Historians have recognized the role of the nurse in the hospital as one which has been subject to the pressures of institutional schedules, physicians and administrators, as well as the needs and demands of their patients. In the case of infant feeding, the maternity nurse had arguably more power in influencing a young mother’s first feeding experience than did her physician. Even after the practice of ‘rooming-in’ became common, for most of the second half of the 20th century the instruction of how to feed one’s baby was left in the hands of the nurse. Despite months of preparation and discussion, mothers often experienced their first feedings in the hospital with only the nurse to guide them. Over the past several decades, historians of medicine have done much to deepen our understanding of changing practices in infant feeding. This paper explores the relationship between the field and practice of nursing and changes in breastfeeding in the decades after WWII. Through an investigation of popular magazine articles, correspondence, interviews and archival records held at the Barbara Bates Center for the History of Nursing, this paper explores the complicated and yet undeniably critical role that nurses have played in influencing the ways that mothers have fed their babies. In doing so, it raises questions about how changes in hospital policy, nursing demographics and education, and personal experience have shaped nurses’ actions in the maternity ward, and adds to our understanding of the factors that have influenced mothers’ decisions to breast- or bottle-feed their infants over the course of the second half of the 20th century.

Learning Objectives:

1. Show the impact of nurses on mothers’ experiences with infant feeding.
2. Show the importance of the history of nursing to discussions of the history of infant feeding.
3. Show how scientific and cultural knowledge and beliefs about infant feeding and motherhood mingled in the practice of the maternity nurse.

Biostatistics and Bioethics in the Management of Disease Risk: The Case of the Diabetes “Control Controversy,” 1936-1970

Aaron Mauck

Harvard University, United States

Throughout the second half of the twentieth century, diabetologists disputed the efficacy of blood sugar control in diabetic patients as a means of minimizing the risk of complications. Historians have argued that this controversy has its roots in small-scale studies on complications performed during the forties and fifties, culminating in 1960 with the introduction of the University Group Diabetes Program (UGDP). This clinical trial was designed to resolve lingering disagreements among experts by replacing the existing body of potentially biased data on control with ostensibly unbiased data collected through new clinical trial methods. The controversy surrounding the UGDP and its ultimate inability to settle the control question has been widely considered exemplary of the politics of mid-century biomedical knowledge production, and of the growing importance of the pharmaceutical marketplace in shaping public perceptions of safety and efficacy.

Despite the unquestionable importance of the UGDP, little attention has been paid to the social and cultural foundations of the control controversy prior to this trial, or to the ways in which divergent assessments of the risk of diabetic complications became connected to competing approaches to disease management. This paper explores these issues in detail, by outlining the history of the control controversy from its origins in the thirties to the cessation of the UGDP in 1970. Throughout this period, physicians trained in rival clinical traditions adopted different approaches to risk and reached different conclusions about the importance of control and the ethical obligation of the physician to promote it. Rather than providing objective techniques of medical evaluation, statistical and clinical practices of risk assessment thus became objects of scrutiny in themselves, inextricably tied to the personal and ideological features of the physicians involved in the control controversy. Disagreements over the ethics of clinical decision-making in diabetes management exposed serious professional fractures concerning the ultimate goals of treatment and the importance of involving patients in the disease planning process—issues that remain at the heart of current debates over the optimum approach to chronic disease management.

Learning Objectives:

1. Describe the social and cultural foundations of risk management practices in medicine in the middle decades of the twentieth century.
2. Relate a comprehensive historical account of the conditions surrounding the shift from small-scale clinical research to large-scale clinical trials in diabetology.
3. Discuss the historical origins of disagreements over the goals of treatment in diabetes care, and the implications of this historical account for the history of similar chronic diseases.

Privacy Law in a Wired World: Implications for Teaching, Research and Publication

Nancy McCall¹, Michael Zimmer², Susan Lawrence³, Christopher Crenner⁴

¹Johns Hopkins Medical Institutions, United States; ²University of Wisconsin Milwaukee, United States; ³University of Nebraska Lincoln, United States;

⁴Kansas University Medical Center, United States

The participants will focus largely on how new media are transforming the ways medical historians teach, conduct research and disseminate their findings. They will discuss passage of the 2009 American Recovery and Reinvestment Act (ARRA) and how significant funding allocated for the digitization and sharing of health information promises new opportunities for research to clinical investigators, as well as a range of other scientists and scholars, including medical historians. There is growing interest in mining data and information from non-current patient records, longitudinal studies and comparative effectiveness research. They will concentrate on how the technical ability to make health information more easily and widely accessible to a broad and diverse body of users involved in patient care and research has given rise to the enactment of new legislation to safeguard the privacy of patients and human research subjects. Primary health privacy regulation and legislation include the Common Rule for Protection of Human Subjects, the HIPAA Privacy Rule and the new 2009 HITECH Act. Overall they include options for research and provide procedures for obtaining waivers of authorization to conduct research. Moreover, the HIPAA Privacy Rule includes provisions for obtaining authorization for release of identifiable health information. However, these provisions are limited and not easily workable. Participants will also discuss the uneven interpretation of HIPAA guidelines for research by covered entities. Many health care delivery facilities have not implemented HIPAA guidelines for obtaining waivers of authorization to conduct research. Entities with a significant research enterprise have taken the lead in implementing HIPAA guidelines for research, but in some instances have made erroneous interpretations of the HIPAA Privacy Rule, thus impeding access and use of records. A major challenge for the medical historian has been to convince the IRBs reviewing their applications for waivers of authorization to conduct research that historical research is, indeed, research. Workshop participants will review options for teaching, research and publication that medical historians have within the current context of health privacy law. They will conclude with constructive steps that medical historians may take to improve access and use of health information in teaching, research and publication.

Learning Objectives:

1. Identify how digital media is driving changes in privacy legislation.
2. Explain how the need to safeguard rights to privacy in a digital environment brings new challenges to the interpretation of intellectual freedom.
3. Current health privacy law allows conduct of research and publication of de-identified findings. It also makes allowances for obtaining authorization from subjects of health information or their legal representatives for release of personal identifiers. If provisions for passage of time for release of identifiable decedent information would be incorporated in health privacy law, teaching and publication of historical research would be greatly eased.

The Other Side of King Louis XIV: Illness as Opportunity in Early Modern France

Lianne McTavish

University of Alberta, Canada

In a portrait of Louis XIV in 1701, painter Hyacinthe Rigaud showed the King extravagantly dressed in ermine-lined coronation robes, his virile legs encased in white tights. With a haughty demeanour and flowing wig, King Louis XIV projected an official image of authority and power, despite his 63 years of age. Yet according to the detailed medical records kept by royal physicians, by 1701 King Louis XIV was decrepit, having suffered from gout, intestinal worms and the loss of both his hair and teeth, among many other afflictions. The radiant image of Louis XIV in Rigaud's portrait might suggest that the King's physical failings were kept secret, disguised beneath artificial ornament.

This was not the case. The illnesses of the aging King were well known, and sometimes even celebrated publicly in visual and written texts. In 1686, art installations, masses and official medals commemorated the King's successful recovery from surgery on his anal fistula—the details of which were widely publicized. Though the King's anal surgery was potentially humiliating, he and the court transformed it into a political opportunity. Louis XIV's recovery was offered as evidence of his divine favour, enabling his subjects to thank God for his survival at various public events. This cure could not simply be announced by the royal physicians. It had to be made visible, in medals cast for the occasion, but also in deliberate displays of the King's body. After his operation, Louis XIV was obliged to ride on horseback and eat copious amounts of food while seated near an open window for all to see.

This paper considers how the King's anal surgery was celebrated as an important historical event in his life, but extends beyond this case to consider how health was visually constructed during the early modern period. Drawing on early modern French medical records, treatises and visual documents, I contend that illnesses were cured only when they were "seen" to be cured. During the early modern period, health could not be achieved without the visual confirmation of an audience that extended well beyond the medical domain.

Learning Objectives:

1. Analyze and understand the visual aspects of health and illness during the early modern period.
2. Consider visual documents not previously analyzed, including the medals commemorating Louis XIV's recovery from anal surgery.
3. Recognize some of the political meanings attached to royal illnesses during the early modern period.

Organizational Impacts on Medical Expertise: Divergent Conceptions of Alcohol and Drug Problems Between 1935 and 1970

Grischa Metlay

Harvard University, United States

Between 1935 and 1970, American experts on alcohol and drug problems championed multidisciplinary research on addiction, but their approaches to the two problems differed dramatically. I suggest that this divergence is best explained by the fact that preeminent alcohol and drug experts operated in different organizational environments. The Center for Alcohol Studies (CAS) at Yale University employed a diverse team of experts and published the country's leading journal for alcohol-related research. According to CAS's experts, and those who published in its journal, alcoholism was a disease, but it also included drinking practices that caused damage to individuals or society. Under the banner of alcoholism, these experts explained individual drinking practices in terms of cultural influences; they measured the economic costs of problem drinking; they used psychoanalytic theories to account for the initial stages of alcohol dependence; and they identified the physiological signs of late-stage alcohol addiction. This encompassing conception of alcoholism translated into community-based solutions, such as a training program for community leaders, out-patient referral centers and industrial alcoholism programs. The Addiction Research Center (ARC), by contrast, was located in a Public Health Service Hospital that rehabilitated convicted drug addicts. ARC employed a group of pharmacologists, clinicians and physiologists who experimented on incarcerated addicts and treated drug addiction as an experimental phenomenon that could be precisely controlled. These experts maintained that drug addicts possessed maladjusted personalities. But their main goal was to develop an operational definition of drug addiction based on quantitatively specifiable abstinence symptoms. This understanding led experts on a search for a non-addictive analgesic to replace morphine, and it legitimated the Public Health Service program for in-patient drug addiction treatment. Approaches to alcohol and drug problems therefore reflected the organizations that nurtured them. CAS was housed in a university environment that encouraged diverse perspectives and community engagement. ARC's location within a cloistered hospital privileged human experimentation, and it bolstered solutions to drug problems that separated addicts from the rest of society. As such, organizational attributes heavily impacted the production of expertise on alcohol and drug problems.

Learning Objectives:

1. Examine broad notions of alcoholism and proposed community-based solutions for alcohol problems that were developed between 1935 and 1970.
2. Explain how experts legitimized in-patient treatment for drug addiction.
3. Summarize the importance of organizational factors in the production of medical knowledge.

Suffrage Hunger Strikes and the British Medical Profession 1909-14

Ian Miller

University College Dublin, Ireland

The medical significance of forcible feeding methods utilised during the suffragist hunger strikes has been less frequently analysed than its political dimensions. This paper explores the interaction between hunger striker and medical professional.

Prison doctors were faced with the dilemma of neglecting the right of the patient to decide whether to receive food. Accordingly, they became central to debates regarding the extent to which non-consensual forcible feeding was life-saving or being utilised as punishment. Yet prison doctors were often brutal and compliant, certifying sane patients, drugging them and inserting stomach tubes anally to degrade the prisoner. Antagonism to forcible feeding was heightened by prominent members of the profession, including Agnes Savill, Charles Mansell Moullin and Victor Horsley, who stressed that it risked serious injuries such as throat laceration, stomach damage, heart problems and septic pneumonia.

This was coupled with claims that suffragists were sending 'abnormal and neurotic' suffragists to jail to increase their chances of obtaining a martyr. These allegedly included people with histories of fits, those who had suffered nervous breakdowns and the 'mentally unstable' and 'eccentric'. One prominent example was May Billinghurst. The emotive image of a cripple being force-fed aroused public sympathy. Similarly, Margaret James was described as a dwarf, an epileptic, and a cripple.' Emily Davison attempted to commit suicide after being force-fed, raising public questions about the extent to which force-feeding might cause insanity. Overall, I aim to explore the complex interactions between political campaigns and medical ethics via autobiographical, political and medical sources.

Learning Objectives:

1. Explore the relationship between political movements and the medical profession.
2. Examine linkage between gender and the profession.
3. Engage with themes related to medical ethics and the hunger strike phenomenon.

Examinations of the Other: German Medical Exams of Turkish ‘Guest Worker’ Applicants

Jennifer Miller

Southern Illinois University Edwardsville, United States

When Germany recruited “guest workers” from Mediterranean countries in the 1950s and 1960s, the first and most complicated step in the application process was the required medical examination. I propose that conceptions of health played a role in the German officials’ designation of the foreign workers as “other” and in applicants’ own negotiations of the process of becoming a “guest worker.” In this paper, I focus on medical exams in Turkey of “guest worker” applicants. Imported German medical doctors conducted the exam in the workers’ home countries, and considering Germany’s dark past with medicalizing differing, the exam was particularly troubling. Significantly, this exam was the first encounter for many future guest workers with Germans. More than just doctor-conducted sterile exams, applicants experienced a deeply personal violation at the hand of a foreign man, speaking in a language that they did not understand. Cultural norms about modesty made having such a private exam in a group setting or undressing in front of a member of the opposite sex an extremely personal if not traumatic experience for many potential workers, especially for women from rural villages. At the same time, I reveal that workers also found their own ways of negotiating the process—sharing urine samples, creating homemade tooth fillings from tin cans or bribing local doctors—supplanting German bureaucracy with local methods. Using internal memos of the German Employment Bureau, original application materials in Turkish, as well as oral history interviews with former guest workers, I contrast not only how German officials planned and conceived of the medical exam with how it was conducted, but also how German officials and Turkish applicants negotiated through this medical exam their future relationships.

Learning Objectives:

1. Learn about the history of public health in migration.
2. Examine transnational ideas of health, bureaucracy and order.
3. Identify the role of health examinations in distinguishing minorities as “different”.

Deamonte's Epidemic: Citizenship, Medical Entitlement and the Politics of Gum Disease in Houston

Richard Mizelle

Florida State University, United States

In 2007 a twelve-year-old young man in Prince George's County, Maryland, named Deamonte Driver died in a hospital next to his mother. The cause of death was an infection from an abscessed tooth that spread to his brain, resulting in several operations and eventually causing Deamonte's untimely death. While the tooth could have been pulled for around \$80, the expenses of surgery would eventually incur thousands of dollars worth of medical bills. The problem was that Deamonte's mother was one of the millions of Americans without health insurance. Deamonte's case reifies the evolving complexities of the un-insured, under-insured, and limitations of Medicaid.

In the midst of national conversations around mandatory healthcare, access to dental coverage continues to be marginalized. Deamonte's death illuminates the invisibility of poor families and children who maintain a convoluted relationship with Medicaid as they continue to have difficulty receiving advanced dental treatment and often struggle with problems of transportation and access. Because so many dentists do not accept Medicaid payment, patients sometimes have to travel great distances to secure a Medicaid dentist. For people without an automobile this means lengthy public transportation rides and perhaps another day off work they cannot afford. My paper provides a historical context of present discussions by focusing on the politics of pain management; questions of race and class in access to dental coverage; transportation and housing; as well as the tortured history of Medicaid in this country.

Recent studies have made clear connections between periodontal disease and an increase in heart attacks and strokes. Gum disease, as it turns out, means more than just bad teeth, but can affect your overall health. Research has also suggested that gum disease can be an early sign of diabetes. The potential long-term health effects of early and reversible gum disease among children make this one of the most important childhood epidemics in America. I focus on Houston, Texas, as having particularly high rates of gum disease among poor black and Hispanic children, as well as low rates of dentists accepting Medicaid patients. Because Houston is such a sprawling city, yet public transportation is not on par with other major metropolises, questions of access, transportation and housing become front and center in this discussion.

Learning Objectives:

1. Explain the circumstances surrounding Deamonte Driver's death.
2. Explore the history of Medicaid and the difficulties poor people have in accessing important and potentially life-saving medical resources.
3. Describe the landscape of gum disease in Houston and the politics of vulnerability for residents without health and dental insurance.

“Brother’s Little Helper”: (Re)establishing the Efficacy of Stimulant Therapy for Hyperkinesis in the 1950s and 1960s

Nathan Moon

Georgia Institute of Technology, United States

At the beginning of the 21st century, an estimated 5 million American children were being prescribed stimulant drugs for the treatment of attention-deficit/hyperactivity disorder (ADHD). While popularly interpreted as a phenomenon of the last two decades, Andrew Lakoff, Elizabeth Bromley, Iina Singh, Matthew Smith and others have elucidated the longer history of ADHD and its diagnostic antecedents, particularly hyperkinetic child syndrome.

Less understood, however, has been how psychostimulants were decisively established as efficacious therapies for hyperkinesis during the 1950s and 1960s. Pediatrician Charles Bradley’s discoveries about the effectiveness of Benzedrine in the late 1930s were virtually ignored for over two decades. Eventually, clinical researchers overcame this therapeutic disjuncture and refocused their attention on the possibilities of Dexedrine, Ritalin and other medications for hyperkinesis. In explaining the rise of stimulant therapy, historians have pointed to competition between psychodynamic and biological orientations in psychiatry, in which the latter prevailed over the former. Alternately, scholar Peter Conrad has contended that the medication of hyperactive children represented the medicalization of socially unacceptable behavior. Yet neither of these interpretations necessarily matches the experiences of the physicians most responsible for the establishment of pediatric stimulant therapy.

