

Professor Nancy Hakooz

Nancy Hakooz has been a professor at the School of Pharmacy-University of Jordan since 2012.

She was the founder of the faculty of pharmacy at Zarqa University in 2010. In 2013 professor Hakooz held the position of the vice president of Zarqa University in addition to her position as the dean. Zarqa University is one of the biggest private universities in Jordan. She was the Acting President on many occasions when the president of Zarqa University was travelling on official and private visits. Professor Hakooz contributed significantly to several changes that took place on many laws governing Zarqa University such as: promotion laws, laws related to scientific research and scientific visits, laws related to scholarships and many more. Furthermore, as part of her duties as the vice president since 2013 she established connections with reputable international universities such as Sapienza (Italy), Queens of Belfast (Ireland) and West of England (UK).

Her research has focused on drug metabolism and pharmacogenetics of the Jordanian population. She was a part of a team that conducted research on genetically isolated populations in Jordan (Chechens and Circassians), mainly studying diabetes, hypertension and metabolic syndrome and their related genes. She has published around 39 papers in reputable and prestigious international journals with an h-index of 14. Professor Hakooz was one of the University of Jordan's highly Cited Researchers.

Professor Hakooz is currently a member of The Technical Committee-Medical and Pharmaceutical sector at The Scientific Research Support Fund and the Institutional Review Board (IRB) committee of the International Pharmaceutical Research Center (IPRC). She also was a member in The Technical Committee for the Registration of Generic Products, Jordanian Food and Drug Administration (JFDA) and the Medical committee in the Circassian Charity Association.

Over the years, Professor Hakooz, has been an outstanding example as a female researcher, a team-builder, an administrator, an academic, a mother and true role model.

Curriculum Vitae

Professor Nancy Hakooz

Personal Information

Date of birth: April 19, 1969.
Place of birth: Wadi Al-Seer, Jordan
Nationality: Jordanian
Marital status: Married with three children.
Address: School of Pharmacy / University of Jordan
Queen Rania St.
Amman, 11942 Jordan
Tel: +962 6 5355000 ext-23351
Fax: +962 5 339649
Mobile: +962 772157232
E-mail: nhakooz@ju.edu.jo



Education

1993-1997 Ph.D., Drug Metabolism and Pharmacokinetics, University of Manchester, Manchester, UK
1992 Permission to Practice Pharmacy, Amman, Jordan
1987-1992 B.Sc. in Pharmacy with an aggregate average of 86.7% (Excellent), The University of Jordan, Amman, Jordan.
1986-1987 Secondary School Certificate with an average of 95.0% (Excellent), Scientific branch, Wadi Al-Seer Secondary School, Jordan.

Training and Working Experience

Sep 2013-Sep 2016 Vice president-Zarqa University
Sep 2010-Sep 2016 Dean of the Faculty of Pharmacy-Zarqa University.
Nov 2012- Professor, Department of Biopharmaceutics and Clinical Pharmacy, Faculty of Pharmacy, University of Jordan, Amman, Jordan.
Sep 2006-Nov 2012 Associate Professor, Department of Biopharmaceutics and Clinical Pharmacy, Faculty of Pharmacy, University of Jordan, Amman, Jordan.
Sep 1997-Sep 2006 Assistant Professor, Department of Biopharmaceutics and Clinical Pharmacy, Faculty of Pharmacy, University of Jordan, Amman, Jordan.
April 2019-Sep 2019 A member of the judgment committee for the Arab researcher's award from the Abdul Hameed Shoman Foundation in the field of Molecular Genetics.
July 2020 A member of the Board of Trustees-Circassia Center for Studies and Research.

- Sep 2018 A member of the Board of Trustees-Khawarizmi University Technical Collage.
- Dec 2018 A member of The Board of Trustees-Prince Hamzah bin Al Hussein Schools.
- May 2016-May 2018 A member of The Technical Committee-Medical and Pharmaceutical sector at The Scientific Research Support Fund, Amman, Jordan.
- 3-5 April 2014 Head of the scientific committee of the 15th Scientific Conference of the Jordanian Pharmacists Association, Amman, Jordan
- Oct 2011-Oct 2013 A member in The Technical Committee for the Registration of Generic Products, Jordanian Food and Drug Administration (JFDA), Amman, Jordan.
- Dec 2006- A member in the Institutional Review Board (IRB) committee of the International Pharmaceutical Research Center (IPRC).
- Oct 2005-Oct 2008 A member in The Higher Committee for the Control of Smoking, The University of Jordan, Amman, Jordan.
- May 2005-Aug 2009 A member in The Technical Committee for the Registration of Generic Products, Jordanian Food and Drug Administration (JFDA), Amman, Jordan.
- May-Jul 2004 An external consultant for MMIS (Management Consultants), Amman, Jordan.
- 16-18 Oct 2001 A member of the organizing committee of the 5th Scientific Congress of the Association of the Colleges of Pharmacy in the Arab World and the 2nd International Conference of the Faculty of Pharmacy, The University of Jordan, Amman, Jordan.
- 1998-1999 A member of The Drug and Therapeutics Committee at Jordan University Hospital, Amman, Jordan.
- 1998-1999 Acting head of the Department of Biopharmaceutics and Clinical Pharmacy, Faculty of Pharmacy, The University of Jordan, Amman, Jordan.
- 1997-1999 Medical committee in the Circassian Charity Association, Amman, Jordan.
- 21-22 Apr 1999 A member of the organizing committee of the 2nd International Clinical Pharmacy Conference “Opportunities and Challenges”, Faculty of Pharmacy, The University of Jordan, Amman, Jordan.
- 1993-1997 Ph.D. candidate, Department of Pharmacy, University of Manchester, Manchester, UK
- 1992-1993 Teaching assistant at the faculty of Pharmacy, The University of Jordan, Amman, Jordan.

