Personal Data

CURRICULUM VITAE

Name	**:**	**Khaled Mohamed Anwar Aboshanab**
D.O.B	**:**	27.08.1973
Place of birth		EL-Behira -Egypt
Nationality	**:**	Egyptian
Marital Status	**:**	Married
Title	**:**	**-Vice Dean for Postgraduate Studies and Scientific Research, Faculty of Pharmacy, Ain Shams University.** **-Professor** of Microbiology and Immunology Department, Faculty of Pharmacy, Ain Shams University. **-Former Acting Dean and Director of the Quality Assurance Unit**, Faculty of Pharmacy, Ain Shams University
Address	**:**	Region 8864- EL-Mokatam Apt# 7, Cairo, Egypt.
Telephone.	**:**	+20 8429040 (home) +20 100 758-2620 (mobile)
E-mail	**:**	aboshanab2012@pharma.asu.edu.eg

Orcid ID	https://orcid.org/0000-0002-7608-850X
Scopus Author ID	36140187000 https://www.scopus.com/authid/detail.uri?authorId=36140187000
Google Scholar ID	https://scholar.google.com/citations?user=zXFaTBQAAAAJ&hl=en
Researchgate ID	https://www.researchgate.net/profile/Khaled_Aboshanab2
Kudos	https://www.growkudos.com/profile/khaled_aboshanab

Research Interests:

- Microbial genetics and antimicrobial resistance
- Biotechnology and genetics of antibiotics-producing microorganisms (aminoglycoside antibiotic biosynthetic gene clusters, biocombinatorial synthesis, biopolymers, and antifungal antibiotics).
- Quraum sensing and phage therapy.
- Microbial biotransformation
- Vaccine development and bioinformatics

Education

May 1996	**Bachelor (BSc)** of Pharmaceutical Sciences, 1996 (Distinction honor).	Faculty of Pharmnacy, Alexandria University
Mars 2001	**Master (MSc)** of Pharmaceutical Sciences (Microbiology and Immunolgy) **Thesis topic:** "*Production of microbial proteases*".	Faculty of Pharmnacy, Ain Shams University
July 2005	**Ph.D.** Molecular biology and Biotechnology **Thesis topic:** "*Genetic studies on the biosynthesis of the major aminoglycoside antibiotics*: *Isolation, analysis and comparison of the biosynthetic gene clusters for 12 aminoglycoside antibiotics*"	Bergishe Universität Wuppertal, Germany

Professional Experience

- **02 Nov. 1996 – 27 April 2001** — **Teaching Assistant**, Faculty of Pharmacy, Ain-Shams University.
- **28 April 2001- 29 Jan. 2006.** — **Assistant Lecturer**, Faculty of Pharmacy, Ain-Shams University.
- **30 Jan. 2006- 29 April 2012** — **Lecturer** of Microbiology and Immunology, Faculty of Pharmacy, Ain-Shams University.
- **30 April 2012-23 April 2017** — **Assistant Professor** of Microbiology & Immunology, Ain Shams University.
- **01 August 2013-31 July 2014** — **Acting Head** of Microbiology & Immunology, Faculty of Pharmacy, Ain-Shams University.
- **Oct. 2013-Oct 2017** — **Director of Quality Assurance Unit,** Faculty of Pharmacy, Ain-Shams University.
- **24 April 2017- now** — **Professor** of Microbiology & Immunology, Faculty of Pharmacy, Ain-Shams University.
- **27 Sep. 2020 -06 April 2021** — **Acting Dean** Faculty of Pharmacy, Ain Shams University.
- **20May 2018-now** — **Vice Dean** for Postgraduate Affairs and Scientific Research, Faculty of Pharmacy, Ain Shams University

Languages

- **English** — **Excellent**.

- **Germany** **Good**
  - Sep 2000- Dec. 2000, Grundstufe II, Goethe institute in Cairo.
  - Jan 2001-April 20001 (Mittelstufe III Goethe institute in Düsseldorf, Germany ().

Practice and Experimental work

- General microbiological treatment (culturing and maintaining defined strains and testing their phenotypic properties).
- General molecular genetics (protoplasting, regeneration, transformation with plasmid DNA, selection of transformants and mutants).

- Construction and transformation of recombinant plasmids, overexpression in different host systems, protein analysis by gel electrophoresis, Western blotting and Ni-NTA adsorption of His-tagged proteins.

- PCR, Southern Blotting and hybridization, DNA sequencing by automated Sanger sequencing, etc.
- Enzymological procedures to test for aminotransferases, dehydrogenases, carbocycling enzymes.

- Microbial biotransformation
- Phenotypic and Genotypic studies on microbial resistance towards various antimicrobial agents.
- Biotechnological productions of Biopolymers (Bio-plastics) and bio-insecticide (Rhamnolipids)
- Preparation and quality assessment of Viral vaccines
-

Teaching courses/coordination

Undergraduate: Bachelor (BSc); PharmD programs	General Microbiology. Pharmaceutical Microbiology, Immunology; Biotechnology, Parasitology, Public Health, Medical Microbiology and Infectious Diseases; Infection control, Bioinformatics
Postgraduate Diploma in Clinical Pharmacy (Diploma)	Immunopharmacology Therapeutics, Health Care
Postgraduate Master (MSc) of Pharmaceutical Sciences (Microbiology and Immunology)	Bioinformatics, Industrial Microbiology, Advanced Immunology, Biosafety and Biodiversity, Infectious Diseases, Microbiology Quality Control
Postgraduate Doctor Philosophy (PhD) of Pharmaceutical Sciences (Microbiology and Immunolgy)	Comprehensive Exams I and II, Evaluation of the Project Presentations

-

Technical experience and Skills

- Computer skills: Microsoft Office Applications, Adobe Photoshop & Chemdraw ultra-8.
- Languages: Arabic (native), English (very good) and German (MS II).

- Computer-assisted analysis of DNA and protein sequences such as:

  Staden Package (Staden 1996; http://staden.sourceforge.net/),
  FramePlot (Ishikawa and Hotta, 1999; http://www.nih. go.jp/~jun/cgi-bin/frameplot.pl),
  Clustal W (Thompson *et al*., 1994; http://www2.ebi.ac.uk/clustalw/),
  Nucleic acids research (SMART**;** Letunic *et al*., 2004; http://nar.oupjournals.org/cgi/content/full/32/suppl_1/D142),
  BioEdit Sequence Alignment Editor Sequence Manipulation Suite (http://www.cbio.psu.edu/sms /index.html),
  Mac-plasmap (CGC Scientific. Inc.),
  DNA-STRIDER™ 1.2 (Marck, 1988).
  Restriction enzyme analysis: Restriction Enzyme Site Mapper version 3 (http://www.restrictionmapper.org/); Webcutter 2.0 (**Error! Hyperlink reference not valid.**).
  PCR: PRIMER-FIND 3.0 (Fröbel Labor-Geräte, Lindau); pDRAW32 (http://www.acaclone. com); and Primer X (http://bioinformatics.org/primerx/).
  Swiss_modelling (prediction and analysis of protein structure and Classifications).

Scientifc Membership		
1	Scientfic Committee for promotion of Professors and associate Professors (Round 47, 2022-2025; Microbiology and Immunology) , Egyptian Supreme Council of Universitues, Ministry of Higher Education.Egypt	**Memember**
2	**American Socity of Microbioloogy (ASM) at the Contributing Membership level, a global community**	**membership number is: 200179329**
3	**Founder of the Internation Culture Collections Ain Shams University (CCASU)** http://www.wfcc.info/ccinfo/collection/col_by_country/e/20/ on World Data Center For Microorganisms (WDCM) http://www.wfcc.info/ccinfo/detail	**Registeration number 1186** **رقم ايداع دولى 1186**
4	**Head of Research Ethics Committee, Faculty of Pharmacy, Ain Shams University**	**Head**
5	**Directory Open Access Journals (DOAJ)** https://doaj.org/	**membership number (Publisher) is: Hi23568380**
6	**Reviewer of Science, Technology, Innovation, Fundung Authority (STIFA)**	**Member ID 19542**
7	**Egyption Socity of Biotechnology** **٤٢٠٦ لسنة ١٩٩٥ بالجمعية المصرية للتكنولوجيا الحيوية المشهرة برقم**	**membership**
8	**Egyptian network for Research Ethics Committee (ENREC)**	**membership**
9	**Membership of Egyptian Pharmacist Syndicate**, Egypt	**membership**
Reviewed Projects and Scentific papers تحكيم رسائل/مشاريع/ ابحاث علمية		
1	**Peer Reviewer of the following journals**: Infection and Drug resistnce, Microorganisms, Zntibiotics GENE, PLOS ONE. AMB express, Applied Microbiology and Immunology, Scientific reports, Journal of ophthalmology, Plos Pathogens, Applied Biochemistry and Biotechnology, BMC microbiology, Biomedical research international, Biomedical Research International, BMC biochemistry, Microbes and infectious Diseases, Journal of Bioinformatics and Sequence analysis, Journal of microbiology and antimicrobials, Agriculture Science research journal, African Journal of Biochemistry, African journal of Microbiology Research, Future Journal of Pharmaceutical science, Bulletin faculty of pharmacy Cairo University, International Research journal of medicine and biomedical sciences,. University of Mauritius Research Journal, Archives of pharmaceutical sciences Ain Shams university, Journal of paediatric infectious diseases, Al Azhar journal of Microbiology, Clinical epidemiology, Microbiology and many others	
2	• **Project Evaluation: STDF** project (ID 33391) at 30 October 2018 and STDF proposal ID 33613 at 22 December 2018, ID 44025 on 16.09.2020. • **Project Evaluation: STDF** ID (47102), Entitled (The bioremediation of environmental pollutants using recombinant enzymes), STIFA grant (Applied Sciences Research Grants) at 10 Jan 2023 • **Project Evaluation: STDF** proposal ID (49355), Entitled (Targeted removal of colorectal cancer-associated *Fusobacterium nucleatum* and its biofilms to remodel	

	the tumor-immune microenvironment), STIFA grant (Egypt-China Cooperation Program: "Chinese-Egyptian Research Fund" (CERF) at 24 August 2023.
3	**External Examiner for many Master and PhD** thesis from faculty of pharmacy of Cairo University, Suez Canal University, Al Azhar University, and Tanta University - **تحكيم رساله دكتوراه من دولة ماليزيا** **THESIS ONLINE SYSTEM; UPM University, Malaysia** **(**Sekolah Pengajian Siswazah (School of Graduates
4	**External Examiner** for oral examinations of various faculties of pharmacy, of different universities such as: Cairo, Alexandria, Al-Azhar (Boys & Girls), El-Mansoura, Tanta, Helwan, Sina, Ahram Canadian (ACU), Miser International (MIU), EL-Nahada University, Misr University for Science and Arts (MSA), Delta University, FUE, RUE.

SUPERVISED SCIENTIFIC THESES

اولا: الاشراف على الرسائل العلمية داخل الكلية:

Supersvion of PhD thesis ا. رسائل الدكتوراة				
Nr	**Name of candidate**	**degree**	**Theses title**	**remarks**
1	**Rana Ashraf Abdelkhalik Abobakr** Assistant Lecturer of Microbiology and Immunology, Faculty of Dentisrty – MSA university	**PhD**	Nanopore metagenomic sequence analysis and microbiological study of patients suffering from periodontal disease	Under work
2	**Mahmoud Magdy Sherif** Assistant Lecturer of Microbiology and Immunology, Faculty of Pharmacy – Ahram Canadian University	**PhD**	Isolation and Characterization of Bacteriophages Active against Clinical Isolates of MDR *Acinetobacter baumannii*	Under work
3	**Reem Abu El-Fath Ragab Allam Youssef** Assistant Lecturer of Microbiology and Immunology, Faculty of Pharmacy – Ahram Canadian University	**PhD**	Isolation and Characterization of Bacteriophages Active against Clinical Isolates of MDR *Salmonella*	Under work
4	**Sayed Emad El-Din El-Sayed** Assistant Lecturer, Faculty of Pharmacy, Ahram Canadian University (ACU) **(2021)**	**PhD**	In vitro and in vivo studies on the activities of some antifungal metabolites produced by some bacilli isolates	Under work
5	**Samar Sayed Mabrouk** Assistant Lecturer, Faculty of Pharmacy, Ahram Canadian University (ACU) **(2021)**	**PhD**	Study of different approaches used to combat multi- drug carbapenem resistant Gram negative pathogens"	Awarded in 2023
6	**Amira A. Abdebaset** National Centre for Radiation Research and Technology (NCRRT), Drug Radiation Research Department, Egyptian Atomic Energy Authority (EAEA), Ahmed El-Zomor Street, Nasr city, Cairo, 11787, Egypt (2021)	**PhD**	Bacterial and gamma radiation synthesis of iron oxide nanoparticles for medical applications	Under work
7	**Radwa Nour Eldeen Morgan** National Centre for Radiation Research and Technology (NCRRT), Drug Radiation Research Department, Egyptian Atomic Energy Authority	**PhD**	In vitro study on the effect of Pseudomonas aeruginosa exotoxin A in combination with gamma radiation on cancer cell line (s)	Awarded in 2023

	(EAEA), Ahmed El-Zomor Street, Nasr city, Cairo, 11787, Egypt (2021)			
8	**Ann Aymen Elshamy** Assistant Lecuture, Faculty of Pharmacy Ain Shams University (2019)	**PhD**	Molecular characterization of plasmid mediated carbapenem resistance of some Gram negative uropathogens"	Awarded in 2023
9	**Mohammed A. Elkhateeb** Research assistant of Microbiology and Immunology Manager Of Safety and bioassay lab. Egyptian Drug Authority (EDA) (2020)	**PhD**	Production and assessment of Meningococcal Vaccine	Under work
10	**Shaza Mohamed Elhusseiny** Bachelor of Pharmaceutical Sciences, Ahram Canadian University (ACU), (2011) Masters of Pharmaceutical Scienc**es, Cairo University (2019)**	**PhD**	Immunomodulatory Effects Of Certain Fungal Metabolites On Some Selected Cancer Or Viral Infected Cell Lines	Awarded in 2022
11	**Asmaa Atef Zaki,** Bacholer of pharmaceutical science, Demonstrator Faculty of Pharmacy, Ain Shams University, /Master 2014 **(2019)**	**PhD**	Bioprocess Engineering for the production of cephalosporin C by Acromonium chrysogenium Strain W42	Under work
12	**Mostafa Ahmed Mohammed Ahmed** Master of Microbiology and Immunology, Faculty of Pharmacy, Al- Azhar University, Assiut **(2018)**	**PhD**	Molecular characterization of resistance mechanisms to fluoroquinolones of some Acinetobacter baumannii clinical isolates in Upper Egypt	Awarded 2020
13	**Rania saied El-Housseiny,** Assistant lecturer, of Pharmacy, Ain Shams University, 2010 Master 2014 (Microbiology & Immunology) **(2018)**	**PhD**	Immunomodulatory role of inflammasomes in pancreatic β-cells survival and function	Awarded 2023
14	**Amr Shaker Meselhy MSc pharmaceutical science,** Demonstrator Faculty of Pharmacy, Ain Shams University, / 2015	**PhD**	Molecular and physiological characterization of bacterial macrolide resistance mechanisms as an approach of infection control	Awarded 2020
15	**Salma Mostafa Abdelaziz MSc pharmaceutical science,** Demonstrator Faculty of Pharmacy, Ain Shams University, /Master 2015	**PhD**	Characterization of antimicrobial resistance Mechanisms(s) in some multi-drug resistant lowever respiratory tract bacterial pathogens	Awarded 2021

16	**Yomna Nagay Elkholy** Assitant lecturer Faculty of Pharmacy, Ain Shams University, /2015 **(2015)**	**PhD**	Studies on antimicrobial activity od some bacterial isolates against extended spectrum beta lactamases producing Gram negative bacteria	awarded 2019
17	**Noha Ahmed Kamel Ahmed,** research assistance, faculty of pharmacy, MIU university, Egypt/2014 **(2014)**	**PhD**	"phenotypic screening and molecular characterization of carbapenem resistance of certain pathogenic Gram negative isolates in Egypt"	Awarded in in 2018
18	**Masarra Mohammad Abo-el-soud Sakrm,** Assitant lecturer Faculty of Pharmacy, Ain Shams University, /2014	**PhD**	Cloning and Expression of certain gene(s) putatively involved in acylhomoserine lactone quarum quenching activities as a new approach for infection control	Awarded in 2018
19	**Noha Salah Elsayed,** Assitant lecturer Faculty of Pharmacy, Ain Shams University, /2014	**PhD**	Production and characterization of polyhydroxyalkanoates biopolymer(s) produced by *Acinetobacter baumanni* isolate P39, *Bacillus cereus* P83 and *Azomonas macrocytogene*s P173	Awarded in 2018
20	**Ahmed Saeed Abuzeid,** Assistant lecturer, of Pharmacy, Ain Shams University, 2013	**PhD**	Characterization and production improvement of cytotoxic agent(s) produced by *Streptomyces parvus* isolate S86 and *Streptomyces griseus* isolate S131	Awarded in 2018
21	**Youmna Nagy Hussien,** Assistant lecturer, of Pharmacy, Ain Shams University, 2013	**PhD**	Study on the production of beta-lactamase(s) inhibitors from soil microbiota	Awarded in 2019
22	**Ahmed Mohamed Abass,** Assistant lecturer, of Pharmacy, Ain Shams University, 2012	**PhD**	Bioprocess development of calcitrol production from Vitamin D3 for industrial application using *Actinomyces hyovaginalis* strain	Awarded in 2018
23	**Samira Hamed Mohamed** research assistance, faculty of pharmacy, MSA university, 6th October,/Master, 2014	**PhD**	"Fluoroquinolones Resistance and its Potential Underlying Mechanisms in some Gram Negative Isolates Recovered from Cancer Patients "	Awarded in 2018
24	**Ghadir saied El-Housseiny,** Assistant lecturer, of Pharmacy, Ain Shams University, 2010	**PhD**	Improvement and Scaling up of Rhamnolipid production by a *Pseudomonas aeruginosa* isolate	Awarded in 2015

25	**Sarra Ebrahim Saleh Mohammed,** Assistant lecturer, of Pharmacy, Ain Shams University, 2012	**PhD**	Studies on interaction between certain microbial species isolated from mixed infections	Awarded in 2015
Supersvion of MSc thesis ب. رسائل الماجستير				
1	**Ann Ayman Ibrahim El-Sayed Ibrahim El-Shamy** Bachelor of Pharmaceutical Sciences Demonstrator Faculty of Pharmacy, Ain Shams University, /Master 2015	**MSc**	Phenotypic and genotypic studies on Antimicrobial Resistance of Certain Clinically Relevant Urinary tract bacterial pathogens	Awarded in 2019
2	**Asmaa Atef Zaki,** Bacholer of pharmaceutical science, Demonstrator Faculty of Pharmacy, Ain Shams University, /Master 2014	**MSc**	A study on the production of certain 2-deoxystreptamine containing aminoglycoside antibiotic***S***	Awarded in 2019
3	**Ayaa Said Mohamoud Hashim,** Bachelor of Pharmaceutical science 2011, NOCTAR, 2013	**MSc**	Experimental preparation of Killed-Rotavirus vaccine and evaluation of immune potential compared to current available rota virus vaccine	Awarded in 2017
4	**Mona Mustafa Abdelkader Abdelalim,** Bachelor of Pharmaceutical science 2009, German University in Cairo (GUC), 2011	**MSc**	Phenotypic and genotypic studies on antimicrobial resistance of some bacteria causing septic meningitis	Awarded in 2017
5	**Mona Mohammed Hesham El-Gayar, Bacholer of pharmaceutical science,** Demonstrator Faculty of Pharmacy, Ain Shams University, /Master 2010	**MSc**	Alternative Approaches for the control of Methicillin resistant *Staphylococcus aureus.*	Awarded in 2015
6	**Manar Mostafa Ahmed, Bacholer of pharmaceutical science,** Demonstrator Faculty of Pharmacy, Sinai University, /Master 2010	**MSc**	Identification of dimerization interaction of certain Type VII secretion system membrane Proteins in *Staphylococcus aureus*: A new approach for virulence control..	Awarded in 2018
7	**Salma Mustafa Mohammad Abdel-aziz, Bachelor of pharmaceutical science,** Demonstrator Faculty of Pharmacy, Ain Shams University, /Master 2012	**MSc**	Phenotypic and genotypic studies on antimicrobial resistance of lower respiratory tract bacterial pathogens	Awarded in 2015

