Room # AA 100 Dept. of Pharmaceutics College of Pharmacy King Saud University P.O.Box 2457 Riyadh 11451 Saudi Arabia Tel (office): + (966) 11 467-5613 Cell: + (966) 55 426-7898 Fax: + (966) 11 467-6295 E-mail: zbinkhathlan@ksu.edu.sa



Ziyad Binkhathlan, BPharm, RPh, PhD

Education

- (Sep 2005- Jul 2011): Ph.D. (Pharmaceutical Sciences), Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Edmonton, AB, Canada. <u>Thesis title</u>: Development of block copolymer based nanocarriers for the solubilization and delivery of valspodar
- (Sep 1998-Feb 2004): **B.Sc. (Pharmacy)**, College of Pharmacy, King Saud University, Riyadh, Saudi Arabia.

Work history

- (Sep 2019- date): **Associate Professor**, Department of Pharmaceutics, College of Pharmacy, King Saud University, Riyadh, Saudi Arabia.
- (Oct 2019- Sep 2022): **Chair**, Department of Pharmaceutics, College of Pharmacy, King Saud University, Riyadh, Saudi Arabia.
- (Aug 2016- Aug 2019): **Visiting Professor** at the Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Edmonton, AB, Canada
- (Oct 2015- Jun 2016): **Vice Dean for Development and Quality** at the College of Pharmacy, King Saud University, Riyadh, Saudi Arabia.
- (Sep 2015- Oct 2015): Vice Dean Designate for Development and Quality at the College of Pharmacy, King Saud University, Riyadh, Saudi Arabia.
- (Apr 2015- Mar 2019): **Consultant** at the Saudi Food and Drug Authority (SFDA), Riyadh, Saudi Arabia
- (Mar 2014- Jan 2016): **Director of the Research Center** at the College of Pharmacy, King Saud University, Riyadh, Saudi Arabia.
- (Mar 2013- Feb 2014): **Deputy-Director of the Research Center** at the College of Pharmacy, King Saud University, Riyadh, Saudi Arabia.
- (Oct 2011- date): **Assistant Professor**, Department of Pharmaceutics, College of Pharmacy, King Saud University, Riyadh, Saudi Arabia.
- (Jan 2008- Apr 2009): **Teaching Assistant**, Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Edmonton, Alberta, Canada.
- (Feb 2004- Jul 2005): **Teaching Assistant**, Department of Pharmaceutics, College of Pharmacy, King Saud University, Riyadh, Saudi Arabia.

Administrative experience

- Nov 2022, Member of the Scientific Advisory Committee, Saudi Food and Drug Authority.
- Jan 2020, Deputy Head of the Advisory Committee for Generic and

Biosimilar Products, Saudi Food and Drug Authority.

- May 2018, Member of the Advisory Committee for Generic and Biosimilar Products, Saudi Food and Drug Authority.
- Dec 2015, Head of the Strategic Planning Committee at the College of Pharmacy.
- Nov 2015, Member of the Supervisory Committee of "Funded Project for Writing Books" Program at the Deanship of Scientific Research, King Saud University
- Nov 2015, Member of the Academic Advising for Students at the College of Pharmacy.
- Sep 2013, Member of the Research Ethics Committee at the College of Pharmacy.
- Sep 2013, Member of the Joint Master Program Committee at the College of Pharmacy.
- Apr 2013, Member of the Scientific Committee for the "Graduate Students Annual Scientific Meeting" at the Deanship of Graduate Studies, King Saud University.
- May 2012, Member of the Research Center Council at the College of Pharmacy
- Mar 2012, Member of the Executive Committee for Strategic Plan of the College of Pharmacy (2012-2016)
- Jan 2011-Sep 2014, Pharmacy Students' Registration Supervisor
- October 2011- Sep 2014, Coordinator of the Academic Committee at the College of Pharmacy, King Saud University, Riyadh, Saudi Arabia.
- Jan 2010, Member of the Graduate Students Scholarship Committee, Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Canada.
- 2006- 2007, The Financial Executive at the Saudi Cultural Club, Edmonton, Alberta, Canada.
- Oct 2006, Chair of the first session on the Research Day 2006, Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Canada.
- Sep 2004, Member of the Safety and Security Committee of the Department of Pharmaceutics, College of Pharmacy, King Saud University, Riyadh, Saudi Arabia.
- Apr 2004, Member of the Organizing Committee in the 5th week of University and Society in King Saud University, Riyadh, Saudi Arabia.
- (Dec 2021- date): **Associate Editor** (Drug Metabolism, Pharmacokinetics and Pharmacodynamics), Saudi Pharmaceutical Journal (SPJ)-Elsevier
- Web of Science profile: https://www.webofscience.com/wos/author/record/H-2714-2019

