

Gautam Chauhan, MS

Doctoral Student, Pharmaceutical Sciences

College of Pharmacy and Health Sciences, St. John's University, Jamaica, NY-11439

gautamchauhan0804@gmail.com | +1 (518) 428-1521

EDUCATION:

Ph.D. in Pharmaceutical Sciences

St. John's University, Queens, NY

Current GPA: 3.8/4.0

Sept 2018 - Present

MS. in Pharmaceutical Sciences

St. John's University, Queens, NY

GPA: 3.71/4.0

Jan 2016 – July 2018

TECHNICAL SKILLS

Formulation development

- Development and optimization of polymeric Nano drug delivery systems
- Development of lipid-based drug delivery systems
- Hot Melt Extrusion (HME)
- 3D printer (Maker-Bot)

Analytical

- Ultra-Performance Liquid Chromatography (UPLC)
- Spectrophotometer (UV-Vis)
- FT-IR (Fourier transform infrared spectroscopy)
- Bruker Nuclear Magnetic Resonance (NMR)
- Tap density tester (USP I and II)
- Dissolution Apparatus (USP I and II)
- Differential Scanning Calorimetry (DSC)
- Powder X-Ray Diffractometry (PXRD)
- Next Generation Impactor (In-vitro lung deposition)

Cell and Molecular Biology

- 2D Cell Culture Studies
- 3D Cell Culture Studies
- Cell based apoptosis & autophagy inhibition assays

Animal study in Rats/Mice

- Oral administration via gavage
 - Intravenous administration via lateral tail vein
 - Blood collection (Tail vein and cardiac puncture)
-

PATENT DISCLOSURES AND PUBLICATIONS

Peer reviewed publications:

Authors

1. Sarvepalli S, Parvathaneni V, **Chauhan G**, Shukla SK, Gupta V* (2022) Inhaled Indomethacin-Loaded Liposomes as Potential Therapeutics against Non-Small Cell Lung Cancer (NSCLC) - Pharmaceutical Research (Accepted September 2022).
2. Kulkarni NS, **Chauhan G**, Goyal M, Sarvapalli S, Gupta V* (2022). Development of Gelatin Methacrylate (GelMa) Hydrogels for Versatile Intracavitary Applications: In-vitro Characterization and Ex-vivo Performance Assessment - Biomaterials Science (Accepted June 2022)
3. Parvathaneni V, Elbatanony R, Shukla SK, Kulkarni NS, Kanabar DD, **Chauhan G**, Ayehunie S, Chen Z, Muth A, Gupta V* (2020). Bypassing P-glycoprotein mediated efflux of afatinib by cyclodextrin complexation – Evaluation of intestinal absorption and anti-cancer activity. Journal of Molecular Liquids (Accepted November 22, 2020).
4. **Chauhan G**, Shaik AA, Kulkarni NS, Gupta V* (2020). Preparation of Lipid Based Drug Delivery Systems using Melt Extrusion. Drug Discovery Today. (Accepted July 29, 2020).
5. Mamidi HK, Palekar S, Nukala PK, Mishra SM, Patki M, Fu Y, Supner P, **Chauhan G**, Patel K. Process optimization of twin-screw melt granulation of fenofibrate using design of experiment (DoE)- International Journal of Pharmaceutics (Accepted Jan 25, 2021).
6. Elbatanony R, Parvathaneni V, Kulkarni NS, Shukla SK, **Chauhan G**, Kunda NK, Gupta V* (2020). Afatinib-loaded Inhalable PLGA Nanoparticles for Localized Therapy of Non-Small Cell Lung Cancer (NSCLC) – Development and In-vitro Efficacy. Drug Delivery and Translational Research (Accepted June 2, 2020)
7. Parvathaneni V, Kulkarni NS, **Chauhan G**, Shukla SK, Elbatanony R, Patel BI, Kunda NK, Muth A, Gupta V* (2020). Development of Pharmaceutically Scalable Inhaled Anti-cancer Nanotherapy – Repurposing Amodiaquine for Non-Small Cell Lung Cancer (NSCLC). Materials Science and Engineering C (Accepted May 28, 2020)
8. Vaidya B, Kulkarni NS, Shukla SK, Parvathaneni V, **Chauhan G**, Damon JK, Sarode A, Garcia JV, Kunda NK, Mitragotri S, Gupta V* (2020). Development of Inhalable Quinacrine Loaded Bovine Serum Albumin Modified Cationic Nanoparticles: Repurposing Quinacrine for Lung Cancer Therapeutics. International Journal of Pharmaceutics 577(2020):118995.

Patent disclosure:

1. Kulkarni NS, **Chauhan G**, Gupta V. A Small-Molecule Anthelmintic for Treatment of Malignant Pleural Mesothelioma, A Rare Cancer of Lungs' Pleural Cavity. (Provisional Patent filed June 24, 2022.) Application # US 63/366,974.

Non-peer reviewed publications:

1. **Chauhan G**, Gupta V* (2020). Continuous Manufacturing of Lipid-Based Delivery Systems using Melt Extrusion. Pharma Focus Asia (In Press).
2. **Chauhan G**, Gupta V* (2019). Development and Challenges: Adapting Continuous Manufacturing for Pharmaceuticals. AAPS Newsmagazine Cover Story, April 2019.