8	**Amr Shaker Meselhy Bachelor of pharmaceutical science,** Demonstrator Faculty of Pharmacy, Ain Shams University, /Master 2010	**MSc**	Phenotypic and genotypic studies on resistance to macrolides in certain bacterial involved in respiratory tract infection	Awarded in 2014
9	**Masarra Mohammad Abo-el-soud Sakrm,** Bachelor of Pharmaceutical Sciences,Demonstrator Faculty of Pharmacy, Ain Shams University, /Master 2006	**MSc**	Inactivation of *Pseudomonas aeruginosa* quorum sensing signals by some soil bacterial isolates	Awarded in 2013
10	**Samira Hamed Mohamed** research assistance, faculty of pharmacy, MSA university, 6th October,/Master, 2008	**MSc**	"Genotypic and Phenotypic Studies on Bacterial Resistance to 2DOS-containing Aminoglycoside Antibiotics in certain Uropathogenic Gram Negative Bacteria"	Awarded in 2013
11	**Noha Salah Elsayed,** Bachelor of Pharmaceutical Sciences, Demonstrator Faculty of Pharmacy, Ain Shams University, /Master 2010	**MSc**	Studies on bacterial production of poly-β-hydroxybutyrate"	Awarded in 2014
12	**Noha Ahmed Kamel Ahmed,** research assistance, faculty of pharmacy, MIU university, Egypt/Master, 2007	**MSc**	"Genotypic and phenotypic studies on antimicrobial resistance of aerobic bacteria involved in diabetic foot infections"	Awarded in 2013
13	**Ahmed Mohamed Abass** Bachelor of Pharmaceutical Sciences, Demonstrator Faculty of Pharmacy, Ain Shams University, /2006	**MSc**	Microbial biotransformation of vitamin D3 into biologically active 1 alpha,25-dihydroxyvitamin D3	Awarded in 2011
14	**Amira Abuzeid Abdelbaset** Bachelor of Pharmaceutical sciences, 2007 Pharmacist at National Centre for Radiation Research and Technology (NCRRT)	**MSc**	"Early prediction of Gram negative bacteremia in febrile cancer patients: Correlation between some inflammatory mediators, exposure to gamma radiation and severity of infection"	Awarded in 2016
15	**May Mohamed Awad** Bachelor of Pharmaceutical Sciences, 2010 National research Center	**MSc**	Isolation and characterization of some potential probiotic candidates for the control of *Clostridium difficile* infection	Awarded in 2017
16	**Walaa Mohammad Mohammad Khalil Rashed**	**MSc**	A comparative study between in vivo and in vitro methods for	Awarded in 2022

	Bachelor of Pharmaceutical Sciences 2010 Deputy of Technical manager of Pyrogen and Safety Subunit National Organization For Research and Control of Biologicals		potency evaluation of Rabies vaccine preparations	
17	**Reem Abu El-Fath Ragab** Allam Youssef Bachelor Degree in pharmacy & Pharmaceutical Sciences Faculty of Pharmacy, Ahram Canadian university (2018)	**MSc**	"Phenotypic and genotypic characterization of Salmonella serovars isolated from humans and animals and studying the clonal relationship using RAPD and ERIC PCR"	Awarded 2021
18	**Sayed Emad El-Din El-Sayed** Bachelor of Pharmaceutical Sciences, Ahram Canadian University (ACU) (2017)	**MSc**	Production and characterization of some antifungal metabolites produced by Alcaligenes and Lysinibacilli isolates	Awarded 2020
19	**Esraa M Abdalla** Bachelor of Pharmaceutical Sciences, Demonstrator Faculty of Pharmacy, Ain Shams University, /2017	**MSc**	Isolation and Characterization of Bacteriophages Active against MRSA Clinical Isolates	Awarded 2021
20	**Rana Ashraf Elmesseri (2020)** Bachelor of Pharmaceutical Sciences Faculty of Pharmacy, Misr International University (MIU) **(2019)**	**MSc**	Evaluating the association between the inhibition of staphyloxanthin production and the virulence of methicillin – resistant staphylococcus aureus isolates as an approach for infection control	Awarded in 2023
21	**Shimaa Hamdy Mostafa** Bachelor of Pharmaceutical Sciences Faculty of Pharmacy, Ain Shams University **(2019)**	**MSc**	Study on Antimicrobial Resistance Pattern of Bacterial Pathogens Recovered from Patients Diagnosed with Fever of Unknown Origin	Under work
22	**Hager Othman Abdelsadek** Bachelor of Pharmaceutical Sciences Faculty of Pharmacy, 6 October University for Modern Sciences and Arts (2020)	MSc	Study of the Antimicrobial Activity of Encapsulated Nanoparticles against Multidrug Resisant Pseudomonas aeruginosa	Under work
23	**Hadeel Khaled Mohamed** Bachelor of Pharmaceutical Sciences Faculty of Pharmacy, Ain Shams University **(2020)**	**MSc**	Isolation and evaluation of antibacterial activities of fortimicin(s) produced by Micromonosporaolivastrospora	Under work

			DSM 43868 against multidrug resistant pathogens"	
24	**Sarra Shokry Soliman** Bachelor of Pharmaceutical Sciences Faculty of Pharmacy, Ain Shams University 2017 **(2020)**	**MSc**	Generation of a reverse genetics-based highly propagative candidate vaccine strains against seasonal influenza A/H3N2 viruses	Under work
25	**Nancy Gamil Banoub** Bachelor of Pharmaceutical Sciences Faculty of Pharmacy, Heliopolis University 2017 **(2020)**	**MSc**	Study on different approaches that can be used to cobat resistance caused by MDR Acinetobacter baumannii pathogens	Awarded 2021
26	**Nagwa Osama Mohamed** Bachelor of Pharmaceutical Sciences Faculty of Pharmacy, RUE 2017 **(2020)**	**MSc**	Phenotypic and genotypic studies on vancomycin resistant *Staphylococcus aureus*	Under work
27	**Mirette Amir Fayez** Bachelor of Pharmaceutical Sciences Faculty of Pharmacy, Ain Shams University (2021)	**MSc**	Comparative Study of Molecular, Serological and Biochemical Techniques used in the diagnosis of Covid-19	Under work
28	**Marina Hosam Bishara** Bachelor of Pharmaceutical Sciences Faculty of Pharmacy, Ain Shams University (2021)	**MSc**	Determination and Quality control of certain mycotoxins in food and food supplements	Under work
29	**Amany Khaled Ahmed** Bachelor of Pharmaceutical Sciences Faculty of Pharmacy, Sinai University (2021)	**MSc**	Characterization of CRISPR/Cas system in Klebsiella pneumoniae and its correlation to antimicrobial resistance	Under work
30	**Aliaa Atef Aziz** Bachelor of Pharmaceutical Sciences Faculty of Pharmacy, Ain Shams University (2021)	**MSc**	Antimicrobial activity and biological evaluation of modified nanoparticles for potential treatment of cancer	Under work
31	**Mariam Zakria Moahmed** Bachelor of Pharmaceutical Sciences Faculty of Pharmacy, Ain Shams University (2021)	**MSc**	Synthesis, Characterization and Evaluation of Coated Silver Nanoparticles against Multidrug Resistant Pathogens "	Under work

اولا:الاشراف على الرسائل العلمية خارج الكلية:

Nr	Name of candidate	degree	Theses title	Remarks
1	**Nisreen Mohamed Okba** Bachelor pharmaceutical Science, Tanta University, Research assistant, Faculty of Pharmacy, Tanta University (girls)/Master 2007	**MSc**	"Genotypic and phenotypic studies on the biosynthesis of ribostamycin from *Streptomyces ribosidificus*"	**Awarded in 2012**
2	**Sally Tohamy kamal Tohamy** Assistance lecturer, Department of Microbiology and Immunology Faculty of pharmacy-(Girls), Al-Azhar University	**PhD**	Characterization of the Antimicrobial Resistance of Gram Negative Bacterial Pathogens involved in Bloodstream Infections in Cancer Patients	**Awarded in 2018**

Scientific Publications

(* =Corresponding author)

A. International publications:

1. **Morgan RN, Aboshanab KM*,**. Green biologically synthesized metal nanoparticles; Biological applications, optimizations and future prospects. Future Science OA, 2023. (accepted, in press)
2. **Boshra MH, El-Housseiny GS, Farag MMS, Aboshanab KM***. Evaluation of ELISA and immunoaffinity fluorometric analytical tools of four mycotoxins in various food categories. AMB Express. 2023 Nov 3;13(1):123. doi: 10.1186/s13568-023-01629-5. PMID: 37922052; PMCID: PMC10624774.
3. **Morgan RN, Ali AA, Alshahrani MY, Aboshanab KM*,**. New Insights on Biological Activities, Chemical Compositions, and Classifications of Marine Actinomycetes Antifouling Agents. Microorganisms. 2023 Sep 29;11(10):2444. doi: 10.3390/microorganisms11102444. PMID: 37894102; PMCID: PMC10609280.
4. **Mostafa SH, Saleh SE, Khaleel EF, Badi RM, Aboshanab KM*, Hamed SM**. Phenotypic and Genotypic Analysis of Bacterial Pathogens Recovered from Patients Diagnosed with Fever of Unknown Origin in Egypt. Antibiotics. 2023; 12(8):1294. https://doi.org/10.3390/antibiotics12081294
5. **Alkompoz AK, Hamed SM, Zaid ASA, Almangour TA, Al-Agamy MH, Aboshanab KM***. Correlation of CRISPR/Cas and Antimicrobial Resistance in *Klebsiella pneumoniae* Clinical Isolates Recovered from Patients in Egypt Compared to Global Strains. Microorganisms. 2023; 11(8):1948. https://doi.org/10.3390/microorganisms11081948
6. **Elhusseiny SM, Bebawy AS, Saad BT, Aboshanab KM***. Insights on monkeypox disease and its recent outbreak with evidence of nonsynonymous missense mutation. Future Sci OA. 2023 Jun 24;9(7):FSO877. doi: 10.2144/fsoa-2023-0048. PMID: 37485445; PMCID: PMC10357398.
7. **Mabrouk SS, Abdellatif GR, Zaid ASA, Aboshanab KM*.** Propranolol restores susceptibility of XDR Gram-negative pathogens to meropenem and Meropenem combination has been evaluated with either tigecycline or amikacin. BMC Microbiol. 2023 Jul 22;23(1):195. doi: 10.1186/s12866-023-02934-6. PMID: 37481513; PMCID: PMC10362616.
8. **Abbas AM, Elkhatib WF, Aboulwafa MM, Hassouna NA, Aboshanab KM***. Bioconversion of vitamin D_3 into calcitriol by Actinomyces hyovaginalis isolate CCASU- A11-2. AMB Express. 2023 Jul 12;13(1):73. doi: 10.1186/s13568-023-01574-3. PMID: 37434090; PMCID: PMC10335987.
9. **El-Housseiny GS, Al-Agamy MH, Aboshanab KM*, (2023).** Editorial: Rekindling of a Masterful Precedent; Bacteriophage: Reappraisal and Future Pursuits. Front Cell Infect Microbiol. 13:1202249. doi: 10.3389/fcimb.2023.1202249. URL=https://www.frontiersin.org/articles/10.3389/fcimb.2023.1202249
10. **Elshamy AA, Saleh SE, Aboshanab KM*, Aboulwafa MM, Hassouna NA.** Transferable IncX3 plasmid harboring bla_{NDM-1}, ble_{MBL}, and aph(3')-VI genes from Klebsiella pneumoniae conferring phenotypic carbapenem resistance in E. coli. Mol Biol Rep. 2023 Apr 20. doi: 10.1007/s11033-023-08401-9.
11. **Abd-Allah IM, El-Housseiny GS, Al-Agamy MH, Radwan HH, Aboshanab, K.M*, Hassouna NA**. Statistical optimization of a podoviral anti-MRSA phage CCASU-L10 generated from an under sampled repository: Chicken rinse. Front Cell Infect Microbiol. 2023 Mar 31;13:1149848. doi: 10.3389/fcimb.2023.1149848. PMID: 37065190; PMCID: PMC10102507.
12. **AbdAlhafiz AI, Elleboudy NS, Aboshanab KM, Aboulwafa MM*, Hassouna NA.** Phenotypic and genotypic characterization of linezolid resistance and the effect of antibiotic combinations on methicillin-resistant Staphylococcus aureus clinical isolates. Ann Clin Microbiol Antimicrob. 2023 Apr 3;22(1):23. doi: 10.1186/s12941-023-00574-2. PMID: 37013561; PMCID: PMC10069030.
13. **Morgan RN, Saleh SE, Farrag HA, Aboshanab, K.M*.** New insights on *Pseudomonas aeruginosa* exotoxin A-based immunotoxins in targeted cancer therapeutic delivery. Ther Deliv. 2023 Jan;14(1):31-60. doi: 10.4155/tde-2022-0055. Epub 2023 Mar 23. PMID: 36950853.

14. **Saeed R, Mohammed AK, Saleh SE, Aboulwafa MM, Aboshanab, K.M*, Taneera J.** Dual Role of Mitogen-Activated Protein Kinase 8 Interacting Protein-1 in Inflammasome and Pancreatic β-Cell Function. Int J Mol Sci. 2023 Mar 5;24(5):4990. doi: 10.3390/ijms24054990. PMID: 36902422; PMCID: PMC10002854.

15. **Hamed SM, Sakr MM, El-Housseiny GS, Wasfi R, Aboshanab, K.M*.** State of the art in epitope mapping and opportunities in COVID-19. Future Sci OA. 2023 Feb;16(3-06):FSO832. doi: 10.2144/fsoa-2022-0048. Epub 2023 Mar 6. PMID: 36897962; PMCID: PMC9987558.

16. **Morgan RN, Saleh SE, Farrag HA, Aboshanab, K.M*.** Correction to: Gamma radiation coupled ADP-ribosyl transferase activity of Pseudomonas aeruginosa PE24 moiety. Appl Microbiol Biotechnol. 2023 Apr;107(7-8):2723. doi: 10.1007/s00253-023-12455-x. Erratum for: Appl Microbiol Biotechnol. 2023 Mar;107(5-6):1765-1784. PMID: 36881119; PMCID: PMC10033588.

17. **Saeed R, Mohammed AK, Saleh SE, Aboshanab, K.M*, Aboulwafa MM, Taneera J.** Expression Silencing of Mitogen-Activated Protein Kinase 8 Interacting Protein-1 Conferred Its Role in Pancreatic β-Cell Physiology and Insulin Secretion. Metabolites. 2023 Feb 20;13(2):307. doi: 10.3390/metabo13020307. PMID: 36837926; PMCID: PMC9964862.

18. **Elmesseri, R.A.; Saleh, S.E.; Ghobish, S.A.; Majrashi, T.A.; Elsherif, H.M.; Aboshanab, K.M*** Diclofenac and Meloxicam Exhibited Anti-Virulence Activities Targeting Staphyloxanthin Production in Methicillin-Resistant *Staphylococcus aureus*. Antibiotics 2023, *12*, 277. https://doi.org/10.3390/antibiotics12020277.

19. **Radwa N. Morgan, Sarra E. Saleh, Hala A. Farrag, Khaled M. Aboshanab*.**. Gamma radiation coupled ADP-ribosyl transferase activity of Pseudomonas aeruginosa PE24 moiety. Appl Microbiol Biotechnol. 2023 Mar;107(5-6):1765-1784. doi: 10.1007/s00253-023-12401-x. Epub 2023 Feb 18. Erratum in: Appl Microbiol Biotechnol. 2023 Mar 7;: PMID: 36808279; PMCID: PMC10006270..

20. **Shokry, S.; Hegazy, A.; Abbas, A.M.; Mostafa, I.; Eissa, I.H.; Metwaly, A.M.; Yahya, G.; El-Shazly, A.M.; Aboshanab, K.M*; Mostafa, A**. Phytoestrogen β-Sitosterol Exhibits Potent In Vitro Antiviral Activity against Influenza A Viruses. *Vaccines* 2023, *11*, 228. https://doi.org/10.3390/vaccines11020228

21. **Mabrouk S, Abdellatif GR, Abu Zaid AS, Aziz RK, Aboshanab KM***. In Vitro and Pre-Clinical Evaluation of Locally Isolated Phages, vB_Pae_SMP1 and vB_Pae_SMP5, Formulated as Hydrogels against Carbapenem-Resistant *Pseudomonas aeruginosa*. Viruses. 2022 Dec 11;14(12):2760. doi: 10.3390/v14122760. PMID: 36560763; PMCID: PMC9780878.

22. **Hassan AH, Bebawy AS, Saad MT, Mosaad GS, Saad BT, Eltayeb WN, Aboshanab KM***. Metagenomic nanopore sequencing versus conventional diagnosis for identification of the dieback pathogens of mango trees. Biotechniques. 2022 Nov 22. doi: 10.2144/btn-2022-0087. Epub ahead of print. PMID: 36412999.

23. **Kamel NA, Tohamy ST, Yahia IS, Aboshanab KM***. Insights on the performance of phenotypic tests versus genotypic tests for the detection of carbapenemase-producing Gram-negative bacilli in resource-limited settings. BMC Microbiol. 2022 Oct 14;22(1):248. doi: 10.1186/s12866-022-02660-5. PMID: 36229768; PMCID: PMC9563167.

24. **Helal AA, Saad BT, Saad MT, Mosaad GS, Aboshanab KM***. Evaluation of the Available Variant Calling Tools for Oxford Nanopore Sequencing in Breast Cancer. Genes (Basel). 2022 Sep 3;13(9):1583. doi: 10.3390/genes13091583. PMID: 36140751; PMCID: PMC9498802.

25. **Elhusseiny SM, El-Mahdy TS, Elleboudy NS, Farag MMS, Aboshanab KM*, Yassien MA.** Immunomodulatory activity of extracts from five edible basidiomycetes mushrooms in Wistar albino rats. Sci Rep.2022 ;12(1):12423. doi: 10.1038/s41598-022-16349-2. PMID: 35859110; PMCID: PMC9300736.

26. **Shaza M. Elhusseiny, Taghrid S. El-Mahdy, Nooran S. Elleboudy, Ibrahim S. Yahia, Mohamed M. S. Farag, Nasser S.M. Ismail, Mahmoud A. Yassien, Khaled M. Aboshanab***. In vitro Anti SARS-CoV-2 Activity and Docking Analysis of *Pleurotus ostreatus*, *Lentinula edodes* and *Agaricus bisporus* edible mushrooms. Infection and Drug Resistance 2022, 15: 3459–3475. doi: 10.2147/IDR.S362823

27. **Abd-Allah IM, El-Housseiny GS, Alshahrani MY, El-Masry SS, Aboshanab KM*, Hassouna NA**. An Anti-MRSA Phage From Raw Fish Rinse: Stability Evaluation and Production Optimization. Front Cell Infect Microbiol. 2022 May 17;12:904531. doi: 10.3389/fcimb.2022.904531. PMID: 35656033; PMCID: PMC9152141.

