

Barry Furr - OBE, PhD, MA (Cantab), FMedSci.

After initial studies in Physiological Chemistry at Reading University followed by a PhD in Reproductive Endocrinology, Barry joined ICI Pharmaceuticals at Alderley Park in 1972 to work with Arthur Walpole. Although the main focus of Walpole's group was on fertility, both human and animal, the following year saw the launch of one of its inventions, NolvadexTM (tamoxifen), as a novel agent for the treatment of advanced breast cancer. This proved important not only for the future direction of Barry's drug discovery work, but also in providing an outstanding example of how the commitment and ingenuity of an individual could have a major influence on a large organisation.

With the change in emphasis towards anti-hormonal approaches to breast and prostate cancer, Barry and colleagues Mike Dukes and Alan Wakeling built the Cancer Biology capability at Alderley Park that was the basis for subsequent success and expansion in Oncology. It was unusual for an anti-cancer group in being exclusively endocrine-based and the tests were based on hormone-related rather than anti-tumour effects. Some of the critical assays involved delicate surgery and took days or even weeks to complete. Barry, through continued personal involvement, had a keen appreciation of the importance of the work done by laboratory scientists and their skills and insights. He assembled and developed a team of outstanding co-workers who moved across projects with him and to whom he was always very attentive.

He began a project to look for LHRH analogues in 1973 shortly after publication of the peptide structure. Working with peptide chemist Anand Dutta, by 1978 Barry had identified a drug candidate, goserelin, which caused down-regulation of the LHRH receptor via its superagonist properties. Although this peptidic compound showed the desired pharmacological profile and extremely high potency, it had to be administered as a daily i.m. or s.c. injection. From his early interactions with clinical and commercial colleagues, Barry understood that this might prove a potential problem with even initial clinical efficacy studies in breast cancer requiring dosing for 6 weeks. Showing his own commitment and ingenuity, Barry then proposed and gained support for what was unprecedented work on a sustained-release solid depot formulation of goserelin based on a novel lactide/glycolide co-polymer generated by colleague Frank Hutchinson. This resulted in ZoladexTM, launched as a 1-month s.c. depot in 1987 and still widely used in 1-month and 3-month forms for the treatment of prostate and breast cancers and also gynaecological disorders. A second major drug launch for prostate cancer was to follow in 1995 with CasodexTM (bicalutamide), an antiandrogen small-molecule agent from a project with Howard Tucker and Les Hughes in the early 1980s.

Barry's willingness to support the anti-cancer agents internally and externally throughout the clinical and commercial phases and to provide input and advice across the associated multidisciplinary teams was exceptional. He continued to do this for Oncology even when the scope of his increasingly senior management roles took in other therapeutic areas. Many of the other successful cancer projects, such as those resulting in Arimidex™ (anastrozole), Faslodex™ (fulvestrant) and Tomudex™ (raltitrexed), benefited from Barry's scientific or strategic input and he maintained a high level of publication throughout his career.

Within ICI Pharmaceuticals he was responsible initially for Cancer Biology activities, then in Zeneca managed work across Immunology and Inflammation and, in 1997, was promoted to lead all late-stage discovery activities. His enthusiasm for and commitment to drug discovery and scientific research remained undiminished and this was reflected in his appointment to the role of Chief Scientist when AstraZeneca was formed in 1999. Until his retirement in 2006, Barry played a central part in bringing together researchers from the two parent organisations and took a particular interest in the TB work done in Bangalore. By stimulating scientific debate, emphasizing the need for focus on drug discovery and helping to develop others, he made a major impact on the next generation of researchers that will provide a lasting legacy. His many achievements were recognised in 2000 by the award of an OBE for services to cancer drug discovery.

After leaving AstraZeneca, Barry served as a non-executive director of the Medicines and Healthcare products Regulatory Agency (MHRA) of the Department of Health of the United Kingdom and worked with a number of biotech companies.

Barry also played a significant role in establishing the Industry-Academic Forum of the Academy of Medical Sciences.

The only thing that Barry valued more than his science was his family – Eileen, his wife, his son Alex, daughters Rhiannon and Abigail and five grandchildren. The family are collecting donations for charities that Barry supported. To donate go to www.justgiving.com/teams/barry-furr.

Gerard Costello
Rodger McMillan
Les Hughes