

FATMA SALAHELDIN DABBOUS, M.Sc., Ph.D.

PERSONAL INFORMATION:

Gender: female

Nationality: Egyptian (green card holder)

Address: 68 Furnace St., Sharon, MA

Telephone: +17815208857

Email: dabbousetal2030@yahoo.com

RESEARCH INTEREST:

I am really interested to study one of the following:

- Discovery of new antimicrobial agents, investigation of their mechanisms of action and studying of the resistance mechanisms.
- Microbiome; the effect of fasting on the oral and gut microbiome.
- Alternative and prophetic medicine.
- Studying the newly emerging pathogens e.g. modified corona virus, ...etc.

EDUCATION:

Ph. D., Microbiology

Faculty of Pharmacy, University of Alexandria, Alexandria, Egypt

11/2008–1/2012

Dissertation "A microbiological study on biosurfactants production from different microbial isolates in Egypt"

M.Sc., Pharmaceutical Sciences, Pharmaceutical Microbiology

Faculty of Pharmacy, University of Alexandria, Alexandria, Egypt

11/2004–9/2007

Thesis "Influence of certain herbal extracts on the activity of some antimicrobial agents against clinical microbial isolates"

B.S., Pharmaceutical Sciences, Distinction with honors

9/1999–6/2004

Faculty of Pharmacy, University of Alexandria, Alexandria, Egypt

LABORATORY SKILLS AND TECHNIQUES:

- **Basic microbiological techniques:** Safety handling of biohazards - Isolation, cultivation, preservation, examination, identification and study of physiological characteristics of microorganisms including BSL 2 bacteria – Bacterial count - Evaluation of the antimicrobial activity of the antimicrobial agents – Studying the antibiotic mechanisms and resistance – Challenging test for preservatives – Biofilm formation – etc.
- Knowledge of operation and maintenance of laboratory equipment and instruments
- **Molecular biological technique:** Isolation of plasmid and genomic DNA - Gel electrophoresis – PCR - Automated DNA sequencing
- **Bioinformatics (Genomics and Proteomics):** Blast - GeneBank - Multiple Sequence Alignment and Phylogenetic tree construction
- **Biotechnology:** Bioreactor fermentation
- **Optimization using experimental factorial design:** Plackett-Burman analysis - Box-Behnken analysis- Bacterial growth kinetics.
- **Other methods:** UV-Vis Spectrophotometry- TLC- HPTLC- Fluorescence spectroscopy – Biostatistics – Some biochemical methods
- **Computer:** Microsoft office (Word, Excel, Power point) - MS windows OS - Origin data analysis and graphing software – Essential regression for experimental design.
- **Languages:** Arabic is mother tongue- English is second language
- Excellent communication and interpersonal skills
- Excellent team working with challenging personality
- Data collection and analysis

TEACHING EXPERIENCE: (Faculty of Pharmacy, Alexandria University, Egypt)

- **Assistant Professor of Microbiology** 04/2012- present (on a leave since 09/2012)
- **Assistant Lecturer of Pharmaceutical Microbiology** 10/2007- 04/2012
- **Demonstrator of Pharmaceutical Microbiology** 09/2004 – 10/2007

COURSES, WORKSHOPS AND TRAINING PROGRAMS:

- **Professional Diploma in Herbs, Aromatherapy and Soap Formulation**, American University for Continuing learning (December 2021)
- **Bioinformatic Methods I**, University of Toronto (January 2017)
- **Exomes and the Clinical Research Conundrum: New Approaches to Enhancing the value of Genomic Data**, Science AAAS online webinar (October 2014)
- **A Systems Approach to the Microbiome World: Investigating Host-Microbiota Symbiosis**, Science AAAS online webinar (September 2014)
- **Expanding the Scope of RNA-Seq: from Stem Cells to FFPE**, Science AAAS online webinar (September 2014)
- **Automated DNA Sequencing of PCR Products**, Science Park, Faculty of Pharmacy, Alexandria University, Egypt (December 2008)
- **Large Scale Production through Fermentation**, with concentration on **Bioreactor Fermentation using Bioflo 110 Bioreactor**, Advanced Technology and New Materials Research Institute in City for Scientific Research and Technology Applications, Alexandria, Egypt (August 2008)
- **Optimization of Production of Secondary Metabolite using Statistical Analysis**, Advanced Technology and New Materials Research Institute in City for Scientific Research and Technology Applications, Alexandria, Egypt (August 2008)
- **Principle of Genetic Engineering**, Institute of Graduate Studies and Research, University of Alexandria Research Center, Alexandria University, Egypt (March 2005)
- **Postgraduate general courses**: Advanced instrumental analysis – Computer science and programming – Physical chemistry – Mathematics and biostatistics
- **University Administration**, FLDP, Alexandria University, Egypt (January 2008)
- **Financial and Legal Affairs**, FLDP, Alexandria University, Egypt (January 2008)
- **Credit Hours**, FLDP, Alexandria University, Egypt (December 2007)
- **Code of Ethics**, FLDP, Alexandria University, Egypt (December 2007)
- **Effective Presentation Skills**, FLDP, Alexandria University, Egypt (December 2007)
- **Teaching with Technology**, FLDP, Alexandria University, Egypt (December 2007)

