

## Hugh Roland Butt

Gastroenterologist whose coagulation studies paved the way for open heart surgery and organ transplantation

With his sharp mind and commitment to medicine, Hugh Butt excelled in the examining room, at the bedside, as a teacher, and as an administrator and leader of medical organisations. With his good humour and strong health, he was also a consummate fundraiser for the Mayo Clinic and a respected coach to younger generations long after he officially retired.

But his most enduring legacy came as a researcher early in his medical career. He was 25 years old and just two years out of medical school when he came up with a theory that led, in his own words years later, to “the first kind of miracle I had ever seen.”

The year was 1935, and Butt, studying at the Mayo Graduate School, had read about Danish biochemist Henrik Carl Peter Dam, who had shown that chickens deprived of a dietary substance for just a few weeks began haemorrhaging and bleeding uncontrollably. Dam dubbed the substance the coagulation vitamin, shortened to vitamin K when published in a German journal (Koagulation being the German for coagulation).

Butt theorised that internal bleeding in patients with jaundice, then a fatal condition, was the result of a vitamin K deficiency. After experimenting with chickens using vitamin K extracts from fishmeal fertilisers, he treated a jaundiced patient who was bleeding internally and close to death. He injected vitamin K mixed with bile salts, to aid absorption, directly into the man’s stomach. The bleeding stopped within an hour, and the patient lived.

Some 17 other jaundiced patients were successfully treated, and in 1938, while still a resident, Butt published his vitamin K study to wide acclaim.

Three years later, he began studying the anticoagulation properties of dicoumarol, conducting the first human trials. He found that

with dicoumarol, “You could make a person’s blood not clot, and you could control it with large doses of vitamin K.” He co-authored a book published in 1941, entitled simply *Vitamin K*.

Mavis Kelsey, a Mayo resident who worked with Butt in the 1940s and later founded the Kelsey-Seybold Clinic in Houston, Texas, said that Butt’s coagulation research helped make possible decades later open heart surgery and organ transplantation. “In today’s world, he would have been given the Nobel prize.”

Hugh Roland Butt was born in 1910 in Belhaven, North Carolina, but grew up in Virginia. He earned his medical degree in 1933 from the University of Virginia. He entered the Mayo Graduate School, a clinical medicine programme which at the time was part of the University of Minnesota, receiving his masters degree in 1937.

He was considered the last link to Mayo brothers William and Charles, who helped found the clinic and who both died in 1939. William Mayo not only had been Butt’s supervisor but also benefited from his vitamin K research after becoming jaundiced after surgery to treat cancer.

As assistant professor in 1943, Butt studied liver disease, concentrating on cirrhosis. Appointed full professor in 1952, he focused on teaching and administration, also serving on the Mayo Clinic boards of governors and of trustees.

In the 1960s he became a nationally recognised advocate for continuing education among doctors and served as president of the American Gastroenterological Association and the American Association for the Study of Liver Diseases. He was named a fellow of the Royal College of Physicians in London in 1971 while serving as president of the American College of Physicians.

Robert Waller, Mayo Clinic president and chief executive officer from 1988 to 1999, made

hospital rounds in the early 1970s with Butt for a few months as part of his internal medicine training. “He was a marvellous teacher, particularly at the bedside, the kindness and compassion he delivered in care of patients.”

Despite the serious nature of his work, Butt had a light and playful side. In 1995 at a Mayo Clinic distinguished alumnus dinner for him, a colleague speaking to attendees noted: “Any man who has red hair and is named Butt was destined to be the butt of jokes. For him to choose gastroenterology and affectionately to be called ‘Red’ required thick skin and a real sense of humour.”

His bedside manner and winning personality sometimes translated into large donations. In 1972 his patient Conrad Hilton, founder of the Hilton Hotel chain, pledged \$10m (£6m; €7.7m) to construct a laboratory medicine building. Winn Dixie grocery store chain magnate J E Davis and his wife, Flo, of Jacksonville, Florida, both his patients, donated 140 acres for Mayo Clinic Florida, which opened in 1986.

Butt was also a driving force in creating the global Ludwig Institute for Cancer Research, heading a \$500m endowment for funding the institute and guiding programme development and staffing as chairman of the scientific committee from 1971 to 1987.

An avid swimmer and walker even after retirement, he continued to be a presence at the Mayo Clinic. He regularly attended lunches and meetings with administrators, passing on notes of encouragement, or sometimes, said Dr Waller, “positive critique . . . He was a bridge to the founders of the Mayo Clinic, and he passed it on to us time and time again.”

Retirement allowed him to devote more time to metal sculpture, using farm implements, old tools, wire, and other metals. His sculptures, often humorous, were featured in three solo exhibitions in Rochester and exhibited in galleries in New York, Texas, Wisconsin, and Minneapolis.

Predeceased by his wife, Mary Dempwolf, in 1990 and a son in 1984, he leaves three daughters, seven grandchildren, and 12 great-grandchildren.

### Ned Stafford

Hugh Roland Butt, former professor of medicine Mayo Clinic, Rochester, Minnesota (b 1910; q Virginia 1933; MD, MMS), died on 16 August 2008 after a fall.

Cite this as: *BMJ* 2008;337:a2196



**Amer Amen**



ENT consultant, head and neck surgeon, Princess Alexandra Hospital, Essex (b 1944; q Baghdad 1967; DLO, FRCS), died from metastatic adenocarcinoma on 17 September 2008.

