IN MEMORIAM

Professor John Francis “Jack” Fowler, DSc FInstP¹, 1925–2016

Jack Fowler, renowned clinical radiobiologist, passed away on December 1, 2016, two months before his 92nd birthday. Jack’s career started with a first-class Physics degree from London University, and training in Medical Physics in Newcastle with Frank Farmer who contributed so much to developing accurate dose-meters and improving national standards. Appointments followed in London at Kings College Hospital, St Bartholomew’s Hospital (as Reader) and then as Professor of Medical Physics, MRC Radiotherapeutics and later Cyclotron Unit in the Hammersmith Hospital, which gave him access to research using fast neutrons and alpha particles.

He followed the path of LH (Hal) Gray and other scientists moving from Hammersmith to Mount Vernon Hospital, taking over the Directorship in 1970 for 18 years of the Gray Laboratory from Oliver Scott who had donated the laboratory. He built on the good foundations established by his predecessors and the laboratory expanded to cover a wide range of research from fundamental biochemical interactions to endpoints of tumor control and normal tissue effects in experimental systems. The staff at that time was a tour de force in the field, and included Ged Adams, Julie Denekamp, Peter Wardman, Barry Michael, Mike Joiner, Adrian Begg, Fiona Stewart, George Wilson and Boris Vojnovic. Jack also took on external tasks, being President of the Hospital Physicists Association, the European Society of Radiation Biology and the British Institute of Radiology.

Jack’s clinical involvement started by helping Frank Ellis in the 1960–1970s to set up two British Institute of Radiology clinical trials, one on 3 versus 5 fractions a week, the other on overall times of less than or more than 4 weeks. He got engrossed in the 1980s in the exploitation of the linear-quadratic dose-fractionation plus time model, and advice was given for the innovative short CHART trial and subsequently many other projected beneficial modifications to a variety of radiotherapy schedules. This included his belief in the low value of α/β for some slowly proliferating tumors, in particular prostate cancer. This was one of Jack’s preoccupations in his later years, argued with some forcefulness against critics, which led to several hypofractionation trials.

He was in great demand as a lecturer, advisor and co-author in many countries. His lectures were didactic and they were delivered with perfect clarity and a flair reminiscent of his earlier involvement in theatre productions. He also had many students and visiting fellows at the Gray laboratory. PubMed lists 226 primary journal articles published by Jack, starting with an article by Fowler and Farmer in Nature (1953) “Effect of Temperature on the Conductivity Induced in Insulators by X-Rays”. His last journal article was published in 2015, a Letter to the Editor commenting on the successful outcome of a hyperfractionation trial for vocal cord tumors as he predicted some 6 years earlier. Also, he published a book in 1981 on

¹ This article was used with permission and originally published in the December 2016 issue of Radiotherapy & Oncology.