

Suhair Sunoqrot, PhD

Assistant Professor of Pharmaceutics
Department of Pharmacy
Faculty of Pharmacy
Al-Zaytoonah University of Jordan

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Education

- 2013 **Doctor of Philosophy**, Biopharmaceutical Sciences (Advisor: Dr. Seungpyo Hong)
Dissertation: "A Multi-scale Hybrid Nanoparticle Platform with Controlled Cellular Interactions and Targeting Kinetics"
University of Illinois, College of Pharmacy, Chicago, IL, USA
- 2007 **Bachelor of Science**, Pharmacy
University of Jordan, Faculty of Pharmacy, Amman, Jordan

Professional Experience

- 2014 - Present **Assistant Professor of Pharmaceutics**
Department of Pharmacy, Faculty of Pharmacy
Al-Zaytoonah University of Jordan, Amman, Jordan
- 2016 - 2017 **Fulbright Visiting Scholar**
Department of Bioengineering (Host: Prof. Phillip Messersmith)
University of California, Berkeley, CA, USA
- 2015 **Visiting Researcher**
Department of Drug Science and Technology (Host: Prof. Roberta Cavalli)
Università degli Studi di Torino, Turin, Italy
- 2014 **Visiting Researcher**
Department of Chemistry (Host: Prof. Jean-Maurice Mallet)
École Normale Supérieure, Paris, France
- 2013 **Research Specialist**
Institute for Tuberculosis Research, University of Illinois, Chicago, IL, USA
- 2010 - 2013 **Research Assistant**
Department of Biopharmaceutical Sciences, College of Pharmacy
University of Illinois, Chicago, IL, USA
- 2008 - 2013 **Teaching Assistant**
Department of Biopharmaceutical Sciences, College of Pharmacy
University of Illinois, Chicago, IL, USA
- 2007 - 2008 **Staff Pharmacist**
Aboud Pharmacy, Amman, Jordan

Funded Research Projects

- 2016 - 2018 **Design and Biological Evaluation of Flavonoid-encapsulated Polymeric Micelles as Potential Anti-cancer Nanomedicines** (*Role: Co-PI*) – 13,300 JD
Deanship of Academic Research, University of Jordan, Amman, Jordan

- 2015 - 2017 **Mussel-inspired Mucoadhesive Nanoparticles as Novel Gastro-retentive Dosage Forms (Role: PI) – 69,530 JD**
Deanship of Scientific Research and Graduate Studies, Al-Zaytoonah University of Jordan, Amman, Jordan
- 2015 - 2017 **The Manufacture and Characterization of Hydrogel-based Platforms for the Reduction of Bacterial Adhesion in Implanted Medical Devices (Role: Co-PI) – 128,100 JD**
Deanship of Scientific Research and Graduate Studies, Al-Zaytoonah University of Jordan, Amman, Jordan

Prizes and Honors

- 2017 **The 5th Arab-American Frontiers in Science, Engineering, and Medicine Symposium Travel Award**
The US National Academy of Sciences, Washington, DC, USA
- 2017 **Postdoctoral Researchers' Networking Tour (Postdoc-NeT) Fellowship**
German Academic Exchange Service (DAAD), Bonn, Germany
- 2016 - 2017 **Fulbright Visiting Scholar Award**
The J. William Fulbright Foreign Scholarship Board, Washington, DC, USA
- 2013 **Charles Wesley Petranek Scholarship**
Department of Biopharmaceutical Sciences, College of Pharmacy, University of Illinois, Chicago, IL, USA
- 2012 **Chancellor's Student Service and Leadership Award**
Office of the Vice Chancellor for Student Affairs, University of Illinois, Chicago, IL, USA
- 2012 **W.E. van Doren Scholarship**
Department of Biopharmaceutical Sciences, College of Pharmacy, University of Illinois, Chicago, IL, USA
- 2011 **Graduate Student Council Travel Award**
Graduate Student Council, University of Illinois, Chicago, IL, USA
- 2011 **Provost and Deiss Award for Research**
Graduate College, University of Illinois, Chicago, IL, USA
- 2010 **Graduate College Student Presenter Award**
Graduate College, University of Illinois, Chicago, IL, USA
- 2009 - 2011 **Chancellor's Supplemental Graduate Research Fellowship**
Graduate College, University of Illinois, Chicago, IL, USA
- 2010 **Rho Chi Pharmacy Honor Society Inductee**
- 2007 **Hikma Pharmaceuticals Award for Academic Excellence**
Hikma Pharmaceuticals, Amman, Jordan
- 2003 - 2007 **Undergraduate Scholarship (full tuition waiver)**
Ministry of Higher Education, Amman, Jordan

