1. Record Nr. UNINA9910255335103321 Autore Garson Justin Titolo A Critical Overview of Biological Functions / / by Justin Garson Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2016 3-319-32020-3 **ISBN** Edizione [1st ed. 2016.] Descrizione fisica 1 online resource (119 p.) Collana Philosophy of Science, , 2366-4495 Disciplina 574.01 Soggetti Biology—Philosophy Medicine—Philosophy Philosophy of Biology Philosophy of Medicine 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 at the end of each chapters. Nota di contenuto Chapter 1. What is a theory of function supposed to do? -- Chapter 2. Goals and Functions -- Chapter 3. Function and Selection -- Chapter 4. Function and Fitness -- Chapter 5. Functions and Causal Roles --Chapter 6. Alternative Accounts of Function -- Chapter 7. Conclusion: What Next?. Sommario/riassunto This book is a critical survey of and guidebook to the literature on biological functions. It ties in with current debates and developments, and at the same time, it looks back on the state of discourse in naturalized teleology prior to the 1970s. It also presents three significant new proposals. First, it describes the generalized selected effects theory, which is one version of the selected effects theory. maintaining that the function of a trait consists in the activity that led to its differential persistence or reproduction in a population, and not merely its differential reproduction. Secondly, it advances "withindiscipline pluralism" (as opposed to between-discipline pluralism) a new form of function pluralism, which emphasizes the coexistence of function concepts within diverse biological sub-disciplines. Lastly, it provides a critical assessment of recent alternatives to the selected

effects theory of function, namely, the weak etiological theory and the systems-theoretic theory. The book argues that, to the extent that

functions purport to offer causal explanations for the existence of a trait, there are no viable alternatives to the selected effects view. The debate about biological functions is still as relevant and important to biology and philosophy as it ever was. Recent controversies surrounding the ENCODE Project Consortium in genetics, the nature of psychiatric classification, and the value of ecological restoration, all point to the continuing relevance to biology of philosophical discussion about the nature of functions. In philosophy, ongoing debates about the nature of biological information, intentionality, health and disease, mechanism, and even biological trait classification, are closely related to debates about biological functions.