28. **Mostafa SH, Saleh SE, Hamed SM, Aboshanab KM*.** Febrile illness of bacterial etiology in a public fever hospital in Egypt: High burden of multidrug resistance and WHO priority Gram negative pathogens. Germs. 2022 Mar 31;12(1):75-85. doi: 10.18683/germs.2022.1308. PMID: 35601951; PMCID: PMC9113693.

29. **El-Gayar MH, Ishak RAH, Esmat A, Aboulwafa MM, Aboshanab* KM.** Evaluation of lyophilized royal jelly and garlic extract emulgels using a murine model infected with methicillin-resistant Staphylococcus aureus. AMB Express. 2022 Mar 21;12(1):37. doi: 10.1186/s13568-022-01378-x. PMID: 35312896; PMCID: PMC8938573.

30. **Kamel NA, Alshahrani MY, Aboshanab* KM, El Borhamy MI (2022).** Evaluation of the BioFire FilmArray Pneumonia Panel Plus to the Conventional Diagnostic Methods in Determining the Microbiological Etiology of Hospital-Acquired Pneumonia. Biology (Basel). 2022 Feb 27;11(3):377. doi: 10.3390/biology11030377. PMID: 35336751; PMCID: PMC8945136..

31. **Elmesseri RA, Saleh SE, Elsherif HM, Yahia IS, Aboshanab KM* (2022).** Staphyloxanthin as a Potential Novel Target for Deciphering PromisingAnti-Staphylococcus aureus Agents. Antibiotics (Basel), 11(3),298, https://doi.org/10.3390/antibiotics11030298

32. **Khalil WM, Aboshanab KM*, Aboulwafa MM (2022).** Evaluation and Correlation of Rabies Vaccine Potency Using the National Institute of Health, Rapid Focus Fluorescent Inhibition, and Passive Hemagglutination Tests. Viral Immunol. 2022 Feb 1. doi: 10.1089/vim.2021.0181.. PMID: 35104162.

33. **Alshahawey MG, El-Housseiny GS, Elsayed NS, Alshahrani MY, Wakeel LM, Aboshanab KM*,.** New insights on mucormycosis and its association with the COVID-19 pandemic. Future Sci OA. 2021 Dec 16;8(2):FSO772. doi: 10.2144/fsoa-2021-0122. PMID: 35059222; PMCID: PMC8686842.

34. **Kamel NA, Ismail NSM, Yahia IS, Aboshanab KM*.** Potential Role of Colchicine in Combating COVID-19 Cytokine Storm and Its Ability to Inhibit Protease Enzyme of SARS-CoV-2 as Conferred by Molecular Docking Analysis. Medicina (Kaunas). 2021 Dec 23;58(1):20. doi: 10.3390/medicina58010020. PMID: 35056328.

35. **Eltokhy MA, Saad BT, Eltayeb WN, Yahia IS, Aboshanab KM*, Ashour MSE**. Exploring the Nature of the Antimicrobial Metabolites Produced by *Paenibacillus ehimensis* Soil Isolate MZ921932 Using a Metagenomic Nanopore Sequencing Coupled with LC-Mass Analysis. Antibiotics (Basel). 2021 Dec 22;11(1):12. doi: 10.3390/antibiotics11010012. PMID: 35052889.

36. **El-Sayed SE, Abdelaziz NA, Osman HH, El-Housseiny GS, Aleissawy AE, Aboshanab KM*,**. *Lysinibacillus* Isolate MK212927: A Natural Producer of Allylamine Antifungal 'Terbinafine'. Molecules. 2021 Dec 29;27(1):201. doi: 10.3390/molecules27010201. PMID: 35011429; PMCID: PMC8746802.

37. **Morgan RN, Saleh SE, Aboshanab KM*, M, Farrag HA**. ADP-ribosyl transferase activity and gamma radiation cytotoxicity of Pseudomonas aeruginosa exotoxin A. AMB Express. 2021 Dec 22;11(1):173. doi: 10.1186/s13568-021-01332-3. PMID: 34936047; PMCID: PMC8695647.

38. **Eltokhy MA, Saad BT, Eltayeb WN, El-Ansary MR, Aboshanab KM*, Ashour MSE (2021)**. A Metagenomic Nanopore Sequence Analysis Combined with Conventional Screening and Spectroscopic Methods for Deciphering the Antimicrobial Metabolites Produced by Alcaligenes faecalis Soil Isolate MZ921504. Antibiotics (Basel). 10(11):1382. doi: 10.3390/antibiotics10111382. PMID: 34827320

39. **Mohammed MA, Salim MTA, Anwer BE, Aboshanab KM, Aboulwafa MM*(2021).** Impact of target site mutations and plasmid associated resistance genes acquisition on resistance of Acinetobacter baumannii to fluoroquinolones. Sci Rep. 11(1):20136. doi: 10.1038/s41598-021-99230-y. PMID: 34635692; PMCID: PMC8505613

40. **Elshamy AA, Saleh SE, Alshahrani MY, Aboshanab KM*, Aboulwafa MM, Hassouna NA(2021)**. OXA-48 Carbapenemase-Encoding Transferable Plasmids of Klebsiella pneumoniae Recovered from Egyptian Patients Suffering from Complicated Urinary Tract Infections. Biology (Basel). 10(9):889. doi: 10.3390/biology10090889. PMID: 34571766; PMCID: PMC8469419

41. **Banoub NG, Sarra E Saleh, Hala S Helal, Khaled M Aboshanab* (2021).** Antibiotics Combinations and Chitosan Nanoparticles for Combating Multidrug Resistance Acinetobacter baumannii. Infection and Drug Resistance 2021:14 3327–3339. https://doi.org/10.2147/IDR.S328788

42. **Elhusseiny, Shaza M., Taghrid S. El-Mahdy, Mohamed F. Awad, Nooran S. Elleboudy, Mohamed M.S. Farag, Khaled M. Aboshanab*, and Mahmoud A. Yassien (2021).** "Antiviral, Cytotoxic, and Antioxidant Activities of Three Edible Agaricomycetes Mushrooms: Pleurotus columbinus, Pleurotus sajor-caju, and Agaricus bisporus" Journal of Fungi 7, no. 8: 645. https://doi.org/10.3390/jof7080645

43. **Elhusseiny SM, El-Mahdy TS, Awad MF, Elleboudy NS, Farag MMS, Yassein MA, Aboshanab KM* (2021)**. Proteome Analysis and In Vitro Antiviral, Anticancer and Antioxidant Capacities of the Aqueous Extracts of Lentinula edodes and Pleurotus ostreatus Edible Mushrooms. Molecules. 2021 Jul 30;26(15):4623. doi: 10.3390/molecules26154623. PMID: 34361776; PMCID: PMC8348442.

44. **Bishr AS, Abdelaziz SM, Yahia IS, Yassien MA, Hassouna NA, Aboshanab KM* (2021).** Association of Macrolide Resistance Genotypes and Synergistic Antibiotic Combinations for Combating Macrolide-Resistant MRSA Recovered from Hospitalized Patients. Biology (Basel). 2021 Jul 6;10(7):624. doi: 10.3390/biology10070624. PMID: 34356479; PMCID: PMC8301042.

45. **Sakr MM, Elkhatib WF, Aboshanab KM*, Mantawy EM, Yassien MA, Hassouna NA (2021).** In vivo evaluation of a recombinant N-acylhomoserine lactonase formulated in a hydrogel using a murine model infected with MDR Pseudomonas aeruginosa clinical isolate, CCASUP2. AMB Express. 2021 Jul 27;11(1):109. doi: 10.1186/s13568-021-01269-7. PMID: 34313869; PMCID: PMC8316526.

46. **Zaid ASA, Aleissawy AE, Yahia IS, Yassien MA, Hassouna NA, Aboshanab KM* (2021).** *Streptomyces griseus* KJ623766: A Natural Producer of Two Anthracycline Cytotoxic Metabolites β- and γ-Rhodomycinone. Molecules. 2021 Jun 30;26(13):4009. doi: 10.3390/molecules26134009. PMID: 34209170; PMCID: PMC8271628..

47. **Abuzaid AS, Yassien MA, Aboshanab KM*, Elissawy AM (2021).** *Streptomyces variabilis* isolate MW091521: A new microbial source of Heliomycin. *Applied Biochemistry and Microbiology*. 57(5), pp. 564–570. https://doi.org/10.1134/S0003683821050021

48. **Abd-Allah IM, El-Housseiny GS, Yahia IS, Aboshanab KM*, Hassouna NA (2021).** Rekindling of a Masterful Precedent; Bacteriophage: Reappraisal and Future Pursuits. Front Cell Infect Microbiol. 2021 May 31;11:635597. doi: 10.3389/fcimb.2021.635597. PMID: 34136415; PMCID: PMC8201069..

49. N**oha A. Kamel, Lamia M. El Wakeel, Khaled M. Aboshanab* (2021)** Exploring SARS-CoV-2 Spikes Glycoproteins for Designing Potential Antiviral Targets. (2021) Viral Immunol. 2021. doi: 10.1089/vim.2021.0023. PMID: 34018828.

50. **Reem Youssef, Ahmed Abass, Ahmed El-Shehawi, Mona Mabrouk, Khaled M. Aboshanab* (2021).** Serotyping and antimicrobial resistance Profile of entericnontyphoidal Salmonella recovered from febrile neutropenic patients andpoultry in Egypt. Antibiotics (Basel). 2021 Apr 26;10(5):493. doi: 10.3390/antibiotics10050493. PMID: 33925773

51. **Kamel NA, Elsayed KM, Awad MF, Aboshanab KM*, El Borhamy MI.** Multimodal Interventions to Prevent and Control Carbapenem-Resistant Enterobacteriaceae and Extended-Spectrum β-Lactamase Producer-Associated Infections at a Tertiary Care Hospital in Egypt. Antibiotics (Basel). 2021 Apr 30;10(5):509. doi: 10.3390/antibiotics10050509. PMID: 33946253; PMCID: PMC8146387.

52. **Abdelaziz SM, Aboshanab KM*, Yahia IS, Yassien MA, Hassouna NA. Correlation between the Antibiotic Resistance Genes and Susceptibility to Antibiotics among the Carbapenem-Resistant Gram-Negative Pathogens (2021)** Antibiotics (Basel). 2021 Mar 4;10(3):255. doi: 10.3390/antibiotics10030255. PMID: 33806340; PMCID: PMC8001261.

53. **El-Housseiny GS, Ibrahim AA, Yassien MA, Aboshanab KM*.(2021)**. Production and statistical optimization of Paromomycin by *Streptomyces rimosus* NRRL 2455 in solid state fermentation. BMC Microbiol. 2021 Jan 23;21(1):34. doi: 10.1186/s12866-021-02093-6. PMID: 33485318; PMCID: PMC7825151.

54. **Elsherif HM, Helal ZH, El-Ansary MR, Fahmy ZA, Eltayeb WN, Radwan S, Aboshanab KM*.(2020)**. Staphylococcal Enterotoxins and Toxic Shock Syndrome Toxin-1 and Their Association among Bacteremic and Infective Endocarditis Patients in Egypt. Biomed Res Int. 2020 Dec 18;2020:6981095. doi: 10.1155/2020/6981095. PMID: 33381576; PMCID: PMC7762650.

55. **El-Housseiny GS*, Aboshanab KM, Aboulwafa MM, Hassouna NA.** Structural and Physicochemical Characterization of Rhamnolipids produced by Pseudomonas aeruginosa P6. AMB Express. 2020 Nov 4;10(1):201. doi: 10.1186/s13568-020-01141-0. PMID: 33146788; PMCID: PMC7642061.

56. **El-Sayed SE, El-Housseiny GS, Abdelaziz NA, El-Ansary MR, Aboshanab KM*. (2020)**. Optimized Production of the Allylamine Antifungal "Terbinafine" by Lysinibacillus Isolate MK212927 Using Response Surface Methodology. Infect Drug Resist. 2020 Oct 15;13:3613-3626. doi: 10.2147/IDR.S267590. PMID: 33116681; PMCID: PMC7571585.

57. **El-Sayed SE, Abdelaziz NA, El-Housseiny GS, Aboshanab KM*.(2020)**. Octadecyl 3-(3, 5-di-tert-butyl-4-hydroxyphenyl) propanoate, an antifungal metabolite of Alcaligenes faecalis strain MT332429 optimized through response surface methodology. Appl Microbiol Biotechnol. 2020 Dec;104(24):10755-10768. doi: 10.1007/s00253-020-10962-9. Epub 2020 Oct 22. PMID: 33090249.

58. **Mabrouk SS, Abdellatif GR, El-Ansary MR, Aboshanab KM*, Ragab YM. (2020)**. Carbapenemase Producers Among Extensive Drug-Resistant Gram-Negative Pathogens Recovered from Febrile Neutrophilic Patients in Egypt. Infect Drug Resist. 2020 Sep 11;13:3113-3124. doi: 10.2147/IDR.S269971. PMID: 32982326; PMCID: PMC7495499.

59. **Mohammed MA, Ahmed MT, Anwer BE, Aboshanab KM*, Aboulwafa MM. (2020)**. Propranolol, chlorpromazine and diclofenac restore susceptibility of extensively drug-resistant (XDR)-Acinetobacter baumannii to fluoroquinolones. PLoS One. 2020;15(8):e0238195. Published 2020 Aug 26. https://doi.org/10.1371/journal.pone.0238195

60. **Ann A. Elshamy, Khaled M. Aboshanab* (2020)**. A review on bacterial resistance to carbapenems: epidemiology, detection and treatment options. Future Sciences OA.2020, 6(3). https://www.future-science.com/doi/10.2144/fsoa-2019-0098

61. **Ann A. Elshamy, Khaled M. Aboshanab*, Mahmoud A. Yassien, Nadia A. Hassouna (2020)**. Prevalence of Plasmid-mediated Resistance Genes Among Multidrug-Resistant Uropathogens in Egyp. African Health Sciences; 20(1):190-8. https://dx.doi.org/10.4314/ahs.v20i1.24

62. **Kamel NA, El-Tayeb WN, El-Ansary MR, Mansour MT, Aboshanab KM* (2019).** XDR-*Klebsiella pneumoniae* isolates harboring blaOXA-48: In vitro and In vivo evaluation using a murine thigh-infection model. Experimental Biology and Medicine, 2019; 1-7 https://doi.org/10.1177/1535370219886826

63. **Elsayed NS, Aboshanab KM*, Yassien MA, Hassouna NH.(2019).** New insight into poly (3-hydroxybutyrate) production by Azomonas macrocytogenes isolate KC685000: large scale production, kinetic modeling, recovery and characterization. Molecular Biology Reports. 2019 Jun;46(3):3357-3370. https://doi.org/10.1007/s11033-019-04798-4

64. **Ibrahim AA, El-Housseiny GS, Aboshanab KM*,Yassien MA, Hassouna NA (2019).** Paromomycin production from Streptomyces rimosus NRRL 2455: statistical optimization and new synergistic antibiotic combinations against multidrug resistant pathogens. BMC Microbiololgy 2019 Jan 18;19(1):18. doi: 10.1186/s12866-019-1390-1. https://doi.org/10.1186/s12866-019-1390-1

65. **El-Housseiny GS, Aboshanab KM*, Aboulwafa MM, Hassouna NA. (2019).** Rhamnolipid production by a gamma ray-induced *Pseudomonas aeruginosa* mutant under solid state fermentation. AMB Express.;9(1):7. doi: 10.1186/s13568-018-0732-y. https://www.ncbi.nlm.nih.gov/pubmed/30617633

66. **Masarra M. Sakr, Khaled M. Aboshanab*, Walid F. Elkhatib, Mahmoud A. Yassien, Nadia A. Hassouna (2018)**. Overexpressed recombinant quorum quenching lactonase reduces the virulence, motility and biofilm formation of multidrug-resistant *Pseudomonas aeruginosa* clinical isolates. Applied Microbiology and biotechnology. DOI: 10.1007/s00253-018-9418-2

67. **Kamel NA, El-Tayeb WN, El-Ansary MR, Mansour MT, Aboshanab KM* (2018).** Phenotypic screening and molecular characterization of carbapenemase-producing Gram-negative bacilli recovered from febrile neutropenic pediatric cancer patients in Egypt. PLoS One. 2018 A 29;13(8):e0202119. doi: 10.1371/journal.pone.0202119

68. **Elsayed NS, Aboshanab KM, Yassien MA*, Hassouna NA (2018).** Kinetic modeling, recovery, and molecular characterization of poly-beta-hydroxybutyrate polymer in *Acinetobacter baumannii* isolate P39. Bioprocess Biosystem Engineering. doi: 10.1007/s00449-018-2000-6. PMID:30194493

69. **Samira M. Hamed, Walid F. Elkhatib*, Hadir A. El-Mahallawy, Mai M. Helmy, Mohamed S. Ashour, Khaled M. A. Aboshanab (2018)**. Multiple mechanisms contributing to ciprofloxacin resistance among Gram negative bacteria causing infections to cancer patients. *Scientific Reports*, 16;8(1):12268. doi: 10.1038/s41598-018-30756-4. PMID:30115947

70. **Masarra M. Sakr, Khaled M. Aboshanab*, Walid F. Elkhatib, Mahmoud A. Yassien, Nadia A. Hassouna (2018)**. The effect of Ahl-1 recombinant lactonase on the resistance of *Pseudomonas aeruginosa* clinical isolates. *World Journal of Pharmaceutical Sciences*, 6(6): 101-106.http://www.wjpsonline.org/

71. **Sally Tohamy Tohamy, Khaled Mohamed Aboshanab*, Hadir Ahmed El-Mahallawy, Mona R El-Ansary , Salwa Selim Afifi (2018).** Prevalence of MDR Gram-negative Pathogens Isolated from Febrile Neutropenic Cancer Patients with Bloodstream Infections in Egypt and New Synergistic Antibiotic Combinations. *Infection and Drug Resistance*, 11:791–803. http://dx.doi.org/10.2147/IDR.S163293

72. **Ahmed MM, Aboshanab KM, Ragab YM, Missiakas DM, Aly KA* (2018).** The transmembrane domain of the Staphylococcus aureus ESAT-6 component EssB mediates interaction with the integral membrane protein EsaA, facilitating partially regulated secretion in a heterologous host. Archives of Microbiology,. doi: 10.1007/s00203-018-1519-x. PMID: 29737367.

