#### DR. MOHAMMAD F. BAYAN



#### Biography

Dr. Mohammad F. Bayan is working as an Associate Professor of Pharmaceutics at faculty of Pharmacy in Philadelphia University, Amman, Jordan and is currently the Head of Pharmacy Department. The major focus of Dr. Bayan's research involves the development of controlled and triggered drug delivery systems using advanced and novel technologies. His work involves organic synthesis, synthesis and characterization of polymeric smart materials and performing drug release studies. Dr Bayan was awarded a scholarship from the Philadelphia University Jordan during his bachelor's study and a scholarship from Jordan University of Science and Technology (JUST) during his master's study. After finishing the master's degree, Dr. Bayan has worked as a part time lecturer in JUST and Philadelphia University; until he awarded, in 2014, a scholarship from the Philadelphia University Jordan to commence his PhD studies in Queen's University Belfast, UK. He is author of more than 40 publications and received funding from national and international grants (Jordan University of Science and Technology, Queen's University Belfast (UK), Teleflex Medical company (Boston, Massachusetts, USA), Philadelphia University, Jordan; Project number 511/34/100 PU, King Khalid University, Saudi Arabia; Project number RGP.2/31/43 and Najran University, Saudi Arabia; Project number NU/RG/MRC/12/20). Dr Bayan has presented his work at numerous international and national conferences such as the 10th world meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology; 6th APS International PharmSci and 38th All Ireland Schools of Pharmacy Research Conference.

### Administrative Experience:

### Head of Pharmacy Department (9/2023-Now)

- Lead, manage and develop the department to ensure it achieves the highest possible standards of excellence in all its activities.
- Maintain the general discipline of the students and staff of the Department.
- Conducting department faculty meetings and implementing the curriculum development.
- Prepare the annual budget in consultation with Dean of the School for the financial year and submit to the Registrar before the end of January of each year with necessary justification for the proposed additional laboratory spaces, if any and procurement of equipment, machinery, instrument, computer, software, etc.
- Appoint Class committees, Class Advisors, Faculty Advisors, etc. for the department.
- Arrange to pass the semester end examinations results by the Class Committee and forward it to the Controller of Examination / Dean, Academic Courses for publication and record.
- Lab manual drafting and including modern methods of green experiments.
- Organized exit exam for the graduating pharmacy students.
- Oversee the teaching performance, research activities and funded projects.
- Organize Seminars / Conferences / Symposium /Workshop / training programs in topics of relevance and importance to the department with financial support from external agencies.
- Documentation of Quality Assurance files at the faculty level, faculty council and the strategic planning activities.
- Be responsible and accountable for setting and advancing the academic strategy of the Department in line with Faculty and University strategic plans and direction.
- Participating in social activities and community services with students and faculty members.
- Propose new programs/courses and increase the in intake in consultation with Dean of the faculty.

# **Educational Qualifications:**

PhD in Pharmacy, QUB, UK (2018).

Master Degree of Science in Pharmacy/Pharmaceutical Technology, JUST, Jordan (2013).

Bachelor's Degree in Pharmacy, Philadelphia University, Jordan (2010).

# **Editorial Service:**

- Guest Editor of a special issue of Molecules journal entitled "Chemistry and Applications of Polymers in Pharmaceuticals and Foods" https://www.mdpi.com/journal/molecules/special\_issues/T2893LC4V0.

- Editing a book titled, "Polymers in Functional Foods and Drugs: Chemistry and Essential Applications" The publisher is Scrivener Publishing LLC in collaboration with WILEY by a joint venture known as Wiley-Scrivener, which is indexed in SCOPUS and Web of Science databases.

- Took part in the QS Global Academic Survey for 2023/*Times Higher Education* World University Rankings for 2022, 2023 and 2024.

- Organizing committee member of the 5thWorld Congress and Expo on Nanotechnology and Materials Science (September 27-28, 2021, Dubai, UAE).

- Member of the United Kingdom and Ireland Controlled Release Society (UKICRS).

- e-Poster session evaluator in the Two days international e-Conference "EXPANDING FRONTIER OF PHARMACEUTICAL RESEARCH TOWARDS GLOBAL EXIGENCY" (15-16 October, 2020, organized by Dept. of Pharmaceutics, Karpagam College of Pharmacy, Coimbatore, TN, India).

-Member of the United Kingdom and Ireland Controlled Release Society (UKICRS).

-- Reviewer for high impact international journals (AAPS PharmSciTech; Polymers; Cosmetics; International journal of nanomedicine; Pharmaceutics; Pharmaceuticals; AAPS open; Annales pharmaceutiques françaises; Sustainability; Antibiotics; Applied sciences; Biomedicines; Biomimetics; ChemistrySelect; Clinical epidemiology; Coatings; Drug, healthcare and patient safety; Emergent materials; Folia microbiologica; Future Journal of Pharmaceutical Sciences; Molecules; Gels; Separations; Powders; International Journal of Molecular Sciences; Materials; Journal of functional biomaterials; International journal of biochemistry research and review; Journal of pharmaceutical research international; Journal of complementary and alternative medical research; Universal journal of pharmaceutical research; Journal of modern biology and drug discovery; Journal of multidisciplinary healthcare; Patient Preference and Adherence).

