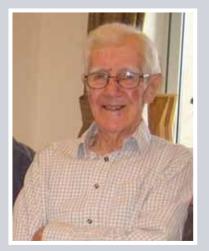
Alan Jennings

BSc (Hons), ARCS, MSc, PhD, DABR, Hon MRCR, Hon FIPEM 1923-2016

Steve Webb



Dr Alan Jennings

r Alan Jennings died on 3rd April 2016, just 3 weeks after enjoying his 93rd birthday with his family on 14th March. Alan was the last surviving Founder Member of the Hospital Physicists' Association (HPA, now IPEM) during the wartime of 1943. With him thus passes an era in which the HPA went from a small group of physicists applying their skills to medicine in a wide variety of areas into today's thriving profession. Alan was proud to have been awarded Honorary Fellowship of IPEM in 2008 and, for context, it should be remembered that there are fewer Hon FIPEMs than the number of years that the HPA/IPEM has existed. I recall him showing me his medal with his usual factual pride but great personal humility.

Personal style

Indeed, Alan's personal style was impressive to all coming into his sphere of influence. Starting the story at the end of his life of paid employment in 1983 (civil servants had to retire from the National Physical Laboratory aged 60), Alan maintained his interest in the field for a further 33 years in his retirement. Indeed, I personally only knew him in this period although I knew of his work much earlier (more about this later). In retirement, Alan attended a vast number of events and lectures organised by IOP, IPEM, BIR, NPL and other professional bodies. In 1995 he was on the organising committee of the Rontgen Centenary Conference and I remember him being one of those who used the event more for factual presentations of historical material than any aggrandisement of their own role. In fact Alan was incapable of anything other than supporting the future prospects of others (including myself) whilst gently contextualising contemporary developments in terms of what had gone before.

Scientists stand on the shoulders of giants and Alan, who knew many such giants, carefully drew the links. Right up until his last month he was writing such history and his wonderful spidery but clearly readable letters would arrive regularly with little footnotes and pictures clipped together. Whilst Alan did embrace email he was happiest putting stamps on snail-mail letters; his letters always opened up new ways of thinking and, although he never demanded this, elicited lengthy responses.

What almost always accompanies such a memory and activity is a vast personally filed store of material. I was privileged to visit Alan's home in Kew a few times and he showed me how everything he owned was neatly filed into labelled boxes in a special room that would have graced the British Museum. With this, however, comes some inevitable sadness. He was quite unhappy that such an archive might well vanish and we discussed this for many hours, given I too am a similar archivist. Unless one is a Churchill or a Mrs Thatcher, modern workers generally have no appetite for creating a long-term archive. Indeed, Alan was a little disappointed to find some of the professional bodies actively discouraging book and paper archives. Alan was well looked after in a care home near Bushy Park, London, of which he spoke highly, but there is no doubt that, for a man with a very active mind, he missed being surrounded by his 'material'. His mind was crystal clear and fortunately he had a very short time of ill health. He is survived by his wife Maureen and three children of whom he spoke warmly.

Starting his career

Alan was born and raised in Geneva where his father was the European correspondent of the *News Chronicle*, based at the League of Nations. As a result, Alan could speak French possibly more rapidly than he spoke English and those who remember him will recall his rapid-fire method of delivery. He was later a boarder at the Friends' School in Saffron Walden, Essex.

In 1939 he planned a career as an architect, and indeed smiled as he told me that he probably had the shortest ever career with the famous Charles Holden who designed many of London's Tube stations. He got the job, turned up for work and was told that, as >

Alan Jennings

BSc (Hons), ARCS, MSc, PhD, DABR, Hon MRCR, Hon FIPEM 1923-2016

➤ WWII had commenced that week, there was no work for him. He, characteristically, kept all his architectural drawings and, only 2 weeks before he died, showed me a lovely book of detailed sketches he had made as a teenager at the Friends' School.