73. **Samira M. Hamed, Khaled M. A. Aboshanab*, Hadir A. El-Mahallawy, Mai M. Helmy, Mohamed S. Ashour, Walid F. Elkhatib (2018)**. Plasmid-Mediated Quinolone Resistance in Gram Negative Pathogens isolated from Cancer Patients in Egypt. *Microbial Drug Resistance* 2018; https://doi.org/10.1089/mdr.2017.0354

74. **Mansour NM*, Elkhatib WF, Aboshanab KM, Bahr MMA (2018).** Inhibition of *Clostridium difficile* in Mice Using a Mixture of Potential Probiotic Strains *Enterococcus faecalis* NM815, E. faecalis NM915, and E. faecium NM1015: Novel Candidates to Control C. difficile Infection (CDI). Probiotics Antimicrob Proteins. doi: 10.1007/s12602-017-9285-7. **(pp 1-12)** https://www.ncbi.nlm.nih.gov/pubmed/28497217

75. **Ahmed Said Abu Zaid, Khaled M. Aboshanab*, Mahmoud Abdel Magead Yassin, Nadia Abdel-Haleim Hassouna (2017)**. Purification and Structure Elucidation of Potential Cytotoxic Agents from Streptomyces parvus KJ623765. World J Pharm Sci 2017; 5(12): 149-161 file:///C:/Users/khaled/Documents/Downloads/RT0WXH.pdf

76. N**oha S. Elsayed, Khaled M. Aboshanab*, Mahmoud A. Yassien, Nadia A.Hassouna (2017)**. Recovery and molecular characterization of poly-β-hydoxybutyrate polymer by *Bacillus cereus* isolate P83. World J Pharm Sci 2017; 5(9): 237-249 **file:///C:/Users/khaled/Documents/Downloads/8jCgHa.pdf**

77. **Hala A Farrag*, Mohamed M Aboulwafa , Khaled M Aboshanab, Amira A Abdelbaset1 (2017).** Serum IL-6, IL-8 and CRP as Markers for Prediction of Bacteremia by Gram Negative Rods in Febrile Cancer Patients and in Irradiated Rats. J Medical Microbiology and Diagnosis. 6: 3, DOI: 10.4172/2161-0703.1000258. https://pdfs.semanticscholar.org/6270/b8134f45da13ca4a26a522d680d8432438f5.pdf

78. **Abdelkader MM, Aboshanab KM*, El-Ashry MA, Aboulwafa MM (2017).** Prevalence of MDR pathogens of bacterial meningitis in Egypt and new synergistic antibiotic combinations. PLoS One. 2017 Feb 16;12(2):e0171349. doi: 10.1371/journal.pone.0171349.https://www.ncbi.nlm.nih.gov/pubmed/28207768

79. **Ahmad M. Abbas, Khaled M. Aboshanab, Walid F. Elkhatib, Mohammad M. Aboulwafa*, Nadia A. Hassouna (2017).** Improvement of Bioconversion of Vitamin D3 into Calcitriol by *Actinomyces hyovaginalis* through Protoplast Fusion and Enzyme Immobilization. International Journal of Biotechnology for Wellness Industries, 6 (1):32-40 http://www.lifescienceglobal.com/pms/index.php/ijbwi/article/view/4595

80. **Ghadir S. El-Housseiny, Khaled M. Aboshanab*, Mohammad M. Aboulwafa, Nadia A. Hassouna (2017).** Isolation, screening and improvement of rhamnolipid production by Pseudomonas isolates. Indian Journal of Biotechnology (2017): 16(4): 611-619.

81. **Ayaa S.M. Hashim, Khaled M.A.Aboshanab, Aly F.M.El-Sayed* (2016).** Developing an inactivated Rotavirus vaccine and evaluating the immunogenicity against a commercially available attenuated RV vaccine using a mice animal model. *Viral immunology* 29(10): 565-571. DOI: 10.1089/vim.2016.0073.http://online.liebertpub.com/doi/abs/10.1089/vim.2016.0073

82. **Ghadir S. El-Housseiny1 • Mohammad M. Aboulwafa*, Khaled M. Aboshanab, Nadia A. Hassouna (2016).** Optimization of Rhamnolipid Production by *P. aeruginosa* Isolate P6. Journal of surfactants and detergents 10: DOI: 10.1007/s11743-016-1845-4. https://link.springer.com/article/10.1007/s11743-016-1845-4

83. **Mona H. El-Gayar, Khaled M. Aboshanab*, Mohammad M. Aboulwafa, Nadia A. Hassouna (2016).** Antivirulence and wound healing effects of royal jelly and garlic extract for the control of MRSA skin infections. *Wound Medicine* 13:18–27. http://dx.doi.org/10.1016/j.wndm.2016.05.004.

84. **Noha S. Elsayed, Khaled M. Aboshanab*, Mohammad M. Aboulwafa, Nadia A. Hassouna (2016).** Cost-effective production of the bio-plastic poly-β-hydroxybutyrate using *Acinetobacter baumannii isolate* P39**.** *Journal of Microbiology, Biotechnology and Food sciences*. 5(6):552-556. doi: 10.15414/jmbfs.2016.5.6.552-556.

85. **Sarra E. Saleh, Khaled M. Aboshanab*, Mohammad M. Aboulwafa and Nadia A. Hassouna (2015).** Effects of plasmid acquisition by *Pseudomonas aeruginosa* clinical isolates on methicillin-resistant *Staphylococcus aureus* biofilm formation**.** *African Journal of Microbiology research*. 9(48): 2307-2319. DOI: 10.5897/AJMR2015.7789

86. **Aboshanab*, Khaled M, Elshafey Mostafa M (2015)** Isolation and sequence analysis of a putative MerR-type-transcriptional regulator and a multidrug efflux protein of Bacillus circulans ATCC 21588: as potential targets of therapeutics. *International Journal of Genetics and Molecular biology*. 7(3): 15-24. DOI: 10.5897/ IJGMB2015.0112.

87. **Masarra Mohammed Sakr, Mohammad Mabrouk Aboulwafa, Khaled Mohamed Anwar Aboshanab*, Nadia Abdel-Haleem Hassouna (2015)** Characterization of the quorum quenching activity of *Streptomyces minutiscleroticus*: A new approach for infection control. *African Journal of Microbiology research*. 9(8):492-502. DOI:10.5897/AJMR2014.7316

88. **Abdelaziz, Salma, Aboshanab*, Khaled M., Aboulwafa, Mohammad M., Hassouna, Nadia A (2015)** Antimicrobial resistance pattern of some bacterial pathogens involved in lower respiratory tract infections in Egypt. *Acta Microbiologica*, 6(1:1), DOI 10.3823/286

89. **El-Gayar, Mona., Aboulwafa, Mohammad M., Aboshanab*, Khaled M., Hassouna, Nadia A (2014)** Virulence characters of some methicillin resistant *Staphylococcus aureus* isolate. Archives of Clinical Microbiology, 5(4:3), DOI 10.3823/283.

90. **Shaker, Amr, Aboshanab*, Khaled, Mabrouk Aboulwafa, Mohammad, Hassouna, Nadia (2014)** Plasmid-carried macrolides target site modification erm and efflux msr genes in some *Staphylococcus* spp. from lower respiratory tract infected patients. *Archives of Clinical Microbiology*, 5(5:1), DOI 10.3823/284

91. **Noha A. Kamel, Mohammad M. Aboulwafa, Wafaa N. El-tayeb, Khaled M. Aboshanab* (2014)** Antibiotic resistance pattern of aerobic bacteria isolated from patients with diabetic foot ulcers in Egypt. *African Journal of Microbiology research*. 8(31):2947-2954. DOI:10.5897/AJMR2014.6909.

92. **Masarra Mohammed Sakr, Mohammad Mabrouk Aboulwafa, Khaled Mohamed Anwar Aboshanab*, Nadia Abdel-Haleem Hassouna (2014)** Screening and preliminary characterization of the quorum quenching 1 activity of some *Bacillus* isolates from soil against clinically isolated *Pseudomonas aeruginosa* homoserine lactones. *Malaysian Journal of Microbiology* (MJM). 10(2), pp. 80-91

93. **Aboshanab M. Khaled*, Okba M. Nisreen, , El-banna S, Tarek, Abd El-Aziz A. Ahmed (2014)** Identification of Genes Putatively Involved in the Biosynthesis of Antitubercular Peptide in *Streptomyces ribosidificus* NRRL B-11466. *British Biotechnology Journal*, 4(1):40-50, ISSN: 2231–2927. http://www.sciencedomain.org/review-history.php?iid=282&id=11&aid=2381

94. **Okba M. Nisreen, Aboshanab M. Khaled*, El-banna S, Tarek, Abd El-Aziz A. Ahmed (2013)** Isolation, heterologous expression and gene duplication of certain ribostamycin biosynthetic *genes from Streptomyces ribosidificus NRRL B-11466. Archives of Clinical Microbiology, 4 (6).* doi: 10.3823/275

95. **Samira M. Hamed, Khaled M. A. Aboshanab*, Walid F. Elkhatib, Mohamed S. Ashour (2013).** Aminoglycoside Resistance Patterns of Certain Gram Negative Uropathogens Recovered from Hospitalized Egyptian Patients. *British Microbiology Research Journal* 3(4): 3(4): 678-691.

96. **Noha Salah, Khaled Aboshanab*, Mohammad Aboulwafa, Nadia Hassouna (2013)** PHB production in *Azomonas*, *Acinteobacter* and *Bacillus* species: Isolation, Screening and Identification. *Archives of Clinical Microbiology*. 4(5) 2013. http://imedpub.com/ojs/index.php/acmicrob/article/view/622

97. **Noha Salah, Khaled Aboshanab*, Mohammad Aboulwafa, Nadia Hassouna (2013)** Optimization of bioplastic (Poly-β-hydroxybutyrate) production by a promising *Azomonas macrocytogenes* bacterial isolate P173. *African Journal of Microbiology Research*.7(42):5025-5035. DOI: 10.5897/AJMR2013.6060

98. **Masarra M. Sakr, Khaled M. Aboshanab*, Mohammad M. Aboulwafa, Nadia A. Hassouna (2013).** Characterization and Complete Sequence of Lactonase Enzyme from *Bacillus weihenstephanensis* Isolate P65 with Potential Activity against Acyl Homoserine Lactone Signal Molecules. *Biomedical Research International*. 2013: 1-10, Article ID 192589. http://dx.doi.org/10.1155/2013/192589.

99. **Noha A. Kamel, Khaled M. Aboshanab*, Mohammad M. Aboulwafa, Wafaa N. El-tayeb (2013)** Plasmid Mediated Extended Spectrum Beta-Lactamase producing strains of Enterobacteraceae Isolated from Diabetic Foot Infections in Egypt. *Arch. Clinical microb.* 4(4):1-8

100. **Ahmad M. Abbas, Mohammad M. Aboulwafa*, Khaled M. Aboshanab, and Nadia A. Hassouna (2011)** Optimization of culture conditions for transformation of vitamin D3 to calcitriol by *Actinomyces hyovaginalis* isolate A11-2. *Arch. Clinical microb.* 2(6):1-10. doi: 10:3823/242:

101. **Ahmad M. Abbas; Khaled M. Aboshanab, Mohammad M. Aboulwafa* and Nadia A. Hassouna (2011)** *Actinomyces hyovaginalis*: A novel bacterial isolate with transforming activity of vitamin D_3 to 1α, 25-dihydroxyvitamin D_3. *J. Am. Science*, 7(9): 231-237.

102. **Aboshanab KM* (2010)** Isolation, recombinant expression and characterization of *the dpr*A gene product in *Streptomyces rimosus* NRRL 2455**.** *African J. of Microbiology Research*, **4**(10): 915-922

B. Local publications:

1. **Samar S. Mabrouk* , Ghada R. Abdellatif , Ahmed S. Abu Zaid , Khaled M. Aboshanab (2023).** New Insights on the Carbapenem-resistant Gram Negative-associated-Infections: Challenges and Opportunities Archives of Pharmaceutical Sciences Ain Shams University, 2023; 7(1):97-127. https://doi.org/10.21608/aps.2023.206876.1118
2. **Ann Elshamy*, Sarra Saleh; Khaled M. Aboshanab; Mohammad M. Aboulwafa; Nadia A. Hassouna (2023).** In Vitro Meropenem/Antibiotic and Meropenem/Bacteriophage Combinations Against Carbapenem-Resistant Gram-Negative Uropathogens. Archives of Pharmaceutical Sciences Ain Shams University, 2023; 7(1):19-30. https://dx.doi.org/10.21608/aps.2023.198691.1111
3. **Walaa M. Khalil* , Khaled M. Aboshanab , Mohammad M. Aboulwafa (2021).** Mini review on Potency Evaluation of Rabies Vaccine preparations. Archives of Pharmaceutical Sciences Ain Shams University, 2021; 5(2):265-274. https://dx.doi.org/10.21608/aps.2021.101125.1071
4. **Elgendy N, K Aboshanab KM, M Yassien, M Aboulwafa, N Hassouna (2021).** Scaling up, Kinetic modeling, and Economic analysis of poly (3-hydroxybutyrate) production by Bacillus cereus isolate CCASU-P83.Archives of Pharmaceutical Sciences Ain Shams University 5 (1), 158-170. DOI: 10.21608/aps.2021.76831.1061
5. **Amr Bishr; Khaled M. Aboshanab; Mahmoud Yassien; Nadia A. Hassouna (2019).** Macrolide resistance pattern of staphylococci collected from hospitalized patients in Egypt. Archives of Pharmaceutical Sciences Ain Shams University, 2019; Vol. 3(2):285-293. https://dx.doi.org/10.21608/aps.2019.17391.1014
6. **Salma M Abdelaziz; Khaled M. Aboshanab; Mahmoud Yassien; Nadia A. Hassouna (2019).** Antimicrobial resistance patterns of MDR Staphylococcus aureus clinical isolates involved in the lower respiratory tract infections in Egypt. Archives of Pharmaceutical Sciences Ain Shams University, 2019; Vol. 3(2):294-304. https://dx.doi.org/10.21608/aps.2019.17391.1014
7. **Yomna N. Elkholy; Walid Faisal Elkhatib; Khaled M. Aboshanab; Mohammad Aboulwafa; Nadia A. Hassouna (2019).** Evaluation of antimicrobial activity and in vitro safety of the methanolic extract of Streptomyces manipurensis soil isolate H21 for potential industrial applications. Archives of Pharmaceutical Sciences Ain Shams University, 2019; Vol. 3(1):1-10. https://dx.doi.org/10.21608/aps.2019.20201
8. **Ann A. Elshamy, Khaled M. Aboshanab* , Mahmoud A. Yassien, Nadia A. Hassouna (2018).** Prevalence of carbapenem resistance among multidrug-resistant Gram-negative uropathogens. Archives of Pharmaceutical Sciences Ain Shams University, 2(2):70-77. https://dx.doi.org/10.21608/aps.2018.18736
9. **Ahmed S. Abu Zaid, Khaled M. Aboshanab* , Mahmoud A. Yassien, and Nadia A. Hassouna (2017).** Improvement the production of cytotoxic metabolites by *Streptomyces griseus* KJ623766. Archives of Pharmaceutical Sciences Ain Shams University, 1(2):31-38. https://dx.doi.org/10.21608/aps.2017.11022
10. **Asmaa A. Ibrahim, Khaled M. Aboshanab*, Mahmoud A. Yassien, and Nadia A. Hassouna (2017).** Improvement of paromomycin production by *Streptomyces rimosus*

subsp paromomycinus NRRL 2455 using gamma irradiation mutagenesis. Archives of Pharmaceutical Sciences Ain Shams University, 2017; Vol. 1(2):26-30. https://dx.doi.org/10.21608/aps.2017.11017

11. **Manar M. Ahmeda, and Yasser M. Ragabb, and Khaled M. Aboshanab* (2017)**. A large soluble domain of the *Staphylococcus aureus* ESAT-6 Virulence Factor EsaA is stable in the absence of its cognate transmembrane domains. Archives of Pharmaceutical Sciences Ain Shams University, 2017; Vol. 1(2):39-45. https://dx.doi.org/10.21608/aps.2017.11025.
12. **Amira A. Abdelbaset, Aboshanab, Khaled M, Mohammad M. Aboulwafa**, **Hala A. Farrag* (2015)**. Profiles of Lipase and Protease Enzymatic activities and antimicrobial resistance of some bacterial isolates recovered from blood samples. *Al_azhar J. Of Pharmaceutical Sciences*.51: 118-134, ISSN 1110-1644.
13. **Aboshanab KM* (2010)** Isolation, Sequencing and Annotation of three genes putatively involved in capreomycidine biosynthesis in *Streptomyces ribosidificus* NRRL B-11466. *Egy. J. of Medical Microbiology*, 19(4): 63-74.
14. **Aboshanab KM* (2010)** Identification of both *neoQ* and *neoB* gene products involved in the biosynthesis of neomycin in *Streptomyces fradiae* BUWKH 66278. *Egy.J. Biotech.* 36: 1-15**.**
15. **Aboshanab KM* (2010)** Cloning, expression and knock-out of *ribE* gene involved in the biosynthesis of Ribostamycin in *Streptomyces ribosidificus* NRRL B-11466**.** *Egy. J. of Medical Microbiology***, 19**(1): 47-58.
16. **Aboshanab KM* (2009)** Formation, Regeneration and Efficient Plasmid Transformation of Protoplasts of the major 2-deoxystreptamine aminoglycoside producers. *Egy. J. biotechnology*, **33**: 66-78.
17. **Aboshanab K* (2006)** Cloning and expression of *neoQ* and *neoB* genes coded for bifunctional 6'- (and 6''')-dehydrogenase and 6'- (and 6''')-aminotransferase involved in the biosynthesis of neomycin in *Streptomyces fradiae* BUWKH 66278. *Egyptian J. Biotechnology*, **24**: 103-120.
18. **Aboshanab K., Hassouna N. A, Yassien M. A*, Aboulwafa M. M. (2003)** Characterization of crude protease enzymes produced by *Streptomyces pseudoechinosporeus* and *Bacillus megaterium*. New Egypt. *J. Microbiol*., **6**: 71-84.
19. **Aboshanab K., Hassouna N. A, Yassien M. A*Aboulwafa M. M. (2003)** Protease production by *Streptomyces pseudoechinosporeus* and *Bacillus megaterium*. New Egypt. *J. Microbiol*., **6**: 33-52.

Conferences:

1. **Aboshanab K (2023).** The 11Th Annual Ain Shams University International Conference, Cairo, Egypt. **"Knowledge Economy for Better Life**" 10-11 May 2023. Triumph Luxury Hotel, Katameya, New Cairo, Egypt: **Chairperson of Session # "Vaccinology Workshop in colloboration with the Jenner Institute at the University of Oxoford)**.
2. **Aboshanab K (2023).** The IMcert International Conference, Leipzig Germay" 05-10 Februray 2023. Program: **2nd International Conference of the Erasmus+ Projekt** IMCert (**Immune Modulation certificate for Postgraduate Students Enabled by Blended Learning**) **No. 619017-EPP-1-2020-1-EG-EPPKA2-CBHE-JP**. **Speaker** as Coordiantor of Ain Shams University for the Ersmus plus project. **"**
3. **Aboshanab K (2022).** The IMcert International Conference, Lorraine, France" 23-28 September 2022. Program: **1st International Conference of the Erasmus+ Projekt** IMCert (**Immune Modulation certificate for Postgraduate Students Enabled by Blended Learning**) **No. 619017-EPP-1-2020-1-EG-EPPKA2-CBHE-JP**. **Speaker** as Coordiantor of Ain Shams University for the Ersmus plus project
4. **Aboshanab K (2022).** The 10Th Annual Ain Shams University International Conference, Cairo, Egypt. "The University as an Anchor for Developmemt, Towards the New Republic" **Delivering Lecture on "Primer Design: Principles and In Silico-Methodology # "Bioinformatics in Medicine)**. 30th March 2022
5. **Aboshanab K (2022).** The 10Th Annual Ain Shams University International Conference, Cairo, Egypt. "The University as an Anchor for Developmemt, Towards the New Republic" **Chairperson of Session # "Prospects in Medical Research)**. 31th March 2022.
6. **Aboshanab K (2020).** The 5Th Medical Integrated Students Research (MISR) conference, Faculty of Medicine Ain Shams University, Cairo, Egypt. Attending and as an **External Examiner** of the Student Research Projects. 4-7 Mars 2020
7. **Aboshanab K (2019).** A conference **Speaker** in Microbiology Conference "9th Annual Congress on Clinical Microbiology and Infectious Diseases "Preventive technique towards infectious Diseases). October 16-17 2019 at Tokyo, Japan.
8. **Aboshanab K (2019). (Title:** Guidelines of antimicrobial agents and Role of Pharamcist in Public. **Key note Speaker** in Microbiology Conference "7th Conference of Damietta Pharmacist Syndicate). 31 October, 2019. , Kempinski hotel, Damietta, Egypt
9. **Aboshanab K (2019)** A conference **Speaker** of a Microbiology and Biotechnology Session (title: Prevalence of MDR-and XDR Gram-negative pathogens isolated from febrile neutropenic cancer patients with bloodstream infections in Egypt and new synergistic antibiotic combinations), 8th International Conference of Ain Shams University 1-3 April, 2019, Cairo, Egypt
10. **Aboshanab K (2019)** A conference **Chairperson** of a Microbiology and Biotechnology Session, 5rd FUE International Conference of Pharmaceutical Sciences (3rd FUE-ICPS) January 28-30, 2019, Rouyal Maxim Palace Kempinski, Cairo, Egypt.

