Duchess of Ancaster told him Queen Charlotte requested his presence "but you must not mention that you was sent for" (vol. 1, p. 173).

In the world of arts and science Hunter maintained a lifelong correspondence with his countryman Tobias Smollett, assisted him and seems not to have fallen out with him. It is not often noticed that Hunter was extremely learned in the history of medicine, particularly anatomy. A draft letter to David Hume from 1764 demonstrates an impressive knowledge of texts dealing with the early history of venereal disease in Europe (vol. 1, pp. 195–7). Hume pops up again in a sad letter from James Trail, Bishop of Down and Connor, who obviously held the philosopher's character in high regard, begging Hunter to dissuade Hume from visiting Ireland where he was "an object of universal Disgust, not to say Detestation" (vol. 1, p. 229). Collecting was one route through which Hunter met and corresponded with the well-to-do such as Lord Rockingham and Sir William Hamilton, who sent Hunter a catalogue of medals from Naples (vol. 2. pp. 171-2). Samuel Johnson used Hunter's influence to present A journey to the western isles of Scotland (1775) to George III (vol. 2, p. 186). But although we know that Hunter spent much time with Sir John Pringle and that he knew people as diverse as Sir Joshua Reynolds and Joseph Priestley, folk such as these scarcely make an appearance and, when they do, their few short letters, like so many to and from Hunter, are very formal. The very public William Hunter was private to the last.

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**Robert Bud,** *Penicillin: triumph and tragedy*, Oxford University Press, 2007, pp. ix, 330, illus., £30.00 (hardback 978-19-925406-4).

The discovery of penicillin is one of the most widely known and frequently discussed scientific events of the twentieth century. Fleming's original discovery, as well as the

work of both the Oxford team who isolated the drug, and the American pharmaceutical companies who developed mass manufacturing methods have together already generated a large-and sometimes controversial-literature. Most of the accounts, however, have been devoted to the early years and the story of discovery and development. In this book, the fruit of many years of research and scholarship, Bud explores the story of penicillin over a sixtyyear period in a much wider social, cultural and geographical context. He accompanies his analysis of the "triumph", the conquering of infection, with what he terms the "tragedy", the excessive use of penicillin which has led directly to the growth and spread of bacteria resistant to antibiotics.

The first four chapters cover the prepenicillin era, the discovery and development of penicillin and its creation as a "brand", the analogy or model Bud has chosen to use for penicillin and its family of antibiotic drugs. By doing this he separates the drugs themselves and their chemical composition from the concept of the brand; this means that the brand encompasses the stories, legion and legendary, which shaped the perception of penicillin as a wonder drug, carrying with it a heavy burden of expectation of an infection-free future.

Chapter 5 charts the very rapid growth in the prescription and consumption of penicillin in the 1950s, the decade in which most of the penicillin formulations, unpatented, were manufactured across the world and the price dropped to commodity levels. At the same time the new broad spectrum antibiotics were discovered, developed, patented and marketed at prices which provided the pharmaceutical corporations with the monopoly profits they required to fund not only the growth of large institutional R&D laboratories, but also large sales forces and international expansion. Although the costs of the new drugs marketed in the post-war period were high (and there were other new products such as cortisone, as well as the antibiotics) it is arguable whether Bud gives too much significance to the role of penicillin in attributing the fall of the Labour

government solely to its cost to the NHS (p. 111). He is on firmer ground in noting that, even in the early days, the signs of drug resistance began to emerge, with the first cases of what is now called the "super bug", MRSA, in the 1960s; these are explored, together with the development of the semi-synthetic penicillins, in chapter 6.

A brand can be diluted or damaged very quickly by loss of trust, and Bud discusses this at some length in chapter 7, when he explores the complex transaction by which prescription medicine reaches its ultimate consumer, and the relationships between doctors and patients. He goes on to examine the use of penicillin in animals through the second half of the twentieth century in chapter 8. The penultimate chapter discusses the threat of a "post-antibiotic" age in the light of the emergence of not only drug-resistant bacteria but also of new diseases such as AIDS in humans and BSE in animals, reflecting on the changing perceptions of the penicillin brand and use of antibiotics. These developments, together with other changes in the last two decades of the twentieth century, such as the emergence of biotechnology and increasing scientific knowledge lead to a concluding chapter which argues that while penicillin is no longer a "wonder drug", it is, and is likely to continue to be, useful.

This is an erudite and wide-ranging study of a revolutionary drug, offering much of interest to historians of medicine, of science and of business. It also deserves to reach a wider nonacademic audience interested in a scientific revolution which shaped our lives in the second half of the twentieth century.

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Marcos Cueto, Cold war, deadly fevers: malaria eradication in Mexico, 1955–1975, Washington, DC, Woodrow Wilson Center Press, and Baltimore, Johns Hopkins University Press, 2007, pp. xvi, 264, £30.00, \$45.00 (hardback 978-0-8018-8645-4).

The reorganization of international agencies in the early years after the Second World War—the creation of the United Nations and, in particular its specialized agencies, the World Health Organization, UNICEFbrought health to the forefront of development planning and policies. The entry of the United States government into areas of international financing and policy shifted the power base from former colonial empires concerned with post-war reconstruction and decolonization to the bilateral Soviet Union versus United States Cold War superpower framework. From 1945, within the climate of the Cold War, the United States actively engaged in directing policy agendas for development and, as a subinterest, for health. Until very recently, historical writing on this period has focused on the competition between the United States and the former Soviet Union as superpowers. Marcos Cueto's book, with its focus on Mexico, redirects our attention from the superpowers of the north to the south, from "high-level politics" to "everyday life" (p. 7). The frame for his narrative is the Malaria Eradication Campaign (MEC), part of the World Health Organization's Global Malaria Eradication Campaign, undertaken in Mexico by the National Commission for the Eradication of Paludism from 1955 to 1975. While Cueto critiques the global programme, his focus is to situate his analysis of the development, delivery and responses to this health intervention in Mexico. Linking popular culture with public health, Cueto calls attention to the perhaps unintended consequence of public health campaigns, the resultant "culture of survival" of Mexico's poor, i.e. populations whose experience has led them to become accustomed to struggle to gain access to state programmes and foreign aid in a situation characterized by Cueto's second metaphor, "privileges of poverty", in which powerful national elites and international agencies control the distribution of limited resources. Cueto exposes the underpinnings of MEC funding (mostly American), delivery (mostly Mexican) and acceptance (mostly elites). The World Health