Awards & Scholarships

- 2019 Erasmus+ Staff Mobility for Training at University of Bath/UK from 17-28th June 2019.
- 2013 Best Scientific Research Award, Zarqa University-Jordan.

- July 2011 Daniel Turnberg Traveling Fellowship-Academy of Medical Sciences spent at the Institute of Cellular Medicine- Medical School-Newcastle University-UK.
- 1993-1997 Ph.D. scholarship, The University of Jordan and Dar Al-Dawa.

Presentations in Local and International Congresses

1. **Hakooz N.**, Research Methodology and Design (Lecture). 8th Pharmacy Students Research Training Program, PSRC, Amman, Jordan, 14th September 2020.
2. Tabbaa-Rida Z. **Hakooz N.**, Alhalaiqa F. Nadaf F. Three Circles of Alema: Growth and Sustainability through Mentoring. Arab Science week, August 16th 2020.
3. **Hakooz N.**, Vitamins and COVID-19 Treatment. Phi's Research and Innovation Summit 2020 (PRIS'20), Virtual PRIS-Taking Actions-Jordan, 3rd-4th July 2020.
4. **Hakooz N.**, Vitamins Role on COVID19 Treatment. An on-line webinar, Jordan Academia Industry Platform (JAIP), Amman, Jordan 6th June 2020.
5. Al-Daghaastani T., Zihlif M. and **Hakooz N.**, Genetic Variants of Vascular Endothelial Growth Factor-634 and Vascular Endothelial Growth Factor-936 in Circassians and Chechens Subpopulations in Jordan. The 7th International Pharmaceutical Conference (ZTIPC2019), Al-Zaytoonah University, Amman, Jordan 6th-7th November 2019.
6. **Hakooz N.**, Research Methodology and Design (Lecture). 7th Pharmacy Students Research Training Program, PSRC, Amman, Jordan, 15th September 2019.
7. **Hakooz N.**, Vitamin supplements-a need or a trend. Phi's Research and Innovation Summit 2019 (PRIS19), King Hussein Bin Talal Convention Centre-Jordan, 5-6th August 2019.
8. **Hakooz N.**, Pharmacogenomics Testing: Toward Personalized Therapy, in the meeting held by Middle East Molecular Biology Sources (MEMBS) and Jordan Pharmacists Association's Scientific Committee: Pharmacogenomics Testing: Toward Personalized Therapy, Amman, ACDIMA BioCenter, 2nd-3rd April 2019.
9. **Hakooz N.**, The Role of the Community Pharmacists in the Interpretation of Laboratory Data in Diabetes Mellitus. 1st FIP Regional Conference, Amman, Jordan, 25-26th April 2019.
10. Abudahab S., **Hakooz N.**, Jarrar Y., Al Shahhab M., Saleh A., Zihlif M., Dajani R., Differences in *UGT1A1* and *UGT1A7* Polymorphisms between Genetically Isolated Populations of Circassian and Chechen and the Jordanian-Arab Population, EUFEPS Annual Meeting, Frankfurt, Germany 6-8th March 2019.
11. **Hakooz N.**, Research Methodology and Design (Lecture). 1st Annual University of Jordan's Research Committee Workshop, PSRC, Amman, Jordan, 12th January 2019.
12. **Hakooz N.**, Jarrar Y., Zihlif M., Imraish A., Hamed S. and Arafat T., Metformin Pharmacokinetics in Jordanians: Effects of Organic Cation Transporters, The 6th International Pharmaceutical Conference: New Horizons in Pharmaceutical Research, Al-Zaytoonah University, Amman, Jordan 29th-30th November 2017.
13. **Hakooz N.**, Can Pharmacogenetics Help Us Design Better Medicines? the 1st Conference of Faculty of Pharmacy-Yarmouk University; New Trends in Pharmacy between Science and Industry, Irbid, Jordan, 22nd-23rd November 2017.
14. Hamaguchi M., Khaymi-Horani H., **Hakooz N.**, Schraudner M., Karlsson L., Elkharraz J., Salibi Z. and Al Bawab A., Role of Women and Men in Advancing Culture of Change