Editorial experience

Professional training

- 2014, Intermediate Workshop on PK&PD Data Analysis, Rome, Italy.
- 2012, Effective Teaching, Deanship of Skills Development, King Saud University, Riyadh, Saudi Arabia
- 2012, Assessment of Learning Outcomes, Deanship of Skills Development, King Saud University, Riyadh, Saudi Arabia
- 2007, Workplace Hazardous Materials Information System (WHMIS) Course, Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Edmonton, Alberta, Canada
- 2006, Animal Handling Course Part II (mouse), Health Sciences Laboratory Animal Services, Medical Sciences Building, University of Alberta, Edmonton, Alberta, Canada
- 2005, Animal Handling Course Part II (rat), Health Sciences Laboratory Animal Services, Medical Sciences Building, University of Alberta, Edmonton, Alberta, Canada
- 2005, Animal Handling Course Part I, University Animal Policy and Welfare Committee, Faculty of Medicine and Dentistry, University of Alberta, Edmonton, Alberta, Canada
- 2005, Graduate Ethics Training Course, Medical Sciences Building, University of Alberta, Edmonton, Alberta, Canada

Awards & Recognitions

- Certificate of Appreciation from Bentham Science for the highly cited paper published in Current Cancer Drug Targets (2013)
- Canadian Chapter of the Controlled Release Society (CC-CRS) Travel Award (2010).
- Dr. L. Chatten Award for 2nd best graduate poster in the Research and Development Day 2008 and 2009, Faculty of Pharmacy & Pharmaceutical Sciences, University of Alberta.
- J Gordin Kaplan Graduate Student Award (2008), Faculty of Graduate Studies and Research (FGSR), University of Alberta.
- Dr. L. Chatten Award for 3rd best graduate poster in the Research & Development Day 2007, Faculty of Pharmacy & Pharmaceutical Sciences, University of Alberta.

Grants

Project title	Funding agency (Amount in SAR)	Role	Period	Status
Nanoparticles Development for the Prevention of Tacrolimus- Associated Nephrotoxicity	KSU-KACST (1,995,550.00)	CO.I.	2012-2014	Completed
Development and Characterization of a Novel Paclitaxel Nanoformulation for the Treatment of Multidrug Resistant Breast Cancer Model	KACST (1,250,0000)	CO.I.	2015-2017	Approved

Development and Characterization of a Novel Nano-sized Formulation for Oral Delivery of Paclitaxel	KSU-KACST (600,000)	P.I.	2019-2021	Funded
Nanomedicine Research Group	DSR-KSU-RG (150,000)	P.I.	2019-2021	Approved
Development and Characterization of Dexamethasone- Loaded Polymeric Micelles for Enhanced Ocular Delivery (Undergraduate Student's Graduation Project)	DSR-KSU- URSP (10,000)	P.I.	2019-2020	Approved
Development and characterization of novel docetaxel-loaded nanocarriers for treatment of multidrug resistant tumors	IFKSUDR (600,000)	P.I.	2021-2022	Submitted
Development and Preclinical Evaluation of a Novel Amphotericin B Polymeric Micellar Formulation for Ocular Delivery	RDIA (1,600,000.00)	PI	2024-2027	Submitted
Preclinical Study of the Selective Novel Anticancer Compounds, Sidroside and Sidrin, from Ziziphus spina-christi	RDIA (1,600,000.00)	CO-I	2024-2028	Submitted
Inhaled Micellar Amphotericin B for the Treatment of Opportunistic Pulmonary Fungal Infections	RDIA (1,500,000.00)	CO-I	2024-2027	Submitted
Development and Preclinical Evaluation of Docetaxel-Loaded Micellar Formulation for Treatment of Multidrug Resistant Tumor	RDIA (1,500,000.00)	CO-I	2024-2027	Submitted

