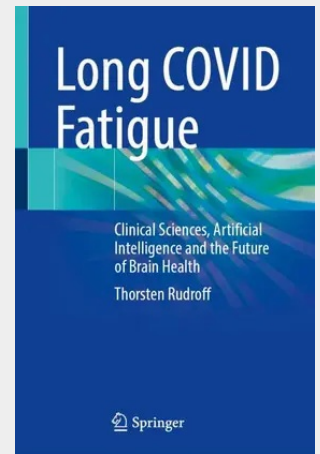


Long COVID Fatigue

Clinical Sciences, Artificial Intelligence and the Future of Brain Health

This book provides the first comprehensive analysis of Long COVID fatigue through the lens of advanced neuroimaging and artificial intelligence. By integrating cutting-edge research findings with clinical applications, it bridges a critical gap between basic science and patient care in the rapidly evolving field of post-viral syndromes. The volume is uniquely structured to guide readers from fundamental concepts through to future innovations, making complex neurobiological mechanisms accessible to both researchers and clinicians. Each chapter builds upon the previous, creating a coherent narrative that connects molecular mechanisms to clinical manifestations. The integration of artificial intelligence applications in diagnosis and treatment represents a pioneering approach in Long COVID literature. This work fills a crucial knowledge gap by providing: - Detailed analysis of brain metabolic patterns in Long COVID fatigue - Novel insights into protective mechanisms, including metabolic heterogeneity in the basal ganglia - Practical guidelines for implementing AI-enhanced diagnostic and treatment approaches - Clear pathways for translating research findings into clinical practice By combining rigorous scientific analysis with practical clinical applications, this book serves as both a current reference and a roadmap for future developments in Long COVID research and treatment. It is focused on how to comprehensively integrate neuroimaging, AI, and clinical practice in addressing Long COVID fatigue. Its main objectives are providing a comprehensive understanding of Long COVID fatigue mechanisms; presenting evidence-based approaches for diagnosis and treatment; showcasing innovative applications of AI in medical imaging; establishing a framework for future research directions; offering practical guidelines for clinical management. This book is tailored for neurologists and neuroscientists, COVID-19 specialists and researchers, radiologists and imaging specialists, healthcare providers managing Long COVID patients, AI researchers in medical applications, and graduate students and postdoctoral researchers in related fields.

This book offers the first comprehensive analysis of long COVID fatigue using advanced neuroimaging and artificial intelligence (AI). It bridges the gap between basic science and patient care in post-viral syndromes. The volume guides readers from fundamental concepts to future innovations, making complex neurobiological mechanisms accessible to researchers and clinicians. Each chapter builds on the previous, connecting molecular mechanisms to clinical manifestations. The integration of AI in diagnosis and treatment is a pioneering approach in long COVID literature. The book provides detailed analysis of brain metabolic patterns in long COVID fatigue, insights into protective mechanisms like metabolic heterogeneity in the basal ganglia, practical guidelines for AI-enhanced diagnostic and treatment approaches, and pathways for translating research into clinical practice. It combines rigorous scientific analysis with practical applications, serving as both a reference and a roadmap for future developments in long COVID research and treatment. The main objectives are to provide a comprehensive understanding of long COVID fatigue mechanisms, present evidence-based approaches for diagnosis and treatment, showcase innovative AI applications in medical imaging, establish a framework for future research, and offer practical clinical management guidelines. This book is tailored for neurologists, neuroscientists, COVID-19 specialists, radiologists, healthcare providers, AI researchers, and graduate students in related fields.



149,79 €

139,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9783031894732

Medium: Buch

ISBN: 978-3-031-89473-2

Verlag: Palgrave Macmillan

Erscheinungstermin: 27.04.2025

Sprache(n): Englisch

Auflage: Erscheinungsjahr 2025

Produktform: Gebunden

Gewicht: 512 g

Seiten: 181

Format (B x H): 160 x 241 mm