My paper follows the clinical and pharmacological research that established pharmacotherapy as the preferred means for treating hyperkinesis, focusing on how clinical researchers and practicing pediatric psychiatrists themselves approached the issue. Many clinicians who embraced stimulant therapies had backgrounds in psychoanalysis or social psychiatry, and they took an atheoretical approach to the issue. With this sense of therapeutic empiricism in mind, I examine the roles of such leading figures as Leon Eisenberg, C. Keith Conners, Gabrielle Weiss and Donald and Rachel Klein in creating a space for pharmacotherapy for children. I conclude that following Maurico Knobel’s initial observations in 1959 and Conners and Eisenberg’s studies in 1963, researchers reproduced these findings, overcame their skepticism and slowly accepted the efficacy of stimulant therapy. Their efforts were aided by more rigorous methodologies and new measures of qualitative assessment. In making its case, my paper draws upon the clinical literature and the archives and oral history collections of the American College of Neuropsychopharmacology.

Learning Objectives:

1. Identify the leading clinical researchers responsible for establishing the efficacy of pediatric stimulant therapy for hyperkinesis and understand their specific contributions.
2. Appreciate the role that assessment tools such as the Wechsler Intelligence Scale for Children, Bender-Gestalt Test and Conners Rating Scale played in the establishment of stimulant therapies.
3. Understand why certain stimulants such as methylphenidate (Ritalin) came to be favored in the treatment of children over other drugs such as dextroamphetamine (Dexedrine).

Female Correspondence, Family Medicine and the Formation of Health Care Networks in Renaissance Italy

Megan Moran

College of Charleston, United States

This paper explores how women acted as the managers of medicine in the household by creating a system of health care networks throughout Renaissance Florence. Traditionally, scholars have argued that men steadily overcame women's role in healthcare by the fifteenth and sixteenth centuries to claim a monopoly over the knowledge and control of female bodies. Depictions of the inconstant nature of women and their importance in producing male heirs subjected them to poking and prodding by men as a way to both understand and control gender relations in Renaissance Italy. However, this paper argues that patrician women from prominent families, such as the Spinelli, Strozzi and Medici, worked to control health and disease in the household. They built and maintained a wide variety of health care networks through exchanging correspondence with both female and male relatives as a way to monitor health, exchange advice and create a forum for discussing approaches to managing illness in their communities. Sending news or advice about sickness and health in letters to family members provided a space for women to discuss the experiences of illness, send medicinal recipes, lend money for doctors and provide other suggestions concerning family health. Through building a system of health care networks, patrician women operated as active participants in the practice of health care and household medicine in Renaissance Florence.

Learning Objectives:

1. Describe the role of women in circulating knowledge about family medicine in the fifteenth and sixteenth centuries.
2. Compare the gendered nature of interactions between family members when discussing health and the body in their correspondence.
3. Recognize the importance of family networks in controlling health and sickness in the communities of Renaissance Florence.

Triage for Terror: The American Red Cross and the 1921 Tulsa Race Riot

Marian Moser Jones

Virginia Commonwealth University, United States

When an angry mob of white Tulsans attacked and killed 300 of their black neighbors on May 31, 1921, most of white Tulsa turned its back. But the American Red Cross proved a significant exception. As 35 square blocks of the black district lay in smoldering ruins, and wounded survivors sought medical aid, local female Red Cross volunteers provided safe transportation for nurses, doctors, supplies and relief workers under the Red Cross banner. ARC Regional headquarters then sent in a trained social worker to supervise the establishment of emergency hospitals for wounded black Tulsans. At these hospitals, local doctors, black and white, aided by public health nurses, performed 163 surgeries during the first week following the riot. The ARC worker soon moved to organize longer-term relief.

This study examines how and why this quasi-governmental organization departed from established policy and practice to become the strongest organized force behind the recovery and rebuilding of black Tulsa in 1921. The study argues that ARC workers, lacking close supervision from more politically cautious national headquarters, applied the organization's ideal of humanitarianism to the circumstances in a similar manner to the way ARC workers had applied this ideal in providing relief for European civilian refugee populations during World War I. The ARC workers in Tulsa also sought to apply the organization's ideal of "neutrality": in addition to organizing medical aid for thousands of black Tulsans, the ARC also provided medical aid to 48 white Tulsans, whose names it kept confidential. But the task of neutral assistance proved more difficult, and neutrality functioned largely as an ideological cloak for maneuvering in the politically and racially polarized climate of Tulsa following the racial violence. Rather than a neutral party, the organization functioned as a strong and steady advocate for the black community in the face of unprecedented and organized racial hostility, marking a rare episode in the history of this American institution.

Learning Objectives:

1. To demonstrate the unique role that the American Red Cross played in the emergency public health and medical response to the white-supremacist violence against African-Americans in the Tulsa Race Riots.
2. To explore the problematic and creative ways that "disaster" has been socially constructed in U.S. history as a means to facilitate provision of medical and public health assistance in politically polarized circumstances, especially those involving racial conflict or oppression.
3. To elucidate how the American Red Cross has historically applied its humanitarian ideals to domestic conflicts and emergencies within the post-World War I U.S.

Using History to Teach Professionalism

Jock Murray¹, Paul Mueller²

¹Dalhousie University, Canada; ²Mayo Clinic, Rochester, MN, United States

In this interactive session Dr. Murray will outline the approach at Dalhousie University to teach the history of the medical profession, and Dr. Mueller will discuss the current professionalism movement and the experience of teaching and assessing professionalism among learners at Mayo Clinic.

Dr. Murray will discuss the stages of medicine from Hippocratic competence to the incorporation of Samaritanism, nobility of service and scientific concepts and the more recent democratization of medicine. The changes from individual skills and craft to guilds, legalization, development of medical associations and modern shared responsibilities with governments and other organizations, and with patients, will be outlined. Finally the evolving concepts of what constitutes a profession will be reviewed.

With this historical introduction, Dr. Mueller will indicate how the current professionalism movement developed, the elements of professionalism and how these are taught and assessed among medical students, residents and fellows, allied health staff and faculty at Mayo Clinic.

With this introduction to the teaching of professionalism to medical students, the audience will be asked for comments on the changing concept of professionalism historically and their experiences and suggestions about teaching and assessing professionalism in today's environment.

Learning Objectives:

1. Describe the stages of development of medicine as a profession.
2. List reasons for the current emphasis on professionalism.
3. Discuss methods of teaching professionalism to medical students.

Safer Than Aspirin: The Campaign for Over-the-Counter Oral Contraceptives

Heather Munro Prescott

Central Connecticut State University, United States

In a 1993 editorial in the American Journal of Public Health, David Grimes of the Department of Obstetrics and Gynecology at the University of California, San Francisco, proposed that in the interest of public health, oral contraceptives should be made available without prescription. Grimes claimed oral contraceptives prevented unwanted pregnancy and improved women's health by protecting against endometrial and ovarian cancer. More importantly, Grimes argued that because analgesic overdose was common, a reasonable argument could be made that oral contraceptives were safer to take than aspirin. That same year, the Henry J. Kaiser Family Foundation sponsored a two-day forum that brought together physicians, lawyers, activists and pharmaceutical company representatives to discuss the advantages and disadvantages of selling birth control pills without prescription.

This paper will use the discussion of over-the-counter oral contraceptives as a case study in the history of the prescription. It will show that this episode represents a complete reversal of the medical profession's position on access to most female-controlled contraceptives. This was especially true of the contraceptive pill, which from the beginning was only available through prescription. By the 1990s, some family planning experts were arguing that women should have access to oral contraceptives over-the-counter, in the same way that men could purchase condoms. Experts who treated adolescents found that prescription status for oral contraceptives, and the requirement that patients have a pelvic examination prior to receiving a prescription, was a significant barrier to contraceptive use by this age group.

However, some feminist health activists, drawing on earlier critiques of the contraceptive pill, challenged the claim that oral contraceptives were safer than aspirin. They also argued that the push for over-the-counter contraceptive pills was driven too much by pharmaceutical companies eager to cultivate brand loyalty for their products. Finally, a number of activists and health providers who worked with lower-income women argued that for this population family planning clinics were often their only entry into the health care system. Because many of these women received their pill supplies for free or at reduced cost, the shift to over-the-counter sales would make oral contraceptives unaffordable for these women.

Learning Objectives:

1. Explain the arguments in favor of making oral contraceptives available without prescription.
2. Discuss why some feminist health activists objected to making oral contraceptives available over-the-counter.
3. Outline how race, class, and age shaped arguments for and against nonprescription access to oral contraceptives.

Subsistence, Sustenance and Productivity: Famine Relief and Nutrition Science in Colonial India

Anindita Nag

University of California, Los Angeles, United States

Famines were a privileged site of colonial concern in nineteenth century India as mass mortality and dislocation undermined the strength and perceived beneficence of colonial rule. The colonial state had presided over famine relief since the 1770s, but by the mid-nineteenth century a panoply of interventions redefined the space of famine as an object of sovereign control through an assemblage of state institutions, scientific knowledge and reigning notions of political economy.

This paper examines the British colonial state's famine relief measures to document the emergence of nutrition science as a paradigm for population management in colonial India. Chronologically focusing on the period from 1860 to 1910, I argue that colonial governmentality framed the discourse of famine relief in minimal and measurable terms through the co-production of an emergent medical regime with a newly emerging political-economic regime. The genealogy of this medico-administrative culture, I hypothesize, can be linked to the Poor Laws of nineteenth-century England and Bentham's pauper management of 1789. Additionally, the assumptions and conceptions of a science of nutrition undergirded the colonial management of relief in contrast to the culturally held conceptions of poverty and nutrition. Such colonial bureaucratic practices were clothed in a discourse of bureaucratic rationality that framed peasant behavior as 'fatalistic' and 'superstitious.'

Through an analysis of representative writings by British administrators, medical doctors and Indian intellectuals, the paper examines the extent to which medical and developmentalist ideas were inscribed into conceptions of famine relief, and the way in which themes established in these formative debates were revived and refashioned in the circumstances of famines through the nineteenth century. The paper brings the insights and sensibilities of the fields of medical humanities, history of science and the theoretical work on the state in social sciences into an analysis of power, technologies, practices and institutions in specific places and circumstances. Notions of production, circulation and translation of medical knowledge are central to this paper, along with ethical dilemmas and gendered calculations in famine relief response.

Learning Objectives:

1. Explain why famine became a site for the consolidation of colonial enterprise and medical expertise in India.
2. Discuss the ways in which disputes between different kinds of 'expert' – medical and political, empirical and theoretical – were played out in debates about famine and relief.
3. Analyze the political exigencies of state and locality in famine relief measures.

“No Medical Indication”: Social and Medical Change and the Decline of Circumcision in Canada, 1971-1984

Elizabeth O’Gorek
York University, Canada

In 1975 the Canadian Pediatric Society (CPS) issued its first “Statement on Circumcision in the Newborn Period,” calling it an “obsolete operation” and pointing out that demand for it was rapidly diminishing. The 1975 statement points to the moment when physicians, not parents, became the first organized opponents of the operation in Canada. While many of the pediatricians on the committee that drafted the statement strongly opposed the routine use of circumcision, the statement was motivated in part by a rivalry between pediatricians and general practitioners for the right to provide primary care to children in a period of declining birthrates. It should also be contextualized in the societal concern for the rights of the patient, whom the general practitioner viewed as the parent, but the pediatrician saw as the child.

Using the CPS statement as a point of departure, I explore the declining use of infant circumcision in Canada in light of the changing Canadian medical and social landscape. In 1975, Canada had completed the transition to state organized medicine, introducing the government as a third party in the patient-physician relationship, which led to public debates about the economic rationality of circumcision. The demographics of practicing physicians had changed greatly since World War II, with increasing numbers of physicians emigrating from nations that viewed circumcision with suspicion. Societal changes affected the use of infant circumcision and the attitudes of physicians towards the operation. Growing suspicion of medical authority led many doctors to carefully monitor their public image. As the infant came to be viewed as an individual with autonomous rights, he came to be seen as the patient, making his parent(s) the health consumer(s). With this change, medical practitioners were divided on their attitudes toward the operation. While parents complained of the paternalism of physicians who refused to perform the operation, general practitioners encouraged doctors to provide it as health service even as pediatricians looking to establish themselves as spokespeople for children increasingly viewed circumcision as an iatrogenic epidemic.

Learning Objectives:

1. Establish that pediatricians, rather than laypeople, were the first organized opponents to routine circumcision in Canada.
2. Point to the professional motivations for opposition, most notably the need of pediatricians to establish a role in the changing Canadian medical landscape.
3. Explore the ways that changing societal views of children, authority and the introduction of state medicine contributed to the debate over circumcision and its eventual decline in use.

“No Logical Grounds for Compensation”: Eli Lilly, La Roche and the Transformation of Plants into Pharmaceuticals (1940-1980)

Abena Osseo-Asare

University of California, Berkeley, United States

In 1965, Eli Lilly received rights to a process to extract chemicals from rosy periwinkle, *Vinca rosea* (now termed *Catharanthus roseus*), originally from Madagascar. In 1968, a team of scientists from France and Madagascar received international patents for the process of converting Indian pennywort (*Centella asiatica*) into hemisuccinates, which they licensed to La Roche. This paper interrogates property rights and profit sharing in drug discovery through the history of the drugs these companies made from periwinkle and pennywort.

Since the late 1980s, activists argued that Lilly ‘owed’ the Malagasy a share of the profits from Oncovin and Velban. Irving Johnson, a scientist at Lilly’s laboratories disagreed: “I do not believe there is a compelling reason to suggest that Madagascar’s role in the discovery of the pharmacological action of a few of the alkaloids from [periwinkle] represents ‘easy picking’ or any logical requirement for compensation.” Concerned with deforestation, legal scholars like James Doyle claimed that Madagascar needed a way to provide incentives to “indigenous peoples” who “can find no place in a legal regime constructed around a vision of individual, transformative, original genius.”

Based on research the author conducted in Madagascar, this paper shows how scientists in the island nation used international patents to secure rights to drug benefits in the 1960s and 1970s. Ironically, around the time periwinkle rose to international attention, chemists in Madagascar worked to develop the wound treatment, Madécassol, from pennywort. When reconsidered together, the story of the two plants indicates the complexities of drug discovery research in Madagascar. While Eli Lilly claims that they owe Madagascar nothing because periwinkle is widely dispersed and used in folk remedies around the world, Malagasy scientists suggest that they owe little to communities in South Asia who also claim pennywort as their own. The paper uses interviews with Malagasy drug researchers, and details gleaned from correspondence between scientists at Eli Lilly, La Roche and competing labs in Madagascar, India and France since the 1940s. To understand the multiple meanings of the plants, it incorporates reminiscences of Malagasy farmers who cultivated periwinkle for export to Eli Lilly and other companies.

Learning Objectives:

1. Develop a framework for understanding the history of drug development within world history using video footage and archival evidence.
2. Explore how scientists in Africa have adopted drug patents as a useful international standard for securing rights to their research.
3. Describe the new avenues for policy in drug research and benefit-sharing.

The Politics and Power Behind Public Health Reforms Among the Jewish Community in Interwar Tunis

Richard Parks

University of Minnesota, United States

At the end of 1930, the French Protectorate offered its solution to a decades-old problem: how to “cleanse” the hara (Jewish quarter) of the medina (old city) of Tunis. Although in terms of hygienic conditions, physical infrastructure and spatial layout the hara was virtually indistinguishable from the rest of the medina as a whole, French government officials, with the active cooperation of French Jewry, pressured the Tunis Municipal Council to provide a lasting solution to the insalubrious and disordered environment that characterized the hara. The solution was as dramatic as it was simple. Between May 1933 and the beginning of World War II, the Tunisian city government expropriated and demolished the vast majority of the hara. Concurrent to the destruction of the hara, the French Protectorate passed sweeping hygienic laws governing the burgeoning Jewish community of La Goulette on the outskirts of Tunis.

My research focuses on the hygienic interventions and spatial reordering of Jews in Tunis by colonial authorities and French Jewry during the early twentieth century and how these interventions and reorganizations formed and reflected ideas about, and controlled access to, French citizenship. The aforementioned cleansing operations not only helped define the parameters of Frenchness, they also marked the path to a new Tunisian Jewish bourgeois, sanitary movement based on the French model. Cleansing and reordering interventions in the hara were the manifestation of a French urban renewal project in which destruction and creation worked hand-in-hand to (re)form citizens who personified the ideals of modern Frenchness within the Oriental confines of the medina.

My research suggests that French authorities and French Jewry embraced cleansing and regeneration schemes for different reasons: whereas elite French Jews were predominantly concerned with Gallicizing their North African coreligionists to ameliorate their health and well-being, French officials viewed Tunisian Jews as potential social mediators between themselves and Tunisian Muslims. As a rule, scholars have noted the role that Jewish communities have traditionally played as economic or merchant middlemen. The interventionist schemes of the Protectorate era – the cleansing of the hara and the hygienic policing of La Goulette – mark unique examples where French officials, with the cooperation of French Jews, used indigenous Jews as social mediators of French normative values in regard to hygiene, sanitation norms and spatial order.

Learning Objectives:

1. Explain how/why the Tunis Jewish community became a model for French hygienic norms.
2. Contrast the legal impediments to sanitary reform as they existed in France and Tunisia.
3. Discuss the powerful discursive elements of hygienic and social reform in a colonial context.