- Editorial Board Member of the Sumerianz Journal of Medical and Healthcare.

- Editorial Board Member of the Universal Journal of Pharmaceutical Research.

- Editorial Board Member of the International Journal of Innovative Research and Scientific Studies (IJIRSS).

- Editorial Board Member of the International Journal of Pharmaceutics and Drug Analysis (IJPDA).

- Editorial Board Member of Journal of Modern Pharmacology and Pathology

# Honours and Awards:

- Researcher Plus Award, QUB, UK, June 2018.
- Research publications award by Philadelphia University, 2023
- Research publications and citations award by Philadelphia University, 2024
- Research publications award by Philadelphia University, 2025

### **Research Area**

Dr. Mohammad Bayan leads three themes within Novel Drug Delivery in the Faculty of Pharmacy; polymeric medical devices, Smart photoactive biomaterials and sensor development. The major focus of Dr. Bayan's research involves the development of controlled and triggered drug delivery systems using advanced and novel technologies. His work involves organic synthesis, synthesis and characterization of polymeric smart materials and performing drug release studies. A further area of research is in the development of biomaterials which are resistant to infection. In particular, his research exploits triggered drug delivery using light, heat, chemical or electrical stimuli to either modulate the properties of materials or directly release appropriate bioactive molecules.

Research Interests:

Pharmaceutics and Pharmaceutical Technology Pharmaceutical Formulation Stimuli-Responsive Polymers Hydrogels and Microgels Microparticles Aerogels Biomaterials Nanotechnology Microfluidic Technology Supercritical Fluid Technology Novel Drug Delivery Controlled Drug Delivery Triggered Drug Delivery

### Publications

- Chandrasekaran, Balakumar, Mohammad F. Bayan, Ali Hmedat, Bilal A. Al-Jaidi, Deniz M. Al-Tawalbeh, Duaa Abuarqoub, Anas J. Rasras, Da'san M. M. Jaradat, Abdel Naser Dakkah, Wafa Hourani, and et al. 2025. "Synthesis, Anticancer Screening, and In Silico Evaluations of Thieno[2,3-c]pyridine Derivatives as Hsp90 Inhibitors" Pharmaceuticals 18, no. 2: 153.
- Jaradat, Abdolelah, Esra'a A. Alomari, Mohammad F. Bayan and Abdallah Y. Naser. "Knowledge, attitudes and practices regarding medication splitting and crushing among the general public in Jordan: a cross-sectional study" BMJ Open 14, no. 11 (2024): e087109.
- "Polymeric-Based Formulation for Intelligent Drug Delivery" Proceedings of the 11th Edition of Global Conference on Pharmaceutics and Novel Drug Delivery, 19-21 September, 2024, NH Roma Villa Carpegna, Rome, Italy.
- "Econazole Topical Gel: Development and Characterization" Proceedings of the International Conference on Chemistry and Chemical Engineering (ICCCE-2024), 16-17 August, 2024, Hotel Grand Central, Singapore.
- Chandrasekaran, Balakumar, Pandi Boomi, Mohammad F. Bayan, Sankar Muthumanickam, and Mohammad H. Alyami. 2024. "Computational Design of a Novel Inhibitor Against COVID" Letters in Drug Design and Discovery 21,(2024).
- Chandrasekaran, Balakumar, Mohammad F. Bayan, Nadia Mansour, Rahaf Oweis, Raneem Al-Halabi, Kumarappan Chidambaram and Rajwinder Kaur. "Computer-Aided Biopharmaceutical Model Development." Physicochemical aspects of dosage forms and Biopharmaceutics: Recent and Future Trends in Pharmaceutics, Volume 2. Elsevier (2024): 339-351.
- "Intelligent Drug Delivery Using Smart Polymers" Proceedings of the Global Meet on Pharmaceutics and Drug Delivery (GMPDDS2024), organized by Prime Meetings, 14 May, 2024.
- Alyami, Mohammad H., Hussain Mahdi Al-Slaim, Hamad Mana Alzamanan, Mohammad F. Bayan, and Khalid Ahmed. 2024. "The Prevalence of Risk Factors for Cardiovascular Diseases in Najran Region, Saudi Arabia" Journal of Personalized Medicine 14, no. 5 (2024): 470.

