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Nota di contenuto	Introduction -- Part I Environmental Microbial Biotechnology -- Chapter 1 Molecular biological tools for the assessment of hydrocarbon-degrading potential in coastal environments -- Chapter 2 Indigenous PAH-degrading bacteria in oil-polluted marine sediments from Patagonia. Diversity and biotechnological properties -- Chapter 3 Hydrocarbon remediation by Patagonian microbial consortia -- Chapter 4 Assessment of microbial Patagonian communities for using in heavy metal bioremediation -- Chapter 5 Microbiological and biochemical indicators for assessing soil quality in drylands from Patagonia -- Part II Patagonian Microorganisms for Industrial and Sanitary Applications -- Chapter 6 Molecular ecology of class 1 integrons in Patagonia as model system for understanding the rise of antibiotic resistance isolates

around the world -- Chapter 7 Novel sources of antimicrobials from pristine and poorly explored environments. The Patagonia microbiota case -- Chapter 8 Bioprospecting for bioactive actinomycetes from Patagonia -- Chapter 9 Microorganisms from Patagonia and Antarctica and their cold-active skills for using polymeric materials -- Chapter 10 Alkaline proteases from Patagonian bacteria -- Chapter 11Extremophilic Patagonian microorganisms working in biomining -- Chapter 12 Microorganisms from Patagonian aquatic environments for use in aquaculture -- Chapter 13 Indigenous lactic acid bacteria communities associated with spontaneous malolactic fermentations in Patagonian wines: Basic and applied aspects -- Part III Yeast Biotechnology -- Chapter 14 Saccharomyces in traditional and industrial fermentations from Patagonia -- Chapter 15 Wild yeasts selection for high quality Patagonian wines -- Chapter 16 Patagonian antagonist yeasts for food biopreservation -- Chapter 17 Biotechnologically relevant yeasts from Patagonian natural environments.

Sommario/riassunto

The Argentinean Patagonia offers a great diversity of scarcely explored environments suitable for the bioprospection of biotechnological relevant microorganisms. This book provides readers with a concise and clearly illustrated treatment of outstanding topics of Patagonian microbiology and biotechnology. It covers a wide range of areas interesting to several audiences such as researchers, graduate students and professionals working on the industry food. Among the main topics we will discuss examples of environmental applications, such as heavy metal and hydrocarbon bioremediation, bioprospection of valuable molecules from extremophilic bacteria and yeasts, the use of Patagonian yeasts and lactic acid bacteria in fermented foods and beverages, aquaculture probiotics and yeasts for food biopreservation.