letters reproduced here, the book's main focus is on the work of Rayer: five chapters are devoted to meticulous analysis of his contributions to nineteenth-century medical science. It is an impressive collection of observations on a wide variety of subjects: from his doctoral thesis on the history of morbid anatomy to the observations on human and animal teratology. His pioneering studies in comparative pathology range from classic papers and books on glanders and tuberculosis to foot-and-mouth disease, animal pox diseases and anthrax, and culminated in a textbook of comparative medicine (1863). His plates of glanders lesions reproduced here are haunting in their realism, as are those accompanying his other major texts on kidney disease, produced between 1837 and 1841. The reproductions of both glanders and kidney disease colour plates here are of high quality, and join other well chosen illustrations in a text which will be treasured as an invaluable source of reference by present and future historians.

Lise Wilkinson.

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Don Finley, *Mad dogs: the new rabies plague*, College Station, Texas A&M University Press, 1998, pp. 215, \$22.95 (hardback 0-89096-804-7), \$14.95 (0-89096-922-5).

Britain is a nation known for its numbers and varieties of dog lovers, many with a penchant for travelling, and shorter or longer stays abroad, preferably accompanied by their pets; and public arguments for and against quarantine laws never cease. This well informed account of recent outbreaks in the United States, by a medical journalist who has done an impressive amount of homework, is of interest on both sides of the Atlantic.

The main story here concerns an outbreak of canine rabies, vectored by wild coyotes, in Texas. Beginning in 1988, the disease was introduced by coyotes and spread to domestic dogs and pet owners along the US-Mexico

border. It is a sobering and well told tale of an epidemic in a wild life population on the move, respecting no borders, and no individuals of its own or other species.

The second strand of Don Finley's story concerns the efforts to develop protective measures for those-humans and their animals-in the path of the epidemic: in this case the development of oral vaccines for wild life, to be air-dropped, suitably camouflaged in the form of various baits (unappetising to various degrees, in order to discourage children in the area from sampling them). The focus here is primarily on the V-RG (vacciniarecombinant glycoprotein) anti-rabies vaccine, developed since the beginning of the 1980s by scientists at the Wistar Institute in Philadelphia, collaborating with colleagues at the National Institutes of Health in Bethesda, Maryland. When in 1984 the bio-engineered V-RG vaccine was found, almost by chance, to work as an oral vaccine in racoons—racoon rabies had been steadily moving north since the mid-1970s, reaching Pennsylvania in 1982—the two American institutions joined forces with French commercial vaccine producers. The battle to prove the safety and acceptability of oral rabies vaccination for wildlife began in earnest.

It was to be a long drawn-out battle, largely because of the complexity of rabies problems in the USA. Unlike Europe and Canada, each with just one or two major rabies host species and where comparable schemes had been successful, the United States have distinct viruses in racoons, foxes, skunks, dogs, coyotes, and a number of bat species. The very number of vector species presents difficulties in baiting arrangements. Adding to the obstacles in the 1980s and 1990s were political difficulties, and the sometimes unyielding attitudes and differences of opinion between leading scientists and public health officials involved in the tests and negotiations concerning safety and eventual approval of the live oral vaccines to be used in the air drops.

In Texas, air drops of V-RG vaccine bait have taken place annually since 1995, the last in January 1998. Reported cases in coyotes and foxes appear to be decreasing; the arguments continue. One scientist involved calls the Texas programme "an experiment, not a control program. [There were no] empirical data to suggest that it would work". The book is a journalist's interpretation of the spread of one outbreak of rabies, and of localized efforts to control it. It is none the worse for that.

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Vernon A Rosario (ed.), *Science and homosexualities*, London and New York, Routledge, 1997, pp. ix, 308, illus., £12.99 (paperback 0-415-91502-3).

Science and homosexualities, edited by Vernon Rosario, contains thirteen essays from participants in two 'Science and (Homo)sexualities' panels held at the 1994 History of Science Society Annual Meeting. The text is of particular interest to historians of sexual medicine as it examines the development of sexological discourses about homosexuality from 1850 to the present, reviewing the positions of many figures who belonged to the non-psychoanalytic tradition of research into homosexuality. Such an exercise is a welcome addition, for not only are the essays-on the whole-of an excellent standard, the bibliographies are very thorough, making Science and homosexualities an essential reference work.

Attention should be drawn to the superior essays by Harry Oosterhuis (on Richard von Krafft-Ebing), James Steakley (on Magnus Hirschfeld), Hubert Kennedy (on Karl Heinrich Ulrichs), Alice Dreger (on French and British medical discourses on hermaphroditism), and Garland Allen (on modern biological research); all five of these contributions demonstrate the state of the art in the history of sexuality. On the other hand, articles by Margaret Gibson (on metaphor and the construction of lesbianism in America) and especially Julian Carter (on the ethnocentricity of sexology) suffer from their polemical nature and

occasional historical inaccuracies, especially in regard to Havelock Ellis, to whom Carter incorrectly attributes the notion that homosexuals are "racially immature peoples" (p. 164), while Gibson subtly misreads connections between criminality, prostitution and lesbianism which Ellis made in an 1895 essay. Furthermore, Anne Fausto-Sterling's brief contribution (which examines John Money's role in American sexology) is out of place in this collection, both in terms of style and quality.

One of the points for which the authors should be congratulated is their commitment to showing the discursive construction of homosexuality from mid-nineteenth-century Germany (Kennedy) to the molecular biology debates of recent times (Richard Pillard, 'The search for genetic influence on sexual orientation', pp. 226–41). Other important historiographical issues are developed by Oosterhuis, who examines the use of patients' autobiographies by Krafft-Ebing, and by Rosario himself, who utilizes literary sources in order to contextualize his work on French *fin de siècle* conceptions of homosexuality.

A few notable absences from the book need to be addressed: although nine of the articles, including the introduction, draw upon Havelock Ellis's contributions, there is no single study of Ellis's medical work. Also, only Erin Carlston refers to Albert Moll, the German physician who was the single most cited author in Ellis's Studies in the psychology of sex (Philadelphia, 1936), and who had the most important pre-Freudian position in sexology after Krafft-Ebing. Furthermore, no attention is paid to hypnotism, championed by Albert von Schrenck-Notzing, Albert Moll and Krafft-Ebing in Germany, Alfred Binet and Charles Féré in France, and Lloyd Tuckey in England. And finally, the role of forensic medicine in establishing "homosexual" identity, particularly in England, is ignored (reference to Alfred Taylor's or Charles Mercier's writings would have been appropriate here). But these points are not to detract from Rosario's laudable achievement. They should be seen as encouragement for him