- "Polymeric-Based Formulation for Intelligent Drug Delivery" Proceedings of the 2nd International Meet on Polymer Science and Composite Materials (POLYMERMEET2024), organized by Albedo Meetings, 18 April, 2024.
- Bayan, Mohammad F., Balakumar Chandrasekaran, Nadia Mansour, Yamam Alrefaie, Kinana Ashour and Hero Khan Pathan. "Computational pharmaceutics." Novel Formulations and Future Trends: Recent and Future Trends in Pharmaceutics, Volume 3. Elsevier (2024): 393-414.
- Rabeh, Mohammad E., Lalitkumar K Vora, Jessica V. Moore, Mohammad F. Bayan, Colin P. McCoy, and Matthew P. Wylie. "Dual stimuli-responsive delivery system for self-regulated colon-targeted delivery of poorly water-soluble drugs" Biomaterials Advances 157, (2024): 213735.
- Bayan, Mohammad F., Balakumar Chandrasekaran, and Mohammad H. Alyami. "Development and Characterization of Econazole Topical Gel" Gels 9, no. 12 (2023): 929.
- Alwraikat, Abdalaziz, Abdolelah Jaradat, Saeed M. Marji, Mohammad F. Bayan, Esra'a Alomari, Abdallah Y. Naser and Mohammad H. Alyami. "Development of a Novel, Ecologically Friendly Generation of pH-Responsive Alginate Nanosensors: Synthesis, Calibration, and Characterisation" Sensors 23, no. 20 (2023): 8453.
- Choudhary, Diksha, Amritpal Kaur, Pargat Singh, Gaurav Chaudhary, Rajwinder Kaur, Mohammad F. Bayan, Balakumar Chandrasekaran, Saeed M. Marji and Reema Ayman. "Target protein degradation by protacs: A budding cancer treatment strategy" Pharmacology and Therapeutics 250, (2023): 108525.
- "Facile Fabrication of Smart Polymers for Controlled Drug Delivery" Proceedings of the second International Forum on Biopolymers and Polymer Science (POLYMERFORUM2023), organized by Continuum Forums, 4 September, 2023.
- Alagusundaram, M., Nem Kumar Jain, M. Yasmin Begum, S. Angala Parameswari, Vinod Kumar Nelson, Mohammad F. Bayan, and Balakumar Chandrasekaran. "Development and Characterization of Gel-Based Buccoadhesive Bilayer Formulation of Nifedipine" Gels 9, no. 9 (2023): 688.
- Kaur, Rajwinder, Kirandeep Kaur, Mohammad H. Alyami, Damanpreet Kaur Lang, Balraj Saini, Mohammad F. Bayan, and Balakumar Chandrasekaran. "Combating Microbial Infections Using Metal-Based Nanoparticles as Potential Therapeutic Alternatives." Antibiotics 12, no. 5 (2023): 909.
- Bhattacharya, Vijeta, Namrata Mishra, Radha Sharma, Subodh Kumar Dubey, Balakumar Chandrasekaran and Mohammad F. Bayan. "Recent targeted discovery of phytomedicines to manage endocrine disorder

develops due to adapting sedentary lifestyle." Recent Frontiers of Phytochemicals. Elsevier (2023): 143-161.

- "5-Fluorouracil Delivery Using Smart Carriers" Proceedings of the Global E-Conference on Chemistry and Chemical Engineering 2023, organized by United Research Forum, UK, 5-6 April, 2023.
- Chellathurai, Benedict Jose, Ramyadevi Anburose, Mohammad H. Alyami, Mohan Sellappan, Mohammad F. Bayan, Balakumar Chandrasekaran, Kumarappan Chidambaram, and Mohamed Rahamathulla. "Development of a Polyherbal Topical Gel for the Treatment of Acne." Gels 9, no. 2 (2023): 163.
- Raju, Rajapandi, Kumarappan Chidambaram, Balakumar Chandrasekaran, Mohammad F. Bayan, Tapan Kumar Maity, Abdullah M. Alkahtani, Harish C Chandramoorthy. "Synthesis, pharmacological evaluation, and molecular modeling studies of novel isatin hybrids as potential anticancer agents." Journal of Saudi Chemical Society 27, no. 2 (2023): 101598.
- Bayan, Mohammad F., Abdolelah Jaradat, Mohammad H. Alyami, and Abdallah Y. Naser. 2023. "Smart Pellets for Controlled Delivery of 5-Fluorouracil." Molecules 28, no. 1(2023): 306.
- Marji, Saeed M., Mohammad F. Bayan, Abdolelah Jaradat. "Facile Fabrication of Methyl Gallate Encapsulated Folate ZIF-L Nanoframeworks as a pH Responsive Drug Delivery System for Anti-Biofilm and Anticancer Therapy." Biomimetics 7, no. 4 (2022): 242.
- "Polymeric Based Pellets as Intelligent Drug Delivery Systems" Proceedings of International Conference on Recent Advances in Chemistry 2022, organized by United Research Forum, UK, 8-9 December, 2022.
- "Polymeric-Based Formulation as Smart Drug Delivery System" Proceedings of Polymers-eCon2022 Conference, organized by The Research Catalyst, 23-24 November, 2022, online.
- "In Vitro Evaluation of Smart Pellets as Intelligent Drug Delivery Systems." Proceedings of The 1st International Conference of the Faculty of Sciences Faculty of Phamacy at Isra University. The 17th Jordanian Chemical Conference (JCC17). "Prospects for Chemical and Pharmaceutical Industries" (ICPCPI). 2022, 15-16 November, 2022, Isra University, Amman, Jordan.
- "Comparative study on the cellular uptake/binding of heparin and its analogues conjugated silica nanoparticles using HUVECs as a vascular model for inhibition of metastasis." Proceedings of Al-Zaytoonah International Pharmaceutical Conference 2022, 18-20 October, 2022, Amman, Jordan.