CONFERENCES ATTENDANCE:

- Joint ASTR-BA Research Grants Hybrid Workshop Applied Research: From Theory to Market. Center for Special Studies and Programs (CSSP), Bibliotheca Alexandria, in cooperation with the Academy of Scientific Research and Technology, Egypt (8-9 November 2021)
- DUPHAT conference and workshops: Dubai International Convention and Exhibition Center, UAE (7-9 March 2017)
- Saudi Health Exhibition and Conference: Riyadh International Convention and Exhibition Center, KSA (17 May 2016)
- Infection Prevention and Control: Riyadh International Convention and Exhibition Center, KSA (19 May 2015)
- Advances in Next Generation Sequences: online event (5-6 May 2015)
- Diagnostic and Biomarkers: Online event (27-28 January 2015)
- Beyond the Genome: Cancer genomics 2014. Harvard Medical School, Boston, MA, USA (October 2014)
- Eastern Mediterranean Regional Infection Control Congress & the 16th Annual conference of the Egyptian Society of Infection Control. Faculty of Medicine, Alexandria University, Alexandria, Egypt (9-12 November 2007)
- Biovision Alexandria 2006. Bibliotheca Alexandria Egypt. New Life Sciences. Changing lives (April 2006)

AWARDS, POSTERS AND PUBLICATIONS:

- Certificate of merit from Faculty of Pharmacy, Alexandria University for being the second top student on my undergraduate class (1000 students) at the cumulative total of B.Sc. in Pharmaceutical Sciences degree (1999-2004).
- Financial awards from the Organic Chemistry Department, Faculty of Pharmacy, Alexandria University for being the first top student on my undergraduate class (1000 students) at the cumulative total in Organic chemistry (2000-2002).
- Kassem MA, Fanaki NH, Fawzi MA, **Dabbous FS. Green Tea Helps Beat Superbug**. Published in 31 March, 2008 at the Society for General Microbiology's 162nd meeting in Scotland.
- Kassem MA, Fanaki NH, Abou-Shleib H, **Dabbous FS, Abdel-Fattah YR. Biosurfactants Production from an Environmental *Bacillus* strain in Egypt**. published in Applied Microbiology 2015, World Congress and Expo on Applied Microbiology, Germany, Frankfurt am Main (18 - 20 August 2015)
- Kassem MA, Fanaki NH, Abou-Shleib H, **Dabbous FS, Abdel-Fattah YR. Characterization and Kinetic Study for Rhamnolipids Produced by an Environmental *Pseudomonas aeruginosa* Isolate**. 4th International Congress of Bacteriology and Infectious Diseases, USA, San Antonio (15 - 18 May 2016)

