Curriculum Vitae

Mahavir Bhupal Chougule, Ph.D., M.Pharm., B.Pharm.
Associate Professor of Pharmaceutical Sciences (Tenured)
Mercer University College of Pharmacy
3001 Mercer University Drive, Atlanta, GA 30341, USA
E-mail: Chougule_mb@mercer.edu
Phone: +1 (678) 547 6248
US citizen
https://pharmacy.mercer.edu/faculty/chougule/
https://www.linkedin.com/in/mahavir-bhupal-chougule-05912514/

A. Statement and Executive Summary of Administration, Service, Research, and Teaching Accomplishment

A1. Introduction, Education, and Experience

I am a drug and gene delivery product development scientist with over 20 years of interdisciplinary research experience in formulation development, preclinical studies, pharmacokinetics, toxicology, and molecular biology. PhD in Pharmacy, Master of Pharmacy in Pharmaceutical Technology, and Bachelor of Pharmacy (B. Pharm) educational credentials are highly relevant to the medical field, health sciences, and allied sciences. Postdoctoral fellowship of 3 years focused on drug and biologics cancer therapeutics via inhalation, parenteral, oral, and nasal routes at the Florida Agricultural and Mechanical University College of Pharmacy, Tallahassee, FL.
I have held academic positions at Mercer University, the University of Mississippi, and the University of Hawaii and completed postdoctoral training at Florida A&M University. With over 18 years of post-graduate experience, I have mentored students and junior faculty, led core facilities, and served on over 50 institutional and professional committees. My work has produced 10 patents and over 75 peer-reviewed publications, integrating research into teaching and service across pharmacy education. My research program has secured $1.55 million in extramural funding from NIH, NSF, industry, and foundations. I've led technology transfer and consultancy agreements and played a key role in the development of the PharmD curriculum. My work has earned national and international recognition, including the AACR and Taniguchi Awards. I actively collaborate with scientists, engineers, and clinicians to advance impactful, interdisciplinary research and education.

Education

- Ph.D. in Pharmacy – Focused on inhaled nano/microparticle drug delivery for lung infections and transplant.
- M.Pharm in Pharmaceutical Technology – Specialized in inhaled antiasthmatic dry powder inhalers
- B. Pharmacy and D. Pharmacy degrees are equivalent to the US PharmD degree and eligible to become a pharmacist.

Research Activity Experience, Contributions, and Accomplishments

- 21 years of biomedical/pharmaceutical research in academia, pharma, and cancer centers, focusing on drug, biologics, gene delivery, vaccines, and novel dosage forms.
- Held tenured Associate Professor roles at Mercer, University of Mississippi (Top 10), and University of Hawaii.
- PI/Co-I on $1.5M+ extramural grants (NIH R15, AHA, industry, Emory); led 11-collaborator projects.
- Expertise in formulation, pharmacokinetics, toxicology, delivery systems (oral, inhaled, parenteral, nasal).
- Developed antiviral, anticancer, and vaccine products; led IND-enabling studies for clinical translation.
- Published 10 patents, 42 research papers, 35+ reviews/book chapters; 4,500+ citations (h-index 34).
- Served on 23+ grant review panels (NIH, DoD, foundations); reviewer for 27 journals and 8 Ph.D. theses.
- Collaborated with 12+ national research institutions; led research lab establishment and team development.
- Advised 60+ mentees (faculty, postdocs, PhDs, PharmDs, undergrads, high school students).
- Recognized with AACR Minority Scholar Awards and Koichi Taniguchi Award.

Teaching Activities Experience, Contributions, and Accomplishments

- 20+ years teaching PharmD, MS, and Ph.D. courses in drug delivery, immunology, pharmacokinetics, and more.
- Directed and co-developed 10+ PharmD courses; integrated team-based and flipped classroom methods.
- High student satisfaction and impactful learning outcomes.
- Developed interdisciplinary curriculum content across departments.

Service Experience and Accomplishments

- 17+ years of leadership in academic service; served on 52+ institutional, national, and international committees.
- Chair/Co-chair of DEI, Bylaws, Curriculum, and Faculty Search Committees.
- Led DEI initiatives for underrepresented groups; implemented aging and diversity trainings.
- Member, University-wide House of Delegates Research Committee; led budget and grant policy reforms.
- Served as external P&T evaluator for 7 pharmacy schools; organized national conferences and sessions.
- Editorial Board member for 6 journals; guest editor for 4 special issues.
- Contributed to Ph.D. program, core lab, and animal facility development.
- Reviewer and judge at academic conferences, journals, book proposals, and science competitions

My research, teaching, and service activities have achieved excellence in contributions and achievements.

B. EDUCATIONAL RECORD AND PROFESSIONAL PREPARATIONS

Postdoctoral Fellow in Cancer Therapy and Nanotechnology 2007- 2010
College of Pharmacy and Pharmaceutical Sciences, Florida A. and M. University, Tallahassee, FL
Research focus: Immediate and Extended Release combination or nano or micro particle-based oral, inhaled, and parenteral pharma and biopharma products for treating lung cancer, and breast cancer.
Research Advisor: Mandip Singh Sachdeva

Doctor of Philosophy in Pharmaceutical Sciences 2004-2007
Pharmacy Department, The Maharaja Sayajirao University of Baroda, Vadodara, Gujarat
(Senior Research Fellow, Indian Council of Medical Research, New Delhi)
Dissertation: Liposomal dry powder inhalers for lung disorders
Research focus: Inhalation delivery for treating infectious lung diseases, cystic fibrosis, AIDS-associated *pneumonia carinii* infection, and lung transplant rejection.
Research Advisor: The Late Professor Dr. Ambikanandan Misra

Master of Pharmacy in Pharmaceutical Technology 2002- 2004
Graduated with Distinction, GPA-3.95
Pharmacy Department, The Maharaja Sayajirao University of Baroda, Vadodara, Gujarat
Dissertation: Development of Dry Powder Inhalers
Research focus: Enhancing the fine particle fraction of drugs to deep lungs.
Research Advisor: Dr. Ambikanandan Misra

Bachelor of Pharmacy
Gold Medalist 1998-2001
Pataldhmal Wadhwani College of Pharmacy, Yavatmal, Amravati University, Amravati, Maharashtra

Diploma in Pharmacy 1996-1998
Graduated with First Class
Bombay Technical Education Board, Mumbai, Maharashtra
Institute of Pharmacy, Miraj, Maharashtra

Licenses and Certifications

Registered Pharmacist, Pharmacy Council of India 1999-present

C. PROFESSIONAL EXPERIENCES AND EMPLOYMENT RECORD

Associate Professor of Pharmaceutical Sciences (tenured), 07/19/2021- present
College of Pharmacy, Mercer University, Atlanta, GA 30341 40 hrs/week

Research Activities, Experience, Contributions, and Accomplishments

- Interdisciplinary research focused on i) COVID-19 and other infectious diseases and extended release antivirals, ii) Inflammatory tumor-responsive natural and bioengineered lipid or polymer-drug and /or siRNA-based pharma products, including nano and microparticles for treatment of lung cancer and mesothelioma, and iii) Asthma therapeutics associated with the infectious agent and targeted inhalation and parenteral delivery of drugs, siRNA and antimer miRNA for the treatment of asthma
- Expertise in the drug, protein, RNAi, and antigen-based inhalation, oral, parenteral, and nasal drug and gene pharma and vaccines products for treating COVID-19, asthma, lung cancer and breast cancer
- Developed and evaluated the extended-release antivirals and spike protein biologics vaccines
- Developed and evaluated the parenteral or inhaled siRNA loaded endogenous lipid based nanoliposomes and gelatin nanoparticles for treating COVID-19, asthma, lung cancer, breast cancer, hypertension
- Dual drug loaded lipid or natural polymeric nanoparticles design, development and evaluation under in vitro and in vivo conditions
- The biologics and drug based bioengineering polymeric nanoparticle products for treating lung cancer
- Expertise in the characterization of inhaled products, nebulizers, pressurized meter dose inhaler and dry powder inhaler
- Design of Experiments, preclinical maximum dose studies, pharmacokinetics, pharmacodynamic, toxicology, and translational research
- Research lab equipment acquisition, management, and requirements were initiated to establish the new inhaled pharma products, pharmacokinetics, pharmacodynamics, and toxicity studies
- Based in the preclinical findings of developed pharma, biopharma, and biotech products
- Planning of an investigational new drug application (IND) submission to FFA to initiate clinical trials and translate it to the clinic.
- Sustained extramurally funded program with about $500,000 extramural grant funding for research program in 3 yrs
- Co-investigator of an NHLBI-funded R15 grant entitled “The role of ROS on beta-2-adrenergic receptor function in human airway”
- Co-investigator of the American Heart Association grant-funded AIREA titled “A gut microbiota-derived metabolite as a novel modulator of vascular endothelin-1 signaling and hypertension”
- Subcontract PI of 2-year NCI-funded R15 grant focused on developing new HER2 inhibitors for treating breast cancer
- Completed 3-year NHLBI-funded R15 grant as a PI focused on nanocarrier for the treatment of asthma ($455,100, 09/01/2018-08/31/2023).
- Grant submissions, sustaining the extramurally funded research program, researchers’ team management, research policy, leave approvals, promotion recommendation, personnel counseling, disciplinary action, budget management, advising and annual evaluating a postdoc, 6 graduate students, 5 PharmD students, 2 visiting scholars, 2 undergraduate students, and 2 high school students.
- Building a cohesive research team by implementing and following the principles of human resources and management, personnel workload distribution, prioritizing the research project, and ensuring the timelines and deliverables

- Active collaboration with basic sciences, cancer center, bioengineers, and clinicians from well reputed Universities, i) Emory University Medical School, Atlanta, GA; ii) Cedar Sinia Research Institute, Los Angeles, CA; iii) Lovelace Respiratory Center, Albuquerque, NM; iv) Arizona State University School of Chemical Engineering, Temple, AZ; v) University of South Florida, Tampa, FL; vii) Florida Agriculture and Mechanical University, Tallahassee, FL, and vii) University of Texas at Tyler, TX
- Development and submission of NIH (R01, R21 and R15) and center program grants
- Extrovert abilities to do interprofessional biomedical research and education
- Nebulized Extended-Release Endogenous Phospholipid-Based Nanoliposomes for Treating Respiratory Diseases" has been submitted to the AAPS Lipid-Based Drug Delivery Systems Community (LBDDS) Community Newsletter
- Established multidimensional collaborative strategies with researchers from multidisciplinary fields such as medical, pharmacology, and bioengineering
- The new pharmaceutical and biopharma products developed in the lab were tested in the preclinical studies, and the aim was to submit an investigational New Drug Application (IND) to initiate clinical trials
- Advancement of nanocarriers for pharmaceutical applications: R&D, technology transfer, manufacturing, and scale-up
- An Invention Disclosure, 5 Scientific research findings peer-reviewed international well-reputed biomedical journals, 4 book chapters, presented 21 scientific posters and an editorial article while servicing as Guest Editor of Molecular Pharmaceutics
- Published 4 review articles in high-impact factor international journals, e.g., Advanced Drug Delivery Reviews- impact factor 17.87
- Delivered 5 international invited research seminars for presenting scientific findings
- 21 research and a DEI committee posters were presented at national or international scientific conferences and the national and international scientific meeting
- Invited as grant proposal expert reviewer on 3 NIH or department of Defense (DoD), and international research panels
- Implemented an effective teaching strategy and provide the students with the highest teaching standards
- Efficiently worked with staff members from diverse backgrounds
- Annual evaluation of postdoc, Ph. D. and Master students
- Advised and mentored 3 PhD students, two M.S., a PharmD, one undergraduate, and two high school students for the research activities
- Graduate research advisor and instructor of 4 Ph.D. and 2 Master's students
- One Ph.D. and one M.S. students graduated

Service Experience and Accomplishments

- One and half years of enriched experience in the identification, planning, and implementation of Diversity Equity and Inclusion (DEI) initiatives and activities for faculty, staff, and students at the College of Pharmacy while serving as chair and co-chair of the Standing DEI Committee
- Contributed to the USP committee as a member of the National Institute for Pharmaceutical Technology & Education (NIPTE), Strategy Committee, American Association of Pharmaceutical Scientists, American Association Cancer Research, NIPTE Biologics and Biosimilars Focus Group, NIPTE Nanotechnology Focus Group, Controlled Release Society, and American Society of Gene and Cell Therapy
- Efficiently contributed for one year and currently serving as a member of the University-wide House of Delegates Research Committee and started new initiatives such as setting up grant award accounts separately for PI and Co-Investigator, including F and A cost allocation, that ensure the research activities and budget management will be smoothly conducted and developed new important resources for faculty members for submission of research grants

- One and half years of experience as a Learning Opportunities Manager and outreach AAPS Nanotechnology Community committees to reach out to broader audience
- Three years member of an assessment committee
- One year experience on the judicial hearing board (Atlanta, Douglas, and Henry Counties)
- Chaired Faculty Search Committee meeting and responsible for screening and interviewing faculty candidates
- Contributed to the departmental, college, and university-level committees
- Actively contributed to the function of committees, and the goal was accomplished while advancing excellence and completing the service activities.
- In service to Public Engagement: I will invest my time, energy, and expertise in community, University, and national efforts that support the college's and University's goals
  Delivering invited talk in the technical session at a national and international scientific conference
- Served as theme issue editor for two pharmaceutical journals, Molecular Pharmaceutics and AAPS PharmSciTech.
- Reviewer for ten international well-reputed journals
- Served as an international external evaluator of a Ph.D. thesis
- Advised and mentored five high school students to pursue careers in biomedical sciences

Teaching Activities and Contributions

- Taught the courses focused on Foundations of research, biotechnology, formulations and development of pharmaceutical products, inhaled drug or protein-based pharma products, drug and gene delivery systems, nano or microtechnology, pharmacokinetics, pharmacology, research, and university guidelines for the wet lab, training, working, animal IACUC protocols and IRB protocols, laboratory and animal research, and clinical applications
- PDN advisor and mentor of 15 PharmD and 2 Ph.D. students and facilitated their program progression
- Taught PHA 742 Foundations in Pharmaceutical Sciences, five credits, PharmD P-1 students (4 contact hours), ii) PHA 807: Pharmaceutical Biotechnology, MS and Ph.D. graduate students (22 contact hrs), iii) PHA 527: Biotechnology, PharmD 2 and 3rd yr students (22 contact hrs).
- In the graduate program, I was coordinator and instructor of the PHA 743 Foundations in Research (98 % of course teaching), three credits, Master's and PhD students
- My teaching contributed to the successful students' research activities and completion of research activities, published findings, learned ethics
- Received a high rating for teaching students
- Teaching the inhalation drug delivery systems and products to PharmD, M.S., and Ph.D. students
- Implemented knowledge of biopharmaceutics and nanomedicine to develop students' critical thinking and problem-solving skills
- Teaching research skills to postdoc fellows and Ph.D. students

Associate Professor of Pharmaceutics and Drug Delivery and Research Associate Professor in the Research of Institute of Pharmaceutical Science
School of Pharmacy, University of Mississippi, University, MS 38677

Research Activity Experience, Contributions, and Accomplishments 08/25/2016-07/18/2021
40 hrs/week

- Multidisciplinary research focused on i) Biostimuli-responsive based drug and siRNA co-loaded nanoparticles for the treatment of lung cancer and mesothelioma, ii) Targeted inhalation and parenteral delivery of drugs, siRNA and antimer miRNA for

the treatment of asthma, and iii) Inhalable extended release antiviral nanomedicine for COVID-19
- Dual drug loaded natural polymeric nanoparticles-based product development and evaluation
- Developed and evaluated the drug, protein, RNAi, and antigen-based inhalation, oral, parenteral, and nasal drug and gene pharma and vaccines products for treating COVID-19, asthma, lung cancer and breast cancer
- Expertise in the dry powder microparticulate and nebulizer product characterization using non-viable and viable Cascade Impactors and in vivo methods
- aerosols, nebulizers, nasal spray pump, dry powder inhaler devices-based design, review, and in vitro and in vivo testing.
- Established an extramurally funded program focused on the delivery of siRNA for the treatment of asthma
- PI of a 3-year NHLBI-funded R15 grant focused on nanocarriers for the treatment of asthma
- Development and submitted new and revised NIH (R01, R21, and R15) proposals
- Two scored R01 proposal focused on inhaled nanomedicine for COVID-19
- Completed NIGMS-funded Competitive Research (SCORE) Research Continuance Award and Foundation grants
- Experiences in the NIH COBRA grant proposal and consultant on NSF instrument grant proposal
- Established multidimensional collaborative strategies with researchers from multidisciplinary fields such as medical, pharmacology, and bioengineering
- Utilization of nanotechnology, formulation, and molecular biology techniques
- Advancement of tumor-responsive nanocarriers for pharmaceutical applications
- Pharma and biopharma product R&D, manufacturing, and scale-up
- Magnesium cream launched by the Center for Magnesium Education and Research, LLC in the market
- Research application submission for sustaining the extramurally funded research program, researchers' team management, research policy, leave approvals, promotion recommendation, personnel counseling, disciplinary action, budget management, advising and annual evaluating a postdoc, 8 graduate students, a PharmD student, and an honor student
- Cohesive research team building while implementing and following the principles of human resources, management, personnel workload distribution, research project prioritization, and ensuring to meet the timelines and deliverables
- Published 13 research articles, 7 review articles, and 3 book chapters
- Delivered 11 invited seminar and presented 23 scientific posters
- Invited expert reviewer for 5 NIH, 3 DOD, two foundations, and two international study panels
- Served as a patent expert and consultant for pharma industries

Service Experience and Accomplishments
- Chair or member of departmental, college, and university committees
- Co-chair of the Curriculum Committee
- Served as a secretary of the Curriculum Committee
- In the Curriculum committee, participated in the curriculum designing, development, implementation, and assessment
- Active role in the development, assessment, and approvals of 25 ACPE standards response for the school self-study for ACPE comprehensive review visit (2019-2020)
- My active participation in the Curricular Transformation Subcommittee resulted in developing and implementing the new integrated LandSharRx curriculum for the PharmD program

- Served on Professional Conduct Council Review Committee
- Member of the successful faculty search committee for the position of tenure track faculty and Associate Dean of Academic Affairs
- Directed and supervised three postdocs, 3 Ph.D. students, 5 master's students, an undergraduate student, and 2 high school students for the biomedical research area Students research received prizes or other recognition
- Served as a graduate dissertation committee member for 6 Ph. D. students and five master students
- Annual evaluation of postdoc, Ph. D. students, and Master students
- Organized and chaired three technical sessions at a scientific conference
- Theme issue editor for two journals, Editorial Board Member of 6 journals, and reviewer for 41 international well-reputed journals

Teaching Activities and Contributions

- Chaired two dissertation committees and faculty members of five graduate students, serving as a research advisor and mentor of two high school students and guiding the community's high school and college students in selecting fields based on their interests and backgrounds and pursuing higher education
- Significantly contributed as a course director and co-course director of PharmD and graduate Ph.D. program
- Taught drug and gene delivery, inhalation delivery, compounding lab, calculations, clinical lab skills, pharmacokinetics, and calculations
- Experience in the pharmaceutics compounding lab
- Implemented knowledge of biopharmaceutics and nanomedicine to develop students' critical thinking and problem-solving skills
- Effectiveness teaching philosophy and excellent teaching evaluations
- Taught research skills to postdoc fellows, Master students, Ph.D. students, and undergraduates
- Efficiently worked with staff members from diverse backgrounds

Associate Professor of Pharmaceutical Sciences (Tenured)
The Daniel K. Inouye College of Pharmacy, the University of Hawaii at Hilo, HI
Assistant Professor of Pharmaceutical Sciences (Tenure-track) 07/01/2015- 8/24/2016
The Daniel K. Inouye College of Pharmacy, the University of Hawaii at Hilo, HI 40 hrs/week

Research Experience, Contributions, and Accomplishments

- Conducted interdisciplinary research focused on 08/16/2010-06/30/2015
  a) Targeted immunomodulatory inhalation delivery of drugs and siRNA for infectious disease using polymeric or lipidic nanoparticles for the treatment of lung cancer and asthma 40 hrs/week
  b) Inflammatory tumor-responsive natural and bio-engineered polymeric nanocarrier-based delivery products of drugs, proteins, and/or siRNA for cancer
- Development of targeted inhalable or parenteral bioresponsive nanocarrier platform technology for drug, protein, and siRNA delivery
- Experienced in interdisciplinary research focused on infectious disease, targeted polymeric and lipidic delivery systems, polymer synthesis, delivery, bioengineering, pharmacokinetics, and pharmacodynamics
- Design, development and evaluation of siRNA loaded lipid or polymeric nanoparticulate Established an extramurally funded program focused on infectious disease, inhalation delivery, combination therapies, nanocarriers, pulmonary disorders, and cancer
- PI of a 4-year NIGMS-funded lung cancer project (funded on the first submission) and three 1.5-year Community Foundation-funded projects
- Attracted extramural funding of $ 715,747 from NIH, NSF, and foundations

- Development of hydrophobic and hydrophilic dual drug-loaded nanocarriers
- Formulation and pharmacokinetics (two-compartment model) of delivery systems for poorly soluble Di-indolyl methane compound and Celecoxib
- Established multidimensional collaborative approaches with researchers from multidisciplinary fields such as bioengineering and medical school
- Advancement of nanocarriers for pharmaceutical applications: R&D, manufacturing, and scale-up pharmacokinetics and pharmacodynamics
- Experienced in the research program addressing the health disparities in Hawaiian, and Pacific Islanders
- Proposal writing and submission for sustaining the extramural interdisciplinary research program, research team management, Application submission for sustaining the extramurally funded research program, researchers' team management, research policy, leave approvals, promotion recommendation, personnel counseling, disciplinary action, budget management, advising and annual evaluation of 5 postdoc, 3 graduate students, 17 PharmD students, 4 visiting scholars, and a high school student.
- Fostered a cohesive research team, managed, implemented the principles of human resources, team workload distribution, prioritizing the research projects, and ensuring the timelines and deliverables
- A Development and submission of NIH (R01/R21/ R15), DOD, NSF, and nonprofit foundation grant proposals
- Received the highest number of awards (15 grant and or travel awards) in the College of Pharmacy and the University campus
- Receipients of totla of 6 awards
- Application submission for sustaining the extramurally funded research program, researchers' team management, research policy, leave approvals, promotion recommendation, personnel counseling, disciplinary action, budget management, advising and annual evaluating 1 postdoc, 7 graduate students, a PharmD students, an honor student and a high school student
- Filed an invention disclosure and a US provisional patent application based on the developed targeted nanocarriers for the treatment of cancer
- Published 13 research articles, 3 review articles, 6 book chapters, and two editorial articles
- Delivered 17 invited talks and presented 21 research posters at conferences
- Directed and supervised 4 postdocs, 3 Ph. D. student, 7 PharmD students, and a high school student
- Students research received prizes or other recognition

Service Experience and Accomplishments

- Chair or member on several departmental, college, and university committees
- Co-chair of the Curriculum Committee and designed and implemented new integrated new curriculum Delivered 17 invited talks courses
- In the Curriculum committee, participated in the curriculum designing, development, implementation, assessment, and approvals
- Served as a secretary of the Curriculum Committee
- Active role in the development, assessment, and approvals of 25 ACPE standards response for the school self-study for ACPE comprehensive review visit (2019-2020)
- My active participation in the Curricular Transformation Subcommittee resulted in developing and implementing the new integrated LandSharRx curriculum for the PharmD program.
- Served on Professional Conduct Council Review Committee
- Member of the faculty search committee for Associate Dean of Academic Affairs. Recommended and successfully filled the position of Associate Dean of Academic Affairs

- Directed and supervised two postdocs, 3 Ph.D., four master's students, an undergraduate and a high school student in the biomedical research area
- Annual evaluation of 2 postdoc, 3 Ph. D. and Master students
- Students research received prizes or other recognition
- Served as a graduate dissertation committee member for 3 Ph. D. students and 4 master students
- Organization and chairing of a technical session at a scientific conference
- Theme issue editor of 2 journals, Editorial Board Member of 6 journals, and a reviewer for 41 international well-reputed journals
- Efficiently worked with staff members from a diverse background

Teaching Activities Experience, Contributions, and Accomplishments

- Course director and co-course director of PharmD and Ph. D. courses in the area of drug and gene delivery, preformulation, and inhalation delivery
- Teaching expertise in the areas of pharmaceutics, immunology, nanotechnology, pharmacokinetics, and pharmacology
- Developed students' critical thinking and problem-solving skills
- The effectiveness of teaching was evident from excellent teaching evaluations
- Taught postdoc fellow and Ph.D. students research skills
- Experience in the biopharmaceutics compounding lab

Collaborative Faculty Member — 01/01/2011-06/30/2013
Cancer Biology Program, University of Hawaii Cancer Center, Honolulu, HI — The efforts were part of the faculty appointment
NCI-designated Cancer Center