Patents/Patent applications

- **Ziyad Binkhathlan**, Abdullah H. Alomrani, Aws Alshamsan, Ibrahim A. Aljuffali, and Raisuddin Ali. "Poly (ε-Caprolactone) Ethoxylated Fatty Alcohol Copolymers". *United States Patent and Trademark Office (USPTO) Patent Application* (No. 15/084441) [Pub. No.: US 2017/0283548 A1; Oct. 5, 2017]
- **Ziyad Binkhathlan**, Abdullah H. Alomrani, Aws Alshamsan, Ibrahim A. Aljuffali, and Raisuddin Ali. "Poly (ε-Caprolactone) Ethoxylated Fatty Acid Copolymers". *United States Patent and Trademark Office (USPTO)* [Patent No.: US 9,622,973 B1; Apr. 18, 2017]; Saudi Authority for Intellectual Property (SAIP) [SA117380465B1; Aug. 8, 2020]

Abstracts

- Ziyad Binkhathlan, Osman Yusuf, Raisuddin Ali, Abdullah H. Alomrani, Aws Alshamsan, Abdullah K. Alshememry, Aliyah Almomen, Musaed Alkholief, Ibrahim A. Aljuffali, and Afsaneh Lavasanifar, "Paclitaxel-Loaded Poly(ε-Caprolactone)-Vitamin E TPGS Micelles: in vitro evaluation". The Controlled Release Society (CRS) 2022 Annual Meeting & Expo, Advanced Delivery Science, Le Palais des Congrès de Montréal (Montreal Congress Centre), Montreal, QC, Canada, [Jul 2022]
- Alshamsan A, Z. Binkhathlan, A. Alomrani, I. Aljuffali, M. Alghonaim, H. Kfoury, and S. Almuhsen, "Mitigating Tacrolimus Nephrotoxicity by PLGA Nanoparticles: A Comparative In Vivo Study With Prograf[®]". 42nd Annual Meeting and Exposition of the Controlled Release Society (CRS): Creating Value Through Customized Delivery. Edinburgh International Conference Centre, Edinburgh, Scotland [July

