

Salah A. Alshehade | B.Pharm. MSc.

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🇸🇾 Nationality: Syrian

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🌐 ID: salah-alsh

👤 ResearcherID: AAV-3602-2020

**Education****Doctor of Philosophy – PhD (Thesis submitted)**

Universiti Sains Malaysia (USM), School of Pharmaceutical Sciences
2020 – 2022

Thesis title: *“Elucidation of The Molecular Mechanism of Orthosiphon aristatus Extract Against Non-Alcoholic Fatty Liver Disease In High-Fat Diet-Fed Mice and Human Multilineage 3D Spheroids”*

Master's degree, Pharmaceutical Sciences (Pharmacy Practice)

University of Petra (UOP), Faculty of Pharmacy & Medical Sciences
2017 – 2019

Thesis title: *“Prevalence and Determinants of Self-Medication Practice among Jordanian Households and Pharmacy Students”*

Bachelor, Pharmacy

Al-Zaytoonah University (ZUJ), Faculty of Pharmacy
2011 – 2015

Experience

August 2020 –
August 2022

Universiti Malaya

Research assistant

At Prof Mohammed Alshawsh lab at the Pharmacology Department, FOM, UM, I am responsible for conducting research activities and maintain laboratory equipment to ensure a safe and efficient work environment. In addition, collects evaluates, interpret research data, writing grants proposals and teaching FYP students.

Jun 2018 – Nov. 2019

Al-Zaytoonah University

Lecturer (Part time)

I was appointed as a part-time lecturer to teach biology courses to the first-year pharmacy student.

April 2019 – Nov. 2019

Al-Manzel Pharmacy
(a community pharmacy)

Responsible pharmacist

I was responsible for dispensing prescriptions, ensuring patients' safety, counselling patients, working with patients on general health, and dealing with insurance companies.

Feb 2017 - April 2019

Aster Orange Pharmacy
a leading chain pharmacy

Responsible pharmacist

I was responsible for dispensing prescriptions, ensuring patients' safety, counselling patients, managing the pharmacy medicine stock, and weekly reporting the progression of the pharmacy.

Feb 2018 – July 2018

Al-Zaytoonah University

Teaching assistant at the Microbiology

I supervised undergraduate students during conducting microbiology experiments, including preparing stained smears, culturing micro-organisms, conducting bacteria resistance assay, performing tests to identify bacteria and fungi, and studying microbial growth rate.

March 2016 - July -2016

ACDIMA Biocenter,
Jordan

Internship in bioequivalence studies

I trained in the clinical department to initiate studies by obtaining the necessary approvals from the Institutional Review Board (IRB) as well as local and international regulatory authorities. Also trained on how to select healthy volunteers through a screening process that guarantees the implementation of the highest eligibility requirements. And how to commit to preventing and reducing the risks encountered and collecting accurate data to ensure quality and human-centred healthcare services are provided.

