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Nota di contenuto	Chapter 1. Emerging Trends of biotechnology in marine bioprospecting: A New Vision -- Chapter 2. MarinOmics- Current and Future Perspectives -- Chapter 3. Marine Nutraceuticals -- Chapter 4. Small at size, big at impact: marine microbes, a boon for biotherapeutics -- Chapter 5. Marine Microbial Pharmacognosy: Prospects and Perspectives -- Chapter 6. Molecular Diversity and Pharmaceutical Applications of Free Living and Rhizospheric Marine Actinobacteria -- Chapter 7. Biodiversity of Marine Actinobacteria in Indonesia and Their Potential to Produce Bioactive Compounds -- Chapter 8. Marine-Derived Fungi : Potential Candidates for Anticancer Compounds -- Chapter 9. Marine Flora: Source of Drugs from the Deep-Sea Environment -- Chapter 10. Edible seaweeds as potential source of nutraceuticals -- Chapter 11. Seaweed and Sea Anemones proteins as a source of new pharmaceutical active principles -- Chapter 12. Marine-microalgae as a potential reservoir of high value nutraceuticals -- Chapter 13. Synthetic biology tools for microalgae -- Chapter 14. Malacology and Pharmacology: An integrated Approach with special emphasis on marine realm -- Chapter 15. Alkaloids from Marine ascidians (Tunicates) and potential for cancer drug development -- Chapter 16. Fish Protein Hydrolysates in Indonesia: Their Nutritional Values, Health Benefits and Potential Applications -- Chapter 17.

Caulerpa: Ecology, Nutraceutical and Pharmaceutical Potential -- Chapter 18. Medicinal Prospects of Marine Flora and Fauna for Drug Discovery -- Chapter 19. Tapping the potential of marine resources in the arena of cosmetics -- Chapter 20. Marine Pharmacognosy: An overview of Marine-derived Pharmaceuticals -- Chapter 21. Compatible Solute Ectoines: Fancy Marine Product for Pharmaceuticals and Cosmeceuticals -- Chapter 22. In silico identification of drug targets and drug-like molecules against Vibrio splendidus LGP32.

Sommario/riassunto

This book offers a comprehensive study of biological molecules acquired from marine organisms, which have been exploited for drug discovery with the aim to treat human diseases. Biomolecules have potential impacts on a diverse range of fields, including medical and pharmaceutical science, industrial science, biotechnology, basic research, molecular science, environmental science and climate change, etc. To understand and effectively apply medicinally important biomolecules, multidisciplinary approaches are called for. The ocean remains a rich biological resource, and the vast untapped potential of novel molecules from marine bio-resources has caught the interest of more and more researchers. These novel biological compounds have never been found in terrestrial or other ecosystems, but only in this rich niche. Advances in sampling techniques and technologies, along with increased funding for research and nature conservation, have now encouraged scientists to look deeper in the waters. Aquaculture supports both tremendous seafood production and the bulk production of marine-derived drugs. Furthermore, molecular methods are now being extensively employed to explore the untapped marine microbial diversity. With the help of molecular and biotech tools, the ability of marine organisms to produce new biosynthetic drugs can be greatly enhanced. This book provides an extensive compilation of the latest information on marine resources and their undisputedly vital role in the treatment of diverse ailments.