“A Variety of Tastes”: The First Seven Years of “The Lancet”

Brittany Pladek

University of Toronto, Canada

In the decades following the Napoleonic wars, a boom in the English medical periodical press made professionals increasingly reliant on print as a means to promote individual and institutional authority. At the same time, greater lay readership of periodicals meant that new medical journals could reach a wider audience than ever before.

In this dynamic but precarious new market, the most successful journals were those that attracted the most readers. The clear leader in this respect, Thomas Wakley’s 1823 “The Lancet,” innovatively broadened its circulation by appealing to both specialist and lay audiences. Wakley’s journal addressed itself to “the Public” and initially marketed itself as “a complete Chronicle of current Literature.” Its inaugural issues incorporated non-medical content designed to satisfy “a variety of tastes,” including a gossip column, chess problems and theatrical reviews. However, Wakley’s rivals accused him of frivolity, dubbing the “Lancet’s” inclusion of these elements an “unnatural union” and questioning the authority of his paper. Wakley, anxious to uphold his professional credibility, subsequently cancelled these features. But he did not excise non-medical material entirely. Instead, the “Lancet” hybridized, framing its medical content with stylistic elements imported from lay periodicals, including satiric poems, closet dramas, witty epigraphs and cliffhanger serialization.

But what began as a bid to attract wider lay readership soon evolved into a sharp-edged rhetorical tool. Wakley was a radical reformer, and his attacks on the corruption of 19th-century professional medicine found their most forceful expression in formats lifted from the non-medical press. The journal’s earliest scandal, the 1828 Bransby Cooper case, exemplifies the efficacy of this rhetoric. “The Lancet” published surgeon Cooper’s botched lithotomy as a drama. By depicting Cooper as a comically bumbling actor in a tragically fatal operation, Wakley helped expose the negligent hiring standards of London-area hospitals. The success of “The Lancet” itself, as well as Wakley’s campaign for medical reform, thus owed much to Wakley’s literary savvy. His case highlights the complex interdependence of medical authority and popular publication in the nineteenth century.

Learning Objectives:

1. Explore the relationship between the 19th century medical press and the “lay” reading public.
2. Explain how London hospital reform was shaped by print culture.
3. Discuss Thomas Wakley’s affect on the public dissemination of medical discoveries.

Antimicrobials, Controlled Trials, and Limits to the Standardization of Therapeutic Practice in America, 1950-1970

Scott Podolsky

Harvard Medical School, United States

In this paper, I will argue that the histories of antimicrobials, controlled clinical trials and attempts by academics to inculcate a rational, standardized therapeutics among clinicians in the United States were tightly linked during a formative period from 1950-1970. Understanding such a trajectory allows us to better appreciate not only the social history of the controlled clinical trial and the priorities of leaders in infectious disease in the United States during this time, but the consequences of their efforts as well.

Maxwell Finland and Harry Dowling, highly influential infectious disease specialists and clinical pharmacologists respectively based at Boston City Hospital and the University of Illinois, would serve at the epicenter of attempts to inculcate an explicitly rational therapeutics in the context of first the broad-spectrum antibiotics, and still more critically, the since-forgotten influx of “fixed-dose combination” antibiotics. With their attention focused less upon individual clinicians than upon pharmaceutical marketers, Finland, Dowling and their supporters would wield the “controlled clinical trial” against the pharmaceutical “testimonial” as a means of ensuring a rational therapeutics. In so doing, they would play a critical role in the direction the subsequent Kefauver hearings (1959-1962) would take toward mandating proof of drug efficacy via controlled clinical trials.

The Kefauver-Harris Amendments would set the stage for the DESI process, during which hundreds of pre-1962 medications which did not pass this standard would be removed from the market. The process would be epitomized by Supreme Court hearings in 1969 regarding Panalba, Upjohn’s fixed-dose combination antibiotic, asserting the government’s authority to remove the medication from the market despite clinicians’ insistence upon its utility in individual hands.

Yet DESI would represent the limits to the government’s attempts to regulate antibiotics, and during the same time that Panalba was taken off the market, both indiscriminate usage of approved antibiotics and antibiotic resistance would proceed apace, as academic leaders would turn their subsequent attention to educating individual providers, with limited degrees of success.

Learning Objectives:

1. Contribute to an understanding of the evolution of contemporary aspirations to “evidence-based medicine” and therapeutic rationality in American medicine.
2. Contribute to an understanding of the limitations to therapeutic restriction and regulation in America, particularly as applied to the use (and perceived misuse) of antibiotics.
3. Contribute to an understanding of the evolving relationship among clinical investigators, practicing physicians, the pharmaceutical industry, and the federal government in post-World War II America.

Depth Perception: Making the Body Legible in Early American Medical Filmmaking

Miriam Posner

Yale University, United States

We often think of the body as an interconnected system, or as a series of functions. Yet depicting this systematicity in visual terms is not so easy. It certainly wasn't for early medical filmmakers. In the absence of endoscopic technology, how could clinical filmmakers show how organs and veins work together, or how different systems interact? Jacob Sarnoff (1887-1961), a Brooklyn plastic surgeon and prolific filmmaker, offered one solution: an extraordinary system of interventions that made the body's interior available to the camera. In one of Sarnoff's most memorable (not to say gruesome) films, the surgeon has removed the vascular system of a day-old infant, mounted it on a board, and pumped it full of air to demonstrate the operation of the circulatory system. Shocking though this film is, a closer inspection reveals that Sarnoff's object is to reveal the otherwise invisible connectedness and seriality of the body's circulatory system. Based on original research at the National Library of Medicine, Cornell University, the American College of Surgeons and the National Museum of Health and Medicine, this paper uses Sarnoff's films as a starting point for investigating the very active culture of medical filmmaking in the early decades of the twentieth century. I focus on the challenge of depicting the body as a coherent, interconnected system. Other physicians, I note, were also cinematic innovators, inventing a range of devices -- such as a pedal-operated surgical camera -- that allowed them to make the body available and coherent to distant observers.

Learning Objectives:

1. Describe why the body's interconnectedness does not reveal itself without careful, deliberate presentation.
2. Assess why many physicians were also active, curious, innovative filmmakers.
3. Identify Jacob Sarnoff as an important figure in the history of medicine's visual culture.

The Evolution of Orthopedic Surgery in the Treatment of New York City's "Crippled Children" in the Late Nineteenth Century

Lisa Pruitt

Middle Tennessee State University, United States

The scientific revolution in medicine at the end of the nineteenth century has been well-documented in many respects, including the transformation of hospitals and the acceleration of medical and surgical specialization. This paper explores its impact on the treatment of children with orthopedic disabilities. Within the evolving specialty of orthopedic surgery, a philosophical debate erupted in the 1880s over the place of operative surgery in the treatment of congenital defects and impairments caused by diseases such as tuberculosis of the bones and joints. The prevailing therapies for those conditions had long focused on the use of corrective shoes, splints, braces, and various forms of traction. Those therapies were sometimes called "mechanical surgery" or "mechano-therapy." The development of antisepsis in the 1860s (and subsequently asepsis) allowed the refinement of operative technique. A new generation of orthopedic surgeons began to advocate the use of those more sophisticated and more invasive techniques, especially on the "crippled children" of America's urban slums. An exploration of this debate helps to illuminate the ways in which the treatment of children with physical disabilities helped shape modern orthopedic surgery, but it also demonstrates the continuing influence of earlier modes of treatment. While the advocates of operative orthopedic surgery sometimes derided their more "conservative" brethren, they continued to use the techniques and instruments of mechano-therapy and carried out both types of treatment in the specialized institutions created by their opponents. To bring the debate into focus, this paper highlights individuals and institutions in New York City. Representing the advocates of mechano-therapy are James Knight of the Hospital for the Ruptured and Crippled and Charles Fayette Taylor of the New York Orthopedic Hospital. Virgil Pendleton Gibney (also of the Hospital for the Ruptured and Crippled) and Lewis Sayre of Bellevue Hospital represent the advocates of operative surgery. Evidence regarding the range of opinions on this subject appears in late nineteenth-century published medical literature and published reports of institutions such as the Hospital for the Ruptured and Crippled.

Learning Objectives:

1. To understand the evolution of orthopedic surgery in the treatment of children with disabilities in the late nineteenth century U.S.
2. To explore the nuances of arguments for and against "mechano-therapy" and operative surgery.
3. To examine the socio-economic influences on therapies extended to children with disabilities in New York City in the late nineteenth century.

Encapsulating Healthcare into a Pill: The U.S. Pharmaceutical Industry, 1959-1979

Roswell Quinn

University of Illinois at Urbana-Champaign, United States

Like other aspects of American life, the U.S. pharmaceutical industry entered the 1960s during a period of turmoil. In the years following World War II, the industry had provided the American public with what was often lauded as “the march of the wonder drugs.” However, Senate hearings beginning in 1959 painted an unpleasant picture of the industry, and the national news media focused intensely on its proceedings. After spending more than a decade under a golden halo, the industry faced a strident backlash in public opinion and a proposed set of regulations that jeopardized its economic prowess.

The most prominent outcome of this intense period was the passage of the 1962 Amendments to the Food Drug, and Cosmetic Acts. Popularly known as the Kefauver-Harris amendments, this new law responded directly to the Thalidomide tragedy by assigning the United States Food and Drug Administration (FDA) with new regulatory power and restoring consumer confidence. In addition, this tragedy overshadowed and ultimately allowed for the scuttling of earlier Senate proposals attempting to curb anticompetitive practices, resolve abuses of the patent system and limit the private ownership of publicly produced science.

Often overlooked is how these failed proposals ignited a robust campaign by the pharmaceutical industry to indoctrinate the nation with its cultural and political priorities. The new amendments and the preceding Senate hearings set off a series of discussions and debates about the place of the pharmaceutical industry in American society and its access to and usage of publically produced scientific resources. Through advertising campaigns, public speeches, lobbying and other efforts, the leaders of the pharmaceutical industry sought to place privately-produced technology at the center of the nation’s medical philosophy and retain commercial access to a mushrooming public sector dedicated to the life sciences. This paper documents how in response to threats against its growing cultural and economic authority the U.S. pharmaceutical industry waged a broad political and cultural campaign that eventually realigned public policies and social perspectives to meet the needs of private business interests by assigning new symbolic and material value to the life sciences and pharmaceutical research and development.

Learning Objectives:

1. Summarize the state of the life sciences in mid-century America, their changing relationship to the pharmaceutical industry, and the implications of proposed legislation on such relationships.
2. Examine the cultural campaigns undertaken by the U.S. pharmaceutical industry in response to Senate activities critical to its operations during the 1960s and 1970s.
3. Discuss the policy maneuvers used by the U.S. pharmaceutical industry to retain access to publically produced science during the 1960s and 1970s.

A Mother's Touch? How Sensory Deprivation Reframed Maternal Deprivation in North American Psychiatry, 1950-1970

Mical Raz

Van Leer Jerusalem Institute, Israel, and Tel Aviv Sourasky Medical Center, Tel Aviv, Israel

In the 1950s, the term “deprivation” entered American psychiatric discourse. The concept of dietary deficiency, and particularly the lack in nutritional components, was popularized at the beginning of the twentieth century, and transferred into psychology, as evidenced by the nutritional metaphors used by psychiatrists John Bowlby and David M. Levy, independently writing on the subject of inadequate mothering. In 1951, Bowlby coined the term “maternal deprivation” to describe a plethora of conditions in which maternal care was seen to be lacking, and which he found detrimental to infant development. Concurrently, early experiments in sensory deprivation were carried out at McGill University and were soon conducted in laboratories throughout North America, becoming a leading field of scientific investigation.

While seemingly two disconnected concepts, sensory deprivation theory led to a reevaluation of the concept of maternal deprivation, as proponents claimed that the infant was being deprived of essential sensory stimulus, rather than of mother love. Attachment theorists Mary Ainsworth and John Bowlby corresponded in the late 1950s regarding the “distressing attempts” of theorists to “depersonalize relationships”, “divorc[ing] sensory stimulation from the child’s relationship with his mother.” Proponents of sensory deprivation theory suggested the establishment of child care centers, to afford disadvantaged children with adequate sensory and intellectual stimuli, ultimately providing the model for remedial education programs such as Head Start. Meanwhile maternal deprivation theorists expressed concerns at the separation of the infant from their mother.

This paper examines the deprivation discourse in the 1950s-1960s and evaluates how the emergence of sensory deprivation led to the reframing of the works of maternal deprivation and attachment theorists. It argues that there was an inherent tension between these two seemingly disparate theories, as the sensory deprivation theory diminished the perceived role of the mother, replacing it with concrete sensory components that could be provided through organized government intervention. Both theories took part in the renewed nature-nurture debate as to the determinants of intelligence, arguing for the role of environmental factors in cognitive and emotional development. This paper examines how psychological theories (maternal deprivation) and laboratory findings (sensory deprivation phenomena) affected public policy and public health interventions.

Learning Objectives:

1. Describe the concepts of sensory and maternal deprivation.
2. Explain how these theories affected governmental policy in the development of Head Start.
3. Discuss the relations between sensory and maternal deprivation.

Exhibiting Children for Health

Leslie J. Reagan

University of Illinois, United States

In the twenty-first century, periodic “well-baby” appointments with doctors and a series of infant vaccinations are routine for most Americans. Yet a century ago, doctors were generally only called in during emergencies or for serious illnesses; mandatory vaccination engendered riots and legal challenges. Physical and visual examination of healthy children seemed, to many, to be unnecessary and strange. Making medical examination of the healthy body and vaccination commonplace were cultural achievements that neither scientific efficacy nor law can completely explain. This fundamental change in health behavior was won, in part, through popular entertainment. Medical examination of children in public at local and world fairs helped create cultural comfort with new health habits. These health exhibits used the entertainment value of strangeness to teach new practices and, ultimately, to make them normal.

The exhibition of “exotic” foreigners and native “primitives” at the 1893 World’s Columbian Exposition in Chicago, the University of California and the New York Natural History Museum all contributed, anthropologists and historians have shown, to turn-of-the-century academic and popular knowledge about race and nation. Similarly, “freak” shows, disabilities scholars argue, created both disabled and normative bodies. The display of healthy white bodies has received little attention. “Child Welfare Exhibits,” such as the one sponsored by the Children’s Bureau at the 1915 Panama Pacific Exhibition in San Francisco included “live” exhibits of children. The children in these exhibits may have been healthy, normal and white, but the medical practices on display were novel, strange and exotic to fair goers—and to many physicians. Through participation in the theatrical genre of exhibiting “primitive” and foreign people, public health attracted attention and aimed to naturalize strange medical habits.

A handful of scholars have investigated the changing practices of medical examination. Early modern European scholars have shown how medical diagnosis relied upon listening to the patient’s story. Others have analyzed the development of the stethoscope and other technologies. Less is known about the cultural processes that made medical examination of the healthy body the norm. This paper is based on research in Children’s Bureau records, reports, publicity materials and films.

Learning Objectives:

1. To investigate how popular entertainment helped produce modern health practices.
2. To discuss medical examination as a cultural ritual that has to be learned by all involved: child, parent, and physicians/nurses.
3. To consider the meanings of exhibiting people—and children in particular—for delineating norms, social differences, and power.

Public Health as Foreign Policy: Smallpox Eradication During the Cold War

Bob Reinhardt

University of California, Davis, United States

In 1980, the World Health Assembly declared victory over smallpox, certifying the completed mission of the World Health Organization's Smallpox Eradication Program (SEP). Observers then and since have marveled at the tenacity and self-sacrifice of the doctors, health professionals and volunteers behind the SEP. Rarely, though, is there an appreciation of the Cold War context in which the campaign took place: two decades encompassing the Berlin Wall, the Cuban Missile Crisis, Vietnam and détente.

This paper recasts smallpox eradication as a Cold War story, focusing on the foreign policy objectives of the United States. Dr. Viktor Zhdanov, Soviet deputy minister of health, first proposed a smallpox eradication campaign in 1958, but the WHO did not fully support the program until 1965, when U.S. President Lyndon B. Johnson committed his support--and US aid money. The paper argues that US political leaders saw smallpox eradication as a front in the Cold War: first as a threat to the US-led malaria eradication program, underway at the time of Zhdanov's proposal, and then as an opportunity to compete with the Soviet Union for the hearts, minds and bodies of Third World peoples. When Johnson and his State Department decided to support the SEP, they recognized its humanitarian value, but they also understood the utility of the program: a way of asserting American moral, medical and cultural authority without incurring the political, economic and military costs of direct Cold War confrontation.

The SEP reflected the state of superpower relationships during the Cold War, but this paper also examines how the program shaped those relationships. Smallpox eradication required and produced cooperation between the US and USSR, with Soviet and American bureaucrats and doctors working side-by-side from Switzerland to Kenya. Though these relationships did not determine US foreign policy, they suggested the practicality and productivity of co-existence, which increasingly came to characterize the US's stance toward the USSR in the 1970s.

Learning Objectives:

1. Demonstrate importance of public health in U.S. foreign policy decisions, particularly during the Johnson administration.
2. Complicate the dichotomy of competition vs. cooperation during the Cold War.
3. Examine political factors behind international public health institutions and initiatives.