- and Innovation, Gender Summit for the Arab World, World Science Forum, Jordan, 10 November, 2017.
15. **Hakooz N.**, Pharmacogenetics: Effect of Genetics on Drug's effectiveness, should we worry? Scientific Workshop, Phi's Research and Innovation Summit-PRIS 2017, Jordan, August 2017.
 16. **Hakooz N.**, Effect of Smoking on Drug Efficacy, Plenary Lecture, the 1st Scientific Day of Faculty of Pharmacy-Yarmouk University; Smoking in a Pharmaceutical Prospective, Irbid, Jordan, 4 July 2017.
 17. Hammad H., Khaymi-Horani H., Al Bawab A., Dajani R. and **Hakooz N.**, Why Aren't There More Women Leaders in Academia? Jordanian Life Sciences for Sustainable Development, Al al-Bayt University, Mafraq – Jordan, April 2017.
 18. **Hakooz N.**, The Role of the Universities to Prepare the Pharmacists for Job Markets, lecture, the 5th scientific day of the Jordan Pharmaceutical Association-Zarqa branch, Zarqa, Jordan, April 2017.
 19. **Hakooz N.**, Al-Sha'er M., Sasso L. and Dajani R., Competency-Based Curriculum Reform at Zarqa University: Re-Engineering the way of Teaching, lecture, the 4th International Conference of the School of Pharmacy, Amman, Jordan, 25-27 October, 2016.
 20. **Hakooz N.**, Professional Perspectives of a Personal Journey "Lessons Learnt", lecture, Faculty of Pharmacy, University of Jordan, Amman, Jordan, 2 May 2016.
 21. **Hakooz N.** and Ismail S., CYP4F2 Genotyping in Jordanian Population, lecture, The VI Serbian Congress of Pharmacy with International Participation, Belgrade, Serbia, 15-19 October 2014.
 22. **Hakooz N.** Education in Pharmacy, Oral presentation, Workshop on Women in Pharmacy, the Jordanian Pharmacists Association, Amman, Jordan, 8 March 2014.
 23. **Hakooz, N.** Zalloum, I and Arafat, T. Influence of Genetic Variations in Enzyme CYP2C19 and the Effect on the Pharmacokinetic Profile of Lansoprazole. Screening the Allele Frequencies of *CYP2C19*1*, *CYP2C19*2* and *CYP2C19*3* in the Jordanian Population. Poster, the 3rd Kuwait International Pharmacy Conference, Kuwait, 14-16 February 2011.
 24. **Hakooz N.**, Arafat T, Payne D, Ollier W, Andrews J and Newman W. Genetic analysis of thiopurine methyltransferase polymorphism in Jordanian population. Poster, the 11th European ISSX Meeting, Lisbon, Portugal, 17-20 May 2009. The abstract was published in *Drug Metabolism Reviews*, Vol. 41, supplement 1.
 25. Wazaify M, Albsoul-Younes A and **Hakooz N.** Student Perspectives on Pharmacy Curriculum and Instruction in the Public Faculties of Pharmacy in Jordan. Oral presentation, the 11th Pharmaceutical Conference of the Jordan Pharmaceutical Association, Amman, Jordan, April 2006.
 26. **Hakooz N** and Hamdan I. Effects of broccoli on CYP1A2 and CYP2A6 activities using Caffeine metabolism in a group of Jordanian volunteers. Poster, the 9th European ISSX Meeting, Manchester, UK, June 2006. The abstract was published in *Drug Metabolism Reviews*, Vol. 38, supplement 1.
 27. **Hakooz N.** and Houston JB. Effect of aminobenzotriazole on diazepam metabolism, Poster, The 6th Stowe Symposium on Drug Metabolism organized by the UK Drug Metabolism Group, Stoke Rochford Hall, Grantham, UK, July 1996.

Workshops and Meetings

1. An online event from **BPS Live-The pharmacology of drugs for COVID-19**, British Pharmacological Society, UK, October 21st 2020.
2. A Webinar on **Modelling and Simulation to Support Qualification of Endogenous Transporter Biomarkers: Current Status**, ISSX Webinar Series, International Society for the Study of Xenobiotics (ISSX), October 21st2020.
3. A Webinar on **Engaging Students: The Tech and the Task**, Elsevier Live Educator, October 14th 2020.
4. A webinar on **Women in the Political Process**, US Embassy in Jordan, October 13th 2020.
5. A webinar on: **Large Scale Genome Projects; Paving the Way Towards Precision Medicine**, Phi Science Institute, Amman, Jordan, October, 10th 2020.
6. A Webinar on **Cytochrome P450 Pharmacogenetics: New Lessons about SNPS, Haplotypes, and in vitro Test Systems**, ISSX Webinar Series, International Society for the Study of Xenobiotics (ISSX), October 5th 2020.
7. A Webinar on **Clearing Up Clearance in PK: What You Need to Know**, ISSX Webinar Series, International Society for the Study of Xenobiotics (ISSX), September 1st 2020.
8. Global Virtual Event, **Science Journalism Forum (SJF)**, 24th-26th August 2020.
9. A webinar on: **Introduction to Evolution**, Phi Science Institute, Amman, Jordan, August 8th 2020.
10. Course Hero Virtual Education Summi' 20, USA, July 29th-31st 2020.
11. A workshop on **Techniques of Managing Online Educational Meetings**, Accreditation and Quality Assurance center, University of Jordan, Amman, Jordan, July 27th 2020.
12. A Webinar on **Biotransformation in the Context of Drug Design: Steps Taken to Enhance Drug Properties**, ISSX Webinar Series, International Society for the Study of Xenobiotics (ISSX), July 17th 2020.
13. A virtual conference-REMOTE: The Connected Faculty Summit, Arizona State University (ASU), USA, July 13th-14th 2020.
14. A workshop on **Advanced Features on Using Microsoft Teams**, Accreditation and Quality Assurance center, University of Jordan, Amman, Jordan, June 29th 2020.
15. Webex meeting entitled: **What is the impact of COVID-19 on Scientific Research?** JAIP, Amman, Jordan, June 24th 2020.
16. Webex meeting entitled: **Covid-19 Pandemic Analysis & Countries strategies**, JAIP, Amman, Jordan, June 15th 2020.
17. Webex meeting entitled: **Covid-19: Why the World doesn't see an effective Vaccine**, JAIP, Amman, Jordan, June 9th 2020.
18. Science webinar: Biology meets programming: **Unraveling the link between the gut microbiome, human health, and disease**, Science/AAAS, US, June 6th 2020.
19. A webinar on: **Evolution and the Coronavirus**, Phi Science Institute, Amman, Jordan, May 30th 2020.
20. A webinar on: **The Gene-Editing Revolution: One Giant Leap for Humankind**, Phi Science Institute, Amman, Jordan, May 21st 2020.