- **Ziyad Binkhathlan**, Wajhul Qamar and Raisuddin Ali. "Assessment of acute toxicity of methoxy poly(ethylene oxide)-block-poly(ε-caprolactone) (PEO-b-PCL) polymeric micelles following oral and intraperitoneal administration to rats". The Canadian Society for Pharmaceutical Sciences (CSPS) 18th Annual Symposium, Drug Discovery and Development in the Post-Genomic Era, Toronto, ON, Canada [May 2015]
- **Binkhathlan Z**, "Synthesis and Characterization of Poly(ε-Caprolactone)-vitamin E TPGS Copolymers for Potential Applications in Drug Delivery". The 1st European Conference on Pharmaceutics, Reims, France [April 2015].
- Alshamsan A, Kalam MA, Badran M, Al-Omrani A, Binkhathlan Z, Aljuffali IA, and Alghonaim M, "Development and Characterization of Tacrolimus-Loaded PLGA Nanoparticles". 16th Canadian Society for Pharmaceutical Sciences (CSPS) Annual Meeting: *Personalized Medicine and Individualized Drug Delivery*. University of British Columbia, Vancouver, BC, Canada [June 2013]
- Ziyad Binkhathlan, Dion R. Brocks, and Afsaneh Lavasanifar. "Tissue distribution of Cyclosporine A following oral administration of Cyclosporine A-loaded polymeric micelles to rats: a pilot study"; The Canadian Society for Pharmaceutical Sciences (CSPS) Annual Symposium, *Modern Therapeutics 2012: Advances in Physiology, Pharmacology and Pharmaceutical Sciences*, University of Toronto, Toronto, ON, Canada [June 2012]
- Ziyad Binkhathlan, Anoosh Shayeganpour, Dion R. Brocks, and Afsaneh Lavasanifar. "Encapsulation of P-Glycoprotein Inhibitors inside Polymeric Micelles Can Reduce Doxorubicin-Free Drug Interactions"; Symposium 2011 of the Canadian Chapter of the Controlled Release Society (CC-CRS), Multidisciplinary Approaches to Modern Therapeutics: Joining forces for a Healthier Tomorrow, Hilton Montreal Bonaventure, Montreal, QC, Canada [May 2011].
- Ziyad Binkhathlan, Sara El Hasi, and Afsaneh Lavasanifar. "Characterization of Nanostructures Formed from Assembly of Poly(ethylene oxide)-block-Poly(α-Benzyl Carboxylate-ε-Caprolactone) in Water"; The 37th Annual Meeting and Exposition of the Controlled Release Society (CRS), *Personalized Medicines and Products for the Next Generation*, Oregon Convention Center, Portland, OR, U.S.A. [July 2010].
- **Ziyad Binkhathlan**, Sara El Hasi, Dion R. Brocks, and Afsaneh Lavasanifar. "Characterization of nano-carriers formed from self assembly of methoxy poly(ethylene oxide)-*block*-poly(α-benzyl carboxylate-ε-caprolactone) for the solubilization and *in vivo* delivery of Valspodar"; The 13th Canadian Society for Pharmaceutical Sciences (CSPS) Annual Meeting, *New Frontiers in Pharmaceutical Sciences*, River Rock Casino Resort, Vancouver (Richmond), BC, Canada [June 2010].
- **Ziyad Binkhathlan**, Dalia A. Hamdy, Dion R. Brocks, and Afsaneh Lavasanifar. "A Comparison between Pharmacokinetics of PSC 833 in the Cremophor EL Formulation and Polymeric Micellar Formulation";

- 2009 AAPS Annual Meeting and Exposition, Los Angeles Convention Center, Los Angeles, CA, USA [November 2009].
- **Ziyad Binkhathlan**, Dalia A. Hamdy, Dion R. Brocks, and Afsaneh Lavasanifar. "A Comparison between Pharmacokinetics of Polymeric Micellar Formulation of Cyclosporine A and its more Hydrophobic Derivative PSC 833"; 6th International Nanomedicine and Drug Delivery Symposium (NanoDDS'08), Leslie Dan Faculty of Pharmacy, Toronto, ON, Canada [October 2008].
- Ziyad Binkhathlan, Sara El Hasi, Dion R. Brocks, and Afsaneh Lavasanifar. "Polymeric nano-carriers for solubilization and delivery of P-glycoprotein inhibitor, PSC 833 (Valspodar)"; 11th Canadian Society for Pharmaceutical Sciences (CSPS) Annual Meeting, *Current Issues in Drug Development Early 21st Century*, The Banff Centre, Banff, AB, Canada [May 2008].