11. **Aboshanab K (2019)** A conference Attender BGICC 2019 the 11th breast- Gynecological & Immunooncology International Cancer Conference, held on 17th and 18th January 2019 in Cairo, Egypt. One World Against Cancer, Hilton, Heliopolis Hotel, Cairo, Egypt.

12. **Aboshanab K (2018) Attender** Chemical Security Vulnerability Assessments and Risk Mitigation for the Pharmaceutical Industry workshop on 9-13 September 2018 at the Hilton Cairo Zamalek Residences. Sandia National Laboratories (SNL) in collaboration with Ain Shams University (ASU) will host a five-day, interactive workshop to train best practices in chemical security vulnerability assessments and risk mitigation for the pharmaceutical industry.

13. **Aboshanab K (2018)** (Mechanisms of fluoroquinolones resistance). **Keynote Speaker** in Microbiology Conference "Next Generation Sequencing in Microbiology from Basic Laboratory Technique to application in the clinical Setting). 10-11 October, 2018. , Intercontinental Cit Stars, Nasr City, Cairo, Egypt

14. **Manar M. Ahmed, Khaled M. Aboshanab, Yasser M. Ragab and Khaled A. Aly (2016).** The Transmembrane Domain of the *Staphylococcus aureus* ESAT-6 Secretion System Component EssB Interacts with the Integral Membrane Protein EssF. **Poster** in Conference of American Society for Microbiology (ASM) Microbe 2016, June 16-20, Boston, Massachusetts, USA.

15. **Masarra M. Sakr, Mohammad M. Aboulwafa, Khaled M. A. Aboshanab, Nadia A. Hassouna (2016).** AHL-lactonases of *Bacillus cereus*, characterization of catalytic activities and sequencing encoding genes**. Poster** in Conference of American Society for Microbiology (ASM) Microbe 2016, June 16-20, Boston, Massachusetts, USA.

16. **Noha S. Elsayed, Khaled M. Aboshanab, Mahmoud A. Yassien, Nadia A. Hassouna (2016).** Recovery and Characterization of Polyhydroxybutyrate Biopolymer Produced by Bacillus cereus Isolate P83. **Poster** in Conference of American Society for Microbiology (ASM) Microbe 2016, June 16-20, Boston, Massachusetts, USA

17. **Aboshanab K (2015)** A conference **Speaker** of a session titled "Pathway Engineering For the Production of Antibiotics Using Genetically Modifying Antibiotic Producing Strains ". 3rd FUE International Conference of Pharmaceutical Sciences (3rd FUE-ICPS) February 9-11, 2015, Intercontinental Cit Stars, Nasr City, Cairo, Egypt

18. **Noha Salah Elsayed, Mohammad Aboulwafa, Khaled Aboshanab, Nadia Hassona (2015).** Improvement of Poly-beta-hydroxybutyrate production by *Bacillus cereus* isolate P83. 5th International Conference of Pharmaceutical and Drug industries Research Division Under the Theme of Advance in Pharmaceutical Reaserch, March 29-30, .www.enbmb.eg.net, March 29-30, National Research Center, Cairo, Egypt.

19. **Masarra M. Sakr, Khaled M. Aboshanab, Mohammad M. Aboulwafa, Nadia A. Hassouna (2015).** Lactonase from *Bacillus thurigiensis* Isolate B16; A highly conserved Chromosome-Mediated Enzyme with Role In Quorum Quenching. 5th International Conference of Pharmaceutical and Drug industries Research Division Under the Theme of Advance in Pharmaceutical Research, March 29-30, .www.enbmb.eg.net, March 29-30, National Research Center, Cairo, Egypt

20. **Aboshanab K (2014)** A conference Speaker of a session titled "Biocombinatorial Synthesis of New Aminogylcoside Antibiotics Using Genetic Manipulation". The 17th Congress of the Association of Pharmacy Colleges in the Arab World. The 1st International Conference of The Faculty of Pharmacy; Ain Shams University "New trends in Drug Discovery,

Development and Pharmacy Practice" 14th -16th October, 2014, Faculty of Pharmacy, Ain Shams University, African Union Organization st., Abbasia, Cairo, Egypt.

21. **Aboshanab K (2014)** A workshop **Speaker** of a session titled "Gene Expression using pET expression system. Four-day Workshop: Advanced Techniques in Molecular Biology and Tissue culture, 22-25 September 2014. Botany and Microbiology Department, Faculty of Science, Al-Azhar University, cairo, Egypt.

22. **Masarra M. Sakr, Khaled M. Aboshanab, Mohammad M. Aboulwafa, Nadia A. Hassouna (2014).** Characterization of the Quarum Quenching activity of *Streptomyces minutiscleroticus*; A new approach for Infection Control. 11th National conference of Biochemistry and Molecular Biology "Disease diagnosis and Healthy care" Organized by National committee for Biochemistry and Molecular Biology (NCBMB).www.enbmb.eg.net, March 30-April 1 (2014), Guesthouse, Ain Shams University, Cairo, Egypt.

23. **Noha Salah Elsayed, Khaled M. Aboshanab, Mohammad M. Aboulwafa, Nadia A. Hassouna (2014)**. Cost-effective production of the bio-plastic Poly-β-hydroxybutyrate using *Acinetobacter baumanii* bacterial isolate P39. 11th National conference of Biochemistry and Molecular biology. "Disease diagnosis and healthy care" Organized by National committee for Biochemistry and Molecular Biology (NCBMB).www.enbmb.eg.net, March 30-April 1 (2014), Guesthouse, Ain Shams University, Cairo, Egypt**.**

24. **Samira M. Hamed, Khaled M. A. Aboshanab, Walid F. Elkhatib, Mohamed S. Ashour (2014).** Phenotypic and genotypic aminoglycoside resistance in certain Gram negative uropathogens recovered from hospitalized Egyptian patients. 11th National conference of Biochemistry and Molecular Biology "Disease diagnosis and healthy care" Organized by National committee for Biochemistry and Molecular Biology (NCBMB).www.enbmb.eg.net, March 30-April 1 (2014) Cairo, Egypt.

25. **Okba M. Nisreen, Aboshanab M. Khaled, El-banna S, Tarek, Abd El-Aziz A. Ahmed (2012).** Isolation and expression of 2-deoxy-scyllo-inosos synthase (RibC) from ribostamycin gene cluster in *E. coli*. *The 18th International Conference of the Egyptian Society for Medical Microbiology"* Current topics in infectious diseases",2012, April 28, Cairo, Egypt..

26. **Aboshanab KM (2010)** Cloning and expression of *neoQ* and *neoB* genes coded for bifunctional 6'- (and 6''')-dehydrogenase and 6'- (and 6''')-aminotransferase involved in the biosynthesis of neomycin in *Streptomyces fradiae* BUWKH 66278. The 17th international conference of the Egyptian Society for Medical Microbiology (ESMM) "New Modalities in Microbiology", held in April, 25-26, **2010** participation.

27. **Aboshanab KM (2004)** The 5th international conference of the Society of Applied Microbiology (ESMM) " Secondary metabolites of Actinomycetes. ", hold in Jena, Germany, Mars, 25-27, **2004** participation.

Patency:

Patency

1. **Ahmad M. Abbas, Mohammad M. Aboulwafa, Khaled M. Aboshanab, and Nadia A. Hassouna (2011)** Production of biologically active calcitriol, from vitamin D3 using locally isolated *Actinomyces hypvaginalis*, request 882-2011 at 31.05.2011.

2. **Aboshanab K., Schmidt-Beissner H., Wehmeier U., Welzel K., Vente A. Piepersberg W. (2005)** Neue Gene aus Biosynthese Genclustern zur Synthese von Aminoglycosid-Antibiotika sowie damit herstellbare neue Aminoglycosid-Antibiotika. **German Patent** Application AZ 102004017141.6 (Combinature Biopharm, Berlin), PCT (**International Patent**) /DE 102004017141A1; Aug. 2005;WO 2005/095591. Patent WO2005095591

Internations Books:

1. **Piepersberg W, Aboshanab KM., Schmidt-Beißner H, Wehmeier U (2007**) The Biochemistry and Genetics of Aminoglycoside Producers. In: Aminoglycoside Antibiotics From Chemical Biology to Drug Discovery. Chapter 2, pp. 15 – 118. Ed.: Arya Dev P., Print ISBN: 978-0-471-74302-6, Online ISBN: 978-0-471-4967-6, John Wiley & Sons, inc., publication, Wiley- VCH, Hoboken, New Jersey, USA.

http://www3.interscience.wiley.com/cgi-bin/bookhome/114034360

Research Projects: المشاريع البحثية

1. **Principle investigator** Science & Technology Development Fund **(STDF),** Ministry of Scientific Research, Egypt. **project Nr: 30172 under the title "**Microbial biotransformation of vitamin D_3 into biologically active calcitriol". April 2022
2. **Coordinator of Ain Shams University: Ersmus Plus project:** Immune Modulation Diploma/IMcert - Capacity Building in the field of higher education – EAC/A02/2019 – Joint Projects." Ain Shams university as a partner University of **IMCert** International Project Under the Title **"Immune Modulation certificate for Postgraduate Students Enabled by Blended Learning"** which is an Erasmus+ project in field of capacity building for higher education, starting from 15th January 2021 and will be ended on 14th January 2024. Funded from the European Commission **(Reference No. 619017-EPP-1-2020-1-EG-EPPKA2-CBHE-JP)** with Al-Azhar University as the Main Coordinator and Sanmhour, Aswan and Cairo University as internal partners and Leipzig institute [ULEI] in Germany, Lorraine [UL] in France and National and Kapodistrian University Athens [NKUA] in Greece as external Euprean partners.
3. **Principle investigator of the International Project** between Faculty of Pharmacy, Ain Shams University, and W42 GmbH, a German corporation located at Otto-Hahn-Straße 15, im BMZ, D-44227 Dortmund, **Germany** (the **"Partner"**), represented by **Prof Dr. Ansgar Stratmann, Project title:** ***"Production of Cephalosporin C (CPC) by the industrial strain Acremonium chrysogenumW42-I"***. (from December, 2018-December 2021).
4. **Principle investigator of the Project title:** "Bioprocess Engineering for the production od cephalosporin C by *Acremonium chrysogenumW42-I* and paromoycin By *Streptomyces rimosus* NRRL 2455" Two years Project 2019-2020 and 2020-2021. Funded by Ain Shams Postgraduate Stratgic Research Program 2019-2020, Ain Shams University
5. **Principle investigator of the Project title:** Molecular and physiological characterization of bacterial macrolide resistance mechanisms as an approach of infection control Two years Project 2016-2017 and 2017-2018. Funded by Ain Shams Envrinomental and Culture affiaris Research Program 2016-2017, Ain Shams University
6. **Principle investigator of the Project title:** Preparation of various pharmaceutical preparations containing Royal Jelly and Garlic extract for the control of skin infections caused by Methicillin-resistant *Staphylococcus aureus* (MRSA). Two years Project 2014-2015 and 2015-2016. Financed by Postgraduate affairs, Ain Shams University.
7. **Co- investigator of the Project title (2016).** Cloning and Expression of certain gene(s) putatively involved in acylhomoserine lactone quarum quenching activities as a new approach for infection control. Two years Project 2016-2017 and 2017-2018, Financed by Postgraduate affairs, Ain Shams University

Published nucleotide/amino acids sequences in the NCBI/EMBL GenBank database (accession codes) online on the internet database. http://www.ncbi.nlm.nih.gov

1. **Shabana,M.R., El Sharawy,T.A., Zaghloul,A.Y., Elleboudy,N.S. and Aboshanab,K.M (2023).** Poliovirus 2 isolate PV2-1 polyprotein gene, partial cds. GenBank: OR260986.1. https://www.ncbi.nlm.nih.gov/nuccore/OR260986.1
2. **Shabana,M.R., El Sharawy,T.A., Zaghloul,A.Y., Elleboudy,N.S. and Aboshanab,K.M.(2023).** Poliovirus 2 isolate PV2-28 polyprotein gene, partial cds, GenBank: OR260985.1. https://www.ncbi.nlm.nih.gov/nuccore/OR260985.1
3. **Morgan,R.N., Saleh,S.E., Farrag,H.A. and Aboshanab,K.M.(2023).**Pseudomonas aeruginosa strain PA16 ToxA gene, partial cds, GenBank: OP889245.1 https://www.ncbi.nlm.nih.gov/nuccore/OP889245.1
4. **Saeed R, Mohammed AK, Saleh SE, Aboulwafa MM, Aboshanab KM and Taneera J.(2023).** Homo sapiens mitogen-activated protein kinase 8 interacting protein 1 (MAPK8IP1), mRNA, NCBI Reference Sequence: NM_005456.4 https://www.ncbi.nlm.nih.gov/nuccore/NM_005456.4
5. **Saeed R, Mohammed AK, Saleh SE, Aboulwafa MM, Aboshanab KM and Taneera J.(2023).**Rattus norvegicus mitogen-activated protein kinase 8 interacting protein 1 (Mapk8ip1), mRNA, NCBI Reference Sequence: NM_053777.1, https://www.ncbi.nlm.nih.gov/nuccore/NM_053777.1
6. **El-Sayed,S.E., Abdelaziz,N.A., El-Housseiny,G.S. and Aboshanab,K.M.(2022).**Bacillus toyonensis strain BCT1 16S ribosomal RNA gene, partial sequence, GenBank: OQ071612.1, https://www.ncbi.nlm.nih.gov/nuccore/OQ071612.1
7. **Elshamy,A.A., Saleh,S.E., Aboshanab,K.M., Aboulwafa,M.M. and Hassouna,N.A.(2022).**Klebsiella pneumoniae strain 37.AK plasmid pNDMKP37, complete sequence, NCBI Reference Sequence: NZ_OK623716.1, https://www.ncbi.nlm.nih.gov/nuccore/NZ_OK623716.1
8. **Elshamy,A.A., Saleh,S.E., Aboshanab,K.M., Aboulwafa,M.M. and Hassouna,N.A.(2022).**Klebsiella pneumoniae strain 37.AK plasmid pNDMKP37, complete sequence, GenBank: OK623716.1. https://www.ncbi.nlm.nih.gov/nuccore/OK623716.1
9. **Morgan,R.N., Saleh,S.E., Aboshanab,K.M. and Farrag,H.A.(2022).** Pseudomonas aeruginosa strain PA 1 exotoxin A (ETA) gene, partial cds, GenBank: MZ851972.1. https://www.ncbi.nlm.nih.gov/nuccore/MZ851972.1
10. **Morgan,R.N., Saleh,S.E., Aboshanab,K.M. and Farrag,H.A.(2021).**Pseudomonas aeruginosa strain isolate 16 16S ribosomal RNA gene, partial sequence.GenBank: MZ713414.1. https://www.ncbi.nlm.nih.gov/nuccore/MZ713414.1
11. **Morgan,R.N., Saleh,S.E., Aboshanab,K.M. and Farrag,H.A.(2021).**Pseudomonas aeruginosa strain isolate 22 16S ribosomal RNA gene, partial sequence. GenBank: MZ713413.1. https://www.ncbi.nlm.nih.gov/nuccore/MZ713413.1

12. **Morgan,R.N., Saleh,S.E., Aboshanab,K.M. and Farrag,H.A.(2021).**Pseudomonas aeruginosa strain isolate 39 16S ribosomal RNA gene, partial sequence, GenBank: MZ713410.1. https://www.ncbi.nlm.nih.gov/nuccore/MZ713410.1

13. **Morgan,R.N., Saleh,S.E., Aboshanab,K.M. and Farrag,H.A.(2021).**Pseudomonas aeruginosa strain isolate 1 16S ribosomal RNA gene, partial sequence. GenBank: MZ713405.1 https://www.ncbi.nlm.nih.gov/nuccore/MZ713405.1

14. **Elhusseiny,S.M., El-Mahdy,T.S., Elhusseiny,S.M., El-Mahdy,T.S., Elleboudy,N.S., Farag,M.M. and Aboshanab,K.M.(2021).** Agaricus bisporus isolate AB003 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene, complete sequence; and internal transcribed spacer 2, partial sequence, GenBank: MZ642282.1. https://www.ncbi.nlm.nih.gov/nuccore/MZ642282.1

15. **Elhusseiny,S.M., El-Mahdy,T.S., Elhusseiny,S.M., El-Mahdy,T.S., Elleboudy,N.S., Farag,M.M. and Aboshanab,K.M.(2021).** Lentinus sajor-caju isolate LS002 small subunit ribosomal RNA gene, partial sequence; internal transcribed spacer 1, 5.8S ribosomal RNA gene, and internal transcribed spacer 2, complete sequence; and large subunit ribosomal RNA gene, partial sequence, GenBank: MZ642259.1, https://www.ncbi.nlm.nih.gov/nuccore/MZ642259.1

16. **Elhusseiny,S.M., El-Mahdy,T.S., Elleboudy,N.S., Farag,M.M., Aboshanab,K.M. and Yassein,M.A.(2021).** Pleurotus columbinus strain PC001 small subunit ribosomal RNA gene, partial sequence; internal transcribed spacer 1, 5.8S ribosomal RNA gene, and internal transcribed spacer 2, complete sequence; and large subunit ribosomal RNA gene, partial sequence. GenBank: MZ642245.1. https://www.ncbi.nlm.nih.gov/nuccore/MZ642245.1

17. **Abdelaziz,S.M., Aboshanab,K.M., Yassien,M.A. and Hassouna,N.A.(2021).** Pseudomonas aeruginosa strain N143 verona integron encoded metallo-beta-lactamase VIM-28 gene, partial cds, GenBank: MW219607.1. https://www.ncbi.nlm.nih.gov/nuccore/MW219607.1

18. **Abuzaid,A.S., Yassien,M.A., Elissawy,A.M. and Aboshanab,K.M.(2021).** Streptomyces variabilis strain S19 16S ribosomal RNA gene, partial sequence, GenBank: MW091521.1. https://www.ncbi.nlm.nih.gov/nuccore/MW091521.1

19. **Mabrouk,S.S., Abdellatif,G.R., El-Ansary,M.R., Aboshanab,K.M. and Ragab,Y.M. (2020).**Klebsiella pneumoniae subsp. pneumoniae strain K89 OXA family beta-lactamase (blaOXA) gene, partial cds, GenBank: MT185946.1. https://www.ncbi.nlm.nih.gov/nuccore/MT185946.1