21. Webex meeting entitled: **Cosmetic Projects and business opportunities**, JAIP, Amman, Jordan, May 21st 2020.
22. A webinar on: **Distance Learning**, Nakahat-Ailiyeh, Amman, Jordan, May 20th 2020.
23. Webex meeting entitled: **COVID 19; Drugs treatment and Clinical Trials**, JAIP, Amman, Jordan, May 20th 2020.
24. A workshop on **Preparing On-Line Exams using Moodle**, Accreditation and Quality Assurance center, University of Jordan, Amman, Jordan, May 16th 2020.
25. A webinar on: **Data Science: A Prescription to Revive the Pharma Industry**, Phi Science Institute, Amman, Jordan, May 16th 2020.
26. Webex meeting entitled: **COVID 19: Analysis of Sars CoV2 Gene Mutations; A Brief Review of Bioinformatics**, JAIP, Amman, Jordan, May 15th 2020.
27. A training workshop on the use of Microsoft Teams, Tablet Academy, University of Jordan, Amman, Jordan, May 13th 2020.
28. Science webinar: Biology meets programming: **Bioinformatics 101 for NGS Researchers**, Science/AAAS, US, May 13th 2020.
29. A webinar on Technology in Education: **Emerging Trends in the New World of Digital Business**, Business Talks Series, Edara, Amman, Jordan, May 13th 2020.
30. A webinar entitled: **How to Prepare Your Manuscripts for Publication in Top Journals**, Cell Press, Elsevier, May 12th 2020.
31. A workshop on **Publishing with in Scopus**, Accreditation and Quality Assurance center, University of Jordan, Amman, Jordan, May 7th 2020.
32. A webinar on **Technology in Education: A Hidden Treasure**, Business Talks Series, Edara, Amman, Jordan, May 6th 2020.
33. A webinar entitled: **The Pharmacogenomics Behind the Investigational Treatments of COVID-19 and its High-Risk Underlying Conditions**, Admera Health, May 5th 2020.
34. A webinar entitled: **All the Questions you were Afraid to Ask About Virtual Learning**, Genome Counselling and Training, Amman, Jordan, April 30th 2020.
35. A workshop on **Conducting On-Line Quizzes and Exams**, Accreditation and Quality Assurance center, University of Jordan, Amman, Jordan, April 29th 2020.
36. A workshop on **Using Microsoft Teams for On-Line Teaching**, Accreditation and Quality Assurance center, University of Jordan, Amman, Jordan, April 23rd 2020.
37. A workshop on **Ethics of Teaching from a Practical Perspective**, Accreditation and Quality Assurance center, University of Jordan, Amman, Jordan, November 27th 2019.
38. A workshop on **Pharmacists' Role in Reducing Addiction of Drugs, Tobacco and Alcohol**, Jordan Pharmacists Association's Scientific Committee, Amman, Jordan, November, 16th 2019.
39. **The 17th International Jordanian Oncology Conference**, organized by the Jordanian Oncology Society, Amman, Jordan, November 7-9th 2019.
40. A workshop on **Project-Based Learning**, Accreditation and Quality Assurance center, University of Jordan, Amman, Jordan, August 1st 2019.
41. A workshop entitled "**Why do we teach Pharmacists Biochemistry**" in the Pharmacy Education Conference, Manchester, UK, June 24th 2019.

