mohamed-ashraf11.github.io

Highlights

Microbiologist with a keen interest in microbial genomics and antimicrobial resistance, currently developing skills in Whole Genome Sequencing data analysis and microbial comparative genomics. Passionate about using R for data analysis and visualization with a strong background in Biostatistics.



Research Interests

- Microbial genomics and whole-genome sequencing data analysis.
- Antimicrobial resistance.
- Microbiology (Bacteriology).

Education

• Ph.D. (in progress) – Biotechnology

Egypt - Japan University of Science and Technology

Expected October 2026

- Proposed Thesis Title: "Exploring the Antimicrobial and Antivirulence Effect of Plant Extracts and its Derived Compounds on Antibiotic-Resistant Bacteria"

• M.Sc. – Biotechnology

June 2023

Egypt – Japan University of Science and Technology

- Thesis Title: "Enhanced Aromatic Polycyclic Hydrocarbons Biodegradation Process by Microbial Biofilm Consortium Development"

• B.Sc. – Biological Sciences

July 2017

Faculty of Science, Sohag University

Research Experience

- Whole-genome sequencing analysis: Prokka (Genome annotation), Roary (Pangenome analysis), FastQC (Quality control), Proksee (Comparative genome mapping), ResFinder (AMR gene detection), etc.
- Evaluation of the antimicrobial and antivirulence effects of plant secondary metabolites against *Pseudomonas aeruginosa*.
- Antimicrobial susceptibility testing and MIC determination.
- Biofilm formation, development of microbial consortia, and biodegradation studies.

Computational skills

- Linux/shell scripting.
- R (competent user at data analysis, Visualization, Biostatistics, RMarkdown).
- Good knowledge of GitHub for version control.
- Python (Novice).
- SPSS for Statistical analysis.

Lab skills

- Microbiological techniques.
- DNA/RNA extraction and purification.
- Polymerase Chain Reaction (PCR).

- Gel electrophoresis.
- Antibiotic susceptibility testing.
- Biochemical identification tests.

Work Experience

• Assistant Lecturer

March 2024 - Present

Faculty of Science, Sohag University

• Teaching Assistant

August 2018 – March 2024

Faculty of Science, Sohag University

Soft skills

- Excellent English communication skills (IELTS Band 7).
- Proven ability to work effectively within multidisciplinary research teams.
- Strong analytical and problem-solving skills.
- Effective planning and organization.
- High ability to manage multiple projects simultaneously.
- Precision in conducting experiments, analyzing, and interpreting data.

Languages

English: Fluent. Arabic: Native.

Manuscripts in preparation

- Mohamed Ashraf, Hesham Soliman, Amr Nassrallah. In Silico Comparative Genomics and Antimicrobial Resistance Profiling of Egyptian Pseudomonas aeruginosa Clinical Isolates Using Whole-Genome Sequencing. (Manuscript under submission).
- Mohamed Ashraf, Ahmed Labena, Aly E. Abo-Amer, Mohamed Ghazy, Ahmed Abdel-Mawgood. Development
 and Evaluation of Biofilm and Bacterial Consortia on the Biodegradation of Polycyclic Aromatic Hydrocarbons.
 (Manuscript under submission).

Peer-Reviewed Conference

- Mohamed Ashraf, Hesham Soliman, Amr Nassrallah. (2025). "Antibacterial and Antivirulence Effects of Spinacia oleracea Root Extract against *Pseudomonas aeruginosa*" in "International Conference on Bioengineering and Biotechnology", Paris, France.
- Mohamed Ashraf, Mohamed A. Ghazy, Ahmed Labena, Aly E. Abo-Amer, Ahmed Abdel-Mawgood. (2023).
 "Effect of biofilm formation and consortium development on biodegradation of polycyclic aromatic hydrocarbons (PAHs)" in "International Conference on Medical, Biological and Pharmaceutical Sciences (ICMBPS-23)", Athens, Greece.

