

## Book Reviews

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VICTORIA A. HARDEN, *Inventing the NIH: federal biomedical research policy, 1887–1937*, Baltimore and London, Johns Hopkins University Press, 1986, 8vo, pp. xiii, 274, £25.55.

Biomedical research in the United States unmistakably is dominated by the National Institutes of Health (NIH), the federal government's chief medical research agency. Yet even though this institution looms so large in the careers of all who pursue health-related research in America, this volume is the first synthetic historical exploration of its genesis. The NIH was established by federal legislation in 1930, but its deeper roots can be traced to a one-room bacteriological laboratory set up by the government in 1887. This study roughly marks the centenary of that beginning, but that should not lead the reader to expect merely a congratulatory commemoration: it is less a celebration of achievements, which receive scant attention, than a pivotal chapter in the history of the federalization of American science. In displaying the origins of the NIH, Victoria Harden has also written a valuable account of the cultural and political processes through which the federal government became a leading patron of biomedical research.

Harden structures her story around two lines of development that intersected during the interwar period. One traces the changing expectations of biomedical scientists and public health personnel who worked within the federal bureaucracy. The Hygienic Laboratory the federal government founded in 1887 as part of its Marine Hospital Service (which later became the Public Health Service) was principally a bacteriological laboratory that conducted routine service work, such as diagnostic testing for infectious diseases among immigrants. Its research activities were modest, held in check by the prevailing conviction that the federal government had little business supporting extensive programmes of scientific investigation. A growing commitment to government regulation of all realms of American life during the Progressive Era, however, increased the scientific responsibilities assigned to federal agencies. The 1906 Pure Food and Drug Act, for example, administered by the Department of Agriculture, demanded government employment of biomedical experts to enforce the law. The Hygienic Laboratory similarly was charged in 1902 with enforcement of the new Biologics Control Act, and a gradual increase in staff accompanied mounting regulatory responsibility. Its research work also expanded in scale and scope, coming to encompass nutritional diseases and not just infectious ones. By the 1920s, this gradual accretion of biomedical activity within government agencies, proceeding at a time when the public prestige of biomedical science was rising, drew into question established assumptions about the federal government's role in health research. Leaders of the public health movement and those of the Public Health Service, emboldened by the mounting experience of scientists within the federal bureaucracy, in 1926 engineered the proposal of the Parker Bill, legislation that would expand the Hygienic Laboratory and its research function.

The most intriguing section of the book traces a second line of development that stemmed from the World War I experiences of chemists in the government's Chemical Warfare Service. Impressed by the efficiency and productivity of wartime research, after the war a group of chemists sought to bring the same sort of coordinated effort and organization to peacetime biomedical inquiry. To this end they established the American Chemical Society Committee on an Institute for Chemo-Medical Research, with industrial chemist Charles Holmes Herty as its chairman, to urge the creation of a chemotherapeutic research body. Their report on *The future independence and progress of American medicine in the age of chemistry* (1921) proselytized the belief that basic research was the key that would spring every lock to medical progress. Nearly a million copies of the report were printed, and one was placed in the hands of every physician in the country. The group initially sought private funding for the envisaged institute, but without success. Then in 1926, a meeting between Herty and Louisiana senator Joseph Eugene Ransdell convinced the congressman to introduce a bill to create a large, federal biomedical research

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institute. Proposed to Congress in the same year as the Parker Bill, the Ransdell Bill sought to transform the Hygienic Laboratory into what the senator called a National Institute of Health with a greatly augmented budget. Ransdell had read the chemists' depiction of *American medicine in the age of chemistry*, and he quoted extensively from the report in promoting a bill patterned largely after their blueprint.

The creation of the NIH through the congressional passage of both bills, in 1930, was wrought out of prolonged conflict among such powerful interest groups as the American Medical Association, the American Chemical Society, pharmaceutical companies, and the existing federal biomedical bureaucracy. This legislative finale reflected the transformation that had taken place in public perceptions of the federal government's proper role in basic scientific research. Inaugurated at the start of the Great Depression, the NIH had its activity dampened by economic constraints during its early years. But what was critical about its course during the remainder of the interwar period, Harden argues, was not concrete expansion or research results so much as critical formation of policy that was to be the platform for the research "take-off" after World War II. A brief epilogue reviews the work of the NIH over the past half century.

Harden provides a crisp and accessible narrative of an important but complex story. Her research among the manuscripts of leading players and in government documents is impressive, as is her restraint in not overwhelming the reader with explications of political manoeuvring in all its minutiae. This is above all a study of federal policy on biomedical research, but Harden takes pains to point to the broader political and medical context. Yet this sensitivity to the larger picture makes the sometimes parochially American focus of the book all the more surprising. Biomedical scientists in the United States were self-consciously aware of European medical models, conceptual and institutional. Yet the models of centralized control over biomedical research that the NIH's architects might have had in mind as guides or foils—Britain's Medical Research Council, for example—here remain unnoticed. Nor is it sufficiently clear how much they looked to such examples as the Lister Institute, Pasteur Institute, or Ehrlich's Institute for Experimental Therapy. This is unfortunate, for a more outward-looking treatment might have added important perspective to the creative processes involved in *inventing* the NIH, and helped to draw a broader significance from an American story. As it stands, though, this is a fine study of the origins of what has become, as Harden puts it, "the foremost biomedical research facility not only in the United States but in the world" (p. 180), and deserves serious attention even from medical historians who have no particular interest in America.

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JOHN M. T. FORD, editor, *A medical student at St Thomas's Hospital, 1801–1802. The Weekes family letters*, *Medical History* Supplement 7, London, Wellcome Institute for the History of Medicine, 1987, 8vo, pp. vii, 264, illus., £14, £18 overseas, post free from Professional and Scientific Publications, BMA House, Tavistock Square, London WC1H 9JR.

Anyone who enjoys Jane Austen's novels for their glimpses into the rhythms, preoccupations, amusements, and trials of family life in early nineteenth-century England will delight in the Weekes family correspondence. Here is humour, pain, and gentle teasing; paternal advice and fraternal competition; sisters' demands for news of London fashions and extended concern for carpet purchases. What makes the collection a welcome contribution to the history of medicine is the information it provides about a medical family whose eldest son, Hampton, spent eighteen months as an apothecary's pupil at St Thomas's Hospital in London. The Weekes, at home in the small town of Hurstpierpoint, Sussex, particularly father Richard, a fairly successful general practitioner and Richard jun. (Dick), also training for a medical career, exchanged 116 letters with Hampton. Five letters between Hampton and Owen Evans, a practitioner friend in Sussex, are also included.

As John Ford carefully remarks, the Weekes' routine medical practice casts a tantalizing shadow over the correspondence. Richard sen., Dick and Hampton's sisters, Mary Ann, Grace and Fanny, only hint at the cases that Richard and Dick saw daily. The tedium of attending