- Bayan, Mohammad F., Saeed M. Marji, Mutaz S. Salem, Yasmin M. Begum, Kumarappan Chidambaram, Balakumar Chandrasekaran. "Development of Polymeric-Based Formulation as Potential Smart Colonic Drug Delivery System." Polymers 14, no. 17 (2022): 3697.
- Ilango, Kumbakonam Balachandran, Senguttuvan Gowthaman, Kumbakonam Ilango Seramaan, Kumarappan Chidambaram, Mohammad F. Bayan, Mohamed Rahamathulla, and Chandrasekaran Balakumar. "Mucilage of Coccinia grandis as an Efficient Natural Polymer-Based Pharmaceutical Excipient." Polymers 14, no. 1 (2022): 215.
- Bayan, Mohammad F., Mutaz S. Salem, and Rana F. Bayan. "Development and In Vitro Evaluation of a Large-Intestinal Drug Delivery System." Research Journal of Pharmacy and Technology 15, no. 1 (2022): 35-39.
- Sankar, Muthumanickam, Boomi Pandi, Nachiyappan Mutharasan, Balajee Ramachandran, Vidhyavathi Ramasamy, Poorani Gurumallesh Prabu, Shanmugaraj Gowrishankar, Yao Wang, Biruntha Muniyandi, Subaskumar Rathinasamy, Balakumar Chandrasekaran, Mohammad F. Bayan, Jeyakanthan Jeyaraman, Gurumallesh Prabu Halliah and Solomon King. "In Silico Screening of Natural Phytoconstituents Towards Identification of Potential Lead Compounds to Treat COVID-19." Frontiers in Molecular Biosciences, 8, 2021, 637122.
- Chandrasekaran, Balakumar, Pran Kishore Deb, Mohammad F. Bayan, Yazan Al-Bataineh, Qutaiba Ahmed Al-Khames Aga, Dasan M.M Jaradat and Ashok Kumar Balaraman. "Nanocarriers in Novel Drug Delivery System." Handbook on Nano-biomaterials for Therapeutics and Diagnostic Applications. Elsevier (2021): 421-437.
- Bayan, Mohammad F., Hala M. Sbaih and Mohamed J. Saadh. "Salivary Inflammatory Mediators in Cancer Diagnosis." Sumerianz Journal of Medical and Healthcare, *4*, no. 1(2021): 23-27.
- Bayan, Mohammad F., Hala M. Sbaih and Mohamed J. Saadh. "Pharmaceutical Mini-Tablets Overview." Indian Journal of Forensic Medicine and Toxicology, 15, no. 1(2021): 1291-1304.
- Bayan, Mohammad F. "Drug Release Control and Enhancement Using Carriers with Different Concentrations of Capmul MCM C8." International Journal of Applied Pharmaceutics, 13, no. 1(2021): 249-252.
- Bayan, Mohammad F., Mohamed J. Saadh and Hala M. Sbaih. "A Survey on the Potential Awareness for the Delivery of Insulin Using Transdermal Microneedle Array in Jordan" International Journal of Pharmaceutical Research, 12, SP1(2020): 2358-2366.
- Saadh, Mohamed J., Mansour Haddad, Moeen F. Dababneh, Mohammad F. Bayan and Bilal A. Al-Jaidi. "A Guide for Estimating the Maximum Safe

Starting Dose and Conversion it between Animals and Humans." Systematic Reviews in Pharmacy, 11, no. 8(2020): 98-101.

