

Dr. Lina A. Dahabiyeh

The University of Jordan
School of Pharmacy
Department of Pharmaceutical Sciences

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Education

- PhD. in Pharmacy, School of Pharmacy, University of Nottingham, UK. 2012-2016. Thesis Title: Targeted Mass Spectrometry for Plasma Glycoprotein Profiling in Pre-eclampsia.
- MSc. in Pharmaceutical Sciences, School of Pharmacy, The University of Jordan, Jordan. Thesis Title: Discovery of New Hormone Sensitive Lipase Inhibitors via Ligand-based Pharmacophore Modeling and QSAR Analysis Followed by Experimental Validation
- BSc. Pharmacy, School of Pharmacy, The University of Jordan, Jordan.

Professional Experience

- September 2023-Present: Assistant Dean for Quality Assurance Affairs, accreditation and Global Rankings, School of Pharmacy, The University of Jordan. Amman, Jordan
- 2021-Present: Associate Professor, Department of Pharmaceutical Sciences, School of Pharmacy, The University of Jordan. Amman, Jordan
- 2017-2020: Assistant Professor, Department of Pharmaceutical Sciences, School of Pharmacy, The University of Jordan. Amman, Jordan
- 2009-2012: Lecturer, Department of Pharmaceutical Chemistry and Pharmacognosy, Faculty of Pharmacy, Applied Science University. Amman, Jordan

Research Interests

- Bioanalysis and biomarker discovery
- Using advanced analytical strategies (such as metabolomics, pharmacometabolomic and proteomic studies) to aid the understanding of the pathogenesis of diseases (i.e. pre-eclampsia, cancer, neurodegenerative disorders), discovering new therapeutic targets, and investigating the mechanism of action/toxicity of pharmacological compounds and drugs.
- Synchrotron Fourier-transform infrared microspectroscopy for biomedical application

Technical Skills

- Mass Spectrometry (MS) and Liquid Chromatography-Mass Spectrometry (LC-MS and LC-MS/MS techniques)
- Metabolomics and proteomics approaches for biomarker discovery
- IR spectroscopy and microspectroscopy
- Protein Fractionation and Extraction Techniques
- Protein Separation, identification and quantification techniques (i.e. ELISA, Western plot, gel electrophoresis)
- Bioinformatics and multivariate data analysis

Teaching and Supervision Experience

- Drug Identification and Characterization (MSc. Students, Pharmaceutical Sciences Program)
- Pharmacology and Biological Evaluation Lab (PhD students, Pharmaceutical Sciences Program)
- Applied Chromatography Course (Instructor and Course Coordinator)
- Instrumental Pharmaceutical Analysis Course (Theory and Practical-Course Instructor and Coordinator)
- Pharmaceutical Analytical Chemistry Course (Theory and Practical- Course Instructor and Coordinator)
- Seminar in Pharmaceutical Sciences Course
- Practical Courses (Pharmaceutical Organic Chemistry, Phytochemical Analysis, Medicinal Chemistry).

