Book review: Hauser - "The face laughs while the brain cries"

Declan T Chard 1,2

- NMR Research Unit, Queen Square MS Centre, Department of Neuroinflammation, UCL Queen Square Institute of Neurology, Faculty of Brain Sciences, University College London, UK
- 2. National Institute for Health Research (NIHR) University College London Hospitals (UCLH) Biomedical Research Centre, UK

Scientific papers are a sparse description of a life's work, the real stories are usually lost. Dr Hauser is an exemplar physician-scientist whose work has helped give people with multiple sclerosis a substantial degree of control over a capricious and disabling disease. In his book "The face laughs while the brain cries" he not only makes his research accessible to a general audience, but gives greater voice to the why and how of it. His aim was to be an 'anonymous witness to the events', and the autobiographical elements were included 'only when absolutely necessary'. As the main protagonist it was difficult for him to avoid telling us anything about himself, but he clearly tries to keep a low profile.

His research has been intimately involved with unpicking the cellular and molecular immunology of multiple sclerosis, and the elegant subversion of the same mechanisms for therapeutic effect by targeting synthetic antibodies at cells that themselves, ironically, produce antibodies. He describes this with lucidity and evident enthusiasm. No less impressive has been his work on the genetics of multiple sclerosis, indeed this came before his immunological interest, as he cold-called Dr Khorana (Nobel laureate) while in his junior year at the Massachusetts Institute of Technology. It is difficult to imagine someone starting today managing to pursue two such different yet substantial lines of research quite so confidently and effectively.

He describes many high points, but also candidly the setbacks too. A particularly fallow period came as he worked on an experimental model for multiple sclerosis, and after three years had concluded that "in science, as in all walks of life, one has to know when to cut bait". Dr Massacesi, as a new postdoctoral fellow, joined the team from Italy and did not want to cut the bait; within three weeks they reached what Hauser describes as the "first eureka moment", reminding us that persistence and luck are both important factors in research. He also highlights the precariousness of drug development and tellingly that the translation of his laboratory work into a viable treatment option was ultimately driven by people who, when it came to it, asked "if we can't do this, why are we here in the first place?" (Art Levinson, Genentech).

Hauser's life progresses against a backdrop of major social and economic changes that followed the second world war. Even if you are not interested in his research, he offers a vivid insight into medical careers in the United States before the advent of today's educationally validated programmes, different institutional zeitgeists, and their dominant personalities. He describes Dr Adams particularly crisply as 'a man of few words and strong opinions, frankly expressed'. When Hauser tells him that he wants to study intellectual disability Adams counters it would be "Better to work on something that you can solve". The taciturn Adams appears to have inspired a change of direction, not a full stop. He describes equally characterfully working with other senior physicians, such as Dr Fisher (who intriguing tells Hauser that "The neurology of ungrateful" was his greatest passion), and Dr Richardson, neuropathologist and "Boston Brahmin". Inspiring, albeit in different way, was his time in at the Institut Pasteur in Paris, where Hauser arrives at 8 am but his colleagues do not: work "would

only begin in earnest after lunch and continue through to cocktail hour". However, it seems to have been a very productive time and he was clearly tempted to stay. He offers a glimpse into a very different era, where people seemed to be much less inundated and managed.

In describing his family and friends, and his early life, we see a side to Hauser that would be hard to guess from his scientific persona: amongst his many skills he can pick locks, he spent years in "the dumb class", and he could have been an astronaut's son (but his father was too tall for the Mercury capsule). His was not a destiny foretold and he had plenty of opportunities not to succeed, had chance or judgement taken him in a different direction. Throughout, the inspiration and support of his family (in particular his wife, whose own very successful medical career would no doubt make for an interesting memoir), his friends, colleagues and patients is made clear, as is his gratitude to them. This book can be read from many different perspectives, for me it is interesting as a history of scientific discovery and fascinating because of the people.

Word count: 743

Acknowledgements

Declan Chard is a consultant for Hoffmann-La Roche. In the last three years he has been a consultant for Biogen, has received research funding from Hoffmann-La Roche, the International Progressive MS Alliance, the MS Society, the Medical Research Council, and the National Institute for Health Research (NIHR) University College London Hospitals (UCLH) Biomedical Research Centre, and a speaker's honorarium from Novartis. He co-supervises a clinical fellowship at the National Hospital for Neurology and Neurosurgery, London, which is supported by Merck.