- Saadh, Mohamed J., Issam J. Sa`adeh, Moeen F. Dababneh, Ammar M. Almaaytah and Mohammad F. Bayan. "Production, immunogenicity, stability, and safety of a vaccine against Clostridium perfringens beta toxins." Veterinary World, 13, no. 8(2020): 1517-1523.
- Bayan, Mohammad F. and Rana F. Bayan. "Recent Advances in Mesalamine Colonic Delivery Systems." Future Journal of Pharmaceutical Sciences 6, no. 43(2020): 1-7. https://rdcu.be/b51dR.
- Bayan, Mohammad F., Mohamed J. Saadh, Ammar M. Almaaytah and Hala M. Sbaih. "Mind Maps of Clinical Nephrology." Kindle Edition. ASIN: B085PRLNQN (8 Mar 2020).
- Dakkah, Abdel Naser, Yazan Bataineh, Bilal A AL Jaidi, Mohammad F. Bayan and Nabil A. Nimer. "Nanomedicines in Tuberculosis: Diagnosis, Therapy and Nanodrug Delivery." Integrative Nanomedicine for New Therapies. Springer, Cham (2020): 357-404.
- McCoy, Colin P., Mohammad F. Bayan, Md Taifur Rahman and Gavin P. Andrews. "In Vitro Release of Na-Fluorescein from pH Responsive Microgels." Proceedings of the 10th World Meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology, 4-7 April, 2016, Scottish Exhibition and Conference Centre, Glasgow.
- McCoy, Colin P., Mohammad F. Bayan, Md Taifur Rahman and Gavin P. Andrews. "Preparation of Monodisperse Smart Microgels Using Microfluidic Technology." Oral Presentation at the 38th All Ireland Schools of Pharmacy Research Conference, 21-22 March, 2016, Royal College of Surgeons in Ireland, Dublin.
- McCoy, Colin P., Mohammad F. Bayan, Md Taifur Rahman and Gavin P. Andrews. "Preparation of pH-Responsive Microgels Using Microfluidic Technology." Proceedings of the 6th APS International PharmSci, 7-9 September, 2015, East Midlands Conference Centre, Nottingham.
- Obaidat, Rana M., Bassam M. Tashtoush, Mohammad F. Bayan, Rana T. Al Bustami and Mohammad Alnaief. "Drying Using Supercritical Fluid Technology as a Potential Method for Preparation of Chitosan Aerogel Microparticles." AAPS PharmSciTech 16, no. 6(2015): 1235-1244.

# Conferences, Workshops, Training and Activities:

- January 2025: Attended and presented my work as an oral presentation and poster at the the Second AAU International Conference on Pharmacy and Biomedical Sciences and the Third AAU Health and Biomedical Postgraduate Symposium "Innovations In Pharmacy Nutrition And Biomedical Research Towards A Healthier Tomorrow", organized by Al Ain University, Abu Dhabi, UAE, 22-23 January, 2025.

- January 2025: Helped in organizing an awareness campaign entitled: smoking is the enemy of health and life, which was held in Philadelphia University (1-5, January 2025).

- January 2025: Poster presentation at the 5th International Conference on Science Engineering of Materials (4-7, January 2025, Physics Department, Sharda School of Basic Sciences and Research, Sharda University, India).

- December 2024: Attended and helped organizing the "Pharmacy Oath" ceremony for the students expected to graduate by the end of the first semester 2024/2025, Tuesday 31/12/2024.

- December 2024: Particpated and represented Philadelphia University in a training workshop on the UNESCO Chairs Program and the UNITWIN Network for University Professors in Public and Private Universities, organized by the Jordanian National Commission for Education, Culture and Science on Monday 12/2/2024 at Olive Tree Hotel, Amman.

- November 2024: Attended and helped organizing an Awareness lecture on career pharmacy paths delivered by Dr. Khaled Khreisat, founder of JAIP to link

pharmaceutical industries with academia, on Monday 11/18/2024 at Philadelphia University.

- November 2024: Organized a meeting for the new students with faculty members, on Tuesday 12/11/2024. The ceremony included a number of introductory videos and awareness-raising tips, in addition to other entertainment competitions.

- November 2024: Meeting with the regional Head of McGrow Hill Publisher Mr.Hugh Bayati and Asaad Haj Asaad the regional account Manager on Tuesday 12/11/2024 to discuss with how they can serve our pharmacy department with their product Access Pharmacy.

- November 2024: Attended 2024 UKICRS Virtual Seminar, organized by the United Kingdom and Ireland Controlled Release Society (UKICRS), 6 November, 2024.

- October 2024: Organizing and delivering a training workshop entitled "Measuring learning outcomes at the program level on the educational platform-Moodle", for the pharmacy faculty members at Philadelphia University, on Wednsday 23 October 2024.

- September 2024: Poster presentation at the 11th Edition of Global Conference on Pharmaceutics and Novel Drug Delivery (19-21 September, 2024, NH Roma Villa Carpegna, Rome, Italy).

- August 2024: Attended and presented my work as an oral presentation at the International Conference on Chemistry and Chemical Engineering (ICCCE-2024), organized by United Research Forum, Hotel Grand Central, Singapore, 16-17 August, 2024.

- May 2024: Attended and presented my work as an oral presentation at the Global Meet on Pharmaceutics and Drug Delivery (GMPDDS2024), organized by Prime Meetings, 14 May, 2024.

- April 2024: Attended "Excellence in Peer Review: How to be an effective peer reviewer" webinar (24 April, 2024), organized by Peer Review Systems Webinars.

- April 2024: Attended "Taylor and Francis Author Services Guide on How to Prepare the Manuscript" webinar (23 April, 2024), organized by Taylor and Francis Group. - April 2024: Attended and presented my work as an oral presentation at the 2nd International Meet on Polymer Science and Composite Materials (POLYMERMEET2024), organized by Albedo Meetings, 18 April, 2024.

- March 2024: Attended and helped organizing a seminar about the "Diabetic Foot" at Philadelphia University on Saturday 9/3/2024.