‘Normal Exposure’ and Inoculation Syphilis: PHS ‘Tuskegee’ Doctors in Guatemala, 1946-48 and at Sing Sing Prison, Ossining, New York, 1953-54

Susan Reverby
Wellesley College, United States

Much of the folklore surrounding the “Tuskegee” Syphilis Study assumes that United States Public Health Service (PHS) doctors actually infected African American men in Macon County, Alabama, with syphilis. They did not. There are, however, two major inoculation studies that do involve the PHS physicians who lead the study in Alabama. In 1946-48, Dr. John C. Cutler, a PHS physician who would go on to direct the Syphilis Study in the 1960s and continue to defend it in the 1990s, ran a syphilis inoculation project in Guatemala. It was the early days of penicillin and the PHS was deeply concerned with whether penicillin could be used to prevent, not just cure, early syphilis infection and how the penicillin worked.

Cutler and the other physicians chose men in the Guatemala City Prison, then in an army barracks, and men and women in a local insane asylum. They used prostitutes with the disease to pass it to the prisoners (since sexual visits were allowed), and then did direct inoculations made from the Nichols’ strain of *T. pallidum* in rabbits into the men’s penises, on their forearms and into the women’s vaginas when the “normal exposure” produced little disease. Cutler’s wife served as the project photographer, and hundreds of photographs were taken to show the inoculation and the syphilitic chancres that developed. Unlike in Alabama, the subjects were then given penicillin after they contracted the illness.

Cutler would then go on to work with other PHS physicians, including Sidney Olansky who also ran the Syphilis Study in Alabama, to use inoculation on “human volunteers” at the infamous Sing Sing Prison in Ossining, New York, in 1953-56. Both studies were focused on the immunological responses to the disease and to providing up to date science in the face of penicillin’s wide spread usage.

This paper, using reports, correspondence and photographs from the John C. Cutler papers at the University of Pittsburgh Archives, explores what was done in both studies, why this work was deemed necessary and the ethical considerations that physicians weighed. It provides a contrast with the ethics and actions in the Syphilis Study in Alabama and provides insight into what happens when a disease is seemingly cured when its scientific questions remain unanswered and the ethics this raises.

Learning Objectives:

1. Recall the history of two inoculation syphilis studies run by the PHS in the 20th century.
2. Examine why experiments often linger after a disease is presumed to be “cured”.
3. Contrast the ethics in the “Tuskegee” Syphilis Study with these two projects.

Priests, Dissection and Female Anatomy in Colonial Philippines

Raquel A. G. Reyes

*Netherlands Institute for Advanced Study in the Humanities and Social Sciences,
Netherlands, Department of History, School of Oriental and African Studies,
University of London, United Kingdom*

If one were to give credence to early twentieth century American reports on the state of medical and scientific research in the Philippines, it would appear that no human female cadaver had ever been dissected in the three hundred years the colony had remained under the Spanish monastic regime. It is true that human dissection, at least for the purposes of academic medical research, remained a rare event even in late 19th-century Philippines. But various dissection practices had long been part of indigenous culture in relation to embalming and preparation for burial. Opening the corpses of women, especially those who had died in child-birth, by priests was also far from uncommon. In medicine, as in every sphere of life in Spanish Philippines, members of the monastic orders wielded great influence and, for theological reasons, the processes of human reproduction, particularly pregnancy and birth, were of special interest to Catholic missionary-priests who held strongly to the belief that it was their divinely ordained duty to administer pastoral care to the unborn. This paper explores a range of colonial sources on human dissection and anatomical knowledge of the human body in Spanish Philippines. The practice of post-mortem fetal excision by priests, the removal of an unborn fetus from the body of the dead mother, provides a unique insight into Spanish Catholic ideas concerning native female anatomy, and an especially striking example of the ways in which colonial attitudes toward human corpses clashed with local funerary practices.

Learning Objectives:

1. History of human dissection in Spanish Philippines.
2. Indigenous and colonial anatomical ideas of the female body.
3. Colonial religious and medical discourse on pregnancy and childbirth.

E. A. Codman, X-ray Anatomy, Hospital Reform and the Goal of Transparency in Turn of the Century Medicine, 1896-1917

Thomas Reznick

Yale University, United States

In 1898, just three years after Wilhelm Röntgen described and applied the phenomena of x-rays to medicine, Boston surgeon E. A. Codman proclaimed this new visual technology would revolutionize not only diagnosis, but also anatomical teaching. Codman is primarily remembered as a crusader for hospital reform, but by the first decade of the 20th century he had established himself as an American authority on the x-ray. Röntgenology, the science of studying these new rays, inspired a new generation of physician and physicist experimenters to examine living anatomy transparently. Codman enthusiastically promoted this new approach, at one point commenting to the Dean of Harvard Medical School that he should “teach students less surgery and more Röntgenography [Radiography].” The x-ray offered a means by which living anatomy could be transparently observed and met practitioners’ aspirations for an accurate, scientific vision free from bias or human failings.

X-rays created cultural momentum within both scientific circles and popular culture. Codman transposed the excitement over scientific, visual diagnosis to his reform movements. He frequently asserted that medicine was inefficient and, worse, unscientific. As a solution, he urged increased oversight and transparency, noting that his reforms meant “honesty surgery and medicine, instead of bluff described by reputation.” From 1911 until his death in 1940, Codman advocated for following up and collecting statistics on quality of care, morbidity and other metrics from both patients and physicians. This data would form the basis for administrative and clinical decisions - an “End Results System.” The ideal behind his End Results campaign relied upon a unique vernacular of visibility that carried the aspiration of objectivity associated with Röntgenology to the reformist zeal for scientifically managed medicine.

Relying upon archival correspondence, both published and unpublished sources, and Codman’s atlas of normal skeletal radiographs, I will argue that the concepts of “objectivity,” “accountability” and “visibility” central to Codman’s hospital reform campaigns drew heavily from his early work with x-rays and the potent visual articulation of scientific medicine that it offered. Codman’s experience suggests that the changing imperatives behind the value of objectivity in visual sciences resonated at the institutional level.

Learning Objectives:

1. Explore the Visual History of X-Ray Photography.
2. Outline the ideals of Codman’s End Results System, and other medical reform projects.
3. Identify the connections between the aspirations for transparent objectivity and the ideals of medical reform.

Cancer in Comics: No Laughing Matter

Michael Rhode¹, James T. H. Connor²

¹National Museum of Health & Medicine, United States; ²Memorial University of Newfoundland, Canada

During the 20th century cancer awareness became increasingly public and “branded” by colored ribbons and emblems and also through visual popular media such as movies (e.g. *An Act of Murder*, 1948; *Love Story*, 1970; *The Doctor*, 1991, *Wit*, 2001; *My Life Without Me*, 2003). The genre of popular culture recently most prolific in featuring cancer, however, is the comic book, along with its more reflective and complex relation, the graphic novel. Initially understood as “alternative” or “underground” reading material and simultaneously dismissed as “kid’s stuff” and juvenile, from the 1960s on this genre has attracted serious attention by scholars owing to the themes addressed and manner in which they are dealt with. Scientific discoveries, “great medical men” and technology have also been a staple of this genre (Hansen, *Bull. Hist. Med.* 78 [2004]). As the genre of comic books and graphic novels traditionally dealt with issues of victimization, empowerment, justice, injustice and retribution, it is not surprising that it has become a recognized medium through which to deal with “tough” social and moral issues of continuing concern.

Our discussion will illustrate how, using recent works (such as Jim Starlin’s *The Death of Captain Marvel*, 1984; Harvey Pekar’s *Our Cancer Year*, 1994; Marisa Acocella’s *Cancer Vixen*, 2006; Brian Fies’ *Mom’s Cancer*, 2006; Tom Batiuk’s *Lisa’s Story: The Other Shoe*, 2008), medicine and bioscience are portrayed through an analysis of their narrative structure, graphic design, characters and social criticisms, while identifying any instructive (self help) “take home” messages. This discussion will also compare these graphic cancer writings with other textual “pathographies,” invalidism/sickness and identity narratives (e.g. Brody, *Stories of Sickness*, 2003; Hawkins, *Reconstructing Illness: Studies in Pathography*, 1999). Mention will also be made of how such material has benefits in the medical classroom. We will also augment recent cancer historiography, for as insightful as the works are they do not address this powerful and increasingly widespread form of popular culture (e.g. Lerner, *The Breast Cancer Wars: Hope, Fear, and the Pursuit of a Cure in Twentieth-century America* [2001]; Aronowitz, *Unnatural History: Breast Cancer and American Society* [2007]; and the special issue of the *Bull. Hist. Med.* 81[2007]).

Learning Objectives:

1. Explore and explain a new primary source for ‘pathographies’.
2. Augment recent cancer historiography.
3. Examine how such material has benefits in the medical classroom.

The Country That DDT Made: USAID, the Cold War, and Anti-Malaria Programs in Nepal

Thomas Robertson

Worcester Polytechnic Institute, United States

For centuries, malaria plagued all lands up to 4,000 feet in Nepal, including mountain valleys and the fertile low-lying land along the Indian border. All this changed during the 1960s with the use of DDT. Starting in 1959, the U.S. combined with the WHO and the Nepali government in a mostly successful attempt to clear the nation of the deadly scourge. Although the program fell short of eradication, the country was transformed.

Based on archival documents and oral histories from the U.S. and Nepal, this paper will examine the overlap of public health programs with geopolitical, national and local agendas. It hopes to do what Frank Snowden and Marcos Cueto have done for Italy and Mexico, respectively—show the complicated interplay of social and technical factors that play out in the incidence and elimination of malaria.

On the global level, Nepal's malaria program was a Cold War tool, a way for the U.S. to counter revolutionary pressures in agrarian Asia, especially on China's border. "Through health," one US official pointed out in the 1950s, "we can defeat the evil threat of communism." But while the Cold War brought Nepal U.S. dollars, it also led to an emphasis on chemicals and immediate effects instead of careful planning, public awareness campaigns and less invasive preventative measures.

On the national level, the malaria programs coincided with the rule of King Mahendra, who seized absolute power in 1960s. Only he, he claimed, could bring development. Whether by design or not, the malaria program supported his interests.

On the local level, the malaria project introduced new ideas related to health, disease and medicine—as well as new social arrangements. Development, as medical anthropologist Stacy Pigg has pointed out, does "more than make drugs like penicillin available...it transforms a people's vision of who they are." In many villages in Nepal, the malaria eradication program was the first display of modern health methods. The program also brought dramatic, and often tragic, changes for the Tharu, the indigenous inhabitants of the malarial low-lands.

Learning Objectives:

1. Examine the overlap of US Cold War interests with the anti-malaria program in Nepal in the 1950s and 1960s.
2. Examine how public health and the rise of the modern Nepali state coincided.
3. Explore how the new health practices and ideas of science introduced by the malaria program changed cultural and social understandings of self and community on the local level, especially the consequences for an indigenous group with genetic and acquired immunities.

Curing the Character: Hieronymo Manfredi, Physiognomy and Humoral Medicine in Fifteenth-century Bologna

Kira Robison

University of Minnesota, United States

This paper traces the way Hieronymo Manfredi used humoral medicine and physiognomy to present negative personality disorders like wickedness or insanity as physical manifestations of inner humoral imbalances, which if balanced, could be cured. This claim comes from an analysis of Book II of Manfredi's medical treatise, "Liber de homine," published in 1474. This book—also known as "Il Perche" ("Why?"), because each subject begins with the phrase "il perche—was written in Italian and became very popular, was published at least 18 times between 1474 and 1678 and was even translated into Castellan in 1581. Book II is a treatment of physiognomy, or the study of personality through analysis of the physical body, most often the face. Manfredi presents his physiognomy in the form of questions—for example, "Why does a small head mean a wicked person, undeserving of praise?" He then follows the question with an answer, which is couched in terms of bodily humors. Thus, Manfredi presents a philosophy of the human body in traditional medical terms.

While obviously balancing the humors in a person would not make one's head grow in size, what Manfredi was doing was attempting to give physiognomy a place in medicine beyond a diagnostic tool. By describing personality disorders as caused by a humoral imbalance, Manfredi placed them in a context familiar to doctors and central to the core aim of medicine: the healing of a sick patient. By including physiognomy in his work, Manfredi also reflected the particular makeup of the medical school at Bologna, where the teaching of medicine was combined with philosophy in the College of Arts and Medicine. This combination occurred because medicine was defined at Bologna by the framework of the world as put forth by Aristotle, so medicine (for all its practical uses) was seen as just another philosophy. Thus, the very context of the medical faculty at Bologna in which Manfredi was teaching generated an environment in which he was able to combine the philosophy of physiognomy with the curative practice of humoral medicine.

Learning Objectives:

1. To contextualize late medieval medical texts.
2. To illuminate instances of originality in sources that are often considered derivative.
3. To illustrate the content of popular vernacular medical texts in the Middle Ages.

From One Woman to Another: Ovarian Transplantation in the late Nineteenth and Early Twentieth Centuries

Sarah Rodriguez

Northwestern University, United States

In 2007, the New England Journal of Medicine published a letter to the editor concerning ovarian transplantation between seven pairs of monozygotic twins. The authors reported that all seven women resumed their menses within 93 days following the transplants, and five had become pregnant. The letter ended by noting the potential benefits of ovarian transplantation to cancer patients with compromised fertility from treatment. This letter was an update from two of the authors of a 2005 article published in the same journal concerning their first attempt at ovarian transplantation between one set of monozygotic twins. In this article, the authors noted that numerous studies “confirmed that ovarian grafts can restore function and fertility in sterilized animals,” and referred to an article published in 2000 as the “first reported clinical cases of ovarian autografting.”

Neither the letter nor the preceding article acknowledged that clinical cases of ovarian transplantation were first reported more than 100 years earlier. In 1895, Robert Morris first published his results in transplanting ovaries; in 1906, he published the results of his grafting ovarian tissue from one woman into another, with the recipient becoming pregnant and delivering a healthy child. Though he was the first to publish his results, Morris was far from the only physician transplanting ovarian tissue during this time in the United States. And, like the authors of the New England Journal of Medicine letter, these doctors also noted the use of the procedure for assisting women who lost their fertility due to disease become pregnant.

In this paper, I will explore the early history of ovarian transplantation in the United States by contextualizing the use of the procedure within the era’s growth of gynecology as a medical specialty, societal expectations of medical technology and cultural pressures of pregnancy. In so doing, I will seek to answer these sorts of questions: why and when did physicians – and recipient women - feel the procedure was necessary, why and when did women donate their ovarian tissue, who were the women donors and who were the women recipients.

Learning Objectives:

1. Describe the early history of ovarian transplant and indications for when it was performed.
2. Describe the reasons why physicians performed and women sought out/underwent ovarian transplantation.
3. Participants will be able to identify why women agreed to be ovarian tissue donors.

The Peculiar Prosperity of Yugoslav Psychoanalysis 1945-1991

Mat Savelli

Oxford University (St. Antony's College), United Kingdom

The Communist takeovers that redefined the political landscape of Eastern Europe reverberated through the psychiatric sphere. One notable development that clearly distinguished “Communist Psychiatry” from mainstream Western psychiatry was the impoverished position of psychoanalysis under communism. Freud and his successors were ignored, muted and at times vilified in most of the Communist world where the influential role of psychoanalysis in American psychiatry caused some authorities to depict it as “imperialist” mental health practice. Yugoslavia, however, remained an outpost for the development of psychoanalytic theory in Eastern Europe. This paper explores the historical development of psychoanalysis in Communist Yugoslavia and attempts to account for the movement’s survival despite unfavourable odds. Moreover, it seeks to analyze the importance of psychoanalysis for Yugoslav psychiatry and argues that the movement played a vital role in shaping dominant understandings of mental health.

Yugoslav psychoanalysis probably should not have survived, let alone proved highly influential. There were barely half a dozen psychoanalysts still living at the conclusion of WWII and Stalinization (although later reversed) could have been a virtual death knell for the practice (as occurred elsewhere in Eastern Europe). Even after Yugoslavia’s break with the Soviet bloc, many authorities remained firmly opposed to psychoanalysis.

This paper attempts to explain why psychoanalysis managed to both survive and prosper as both a mental health theory and therapeutic method. Firstly, it examines the roles played by the “founding fathers” of psychiatry – Hugo Klajn, Nikola Sugar, and Stjepan Betlheim – and posits that their status as enemies of the fascist occupiers (they were Jews) and their participation with Tito’s partisans helped create the foundations for the continued existence of movement. Secondly, it describes the personal efforts and struggles of key participants (i.e. Vojin Matic and his circle of students in Belgrade) in preserving the psychoanalytic tradition through non-state and private means. Finally, it argues that the psychoanalytic movement played a defining role in shaping the development of psychiatry in Yugoslavia as psychoanalytic theory underpinned mainstream understandings of concepts such as depression and suicide. Thus, Yugoslavia provided an example of a comparatively thriving psychoanalytic movement under Communism.

Learning Objectives:

1. Trace the historical development of the psychoanalytic movement in Yugoslavi.
2. Assess how and why psychoanalysis prospered in Yugoslavia in contrast to the rest of the Communist world.
3. Examine how psychoanalysis negotiated the ideological landscape of Titoism.

