Record Nr. UNINA9910809824703321 Ecoimmunology / / edited by Gregory E. Demas and Randy J. Nelson Titolo New York, : Oxford University Press, c2012 Pubbl/distr/stampa **ISBN** 1-280-59410-1 9786613623935 0-19-987624-X Edizione [1st ed.] 1 online resource (649 p.) Descrizione fisica Altri autori (Persone) DemasGregory E NelsonRandy Joe Disciplina 616.07/9 Soggetti Immune system Disease susceptibility Psychoneuroimmunology 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 Cover; Contents; Contributors; 1. Introduction to Ecoimmunology; 2. Life-History Evolution, Hormones, and Avian Immune Function; 3. Sickness Behavior in Vertebrates: Allostasis, Life-History Modulation, and Hormonal Regulation; 4. Amphibian Immunity: Staying in Tune with the Environment; 5. Immunity in Primates within a Psychobiological Perspective: 6. Maternal Modulation of Offspring Immune Function in Vertebrates; 7. Trade-offs Limiting MHC Heterozygosity; 8. The Energetics of Immunity: Mechanisms Mediating Trade-offs in Ecoimmunology 9. Neuroendocrine Mechanisms of Seasonal Changes in Immune Function 10. Pineal Gland and Circulatory Melatonin in the Regulation of Immune Status of Seasonally Breeding Mammals; 11. Environmental Challenges and the Neuroendocrine Mechanisms of Stress-Induced Modulation of Host Resistance to Microbial Infection; 12. Inflammation and Behavior: 13. The Importance of Physiology for Ecoimmunology: Lessons from the Insects; 14. Interactions between Host Social Behavior, Physiology, and Disease Susceptibility: The Role of

Dominance Status and Social Context

15. Sexual Selection and Parasites: Do Mechanisms Matter?16. Sex

Differences in Immune Responses to Viruses; 17. Immunopathology in Ecological Immunology; 18. The Evolutionary Ecology of Infectious Disease Virulence; 19. Evolutionary Genetics of Infectious Disease; Index; A; B; C; D; E; F; G; H; I; J; K; L; M; N; O; P; Q; R; S; T; U; V; W; X; Y; Z

Sommario/riassunto

The role of parasites and pathogens in the evolution of life history traits is of increasing interest to both ecologists and evolutionary biologists. Immunology, which was once studied almost exclusively by immunologists, has become an important area of proximate investigation to animal physiologists as a means for understanding changes in disease susceptibility and the neural and neuroendocrine mechanisms that mediate these changes. The coalescence of these different perspectives has given rise to the field of ecological immunology, an interdisciplinary research field that examines interaction