Research Activity Experience, Contributions, and Accomplishments

- The design of the targeted delivery system of STAT6 siRNA, Gemcitabine, Celecoxib, and Noscapine for lung cancer
- Development and patents for natural and polymeric nanocarriers for dual drug delivery and cancer therapy
- Contributed to the center grant
- Established extramurally funded cancer and asthma research programs
- Implementing the human resources policies, research team workload management, promotions, and disciplinary actions

Post-doctoral Research Fellow — 06/19/2007-08/15/2010
Division of Basic and Pharmaceutical Sciences, College of Pharmacy and Pharmaceutical Sciences, Florida A. and M. University, Tallahassee, FL — 40 hrs/week

Research Activity Experience, Contributions, and Accomplishments

- Infectious disease pathogenesis and therapies
- Formulation, pharmacokinetics, and *in vivo* efficacy of inhalation delivery systems for delivery of Celecoxib and oral Di-indolyl methane compounds (*In Vitro–In Vivo* Correlation) for the treatment of inflammatory lung cancer
- Development and delivery of drug and biologics-based products
- Enhancement of oral bioavailability of poorly soluble Noscapine using developed oral mannose receptor-targeted nanoparticles
- Developed Di-indolyl methane compound loaded PEGylated lipid carriers conjugated to CREKA peptide to enhance the delivery to tumor vasculature
- Designed Noscapine and FDA-approved chemo drug-based combination therapies for lung and breast cancer
- Experienced in proteomics tissue sample studies
- Research project prioritization, research students' work load distributions, delivering timelines, evaluations, mentoring, implementing the human resource policies, budget management

- Published 5 research articles, a review article, and a book chapter
- Presented research in the form of 30 posters at scientific conferences
- Established an extramural Florida Department of Health-funded lung cancer research program in nanotechnology
- Experienced in the development of NIH (R21, R15, SC1, P20), DOD, and James and Esther King Biomedical Research proposals Experiences in the R01, R15, the Research Centers in Minority Institutions (RCMI) program, NIH-Minority Biomedical Research Support (MBRS) proposals
- Experienced in the research program addressing the African American health disparities
- Mentored and advised 2 Ph. D. students, 2 PharmD students, an undergraduate student, and a high school student
- Scientist contributions resulted in 5 peer-reviewed research article, a book chapter, a review article, 29 scientific posters

Teaching Activities Experience, Contributions, and Accomplishments

- Taught drug delivery system and immunotherapy topics to first-year year PharmD students
- Co-mentored 2 PharmD students, 2 Ph. D. students, and an undergraduate student

Research Scientist, Novel Drug Delivery Systems 05/25/2006-05/28/2007
Wockhardt Research Center, Aurangabad, India 40 hrs/week

Research Activity Experience, Contributions, and Accomplishments

- Developed Bupropion and Metoprolol generic products approved by approved by the US FDA
- Design and formulation of modified release formulations such as matrix, pellets, and spherules-based tablets or capsules for the US
- generic market
- Data collection, processing and statistically analyze data and draw conclusion based scientific findings, future next step decisions, FDA regulatory guidelines and policies.
- The FDA ANDA package preparation and submission guidelines
- Filed 2 World patents and 3 Indian patents
- Experienced in ICH stability studies
- Proficient in tablet compression and coating, fluidized bed processors (Dryers, Glatts), rapid mixing granulators, extruder and spheronizers, and capsule filling machines
- Experienced in the searching, drafting, interpretation of technical patents, and development of non-infringing formulations
- Recipient of 2 awards

Research Fellow, Ph. D. Candidate in Pharmaceutical Sciences
Pharmacy Department, the Maharaja Sayajirao University of Baroda, Vadodara, Gujarat 04/01/2004-5/24/2006
Research Activity Experience, Contributions, and Accomplishments 20 hrs/week

- AIDS-associated *pneumonia carinii* infection and developed Dapsone loaded nanoliposomal dry powder inhaler for the treatment of AIDS-associated *pneumonia carinii* infection
- Experienced in design, optimization, manufacturing, stability, and pharmacokinetic testing of spray or freeze-dried Amiloride loaded liposomal dry powder inhaler formulations for the treatment of cystic fibrosis
- Design and formulation of Tacrolimus loaded liposomal dry powder inhaler for the treatment of lung transplant rejection, respectively
- Filed patents on liposomal formulations with aerodynamically light particles, which results in improved deep lung delivery

- Expertise in the aerosol product using non-viable and viable Cascade Impactors and in vivo studies
- Filed 3 Indian patents based on developed formulations
- Published 3 research articles, a review article, a book chapter, and presented 8 research posters
- Recipient of 4 awards including, Senior and Junior Research Fellowships from the Indian Council of Medical Research and Lady Tata Memorial Trust, respectively

Research Scientist, Pharmaceutical Industry project 02/01/2004 - 1/31/2005
Pharmacy Department, the Maharaja Sayajirao University of Baroda, Vadodara, and Sun Pharma Advanced Research Centre, Vadodara, Gujarat 5 hrs/week
Research Activity Experience, Contributions, and Accomplishments
Experience in industrial product designing, planning, and development of dry-powered inhalers product for treating asthma

- Design, optimization, development, and technology transfer of dry powder inhaler formulations having enhanced fine particle fractions using surface coating technique with different carriers and their optimum combinations
- The developed dry powder inhaler products exhibited enhanced drug delivery to deep lungs
- Industrial and clinical translational of developed dry powder inhaler product

Research Scientist, Pharmaceutical Industry project 03/15/2004 - 8/14/2004
Pharmacy Department, the Maharaja Sayajirao University of Baroda, Vadodara, Gujarat and Panacea Biotec Ltd. Lalru, Punjab 5 hrs/week
Research Activity Experience, Contributions, and Accomplishments

- Project: Dry Powder Inhaler for the Combination Drugs for Asthma
- Design, development, and technology transfer of combination drugs-based dry powder inhalers with improved fine particle fractions for the treatment of asthma
- The design of stability studies & validation of protocols
- Industrial and clinical translational application of dry powder inhalers

Instructor
Pharmacy Department, the Maharaja Sayajirao University of Baroda, Vadodara, Gujarat 07/01/2004-11/30/2004
Teaching Activities and Contributions 20 hrs/week

- Taught Pharmacology and Pharmaceutics courses to first-year 40 Bachelor of Pharmacy students
- Taught Pharmaceutics compounding lab and pharmacology experimental to first-year 40 Bachelor of Pharmacy students

D. AWARDS AND HONORS

Synopsis: I have received several national and international awards, including the Koichi and Taniyo Taniguchi Award for Excellence and Innovation and the American Association of Cancer Research (AACR) Minority-Serving Institution Faculty Scholar in Cancer Research Award.

1. The Koichi and Taniyo Taniguchi Award for Excellence and Innovation, the University of Hawaii at Hilo 2016
2. American Association of Cancer Research (AACR) Minority-Serving Institution Faculty Scholar in Cancer Research Award, AACR Annual Meeting, Philadelphia, PA 2015
3. The University of Hawaii at Hilo's Research Council Faculty Travel Award to present a research poster at the American Association of Pharmaceutical Scientists (AAPS) Annual Meeting and Exposition, San Diego, CA 2014

4. AACR Minority-Serving Institution Faculty Scholar in Cancer Research Award, 104th AACR Annual Meeting, Washington, DC — 2013
5. The University of Hawaii at Hilo's Research Council Faculty Travel Award to present a research poster at the AAPS Annual Meeting and Exposition, San Antonio, TX — 2013
6. AACR Minority-Serving Institution Faculty Scholar in Cancer Research Award, 103rd AACR Annual Meeting, Chicago, IL — 2012
7. AAPS Executive Council's Travel Award to present a research poster at the 2010 Annual Meeting and Exposition meeting, New Orleans, LA — 2010
8. Post-doctoral Research fellowship award, Florida Department of Health, Bankhead-Coley Biomedical Research Program, Tallahassee, FL — 2010
9. Research Travel Grant to present research poster at the Respiratory Drug Delivery X Conference, Boca Raton FL from i) Department of Science and Technology, Government of India, New Delhi, India, ii) Department of Biotechnology, Government of India, New Delhi, India, iii) Council of Scientific and Industrial Research, Government of India, New Delhi, India, and iv) Sir Dorabji Tata and Allied Trusts, Mumbai, Maharashtra, India — 2006
10. Senior Research Fellowship (SRF) by Indian Council of Medical Research (ICMR), New Delhi, India — 2005-2006
11. Junior Research Fellowship (JRF) by Lady Tata Memorial Trust, Mumbai, Maharashtra, India — 2004-2005
12. Research Fellowship by University Grant Commission, New Delhi, India — 2002-2004
13. Graduate Aptitude Test in Pharmaceutical Sciences (GATE) Exam, 99. 19 Percentiles, Indian Institute of Science, Bangalore, Karnataka, India — 2002
14. Best Student Award, Pataldhamal Wadhawani College of Pharmacy, Yavatmal, Maharashtra, India — 2001
15. Gold Medalist, Bachelor of Pharmacy, Pataldhamal Wadhawani College of Pharmacy, Yavatmal, Maharashtra, India — 2001

E. GRANT AND PROPOSAL REVIEWER

Synopsis: I have served as an invited scientific reviewer on 33 panels of NIH and Department of Defense, foundation, national, and international study sections.

1. 2022, Reviewer, peer review panel of the Department of Defense Congressionally Directed Lung Cancer Research Programs, June 2022
2. 2022, Reviewer, peer review panel of the Department of Defense Congressionally Directed Breast Cancer Research Programs, July 2022
3. 2021, Reviewer, NIGMS Special Emphasis panel – Therapeutics for infectious disease, July 2021
4. 2021, Reviewer, NIH Gene and Drug Delivery (GDD) panel, March 2021
5. 2020, Reviewer, NIH Biomaterials Biointerfaces (BMBI), Sep 2020
6. 2020, Reviewer, NIH Gene and Drug Delivery (GDD) study section, June 2020
7. 2020, Reviewer, Health Research Charities Ireland, Breakthrough Cancer Research, Ireland
8. 2020, Reviewer, peer review panel of the 2020 Peer Reviewed Medical Research Program (PRMRP) for the Congressionally Directed Medical Research Programs (CDMRP)
9. 2019, Reviewer, peer review panel of the 2019 Peer Reviewed Medical Research Program (PRMRP) for the Congressionally Directed Medical Research Programs (CDMRP)
10. 2019 Reviewer, Discovery, Respiratory Diseases (DIS-RD) peer review panel of the 2019 Peer Reviewed Medical Research Program (PRMRP) for the Congressionally Directed Medical Research Programs (CDMRP)
11. 2019 Reviewer, Graduate Student Council Research Grants, University of Mississippi, University, MS
12. 2018 Reviewer, King Abdullah International Medical Research Center (KAIMRC), Saudi Arabia
13. 2018 Reviewer, research program peer review panel of the 2018 King Abdullah International Medical Research Center, Saudi Arabia
14. 2018 Reviewer, Special Emphasis Panel to review applications submitted in response to the RFA-RM-18-016 "Innovative Technologies to Deliver Genome Editing Machinery to Disease-relevant Cells and Tissues." 2018/08 ZRG1 GGG-D (70) R

15. 2018 Reviewer for the Department of Defense (DOD) Congressionally Directed Medical Research Programs (CDMRP) Reviewer, National Institute of General Medical Sciences, Support of Competitive Research (SCORE) program
16. 2017 Reviewer, Therapeutics, Treatment, and Resistance peer review panel of the 2015 Lung Cancer Research Program, IDEA award for the Department of Defense (DOD) Congressionally Directed Medical Research Programs (CDMRP)
17. 2017 Reviewer, Concept-Clinical and Experimental Therapeutics (CON-CET) peer review panel of the 2015 Lung Cancer Concept Award for the Department of Defense (DOD) Congressionally Directed Medical Research Programs (CDMRP)
18. 2017 Reviewer, Foundation for Polish Science, TEAM TECH Program, Warsaw, Poland
19. 2016 Reviewer, National Institute of General Medical Sciences, Support of Competitive Research (SCORE) program, ZGM1 RCB-X (SC)
20. 2016 Reviewer, Mitacs Accelerate research proposal, Mitacs, Montréal, Canada.
21. 2016 Reviewer, Kentucky Science and Engineering Foundation R&D Excellence Award. Lexington, KY
22. 2016 Reviewer, Nanotechnology peer review panel of the Lung Cancer Research Program, IDEA award for the Department of Defense (DOD) Congressionally Directed Medical Research Programs (CDMRP)
23. 2016 Reviewer, Therapeutics, Treatment, and Resistance peer review panel of the Lung Cancer Program, Concept award for the Department of Defense (DOD) Congressionally Directed Medical Research Programs (CDMRP)
24. 2016 Reviewer, Peer Reviewed Cancer Research Program (PRCRP) Horizon Award, Program for the Department of Defense (DOD) Congressionally Directed Medical Research Programs (CDMRP)
25. 2015 Reviewer, National Institute of General Medical Sciences, the Kansas University Medical Center (KUMC) Kansas IDeA Network of Biomedical Research Excellence (K-INBRE) Developmental Research Project Program (DRPP) and/or the Bridging Grant Program, American Institute of Biological Sciences, Reston, VA
26. 2015 Reviewer, National Institute for General Medical Sciences IDeA- funded Wyoming IDeA Networks for Biomedical Research Excellence program. Laramie, WY
27. 2015 American Association of Colleges of Pharmacy Teachers of Pharmaceutics Section's Award Committee, Alexandria, VA
28. 2014 Research Center in Minority Institution (RCMI) Pharmaceutical Research Center Pilot Project Program, The Florida Agriculture and Mechanical University, Tallahassee, FL
29. 2014 Reviewer, NIH Developmental Therapeutic (DT) standing study section, Washington DC Ro1, R21, and R03 research proposals
30. 2014 Reviewer, American Association of Colleges of Pharmacy, Alexandria, VA. New Investigator Award Program proposals
31. 2014 Reviewer, European Research Council Research Grant, European Research Council Executive Agency Brussels, Belgium
32. 2013 Catalent Applied Drug Delivery Institute's Global Academic Competition for Life Science Leaders, University Academic Partnership Competition, JFK Communications, Princeton, NJ
33. 2012 Reviewer, Cancer Research Project, Ohio CRA, Ohio State, Columbus, OH. Cancer research proposals

F. PROFESSIONAL ACTIVITIES

Synopsis: I am actively contributing to the national organization such as the American Association of Pharmaceutical Scientists (AAPS). In the past, I served in the AACR and Controlled Release Society and organized symposiums and programs for scientific conferences. I will continue to serve these organizations effectively.

Membership in professional organizations

1. Member the Maharaja Sayajirao University Pharmacy Alumni Association	2006-Present
2. Member, American Association of Pharmaceutical Scientists (AAPS)	2007–Present
3. Member, National Institute for Pharmaceutical Technology & Education (NIPTE)	2018-2021
	2018-2021
4. Member, NIPTE Nanotechnology Focus Group	2018-2021
5. Member, NIPTE Biologics and Biosimilars Focus Group	2009–2018
6. Active Member, American Association of Cancer Research (AACR)	

7. Member, Controlled Release Society (CRS) 2013-14
8. Member, American Society of Gene and Cell Therapy (ASGCT) 2011-2012
9. Member, American Association of College of Pharmacy (AACP) 2011-2012

G. PATENT AND INVENTION DISCLOSURES

Synopsis: I hold ten patents, a provisional patent, and an invention disclosure related to the development of oral formulations, inhaled products, and targeted nanocarrier systems-based products. My publication strategy has been to submit manuscripts to the top high-impact factor journals in my profession.

1. Chougule MB, Turkson J, Kotha A, Kashikar R. Extended release delivery systems for the treatment of pulmonary diseases such as COVID-19, asthma, lung cancer, and pulmonary fibrosis, *Invention disclosure,* May 2021
2. Chougule MB, Kotha A, Kashikar R. Extended release delivery systems for the prevention and treatment of COVID-19, *Invention disclosure*, Feb 2021
3. Chougule MB, Bachmann AS. Development of ligand-mediated nanocarrier system of Difluoromethylornithine alone and/or combined with chemotherapeutic drug for cancer treatment. *U.S. provisional application*, No. 61/558368, 2010
4. Chougule MB, Bachmann AS. Development of ligand-mediated nanocarrier system of Difluoromethylornithine alone and/or in combination with chemotherapeutic drug for the treatment of cancer. *Invention disclosure*, UH TLG 884, 2010
5. Joshi VM, Mandaogade PM, Chougule MB, Jain GK. Pharmaceutical compositions of Bupropion. *International patent*, WO/2008/026044, 2008
6. Joshi VM, Mandaogade PM, Chougule MB, Jain GK. Stable pharmaceutical compositions of Bupropion. *International patent*, WO/2008/129465, 2008
7. Joshi VM, Mandaogade PM, Chougule MB, Jain GK. Pharmaceutical composition comprising Bupropion or salt thereof and stabilizer. *Indian patent*, 771/MUM/2007 A, 2007
8. Mandaogade PM, Joshi VM, Chougule MB, Srivastav S, Jain GK. Stabilized pharmaceutical composition of Bupropion or salt thereof. *Indian patent*, 1389/MUM/2006 A, 2006
9. Joshi VM, Chougule MB, Mandaogade PM, Jain GK. Melt-granulated Bupropion sustained release formulation. *Indian patent*, 1375/MUM/2006 A, 2006
10. Misra A, Chougule MB, Ganesh S, Padhi B. Aerodynamically light porous dry powder inhaler formulations for targeted pulmonary deposition. *Indian patent*, 953/MUM/2006, 2006
11. Misra A, Chougule MB, Padhi B, Ganesh S. Enhancement of pulmonary therapeutic index of drugs from dry powder inhaler formulations. *Indian patent*, 729/ MUM /2005, 2005
12. Misra A, Chougule MB, Padhi B. Engineered monodisperse inhalation powders for effective treatment of lung diseases. *Indian patent*, 228/MUM/2005, 2005

Press Releases

The breakthrough research on developing a hybrid albumin-chitosan nanocarrier for cancer therapy was *highlighted in the World Biomedical Frontiers*. World Biomedical Frontiers was founded in 2012 and is headquartered in New York, USA. World. Biomedical Frontiers is an organization that focuses on cutting-edge biomedical research from around the globe.

H. PRINTED PUBLICATIONS

Synopsis: My publication strategy has been to submit manuscripts to the top high-impact factor journals in my profession. I have published 42 peer-reviewed research articles, 16 peer-reviewed review articles in high-impact journals (highest 17.87), 21 book chapters, 3 editorial articles, 38 invited seminars, and > 120 posters. Based on my research accomplishments, I received three awards from the American Association of Cancer Research (AACR) faculty scholars in cancer research, including the Taniyo Taniguchi Award for Excellence. My publication was recognized as a featured article in college magazines. Furthermore, my research contribution is evident from the email sent by the patient's family member seeking advice on breast cancer treatment. My publications have received over **5,000 citations,** with an **h-index of 35** and **an i10-index of 63**.

The ISI impact factors peer-reviewed journals of my publications are presented in Table 1.

Table. 1 Recent ISI impact factors of peer-reviewed journals

Journal Title	ISI Impact factor	No of papers
Advanced Drug Delivery Reviews	17.87	1
Clinical Cancer Research	13.80	1
Journal of Controlled Release	11.47	5
Wiley Interdiscip Rev Nanomed Nanobiotechnol.	9.42	1
Molecular Therapy-Nucleic Acids, *Nature Publishing Group*	8.8	1
Nanomedicine	6.50	2
Molecular Cancer Therapeutics	6.0	1
Lung Cancer	5.70	1
Molecular Pharmaceutics	5.36	4
Journal of Biomedical Nanotechnology	5.06	1
Expert Opinion on Drug Delivery	4.84	1
International Journal of Pharmaceutics	4.82	2
International Journal of Nanomedicine	4.41	1
European Journal of Pharmaceutical Sciences	4.38	1
Pharmaceutical Research	4.20	2
AAPS PharmSciTech	4.02	6
Journal of Drug Delivery Science and Technology	3.98	3
Pharmaceutical Development Technology	3.91	2
ChemoNanoMat	3.82	1
PLoS One	3.75	3
Current Drug Delivery	3.75	2
Journal of Drug Targeting	5.01	1
KONA Powder and Particle Journal	3.98	2
Cancer Chemotherapy and Pharmacology	3.33	1
ACS Applied Biomaterials	3.25	1
Current Pharmaceutical Design	3.1	1
BioMed Research International	3.24	2
Methods in Enzymology	1.68	1
Indian Journal of Experimental Biology	1.47	1
Journal of Nanoscience and Nanotechnology	1.35	1

Peer-Reviewed Research and Review Articles (Total of 58)

Peer-reviewed *research articles (Total of 42),* *Corresponding author

1. #Marathe S., Joshi R., Yang R., Shadambikar G., Bachmann AS., **Chougule MB*.** Integration of Design of Experiments for the Development and Evaluation of Sulfasalazine Loaded Hybrid Albumin Chitosan Based Polymeric Nanocarriers. AAPS PharmSciTech, Article ID : 12249_2025_3190 In Press, July 2025, DOI: 10.1208/s12249-025-03190-9
2. # Kashikar R, Kotha AK, Shrestha R, Channappanavar R, **Chougule MB*.** Formulation and In-Vitro Testing of Nebulized Camostat Mesylate Loaded Nanoliposomes for the Treatment of SARS-CoV-2 Infection. AAPS PharmSciTech. 2025 May 16;26(5):139. PMID: 40379909
3. Patel N, Desai A, Vyas B, Shah P, Shubhada M, Milind U, Pathak K, **Chougule MB**. Integration of Synchronizing In Silico, In Vitro, and In Vivo Strategies for the Development of Antipsoriatic Apremilast-

loaded Nanostructured Lipid Carrier Embedded in Hydrogel. AAPS PharmSciTech. 2025 Apr 25;26(5):115. doi: 10.1208/s12249-025-03103-w.

4. # Kashikar, R., Kotha, A. K., Shrestha, R., Channappanavar, R., and **Chougule, MB*.** (2024). Design of experiments using Box-Behnken design in the development, characterization, mathematical modeling, and evaluation of lung-targeted nebulized antiviral camostat mesylate loaded pegylated nanosuspension product. *Journal of Drug Delivery Science and Technology*, 2024, *98*, 105810. DOI: 10.1016/j.jddst.2024.105810
5. Harris HM, Boyet KL, Liu H, Dwivedi R, Ashpole NM, Tandon R, Bidwell GL 3rd, Cheng Z, Fassero LA, Yu CS, Pomin VH, Mitra D, Harrison KA, Dahl E, Gurley BJ, Kotha AK, Chougule MB, Sharp JS*. Safety and pharmacokinetics of intranasally administered heparin. *Pharm Res.* 2022 Mar;39(3):541-551.
6. Vinjamuri BP, Papachrisanthou K, Haware RV, Chougule MB*, Gelatin solution pH and incubation time influence the size of the nanoparticles engineered by desolvation—*Journal of Drug Delivery Science and Technology* 2021, 63, 02423.
7. Shadambikar, Marathe S, Ji Nan, Bandari S, Chougule MB, Repka M. Formulation development of itraconazole loaded pegylated nano-lipid carriers for pulmonary aspergillosis using hot melt extrusion technology, *International Journal of Pharmaceutics*, 2021, Mar 3;3:100074.
8. Shahin HI, Vinjamuri BP, Mahmoud AA, Mansour SM, Chougule MB, Chablani L. Formulation and optimization of sildenafil citrate-loaded PLGA large porous microparticles using spray freeze-drying technique: A factorial design and in-vivo pharmacokinetic study. *International Journal of Pharmaceutics* 2021 Feb 1;597:120320.
9. Chandrasiri I, Abebe DG, Yaddehige ML, Dal Williams JS, Zia MF, Dorris A, Barker A, Vinjamuri, BP, Le N, Gayton JN, Chougule MB, Hammer NI, Flynt A, Delcamp JH, Watkins D Self-Assembling PCL-PAMAM Linear Dendritic Block Copolymers (LDBCs) for Bioimaging and Phototherapeutic Applications. *ACS Applied Bio Materials*, 2021, 3(9), 5664-5677.
10. Yaddehige ML, Indika C, Abigail B, Kotha AK, Williams Jon SD, Simms B, Kucheryavy P, Abebe DG, Chougule MB, Watkins DL. Structural and Surface Properties of Polyamidoamine (PAMAM) - Fatty Acid-based Nanoaggregates Derived from Self-assembling Janus Dendrimers. *ChemoNanoMat*, Online published 15 October 2020, https://doi.org/10.1002/cnma.202000498.
11. Bhatt P, Narvekar P, Lalani R, Chougule MB, Pathak Y, Sutariya V. An in vitro Assessment of Thermo-Reversible Gel Formulation Containing Sunitinib Nanoparticles for Neovascular Age-Related Macular Degeneration. *AAPS PharmSciTech*. 2019 Aug 9; 20(7):281. doi: 10.1208/s12249-019-1474-0.
12. Mahaparale PR, Vinjamuri BP, Chavan MS, Chougule MB, Haware RV. Computational predictability of microsponge properties using different multivariate models. *AAPS PharmSciTech*. 2019 Apr 23; 20(5):172
13. Shahin HI, Vinjamuri BP, Mahmoud AA, Shamma RN, Mansour SM, Ammar HO, Ghorab MM, Chougule MB*, Chablani L. Design and evaluation of novel inhalable sildenafil citrate spray-dried microparticles for pulmonary arterial hypertension. *J Control Release*. 2019 Mar 30. pii: S0168-3659(19)30189-0.
14. Haware RV, Vinjamuri BP, Gavireddi M, Dave VS, Gupta D, Chougule MB, Stagner WC., Physical properties and solubility studies of nifedipine-peg 1450/hpmcas-hf solid dispersions. *Pharm Dev Technol*. 2018 Sep 3:1-23.
15. Gandhi NS, Godeshala S, Koomoa-Lange DT, Miryala B, Rege K, Chougule MB*. Bioreducible poly (amino ethers) based mTOR siRNA delivery for lung cancer. *Pharm Res*. 2018 Aug 13;35(10):188.
16. Youngren-Ortiz SR, Hill DB, Hoffmann PR, Morris KR, Barrett EG, Forest MG, Chougule MB*. Development of Optimized, Inhalable, Gemcitabine-loaded gelatin nanocarriers for lung cancer*, J Aerosol Med Pulm Drug Deliv*. 2017 Mar 9. doi: 10.1089/jamp.2015.1286.
17. Yang R, Nam K, Kim SW, Turkson J, Zou Y, Zuo YY, Haware RV, Chougule MB*, Factorial design based multivariate modeling and optimization of tunable bioresponsive arginine grafted poly(cystaminebis(acrylamide)-diaminohexane) polymeric matrix based nanocarriers. *Mol Pharm.* 2017 Jan 3;14(1):252-263.
18. España-Serrano L and Chougule MB*. Enhanced anticancer activity of PF-04691502, a dual PI3K/mTOR inhibitor, in combination with VEGF siRNA against non-small cell lung cancer. Molecular Therapy - Nucleic Acids. 2016;5: e384. PMID:27845769.
19. Andey T, Patel A, Marepally S, Chougule M, Spencer S, Rishi AK, Singh M, Formulation, Pharmacokinetic, and efficacy studies of mannosylated self-emulsifying solid dispersions of noscapine. *PLoS One.* 2016 Jan 12;11(1):e0146804.

