Record Nr. UNINA9910349445703321 Autore Ghosh Shrestha Titolo SIRT6 Activities in DNA Damage Repair and Premature Aging: Functions of SIRT6 / / by Shrestha Ghosh Singapore:,: Springer Singapore:,: Imprint: Springer,, 2019 Pubbl/distr/stampa **ISBN** 981-329-267-9 Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (188 pages) Collana Springer Theses, Recognizing Outstanding Ph.D. Research, , 2190-5053 572.86459 Disciplina Soggetti Human genetics Cell biology **Human Genetics** Cell Biology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia "Doctoral thesis accepted by The University of Hong Kong, Hong Kong, Note generali China"--Title page. Introduction -- Materials and Methods -- Results-I. Lamin A is an Nota di contenuto endogenous activator of SIRT6 in DNA damage repair process --Results-II. Haploinsufficiency of p53 rescues lifespan and premature aging-associated abnormalities in Sirt6-deficient mice -- Results-III. SIRT6 is an acetylated protein and a NAD+-dependent self-deacetylase -- Discussion. Sommario/riassunto This book illustrates the activities of mammalian sirtuin SIRT6 in connection with DNA damage repair and premature aging. It mainly presents research on the nuclear lamin A, notably the upregulation of p53 and acetylation etc. Taken together, these studies reveal the various regulatory roles of SIRT6, which are of substantial biological relevance in DNA damage repair, aging and longevity, and can have significant implications in devising therapeutic strategies to combat age-associated pathologies. Given its scope, the book offers a valuable resource for students and researchers in the fields of genetics, cell

biology, molecular biology etc.