Exercise of Power: The Harvard Fatigue Laboratory, Athletes and the Interwar Physiochemistry of Work

Robin Scheffler

Yale University, United States

The founder of the Harvard Fatigue Laboratory (HFL—the doctor, biochemist physiologist and sociologist Lawrence Joseph Henderson—is widely remembered for his physiochemical studies of blood and his proposal that human physiology could be holistically understood as a system of many variables existing in dynamic equilibrium. Less examined is the biomedical research which followed his proposal. In the 1920s and 1930s researchers at the HFL carried out what sports scientists widely consider a seminal series of treadmill experiments with the seven-time Boston Marathon champion Clarence De Mar. The study of De Mar exemplifies two unique features of the HFL’s approach to the study of fatigue: its focus on forms of intense physiological stress and its efforts to measure the physiochemistry of its subjects concurrently with their exertion.

The operation of the HFL by the Harvard Medical and Business Schools suggests that its researchers had more than physiological questions in mind. In fact, the HFL used its first studies with De Mar to decisively rebut the contention of Progressive-era reformers that industrial workers’ fatigue had a physiological basis. The HFL’s work accomplished this feat through the construction of new analogies amongst the bodies of athletes, academics and workers. Yet these analogies were also explorations of the anxieties held by Harvard academics over the specter of social discord and their own sedentary masculinity, anxieties which converged in the study of runner’s bodies.

Drawing on archival material and published papers, I consider the scientific and cultural means through which these bodily analogies were developed. First, I briefly describe the early institutional history of the HFL, especially its connection to the Rockefeller Foundation. Second, I describe the instrumental and physiochemical innovations of the HFL’s work with athletes such as De Mar, culminating in their description of the “steady state” of exertion maintained by elite athletes on treadmills. Finally, I trace the cultural understandings of athletics, masculinity and student health held by members of the HFL which explain how a runner such as De Mar became the ideal subject for the HFL’s work and illuminates the participation of the HFL’s researchers in their own experiments.

Learning Objectives:

1. Discuss the political dimensions of holism and reductionism in biomedical accounts of fatigue in the early twentieth century.
2. Investigate the influence of cultural factors on medical thought.
3. Present a new perspective on self-experimentation as a form of medical autobiography

Fetal Remains or “Baby Choice”: The Contested Meaning of Abortion in 1980s America

Johanna Schoen

University of Iowa, United States

In early 1988, four anti-abortion activists broke into a Chicago pathology lab and stole more than 4,000 fetuses. The fetuses, sent to the lab from abortion clinics around the country, became the centerpiece in a publicity stunt intended to contest the meaning of fetal remains. Seeking to define the fetal material as persons, anti-abortion activists reassembled the fetal parts, named and photographed them, and eventually shipped them to different locations around the country where priests officiated over “Christian burials” of the remains. “Fetal Remains or ‘Baby Choice’”—the generic name given to a fetus frequently displayed on anti-abortion picket lines—will analyze the contested meaning of abortion in the 1980s, when the proliferation of fetal imagery and the development of new pregnancy termination procedures seemed to be on a collision course.

In the 1980s, fetal imagery and a number of other technical developments convinced American abortion providers to adopt D&E [Dilation and Evacuation] as the procedure of choice when terminating a pregnancy past the first trimester. Since D&Es were much quicker and cheaper than older instillation procedures, this change in abortion care significantly expanded women’s access to abortion. But as abortion providers adopted the new technique, anti-abortion activists intensified their campaign against abortion. Utilizing fetal images, plastic models, and remains, they congregated in ever larger numbers outside of clinics where they displayed what they deemed visual proof of fetal personhood. In a growing frenzy, they denounced abortion providers as baby killers and D&E procedures as cutting the fetus apart and then sucking it out. Indeed, reassembling fetal remains held much symbolic power as it seemed to reverse this process.

But abortion providers, too, were conflicted about the meaning of D&E. Acknowledging that the sensation of destruction was much more apparent in more developed fetuses, they debated the conditions under which to perform pregnancy terminations at more advanced gestational stages. In the end, however, they focused on the woman rather than the fetus, rejecting the anti-abortion conclusion that the fetus was, indeed, a baby.

Learning Objectives:

1. Examine the development and increased practice of D&E as an abortion procedure.
2. Review the impact which fetal imagery had on the abortion debate, on the one hand expanding women’s access to abortion procedures past the first trimester while on the other hand offering a powerful tool to anti-abortion activists.
3. Summarize the escalation of anti-abortion activism in the 1980s and its impact on the provision of abortion care in the long run.

Medical Police Practices in the Habsburg Monarchy, 1770-1830

Teodora Daniela Sechel
Central European University, Hungary

Medizinische Polizeiwissenschaft (the science of medical police) as constructed in the eighteenth-century Habsburg Monarchy, was part of an extensive discursive strategy that linked theories of government with the preservation of the population's health. It included medical police (medizinischen Polizei) and forensic medicine as the practical side of 'a theoretical science.'

Medical police practices, in the last part of the eighteenth century, were shaped by the interplay between medical theories and political-economic interest of the Emperor. They were limited to the control of epidemic diseases and to environmental sanitation.

At end of the eighteenth century there was a conceptual shift from medical police to state medicine (Medicina publica /Staatsarzneikunde) composed of medical police (Politia Medicinae/Polizei der Medicin), police of the medicine (Politia Medica/medizinische Polizei) and forensic medicine (Medicina Forensis/gerichtliche Arzneikunde).

My paper is based on extensive research in Archives from Romania, Hungary and Austria. It aims to show:

1. What was the medical, economic and political conjuncture that favored the birth of the new concept of state medicine?
2. How did the conceptual shift from medical police to state medicine establish new medical police practices?
3. What were the peculiarities of medical police practices in the Habsburg Monarchy?

It relates the bureaucratization process with professionalization of physicians arguing that the concept of state medicine reflects the processes of state building and centralization. The creation of a quasi-uniform sanitary administration helped the implementation of health policies which regulated medical practitioners and medical practices, thereby transforming the university trained physicians employed in the state administration (physicus) into a 'medical police officer.' Duties included regulating medical practitioners (surgeons, barbers, midwives), supervising the level and quality of medical instruction, instituting new plans to prevent epidemics and collaborating with local authorities and town physicians in the regulation of public health and hygiene. The physicus was a Beamter loyal to the Habsburg emperor and a patriot aiming at improvement of their fatherland. These characteristics of medical police were visible in the complex ethnic, political and confessional milieu of Hungary and Transylvania.

Learning Objectives:

1. Identify the interdisciplinary nature of history of medicine.
2. Summarize the history of medicine in Central and Eastern Europe.
3. Discuss the role of healthcare policies in state building and centralization.
4. Emphasize the relevance of history of medicine in understanding complex social, political, economic and cultural problems of the past.

Israel's Ellis Island? Power, Disease and Immigration Control at Shaar Haaliya, 1949-1962

Rhona Seidelman¹, Shifra Shvarts^{1,2}, S. Ilan Troen³

¹Ben-Gurion University of the Negev, Israel; ²Gertner Institute for Epidemiology and Health Policy Research; Sheba Medical Center, Israel; ³Brandeis University, United States

Shaar Haaliya was the central immigrant processing station in Israel during the period known as the Mass Immigration (1948-1957) that followed the establishment of the state in 1948. A main impetus behind its establishment was the fear that, with their poor health, the new immigrants would contaminate the larger population. Thus, this Ellis Island-like camp was created as a space in which the new immigrants were to be quarantined, examined and vaccinated before being allowed to interact with others outside the camp.

In this paper we will present a history of Shaar Haaliya, focusing on the role that health concerns and medical science had in shaping Shaar Haaliya's purpose and function. This work aims to show that while Shaar Haaliya was molded on Western traditions of state-imposed medical inspection and separation, the scenario at Shaar Haaliya can only be fully understood as a part of the particular concept of aliya: Jewish immigration to Israel. The widespread disregard of the isolation and the newcomers' defiant attitudes towards the health-care treatment and health-care workers at Shaar Haaliya consistently show them to have been in a greater position of power than they would likely have been in if they were, simply, immigrants. It is our belief that the unique relationship between the Jewish citizen and the Jewish state created a scenario whereby the power traditionally held by the state in the medical processing of immigrants was undermined and the newcomers were, to a large extent, empowered.

Through this Israeli case-study we aim to contribute to broader research being done on health and immigration by exploring how alternate forms of citizenship may influence the efficacy of state-controlled medical inspection and quarantine.

Learning Objectives:

1. Present a history of Shaar Haaliya, which served as Israel's central immigrant processing station from 1949-1957.
2. Explore how the concept of aliya (Jewish immigration to Israel) undermined the power traditionally held by the state in the medical processing of immigrants.
3. Raise questions about the extent to which alternate forms of citizenship may influence the efficacy of state-controlled medical inspection and quarantine.

“Operating on Shadows”: Evolving Perceptions of the Incidentally Discovered Adrenal Mass, 1982-2002

Wen Shen

University of California, San Francisco, United States

Computed tomography (CT) scanning is an integral component of 21st-Century medical practice, and physicians have become increasingly reliant on this imaging modality for diagnosing disease and planning operative treatment. Following its introduction in the 1970s, CT scanning proved especially valuable for studying the organs of the abdominal cavity. However, with the rapid rise in the number of abdominal CT scans came an unanticipated problem: the identification of clinically silent adrenal tumors of unknown significance. The recognition of these asymptomatic, incidentally discovered adrenal tumors, dubbed “incidentalomas” by George Washington University surgeon Glenn Geelhoed in 1982, compelled physicians to embark on extensive hormonal workups, order further radiographic studies, and, in many cases, perform operations of questionable benefit.

In this paper I provide a historical analysis of adrenal incidentaloma, from its initial recognition in 1982 until the National Institutes of Health-mandated consensus conference dedicated solely to its management in 2002. First, I explore the circumstances and historical context surrounding the early reports of adrenal incidentaloma and describe how this entity received its name. Next, I trace the efforts of three separate classes of physicians (endocrinologists, radiologists, and surgeons) to characterize these tumors and formulate rational guidelines for their treatment. Finally, I reflect upon the impact that adrenal incidentaloma has made upon medical thought and practice during its relatively short existence. Throughout this paper I show how adrenal incidentaloma has transformed the traditional diagnostic algorithms of adrenal disease, altered definitions of illness and wellness in subtle but significant ways, and forced physicians to come to terms with uncertainty in a practice environment that increasingly expects them to provide unassailable, error-free care.

Learning Objectives:

1. Describe how the introduction of CT scanning resulted in a new phenomenon of incidentally discovered adrenal masses
2. Examine the responses of endocrinologists, radiologists, and surgeons to the clinical entity of adrenal “incidentaloma”
3. Recognize the impact of adrenal “incidentaloma” on current medical thought and practice

Touching Nature: Vision, Tactility, and Epistemological Reform in 19th-Century American Medicine

Paul Shin

Yale University, United States and University of Rochester, United States

Historians have long recognized the links between empiricism and anatomy in 19th-century American medical reform: physicians believed access to bodies living and dead would lead to ‘improvement.’ Yet, few historians have investigated how changing notions of perception and thus epistemology shaped such reform. As new understandings of vision and touch emerged from anatomical and clinical practices, one result was a newfound regard for tactility. I argue that physicians, in making knowledge ‘experiential,’ made practices of touch central to medical reform.

Classically, vision was the most ‘intellectual’ of the senses, offering unmediated access to the world: images impressed onto the mind were then judged by reason for truth. Touch, considered primal, was thus held in low regard. When an object was not viewable, savants instead used the ‘mind’s eye’ the imagination. Thus, unable to see the earth in its entirety, Benjamin Franklin sought to “wander a little in the wilds of fancy.” Imagination thus augmented vision.

Between 1780 and 1840, physicians pathologized the imagination as a stumbling block for natural knowledge. This change was part of more widespread attacks against rationalist, speculative systems. Elisha Bartlett decried “the fairy imaginations of a speculative optimism.” True knowledge could “only be acquired by the senses; nature has no archetype in the human imagination.”

Despite calls for sensualism, physicians grew to distrust vision; its association with the imagination was now problematic. Moreover, anatomical research demonstrated that seeing was mediated by unconscious movements of the eye objects not so much perceived as they were “presented to the most sensible spot in the eye.” This ‘muscular’ vision could be deceived, “subject to exhaustion.” Seeing was no longer an act of knowing.

The apparent paradox calls for ‘observation’ despite skepticism of sight reflected vision and perception disarticulated, a difference that gave new importance to touch. I argue that practices like dissection, specimen making and surgery took hold in the 19th century as a result of this trust in tactile sensation. Illusory vision whether from the wandering imagination or fatigue could be corrected by ‘touching nature.’ What had been previously disregarded as a non-intellectual, ‘rude’ sense was now extolled precisely because of its embodied, primal nature.

Learning Objectives:

1. To describe late 18th and 19th century understandings of the imagination, vision, and chart their changing relations.
2. To separate ‘vision’ from ‘perception’ in understanding empiricism, observation, and visual culture in 19th century America.
3. To demonstrate how anatomical and medical practices shifted over time to emphasize the sense of touch.

Building the Emergency Room on Wheels: Physicians, the State, and the Creation of the Modern Ambulance, 1966-1973

Andrew T. Simpson

Carnegie Mellon University, United States

In 1966, morticians provided 50 percent of the ambulance service in the United States, because their vehicles could accommodate a supine patient. By 1973, national standards governed ambulance design, dictated on board technology and established training guidelines for paramedics. This paper examines the rapid changes in ambulance design and paramedic training between the passage of the 1966 Highway Safety Act and the 1973 Emergency Medical Services Systems Act. Using the example of Dr. Peter Safar, it demonstrates how physician experimentation intersected with federal policy to create national standards.

Safar, widely regarded as the father of modern CPR, began experimenting with ways to provide treatment en route from an incident site in the 1950s. By the mid-1960s, Safar and his colleagues reconfigured the interior arrangement of the ambulance—placing the attendant’s seat at the head of the patient and raising the vehicle’s roofline to improve working space; designing a prototype seated on a van, rather than wagon chassis. Safar also administered Freedom House Ambulance Service, an operation that combined technical innovations in ambulance design with a training program structured to transform low-income and under-educated African Americans into skilled paramedics. Safar, like other physicians experimenting to improve trauma care, relied on communication with medical professionals, travel to Europe and the Soviet Union and most importantly involvement with the National Academy of Sciences Committee on Emergency Medical Services to test ideas and to develop consensus about national standards.

The ambulance and paramedic training standards are emerging areas of historical inquiry. Historical actor accounts typically highlight separate local experiments as the critical factor for developing ambulance technology and paramedic training policy. Recent secondary scholarship, especially Ryan Corbett Bell’s “The Ambulance” (2008), tries to bind disparate experiments into a national-level narrative. This paper argues the modern ambulance and the modern paramedic are more than the sum of separate local experiments. While physicians like Safar provided necessary technology and training skills, they were engaged in a series of conversations that placed local experimenters in direct contact with federal policymakers. These conversations provided a testing ground for the technologies and methods that were later codified into national standards.

Learning Objectives:

1. Draw attention to the ambulance and paramedic training as important areas for future study.
2. Discuss the modern ambulance and paramedic deriving from the product of numerous separate local experiments and to show how physicians and first responders engaged in a productive and unified conversation with policymakers about national standards.
3. Demonstrate that EMS was only a part of a mutual relationship between the medical profession and the state in the post-war years that was essential to development of each.

Prison, Health, Human Rights and the Doctors' Dilemma: A Narrative in the Indian Medical Gazette [IMG] (1866-1900)

Savitri Das Sinha

All India Institute of Medical Sciences, India

The IMG was a very influential medical journal in colonial India. While not an official journal, it often reflected the academic and social viewpoints of the influential medical men, particularly the Indian Medical Service (IMS).

The incarceration of prisoners for common crimes markedly increased under colonial rule. Doctors were key personnel in prison administration. Most jails were headed by IMS officers who were appointed to the posts of Inspector General of Prisons.

Prisons were noted for a high degree of mortality and morbidity. This aroused a strong sense of injustice in several IMS officers involved in prison administration. The IMG provides strong public evidence of the dilemma faced by doctors, possibly because their professed liberal democratic and humanistic traditions and education (implicit in medical training), coupled with their role as healers, was confronted with the inexorable logic of colonial economics, justice and administration of institutions for achieving social order. They were particularly perturbed about the fate of under-trial prisoners who had low rates of conviction and did not deserve to be punished by exposure to a high risk of illness and death. The narrative of prison health in the IMG also provides detailed information on prison mortality and morbidity and debates on the merits and demerits of harsh versus soft prison regimes.

Later articles (after the 1880s) report better conditions, which were, however, in variance Indian perceptions. Prison administration was appropriated to a welfarist platform with a marked improvement in the self image of prison administration, a striking example being the depiction of an Indian prisoner in Rudyard Kipling's Kim.

In brief, the IMG publications related to prison health highlight the multiple personal, social and political forces acting on the individual IMS officer associated with prison administration and demonstrate a surprising degree of commonality with the current debates on prison administration, reforms and health of prisoners.

