Peter Wells

Peter Wells CBE FRS FREng FMedSci FLSW is recognised internationally for his accomplishments in medical ultrasonics. His earliest work was concerned with ultrasound as a surgical tool, and since 1962, he and his colleagues have pioneered numerous techniques which have been clinically significant, many of which are in diagnostic use today. Perhaps most notable of these are the world’s first ultrasonic static scanner with articulated arms, the first water-immersion automated ultrasonic breast scanner, the first realisation of dynamic ultrasonic beam focusing, the first ultrasonic characterisation of the liver in health and disease, one of the first of three simultaneous independent demonstrations of pulsed Doppler ultrasound, the discovery of the ultrasonic Doppler signal due to malignant tumour neovascularisation, and the development of continuous wave ultrasonic Doppler tomography.

He began his career in medical physics in 1959, as a trainee at Bristol General Hospital, having first served a student apprenticeship at the General Electric Company’s Telephone Works in Coventry. After this, he worked as a Research Assistant at the United Bristol Hospitals, supported for 12 years by grants from the Medical Research Council. At the age of 35, he was appointed Professor of Medical Physics at the Welsh National School of Medicine, now Cardiff University School of Medicine. He returned to Bristol in 1975, as Area Physicist to the Avon Area Health Authority (Teaching) and Head of the Department of Medical Physics in what is now the University Hospitals Bristol NHS Foundation Trust, retiring from the Professorship of Physics and Engineering in Medicine at Bristol University in 2001. He was appointed Distinguished Research Professor in the School of Engineering at Cardiff University in 2004, where he continues to be active in scientific leadership and research. His most recent paper, his 170th in peer-reviewed journals, has recently been accepted for publication in Physics in Medicine and Biology.

Peter Wells was the first recipient of the EFOMP Medal, as well as numerous other medals, awards, honorary fellowships and honorary degrees, both at home and abroad. Almost uniquely, he is a Fellow of three of the UK’s National Academies, the Royal Society, the Royal Academy of Engineering and the Academy of Medical Sciences, as well as the Learned Society of Wales.