20. Tekade RK, Youngren SR, Yang H, Haware R, Chougule MB*. Designing hybrid Onconase nanocarriers for mesothelioma therapy: a Taguchi orthogonal array and multivariate component driven analysis. *Molecular Pharmaceutics*. 2014; 11(10):3671-83.
21. Chougule MB*, Patel AR, Patlolla R, Jackson T, Singh M. Epithelial transport of Noscapine across cell monolayer and influence of absorption enhancers on *in vitro* permeation and bioavailability: implications for intestinal absorption. *Journal of Drug Targeting*. 2014; 22(6):498-508.
22. Patel AR, Chougule MB, Lim E, Francis KP, Safe S, Sachdeva M. Theranostic tumor homing nanocarriers for the treatment of lung cancer. *Nanomedicine.* 2014; 10(5):1053-63.
23. Patel AR, Chougule MB, Singh M. EphA2 targeting pegylated nanocarrier drug delivery system for the treatment of lung cancer. *Pharmaceutical Research*. 2014; 31(10):2796-809.
24. Youngren SR, Tekade RK, Chougule MB*. STAT6 siRNA matrix-loaded gelatin nanocarriers: formulation, characterization, and ex vivo proof of concept using adenocarcinoma cells. *BioMed Research International*. 2013; 2013:858946.
25. Youngren SR, Mulik R, Jun B, Hoffmann PR, Morris KR, Chougule MB*. Freeze-dried targeted mannosylated Selenium-loaded nanoliposomes: development and evaluation. *AAPS PharmSciTech.* 2013; 14(3):1012-24.
26. Tekade RK, Chougule MB*. Formulation development and evaluation of hybrid nanocarrier for cancer therapy: Taguchi orthogonal array based design. *BioMed Research International*. 2013; 2013:712678.
27. Laird AC, Laird A, Chougule MB*, Hamad M, Morris KR. Thermodynamics associated with monitoring pre-nucleation aggregation at high supersaturation. *International Journal of Pharmaceutical Sciences Review and Research*. 2013; 18(1): 6-12.
28. Patel AR, Chougule MB*, Ian T, Patlolla RR, Guangdi W, Singh M. Efficacy of aerosolized Celecoxib encapsulated nanostructured lipid carrier in non-small cell lung cancer in combination with Docetaxel. *Pharmaceutical Research*. 2013; 30(5):1435-46.
29. Godugu C, Patel AR, Marepally S, Doddapaneni R, Singh M, Chougule MB. Abstract 2139: Effect of Telmisartan on triple-negative breast cancer (TNBC) and lung cancer tumor progression and intratumoral distribution of nanoparticles, *Cancer Res* (2013) 73 (8_Supplement): 2139.
30. Patel AR, Spencer SD, Chougule MB, Safe S, Singh M. Pharmacokinetic evaluation and in vitro-in vivo Correlation (IVIVC) of novel methylene-substituted 3, 3' diindolylmethane (DIM). *European Journal of Pharmaceutical Sciences*. 2012; 46(1-2):8-16.
31. Chougule MB, Patel AR, Sachdeva P, Jackson T, Singh M. Enhanced anticancer activity of Gemcitabine in combination with Noscapine via antiangiogenic and apoptotic pathway against non-small cell lung cancer. *PLoS One.* 2011; 6(11):e27394.
32. Chougule MB, Patel AR, Jackson T, Singh M. Antitumor activity of Noscapine in combination with Doxorubicin in triple-negative breast cancer. *PLoS One*. 2011; 6(3):e17733.
33. Chougule MB, Patel AR, Sachdeva P, Jackson T, Singh M. Anticancer activity of Noscapine, an opioid alkaloid in combination with Cisplatin in human non-small cell lung cancer. *Lung Cancer.* 2011; 71(3):271-82.
34. Ichite N[#], Chougule MB[#], Jackson T, Safe S, Singh M. Inhalation delivery of a novel Diindolylmethane derivative for lung cancer treatment. *Molecular Cancer Therapeutics.* 2010; 9(11):3003-14 # *indicate author with equal contribution.*
35. Patlolla RR, Chougule MB, Patel AR, Jackson T, Tata PN, Singh M. Formulation, characterization, and pulmonary deposition of nebulized Celecoxib encapsulated nanostructured lipid carriers. *Journal of Controlled Release*. 2010; 144(2):233-241.
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37. Jackson T, Chougule MB, Ichite N, Patlolla R, Singh M. Antitumor activity of Noscapine in human non-small cell lung cancer xenograft model. *Cancer Chemotherapy and Pharmacology*. 2008; 63(1): 117-26.
38. Padhi B, Chougule MB, Misra A. Aerosol performance of large respirable particles of Amikacin sulfate produced by spray and freeze-drying techniques. *Current Drug Delivery*. 2009; 6(1): 8-16.
39. Chougule MB, Padhi B, Misra A. Development of spray dried liposomal dry powder inhaler of Dapsone. *AAPS PharmSciTech*. 2008; 9(1): 47-53.

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41. Padhi B, Chougule MB, Misra A. Optimization of formulation components and characterization of large respirable powders containing high therapeutic payload. *Pharmaceutical Development and Technology*. 2006; 11(4): 465-75.
42. Chougule MB, Padhi B, Misra A. Nano-liposomal dry powder inhaler of Amiloride Hydrochloride. *Journal of Nanoscience and Nanotechnology.* 2006; 6(9-10): 3001-9.
43. Naik S, Chougule MB, Padhi B, Misra A. Development of novel lyophilized mixed micelle Amphotericin B formulation for the treatment of systemic fungal infection. *Current Drug Delivery*. 2005; 2:177-184.
44. Kalariya M, Misra A. Clobetasol propionate solid lipid nanoparticles cream for effective treatment of eczema: formulation and clinical implications. *Indian Journal of Experimental Biology*. 2005; 43: 233-240.
45. Kalariya M, Padhi B, Chougule MB, Misra A. Methotrexate-loaded solid lipid nanoparticles for topical treatment of psoriasis: formulation and clinical implications. *Drug Delivery and Technology*. 2004; 4(8): 65-71.

Preprint

Harris HM, Boyet KL, Liu H, Dwivedi R, Ashpole NM, Tandon R, Bidwell GL 3rd, Cheng Z, Fassero LA, Yu CS, Pomin VH, Mitra D, Harrison KA, Dahl E, Gurley BJ, Kotha AK, Chougule MB, Sharp JS., Safety and Pharmacokinetics of Intranasally Administered Heparin. *medRxiv.* 2022 Feb 17:2021.07.05.21259936. Doi: 10.1101/2021.07.05.21259936. Preprint

Peer-reviewed review articles (Total of 16)

1. Shah S, Famta P, Tiwari V, Kotha AK, Kashikar R, Chougule MB*, Chung YH, Steinmetz NF, Uddin M, Singh SB, Srivastava S*. Instigation of the epoch of nanovaccines in cancer immunotherapy. *Wiley Interdiscip Rev Nanomed Nanobiotechnol*. 2023 May-Jun;15(3):e1870.
2. Shah S, Famta P, Bagasariya D, Charankumar K, Sikder A, Kashikar R, Kotha AK, Chougule MB, Khatri DK, Asthana A, Raghuvanshi RS, Singh SB, Srivastava S. Tuning Mesoporous Silica Nanoparticles in Novel Avenues of Cancer Therapy, *Mol Pharm*. 2022 Dec 5;19(12):4428-4452.
3. Kashikar R, Kotha AK, Shah S, Famta P, Singh SB, Srivastava S, Chougule MB*, Advances in nanoparticle-mediated targeting of RNA binding protein for cancer. *Adv Drug Deliv Rev.* 2022 Jun;185: 114257.
4. Shah S, Chougule MB., Kotha AK, Kashikar R, Godugu C, Raghuvanshi RS, Singh SB, Srivastava S. Nanomedicine based approaches for combating viral infections. *Journal of Controlled Release.* 2021 Oct 10;338:80-104.
5. Alexander A, Agrawal M, Saraf S, Saraf S, Ajazuddin, Chougule MB. Formulation strategies of nano lipid carrier for effective brain targeting of anti-ad drugs. Curr Pharm Des. 2020;26(27):3269-3280.
6. Agrawal M, Saraf S, Saraf S, Antimisiaris SG, Chougule MB, Shoyele SA, Alexander A. Nose-to-brain drug delivery: An update on clinical challenges and progress towards approval of anti-Alzheimer drugs. *J Control Release*. 2018 Jul 10;281:139-177.
7. Agrawal M, Saraf S, Saraf S, Antimisiaris SG, Hamano N, Li SD, Chougule MB, Shoyele SA, Gupta U, Ajazuddin, Alexander A. Recent advancements in the field of nanotechnology for the delivery of anti-Alzheimer drug in the brain region. *Expert Opin Drug Deliv*. 2018 Jun;15(6):589-617
8. Youngren-Ortiz SR, Chougule MB*. The Daniel K. Inouye College of Pharmacy Scripts: Targeted Nanocarrier Based Systems for the Treatment of Lung Cancer. Hawaii J Med Public Health. 2017 Nov;76(11):318-325.
9. Youngren-Ortiz SR, Gandhi NS, España-Serrano L, Chougule MB*. Aerosol delivery of siRNA to the lungs. Part 2: Nanocarrier-based delivery systems. *KONA Powder and Particle Journal*, 2017;34:44-69. *Selected as one of the "Featured Articles 2018".*
10. Dave VS*, Shahin HI, Youngren-Ortiz SR, Chougule MB, Haware RV., Emerging technologies for the non-invasive characterization of physical-mechanical properties of tablets., *Int J Pharm.* 2017 Oct 30;532(1):299-312.
11. Youngren-Ortiz SR, Gandhi NS, España-Serrano L, Chougule MB*. Aerosol delivery of siRNA to the lungs. Part 1: rationale for gene delivery systems, *KONA Powder and Particle Journal*, 2016 Feb 28;33:63-85.

12. Aldawsari M, Chougule MB*, Babu JR*. Progress in topical siRNA delivery approaches for skin disorders, *Current Pharmaceutical Design.* 2015;21(31):4594-605
13. Glasgow M, Chougule MB*. Recent developments in active tumor targeted multifunctional nanoparticles for combination chemotherapy in cancer treatment and imaging, *Journal of Biomedical Nanotechnology*. 2015;11(11):1859-98.
14. Gandhi NS, Tekade RK, Chougule MB*. Nanocarrier mediated delivery of siRNA/miRNA in combination with chemotherapeutic agents for cancer therapy: current progress and advances. *Journal of Controlled Release*. 2014; 194C:238-256.
15. Misra A, Jinturkar K, Patel D, Lalani J, Chougule MB. Recent advances in liposomal dry powder formulations: preparation and evaluation. *Expert Opinion on Drug Delivery*. 2009; 6(1):71-89.
16. Chougule MB, Padhi B, Jinturkar K, Misra A. Development of dry powder inhalers, *Recent Patents on Drug Delivery and Formulation*. 2007; 1(1): 11-21.

Editorial Articles (Total of 3)

1. Chougule MB, Brogden N. Interdisciplinary integration of biomaterials for drug and gene therapy, *Molecular Pharmaceutics* Vol 19/Issue 12, 2022.
2. Chougule MB*, Tan C. Translational application of nano delivery systems: Emerging cancer therapy. *AAPS PharmSciTech*. 2015 Feb;16(1):3-4.
3. Chougule MB*, Tekade R. Current scene and prospective potentials of siRNA in cancer therapy. *Journal of Pharmacogenomics and Pharmacoproteomics*. 2012; 3(6): e125.

Invited Book Chapters (Total of 21)

1. Sikder A., Bagasariya D., Shah S., Famta P., Kashikar R., Kotha A. K., Johnson K. R., Archer B. P., Chougule M. B*, Singh S. B. and Srivastava S., Chapter 8: Polymers in advanced drug and gene delivery in "Polymers for Pharmaceutical and Biomedical Applications, Fundamentals, Selection, and Preparation, Pages 291-332 2024.
2. Bhattacharya, S., Singh, S., Chakraborty, S., Prajapati, B. G., Chougule, M., & Patel, J. K. Novel Formulation Approaches for Treatment of Ebola Virus. In Viral Drug Delivery Systems: Advances in Treatment of Infectious Diseases 2023, pp. 141-160. Cham: Springer International Publishing.
3. Paliwal, H., Prajapati, B. G., Parihar, A., Ganugula, S., Patel, J. K., & Chougule, M. Solid Lipid Nanoparticles in Malaria. Malarial Drug Delivery Systems: Advances in Treatment of Infectious Diseases, 2023, (pp. 113-137). Cham: Springer International Publishing.
4. Kotha, A.K., Kashikar, R., Famta, P., Shah, S., Srivastava, S., Chougule, M.B. (2022). Nanomaterials Mediated Diagnosis of Lung Cancer. In: Chaughule, R.S., Patkar, D.P., Ramanujan, R.V. (eds) Nanomaterials for Cancer Detection Using Imaging Techniques and Their Clinical Applications. Springer, Cham. https://doi.org/10.1007/978-3-031-09636-5_8
5. BP Vinjamuri, AK Kotha, A Kolte, RV Haware, MB Chougule*. Chapter-Polymer Applications in Pulmonary Drug Delivery, Applications of Polymers in Drug Delivery edited by Misra A and Shahiwala A. January 2021, 333
6. Agrawal M, Saraf S, Saraf S, Antimisiaris SG, Chougule MB, Shoyele SA, Alexander A. Chapter 9 - Nose-to-brain drug delivery: an alternative approach for effective brain drug targeting in Nanopharmaceuticals, Volume 1: Expectations and Realities of Multifunctional Drug Delivery Systems, 2020, Pages 175-200
7. Kotha A K, Ghosh S, Komanduri N, Wang R, Bhowmick S, Chougule MB*, Chapter-Approaches in Barriers, Modifications, Route of Administrations, and Formulations of Therapeutic Agents for Brain Delivery, Novel Drug Delivery Technologies edited by Misra A., Shahiwala A. (eds), 2019, pages 383-401
8. Raval N, Maheshwari R, Kalyane1 D, Chougule MB, Tekade RK, Chapter 10 - Importance of physicochemical characterization of nanoparticles in pharmaceutical product development, Advances in Pharmaceutical Product Development and Research edited by R.K. Tekade, Elsevier Inc., 2019, Pages 369-400
9. Mehtani D, Seth A, Sharma P, Maheshwari R, Abed s N, Deb P, Chougule MB, and Tekade RK, Chapter 9 - Dissolution profile consideration in pharmaceutical product development, Advances in pharmaceutical product development and research edited by R.K. Tekade, Elsevier Inc., 2018, Pages 287-336

10. Ponkshe P, Thakkar R, Mulay T, Joshi R, Javia, Amrutiya J, Chougule MB*, Chapter 4: Nasal and pulmonary drug delivery systems edited by A. Misra and A. Shahiwala, CRC Press, a Taylor & Francis Group, 2018, page 56
11. Gandhi NS, Glasgow M, Chougule MB*. Nanocarrier based pulmonary gene delivery for lung cancer: therapeutic and imaging approaches. Cancer Therapeutics and Imaging: Molecular and Cellular Engineering and Nanobiomedicine, edited by K. Rege and S. Goklany. World Scientific Publishing, 2018 pp. 89-136
12. Tekade RK*, Maheshwari R, Tekade M, Chougule, MB*, Chapter 8. Solid lipid nanoparticles for targeting and delivery of drugs and genes, nanotechnology-based approaches for targeting and delivery of drugs and genes, edited by V. Mishra, P. Kesharwani, M. Amin, and A. Iyer, Elsevier publisher, 2017, Pages 256-286
13. Tekade RK*, Maheshwari R, Soni N, Tekade M. Chougule, MB*, Chapter 1 - Nanotechnology for the Development of Nanomedicine in Approaches for Targeting and Delivery of Drugs and Genes, 2017, Pages 3-61
14. Shegokar R*, Athawale R, Kurup N, Yang R, Chougule, MB*, Chapter 9. Lipid-based nanoparticles for targeted drug delivery of an anticancer drug, Nanotechnology-Based Approaches for Targeting and Delivery of Drugs and Genes, edited by V. Mishra, P. Kesharwani, M. Amin, and A. Iyer, Elsevier publisher, 2017, Pages 287-321
15. Tekade RK*, Maheshwari R, Soni M, Tekade M, Chougule, MB, Chapter 1. Nanotechnology for Development of Nanomedicine, Nanotechnology-Based Approaches for Targeting and Delivery of Drugs and Genes, edited by V. Mishra, P. Kesharwani, M. Amin, and A. Iyer, Elsevier publisher, 2017, Pages 3-61
16. Hazare S., Yang R., Chavan S., Menon MD, Chougule MB*. Aging Disorders of the Eye: Challenges and Approaches for Their Treatment. Nano-Biomaterials for Ophthalmic Drug Delivery. Springer International Publishing, 2016; 277-320
17. Lohade AA, Gandhi NS, Shrivastava AR, Singh DJ, Parmar JJ, Mehta MR, Jain RR, Menon MD, Chougule MB*. Chapter 15. Aerosolized nanoparticle-based approaches for the treatment of lung cancer. Nanostructured Drug Delivery of the Series "Nanobiomedicine" edited by B. S. Bhoop, Vol. 4. Studium Press LLC, 2014; 451-490
18. Shi Q, Chougule MB, Sutariya VB, Bhatia D. Chapter 10. Toxicogenomic approach to understand the toxicity of nanoparticles in the bio-interactions of Nanomaterials. Bio-interactions of Nanomaterials edited by VB Sutariya and Y. Pathak. CRC Press 2014; 209–224
19. Chougule MB*, Tekade RK, Hoffmann PR, Bhatia D, Pathak Y. Chapter 11. Nanomaterial based gene and drug delivery: pulmonary toxicity considerations. Bio-interactions of Nanomaterials edited by VB Sutariya and Y. Pathak. CRC Press, 2014; 225–248
20. Sutariya VB, Pathak V, Groshev A, Chougule MB, Naik S, Patel D, Pathak Y. Chapter 1. Introduction—Biointeractions of Nanomaterials: Challenges and Solutions. Bio-interactions of Nanomaterials edited by VB Sutariya and Y. Pathak. CRC Press, 2014; 1–48
21. Kolte A, Chougule MB*. Chapter 12. Application of polymers in lung drug delivery. Handbook-Applications of Polymers in Drug Delivery edited by A Misra and A Shahiwala. Smithers Rapra Publishing, 2012; 413-45

I. CITATION INDICES AND CITATION OF ARTICLES

The above scientific publications have resulted in the following citations of my research findings, as published in research and review articles listed in Google Scholar. My publications have received > 5,000 citations with an h-index of 35 and i10-index of 63.

The following table and the figure show the citation indices and citations per year of peer-reviewed published articles.

Table. Citation indices of my peer-reviewed publications.

Citations	*5046*
h-index	*35*
i10-index	63

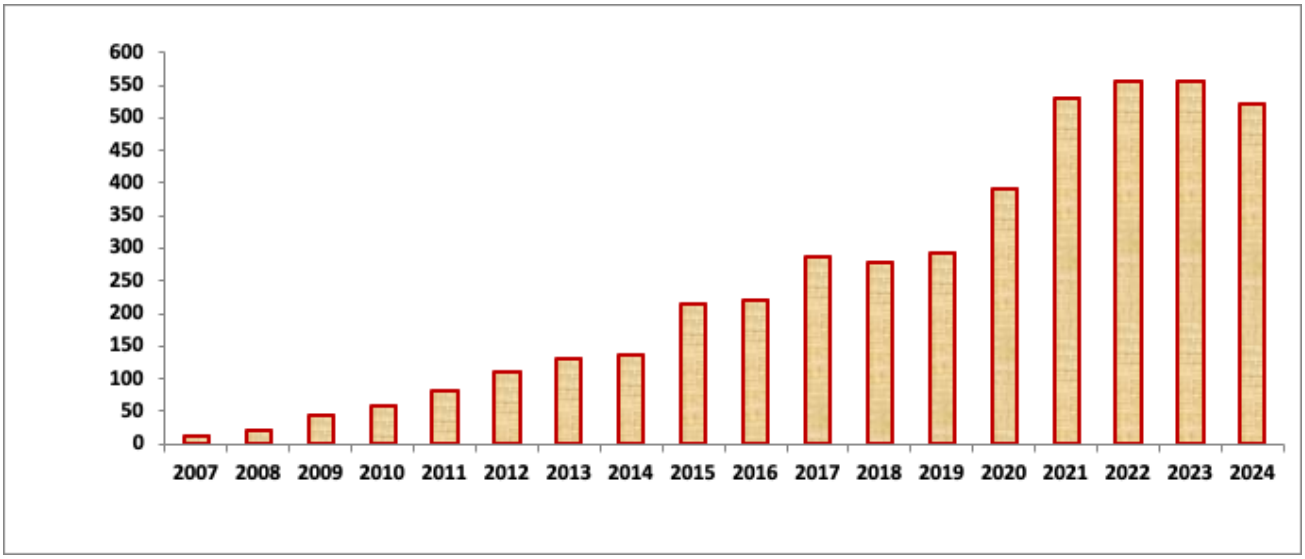

Figure. Citation per year of peer-reviewed published articles.

Source: https://scholar.google.co.in/citations?user=jYxYewIAAAAJ&hl=en

J. POSTER AND PODIUM PRESENTATIONS

Synopsis: My research findings were presented in 120+ research posters or podiums at national and international conferences. ^^ Note: *all are refereed presentations and were presented by myself unless otherwise noted.*

Poster and podium presentations (Total of 121)

1. Kashikar R, Akkineni S, Ngyugen T, Kotha AK, Lee J., Harsoda Y, Lopez-Tapia F, Chougule MB, Turkson J, Inhaled H182-cSS-pegNL Lipid Nanosuspension Product: Effective Therapy for Severe Asthma Management. 2024 14th annual Atlanta Research Conference, Atlanta, GA. April 6, 2024. Presented by Akkineni S.
2. Lee J, Kashikar R, Chougule MB, Characterization of inhalable nanoliposomes loaded with TMPRSS2 inhibitor for the treatment of COVID. 2024 14th annual Atlanta Research Conference, Atlanta, GA. April 6, 2024. Presented by Lee J.
3. Moye P., Barnett, Barnett CW, Berry J, Winkles CL, Chougule MB, Frierson-Ali T, Geralds E. **Determination of Programming Priorities for Diversity, Equity and Inclusion at an Urban Private Pharmacy School.** 2024 AACP annual meeting, July 21-22, 2025, Boston, MA. Presented by Moye P.
4. Kotha, A.K., Kashikar, R., Neill, S., Akkineni, S., Nguyen, T., Harsoda, Y., Le J., Chougule, M.B*. Formulation of Stat6 siRNA loaded gelatin nanocarriers (S6S-GNC-P) for targeting T cells for asthma treatment. Mercer University School of Medicine and College of Pharmacy Joint Research Conference. Atlanta, GA. October 25, 2024. Presented by Neill, S.
5. Harsoda, Y.P., Lee, J.N., Hasan, R., Chougule, MB*. Development and Characterization of Auxin-Encapsulated Nanoliposomes for Potential Therapeutic Use. Mercer University School of Medicine and College of Pharmacy Joint Research Conference. Atlanta, GA. October 25, 2024. Presented by Harsoda, Y.
6. Kotha, A.K., Neill, S., Nguyen, T., Kashikar, R., Patil, P., Samuels, O., Sadan, O., Chougule, M.B*. Formulation Development and Characterization of Parenteral Nicardipine HCl Product for Intrathecal Administration. Mercer University School of Medicine and College of Pharmacy Joint Research Conference. Atlanta, GA. October 25, 2024. Presented by Kotha AK.
7. Gandhi, N., Kotha, A.K., Neill, S., Godeshala, S., Koomoa-Lange, D., Miryala, B., Rege, K., Chougule, M.B*. PEGylated Nanoparticles Conjugated with LHRH Receptor Binding Peptide for Treatment of Lung Cancer. American Association of Pharmaceutical Scientists (AAPS) Pharm Sci 360Conference: Salt Lake City, UT. October 22, 2024. Presented by Neill, S.
8. Ezewudo E, Zerin F, Menon SN, Nguyen T, Chougule M, Rahman T, Hasan R*. Indole-3 acetic acid inhibits vascular dysfunction and hypertension. Atlanta Research Conference. Atlanta, GA April 15, 2023.
9. Kashikar R., Kotha, A.K., Xu, S., Liu, W., Chougule, M.B., Formulation and Characterization of MP-I8 loaded Pegylated Nanoliposomes using ionizable lipid. Atlanta Research Conference, Mercer University College of Pharmacy, Atlanta, USA. 15 April 2023. Presented by Kashikar R.

