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Sommario/riassunto	O-linked N-acetylglucosamine (O-GlcNAc) is a prevalent post-translational modification of numerous intracellular proteins. This modification has recently emerged as a key regulator of various important biological processes, including gene transcription, stress response, metabolic homeostasis, and immune regulation. Given the critical role of O-GlcNAc in normal physiology, increasing evidence has now demonstrated that deregulation of O-GlcNAc is closely associated with the development and progression of various diseases, including neurodegeneration, cardiovascular disease, and cancer. This book provides a comprehensive overview of the current progress and understanding of this modification in biology, and likely provides new

research directions in the future.