42. A workshop on **Differentiate Biologics**, organized by JFDA and Sanofi, Amman, Jordan, December 15-16th, 2018.
43. **The 1st International Conference on Cancer Care Informatics (CC12018)**, organized by King Hussein Cancer Center and University of the West of England, Amman, Jordan, November 19th-21st, 2018.
44. A workshop on **Advanced E-Learning: Using Classroom Response Systems (Clickers) and Smart Devices in Teaching**, Accreditation and Quality Assurance center, University of Jordan, Amman, Jordan, October 20th 2018.
45. A workshop on **How to Increase Your Citation Rate**, Accreditation and Quality Assurance center, University of Jordan, Amman, Jordan, October 10th 2018.
46. A workshop on **Teaching critical thinking skills**, Accreditation and Quality Assurance center, University of Jordan, Amman, Jordan, February 28th 2018.
47. A workshop on **Teaching creativity and innovation**, Accreditation and Quality Assurance center, University of Jordan, Amman, Jordan, February 20th 2018.
48. A workshop on **Interactive Learning and Students' Engagement**, Accreditation and Quality Assurance center, University of Jordan, Amman, Jordan, February 15th 2018.
49. A workshop on the **Management of European Projects, International Marketing Skills and Global Education, part of the workshops by the European Project (VTC)**, University of Jordan, Amman, Jordan, October 26th 2017.
50. Management of European Projects, International Marketing Skills, between Vocational Training Center, University of Jordan, Amman, Jordan, October 26th 2017
51. **Higher Education Cooperation Day**, National Erasmus+ office, Le Royal Hotel, October 9th 2017.
52. **New Trends in Teaching Methods at University Level**, Al Ahliyya Amman University and the National Erasmus+ office, Amman, Jordan, May 18th 2017.
53. **Round Table: "Innovative ways of bridging universities-industry partnership in the smart learning and knowledge based society"**, Princess Sumaya University for Technology-PSUT and the National Erasmus+ office, Amman, Jordan, May 14th 2017.
54. **The Diploma Supplement and Degree Profile-The EU Experience**, The University of Jordan and the National Erasmus+ office, Amman, Jordan, April 26th-27th 2017.
55. **The Role of Students in Accreditation for Universities**, The University of Jordan and the National Erasmus+ office, Amman, Jordan, April 23rd 2017.
56. **Circles of Mentoring: Pathways to Professional and Personal Growth**. AAAS 2017 Annual Meeting, Boston, USA, February 16-20th 2017.
57. **Management of Horizon 2020 projects (University External Relations):** Higher Council for Science and Technology (HCST) and Technological Development and Innovation in Jordan-Phase II (SRTD II), Amman, Jordan, January 16th 2017.
58. **Proposal Writing for H2020 EU Funding Opportunities:** Higher Council for Science and Technology (HCST) and Technological Development and Innovation in Jordan-Phase II (SRTD II), Amman, Jordan, October 30th -November 1st 2016.

59. Current Issues in Higher Education Institutions: **National Qualification Framework, Diploma Supplement and Degree Profile**, The University of Jordan and the National Erasmus+ office, Amman, Jordan, October 20th 2016.
60. **Scientific Writing Workshop**, Three Circles of Alemat, Zarqa University, September 26-27th 2016.
61. **Leadership Management Benchmarking for Quality Leadership in Jordanian Universities**, Princess Sumaya University for Technology, Amman, Jordan, 15-16th March 2016.
62. **The 7th Annual Conference of AROQA** (The Arab Organization for Quality Assurance in Education, Casablanca, Morocco, December 7-8th 2015).
63. **1st Women in Science Symposium**, Princess Sumaya University for Technology, May 18th 2015.
64. **“Three Circles of Alemat”**, USAID Funded Project on Women Mentoring, Jordan Society for Scientific Research (JSSR), January 3rd 2015.
65. **The 6th Annual Conference of AROQA** (The Arab Organization for Quality Assurance in Education, Muscat, Sultanate of Oman, December 10-11th 2014).
66. **Workshop on Erasmus + program**, the National Erasmus+ office, Amman, Jordan, December 8th 2014.
67. **Developing Service-Learning and Civic Engagement Partnership across the Curriculum**, EU Funded Tempus IV Tawasol Project, January 26th-31st 2011. Lebanon.
68. **Clinical Investigation Training Program (CITP)**, May 8-9th 2010.
69. **Implementation of Global Guidelines in Bioequivalence and Stability Studies**, March 3rd, 2007. Participating with a presentation with the title “Stability Fundamentals of Drug Product, ICH Guidelines” organized by the Jordan Food and Drug Administration.

Professional memberships

1. Member of the British Pharmacological Society (*Since March, 2020*).
2. Member of UK Pharmacogenetics and Stratified Medicine Network (*since 2019*).
3. Member of the Organization of Women in Science for the Developing World (OWSD)-UNISCO (*since 2019*).
4. Member of EUFEPS (*since 2018*).
5. Member of The Association of Jordanian Women Academics (*since 2016*).
6. Member of the International Society for the Study of Xenobiotica (ISSX) (*since 1996*).
7. Member of the Jordan Pharmaceutical Association (*since 1992*).

Research interests:

- 1- Phenotyping/genotyping of the Jordanian population for drug metabolic enzymes.
- 2- Studying genetically isolated subpopulations in Jordan: Circassians and Chechens.
- 3- Scaling Factors: Quantitative prediction of *in vivo* drug clearance from *in vitro* data from microsomes and hepatocytes in both rats and humans. This line of research was conducted during visits to Professor Brian Houston’s laboratory in the University of Manchester, Manchester, UK.

- 4- Public Health: The Jordanian population is not a well-characterized population. Screening of the Jordanian population on the national level in different aspects will be very expensive. The only alternative is to conduct such screening on a smaller level for example in different areas of Jordan. This will add to the knowledge of the public health status in general. Along this line of research, the prevalence of vitamin B₁₂ and folate deficiency in two ethnic groups in Amman: Arab and Circassian were investigated.
- 5- Cell Culture: Participating in the establishment of a cell culture lab for the use of validated cell culture systems for the assessment of drug toxicity and transport. This lab is going to be extended in the future to include drug metabolism studies.

Funded Research Projects:

- 1- The frequency of CYP4F2 among Jordanians (**4 500JD**, Deanship of Academic research, Zarqa University), 2012.
- 2- The effect of CYP2D6 and CYP1A2 polymorphisms on the pharmacokinetics of paroxetine in healthy volunteers (**25 000JD**, Deanship of Academic research, University of Jordan), 2011.
- 3- Effect of genetic polymorphism of organic cation transporter 1 and 3 on the response to metformin in Jordanians (**13 000JD**, Deanship of Academic research, University of Jordan), 2011.
- 4- Assessment of Drug Toxicity/Transport Using Validated Cell Culture Systems (**12 500JD**, Deanship of Academic research, University of Jordan), 2002.
- 5- Studying the Effect of Nafcillin and Broccoli Induction of CYP1A2 mRNA Using *In Vitro* Chemiluminescent Detection Kits (**6 900 JD**, Deanship of Academic research, University of Jordan), 2000.

