

Obituary



David Ottoson. Photograph © IBRO.

David Ottoson (1918–2001)

A master in our field of sensory physiology has passed away after a short, but painful illness. He left his wife Inger and daughter Gabrielle Ahlberg.

David Ottoson was born and spent his childhood in Chalgan, China, where his parents were missionaries. David first studied odontology, then medicine, and started his scientific career in 1952 as a research assistant at the Department of Physiology at Karolinska Institutet, Stockholm. His thesis 'Analysis of the electrical activity of the olfactory epithelium' was defended in 1956 and is a milestone in olfactory research.

David Ottoson was appointed professor at the Royal Veterinary College in 1966; in 1974 he became professor at the Department of Physiology at Karolinska Institutet. He was a member of the Nobel Committee (1974–1984) and chairman (1982–1984), and with pleasure saw Sperry, Hubel and Wiesel receive the Nobel-prize in 'Physiology or Medicine' in 1981. He held posts as secretary general for the Association of Physiology, Stockholm, and editor of *Acta Physiologica Scandinavica*. David also headed the Wenner-Gren Institutions and by remarkable fundraising activities created an international centre for scientific exchange.

On the international scene, David created and became editor-in-chief of the 'Progress in Sensory Physiology' series

(1980–1990). He founded the journal *NeuroReport* in 1990, seeing the need for rapid publication; and was editor-in-chief close to his death. At his retirement in 1984 from the professorship at Karolinska Institutet, he became Secretary General of the International Brain Research Organization (IBRO), a position he held until 1997. He was also a special advisor to the Director-General of UNESCO and a member of the Council of Advisers of the Frontier Research Program, Tokyo.

An appreciation of the different positions he held on the international scene is seen in the following recognitions: Honorary Professor of Beijing Medical University, Officier et Commandeur dans l'Ordre National de la Légion d'Honneur, Chevalier dans l'Ordre du Lion du Senegal, the Order of 'Commendatore Della Repubblica Italiana' and the Royal Order of Merit of Sweden.

In all of the organizations that he participated in or headed, David's unfailing capacities and skills fermented growth and prosperity. His genuine kindness, knowledge, enthusiasm and charm worked like a magic wand. But behind all his success lay hard work, well-set objectives and determined intelligence.

David Ottoson made many significant contributions to the field of olfaction. He discovered the electro-olfactogram (EOG), analysed its properties in detail and wrote a masterpiece of a thesis. He continued with studies of the connections between the EOG and the slow potentials of the olfactory bulb. He described the propagation of nerve impulses in the olfactory nerve and transmission of nerve impulses in the synapses of the olfactory bulb. In addition to his scientific activities, David, together with Yngve Zotterman, initiated the Olfaction and Taste meetings, later to become ISOT. The first symposium was held at the Wenner-Gren Center, Stockholm, in September 1962. Under the leadership of David, more than 60 meetings, mostly in neurophysiology, were held there during a period of 10 years. These symposia make a fascinating exposé of the development of neuroscience and established Stockholm as a centre for neuroscience. David was an eloquent and highly appreciated president of ECRO from 1976 to 1982 and an honorary member of our chemosensory society.

David Ottoson made contributions to many fields of sensory physiology. However, the reception of the discovery of the EOG was not what he had hoped for and what we today would considered normal. Thus, bitterly, he switched from olfaction to the isolated muscle spindle of crustacea, frog and mammals, where competitors were of a higher standard. The dexterity needed to make recordings from isolated muscle spindles is evident to anyone who has tried it. Together with Charles Edwards, he studied the lobster stretch receptor, and they discovered that the spike potential

originated not at the dendrite but at a region of the axon, a sensation at that time. David described how in the middle of this work he woke up one night with the thought that maybe the two beams of the Textronix 502 were not synchronous. Thus, he hurried down to the laboratory and switched on the oscilloscope, only to observe that the beams were perfectly adjusted and thus the findings correct. This glimpse of his attitude shows his concern for detail and the meticulous nature of his approach. We should not ignore that David

also made significant contributions to studies of pain. In all, he published about 200 articles and several textbooks in neuroscience. His last contribution was 'Towards the unknown', in *NeuroReport* 2000, 11: i.

With the death of David Ottoson we have lost a generous person, a great scientist and a colourful ambassador of science. He had keys to the heart of us all. We shall miss him.

Kjell Døving