Research Papers

- **Ziyad Binkhathlan**, Osman Yusuf, Raisuddin Ali, Abdullah H. Alomrani, Aws Alshamsan, Abdullah K. Alshememry, Aliyah Almomen, Musaed Alkholief, Ibrahim A. Aljuffali, Faleh Alqahtani, Saad Alobaid, Essam A. Ali, Afsaneh Lavasanifar. "Polycaprolactone vitamin E TPGS micelles for delivery of paclitaxel: *in vitro* and *in vivo* evaluation". Int J Nanomedicine. 2023 [ID: 450296; *Submitted*]
- **Ziyad Binkhathlan**, Raisuddin Ali, Abdullah H. Alomrani, Mohd Abul Kalam, Aws Alshamsan, Afsaneh Lavasanifar. "Role of polymeric micelles in ocular drug delivery: An overview of decades of research". Mol Pharm. 2023 Nov 6;20(11):5359-5382.
- Alanoud Altalal, Aliyah Almomen, Musaed Alkholief, Ziyad Binkhathlan, Nourah Z Alzoman, Aws Alshamsan. "Development and validation of a UPLC-MS/MS method for simultaneous detection of doxorubicin and sorafenib in plasma: Application to pharmacokinetic studies in rats". Saudi Pharm J. 2023 Jul;31(7):1317-1326.
- Ziyad Binkhathlan, Abdullah H Alomrani, Olsi Hoxha, Raisuddin Ali, Mohd Abul Kalam, Aws Alshamsan. "Development and Characterization of PEGylated Fatty Acid- Block-Poly(ε-caprolactone) Novel Block Copolymers and Their Self-Assembled Nanostructures for Ocular Delivery of Cyclosporine A". Polymers (Basel). 2022 Apr 19;14(9):1635
- Abdullah Alshememry, Mohd Abul Kalam, Abdulhadi Almoghrabi, Abdulwahab Alzahrani, Mudassar Shahid, Azmat Ali Khan, Anzarul Haque, Raisuddin Ali, Musaed Alkholief, **Ziyad Binkhathlan**, and Aws Alshamsan. "Chitosan-coated Poly (lactic-co-glycolide) nanoparticles for dual delivery of doxorubicin and naringin against MCF-7 cells". Journal of Drug Delivery Science and Technology (JDDST). 2022 Feb: 68: 103036
- Sams M A Sadat, Melinda Wuest, Igor M Paiva, Sirazum Munira, Nasim Sarrami, Forughalsadat Sanaee, Xiaoyan Yang, Marco Paladino, Ziyad Binkhathlan, Feridoun Karimi-Busheri, Gary R Martin, Frank R Jirik, David Murray, Armin M Gamper, Dennis G Hall, Michael Weinfeld, Afsaneh Lavasanifar. "Nano-Delivery of a Novel Inhibitor of Polynucleotide Kinase/Phosphatase (PNKP) for Targeted Sensitization of Colorectal Cancer to Radiation-Induced DNA Damage". Front