Learning Objectives:

1. Describe doctors' perception of human rights of prisoners in early colonial India. Conflicts of roles as healers and administrators
2. Examine colonial proclamation and ground realities in prison administration
3. Summarize the doctors as prison administrators and the reasons for this phenomenon during this period

Colonial Visions and Nationalist Pasts: The politics of Defining and Regulating Aging and Disability in India (1870's-1960's)

Kavita Sivaramakrishnan

Harvard University, United States

This paper aims to explore from a historical perspective the changing construction of age and aging in nineteenth and twentieth century India. It will trace the evolving categories and understanding of old age and disability in the late Colonial and early post-Colonial setting. The central focus of this work will be to trace how the state—in particular medical and welfare administrators—viewed and reconfigured infirmity and dependence. It will argue that these shifts in ideas were determined by political priorities and medical-social theories and did not necessarily coincide with demographic shifts. In particular, they were shaped by changes in understanding of poverty, in particular of the deserving and undeserving poor, and of productivity.

The understanding of aging bodies and their biological profile was therefore closely entangled with and shaped by the framing of political priorities and social boundaries. Old age and dependence intersected with several dualities in Colonial India. It embodied both colonial visions of improvement and nationalist constructions of Hindu families and a unified national past that in turn marginalized other communities. The post-colonial state in turn addressed aging through the lens of filial support, and the unproductive aging poor were addressed within the early socialist visions of poverty alleviation. It also brought out the tensions of seeking 'modernity' for the new Indian nation through medical advance and technology from the West while being compromised by a loss of 'tradition.' Recent legislation in India to protect "senior citizens," a homogeneous category typified by urban, middle class males, and its enforcement of parental maintenance legislation to reinforce "age old Indian values" can be traced back to these historical fault lines in medical and social constructions of age and aging populations.

These ideas and debates will be reconstructed through an analysis of medical narrative in contemporary medical and social reform journals, census surveys starting from 1871, pension legislation and related reforms, the Hindu Adoptions and Maintenance Act, Government Planning Commission Reports on population health and early factory legislation relating to workmen's compensation and disability.

Learning Objectives:

1. Describe how social and biological categories evolve as political constructs.
2. Identify continuities and change in historical discussions of Colonial and post-Colonial public health and welfare agenda.
3. Summarize from a historical perspective an area of study in south Asia that has so far been explored largely by demographers or anthropologists.

What to Test, How to Test, Who to Test: Medical Knowledge and the Feingold Diet for Hyperactivity

Matthew Smith

University of Exeter, United Kingdom

In 1974 Random House published a popular and controversial book entitled *Why Your Child is Hyperactive*. In it, its author, San Francisco allergist Ben F. Feingold, claimed that hyperactivity, by then the most commonly diagnosed childhood psychiatric disorder, was caused by food additives and was best prevented and treated with an additive-free diet, subsequently dubbed the 'Feingold diet.' Reaction to the idea was swift. The media and parents found Feingold's environmentally-based theory intriguing, as it provided an etiological explanation for hyperactivity that was both sensible and topical. The medical community, in contrast, was suspicious and designed double-blind trials to test his theory. The majority of physicians claimed that the findings of these trials disproved Feingold's hypothesis, and were reluctant to recommend his diet to treat hyperactive children. As a result, both Feingold's hypothesis and his diet were marginalised to the fringes of medical practice. Today, most physicians concur that the Feingold diet was proven to be ineffective and consider it a regrettable, yet persistent, aberration in the progression of treatment for hyperactivity.

In this paper, I examine the tests done to test Feingold's theory. I argue that, from the outset, complex methodological problems related to what additives to test, how to control the trials and which children should be tested, rendered the results of the trials misleading and confusing. Despite these shortcomings, researchers and reviewers, including both Feingold's supporters and detractors, made bold statements about what the trial results implied for Feingold's theory, suggesting that their preconceptions about whether or not food additives could cause behavioral problems clouded their interpretations.

The possibility that the fate of a potentially beneficial treatment for hyperactive children was discredited on the basis of inconclusive trial evidence raises numerous issues about not only how to test new and unconventional medical ideas, but also our reliance on double-blind controlled trials. I conclude the paper by suggesting that a more sophisticated model of testing such controversial theories, relying not only on trial evidence, but also on the observations and experiences of parents, patients and clinicians, as well as historical analysis, should be developed.

Learning Objectives:

1. Develop an understanding of how the Feingold diet for hyperactivity was tested
2. Review that the testing of the Feingold diet was often methodologically unsound, making it difficult to accept many interpretations of the trial results
3. List other ways of determining the validity of controversial new medical ideas

From Captive Populations to Citizen Volunteers: The NIH Normal Volunteer Patient Program in the History of Human Subjects Research, 1953-1966

Laura Stark

Wesleyan University, United States

For most of the 20th century, American scientists used “captive populations”—such as prisoners, soldiers, and school children—to carry out non-therapeutic medical research on humans. By the end of the century, however, rights-bearing citizens filled the enrollment demands of biomedical researchers. To be sure, the rise of bioethics and the civil rights movement help to explain why research on people with little political power began to dwindle during the 1960s. Yet it is not clear how researchers moved—both morally, legally and logistically—from captives to citizens.

This paper argues that researchers relinquished captive populations—though slowly and reluctantly—in part because they had an alternative population at the ready. By 1960, the National Institutes of Health had established an infrastructure that allowed researchers to enroll “normal subjects” in non-therapeutic research. With the help of the Selective Services, NIH leaders arranged to have Conscientious Objectors to the Korean War serve their tours as research subjects at the NIH Clinical Center.

This paper uses archival documents from the James Shannon Papers at the National Library of Medicine and the Office of Scientific Research and Development collection at the National Academy of Sciences to demonstrate that Conscientious Objectors were the moral, legal and logistical bridge between research on captive populations and research on consenting citizens. The first human subjects in non-therapeutic research at NIH were to be members of Brethren and Mennonite Churches. They were channeled through the NIH “Normal Volunteer Patient Program,” which was designed to provide human subjects for intramural research at the Clinical Center that opened in 1953. The NIH program quickly expanded, however, to allow any member of the church, not only drafted men, to live in the Clinical Center as human subjects. In the program’s first year (1954), for example, several young women spent their year of Christian service at the Clinical Center as human subjects. By the end of the 1960s, the legal infrastructure was secure enough that NIH administrators further extended the Normal Volunteer Patient Program to recruit healthy subjects through colleges and community organizations.

Learning Objectives:

1. Describe the NIH Normal Volunteer Patient Program.
2. Explain a shift in the history of non-therapeutic research (regarding human subjects).
3. Contribute to scholarship on interactions between the state and the medical research.

“The Medical Doctor is the Best Social Doctor”: Turn-of-the-Century U.S. Physicians Confront Lynching

Melissa Stein

Indiana University, United States

On March 11, 1893, one month after the nation’s first spectacle lynching, Hunter McGuire, a respected Richmond physician and president of the American Medical Association, wrote an open letter to G. Frank Lydston, then Professor of Genito-Urinary Surgery at the Chicago College of Physicians and Surgeons, seeking “some scientific explanation of the sexual perversion in the negro of the present day.” He maintained that the kind of mob violence that recently erupted in Texas was an inevitable reaction. In response, Lydston proposed castration by trained surgeons as both a solution to sexual crimes and an alternative to lynching, which he deemed ineffective as a rape deterrent. McGuire’s letter and Lydston’s response were published in the *Maryland Medical Journal* and later reprinted in book form.

While it may be tempting to dismiss the exchange between McGuire and Lydston as an unfortunate aberration in the history of American medicine, in fact, their public correspondence launched a conversation among physicians that lasted three decades and spanned medical—and some popular—publications across the country, which comprise my primary evidence here. Like McGuire and Lydston, other physicians who supported Lydston’s “castration proposal” were not on the fringes of the medical establishment. Rather, most were professionally respected and in positions of influence and power.

Also like Lydston, other physicians who advocated castration as an alternative to lynching viewed themselves as progressive reformers, saving society from black men and black men from themselves. By pathologizing the “black rapist,” turning a popular racial trope into a disease, these physicians created a cultural need for their medical expertise. Even more than lynching’s ineffectiveness or inhumanity, their objections to the practice revealed their concern for medical authority, particularly over racial matters. So more than just a story about a moment in American race relations, this paper also considers how medicine functions in a socio-cultural context. Indeed, physicians’ oft-repeated proposition of surgical castration laid bare fundamental issues of authority—the authority of the physician on societal problems versus the power of the public—by suggesting that medicine rather than the law or vigilantism offered the solution to America’s “race problem.”

Learning Objectives:

1. Analyze how medicine functions in specific socio-cultural contexts.
2. Interrogate the issue of medical authority and how it has been constructed or maintained, particularly vis-a-vis issues of race.
3. Consider “progressive” medicine as historically situated.

'The Most Perfect Mechanism': Cochlea Research in Enlightenment French Otology

Ingrid Sykes

University of Warwick, United Kingdom

Doctors did not consider the cochlea to be significant in the study of deafness until 1778. In his groundbreaking work, "Dissertation sur l'organe de l'ouïe, des reptiles, et des poissons", Etienne-Louis Geoffroy, a French physician, was the first to challenge the widespread assumption that most deaf people had faulty ear drums. It was the cochlea, he explained, with its sensitive nerve structure, where the majority of hearing problems occurred. Geoffroy's work followed a number of other French treatises which identified the cochlea as the locus of listening refinement. The famous Rouen surgeon, Claude Nicholas Le Cat, described the cochlea in his essay, "De l'ouïe" from his "Traité des sens" (1740) as the "most perfect mechanism." Both Le Cat and Geoffroy considered its existence in living organisms to be an indicator of intelligence: fish and birds were considered less intelligent than humans and quadrupeds precisely because they lacked a cochlea. Communication for such creatures was only possible through a basic signalling process involving vibrating bodies and resonating heads.

This paper will explore previously unacknowledged work on the cochlea by Enlightenment doctors and its important position in an increasingly rich acoustical culture of medical science. Though French doctors were considered regressive in certain areas of hearing science (such as ear trumpet production and their particular stance on music and the soul, for example), their theories on the relationship between aural physiology and the acoustical environment were extremely sophisticated. Their treatises do not describe the rational mathematics of acoustical physiology. Rather, they address the listening process through conceptual models of communication (often with visual illustration), analysing each part of the cavernous ear structure and its role in a complex chain of acoustic stimulation and perception. Through such exhaustive analysis, the cochlea emerged as the dominant force in human audition.

Learning Objectives:

1. Trace the emergence of the cochlea in eighteenth-century French treatises.
2. Explore how the cochlea transformed understanding of hearing processes.
3. Reflect how such innovations contribute to the better understanding of hearing science.

The German Mayo Clinic: How Free Enterprise Failed in West German Medicine in the 1970s

Carsten Timmermann

The University of Manchester, United Kingdom

In 1965 the German celebrity doctor Leo Krutoff published a richly illustrated, 300 page book praising the Mayo Clinic as a model of how medicine should be organised, based on several visits to Rochester, Minnesota, conversations with Charles Mayo and others, and including a brief history of the Mayo Clinic. Krutoff was known to a wider public as a writer on health for newspapers and magazines and author of popular guide books on, for example, how to avoid a heart attack or live a healthy life in old age. This was not the first time the Mayo Clinic had been cited as a model by German physicians, but Krutoff went further than previous German visitors who had been impressed by what they had encountered in Rochester. Krutoff joined forces with a number of potent investors, secured the support of a team of medical professors (including, among others, the Heidelberg psychiatrist Alexander Mitscherlich), and started to raise funds for a "German Mayo Clinic," which was to be smaller than the original but organised according to similar principles. Crucially, this was to be a private enterprise in a fairly strictly regulated medical system with strong health insurance funds (with compulsory health insurance membership for employees up to a certain income threshold). In 1970 the "Deutsche Klinik für Diagnostik" opened its doors in the fashionable spa town of Wiesbaden, near Frankfurt. By 1974 the clinic was facing bankruptcy and was transferred into public ownership. In this paper I will look at the brief history of the German Mayo Clinic and discuss the reasons for its failure in the context of the post-war history of the West German health system.

Learning Objectives:

1. Discuss problems faced by a model copied from the US in a European health system.
2. Provide a historical perspective on current debates in health policy.
3. Provide material for international comparison.

Town and Gown: The Politics of Medical Education and Practice in 1960s' America

Dominique Tobbell

University of Minnesota, United States

While the oftentimes acrimonious relationship between non-academic private practitioners and academic physicians (so-called town and gown relations) is known by historians of medicine to have been a feature of 20th-century American medical practice, very little has been written on the subject by scholars. This paper corrects this historiographical gap by investigating the influence of town and gown politics on the development of the University of Minnesota's Department of Family Practice and on the efforts of local, non-academic physicians to establish a second medical school in the Twin Cities during the 1960s.

The political tensions within the Minnesota medical community mirrored those within the American Medical Association. Indeed, at the same time that the battle lines were drawn over the institutional future of medical education in Minnesota, the private practitioners who dominated the AMA's leadership in the 1960s were waging war with the academics on its own Council on Drugs. This case study will serve to contextualize the Minnesota story into a broader narrative about medical politics in post-World War II America.

Based on research in the institutional archives of the University of Minnesota's Medical School, the personal papers of leading academic physicians and oral history interviews with academic and non-academic physicians who practiced in Minnesota in the 1960s, this paper describes the efforts of local private practitioners to influence the development of academic medicine and to reshape the institutional structure and character of medical education in the 1960s to better serve the interests of the local medical community. In doing so, this paper argues that town and gown relations were a defining feature of medical politics in post-World War II America, and challenges historians of post-World War II American medicine to think beyond historical narratives that privilege the political authority of academic physicians above those of local private practitioners.

Learning Objectives:

1. Explain the role of local private practitioners in establishing the University of Minnesota's Department of Family Practice.
2. Identify and explain the sources of conflict between academic physicians and private practitioners.
3. Explain the influence of private practitioners on state health policy.

The Anthropomorphic Pavlov (A Reinterpretation of His Scientific Quest)

Daniel Todes

Johns Hopkins University, United States

Renowned as the quintessential “objectivist” and often characterized, erroneously, as a bell-ringing behaviorist who denied the existence of the subjective realm, Ivan Pavlov was actually a profoundly anthropomorphic thinker. His anthropomorphism was central to the interpretation of experiments upon laboratory dogs, to his use of those experiments to interpret psychological, psychiatric, and social phenomena among humans and, indeed, to his thirty-year quest to understand the “mysteries of the human psyche”.

Like Darwin, Pavlov never doubted that dogs, like humans, were conscious, feeling beings. For each organism, he explained to coworkers, “It would be stupid to reject the subjective world. It clearly exists, of course. . . . The question is how to analyze this subjective world.”

For Pavlov, Dogs were (simple) People, and People were (complex) Dogs. An important informal corollary was that the dog’s subjective world was understandable by combining his mechanistic model of higher nervous processes with human introspection (though he would have bridled at this term). Rarely discernible in his publications—in which he adopted a cautious, positivist lexicon—this interpretive moment was constantly on display in the lab and informal occasions. “That which I see in dogs I immediately transfer to myself,” he once explained, “since the basics are identical.” Research on one dog, for example, helped Pavlov solve the mystery of how such an excitable, choleric fellow as he—apparently lacking the necessary nervous balance for cognition of reality—nevertheless became a fine scientist. The metaphorical relationship between dogs and people flowed both ways. His experiences with humans regularly informed his interpretation of animal experiments, for example, when he deployed his experience with a mentally ill friend to interpret one dog’s salivary responses.

In this talk, I use archival materials (including Pavlov’s lab notebooks and the unpublished memoirs of his coworkers and acquaintances) and previously unexamined (and under-examined) Russian-language publications (scientific articles, the records of his weekly meetings with co workers) to explore the anthropomorphic Pavlov and reinterpret his scientific procedures and objectives. I conclude with some thoughts about the historical sources of the misleading iconic images with which we are so familiar.

Learning Objectives:

1. Describe Pavlov’s scientific work.
2. Summarize the contradictory implications of a mechanistic model of the mind/body.
3. Recognize the historical process of the making of an iconic image.

Quick, Simple and Painless? Routinizing the Smear and the Mammogram in Late Twentieth-century Britain

Elizabeth Toon

University of Manchester, United Kingdom

By the 1980s, the two chief technologies of women's cancer screening had been introduced and widely adopted in Britain. First, the cervical smear became the mainstay of UK cervical cancer screening, when a nation-wide screening program was established. Mammography was introduced in the 1960s: British clinicians, researchers, and policymakers encouraged its development, and after local experiments, regional trials, and observation of other countries' apparent success, in the mid-1980s a national breast cancer screening program made the mammogram its central tool.

But as this paper shows, women's cancer screening required changes not just for the UK's health care system, but in women's thinking and behavior. The cervical smear and the mammogram – not to mention the investigative procedures that followed a positive result – were uncomfortable, time-consuming, sometimes emotionally or physically traumatic, and even, thanks to mammography radiation, a health risk in themselves. How, then, did screening advocates convince (or at least try to convince) British women that undergoing a smear test and/or a mammogram was not only worthwhile, but a necessary element of every woman's health routine?

This paper examines British efforts to “normalize” the smear and the mammogram, to make these technologies a routine part of health care and an expected component of everyday women's health practices. Analyses of screening as a form of surveillance sometimes assume these new practices to have been widely and rapidly accepted, but as I show, convincing British women to adopt them turned out to be quite difficult. Drawing on materials created by government bodies and voluntary and professional groups, I show how architects of women's cancer screening programs represented screening technologies to a sometimes welcoming, sometimes reluctant populace. I also consider the work of social scientists and journalists who set out to describe the experience of being screened, whether to promote it or improve it. Finally, using mainstream women's magazines, the feminist health movement, and media portrayals of the smear and mammogram, I provide a glimpse of how everyday women themselves may have understood and experienced screening technologies and incorporated them into their lives.

