Record Nr.	UNINA9910792343303321
Titolo	Microbial evolution and co-adaptation [[electronic resource] ] : a tribute to the life and scientific legacies of Joshua Lederberg : workshop summary / / rapporteurs, David A. Relman [et al.]
Pubbl/distr/stampa	Washington, D.C., : National Academies Press, 2009
ISBN	0-309-17731-6 0-309-13122-7
Descrizione fisica	1 online resource (329 p.)
Altri autori (Persone)	LederbergJoshua RelmanDavid A
Disciplina	579/.135
Soggetti	Microorganisms - Evolution Communicable diseases Evolution Adaptation (Biology)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Workshop overview Appendix: WO-1. Infectious history / Joshua Lederberg The life and legacies of Joshua Lederberg Reflections on the career of Joshua Lederberg / David A. Hamburg Joshua Lederberg remembered / Stephen S. Morse The life and impact of a legend-Joshua Lederberg / Adel Mahmoud Microbial ecology and ecosystems War and peace: humans and their microbiome / David A. Relman Deciphering the complex molecular dialogue of symbiosis: Esperanto or polyglot? / Margret McFall-Ngai Pathogen evolution Bacterial pathogenicity: an historical and experimental perspective / Stanley Falkow Evolution of bacterial-host interactions: virulence and the immune overresponse / Elisa Margolis and Bruce R. Levin Antibiotic resistance: origins and countermeasures Antibiotic resistance and the future of antibiotics / Julian Davies Microbial drug resistance: an old problem in need of new solutions / Stanley N. Cohen Expanding the microbial universe: metagenomics and microbial community dynamics / Jo Handelsman Infectious disease emergence: past, present, and future Emerging infections:

1.

	condemned to repeat? / Stephen S. Morse Ecological origins of novel human pathogens / Mark Woolhouse and Eleanor Gaunt Genomic evolvability and the origin of novelty: studying the past, interpreting the present, and predicating the future / Jonathan A. Eisen Can we predict future trends in disease emergence? / Peter Daszak Appendices: A. Agenda B. Acronyms C. Glossary D. Forum member biographies.
Sommario/riassunto	"Dr. Joshua Lederberg - scientist, Nobel laureate, visionary thinker, and friend of the Forum on Microbial Threats - died on February 2, 2008. It was in his honor that the Institute of Medicine's Forum on Microbial Threats convened a public workshop on May 20-21, 2008, to examine Dr. Lederberg's scientific and policy contributions to the marketplace of ideas in the life sciences, medicine, and public policy. The resulting workshop summary, Microbial Evolution and Co-Adaptation, demonstrates the extent to which conceptual and technological developments have, within a few short years, advanced our collective understanding of the microbiome, microbial genetics, microbial communities, and microbe-host-environment interactions."