

Dr Mais Majed Urabi Saleh

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Associate Professor

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Research Resume

My research focuses on understanding how the physiochemical properties of actives influence their cutaneous penetration, as well as efficacy and safety testing, and the designing of innovative nanomaterial for cosmetic and dermatological applications.

Education & Degrees

- **Ph.D. in Pharmaceutical Science, 2014-2019**

Institute of Pharmaceutical Sciences, King's College London, University of London – England

Thesis title: **Delivery of tocopherol phosphate nanomaterials into the skin to protect against ultraviolet radiation**



- **M.Sc. in Pharmacology, 2010-2012, (3.75 – Distinction)**

Faculty of Medicine, University of Jordan – Amman, Jordan

Thesis title: **Methylene Tetrahydrofolate Reductase Genotype Correlation with the Toxicity of and Response to Methotrexate in Rheumatoid Arthritis Patients at Jordan University Hospital.**



- **B.Sc. in Pharmacy, 2005-2010, (3.4 – Very Good)**

Faculty of Pharmacy, University of Jordan – Amman, Jordan



Work experience

University of Jordan – Amman, Jordan

✓ **Associate professor** (current position) 2023 –till now

✓ **Assistant professor** (2019 –2023)

Department of Pharmaceutics and Pharmaceutical Technology, School of Pharmacy, University of Jordan (Accreditation Council for Pharmacy Education (ACPE)).

I have been teaching these modules: Cosmetics science, Seminar in Pharmaceutics and Pharmaceutical Technology, Pharmaceutical Calculations and Compounding of Dosage Forms, and Physicochemical Principles of Pharmacy.

King's College London – London, UK

2017-2018

✓ **Visiting Ph.D. student**, St John's Institute of Dermatology, Guy's Hospital, King's College London, London, UK.

During my Ph.D. I worked independently for 12- months at St John Institute of Dermatology at Guy's Hospital to complete the photobiology experimental part of my PhD thesis.

2015-2017

✓ **Postgraduate teaching & research assistant**, Institute of Pharmaceutical Science, School of life science & medicine, King's College London

I have been demonstrating in "Physical Pharmacy Practice". I have been Supervising MSc students during my PhD research, training & supporting them in managing and designing their projects.

University of Jordan – Amman, Jordan

2012 – 2014

✓ **Teaching assistant**, Faculty of Pharmacy, University of Jordan.

I have been demonstrating in Phyto-chemical analysis practical, Pharmaceutical organic chemistry practical, and Pharmaceutical technology practical.

German Jordanian University – Amman, Jordan

2011-2012

✓ **Teaching & research assistant**, Department of Pharmaceutical & Chemical Engineering, German Jordanian University.

I have been demonstrating in General Chemistry, Biochemistry, Biotechnology practical, and Pharmaceutical technology practicals.

Community services

- 1) **Member of the Erasmus + Vet project: "Developing a Cosmetology vocational diploma to increase the employability for Women/COSMO"** The project consortium consists of 9 partners from France, Italy, Croatia, Egypt, Tunisia, and Jordan. The project duration is 3 years, and it has been started on January 1st, 2023.
- 2) **Member of the Scientific Committee at Jordan Pharmacist Association (JPA)** since August 2022 till now.

- 3) **Cosmetics Registration Committee @JFDA.** I am a member of the cosmetic registration committee in Jordan Food & Drug Administration (JFDA), April 2022-April 2024.
- 4) **Organization & management subcommittee.** I am taking part in preparing of detailed self-study report and organization and administrative document on how the pharmacy degree program is addressing ACPE's International Quality Criteria to renew the ACPE certificate from the International Commission and Board of Directors. I helped in collecting the documents, data, and descriptive text that will need to be provided by the school for evaluation during the on-site visit in order to determine how the program is addressing each of the Quality Criteria. (25.03.2021- 01.09.2021).
- 5) **Faculty committee:** Faculty Symposium Committee, Graduation, Alumni, Sports, community service, and Website Committee (20.10.2020-till now).
- 6) **Accreditation and quality assurance commission.** I have been assigned by the Accreditation and quality assurance commission for higher education institutes different tasks, such as reviewing processes and commission decisions in accreditation as well as establishing the learning outcomes, competencies, and cognitive areas for the cosmetic science bachelor program at Al-Ahlyya Amman University during the period of August 29 till September 23, 2019.

