

Curriculum Vitae

Afrah Mohammed Hassan Salman

Mobile: 07755592762

Email: goldsunlight1@gmail.com

EDUCATION:

- Postdoctoral in Biomedical sciences/ Microbiology-Molecular Genetics, Reading University, UK.
- Ph.D. Biomedical sciences/ Microbiology-Molecular Genetics, Reading University, UK.
- M.Sc.: Microbiology
- B.Sc. Biology

Current position:

Member of Academic staff and Lecturer at the Department of Pharmacology and Toxicology, College of Pharmacy/ Mustansiriyah University since 2004.

Skills and expertise acquired:

- DNA extraction (chromosomal and plasmid DNA); Bacterial transformation; P1 Transduction; Cloning; PCR; Real Time PCR system ; RNA extraction; The 4200 TapeStation-systems; Agarose gel electrophoresis; SDS-PAGE; Western Blot Analysis; Protein overexpression and purification; Immunoprecipitation; Mutagenesis; Molecular Genetic analysis; Sequences Alignment analysis using CLC Genomic Workbench using standard parameters.

ACADEMIC /TEACHING EXPERIENCE:

- Practical demonstrating on Bacteriology and Virology module in School of Biological Sciences, University of Reading, UK. Spring term 2015 and 2016.
- Practical demonstrating on Introductory Microbiology module in School of Biological Sciences, University of Reading, UK. Winter term 2015.
- Online teaching and online assessment using Google meet.

COURSES TAUGHT:

Undergraduate	Graduate
Pharmaceutical Microbiology, Biotechnology, Histology, Medical Terminology, Biology, English	Seminar for M.Sc and PhD students , Separation techniques (PhD) Research Methodology (M S. c.)

PROFESSIONAL AFFILIATIONS:

- Microbiology Society member since 2015. www.microbiologysociety.org

PUBLICATIONS:

1. Shrooq R. Kadhim, Afrah M. Hassan, Duaa S. Shoukat. Antimicrobial Susceptibility patterns against *Escherichia coli* and prevalence of extended –spectrum β -lactamases. *Karbala J. Med.* Vol.4, No. 1, 2, Jun, 2011.
2. Ban A. Abdul Sattar, Duaa S. Shawket and Afrah Mohammed Hassan Salman. Studying the antibiotic sensitivity test of *Lactobacillus* on two different media *Al-Mustansiriyah Journal of Pharmaceutical Sciences.* , Vol.9, No.1, 2011.
3. Afrah Mohammed Hassan Salman. Study the antibiotic susceptibility pattern of *Pseudomonas aeruginosa* isolated from hospital infection. *Al-Mustansiriyah Journal of Pharmaceutical Sciences*, Vol.10, No.2, 2011.
4. Ahmed A. M. AL-Azzaui and Afrah Mohammed Hassan Salman. The beetroot juice as a bacterial growth and maintenance medium for pathogenic bacteria. *Iraqi Journal of Market Research and Consumer Protection*, Vol. 3, No. 5, 2011.
5. Rafah F. AL-Smaisim, Ayad M.R, Rauf, Afrah Mohammed Hassan Salman . Synthetic Characterization and Antimicrobial Activity of some New 2- Mercaptothiazol Heterocyclic Derivatives. *Medical Journal of Babylon –Vol.7 –No.4-3.* 2010.
6. Afrah M.H. S., Duaa S. S. Frequency of extended Spectrum β - Lactamase (ESBLs) producing *Klebsiella* isolates among multi-drug resistant, causing infections in AL-Kindy hospital in Baghdad/Iraq. *Al-yarmouk Journal* 1 (1). 25-45. (2014).
7. Salman A M H; Al-Zubaidi M A; Abdul kaleq M A. Using Fourier transform infrared (FTIR) spectroscopy coupled with multivariate analysis to diagnose polycystic ovary syndrome (PCOS). *Systematic Reviews in Pharmacy.* 2020 Apr 1;11(4).
8. Al-Zubaidi M A; Salman A M; Mohsin R A; Abdul kaleq M A. Diagnosis of patients with Hypothyroidism Using Spectrochemical Analysis of Blood Sera. *Prensa Med Argent.* 2019; 105:6.
9. Salman, Afrah. "A New Pandemic Coronavirus COVID-19 Evolutionary Relation, Transmission, Infectivity and Immunity." *Al-Nahrain Journal of Science* 5 (2021): 1-5.
10. Hasan, H.A., Salman, A. and Abdulmalek, E., 2021. Anticancer Activity and High Content Screening of New 6-Substituted-5, 6-dihydrobenzo [4, 5] imidazo [1, 2-c] quinazoline Derivatives. *Research Journal of Pharmacy and Technology*, 14(5), pp.2397-2405.
11. Abdulkadhim, S.L., Mohamed, M.B.M. and Salman, A.M.H., 2023. Fabrication, Characterization and in vitro Evaluation of Prednisolone Sustained Release Multiparticulate System for Colonic Targeting. *Al-Rafidain Journal of Medical Sciences* (ISSN 2789-3219), 5, pp.229-236.
12. Lateef, S., Basim, M. and Mohammed, A., 2024. Effect of Different Variables on the Formulation of Sodium Alginate Beads. *Al Mustansiriyah Journal of Pharmaceutical Sciences*, 24(2), pp.117-126.
13. Yousfan, A., Salman, A., Barrett, G. and Al-Obaidi, H., 2024. Boosting antimicrobial potency: Micro encapsulated polymyxin in hydroxypropyl beta cyclodextrin 'sugar cage' and alginate via spray drying with coating. *Clinica Chimica Acta*, 558, p.119210.
14. Yousfan, A., Al Khatib, A.O., Salman, A.M., Abu Elella, M.H., Barrett, G., Michael, N., Zariwala, M.G. and Al-Obaidi, H., 2024. Innovative microencapsulation of polymyxin B for enhanced antimicrobial efficacy via coated spray drying. *Molecular Pharmaceutics*, 22(1), pp.113-130.

