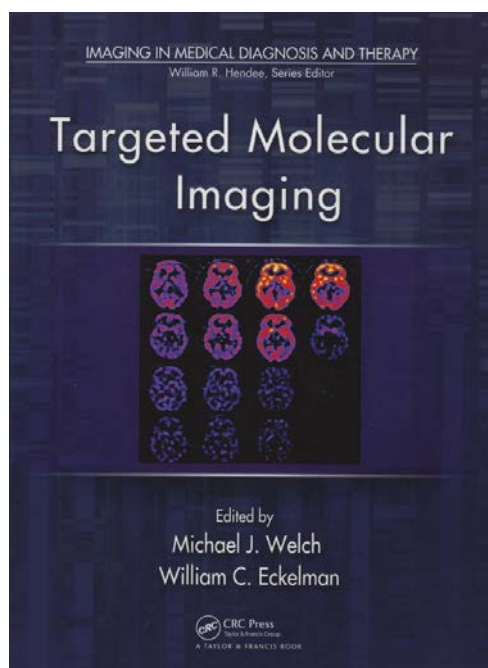


MICHAEL J. WELCH, WILLIAM C. ECKELMAN (EDITORS) TARGETED MOLECULAR IMAGING



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Targeted Molecular Imaging covers the development of novel diagnostic approaches that use an imaging probe and agent to noninvasively visualize cellular processes in normal and disease states. It discusses the concept, development, preclinical studies, and, in many cases, translation to the clinic of targeted imaging agents.

The many case studies that form the core of this book deal with the development and translation of non-nuclear probes and radiotracers; other sections address critical topics such as *In vitro* studies, small animal research, and the application of targeted probes for nuclear, optical and MRI imaging. The chapters use a common format to demonstrate how various investigators approach the comprehensive task of validating a new targeted probe.

Targeted Molecular Imaging is a timely resource for a rapidly advancing field, and addresses:

- various methods of validating a new targeted probe through examples from human studies with imaging of breast cancer, cardiovascular disease, and neurodegenerative diseases
- basic principles, disease models, imaging studies in animals, imaging in initial human studies, and the application of molecular imaging in pharmacy and drug discovery
- *in vitro* studies, small animal studies, and targeted radiopharmaceuticals

Using these case studies, investigators can generalize and apply the information to their own specific targeted probe. The insights provided by the contributors, experts who have developed these approaches in their own groups, help guide scientists planning to translate imaging agents from the concept stage to clinical application.

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