Research funding & Collaboration

<u>Type of collaboration</u>	<u>Project title</u>	<u>Funders</u>	<u>Achievements</u>
Funding, professional & experimental aspects	Design and evaluation of nanoemulgels containing Tamsulosin/Solifenacin combination therapy in transdermal patch for the management of lower urinary tract symptoms	The deanship of scientific research @ UJ	In progress
Funding, professional & experimental aspects	Design and development of lipid-based nanocarriers for cosmetic applications	The deanship of scientific research @ UJ	In progress
Funding, professional & experimental aspects	Tocopherol phosphate: characterizing its permeation into human skin layers ex vivo. (April 2020)	The deanship of scientific research @ UJ	Published
Funding, professional & experimental aspects	Correlation of skin cancer and actinic keratosis-related knowledge, and sun protection behaviours. (April 2020)	The deanship of scientific research @ UJ	Published

Scholarship & Awards

1.) Postdoctoral scholarship from the Scientific Research and Innovation Support Fund for the year 2022.

✓ Research project entitled “**Smart Cyclodextrin nanomaterials: Investigate their inclusion of antioxidants to protect from Ultraviolet radiation**” at King’s College London in the United Kingdom for a one-year period, and the amount of remuneration/financial support is (£29,042).

2.) Travel grant from Athena SWAN at King’s College London-London, UK

✓ Covers all the cost to attend the Perspective of Percutaneous Penetration (PPP 2018) conference in France la Grande Motte.

April 03-06, 2018

3.) Travel grant from Athena SWAN at King’s College London-London, UK

✓ Covers all the cost to attend the 6th FIP Pharmaceutical Sciences World Congress (PSWC 2017) in Sweden Stockholm.

May 21– 24, 2017

4.) PhD Full Scholarship granted by the University of Jordan -Amman, Jordan

2014-2018

✓ Covers tuition fees, bench fees, health insurance, and monthly salary.

Membership

- Member of Jordan Pharmacists Association.
- Member of the Society of cosmetic science (SCS).
- Member of the American Association of Pharmaceutical Scientists (AAPS).
- Member of Middle East association of Pharmaceutical medicine professionals (MEAPP).

Research Skills

- Biological skills: Tissue culture, Cell viability assay (Alamar blue, MTT, and Neutral red assay), DNA extraction, RNA extraction, PCR, RFLP, Real time- PCR, Agarose gel electrophoresis, skin cryo-sectioning, H&E staining, Western blotting, and Immunohistochemistry.
- Pharmaceutical and biophysical skills: Release studies, Skin deposition studies, HPLC- UV, and HPLC- Fluorescence, Franz Cell diffusion studies across silicone artificial membrane and porcine animal skin, Atomic force microscopy (AFM), Langmuir trough isotherm (Langmuir Blodgett), and constant assay, FTIR, Fluorometry, Spectrophotometry, DCFDA/H₂DCFDA cellular ROS assay, DPPH and ORAC antioxidant assay, Solid lipid nanoparticles fabrication, chitosan nanoparticles small-scale synthesis, and Liposome preparation by thin film hydration method,
- Other skills: Microsoft Excel, power point poster presentation, EndNote, SPSS, Sigma plot, Graph pad prism, Camtasia, Moodle, and Microsoft team.

Workshops & Trainings

- **The Cosmetics & Cosmeceuticals Workshop.** Jordan Association of Pharmaceutical Manufacturers (JAPM) & Jordan Food & Drug administration (June 20, 2023).
- **Mastering In Vitro Permeation Testing: A Comprehensive Guide to Conducting an IVPT Study.** Teledyne Hanson (May 16, 2023).
- **3D-Dissolution, diffusion, disintegration course.** Teledyne Hanson (Nov 15, 2022).
- **Emulsion chemistry and preparation of semi-solid creams – Emulsion chemistry and preparation of semi-solid creams & choosing the right tools for bench-top mixing and manufacturing simulations.** BASF Topical Academy (April 29, 2022).