- January 2024: Attended and helped organizing the "Pharmacy Oath" ceremony for the students expected to graduate by the end of the first semester 2023/2024, on Monday 15/01/2024. The ceremony has included an introductory lecture on the conditions and requirements for practicing the pharmacy profession in Canada.

- December 2023: Attended and presented my work as an oral presentation at the 17th International Conference on Chemistry and Medicinal Chemistry, organized by Allied Academies, 4 December, 2023.

- November 2023: Organized an awareness day in Utopia International School and Kindergarten, in Salt, on Sunday 19/11/2023.

- November 2023: Attended the Eleventh Conference on Scientific Research in Jordan, organized by the Jordan Society for Scientific Research, Entrepreneurship, and Creativity (JSSREC), in partnership with Amman National University, 11 November, 2023.

- November 2023: Attended 2023 UKICRS Virtual Seminar, organized by the United Kingdom and Ireland Controlled Release Society (UKICRS), 8 November, 2023.

- November 2023: Attended and helped organizing a free medical day at Philadelphia University in cooperation with Telescope Eye Medical Center on Monday 6/11/2023.

- October 2023: Organized a meeting for the new students with faculty members, on Sunday 29/10/2023. The ceremony included a number of introductory videos and awareness-raising tips, in addition to other entertainment competitions.

- September 2023: Attended and presented my work as an oral presentation at the second International Forum on Biopolymers and Polymer Science (POLYMERFORUM2023), organized by Continuum Forums, 4 September, 2023.

- May 2023: Attended ASU-UNICAM Pharmacy Scientific Day 2023, organized by ASU, Jordan, 21 May, 2023.

- May 2023: Attended the joint scientific day of the faculty of Allied Medical Sciences and faculty of Pharmacy-Philadelphia University "Food and Drug Security: Challenges and Opportunities" (16 May, 2023, Philadelphia University, Jordan).

- April 2023: Attended and presented my work as an oral presentation at the Global E-Conference on Chemistry and Chemical Engineering 2023, organized by United Research Forum, UK, 5-6 April, 2023.

- March 2023: Help organizing an industrial visit for a group of pharmacy students at Philadelphia University to Pharma International Company (PIC) factory. This visit helped the students to understand the link between academia and the Industry as well as encouraged them to invest their skills and abilities to find solutions to a number of issues and challenges facing the pharmaceutical field (Wednesday 22 March, 2023, Qastal, Amman, Jordan).

- February 2023: Attended and presented my work as an oral presentation at the International Conference on Chemistry and Pharmaceutical Chemistry, Theme: Novel Techniques and Approaches in the field of Chemistry and Pharmaceutical Chemistry, organized by Sciencezo Planet, UK, 10-11 February, 2023.

- December 2022: Attended and presented my work as an oral presentation at the International Conference on Recent Advances in Chemistry 2022, organized by United Research Forum, UK, 8-9 December, 2022.

- November 2022: Attended Polymers-eCon2022 Conference, organized by The Research Catalyst, 23-24 November, 2022, online. some of my work was presented in this conference as an oral presentation.

- November 2022: Attended and presented a poster at The 1st International Conference of the Faculty of Sciences Faculty of Phamacy at Isra University. The 17th Jordanian Chemical Conference (JCC17). " Prospects for Chemical and Pharmaceutical Industries" (ICPCPI). 2022, 15-16 November, 2022, Isra University, Amman, Jordan.

- October 2022: Organized a meeting for the new students with faculty members, on Sunday 30/10/2022. During the meeting, I have delivered a speech focusing on the importance of studying and working hard, teamwork, the need for optimism

and self-confidence, participation in extracurricular activities and helping others. The ceremony included a number of introductory videos and awareness-raising tips, in addition to other entertainment competitions.

- October 2022: Attended and presented a poster at Al-Zaytoonah International Pharmaceutical Conference 2022 (18-20 October, 2022, Amman, Jordan).

- June 2022: Attended the 6th Scientific day of the faculty of Pharmacy-Philadelphia University "Immunotherapy: History and Developments" (8 June, 2022).

- March 2022: Participated in organizing Our Health Deserves" initiative, which was held in Al-Rahmaniya Mixed School, in the village of Marsa', on Sunday 03/20/2022, in cooperation with the Directorates of Education, Health and Community Police in Jerash Governorate.

- January 2022: Organized the "Pharmacy Oath" ceremony for the students expected to graduate by the end of the first semester 2021/2022, on Sunday 02/01/2022. The ceremony included an oath of commitment the students make to the pharmacy profession and the health of the patients they serve.

- November 2021: Organizing a meeting for the new students with faculty members, on Monday 11/15/2021. During the meeting, I have delivered a speech focusing on the importance of studying and working hard, teamwork, the need for optimism and self-confidence, participation in extracurricular activities and helping others. The ceremony included a number of introductory videos and awareness-raising tips, in addition to other entertainment competitions.

- November 2021: Attended Dubai International Gastroenterology Congress, held in Conrad, Dubai and Virtually on 04-05 November, 2021, organized by Maarefah.