20. **Mabrouk,S.S., Abdellatif,G.R., El-Ansary,M.R., Aboshanab,K.M. and Ragab,Y.M. (2020.** Klebsiella pneumoniae subsp. pneumoniae strain K92 KPC family beta-lactamase (blaKPC) gene, partial cds, GenBank: MT185945.1, https://www.ncbi.nlm.nih.gov/nuccore/MT185945.1

21. **Mabrouk,S.S., Abdellatif,G.R., El-Ansary,M.R., Aboshanab,K.M. and Ragab,Y.M. (2020).**Acinetobacter baumannii strain G20 VIM family beta-lactamase (blaVIM) gene, partial cds, GenBank: MT185944.1, https://www.ncbi.nlm.nih.gov/nuccore/MT185944.1

22. **Kamel,N.A., El-Tayeb,W.N., El-Ansary,M.R., Mansour,M.T. and Aboshanab,K.M.(2020).** Klebsiella pneumoniae subsp. pneumoniae strain KP188 class D OXA-48 carbapenemase (blaOXA) gene, partial cds, GenBank: MH986336.1. https://www.ncbi.nlm.nih.gov/nuccore/MH986336.1

23. **Kamel,N.A., El-Tayeb,W.N., El-Ansary,M.R., Mansour,M.T. and Aboshanab,K.M.(2020)**.Klebsiella pneumoniae subsp. pneumoniae strain KP189 class D OXA-48 carbapenemase (blaOXA) gene, partial cds, GenBank: MH986335.1. https://www.ncbi.nlm.nih.gov/nuccore/MH986335.1

24. **Kamel,N.A., El-Tayeb,W.N., El-Ansary,M.R., Mansour,M.T. and Aboshanab,K.M.(2020).** Klebsiella pneumoniae subsp. pneumoniae strain KP192 class D OXA-48 carbapenemase (blaOXA) gene, partial cds, GenBank: MH986334.1. https://www.ncbi.nlm.nih.gov/nuccore/MH986334.1

25. **Hamed,S.M., Elkhatib,W.F., El-Mahallawy,H.A., Helmy,M.M., Ashour,M.S. and Aboshanab,K.M.A.(2020).** Pseudomonas aeruginosa strain S205b DNA topoisomerase IV subunit A (parC) gene, partial cds, GenBank: MG242343.1. https://www.ncbi.nlm.nih.gov/nuccore/MG242343.1

26. **Hamed,S.M., Elkhatib,W.F., El-Mahallawy,H.A., Helmy,M.M., Ashour,M.S. and Aboshanab,K.M.A.(2020).**Klebsiella pneumoniae subsp. pneumoniae strain S116 DNA topoisomerase IV subunit A (parC) gene, partial cds, GenBank: MG242341.1. https://www.ncbi.nlm.nih.gov/nuccore/MG242341.1

27. **Hamed,S.M., Elkhatib,W.F., El-Mahallawy,H.A., Helmy,M.M., Ashour,M.S. and Aboshanab,K.M.A.(2020).**Escherichia coli strain S26 DNA topoisomerase IV subunit A (parC) gene, partial cds, GenBank: MG242340.1. https://www.ncbi.nlm.nih.gov/nuccore/MG242340.1

28. **Hamed,S.M., Elkhatib,W.F., El-Mahallawy,H.A., Helmy,M.M., Ashour,M.S. and Aboshanab,K.M.A.(2020).**Klebsiella pneumoniae subsp. pneumoniae strain S141 DNA gyrase subunit A (gyrA) gene, partial cds, GenBank: MG242342.1. https://www.ncbi.nlm.nih.gov/nuccore/MG242342.1

29. **Hamed,S.M., Elkhatib,W.F., El-Mahallawy,H.A., Helmy,M.M., Ashour,M.S. and Aboshanab,K.M.A.(2020)**Acinetobacter baumannii strain S251b DNA gyrase subunit A (gyrA) gene, partial cds, GenBank: MG198063.1, https://www.ncbi.nlm.nih.gov/nuccore/MG198063.1

30. **Hamed,S.M., Elkhatib,W.F., El-Mahallawy,H.A., Helmy,M.M., Ashour,M.S. and Aboshanab,K.M.A.(2020)**Pseudomonas aeruginosa strain S205b DNA gyrase subunit A (gyrA) gene, partial cds, GenBank: MG198062.1. https://www.ncbi.nlm.nih.gov/nuccore/MG198062.1

31. **Hamed,S.M., Elkhatib,W.F., El-Mahallawy,H.A., Helmy,M.M., Ashour,M.S. and Aboshanab,K.M.A.(2020)** Proteus mirabilis strain S254b DNA gyrase subunit A (gyrA) gene, partial cds, GenBank: MG198061.1. https://www.ncbi.nlm.nih.gov/nuccore/MG198061.1

32. **Hamed,S.M., Elkhatib,W.F., El-Mahallawy,H.A., Helmy,M.M., Ashour,M.S. and Aboshanab,K.M.A.(2020)** Klebsiella pneumoniae subsp. pneumoniae strain S304 DNA gyrase subunit A (gyrA) gene, partial cds, GenBank: MG198060.1. https://www.ncbi.nlm.nih.gov/nuccore/MG198060.1

33. **Hamed,S.M., Elkhatib,W.F., El-Mahallawy,H.A., Helmy,M.M., Ashour,M.S. and Aboshanab,K.M.A.(2020)** Klebsiella pneumoniae subsp. pneumoniae strain S116 DNA gyrase subunit A (gyrA) gene, partial cds, GenBank: MG198059.1. https://www.ncbi.nlm.nih.gov/nuccore/MG198059.1

34. **Hamed,S.M., Elkhatib,W.F., El-Mahallawy,H.A., Helmy,M.M., Ashour,M.S. and Aboshanab,K.M.A.(2020)**Acinetobacter baumannii strain S284 topoisomerase IV subunit A (parC) gene, partial cds, GenBank: MG753557.1. https://www.ncbi.nlm.nih.gov/nuccore/MG753557.1

35. **Hamed,S.M., Elkhatib,W.F., El-Mahallawy,H.A., Helmy,M.M., Ashour,M.S. and Aboshanab,K.M.A.(2020)**Acinetobacter baumannii strain S251b topoisomerase IV subunit A (parC) gene, partial cds,GenBank: MG753556.1. https://www.ncbi.nlm.nih.gov/nuccore/MG753556.1

36. **Hamed,S.M., Elkhatib,W.F., El-Mahallawy,H.A., Helmy,M.M., Ashour,M.S. and Aboshanab,K.M.A.(2020)** Escherichia coli isolate 82 DNA gyrase subunit A gene, partial cds, GenBank: MF991462.1. https://www.ncbi.nlm.nih.gov/nuccore/MF991462.1

37. **Hamed,S.M., Elkhatib,W.F., El-Mahallawy,H.A., Helmy,M.M., Ashour,M.S. and Aboshanab,K.M.A.(2020**) Escherichia coli isolate 26 DNA gyrase subunit A gene, partial cds, GenBank: MF991461.1. https://www.ncbi.nlm.nih.gov/nuccore/MF991461.1

38. **Hamed,S.M., Elkhatib,W.F., El-Mahallawy,H.A., Helmy,M.M., Ashour,M.S. and Aboshanab,K.M.A.(2020)** Klebsiella pneumoniae subsp. pneumoniae strain S3 DNA gyrase subunit A (gyrA) gene, partial cds,GenBank: MG471385.1. https://www.ncbi.nlm.nih.gov/nuccore/MG471385.1

39. **Hamed,S.M., Elkhatib,W.F., El-Mahallawy,H.A., Helmy,M.M., Ashour,M.S. and Aboshanab,K.M.A.(2020**) Klebsiella pneumoniae subsp. pneumoniae strain S117 DNA gyrase subunit A gene, partial cds, GenBank: MG014723.1, https://www.ncbi.nlm.nih.gov/nuccore/MG014723.1

40. **El-Sayed,S.E., AbdelAziz,N.A., El-Housseiny,G.S. and Aboshanab, K.A. (2020).** Alcaligenes faecalis strain F2 16S ribosomal RNA gene. GenBank: MT332429. https://www.ncbi.nlm.nih.gov/nuccore/MT332429.1

41. **El-Sayed,S.E., AbdelAziz,N.A., El-Housseiny,G.S. and Aboshanab,K.A.(2019).** Lysinibacillus sp. strain S6 16S ribosomal RNA gene, partial sequence. GenBank: MK212927.1 https://www.ncbi.nlm.nih.gov/nuccore/MK212927.1

42. **Abdelaziz,S.M., Aboshanab,K.M., Yassien,M.A. and Hassouna,N.A. (2019**) Klebsiella pneumoniae subsp. pneumoniae strain S1 AAC(6')-Ib family aminoglycoside 6'-N-acetyltransferase (AAC(6')-Ib) gene, partial cds, GenBank: MK493336.1. https://www.ncbi.nlm.nih.gov/nuccore/MK493336.1

43. **Abdelaziz,S.M., Aboshanab,K.M., Yassien,M.A. and Hassouna,N.A. (2019**)Klebsiella pneumoniae subsp. pneumoniae strain N44 SHV family class A beta-lactamase (blaSHV) gene, partial cds, GenBank: MK482385.1 https://www.ncbi.nlm.nih.gov/nuccore/MK482385.1

44. **Abdelaziz,S.M., Aboshanab,K.M., Yassien,M.A. and Hassouna,N.A. (2019**) Klebsiella pneumoniae subsp. pneumoniae strain N6 multidrug efflux RND transporter periplasmic adaptor subunit AcrA gene, partial cds, GenBank: MK468797.1 https://www.ncbi.nlm.nih.gov/nuccore/MK468797.1

45. **Abdelaziz,S.M., Aboshanab,K.M., Yassien,M.A. and Hassouna,N.A. (2019**) Klebsiella pneumoniae subsp. pneumoniae strain N76 multidrug efflux RND transporter periplasmic adaptor subunit AcrA gene, partial cds, GenBank: MK468796.1 https://www.ncbi.nlm.nih.gov/nuccore/MK468796.1

46. **Abdelaziz,S.M., Aboshanab,K.M., Yassien,M.A. and Hassouna,N.A. (2019**) Klebsiella pneumoniae subsp. pneumoniae strain N43 OXA family beta-lactamase (blaOXA) gene, partial cds, GenBank: MK468795.1.
https://www.ncbi.nlm.nih.gov/nuccore/MK468795.1

47. **Abdelaziz,S.M., Aboshanab,K.M., Yassien,M.A. and Hassouna,N.A. (2019**) Klebsiella pneumoniae strain N38 TEM family extended spectrum beta-lactamase (blaTEM) gene, partial cds,GenBank: MK341127.1.
https://www.ncbi.nlm.nih.gov/nuccore/MK341127.1

48. **Abdelaziz,S.M., Aboshanab,K.M., Yassien,M.A. and Hassouna,N.A. (2019**) Klebsiella pneumoniae strain N38 CTX-M family extended spectrum beta-lactamase (blaCTX-M) gene, partial cds, GenBank: MK341126.1.
https://www.ncbi.nlm.nih.gov/nuccore/MK341126.1

49. **Abdelaziz,S.M., Aboshanab,K.M., Yassien,M.A. and Hassouna,N.A. (2019**) Staphylococcus aureus strain S32 MecA (mecA) gene, partial cds, GenBank: MK341125.1
https://www.ncbi.nlm.nih.gov/nuccore/MK341125.1

50. **Abdelaziz,S.M., Aboshanab,K.M., Yassien,M.A. and Hassouna,N.A. (2019**) Pseudomonas aeruginosa strain S20 MexA gene, partial cds,nGenBank: MK341124.1.
https://www.ncbi.nlm.nih.gov/nuccore/MK341124.1

51. **Abdelaziz,S.M., Aboshanab,K.M., Yassien,M.A. and Hassouna,N.A. (2019**) Klebsiella pneumoniae strain N83 OXA family carbapenem-hydrolyzing class D beta-lactamase (blaOXA) gene, complete cds,GenBank: MK341123.1
https://www.ncbi.nlm.nih.gov/nuccore/MK341123.1

52. **Abdelaziz,S.M., Aboshanab,K.M., Yassien,M.A. and Hassouna,N.A. (2019**) Staphylococcus aureus strain N141 MepA (mepA) gene, partial cds,GenBank: MK341122.1 https://www.ncbi.nlm.nih.gov/nuccore/MK341122.1

53. **Abdelaziz,S.M., Aboshanab,K.M., Yassien,M.A. and Hassouna,N.A. (2019**) Klebsiella pneumoniae subsp. pneumoniae strain N76 NDM family subclass B1 metallo-beta-lactamase gene, complete cds, GenBank: MK341121.1.
https://www.ncbi.nlm.nih.gov/nuccore/MK341121.1

54. **Abdelaziz,S.M., Aboshanab,K.M., Yassien,M.A. and Hassouna,N.A. (2019**) Klebsiella pneumoniae subsp. pneumoniae strain N62 New Delhi metallo-beta-lactamase-6 (blaNDM) gene, blaNDM-6 allele, partial cds,GenBank: MH971065.1
https://www.ncbi.nlm.nih.gov/nuccore/MH971065.1?report=genbank

55. **Kamel,N.A., El-Tayeb,W.N., Mansour,M.T. and Aboshanab,K.M.(2018)** Klebsiella pneumoniae subsp. pneumoniae strain KP188 class D OXA-48 carbapenemase (blaOXA) gene, partial cds, GenBank: MH986336.1.
https://www.ncbi.nlm.nih.gov/nuccore/MH986336.1

56. **Kamel,N.A., El-Tayeb,W.N., Mansour,M.T. and Aboshanab,K.M.(2018)** Klebsiella pneumoniae subsp. pneumoniae strain KP189 class D OXA-48 carbapenemase (blaOXA) gene, partial cds, GenBank: MH986335.1.
https://www.ncbi.nlm.nih.gov/nuccore/MH986335.1

57. **Kamel,N.A., El-Tayeb,W.N., Mansour,M.T. and Aboshanab,K.M.(2018)** Klebsiella pneumoniae subsp. pneumoniae strain KP192 class D OXA-48 carbapenemase (blaOXA) gene, partial cds, GenBank: MH986334.1.
https://www.ncbi.nlm.nih.gov/nuccore/MH986334.1

58. **Elkholy,Y.N., Aboshanab,K.M., Elkhatib,W.F., Aboulwafa,M.M. and Hassouna, N.A.(2018).**Streptomyces manipurensis strain H21 16S ribosomal RNA gene, partial sequence, GenBank: MH036744.1.
https://www.ncbi.nlm.nih.gov/nuccore/MH036744.1

59. **Elkholy,Y.N., Aboshanab,K.M., Elkhatib,W.F., Aboulwafa,M.M. and Hassouna, N.A.(2018).** Streptomyces fulvissimus strain W2 16S ribosomal RNA gene, partial sequence,GenBank: MH036743.1
https://www.ncbi.nlm.nih.gov/nuccore/MH036743.1

60. **Hamed,S.M., Aboshanab,K.M.A., El-Mahallawy,H.A., Helmy,M.M., Ashour, M.S.E. and ElKhatib,W.F.(2018).**Pseudomonas aeruginosa strain S205b DNA topoisomerase IV subunit A (parC) gene, partial cds**, GenBank: MG242343.1**

https://www.ncbi.nlm.nih.gov/nuccore/MG242343.1

61. **Hamed,S.M., Aboshanab,K.M.A., El-Mahallawy,H.A., Helmy,M.M., Ashour, M.S.E. and ElKhatib,W.F.(2018).** Klebsiella pneumoniae subsp. pneumoniae strain S116 DNA topoisomerase IV subunit A (parC) gene, partial cdss, GenBank: GenBank: MG242341.1**https://www.ncbi.nlm.nih.gov/nuccore/MG242341.1**

62. **Hamed,S.M., Aboshanab,K.M.A., El-Mahallawy,H.A., Helmy,M.M., Ashour, M.S.E. and ElKhatib,W.F.(2018).** Escherichia coli strain S26 DNA topoisomerase IV subunit A (parC) gene, partial cds, GenBank: MG242340.1

https://www.ncbi.nlm.nih.gov/nuccore/MG242340.1

63. **Hamed,S.M., Aboshanab,K.M.A., El-Mahallawy,H.A., Helmy,M.M., Ashour, M.S.E. and ElKhatib,W.F.(2018).** Klebsiella pneumoniae subsp. pneumoniae strain S141 DNA gyrase subunit A (gyrA) gene, partial cds, GenBank: MG242342.1

https://www.ncbi.nlm.nih.gov/nuccore/MG242342.1

64. **Hamed,S.M., Aboshanab,K.M.A., El-Mahallawy,H.A., Helmy,M.M., Ashour, M.S.E. and ElKhatib,W.F.(2018).** Acinetobacter baumannii strain S251b DNA gyrase subunit A (gyrA) gene, partial cds, GenBank: MG198063.1

https://www.ncbi.nlm.nih.gov/nuccore/MG198063.1

65. **Hamed,S.M., Aboshanab,K.M.A., El-Mahallawy,H.A., Helmy,M.M., Ashour, M.S.E. and ElKhatib,W.F.(2018).** Pseudomonas aeruginosa strain S205b DNA gyrase subunit A (gyrA) gene, partial cds, GenBank: MG198062.1

https://www.ncbi.nlm.nih.gov/nuccore/MG198062.1

66. **Hamed,S.M., Aboshanab,K.M.A., El-Mahallawy,H.A., Helmy,M.M., Ashour, M.S.E. and ElKhatib,W.F.(2018**). Proteus mirabilis strain S254b DNA gyrase subunit A (gyrA) gene, partial cds, GenBank: MG198061.1

https://www.ncbi.nlm.nih.gov/nuccore/MG198061.1

67. **Hamed,S.M., Aboshanab,K.M.A., El-Mahallawy,H.A., Helmy,M.M., Ashour, M.S.E. and ElKhatib,W.F.(2018**). Klebsiella pneumoniae subsp. pneumoniae strain S304 DNA gyrase subunit A (gyrA) gene, partial cds, GenBank: MG198060.1

https://www.ncbi.nlm.nih.gov/nuccore/MG198060.1

68. **Hamed,S.M., Aboshanab,K.M.A., El-Mahallawy,H.A., Helmy,M.M., Ashour, M.S.E. and ElKhatib,W.F.(2018**). Klebsiella pneumoniae subsp. pneumoniae strain S116 DNA gyrase subunit A (gyrA) gene, partial cds, GenBank: MG198059.1

https://www.ncbi.nlm.nih.gov/nuccore/MG198059.1

69. **Hamed,S.M., Aboshanab,K.M.A., El-Mahallawy,H.A., Helmy,M.M., Ashour, M.S.E. and ElKhatib,W.F.(2018).** Acinetobacter baumannii strain S305 topoisomerase IV subunit A (parC) gene, partial cds, GenBank: MG753558.1

https://www.ncbi.nlm.nih.gov/nuccore/MG753558.1

70. **Hamed,S.M., Aboshanab,K.M.A., El-Mahallawy,H.A., Helmy,M.M., Ashour, M.S.E. and ElKhatib,W.F.(2018).** Acinetobacter baumannii strain S284 topoisomerase IV subunit A (parC) gene, partial cds, GenBank: MG753557.1

https://www.ncbi.nlm.nih.gov/nuccore/MG753557.1

71. **Hamed,S.M., Aboshanab,K.M.A., El-Mahallawy,H.A., Helmy,M.M., Ashour, M.S.E. and ElKhatib,W.F.(2018).** Acinetobacter baumannii strain S251b topoisomerase IV subunit A (parC) gene, partial cds, GenBank: MG753556.1