Postgraduate Students Supervision

- Duaa Hijazi (MSc in pharmaceutical sciences, The University of Jordan). Assessing the effects of micafungin as a potential quorum sensing inhibitor on *Pseudomonas aeruginosa* biofilm formation using metabolomics and confocal laser microscopy. **Main Supervisor**. Defended January 2022.
- Bayan Alsaafin (MSc in pharmaceutical sciences, School of Pharmacy, The University of Jordan). Insights into The Effect of Prebiotic and Probiotic on Rhamnolipids Production and Biofilm Formation of *Pseudomonas aeruginosa* **Main Supervisor**. Defended December 2021.
- Farah Hudaib (MSc in pharmaceutical sciences, School of Pharmacy, The University of Jordan). The Application of Mass Spectrometry-Based Metabolomics Approach to Investigate the Potential Antiproliferative Effect of Leukotriene Receptor Antagonists. **Main Supervisor**. Defended December 2021.
- Amenah Majid AL-Imam (MSc in pharmaceutical sciences, School of Pharmacy, The University of Jordan). Development of structure-based pharmacophore model for dual specificity protein kinase TTK using novel computational workflow based on machine learning and ligand-receptor contacts analysis. **Co-Supervisor**. Defended December 2021.
- Sarah Arjah (MSc in laboratory medical sciences, Jordan University of Science and Technology). Metabolomics profiling in colorectal cell lines for identification hypoxia associated biomarkers. **Co-Supervisor, 2022/2023**
- Zeina Suliman, (PhD in Pharmaceutical Sciences, Mustansiriyah University, Iraq). Preparation and Characterization of Epirubicin-Loaded Superparamagnetic Iron-Oxide Liposomes for Oral Targeting Gastric Solid Tumor. **Co-Supervisor, 2023/2024**
- Marwa Seif, (MSc in biological sciences, School of Sciences, The University of Jordan). Anti-Inflammatory Activity and Metabolite Profiling Evaluation of Myo-Inositol in LPS-stimulated RAW 264.7 Cells. **Co-Supervisor, 2023/2024**
- Ayat Nofel (MSc in clinical pharmacy, School of Pharmacy, The University of Jordan). Evaluation of the plasma levels of phosphorylated tau and amyloid β in Jordanian Alzheimer's patients. **Co-Supervisor, 2023/2024**

Selected Workshops and Training Courses:

- The 7th Regional Pharmacy Faculty Development Workshop on Best practices for Assessment in Pharmacy Education, Ajman-UAE January 13-14, 2024
- Leadership Course on Intellectual Property, Science and Innovation for Women Scientists and Innovators, Geneva April 25-28, 2023 organized by World Intellectual Property Organization (WIPO) and UNESCO.
- Imaging Mass Spectrometry workshop: Sample Preparation, Dr. Elizabeth Neumann, UC Davis, April 24, 2023.
- Fundamental of Lipidomics, Dr. Tong Shen, UC Davis, January 26, 2023
- Fundamentals of Gas Chromatography-MS in Metabolomics workshop with Dr. Oliver Fiehn, Dr. Uri Keshet, and Luis Vladiviez - UC Davis, November 3, 2022, online
- Mindshift: Break Through Obstacles to Learning and Discover Your Hidden Potential, an online course authorized by McMaster University and offered through Coursera, November 1, 2022
- The 7th Gateway Symposium, "NMR in Metabolism: New methods & applications, University of Kentucky, October 20-21, 2022. Online
- Fall MANA (Metabolomics Association of North America) symposium (online): We are what we eat. Metabolomics lead the way to nutrition, 14 October 2022
- Introduction to Metaboanalyst workshop, Dr. Jeff Xia, McGill University, October 6 2022, online
- International Summer Course in Metabolomics, West Coast Metabolomics Center, Davis, California. August 22nd - September 2nd, 2022.
- Negotiation Fundamentals an online course authorized by ESSEC Business School and offered through Coursera, June 8, 2022
- The Science of Well-Being an online course authorized by Yale University and offered through Coursera, May 27, 2022
- Giving Helpful Feedback an online course authorized by University of Colorado Boulder and offered through Coursera, May 3, 2022
- 1st on-line School on Synchrotron Radiation "Gilberto Vlaic": Fundamentals, Methods and Application. September 13th-17th, 2021.
- NMR-based metabolomics in breast cancer research, SelectScience. Virtual seminar. May 14th, 2021.

