

Professor Sir Colin Dollery died on December 12th, 2020, aged 89. He grew up in Lincoln and attended Lincoln School. His father hoped Colin would study Chemistry, as he had done. However, Colin was set on Medicine and obtained a first in Physiology in 1953 at the University of Birmingham, graduating MB ChB with top honours in 1956. After a stint as House Physician to Sir Melville Arnott, Colin moved to the Hammersmith, attracted by the research of Professor Sir John McMichael FRS. Colin's plans to take a research fellowship at Oxford were forestalled by McMichael offering him a job as research registrar in the medical unit, famously crammed into the lower medical corridor at the Hammersmith.

Colin remained at the Hammersmith until he retired in 1996, becoming Professor of Clinical Pharmacology in 1969, Professor of Medicine in 1987 and Dean of the Royal Postgraduate Medical School in 1992.

McMichael's team had a unique advantage, access to the new MRC Cyclotron on the Hammersmith site. Colin's first research project used short lived isotopes of carbon and nitrogen to show that gaseous exchange in the lungs of patients with mitral stenosis was abnormally distributed. However, his eureka moment came later when he used pentolinium, a ganglion blocker developed by Paton at Oxford, to successfully treat a patient with malignant hypertension who was dying with pulmonary oedema.

Over several decades, in collaboration with many different pharmaceutical firms, Colin researched and introduced more effective and better tolerated drugs for hypertension. The Hammersmith Hypertension Clinic became one of the largest in the country. Over the next 40 years hypertension, once an untreatable, often fatal condition, became so effectively treated that patients are now routinely managed with oral drugs in general practice. This gradual transformation of a common condition has had a huge impact on public health and is largely responsible for the important reduction in cardiovascular deaths in the UK and around the world.

Inevitably, widely used drugs turn up unexpected adverse events and Colin identified and investigated several, including the diabetogenic effects of thiazide diuretics, the haemolytic anaemia caused by methyldopa and the lupus syndrome caused by hydralazine.

Another interest early on was observation of retinal blood vessels in hypertension and diabetes using fluorescein cine angiography. He made careful measurements of the diameter of retinal vessels after infusions of pressor agents. This use of novel measuring techniques to quantitate drug effects in man became a hallmark of his research in different diseases from hypertension to asthma and it was by natural progression that he became a leader in establishing Clinical Pharmacology as an experimental discipline.

Colin Dollery was appointed Honorary Director of the Medical Research Council Clinical Pharmacology Research Group at the Royal Postgraduate Medical School (RPMS) in 1966 and this enabled him to assemble a multi-disciplinary research team to study drug action, safety, and metabolism. The Department of Clinical Pharmacology at the RPMS was established in 1969. Research on the cardiovascular system was a major interest of the Department but other important areas of research were opened particularly those on drug interactions and mechanisms of drug toxicity. The Department was one of the first to apply the new technique of combined gas chromatography and mass spectrometry to biological research. The epidemic of asthma deaths in the late 1960s led Colin to switch his research interest to that disease and there followed a highly productive period of research on the action and safely of anti-asthmatic drugs and the propellants used in metered dose inhalers. This research naturally progressed to investigations of the physiological and the pathophysiological role of eicosanoids in asthma studies which attracted programme grant support from the Medical Research Council.

Even in these early days it was Colin Dollery's belief that it was a great privilege to conduct studies on healthy volunteers and patients and he insisted that the experiments had to be conducted to the highest standards using the best validated methods to measure drug action, safety, and metabolism. Protocols were written with great care. If they were not rigorously adhered to all hell broke

loose. This was 'Good Clinical Practice' in all but name. This influence can be seen in the subject matter and quality of research conducted by former members of the Department. High standards were set for the delivery of lectures. Rehearsals were mandated, whether it be for a brief communication to a learned society or an invited lecture.

The Department under Colin Dollery enjoyed an unrivalled reputation for training scientists, many of whom were appointed to senior academic and industrial positions in Medicine, Clinical Pharmacology and Pharmacology in the UK and worldwide, but its influence extended beyond members of the Department. Through its 'Workshops in Clinical and Chemical Pharmacology' the Department contributed to the training of many people who became leaders in the pharmaceutical industry internationally.

Colin Dollery's great energy and enthusiasm enabled him to make major contributions to the development of Clinical Pharmacology. He was the first Chairman of the Clinical Pharmacology Section of the British Pharmacological Society (1970-75) and played a major role in the establishment of The British Journal of Clinical Pharmacology. He made numerous contributions to the international development of Clinical Pharmacology none more so than by running the successful 'First World Conference on Clinical Pharmacology' in London in 1980. He was President of the International Union of Pharmacology from 1987 to 1990 and served on many Expert Advisory Panels in the UK and at the World Health Organization. After retirement from the RPMS Colin worked almost full time as a Consultant to GSK well into his 80s, attending research meetings and visiting labs.

Colin Dollery did not devote all his energies to research. He was a keen radio ham, building his own transmitter as a teenager and later counting the King of Jordan among his radio contacts. Travel was another enthusiasm. There are numerous stories of his legendary appetite for short trips to far flung destinations. One diary entry caused great amusement in the Department: "Wednesday, fly to India, Thursday, India all day, Friday, fly to Hong Kong".

Colin had little time for small talk. His direct, brusque style upset some people and he was never slow to call out errors and woolly thinking. However, many have cause to thank him for help, freely given, in their professional and personal lives.

Colin was a moderniser. He regarded medicine in the UK as clubby and slow to embrace change, not popular opinions even today. Looking back objectively one

can see that his contributions to Clinical Pharmacology and Drug Regulation were immense, both in what he achieved and what he inspired others to do.

He is survived by Diana, whom he married in 1958, and their two children, Peter, a teacher and Clare a Medical Director.

Donald S Davies and Peter Lewis