Preface

The use of complex 3D imaging has significantly changed medicine in its approach to patients, particularly to those going under radiation. Over the past 30 years, the field of radiation oncology has evolved from reliance on pure 2D imaging to detailed visual analysis of tumor and complex structure surrounding it. This visualization has permitted more precise treatments in all areas of the body. For gynecologic therapy, the impact of imaging has changed treatment approaches over the past 10 years with the development of intensity modulated radiation therapy and image-guided brachytherapy. This text is a state-of-the-art presentation of the current thought and issues in the field of gynecologic imaging as applied to radiation oncology. Section 1 reviews general principles with regard to radiologic imaging. Section 2 applies imaging and discusses specific applications for external beam treatment planning. Sections 3 and 4 describe in detail image-guided brachytherapy. A highlight of this book is the diversity of institutional practical approaches presented from centers around the world.

This multi-institutional international collaboration has been a very fruitful endeavor and we hope it will improve the outcomes of gynecologic patients around the world. We wish to thank all of the authors, physicians, physicists, nurses, dosimetrists, support staff, and those providing care who made this work feasible, and of course, our patients for whom this work pertains.

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