- Finish a Western Blot quickly with the iWestern workflow. ThermoFisher Scientific, Virtual seminar. May 19th, 2020.
- Latest Advances in LC-MS/MS Analysis; Forensic, Clinical, Pharma & Biopharma Laboratories, Food & Environmental Laboratories InterContinental Amman, Jordan. August 27th and 28th, 2019.
- Latest applications for mass spectrometry for the analysis of BIOLOGICS, InterContinental Amman, Jordan 12 December 2018.
- Research Based Teaching Workshop, National Erasmus+ Office, Hamdi Mango Centre for Scientific Research. The University of Jordan. Jordan. 24th September 2018.
- HPLC instrument and practical approaches to significantly improve laboratory Sheraton Hotel, Amman, Jordan, 2nd July 2018.
- Using Advanced Mass Spectroscopy Technologies in Clinical and Forensic Applications, InterContinental Amman, Jordan 1st November 2017.
- The fourth Erasmus + national Conference. La Royal Amman, Jordan. 9th October 2017
- TAIEX Workshop on GEANT, H2020 and European Synchrotron Sources (**SESAME**), Days Inn Hotel & Suites Amman, Jordan. 12– 13 August 2017.

Selected Conference Contributions and National and International Meetings

- The 11th Conference for Scientific Research in Jordan organized by JSSREC, November 11, 2023, Amman, Jordan, Attendee
- The 18th Jordanian Chemistry Conference & Exhibition (JCC18), September 12-13, 2023, Amman Jordan. "Mass Spectrometry-Based Metabolomics Approach for Biomarker and Therapeutic Target Discovery: Examples from Parkinson's Disease and Colorectal Cancer", Oral Presentation
- 71st ASMS Conference on Mass Spectrometry and Allied Topics, June 4-8, 2023, Houston, Texas, USA. Poster Presentation.
- Spring 2023 Chicago Fulbright Scholar Enrichment Seminar in Public Health, April 12-15, 2023, Chicago, Illinois, USA. Attendee
- APS (American Physical Society) March 2023 meeting, March 20-22, 2023. Oral presentation
- Modern Trends and Technologies in Pharmacy Research, Mustansiriyah University, 3rd International Virtual Conference January 12-13, 2022. "The Use of Metabolomics Approach to Investigate the Cytotoxic Effect of Phospholipid-Gold Nanorods in MCF-7 Cells". Oral Presentation. Invited speaker.
- Research as a Career (Lecture and Panel Discussion). 9th Pharmacy Students Research Training Program, PSRC, Amman, Jordan, 5th October 2021. Invited speaker.
- Women in Academia, virtual conference, January 20-21, 2021. Jordan. Attendee
- Phi's Research and Innovation Summit, July 3-4, 2020. "The Emerging Role of Proteomics in Disease Biomarker Discovery: Approaches and Applications". Oral Presentation. Invited speaker.
- 7th International Symposium-Cum-Training Course on Molecular Medicine and Drug Research (MMDR-7), ICCBS, University of Karachi, Pakistan. November 4-7, 2019. "The Promising Role of Mass Spectrometry in Targeted Protein Quantification", Oral Presentation and Session Chair. Invited Speaker.
- 16th SESAME Users Meeting Amman, Jordan. December 15-16, 2018. "Infrared Microspectroscopy to Investigate the Role of Placenta in the Pathogenesis of Pre-eclampsia". Oral Presentation.
- Gordon Research Seminar (GRS) and Gordon Research Conference (GRC) Ventura, CA, USA February 17-23, 2018. "Quantification of Plasma Angiotensinogen Redox Forms in a Case-control Study of Pre-eclampsia using Targeted LC-MS/MS", Oral and Poster Presentations.
- 19th International Conference on Pharmacology and Pharmaceutical Sciences, Italy, April 13-14, 2017. "Quantification of Plasma Angiotensinogen Redox Forms in a Case-control Study of Pre-eclampsia using Targeted LC-MS/MS ICPPS 2017: Oral Presentation.

Awards and fellowships

- **2022-2023 Fulbright Visiting Scholar Program**, West Coast Metabolomics Center, UC Davis, CA, USA. September 2022-May 2023.

