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	Titolo	Diabetes Mellitus : A risk factor for Alzheimer's Disease / / edited by Yusaku Nakabeppu, Toshiharu Ninomiya
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	Nota di contenuto	Chapter 1 Origins of brain insulin and its function -- Chapter 2 Epidemiological evidence of the relationship between diabetes and dementia -- Chapter 3 Molecular pathophysiology of insulin depletion, mitochondrial dysfunction, and oxidative stress in Alzheimer's Disease Brain -- Chapter 4 The Full Spectrum of Alzheimer's Disease is Rooted in Metabolic -- Derangements That Drive Type 3 Diabetes -- Chapter 5 The roles of apolipoprotein E, lipids and glucose in the pathogenesis of Alzheimer's disease -- Chapter 6 Molecular connection between diabetes and dementia -- Chapter 7 Type II Diabetes mellitus accelerates age-dependent A pathology in cynomolgus monkey brain -- Chapter 8 Diabetes-related dementia -- Chapter 9 Tortuous paths of insulin signaling and mitochondria in Alzheimer's disease -- Chapter 10 Mammalian target of rapamycin at the crossroad between Alzheimer's Disease and diabetes -- Chapter 11 Therapeutic strategies for Alzheimer's disease in the view of diabetes mellitus.
	Sommario/riassunto	This book describes the precise mechanisms by which insulin resistance and diabetes mellitus (DM) act as risk factors for Alzheimer's disease (AD). It opens by discussing the de novo synthesis of insulin in the brain and its functional significance with regard to glucose metabolism and maintenance of neuronal function in the brain. The

epidemiological evidence that DM is a risk factor for the development of dementia, including AD as well as vascular dementia, is then examined. Subsequent chapters explore in depth the mechanisms involved in this relationship, including abnormal protein processing, dysregulated glucose metabolism, impaired insulin signaling, and mitochondrial dysfunction. The molecular interactions between diabetes and AD are fully discussed, highlighting the pathological molecular mechanisms induced by diabetes that promote and accelerate AD pathology. Finally, diagnostic biomarkers and potential therapeutic approaches for AD are considered on the basis of the presented evidence. In providing answers to the critical questions of whether and why DM is a risk factor for AD, this book will hold appeal for a wide interdisciplinary audience.