The field of molecular imaging of living subjects has evolved considerably and has seen spectacular advances in chemistry, engineering and biomedical applications. This textbook was designed to fill the need for an authoritative source for this multi-disciplinary field.

Given the multidisciplinary nature of the field, the book is broken into six different sections: Molecular Imaging technologies, Chemistry, Molecular Imaging in Cell and Molecular Biology, Applications of Molecular Imaging, Molecular Imaging in Drug Evaluation with the final section comprised of chapters on computation, bioinformatics and modeling.

The organization of this large amount of information is logical and strives to avoid redundancies among chapters. It encourages the use of figures to illustrate concepts and to provide numerous molecular imaging examples.