1. Record Nr. UNINA9910742486603321 Autore Cross Donna J Titolo Molecular Imaging of Neurodegenerative Disorders [[electronic resource] /] / edited by Donna J. Cross, Karina Mosci, Satoshi Minoshima Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2023 **ISBN** 3-031-35098-7 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (340 pages) Altri autori (Persone) MosciKarina MinoshimaSatoshi Disciplina 616.804754 Soggetti Nuclear medicine Nervous system - Radiography Neurology **Nuclear Medicine** Neuroradiology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia 1. What is neurodegeneration? -- 2. Appropriate Use of Biomarkers in Nota di contenuto Suspected Neurodegenerative Diseases -- 3. Overview of clinically available radiotracers for imaging in neurodegenerative disorders -- 4. FDG PET Imaging Evaluation of Neurodegenerative Dementias -- 5. Amyloid PET Imaging -- 6. Traits and Trammels of Tau Tracer Imaging -- 7. Dopaminergic nerve terminal imaging across the spectrum of

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and Reporting .-.

## Sommario/riassunto

This book provides a comprehensive review of the role of molecular imaging in neurodegenerative diseases. A growing field, molecular imaging of neurodegeneration is becoming increasingly relevant with an aging population, and this book serves to provide both an introduction to the concept and background of neurodegeneration and an update on the most recent imaging advances. Throughout, chapters will review current applications of neuroimaging in neurodegenerative disorders, like dementia and movement disorders, and increase knowledge of quantification and semi-quantification methods for neuroimaging. Imaging methods such as PET/CT and PET/MR are covered, as well as more advanced technologies like artificial intelligence algorithms and novel radiotracers. Chapters are also intended to improve competency in reporting and interpretation skills with structured information on current practice. The book concludes with a collection of up to date practice cases for the interpretation of neurodegeneration in nuclear medicine imaging. This is an ideal guide for nuclear medicine physicians, neuroradiologists, neurologists, residents, trainees, and related medical professionals caring for patients with neurodegeneration.