Published articles

- [1] Abdulghani M, **Alshehade S**, Kamran S, Alshawsh MA. Effect of monosodium glutamate on serum sex hormones and uterine histology in female rats along with its molecular docking and in-silico toxicity. *Heliyon* **2022**. **accepted (Q2, IF: 3.776)**
- [2] Lim SYM, Alshagga M, Kong C, Alshawsh MA, **Alshehade SA**, Pan Y. CYP35 family in *Caenorhabditis elegans* biological processes: fatty acid synthesis, xenobiotic metabolism, and stress responses. *Arch Toxicol* **2022**. <https://doi.org/10.1007/s00204-022-03382-3>. **(Q1, IF: 6.168)**
- [3] **Alshehade SA**, Al Zarzour RH, Murugaiyah V, Lim SYM, El-Refae HG, Alshawsh MA. Mechanism of action of *Orthosiphon stamineus* against non-alcoholic fatty liver disease: Insights from systems pharmacology and molecular docking approaches. *Saudi Pharm J* **2022**. <https://doi.org/10.1016/j.jsps.2022.09.001>. **(Q2, IF: 4.562)**
- [4] **Alshehade S**, Alshawsh MA, Murugaiyah V, Asif M, Alshehade O, Almoustafa H, et al. The role of protein kinases as key drivers of metabolic dysfunction-associated fatty liver disease progression: New insights and future directions. *Life Sci* **2022**;305:120732. <https://doi.org/10.1016/j.lfs.2022.120732>. **(Q1, IF: 6.780)**
- [5] Alshawsh MA, Alsalahi A, **Alshehade SA**, Saghir SAM, Ahmeda AF, Zarzour RH Al, et al. A Comparison of the Gene Expression Profiles of Non-Alcoholic Fatty Liver Disease between Animal Models of a High-Fat Diet and Methionine-Choline-Deficient Diet. *Molecules* **2022**;27:858. <https://doi.org/10.3390/molecules27030858>. **(Q2, IF: 4.927)**
- [6] **Shehade SA Al**, Zarzour RH Al, Alshehadeh AR, Bal'awi D, Hamade S. Self-Medication Practice among Amman's Householders: Prevalence and Factors. *J Pharm Res Int* **2020**;32:102–13. <https://doi.org/10.9734/jpri/2020/v32i1130562>.
 Alshehade, S., Al Zarzour, R. H., Murugaiyah, V., S. Y. M. & Alshawsh, M. A. *Orthosiphon aristatus* (Blume) Miq alleviates Non-Alcoholic Fatty Liver Disease via antioxidant activities in C57BL/6 mice fed high-fat diet and palmitic-oleic acid-induced steatosis in HepG2 cells; [Submitted](#)
 Molecular Mechanism of Action of *Orthosiphon stamineus* Benth. Ethanolic Extract on Fatty Acid-Induced Non-alcoholic Fatty Liver in 3D Co-Culture Model; [Writing up the draft](#)

Conferences

- The 5th International Conference on Molecular Biology and Biotechnology (**2022**)
 - **Poster:** *Orthosiphon aristatus* “Misai Kucing” Standardised Extract Reduces Intracellular Fat Accumulation in HepG2 cells
- Malaysian Society of Pharmacology & Physiology (MSPP) - 34th Scientific Meeting (**2021**): [doi: 10.3389/978-2-888-971-008-9](https://doi.org/10.3389/978-2-888-971-008-9)
 - **Oral presentation:** Systems pharmacology approach for interpreting the potential therapeutic mechanisms of action of *Orthosiphon aristatus*
 - **Poster:** The relationship between non-alcoholic fatty liver disease and Alzheimer's disease: A computational molecular network study
- MONASH INITIATE **2021**, The Inaugural Monash International Health Science and Technology Conference:
 - **Poster:** Liver Dysfunction and COVID-19

Workshops

- Good Clinical Practice (GCP) Workshop organized by the Clinical Investigation Centre (CIC) at the University of Malaya Medical Centre
- Molecular docking and dynamic simulation
- Animal handling, administration, and dissection (mice, rats, and rabbits)
- Systematic review and meta-analysis (from A to Z)

Memberships

- Malaysian Society of Pharmacology and Physiology (MSPP)
- Malaysian Pharmacists Society

Research technique

Cell culture; 3D spheroid culture; DNA/RNA extraction; Northern blot; PCR; IHC; IF; Fluorescence and confocal microscopy; Flow cytometry; Animal work; H&E staining; Molecular Docking & Dynamics Simulation; Culturing bacteria; Statistical Analysis; SPSS; Prism; ImageJ.

Skills

Research-related Skills

- Planning and performing experiments that are necessary to meet project goals on time.
- Maintaining an up-to-date understanding of the relevant literature, to ensure that the research project remains relevant and competitive.
- Assist in drafting reports including conference presentations, and research publications.
- Responsible for equipment maintenance of specific equipment, and purchasing and stocking consumables as the project required.

- Languages** Arabic: Mother tongue
 English: IELTS: 7 score
- Communication skills** ▪ Willingness to question and to listen to aid my understanding and that of others.
 ▪ Able to communicate clearly and succinctly, both orally and in writing.
- Organisation** ▪ Set objectives and plan activities and resources to achieve a goal.
- Problem-solving** ▪ Able to understand information quickly and accurately.
 ▪ Able to evaluate and choose effective solutions to problems.
- Motivation** ▪ Desire to continuously learn and develop and evaluate own performance.

Referee

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