

1. Record Nr.	UNINA9910830800603321
Titolo	Long-lived proteins in human aging and disease / / edited by Roger J. W. Truscott
Pubbl/distr/stampa	Weinheim, Germany : , : Wiley-VCH, , [2021] Â©2021
ISBN	3-527-82673-4 3-527-82674-2 3-527-82675-0
Descrizione fisica	1 online resource (x, 209 pages) : illustrations
Disciplina	612.67
Soggetti	Aging - Molecular aspects
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	"While most proteins in the human body are short-lived and are constantly being regenerated, this is not true for all. A significant fraction of proteins in long-lived cells such as nerve cells are likewise long-lived and will age over time by accumulating damage and other modifications. Scientists are only beginning to understand how this aging of long-lived proteins contributes to age-dependent diseases such as dementia and cancer. Divided into six major sections, this comprehensive overview on an emerging topic in the molecular life sciences covers all aspects of the aging of (long-lived) proteins. Analytical methods to study protein half-life and the accumulation of modifications are presented, followed by several examples of long-lived proteins found in humans and other organisms. Next, the molecular mechanisms of aging on the protein level are described, in particular the most common side chain modifications, followed by a discussion of the consequences of protein aging on cellular and organ function. Finally, the impact of protein aging on several age-related diseases in humans is dissected, and their role in limiting human lifespan is discussed"--