Organization of Scientific Meetings

- 2017 **Scientific Committee Member**, the 2nd Conference of the Faculty of Pharmacy, Al-Isra University, Amman, Jordan

- 2015 **Organizing Committee Member**, Al-Zaytoonah University of Jordan and The University of Toledo 5th International Pharmaceutical Conference (ZTIPC), Amman, Jordan
- 2015 **Scientific Committee Member**, the 1st International Conference of the Jordanian Faculties of Pharmacy, Amman, Jordan
- 2010 - 2011 **Planning Committee Member**, CRS-IL Student Chapter Annual Seminar Series, Chicago, IL, USA
- 2009 - 2011 **Planning Committee Member**, CRS-IL Student Chapter Annual Symposium, Chicago, IL, USA
- 2008 - 2009 **Events Coordinator**, CRS-IL Student Chapter, Chicago, IL, USA

Professional and Extracurricular Activities

- 2016 - Present **Reviewer**, Nanomedicine: Nanotechnology, Biology, and Medicine, Elsevier Inc.
- 2015 - Present **Reviewer**, Jordan Journal of Pharmaceutical Sciences, Deanship of Academic Research, University of Jordan, Amman, Jordan
- 2015 - Present **Member**, Scientific Research Committee, Faculty of Pharmacy, Al-Zaytoonah University of Jordan, Amman, Jordan
- 2015 - 2016 **Member**, Seminars and Conferences Committee, Faculty of Pharmacy, Al-Zaytoonah University of Jordan, Amman, Jordan
- 2015 - 2016 **Member**, Competency Exam in Pharmacy Committee, Faculty of Pharmacy, Al-Zaytoonah University of Jordan, Amman, Jordan
- 2014 - 2016 **Reviewer**, Post-approval Changes (PAC) Committee, Jordan Food and Drug Administration, Amman, Jordan
- 2014 - 2015 **Member**, Alumni Affairs Committee, Faculty of Pharmacy, Al-Zaytoonah University of Jordan, Amman, Jordan
- 2014 - 2015 **Member**, Computing and E-learning Committee, Faculty of Pharmacy, Al-Zaytoonah University of Jordan, Amman, Jordan
- 2012 - 2013 **Member**, International Society of Pharmaceutical Engineers (ISPE)
- 2011 - 2013 **Member**, American Association of Pharmaceutical Scientists (AAPS)
- 2010 - 2011 **Member**, Materials Research Society (MRS)
- 2010 - 2011 **President**, Controlled Release Society (CRS)-IL Student Chapter, Chicago, IL, USA
- 2009 - 2011 **Member**, Controlled Release Society (CRS)
- 2009 - 2010 **Vice President**, CRS-IL Student Chapter, Chicago, IL, USA
- 2008 - 2013 **Member**, CRS-IL Student Chapter, Chicago, IL, USA
- 2008 - 2013 **Member**, AAPS-University of Illinois Student Chapter, Chicago, IL, USA
- 2007 - Present **Member**, Jordanian Pharmacists Association (JPA), Amman, Jordan

Students Supervised

- 2017 - Present **Lujain Abujamous**, Master of Science Student, Faculty of Pharmacy, Al-Zaytoonah University of Jordan, Amman, Jordan
- 2015 - 2016 **Aya Al-Sa'di**, Master of Science Student, Faculty of Pharmacy, Al-Zaytoonah University of Jordan, Amman, Jordan
- 2015 - 2016 **Reem Al-Janabi** (*as co-advisor*), Master of Science Student, Faculty of Pharmacy, Al-Zaytoonah University of Jordan, Amman, Jordan

