

1. Record Nr.	UNINA9911019427703321
Titolo	Promises and limits of reductionism in the biomedical sciences // edited by Marc H.V. Van Regenmortel, David L. Hull
Pubbl/distr/stampa	Chichester, West Sussex, England ; ; Hoboken, NJ, USA, : John Wiley & Sons, c2002
ISBN	9786610270002 9781280270000 1280270004 9780470854174 0470854170 9780470854181 0470854189
Descrizione fisica	1 online resource (393 p.)
Altri autori (Persone)	Van RegenmortelM. H. V HullDavid L
Disciplina	570 570/.1 660/.28443
Soggetti	Reductionism Biology Psychology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"... presentations made ... at the Philippe Laudat Conference on 'Promises and Limits of Reductionism in the Biomedical Sciences', held at the Abbey of Royaumont, north of Paris, on 22-24 May 2000"--Pref.
Nota di bibliografia	Includes bibliographical references (p. 365-367) and index.
Nota di contenuto	PROMISES AND LIMITS OF REDUCTIONISM IN THE BIOMEDICAL SCIENCES; Contents; Preface; Contributors; About the Editors; 1 Introduction; 2 Emergent Properties of Biological Molecules and Cells; 3 From Nineteenth Century Ideas on Reduction in Physiology to Non-Reductive Explanations in Twentieth-Century Biochemistry; 4 Pitfalls of Reductionism in Immunology; 5 Reductionism in Medicine: Social Aspects of Health; Questions and Discussion; 6 'Who's Afraid of Reductionism?' 'I Am!'; Questions and Discussion; Round Table Discussion 1: Chair - Alex Rosenberg; 7 Reductionism in an Historical

Science

Questions and Discussion8 Varieties of Reductionism: Derivation and Gene Selection; Questions and Discussion; 9 The Gene: Between Holism and Generalism; Questions and Discussion; 10 Genes versus Molecules: How To, and How Not To, Be a Reductionist; Questions and Discussion; 11 Limits of Reproduction: A Reductionistic Research Strategy in Evolutionary Biology; Questions and Discussion; 12 Evolutionary Psychology: A Case Study in the Poverty of Genetic Determinism; Questions and Discussion; Round Table Discussion 2: Chair - Marc H. V. Van Regenmortel

13 The Ethical Imperative of Holism in MedicineQuestions and Discussion; 14 Levels of Explanation in Human Behaviour: The Poverty of Evolutionary Psychology; Questions and Discussion; 15 Reductionism and Social Policy; Questions and Discussion; 16 Reductionism, Complexity and Molecular Medicine: Genetic Chips and the 'Globalization' of the Genome; Questions and Discussion; Round Table Discussion 3: Chair - Kenneth F. Schaffner; Bibliography; Index

Sommario/riassunto

Reductionism as a scientific methodology has been extraordinarily successful in biology. However, recent developments in molecular biology have shown that reductionism is seriously inadequate in dealing with the mind-boggling complexity of integrated biological systems. This title presents an appropriate balance between science and philosophy and covers traditional philosophical treatments of reductionism as well as the benefits and shortcomings of reductionism in particular areas of science. Discussing the issue of reductionism in the practice of medicine it takes into account the holis
