

Curriculum Vitae (2023)

Rania Mahafdeh

Personal

Name: Rania Mahafdeh

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Education

2019-2023	PhD in Pharmacology School of Pharmacy, Queen's University Belfast, United Kingdom
2018-2019	Fellowship in research ethics, Responsible Conduct of Research University of California San Diego, USA Jordan University of Science and Technology, Jordan
2014-2016	Master of Science in Clinical Pharmacy Jordan University of Science and Technology, Jordan
2008-2013	Bachelor of Science in Pharmacy Jordan University of Science and Technology, Jordan

Awards and Honors

- Best Poster Award (**Judges choice poster award**), Academy of Pharmaceutical Sciences (APS PharmSci), Belfast, UK, 2022
- Awarded Jadara University Scholarship, School of Pharmacy (Tuition fees, and stipend due to academic excellence), Jordan to get PhD in Pharmacy from Queen's University Belfast (2019)
- Awarded Responsible Conduct of Research Fellowship, University of California San Diego (UCSD) (June 2018).
- Best Master Thesis Award for the academic year 2016/2017. Awarded by the Faculty of Graduate Studies at Jordan University of Science and Technology (April 2018)
- Awarded scholarship (due to academic excellence), Faculty of Graduate Studies. This scholarship covers the tuition fees and stipend (2015- 2017).
- Honor list - College of Pharmacy, Jordan University of Science and Technology, Irbid, Jordan (2012-2013)

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Certificates

The Collaborative Institutional Training Initiative (CITI Program), 2018

Publications

1. **Rania Mahafdeh**, Colin McCoy, “Eradication of E. coli and S. aureus by Ciprofloxacin-loaded hydrogel”, British Journal of Pharmacy (2022), DOI: [10.5920/bjpharm.1135](https://doi.org/10.5920/bjpharm.1135)
2. **Rania Mahafzah**, Karem H. Alzoubi, Omar F. Khabour, and Rana Abu-Farha, “Awareness and perception of healthcare providers about proxy consent in critical care research”, Critical Care Research and Practice (2021), DOI: [/10.1155/2021/7614517](https://doi.org/10.1155/2021/7614517)
3. **Rania Mahafzah**, Karem H. Alzoubi, Omar F. Khabour, “The attitudes of relatives of ICU patients toward informed consent for clinical research”, Critical Care Research and Practice (2020), DOI: [10.1155/2020/2760168](https://doi.org/10.1155/2020/2760168)
4. Alzoubi, Karem H., Fadia A. Mayyas, **Rania Mahafzah**, and Omar F. Khabour. “Melatonin prevents memory impairment induced by high-fat diet: Role of oxidative stress.” Behavioural brain research 336 (2018), DOI: [10.1016/j.bbr.2017.08.047](https://doi.org/10.1016/j.bbr.2017.08.047)

Conference Presentations and Abstracts

- **Rania Mahafdeh**, Colin McCoy, “Eradication of E. coli and S. aureus by Ciprofloxacin-loaded hydrogel”, Academy of Pharmaceutical Sciences (APS PharmSci), Belfast, UK, 2022
- **Rania Mahafdeh**, Colin McCoy, “The role of singlet oxygen generation from photodynamic hydrogel in infection control”, United Kingdom & Ireland Controlled Release Society (UKICRS), Manchester, UK, 2022
- **Rania Mahafdeh**, Colin McCoy, Nicola Irwin, “Investigation the light controlled antibacterial properties of a photosensitizer incorporated copolymer”, Academy of Pharmaceutical Sciences (APS PharmSci), 2021
- **Rania Mahafdeh**, “The attitudes of relatives of ICU patients toward informed consent for clinical research”, 5th International Conference on Research Ethics in the MENA, Jordan University of Science and Technology, Nov 6-7/2020.

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- **Rania Mahafdeh**, "Adolescent Informed Consent Form", Research Ethics Education Program, Jordan University of Science and Technology, (2018).
- **Rania Mahafdeh**, Karem Alzoubi, Fadia Mayyas, "Evaluation of the effect of melatonin on learning and memory impairment induced by high-fat-high-carbohydrates diet in rats". Graduate Students Research Conference. 18 April 2018. Faculty of Graduate Studies and Deanship of Research, Jordan University of Science and Technology.
- **Rania Mahafdeh**, Karem Alzoubi, Fadia Mayyas, "Evaluation of the effect of melatonin on learning and memory impairment induced by high-fat-high-carbohydrates diet in rats". JUST International Pharmacy Conference at Jordan University of Science and Technology, (2017).
- **Rania Mahafzah**, Karem Alzoubi, "Melatonin prevents memory impairment induced by high-fat diet: Role of oxidative stress". IBRO Advanced School in Neurodegenerative Disorders: Translation into Clinical Neurology, (2017).