POSTERS AND PRESENTATIONS

1. **Chauhan G**, Gupta V*. Continuous Production of Solid Lipid Nanoparticles Using Hot Melt Extrusion for Oral Delivery of Poorly Water-soluble drug. (Northeast Regional Discussion Group) NERDG - 2022, ARA Presentation.
2. **Chauhan G**, Gupta V*. Layer-by-layer Assembled Particles for Non-invasive Inhaled Therapeutic Delivery to the Lungs. AAPS Annual meeting, November 2021, Pennsylvania, PA.

3. **Chauhan G**, Shaik AA, Sawant SS, Kunda NK, Gupta V*. Continuous Production of Nebulized Antibiotic Formulation for Treatment of Pseudomonas Aeruginosa Infections in Cystic Fibrosis. 2021 Respiratory Drug Delivery (RDD) Annual Meeting, May 2021 (Virtual).
 4. **Chauhan G**, Shukla S, Shaik AA, Gupta V*. Exploring Clinical Outcomes of 3D Printed Modified Release Tablets by Physiologically based Pharmacokinetic Modeling. Controlled Release Society (CRS) small talk – 2020.
 5. **Chauhan G**, Shaik AA, Shukla SK, Gupta V*. Development of Solid Lipid Nanoparticles using Hot Melt Extrusion for Pulmonary Delivery of Water Insoluble Drugs. AAPS Annual Meeting, November 2018, Washington, DC.
 6. **Chauhan G**, Parvathaneni V, Shaik A, Gupta V*. Combined effect of Hydroxypropyl Methylcellulose (HPMC) Gradation and Integral Structure of 3D printed Tablets for Modified Drug Release. NJPhaST Regional Meeting, April 2019, Whippany, NJ.
 7. **Chauhan G**, Shaik A, Shukla S, Gupta V*. Preparation of Solid Lipid Nanoparticles using Hot Melt Extrusion for Oral Delivery. Jarowski symposium, May 2019, St. John's University, Queens, NY.
 8. **Chauhan G**, Gupta V*. Preparation of Solid Lipid Nanoparticles using Hot Melt Extrusion for Oral Delivery. CIMSEPP Meeting, June 2019, NJIT, Newark, NJ.
-

WORK EXPERIENCE

St. John's University, Queens, NY September 2021- present
Graduate Teaching Assistantship, Pharmaceutical Sciences

- Conducting lab courses for undergraduate students and develop their practical skills

St. John's University, Queens NY Jan 2016 - May 2021
Graduate Assistantship, Animal Care Center

- Handling the Animals for Lab research work- Rats, Mice, Hamsters, Frogs, Rabbits. Check the health status of all animals, ensure proper feed and water are available for all animals, check on environmental conditions in facility.
- Monitors and help to train new student employees in the proper functioning of the Animal Care Center including training the students to assist on weekends and holidays.

Dr. Reddy's Laboratories, New Delhi, India July 2014 - October 2015
Professional Service Representative (PSR)

- Attended and organized trade exhibitions, conferences, meetings and sales performance and managed budget.
- Undertook relevant research and wrote reports and other literatures such as sales report, presentation of products like Omeprazole, Domperidone, Levofloxacin, etc.

Kanha Biogenetic Laboratories, Himachal Pradesh, India July 2013 - June 2014
Production Chemist

- Monitoring Manufacturing schedule and Targets.
 - Monitoring of process validation activities in Granulation and Compression, online BMR filling, and maintaining of Related Records and Documentations, Daily Monitoring of Manufacturing Plan and Output Reporting.
-

INTERNSHIP

Akums Drugs & Pharmaceuticals Limited

June 2012 - August 2012

Industrial Trainee

- Learned different aspects of Preparation, Coating of Tablets, Filling of Capsules, Preparation & evaluation of emulsions, suspensions, creams & pastes, Dissolution and Disintegration studies of tablets. Worked on machinery like Spray Coating Machine, Rotary Tablet Press, Capsule filling polishing and Packing Machine, etc.

Surbhi Hospital, Noida, India

May 2011 - August 2011

Volunteer Pharmacist

- Responsible for handling, dispensing, keeping record of medicine, reading prescriptions, stock management and order booking.

TEACHING AND PROFESSIONAL AFFILIATIONS

PHS 3604 – Pharmacy Practice Lab – II

Spring - 2022

PHS 3602 – Pharmacy Practice Lab – I

Fall - 2021

Organizing committee, Charles Jaworski Symposium in Industrial Pharmacy

September 2018- present

Social Media Strategist, AAPS student chapter

September 2018- May 2019

MEMBERSHIP IN PROFESSIONAL SOCIETIES

1. American Association of Pharmaceutical Scientists (AAPS)

Active

2. Controlled Release Society (CRS)

2019-2020

STUDENTS TRAINED

1. Daya Biju (Pharm D)

Spring 2021- present

2. Peter D. Tran (Pharm D)

Fall 2020

3. Josephine Chen (Senior year)

Spring 2019

4. Yasmeen Saleem (Pharm D)

Spring 2018- Spring 2019