Amer Amen qualified and worked in Iraq. In 1976 he came to the UK and worked as an ENT registrar and later a consultant in St Margaret's Hospital, Essex. He was a gifted surgeon and teacher and could perform almost any ENT operation from major head and neck resections to fine otological procedures. He set up a charity in 1989 to purchase a carbon dioxide laser and endoscopic sinus surgery instruments and became expert in their use. Amer set up a computer database of electronic patient records and refined it throughout his career. He leaves a wife, Bushra; two sons; a daughter; and a grandson.

**Furrat Amen, Ali Jawad**

*Cite this as: BMJ 2008;337:a2361*

**Dick Bruce**

Retired general practitioner (b 1919; q St Thomas' Hospital, London, 1942; FRCP), d 2 June 2008.

After qualifying, Dick Bruce joined tank units in North Africa and Italy as a regimental medical officer. He entered general practice in Sussex after demobilisation. In 1948 he moved to Cheltenham, remaining in practice there until he retired, aged 70. He was a founder member of the Royal College of General Practitioners, subsequently becoming a fellow and provost of the Severn faculty. In his 60s he took and passed the RCGP membership examination. He took a keen interest in medical education and became foundation clinical tutor at Cheltenham Postgraduate

Centre, course organiser to the new GP vocational training scheme, and University of Bristol associate adviser. He leaves a wife, Valerie; and six sons by his first two marriages.

**Roddy Hughes**

*Cite this as: BMJ 2008;337:a2242*

**Hugh John Hughes**

Former consultant radiotherapist Clatterbridge Centre for Oncology, Wirral, Merseyside (b 1930; q Welsh School of Medicine 1952; DMRT, FRCR), died from renal failure 21 September 2008.

After house jobs in Cardiff and Bangor, Hugh John Hughes moved to the Radium Institute in Liverpool. In 1957, he became one of the founding radiotherapists for what is now the Clatterbridge Centre for Oncology, where he worked until retirement in 1995. In 1964, Hugh married Jean Ames, a radiologist in Chester. He travelled to clinics in Merseyside, Chester, North Wales, and the Isle of Man. He was chairman of the Division of Radiotherapy from 1983 to 1985. He leaves a wife, Jean; three children; and three grandchildren.

**Mark Hughes**

*Cite this as: BMJ 2008;337:a2250*

**Stephen Lazar**

Deputy director of GP education, East of England Deanery (b 1947; q Middlesex Hospital, London, 1974; MSc, FRCGP), died 12 August 2007 after heart surgery.

Stephen Lazar ("Steve") started his medical education in South Africa but emigrated when his stepmother was banned as a human rights lawyer. After entering the Ipswich general practitioner (GP) vocational training scheme in 1975, he became a GP principal and later associate regional adviser. As deputy director of GP education, East of England Deanery, from 2001 until his untimely death, he codirected the interprofessional course for primary care teachers at the University of Cambridge. Steve was a challenging, enthusiastic, and inspired teacher. For 22 years he was doctor for Ipswich Town

Football Club. He leaves a wife, Sue; five children; and six grandchildren.

**Arthur Hibble**

*Cite this as: BMJ 2008;337:a2248*

**Anna Cecilia McKee (née Martin)**



Former general practitioner, Belfast (b 1919; q Queen's University, Belfast, 1941; DPH), died peacefully after a short illness on 6 August 2008.

Anna Cecilia McKee ("Nan") spent the war in hospitals in England. After qualifying in public health, she was a chest physician before joining her husband in general practice in East Belfast. Her experiences as a young female doctor stimulated a deep commitment to the advancement of women in medicine. She was president of the Northern Ireland branch of the Medical Women's Federation and of other professional associations, ensuring their voice was heard in policy debates and acting as a mentor to younger colleagues. She always demonstrated a firm belief in social justice and internationalism. Predeceased by her husband, Clifford, she leaves two sons.

**Martin McKee, Henry McKee**

*Cite this as: BMJ 2008;337:a2353*

**Melanie Peisach**



General practitioner, North Finchley, London (b 1966; q Cape Town 1989; MRCP), d 27 March 2008.

After qualifying, Melanie Peisach worked in Cape Town and rural Saskatchewan before arriving in London in 1992 to start general practitioner training. She joined a group practice as a partner. She worked at local hospitals in gynaecology clinics and became skilled at colposcopy. In 2007, she was diagnosed with metastatic melanoma. Melanie bore her illness with courage, dignity, and stoicism. She always remained concerned for the welfare of others, fundraising for charity and highlighting the dangers of sun exposure. Melanie was a respected doctor, well liked by her patients and colleagues. She leaves a husband, Robert, and two children.

**Allan Daitz, Vivienne Watkin**

*Cite this as: BMJ 2008;337:a2254*

**Jeremy Rowe**

Consultant in geriatric medicine,



Moseley Hall Hospital, Birmingham (b 1954; q Birmingham 1977; FRCP), died 17 September 2008 from motor neurone disease.

Jeremy Rowe ("Jed") was a giant among geriatricians, a charismatic lecturer, skilled researcher, and innovator who has left an indelible mark on improving the care of older people. He was founding treasurer of the British Geriatrics Society (BGS) falls prevention and bone health section and helped create falls services. He played a major role in setting up Action on Elder Abuse and first described Munchausen's syndrome by proxy in later life. He received the BGS president's medal for outstanding service and was presented with a plaque for his excellent local contribution by the Institute of Ageing and Health. He leaves a wife, Teresa; and four children.

**Peter Mayer**

*Cite this as: BMJ 2008;337:a2252*