Current Ph.D. Supervisors

Prof. Dr. Hesham Soliman

PharmD Program - Egypt-Japan University of Science and Technology

E-mail: hesham.soliman@ejust.edu.eg

Assoc. Prof. Dr. Amr Nassrallah

Biotechnology - Egypt-Japan University of Science and Technology

E-mail: amr.nassrallah@ejust.edu.eg



E-JUST

الجامعة المحربة اليابانية للعلوم والتكنول وجيا EGYPT-JAPAN UNIVERSITY OF SCIENCE AND TECHNOLOGY エジプト日本科学 技術大学

02219



CERTIFICATE

Egypt –Japan University of Science and Technology (E-JUST) hereby certifies that Mr. Mohamed Ashraf Youssef Mohamed

Born in: Sohag

On: April 01, 1995

Nationality: Egyptian

National ID: 29504012604278

Has been awarded the degree of Master of Science (M.Sc.) in **Biotechnology**

Thesis Title: Enhanced aromatic polycyclic hydrocarbons biodegradation process by microbial biofilm consortium development

عنوان الرسالة: عملية التحلل البيولوجي المحسنة للهيدروكربونات متعددة الحلقات عن طريق تكون الأغشية الحيوية الميكروبية

The Education Council Approved on: June 19, 2023

University Council Approved on: June 22, 2023

Student Affairs Senior Specialist

Nancy Arref

Student Affairs General Manager

S. Alkersh

Vice President of Education and Academic Affairs

Prof. Sameh Nada

Issue Date: 20/08/2023



Issue Date: 20/08/2023

الجامعة المحرية اليابانية للعلوم والتكنول وجياً EGYPT-JAPAN UNIVERSITY OF SCIENCE AND TECHNOLOGY エジプト日本科学 技術大学

02218

Student Courses Transcript

Student Name: Mohamed Ashraf Youssef Mohamed

A 3 3 4

Nationality: Egyptian
Institute: Basic and Applied Science

Awarded Degree: Master of Science (M.Sc.)

Student ID: 222020015 Birth Date: April 01, 1995

Program: Biotechnology **Graduation Date:** June 22, 2023

The student has passed successfully the following graduate courses in semesters fall 2020, and spring 2021 semesters:

Preparatory Course					
Course Code	Course Title	Credit Hours	GPA	Grade	
PRE 427	Genetics and molecular genetics	1	4.00	A+	
PRE 435	Bioremediation	1	-	Waived	
PRE 403	Japanese Language	1	4.00	A+	
PRE 404	Japanese Culture	1	3.00	В	
PRE 405	Research Skills and methods	1	2.50	C+	
PRE 401	English Language	1	-	Waived	

Program Compulsory Core Courses				
Course Code	Course Title	Credit Hours	GPA	Grade
BIO 501	Molecular Biology and Genetic Engineering	3	3.30	B+
BIO 502	Advanced Microbiology and	3	4.00	A+
	Microbiological Techniques		祖 1	,

Program Research Elective Courses				
Course Code	Course Title	Credit Hours	GPA	Grade
BIO 503	Advanced enzymology and cofactors	3	3.30	B+
BIO 504	Hormones (biosynthesis and action)	3	3.70	A
BIO 701	Project-Based Learning in Agricultural	3	3.70	A
	Biotechnology	4. 64. 6. 7.		

Attended Credit Hours	Earned Credit Hours	Waived Credit Hours	Thesis Credit Hours	CGPA
19	19	2	15	3.55

 $A+\geq 95$, $95>A\geq 90$, $90>B+\geq 85$, $85>B\geq 80$, $80>C+\geq 75$, $75>C\geq 70$, $70>D+\geq 65$, $65>D\geq 60$, F<60, I=Incomplete, W=Withdrew, FW=Forced-Withdrawn, Au=Audit CGPA is out of 4

Student Affairs Specialist

Nancy Areal

Student Affairs General Manager

S. Alkersh

Vice President of Education and Academic Affairs Prof. Sameh Nada