- June 2021: Attended the "6th Annual Dubai International Conference on Infectious Diseases Vaccination" (17-19 June, 2021), organized by Maarefah.

- June 2021: Attended " The MENA Pharmacy Congress" (10-12 June, 2021), organized by Maarefah.

- May 2021: Attended " The 3rd Annual Arab International Pharmacy Congress" (25-27 May, 2021), organized by Maarefah.

- April 2021: Attended "Pharmacy Educational Webinar Series" (20 April, 2021), organized by Maarefah.

- April 2021: Attended "The School of Pharmacy 2021 Conference. Theme: Recent Updates in Pharmacy and Pharmaceutical Sciences" (7-8 April, 2021), organized by the school of Pharmacy, the University of Jordan.

- April 2021: Attended "COVID-19: What do we know so far?" webinar (2 April, 2021), organized by Jordan Pharmacists Association.

- March 2021: Attended "Genomics-led solutions for all life on Earth" webinar (25 March, 2021), organized by Frontiers.

- March 2021: Attended "10 Must-Know Cost-Saving Tips Before You Buy and Install Universal Testing Machines" webinar (24 March, 2021), organized by Shimadzu Middle East and Africa.

- March 2021: Attended "Jordan Nano-Symposium 2021" (16-18 March, 2021), organized by the Nanotechnology Center at the University of Jordan.

- March 2021: Attended "How to Optimise qPCR Assays for Rapid and Reproducible Results" webinar (18 March, 2021), organized by Antylia Scientific.

- March 2021: Attended the scientific lecture "Covid 19 : Drugs and Vaccines Update" (12 March, 2021), delivered by Dr. Derar Bala'awi In collaboration with Philadelphia Pharmaceuticals Company.

- March 2021: Attended "3rd Annual Saudi International Vaccination Forum and 3D Exhibition" (9-11 March, 2021), organized by Maarefah.

- November 2020: Attended "Managing Allergic Symptoms in COVID-19 times" webinar (30 November, 2020, organized by Saudi Pharmaceutical Society, Riyadh, Kingdom of Saudi Arabia).

- November 2020: Attended "Think you know HPLC? Well things have changed!" webinar (25 November, 2020, organized by Integrated Scientific Solutions, Dubai, United Arab Emirates).

- October 2020: Attended Two days international e-Conference on EXPANDING FRONTIER OF PHARMACEUTICAL RESEARCH TOWARDS GLOBAL EXIGENCY and partcipated as an evaluator for the poster presentations (15-16

October, 2020, organized by Dept. of Pharmaceutics, Karpagam College of Pharmacy, Coimbatore, TN, India).

September 2020: Conducted a training for members of Faculty of Pharmacy in Philadelphia University on how to use "iSpring Suite Authoring Tool for Moodle LMS" on Thursday 10/09/2020.

- December 2019: Organizing a visit for a group of Philadelphia pharmacy students to Al-Amal Center for disabled. During the visit, some educational gifts were presented to the children and the students participated with them in some entertainment activities, in addition to having a breakfast with them (Wednesday 18/12/2019).

- December 2019: help organizing a medical day entitled "The health of our adults concerns us" on Tuesday 10/12/2019. The activities on this day included a lecture on the topic Dementia disease, and a number of tests were performed for the attendees, such as measuring vision level, measuring blood pressure and blood sugar level. The Community Service Committee presented and distributed a number of awareness brochures for chronic diseases and related to the elderly. A number of pharmaceutical companies also participated by displaying their products and distributing some free samples to the audience.

- November 2019: Organized the Pharmacy Cake's Day, which is a charitable activity in the form of an entertainment competition, the proceeds of which were raised to support the low-income students, Thursday 11/14/2019.

- November 2019: Help organizing an intensive training workshop (two days) aimed to raise awareness of mental illnesses.

- November 2019: Organized a visit to the Al-Amal Center for disabled on Sunday 3/11/2019. The volunteers gave some gifts to the children and participated in some entertainment games, in addition to having a lunch with them.

- October 2019: Organizing a meeting for the new students with faculty members, on Thursday 10/31/2019. During the meeting, I have delivered a speech in the form of a short success story for graduates at Philadelphia university, as I have studied, graduated and sponsored by the university to do a PhD in a world class university. The ceremony included a number of introductory videos and awareness-raising tips, in addition to other entertainment competitions.

- October 2019: Organizing an entertainment activity for students at Faculty of Pharmacy / Class 2016, which was held on Thursday 10/24/2019. The ceremony included many educational and creative events and competitions, in addition to showing the talents and creativity of students.

- September 2019: Chair of Community service, extracurricular and Social Activities Committee at Faculty of Pharmacy, Philadelphia University.

- May 2019: Participating in a volunteer activity with a group of pharmacy students at Philadelphia University - a Ramdan Iftar with orphans and poor children in Ghamadan Zoo organized by Jordan Volunteers Team. The volunteers accompanied the children on a tour in the zoo and participated them in some entertainment games as well as the Iftar (Saturday 11 May, 2019, Ghamadan Zoo, Amman, Jordan).