- **The 2022 L'Oréal UNESCO For Women In Science International Rising Talent Award.** UNESCO Headquarter, Paris 22nd June 2022.
- **The 2020 L'Oréal UNESCO For Women In Science Levant Young Talents Award.**
- **Daniel Turnberg Travel Fellowship,** The Academy of Medical Sciences, UK Scheme 2019. School of Pharmacy, Queen's Belfast University, UK. 20th July-20th August 2019.
- **Erasmus+ Program Staff Mobility for Teaching.** University of Debrecen, Hungary 20-24 May 2024 teaching postgraduate students at Faculty of Pharmacy a topic entitled "The Promising Role of Mass Spectrometry and IR Microspectroscopy in Biomedical Sciences"
- **Erasmus+ Program Staff Mobility for Teaching.** Jagiellonian University, Poland 12-18 May 2019. Teaching postgraduate students at Faculty of Chemistry a topic entitled "Biomarker Discovery Using Mass Spectrometry–Based Proteomics"
- **Best Poster** in the 13th East Midlands Proteomics Workshop and Exhibition, Leicester, UK. 19 November 2014.
- **Second runner up.** PG poster competition, School of Pharmacy, University of Nottingham, UK. 2014.
- **Best Research Paper in Natural Sciences for the year 2009 granted by Al-Najah National University, Nablus.**
- A scholarship from the University of Jordan to pursue my PhD study, and a scholarship from the Ministry of Higher Education, Amman, Jordan 2007 to pursue my MSc study.

Papers and Publication

- **Lina A Dahabiyeh***, RM Nimer, M Rashed, JD Wells, O Fiehn Serum-Based Lipid Panels for Diagnosis of Idiopathic Parkinson's Disease, *Metabolites*, 2023 13 (9), 990
- Orwa Aboud, Yin Liu, **Lina A. Dahabiyeh**, Ahmad Abuaisheh, Fangzhou Li, et al. Profile Characterization of Biogenic Amines in Glioblastoma Patients Undergoing Standard-of-Care Treatment, *Biomedicines*, 2023 11 (8), 2261
- Hicham Benabdelkamel, Malak A Jaber, **Lina A Dahabiyeh**, Afshan Masood, Reem H Almalki, et al, Metabolomic profile of patients on levothyroxine treatment for hypothyroidism, *European Thyroid Journal*, 2023 12 (4)
- **Lina A Dahabiyeh**, Refat M Nimer, Khalid M Sumaily, Mohamad S Alabdjalbar, Minnie Jacob, et al, Metabolomics profiling distinctively identified end-stage renal disease patients from chronic kidney disease patients, *Scientific Reports*, 2023 13 (1), 6161
- Bayan A Al-Saafin, Amal G Al-Bakri, Salah Abdelrazig, **Lina A Dahabiyeh***, Investigating the effect of the probiotic *Lactobacillus plantarum* and the prebiotic fructooligosaccharides on *Pseudomonas aeruginosa* metabolome, virulence factors and biofilm formation as potential quorum sensing inhibitors, *Microbial Pathogenesis*, 2023.
- DM Hijazi, **Lina A Dahabiyeh***, S Abdelrazig, et al, Micafungin effect on *Pseudomonas aeruginosa* metabolome, virulence and biofilm: potential quorum sensing inhibitor, *AMB Express*, 2023.
- **Lina A Dahabiyeh***, Farah Hudaib, Wafa Hourani, et al, Mass Spectrometry-based Metabolomics Approach and in vitro Assays Revealed Promising Role of 2, 3-Dihydroquinazolin-4 (1H)-one Derivatives Against Colorectal Cancer Cell Lines, *European Journal of Pharmaceutical Sciences*, 2023.
- Dania Alkabbani, **Lina A Dahabiyeh**, Mutasem O Taha, Dipeptidyl Peptidase-IV Blockers Potently Inhibit Monoglyceride Lipase: Investigation By Docking Studies And In Vitro Bioassay, *Medicinal Chemistry Research*, 2022
- **Lina A Dahabiyeh***, Wafa Hourani, Wesam Darwish, et al, Molecular and metabolic alterations of 2,3-dihydroquinazolin-4(1H)-one derivatives in prostate cancer cell lines, *Scientific Reports*, 2022.
- Amal G Al-Bakri, **Lina A Dahabiyeh**, Enam Khalil, et al, Synchrotron-Radiation-Based Fourier Transform Infrared Microspectroscopy as a Tool for the Differentiation between Staphylococcal Small Colony Variants, *Antibiotics*, 2022.
- **Lina A Dahabiyeh**, Muhammad Mujammami, Reem H AlMalki, et al, Lipids Alterations Associated with Metformin in Healthy Subjects: An Investigation Using Mass Spectrometry Shotgun Approach, *IJMS*, 2022.
- Masar Basim Mohsin Mohamed, **Lina A Dahabiyeh**, et al, Design and evaluation of molecular organogel based on folic acid as a potential green drug carrier for oral route, *Drug Development and Industrial Pharmacy*, 2022.

