

Henry Gemmell Morgan

Emeritus Professor of Pathological Biochemistry, University of Glasgow.



Professor Gemmell Morgan lived in an era of unprecedented technological change in the provision of healthcare in Scotland and his drive and enthusiasm put him at the forefront of that process. The science of clinical biochemistry in the country owes more to him than to anyone else of his generation.

Born into a well-known east coast medical family, (his father, Dr J M Morgan, was Senior Physician to the Royal Infirmary in Dundee), he was educated at Dundee High School, Merchison Castle School and the University of St Andrews where he graduated BSc in 1943 and MB ChB (with commendation) in 1946. After house jobs in Dundee and short spells of paediatrics in Kent and general practice in the Carse of Gowrie, he was drawn to the challenges of pathology in Dundee Royal Infirmary where, contrary to the trend to settle on morbid anatomy (histopathology) as a career, his enquiring mind turned to the development of clinical biochemistry almost as a hobby. His obvious enthusiasm for his subject led him to be appointed in independent charge of Clinical Biochemistry at Dundee Royal from 1952 onwards, and to encourage interest in his subject he immediately went about designing an extensive final year undergraduate teaching course of lectures and practical classes which was implemented from 1953 onwards.

From two small rooms and an office at its inception, his department expanded ten-fold and included the newly introduced flame photometer, blood gas analyser and, ultimately, a multichannel autoanalyser prior to his departure for Glasgow in 1965.

During this flurry of activity he took time out from 1956-57, with the aid of a Fullbright Research Fellowship to work in Baltimore, USA, under the tutelage of John Eager Howard on calcium metabolism and bone disease. This episode brought him to the realisation that good clinical practice comes from research-based fundamental knowledge. It also led him to discover what, in the immediate post-war period may have been a major public health blunder. Following preliminary experiments on chickens a decision was taken by central government to "fortify" cod liver oil, cereals and dried milk with vitamin D₂, using doses appropriate for the chickens. Unfortunately, infants are substantially more sensitive to vitamin D₂ and as a consequence of this vitamin overdosage, cases of infantile hypercalcaemia began to appear out of the blue. This dawned on Gemmell when he did full metabolic studies on two hypercalcaemic infants. He rushed his findings into the Lancet and, very quietly, the vitamin D₂ fortification program was dropped.

When he arrived in Glasgow in 1965 to take up the newly established Chair of Pathological Biochemistry, the appointments committee, behind closed doors, recognised in him a firebrand whose selection was "risky, but well worth making". He immediately set about expanding the horizons of his subject by encouraging his staff to develop individual research projects and to contribute to a clinical biochemistry teaching program in Glasgow University. This formed the basis of an undergraduate textbook used worldwide and translated into Spanish, Portuguese, Greek and Japanese. His vision ultimately led to the opening of a new Institute of Biochemistry on the Royal Infirmary site in 1977, followed a few years later by expansion into the new University Tower on the fourth floor of the Queen Elizabeth Building.

While Gemmell was justifiably proud of his achievements in terms of the first class biochemistry service to the clinicians and patients at Glasgow Royal Infirmary, he also created the physical environment which encouraged the development of his staff to their full potential. Over his 23 years in Glasgow his primary objective was to attract staff of the highest quality and to give them the freedom to develop their own interests within the framework of a department which promoted collaborative team work both within and beyond its walls. He took great pride in recounting that in his day his Institute had trained 24 medical consultants (five of whom became full professors in and beyond the UK) and large numbers of senior clinical scientists and medical technologists.

Throughout his career he held many influential positions, most memorable of which was his election to Chairmanship of the Association of Clinical Biochemists in the UK from 1982-85, followed by appointment to its Presidency between 1985-87. While in that post he developed the UK Manpower Board for Clinical Biochemistry and helped promote the establishment of an annual national meeting for his subject, the

second of which, dedicated to his unparalleled contribution to the development of his subject, was held in Glasgow just before he retired in 1988.

All of the above achievements made Gemmell Morgan a remarkable man, but one little known fact adds a new dimension to his distinction. At the age of 18, while a first year medical student he was discovered to have a fist-sized malignant tumour of his left thigh which, remarkably, did not spread widely throughout his body, but did recur locally on three occasions. Major mutilating surgery was recommended but Gemmell opted for intensive courses of radiotherapy which caused the tumour to regress. In 2005 he confided that "the lump is still there and worries me occasionally." The story did not end there. As a result of his intensive radiotherapy Gemmell developed a blockage of his left femoral artery and a swelling of his lower aorta which almost cost him his leg during a business trip to Mexico. Skilful reparative surgery in his own hospital replaced the defective artery with a Dacron graft which served him well for almost thirty years. Ultimate failure of the graft deprived us of a clinical biochemist of tremendous vision. The Institute which he left behind is a monument to his enthusiasm, persistence and drive. He is survived by his wife, Margaret, daughter Imogen, son-in-law David and grandchildren Iona and Alasdair.

Professor Jim Shepherd and Professor Alan Shenkin

Henry Gemmell Morgan, BSc, MB ChB (St Andrews), FRCPE, FRCPG, FRCPath. Born December 25th, 1922, elected FRSE 1st March 1971, died October 31st, 2006.