Work experiences

- **(2022-2023)** as a research assistant (Part-Time), at the school of pharmacy, Queen's University Belfast
- **(2019-2023)** as a demonstrator at the school of pharmacy, Queen's University Belfast:
 - Bioinformatics workshop
 - Statistic workshop
 - OSCE
 - Laboratory skills sessions (Level 1 skills modules)
- **(2017-2019)** Clinical Preceptor and Clinical pharmacist at Intensive Care Unit, Prince Rashid Hospital (PRH), Jordan University of Science and Technology.
- **(June-August,2017)** Clinical Preceptor at Internal Medicine Rotation, Princess Basma Hospital (PBH), Jordan University of Science and Technology.
- **(February-May,2017)** Clinical Preceptor for Oncology Rotation, King Abdullah University Hospital (KAUH), Jordan University of Science and Technology.
- **(2014-2016)** Teaching assistant at Medicinal Chemistry and Pharmacognosy Department at Faculty of Pharmacy at Jordan University of Science and Technology.

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Practical Experiences

➤ **Hands-on technical experience with:**

1. Cell-based assays:

- Thawing, trypsinization, and media exchanging of different types of cells
- Hemacytometer cell counting
- MTT assay
- LDH assay
- Wound healing assay
- Cell proliferation assays
- Live/dead cell staining

2. Microbial cells:

- MIC/MBC
- Adherence assay
- Time-kill assay
- Checkerboard assay
- Crystal Violet assay
- Live/dead cell staining

3. Fluorescence microscope

4. Production biomaterial (copolymeric hydrogel)

5. Keyence microscope

6. UV-Visible spectroscopy

7. Fourier-transform infrared spectroscopy (FTIR)

8. Differential scanning calorimetry (DSC)

9. Scanning electron microscope (SEM) analysis

10. Thermogravimetric analysis (TGA)

11. Contact angle analysis

12. Swelling test

13. In vitro drug loading and release

14. Measuring the power output of light emitted from a white LED array by using Ocean Optics Jaz spectrometer (Ocean Optics, Winter Park, Florida, USA)

➤ **Hands-on experience in performing an in-vivo study on an animal model (Wistar rats)**

- Hippocampus dissection
- Behavioral test: radial arm water maze test (RAWM)
- Colorimetric assays and ELISA.

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➤ **Technical experience on:**

Statistical analysis (GraphPad Prism, SPSS, Microsoft Excel)

Professional Memberships

- **2013-present** Jordan Pharmaceutical Association (JPA)
 - **2021-present** Academy of Pharmaceutical Sciences
 - **2022-present** United Kingdom & Ireland Controlled Release Society
 - **2023-present** British Pharmacology Society
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Research Interests

- Pharmacology
 - Drug Delivery
 - Photodynamic therapy
 - Antioxidants agents
 - Clinical Outcomes
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Languages

- Arabic: mother tongue
 - Very good in English spoken and written
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Social Engagements

- The Jordanian Students' Society (IZWITNA Queen's University Belfast), (2019-present)
- Participating as a coordinator at "**The Day of Change**" at the hospital of Royal Medical Services (RMS), Jordan. This Voluntary day at the hospital included the distribution of the brochures and provision of patient education about the optimal use of anti-diabetic treatment for the patients in the Internal Medicine Department (**November 2017**).
- Voluntary campaigns on several open days, Irbid, Jordan. These campaigns spread health awareness and necessary health services talking about the role of pharmacists in the community and how pharmacists can provide the best health care to the patient through using brochures and posters and giving awareness lectures about the number of diseases (**2016**).

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References

- **Professor Colin McCoy (My PhD supervisor)**
Head of School
School of Pharmacy
Queen's University Belfast
Email: c.mccoy@qub.ac.uk
- **Dr. Louise Carson (Second Supervisor)**
Senior lecturer
School of Pharmacy
Queen's University Belfast
Email: l.carson@qub.ac.uk
- **Professor Karem Alzoubi (My master's supervisor)**
Head of School
The University of Sharjah
United Arab Emirates (UAE)
Email: khalzoubi@just.edu.jo