- Osman Yusuf, Raisuddin Ali, Abdullah H Alomrani, Aws Alshamsan, Abdullah K Alshememry, Abdulaziz M Almalik, Afsaneh Lavasanifar, and Ziyad Binkhathlan. "Design and Development of D-α-Tocopheryl Polyethylene Glycol Succinate- block-Poly(ε-Caprolactone) (TPGS-b-PCL) Nanocarriers for Solubilization and Controlled Release of Paclitaxel". Molecules. 2021 May 4;26(9):2690
- **Ziyad Binkhathlan**, Raisuddin Ali, Wajhul Qamar, and Afsaneh Lavasanifar. "Pharmacokinetic and Tissue Distribution Study of Orally administered Cyclosporine A-Loaded Poly(Ethylene Oxide)-*block*-Poly(ε-Caprolactone) Micelles Versus Sandimmune® in Rats". Pharm Res. 2021 Jan;38(1):51-65
- Aws Alshamsan, Ziyad Binkhathlan, Mohd Abul Kalam, Wajhul Qamar, Hala Kfouri, Mohammed Alghonaim, and Afsaneh Lavasanifar." Mitigation of Tacrolimus-Associated Nephrotoxicity by PLGA Nanoparticulate Delivery Following Multiple Dosing to Mice while Maintaining its Immunosuppressive Activity". Sci Rep. 2020 Apr 21;10(1):6675
- Alshamsan A, Abul Kalam M, Vakili MR, Binkhathlan Z, Raish M, Ali R, Alturki TA, Safaei Nikouei N, and Lavasanifar A. "Treatment of endotoxin-induced uveitis by topical application of cyclosporine aloaded PolyGelTM in rabbit eyes". Int J Pharm. 2019 Oct 5;569:118573
- Al-Lawati H, **Binkhathlan Z**, and Lavasanifar A. Nanomedicine for the effective and safe delivery of non-steroidal anti-inflammatory drugs: A review of preclinical research". Eur J Pharm Biopharm. 2019 Sep;142:179-194
- Alhowyan AA, Altamimi MA, Kalam MA, Khan AA, Badran M, Binkhathlan Z, Alkholief M, and Alshamsan A. "Antifungal efficacy of Itraconazole loaded PLGA-nanoparticles stabilized by vitamin-E TPGS: *In vitro* and *ex vivo* studies". J Microbiol Methods. 2019 Jun;161:87-95
- **Ziyad Binkhathlan**, Raisuddin Ali, Wajhul Qamar, and Afsaneh Lavasanifar. "Pharmacokinetics of Orally Administered Poly(Ethylene Oxide)-block-Poly(ε-Caprolactone) Micelles of Cyclosporine A in Rats: Comparison with Neoral®". *J Pharm Pharm Sci.* 2018;21(1s):192s-199s
- **Ziyad Binkhathlan**. "Cremophor EL alters the plasma protein binding and pharmacokinetic profile of valspodar in rats". *Drug Res (Stuttg)*. 2017 Oct;67(10):591-595
- **Ziyad Binkhathlan**, Wajhul Qamar, Raisuddin Ali, Hala Kfoury, and Mohammed Alghonaim. "Toxicity evaluation of methoxy poly(ethylene oxide)-*block*-poly(ε-caprolactone) polymeric micelles following multiple oral and intraperitoneal administration to rats". *Saudi Pharm J.* 2017 Sep;25(6):944-953
- Raisuddin Ali, Abubakar Farah, and **Ziyad Binkhathlan**. "Development and characterization of methoxy poly(ethylene oxide)block-poly(ε-caprolactone) (PEO-b-PCL) micelles as vehicles for the solubilization and delivery of tacrolimus". Saudi Pharm J (2016); Feb;

- Ziyad Binkhathlan, Mohamed M. Badran, Abdullah Alomrani, Ibrahim A. Aljuffali, Mohammed Alghonaim, Saleh Al-Muhsen, Rabih Halwani, and Aws Alshamsan. "Reutilization of Tacrolimus Extracted from Expired Prograf® Capsules: Physical, Chemical, and Pharmacological Assessment". AAPS PharmSciTech (2016); Aug; 17(4):978-87
- **Ziyad Binkhathlan** and Afsaneh Lavasanifar. "P-glycoprotein inhibition as a therapeutic approach for overcoming multidrug resistance in cancer: current status and future perspectives". *Curr Cancer Drug Targets.* 2013 Mar; 13(3):326-46
- **Ziyad Binkhathlan** and Aws Alshamsan. "Emerging nanodelivery strategies of RNAi molecules for colon cancer therapy: preclinical developments". *Therapeutic Delivery* 2012 Sep; 3(9):1117-30
- Xiao-bing Xiong, Ziyad Binkhathlan, Leila Molavi, and Afsaneh Lavasanifar. "Polymeric micelles and related structures for drug delivery applications: an overview". Acta Biomater. 2012 Jul; 8(6):2017-33
- **Ziyad Binkhathlan**, Anoosh Shayeganpour, Dion R. Brocks, and Afsaneh Lavasanifar. "Encapsulation of P-glycoprotein Inhibitors inside polymeric micelles can reduce doxorubicin-free drug interactions". *Eur J Pharm Biopharm*. 2012 May; 81(1):142-8
- **Ziyad Binkhathlan**, Sara Elhasi, Dion R. Brocks, and Afsaneh Lavasanifar. "Characterization of the self assembly of methoxy poly(ethylene oxide)-*block*-poly(α-benzyl carboxylate-ε-caprolactone) for the solubilization and *in vivo* delivery of valspodar". *Curr Drug Deliv*. 2012 Mar; 9(2):164-71
- **Ziyad Binkhathlan,** Dalia A. Hamdy, Dion R. Brocks, and Afsaneh Lavasanifar. "Development of a polymeric micellar formulation for valspodar and Assessment of its pharmacokinetics in rat". *Eur. J. Pharm. Biopharm.* 2010 Jun; 75(2):90-5
- **Ziyad Binkhathlan**, Dalia A. Hamdy, Dion R. Brocks, and Afsaneh Lavasanifar. "Pharmacokinetics of PSC 833 (valspodar) in its cremophor EL formulation in rat". *Xenobiotica*. 2010 Jan; 40(1) 55-61
- **Ziyad Binkhathlan**, Vishwa Somayaji, Dion R. Brocks and Afsaneh Lavasanifar. "Development of a liquid chromatography –mass spectrometry (LC/MS) assay method for the quantification of PSC 833 (Valspodar) in rat plasma". *Journal of Chromatography B*. 2008 Jun; 869 (1-2) 31-37