- Katharigatta N Venugopala, Nizar A Al-Shar'i, **Lina A Dahabiyeh**, et al, Antitubercular, Cytotoxicity, and Computational Target Validation of Dihydroquinazolinone Derivatives, *Antibiotics*, 2022.
- **Lina A Dahabiyeh***, Randa SH Mansour, Wesam Darwish, et al, Plasma drop and thin-film revealed distinguished molecular structure in pre-eclampsia: An investigation using synchrotron Fourier-transform infrared microspectroscopy, *Journal of Pharmaceutical and Biomedical Analysis*, 2022.
- Minnie Jacob, Refat M Nimer, Mohamad S Alabdjalbar, Essa M Sabi, Mysoon M Al-Ansari, Maged Housien, Khalid M Sumaily, **Lina A Dahabiyeh**, Anas M Abdel Rahman, Metabolomics Profiling of Nephrotic Syndrome towards Biomarker Discovery, *IJMS*, 2022.
- Firas F Awwadi, **Lina A Dahabiyeh**, Imad I Hamdan, Trimolecular Co-crystals of Ciprofloxacin, p-Coumaric Acid, and Benzoic Acid or Salicylic Acid, *Journal of Chemical Crystallography*, 2022.
- R Nimer, G Kamel, MA Obeidat, **Lina A Dahabiyeh*** Investigating the molecular structure of plasma in type 2 diabetes mellitus and diabetic nephropathy by synchrotron Fourier-transform infrared microspectroscopy. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 2022.
- Sanaa K Bardaweel, **Lina A Dahabiyeh**, Bushra M Akileh, et al. Molecular and Metabolomic Investigation of Celecoxib Antiproliferative Activity in Mono-and Combination Therapy Against Breast Cancer Cell Models. *Anticancer Agents in Medicinal Chemistry*. 2022.
- Malak A Jaber, Hicham Benabdelkamel, **Lina A Dahabiyeh**, et al, The metabolomics approach revealed a distinctive metabolomics pattern associated with hyperthyroidism treatment, *Frontiers in Endocrinology*, 2022.
- Mysoon M Al-Ansari, Reem H AlMalki, **Lina A Dahabiyeh**, Anas M Abdel Rahman, Metabolomics-Microbiome Crosstalk in the Breast Cancer Microenvironment. *Metabolites*. 2021
- **Lina A Dahabiyeh***, M Mujammami, T Arafat, et al. A Metabolic Pattern in Healthy Subjects Given a Single Dose of Metformin: A Metabolomics Approach. *Frontiers in Pharmacology*, 2021
- **Lina A Dahabiyeh***, Nouf N Mahmoud, Mohammad A Al-Natour, et al. Phospholipid-Gold Nanorods Induce Energy Crisis in MCF-7 Cells: Cytotoxicity Evaluation Using LC-MS-Based Metabolomics Approach. *Biomolecules*, 2021.
- Shereen M Aleidi, **Lina A Dahabiyeh**, Xinyun Gu, et al. Obesity Connected Metabolic Changes in Type 2 Diabetic Patients Treated with Metformin. *Frontiers in Pharmacology*, 2021.
- Pobitra Borah, Pran Kishore Deb, Nizar Al-Shar'i, **Lina A. Dahabiyeh**, et al. Perspectives on RNA vaccine candidates for COVID-19. *Frontiers in Molecular Biosciences*, 2021.
- Safa Daoud, Shada J. Alabed and **Lina A. Dahabiyeh**. Identification of potential COVID-19 main protease inhibitors using structure-based pharmacophore approach, molecular docking and repurposing studies. *Acta pharmaceutica*, 2021.
- Afaf H Al-Nadaf, **Lina A Dahabiyeh**, Sajidah Jawarneh, et al, Folic Acid-Hydrophilic polymer Coated Mesoporous Silica Nanoparticles Target Doxorubicin Delivery. *Pharmaceutical Development and Technology*, 2021
- KN Venugopala, S Chandrashekharappa, PK Deb, C Tratratt, Melendhran Pillay, Deepak Chopra, Nizar A Al-Shar'i, Wafa Hourani, **Lina A Dahabiyeh** et al. Anti-tubercular activity and molecular docking studies of indolizine derivatives targeting mycobacterial InhA enzyme, *Journal of enzyme inhibition and medicinal chemistry*. 2021.
- Imad I. Hamdan, Dina El-Sabawi, Rula Darwish, **Lina A. Dahabiyeh***. Preparation, characterization and antimicrobial assessment of selected ciprofloxacin molecular salts. *Acta Pharmaceutica*, 2021.
- **Lina A. Dahabiyeh***, Randa S.H. Mansour, Shawqi S. Saleh, Gihan Kamel. Investigating the molecular structure of placenta and plasma in pre-eclampsia by infrared microspectroscopy. *Journal of Pharmaceutical and Biomedical Analysis*, 2020.
- **Lina A Dahabiyeh**, Abeer K. Malkawi, Xiaohang Wang, et al. Dexamethasone-Induced Perturbations in Tissue Metabolomics Revealed by Chemical Isotope Labeling LC-MS analysis, *Metabolites*, 2020.
- Eman Y. Abu-rish, Ahmad Mansour, Hebah Mansour, **Lina A. Dahabiyeh**, et al. Pregabalin inhibits in vivo and in vitro cytokine secretion and attenuates spleen inflammation in Lipopolysaccharide/Concanavalin A induced murine models of inflammation. *Scientific Reports*, 2020.
- **Lina A. Dahabiyeh**, David Tooth, Lesia O. Kurlak, et al, A pilot study of alterations in oxidized angiotensinogen and antioxidants in pre-eclamptic pregnancy, *Scientific Reports*, 2020.
- **Lina A. Dahabiyeh***, Eman Y. Abu-rish, Mutasem O. Taha, Inhibition of Monoglyceride Lipase by Proton Pump Inhibitors: Investigation Using Docking and In Vitro Experiments, *Pharmacological Reports*. 2020.
- Afaf H.Al-Nadaf, **Lina A. Dahabiyeh***, Sanaa Bardaweel, et al Functionalized mesoporous silica nanoparticles by lactose and hydrophilic polymer as a hepatocellular carcinoma drug delivery system, *Journal of Drug Delivery Science and Technology*, 2020.