Learning Objectives:

1. Describe how cancer prevention and medical technology have been introduced, interpreted, and experienced in one national historical context.
2. Summarize how existing ideas about medical intervention in Britain were challenged, reaffirmed, or changed by the introduction of women's cancer screening.
3. Recognize how medical professionals, health care workers, policy makers, and social scientists tried to change everyday thinking and behavior around cancer screening, and how their efforts were received.

Being a pharmacist in Senegal: Three Historical Perspectives on Pharmacy and Decolonisation

Noemi Tousignant

London School of Hygiene and Tropical Medicine, United Kingdom

What did it mean to be an African health professional, scientific expert and medical entrepreneur in Africa before and after independence? In this paper, I address these questions by exploring, through three sets of sources, the impact of decolonisation on pharmacy in Senegal.

Through legislation, reports and articles from the 1950s-70s, I first trace how governments defined new roles for Senegalese pharmacists. In the 1950s, reforms in health legislation and citizenship assigned new rights and obligations to African pharmacists. By responding to increasing demands from the French pharmaceutical industry, while drawing private pharmacists into public roles as “partners in development,” the State also articulated new relations between public and private pharmaceutical interests. From the late 1960s, State-led efforts to foster local pharmaceutical production, “Senegalize” pharmacy ownership and regulate profits emphasized the shared interests, and mutual sacrifices, of Senegalese pharmacists and the State as “nation-builders.”

But how were new roles experienced by Senegalese pharmacists? The second part of my paper focuses on the oral accounts, and biographical trajectories, of the first generation of Senegalese pharmacists. A salient characteristic of this group is its small size. This detail is significant; the multiple functions and dense informal links described by these pharmacists seems to blur the distinctions, appearing in official documents, between public and private interests, and the experience of governing and of being governed by pharmaceutical policies.

This is in marked contrast with the overcrowding, competition and disjunctions between political authority and pharmaceutical expertise complained of by Senegalese pharmacists today. As a third line of investigation, I asked younger pharmacists to describe old Senegalese pharmacists and pharmaceutical legislation. I discuss how their ambivalence towards this older generation, which they both idealize as patriotic and pioneering and mock as self-important, might be a response to their own sense of uncertainty about the future.

I conclude by discussing the implications of combining oral and documentary historical sources for understanding the significance of decolonization for African health professionals.

Learning Objectives:

1. To evaluate the impact of political change on health and medicine in Africa.
2. To reflect on the methodological and theoretical implications of combining oral and documentary historical sources.
3. To explore historical change in pharmacy through the concept of citizenship and relationships between the public and private sectors.

Fasting for Research and Relief: Ancel Keys and the Minnesota Starvation Experiment, 1945-46

Sarah Tracy

University of Oklahoma, United States

In November 1945, 36 Conscientious Objectors arrived at Gate 27 of the University of Minnesota football stadium. They were there to take part in the Minnesota Starvation Experiment (MSE), a study supported by the historic peace churches (Brethren, Mennonites, and Quakers), the Office of the Surgeon General, the University of Minnesota Athletic Department and the National Dairy Council. Ancel Keys, the physiologist who developed the K Ration for the U.S. Army Quartermaster in 1942, was transitioning into peacetime research. His goal was to determine how best to rehabilitate individuals whose diets had suffered during the Second World War.

The C.O.s volunteered from Civilian Public Service camps across the country, eager to fight hunger, not war, and to provide baseline data on the body and mind under the stress of starvation and rapid rehabilitation. On average, the men participating in this experiment lost 24 percent of their weight over the course of six months, and they spent another half year recovering under different dietary regimens. Keys published the results of his study in 1950 in a two-volume tome, *THE BIOLOGY OF HUMAN STARVATION*. Preliminary results were published from the study throughout the 1940s, guiding foreign relief efforts.

This paper examines the organization and execution of the MSE, as well as its consequences for Ancel Keys and the Conscientious Objectors. The study is a curious one in which C.O.s assumed much responsibility for running the experiment – in some ways acting more as collaborators than as vulnerable subjects. They were, of course, both. Many possessed the missionary zeal of fellow faith-based foreign aid workers and used their experience to train for postwar relief work. United by their shared experience, MSE participants held reunions at the University through the 1980s. This paper employs the MSE to critically examine the nature of “subject participation” in government research, arguing that it is more complex than previous historical studies of Tuskegee and the Human Radiation Experiments have suggested. It also places the MSE within the context of Keys’ life and subsequent science, and offers insight into the unique collaborations made possible through wartime and postwar research.

Learning Objectives:

1. Review a new perspective on biomedical human subject research during the Second World War.
2. Examine the complex web of institutional support and funding for World War II nutritional and medical research.
3. Discuss the significance of the Minnesota Starvation Experiment within the life of Ancel Keys, the lives of the participating Conscientious Objectors, and the history of medicine.

“When Pirates Feast...Who Pays?” The Pirate Figure in Trojan Brand Condom Advertisements, 1926-1932

Paula Treichler¹, Kelly Gates²

¹University of Illinois at Urbana-Champaign, United States; ²University of California at San Diego, United States

In the late 1920s, a trademark battle erupted between two rival U.S. condom makers over use of the “Trojan” brand name, a battle joined and enlivened by the nefarious figure of the Pirate. This paper examines a series of condom advertisements that dramatized the battle and helped make the condom a legitimate market product. The context for the ad series was “Youngs Rubber vs. C. I. Lee,” a landmark case in trademark law, well known to historians of birth control. Youngs Rubber Corporation, the official holder of the “Trojan” trademark, claiming to be the rightful manufacturer of Trojan brand condoms, charged C. I. Lee with infringement under the Trademark Act of 1905 for making and selling pirated copies of Youngs’ leading brand. Lee countered that because condoms had been ruled immoral and illegal under both federal and state statutes, the product’s trademark was bogus and deserved no legal protection.

Lee’s strategy might have prevailed but for developments in the 1920s and 1930s that combined to give Youngs the victory, including the growing strength of legal and regulatory protections for the private sector, trademark holders included. And despite the condom’s unique “dual function,” the rampant VD epidemic discouraged the court from invalidating the trademark protection for Youngs’ popular condoms despite their potential contraceptive use. But a corollary factor in Youngs’ victory was the skillful deployment of the lawless figure of the Pirate beyond as well as inside the courtroom. In a series of advertisements for Youngs and Trojans published roughly between 1928 and 1936 in trade journals, a swaggering Pirate is used to represent unscrupulous condom dealers like Lee. Drawing on plot elements and visual stereotypes popularized through books and films (notably “Treasure Island”), such ads as “Where Pirates Feast...Who Pays?” spell out the many forms of doom awaiting the druggist or drugstore tempted by the Pirates’ shoddy wares. Examining textual and visual elements in selected ads, we demonstrate several ways in which the series sought to transform the condom into a respectable drugstore product and consolidate its place within the dominant economic system.

Learning Objectives:

1. Examine why positive and negative responses to condoms today are rooted in U.S. history.
2. Describe the role of popular culture in the legal & medical history of condoms.
3. Explain why advertisers so rarely exploit the condom’s unique status as a “dual function” device (contraception/disease prevention).

Reconciling Thirteenth-Century Medical and Theological Theories of Pain Perception at the University of Paris

Donna Trembinski

St. Francis Xavier University, Canada

Recent work about how pain was conceptualized in the Middle Ages has focused almost entirely on theological rather than medical discussions. This is not terribly surprising given that Esther Cohen's seminal article on the subject, "The Animated Pain of the Body," argued that the most complete theorization of pain was found in the discipline of theology and that medieval medicine did not develop "an integrated theory of pain" (49). Yet, as I argue in this paper, medical texts did theorize causes and experiences of pain, often integrating theological and medical models. Medical texts emerging from the University of Paris in the thirteenth century demonstrate that physicians working and training there were extremely concerned with reconciling theories of pain that originated in medical texts, particularly those written by Galen and Avicenna, with theological theories of pain experience. In particular, commentaries on Galen's "Tegni," commonly used in the thirteenth century, glossed Galen's contention that pain was a corruption in the sense of touch, by arguing that the root cause of that feeling of corruption lay in experiences of pain in the soul, experiences that were always more severe than feelings of pain originating in the body. In one of the most complex discussions of pain in a medical text from the Middle Ages, the physician Albertus de Zancharii located the cause of physical pain in the proportional experience of sadness in the soul. He acknowledged Galen's position outlined above, and Avicenna's belief that pain was caused by a sudden contrary sensation. However, he ultimately argued that while such secondary causes might relate to the experience of pain, the formal cause of all pain could not be anything other than sadness in the soul, with which the proper corporeal organ then commiserated. It is not surprising that such efforts to reconcile medical and theological theories of pain emerged at the University of Paris in the thirteenth century, for it is there and no place else in the Middle Ages that it became somewhat common for individuals who trained as physicians to take a second degree in theology.

Learning Objectives:

1. Describe how physical pain was conceptualized in the Middle Ages.
2. Recognize that in the Middle Ages physical pain was thought to be intimately connected with pains of the soul or emotions.
3. Explore the possibility that physicians teaching and training at Paris in the thirteenth century were attempting to reconcile theological and medical theories of pain in their writings.

Publishing: The Humorous Approach

Sian Hunter¹, Jackie Wehmueller², Karen Darling³, Barron Lerner⁴

¹University of North Carolina Press, United States; ²Johns Hopkins University Press, United States; ³University of Chicago Press, United States, ⁴Columbia University, United States

Hippocrates tells of four humors, which are evident in all of publishing.

Stage 1: Sanguine. Yes, you're courageous, hopeful, and possibly even amorous towards the manuscript you've composed. But what are editors looking for? This'll be a quick look at the symptoms that the body of your text might manifest. Doreen Valentine

Stage 2: Melancholic. Yes, during the review process you, too, can become despondent, sleepless, and irritable. In this section an editor will look at peer-review. After receiving the reviewer's diagnosis, how do author and editor work together to influence prognosis? Jackie Wehmueller

Stage 3: Choleric. Marketing and publicity often make people easily angered and bad tempered. Here's what an author can do, along with the publisher, to infect the world with their book. Karen Darling

Stage 4: Phlegmatic. The calm unemotional state that can be reached when knowledge of your book is widespread, your department head is happy, and you start to plan the next master work. Here an established author explains how to thrive.

At this Lunch Session, editors from Rutgers University Press, the Johns Hopkins University Press, and the University of Chicago Press will share their insights into issues in scholarly book publishing, including conceiving and executing a compelling book, finding and working with an editor, submitting a book proposal or manuscript, navigating the peer review process and in-house editorial review, and publicizing the book after publication. To complement their perspective, the editors will be joined by a successful author (TBD) who will speak briefly about his or her experiences. Time will be preserved after the presentations for questions and answers. The session will interest and inform seasoned authors as well as scholars for whom book publishing is a new experience.

In addition to describing the book publication process from submittal through to marketing, each editor on the panel will describe her specific areas of acquisitions and the types of books she is seeking at this time.

Learning Objectives:

1. Identify what kind of work editors at scholarly presses are seeking, as well as how to approach and present your work to editors.
2. Describe the peer review process and the role of the editor in working with the author through review and revision.
3. Summarize the role of the author and the role of the publisher in promoting published works of scholarship.

Between Free Market and Socialized Medicine: Health Care in the Netherlands, 1945-2006

Kees-Jan van Klaveren

University of Amsterdam, Netherlands

From an American perspective, the European model of health care has often been identified with socialized medicine. Mistakenly so: firstly, there has never been a single European model; secondly, continental European health care systems are 'mixed models', balancing between government regulations and private initiatives, between civic responsibility and government imposed solidarity. In recent decades, European countries also showed an increasing interest in the benefits of the free market. The history of Dutch health care forms an interesting example of those developments, even more so because of its liberal policy on medical-ethical issues like euthanasia.

In the aftermath of the Second World War, the Dutch government tried to organize health care as part of the social security system of the welfare state. It never considered socialized medicine as a serious option: Dutch society was supposed to be too pluralistic and liberty-loving to allow such kind of government intervention. On the other hand, health care was perceived as a social responsibility of the entire community that for-profit organizations could not be entrusted with. In order to ensure both universal health care and pluralism, the Dutch government set minimum requirements, but left it to private nonprofit organizations to provide care.

By the 1980s, government payments on health care had increased rapidly, and were expected to rise even further if policy did not change. The new theme for political discussions on health care was cost containment, if not reduction. The American model of health care became the new orientation. According to a growing political majority, the best way both to control government expenditures and to guarantee the same level of quality and accessibility of health care was to increase efficiency by liberalization. The ideal was to continue the welfare state provisions by other means – means that were previously viewed as incompatible with the values of the welfare state. In 2006, the Dutch government introduced a new health care system based on these ideas.

The paper will focus on the Dutch case as one of the continental European 'mixed models' of health care, showing its developments since the formation of the welfare state.

Learning Objectives:

1. Explain how values of right to health and liberty of choice shaped the Dutch post-war health care system.
2. Discuss the history of the Dutch health care system in the context of the continental European 'mixed models' of health care.
3. Explain how Dutch views on commercial health care changed from endangering to potentially saving welfare state values.

“It’s Your Union, Doctor”: Resident Unions and the American Medical Association, 1970 to 1980

*Heather Varughese
Yale University, United States*

What is the dividing line between professional organizations such as the AMA (the traditional voice of American organized medicine) and physician labor unions such as the Committee of Interns and Residents (which made the seemingly oxymoronic declaration, “it’s your union, doctor”)? Examining the relationship between the AMA and resident unions in the 1970s reveals shifting answers to that question during a particularly turbulent period in the history of the American medical profession. Both organizations struggled to convince potential members that they were effective representatives for physicians, which, surprisingly, sometimes led them to work together.

In the late 1960s, the AMA’s survival as an authoritative agent of the profession seemed dependent upon convincing young physicians that it was, as articulated in a later recruitment brochure, “not your father’s AMA.” Accordingly, in 1970, the AMA took initial steps toward resident inclusion. Early AMA resident leadership overlapped with that of the Physicians’ National Housestaff Association, a newly formed proto-union for residents. The AMA seemed poised to support young physicians who sought radical change. For example, it consistently advocated for residents’ collective bargaining rights, even after the National Labor Relations Board denied such rights in 1976. Throughout the decade, however, there were also signs of unease in the AMA’s relationship with burgeoning housestaff unionization: the PNHA split from the AMA’s resident section in 1975, and the AMA began encouraging residents to form housestaff associations unaffiliated with national labor unions. By the end of the decade, AMA resident membership had grown dramatically, and the national housestaff unionization movement was dead. Was this reversal in vitality between the two models of physician organizing because of, or in spite of, the AMA’s efforts?

Drawing on the works of Kenneth Ludmerer on medical education and Naomi Rogers on medical activism, my examination of archival material from the AMA’s resident section and from resident unions sheds light on: the hitherto unexplored involvement of the AMA with a national housestaff unionization movement, the tension between dynamism and maintenance of the status quo within the AMA, and the changing nature of the American labor movement in the 1970s.

Learning Objectives:

1. Discuss the ways in which the AMA supported, yet distanced itself from, the formation of physician labor unions.
2. Describe the importance and role of resident physicians in the AMA during their first decade of inclusion in the organization.
3. Situate the rise of housestaff unionization within the broader context of a supposed era of labor decline in the U.S.

Venerate the Heat Pump! Climate Control for Hospitals and Humans

Christian Warren

Brooklyn College, United States

The age of air conditioning can be traced back to the 1840s, with Florida physician John Gorrie's quixotic attempt to cure yellow fever by artificially producing nature's cure. Observing that "nature would terminate the fevers by changing the seasons," Gorrie placed yellow fever patients in rooms chilled by ice. He experimented with mechanisms to produce ice, eventually receiving a patent, in 1851, for a compressor-based process that could cool air or freeze water. Despite a working prototype and grand plans of cooling entire hospitals, Gorrie's business was a failure, and he died a few years later. Since then, the promise of climate control in the pursuit of health, both in and outside of hospitals, has often outrun the technological and economic resources devoted to it. This paper will trace the history of mechanical climate control in hospitals, and the transformation of air conditioning from luxury to medical necessity, both in hospitals and in the broader built environment.

The same years that saw Gorrie launching the technology that would eventually make today's climate-controlled, hermetically-sealed hospital feasible, hospital design was tending toward maximizing direct exposure to fresh air and sunlight. Well into the mid-twentieth century, large functional windows and cruciform hospital designs maximized passive cross-ventilation and natural light, both touted as indispensable elements of a healing environment. Hospitals' adoption of large-scale central air conditioner systems began in specialized wards, but gradually the cooling ducts proliferated, a process mirrored in domestic and commercial spaces.

Climate control has become normalized to the extent that in heat emergencies, differential access to climate control across socioeconomic status is factored as an environmental justice issue. But not all health experts are cool with the status quo. They stand with a long line of observers questioning the long-term health consequences, as well as the philosophical implications, of relying on complex mechanical systems to regulate (often limiting to an unnatural degree) the climate indoors, where we spend ever more time.