Book Chapters

- Alam MA, Al-Jenoobi FI, Binkhathlan Z. "Advanced Analytical Techniques in Therapeutic Drug Monitoring". In: Clinical Pharmacokinetics and Therapeutic Drug Monitoring, Springer. [Under review]
- **Ziyad Binkhathlan** and Afsaneh Lavasanifar. "Effects of Block Copolymer Micelles on the Pharmacokinetics of Encapsulated Drugs". In: Nanoarchitectonics in Biomedicine, Elsevier. 2019; 507-546. https://doi.org/10.1016/C2017-0-04439-7 [invited]

Student Supervision

Name	Degree	Role	Period	Project title
Ahmad Balkhair	MSc	Co-supervisor	2022-2024	Development, characterization, and in vitro evaluation of poly(ethylene oxide)-block-poly(ε- caprolactone-α-tocopheryl succinate) (PEO-b-PCL-α- TS) micelles as nanocarriers for rapamycin delivery
Taghreed Altoum & Sara Abaalala	PharmD	Co-supervisor	2022-2023	Erlotinib-loaded micelles for pulmonary delivery
Meshari Alnuwaiser	PharmD	Supervisor	2022-2023	Docetaxel loaded-polymeric micelles: effect of molecular weight and hydrophilic /lipophilic segment ratio on the drug's entrapment efficiency
Osman Yusuf	PhD	Supervisor	2017-2022	In vitro and pharmacokinetic assessment of polycaprolactone-tocopheryl polyethylene glycol succinate micelles as nanocarriers for paclitaxel delivery
Abdullah Alamri & Faisal Alhamdan	BSc	Supervisor	2019-2020	Development and characterization of dexamethasone-loaded polymeric micelles for enhanced ocular delivery
Olsi Hoxha	MSc	Co-supervisor	2017-2020	Novel polymeric micelles of pegylated fatty acids or fatty alcohol-ε-caprolactone copolymers as vehicle for delivery of hydrophobic drugs
Abubakar Farah	BSc	Supervisor	2019-2021	Development and characterization of methoxy poly(ethylene oxide)-block- poly(\varepsilon-caprolactone) (PEO- b-PCL) micelles as vehicles for the solubilization and delivery of tacrolimus
Mohamed Almunif	BSc	Supervisor	2011-2012	Development of an HPLC– UV method for the quantification of simvastatin in rat plasma

