Biosketch
Wesley E. Bolch, PhD

Dr. Wesley E. Bolch is Professor of Biomedical Engineering and Medical Physics in the J. Crayton Pruitt Family Department of Biomedical Engineering at the University of Florida (UF). He serves as Director of *ALRADS* – the Advanced Laboratory for Radiation Dosimetry Studies at UF, and has affiliate faculty appointments within the Departments of Pediatrics (College of Medicine) and Small Animal Clinical Sciences (College of Veterinary Medicine). Prior to 2011, Dr. Bolch held positions of Associate Professor (1995 to 2001) and Professor (2001 to 2011) within the UF Department of Nuclear & Radiological Engineering at UF, and served as the Director of the Health Physics Graduate Program from 2000 to 2010. Prior to his arrival at the University of Florida, he was Assistant Professor (1988 to 1994) and then Associate Professor (1994-1995) within the Department of Nuclear Engineering at Texas A&M University and Director of their health physics graduate program. Dr. Bolch earned his BSE degree in environmental engineering in 1984, his ME degree in radiological physics in 1986, and his PhD degree in radiological physics in 1988 from the University of Florida. His MS and PhD studies were supported under the DOE Health Physics Fellowship program, and were supervised by Dr. James E. Turner of the Health and Safety Research Division of the Oak Ridge National Laboratory from 1985 to 1988. His dissertation work was in the field of microdosimetry and computational modeling of free radical molecular interactions. He has been certified by the American Board of Health Physics since 1994 and licensed in Radiological Health Engineering by the Texas Board of Professional Engineers since 1992. In 2011, Dr. Bolch was elected Fellow of both the Health Physics Society (HPS) and the American Association of Physicists in Medicine (AAPM). He has been a member of the Society of Nuclear Medicine's Medical Internal Radiation Dose (MIRD) Committee since 1993, a member of the National Council on Radiation Protection and Measurements (NCRP) since 2005, and a member of Committee 2 of the International Commission on Radiological Protection (ICRP) since 2005. Within the latter, he serves as C2 Secretary and Leader of the ICRP Task Group on Dose Calculations (DOCAL). Other areas of professional service include serving as Associate Editor for *Health Physics,* Editorial Board Member for *The Journal of Nuclear Medicine* and *Radiation Environmental Biophysics,* and Member of the International Advisory Board for *Physics in Medicine and Biology*. He has published over 160 peer-reviewed journal articles and co-authored/edited 14 books/book chapters. He is a co-author on NCRP Reports No. 161[1] and 164[2], ICRP Publications 110[3] and 116[4], and MIRD Committee Monographs on Head/Brain Dosimetry and Cellular Dosimetry. Dr. Bolch manages a broad research program including (1) projects to construct high-resolution models of the skeleton to support dose-response studies in radionuclide therapy and radiation epidemiology, (2) projects to develop scalable NURBS-based and voxel-based computational phantoms of adult and pediatric patients and associated software for organ dose assessment in nuclear medicine, computed tomography, interventional fluoroscopy, and radiotherapy, (3) projects to develop stereotactic kilovoltage x-ray treatments for age-related macular degeneration and glaucoma, and (4) projects in stochastic modeling of worker inhalation and gamma-ray exposures following radiological accidents and potential terrorist events. Over the past three years, his core research activities have been funded by the National Cancer Institute, National Institute for Biomedical Imaging and Bioengineering, the US Department of Energy, and the Centers for Disease Control and Prevention, with additional funding from the Air Force Research Laboratory, Oraya Therapeutics, Inc., and the European Union. Since 1988, Dr. Bolch has taught courses in radiation dosimetry, nuclear instrumentation and detection, radiation shielding, radiological dose assessment, and biomedical engineering instrumentation. Since 1988, Dr. Bolch has mentored 4 postdoctoral research associates, and has graduated 51 MS students and 33 PhD students, 12 of whom are serving in academic positions in either the United States or the Republic of Korea.

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[1] *Management of Persons Contaminated with Radionuclides*
[2] *Uncertainties in Internal Radiation Dose Assessment*
[3] *Adult Reference Computational Phantoms*
[4] *Conversion Coefficients for Radiological Protection Quantities for External Radiation Exposures*