

From the Editor's Desk

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Brain and Visual Perception is a superb book¹ by David H Hubel and Torsten N Wiesel published in 2005. As most readers are probably aware, these two vision scientists and authors were awarded the Nobel Prize in 1981 for their work in the field of vision perception. Their book is intellectually stimulating and provocative, somewhat demanding and essentially is based upon many of their most significant papers that were published in prestigious journals over a period of about twenty five years from 1958 to 1982. Each research paper has a foreword that briefly introduces the paper and discusses aspects such as why they decided to embark on the specific research activities concerned, what were some of the challenges and rewards associated with the research and also explains some of their reasons for eventually including the paper in their book. Following each of the previously published papers included in their book¹ is also an afterword that discusses the reception of the research papers by the scientific community or other interested parties and then any relevant and subsequent developments since publication of the papers are also described.

One of the most enjoyable aspects of reading this excellent book by Hubel and Wiesel is the manner in which one gets a sense of just how intensely dedicated these researchers were to their particular interests and the very extensive and detailed studies that they

performed in order to understand how vision processing occurs in the visual pathway and brain. They sometimes would spend as much as nine hours stimulating a single cell of an animal visual pathway or brain with different types of stimuli or environmental conditions in order to completely understand the mechanisms through which that visual cell responded or functioned. During the years they also collaborated with several important researchers such as Stephen Kuffler and proper credit and interesting anecdotes are often provided in their book.

The various research environments in which they performed their work (such as the Wilmer Institute at The John Hopkins Hospital and University and the Neurophysiology Laboratory and Department of Neurobiology at Harvard Medical School) were also ones where researchers were permitted to do their work with usually minimal interference; something which is increasingly becoming less common in South African universities as external influences and internal bureaucracy takes over. In the modern university, within South Africa at least but possibly also elsewhere, there appears to be a shift towards greater superficiality and improving throughput of students is becoming the major or overriding concern. Also, there are increasingly many influences to provide so-called *work* or *job-ready* individuals whatever that might actually mean and this will cer-



tainly be at the expense of university-oriented educational content. Unfortunately there is also a growing tendency towards a supposed emphasis on quality but in reality the numbers of successfully completed undergraduate and postgraduate degrees and published papers are becoming of greater importance than the actual quality of educational or research activities or the true value of such postgraduate dissertations, theses or other research publications. Greater emphasis is being placed on getting students through the system successfully and as quickly as possible and the nature and actual quality of the work they perform is becoming of lesser importance. But people like Hubel and Wiesel were much more interested in performing research of an extremely high quality and thereafter in publishing papers of superior or exquisite content rather than attempting to instead publish lots of papers of possibly doubtful value. The quantity of successfully completed degrees or of published papers would not have impressed them very much and if in any one year they were able to produce only a single paper but nevertheless one of an exceptional standard they were more than amply satisfied. The institutions within which they performed their ac-

tivities were also sensible enough to let them get on with their various activities without too much unnecessary distraction or interference. Something that some South African universities still need to understand concerning academic and researcher behaviour or appear to have ignored or forgotten in their rush towards applying sometimes undesirable, excessive or unnecessary managerial or administrative control or influence over academics, researchers and their various activities within the university environment. If South African universities truly want to compete with the *best in the world* then they should ideally implement best practices of those universities that are already amongst the best in the world.

Reference

1. David H Hubel, Torsten N Wiesel. *Brain and Visual Perception: The Story of a 25-Year Collaboration*. New York: Oxford University Press, 2005.

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