15. Salman, A.M.H., 2025. The expression of iron storage gene of E. coli under a range of environmental condition. Microbes and Infectious Diseases, 6(2), pp.762-771.

PROFESSIONAL DEVELOPMENT

Date	Name of Instruction or Organization and Address
8, 9 and 29 February 2016	The Graduate School & Henley Business School Leadership Programme 2016. University of Reading, UK.
28 th January 2016	Preparing to teach programme: Undergraduate Dissertation support In University of Reading, UK., UK.
Tuesday November 17 th 2015	Electron Microscopy Workshop – Sample preparation (SEM) in University of Reading, UK.
4-6th November 2015	Preparing to teach programme: Introduction to teaching and Learning 4th November 2015. Marking and feedback 4th November 2015. Small group teaching 5th November 2015. Laboratory demonstrating & leading small groups 5th November 2015. Large group presentation skills 6th November 2015. Project Supervision 6th November 2015 In University of Reading, UK.

Conferences

Conferences	Place
1. Doctoral Research Conference 2015/06/18.	University of Reading, UK.
2. Microbiology Society Annual Conference 21-24 of March 2016.	ACC, Liverpool, UK.
3. Doctoral Research Conference 2016-06-23.	University of Reading, UK.
4. The First (ICSCR) Iraqi Cultural and Scientific Conference at Reading 2016 Friday 15th July, 2016. (Organizer Member in the conference).	University of Reading, UK.
5. The Microbiology Research Day 18 th August 2016. [Participate in talk presentation for my work project in title (Mechanisms of iron storage in <i>Escherichia coli</i>)].	University of Reading, UK.
6. The Seventh Congress of the international BioIron Society conference (May 7-11, 2017). Presenting research work in poster.	The UCLA Luskin Conference Center in Los Angeles, CA, USA.
7. Microbiology Society Annual Conference (March 2017). Presenting research work in poster. “ the role of the three iron-storage proteins of <i>Escherichia coli</i> in supporting low-iron growth and redox stress resistance”.	Edinburgh, UK.
8. ANNUAL CONFERENCE 2023 17 - 20 April 2023; Presenting research work “Molecular analysis of how iron regime affects the turnover of ferritin A of <i>E. coli</i> ”	Birmingham International Convention Centre.UK
9. IFCC WorldLab Dubai 2024 May	Dubai . UAE

<p>26th International Congress of Clinical Chemistry and Laboratory Medicine Conference: “Boosting antimicrobial potency: Micro encapsulated polymyxin in hydroxypropyl beta cyclodextrin ‘sugar cage’ and alginate via spray drying with coating”</p>	
<p>10. The Sixth International Conference of the College of Pharmacy, Mustansiriyah University February 19-20, 2025: Applications of Advanced Software and Techniques in Pharmaceutical Research; Oral Presentation: “Innovative Microencapsulation of Polymyxin B for Enhanced Antimicrobial Efficacy via Coated Spray Drying”</p>	<p>The American University of Baghdad. Iraq</p>