10. Kotha, A.K., Johnson, K., Kashikar, R., Trinh H. N., Chougule, MB*. Developed, optimized, and characterized a Gelatin Nanoparticulate suspension product using Box Behnken Design (BBD) to meet the target profile. Mercer University School of Medicine and College of Pharmacy Joint Research Conference. Atlanta, GA. October 27, 2023. Presented by Kotha A.
11. Kashikar R, Xu S, Kumar S, Neuman B, Wenshe RL, Chougule, MB*, Non-invasive, targeted, nebulized potent antiviral drug, NSF207 loaded pegylated nanoliposomal suspension product for treatment of COVID-19: Design, development, and evaluation. Mercer University School of Medicine and College of Pharmacy Joint Research Conference. Atlanta, GA. October 27, 2023. Presented by Kashikar R.
12. Ezewudo E, Zerin F, Menon SN, Nguyen T, Chougule M, Rahman T, Hasan R*. Indole-3 acetic acid inhibits vascular dysfunction and hypertension. Mercer University School of Medicine and College of Pharmacy Joint Research Conference. Atlanta, GA. October 27, 2023, presented by Ezewudo E.
13. Kashikar R, Xu S, Kumar S, Neuman B, Wenshe RL, Chougule, MB*. Formulation and characterization of non-invasive nebulization based antiviral drug, NSF207 loaded pegylated nanoliposomal suspension product for treatment of COVID-19, AAPS PharmSci 360 meeting, October 22-25, 2023. Presented by Kashikar R.
14. Ezewudo E, Zerin F, Menon SN, Nguyen T, Chougule M, Rahman T, **Hasan R***. Indole-3 acetic acid inhibits vascular dysfunction and hypertension. Mercer University School of Medicine and College of Pharmacy Joint Research Conference. Atlanta, GA. October 27, 2023.
15. Gandhi N, Kotha AK, Godeshala S, Koomoa-Lange D, Miryala B, Rege K, Chougule MB*, Stimuli-Responsive Newly Designed Poly (amino ether) Glycopolymer Based Pegylated Nanoparticles Conjugated with Receptor Binding Peptide for siRNA Delivery to Treat Lung Cancer. AAPS PharmSci 360 meeting, October 22-25, 2023. AAPS ePoster Library. 10/25/202-03-18. Presented by Kotha A.
16. Kotha AK, Nguyen TT, Kashikar R, Patil P, Sadan O, Chougule MB*, Formulation Development and Characterization of Parenteral Nicardipine HCl Product for Intrathecal Administration. AAPS PharmSci 360 meeting, October 22-25, 2023. ePoster Library. 10/23/2023; 403074; M1230-12-80. Presented by Kotha A.
17. Kashikar R., Kotha A.K., Channappanavar R., Chougule, M. B. Development of a pain-free nebulization technique a radical cure for pediatric patients against COVID-19, Annual South-eastern Paediatric Research Conference, Atlanta, GA, 9th June 2023. Presented by Kashikar R.
18. Ezewudo E, Menon S, Zerin F, Moniri N, Nguyen T, Kashikar R, Chougule M, Rahman T, Hasan R*. A novel small molecule inhibitor of vascular endothelin signaling and hypertension at Physiology Annual Conference, July 10-12, 2023. Published abstract in Physiology. 2023 May 23;38(S1):5731434.
19. Ezewudo E, Zerin F, Menon SN, Nguyen T, Chougule M, Rahman T, Hasan R*. Indole-3 acetic acid inhibits vascular dysfunction and hypertension. Atlanta Research Conference. Atlanta, GA, April 15, 2023.
20. Kashikar R., Kotha A.K., Chougule, MB*. Development and characterization of NSF207 extended release pegylated nanoliposomes using the ethanol injection method, Atlanta Research Conference, Atlanta Campus, Mercer University, 15th April 2023. Presented by Kashikar R.
21. Kotha, A.K., Johnson, K., Kashikar, R., Trinh H. N., Chougule, MB*. Formulation and optimization of Gelatin Nanoparticles formulation using the Quality by design (QbD). Atlanta Research Conference, Atlanta Campus, Mercer University College of Pharmacy, Atlanta, USA. 15th April, 2023. Presented by Kotha AK.
22. Kotha, A.K., Gandhi N.S., Godeshala S., Koomoa-Lange D.T., Miryala B, Rege K, Chougule, MB*. Receptor Targeted mTOR siRNA Delivery by Bioreducible Poly (amino ethers) Polymer for the Treatment of Lung Cancer. Atlanta Research Conference, Atlanta Campus, Mercer University College of Pharmacy, Atlanta, USA. 15th April, 2023. Presented by Kotha AK.
23. Kashikar R., Kotha A.K., Chougule, MB*. Optimization and characterization of Camostat Mesylate extended release pegylated nanoliposomes using the Quality by Design approach, Georgia Southeast Regional Clinical & Translational Science Conference, Callaway Resort and Gardens, GA, USA. March 1-3, 2023. Presented by Kashikar R.
24. Nguyen, T., Kashikar R., Kotha, A.K., Chougule, M.B., Hasan, R. Formulation and Evaluation of Gastroretentive Indole-3-acetic acid In Situ Gel Product. Southeast Regional Clinical & Translational Science Conference, Callaway Resort and Gardens, GA, USA. March 1-3, 2023. Presented by Ngyuyen T.
25. Youngren. S.R., Hoffmann, P.R., Kotha, A.K., Chougule, MB*. Development, Optimization, and Characterization of Gelatin Nanocarriers by two-step desolvation method for the delivery of siRNA for Asthma treatment. Southeast Regional Clinical & Translational Science Conference, Callaway Resort and Gardens, Pine Mountain, GA, USA. 1st March – 3rd March, 2023. Presented by Kotha AK.

26. Youngren-Ortiz S. R., Hoffmann P. R., Kotha A. K., Chougule, MB*. Development and In vitro Characterization of STAT6 siRNA loaded PEGylated Gelatin Nanocarriers as an Anti-Asthmatic Therapy, AAPS PharmSci 360 meeting, October 16- October 19, 2022. Presented by Kotha A.
27. Kashikar R, Kotha A, Chougule, MB*. Using Design of Experiments (DoE) in Validation of Camo-peg NL formulation, AAPS PharmSci 360 meeting, October 16- October 19, 2022. Presented by Kashikar R.
28. Kotha, A.K., Kashikar, R., Chougule, MB*. Development of Nebulized extended release Camostat Mesylate loaded Nanoliposomes, Atlanta Research Conference, Atlanta Campus, Mercer University, 26 March, 2022. Presented by Kotha AK.
29. Kotha, A.K., **Kashikar R.**, Chougule, M.B. Development and characterization of extended-release amikacin nanoliposomes using ethanol injection method. COP Research Day Poster Symposium, Mercer University College of Pharmacy, Atlanta, USA. 14th October 2022. Presented by Kotha AK.
30. Kotha, A.K., **Kashikar R.**, Chougule, M.B. Ethanol Injection Method based development and characterization of Nebulized extended release nanoliposomes, AAPS Annual Meeting, Philadelphia, PA, USA, 17 October – 20 October 2021. Presented by Kotha AK.
31. Gandhi, N.S., Kotha, A.K., Godeshala, S., Koomoa-Lange, D.L.T., Miryala, B., Rege, K., Chougule, MB*. Bioreducibile Poly (amino ethers) based receptor targeted mTOR siRNA delivery for lung cancer, Fourth END2CANCER: Emerging Nanotechnology and Drug Delivery Applications for Cancer, Stephenson Cancer Center, The University of Oklahoma Health Sciences Center, Oklahoma City, OK. Oral presentation, 2nd December -3rd December 2021. Presented by Kotha AK.
32. Kotha, A.K., Kashikar, R., Chougule, MB*. Ethanol Injection Method-based development and characterization of Nebulized extended release nanoliposomes, 2021 American Association of Pharmaceutical Sciences (AAPS) Annual Meeting, Philadelphia, PA, USA, 17th October – 20th October, 2021. Presented by Kotha AK.
33. Kashikar, R., Kotha, A.K., Chougule, M.B., Enhancing Camostat Mesylate Extended Release: A Quality-Driven Approach for Pegylated Nanoliposome Optimization, 2021, Georgia CTSA, Georgia, USA. Presented by Kashikar R.
34. Kotha A, Avula B, Kashikar R, Khan IA, Chougule, MB*. Amikacin extended release nanoliposomes using the ethanol injection method: development and characterization, 2020 AAPS PharmSci 360 meeting, October 26-November 5, 2020. Presented by Kashikar R.
35. Kashikar R, Kotha A, Chougule, MB*. Optimization of Camostat Mesylate Extended Release Pegylated Nanoliposomes using the Quality by Design Approach, 2021 AAPS annual PharmSci 360 meeting, October 17-20, 2021. Presented by Kashikar R.
36. Kotha A, Vinjamuri PB, Chougule, MB*. Formulation and evaluation of Doxorubicin HCl Nanoliposomes by ethanol injection method. 2020 AAPS PharmSci 360 meeting, October 26-November 5, 2020. Presented by Kotha A.
37. Kotha AK, Marathe S, Joshi R, Bachmann AS, Chougule, MB*. Development and Evaluation of Chemodrug-Loaded Albumin Polymeric Nanocarriers for the Treatment of Neuroblastoma, 2019 Mississippi IDeA Conference, August 2, 2019, Jackson. Presented by Kotha AK.
38. Mulay T, Joshi R, Yang R, Chougule MB*. Development and characterization of liposomes for the treatment of asthma, poster presentation at 2018 AAPS Annual Meeting & Exposition, November 4-7, 2017, Washington DC. Presented by Chougule M B
39. Ponkshe P, Youngren-Ortiz S, Joshi RR, Yang R, Hoffmann PR, Chougule MB, Development and characterization of inhalable siRNA loaded nanoliposomes, poster presentation at 2018 AAPS Annual Meeting & Exposition, November 4-7, 2018, Washington DC. Presented by Chougule M B
40. Thakkar R, Joshi RR, Chougule MB*. Inhalation delivery of bio-inspired tofacitinib loaded liposomes: formulation and evaluation, poster presentation at 2018 AAPS Annual Meeting & Exposition, November 4-7, 2018, Washington DC. Presented by Thakkar R
41. Marathe S, Yang R, Bachmann A, Chougule MB*. Development and evaluation of chemo drug-loaded albumin polymeric nanocarriers for the treatment of neuroblastoma, poster presentation at 2018 AAPS Annual Meeting & Exposition, November 4-7, 2018, Washington DC. Presented by Marathe S
42. Shahin HI, Vinjamuri PB, ChouguleMB, Chablani L, Formulation and in-vitro evaluation of spray-dried hydrogel sildenafil citrate for pulmonary drug delivery, poster presentation at 2018 AAPS Annual Meeting & Exposition, November 4-7, 2018, Washington DC. Presented by Shahin HI
43. Shahin HI, Vinjamuri PB, ChouguleMB, Chablani L, Formulation and in-vitro evaluation of spray-dried hydrogel sildenafil citrate for pulmonary drug delivery, poster presentation at 2018 AAPS Annual Meeting & Exposition, November 2018, Washington DC. Presented by Shahin HI

44. Almotairy AM, Almutairy BK, Almutairi MS, Sarabu S, Vinjamuri BP, Herman C, Bandari S, Chougule MB, Smyth HDC, Repka MA, Characterization of drug-loaded milled extrudate particles produced by hot melt extrusion technology for dry powder inhalers, poster presentation at 2018 AAPS Annual Meeting & Exposition, November 4-7, 2018, Washington DC. Presented by Almotairy AM
45. Mulay T, Vinjamuri B.P., Yang R, Chougule MB*. Bioengineered inhalable anti-microRNA loaded liposomes for asthma therapy, Poster Presentation, 2017 AAPS Annual Meeting & Exposition, November 12 - 15, 2017, San Diego, CA. Presented by Mulay T
46. Vinjamuri BP, Komanduri N, Wang R, Chougule MB*. Multifunctional nanocarriers for lung cancer and asthma, poster presentation, 2018 School of Pharmacy, University of Mississippi Annual Research Day, October 6, 2018. Presented by Vinjamuri BP and Chougule MB
47. Marathe S, Yang R, Bachmann A, Chougule MB*. Development and evaluation of chemo drug-loaded albumin polymeric nanocarriers for the treatment of neuroblastoma. Presented at the AAPS 2017 Annual Meeting and Conference, November 12-15, 2017, San Diego, California. Presented by Marathe S
48. Thakkar R, Yang R, Chougule MB*. Development and characterization of Tofacitinib Loaded Liposomes presented at the AAPS 2017 Annual Meeting and Conference, November 12-15, 2017, San Diego, California, Presented by Thakkar R.
49. Thakkar R, Youngren-Ortiz S, Hill D, Hoffmann P, Morris K, Barrett E, Forest G, Chougule MB*. Formulation and characterization of gemcitabine-loaded gelatin nanocarriers for lung cancer via inhalation, Poster Presentation, 2017 AAPS Annual Meeting & Exposition, November 12 - 15, 2017, San Diego, CA. Presented by Thakkar R
50. Ponkshe P, Youngren-Ortiz S, Joshi RR, Yang R, Hoffmann PR, Chougule MB*. Inhalation Delivery of siRNA-Loaded Nano Liposomes for pulmonary disorder, Poster Presentation, 2017 AAPS Annual Meeting & Exposition, November 12 - 15, 2017, San Diego, CA. Presented by Ponkshe P
51. Almotairy AM, Almutairy BK, Almutairi MS, Bandari S, Chougule MB, Repka MA, Development and characterization of microporous particles of theophylline via hot melt extrusion technology, poster presentation, 2017 AAPS Annual Meeting & Exposition, November 12-15, 2017, San Diego, CA. Presented by Almotairy AM
52. Thakkar R, Yang R, Chougule MB*. Development and characterization of Tofacitinib Loaded Liposomes, poster presentation, School of Pharmacy Poster Sessions, the University of Mississippi, October 6, 2017, University, MS. Presented by Thakkar R.
53. Marathe S, Yang R, Bachmann A, Chougule MB*. Development and evaluation of chemo drug-loaded albumin polymeric nanocarriers for the treatment of neuroblastoma, poster presentation, School of Pharmacy Poster Sessions, the University of Mississippi, October 6, 2017, University, MS. Presented by Thakkar R.
54. Yang R and Chougule MB*. Targeted nanotherapy for lung cancer and asthma, 2017 Annual UM/UMMC Research Day, April 13th, 2017, University, MS
55. Yang R, Nam K, Kim SW, Yue P, Turkson J, Chougule MB*. Targeted bioresponsive polymeric nanotherapy for lung cancer, the University of Mississippi School of Pharmacy 20th Annual Poster Session, October 7, 2016, University, MS, Presented by Yang R.
56. Youngren SR, Hoffmann PR, Chougule MB*. Design and evaluation of a siRNA loaded gelatin nanocarriers for asthma therapy, poster presentation, 2016 National Biotechnology Conference, AAPS, May 18, 2016, Boston, MA
57. Yang R, Nam K, Kim SW, Yue P, Turkson J, Chougule MB*. STAT3 Inhibitor loaded bioresponsive polymeric nanotherapy for lung cancer, podium presentation, 2015 IEEE- NANOMED, November 15 - 18, 2015, Honolulu, HI. Presented by Yang R
58. Tekade RK, Youngren SR, Yang H, Haware R, Chougule MB*. Albumin-chitosan hybrid Onconase nanocarriers for mesothelioma therapy, abstract 3680, AACR Annual Meeting, AACR Annual Meeting Philadelphia, Apr 18-22, 2015. 2015 AACR Minority-Serving Institution Faculty Scholar in Cancer Research Award to Chougule MB
59. Youngren SR, Tekade RK, Gustilo B, Hoffmann PR, Chougule MB*. Formulation and characterization of STAT6 siRNA matrix-loaded gelatin nanocarriers, 2014 AAPS Annual Meeting and Exposition, poster M1039, San Diego Convention Center, San Diego, CA, Nov 2-6, 2014. AAPS FDD Travel Award and University of Hawaii at Hilo ALEX Travel Award to Youngren SR.
60. Tekade RK, Youngren SR, Yang H, Haware R, Chougule MB*. Onconase loaded albumin-chitosan hybrid nanocarriers for mesothelioma therapy, 2014 AAPS Annual Meeting, and Exposition, poster M1210, San Diego Convention Center, San Diego, CA. Nov 2-6, 2014. The University of Hawaii at Hilo Research Council Faculty Travel Award to Chougule MB
61. Glasgow M, Clark M, Tomassone S, Hamad M, Chougule MB*. Morris KR. Modeling and validation of material properties of crystalline particles: formation and stability under stress, 2014 AAPS Annual Meeting, and

Exposition, poster W4332, San Diego Convention Center, San Diego, CA. Nov 2-6, 2014. Presented by Glasgow M. University of Hawaii at Hilo ALEX Travel Award to Glasgow M

62. Chougule MB*. Tekade RT, Youngren-Ortiz SR, Yang H, Haware R. Design and analysis of hybrid Onconase nanocarriers for mesothelioma therapy, poster 10, 12th International Nanomedicine and Drug Delivery Symposium, Chapel Hill, NC, Oct 6-8, 2014
63. Yang R, Chougule MB*. Optimization of arginine grafted bioreducible polymer-based nanoparticles by Taguchi factorial design, podium presentation, Department of Pharmaceutical Sciences Research Day, the Daniel K. Inouye College of Pharmacy, the University of Hawaii at Hilo, HI, Aug 13, 2014. Presented by Yang R
64. Gandhi N, Chougule MB*. Design, development, and evaluation of hybrid nanocarrier for the treatment of mesothelioma, podium presentation, Department of Pharmaceutical Sciences Research Day, the Daniel K. Inouye College of Pharmacy, the University of Hawaii at Hilo, HI, Aug 13, 2014. Presented by Gandhi N
65. Youngren-Ortiz SR, Chougule MB*. STAT6 siRNA loaded gelatin nanocarriers, Department of Pharmaceutical Sciences Research Day, the Daniel K. Inouye College of Pharmacy, the University of Hawaii at Hilo, HI, Aug 13, 2014. Presented by Youngren-Ortiz SR. Research Day Best Poster Presentation Award
66. Tekade RK, Youngren SR, Yang H, Chougule MB*. Albumin-Chitosan based nanocarrier of Onconase for the treatment of mesothelioma, poster 0327-002066, 12th US-Japan Symposium on Drug Delivery Systems, Westin Maui Resort, and Spa, Lahaina, Maui, HI, Dec 16-20, 2013.
67. Tekade RK, Yan H, Chougule MB*. Hybrid nanocarrier mediated delivery of Onconase for the treatment of mesothelioma, poster M1062, 2013 AAPS Annual Meeting and Exposition, San Antonio, TX, Nov 10-14, 2013. The University of Hawaii at Hilo Research Council Faculty Travel Award to Chougule MB
68. Youngren SR, Tekade RK, Hoffmann PR, Chougule MB*. Nanocarrier mediated targeted delivery of STAT-6 siRNA to cancer cells, poster M1063, 2013 AAPS Annual Meeting and Exposition, San Antonio, TX, Nov 10-14, 2013. The University of Hawaii at Hilo Research Council Faculty Travel Award to Chougule MB
69. Youngren SR, Tekade RK, Hoffmann PR, Chougule MB*. Development of gelatin nanocarriers for the targeted delivery of STAT-6 siRNA, poster 714, 40th Annual Meeting and Exposition of the Controlled Release Society, Honolulu, HI, Jul 21-24, 2013. Presented by Youngren SR
70. Tekade RK, Yan H, Chougule MB*. Formulation and evaluation of hybrid Onconase nanoparticles for the treatment of mesothelioma, poster 100874, 40th Annual Meeting and Exposition of the Controlled Release Society, Honolulu, HI, Jul 21-24, 2013.
71. Glasgow M, Clark M, Hamad M, Chougule MB, Morris KR. Project A-7: Modeling and validation of material properties of crystalline particles: formation and stability under stress, Purdue University, West Lafayette, IN, May 14-17, 2013. Presented by Glasgow M
72. Youngren SR, Tekade RK, Hoffmann PR, Chougule MB*. STAT6 siRNA encapsulated gelatin nanocarriers: formulation, characterization, and in vitro proof of concept using adenocarcinoma human alveolar basal epithelial cell line, poster M1024, 2013 AAPS National Biotec Conference, San Diego, CA, May 20–22, 2013. Presented by Youngren SR. AAPS BIOTEC Travel Award and the University of Hawaii at Hilo ALEX Travel Award to Youngren SR.
73. Glasgow M, Clark M, Hamad M, Chougule MB, Morris KR. Modeling and validation of material properties of crystalline particles: formation and stability under stress, Rutgers University, Newark, NJ, Apr 1-6, 2013. Presented by Glasgow M
74. Youngren SR, Tekade RK, Hoffmann PR, Chougule MB*. . Biocompatible nanocarrier mediated delivery of STAT-6 siRNA to cancer cells, abstract 3142, 104th AACR Annual Meeting, Washington DC, Apr 6-10, 2013. 2013 AACR Minority-Serving Institution Faculty Scholar in Cancer Research Award to Chougule MB
75. Godugu C, Patel AR, Marepally S, Doddapaneni R, Singh M, Chougule MB*. Effect of Telmisartan on triple negative breast cancer (TNBC) and lung cancer tumor progression and intratumoral distribution of nanoparticles, abstract 2139, 104th AACR Annual Meeting, Washington DC, Apr 6-10, 2013. Presented by Godugu C
76. Mayuramas S, Byoung J, Mazen H, Chee LC, Rosanoff A, Chougule MB*. Preliminary study of transdermal permeation of magnesium cream formulations across skin, XIII International Magnesium Symposium, Mérida, Yucatan, México. Oct 16-19, 2012. Presented by Mayuramas S
77. Mulik R, Jun B, Connelly L, Chougule MB*. Targeted nanocarriers of siRNA for the treatment of cancer, abstract 5644, 103rd AACR Annual Meeting, Chicago, IL, Mar 31-Apr 4, 2012. 2012 AACR Minority-Serving Institution Faculty Scholar in Cancer Research Award to Chougule MB
78. Chougule MB, Patel A, Patlolla R, Jackson T, Singh M*. Anticancer efficacy of Celecoxib encapsulated nanostructured lipid carrier in treatment of non-small cell lung cancer, poster T3211, FIP Pharmaceutical Sciences

2010 World Congress in Association with the AAPS Annual Meeting and Exposition meeting, New Orleans, LA, Nov 14-18, 2010. AAPS Council's Award to Chougule MB

