Foundation
of
Radiological
Physics

Cheng B. Saw, Ph.D.

This book is presented for conceptual understanding only. Direct application of information to clinical practice should be avoided. Numerical values or procedures presented in the textbook are for illustrative purposes only, and may not be appropriate for direct clinical use.

*In memory of
my dad, Hai G. Saw
my mom, Neoh Onn
and sister-in-law, Kum S. Yam*

About the author:

Cheng B. Saw, Ph.D., is currently Associate Director of Medical Physics Division, Department of Radiation Oncology, University of Pittsburgh Medical Center (UPMC) Cancer Centers, Pittsburgh, PA. In 1973, he emigrated to the United States of America from Malaysia under a scholarship to pursue a Bachelor's degree. He received his Bachelor's degree in Mathematics and Physics at Hampden-Sydney College, Hampden-Sydney, Virginia, in 1977. After graduating, he pursued his Doctorate degree in Experimental Low Energy Nuclear Physics. After completing his Doctorate degree in 1983, he assumed a post-doctoral position in Nuclear Medicine at University of Miami, Miami, Florida. In 1984, he accepted a training position in Medical Physics at Thomas Jefferson University Hospital, Philadelphia, PA. He joined the medical physics staff at Thomas Jefferson University Hospital immediately after completing his training. Since then, he has held appointments at University of Pittsburgh Medical Center, West Virginia University Medical Center, University of Iowa Hospitals and Clinics, and University of Nebraska Medical Center.

Dr. Saw has been active in The American Association of Physicists in Medicine (AAPM). He has served on a number of committees that include Asian Oceanic Affairs Subcommittee, Training of Technologists Committee, Training of Medical Physicists Committee, Program Committee, Award and Honors Committee, and as a member of the Board of Directors. He also serves as abstract reviewer and has chaired/co-chaired sessions at the AAPM annual meeting over the years. Besides participating in the AAPM society, Dr. Saw has also served as a reviewer for the Medical Physics journal, Medical Dosimetry journal, International Journal of Radiation Oncology Biology and Physics, Endocurietherapy Hyperthermia Oncology journal, and Medical Imaging journal. Dr. Saw has authored/co-authored over 100 abstracts, 60 papers and 32 invited presentations around the world. Dr. Saw contributed to nine book chapters and was the guest editor for three special medical dosimetry journal volumes on intensity-modulated radiation therapy (IMRT).