



International Commission on Radiation Units and Measurements, Inc.

**For Immediate Release
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Dr. Fiona Anne Stewart Received 17th ICRU Gray Medal



Dr. Fiona Stewart was awarded the 17th Gray Medal for her outstanding contributions to the field of radiation oncology. The medal was presented to her on 27 May 2015 by ICRU Commission Member Søren Bentzen during a plenary session at the 15th International Congress of Radiation Research that was held in Kyoto, Japan. The title of Dr. Stewart's award presentation was "Mechanisms of Development of Cardiovascular Disease in Irradiated Cancer Patients and The Possible Influence of ErbB2 Blocking Agents"..

Born in Yorkshire, UK, Dr. Stewart earned a BSc in Biology from London University in 1973 and a PhD in Radiation Biology also from London University in 1978. Her PhD research on normal tissue damage after radiation combined with hyperthermia became the starting point for a career-long interest in normal tissue effects of radiation therapy alone or combined with drugs. Dr. Stewart was a post-doctoral scientist at the Gray Laboratory from 1978-1984 followed by a move to the Netherlands Cancer Institute, Amsterdam (NKI) as a senior post-doctoral scientist in 1984. She was promoted to Assistant Professor at NKI in 1988 and Associate Professor and Senior Team Leader from 1997 to her retirement in 2013. At a time when much of the scientific thinking in radiation biology was dominated by biomathematical models of target-cell survival after graded doses of radiation, Fiona Stewart became one of the pioneers of the modern paradigm that normal tissue effects of ionizing radiation are orchestrated biological stress responses that can, at least in principle, be manipulated to improve the health-related quality of life after radiation therapy. In particular, Dr. Stewart's research has advanced the understanding of the role of radiation induced endothelial cell and vascular damage in the development of late normal tissue injury. Her work spans the whole range of experimental model systems from endothelial cells in culture via mouse models to biopsies of irradiated and control tissue from cancer patients. Her research has resulted in more than 150 peer reviewed scientific publications.

Dr. Stewart has served in leadership positions on numerous national and international professional and scientific committees including Netherlands Radiobiology Society; Netherlands Medical Laser Society, International Commission on Radiological Protection (ICRP); European

Society for Radiotherapy and Oncology (ESTRO) Radiobiology Committee; and the ESTRO Board. She was Secretary and Treasurer for the International Association for Radiation Research; Chair of the ICRP Task group on Radiation Tissue Effects; Councilor Radiation Research Society; Chair Radiation Research Education Committee; and Core Member of the ESTRO Education Committee. She has served on the Editorial Boards of Radiation Research (2000–2004); International Journal Radiation Biology Oncology Physics (2000–2010); International Journal Radiation Biology (2009-2010) and as Senior Editor of Radiation Research (2011-2013).

Fiona Stewart is an outstanding teacher and has organized and lectured in courses all over the world. In particular, she has played a significant role as a leader and teacher in promoting the radiation biology curriculum in the ESTRO School of Radiation Oncology.

Dr. Stewart's many accomplishments have been acknowledged through several prestigious awards including the Weiss Medal from the UK Association for Radiation Research (2012), the Bacq and Alexander Medal from the European Association for Radiation Research (2014), and the Lifetime Achievement Award of the European Society for Radiotherapy and Oncology (2014).