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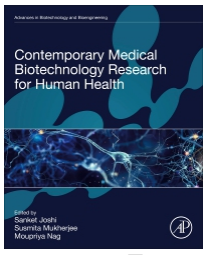

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Contemporary Medical Biotechnology Research for Human Health

1st Edition - February 24, 2022

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Editors: Sanket Joshi, Susmita Mukherjee, Moupriya Nag
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Description

Contemporary Medical Biotechnology Research for Human Health discusses a range of currently available solutions required to defeat the ever-increasing human health challenges. The junction between biotechnology and biomedical/health sciences has led to several improvements in patients' treatment, diagnosis and well-being. The book discusses vital topics ranging from biofilms and UTI, mycobacterial infections, diabetes, aplastic anemia, oral cancer, and possible applications of nanoparticles. In addition, it discusses computer-aided drug design using natural products and new technologies to develop antibiotics. This is a valuable resource for biotechnology and biomedical researchers, bioinformaticians and members of health sciences interested in understanding recent technological developments.

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About the Editors

Sanket Joshi

Sanket Joshi is a deputy director, Oil & Gas Research Centre, and an application specialist, Central Analytical and Applied Research Unit, at the Sultan Qaboos University, Oman. He has academic teaching and research experience of about 17 years, and industrial R&D experience of about 4 years, in India and Oman. His current research interests encompass energy (in situ/ex situ microbial enhanced light/heavy oil recovery, chemical EOR, biofuels), microbial products (biosurfactants, biopolymers, R&D, and scale-up), and environmental bioremediation (crude oil pollution; analysis, mitigation, and control of souring by sulfate-reducing bacteria; HPAM-contaminated sites).

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Susmita Mukherjee, PhD did her Graduation and Post-graduation in Zoology. Passionate to learn and work on Environmental Biotechnology, she has been working in this field for more than 10 years towards preservation of ecosystems. She has done extensive work on the effect of ecological factors on sewage fed fisheries of East Kolkata Wetlands, India. Her doctoral work was on the Wastewater management of Kolkata city. Her research interest is in environmental toxicology and waste bioremediation primarily of land and aquatic systems. Also worked on the algal bioremediation of wastewater, understanding the effectiveness of the algal system involving different variations compared to other prevailing indigenous systems towards better management of wastewater problem.

Affiliations and Expertise

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Moupriya Nag

Moupriya Nag, PhD postdoctoral work was focused on exploring the aggregation kinetics and mechanism of action of peptides associated with neurodegenerative diseases in presence of various membrane surfaces with solution NMR, making her gain experience with various state of the art techniques used in a molecular biology research. Her research interests include single molecule biophysics of protein unfolding/refolding and protein aggregation kinetics and its mechanism of action, especially the amyloid proteins in neurodegenerative disorders. Recently, her research focuses on functional amyloids in bacteria and their relation in forming biofilms. She has about 5 years of teaching experience in Biophysics, Bioinformatics, Bioprocess and Biotechnology, Enzyme Technology, Computing, Molecular Modeling and Drug Design. She has also published many research articles in the peer-reviewed international journal and authored or co-authored numerous book chapters. She is also a member of many scientific societies like Indian Biophysical Society and Indian Science Congress Association

Affiliations and Expertise

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