https://www.ncbi.nlm.nih.gov/nuccore/MG753556.1

72. **Hamed,S.M., Aboshanab,K.M.A., El-Mahallawy,H.A., Helmy,M.M., Ashour, M.S.E. and ElKhatib,W.F.(2018).** Escherichia coli isolate 82 DNA gyrase subunit A gene, partial cds, GenBank: MF991462.1

https://www.ncbi.nlm.nih.gov/nuccore/MF991462.1

73. **Hamed,S.M., Aboshanab,K.M.A., El-Mahallawy,H.A., Helmy,M.M., Ashour, M.S.E. and ElKhatib,W.F.(2018).** Escherichia coli isolate 26 DNA gyrase subunit A gene, partial cds, GenBank: MF991461.1

https://www.ncbi.nlm.nih.gov/nuccore/MF991461.1

74. **Hamed,S.M., Aboshanab,K.M.A., El-Mahallawy,H.A., Helmy,M.M., Ashour, M.S.E. and ElKhatib,W.F.(2018).** Klebsiella pneumoniae subsp. pneumoniae strain S3 DNA gyrase subunit A (gyrA) gene, partial cds, GenBank: MG471385.1

https://www.ncbi.nlm.nih.gov/nuccore/MG471385.1

75. **Hamed,S.M., Aboshanab,K.M.A., El-Mahallawy,H.A., Helmy,M.M., Ashour, M.S.E. and ElKhatib,W.F.(2018).** Klebsiella pneumoniae subsp. pneumoniae strain S117 DNA gyrase subunit A gene, partial cds, GenBank: MG014723.1

https://www.ncbi.nlm.nih.gov/nuccore/MG014723.1

76. **Tohamy, S. T., Aboshanab,K. M., El-Mahalawy, H.A. and Afifi, S. S. .(2017).** Escherichia coli strain S25 AAC6'-Ib- 6'-N-acetyltransferase gene, partial cds, GenBank: KY612441.1

https://www.ncbi.nlm.nih.gov/nuccore/KY612441.1

77. **Tohamy, S. T., Aboshanab,K. M., El-Mahalawy, H.A. and Afifi, S. S. .(2017).** Acinetobacter baumannii strain S22 6'-N-acetyltransferase gene, partial cds, GenBank: KY612440.1

https://www.ncbi.nlm.nih.gov/nuccore/KY612440.1

78. **Tohamy, S. T., Aboshanab,K. M., El-Mahalawy, H.A. and Afifi, S. S. .(2017).** Klebsiella pneumoniae subsp. pneumoniae strain S18 beta-lactamase CTX-M-15 gene, partial cds, GenBank: KY612439.1

https://www.ncbi.nlm.nih.gov/nuccore/KY612439.1

79. **Tohamy, S. T., Aboshanab,K. M., El-Mahalawy, H.A. and Afifi, S. S. .(2017).** Acinetobacter baumannii strain S16 TEM-1 beta-lactamase gene, complete cds, GenBank: KY612438.1

https://www.ncbi.nlm.nih.gov/nuccore/KY612438.1

80. **Tohamy, S. T., Aboshanab,K. M., El-Mahalawy, H.A. and Afifi, S. S. .(2017).** Escherichia coli strain S11 TEM-1 beta-lactamase gene, complete cds, GenBank: KY612437.1

https://www.ncbi.nlm.nih.gov/nuccore/KY612437.1

81. **Mansour,N.M., Elkhatib,W.F., Aboshanab,K.M. and Bahr,M.M. (2017).** Enterococcus faecium strain NM1015 16S ribosomal RNA gene, partial sequence, GenBank: KU365168.1

https://www.ncbi.nlm.nih.gov/nuccore/KU365168.1

82. **Mansour,N.M., Elkhatib,W.F., Aboshanab,K.M. and Bahr,M.M. (2017).** Enterococcus faecalis strain NM915 16S ribosomal RNA gene, partial sequence, GenBank: KU365167.1

https://www.ncbi.nlm.nih.gov/nuccore/KU365167.1

83. **Mansour,N.M., Elkhatib,W.F., Aboshanab,K.M. and Bahr,M.M. (2017).** Enterococcus faecalis strain NM815 16S ribosomal RNA gene, partial sequence, GenBank: KU365166.1

https://www.ncbi.nlm.nih.gov/nuccore/KU365166.1

84. **Elsayed,N.S., Aboshanab,K.M., Yassien,M.A. and Hassouna,N.A (2016).** *Azomonas macrocytogenes* strain P173 poly(R)-hydroxyalkanoic acid synthase class III (phaC) gene, partial cds. Accession code:. http://www.ncbi.nlm.nih.gov/nuccore/KX358863

85. **Aboshanab,K.M., Schmidt-Beissner,H., Wehmeier,U.F., Welzel,K., Vente,A. and Piepersberg,W.(2016)** Streptoalloteichus hindustanus type strain:DSM 44523 kamB gene for 16S rRNA (adenine(1408)-N(1))-methyltransferase KamB, complete CDS,NCBI Reference Sequence: NG_050562.1. https://www.ncbi.nlm.nih.gov/nuccore/NG_050562.1

86. **Aboshanab,K.M., Schmidt-Beissner,H., Wehmeier,U.F., Welzel,K., Vente,A. and Piepersberg,W.(2016)**Streptoalloteichus tenebrarius type strain: DSM 40477 kamB gene for 16S rRNA (adenine(1408)-N(1))-methyltransferase KamB, complete CDS, NCBI Reference Sequence: NG_050561.1 https://www.ncbi.nlm.nih.gov/nuccore/NG_050561.1

87. **Aboshanab,K.M., Schmidt-Beissner,H., Wehmeier,U.F., Welzel,K., Vente,A. and Piepersberg,W.(2016)** Streptomyces ribosidificus NRRL B-11466 aph(3')-Vb gene for aminoglycoside O-phosphotransferase APH(3')-Vb, complete CDS, NCBI Reference Sequence: NG_047453.1. https://www.ncbi.nlm.nih.gov/nuccore/NG_047453.1

88. **Aboshanab,K.M., Schmidt-Beissner,H., Wehmeier,U.F., Welzel,K., Vente,A. and Piepersberg,W.(2011)** Streptoalloteichus tenebrarius tobramycin biosynthesis gene cluster region, type strain DSM 40477T, GenBank: AJ810851.1. https://www.ncbi.nlm.nih.gov/nuccore/AJ810851.1

89. **Elsayed,N.S., Aboshanab,K.M., Yassien,M.A. and Hassouna,N.A (2016).** *Acinetobacter baumannii* strain P39 poly(R)-hydroxyalkanoic acid synthase (phaC) gene, partial cds. Accession code: KX358864.http://www.ncbi.nlm.nih.gov/nuccore/KX358864

90. **Elsayed,N.S., Aboshanab,K.M., Yassien,M.A. and Hassouna,N.A (2016).** *Bacillus cereus* strain P83 poly(R)-hydroxyalkanoic acid synthase (phaC) gene, partial cds.Accession code: KX358865. http://www.ncbi.nlm.nih.gov/nuccore/KX358865

91. **Tohamy,S.T., Aboshanab,K.M., El-Mahalawy,H.A. and Afifi,S.S. (2016).** *Klebsiella pneumoniae subsp. pneumoniae* strain S6 class A beta-lactamase SHV-1 (blaSHV) gene, blaSHV-1 allele, partial cds. Accession code: KX580955 http://www.ncbi.nlm.nih.gov/nuccore/KX580955

92. **Tohamy,S.T., Aboshanab,K.M., El-Mahalawy,H.A. and Afifi,S.S. (2016)** *Acinetobacter baumannii* strain S10 class A beta-lactamase SHV-1 (blaSHV) gene, blaSHV-1 allele, partial cds. Accession code: KX580956 http://www.ncbi.nlm.nih.gov/nuccore/KX580956

93. **Abdelkader,M.M., Aboshanab,K.M., El-Ashry,M.A. and Aboulwafa,M.M. (2016).** *Acinetobacter baumannii* strain S888 6'-N-acetyltransferase Aac6' gene, partial cds. Accession code: KX214662. http://www.ncbi.nlm.nih.gov/nuccore/KX214662

94. **Abdelkader,M.M., Aboshanab,K.M., El-Ashry,M.A. and Aboulwafa,M.M.(2016).** *Klebsiella pneumoniae subsp. pneumoniae* strain S907 extended spectrum beta-lactmase CTX-M-15 (blaCTX-M) gene, blaCTX-M-15allele, partial cds. Accession code KX214663. http://www.ncbi.nlm.nih.gov/nuccore/KX214663

95. **Abdelkader,M.M., Aboshanab,K.M., El-Ashry,M.A. and Aboulwafa,M.M. (2016)**. Klebsiella pneumoniae subsp. pneumoniae strain S907 extended spectrum beta-lactmase TEM-1 (blaTEM) gene, blaTEM-1 allele, partial cds. Accession code KX214665. http://www.ncbi.nlm.nih.gov/nuccore/KX214665

96. **Abdelkader,M.M., Aboshanab,K.M., El-Ashry,M.A. and Aboulwafa,M.M.(2016)** *Klebsiella pneumoniae subsp. pneumoniae* strain S907 extended spectrum beta lactmase SHV-1 (blaSHV) gene, blaSHV-1 allele, partial cds. Accession code KX214664. http://www.ncbi.nlm.nih.gov/nuccore/KX214664

97. **Sara E. Saleh, Aboshanab,K.M., Abouelwafa,M.M. and Hassouna,N.A (2016).** AraC family transcriptional regulator of *Pseudomonas aeruginosa* isolate P14. Accession code**:** KT693035 http://www.ncbi.nlm.nih.gov/nuccore/KT693035

98. **Sara E. Saleh, Aboshanab,K.M., Abouelwafa,M.M. and Hassouna,N.A (2016).** Acyl-homoserine-lactone synthase of *Pseudomonas aeruginosa* isolate P14. Accession code**:** KT693033, http://www.ncbi.nlm.nih.gov/nuccore/KT693033

99. **Sara E. Saleh, Aboshanab,K.M., Abouelwafa,M.M. and Hassouna,N.A (2016).** 2-heptyl-3-hydroxy-4(1H)-quinolone synthase of *Pseudomonas aeruginosa* isolate P14. Accession code**:** KT693034, http://www.ncbi.nlm.nih.gov/nuccore/KT693034

100. **Aboshanab,K.M. and Elshafey,M.M (2015).** *Bacillus circulans* strain ATCC 21558 MerR family transcriptional regulator and major facilitator transporter genes, complete cds. Accession number, KR049081. GI:927348252, . http://www.ncbi.nlm.nih.gov/nuccore/KR049081

101. AbdelAziz,S.M., Abouelwafa,M.M., Aboshanab,K.M. and Hassouna,N.A.(2014) *Escherichia coli* plasmid pECAC-10, aminoglycoside-(6')-N-acetyltransferase AAC(6')-Ib (aac6') gene, partial cds. Accession number, KM052219, GI:686689811. http://www.ncbi.nlm.nih.gov/nuccore/KM052219.1

102. AbdelAziz,S.M., Abouelwafa,M.M., Aboshanab,K.M. and Hassouna,N.A.(2014) *Klebsiella pneumoniae subsp. pneumoniae* plasmid pKPS29 TEM-1 beta-lactamase gene, partial cds partial cds. Accession number, KM052218.1 GI:686689802. http://www.ncbi.nlm.nih.gov/nuccore/KM052218.1

103. AbdelAziz,S.M., Abouelwafa,M.M., Aboshanab,K.M. and Hassouna,N.A.(2014 *Klebsiella pneumoniae subsp. pneumoniae* plasmid pKPS29 beta-lactamase enzyme CTX-M-15 gene, partial cds.. Accession number, KM052216.1 GI:686689785, http://www.ncbi.nlm.nih.gov/nuccore/KM052216

104. AbdelAziz,S.M., Abouelwafa,M.M., Aboshanab,K.M. and Hassouna,N.A.(2014 *Klebsiella pneumoniae subsp. pneumoniae* plasmid pKPS29 beta-lactamase enzyme SHV-1 gene, partial cds.. Accession number, KM052217.1 GI:686689794, http://www.ncbi.nlm.nih.gov/nuccore/KM052217

105. Shaker,A., Aboshanab,K.M., Abouelwafa,M.M. and Hassouna,N.A (2014) *Escherichia coli* strain R10 plasmid 23S rRNA methylase (*erm*B) gene, partial cds. Accession number, KJ710358. http://www.ncbi.nlm.nih.gov/nuccore/KJ710358

106. Shaker,A., Abouelwafa,M.M., Aboshanab,K.M. and Hassouna,N.A (2014) *Escherichia coli* strain R10 macrolide 2'-phosphotransferase I (*mph*2) gene, partial cds, Accession number, KJ710359. http://www.ncbi.nlm.nih.gov/nuccore/KJ710359

107. Shaker,A., Aboshanab,K.M., Abouelwafa,M.M. and Hassouna,N.A (2014) *Staphylococcus aureus* strain S78 erythromycin resistance ATP-binding protein (*msr*A) gene, partial cds KJ710361. http://www.ncbi.nlm.nih.gov/nuccore/KJ710361

108. Shaker,A., Abouelwafa,M.M., Aboshanab,K.M. and Hassouna,N.A (2014) *Escherichia coli* strain S45 macrolide 2'-phosphotransferase I (*mph*2) gene, partial cds. Accession number KJ710360. http://www.ncbi.nlm.nih.gov/nuccore/KJ710360

109. Shaker,A., Aboshanab,K.M., Abouelwafa,M.M. and Hassouna,N.A (2014) Plasmid-mediated erythromycin esterase (pERES70) isolated from *Escherichia coli* isolate S70, Accession number,KJ652913. **http://www.ncbi.nlm.nih.gov/nuccore/KJ652913**

110. Sakr,M.M., Aboshanab,K.M., Abouelwafa,M.M. and Hassouna,N.A (2014) *Streptomyces minutiscleroticus* strain St62 16S ribosomal RNA gene, partial sequence. Accession number, KJ652914. **http://www.ncbi.nlm.nih.gov/nuccore/657085181**

111. AbuZaid,A.S., Abouelwafa,M.M., Hafez,M.M., Aboshanab,K.M. and Hassouna,N.A. (2014) *Streptomyces parvus* strain S86 16S ribosomal RNA gene, partial sequence. . Accession number, KJ623765. **http://www.ncbi.nlm.nih.gov/nuccore/KJ623765**

112. AbuZaid,A.S., Abouelwafa,M.M., Hafez,M.M., Aboshanab,K.M. and Hassouna,N.A.(2014) *Streptomyces griseus* strain S131 16S ribosomal RNA gene, partial sequence. Accession number, KJ623766. **http://www.ncbi.nlm.nih.gov/nuccore/KJ623766**

113. Sakr,M.M., Aboshanab,K.M., Abouelwafa,M.M. and Hassouna,N.A.(2013) *Bacillus thuringiensis* strain B16 N-acyl homoserine lactone hydrolase (ahl-1) gene, complete cds, Accession number KF254905. **http://www.ncbi.nlm.nih.gov/nuccore/KF254905**

114. **Sakr,M.M., Aboshanab,K.M., Abouelwafa,M.M. and Hassouna,N.A.(2013)** *Bacillus cereus* strain B58 N-acyl homoserine lactone hydrolase gene, complete cds, Accession number KF254906. **http://www.ncbi.nlm.nih.gov/nuccore/KF254906**

115. **Sakr,M.M., Aboshanab,K.M., Abouelwafa,M.M. and Hassouna,N.A.(2013)** *Bacillus weihenstephanensis* strain B65 AHL-lactonase (ahl-1) gene, complete cds, Accession number KC823046. **http://www.ncbi.nlm.nih.gov/nuccore/KC823046**

116. **Sakr,M.M., Aboshanab,K.M., Abouelwafa,M.M. and Hassouna,N.A.(2013)** *Bacillus cereus* strain B112 N-acyl homoserine lactone hydrolase gene, complete cds, Accession number KF254907. **http://www.ncbi.nlm.nih.gov/nuccore/KF254907**

117. **Sakr,M.M., Aboshanab,K.M., Abouelwafa,M.M. and Hassouna,N.A.(2013)** *Bacillus weihenstephanensis* strain B65 16S ribosomal RNA gene, Accession number KC899665. **http://www.ncbi.nlm.nih.gov/nuccore/KC899665**

118. **Sakr,M.M., Aboshanab,K.M., Abouelwafa,M.M. and Hassouna,N.A.(2013)** *Bacillus cereus* strain B68 N-acyl homoserine lactone hydrolase gene, partial cds, Accession number KF254908. **http://www.ncbi.nlm.nih.gov/nuccore/KF254908**

119. **Elsayed,N.S., Aboshanab,K.M., Aboulwafa,M.M. and Hassouna,N.A.(2013)** *Acinetobacter baumannii* strain P39 16S ribosomal RNA gene, produces poly-hydroxybutyrate (PHB), Accession number KC876036. **http://www.ncbi.nlm.nih.gov/nuccore/KC876036**

120. **Sakr,M.M., Aboshanab,K.M., Abouelwafa,M.M. and Hassouna,N.A.(2013)** *Bacillus cereus* strain B78 N-acyl homoserine lactone hydrolase gene, complete cds, Accession number KF254909. **http://www.ncbi.nlm.nih.gov/nuccore/KF254909**

121. **Elsayed,N.S., Aboshanab,K.M., Aboulwafa,M.M. and Hassouna,N.A.(2013)** *Bacillus cereus* strain P83 16S ribosomal RNA gene, produces poly-hydroxybutyrate (PHB), Accession number KC876035. **http://www.ncbi.nlm.nih.gov/nuccore/KC876035**

122. **Sakr,M.M., Aboshanab,K.M., Abouelwafa,M.M. and Hassouna,N.A.(2013)** *Bacillus cereus* strain B115 N-acyl homoserine lactone hydrolase gene, complete cds, Accession number KF254910. **http://www.ncbi.nlm.nih.gov/nuccore/KF254910**

123. **Elsayed,N.S., Aboshanab,K.M., Aboulwafa,M.M. and Hassouna,N.A.(2013)** *Azomonas macrocytogenes* strain P173 16S ribosomal RNA gene, *Azomonas sp*. isolate P173 16S ribosomal RNA sequence produce biopolymer: beta-hydroxybutyrate, Accession number KC685000. **http://www.ncbi.nlm.nih.gov/nuccore/KC685000**

124. **Kamel,N.A., Aboshanab,K.M., El-Tayeb,W.N. and Aboulwafa,M.M (2012)** *Escherichia coli* strain Harbour Plasmid mediated Beta-lactamase 2 (TEM-1) clone *Escherichia coli*/pECDF16. BankIt1573509; Accession number JX976326. **http://www.ncbi.nlm.nih.gov/nuccore/JX976326**

125. **Kamel,N.A., Aboshanab,K.M., El-Tayeb,W.N. and Aboulwafa,M.M (2012)** Escherichia coli strain harbour extended spectrum Beta-lactamase (SHV-8) clone *Escherichia coli*/pECDF16. BankIt1574169 Accession number: JX976327. **http://www.ncbi.nlm.nih.gov/nuccore/JX976327**

126. **Aboshanab,K.M., Schmidt-Beissner,H., Wehmeier,U.F., Welzel,K., Vente,A. and Piepersberg,W.(2011)** Streptoalloteichus tenebrarius genomic region of the apramycin biosynthesis cluster, type strain DSM 40477T,GenBank: AJ629123.1. https://www.ncbi.nlm.nih.gov/nuccore/AJ629123.1