Moving into science

He joined the National Physical Laboratory as a laboratory assistant for a year, and then in 1940 went to the Royal College of Science (part of Imperial College) where he gained the Tyndall Prize and a free place at the college. At the end of his second year he was requested to undertake war work or join the Forces but, as a Quaker, he could not accept this. He had to resign from Imperial and was sent by a tribunal to Professor Sidney Russ who, also a pacifist, having lost a son in WWI, had sympathetic views. Russ sent him to the Radon Centre in Barton and at the same time he continued his studies at Birkbeck College at weekends, graduating in 1944. Russ invited him to the inaugural meeting of the HPA in 1943. In 1983, the HPA published *History of the HPA 1943–1983* and Alan's biography to that date is on page 104. This book is recommended to newer IPEM members to describe the profession as it was in the early days and how it developed up to 1983.

In 1944, Alan went onto the King's Fund panel of physicists, working in a number of hospitals before joining the (then) Royal Northern Hospital (RNH) in 1947 and, with Anthony Green, devised the 'tracking x-ray unit'. This essentially causes the delivery of radiation to the complex projected shape of a tumour and its extensions (target volume). Alan's specific role was to devise the



dosimetry without the aid of any computer. The machine worked largely by mechanical means and may be regarded as a very early form of conformal radiotherapy (CFRT). Of course, all this pre-dated x-ray computed tomography and so in the 1980s other workers developed more accurate geometrical CFRT and in turn intensitymodulated radiation therapy (IMRT). Alan could see the connections. Back in the late 1940s the RNH system was unique and drew hordes of visitors and justified fame for Alan and his colleagues.

Distinguished service

In 1955/6 Alan spent a year, by invitation, at the Argonne Research Hospital at the University of Chicago introducing UK treatment planning practice to the USA. In 1956, he became a Diplomate of the American Board of Radiology (DABR) and helped establish the American Association of Physicists in Medicine (AAPM). The Americans wanted to keep him and made many offers but Alan wished to return to the UK.

Alan was active on many international committees, specifically the International Commission on Radiation Units and Measurements (ICRU) and the International Atomic Energy Agency (IAEA) in Vienna. He was Secretary of the British Committee on Radiation Units and Measurements (BCRU) and an HPA Executive Committee member. He became HPA President in 1966.

He joined the NPL in 1967 and, in 1975, was promoted to be Head of the Division of Radiation Science and Acoustics, the post from which he somewhat reluctantly retired in 1983.



In 2007, he agreed to accompany me to Archamps (near Geneva) to give a historical lecture to the European School for Medical Physics, then in its 10th anniversary year. Despite being, even then, 84 years old, the lure of Geneva encouraged his agreement to speak.

Alan knew so many famous people who obviously then knew him. His group of friends at Imperial included Ray Lowd, Donald Davies (who also went onto to work at the NPL and developed packet switching – the basis of the Internet) and Harry Stopes-Roe, whose mother Marie Stopes opposed Harry's marrying Mary, the daughter of Barnes Wallis, on the grounds that she wore glasses. Incredibly, Marie Stopes (*sic*) was a supporter of eugenics (wiki explains more). These stories tripped off Alan's tongue as if they had recently happened and with no egoistic sense. He just knew these people as his colleagues and friends. From others it might have seemed major name dropping, but not from Alan. He also told of his professional visit to China in 1980 to discuss national measurement standards where he was interviewed by one of China's Vice Presidents, then the Minister for Science and Technology. The photos show him in the same room in the People's Palace in Peking (now Beijing) where a similar photo showed Mrs Thatcher on a different occasion.

Alan met Maureen whilst they were both studying science at Birkbeck and were married for some 68 years. Maureen went on to become a well-respected craft teacher, with her basketry, weaving and braiding winning plaudits. Many international scientists came to stay at their house over the years, with their three children doubling or tripling up to free up bedrooms for guests.

Most of all, Alan exemplified all that was gentlemanly and cultured and scholarly. He will be missed greatly.

→ CONTACT

If you have a comment on this article please email Steve Webb: steve.webb@icr.ac.uk