

Book Reviews

In sum, *Experiment and interpretation* is disappointing, both as a philosophical and a historical inquiry into the practice of science. It also stands as a poor memoir for a pathologist's lifelong investment in trying to understand experimentally the genesis of cancer—Salaman died just before the publication of this book. It certainly does not allow us, the readers, to understand the epigraph: from my old self to my young self, who would have learned a lot from it.

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Alan E H Emery and Marcia L H Emery, *The history of a genetic disease: Duchenne muscular dystrophy or Meryon's disease*, London, Royal Society of Medicine Press, 1995, pp. xvi, 248, illus., £20.00, \$40.00 (1–85315–249–8).

This is a remarkably informative book. The title is much too modest and the Emerys have not only covered the history of Duchenne muscular dystrophy (Meryon's disease) but also offer insight into all the main contributors both in the early development of knowledge as well as in recent times. They examine the history of the other forms of muscular dystrophy and also give an overview of major scientific developments, particularly in relation to the molecular genetic revolution, which had its first successful application in identifying the unknown protein of Duchenne muscular dystrophy after location and characterization of the gene for the disease.

After a review of the eighteenth- and nineteenth-century accounts of muscular dystrophy and its separation from muscular atrophy, such as those by Charles Bell, Giovanni Conte, Richard Partridge, and William Little, a full chapter is then devoted to the remarkable contributions of Edward Meryon (1807–1880), a physician at St Thomas' Hospital in London, who gave a very detailed description of the disease, together with an important insight into the pathological

features in the muscle, the normality of the nervous system, the pattern of inheritance through the female, and also speculation on the possible pathogenesis, with a remarkably perceptive and prophetic suggestion that the primary abnormality might lie in the muscle membrane, which is being proved correct by recent research. After the detailed discussion of Meryon's contributions, the Emerys then review Meryon the man, and also give an interesting vignette of society and medicine around Meryon's time and look to the possible environmental factors that might have influenced his choice of muscle diseases as an area of special interest. They trace Meryon's family back to the seventeenth century when his forebears, who were French Huguenots, fled from France to England at the time of the revocation of the edict of Nantes in 1685, and settled in the town of Rye. Finally they managed to find Meryon's completely overgrown grave in the Brompton cemetery and also a painting of him by the Victorian portrait artist John Linnell.

A similarly detailed account is given of the life and times of Duchenne de Boulogne (1806–1875), who worked at the Salpêtrière in Paris and made major contributions to neurological diseases in general and particularly to the muscular atrophies and muscular dystrophy. They also discuss the possible reasons for Duchenne not only apparently ignoring Meryon's earlier contributions but also at times completely misquoting his interpretations.

These early descriptions of muscular dystrophy are followed by a review of the major contributions since that time, beginning with the remarkably lucid writings of William Gowers (1845–1915) and continuing to the present time. The book is well illustrated with portraits of all the early figures in the muscle world as well as a large series of mainly informal portraits of the recent and contemporary enthusiasts in the field.

The Emerys have also reviewed the advances in thinking over recent years in relation to the pathogenesis of muscular dystrophy and the eventual location, isolation

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and characterization of the gene by recombinant DNA technology. Many firsts were achieved in relation to the unravelling of Duchenne muscular dystrophy, from its earliest times and in relation to the molecular genetic advances. It was the first disease in which a hitherto unknown protein was characterized by so called "reverse genetics", with initial location and subsequent characterization of the gene itself and then identification of the protein it encoded. This has now happened in relation to many diseases, both neuromuscular and others, and is more generally referred to as positional cloning. The Emerys' final chapter reviews recent advances

in potential treatment, particularly efforts at myoblast transfer with the injection of normal cultured myoblast cells directly into the muscle in relation to muscular dystrophy. This has not proved successful in relation to human trials, and latterly efforts have been directed at gene therapy in experimental animals, with a replacement of the abnormal gene by a normal construct. This is certainly one of the most entertaining, captivating, as well as educational books on an aspect of medical history that I have read.

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