- **Lina A. Dahabiyeh**, David Tooth, Robin W. Carrell, et al. Measurement of the Total Angiotensinogen and its Reduced and Oxidised Forms in Human Plasma Using Targeted LC-MS/MS. *Analytical and Bioanalytical Chemistry*, 2019.
- **Lina A. Dahabiyeh**, David Tooth and David A Barrett. Profiling of 54 plasma glycoproteins by label-free targeted LC-MS/MS, *Analytical Biochemistry*, 2019.
- **Lina A. Dahabiyeh**, Yasser Bustanji, Mutasem O. Taha The Herbicide Quinclorac as a Potent Lipase Inhibitor: Discovery via Virtual Screening and in vitro/in vivo Validation. *Chemical Biology and Drug Design*, 2018.
- Eman Y. Abu-rish, **Lina A. Dahabiyeh**, Yasser Bustanji, et al. Effect of lamotrigine on in vivo and in vitro cytokine secretion in murine model of inflammation. *Journal of Neuroimmunology*, 2018.
- **Lina A. Dahabiyeh***. The discovery of protein biomarkers in pre-eclampsia: the promising role of mass spectrometry. *Biomarkers*, 2018.
- Jumana D. Al-Shawabkeh, Afaf H. Al-Nadaf, **Lina A. Dahabiyeh**, Mutasem O. Taha. Design, synthesis and structure–activity relationship of new HSL inhibitors guided by pharmacophore models. *Medicinal Chemistry Research*, 2014.
- Mutasem O. Taha, **Lina A. Dahabiyeh**, Yasser Bustanji, et al. Combining Ligand-Based Pharmacophore Modeling, Quantitative Structure–Activity Relationship Analysis and in Silico Screening for the Discovery of New Potent Hormone Sensitive Lipase Inhibitors. *Journal of Medicinal Chemistry*, 2008.

