## H.O.J. Collier

Pharmacology lost one of its most active and respected peers with the death of Dr Harry Collier on August 29th, 1983 at the age of 71. Although Harry spent almost all of his working life in the pharmaceutical industry he was much more than the conventional industrial pharmacologist of his day, believing that one's approach should be more than an empirical one. Throughout his career he was interested in the mode of action of drugs and the mechanisms of biological processes. In all aspects of his working life he was a precise man, known to correct his incoming mail so that it might be filed as a proper record. Although basically a shy man, he was always very eloquent in his working scientific environment, adding interest to any meeting with constructive criticism, wit and helpful advice. It is not surprising that he became respected and befriended by academics and industrialists alike.

Henry Oswald Jackson Collier was educated at the Royal Grammar School, Worcester from where he went up as a scholar to Trinity Hall, Cambridge. He gained a double first in the Natural Sciences Tripos in 1933 and went on to do post-graduate research under Sir James Gray on the primitive nervous system. He spent the following four years as assistant lecturer and demonstrator in Comparative Physiology at the University of Manchester. In 1941 he joined I.C.I. as a parasitologist but was seconded to research in chemotherapy at the Liverpool School of Tropical Medicine during the war. Then in 1945 he set up a new pharmacology department at Ware for Allen and Hanbury; from 1958–1969 he was Director of Pharmacological Research at Parke-Davis, Hounslow after which he moved to Miles Laboratories at Stoke Poges and as Research Director reorganised their research programmes and collected an active young group of researchers working on allergy.

He retired from the industry in 1981 but remained active until the end. He was appointed Visiting Professor in the Pharmacology Department, Chelsea College, University of London.

First at Manchester and afterwards at Ware, he spent many years examining the effect of substances on neuromuscular transmission. He worked together with chemical colleagues on a group of synthetic compounds resembling (+)-dimethyl-tubocurarine. The development of the neuromuscular blocking agent, laudexium resulted from this investigation and was followed by the introduction of suxamethonium and the discovery of the connection between its long action and serum cholinesterase deficiency.

While at the School of Tropical Medicine in Liverpool, Harry Collier and his colleagues in June 1941, were the first to observe the therapeutic effect of penicillin against spirochaetal infections and later carried out clinical trials of penicillin in syphilis. At Ware he continued his work on chemotherapy, particularly in relation to the antimicrobial properties of new pteridines and quaternary ammonium compounds which resulted in the introduction of dequalinium and hedaquinium.

Another of his scientific interests was the development of bioassay techniques for the active principles of various plant extracts. Typical examples are an assay for the active substances of senna, the identification of 5-hydroxytryptamine in nettle sting and the characterisation of curarising compounds.

He had a long-standing interest in pain, pain-producing substances, analgesics and drug-dependence. Until recently opioids were the only known inducers of dependence for which there was no satisfactory treatment. Only within the last few years while working at Chelsea, Harry Collier himself found that another endogenous compound, adenosine, was able to interfere with the development of opiate dependence and its later manifestations. This finding is of great potential importance as a basic for preventing dependence on morphine and similar drugs.

Another of Harry's interests was allergic reactions, particularly in the bronchoconstriction caused by bradykinin, SRS-A and antigen as an approach to improving the treatment of asthma. He and his colleagues were the first to observe these actions *in vivo*, as well as their selective antagonism by aspirin-like drugs. In 1968, when much work was being carried out on prostaglandins, he suggested that the anti-inflammatory activity of aspirin-like drugs might be the result of their interfering with the production of endogenous mediators such as prostaglandins. It was only three years later that this was shown experimentally by John Vane and his colleagues.

In addition to publishing nearly 200 original scientific papers, Harry Collier was an accomplished writer, lecturer and broadcaster. Editors and producers were quick to realise his potential for explaining difficult problems in terms understandable to the lay and semi-lay public. He was frequently invited to write general articles for the non specialist reader and contributed to *Penguin*

*Science News* and the *New Scientist.* He was also a popular broadcaster. Among the many talks he gave were subjects of such diverse interests as 'Healing Chemicals', 'Itches and Stings' and 'Opium'.

Harry built his high scientific reputation in what was then the harsh world of industry. Perhaps this was the reason why he did not receive the outward recognition from his peers and contemporaries which he deserved. In contrast, he was always prepared to acknowledge generously the achievements of others and never showed signs of harbouring rancour. We shall miss his witty, gentle but very sincere contributions to discussions of communications given at Society meetings.

He was a highly literate man having interests which ranged widely over the cultural field including the arts and literature. Harry Collier's artistic as well as his scientific nature lives on in his children since his two daughters are artists and his son is a pharmacologist.

G.P.L.