2014 - 2015	Marwa Al-Zaben (<i>as co-advisor</i>), Master of Science Student, Faculty of Pharmacy, Al-Zaytoonah University of Jordan, Amman, Jordan
2015	Ali Jasim (<i>as examiner</i>), Master of Science Student, Faculty of Pharmacy, Al-Zaytoonah University of Jordan, Amman, Jordan
2014	Areej Awadallah (<i>as examiner</i>), Master of Science Student, Faculty of Pharmacy, Al-Zaytoonah University of Jordan, Amman, Jordan
2012 - 2013	Eri Iwasaki , Master of Science Student, Department of Bioengineering, University of Illinois, Chicago, IL, USA
2012 - 2013	Jason Bugno , PharmD/PhD Student, Department of Biopharmaceutical Sciences, University of Illinois, Chicago, IL, USA
2012	Frehiwot Gebrehiwot , Teacher, Academy of Scholastic Achievement, Chicago, IL, USA
2011 - 2012	Tahir Mohideen , High School Student, Illinois Mathematics and Science Academy, Aurora, IL, USA
2011	Jacquelyn Handley , Undergraduate Student, Department of Materials Science and Engineering, University of Illinois at Urbana-Champaign, Urbana, IL, USA
2010	Jeromy Bentley , Teacher, Naperville Central High School, Naperville, IL, USA

Peer-Reviewed Publications (*Corresponding author, †Co-first authors)

1. **Sunoqrot, S.***, Alsadi, A., Tarawneh, O., and Hamed, R. Polymer Type and Molecular Weight Dictate the Encapsulation Efficiency and Release of Quercetin from Polymeric Micelles. **Colloid and Polymer Science** **2017**, 295(10), 2051-2059
2. **Sunoqrot, S.***, Hassan, L., Alsadi, A., Hamed, R., and Tarawneh, O. Interactions of Mussel-Inspired Polymeric Nanoparticles with Gastric Mucin: Implications for Gastro-retentive Drug Delivery. **Colloids and Surfaces B: Biointerfaces** **2017**, 156, 1-8
3. Hamed, R., Al-Janabi, R., **Sunoqrot, S.**, and Abbas, A. The Effect of pH, Buffer Capacity, and Ionic Strength on Quetiapine Fumarate Release from Matrix Tablets Prepared Using Two Different Polymeric Blends. **Drug Development and Industrial Pharmacy** **2017**, 43(8), 1330-1342
4. **Sunoqrot, S.***, Hamed, R., Abdel-Halim, H., and Tarawneh, O. Synergistic Interplay of Medicinal Chemistry and Formulation Strategies in Nanotechnology – From Drug Discovery to Nanocarrier Design and Development. **Current Topics in Medicinal Chemistry** **2017**, 17(13), 1451-1468
5. Hamed, R., Al-Samydai, A., Al Baraghthi, T., Tarawneh, O., and **Sunoqrot, S.** Influence of HPMC K100LV and Compritol® HD5 ATO on Drug Release and Rheological Behavior of HPMC K4M Matrix Tablets. **Journal of Pharmaceutical Innovation** **2017**, 12(1), 62-75
6. Hamed, R., Al Baraghthi, T., and **Sunoqrot, S.** Correlation between the Viscoelastic Properties of the Gel Layer of Swollen HPMC Matrix Tablets and their In Vitro Drug Release. **Pharmaceutical Development and Technology** **2016**, <http://dx.doi.org/10.1080/10837450.2016.1257022>