79. Chougule MB, Patel A, Patlolla R, Singh M*. Multifunctional nanocarriers of synergistically acting Noscapine and doxorubicin conjugated with CREKA peptide for the treatment of breast cancers, poster M1294, FIP Pharmaceutical Sciences 2010 World Congress in Association with the AAPS Annual Meeting and Exposition meeting, New Orleans, LA, Nov 14-18, 2010. AAPS Council's Award to Chougule MB
80. Patel AR, Spencer SD, Chougule MB, Sachdeva M*. Pharmacokinetic modeling and in vitro-in vivo correlation (IVIVC) of methylene-substituted 3, poster R6436, FIP Pharmaceutical Sciences 2010 World Congress in Association with the AAPS Annual Meeting and Exposition meeting, New Orleans, LA, Nov 14-18, 2010. Presented by Patel AR. Travel Award to Patel AR
81. Chougule MB, Patel A, Patlolla RR, Singh M*. Multifunctional CREKA peptide conjugated lipid nanocarriers of synergistically acting Noscapine and Doxorubicin for breast cancer therapy, 101st AACR Annual Meeting, Washington DC, Apr 17-21, 2010
82. Desai U, Chougule MB, Singh M*. AlgiMatrix™ 3-D cell culture system as an in vitro tumor model for H460 non-small cell lung cancer cell line, abstract 3234, 101st AACR Annual Meeting, Washington DC, Apr 17-21, 2010
83. Chougule MB, Patlolla RR, Patel A, Singh M*. Transepithelial transport of Noscapine and influence of permeation enhancers on permeability across cell monolayer, poster W4279, 2009 AAPS Annual Meeting and Exposition, Los Angeles, CA, Nov 8 – 12, 2009
84. Chougule MB, Patel A, Patlolla R, Singh M*. Antitumor activity of Noscapine, an oral chemotherapeutic agent in human breast cancer xenograft model, poster T3075, 2009 AAPS Annual Meeting and Exposition, Los Angeles, CA, Nov 8 – 12, 2009
85. Patel A, Chougule MB, Patlolla R, Jackson T, Safe S, Singh M*. Novel C-substituted Diindolylmethane derivative: Transepithelial permeability across Caco-2 monolayer and pharmacokinetic evaluation, 2009 AAPS Annual Meeting and Exposition, Los Angeles, CA, Nov 8 – 12, 2009. Presented by Patel A. Travel Award Winner -Patel A
86. Patlolla R, Patel A, Chougule MB, Singh M*. In vitro dissolution vs. in vitro cytotoxicity of Celecoxib encapsulated nanostructured lipid carrier nanoparticles in NSCLC cell lines, 2009 AAPS Annual Meeting and Exposition, Los Angeles, CA, Nov 8 – 12, 2009. Presented by Patlolla R
87. Patlolla R, Vashi P, Samaan J, Chougule MB, Singh M*. Translocation of cell penetrating peptide engrafted nanoparticles across the skin layers, 2009 AAPS Annual Meeting and Exposition, Los Angeles, CA, Nov 8 – 12, 2009. Presented by Patlolla R
88. Patlolla R, Desai U, Vashi P, Chougule MB, Singh M*. Encapsulation of plasmid DNA in liposomes using modified ethanol destabilization method and enhancing the transfection with cell penetrating peptide, 2009 AAPS Annual Meeting, and Exposition, Los Angeles, CA, Nov 8 – 12, 2009. Presented by Patlolla R
89. Terrick A, Chougule MB, Safe S, Singh M*. Induction of apoptosis by Nur-active 1, 1-Bis (3'-indolyl)-1-(p-substituted phenyl) methanes in non-small cell lung cancer cells, Florida A. and M. University MBRS Symposium, Tallahassee, FL, Oct 2, 2009. Presented by Terrick A. First Prize Winner - Terrick A
90. Patel A, Chougule MB, Patlolla R, Jackson T, Safe S, Singh M*. Pharmacokinetic evaluation of 3, 3' diindolylmethane derivative: A novel anticarcinogenic compound, Florida A. and M. University MBRS Symposium, Tallahassee, FL, Oct 2, 2009. Presented by Patel A
91. Patlolla R, Vashi P, Samaan J, Patel A, Chougule MB, Singh M*. Translocation and in vitro permeation of cell penetrating peptide engrafted nano structured lipid carrier nanoparticles across the skin layers, Florida A. and M. University MBRS Symposium, Tallahassee, FL, Oct 2, 2009. Presented by Patlolla R. Second Prize Winner-Patlolla R
92. Desai U, Patlolla R, Chougule MB, Singh M*. Evaluation of Epiderm Full Thickness (EFT) as an in vitro model for wound healing, Florida A. and M. University MBRS Symposium, Tallahassee, FL, Oct 2, 2009. Presented by Desai U. Second Prize Winner-Desai U
93. Patel A, Chougule MB, Patlolla R, Jackson T, Safe S, Singh M*. Physiological and pharmacokinetic evaluation of novel 3, 3' diindolylmethane derivative (DIM-C-pPhC6H5), Graduate Research Association of Students in Pharmacy (GRASP) meeting, Mercer University, Atlanta, GA, Jun 5-7, 2009. Presented by Patel A
94. Terrick A, Chougule MB, Safe S, Singh M*. Anticancer activity of 1, 1-bis (3'-indolyl)-1-(p-substituted phenyl) methanes in non-small cell lung cancer cells, Graduate Research Association of Students in Pharmacy (GRASP) meeting, Mercer University, Atlanta, GA, Jun 5-7, 2009. Presented by Terrick A

95. Vashi P, Patlolla R, Samaan J, Chougule MB, Singh M*. Topical delivery and characterization of Celecoxib encapsulated cell penetrating peptide engrafted nanolipid crystal nanoparticles, Graduate Research Association of Students in Pharmacy (GRASP) meeting, Mercer University, Atlanta, GA, Jun 5-7, 2009. Presented by Vashi P
96. Singh M*, Jackson T, Chougule MB, Ichite N, Patlolla R. Evaluation of antitumor activity of Noscapine against human non-small cell lung cancer xenograft model, 11th RCMI International Symposium on Health Disparities, Honolulu, HI, Dec 1 - 4, 2008. Presented by Singh M
97. Chougule MB, Patlolla R, Kandimalla K, Singh M*. pH-dependent bidirectional transport of Noscapine across Caco-2 and MDCK monolayers: Implications for intestinal absorption, poster T2022, 2008 AAPS Annual Meeting and Exposition, Atlanta, GA, Nov 16-20, 2008
98. Patlolla R, Chougule MB, Kandimalla K, Singh M*. Pulmonary deposition and pharmacokinetics of nebulized Celecoxib loaded nanostructured lipid carriers, 2008 AAPS Annual Meeting and Exposition, Atlanta, GA, Nov 16-20, 2008. Presented by Patlolla R
99. Patlolla R, Chougule MB, Vashi P, Somman J, Babu J, Singh M*. Encapsulation and in vitro skin permeation of Spantide II encapsulated Nanolipid crystal (NLC) nanoparticles, 2008 AAPS Annual Meeting and Exposition, Atlanta, GA, Nov 16-20, 2008. Presented by Patlolla R
100. Ichite N, Chougule MB, Jackson T, Safe S, Singh M*. Inhalation drug delivery of a novel diindolyl methane derivative for the treatment of lung cancer, 2008 AAPS Annual Meeting, and Exposition, Atlanta, GA, Nov 16-20, 2008. Presented by Ichite N
101. Marijani R, Chougule MB, Singh M*. Evaluation of aggregation and spray characteristics of nasal formulations of human growth hormone, 2008 AAPS Annual Meeting, and Exposition, Atlanta, GA, Nov 16-20, 2008. Presented by Marijani R
102. Vashi P, Mallampati R, Patlolla R, Chougule MB, Babu J, Singh M*. In vitro permeation of Alpha MSH formulations in Human and Rat skin, Graduate Research Association of Students in Pharmacy (GRASP) Annual Meeting, Tallahassee, FL, Jun 6-8, 2008. Presented by Vashi P
103. Marijani R, Chougule MB, Patlolla R, Singh M*. Development of inhalation and nasal drug delivery system for delivery of peptides and proteins, Florida A. and M. University Graduate Feeder Conference and Student Research Forum, Tallahassee, FL, Jun 6-8, 2008. Presented by Marijani R
104. Gayed R, Chougule MB, Ichite N, Patlolla R, Singh M*. In vitro anti-tumor effect of Noscapine in combination with Docetaxel in lung cancer cell lines, Florida A. and M. University Graduate Feeder Conference and Student Research Forum, Tallahassee, FL, Jun 6-8, 2008. Presented by Gayed R
105. Ichite N, Chougule MB, Jackson T, Safe S, Singh M*. Diindolylmethane (DIM) compound potentiate the apoptotic effect of Docetaxel in A549 orthotopic non-small cell lung cancer xenograft Model, Florida A. and M. University Graduate Feeder Conference, and Student Research Forum, Tallahassee, FL, Jun 6-8, 2008. Presented by Ichite N
106. Samaan J, Patlolla R., Mallampati R, Chougule MB, Singh M*. Formulation of nano liquid crystals (NLC) for the topical delivery of Nimesulide, Florida A. and M. University Graduate Feeder Conference and Student Research Forum, Tallahassee, FL, Jun 6-8, 2008. Presented by Samaan J. Second Prize Winner-Samaan J
107. Chougule MB, Patlolla R, Patel A, Singh M*. Nebulization of Celecoxib loaded nanostructured lipid carriers: preparation, characterization, pharmacokinetics and lung deposition, 2008 Respiratory Drug Delivery conference, Scottsdale, AZ, May 11-15, 2008
108. Ichite N, Chougule MB, Jackson T, Safe S, Singh M*. Characterization of aerosolized Diindolylmethane (DIM) derivative as a potential inhalation delivery agent against lung cancer, 99th AACR Annual Meeting, San Diego, CA, Apr 12-16, 2008. Presented by Ichite N
109. Patel A, Chougule MB, Patlolla R, Jackson T, Ichite N, Singh M*. Anti-tumor effect of Noscapine in combination with antitumor agents against non-small cell lung cancer, Graduate Research Association of Students in Pharmacy (GRASP) Annual Meeting, Tallahassee, FL, Jun 6-8, 2008. Presented by Patel A
110. Patel A, Chougule MB, Patlolla R, Jackson T, Kandimalla K, Singh M*. Aerosol characterization and lung deposition of Celecoxib encapsulated lipid Nanoparticles. NanoFlorida Symposium, University of Central Florida, Orlando, FL, Sep 26-28, 2008. Presented by Patel A
111. Vashi P, Patlolla R, Samaan J, Chougule MB, Singh M*. In vitro skin permeation of anti-inflammatory peptide encapsulated Nanolipid Crystal (NLC) nanoparticles, NanoFlorida Symposium, University of Central Florida, Orlando, FL, Sep 26-28, 2008. Presented by Vashi P.
112. Chougule MB, Padhi B, Misra A*. Aerosolized nano-liposomal dry powder inhaler of Dapsone: preparation and characterization, 2007 AAPS Annual Meeting and Exposition, San Francisco, CA, Nov 10-15, 2007

113. Chougule MB, Padhi B, Misra A*. Formulation of a nano-liposomal dry powder inhaler containing Amiloride hydrochloride: preparation and characterization, the Respiratory Drug Delivery X conference, Boca Raton, FL, Apr 23-27, 2006
114. Chougule MB, Padhi B, Misra A*. Nano-liposomal dry powder inhaler formulation of Amiloride hydrochloride, Conference on Nanotechnology in Drug Delivery, Mohali, Punjab, India, Feb 18-19, 2006.
115. Chougule MB, Padhi B, Misra A*. Influence of disaccharides on in vitro lung deposition of spray-dried liposomal dry powder inhaler formulation, 1st Indo-Japanese International Conference on Advances in Pharmaceutical Research and Technology, Mumbai, Maharashtra, India, Nov 25-29, 2005
116. Chougule MB, Padhi B, Misra A*. Spray dried nano-liposomal dry powder formulation for pulmonary drug delivery, National Symposium on Exploring Nanotechnology in Drug Delivery, Vadodara, Gujarat, India, Jul 29-30, 2005
117. Chougule MB, Kalariya M, Padhi B, Misra A*. Formulation and clinical evaluation of nanosized Clobetasol propionate for topical treatment of eczema, National Symposium on Science, Technology, and Application of Nanomaterials, Vadodara, Gujarat, India, Mar 21-22, 2005
118. Chougule MB, Kalariya M, Padhi B, Misra A*. Formulation and clinical implications: methotrexate loaded solid lipid nanoparticulate gel for topical treatment of psoriasis, National Symposium on Polymers, Surfactants and Gels, Vadodara, Gujarat, India, Feb 11-13, 2005
119. Chougule MB, Naik S, and Misra A*. Development of novel lyophilized mixed micellar formulation of Amphotericin B, 6th International Controlled Release Society Symposium, Indian Chapter, Mumbai, Maharashtra, India, Feb 18-19, 2005
120. Chougule MB, Padhi B, Misra A*. Influence of cryoprotectant on in vitro lung deposition of lyophilized liposomal dry powder inhaler formulation, 57th Indian Pharmaceutical Congress, Hyderabad, Andhra Pradesh, India, Dec 2-4, 2005
121. Chougule MB, Misra A*. Influence of composition of carrier lactose on the site of drug delivery in the lung from Budesonide dry powder inhaler formulations in vitro, 55th Indian Pharmaceutical Congress, Chennai, Tamilnadu, India, Dec 19-20, 2003

K. INVITED RESEARCH SEMINAR PRESENTATIONS *(Total 39)*

Synopsis: I have delivered 38 invited talks based on developed technologies, combination therapies, and drug and gene delivery systems at reputed institutes, conferences, or pharmaceutical companies.

1. An invited speaker's research presentation titled "Hydrophobic drug-loaded lipidic and hydrophilic siRNA-loaded biopharma-engineered polymeric nanoparticles conjugated with targeting peptide for treating lung cancer" was presented at the International Conference on "The future of pharmaceutical drug development: trends, challenges and Opportunities," September 13-14, 2024
2. An invited research presentation titled "Pharmaceutical Sciences Opportunities for Higher Education and the Interdisciplinary Nanotech-based Strategy for siRNA Delivery Pharma Products" was presented at the *Dr. Shivajirao Kadam College of Pharmacy,* Kasabe Digraj, Sangli, Maharashtra State, June 28, 2024
3. An invited presentation titled "Opportunities in Higher Education, Career, and the Application of Nanoengineering in Biopharma Healthcare in the USA" was presented at the *Vidya Samvardhak Mandal Somashekar R. Kothiwale Institute of Technology,* Nipani, Karnataka State, June 12, 2024
4. An invited research presentation titled "Inhaled and Parenteral Depot Products: Extended Release Lipidic Nanocarrier for Lung Cancer" 21st international symposium on "Advances in Technology and Business Potential of New Drug Delivery Systems," Mumbai, Maharashtra, February 25th, 202
5. An invited research presentation titled "Tumor Blood Vessels Targeted Nanomedicine for the Treatment of Lung Cancer" has been presented at the *Appasaheb Birnale College of* Pharmacy, Sangli, Maharashtra, India, May 11, 2022
6. An invited research presentation, "Nebulized Lipid-based Nanomedicine for the Treatment of Lung Cancer," at the e-international conference on "pharmaceutical sciences and drug developments" sponsored by Gujarat Council On Science And Technology, Nootan Pharmacy College. Mahesana, Gujarat, India, Sep 9, 2021
7. An invited seminar titled "Aerosolized Nanomedicine mediated Lung Cancer Therapy" at the Patadhmal Wadhwani College of Pharmacy, Yavatmal, Maharashtra state, India, July 16, 2020
8. An invited seminar titled "Functionalization of targeted nanomedicine for the treatment of lung cancer" has been

presented at the Department of Biotechnology, *Latthe Education Society's Smt. Kasturbai Walchand College, Shivaji University*, Sangli, Maharashtra, India, July 1, 2019

9. An invited seminar titled "Functionalization of targeted nanomedicine for the treatment of lung cancer" has been presented at the Department of Biotechnology, *Latthe Education Society's Smt. Kasturbai Walchand College, Shivaji University*, Sangli, Maharashtra, India, July 1, 2019
10. An invited conference speaker, a seminar titled "Lipidic Nanocarrier-based Targeted Therapy for Lung Cancer, " was presented at the *END2Cancer: Emerging Nanotechnology and Drug Delivery Applications for Cancer Conference*. Oklahoma City, Oklahoma, December 5-7, 2018
11. A seminar titled "Nanocarrier mediated targeted delivery for lung cancer therapy" has been presented at the *Arnold and Marie Schwartz College of Pharmacy and Health Sciences, Long Island University,* Brooklyn, New York, Oct 8, 2018
12. A seminar titled "Nanomedicine for lung cancer" has been presented at the *Bombay College of Pharmacy*, *University of Mumbai*, Kalina, Santacruz (E), Mumbai, Maharashtra, India, Dec 20, 2016
13. A seminar titled "Targeted delivery systems for the treatment of pulmonary disorders" was presented at *KLE Society's College of Pharmacy,* Nipani, Karnataka, India, Dec 13, 2016.
14. A seminar titled "Development and evaluation of targeted nanomedicine" has been presented at the *Ajit Laboratory Pvt. Ltd.,* Miraj, Maharashtra, India, Dec 8, 2016
15. A seminar titled "Targeted nanoparticles for the treatment of lung cancer" has been presented at the *Appasaheb Birnale College of Pharmacy*, Sangli, Maharashtra, India, Dec 7, 2016
16. A seminar titled "Multitarget-based nanoparticles for the treatment of lung cancer" has been presented at the *Maharashtra Institute of Pharmacy*, S.No. 124, MIT Campus Paud Road, Kothrud, Pune, Maharashtra, India, Nov 30, 2016
17. A seminar titled "Targeted inhalation delivery for lung cancer" has been presented at the *Poona College of Pharmacy*, *Pune University,* Erandwane, Pune, Maharashtra, India, Nov 29, 2016
18. A Seminar titled "Tumor targeted nanocarriers for the treatment of lung cancer" has been presented at the international conference *2015 IEEE-NANOMED*, Honolulu, HI, November 15 - 18, 2015
19. A seminar titled "Targeted biodegradable nanocarriers for the treatment of lung cancer" has been presented at the Ernest Mario School of Pharmacy, *Rutgers, The State University of New Jersey,* Piscataway, NJ, April 15, 2015
20. A seminar titled "Nanocarrier mediated targeted delivery of drugs and proteins for the treatment of cancer" has been presented at the Otto York Department of Chemical Engineering, *New Jersey Institute of Technology*, Newark, NJ, April 17, 2015
21. A seminar titled "Biomaterial-based targeted delivery for lung cancer therapy" was presented at the School of Pharmacy, *Temple University*, Philadelphia, PA, April 23, 2015.
22. A seminar titled "Targeted nanoparticle-based delivery approaches for the treatment of lung cancer" has been presented at the Skaggs School of Pharmacy and Pharmaceutical Sciences, *University of California at San Diego*, La Jolla, CA, Nov 7, 2014
23. A seminar titled "Targeted nanocarriers for the treatment of cancer" has been presented at the Eshelman School of Pharmacy, *University of North Carolina at Chapel Hill*, Chapel Hill, NC, Oct 9, 2014
24. A seminar titled "Albumin-Chitosan based nanocarrier of Onconase for the treatment of mesothelioma" has been presented at the *12th US-Japan Symposium on Drug Delivery Systems*, Westin Maui Resort, and Spa, Lahaina, Maui, HI, Dec 16-20, 2013
25. A seminar titled "Targeted delivery to chemo drugs for the treatment of lung cancer" has been presented in the Pharmaceutics Division's Seminar Series at the College of Pharmacy, *The University of Texas at Austin*, Austin, TX, Nov 15, 2013
26. A seminar titled "Targeted chemo and gene therapy for the treatment of cancer" has been presented in a seminar series at the School of Chemical Engineering, *Arizona State University*, Tempe, AZ, Nov 8, 2013
27. A seminar titled "Albumin-Chitosan polymer based hybrid nanocarriers for cancer" has been delivered in a seminar series at the *University of Hawaii Cancer Center*, Honolulu, HI, Oct 14, 2013
28. Seminar titled "Targeted nanotech-based delivery systems: an emerging cancer therapy" has been delivered at the *College of Pharmacy – University of Hawaii Cancer Center Symposium*, Hilo, HI, Mar 13-14, 2013
29. A seminar titled "Multiple pathways based targeted therapies for non-small cell lung cancer" has been delivered at the Innovative Drug Delivery Research, Pharmaceutical R and D, *Abbott Healthcare Pvt. Ltd.* Goregaon (E), Mumbai, Maharashtra, India, Jun 17, 2013

30. A "Novel nanocarrier therapies for lung cancer" seminar was delivered at the Bombay College of Pharmacy, *University of Mumbai*, Kalina, Mumbai, Maharashtra, India, on June 18, 2013.
31. A seminar titled "Inhalation delivery of anticancer agents for lung cancer therapy" was delivered at the *Cipla Ltd.*, Vikhroli West, Mumbai, India, Jun 19, 2013
32. A seminar titled "Nanocarrier-based delivery of chemotherapeutic agents for lung cancer treatment" was delivered at the Pharmacy Department, Faculty of Technology and Engineering, *The Maharaja Sayajirao University of Baroda*, Vadodara, Gujarat, India, Jun 28, 2011
33. A seminar titled "Inhalation drug delivery as a novel approach for the treatment of lung cancer" has been delivered at the *Sun Pharma Advanced Research Company (SPARC) Ltd*., Baroda, Gujarat, India, Jun 29, 2011
34. A seminar titled "Targeted nanoparticles for the treatment of lung cancer" has been presented in the Basic Science and Translational lecture series at the *Cancer Research Center of Hawaii*, University of Hawaii, Honolulu, HI, May 16, 2011
35. A seminar titled "Polymeric Nanoparticle for the Treatment of Cancer" has been delivered at the College of Pharmacy Faculty seminar series, *the Daniel K. Inouye College of Pharmacy*, *University of Hawaii at Hilo*, HI, Jan 20, 2016
36. A seminar titled "Multifunctional targeted nanocarriers for cancer therapy" has been presented in the Natural Products and Experimental Therapeutics program summer retreat at the *University of Hawaii Cancer Center*, Honolulu, HI, Jul 17, 2014
37. A seminar titled "Preparation and characterization of a Selenium-loaded nanoliposomal formulation" was delivered at the College of Pharmacy Faculty seminar series, *the Daniel K. Inouye College of Pharmacy,* the University of Hawaii at Hilo, HI, Aug 22, 2012
38. A seminar titled "Targeted chemotherapy approaches for the treatment of breast cancer" has been delivered at the College of Pharmacy Faculty seminar series, *the Daniel K. Inouye College of Pharmacy, the University of Hawaii at Hilo*, HI, Sep 29, 2011

L. RESEARCH GRANTS AND INTERDISCIPLINARY COLLABORATION

Synopsis: I have established a combination therapies and nanotechnology-based program, funded by the NIH, NSF, and nonprofit foundations. Since 2010, I was PI and successfully completed i) Emory research grant award focused on development of intrathecal Nicardipine solution products with high drug strength for treating brain diseases ($ 11,761, 12/01/2022 to 11/30/2024), ii) NHLBI R15 grant focused on designing and evaluating targeted nanocarriers for treatment of asthma, an inflammatory disease ($455,100, 09/01/2018-06/31/2023), iii) 4-year NIGMS Support of Competitive Research Continuance award focused on siRNA nanomedicine for lung cancer ($358,100, 05/01/2014 to 04/31/2017), iv) Hawaii Community Foundation (HCF)'s LEAHI FUND for Pulmonary Research Award focused to develop, characterize, and evaluate the efficacy of STAT3 inhibitor-loaded bioresponsive polymeric nanocarriers for the treatment of lung cancer ($ 47,228, 07/10/2015 to 01/09/2017), v) HCF Medical Research Award focused to develop, characterize, and evaluate the efficacy of siRNA based delivery system against non-small cell lung cancer ($ 50,000, 03/14/2013 to 12/18/2015), vi) HCF LEAHI FUND for Pulmonary Research Award focused to formulate and test the efficacy of Onconase based delivery system against malignant mesothelioma, vii) HCF LEAHI FUND for Pulmonary Research Award focused on formulation and evaluation of Nanocarriers of siRNA for the Treatment of Asthma, vii) Center for Magnesium Research Grant to study the permeation of topical Magnesium cream formulation across human skin to explore the topical use of Magnesium for the treatment of hypomagnesemia ($ 16,347, 10/25/11 to 10/24/12), and viii) Mercer University Research Seed grant focused on inhaled targeted siRNA-loaded innovative nanoparticles for treating severe chronic asthma ($3900, 07/012022-06/30/2023), and ix) University of Hawaii at Hilo Research Council Seed Grant Award focused on the development of targeted nanocarrier system for the treatment of lung cancer ($ 8,600). I was Co-Investigator of completed grants i) NHLBI, R15 Research award (PI, Dr. Nander Moniri) focused on the lung's oxidative status in response to inhaled medicines in severe asthma ($424,500, 07/01/2023 – 06/31/2025), ii) American Heart Association Institutional Research Enhancement Award (AIREA) focused on a new compound's antihypertensive effect using multidisciplinary strategies in vitro and in vivo ($ 154,000, 04/01/2023 – 03/31/2025), and iii) NSF Engineering Research Center on Structured Organic Particulate Systems Outreach Program ($50,000, 07/01/2011- 06/30/2012).

In the active funding at Mercer University, I am a Co-investigator of **NCI-funded R15 grant** focused on HER2 inhibitors with a novel mechanism for treating breast cancer. In total, I have secured extramural funding of over 1.5 million. The details of successfully completed grants are below.

