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Titolo	Evolutionary Biology: Self/Nonself Evolution, Species and Complex Traits Evolution, Methods and Concepts / / edited by Pierre Pontarotti
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-61569-6
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (396 pages)
Disciplina	575
Soggetti	Evolution (Biology) Microbial genetics Microbial genomics Plant genetics Animal genetics Evolutionary Biology Microbial Genetics and Genomics Plant Genetics and Genomics Animal Genetics and Genomics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Part I: Self/Nonself Evolution, A new view of how MHC class I molecules fight disease: generalists and specialists -- Evolution and diversity of defensins in vertebrates -- Interdependencies between the adaptation and interference modules guide efficient CRISPR-Cas immunity -- How the other half lives: CRISPR-Cas's influence on bacteriophages -- Hidden Silent Codes in Viral Genomes -- Self and Non-Self from a Genomic Perspective: Transposable Elements -- Mammalian-specific traits generated by LTR retrotransposon-derived SIRH genes.- Part II: Species Evolution and Evolution of Complex Traits, The life history of domesticated genes illuminates the evolution of novel mammalian genes -- Evolution of Complex Traits in Human Populations -- The descent of bison -- Convergent and parallel evolution in early Glires (Mammalia) -- Reductive evolution of apicomplexan parasites from phototrophic an-cestors.- Part III : Methods and Concepts, Evolution of

	milk oligosaccharides and their function in monotremes and marsupials -- Mechanistic Models of Protein Evolution -- Genome-wide screens for molecular convergent evolution in mammals -- Assessing evolutionary potential in tree species through ecology-informed genome screening -- Evolutionary constraints on coding sequences at the nucleotidic level: a statistical physics approach -- Case studies of seven gene families with unusual high retention rate since the Vertebrate and Teleost Whole Genome Duplications.
Sommario/riassunto	This book presents 19 selected contributions to the 20th Evolutionary Biology Meeting in Marseille, which took place in September 2016. They are grouped under the following major themes: · Self/Nonself Evolution · Species Evolution and Evolution of Complex Traits · Methods and Concepts The aims of the annual meetings in Marseille – which bring together leading evolutionary biologists and other scientists using evolutionary biology concepts, e.g. for medical research – are to promote the exchange of ideas and to encourage interdisciplinary collaborations. Offering a revealing overview of the latest findings in the field of evolutionary biology, this book represents an invaluable source of information for scientists, teachers and advanced students alike.