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AAPM HONORS OUTSTANDING WORK IN MEDICAL PHYSICS

Several researchers received honors at the July meeting of the American Association of Physicists in Medicine, held in San Francisco. The Coolidge Award was presented to Moses A. Greenfield of the University of California, Los Angeles. Greenfield was cited for his "lasting influence on both the development and practice of professional medical physics in the United States and internationally."

Greenfield's research has included work in general physics as well as in various areas of medical physics. Among other things, he has developed improved methods for measuring thyroid activity and characterizing bone tissue. He has also had an enormous impact on the profession of medical physics, helping to found UCLA's training program and serving as its director for 20 years. The citation recognized Greenfield's efforts as an expert witness in medical fraud cases and as a medical physics consultant in many countries.

Greenfield earned a bachelor's degree from the City College of New York in 1935 and a PhD in physics, under the guidance of George Gamow, from New York University in 1941. He then began working for the US Navy's David Taylor Model Basin. In 1948 he joined the faculty of UCLA's radiological sciences department.

Also at the July meeting, the Sylvia Sorkin Greenfield Award, which recognizes the best paper published in *Medical Physics* during the previous year, was presented to Jose Delannoy, Denis LeBihan, Ronald L. Levin and David I. Hoult for their article "Hyperthermia System Combined with a Magnetic Resonance Unit" (*Med. Phys.* 17, 855, 1990). The paper describes the use of an MRI unit and a hyperthermia device to obtain noninvasive temperature images. Such a



Moses A. Greenfield

system is thought to have applications in noninvasively monitoring a patient's temperature, blood flow and cell metabolism during oncologic hyperthermia.

Delannoy is now a researcher with Sonotron-Hitachi in Les Ulis, France. LeBihan is currently a visiting scientist in the diagnostic radiology department of the National Institute of Health's Warren Grant Magnuson Clinical Center in Bethesda, Maryland. Levin is a biomedical engineer in the biomedical engineering and instrumentation program at NIH's National Center for Research Resources. Hoult is a physicist at the University of Utrecht in the Netherlands.

The authors of two papers were chosen this year to receive the Farrington Daniels Award, which goes to the best paper on radiation dosimetry published in *Medical Physics* during the previous year.

Milton K. Woo, John R. Cun-

ningham and John J. Jezioranski were cited for their article "Extending the Concept of Primary and Scatter Separation to the Condition of Electronic Disequilibrium" (*Med. Phys.* 17, 588, 1990). The article is a practical treatment of the mathematics of handling electron transport in photon dose calculation algorithms. Such information is used primarily for improving accuracy of absorbed dose calculations, in planning radiation treatment for cancer patients.

Woo is a medical physicist at Toronto Bayview Cancer Clinic. Cunningham, a professor emeritus of medical biophysics at the Ontario Cancer Institute in Toronto, is a consultant for Theratronics International of Kanata, Ontario. Jezioranski is a medical physicist at the Ontario Cancer Institute.

The other Farrington Daniels Award went to Bruce A. Faddegon, Carl K. Ross and David W. O. Rogers for their article "Forward-Directed Bremsstrahlung of 10- to 30-MeV Electrons on Thick Targets of Al and Pb" (*Med. Phys.* 17, 773, 1990). The paper is a study of x-ray spectra in the energy range commonly used in cancer therapy. Accurate absolute measurements of thick-target yields, which were carried out on the linear accelerator at the National Research Council of Canada, were found to agree with precise Monte Carlo calculations from the EGS4 code (widely used in medical and high-energy physics).

Faddegon, Ross and Rogers are all staff members of the Institute for National Measurement Standards of the NRCC in Ottawa. Rogers is the group leader of the ionizing radiation standards group at the NRCC, and Ross and Faddegon are physicists in the same group.