- Kassem MA, Fanaki NH, Fawzi MA, **Dabbous FS. Influence of Aqueous Herbal Extracts on the Antimicrobial Activity of Some Antibiotics against Clinical Microbial Isolates.** New Egyptian Journal of Microbiology 2007.
- Kassem MA, Fanaki NH, Fawzi MA, **Dabbous FS. Effect of Green Tea Extract on Some Virulence Factors of Selected Multiresistant clinical isolates.** Egyptian Journal of Medical Microbiology 2007; 16(3):461-71.
- Kassem MA, Fanaki NH, *Dabbous FS*, Abdel-Fattah YR. **Optimization of Biosurfactant Production From Pseudomonas aeruginosa Through Factorial Designs.** New Egyptian Journal of Microbiology 2009.
- Kassem MA, Fanaki NH, Abou-Shleib H, **Dabbous FS**, Abdel-Fattah YR. **Characterization and Kinetic Study for Rhamnolipids Produced by an Environmental Pseudomonas aeruginosa Isolate.** Egyptian Journal of Medical Microbiology 2013;(22):123-30.
- Kassem MA, Fanaki NH, Abou-Shleib H, **Dabbous FS**, Abdel-Fattah YR. **Biosurfactants Production from an Environmental Bacillus strain in Egypt.** Egyptian Journal of Biotechnology 2014;(46):66-84.
- Atayab HN, Ibrahim MA, AbouElfetouh A, Genawi KK, Jaweesh RS, **Dabbous FS**, Ouanes Z, El Kadmiri N, Amrani I, Fredj M, Mehanna MM, Abujilban S, Emahbes T, Ahmat AB, Elhassan M, Al-Delaimy WK. **Knowledge, Attitude, and Practice of Middle East and North African Populations toward COVID-19.** International Journal of Research and Ethics 2022; 5(2).

PROFESSIONAL EXPERIENCE AND MEMBERSHIP: (Faculty of Pharmacy, Alexandria University, Egypt)

- Assisting postgraduate colleagues in their researches and experiments. Coaching them in writing scientific papers as well as publishing.
- Teaching and supervision of undergraduate laboratory courses of **Pharmaceutical Microbiology and Public Health** for students from diverse populations through practicing evidence-based teaching and use of modern instructional technology
- Participating member in improving, updating and writing the notebook of undergraduate laboratory courses **Pharmaceutical Microbiology and Public Health.**
- Teaching and leading a workshop of **“Molecular Microbiological Techniques: Principle of PCR and its application”**
- Coaching and supervising the laboratory course of postgraduate diploma of **“General Microbiological and Molecular Microbiological Techniques”** for international students.
- Member of External **Microbiological Quality Control Unit** of different pharmaceutical products for many National Pharmaceutical Companies in Faculty of Pharmacy, Alexandria University
- Member of Egyptian pharmacist syndicate
- Staff Member of department of Pharmaceutical Microbiology, Faculty of Pharmacy, Alexandria University, Egypt
- Member of executive committee of **“Continuous Improvement and Qualifying for Accreditation Project”** of Faculty of Pharmacy, Alexandria University
- Member of executive committee of **“the Project of Enhancement of Students Assessment System”** of Faculty of Pharmacy, Alexandria University

REFERENCES

- 1- Prof. Dr. Yasser Abdel-Fattah, Deputy of Minister of Higher Education for Scientific Research Affairs. Professor of Microbiology and Biotechnology, Department of Bioprocess Development, Genetic Engineering and Biotechnology Research Institute, City for Scientific Research and Technology Applications, New Borg El-Arab, Alexandria, Egypt.
Email: yasser1967@yahoo.com Tel: +201004371993
- 2- Rana Abdelnabi, Postdoctoral Researcher and Project Manager, Rega Institute KU Leuven, Belgium.
Email: Rana.abdelnabi@kuleuven.be Tel: +32494938825
- 3- Prof. Dr. Alaa Abouelfetouh, Director, Technology Innovation Commercialization Office, Alamein International University, Egypt. Professor, Microbiology and Immunology, Faculty of Pharmacy, Alamein International University, Egypt.
Email: aabouelfetouh@Aiu.edu.eg Tel: +201003527160
- 4- Dr. rer. nat. Dina Raafat, Postdoctoral Researcher, Institute of Immunology, University Medicine Greifswald, Germany. Assistant Professor, Department of Microbiology and Immunology, Faculty of Pharmacy, Alexandria University, Egypt.
Email: dina.raafat@yahoo.com Tel: +49(0)17650151336

- 5- Omar M. El-Halfawy, Canada Research Chair in Chemogenomics and Antimicrobial Research, Faculty of Science, University of Regina, Canada. Assistant Professor of Biochemistry, Faculty of Science, University of Regina, Canada. Lecturer, Department of Microbiology and Immunology, Faculty of Pharmacy, Alexandria University, Egypt.
Email: omar.el-halfawy@uregina.ca Tel: +1 (306)337-2214

- 6- Eman Y. Gohar, Assistant Professor of Medicine, Division of Nephrology and Hypertension at Vanderbilt University Medical Center, Nashville, TN, USA. Lecturer of Pharmacology, Faculty of Pharmacy, Alexandria University, Egypt.
Email: Eman.gohar@vumc.org Tel: +1 (205)243-0419