Learning Objectives:

1. Explore the adoption of air conditioning in hospitals.
2. Reflect on the relationship between medical adoption of climate control and the same process in the broader built environment.
3. Consider the consequences for changing social definitions of the body's natural relationship to temperature and humidity variation.

One Large Nutrition Laboratory: Civilized Diseases and Dietary Developmentalism, 1954-1979

Daniel Wherley

Rutgers University, United States

This paper examines the complex relationship between dietary reform and American developmental policy in the post-war period. A key assumption underlying these reforms was that by changing dietary patterns and nutritional status in the developing world to more closely resemble American diet, a more modern socio-economic state of development would take shape around the world. Yet by the end of the 1970s the targeted regions' development was falling further behind that of the West and dietary change had wrought unanticipated outcomes. Not only was undernutrition still haunting the developing world, now many of these same regions were suffering increased rates of heart disease, diabetes, and obesity – the so-called “diseases of civilization.”

From Eisenhower's Food for Peace program, which stressed the distribution of agricultural surpluses, by the 1970s American food policy had evolved into a program of global nutrition intervention. A wide range of parties put their imprint on the process. While this included farmers, NGOs, and lobbyists, I will primarily focus on the role of politicians and dietary experts in this evolution. A select cadre of American experts such as Alan Berg, Nevin Scrimshaw, Charles Glen King and W.H. Sebrell had an outsize role in forging the connection between dietary reform and American foreign policy. I will demonstrate that proper nutrition was but one aspect of their larger personal, professional and political aspirations.

Arturo Escobar, Mitchel Wallerstein, and other scholars have looked at post-war American food policy but their interpretations see it as evidence of either policymakers' benevolence or venality. Using the voluminous professional nutrition literature and policy statements, I will illustrate how developmental ideology was shaped by conflicted individuals whose immersion in neo-colonial notions of modernity and progress infused their actions. Placed in its larger context, nutritional reform is less a narrative of heroes and villains but rather a reflection of the period's circumscribed vision of modern development. I will demonstrate how this myopia obscured a vital but uncomfortable reality – many of the developing world's nutritional deficiencies and other perceived shortcomings were themselves products of “Western modernity.”

Learning Objectives:

1. Assess what lies beneath American developmentalist policy.
2. Illustrate how neo-imperial worldviews regarding modernity infiltrated the world of international nutrition and, consequently, led to interpretations of the developing world that justified wholesale social and economic transformation.
3. Explore how both undernutrition in the developing world and overnutrition in the contemporaneous U.S. are constitutive elements of Western modernity.

The Transparent Man: A Teaching Tool that Mesmerized Crowds at the 1933 Chicago World's Fair and Three Generations of Mayo Clinic Visitors

Elizabeth Wilkinson

Mayo Clinic, Rochester, MN, United States

In the autumn of 1931, Dr. Will Mayo received a letter from the director of the medical section of the Basic Sciences Division of the 1933 Chicago World's Fair Planning Committee. Dr. Eben Carey encouraged the Mayo Clinic to sponsor a central exhibit in the basic medical science section of the huge Hall of Science Building. Carey explained, "The main medical objective is to present in a clear and simple manner for the layman, the progress in the Medical Sciences during the last century." He proposed that the Mayo Clinic sponsor the "Transparent Man," a replica of the life-sized anatomical model constructed in 1911 for the First International Hygiene Exhibition in Dresden, Germany. The Mayo Board decided to sponsor the exhibition at the cost of \$10,000.

From June through November 1933, the Transparent Man was displayed at the Chicago World's Fair. He was constructed with "skin" of a clear material called cellophane that allowed viewers an unparalleled look at human anatomy. The exhibit included a taped monologue of the Transparent Man describing the systems of the human body while the corresponding internal organs were alternately illuminated.

Following the fair, the Transparent Man was displayed at the Mayo Medical Museum, which opened in April 1935. The museum was housed in a former school building near the Mayo Clinic campus that was thoughtfully renovated to best display specimens, models and other exhibits. Dr. Arthur Bulbulian, who was the chief curator of the museum, wrote about such museums, "...most members of the [medical] profession realize that the work has great value, and that the opportunity should be grasped to educate the public in regard to hygiene, the early recognition of serious diseases, and the possibilities of prophylaxis against them." The Mayo Medical Museum is now defunct; however, the Transparent Man remains on display in the Clinic's patient education area.

The acquisition of the Transparent Man will be discussed along with an exploration of the display of the Transparent Man at both the 1933 World's Fair and the Mayo Medical Museum.

Learning Objectives:

1. Explain how the Mayo Clinic acquired the Transparent Man.
2. Discuss how the Transparent Man was displayed at the Chicago World's Fair.
3. Discuss the purpose of displaying the Transparent Man at the Mayo Clinic.

The English “Birth of the Clinic”: Guy’s Hospital in the 1820s

Adrian Wilson

University of Leeds, United Kingdom

Richard Bright, Thomas Hodgkin and Thomas Addison – the famous “Guy’s triumvirate” – are rightly celebrated as those who first transplanted into Britain the Parisian pathological anatomy of Bichat and his successors, thereby discovering the diseases that bear their names. I shall argue that these achievements were only possible in the setting of Guy’s Hospital, and that they stemmed from a deliberate policy, and practice, of anatomic-symptomatic correlation.

Guy’s, alone of all the London hospitals, did not restrict admissions to curable patients but also admitted incurables - so many of them, in fact, that in the 1820s mortality at Guy’s was around 25 percent. As a result, Guy’s at this time offered a wealth of pathological material, thereby mimicking the Paris hospitals. Bright, who became Assistant Physician in 1820, exploited this opportunity in two ways. The appointment of Hodgkin in 1825 as Demonstrator in Morbid Anatomy led to the rapid development of an extensive and well-catalogued pathological museum, more than compensating for the break with St Thomas’s which (coincidentally), took place in the same year. But Hodgkin also recorded his post-mortem observations in the clinical case-notes of the patients; and it was this which made it possible to link symptoms with morbid anatomy, which was the precondition of the triumvirate’s achievements.

These conclusions are based on a collation of the extant case-records, Bright’s published Reports of Medical Cases (1827-31), and Hodgkin’s Catalogue of the Preparations in the Anatomical Museum of Guy’s Hospital (1829). This exercise also illustrates the historical importance of both ideas and practices. The work of the hand, both in dissection and in recording the results, was essential; but so too was the underlying idea of connecting symptoms with post-mortem findings.

Learning Objectives:

1. Describe the discoveries by Bright, Hodgson and Addison of their respective eponymous diseases.
2. Demonstrate the historical importance of anatomico-clinical correlation (as distinct from mere pathological anatomy).
3. Recommend that historical reconstruction should be concerned both with ideas and with practices (not just with one or the other).

The Monkey Colony at the Carnegie Institution of Washington's Department of Embryology

Emily Wilson

National Museum of Health and Medicine, United States

In establishing the Department of Embryology at the Carnegie Institution of Washington in 1914, its founders intended to both organize and, in many ways, invent the field of human embryology. The Department sought to remedy the existing problems associated with the inadequate state of contemporary specimen collections by amassing a substantial collection of well-preserved embryos, complete with medical histories. This collection would supply researchers with the materials needed for reliable, systematic study of human embryo development and reproduction.

However, fulfilling the Department's original intent would subsequently require the support of a much different kind of collection. In 1925 the Department took on the operation of a small, breeding population of rhesus macaques (*Macaca mulatta*) known as the monkey colony. The project had been initiated at Johns Hopkins University by George W. Corner, later to be the director of the Embryology Department, and grew under the direction of Carl G. Hartman. Though comparative collections were far from new, the concept of maintaining a primate colony under laboratory conditions was. Because of their biological similarity to humans and their manipulability, rhesus monkeys are an excellent model for understanding human embryology and reproduction. Researchers were able to closely monitor and control the monkey's menstrual cycles, conceptions and terminations. Using methods with monkey subjects that would have been impossible with human subjects resulted in the kind of research that the Department had originally envisioned.

The monkey colony demonstrates the ingenuity and unique research methods that made the Carnegie Department of Embryology a highly influential and internationally renowned research center during such a momentous time in reproductive medicine. Over the more than 40 years before its move to Rush University in Chicago in 1971, the monkey colony was integral to a number of discoveries in human development and reproduction, including those in placental circulation, ovulation and in vitro fertilization. The centrality of the monkey colony to Carnegie embryology is especially evident through the noticeable shift in research to primate biology in 1925. A significant amount of the Embryology Department's considerable contributions to human health and knowledge would have been impossible without the monkey colony.

Learning Objectives:

1. Explain the circumstances and purposes behind the establishment of the monkey colony within the Carnegie Embryology Department's human embryo collection.
2. Identify the benefits and results of research involving the monkey colony that made it useful for a human embryology department.
3. Explain the impact of the monkey colony on the research at the Carnegie Department of Embryology and on wider medical research.

Post-asylum Geographies and Film: (Re)building Community

Lucy Winer³, Eran Preis², Michael Dorn², Michele Masucci², Nancy Tomes¹

¹Stony Brook University, United States; ²Temple University, United States;

³independent filmmaker, New York, NY, United States

Recently social geographers and planners have begun to direct their attention to the “landscape of care in the community” that developed alongside and has now largely succeeded the network of large institutions for populations labeled mentally ill and mentally retarded. Like the exposes of life on the back wards (Pennhurst; Willowbrook; Wiseman’s Titicut Follies and Multi-Handicapped), these new institutional/communal spaces have become the subject matter of a new generation of documentary filmmakers.

This luncheon workshop will feature the work of two such documentarians, both of whom are surveying changes in a therapeutic landscape once dominated by the mental hospital. They present short segments of their work and discuss the politics and poetics of cinematic depictions of mental illness as a social problem. Documentary #1 is “Kings Park” by film maker Lucy Winer, who returns to the hospital where she was treated as a teenager in the late 1960s. Part memoir and part historical commentary, Winer’s film traces the history of the Kings Park Psychiatric Center in Kings Park, NY, from the 1940s to the present day. Through interviews with former patients, employees and hospital administrators, she looks at the legacy, good and bad, of Kings Park and its demise. Documentary #2 is “Jonathan Returns” by Director Eran Preis, which is part of a projected three part documentary on mental illness in the United States. In this segment, Preis offers an intimate portrait of an Israeli-American family’s struggle, as Jonathan (the director’s son), develops symptoms and is diagnosed with schizophrenia; the documentary follows Jon’s efforts to reclaim his past and his identity. Winer and Preis will discuss their current plans to distribute their work, inviting the audience to help them explore ways to reach a broader community (schools, libraries and churches, as well as virtual platforms), to educate, provoke and ultimately inspire. Joining the discussion will be three scholars who have worked with them: historian Tomes with Winer, and social geographers Dorn and Masucci with Preis. This workshop showcases an innovative way of bringing history to life and a valuable resource for teaching.

Learning Objectives:

1. Describe new perspectives on the history of mental illness and its treatment.
2. Explore the unique capacity of film as a form of historical documentation as well as artistic expression.
3. Assess the potential educational uses of documentary films for health care professionals.

The Construction of Biomedical Aging: Locality, Contingency, and Experimentalism in the Science of Senescence, 1900-1929

Hyung Wook Park
University of Durham, United Kingdom

Several people, such as Gerald Gruman, Carole Haber and Richard Grant, have written histories of medical understanding of aging. According to them, physicians and other scholars viewed aging as an inherently declining process whose course was fixed and inevitable. In particular, Richard Grant has even claimed that the same medical idea of aging has persisted from the ancient Greek era to the twentieth century without undergoing any substantial change. This paper aims at showing a modified view based on analyzing the works of several significant researchers during the early twentieth century, including Alexis Carrel, Raymond Pearl and C. M. Child. They were different from previous scholars, because they provided new ways of approaching the subject of aging. Through their and other scientists' studies of minute details of aging in different portions and tissues of the body, they argued that the process of aging was highly localized, because its rate and mode were distinct in each portion of the body. Moreover, many of these researchers, based on their use of cultured tissues and experimental organisms, argued that the aging process was contingent upon developmental, evolutionary and environmental factors, and, therefore, could be subject to experimental manipulation. These new standpoints were different from earlier perspectives stipulating that aging was an inevitable process that occurred in an unidirectional way and at a fixed rate through the decline of a single critical factor, such as "innate heat." I will argue that this change was closely related to the construction of the biomedical models of the body in the early twentieth century, which were dependent upon laboratory-based approaches and experimental organisms within emerging research universities and medical research institutes, especially those in the United States. While the traditional views of aging stemmed from clinical observation and everyday experience, this biomedical body model reflected new lines of movements in a number of growing institutions which introduced and adopted novel ways of understanding and managing the body, including its senile changes.

Learning Objectives:

1. Develop an appreciation of the new models of aging in relation to the biomedical view of the body.
2. Describe the contributions of major historical actors involved in constructing the new models.
3. Explain how the change occurred within new institutional environments of the early twentieth century.

Veterinary Practice and Scientific Medicine in the Middle Ages: Gaston Phoebus' "Livre de chasse"

William York

Portland State University, United States

Gaston Phoebus, Count of Foix (1331-1391), is best remembered for his hunting book, the *Livre de chasse*, which circulated widely in the late-fourteenth and fifteenth centuries. In this text, Gaston lays out a variety of techniques for hunting and trapping a wide range of animals (reindeer, wild boar, wolves, etc.). In addition to the chapters on hunting, he includes several chapters on training and caring for hunting dogs. One of these chapters examines a range of illnesses and injuries that afflict dogs and how they might be cured. Although the *Livre de chasse* is written in French and likely aimed at an aristocratic courtly audience, it reflects a strong understanding of contemporary scientific medical theory found in Latin texts.

I wish to examine the ways in which Gaston incorporates elements of the medieval Latin medical tradition alongside knowledge about treating sick and injured dogs drawn from his own experience, or from traditional veterinary practices. As a result, Gaston's technical manual on hunting provides an interesting source in which to examine the relationship between theoretical science and craft practices during the Middle Ages. The *Livre de chasse* also provides insight into the ways in which scientific theories, developed and discussed within university circles, found value within the context of lay aristocratic courts. Gaston Phoebus was renowned for his patronage of learning and his court attracted a number of authors. One of these authors was a university physician from Montpellier, whose own text struggled with the issue of how to integrate theoretical medicine with empirical learning. The interactions at court, therefore, likely played an important part in Gaston's own approach to veterinary medicine.

Empiricism has long held a central place in the traditional narrative of the Scientific Revolution. Historians have often considered the ways in which learned scientists integrated craft knowledge into their philosophical systems. In the *Livre de chasse*, however, we can explore the integration of vernacular and Latin conceptions of nature taking place outside the university setting. Doing so will provide further insight into the shaping of the "new" philosophy associated with the Scientific Revolution.

Learning Objectives:

1. Explain the way in which Gaston Phoebus drew upon contemporary scientific medical theories and incorporated them with empirical knowledge gained from his own experience and from traditional practices.
2. Consider the role of scientific medicine at aristocratic courts during the Middle Ages.
3. Examine the significance of Gaston Phoebus' hunting manual in the development of veterinary medicine.

A History of Autism Spectrum Disorder Etiologic Research

Michael Yudell

Drexel University School of Public Health, United States

There remains, despite myriad claims to the contrary, no known etiology of autism spectrum disorders (ASD), and little historical understanding of the diagnosis. From blaming parents to genes to vaccines and vaccine ingredients, the search for what causes ASDs has produced more condemnation and controversy than a definitive understanding of the group of developmental disorders under the ASD umbrella. This paper explores the early history of the search for the etiology of ASDs. Once diagnosed as childhood schizophrenia and a host of other neuropsychiatric disorders, autism was first named by the psychiatrist Leo Kanner in 1943 as a disorder of “disturbances of affective contact.” Kanner, a founder of the field of child psychiatry and its director at the Johns Hopkins Hospital, first described the etiology of autism as being biologically hereditary in nature. Yet, before the end of the 1940s, Kanner abandoned a biological explanation for the disorder for a purely psychogenic one. Kanner’s new description of autism etiology laid blame squarely on bad parenting. From Kanner was born what would become one of the most destructive and reviled theories of autism etiology—the refrigerator parent or, more commonly, mother. In Kanner’s view, autistic children were “kept neatly in refrigerators that did not defrost. Their withdrawal seems to be an act of turning away from such a situation to seek comfort in solitude.” This view of autism dominated the medical and psychological fields for almost three decades, led most prominently by the psychologist Bruno Bettelheim. It was not until the 1960s that the refrigerator parent hypothesis was challenged in any significant way. Biological and environmental theories of autism etiology did not become the dominant approach in research until at least the 1970s and 1980s. This paper will explore the history of etiologic research of ASDs and explore the shifts between biological, psychogenic and environmental explanations for the disorder from the 1940s through the 1970s. The paper will consider both the social and scientific forces behind changing approaches to the etiology of the disorder. Finally, the paper explores the role that parents and parent-run advocacy organizations played in changing research approaches.

Learning Objectives:

1. Explain the shifts in claims about the etiology of autism spectrum disorders.
2. Discuss the role of parents and parent advocacy groups in autism etiology research.
3. Discuss the hostility between those advocating biological and psychological explanations for autism spectrum disorders.

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