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Collana	Heat Shock Proteins, , 1877-1246 ; ; 8
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Foreword -- 1 The multicolored world of the HSPB family -- 2 Immense implications associated to small stress expression : impacts on human pathologies -- 3 Dynamics-function relationship sof the small Heat shock Proteins -- 4 Insights into how small heat shock proteins bind a great diversity of substrate proteins: a super transformer model -- 5 Model chaperones: small heat shock proteins from plants -- 6 Regulation of the chaperone function of small Hsps -- 7 Redefining the chaperone mechanism of sHsps: not just holdase chaperones -- 8 Everything but the ACD, functional conservation of the non-conserved regions in sHSPs -- 9 HspB6 (Hsp20) as a versatile molecular regulator -- 10 The chloroplast-localized plant sHSP in Arabidopsis thaliana-role of its oligomeric conformation and its translocation into membranes -- 11 Multifunctional roles of crystallin in skeletal and cardiac muscle momeostasis and disease -- 12 Role of small heat shock protein HspB5 in cancer -- 13 Small heat shock proteins and fibrosis -- 14 Neurodegenerative diseases, sex differences and the 27 kDa heat shock protein in the nervous system -- 15 HspB5/B-crystallin

in the brain -- 16 Small HSP variants and diseases -- 17 The dynamic duo of small heat proteins and Ifs maintain cell homeostasis, resist cellular stress and enable evolution in cells and tissues -- 18 Regulation of actin-based structure dynamics by HspB proteins and partners -- 19 Heat shock alters keratocyte movement and morphology: exploring a role for HSP17 (HSPB1) -- 20 Reconsidering Old Data: Non-Canonical HspB1 Species and the Enigma of the Cytoskeletal Function of HspB1 -- 21 Role of HSPB8 in the proteases network: from protein synthesis to protein degradation and beyond -- 22 Understanding what small heat shock proteins do for bacterial cells -- 23 How to stabilize both the proteins and the membranes: diverse effects of sHsps in neuro protection -- 24 Small Heat Shock Proteins and Diapause in the Crustacean, Artemia franciscana -- 25 Drosophila small heat shock proteins: an update on their features and functions -- Index.

Sommario/riassunto

Based upon a workshop entitled “The Small HSP World” held in Québec 2-5 October 2014. Twenty-five scientists provided chapters for the book. The chapters are from the best scientists currently working in this field. These colleagues include Arrigo, Benesch, Benjamin, Buchner-Haslbeck-Weinkauf, Benndorf, Boelens, Carra, Chang, Currie, Ecroyd, Emanuelsson, Fu, Garrido, Golenhofen, Gusev, Hightower, Kampinga, Lavoie, MacRae, Quinlan, Tanguay, Vierling, Vigh, Weeks and Wu. Briefly, the book starts with the structure of small heat shock proteins, moving to their functions and finishing with their involvement in diseases. Although this is quite broad, the structural aspect will be the unifying theme of the book.