Supervision of Postgraduate Students:

- 1- **Esra odat**, MSc thesis entitled: Beta 2 Adrenergic Receptor Polymorphism in Asthmatic Patients and Healthy Adult Jordanians; July 2020.
- 2- **Mhamad Majeed** MSc thesis entitled: Thyroid-Stimulating Hormone Level in Patients with Macrocytic Anemia; December 2019.
- 3- **Safa'a Mashal**, MSc thesis entitled: Genotyping Type 2 Diabetes Mellitus Susceptibility Variant rs13266634 in a Jordanian Patients Cohort; December 2019.
- 4- **Tamara Al-Daghastani**, MSc thesis entitled: Genetic Variants of Vascular Endothelial Growth Factor-634 and Vascular Endothelial Growth Factor-936 in Circassians and Chechens Subpopulations in Jordan; July 2019.
- 5- **Sara Abu Dahab**, MSc thesis entitled: Genetic Polymorphism of UGT1A1 and UGT1A7 in Circassians and Chechens; July, 2018.
- 6- **Imad Zalloum**, MSc thesis entitled: Influence of Genetic Variations in Enzyme CYP2C19 and the Effect on the Pharmacokinetics Profile of Lansoprazole; July 2008.

Publications:

1. Mashal S., Khanfar M., Al-Khalayfa S., Srour L., Mustafa L., **Hakooz N.M.**, Zayed A.A., Khader Y.S., Azab B. (2021) SLC30A8 gene polymorphism rs13266634 associated with increased risk for developing type 2 diabetes mellitus in Jordanian population. *Gene* 5; 768:145279. doi: 10.1016/j.gene.2020.145279.
2. Al-Eitan L.N., Rababa'h D.M., **Hakooz N.M.**, Alghamdi M.A., Dajani R.B. (2020) Analysis of Comprehensive Pharmacogenomic Profiling of VIP Variants Among the Genetically Isolated Chechen Subpopulation from Jordan. *Pharmacogenomics and Personalized Medicine* 13:199-215. doi:10.2147/PGPM.S254677
3. Al-Eitan L.N., Al-Maqableh H.W., **Hakooz N.M.**, Dajani R.B. (2020) Genetic Analysis of Pharmacogenomic VIP Variants of ABCB1, VDR and TPMT Genes in an Ethnically Isolated Population from the North Caucasus Living in Jordan. *Current Drug Metabolism*, 21(4):307-317. doi:10.2174/1389200221666200505081139
4. AL-Eitan L., Rababa'h D., **Hakooz N.**, Alghamdi MA., Dajani R. (2020) Genetic Polymorphisms of Pharmacogenes among the Genetically Isolated Circassian Subpopulation from Jordan. *Journal of Personalized Medicine* (JPM), 6(10):1.
5. Al-Eitan L., Saadeh H., Alnaamneh A., Darabseh S., Al-Sarhan N., Alzihlif M., **Hakooz N.**, Ivanova E., Kelsey G., Dajani R. (2020) The genetic landscape of Arab Population, Chechens and Circassians subpopulations from Jordan through HV1 and HV2 regions of mtDNA. *Gene* 1(729):144314. doi: 10.1016/j.gene.2019.144314.
6. AL-Eitan LN., Darwish NN., **Hakooz NM.** and Dajani RB. (2020) Investigation of the forensic GlobalFiler loci in the genetically isolated Circassian subpopulation in Jordan. *Gene*, 5(733):144269. doi: 10.1016/j.gene.2019.144269.
7. AL-Eitan L., Darwish N., **Hakooz N.** and Dajani R. (2019) Assessing the forensic efficiency of the GlobalFiler STR loci among the genetically isolated Chechen subpopulation in Jordan. *Gene* 15(720):144078. doi: 10.1016/j.gene.2019. 144078.
8. Al-Eitan LN., Mohammad NN., Al-Maqableh HW., **Hakooz NM.**, Dajani RB. (2019) Genetic Polymorphisms of Pharmacogenomic VIP Variants in the Circassian Subpopulation from Jordan. *Current Drug Metabolism*, 20(8):674-681. doi: 10.2174/1389200220666190729124000.
9. Abudahab S., Hakooz N., Jarrar Y., Al Shahhab M., Saleh A., Zihlif M. and Dajani R. (2019) Interethnic variations of UGT1A1 and UGT1A7 Polymorphisms in the Jordanian Population. *Current Drug Metabolism*, 20(5):399-410. doi: 10.2174/1389200220666190528085151.
10. Odeh M., Dajani R., Tbaishat D., Odeh Y., Tbakhi A., Sultan I., **Hakooz N.** and Kharbat F. (2018) i. LLL. CancerCare: Towards an Intelligent Life Long Learning Framework for Cancer Care. *2018 1st International Conference on Cancer Care Informatics (CCI)*, DOI: [10.1109/CANCERCARE.2018.8618230](https://doi.org/10.1109/CANCERCARE.2018.8618230).