7. Hamed, R., Basil, M., Al Baraghthi, T., **Sunoqrot, S.**, and Tarawneh, O. Nanoemulsion-Based Gel Formulation of Diclofenac Diethylamine: Design, Optimization, Rheological Behavior and In Vitro Diffusion Studies. **Pharmaceutical Development and Technology** **2016**, 21(8), 980-989
8. Hamed, R., Awadallah, A., **Sunoqrot, S.**, Tarawneh, O., Nazzal, S., Al Baraghthi, T., Al Sayyad, J., and Abbas, A. pH-Dependent Solubility and Dissolution Behavior of Carvedilol – Case Example of A Weakly Basic BCS Class II Drug. **AAPS PharmSciTech** **2016**, 17(2), 418-426
9. Gao, W., Kim, J.Y., Anderson, J.R., Akopian, T., Hong, S., Jin, Y.-Y., Kandror, O., Kim, J.-W., Lee, I.-A., Lee, S.-Y., McAlpine, J.B., Mulugeta, S., **Sunoqrot, S.**, Wang, Y., Yang, S.-H., Yoon, T.-M., Goldberg, A.L., Pauli, G.F., Suh, J.W., Franzblau, S.G., and Cho, S. The Cyclic Peptide Ecumicin Targeting ClpC1 is Active against Mycobacterium Tuberculosis In Vivo. **Antimicrobial Agents and Chemotherapy** **2015**, 59(2), 880-889
10. **Sunoqrot, S.**, Bugno, J., Lantvit, D.D., Burdette, J.E., and Hong, S. Prolonged Blood Circulation and Enhanced Tumor Accumulation of Folate-Targeted Dendrimer-Polymer Hybrid Nanoparticles. **Journal of Controlled Release** **2014**, 191, 115-122
11. Modi, D.A.[†], **Sunoqrot, S.[†]**, Bugno, J., Lantvit, D.D., Hong, S., and Burdette, J.E. Targeting of Follicle Stimulating Hormone Peptide-Conjugated Dendrimers to Ovarian Cancer Cells. **Nanoscale** **2014**, 6, 2812-2820
12. Turturro, S.[†], **Sunoqrot, S.[†]**, Ying, H.[†], Hong, S., and Yue, B. Sustained Release of Matrix Metalloproteinase-3 to Trabecular Meshwork Cells using Biodegradable PLGA Microparticles. **Molecular Pharmaceutics** **2013**, 10(8), 3023-3032
13. **Sunoqrot, S.**, Liu, Y., Kim, D.H., and Hong, S. In Vitro Evaluation of Dendrimer-Polymer Hybrid Nanoparticles on their Controlled Cellular Targeting Kinetics. **Molecular Pharmaceutics** **2013**, 10(6), 2157-2166
14. Gonzalez, L.[†], Loza, R.J.[†], Han, K.-Y., **Sunoqrot, S.**, Cunningham, C., Purta, P., Drake, J., Jain, S., Hong, S., and Chang, J.-H. Nanotechnology in Corneal Neovascularization Therapy – A Review. **Journal of Ocular Pharmacology and Therapeutics** **2013**, 29(2), 124-134
15. Pearson, R.M., **Sunoqrot, S.**, Hsu, H.-J., Bae, J.W., and Hong, S. Dendritic Nanoparticles: The Next Generation of Nanocarriers? **Therapeutic Delivery** **2012**, 3(8), 941-959
16. Yang, Y., **Sunoqrot, S.**, Stowell, C., Ji, J., Lee, C.-W., Kim, J.W., Khan, S.A., and Hong, S. The Effect of Size, Surface Charge and Hydrophobicity of Poly(amidoamine) Dendrimers on their Skin Penetration. **Biomacromolecules** **2012**, 13(7), 2154-2162
17. **Sunoqrot, S.**, Bae, J.W., Pearson, R.M., Shyu, K., Liu, Y., Kim, D.H., and Hong, S. Temporal Control over Cellular Targeting through Hybridization of Folate-targeted Dendrimers and PEG-PLA Nanoparticles. **Biomacromolecules** **2012**, 13(4), 1223-1230
18. Bae, J.W.[†], Pearson, R.M.[†], Patra, N., **Sunoqrot, S.**, Vukovic, L., Král, P. and Hong, S. Dendron-mediated Self-assembly of Highly PEGylated Block Copolymers: A

- Modular Nanocarrier Platform. **Chemical Communications** **2011**, 47(37), 10302-10304
19. **Sunoqrot, S.**, Bae, J.W., Jin, S.-E., Pearson, R.M., Liu, Y. and Hong, S. Kinetically Controlled Cellular Interactions of Novel Polymer-Polymer and Polymer-Liposome Nanohybrid Systems. **Bioconjugate Chemistry** **2011**, 22(3), 466-474

