



CURRICULUM VITAE

Personal Information

Name:	Rand Radwan Tu'mah Ghanma
Place & Date of birth:	Amman- 17/10/1992
Gender:	Female
Nationality:	Jordanian
Marital Status:	Married
Address:	Al- Huson- Jordan
E-mail:	rrghanma@just.edu.jo

Education:

- Ph.D in Pharmacy-Pharmaceutical Sciences and Nanotechnology from Queen's University Belfast, UK (December, 2023).
Thesis title: Polymeric Microneedles for Delivery of Risperidone: Pharmaceutics, Pharmaceutical Analysis, Nanomedicine and Pharmacokinetics
- M.Sc. in Pharmaceutical Technology from Jordan University of Science and Technology (August, 2017).
GPA: 90.8 (3.94) (Excellent)
Thesis title: Effect of Selected Polymers on Solubility, Dissolution and Stability of Cefixime Trihydrate in Prepared Dispersions.
- B.Sc. in Pharmacy from Jordan University of Science and Technology (February, 2015).
GPA: 91 (Excellent, Ranked 3rd/220)

Work Experience:**Assistant professor**

02/2024-present Jordan University of Science and Technology Irbid – Jordan

Part-time lecturer

02/2017-6/2020 Jordan University of Science and Technology Irbid – Jordan

Part-time responsible pharmacist

2/2015-7/2020 Al-Huson pharmacy Irbid – Jordan

Teaching experience:

Phar353: Pharmacy Practice Laboratory (I)

Phar356: Pharmacy Practice Laboratory (II)

Phar454: Pharmacy Practice Laboratory (III)

Phar252: Pharmaceutics (I)

Phar351: Pharmaceutics (II)

Other Experience:

Demonstrator at School of Pharmacy, Queen's University Belfast:

- Extemporaneous Dispensing course (Part of the Level II Pharmaceutical Technology module PMY2006)
- Level 1 skills modules

Languages:

Arabic: Native language

English: Excellent

Conferences:

- 2021 UKICRS Virtual Symposium (October 13, 2021)

- 13th PBP World Meeting, Rotterdam, Netherlands (March 28 – 31, 2022)
- 13th APS International PharmSci Conference, Belfast (September 7 – 9, 2022)
- AAPS 2022 PharmSci 360 Conference, Boston, MA (October 16 – 19, 2022)
- 1st Pharmaceutical Sciences Conference, Al-Hashimit University, Jordan (25/4/2024)
- المؤتمر الوطني الأول للأمن الدوائي (تعزيز الأمن الدوائي لضمان الاستدامة الصحية)- مقرر اللجنة العلمية (2-3/11/2024) -

Publications:

- R.M. Obaidat, M. Khanfar, **R. Ghanma**, A comparative solubility enhancement study of cefixime trihydrate using different dispersion techniques, American Association of Pharmaceutical Scientists 20(5) (2019) 194.
- R.Y. AlSheyyab, R.M. Obaidat, Y.R. Altall, R.T. Abuhuwaij, **R.R. Ghanma**, A.S. Ailabouni, H.A. Mashaqbeh, S. Al-Haj, Solubility enhancement of nimodipine through preparation of Soluplus® dispersions, Journal of Applied Pharmaceutical Science 9(9) (2019) 30-37.
- M.B. McGuckin, J. Wang, **R. Ghanma**, N. Qin, S.D. Palma, R.F. Donnelly, A.J. Paredes, Nanocrystals as a master key to deliver hydrophobic drugs via multiple administration routes, Journal of Controlled Release 345 (2022) 334-353.
- A. Himawan, Q.K. Anjani, U. Detamornrat, L.K. Vora, A.D. Permana, **R. Ghanma**, Y. Naser, D. Rahmawanty, C.J. Scott, R.F. Donnelly, Multifunctional low temperature-cured PVA/PVP/citric acid-based hydrogel forming microarray patches: Physicochemical characteristics and hydrophilic drug interaction, European Polymer Journal 186 (2023).
- M.B. McGuckin, A.R. Hutton, E.R. Davis, A.H. Sabri, A. Ripolin, A. Himawan, Y.A. Naser, **R. Ghanma**, B. Greer, H.O. McCarthy, Transdermal Delivery of Pramipexole Using Microneedle Technology for the Potential Treatment of Parkinson's Disease, Molecular Pharmaceutics (2024).
- **R. Ghanma**, Q.K. Anjani, Y.A. Naser, A.H.B. Sabri, A.R. Hutton, L.K. Vora, A. Himawan, B. Greer, H.O. McCarthy, R.F. Donnelly, Risperidone-cyclodextrin complex reservoir combined with hydrogel-forming microneedle array patches for enhanced transdermal delivery, European Journal of Pharmaceutics and Biopharmaceutics 202 (2024) 114415.

- **R. Ghanma**, Y.A. Naser, Q.K. Anjani, A.H.B. Sabri, A.R. Hutton, L.K. Vora, A. Himawan, N. Moreno-Castellanos, B. Greer, H.O. McCarthy, Dissolving microarray patches for transdermal delivery of risperidone for schizophrenia management, *International Journal of Pharmaceutics* (2024) 124342.

Poster presentations

- **Ghanma, R.**, Paredes, A.J., Naser, Y.A., Sabri, A.B. and Donnelly, R.F. (2021). Nanocrystals as versatile platform for enhancing the dissolution profile of risperidone for the treatment of schizophrenia. *Proceedings of the 2021 UKICRS Virtual Symposium*.
- **Ghanma, R.**, Paredes, A.J., Naser, Y.A. and Donnelly, R.F. (2022). The combination of nanocrystals and microneedles for transdermal delivery of risperidone for the treatment of schizophrenia. *Proceedings of the 13th PBP World Meeting*, Rotterdam, Netherlands.
- **Ghanma, R.**, Anjani, Q.K., Himawan, A. and Donnelly, R.F. (2022). Risperidone/hydroxypropyl- β -cyclodextrin inclusion complexes in combination with hydrogel-forming microneedles for enhanced transdermal delivery. *Proceedings of the 13th APS International PharmSci Conference*, Belfast.
- **Ghanma, R.**, Anjani, Q.K., Himawan, A. and Donnelly, R.F. (2022). Hydrogel-forming microneedles in combination with risperidone/hydroxypropyl- β -cyclodextrin inclusion complexes for enhanced transdermal delivery potential for the treatment of schizophrenia. *Proceedings of the AAPS 2022 PharmSci 360 Conference*, Boston, MA.

Research interest:

- Fabrication, characterisation and evaluation of microneedle array patches
- Enhancement of solubility/dissolution of poorly water-soluble drugs using various techniques
- Preparation and characterisation of nanocrystals