- **How to measure relevant rheological properties of semi-solids & In Vitro permeation testing: methods & critical parameters.** BASF Topical Academy, (April 28, 2022).
- **3D printing: One step forward to personalized medicines,** online webinar, Gattefosse, (Apr 7, 2022).
- **How to write a grant application for the Scientific Research and Innovation Support Fund at the Ministry of Higher Education and Scientific Research,** The University of Jordan. (January 23, 2022).
- **Transcending transdermal delivery online webinar,** Teledyne Hanson research & Gattefosse, (Nov 30, 2021).
- **IVRT/IVPT Methods: Best Practices and Scientific Considerations for ANDAs,** Center for Research on Complex Generics, virtual workshop scheduled for Aug. 18-20, 2021.
- **Introduction to IVRT Fundamentals of *In-Vitro* Release Testing of Semisolids,** RaDes GmbH & Teledyne Hanson/pharma, Online Webinar (June, 9th, 2021).
- **BASF Topical Workshop 'Advancing Quality Regulatory, And Formulation Innovations Through Digitalization for Topicals',** BASF pharmaceuticals & Centre of dermal research, 2-day Online Webinar (Apr. 22, 2021 & May, 20, 2021).
- **Assessing the bioavailability in Skin using Raman Spectroscopy,** University of Bath, online Webinar (Jan., 29, 2021).
- **Mini botanical formulation course,** Formula Botanica, online training course (Jan., 29, 2021)
- **Step-by-step guide to prepare a successful paper for publication,** Springer, a part of Springer Nature. Online webinar (Nov.,18, 2020).
- **How to Use Web of Science platform,** A Clarivate analytics company, Online webinar (Oct., 06, 2020).
- **Good clinical practice (GCP),** NIDA Clinical Trials Network online 6-hour training course (March, 02, 2020).
- **How to Write a Good Research Grant Application,** King's College London, London, UK (June 07, 2018).
- **Introduction to statistics with SPSS for post-graduate students,** King's College London, London, UK (June 01-07, 2018).
- **Pre-conference course: Introduction to skin permeation, product development and regulation,** PPP 2018, La Grande Motte, France (April 03, 2018).
- **Quantitative Genomics, Epigenomics, and Biobank (qGEB) workshop with CyTOF,** School of Cancer & Pharmaceutical Sciences, King's College London, London, UK (October, 2017).
- **Presentation Skills (For Postgraduate Research Students & Research Staff),** King's College London, (May, 2017).
- **An introduction to lecturing,** King's College London, London, UK (May, 2017).
- **Adobe Photoshop Elements introduction,** King's College London, London, UK (May, 2017).
- **Writing for Publication in the Sciences,** King's College London, London, UK (April, 2017).
- **Turbocharge your writing,** King's College London, London, UK (November, 2016).
- **Human tissue act and consent form course,** King's College London, London, UK (March, 2016).
- **Responsible Conduct in Research: Research Ethics, Governance & Integrity,** King's College London, London, UK (November, 2015).
- **Managing Research Projects,** King's College London, London, UK (October, 2015).
- **Managing your research data,** King's College London, London, UK (September, 2015).
- **Microsoft Excel advanced tools and PowerPoint poster presentation,** King's College London, London, UK (July, 2015).
- **Writing a literature review,** King's College London, London, UK (February, 2015).
- **How to get published,** King's College London, London, UK (February, 2015).
- **Preparing to Teach in high education,** King's College London, London, UK (September, 2014).

Reviewed articles

- **Dermatology Patients' Knowledge of Sunscreen Guidelines at a University Hospital in Saudi Arabia.** Clinical, Journal: Cosmetic and Investigational Dermatology, (review submitted on 29 November 2022). Published 29 December 2022.
- **Ameliorative effect of gel combination of Centella asiatica extract transfersomes and rosemary essential oil nanoemulsion against UVB-induced skin aging in Balb/c mice.** Journal: F1000Research (review submitted on December 2022).

Conferences

- The MEAPP 2nd annual conference, named “Pharmaceutical Medicine Domiciliation in the Middle East”, Amman, Jordan (September 25-26, 2024).
- 19th Skin Forum 2024, UCL School of Pharmacy, London, UK. (25-26 June 2024) (Poster presentation).
- LE STUDIUM CONFERENCE named” Skin Models in Cosmetic Science: Bridging Established Methods and Novel Technologies, 3rd meeting (July1, 2024).
- The 1st International Pharmaceutical Sciences Conference named “Exploring New Frontiers in Pharmaceutical Sciences”, Hashemite University, Zarqa, Jordan, on April 25, 2024.
- Al-Zaytoonah International Pharmaceutical Conference 2022 (ZIPC 2022), (October 18-20, 2022) (Poster presentation).
- LE STUDIUM CONFERENCE named” Skin Models in Cosmetic Science: Bridging Established Methods and Novel Technologies, 2nd meeting (April 7, 2022 - April 8, 2022) (oral presentation).
- The 1st dermatology away day (DRAD, 2018), The Great Hall, Stand Campus, King’s College London, London, UK (May, 2018) (poster presentation).
- Perspectives in Percutaneous Penetration Conference (PPP 2018), La Grande Motte, France (April 03-06, 2018) (poster presentation).
- The 1st skin @ Bath Network Symposium (S@BNS 2017), Old theatre Royal, Bath, UK (Nov., 2017) (poster presentation).
- The 6th Pharmaceutical Sciences *FIP* World Congress (PSWC 2017), Stockholm, Sweden (May 21– 24, 2017) (poster presentation).
- The 2017 European Nanomedicine Meeting, King’s College London, London, UK (April, 2017).
- Institute of Pharmaceutical Sciences Symposium, King’s College London, London, UK (May, 2016) (Oral presentation).
- Institute of Pharmaceutical Sciences Symposium, King’s College London, London, UK (May, 2015) (Poster presentation).
- JU-Pharmacy 3rd International Conference, "Recent Trends and Advances in Pharmacy", the University of Jordan, Amman, Jordan (October 2012) (Oral presentation).

