


Dr. Mahmoud M. Berekaa

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Basic Information

 Dr. Mahmoud M. Berekaa

Name: Dr. Mahmoud M. Berekaa
(Jul 1967–)

Birth Alexandria, Egypt.

Location:

Titles: Professor

Doctor

Ph.D.

Affiliations: Faculty of Science, Alexandria University, Egypt.

College of Public Health, Imam Abdulrahman Bin Faisal University, Saudi Arabia.

Honor: Unknown

1. Introduction

I'm **Dr. Mahmoud M. Berekaa** graduated from University of Alexandria with a Bachelor of Science with honors in Microbiology. I started my postgraduate studies with a Master degree in Faculty of Science by focusing on Biotechnological Production of Microbial Enzymes before moving to "University of Munster, Germany" to undertake a five years research fellowship at the University of "Westfälische Wilhlem Klimm Universitat Munster", leading to the award of a PhD for his thesis in 2001. I did postdoctoral work on the study of microbial communities on molecular levels in Duquesne University, Pittsburg, Pennsylvania, USA in 2005. Indeed, I awarded a Professor degree in Molecular Microbiology and Biotechnology in 2014, Faculty of Science, Alexandria university.

2. Researches and Publications

My research interests include; biotechnological production and biodegradation of biopolymer, bioremediation, biotransformation of toxic metals (e.g. Cr⁺⁶, As, Se), production of bioactive compounds from bacteria as well as the production of microbial enzymes from thermophilic bacteria. Special focus on study of research subjects on molecular level (gene cloning) and optimization of bioprocesses by application of statistical experimental designs. Also, interested in assessment of microbial and bioaerosols contaminants in many environments including air, food and water. Also, interested in application of cold plasma and different organic and inorganic nanomaterials and nanocomposites as potential antimicrobial agents and other environmental applications. Epidemiological studies for prevention and control of diseases also of concern. In addition, I applied for five patents in the field of Molecular Microbiology and Biotechnology. Among the published patents, Method for isolation of DNA from blood and body fluids and an innovative method for synthesis of DNA ladder by experimental design. The most recent patent is published in collaboration with IAU University on an innovative method for PHB biopolymer production using date syrup, method for production of novel bioactive compound from local bacterial isolate and the latest innovation is the design of novel biosensor for detection of toxic metals using microbially produced fluorescent compound.

I published more than 50 papers in International Recognized Journals and many talks and presentations in national and international conferences. I supervised number of PhD and Master Theses in Egypt and Saudi Arabia covering several topics in the field of molecular microbiology, environmental microbiology and biotechnology, biotransformation of toxic

metals and occupational safety. Also, reviewer in many international journals and registered in Publon. Moreover, I organized several workshops in Molecular Biology Techniques and Applications as well as workshops on Bioinformatics.

Currently I am appointed as an Assistant Professor in Imam Abdulrahman University, College of Public health. On administrative level, first as quality coordinator I'm responsible for quality and accreditation for under and postgraduates' programs. I'm also responsible for exams assessment quality in the college of public health. Regarding teaching responsibility, I was awarded an Excellence in Teaching Award, 2022. Also, coordinator for several courses in microbiology and biotechnology for under and postgraduate students such as: Environmental Microbiology, Environmental Biotechnology, Advanced Techniques in Molecular Microbiology, Food Safety and Hygiene, Infection control, biological hazards in workplaces, Environmental Health and Epidemiology and other courses in occupational health and safety. Also, coordinator for Environmental Microbiology and Microbiology of Food for Fellowship candidates in Medical Microbiology, College of Medicine, IAU university.

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