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Titolo	Targeting the Broadly Pathogenic Kynurenine Pathway // edited by Sandeep Mittal
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ISBN	3-319-11870-6
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (422 p.)
Disciplina	570
Soggetti	Enzymology Proteins Molecular biology Cell physiology Neurochemistry Protein Structure Molecular Medicine Cell Physiology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Part I. Overview -- Overview of the Kynurenine Pathway of Tryptophan Metabolism -- Role of Tryptophan Metabolism in Health and Disease -- Nutritional Aspects of Tryptophan Metabolism -- Role of Kynurenine Pathway in Early Brain Development -- Role of Kynurenine Pathway in Aging -- Role of Tryptophan Metabolism in Mood, Behavior, and Cognition -- Part II. Systemic Diseases -- Role of Kynurenine Pathway in Inflammatory Diseases -- Role of Kynurenine Pathway in Allergy -- Role of Kynurenine Pathway in HIV/AIDS -- Role of Kynurenine Pathway in Cardiovascular Disease -- Role of Kynurenine Pathway in Respiratory Diseases -- Role of Kynurenine Pathway in Gastrointestinal Diseases -- Role of Kynurenine Pathway in Insulin Resistance -- Role of Kynurenine Pathway in Infections -- Part III. CNS Disorders -- Role of Kynurenine Pathway in Neurodegenerative Diseases -- Role of Kynurenine Pathway in Epilepsy -- Role of Kynurenine Pathway in Stroke -- Role of

Kynurenine Pathway in Pain and Migraines -- Role of Kynurenine Pathway in Autism Spectrum Disorders -- Role of Kynurenine Pathway in Neuropsychiatric Disorders -- Part IV. Oncology -- Role of Kynurenine Pathway in Stem Cell Biology -- Role of Kynurenine Pathway in Cancer Biology -- Role of Kynurenine Pathway in Neuro-oncology -- Role of the Kynurenine Pathway in Hematologic Malignancies -- Part V. Experimental Models and in Vivo Imaging -- Experimental Models to Study the Kynurenine Pathway -- Animal Models to Study the Role of Kynurenine Pathway in Mood, Behavior, and Cognition -- Applications of Small Animal PET Imaging -- Molecular Imaging of Serotonin Synthesis in the Brain -- Molecular Imaging of Tryptophan Metabolism -- Part VI. Therapeutic Approaches -- Inhibition of the Kynurenine Pathway of Tryptophan Catabolism -- Clinical Trials Targeting the Kynurenine Pathway -- The Next Decade in Tryptophan Metabolism Research.

Sommario/riassunto

This book highlights the known associations between the kynurenine pathway and various disease states and also examines the current state of drug development and clinical trials of compounds known to alter tryptophan metabolism. This book provides a unique bridge between basic mechanistic understanding of the role of the kynurenine pathway with translational applications and clinical relevance. It explores the indications that tryptophan metabolism is a potential biomarker of disease activity, can contribute to local and possibly systemic immune suppression in cancer, and is an attractive target for which a variety of inhibitors are readily available. This book also:

- Combines basic understanding of the role of the kynurenine pathway with translational applications and clinical relevance
- Explains the role of the kynurenine pathway in various disease states
- Explores ongoing clinical trials using IDO/TDO inhibitors.
