

1. Record Nr.	UNINA9910808477403321
Titolo	Microbial ecology in states of health and disease : workshop summary / Eileen R. Choffnes, LeighAnne Olsen and Alison Mack, rapporteurs forum on microbial threats board on global health
Pubbl/distr/stampa	Washington, District of Columbia : , : National Academies Press, , 2014 ©2014
ISBN	0-309-29065-1 0-309-29063-5
Descrizione fisica	1 online resource (548 p.)
Disciplina	579.17
Soggetti	Microbial ecology - Health aspects Microorganisms - Research Host-bacteria relationships
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	<p>""Front Matter""; ""Reviewers""; ""Acknowledgments""; ""Contents""; ""Tables, Figures, and Boxes""; ""Workshop Overview""; ""Appendix A: Contributed Manuscripts""; ""A1 Effector and memory T cell responses to commensal bacteria--Yasmine Belkaid, Nicolas Bouladoux, and Timothy W. Hand""; ""A2 What are the consequences of the disappearing human microbiota?--Martin J. Blaser and Stanley Falkow""; ""A3 Pathways in microbe-induced obesity--Laura M. Cox and Martin J. Blaser""</p> <p>""A4 Microbial exposure during early life has persistent effects on natural killer T Cell function--Torsten Olszak, Dingding An, Sebastian Zeissig, Miguel Penilla Vera, Julia Richter, Andre Franke, Jonathan N. Glickman, Reiner Siebert, Rebecca M. Barron, Dennis L. Kasper, and Richard S. Blumberg""</p> <p>""A5 The application of ecological theory toward an understanding of the human microbiome--Elizabeth K. Costello, Keaton Stagaman, Les Dethlefsen, Brendan J. M. Bohannan, and David A. Relman""</p> <p>""A11 Community ecology and the vaginal microbiome--Larry J. Forney and Jacques Ravel""</p> <p>""A12 Investigating bacterial-animal symbioses with</p>

light sheet microscopy--Michael J. Taormina, Matthew Jemielita, W. Zac Stephens, Adam R. Burns, Joshua V. Troll, Raghuvveer Parthasarathy, and Karen Guillemin"; ""A13 Clinical application of fecal microbiota transplantation in Clostridium difficile infection and beyond--Josbert J. Keller and Els van Nood""

""A14 Consumption of human milk glycoconjugates by infant-associated bifidobacteria: Mechanisms and implications--Daniel Garrido, David C. Dallas, and David A. Mills""""A15 Bacteriophage adhering to mucus provide a non host-derived immunity--Jeremy J. Barr, Rita Auro, Mike Furlan, Katrine L. Whiteson, Marcella L. Erb, Joe Pogliano, Aleksandr Stotland, Roland Wolkowicz, Andrew S. Cutting, Kelly S. Doran, Peter Salamon, Merry Youle, and Forest Rohwer""

""A16 Topographic diversity of fungal and bacterial communities in human skin--Keisha Findley, Julia Oh, Joy Yang, Sean Conlan, Clayton Deming, Jennifer A. Meyer, Deborah Schoenfeld, Effie Nomicos, Morgan Park, NIH Intramural Sequencing Center Comparative Sequencing Program, Heidi H. Kong, and Julia A. Segre""

Sommario/riassunto

"Individually and collectively, resident microbes play important roles in host health and survival. Shaping and shaped by their host environments, these microorganisms form intricate communities that are in a state of dynamic equilibrium. This ecologic and dynamic view of host-microbe interactions is rapidly redefining our view of health and disease. It is now accepted that the vast majority of microbes are, for the most part, not intrinsically harmful, but rather become established as persistent, co-adapted colonists in equilibrium with their environment, providing useful goods and services to their hosts while deriving benefits from these host associations. Disruption of such alliances may have consequences for host health, and investigations in a wide variety of organisms have begun to illuminate the complex and dynamic network of interaction - across the spectrum of hosts, microbes, and environmental niches - that influence the formation, function, and stability of host-associated microbial communities. Microbial ecology in states of health and disease is the summary of a workshop convened by the Institute of Medicine's Forum on Microbial Threats in March 2013 to explore the scientific and therapeutic implications of microbial ecology in states of health and disease. Participants explored host-microbe interactions in humans, animals, and plants; emerging insights into how microbes may influence the development and maintenance of states of health and disease; the effects of environmental change(s) on the formation, function, and stability of microbial communities; and research challenges and opportunities for this emerging field of inquiry"--
