



BioMed Research International

Special Issue on

Microbial Diversity for Biotechnology 2014

CALL FOR PAPERS

Microbes have been the driving force for the evolution of life on Earth for the last 4 billion years regulating the recycling of all major chemicals, producing fuels, synthesizing novel natural products, determining the oxic condition of our atmosphere, promoting soil fertility, interacting with animal and plant species, and, in general, sustaining all living organisms. Despite their great importance, only a small fraction of them has been cultivated in the laboratory. It is now clear that molecular techniques have played a major role in the detection and unravelling of the enormous microbial diversity. Omic technologies like genomics, metagenomics, and single cell genomics enabled the characterization of a huge and unexplored portion of the microbial diversity that is being referred to as microbial dark matter (MDM). Understanding the unculturable and culturable fraction of Earth's microbiome would benefit almost every aspect of human health, including the promotion of environmental remediation and recovery of polluted ecosystems, transformation and detoxification of inorganic and organic pollutants, the isolation of extremozymes in order to allow industrial processes under harsh conditions, and the development of biosensors.

For the above reasons, we invite researchers all over the world to contribute with original articles, as well as reviews that will stimulate the continuing efforts to understand the hidden microbial diversity, to develop new technologies that can lead to potential biotechnological advancements and also for the use of microbes to suppress insect populations of environmental, agricultural, and medical importance.

Potential topics include, but are not limited to:

- ▶ Microbial ecology
- ▶ Arid ecosystems
- ▶ Microbial evolution
- ▶ Bioremediation
- ▶ Bioenergy
- ▶ Fermentation
- ▶ Arthropod symbionts
- ▶ Biodiscovery, antibiotic resistance, and new antibiotics
- ▶ Biosensors
- ▶ Bioreactors
- ▶ Omic technologies: genomics, proteomics, metabolomics, and transcriptomics
- ▶ Bioinformatics and biotechnology

Authors can submit their manuscripts via the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/bmri/biotechnology/mdb14/>.

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Friday, 12 December 2014

First Round of Reviews

Friday, 6 March 2015

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