## **Kevin Park In Memoriam**

Professor Brian Kevin Park died, aged 70, on 27 January 2022, after a short illness.

Kevin Park undertook work across the disciplines of clinical and basic pharmacology and toxicology, and medicinal chemistry for nearly 50 years. His contribution to improving drug safety nationally and internationally made major impact in terms of benefiting individual patients, public health, Government policy and the pharmaceutical industry.

Kevin was born in New Zealand on 24 June 1951. After his school education in Preston, he graduated with a BSc in Chemistry in 1971 at the University of Liverpool, followed by a PhD in Organic Chemistry, under the supervision of Prof Frances Dean, in 1975. He then spent 2 years as a postdoctoral fellow in the Department of Biochemistry, before accepting a lectureship in the Department of Pharmacology and Therapeutics in 1976, under the leadership of Professor Sir Alasdair Breckenridge. Kevin's appointment was transformational for the Department, where he established new areas of research, developed one of the largest research groups in the University, progressed rapidly through the academic ranks, becoming Wellcome Senior Lecturer in 1983, Wellcome Principal Research Fellow in 1989 and Professor of Pharmacology and Therapeutics in 1989. He succeeded Alasdair Breckenridge to become Head of Department in 1999. He remained fervently loyal to the Department of Pharmacology in Liverpool until his retirement in the summer of 2021. Kevin's contribution was instrumental in the Department being awarded the Queen's Anniversary Prize for Further and Higher Education in 2018. Kevin was never one to stand still – with every stage of his career, he developed new avenues of research, and inspired new initiatives. One of his greatest achievements was the award of the MRC Centre for Drug Safety Science in 2008, one of the first Centres in the world to focus on drug safety. "Molecule to humans, and from bench to the clinic, and back" were foundational principles of his outstanding research success.

Kevin's research contributions were extensive, with more than 700 publications in the top Pharmacology and Medical journals. He was frequently on the speaker list of major national and international conferences highlighting the reach of his work. His research portfolio was extensive, and the short description here does not do justice to his impact. Particular highlights include the development of radioimmunoassay for urinary 6β-hydroxy-cortisol, a marker of CYP3A4 induction; the relationship between the disposition and pharmacological response to vitamin K providing a more rational approach to coumarin therapy; the formulation of the hapten hypothesis of drug hypersensitivity (more latterly focusing on the role of T cells in immune-mediated adverse drug reactions); and better understanding of the mechanisms of adverse drug reactions by a dissection of the clinical, cellular, molecular and chemical pathways, with a view to identifying individual predisposition, including at a genetic level (pharmacogenetics), or to prevent adverse drug reactions through safe drug design. The latter led to the concept of how chemical modification, fluorination, can block the bioactivation of oestrogens and 4-aminoquinoline antimalarials without loss of pharmacological activity. This also led to the development of isoquine - a product of a publicprivate partnership between the University of Liverpool, the Medicines for Malaria Venture and GSK. Kevin spent the latter part of his career advancing knowledge into the causes and mechanisms of drug-induced liver injury. He led two major innovative medicines initiative (IMI) consortia, which brought together a large global team of researchers from industry and academia, resulting in changes in how some pharmaceutical companies assess the risk for liver injury of their drug development candidates.

Kevin was a great teacher and developed the Chemistry-Pharmacology honours course at the University. He supervised a staggering 135 PhD students throughout his career – he knew all their work thoroughly, and saw them frequently for supervisory meetings during their PhDs. He operated an open-door policy, always ready to meet up, to discuss data ("exciting green lightning" was often heard from the open door of his office). Where research was not advancing, he would think of possible solutions; he was always interested, and always one step ahead of most of us. He did not suffer fools gladly, yet he was the first to support and mentor his students and colleagues who had work or personal problems, with a friendly arm around the shoulder, a supportive comment, probably with a humorous observation thrown in to cheer people up. He recognised that the research endeavour can be very frustrating and stressful, and requires a sprinkling of good fortune as well as dedication and inspiration. He believed that building up the confidence of his colleagues was an essential part of his role, and many of his students and colleagues learnt this important lesson from him.

Kevin received many prestigious prizes and awards over the course of his career, including the Pfizer Medal for Innovative Science (2000), the Scientific Achievement Award for major Scientific Contribution in the Field of Xenobiotics from ISSX (2012) and the Barnes Prize from the British Toxicology Society (2017). Kevin was a fervent supporter of the British Pharmacological Society (BPS) – he served on the BPS council from 2008, and won at least 5 prizes from BPS. He was awarded Honorary Fellowship in 2016, the highest award from the BPS. Kevin made enormous contributions to public service through his work with the Medicine and Healthcare Products Regulatory Agency (MHRA) – he sat on various advisory committees including the Committee on Safety of Medicines (1993-2005) and the Commission on Human Medicines (2005-2015).

In keeping with his University career, Kevin was a one-team football fan - of his beloved Manchester United. After the Red Devils had thoroughly embarrassed local reds, he was quick to make a call to the noisy Liverpool supporters in the Department! There was also his love of cycling and the achievements of the coast to coast and Land's End to John O'Groats! He used to tell one of his colleagues, David Back who was a lay preacher 'Give them a long sermon next Sunday so that you keep them off the roads and give us cyclists a bit of quiet!' Kevin was also a family man — he would delight in talking to his colleagues about his grandchildren, his love of playing football with them and was always happy to show a recent photograph.

Kevin had an extraordinary drive and scientific intellect, and he was held in the highest esteem for his sharp mind, his wit, his genuine interest, and his scientific rigour and integrity. The world of pharmacology has lost one of its greatest original thinkers and scientists. His parting leaves us saddened, but honoured to have had the privilege to have known and worked with a true great. He leaves a remarkable legacy with very many of his PhD students holding Professorial positions in universities and senior positions in Industry.

Kevin is survived by his wife, Caryl, his children Cathryn and Gareth, and his three grandchildren.

Department of Pharmacology and Therapeutics at the University of Liverpool.

10 February 2022