- April 2019: Help organising an industrial visit for a group of pharmacy students at Philadelphia University to Pharma International Company (PIC) factory. This visit helped the students to understand the link between academia and the Industry as well as encouraged them to invest their skills and abilities to find solutions to a number of issues and challenges facing the pharmaceutical field (Wednsday 3 April, 2019, Qastal, Amman, Jordan).

- February 2019: Attended Shimadzu seminar for universal testing machine [Material Testing Instruments (Tensile, Compression) and Applications] organised by Modern Scientific Supplies (MSS) (25 February, 2019, Le Grand Amman Managed by AccorHotels, Jordan).

- February 2019: Attended the info seminar day on Newton-Khalidi Fund "Researcher Links Workshops" organised by British Council (19 February, 2019, Grand Hyatt Amman, Jordan).

- January 2019: Attended the ASU Pharmacy Fourth International Conference "Recent Trends in Postgraduate Research" (5-6 Jan, 2019, Applied Science Private University, Jordan).

- September 2018: Attended the Regional Info Day-North of Jordan organized by the National Erasmus+ Office - Jordan (26 September, 2018, JUST, Jordan).

- May 2018: Attended the 4th Scientific day of the faculty of Pharmacy-Philadelphia University "Novel Drugs: Chemistry and Design" (9 May, 2018, Philadelphia University, Jordan). - ़April 2018: Attended the 1st International conference of the faculty of Pharmacy-Mutah University "Modern techniques in pharmaceutical sciences" (18-19 April, 2018, Kempinski Hotel Ishtar Dead Sea, Jordan).

- February 2018: Attended 'Predone' launch seminar organised by Hikma pharmaceutical company (21 February, 2018, Amman Marriott Hotel, Jordan).

- May 2017: Help organising the QUB school of pharmacy research day, where the postgraduate students from different research groups get the opportunity to present their work orally or as posters and discuss it with each other. This research day was held on Wednesday 17th May in Malone Lodge Hotel, Belfast, UK.

- April 2017: Nominated as a Course Representative of the year for the Faculty of Medicine, Health and Life Sciences at QUB.

- February 2017: I have participated in the "ask the panel" session in the postgraduate research induction day at QUB, which gave me the opportunity to reflect on my experiences as a PhD student at QUB.

- October 2016: I have been elected as a Course Rep. for PhD level 3 students at QUB school of pharmacy. I have acted as a link between the students of my level and the school staff through listening to the students' views and feeding these back to the staff members at the PGSSCC meetings.

- October 2016: I have participated in the "ask the panel" session in the postgraduate research induction day at QUB, which gave me the opportunity to reflect on my experiences as a PhD student at QUB.

- August 2016: I had the opportunity to visit Teleflex Medical company (Boston, Massachusetts, USA) and Harland Medical systems company (Minneapolis, Minnesota, USA), which helped me to gain the experience of how the work carried out at PhD level can be translated to industry.

- April 2016: Attended and presented my work as a poster at the 10th world meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology (4-7 April, 2016, Scottish Exhibition and Conference Centre, Glasgow).

- March 2016: Attended and presented my work as an oral presentation at the 38th All Ireland Schools of Pharmacy Research Conference (21-22 March, 2016, Royal College of Surgeons in Ireland, Dublin).

- October 2015: I have been trained and acted as a 1-1 Peer Mentor for postgraduate research as well as taught students from October to May 2016, and this gained me a great experience in dealing with issues and providing advice to postgraduate students.

- September 2015: Help organising the School of Pharmacy Career Development Symposium, which was held on Thursday 17th September 2015 in the lecture theatre, School of Pharmacy at Queen's University Belfast.

- September 2015: Attended and presented my work as a poster at the 6th APS International PharmSci Conference (7-9 September, 2015, East Midlands Conference Centre, Nottingham).

- March 2015: Attended the 37th All Ireland Schools of Pharmacy Research Conference (30-31 March, 2015, School of Pharmacy, Queen's University Belfast).

- October 2009: Ambassador participant (October to July 2010) in the health and traffic ambassadors' project of the Royal Health Awareness Society (RHAS), Amman, Jordan.

- February 2009: Attended the business ethics course via INJAZ organisation from February to June 2009 at Philadelphia University, Jordan.

- October 2009: Attended the principles of true citizenship wortkshop (21-24 October 2009) at Amman Youth House, Jordan.

- April 2008: I have been elected as a Representative for the Faculty of Pharmacy at the student Union of Philadelphia University.

### My Links:

https://scholar.google.com/citations?user=ZjH2s9wAAAAJ&hl=en https://publons.com/researcher/3735541/mohammad-f-bayan/ http://orcid.org/0000-0002-1736-1799 https://loop.frontiersin.org/people/1079958/overview https://sciprofiles.com/profile/1625702 https://www.webofscience.com/wos/author/record/2028511 https://www.scopus.com/authid/detail.uri?authorId=56545610800 http://www.philadelphia.edu.jo/academics/mbayan/index.php **Contact Information** 

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