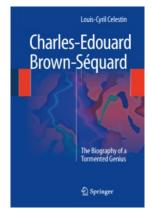


## **Internet Journal of Medical Update**

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## **Book Review**

## Charles-Edouard Brown-Séquard: The Biography of a Tormented Genius by Louis-Cyril Celestin Publisher: Springer International Publishing, Switzerland, Year 2014, 279 pages Format: PDF and EPUB – 83.29 € Hardcover – 99.99 € ISBN: 978-3-319-03019-7 (Print) 978-3-319-03020-3 (Online)



Charles-Edouard Brown-Séquard is one of the most intriguing men to have ever lived. As a scientist he was both brilliant and eccentric, driven by a passion that fuelled an oeuvre that is, till today, unrivalled in depth, breadth and, at the time, controversy. Born in Mauritius in

1817, Brown-Séquard lived a nomadic life

unparalleled by any scientist and went on to become one of the most radical shakers in neurophysiology, immortalized for generations of students of medicine and biology by his eponymous syndrome of spinal cord hemi-section. In a career understandable only in the context of maps and timelines, he crossed the Atlantic over sixty-five times, spending six years of his life at sea, shuttling restlessly between five countries and three continents. He was awarded four university chairs, refused four more, and survived three wives. He lived and taught in Boston, Harvard, New York, Richmond, London, Paris, Geneva, Dublin, Glasgow and Edinburgh, with frequent impulsive homecomings to Mauritius. He wrote over 577 papers and helped found, edit and substantially fill three journals. Perhaps his greatest achievement was the understanding of the importance of the adrenals to life. He studied vasoconstriction, and amplified Bordeu's concept of internal secretions into what we call hormones today and he first promoted the use of bromides in epilepsy.

His animal experiments, often without anaesthetics, made him the target of rabid anti-vivisectionists. To be fair, he did not baulk at experimenting upon himself suffering permanent disability and risking death. Even as he was dying of a stroke, he objectively reported on the symptoms and progression in letters to his friends.

Brown-Séquard's twilight years were unfortunately (and unfairly) blemished by his work on "Sequardine". The 72-year-old experimentalist reported rejuvenation of bodily functions in himself and volunteers after injections of testicular extracts from dogs and guinea pigs. Though he stressed the need for further confirmation, his peers and the press lampooned this "Elixir of Life" and blamed him for the craze of unbridled quackery that followed. In retrospect today, we see how this laid the groundwork for the science of endocrinology and hormone replacement therapy.

The life story of such a controversial genius will necessarily skirt dark corners and wander past closed doors. While this underrated savant deserves a much greater tribute than has been his legacy, this biography is emphatically not it. Celestin's book attempts to flush the demons that tormented and drove Brown-Séquard the way no eulogy can, and pays homage as much to his genius as to his irrationality.

The author, also born in Mauritius, has combed through archival material painstakingly over two decades, to piece together a semblance of the puzzle that Brown-Séquard lived. He has brought to life the foibles of this visionary outlined against his brilliance, and set it in the context of the scientific field as it was in the nineteenth century. With a background in medicine and translation, the author is well placed to reappraise the archives, and indeed has explained better what earlier biographers have misconstrued.

The onomastic index is comprehensive, and the author deftly provides potted biographies of the characters as they come on stage in the text. This is delightful if one has met them before, but may leave the casual reader a bit dazed, because they pop in and out of the narrative as erratically as they did in Brown-Séquard's peripatetic life.

The book could do with stricter proofing. The use of a bold font for terminology and titles (instead of quotes or italics) detracts from readability. This idiosyncratic format is also followed for binomial nomenclature when this should be italicized; in a book so awash with unfamiliar names, *something* should distinguish organisms from scientists.

*Claviceps purpurea*, *Mus rattus*, parthenogenesis and Lamarckism have been misspelt in the text and names too suffer (Jokichi Takamine, Georges Cuvier, even Brown-Séquard). Factual errors too have crept in: Joseph Lister's pure culture (p118) was of *Bacterium lactis* not *Listeria monocytogenes* (which was named generations later). Paget's recurrent fibroid occurs in abdominal muscle, not in the uterus. Paget-von Schroetter disease (upper limb DVT) is inexplicably illustrated by a sketch of Brown-Séquard (p100).

But all that is trivial and cannot detract from a very good read, so engrossing that I devoured it at one go. Of course, having a long-held interest in Brown-Séquard helped, and I do not expect it to be as gripping to an accidental reader. However, anyone with an interest in the history of medicine, or neurology and endocrinology in particular, will find this a captivating synoptic view of an exciting and formative epoch in the evolution of medical science.

Celestin has neatly partitioned Brown-Séquard's chaotic lifeline into aptly titled chapters and this, more than anything else, helps make some sense of where Brown-Séquard was headed. It is a tribute to the author's diligence and skill that, within the space of 280 pages, the tormented genius of Brown-Séquard comes to life.

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