

# **Report of 'History of Radiology' session Liverpool UKIO June 2024**

by Dr Arpan K Banerjee Chair ISHRAD (International Society for the History of Radiology), Trustee and Past Chair Brit Soc History of Radiology UKIO Liverpool 2024

The first talk titled 'Double Indemnity –the arrival of the digital twin' was delivered by Dr Michael Jackson the current chair of the BSHR. Since the rise of artificial intelligence algorithms over the last decade the term digital twin ( produced by simulation) has promised us health benefits in the years to come. In the talk the use of digital twins in the media, cinema and television was also described. Ethical considerations and the good/evil dichotomy have been exemplified in the Batman films. The role of digital twins pose ethical and environmental challenges as well as increasing high tech high carbon cost healthcare which with a climate crisis seems a perverse way forward.

The next talk was delivered by Prof Adrian Thomas on 'John Poland of Blackheath and the development of paediatric orthopaedics'. John Poland (1855-1937) was an orthopaedic surgeon at the Miller General Hospital in Greenwich. He was interested in paediatric skeletal trauma and following the discovery of X-rays produced his hugely influential book 'Traumatic Separation of the Epiphyses' in 1898 incorporating new knowledge gained from radiography. In that same year he published the first bone age atlas.

At the Miller Hospital Poland worked with the surgeon Thomas Moore and the scientist William Webster and in March 1896 Moore and Webster radiographed the fractured ribs of a child attending the Miller Hospital. This X-ray department, founded in 1896, was one of the first in the world.

The next talk by Kimberley Bradshaw from the University of Cumbria was titled 'Florence Stoney and formidable feminism in the history of radiology'. The life and work of Florence Stoney the first UK female radiologist was presented. She qualified from the Royal Free Hospital in 1895 returning as a medical electrician in 1901 and eventually leading this department. Her work during the WW1 was described as well as her post war life and career. She was a remarkable person and an inspiring example of what can be achieved with determination in spite of the difficulties she faced.

Edwin Aird was unable to present his talk and so Prof Thomas delivered the talk on 'The million volt radiotherapy X-ray set at St Bartholomew's hospital in 1938' In the 1930s high voltage X-ray tubes were in use to treat cancer. In the

USA higher voltage tubes for treatment were being discussed. At St Bartholomew's hospital following a legacy George Innes set about solving this problem and eventually Metropolitan Vickers Electrical Company installed an X-ray tube, which by 1938, operated successfully at 1MV, and continued treating patients until 1962.

The final talk was delivered by Dr Arpan K Banerjee titled 'Francis H Williams-an American Radiology pioneer'. Francis Williams started off as a physician and worked in the Boston City Hospital and collaborated with the Physics Prof at the MIT Charles Cross who initially provided him with the early equipment to X-ray patients in 1896. He collaborated with Rollins another pioneer in the USA and produced his magnum opus in 1901 'The Rontgen Rays in Medicine and Surgery'. His contributions to chest radiology were described including early descriptions of Tuberculosis in the chest amongst many other descriptions of chest pathology.

The BSHR stand this year was again very popular with numerous visitors. Thanks to Michael Jackson for his short education sessions on the stands covering topics such as 'art and artefact' and 'bone age assessment'. Thanks are also due to Adrian and Johanna for their work on the stand and also to Tina and Arpan Banerjee for helping man the stand with Adrian and Johanna over the three days. It was nice to see so many delegates stop by and have a chat about the society.