11. Rjoub M., Saleh A., **Hakooz N.**, Imraish A., Jarrar Y. and Zihlif M. (2018) Allelic frequency of PON1 Q192R, CYP2C19* 2 and CYP2C19* 17 among Jordanian patients taking clopidogrel. *Tropical Journal of Pharmaceutical Research*, 17(11):2275-80. <http://dx.doi.org/10.4314/tjpr.v17i11.24>
12. **Hakooz N.**, Jarrar YB., Zihlif M., Imraish A., Hamed S. and Arafat T. (2017) Effects of the genetic variants of organic cation transporters 1 and 3 on the pharmacokinetics of metformin in Jordanians. *Drug Metabolism and Personalized Therapy*, 2017 Sep 26;32(3):157-162. doi: 10.1515/dmpt-2017-0019.
13. Dajani R., Li J., Wei Z., March ME., Xia Q., Khader Y., **Hakooz N.**, Fatahallah R., El-Khateeb M., Arafat A., Saleh T., Dajani AR., Al-Abbadi Z., Abdul Qader M., Shiyab AH., Bateiha A., Ajlouni K. and Hakonarson H. (2017) Genome-wide association study identifies novel type II diabetes risk loci in Jordan subpopulations. *Peer Journal*, Aug 17;5: e3618. doi: 10.7717/peerj.3618.
14. Al-Sha'er MA., Mansi I. Almazari I. and **Hakooz N.** (2015) Evaluation of Novel Akt1 Inhibitors as Anticancer Agents using Virtual Co-crystallized Pharmacophore Generation. *Journal of Molecular Graphics and Modeling*, 62: 213-225.
15. Al-Sha'er MA, Mansi I. and **Hakooz N.** (2015) Screening of miscellaneous Hsp90 inhibitors using virtual co-crystallized pharmacophore. *Journal of Computational Methods in Molecular Design*, 5 (3): 47-57.
16. Dajani R., Li J., Wei Z., Glessner J., Chang X., Cardinale C., **Hakooz N.**, Khader Y., Sheshani A., Zandaki D. and Hakonarson H. (2015) CNV Analysis Associates AKNAD1 with Type-2 Diabetes in Jordan Subpopulations. *Scientific Reports* 21; 5:13391. doi: 10.1038/srep13391.
17. Al-Sha'er MA., Mansi I. and **Hakooz N.** (2015) Docking and pharmacophore mapping of halogenated pyridinium derivatives on heat shock protein 90. *Journal of Chemical and Pharmaceutical Research*, 7(4): 103-112.
18. Al-Sha'er MA., Mansi I. and **Hakooz N.** (2013) 1-[2-Substituted ethyl]-2-methyl-5-nitroimidazole derivatives, synthesis and antibacterial activities. *Der Pharma Chemica*, 5(3): 156-162.
19. Dajani R., Fathallah R., Arafat A, Abdulqader ME., **Hakooz N.**, Al-Motassem Y. and El Khateeb M. (2013) Prevalence of MTHFR C677T Single Nucleotide Polymorphism in Genetically Isolated Populations in Jordan. *Biochemical Genetics*, 51(9-10): 780-788.
20. Shakya A., Arafat T., **Hakooz N.**, Abuawwad A, Al-Hroub H. and Melhim M. (2013) High Performance Liquid Chromatographic Determination of Montelukast Sodium in Human Plasma: Application to Bioequivalence Study. *Acta Chromatographica*, July. DOI: 10.1556/AChrom.26.2014.3.5

21. Dajani R., Arafat A., **Hakooz N.**, Al-Abbadi Z., Yousef AM., El Khateeb M. and Quadan F. (2013) Polymorphisms in Factor II and Factor V thrombophilia genes among Circassians in Jordan. *Journal of Thrombosis and Thrombolysis*, 35(1): 83-89.
22. Dajani R., Khader YS., **Hakooz N.**, Fatahalla R. and Quadan F. (2013) Metabolic syndrome between two ethnic minority groups (Circassians and Chechens) and the original inhabitants of Jordan. *Endocrine*, 43(1): 112-119.
23. Yousef AM., Bulatova NR., Newman W., **Hakooz N.**, Ismail S., Qusa H., Zahran F., Anwar Ababneh N., Hasan F., Zaloom I., Khayat G., Al-Zmili R., Naffa R., Al-Diab O. (2012) Allele and genotype frequencies of the polymorphic cytochrome P450 genes (CYP1A1, CYP3A4, CYP3A5, CYP2C9 and CYP2C19) in the Jordanian population. *Molecular Biology Reports*. 39(10): 9423-33.
24. Dajani R., Khader YS., Fatahallah F., El-Khateeb M., Shiyab AH., **Hakooz N.** (2012) Diabetes mellitus in genetically isolated populations in Jordan: prevalence, awareness, glycemic control, and associated factors. *The Journal of Diabetes and Its Complications*, 26(3):175-80.
25. **Hakooz N.**, Alzubiedi S., Yousef A., Arafat T., Dajani R., Ababneh N. and Ismail S. (2012) UDP-Glucuronosyltransferase 1A4 (*UGT1A4*) Polymorphisms in A Jordanian Population. *Molecular Biology Reports*, 39(7):7763-8.
26. **Hakooz N.** and Salem I. (2012) Prevalence of Desloratadine Poor Metabolizers Phenotype in Healthy Jordanian Males. *Biopharmaceutics and Drug Disposition*, 33(1); 15-21.
27. Zalloum I., **Hakooz N.** and Arafat T (2012). Genetic polymorphism of *CYP2C19* in a Jordanian population: influence of allele frequencies of *CYP2C19*1* and *CYP2C19*2* on the pharmacokinetic profile of lansoprazole. *Molecular Biology Reports*, 39(4); 4195-200.
28. Idkaidek N., Arafat T., Melhim M., Alawneh J. and **Hakooz N.** (2011). Metformin IR versus XR Pharmacokinetics in Humans. *Journal of Bioequivalence and Bioavailability*, 3: 233-235. doi:[10.4172/jbb.1000092](https://doi.org/10.4172/jbb.1000092).
29. **Hakooz N.**, Arafat T., Payne D., Ollier W., Pushpakom S., Andrews J. and Newman W. (2010). Genetic analysis of thiopurine methyltransferase polymorphism in the Jordanian population. *European Journal of Clinical Pharmacology*, 66; 999-1003.
30. Shakya AK., **Hakooz N.**, Arafat T., Abu-Awwad A., Abd El-Ghani J. and Melhim M. (2010). Tamsulosin quantification in human plasma by high performance liquid chromatography coupled to electrospray tandem mass spectrometry. *Acta Chromatographica*, 22, 99–116.