127. **Aboshanab KM (2010)** Isolation and sequencing of three genes putatively involved in capreomycidine biosynthesis in *Streptomyces ribosidificus*, complete cds | BankIt1394159 HQ327309**.** **http://www.ncbi.nlm.nih.gov/nuccore/HQ327309**

128. **Aboshanab KM (2008)** *Streptomyces rimosus* putative large secreted protein gene, partial cds; and dihydrodipicolinate synthase (dprA) and putative integral membrane protein genes, complete cds gi|184216049|gb|EU617017.1|[184216049]**.** **http://www.ncbi.nlm.nih.gov/nuccore/184216049**

129. **Vente,A., Piepersberg,W., Wehmeier,U., Schmidt-Beissner,H.,Aboshanab, K.M. and Welzel,K. (2006).** Sequence 560 from Patent WO2005095591,GenBank: CS184978.1. https://www.ncbi.nlm.nih.gov/nuccore/CS184978.1

130. **Vente,A., Piepersberg,W., Wehmeier,U., Schmidt-Beissner,H.,Aboshanab, K.M. and Welzel,K. (2006).** Sequence 528 from Patent WO2005095591,GenBank: CS184946.1. https://www.ncbi.nlm.nih.gov/nuccore/CS184946.1

131. **Vente,A., Piepersberg,W., Wehmeier,U., Schmidt-Beissner,H.,Aboshanab, K.M. and Welzel,K. (2006).** Sequence 459 from Patent WO2005095591, GenBank: CS184877.1. https://www.ncbi.nlm.nih.gov/nuccore/CS184877.1

132. **Vente,A., Piepersberg,W., Wehmeier,U., Schmidt-Beissner,H.,Aboshanab, K.M. and Welzel,K. (2006).** Sequence 421 from Patent WO2005095591, GenBank: CS184839.1. https://www.ncbi.nlm.nih.gov/nuccore/CS184839.1

133. **Vente,A., Piepersberg,W., Wehmeier,U., Schmidt-Beissner,H.,Aboshanab, K.M. and Welzel,K. (2006).** Sequence 413 from Patent WO2005095591, GenBank: CS184831.1. https://www.ncbi.nlm.nih.gov/nuccore/CS184831.1

134. **Vente,A., Piepersberg,W., Wehmeier,U., Schmidt-Beissner,H.,Aboshanab, K.M. and Welzel,K. (2006).** Sequence 382 from Patent WO2005095591, GenBank: CS184800.1. https://www.ncbi.nlm.nih.gov/nuccore/CS184800.1

135. **Vente,A., Piepersberg,W., Wehmeier,U., Schmidt-Beissner,H.,Aboshanab, K.M. and Welzel,K. (2006).** Sequence 339 from Patent WO2005095591, GenBank: CS184757.1. https://www.ncbi.nlm.nih.gov/nuccore/CS184757.1

136. **Vente,A., Piepersberg,W., Wehmeier,U., Schmidt-Beissner,H.,Aboshanab, K.M. and Welzel,K. (2006).** Sequence 304 from Patent WO2005095591, GenBank: CS184722.1. https://www.ncbi.nlm.nih.gov/nuccore/CS184722.1

137. **Vente,A., Piepersberg,W., Wehmeier,U., Schmidt-Beissner,H.,Aboshanab, K.M. and Welzel,K. (2006).** Sequence 263 from Patent WO2005095591, GenBank: CS184681.1. https://www.ncbi.nlm.nih.gov/nuccore/CS184681.1

138. **Vente,A., Piepersberg,W., Wehmeier,U., Schmidt-Beissner,H.,Aboshanab, K.M. and Welzel,K. (2006).** Sequence 227 from Patent WO2005095591. GenBank: CS184645.1. https://www.ncbi.nlm.nih.gov/nuccore/CS184645.1

139. **Vente,A., Piepersberg,W., Wehmeier,U., Schmidt-Beissner,H.,Aboshanab, K.M. and Welzel,K. (2006).** Sequence 190 from Patent WO2005095591, GenBank: CS184608.1. https://www.ncbi.nlm.nih.gov/nuccore/CS184608.1

140. **Vente,A., Piepersberg,W., Wehmeier,U., Schmidt-Beissner,H.,Aboshanab, K.M. and Welzel,K. (2006).** Sequence 151 from Patent WO2005095591, GenBank: CS184569.1. https://www.ncbi.nlm.nih.gov/nuccore/CS184569.1

141. **Vente,A., Piepersberg,W., Wehmeier,U., Schmidt-Beissner,H.,Aboshanab, K.M. and Welzel,K. (2006).** Sequence 95 from Patent WO2005095591, GenBank: CS184513.1. https://www.ncbi.nlm.nih.gov/nuccore/CS184513.1

142. **Vente,A., Piepersberg,W., Wehmeier,U., Schmidt-Beissner,H.,Aboshanab, K.M. and Welzel,K. (2006).** Sequence 29 from Patent WO2005095591, GenBank: CS184447.1. https://www.ncbi.nlm.nih.gov/nuccore/CS184447.1

143. **Aboshanab K.M., Schmidt-Beissner H, Wehmeier U, Piepersberg W, Welzel K, Vente A (2006)** *Streptomyces lividus* lividomycin biosynthesis gene cluster. gi|85813636|*EMBL*| AJ748832.1| [85813636] **http://www.ncbi.nlm.nih.gov/nuccore/AJ748832.1**

144. **Aboshanab K.M., Schmidt-Beissner H, Wehmeier U, Piepersberg W, Welzel K, Vente A.(2006)** *Bacillus circulans* genomic region of the butirosin biosynthetic gene cluster, strain ATCC 21557**, accession**; AJ781030 **http://www.ncbi.nlm.nih.gov/nuccore/AJ781030.2**

145. **Aboshanab K.M., Schmidt-Beissner H, Wehmeier U, Piepersberg W, Welzel K, Vente A (2006)** *Streptoalloteichus hindustanus* partial apramycin biosynthesis gene cluster, type strain DSM 44523, gi|86261622|*EMBL*|AJ875019.1|[86261622]**.** **http://www.ncbi.nlm.nih.gov/nuccore/AJ875019**

146. **Aboshanab K.M., Schmidt-Beissner H, Wehmeier U, Piepersberg W, Welzel K, Vente A (2006)** *Micromonospora echinospora* genomic region of the gentamicin biosynthesis gene cluster, strain DSM 43036, gi|85813995|*EMBL*|AJ628149.4|[85813995]. **http://www.ncbi.nlm.nih.gov/nuccore/AJ628149.4**

147. **Aboshanab K.M., Schmidt-Beissner H, Wehmeier U, Piepersberg W, Welzel K, Vente A (2006)** *Streptomyces kanamyceticus* partial kanamycin biosynthesis gene cluster, strain DSM 40500, gi|85813944|*EMBL*|AJ628422.2|[85813944]. **http://www.ncbi.nlm.nih.gov/nuccore/AJ628422.2**

148. **Aboshanab K.M., Schmidt-Beissner H, Wehmeier U, Piepersberg W, Welzel K, Vente A. (2006)** *Micromonospora olivasterospora* fortimicin biosynthesis gene cluster, strain DSM 43868 gi|85813900|*EMBL*|AJ628421.2|[85813900] **http://www.ncbi.nlm.nih.gov/nuccore/AJ628421.2**

149. **Aboshanab K.M., Schmidt-Beissner H, Wehmeier U, Piepersberg W, Welzel K, Vente A.(2006)** *Streptomyces rimosus* subsp. *paromomycinus* genomic region of the paromomycin biosynthesis gene cluster, strain NRRL 2455, gi|85813857| *EMBL*|AJ628955.2|[85813857] **http://www.ncbi.nlm.nih.gov/nuccore/AJ628955.2**

150. **Aboshanab K.M., Schmidt-Beissner H, Wehmeier U, Piepersberg W,Welzel K, Vente A. (2006)** *Streptomyces hygroscopicus* subsp. *hygroscopicus* genomic region of the gene cluster for hygromycin B biosynthetis, strain DSM 40578, gi|85813775|emb|AJ628642.1|[85813775] http://www.ncbi.nlm.nih.gov/nuccore/AJ628642.1

151. **Aboshanab K.M., Schmidt-Beissner H, Wehmeier U, Piepersberg W, Welzel K, Vente A (2006)** Streptomyces sp. DSM 40477, tobramycin biosynthesis gene cluster region, gi|85813675| *EMBL* |AJ810851.1|[85813675] **http://www.ncbi.nlm.nih.gov/nuccore/AJ810851.1**

152. **Aboshanab K.M., Schmidt-Beissner H, Wehmeier U, Piepersberg W,Welzel K, Vente A (2006)** *Streptomyces rimosus* subsp. *paromomycinus* ORF SriA13.1 (partial), aacC7 gene, aac(6')-II gene, ORF SriA13.4c, ORF SriA13.5, ORF SriA13.6 and ORF SriA13.7 (partial), strain NRRL2455, gi|85813667|*EMBL*|AJ749845.1|[85813667] **http://www.ncbi.nlm.nih.gov/nuccore/AJ749845.1**

153. **Aboshanab K.M., Schmidt-Beissner H, Wehmeier U, Piepersberg W, Welzel K, Vente A.(2006)** *Streptomyces ribosidificus* ribostamycin biosynthesis gene cluster, strain NRRL B-11466 gi|85813594|*EMBL*|AJ744850.1|[85813594]
http://www.ncbi.nlm.nih.gov/nuccore/AJ744850.1

154. **Aboshanab K.M., Schmidt-Beissner H, Wehmeier U, Piepersberg W, Welzel K, Vente A (2006)** *Streptomyces fradiae* neomycin biosynthesis gene cluster, strain DSM 40063 gi|85813555| *EMBL*|AJ629247.1|[85813555]
http://www.ncbi.nlm.nih.gov/nuccore/AJ629247.1

155. **Aboshanab K.M., Schmidt-Beissner H, Wehmeier U, Piepersberg W, Welzel K, Vente A (2006)** *Streptomyces sp*. DSM 40477 genomic region of the apramycin biosynthesis cluster gi|85813519| *EMBL*|AJ629123.1|[85813519].
http://www.ncbi.nlm.nih.gov/nuccore/AJ629123.1

156. **Aboshanab K.M., Schmidt-Beissner H, Wehmeier U, Piepersberg W, Welzel K, Vente A (2006)** *Streptomyces tenjimariensis* istamycin biosynthesis cluster, strain ATCC 31603gi|83999825| *EMBL*|AJ845083.2|[8399.
http://www.ncbi.nlm.nih.gov/nuccore/AJ845083.2

Date	location	Worshops/training	م
30 May-1 June 2023	وحدة التدريب و التاهيل جامعة عين شمس Ain Shams University	**University administration and leadership program for job seekers and the position of dean of a college/institute**	**1**
5 May 2022-2 June 2022	الأكاديمية الوطنية للتدريب (NAT) – مدينة 6 اكتوبر	**cultural attaché, office manager, and he is among two candidates as cultural attachés for the state of Austria, after passing the seven stages of the competition and meeting with the Minister of Higher Education.**	**2**
19 Jul-27 August 2020	الأكاديمية الوطنية للتدريب (NAT) – مدينة 6 اكتوبر	**cultural attaché, office manager, and he is among two candidates as cultural attachés for the state of Austria, after passing the seven stages of the competition and meeting with the Minister of Higher Education.** -	**3**
12 May-6 August 2020	online بالتنسيق مع كلية الطب جامعة عين شمس (ا. سمر قاسم و اد. ريم سلام)	**H3ABioNet دوره المعلوماتية الحيويه Introduction to Bioinformatics Course (attendance and coordinator)** https://mailchi.mp/7bd0f18ed224/ibt_2020-classroom-host-applications	**4**
03-07 Nov 2019	فندق ماريوت– القاهره	**Sharing Responsible Science Curriculum workshop وSandia National Labororatory CRDF (USA)**	**5**
25 Feb. 2019	أكاديمية البحث العلمى –القاهره	**Web of Science Journal selection with colloboartion Egyptian Knowlegd Bank (EKB)**	**6**
9-13 Sep. 2018	Sandia National Labororatory (USA)or- Hilton Zamalek Residence Cairo	**Chemical security Vulnerability Assessments and Risk mitigation for the Pharmaceutical Industry workshop**	**7**
15-16 Juli 2018	QAAC (Quality assurance and accreditation center), Ain Shams University	**Effective management**	**8**
30 Jan-1 Feb 2018	الهيئة القومية لضمان جودة التعليم و الاعتماد– دار المدرعات–القاهره	**External review of colleges of higher education**	**9**
28-29, Jan 2018	الهيئة القومية لضمان جودة التعليم و الاعتماد– دار المدرعات–القاهره	**Strategic planning for university colleges**	**10**
21-23, Jan 2018	الهيئة القومية لضمان جودة التعليم و الاعتماد– دار المدرعات–القاهره	**Description of programs and courses and evaluation of outcomes**	**11**

16-18, Jan 2018	**الهيئة القومية لضمان جودة التعليم و الاعتماد– دار المدرعات–القاهره**	**Self-evaluation of colleges and institutes of the university**	**12**
18-19 December 2017	**الهيئة القومية لضمان جودة التعليم و الاعتماد** Golden Tulip Flamenco Hotel, El Zamalek, Cairo	**Competency based NARS**	**13**
21-22, Feb 2017	TDC (the training and development center) مركز التدريب و التطوير جامعة عين شمس	**Strategic Planning**	**14**
19-20, Feb 2017	TDC (the training and development center) **مركز التدريب و التطوير جامعة عين شمس**	**Decision making and problem solving**	**15**
14-15 Feb 2017	TDC (the training and development center) **مركز التدريب و التطوير جامعة عين شمس**	**University administration**	**15**
13-16 May 2016	Faculty of medicine, Al_Azhar University (Girls)	**Use of tissue culture in diagnosis of hepatitis viruses**	**17**
May. 2016	QAAC (Quality assurance and accreditation center), Ain Shams University	**Documentation and file management in ensuring quality in educational institutions)**	**18**
Dec. 2015	QAAC (Quality assurance and accreditation center), Ain Shams University	**Examination and evaluation systems**	**19**
Dec. 2015	QAAC (Quality assurance and accreditation center), Ain Shams University	**Self-study update**	**20**
Sep. 2014	Faculty of Science, Al-Azhar University	**Molecular Biology and Tissue culture**	**21**
Mars 2014	QAAC, Ain Shams University	**Updating the strategic and executive plan for the colleges**	**22**
Aug. 2013	Ain Shams University	**Professional etiquette and behavior ة**	**23**
Aug. 2010	QAAC, Ain Shams University	**Competitive Research Projects**	**24**
Nov. 2009	QAAC, Ain Shams University	**Quality Management System, (ISO 9001/2008) IWA2**	**25**
Jul. 2009	QAAC, Ain Shams University	**Academic Reference Standards**	**26**

Jul. 2009	QAAC, Ain Shams University	**Research Team Management**	**27**
Sep. 2008	QAAC, Ain Shams University	**Time and Meeting Management**	**28**
Sep. 2008	QAAC, Ain Shams University	**Ethics of Scientific Research**	**29**
June 2007	QAAC, Ain Shams University	**International Publication**	**30**
Mar. 2007	Faculty of Veterinary Medicin Biotechnology center for servic and Researches	**Application of Modern Immuno-Diagnostic techniques for Diagnosis Infectious diseases by ELISA**	**31**
April 2005	Chemical Microbiology deptment, Bergishe Universität Wuppertal, Germany	**Cosmid Library**	**32**
Oct. 2004	Chemical Microbiology deptment, Bergishe Universität Wuppertal, Germany	**Southern Hybridization**	**33**
Dec. 2003	Chemical Microbiology deptment, Bergishe Universität Wuppertal, Germany	**Molecular Cloning and gene expression**	**34**

-المشاركة في عضوية هيئات دولية وفي تحكيم أبحاث والتمثيل في منظمات وجمعيات محلية وإقليمية ودولية

Scientifc Membership		
1	**American Socity of Microbioloogy (ASM) at the Contributing Membership level, a global community**	**membership number is: 200179329**
2	**Founder of the Internation Culture Collections Ain Shams University (CCASU)** http://www.wfcc.info/ccinfo/collection/col_by_country/e/20/ on World Data Center For Microorganisms (WDCM) http://www.wfcc.info/ccinfo/detail	**Registeration number 1186** **1186 رقم ايداع دولى**
3	**Directory Open Access Journals (DOAJ)** https://doaj.org/	**membership number (Publisher) is: Hi23568380**
4	**Reviewer of Science, Technology, Innovation, Fundung Authority (STIFA)**	**Member ID 19542**
5	**Egyption Socity of Biotechnology** **٤٢٠٦ لسنة بالجمعية المصرية للتكنولوجيا الحيوية المشهرة برقم ١٩٩٥**	**عضوا**
6	**Egyptian network for Research Ethics Committee (ENREC)**	**عضوا**
7	**Membership of Egyptian Pharmacist Syndicate**, Egypt	**عضوا**

تحكيم رسائل/مشاريع/ ابحاث علمية	
1	**Peer Reviewer of the following journals**: Infection and Drug resistnce, GENE, PLOS ONE. AMB express, Applied Microbiology and Immunology, Scientific reports, Journal of ophthalmology, Plos Pathogens, Applied Biochemistry and Biotechnology, BMC microbiology, Biomedical research international, Biomedical Research International, BMC biochemistry, Microbes and infectious Disaeses, Journal of Bioinformatics and Sequence analysis, Journal of microbiology and antimicrobials, Agriculture Science research journal, African Journal of Biochemistry, African journal of Microbiology Research, Future Journal of Pharmaceutical science, Bulletin faculty of pharmacy Cairo University, International Research journal of medicine and biomedical sciences,. University of Mauritius Research Journal, Archives of pharmaceutical sciences Ain Shams university, Journal of paediatric infectious diseases, Al Azhar journal of Microbiology, Clinical epidemiology, Microbiology
2	**Project Evaulation: STDF project** (ID 33391) at 30 October 2018 and STDF proposal ID 3 at 22 December 2018, ID 44025 at 16.09.2020
3	**External Examiner for many Master and PhD** thesis from faculty of pharmacy of Cairo University, Suez Canal University, Al Azhar University, and Tanta University - **تحكيم رساله دكتوراه من دولة ماليزيا** **THESIS ONLINE SYSTEM; UPM University, Malaysia** **(**Sekolah Pengajian Siswazah (School of Graduates
ح	**External Examiner** for oral examinations of various faculties of pharmacy, of different universities such as: Cairo, Alexandria, Al-Azhar (Boys & Girls), El-Mansoura, Tanta, Helwan, Sina, Ahram Canadian (ACU), Miser International (MIU), EL-Nahada University, Misr University for Science and Arts (MSA), Delta University, FUE, RUE.
5	**تحكيم جوائز: Award evaluation** **تحكيم جوائز جامعة القاهرة التشجيعية للعام الجامعى 2018/2017 و العام الجامعى 2019/2018**
6	**Patent evaluations:** **الوارده الينا من أكادمية البحث العلمي والتكنولوجيا – مكتب براءة الإختراع بوزارة التعليم العالى و البحث العلمى**
	1 **براءة الإختراع رقم 147 لسنه 2003 بتاريخ 15 سبتمبر 2019**
	2 **براءة الاختراع رقم 215 لسنة 2009 PCT بتاريخ 10 فبراير 2020**
	3 **براءة الاختراع رقم 1233 لسنة 2007 PCT بتاريخ 10 فبراير 2020**