Alzheimer the man

Gerald Münch

Alzheimer: The Life of a Physician
& the Career of a Disease
by Konrad Maurer and Ulrike Maurer
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The very name 'Alzheimer' now sends shudders down the spine. Not through any fault of the pioneering psychiatrist who first described the disease that now bears his name, but because of the mental devastation that

accompanies this increasingly common malady. If no cure or preventive treatment is found, 5% of the total population will suffer from the disease by the year 2050. Despite considerable progress in histochemical, biochemical and genetic research, the underlying causes of Alzheimer's disease (AD) remain mysterious, as did, until recently, the man after whom it was named. Now, a new book by Konrad Maurer, Director of the Psychiatric University Clinic in Frankfurt, Germany, and his wife Ulrike, gives us some insight into Alzheimer's life. But *Alzheimer: The Life of a Physician & the Career of a Disease* is more than a biography; it is a story of scientific discovery at a crucial stage in the history of biological psychiatry and of scientific life in nineteenth century Germany.

This book is great reading, especially, but not only, for the modern-day molecular biologist investigating AD who needs to step back from amyloid, tau, cell cultures and transgenic mice and view the larger context of this devastating, uniquely human, disease. Alois Alzheimer (1864–1915) was practising medicine at the Frankfurt Asylum in 1901 when he met Auguste D., a patient whose condition perplexed and intrigued him. In the first chapter, the authors give the

reader the opportunity to be Alzheimer at the bedside of Auguste D., examining a relatively young patient with a strange, mysterious and disturbing dementia. Konrad Maurer uses his neurology, psychiatry and psychotherapy background to describe the scientific aspects of Alzheimer's life. The reader is then taken back in time and the authors switch from their role as psychiatrists to knowledgeable historians. They describe the history of Alzheimer's family in the small country town of Marktbreit in Lower Frankonia, Germany, where Ulrike Maurer has converted his family home into an excellent museum.

The authors describe Alzheimer's daily life in nineteenth century Germany in enough detail to engage the general reader, whether interested in the disease or not. For example, the Alzheimer family moved to Aschaffenburg to give the children the opportunity to attend the Royal Humanistic Gymnasium. Alzheimer was praised for his profound understanding of the natural sciences in high school (medical students, take note!), but he was 'excused' from gymnastics. After graduating from high school, he studied medicine in Berlin because his father believed that the greatest minds—such as the renowned German pathologist, Rudolf Virchow—were there and that his son would greatly profit from such an inspiring environment. Alzheimer, however, was not happy in the big city and moved closer to home to Würzburg in 1884, where he took 'the chemistry of metals' as his only course in the summer semester. Did he already realize the importance of transition metals for the development of the disease at that time?

Pointed out many times in the book is the importance of mentors for the development of a promising scientist. During his Würzburg days, Alzheimer worked in the lab of Swiss physiologist and histologist Albert von Kölliker, who introduced him to the fantastic world revealed by the microscope. He also met neuropathologist Franz Nissl, who developed techniques for staining nerve cells in Frankfurt that laid the foundations for the histochemical and neuroanatomical studies that made Alzheimer's discoveries possible. In

addition to the science, there are many interesting facets of Alzheimer in this book. He married a rich widow and thus had enough money to work as an unpaid assistant in Munich, he considered extended baths one of the best treatments for many psychiatric diseases, and he was a firm believer in the benefit of long walks and midday rests for working productively.

I can highly recommend this book to anyone interested in the disease and the man behind it. My favourite part of the book is when Alzheimer presents the case of Auguste D., for the first time, at the 37th Annual Meeting of the Southwest German psychiatrists in Tübingen in 1906. After his lecture, complete with brilliant slides showing neurofibrillary tangles, plaques and activated glia, the minutes show that no questions were asked. The chair remarked: "So then, respected colleague Alzheimer, I thank you for your remarks, clearly there is no desire for discussion." Alzheimer was confused. He was used to lively discussions and had expected as much—did his colleagues not understand the importance of his results? But like many innovative scientists, he was ahead of his time, not receiving the attention he deserved until long after his death. At a time when his career was finally moving steeply upwards, Alzheimer was appointed as the director of the psychiatric clinic at the University of Breslau (now Wrocław, Poland). As he embarked on the long trip east, he was exhausted—and, without knowing it, was acutely ill during the journey with angina, nephritis and inflammation of the joints. Alzheimer never fully recovered and he died 3 years later, on December 19, 1915, at the age of 51. At least now with this biography, we can begin to understand the life of a man who has been immortalized forever.

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