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Book Chapters

- Metabolomics: A Pipeline for Biomarker Discovery in Genetic Diseases In Clinical Metabolomics Applications in Genetic Diseases, **Lina A Dahabiyeh***, Refat M. Nimer, Springer Nature Singapore, 30/9/2023, 43-69.
- Advancements in Translational Respiratory Research Using Nanotechnology In Advanced Drug Delivery Strategies for Targeting Chronic Inflammatory Lung Diseases, Ratnali Bania, Pobitra Borah, Juti Rani Devi, Satyendra Deka, **Lina A Dahabiyeh**, Wafa Hourani, Pran Kishore Deb, Katharigatta N Venugopala, Gaurav Gupta, Springer Nature Singapore, 24/3/2022, 45-73.
- Current strategies in targeted anticancer drug delivery systems to brain In Advanced Drug Delivery Systems in the Management of Cancer, Ratnali Bania, Pobitra Borah, Satyendra Deka, **Lina A Dahabiyeh**, Vinayak Singh, Nizar A Al-Shar'i, Anroop B Nair, Manoj Goyal, Katharigatta N Venugopala, Rakesh Kumar Tekade, Pran Kishore Deb, Academic Press, 1/1/2021, 267-280.

Current Research Grants

- The effect of novel 2,3-dihydroquinazolin-4(1H)-one derivatives against 2D and 3D cell cultures models of glioblastoma: An investigation using mass spectrometry-based metabolomics approach. Deanship of Scientific Research, The University of Jordan. **Principal investigator**, 20000 JD, 2023-2025.
- Insights into the pathophysiology of Parkinson's disease: an investigation using integrated omics approaches and synchrotron Fourier-transform infrared microspectroscopy. Deanship of Scientific Research, The University of Jordan. **Principal investigator**, 18600 JD, 2021-2024.
- Metabolic and proliferative effects of loss of cell-cell contacts mediated by E-cadherin in human facial epidermal keratinocytes. Deanship of Scientific Research, The University of Jordan. **Co-researcher**, 20000 JD, 2021-2024.
- Evaluation of the levels of inflammatory mediators in pediatric patients with epilepsy. Deanship of Scientific Research, The University of Jordan. **Co-researcher**, 18500 JD, 2020-2023.
- Molecular evaluation of novel monoamine oxidase-A inhibitors targeting lung cancer using mass spectrometry-based metabolomics and IR-microspectroscopy. Abdul Hameed Shoman Foundation, **Co-researcher**, 20000 JD, 2021-2023.
- A novel fingerprint pattern to unravel the etiology of pre-eclampsia and empower its diagnosis: Investigation using infrared microscopic examination of dried plasma drop. The 2020 L'Oréal UNESCO For Women In Science Levant Young Talents Program, **Principal investigator**, 10000 Euro, 2021-2023
- Insights into the potential anti-inflammatory and anti-proliferative effects of novel pyrimidine derivatives: An investigation using biochemical assays and mass spectrometry-based metabolites profiling. Deanship of Scientific Research, The University of Jordan. **Principal investigator**, 20000 JD, 2020-2023.
- Effect of storage conditions of human skin sheets on physical barrier properties of the stratum corneum. Deanship of Scientific Research, Philadelphia University. **Co-researcher**, 5000 JD, 2020-2023

