

1. Record Nr.	UNINA9910830305603321
Titolo	Microbes and evolution [[electronic resource]] : the world that Darwin never saw // edited by Roberto Kolter and Stanley Maloy
Pubbl/distr/stampa	Washington, D.C., : ASM Press, c2012
ISBN	1-68367-073-6 1-55581-847-1
Descrizione fisica	1 online resource (314 p.)
Altri autori (Persone)	KolterRoberto <1953-> MaloyStanley R
Disciplina	571.8/92
Soggetti	Microorganisms - Evolution Bacteria - Evolution Evolution (Biology)
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""; ""Half Title""; ""Title Page""; ""Copyright""; ""Contents""; ""Contributors""; ""Preface""; ""Introduction: Darwin and Microbiology""; ""Chapter 1. Evolution in Action: A 50, 000-Generation Salute to Charles Darwin""; ""Chapter 2. Minimal Genomes and Reducible Complexity""; ""Minimal Cells: from Aristotle to Plato""; ""Naturally Evolved Reduced Genomes""; ""The Flagellum of a Bacterial Endosymbiont: A Case against Intelligent Design""; ""Chapter 3. Lady Lumpsæ's Mouthguard""; ""Chapter 4. Trying To Make Sense of the Microbial Census""; ""Chapter 5. The View from Below""; ""Chapter 6. Running Wild with Antibiotics""; ""Chapter 7. Antibiotic Resistance""; ""What Are Antibiotics and How Do They Work?""; ""Some Bacteria Are Naturally Resistant to Particular Antibiotics""; ""How Susceptible Bacteria Become Resistant to Antibiotics""; ""Target-Focused Resistance Mechanisms""; ""Drug-Focused Resistance Mechanisms""; ""What Has Antibiotic Use Taught Us about Natural Variation, Selection, and Evolution of Bacteria?""; ""Where Do We Stand Today?""; ""Chapter 8. Bacteria Battling for Survival""; ""Chapter 9. Phage: An Important Evolutionary Force Darwin Never Knew""; ""Chapter 10. The Struggle for Existence: Mutualism""; ""Chapter 11. The

Secret Social Lives of Microorganisms"; "Chapter 12. Microbes and Microevolution"; "Chapter 13. Unnecessary Baggage"; "Chapter 14. Bacterial Adaptation: Built-In Responses and Random Variations"; "Graduality and Overlap of Bacterial Built-In Responses"; "Heterogeneity in Bacterial Populations"; "Bacterial Genome Plasticity"; "Variation of Mutation Rates"; "Clues of Bacterial Evolutionary Success"; "Chapter 15. The Impact of Differential Regulation on Bacterial Speciation"
"Chapter 16. An Accidental Evolutionary Biologist: GASP, Long-Term Survival, and Evolution""Chapter 17. How Bacteria Revealed Darwin's Mistake (and Got Me To Read On the Origin of Species"; "The Importance of Small-Effect Mutations"; "Before You Can Estimate the Mutation Rate, You Must Eliminate Natural Selection"; "Why are Mutants Frequent in the Cairns Experiment?"; "Take-Home Points"; "Chapter 18. The Role of Conjugation in the Evolution of Bacteria"; "Chapter 19. Do Bacteria Have Sex?"; "Chapter 20. Better than Sex"
"Chapter 21. Darwin in My Lab: Mutation, Recombination, and Speciation""Chapter 22. Sexual Difficulties"; "Chapter 23. Unveiling Prochlorococcus: The Life and Times of the Ocean's Smallest Photosynthetic Cell"; "Chapter 24. Deciphering the Language of Diplomacy: Give and Take in the Study of the Squid-Vibrio Symbiosis"; "The Geological Context of the Evolution of Animal-Microbial Partnerships"; "A Symbiosis Begins: Margareta's Story"; "Evolution of a Microbiologist: Neda's Story"; "What We've Learned, Where We Are Now, and Where We're Going"
"Chapter 25. The Tangled Banks of Ants and Microbes"