Conference Presentations

1. **Sunoqrot, S.** and Messersmith, P. Novel Polyphenol Nanoparticles for Targeted Anti-cancer Drug Delivery, **The 5th Arab-American Frontiers of Science, Engineering, and Medicine Symposium 2017**, Rabat, Morocco
2. **Sunoqrot, S.** and Hong, S. A Multi-scale Hybrid Nanoparticle Platform for Targeted Drug Delivery to Cancer Cells. **The 15th Scientific Congress of the Jordanian Pharmacists Association 2014**, Amman, Jordan
3. **Sunoqrot, S.**, Bae, J.W., Liu, Y., Kim, D.-H., and Hong, S. In Vitro Evaluation of Dendrimer-Polymer Hybrid Nanoparticles on their Controlled Cellular Targeting Kinetics. **American Chemical Society (ACS) Annual Meeting 2013**, Indianapolis, IN, USA
4. **Sunoqrot, S.**, Bae, J.W., Liu, Y., Kim, D.-H., and Hong, S. The Janus-faced Biological Properties of Dendrimer-Polymer Hybrid Nanoparticles. **University of Illinois College of Pharmacy Research Day 2013**, Chicago, IL, USA
5. **Sunoqrot, S.**, Bae, J.W., Liu, Y., Kim, D.-H., and Hong, S. The Janus-faced Biological Properties of Dendrimer-Polymer Hybrid Nanoparticles. **American Association of Pharmaceutical Scientists (AAPS) Annual Meeting 2012**, Chicago, IL, USA
6. **Sunoqrot, S.**, Bae, J.W., Pearson, R.M., Shyu, K., and Hong, S. Hybrid Nanoparticles of Folate-targeted Dendrimers and PEG-PLA for Controlled Cellular Targeting. **Midwest Pharmaceutical Graduate Student Research Meeting (PGSRM) 2012**, Omaha, NE, USA
7. **Sunoqrot, S.**, Bae, J.W., Pearson, R.M., Shyu, K., Liu, Y., and Hong, S. Novel Hybrid Nanoparticles Folate-targeted Dendrimers and PEG-PLA Nanoparticles for Temporal Control over Targeting. **University of Illinois Cancer Center Research Forum 2012**, Chicago, IL, USA
8. **Sunoqrot, S.**, Bae, J.W., Pearson, R.M., Shyu, K., Liu, Y., and Hong, S. Novel Hybrid Nanoparticles Folate-targeted Dendrimers and PEG-PLA Nanoparticles for Temporal Control over Targeting. **University of Illinois College of Pharmacy Research Day 2012**, Chicago, IL, USA
9. **Sunoqrot, S.**, Bae, J.W., Pearson, R.M., Shyu, K., Liu, Y., and Hong, S. Novel Hybrid Nanoparticles Folate-targeted Dendrimers and PEG-PLA Nanoparticles for Temporal Control over Targeting. **American Association of Pharmaceutical Scientists (AAPS) Annual Meeting 2011**, Washington, DC, USA
10. **Sunoqrot, S.**, Bae, J.W., Jin, S.-E., Pearson, R.M., Liu, Y., and Hong, S. Kinetically Controlled Cellular Interactions of Novel Polymer-Polymer and Polymer-Liposome Nanohybrid Systems. **Chicago Biomedical Consortium (CBC) Annual Symposium 2011**, Chicago, IL, USA

11. **Sunoqrot, S.**, Bae, J.W., Jin, S.-E., Pearson, R.M., Liu, Y. and Hong, S. Kinetically Controlled Cellular Interactions of Novel Polymer-Polymer and Polymer-Liposome Nanohybrid Systems. **Midwest Pharmaceutical Graduate Student Research Meeting (PGSRM) 2011**, Madison, WI, USA
12. **Sunoqrot, S.**, Bae, J.W., Jin, S.-E., Pearson, R.M., Liu, Y. and Hong, S. Kinetically Controlled Cellular Interactions of Novel Polymer-Polymer and Polymer-Liposome Nanohybrid Systems. **University of Illinois College of Pharmacy Research Day 2011**, Chicago, IL, USA
13. **Sunoqrot, S.**, Bae, J.W., Jin, S.-E., Pearson, R.M., Liu, Y. and Hong, S. Polymer-Polymer and Polymer-Liposome Nanohybrid Systems with Kinetically Controlled Cellular Interactions. **Materials Research Society (MRS) Annual Meeting 2010**, Boston, MA, USA
14. **Sunoqrot, S.**, Jin, S.-E., Bae, J.W., Liu, Y. and Hong, S. Novel Polymer-Polymer and Polymer-Liposome Nanohybrid Systems as Potential Targeted Delivery Vehicles. **Midwest Pharmaceutics Graduate Students Research Meeting (PGSRM) 2010**, Columbus, OH, USA
15. **Sunoqrot, S.**, Jin, S.-E., Bae, J.W., Liu, Y. and Hong, S. Novel Polymer-Polymer and Polymer-Liposome Nanohybrid Systems as Potential Targeted Delivery Vehicles. **UIC Graduate Student Research Forum 2010**, Chicago, IL, USA
16. **Sunoqrot, S.**, Jin, S.-E., Bae, J.W., Liu, Y. and Hong, S. Novel Polymer-Polymer and Polymer-Liposome Nanohybrid Systems as Potential Targeted Delivery Vehicles. **UIC College of Pharmacy Research Day 2010**, Chicago, IL, USA

Courses Taught

Graduate

201762 Advanced Pharmaceutical Technology

Undergraduate

201221 Pharmaceutics I
 201322 Pharmaceutics Laboratory
 201521 Pharmacy Practice I
 201522 Pharmacy Practice II
 201541 Pharmaceutical Technology