

Les Iversen FRS 31st October 1937 - 30th July 2020

Les died on the morning of Thursday 30th of July, at home in Castle Combe after he had fought a short but difficult battle with Parkinson's Disease.

He was the Gaddum Lecturer of the BPS in 1971, joined the Society in 1975, was awarded the Wellcome Gold Medal in 2003 and elected to Honorary Fellowship in 2009. Outside the BPS he was also recognised and honoured being elected Fellow of the Royal Society in 1980, Honorary Member of the American Academy of Arts and Sciences in 1981, Foreign Associate Member, National Academy of Science in 1986 and received the Lifetime Achievement Award of the British Academy for Psychopharmacology in 2006. He was made a Commander of the Order of the British Empire in 2013.

Les was born in Exeter and after attending the local grammar school went up to Trinity College, Cambridge with a scholarship to read Botany but at the end his first year switched to the study of Biochemistry. At this time he met his future wife, Sue, when they shared practical classes in Physiology. He started his career in catecholamine research as a PhD student initially with Gordon Whitby and then with Arnold Burgen. He made fundamental discoveries on the nature of catecholamine uptake, including the discovery of uptake₂, such that his PhD thesis became a best-selling book ("The Uptake and Storage of Noradrenaline"). He was awarded a Harkness Fellowship to work and study in the USA spending time in the Axelrod lab at NIH as one of the first overseas visitors and at Harvard with Kuffler and Kravitz where he was involved in the first experiments showing that GABA was a neurotransmitter. He then returned to Cambridge as a Locke Fellow of the Royal Society where he shared a lab with Brian Callingham in the Dixon Building on the Downing Site and Bevyn Jarrot joined him as his first PhD student. A very productive few years of experiments on catecholamines, GABA and glycine was followed by the founding of the MRC Neurochemical Pharmacology Unit, with Les as Director, in 1970. This attracted a constant stream of talented PhD students and postdocs, many of whom went on to do great things in their own right. His research interests broadened in this period to include studies on neuropeptides including the enkephalins and substance P. In 1983 Les moved to the new MSD Neuroscience Research Centre as its first Director and recruited a whole new cohort of talented people plus some of his Cambridge colleagues. His wife Sue also decided to join the team as Head of the Behavioural Pharmacology department. Les had a vision for the type of science that was needed for modern drug discovery and he embraced the leading edge, choosing not to hunt with the pack but to pioneer new pathways. Over the years the Centre grew to have more than 300 staff (possibly the highest density of industry neuroscientists anywhere in the world) and much fundamental research on neuropeptides, amino-acid transmitters and other topics was published. Drugs for treating migraine headache and nausea and vomiting after cancer chemotherapy were discovered during Les's time as Director. In 1995 Les took early retirement from MSD to move to Oxford as Honorary Professor in the Department of Pharmacology where Sue was already installed as Professor and Head of the Department of Experimental Psychology. He held numerous consultant and advisory positions including being the Chair of the government Advisory Council for the Misuse of Drugs.

A pioneer in Neurochemical Pharmacology, Les helped drive our understanding of basic neurotransmitter function. Les was, without doubt, a master of his craft. Not only were his achievements outstanding, but he also had the wonderful talent of bringing out the best in those

who worked with him. Friendships made throughout his career have flourished right up to the end. Indeed, his Eightieth Birthday lunch in 2017 was organised by Bevyn Jarrott. Like so many of those who worked with Les and were proud to call him a friend I shall miss him.

If anyone wishes to make a contribution to funding research into Parkinson's Disease in memory of Les, his family have kindly provided the following link <https://www.gofundme.com/f/ksfjw-in-memory-of-professor-leslie-iversen>

A memorial service is planned for later in the year but details are not yet available.

Ray Hill 5th Sept 2020 (I am grateful for valuable information provided by Brian Callingham, Peter Roberts and Ruth McKernan)