- Investigation of metabolite profile in bacterial biofilms using mass spectrometry. Deanship of Scientific Research, The University of Jordan. **Co-researcher**, 15000 JD, 2019-2023.

Professional Scientific Achievements and Services

- Established a research lab for bioanalysis at the University of Jordan and introduced advanced cutting-edge analytical methods and approaches (e.g. metabolomics, proteomics, pharmacometabolomics) to improve the quality of scientific research conducted in Jordan.
- Established several research collaborations at the national and the international levels and expanded my professional network to include collaborators from prestigious universities and research institutions.
- Act as a reviewer in ISI international journals (ex. Journal of Pharmaceutical and Biomedical analysis, Biomedicine and Pharmacotherapy, Scientific Reports, Journal of Proteome research, Biochimica et Biophysica Acta - Molecular Basis of Disease, Placenta, and Plos One).
- Head and active member in several committees at the school of pharmacy including international accreditation and quality assurance (Head), seminars and conferences, scientific committee, student activity and community service (Head).
- Member of the University of Jordan scientific research council.
- Internal and external examiner for several postgraduate students.
- Supervised several activities directed toward supporting the new generation of researchers and scientists. This includes:
 - Supervising research projects for students and offering them constructive and valuable feedback that enabled them to participate in international competitions such as Intel and Stars of Science.
 - Attracting young students to a career in science by:
 - 1) Giving several workshops related to research methodologies and writing research proposals, and the importance of research as a career.
 - 2) Granting them access to my lab to conduct experiments and improve their practical research skills and exposing them to advanced techniques and methodologies in research.

Membership in Local and International Societies

- Jordanian Users Committee for Synchrotron-light for Experimental Science and Applications in the Middle East (SESAME), 2017-present.
- Metabolomics Association of North America
- International Society for the Study of Xenobiotics, 2023-present
- Middle East Molecular Biology Sources (MEMBS), 2017-present.
- Association of Jordanian Women Academics, 2020-present
- Jordan Society for Scientific Research, entrepreneurship and creativity, 2020-present
- Jordan Association of Pharmacists, 2005-present
- Biochemical Society, 2015-present
- British Society for Proteome Research, 2015-2017
- American Society for Mass Spectrometry

Community Service

- Organized and moderated series of online webinars during COVID-19 crisis to increase the awareness among the Jordanian community regarding several important topics related to the Corona virus and the available vaccines.
- Organized and participated in a walk to support cancer patients in the World Cancer Day, 2021
- Planned and conducted a scientific day (included live practical experiments) in a public school to emphasize the importance of research in advancing knowledge to encourage younger generation to pursue a scientific and research-based career.
- Organize and supervise medical days and campaigns at Malls and refugee camp to create awareness about important health issues including drug usage and interactions, early detection of breast cancer, correct use of inhalers, insulin injectors and blood pressure measuring devices.
- Supervised research projects for young researchers from Jubilee School.