Grants funded and completed research support

1. **NHLBI, R15 Research Enhancement Award Program (REAP)** for Health Professional Schools and Graduate Schools (Co-Investigator, Chougule; PI: Dr. Nader Moniri) 07/01/2023 – 06/31/2025
   Proposal Title: The role of ROS on beta-2-adrenergic receptor function in the human airway
   The goal is to investigate the lung's oxidative status in response to inhaled medicines in severe asthma.
   Total Award: $424,500
2. **American Heart Association Institutional Research Enhancement Award (AIREA)**
   (Co-Investigator, Chougule; PI: Dr. Raquib Hasan) 04/01/2023 to 03/31/2025
   Proposal Title: New gastrointestinal microbiota compound for antihypertensive effect in systemic hypertension
   The goal is to investigate a new compound's antihypertensive effect using multidisciplinary strategies in vitro and in vivo
   Total Award: 154,000
3. **Emory University Contract Research Grant Award** (PI, Chougule) 12/01/2022 to 11/30/2023
   Proposal Title: Formulation Development of Nicardipine for Intrathecal Administration
   The goal is to develop parenteral, including intravenous Nicardipine products with high drug strength for brain diseases
   Total Award: $ 11,761
4. **NIGMS 1SC3GM109873-01**, Support of Competitive Research (SCORE) Research Continuance Award (PI, Chougule), NIH/NIGMS 05/01/2014 to 04/31/2017
   Funded on the first submission
   Proposal Title: Targeted Combination Therapy for Lung Cancer
   This proposal aims to develop, characterize, and evaluate the nanocarrier systems of siRNA in combination with chemo drug for the treatment of lung cancer.
   Total award: $358,100,
5. **15ADVC-74296 Hawaii Community Foundation**'s LEAHI FUND for Pulmonary Research Award (PI, Chougule) Leahi Fund to Treat and Prevent Pulmonary Diseases 07/10/2015 to 01/09/2017
   Proposal Title: STAT3 Inhibitor Loaded Bioresponsive Polymeric Nanotherapy for Lung Cancer
   The goal is to develop, characterize, and evaluate the efficacy of STAT3 inhibitor-loaded bioresponsive polymeric nanocarriers for the treatment of lung cancer.
   Total award: $ 47,228
6. **13ADVC-60311, Hawaii Community Foundation's Medical Research Award (PI-Chougule)**
   George F. Straub Trust and Robert C. Perry Fund of the Hawaii Community Foundation
   Funded on revised submission 03/14/2013 to 12/18/2015
   Proposal Title: Targeted Nanocarriers of mTOR siRNA for the Treatment of Lung Cancer
   The goal is to develop, characterize, and evaluate (*in vitro* and *in vivo*) the efficacy of siRNA based delivery system against non-small cell lung cancer.
   Total award: $ 50,000
7. **13ADVC-60226, Hawaii Community Foundation's LEAHI FUND for Pulmonary Research Award**
   (PI-Chougule) 03/14/2013 to 09/13/2015
   Funded on the first submission
   Proposal Title: Receptor Directed Nanotherapeutics for the Treatment of Mesothelioma
   The goal is to develop, characterize, and evaluate the efficacy of Onconase based delivery system against malignant mesothelioma.
   Total award: $ 50,000
8. **11ADVC-49699, Hawaii Community Foundation's LEAHI FUND for Pulmonary Research Award**
   (PI, Chougule) 09/01/2011 to 02/29/2013
   Funded on the first submission
   Proposal Title: Targeted Nanocarriers of siRNA for the Treatment of Asthma
   The goal is to develop, characterize, and evaluate the efficacy of the siRNA-based product.

Total award: $ 35,000

9. **University of Hawaii at Hilo Research Council Seed Grant Award** (PI, Chougule)
   Proposal Title: Development of Targeted Nanocarrier System for the Treatment of Lung Cancer
   The goal is to formulate the VEGF siRNA loaded nanocarriers and evaluate their efficacy against lung cancer cells.
   Total award: $ 8,600
10. **433999, Center for Magnesium Research Grant** (PI, Chougule)
    Center for Magnesium Education and Research, LLC 10/25/11 to 10/24/12
    Funded on the first submission
    Proposal Title: Transdermal magnesium cream testing using human skin
    This research project aims to study the permeation of topical Magnesium cream formulation across human skin to explore the topical use of Magnesium for the treatment of hypomagnesemia.
    Total award: $ 16,347

11. **004085-00001, Rutgers, State University Of New Jersey, NSF** (Co-Investigator, Chougule)
    NSF 06/01/2012 to 05/30/2013
    Funded on the first submission
    Proposal Title: Modeling and Validation of Material Properties of Crystalline Particles: Formation and Stability Under Stress
    The goal is to characterize the material properties of crystalline particles during formation and stability under stress.
    Total award: $ 50,000
12. **Engineering Research Center on Structured Organic Particulate Systems Outreach Program**
    (Co-Investigator, Chougule), NSF 7/01/2011 to 06/30/2012
    Funded on the first submission
    Proposal Title: "Outreach Partner" for National Science Foundation Engineering
    Research Center on Structured Organic Particulate Systems
    The goal is to educate K-12 teachers and students in science and technology.
    Total award: $ 50,000
13. **American Association of Cancer Research (AACR)** Minority-Serving Institution Faculty Scholar in Cancer Research Award (PI-Chougule) 2015
    The AACR is the largest scientific organization in the world focused on every aspect of high-quality, innovative cancer research. The Award Selection Committee judged the award applications and recommended the award to the highly deserving candidate. This award was based on developing and evaluating Onconase loaded nanocarriers for the treatment of mesothelioma.
    Total award: $ 1,800
14. **American Association of Cancer Research (AACR)** Minority-Serving Institution Faculty Scholar in Cancer Research Award (PI-Chougule) 2013
    The AACR is the largest scientific organization in the world focused on every aspect of high-quality, innovative cancer research. The Award Selection Committee judged the application and recommended the award to the highly deserving candidate. This award was based on STAT-6 siRNA-loaded gelatin nanocarriers evaluated in lung epithelial cells.
    Total award: $ 1,800
15. **Research Council Faculty Travel Award**
    University of Hawaii at Hilo Research Council 2013
    The Research Council Faculty travel award applications have been judged by the Award Selection Committee and awarded to highly deserving faculty to present the research work at the international scientific conference.
    Total award: $ 2,200
16. **American Association of Cancer Research (AACR)** Minority-Serving Institution Faculty Scholar in Cancer Research Award (Chougule) 2012
    The AACR is the largest scientific organization in the world focused on every aspect of high-quality, innovative cancer research. The Award Selection Committee judged the award applications and recommended

the award to the highly deserving candidate. This award was based on siRNA-loaded nanocarriers for lung cancer treatment.
Total award: $ 1,800

Ongoing Research Collaborations

I have established multidimensional collaborations with researchers from multidisciplinary, well-renowned institutes, such as Medical Schoo, University of Hawaii at Manoa; University of Hawaii Cancer Center; Department of Bioengineering, Department of Pharmaceutics & Pharmaceutical Chemistry, College of Pharmacy, University of Utah; School of Chemical Engineering, Arizona State University; Departments of Mathematics & Biomedical Engineering, University of North Carolina at Chapel Hill, National Institute of Pharmaceutical Education and Research (NIPER) Balanagar, Hyderabad, India, and Maliba Pharmacy College, UKA Tarsadia University, Gujarat , India. The details of established collaborations are given below.

Project 1. Formulation of nanocarriers and nanocarriers targeted therapies for the treatment of asthma and SARS-CoV-2 infection — 2011- present

Collaborators:

- Dr. Edward Barrett, Senior Scientist, and Respiratory Immunology, and Asthma Program, Lovelace Biomedical and Environmental Research Institute (L.B.E.R.I.), Lovelace Respiratory Research Institute (L.R.R.I.), Albuquerque, NM
- Dr. Kaushal Rege, School of Engineering, Arizona State University, Tempe, AZ
- Dr. Peter Hoffmann, Associate Professor, John A. Burns School of Medicine University of Hawaii at Manoa, Honolulu, HI
- Dr. M. Gregory Forest, Grant Dahlstrom Distinguished Professor, Departments of Mathematics & Biomedical Engineering, Director, Carolina Center for Interdisciplinary Applied Mathematics, University of North Carolina at Chapel Hill
- Dr. Pranav Shah and Dr. Mithali Patel, Maliba Pharmacy College, UKA Tarsadia University, Gujarat , India.

Project 2. Targeted therapies for the treatment of cancer — 2011- present

Collaborators:

- Dr. Sung Wan Kim, Distinguished Professor, Department of Bioengineering, Department of Pharmaceutics and Bioengineering, College of Pharmacy, University of Utah, Salt Lake, UT
- Dr. Kaushal Rege, School of Chemical Engineering, Arizona State University, Tempe, AZ
- Dr. James Turkson, Professor, Cedars-Sinai Medical Center, Los Angeles
- Dr. Saurabh Srivastava, National Institute of Pharmaceutical Education and Research (NIPER) Balanagar, Hyderabad, India, and Maliba Pharmacy College, UKA Tarsadia University, Gujarat , India.

Project 3. Development of nanocarriers products for treating neuroblastoma — 2011- present

Collaborator:

Dr. Andre S. Bachmann, Professor and Associate Chair of Research, Department of Pediatrics, College of Human Medicine, Michigan State University, East Lansing, MI

M. TEACHING AND CURRICULUM DEVELOPMENT ACTIVITIES

Synopsis*:* Currently, at Mercer University of the College of Pharmacy, I am a course coordinator for three courses in the graduate and PharmD programs. I teach the fundamentals to students, the research findings, drug delivery,

preclinical research, research compliance, and inhalation drug delivery topics to students. At the Mississippi School of Pharmacy, I am a course director and co-course director of several PharmD, Master, and Ph. D. courses in compounding lab, calculation, and drug delivery. I also taught Compounding Skills and Clinical Laboratory Data Analysis courses. I taught Aerosol Physics in Medicines and cancer nanotechnology elective course. In the teaching courses, I have utilized an approach similar to a flipped classroom model with recorded lectures to augment students' advanced learning. At the University of Mississippi School of Pharmacy, I serve on the Curriculum Transformation Committee (member) and Curriculum Committee (Co-Chair) and actively design and develop a new integrated PharmD curriculum. I have served as a leader or member of the course design and development committee of the new integrated LandSharRx curriculum for the PharmD program. I have developed/co-developed nine new graduate courses, including currently developed Pharmaceutical Calculation and Clinical Laboratory Data Analysis courses. At the University of Hawaii at Hilo College of Pharmacy, I have also developed Pharmaceutics, drug delivery, and inhalation delivery courses for the PharmD and Ph.D. programs. In addition, a research elective course entitled "Nanocarrier for human disease" elective course, "PHPS-598 Aerosol Physics in Medicine: Inhaled Drug Therapy, was developed. The details of my teaching activities are given below.

PharmD 1st year (P-1), PharmD 2nd year (P-2), PharmD 3rd year (P-3), and PharmD 4th year (P-4)

M1. Teaching activities

Teaching record at the Department of Pharmacy, Mercer University College of Pharmacy, Atlanta

Spring 2025

1. Instructor, PHA 807: Pharmaceutical Biotechnology, three credits, Master and Ph.D. graduate students
2. Instructor, PHA 527: Biotechnology, two credits, PharmD P-2-3 students
3. Course Coordinator, PHA 548 Project Development, two credits, PharmD P-2 and P-3 students
4. Course Coordinator, PHA 549 Introduction to Pharmaceutical Research, two credits, PharmD P-2 and P-3 students
5. Research advisor for Master student, Yash Harsoda
6. Research advisor for three undergraduate students

Fall 2024

1. Course coordinator, PHA 537: Gastrointestinal Disorders & Musculoskeletal Pharmacotherapy, five credits, PharmD P-3 students
2. Course Coordinator and Instructor, PHA 548 Project Development, two credits, PharmD P-two and P-3 students
3. Course Coordinator and Instructor, PHA 549 Introduction to Pharmaceutical Research, 2twocredits, PharmD two-2 and P-3 students
4. Research advisor for PhD student, Sterling Neil
5. Research advisor for Master student John Lee
6. Research advisor for Master student, Yash Harsoda
7. Research advisor for two researchers, Sachin Kapoor and Jade Harris

Summer 2024

1. Coordinator and Instructor, PHA 743 Foundation to Research, three credit graduate students
2. Research advisor for PhD student, Sterling Neil
3. Research advisor for Master student John Lee
4. Research advisor for Master student, Yash Harsoda
5. Research advisor for an undergraduate student funded by the M.U.R. S. program, Saher Lalni
6. Research advisor for two researchers, Sachin Kapoor and Jade Harris

Spring 2024

7. Instructor, PHA 807: Pharmaceutical Biotechnology, three credits, Master and Ph.D. graduate students
8. Instructor, PHA 527: Biotechnology, two credits, PharmD P-2-3 students
9. Course Coordinator, PHA 548 Project Development, two credits, PharmD P-2 and P-3 students
10. Course Coordinator, PHA 549 Introduction to Pharmaceutical Research, two credits, PharmD P-2 and P-3 students
11. Research advisor for PhD student, Sterling Neil
12. Research advisor for PhD student Rama Kashikar
13. Research advisor for PhD student Snehitha Akkineni

14. Research advisor for Master student John Lee
15. Research advisor for Master student, Yash Harsoda
16. Research advisor for two researchers, Sachin Kapoor and Jade Harris

Fall 2023

1. Course Coordinator and Instructor, PHA 548 Project Development, two credits, PharmD P-2 and P-3 students
2. Course Coordinator and Instructor, PHA 549 Introduction to Pharmaceutical Research,two2 credits, PharmD P-2 and P-3 students
3. Instructor, PHA 742 Foundations in Pharmaceutical Science, five credits, PharmD P-1 students
4. Research advisor for PhD student, Sterling Neil
5. Research advisor for PhD student Rama Kashikar
6. Research advisor for PhD student Snehitha Akkineni
7. Research advisor for Master student John Lee
8. Research advisor for Master student, Yash Harsoda
9. Research advisor for two researchers, Sachin Kapoor and Jade Harris

Summer 2023

1. Research advisor for PhD students, Rama Kashikar
2. Research advisor for PhD student, Tro Thien
3. Research advisor for Master student John Lee
4. Research advisor for an undergraduate student funded by the University M.U.R.S. program
5. Research advisor for two high school students, Yash Vyavahare and Aaditya Jagtap

Spring 2023

1. Instructor, PHA 807: Pharmaceutical Biotechnology, three credits, Master and Ph.D. graduate students
2. Instructor, PHA 527: Biotechnology, two credits, PharmD P-2-3 students
3. Course Coordinator, PHA 548 Project Development, two credits, PharmD P-2 and P-3 students
4. Course Coordinator, PHA 549 Introduction to Pharmaceutical Research, two credits, PharmD P-2 and P-3 students
5. Research advisor for PhD students, Rama Kashikar
6. Research advisor for Master student John Lee

Fall 2022

1. Coordinator, PHA 548 Project Development, two credits, PharmD P-2 and P-3 students
2. Coordinator, PHA 549 Introduction to Pharmaceutical Research, two credits, PharmD P-2 and P-3 students
3. Research advisor for PhD students, Rama Kashikar
4. Research advisor for Master student John Lee

Summer 2022

1. Course coordinator and instructor and PHA 743 Foundations in Research, three credits, PharmD and Master and PhD student
2. Research advisor for PhD students, Rama Kashikar

Spring 2022

1. Instructor, PHA 807: Pharmaceutical Biotechnology, three credits, Master and Ph.D. graduate students
2. Instructor, PHA 527: Biotechnology, Two credits, PharmD P-2-3 students
3. Course Coordinator, PHA 548 Project Development, two credits, PharmD P-2 and P-3 students
4. Course Coordinator, PHA 549 Introduction to Pharmaceutical Research, two credits, PharmD P-2 and P-3 students

Fall 2021

1. Instructor, PHA 742 Foundations in Pharmaceutical Sciences, five credits, PharmD P-1 students
2. Course Coordinator and Instructor, PHA 548 Project Development, two credits, PharmD P-2 and P-3 students
3. Course Coordinator and Instructor, PHA 549 Introduction to Pharmaceutical Research, two credits, PharmD P-2 and P-3 students
4. Facilitator and evaluator, PHA 493 Professional Development and Engagement, one credit hour (4 student presentations).

Teaching record at the University of Mississippi School of Pharmacy

Aug, 2016– July, 2021

Spring 2021

1. Academic Coordinator and Instructor, PHAR 422 Pharmaceutics and Calculations II, three credits, PharmD P-1 students
2. Instructor, PHCY 508 Integrated Systems – G.I./Nutrition, three credits, PharmD P-1 student
3. Dissertation Advisor, Research Dissertation- the Department of Pharmaceutics and Drug Delivery, Prasad Vinjamuri, Ph. D. Student
4. Dissertation Advisor, Bhavana Chivukula, Master in Pharmaceutics and Drug Delivery student

Fall 2020

1. Coordinator and Instructor, PHAR 421 Pharmaceutics and Calculations I, three credits, PharmD P-1 students
2. Coordinator and Instructor, PHAR 741 Advanced Pharmaceutics, four credits, Ph.D. graduate students
3. PHCY 503 Integrated Systems: Respirator, Three, three credits, PharmD P-2 students
4. Academic coordinator, PHCY 451 Pharmacogenomic, threes, three credits, PharmD P-1 students
5. Instructor, PHAR 650 Formulation Development, three credits, Master in Pharmaceutics and Drug Delivery students
6. Team Teaching Contributor, PHCY 400 Becoming Pharmacist, one credit -P1 students
7. Instructor, Tablet Course, Industry and academic scientists
8. Dissertation Advisor of Prasad Vinjamuri, Ph. D. Student, Research Dissertation- the Department of Pharmaceutics and Drug Delivery
9. Dissertation Advisor of Rama Kashikar, Ph. D. Student, Research Dissertation- the Department of Pharmaceutics and Drug Delivery
10. Dissertation Advisor of Bhavana Chivukula, Master in Pharmaceutics and Drug Delivery student

Spring 2020

1. Academic Coordinator and Instructor, PHAR 422 Pharmaceutics and Calculations II, three credits, PharmD P-1 students
2. Instructor, PHCY 508 Integrated Systems – G.I./Nutrition, three credits, PharmD P-1 student
3. Dissertation Advisor, Research Dissertation- the Department of Pharmaceutics and Drug Delivery, Prasad Vinjamuri, Ph. D. Student
4. Dissertation Advisor, Bhavana Chivukula, Master in Pharmaceutics and Drug Delivery student

Fall 2019

1. Instructor, PHAR 421 Pharmaceutics and Calculations I, three credits, PharmD P-1 students
2. Coordinator and Instructor, PHAR 741 Advanced Pharmaceutics, four credits, Ph.D. graduate students
3. PHCY 503 Integrated Systems: Respiratory, three credits, PharmD P-2 students
4. Academic coordinator, PHCY 451 Pharmacogenomic, three credits, PharmD P-1 students
5. Instructor, PHAR 650 Formulation Development, three credits, Master in Pharmaceutics and Drug Delivery students
6. Team Teaching Contributor, PHCY 400 Becoming Pharmacist, one credit -P1 students
7. Instructor, Tablet Course, Industry and academic scientists

Spring 2019

1. Instructor, PHAR 422 Pharmaceutics and Calculations II, PharmD P-1 students
2. Instructor, PHAR 749 Product Development, Master in Pharmaceutics and Drug Delivery students
3. Instructor, Tablet Course, Industry and academic scientists
4. Dissertation Advisor- Research Dissertation- the Department of Pharmaceutics and Drug Delivery, Prasad Vinjamuri, Ph. D. Student
5. Dissertation co-advisor- Research Dissertation- the Department of Pharmaceutics and Drug Delivery, Neeraja Komanduri, Ph. D. Student
6. Dissertation co-advisor- Research Dissertation- the Department of Pharmaceutics and Drug Delivery, Rui Wang, Master Student

Fall 2018

1. Team Teaching Contributor and Compounding Skills Lab Coordinator, PHCY 421 Pharmaceutics and Calculations I, three credits - P1 students
2. Academic Coordinator, PHCY 451 Pharmacogenomics two credits -P1 students

3. Team Teaching Contributor, PHCY 400 Becoming Pharmacists, one credit -P1 students
4. Team Teaching Contributor, PHCY 431 Social and Administrative Pharmacy I, three credits - P1 students
5. Coordinator and Instructor, PHAR 741 Advanced Pharmaceutics, four credits, Ph.D. graduate students
6. Instructor, PHAR 650 Formulation Development, Master and Ph. D. in Pharmaceutics and Drug Delivery students
7. Dissertation Advisor- Research Dissertation- the Department of Pharmaceutics and Drug Delivery, Neeraja Komanduri, Ph. D. Student
8. Dissertation Advisor- Research Dissertation- the Department of Pharmaceutics and Drug Delivery, Prasad Vinjamuri, Ph. D. Student Dissertation Advisor- Research Dissertation- the Department of Pharmaceutics and Drug Delivery, Rui Wang, Master Student

Spring 2018

1. Course Director and Instructor, PHAR 335 Clinical Laboratory analysis, one credit – PharmD P2 students.
2. Instructor, PHAR 749 Product Development, Master in Pharmaceutics and Drug Delivery students
3. Dissertation Advisor- Research Dissertation- the Department of Pharmaceutics and Drug Delivery, Neeraja Komanduri, Ph. D. Student
4. Dissertation Advisor- Research Dissertation- the Department of Pharmaceutics and Drug Delivery, Prasad Vinjamuri, Ph. D. Student
5. Dissertation Advisor- Research Dissertation- the Department of Pharmaceutics and Drug Delivery, Pranav Ponkshe, Master Student
6. Dissertation Advisor- Research Dissertation- the Department of Pharmaceutics and Drug Delivery, Ruchi Thakkar, Master Student
7. Dissertation Advisor- Research Dissertation- the Department of Pharmaceutics and Drug Delivery, Tarul Mulay, Master Student
8. Dissertation Advisor- Research Dissertation- the Department of Pharmaceutics and Drug Delivery, Sushrut Marathe, Master Student

Fall 2017

1. Course Director and Instructor, PHAR 330 Pharmaceutical Calculations, one credit - P1 students.
2. Course Director and Instructor, PRCT 353 Practice Skills Laboratory I, two credit -P1 students
3. Dissertation Advisor- Research Dissertation- the Department of Pharmaceutics and Drug Delivery, Prasad Vinjamuri, Ph. D. Student
4. Dissertation Advisor- Research Dissertation- the Department of Pharmaceutics and Drug Delivery, Pranav Ponkshe, Master Student
5. Dissertation Advisor- Research Dissertation- the Department of Pharmaceutics and Drug Delivery, Ruchi Thakkar, Master Student
6. Dissertation Advisor- Research Dissertation- the Department of Pharmaceutics and Drug Delivery, Tarul Mulay, Master Student
7. Dissertation Advisor- Research Dissertation- the Department of Pharmaceutics and Drug Delivery, Sushrut Marathe, Master Student

Spring 2017

1. Course Director and Instructor, PHAR 335 Clinical Laboratory Data Analysis, one credit – PharmD P2 students.
2. Instructor, Ch E 515 Research Seminar graduate course, Multifunctional bio-polymer nanocarriers based nanocarrier therapy for lung cancer April 27, 2017

Fall 2016

Instructor, PHAR 749 Product Development, Master in Pharmaceutics and Drug Delivery students

Teaching as Instructor of Record at the Daniel K. Inouye College of Pharmacy, the University of Hawaii at Hilo, HI

08/2010–07/2016

[500 courses are offered in the PharmD program, 600 courses are offered in the M.S. program, and 700 and higher number courses are provided in the Ph. D. program]

Spring 2016

1. Course Coordinator and Lecturer in PHPS -506 Pharmaceutics II, three credits – P1 students.
2. Co-director and Lecturer, PHPS -601 Pharmaceutical Course, seven credits – M.S. Clinical Psychopharmacology students. Online distance learning course

3. Dissertation Advisor- PHPS -800 Research Dissertation-Pharmaceutical Sciences six credits, Susanne Youngren-Ortiz, Ph. D. Student
4. Dissertation Advisor- PHPS -800 Research Dissertation- Pharmaceutical Sciences six credits, Micah D.K. Glasgow, Ph. D. Student
5. Dissertation Advisor- PHPS -800 Research Dissertation- Pharmaceutical Sciences, 12 credits, Nishant Gandhi, Ph. D. Student

Fall 2015

1. Course Coordinator and Lecturer in PHPS -505 Pharmaceutics, three credits –first-year year (P1) students.
2. Lecturer in P.H.P.S. - 540 Drug Action, two credits – P1 students.
3. Lecturer in PHPP -550 History of Pharmacy, two credits –PharmD second year (P2) students
4. Dissertation Advisor- PHPS -800 Research Dissertation- Pharmaceutical Sciences, six credits, Susanne Youngren-Ortiz, Ph. D. Student
5. Dissertation Advisor- PHPS -800 Research Dissertation- Pharmaceutical Sciences, six credits, Micah D.K. Glasgow, Ph. D. Student
6. Dissertation Advisor- PHPS -800 Research Dissertation- Pharmaceutical Sciences, 12 credits, Nishant Gandhi, Ph. D. Student