31. Wazaify M., Albsoul-Younes A. and **Hakooz N.** (2010). Improving Pharmacy Education at the Public Faculties of Pharmacy in Jordan: Students' Experience and Expectations. *Pharmacy Education*, 10; 107-13.
32. **Hakooz N.** (2009). Caffeine Metabolic Ratios for the *In Vivo* Evaluation of CYP1A2, N-acetyltransferase 2, Xanthine Oxidase and CYP2A6 Enzymatic Activities. *Current Drug Metabolism*, 10; 329-38.
33. **Hakooz N.** and Hamdan I. (2007). Effects of dietary broccoli on human *in vivo* caffeine metabolism: a pilot study on a group of Jordanian volunteers. *Current Drug Metabolism*, 8; 9-15.
34. Abu-Dahab R., **Hakooz N.** (2006). A primer of an animal cell culture laboratory for efficacy, toxicity and transport screening. *Jordan Medical Journal*, 40; 172-8.
35. **Hakooz N.**, Abu-Dahab R., Arafat T., Hamad M. (2006). A trend of low serum vitamin B₁₂ in Jordanian adults from two ethnic groups in Amman. *Jordan Medical Journal*, 40; 80-7.
36. **Hakooz N.**, Ito K., Rawden H., Gill H., Lemmers L., Boobis A.R., Edwards R.J., Carlile D.J., Lake G.B. and Houston J.B. (2006). Determination of a human hepatic microsomal scaling factor for predicting *in vivo* drug clearance. *Pharmaceutical Research*, 28; 533-9.
37. Hallifax D., Rawden H., **Hakooz N.** and Houston J.B. (2005). Prediction of metabolic clearance using cryopreserved human hepatocytes: Kinetic characteristics for five benzodiazepines. *Drug Metabolism and Disposition*, 33; 1852-8.
38. Carlile D.J., **Hakooz N.**, Bayliss M.K. and Houston J.B. (1999). Microsomal prediction of *in vivo* clearance of CYP2C9 substrates in humans. *British Journal of Clinical Pharmacology*, 47; 625-635.
39. Carlile D.J., **Hakooz N.** and Houston J.B. (1999). Kinetics of drug metabolism in rat liver slices: Comparison of ethoxycoumarin clearance by liver slices, isolated hepatocytes and hepatic microsomes from rat pretreated with known modifiers of CYP activity. *Drug Metabolism and Disposition*, 27; 526-532.

Editor in chief:

Gene Journal: <http://www.journals.elsevier.com/gene/editorial-board/>

Meta Gene: <http://www.journals.elsevier.com/meta-gene/editorial-board>

Reviewer for the following per-reviewed Journals

1. International Journal of Medical Sciences (IJMS).
2. Asia Pacific Journal of Cancer Prevention (APJCP)
3. Saudi Journal of Biological Sciences
4. Molecular Biology Reports
5. Jordan Journal of Pharmaceutical Sciences

6. Saudi Medical Journal
7. Egyptian Journal of Medical Human Genetics.
8. المجلة الأردنية للعلوم التطبيقية
9. Biopharmaceutics and Drug Disposition
10. Archives of Pharmacol Research
11. Journal of Pharmacology and Pharmacotherapeutics
12. Clinical Drug Investigation
13. Pharmacogenomics Journal
14. FEBS Letters

Courses Taught:

BSc Courses:

- Clinical Biochemistry
- Clinical Biochemistry Practical
- Clinical Biochemistry I (PharmD program)
- Clinical Biochemistry II (PharmD program)
- Genetics and Immunology (PharmD program)
- Biochemistry I
- Biochemistry II
- Biochemistry Practical
- Biopharmaceutics
- Pharmacokinetics
- Pharmacokinetics Workshops.

MSc Clinical Pharmacy:

- Advanced Clinical Biochemistry.

Active participation in the course development for the program of PharmD and MSc in clinical pharmacy at the Faculty of Pharmacy-University of Jordan.

Languages:

- Arabic: native language.
- English: very good command (spoken and written)
- Circassian: well enough (spoken)

Computer skills

The University of Jordan Computer Driving License (UJCDL), passing successfully in 7 modules.