Publications

- 1) Sharif Abdelghany, Suha Al-Muhaisen, Yazan Al Thaher, Mais Melhem, Majd Fashho, Othman Alfuqaha, **Mais Saleh**. Needle phobia among adult Jordanians: General awareness, prevalence; and exploring microneedles as a promising solution. **PLOS ONE**. 18(9): e0291807. Published: September 20, 2023.
- 2) **Mais M Saleh**, Raghad Abuhamdan, Walhan Al-Shaer, Marzouq Amarin, Hiba Abdelnabi, Maram Abdaljaleel, Kholoud Friehat, Salah Aljamal, Samer M. Najjar, Saja H Hamed (2023). Cosmeceutical Formulations of Pro-Vitamin E Phosphate: In-vitro Release Testing and Dermal Penetration into Excised Human Skin. *International Journal of Pharmaceutics*. Available online 26 February 2023, 122781.
- 3) **Mais M Saleh**, Awwad O, Jalil MHA, et al. (2022). Correlation of Skin Cancer and Actinic Keratosis-Related Knowledge and Sun Protection Behaviors and Sunscreen Use Among a Sample of Jordanian Population. **Journal of Cosmetic Dermatology**. 21(12):7066-7074.
- 4) Walid Al-Qerem, Alaa Hammad, Anan Jarab, **Mais Saleh**, Haneen A Amawi, Jonathan Ling, Fawaz Alasmari (2022). Knowledge, attitudes, and practice with respect to antibiotic use among pharmacy students: A cross-sectional study. *European Review for Medical and Pharmacological Sciences*. 26: 2284-0729.
- 5) Dima Khater, Hamdi Nsairat, Fadwa Odeh, **Mais Saleh**, Areej Jaber, Walhan Alshaer, Abeer Al-Bawab and Mohammad S. Mubarak (2021). Design, Preparation and Characterization of Effective Dermal and Transdermal Lipid Nanoparticles. *Cosmetics*. 8(2):39.

- 6) **Mais M Saleh**, Karl P Lawrence, and Stuart. A. Jones, Antony R Young (2021). The photoprotective properties of α -tocopherol phosphate against long-wave UVA1 (385nm) radiation in keratinocytes *in vitro*. *Scientific reports*. 11:22400.
- 7) **Mais M Saleh**, Arcadia Woods, Richard Harvey, Stuart. A. Jones (2021). Nanomaterials fusing with the skin: alpha-tocopherol phosphate delivery into the viable epidermis to protect against ultraviolet radiation damage. *International Journal of Pharmaceutics*. 594, 120000
- 8) Mariam H. Abdel Jalil, Mervat M AL Sous, Khawla Abu Hammour, **Mais M Saleh**, Rimal Mousa, Emman Hammad (2020). Role of pharmacists in COVID-19 disease: a Jordanian perspective. *Journal of disaster Medicine and public health preparedness*. 1-7.
- 9) Mariam H. Abdel Jalil, Mervat M AL Sous, Khawla Abu Hammour, **Mais M Saleh**, Rimal Mousa, Emman Hammad (2020). Perceived stress during COVID-19 outbreak and the public perceptions regarding pharmacists' roles in public health emergencies. *Journal of disaster Medicine and public health preparedness*. 1-16.
- 10) Robert A. Harper, Latrisha Petersen, **Mais M. Saleh**, Gordon Proctor, Guy Carpenter, Robert Gambogi, Anthony Geonnotti, Robert Hider and Stuart A. Jones (2019). Targeting macrophages and their recruitment in the oral cavity using swellable (+) alpha tocopheryl phosphate nanostructures. *Nanomedicine: Nanotechnology, Biology and Medicine*, Volume 21, 102010.
- 11) Robert A. Harper, **Mais M. Saleh**, Guy Carpenter, Vincenzo Abbate, Gordon Proctor, Richard D. Harvey, Robert J. Gambogi, Anthony Geonnotti, Robert Hider and Stuart A. Jones (2018). Soft, adhesive (+) alpha tocopheryl phosphate planar bilayers that control oral biofilm growth through a substantive antimicrobial effect. *Nanomedicine: Nanotechnology, Biology and Medicine*, 14 (7), 2307-2316.
- 12) **Mais M Saleh**, Yacoub M Irshaid, Khader N Mustafa (2015). Methylene tetrahydrofolate reductase genotypes frequencies: association with toxicity and response to methotrexate in rheumatoid arthritis patients. *International Journal of Clinical Pharmacology Therapeutics*. 53(2):154-62.

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