Continues a tradition of excellence with extensive updates throughout, many new chapters, and more than 1,400 full-color illustrations that highlight key concepts in tumor pathogenesis, diagnosis, and targeted radiation therapy.

For more than 30 years, Perez and Brady’s Principles and Practice of Radiation Oncology has been the must-have standard reference for radiation oncologists and radiation oncology residents who need a comprehensive text covering both the biological and physical science aspects of this complex field as well as disease site-specific information on the integrated, multidisciplinary management of patients with cancer. The book has established itself as the discipline’s “text-of-record,” belonging on the shelf of all those working in the field.Key Features: Comprehensive coverage of the current state of knowledge of cancer biology; medical radiation physics; clinical radiation oncology; and radiation oncology economics, ethics, and public policy. Regular, twice-yearly content updates available with the digital version of the text. Ideal for radiation oncologists, radiation oncology residents, radiation biologists, medical radiation physicists, oncologists, physicists-in-training, radiation dosimetrists, and nurses and physician assistants working in radiation oncology departments. New chapters include: Proton and Carbon Ion Beam Dosimetry and Treatment Planning; Stereotactic Radiation Therapy; Re-Irradiation; Error Avoidance; Undergraduate, Graduate, and Continuing Medical Education in Radiation Oncology; and a completely rewritten chapter on the economics of radiation oncology. Designed to provide a better understanding of the natural history of cancer, the physical and technological methods of radiation application, the effects of irradiation on normal tissues, and the most judicious ways in which radiation therapy can be employed in the treatment of patients with cancer, either as a single modality or as part of a multi-modality treatment program. All references printed in the book are now streamlined for quick access to further information. Site-specific chapters include relevant background information on each tumor—including epidemiology, pathology, diagnostic work-up, prognostic factors, treatment techniques, applications of surgery, chemotherapy, immunotherapy and biological therapy, end results, and more. Increased focus on new approaches and technologies with new and updated chapters. Greater emphasis on palliative and supportive care reflects the role of radiation treatment in non-curative roles. An international group of expert chapter authors keeps you well-informed. A completely revised first chapter is designed to provide an overview of the discipline of radiation oncology. This will be particularly useful for residents beginning training and medical students beginning a radiation oncology clinical clerkship. The chapter is supplemented with multiple sidebars to augment the reader’s understanding of the field.