

1. Record Nr.	UNINA9910298319803321
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Titolo	Oxidative Stress and Hormesis in Evolutionary Ecology and Physiology : A Marriage Between Mechanistic and Evolutionary Approaches // by David Costantini
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2014
ISBN	3-642-54663-3
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (359 p.)
Disciplina	570 571.1 571.8 571.9453
Soggetti	Animal physiology Oxidative stress Animal ecology Biodiversity Evolutionary biology Developmental biology Animal Physiology Oxidative Stress Animal Ecology Evolutionary Biology Developmental Biology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Historical and Contemporary Issues of Oxidative Stress, Hormesis and Life History Evolution -- Early Life Hormesis and Oxidative Experiences Fine-Tune the Adult Phenotype -- Variation in Oxidative Stress Threats and Hormesis Across Environments -- Nutritional Ecology, Foraging Strategies and Food Selection -- Coping with Physical Activity and Inactivity -- The Costs of Makeup in Sexual Selection and Social Signalling -- The Role of Oxidative Stress and Hormesis in Shaping

Reproductive Strategies from Mating Systems to Parental Care --  
Combating Parasites: Immune Response and Inflammation -- Variation  
Within and Among Species in Resistance to Oxidative Stress and  
Hormetic Responses -- Integrating Oxidative Stress and Hormesis into  
Research on Senescence and Survival Perspectives.

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Sommario/riassunto

This book discusses oxidative stress and hormesis from the perspective of an evolutionary ecologist or physiologist. In the first of ten chapters, general historical information, definitions, and background of research on oxidative stress physiology, hormesis, and life history are provided. Chapters 2-10 highlight the different solutions that organisms have evolved to cope with the oxidative threats posed by their environments and lifestyles. The author illustrates how oxidative stress and hormesis have shaped diversity in organism life-histories, behavioral profiles, morphological phenotypes, and aging mechanisms. The book offers fascinating insights into how organisms work and how they evolve to sustain their physiological functions under a vast array of environmental conditions.

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