Spring 2015

1. Course Coordinator and Lecturer in PHPS -506 Pharmaceutic-II, three II credits – P1 students
2. Course Co-coordinator and Lecturer, PHPS -598 Aerosol Physics Medicines, one credit – PharmD second year (P2) students. New Course
3. Course Co-coordinator and Lecturer, PHPS -798 Advanced Inhaled Drug Therapy, one credit – Ph. D. students, New Course
4. Co-director and Lecturer, PHPS -601 Pharmaceutical Course, credits – M.S. Clinical Psychopharmacology students. Online distance learning course
5. Dissertation Advisor- PHPS -800 Research Dissertation-Pharmaceutical Sciences, 12 credits, Susanne Youngren-Ortiz, Ph. D. Student
6. Dissertation Advisor- PHPS -800 Research Dissertation- Pharmaceutical Sciences, 14 credits, Micah D.K. Glasgow, Ph. D. Student
7. Dissertation Advisor- PHPS -800 Research Dissertation- Pharmaceutical Sciences, ten credits, Nishant Gandhi, Ph. D. Student

Fall 2014

1. Course Coordinator and Lecturer in PHPS -505 Pharmaceutics, three credits – P1 students
2. Lecturer in PHPS -512 Introduction to the Pharmaceutical Sciences, three credits – P1 students
3. Lecturer in PHPP -550 History of Pharmacy, two credits –P2 students
4. Dissertation Advisor- PHPS -800 Research Dissertation- Pharmaceutical Sciences, 12 credits, Susanne Youngren-Ortiz, Ph. D. Student
5. Dissertation Advisor- PHPS -800 Research Dissertation- Pharmaceutical Sciences, 14 credits, Micah D.K. Glasgow, Ph. D. Student
6. Dissertation Advisor- PHPS -800 Research Dissertation- Pharmaceutical Sciences, 12 credits, Nishant Gandhi, Ph. D. Student

Spring 2014

1. Course Coordinator and Lecturer in PHPS -506 Pharmaceutics II, three credits – P1 students
2. Course Coordinator and Lecturer in PHPS -756 Advance Pharmaceutics II, three credits – First year Ph. D. students
3. Co-director and Lecturer, PHPS -601 Pharmaceutical Course, seven credits – M.S. Clinical Psychopharmacology students. Online distance learning course
4. Dissertation Advisor- PHPS -800 Research Dissertation-Pharmaceutical Sciences, 12 credits, Susanne Youngren-Ortiz, Ph. D. Student
5. Dissertation Advisor- PHPS -800 Research Dissertation- Pharmaceutical Sciences, 14 credits, Micah D.K. Glasgow, Ph. D. Student
6. Dissertation Advisor- PHPS -800 Research Dissertation - Pharmaceutical Sciences, ten credits, Nishant Gandhi, Ph. D. Student

Fall 2013

1. Lecturer in PHP -505 Pharmaceutics I, three credits – P1 students
2. Lecturer in PHPS -512 Introduction to Pharmaceutical Sciences, three credits – P1 students.
3. Lecturer in PHPP -550 History of Pharmacy, two credits – P2 students
4. Lecturer in PHPS -750 Overview of the Pharmaceutical Sciences, three credits – First-year Ph. D. students
5. Course Coordinator and Lecturer in PHPS -755 Advance Pharmaceutics I, three credits – First year Ph. D. students
6. Dissertation Advisor- PHPS -800 Research Dissertation- Pharmaceutical Sciences, 12 credits, Susanne Youngren-Ortiz, Ph. D. Student
7. Dissertation Advisor- PHPS -800 Research Dissertation- Pharmaceutical Sciences, 12 credits, Micah D.K. Glasgow, Ph. D. Student
8. Dissertation Advisor- PHPS -800 Research Dissertation- Pharmaceutical Sciences, eight credits, Nishant Gandhi, Ph. D. Student

Spring 2013

1. Course Coordinator and Lecturer in PHPS -506 Pharmaceutics, three credits – P1 students
2. Lecturer in PHPS -756 Advance Pharmaceutics II, three credits – First year Ph. D. students
3. Course Coordinator and Lecturer PHPS-599V Design of Nanocarrier for Chemotherapy, Directed Studies in Pharmaceutical Sciences, Research Elective course, two credits, P2 students
4. Co-director and Lecturer, PHPS -601 Pharmacological Course, seven credits – M.S. Clinical Psychopharmacology students. Online distance learning course
5. Dissertation Advisor- PHPS -800 Research Dissertation- Pharmaceutical Sciences, 11 credits, Susanne Youngren-Ortiz, Ph. D. Student
6. Dissertation Advisor- PHPS -800 Research Dissertation- Pharmaceutical Sciences, 12 credits, Micah D.K. Glasgow, Ph. D. Student
7. Dissertation Advisor- PHPS -800 Research Dissertation- Pharmaceutical Science, six credits, Nishant Gandhi, Ph. D. Student

Fall 2012

1. Lecturer in PHPS -505threePthreearmaceutics I, 3 credits – P1 students
2. Lecturer in PHPS -512 Introduction to the Pharmaceutical Sciences, three credits – P1 students.
3. Lecturer in PHPP -550 History of Pharmacy, two credits – P2 students
4. Course Coordinator and Lecturer in PHPS 755 -Advanced Pharmaceutics I, three credits – First year Ph. D. students
5. Lecturer in PHPS 750 – Overview of the Pharmaceutical Sciences, three credits – First year Ph. D. students
6. Dissertation Advisor- PHPS -800 Research Dissertation-pharmaceutical Sciences, ten credits, Susanne Youngren-Ortiz, Ph. D. Student
7. Dissertation Advisor- PHPS -800 Research Dissertation- pharmaceutical Sciences, nine credits, Micah D.K. Glasgow, Ph. D. Student

Spring 2012

1. Course Co-coordinator and Lecturer in PHPS -506 Pharmaceutics II, three credits – P1 students
2. Co-director and Lecturer, P.H.P.S. Pharmaceutical Course, Seven credits – M.S. Clinical Psychopharmacology students. New course. Online distance learning course
3. Course Co-coordinator and Lecturer in PHPS-756 Advance Pharmaceutics II, three credits, first-year PharmD students

Fall 2011

1. Course Co-coordinator and Lecturer PHPS -505 Pharmaceutics I, three credits – P1 students
2. Lecturer in PHPS -512 Introduction to the Pharmaceutical Sciences, three credits – P1 students
3. Lecturer PHPP -550 History of Pharmacy, two credits – P2 students
4. Course Co-coordinator and Lecturer in PHPS -755 Advance Pharmaceutics I, three credits - First-year PharmD students Course
5. Lecturer in PHPS -750 Overview of the Pharmaceutical Sciences, three credits– First year Ph. D students Course

Spring 2011

Course Co-coordinator and Lecturer in PHS -506 Pharmaceutics II, three credits – P1 students

Fall 2010

1. Lecturer three PHPS -505 Pharmaceutics I, three credits – P1 students
2. Lecturer in PHPS -512 Introduction to the Pharmaceutical Sciences, three credits – P1 students

Teaching as Instructor at the College of Pharmacy and Pharmaceutical Sciences, Florida A. and M. University, Tallahassee, FL

Spring 2010

Instructor PHA 311 Pharmaceutics II course, P1 students

Teaching as Instructor at the Pharmacy Department, the Maharaja Sayajirao University of Baroda, Vadodara, Gujarat, India

Spring 2005

1. Lecturer in the Pharmaceutics lab, Bachelor of Pharmacy, first-year students
2. Lecturer in the Pharmacology didactic and lab, Bachelor of Pharmacy, first-year students

Fall 2004

1. Lecturer in the Pharmaceutics lab, Bachelor of Pharmacy, first-year students
2. Lecturer in the Pharmacology didactic and l, ab, Bachelor of Pharmacy first-year students

M2. Development of New Curriculum Courses

The details of the developed courses are given below.

College of Pharmacy, Mercer University, Atlanta, GA

PHA 743 Foundations in Research course: After I joined in July 2021, I developed the new PHA 743 Foundations in Research course, three credit hours for graduate students. In the PHA 743 Foundations in Research, I have taught the fundamental concepts and scientific knowledge of research compliance at Mercer, bioethics in research, basic safety procedures in the laboratory, and statistical and study design principles useful in critically evaluating the biomedical literature for graduate students. In addition, this course is focused on the AACP Core Competencies for graduate students (Leadership, Communications, Professionalism, Integrity, Professional Development), literature review and evaluation, and regulatory affairs.

School of Pharmacy, University of Mississippi, University, MS

New integrated LandSharRx curriculum: LandSharRx curriculum courses development for PharmD and B.S. in Pharmaceutical Sciences program in collaboration with the faculty members from the Department of Pharmaceutics and Drug Delivery, Department of Biomolecular Sciences, Department of Pharmacy Practice, and Department of Pharmacy Administration.

1. PHCY 421 Pharmaceutics and Calculations I, three credits, PharmD and B.S. first-year program, 2017-18. I designed and developed the Pharmaceutics and Calculations I course for the new integrated curriculum. This course is designed to teach the basic principles of biopharmaceutical and pharmacokinetic properties necessary to understand pharmaceutical active ingredients, dosage forms, and their design. This course also focused on the pharmaceutical calculations involved in prescription and formulation development. This course was developed in collaboration with the Department of Pharmaceutics and Drug Delivery faculty members, the Department of Biomolecular Sciences, the Department of Pharmacy Practice, and the Department of Pharmacy Administration.
2. PHCY 422 Pharmaceutics and Calculations II, three credits, PharmD and B.S. first-year program, 2018-19. I was actively involved in designing and developing the Pharmaceutics and Calculations II course for the new integrated curriculum. This course is designed to teach various pharmaceutical dosage forms and calculations. This course also focused on the pharmaceutical calculations involved in prescription and formulation development.
3. P.H.C.Y. Integrated Systems – G.I./Nutrition, I chaired the committee and served as the department representative in the design and development of this course. In addition, I have actively contributed to developing this course for the new integrated curriculum. This block provides patient-centered care of G.I./Nutrition systems while serving as a collaborative interprofessional team member. It introduces basic pharmacology and medicinal chemistry concepts, mainly applied to gastrointestinal nutrition systems. Learning

involves teamwork. This course focuses on providing patient-centered care to gastrointestinal or nutrition patients.

4. PHCY 431 Social and Administrative Pharmacy I, three credits, PharmD and B.S. first-year program, 2017-18. I have contributed to and served as the department representative in designing and developing the Social and Administrative Pharmacy I course for the new integrated curriculum. The purpose of this course is to introduce you, in an organized way, to the complexity of human and social issues that exert a powerful influence on the pharmacy profession and the modern healthcare system, of which pharmacy is an important part.
5. PHCY 431 Social and Administrative Pharmacy I, three credits, PharmD and B.S. first-year program, 2017-18. I have actively contributed as the department representative in designing and developing the Social and Administrative Pharmacy I course for the new integrated curriculum. The purpose of this course is to introduce you, in an organized way, to the complexity of human and social issues that exert a powerful influence on the pharmacy profession and the modern healthcare system, of which pharmacy is an important part.
6. PHCY 432 Social and Administrative Pharmacy II, three credits, PharmD and B.S. first-year program, 2017-18. I designed and developed the Social and Administrative Pharmacy II course for the new integrated curriculum. This course is designed to provide students with a comprehensive review of the evaluation of pharmaceutical outcomes. In this course, the effects of drugs on patient populations will be examined. These courses also explore the mechanisms and approaches for improving medication safety in pharmacy practice.
7. PHCY 441 Pharmacists' Patient Care Process I and PCHY 442 Pharmacists' Patient Care Process II, two credits, PharmD and B.S. first-year program, 2017-18. I was involved in designing and developing Pharmacists' Patient Care Process I and II courses for the new integrated curriculum. This course introduces the foundational steps of patient care used by all pharmacists regardless of practice setting. This course emphasizes active learning for integrating and applying content and developing professional and general abilities. This course utilizes standard disease states to walk through the Pharmacists' Patient Care Process.
8. PHCY 441 Respiratory System, four credits, PharmD and B.S. first-year program, in 2017-18 designed and developed Respiratory System course for the new integrated curriculum. This module is designed to *provide patient-centered care* for the respiratory system. It introduces basic pharmacology and medicinal chemistry concepts, particularly those applied to the respiratory system. This course focuses on providing patient-centered care to patients with a respiratory-based disease status or issue. Learners develop, integrate, and apply knowledge from the foundational disciplines (i.e., pharmaceutical and clinical sciences) and use the Pharmacists' Patient Care Process in solving case-based scenarios of patients with cardiovascular issues.

Traditional curriculum courses development for PharmD and B.S. in Pharmaceutical Sciences program

The traditional curriculum co-developed for PharmD and B.S. in Pharma in the traditional curriculum pharmaceutical Science students.

9. PHAR 330 Pharmaceutical Calculations I, one credit, PharmD first-year program. I was responsible for the design development of this course. This course is focused on arithmetic skills and fundamentals of pharmaceutical measurement. It also introduces basic pharmaceutical calculations encountered in the contemporary practice of pharmacy.
10. PHAR 335 Clinical Laboratory Data Analysis, one credit – P1 and P2 students. I was responsible for the design development of this course. This course is focused on the enhancement of student's skills in clinical lab test interpretation. It also provides information on common laboratory tests used to screen for or diagnose disease, monitor the effectiveness and safety of the treatment, or assess disease severity.

Curriculum development for Ph. D. and Master program courses

Phar 741 Advanced Pharmaceutics, Master and Ph. D. students

Designed and developed an Advanced Pharmaceutics course. The course focuses on ionic equilibrium principles and mass transport applied to pharmaceutical systems. In addition, the principles and application of pharmaceutical analytical methods used for the analysis of pharmaceutical active ingredients

The Daniel K. Inouye College of Pharmacy, the University of Hawaii at Hilo, HI

The following courses were developed for PharmD students.

1. PHPS-599 Nanocarrier for Chemotherapy, Directed Studies in Pharmaceutical Sciences, Research Elective course, two credits (New course, Fall 2012, PharmD students), Role: Course Coordinator and Lecturer

2. Lecturer in P.H.P.S. - 540 Drug Actions I, two credits (New course, Fall 2015, PharmD first-year students), Role: Lecturer

The following courses were co-developed for Ph. D. students in collaboration with Dr. Kenneth Morris, Chairman and Professor of the Department of Pharmaceutical Sciences at the Daniel K. Inouye College of Pharmacy at the University of Hawaii at Hilo.

1. PHPS -755 Advance Pharmaceutics I, three credits (New course, Fall 2011 - Ph. D. students), Role: Course Co-coordinator and Lecturer
2. PHPS -756 Advance Pharmaceutics II, three credits (New course, Spring 2012 - Ph. D. students), Role: Course Co-coordinator and Lecturer

The following course was co-developed for Ph. D. students in collaboration with Dr. Anthony Wright, Associate Professor, Department of Pharmaceutical Sciences, the Daniel K. Inouye College of Pharmacy, the University of Hawaii at Hilo.

PHPS -750 Overview of the Pharmaceutical Sciences, three credits (New course, Fall 2011 - Ph. D. students), Role: Lecturer

The following courses were co-developed for PharmD and Ph. D. students in collaboration with Dr. Jolyon Mitchell, Director, Jolyon Mitchell Inhaler Consulting Service Inc., London, Canada.

1. PHPS -598 Aerosol Physics in Medicine: Inhaled Drug Therapy, one credit (New Course, P2 and PharmD third-year (P3) students), Role: Course Co-coordinator and Lecturer. Spring 2015
2. PHPS -798 – Advanced Inhaled Drug Therapy, one credit (New Course, Ph. D. students), Role: Course Co-coordinator and Lecturer. Spring 2015

N. ATTENDANCE AT UNIVERSITY/COLLEGE TEACHING WORKSHOPS

Synopsis: I have attended the following teaching and leadership workshops to learn and enhance my academic, administrative, and scientific skills.

1. The faculty search committee training at the Mercer University College of Pharmacy, August 5, 2024
2. Faculty Development session by Dr. Melissa Medina, Professor, Associate Dean of Assessment & Evaluation, and Director of Preparing Future Faculty, the University of Oklahoma College of Pharmacy, University of Mississippi, University, MS, June 15, 2018
3. Establishing Positive Learning Environments: Keeping the Customers Happy session Facilitated by Dr. Tom Zlatic, University of Mississippi, University, MS, June 16, 2017
4. Strategies for Fruitful Course Development session by Dr. Tom Zlatic, University of Mississippi, University, MS, June 16, 2017
5. Conflict Management Leadership Workshop, the University of Hawaii at Hilo, HI, February 28, 2015
6. Teaching Effectiveness Workshop, the Daniel K. Inouye College of Pharmacy, the University of Hawaii at Hilo, HI, August 22, 2014
7. Professional Development for Junior Academics/Professionals and Succeeding in your Academic or Professional Career Workshop offered by Prof. Rajesh Dave, Distinguished Professor of Chemical, Biological, and Pharmaceutical Engineering, New Jersey Institute of Technology, Newark, NJ, the Daniel K. Inouye College of Pharmacy, University of Hawaii at Hilo, HI, March 29, 2012

O. SUPERVISION AND MENTORING EXPERIENCES

Synopsis: The most significant impact of a T.A. teacher on a student's life is during the mentoring stage. I am proud to have met three faculty members: 11 postdoctoral/visiting fellows, 20 Ph. D. students, six master students, 20 PharmD or pharmacy students, four undergraduate students, and four high school students. I am an advisor and mentor of two Ph. D. students, an undergraduate and a high school student. I served on the dissertation committees of 13 PhD students. In addition, I am mentoring an undergraduate student. Notably, many of these students are pursuing careers in academia, the Pharmaceutical industry, higher education, or the pharmacy profession. A Ph.D. student mentored by me was successfully appointed to an Assistant Professor position and was promoted to Associate Professor and Department Chair. The detailed listings of mentored students, postdocs, and visiting scholars are given below.

Postdoc fellows and students' information **Semester**

Postdoctoral fellows/Research Associate/Visiting Scholars (Total 13)

Research Advisor and Mentor

College of Pharmacy, Mercer University, Atlanta, GA

1. Dr. Arun Kotha, Ph. D., Research Associate, University of Mississippi, Current position- Senior Research Fellow, University Mississippi School of Pharmacy — Fall 2021- Spring 2024

School of Pharmacy, University of Mississippi, University, MS

2. Dr. Arun Kotha, Ph. D., Research Associate, University of Mississippi, Current position- Senior Research Fellow — Spring 2019- Summer 2021
3. Dr. Krishna Chaturvedi, Visiting Research Associate, University of Mississippi, University, MS — Spring 2017-Fall 2018
4. Dr. Rohit Joshi, Ph. D., Research Associate, University of Mississippi, Current position-Postdoctoral Research Associate at Western University of Health Sciences, Pomona, CA — Spring 2017-Spring 2018
5. Dr. Rongbing Yang, Ph. D., Research Associate, University of Mississippi Current position- Researcher at Chinese University, China — Fall 2016-Spring 2018
6. Dr. Nishant Gandhi, Ph. D., Research Associate, University of Mississippi, Current position- Scientist at L.E.A.F. Pharmaceuticals, Boston, MA — Fall 2017-Spring 2018
7. Mrs. Smitha Varricatt. M. Sc. Microbiology, M. Phil. Current position- Master student — Spring 2015-Spring 2016
8. Mrs. Priya Patil. B.Sc. and M. Sc. Current position- Master Student, Arizona State University, Tempe, AZ — Spring 2016
9. Laura España-Serrano, Ph. D., Research Associate, University of Hawaii, Current position, Postdoctoral Researcher at University of Southampton, Southampton, United Kingdom
10. Rongbing Yang, Ph. D., Research Associate, University of Hawaii, Current position- Researcher at the Chinese's University, China — Fall 2014- Spring 2016
11. Rakesh Tekade, Ph. D., Postdoctoral fellow, Current position-assistant professor of the Department of Pharmaceutics, National Institute of Pharmaceutical Education and Research (N.I.P.E.R.) – Ahmedabad, Gujarat, India — Fall 2013-Fall 2017
12. Rahul Haware, postdoctoral fellow (Professional-mentor), Current position-Associate Professor, Long Island University – Brooklyn Campus Arnold & Marie Schwartz College of Pharmacy and Health Sciences, Brooklyn, New York — Spring 2012-Fall 2013
13. Rohit Mulik, Ph. D., Postdoctoral fellow, Current position- Formulation Scientist — Spring 2011-Spring 2012

Ph. D. and Master students (Total 20)

Ph.D. students: 11 and 8 M. S. student

Research Advisor and Mentor

College of Pharmacy, Mercer University, Atlanta, GA

1. Rama Kashikar, Ph. D. student
   Thesis title: Development of lipid nanocarriers for treating pulmonary diseases — Fall 2021- Spring 2024t
2. Snehitha Akkineni, Ph. D. student
   Thesis title: Extended-release Pharma Product for Treating Inflammatory Diseases — Fall 2023- Spring 2024
3. Sterling Neil, Ph. D. student, Gates Foundation Scholarship — Spring 2024-Present

Thesis title: Inhaled and parenteral particulate-based delivery systems for treating cancer and pulmonary diseases — Spring 2022-Spring 2023

4. Tro Thien Nguyen Ph. D. student
   Thesis title: Delivery of lipid-based products for treating breast cancer and COVID-19 — Fall 2022-Summer 2024
5. John Lee, Graduated, M. S. Pharmaceutical Sciences
6. Yash Harsoda, Master student — Fall 2023 – Present

School of Pharmacy, University of Mississippi, University, MS

7. Dr. Rama Kashikar, Ph. D. student — Fall 2020-Spring 2021
   Thesis title: Development of lipid and polymeric nanocarriers
8. Bhavana Charula, Master student — Fall 2020-Spring 2021
   Thesis title: Synthesis and evaluation of inhalable nanocarriers
9. Neeraja Kolmulari, Ph. D. student — Spring 2018-Spring 2021
   Thesis title: The Design and Evaluation of Sustained Release Drug Delivery Systems
10. Dr. Prasad Vinjamuri, Ph. D. student, graduated, joined Biogen, Boston — Fall 2017-Spring 2021
    Thesis title: The Quality by Design Approach for the Development and Evaluation of Nanocarriers for Lung Cancer
11. Rui Wang, Master student, graduated, current position- Ph.D. student at University of Tennessee Health Sciences, School of Pharmacy, Memphis, Tennessee — Spring 2018-Spring 2019
    Thesis title: Targeted nanocarriers for nanocarriers of the anti-asthmatic drug
12. Dr. Pranav Ponkshe, a Master's student, graduated, current position student at Univ of Mississippi School of Pharmacy — Spring 2017-Summer 2018
    Thesis title: Inhalation delivery nanoliposomes for pulmonary disorder
13. Ruchi Thakkar, Master's student, Graduated 2018, Current position, Ph. D. student at University of Mississippi School of Pharmacy — Spring 2017-Summer 2018
    Thesis title: Formulation and evaluation of liposomes for asthma therapy
14. Tarul Mulay, a Master's student, Graduated in 2018 cu. Current position- Formulation Research Associate, Precision BioSciences, Inc. Durham, North Carolina — Spring 2017-Summer 2018
    Thesis title: Bioengineered liposomes for asthma therapy
15. Sushrut Marathe, Master student, Graduated 2018, current position- Ph. D. student at University of Mississippi School of Pharmacy — Spring 2017-Summer 2018
    Thesis title: Development of polymeric nanocarriers for treating neuroblastoma, current position-PhD student

The Daniel K. Inouye College of Pharmacy, the University of Hawaii at Hilo

16. Dr. Susanne R. Youngren-Ortiz Graduated in 2016, current position- Formulation Scientist at Pfizer Pharmaceuticals. — Spring 2012-Spring 2016
    Thesis title: The Design and Characteristics of Nanocarriers of Asthma
17. Dr. Micah Glasgow. Graduated 2017, current position- Manager, Hilo Medical Center, Hilo, HI — Spring 2013-Fall 2017
    Thesis title: Development of hybrid Etoposide/Difluoromethylornithine nanoparticles for the treatment of neuroblastoma
18. Dr. Nishant Gandhi. Graduated 2017, Current position- Scientist at L.E.A.F. Pharmaceuticals, Boston, MA — Spring 2012-Spring 2017
    Thesis title: Development and Evaluation of Targeted Therapies for the Treatment of Lung Cancer

College of Pharmacy and Pharmaceutical Sciences, Florida A. and M. University, Tallahassee, FL

Research supervisor under the guidance of a primary advisor

19. Dr. Terrick Andy, Ph. D. in Pharmaceutical Sciences, Graduated 2014 — Fall 2009-Spring 2010
    Thesis title: Delivery of Nur agonists for lung cancer treatment. Current position- Associate Professor of Pharmaceutical Sciences - Massachusetts College of Pharmacy and Health Sciences University, Boston, MA.
20. Dr. Apurva Patel, M.S. in Pharmaceutical Sci and Ph. D. in Pharmaceutical Sciences, Graduated in 2013. — Fall 2008-Spring 2010
    Master thesis title: Delivery of PPAR-gamma agonists for lung cancer treatment. Ph.D. thesis title: Investigation of Anticancer Agents: D.I.M.- p-PhC6H5 and Noscapine. Current position- Formulation Scientist - R&D, Nesher Pharmaceutical U.S.A. (L.L.C.) - A Zydus Company, Bridgeton, MO