Examining Committees

Candidate name	Exam/ Degree	Exam Date	Supervisor	Project title
Osamah Alnemer	Candidacy /PhD	05/2023	Dr. Mohammad Altamimi	Synergistic treatment of cutaneous cancer and the associated fungal infection using ciclopirox olamine loaded lipid based nanocarriers
Lama Alruhaily	Candidacy /PhD	05/2023	Prof. Ibrahim Alsarra	Synthesis and design of inhaled inhibitory peptides for blocking Sars-cov-2-rbd and ace2 interaction: in vitro and in vivo evaluation
Ali Mohammed Asiri	Defense/ MSc	01/2023	Dr. Faleh Alqahtani	Development and evaluation of PBPK models for hydroxychloroquine in healthy and disease populations
Saeed Al-Qahtani	Defense/ PhD	12/2019	Prof. Fars Alanazi	Design of erythrocyte membrane coated nanocarriers targeting 5- fluorouracil to liver cancer
Sattam Alghodayyr	Defense/ MSc	04/2016	Dr. Fahad Al- Jenoobi	Development and characterization of dexamethasone-loaded polymeric micelles for enhanced ocular delivery
Essam Tawfik	Defense/ MSc	11/2014	Dr. Aws Alshamsan	Optimizing 5-fluorouracil loaded polymeric nanoparticles for cancer chemotherapy
Hamdan Al-Ajmi	Defense/ MSc	01/2014	Dr. Ehab A. Fouad	Development and pharmaceutical evaluation of celecoxib-loaded solid lipid nanoparticles for treatment of colon cancer

Conferences Workshops attended

- The Controlled Release Society (CRS) 2022 Annual Meeting & Expo, Advanced Delivery Science, Le Palais des Congrès de Montréal (Montreal Congress Centre), Montreal, QC, Canada, [Jul 2022]
- Population Pharmacokinetics, Simulation and Modeling Symposium, Saudi Food and Drug Authority, Riyadh, Saudi Arabia [Jun 2022]
- The Canadian Society for Pharmaceutical Sciences (CSPS) 18th Annual Symposium, *Drug Discovery and Development in the Post-Genomic Era*, Toronto, ON, Canada [May 2015]
- The 1st European Conference on Pharmaceutics, Reims, France [April 2015]
- The 5th Annual Canadian Pharmacy Education & Research Conference, Delta Bessborough Hotel, Saskatoon, Saskatchewan, Canada [May 2014]
- The 8th International Dendrimer Symposium, hotel Convención, Madrid, Spain [Jun 2013]
- The 39th Annual Meeting & Exposition of the Controlled Release Society, Smart Materials - From Innovation to Translation, Centre des congrès de Québec, Québec City, Canada [Jul 2012]

- The Canadian Society for Pharmaceutical Sciences (CSPS) Annual Symposium, *Modern Therapeutics 2012: Advances in Physiology, Pharmacology and Pharmaceutical Sciences*, University of Toronto, Toronto, ON, Canada [Jun 2012]
- The 37th Annual Meeting and Exposition of the Controlled Release Society (CRS), *Personalized Medicines and Products for the Next Generation*, Oregon Convention Center, Portland, OR, U.S.A. [Jul 2010].
- The 13th Canadian Society for Pharmaceutical Sciences (CSPS) Annual Meeting, *New Frontiers in Pharmaceutical Sciences*, River Rock Casino Resort, Vancouver (Richmond), BC, Canada [Jun 2010].
- 6th International Nanomedicine and Drug Delivery Symposium (NanoDDS'08), Leslie Dan Faculty of Pharmacy, Toronto, ON, Canada [October 2008].
- 11th Canadian Society for Pharmaceutical Sciences (CSPS) Annual Meeting, *Current Issues in Drug Development Early 21st Century*, The Banff Centre, Banff, AB, Canada [May 2008].
- The 6th International Saudi Pharmacy Conference: *Pharmacy Profession towards Patient Care*, Al-Faisaliah Hotel, Riyadh, Saudi Arabia [Oct 2003].
- Literature Evaluation Workshop, in the 6th International Saudi Pharmacy Conference: *Pharmacy Profession towards Patient Care*, Al-Faisaliah Hotel, Riyadh, Saudi Arabia [Oct 2003].
- The Pharmacogenomics Mini Symposium, Intercontinental Hotel, Riyadh, Saudi Arabia [Feb 2003].
- *The 1st Symposium of Pharmacy Profession Ethics*, Riyadh Palace Hotel, Riyadh, Saudi Arabia [Oct 2002].

Professional memberships

- Saudi Pharmaceutical Society (SPS)
- Controlled Release Society (CRS)
- Canadian Society of Pharmaceutical Sciences (CSPS)