PharmD students (Total 17)

Advisor, Co-advisor, and Mentor

College of Pharmacy, Mercer University, Atlanta, GA

1. Kendall Johnson, 3rd-year PharmD student — Summer 2022
2. Ha Nguyen Trinh, 2nd year Pharmacy Student — Summer 2022

School of Pharmacy, University of Mississippi, University, MS

3. Jessie Frits PharmD, Current position- Pharmacist at retail pharmacy — Fall 2018-Fall 2020

The Daniel K. Inouye College of Pharmacy, the University of Hawaii at Hilo, HI

4. Jessica Lee, Current position- Retail Pharmacist at national chain pharmacy stores — Spring 2015-Summer 2026
5. Katie Post, Current position- Retail Pharmacist at national chain pharmacy stores — Summer 2022
6. Anissa Marzuki, Current position- Retail Pharmacist at national chain pharmacy stores — Fall 2013-Fall 2014
7. Amber Goodloe, Current position- Retail Pharmacist at national chain pharmacy stores — Fall 2012-Spring 2013
8. Jenny Ramos. Current position- Retail Pharmacist at national chain pharmacy stores — Fall 2012-Spring 2013
9. Brianne Gustilo, Current position- Retail Pharmacist at national chain pharmacy stores — Fall 2012-Spring 2013
10. Ashfaq Mohammad. Current position- Retail Pharmacist at national chain pharmacy stores — Spring 2013
11. Byoung Jun, Current position- Retail Pharmacist at national chain pharmacy stores — Fall 2011-Spring 2012
12. Amanda Wendel, Current position- Retail Pharmacist at national chain pharmacy stores — Fall 2013-Spring 2014
13. Samantha Hanabaga, Current position- Retail Pharmacist at national chain pharmacy stores — Fall 2013-Spring 2014
14. Chang Sami Current position- Retail Pharmacist at national chain pharmacy stores — Fall 2013-Spring 2014
15. Francis Sakai-Kawada, Current position- Retail Pharmacist at national chain pharmacy stores — Fall 2013-Spring 2014

16. Eric Tsuji Current position- Retail Pharmacist at national chain pharmacy stores — Fall 2013-Spring 2014
17. Sean Pfundstein, Current positions- Retail Pharmacist at national chain pharmacy stores — Fall 2013-Spring 2014

High School students (Total 5)

Research Advisor and Mentor

College of Pharmacy, Mercer University, Atlanta, GA — Summer 2022 and 2023

1. Yash Vyavahare, High School student, Memphis, Tennessee — Summer 2023
2. Aaditya Jagtap, High School student, San Francisco, California

School of Pharmacy, University of Mississippi

3. Akshaya Vijay, Oxford High School, Oxford — Fall 2017-Spring 2018

The Daniel K. Inouye College of Pharmacy, the University of Hawaii at Hilo

4. Natalie Hagemann, Kea'au High School, Hilo. — Spring 2012-Fall 2013

The College of Pharmacy and Pharmaceutical Sciences, Florida A. and M. University, Tallahassee, FL

5. Dr. Pratik Sachdeva, High School, Tallahassee, FL. Current position- graduated, PhD in physics and currently postdoctoral Scholar at the University of California at Berkley — Summer 2009

Graduate Student's dissertation or Thesis Advisory Committees (Total 27)

Department of Pharmaceutical Sciences, Mercer University College of Pharmacy — Fall 2021 – Present

1. Sharvari Kshirsagar, PhD student in the Department of Pharmaceutical Sciences, Mercer University College of Pharmacy
2. Nisha Shrestha, PhD student in the Department of Pharmaceutical Sciences, Mercer University College of Pharmacy
3. Sarthak Shah, PhD student in the Department of Pharmaceutical Sciences, Mercer University College of Pharmacy
4. Jaslyn C. Joseph, Master student in the Department of Pharmaceutical Sciences, Mercer University College of Pharmacy
5. Ruchi Kiran Singh Rautela, Master student in the Department of Pharmaceutical Sciences, Mercer University College of Pharmacy
6. Dr. Priyal Bhagwe, PhD student in the Department of Pharmaceutical Sciences, Mercer University College of Pharmacy
7. Dr. Deepal Vora, PhD student in the Department of Pharmaceutical Sciences, Mercer University College of Pharmacy
8. Smital Patil, PhD student in the Department of Pharmaceutical Sciences, Mercer University College of Pharmacy
9. Dr. Amruta Dandekar, PhD student in the Department of Pharmaceutical Sciences, Mercer University College of Pharmacy
10. Sharon Christina Pearline Vijayanand, PhD student in the Department of Pharmaceutical Sciences, Mercer University College of Pharmacy
11. Dr. Ahasanul Hasan, PhD student in the Department of Pharmaceutical Sciences, Mercer University College of Pharmacy
12. Dr. Dhanashree Selvan, Ph. D. student, Graduated Department of Chemistry and Biochemistry, College of Liberal Arts, University of Mississippi
13. Dr. Gauri Shadambikar, School of Pharmacy, University of Mississippi, University, MS

14. Dr. Sushrut Marathe, School of Pharmacy, University of Mississippi, University, MS

School of Pharmacy, University of Mississippi, University, MS Fall 2016 – Summer 2021

15. Dr. Ajinkya M. Bhagurkar, Ph. D. student, School of Pharmacy, University of Mississippi, University, MS
16. Dr. Priyanka Thipsay, Ph. D. student, School of Pharmacy, University of Mississippi, University, MS
17. Dr. Prit M. Lakhani, Ph. D. student, School of Pharmacy, University of Mississippi, University, MS
18. Dr. Akash Patil, Ph. D. student, School of Pharmacy, University of Mississippi, University, MS
19. Dr. Anh Vo, Ph. D. student, School of Pharmacy, University of Mississippi, University, MS
20. Dr. Jiaxiang Zhang, Ph. D. student, School of Pharmacy, University of Mississippi, University, MS
21. Dhanashree Selvan, Ph. D. student, Department of Chemistry and Biochemistry, College of Liberal Arts, University of Mississippi
22. Mittal Darji, Master student, School of Pharmacy, University of Mississippi, University, MS
23. Anggrida Saragih, Master student, School of Pharmacy, University of Mississippi, University, MS
24. Adwait Pradhan, Master student School of Pharmacy, University of Mississippi, University, MS
25. Ahmed Almutari, Master student, School of Pharmacy, University of Mississippi, University, MS
26. Maha Alkurdi, Master student, School of Pharmacy, University of Mississippi, University, MS

Daniel K. Inouye College of Pharmacy, the University of Hawaii at Hilo

27. Mayuramas Sang-ngern, Ph. D. candidate Fall 2011– Summer 2016

P. STUDENT AWARDS, HONORS, AND RECOGNITION

Synopsis: On several occasions, my students' work has been selected for prizes or other recognition. Under my mentorship, Ph. D. students received the following awards.

1. 2020 AAPS FDD section poster award to Rama Kashikar for the research focused on nanoliposome inhalation delivery, 2020 AAPS PharmSci 360 meeting, October 26-November 5, 2020.
2. 2014 University of Hawaii at Hilo A.L.E.X. travel award of $ 1,800 to Micah Glasgow to present a research poster entitled "Modeling and validation of material properties of crystalline particles: formation and stability under stress" at the 2014 AAPS Annual Meeting and Exposition, San Diego Convention Center, San Diego, CA, Nov 2-6, 2014
3. 2014 Walter Francis and Mary Dillingham Frear Scholarship of $2,000 to Micah Glasgow in support of Ph. D. education and dissertation research project
4. 2014 AAPS FDD section travel award of $750 to Youngren SR to present a poster entitled "Formulation and characterization of STAT6 siRNA matrix-loaded gelatin nanocarriers" at Annual Meeting and Exposition, San Diego Convention Center, San Diego, CA, Nov 2-6, 2014
5. 2014 Liko A'e A'eive Hawaiian Leadership Scholarship of $5,500 to Micah Glasgow in support of Ph. D. education and dissertation research project
6. 2014 Dr. Hans and Clara Zimmerman Foundation Health Scholarship of $2,700 to Micah Glasgow in support of Ph. D. education and dissertation research project.
7. 2014 George and Lucille Cushnie Scholarship Fund of $2,500 to Micah Glasgow in support of Ph. D. education and dissertation research project

8. 2014 Na Ho'oHo'okahuaartment of Education Award of $10,000 to Micah Glasgow in support of Ph. D. education and dissertation research project
9. 2013 University of Hawaii at Hilo A.L.E.X. travel award of 1,800 to Youngren SR to present a research poster entitled "Development of gelatin nanocarriers for the delivery of STAT-6 siRNA" at the 40th Annual Meeting and Exposition of the Controlled Release Society, Honolulu, HI, Jul 21-24, 2013
10. 2013 AAPS BIOTEC section travel award of $ 500 and 2013 University of Hawaii at Hilo A.L.E.X. travel award of $1,800 to Youngren SR to present a poster entitled "STAT6 siRNA encapsulated gnanocarriersarriers: Formnanocarriersracterization, and in vitro proof of concept using adenocarcinomic human alveolar basal epithelial cell line" at "the 2013 AAPS National Biotec Conference, San Diego, CA, May 20–22, 2013
11. 20,13 The Daniel K. Inouye College of Pharmacy, University of Hawaii at Hilo leadership fund award of $ 10,000 to Ph. D. students in the University of Hawaii at Hilo AAPS Student Chapter to attend and present research posters at the 40th Annual Meeting and Exposition of the Controlled Release Society, Honolulu, HI, Jul 21-24, 2013
12. 2013 Na Ho'oHo'okamaauahi Scholarship of $8,000 to Micah Glasgow in support of Ph. D. education and dissertation research project
13. 2013 University of Hawaii at Hilo Alumni Scholarship Award of $2,500 to Micah Glasgow in support of Ph. D. education and dissertation research project
14. 2013 the University of Hawaii at Hilo A.L.E.X. travel award of $1,800 to Micah Glasgow to attend the 40th Annual Meeting of the Controlled Release Society, Honolulu, HI, Jul 21-24, 2013
15. 2013 Ke Ola Mau Scholarship of $3,400 to Micah Glasgow in support of Ph. D. dissertation
16. 2013 Shelley M. Williams, RPh Scholarship Fund of $1,000 to Micah Glasgow in support of Ph. D. education and dissertation research project
17. 2013 University of Hawaii at Hilo Opportunity Grant of $1,000 to Micah Glasgow in support of Ph. D. education and dissertation research project
18. 2013 Dr. Hans and Clara Zimmerman Foundation Health Scholarship of $2,400 to Micah Glasgow in support of Ph. D. education and dissertation research project
19. 2013 Walter Francis and Mary Dillingham Frear Scholarship of $2,000 to Micah Glasgow in support of Ph. D. education and dissertation research project
20. 2012 Ke Ola Mau Scholarship of $3,000 to Micah Glasgow in support of Ph. D. education and dissertation research project
21. 2012 University of Hawaii at Hilo Opportunity Grant of $1,000 to Micah Glasgow in support of Ph. D. education and dissertation research project
22. 2012 Rosemary and Nellie Ebrie Fund Scholarship of $1,000 to Micah Glasgow in support of Ph. D. education and dissertation research project
23. 2012 Na Ho'oHo'okamaauahi Scholarship of $8,000 to Micah Glasgow in support of Ph. D. education and dissertation research project
24. 2012 Dr. Hans and Clara Zimmerman Foundation Health Scholarship of $2,400 to Micah Glasgow in support of Ph. D. education and dissertation research project

Q. SERVICE EXPERIENCES AND ACCOMPLISHMENTS

Synopsis: I have served as a chair/co-chair, secretary, and member on 52 departmental, college, and university committees and successfully achieved the service goals. I was Chair, Co-Chair, or member of several college, University, national, and international committees at Mercer University College of Pharmacy, Atlanta, GA, University of Mississippi School of Pharmacy, University of Hawaii at Hilo College of Pharmacy, and the University of Hawaii Cancer Center. I have one and half years of enriched experience in identifying, planning, and implementing Diversity Equity and Inclusion (DEI) initiatives and activities for College of Pharmacy faculty, staff, and students while serving as chair (2024-25) and co-chair (2023-24), of the Standing DEI Committee. From 2026 to 2021 at the University of Mississippi, my leadership role as a Co-chair of the curriculum committee resulted in the design, development, evaluation, and assessment of a new integrated PharmD curriculum. The new integrated curriculum was successfully implemented in Fall 2the 01of 8. In addition, I served as a secretary of the curriculum committee and a member of the professional conduct council review committee. While serving on the By-Laws committee as a Chair for three years, I have considered suggestions of faculty and staff members to the Committee members for further discussion. As a committee, we approve the revised by-laws to implement staggered terms of service in the self-nomination process for committee member selection faculty members. I also chaired the Faculty Search Committee and served as a Faculty

Search Committee. At the international level, I have organized and chaired three conference sessions. In addition, I was a member of the Technical Program Committee of 2 scientific conferences. I have served as a referee for 41 international peer-reviewed journals. While interacting with the pharmaceutical industry, I have established an industrial consultancy agreement with Sun Pharmaceutical Advanced Research Company Ltd., a leading pharmaceutical company, to conduct the contract research project. My international-level service includes serving as theme issue editor for three well-known international journals and as an Editorial Board Member of 6 journals. Several manuscripts were reviewed, and those were submitted to well-reputed pharmaceutical and biomedical journals. I have organized and chaired three conference sessions. In addition, I was a member of the Technical Program Committee of 2 scientific conferences.

I have served as a referee for 41 international peer-reviewed journals. In addition, I have reviewed six book proposals, several scientific conference abstracts, and 5 Ph.D. theses. I was also a founding advisor of the AAPS Student Chapter. I also served as a committee member for nine master's and 11 Ph. .D. students' dissertation research work and community services. The national expert guest speakers are invited to deliver their presentations, which the UHH AAPS Student Chapter organizes. These seminars helped students, faculty, and community members acquire current and up-to-date information in biomedical research. I served as the Pharmacy Student Council president and class representative during my bachelor's studies.

Q1. Service to the Department, School, and the University

Mercer University College of Pharmacy, Atlanta, GA

Department and School Committees

Fall 2024-Present

1. Chair, Diversity, Equity, and Inclusion Committee for Student Academic Success
2. Member, Assessment Committee
3. Member of University-wide House of Delegates Research Committee
4. Member, Judicial Hearing Board (Atlanta, Douglas, Henry counties)

Fall 2023-Summer 2024

1. Vice-chair, Diversity, Equity, and Inclusion Committee for Student Academic Success
2. Member, Assessment Committee
3. Member, Judicial Hearing Board (Atlanta, Douglas, Henry counties)
4. Member of University-wide House of Delegates Research Committee

Fall 2022-Summer 2023

1. Member, Assessment Committee
2. Member Diversity, Equity, and Inclusion Committee for Student Academic Success
3. Member, Judicial Hearing Board (Atlanta, Douglas, Henry counties)
4. Member, Search Committee for Associate Professor of Pharm. Sci.
5. P.D.N. advisor for PharmD students

Fall 2021-Summer 2022

1. Member, Judicial Hearing Board (Atlanta, Douglas, Henry counties)
2. Member, Search Committee for the faculty with Internal Medicine Expertise
3. Member, Search Committee for the faculty with Health Economics and Outcomes Research
4. P.D.N. advisor for PharmD students

University of Mississippi School of Pharmacy, University, MS

Department and School Committees

Fall 2020- Spring 2021

1. Member, Curriculum Committee
2. Member, Standing Committees Task Force
3. Member, Search Committee for Research Associate
4. Member, Curricular Transformation Subcommittee

Fall 2019-Spring 2020

1. Co-chair and Member Curriculum Committee
2. Member, Curricular Transformation Subcommittee

3. Member, Standing Committees Task Force
4. Member, Respiratory Systems course development subcommittees
5. Member, Complex Patient Care I and II course development subcommittees
6. Member, Multisystem Complex Patient Care course development subcommittees
7. Member, Search Committee for Research Scientist

Fall 2018- Spring 2019

1. Member, Curriculum Committee
2. Member, Curricular Transformation Subcommittee
3. Member, Standing Committees Task Force
4. Professional Conduct Council Review Committee
5. Leader and Member, G.I./Nutrition course development subcommittees
6. Member, Multisystem Complex Patient Care course development subcommittees
7. Member, Complex Patient Care I and II course development subcommittees
8. Member, Respiratory Systems course development subcommittees

Fall 2017-Spring 2018

1. Member, Faculty search committee for Associate Dean of Academic Affairs
2. Member, Curriculum Committee
3. Member, Curricular Transformation Subcommittee
4. Leader and Member, G.I./Nutrition course development subcommittees
5. Member, Multisystem Complex Patient Care course development subcommittees
6. Member, Complex Patient Care I and II course development subcommittees
7. Member, Respiratory Systems course development subcommittees

Fall 2016-Spring 2017

1. Secretary and Member, Curriculum Committee
2. Member, Curricular Transformation Subcommittee
3. Member, Course development for new curriculum subcommittees for Curricular Transformation Subcommittee
4. Member, Course development for new curriculum subcommittees for Curricular Transformation Subcommittee

University of Hawaii at Hilo College of Pharmacy, Hilo, HI

Fall 2015-Spring 2016

1. Member, By-Laws Committee
2. Member, Student Scholarship and Awards Committee
3. Member, Distance Learning & Education Technology Committee
4. Member, Ph. D. Curriculum Committee
5. Faculty advisor for Class of 2019 students, eight students, Sean Janeway, Sydney Barney, Ashley Trieu, Jessica Regpala, Preston Ho, Nicholas Tsoi, Jessie Lam, Mandy Lui, and Desiree Shouse

Fall 2014 - Spring 2015

1. Chair, Faculty Search Committee, Instructor Pharmacology
2. Chair, By-Laws Committee
3. Member, Student Scholarship and Awards Committee
4. Member, Faculty Search Committee, Director of Community and International Partnerships.
5. Member, Ph. D. Curriculum Committee
6. Faculty advisor for Class of 2015 students, eight students, Gabriel Jozelle, Wigmosta, Eric Lo, Kristina Nguyen, Thai Takahashi, Kacie Jung, Eun Hae, Fukumitsu Ryan, and Ibrahim Mina

Fall 2013 - Spring 2014

1. Chair, By-Laws Committee.
2. Member, Student Scholarship and Awards Committee
3. Faculty advisor for Class of 2015 students, eight students, Gabriel Jozelle, Wigmosta, Eric Lo, Kristina Nguyen, Thai Takahashi, Kacie Jung, Eun Hae, Fukumitsu Ryan, and Ibrahim Mina
4. Faculty co-advisor for Class of 2013 students, a total of 7 students, Reiss Brandon K, Huynh Louis D, Ayson Truong, Anh Sasaki, Matthew A Tsuji, Michael Setsuo, and Lee Trisha.

Fall 2012 - Spring 2013

1. Chair, By-Laws Committee
2. Member, Student Scholarship and Awards Committee
3. Member, Promotion and Tenure Guideline Committee
4. Member, Faculty Search Committee, Assistant Professor of Pharmaceutical Sciences (Medicinal Chemistry)
5. Member, Faculty Search Committee, Assistant Professor of Pharmaceutical Sciences (Pharmacology)
6. Faculty advisor for Class of 2015 students, a total of 8 students, Gabriel Jozelle, Wigmosta, Eric Lo, Kristina Nguyen, Thai Takahashi, Kacie Jung, Eun Hae, Fukumitsu Ryan, and Ibrahim Mina
7. Faculty co-advisor for Class of 2013 students, a total of 7 students, Reiss Brandon K, Huynh Louis D, Ayson Truong, Anh Sasaki, Matthew A Tsuji, Michael Setsuo, and Lee Trisha

Fall 2011 - Spring 2012

1. Member, By-Laws Committee
2. Member, Graduate Sciences Education, Graduate Student Affairs and Joint Degree Programs Committee
3. Faculty advisor for Class of 2015 students, a total of 8 students, Gabriel Jozelle, Wigmosta, Eric Lo, Kristina Nguyen, Thai Takahashi, Kacie Jung, Eun Hae, Fukumitsu Ryan, and Ibrahim Mina
4. Faculty co-advisor for Class of 2013 students, a total of l 7 students, Reiss Brandon K, Huynh Louis D, Ayson Truong, Anh Sasaki, Matthew A Tsuji, Michael Set,suo and Lee Trisha

Fall 2010 - Spring 2011

1. Member, By-Laws Committee
2. Member, Promotion and Tenure Guideline Committee

College Committees or Service at the Wadhawani College of Pharmacy, Yavatmal, Maharashtra, India.

Fall 2000-Spring 2001

President of Pharmacy Student Council.

Fall 1999-Spring 2000

Class Representative, a third-year Bachelor of Pharmacy class.

Judging scientific posters at the University of Mississippi

1. Research Symposium Judge: Graduate Student Council's Annual Research Symposium, Graduate Student Council and U.M. graduate students, University, MS, March 2019
2. Research Symposium Judge: Graduate Student Council's Annual Research Symposium, Graduate Student Council and U.M. graduate students, University, MS, March 2, 2017

Service to the State of Mississippi

Served as the judge at the Science Fair: Mississippi Region VII Science Fair, University, MS, March 23, 2017

Q2. Additional service to the University

University of Mississippi School of Pharmacy

Participation in Student events and activities at the University of Mississippi

1. *Participant*, AAPS Student Chapter community activities
2. *Participant*, AAPS Student Chapter activity, meeting with faculty

External Speaker Hosting - the University of Mississippi School of Pharmacy

1. Professor Juan L. Vivero-Escoto, University of North Carolina Charlotte, April 20, 2017
2. Professor Tao L. Lowe, The University of Tennessee Health Science Center, Planned in the fall of 2019
3. Professor Ajay Singh, U.S.A. Health Center, April 20, 2017, Planned in Fall 2019

Interviewing/Reviewing

1. *Reviewer,* 2019 Graduate Council research proposals, Jan-Feb 2019
2. *Interviewer*, Pharmacy Applicant Interview Days, January 2019
3. *Interviewer*, Pharmacy Applicant Interview Days, January 2018
4. *Interviewer*, Pharmacy Applicant Interview Days, January 2017

The University of Hawaii at Hilo College of Pharmacy

Fall 2014

1. Advisor for University of Hawaii at Hilo AAPS Student Chapter in the Annual Healthy Keiki Fun Run, Health Services Academy of Waiakea High School, Hilo, HI, December 14, 2013

Spring 2013

2. Organization and participation in the University of Hawaii at Hilo AAPS Student Chapter at The Daniel K. Inouye College of Pharmacy, the University of Hawaii at Hilo annual health fair, Hilo, HI, October 13, 2013

External Speaker Hosting - the University of Hawaii at Hilo College of Pharmacy

1. Mr. Bruce Stouffer, Director in Analytical and Bioanalytical Development at Bristol Myers- Squibb, "The Role of Selective Integration in BioPharma Transformation," Overview of the Pharmaceutical Industry, career opportunities, and scientific challenges within the bioanalytical field, February 1, 2014
2. Dr. Giovanna Bermano, Senior Lecturer, Theme Leader for Cardiovascular and Metabolic Diseases (C.V.M.D.), Institute for Health and Welfare Research (I.H.W.R.), "Obesity, inflammation, and antioxidant status: do they play a role in cancer development/progression?", July 31, 2013
3. Dr. Yashwant Pathak, Professor and Associate Dean for Faculty Affairs, College of Pharmacy, University of South Florida Health, "Nan" is Too Big: Nanoparticulate drug delivery systems applications and challenges," July 26, 2013
4. Dr. Kevin Rice, Professor of Medicinal & Natural Chemistry and Professor of Pharmaceutics, University of Iowa, "Development of Non-Viral Gene Delivery Vectors for the Liver," July 19, 2013
5. Dr. Jolyon Mitchell, Scientific Director, Trudell Medical International, "Present Regulatory Guidance, Standards and Pharmacopeial Landscape for Orally Inhaled Products," February 26, 2013
6. Dr. Jolyon Mitchell, Scientific Director, Trudell Medical International, "Clinically Appropriate Methods for the Laboratory Evaluation of Orally Inhaled Products (O.I.P.s)," March 14, 2012

Q3. Service the facilities and the expertise of the University available to the larger society

Industrial consultancy and contracts

1. Sun Pharmaceutical Advanced Research Company Ltd, Baroda, Gujarat, India: The consultancy agreement with Sun Pharmaceutical Advanced Research Company Ltd., Baroda, Gujarat, India, has been established. The contract research projects will focus on formulation design, drug delivery systems, nanoparticles, aerosols, drug powder inhalers, and developing small molecular inhibitors in collaboration with Sun Pharmaceutical Advanced Research Company Ltd. In addition, I will provide expertise for evaluating newer therapeutic agents and developing targeted delivery systems.
2. Tamir Biotechnology, Inc., San Diego, CA: The agreement with Tamir Biotechnology, Inc. San Diego, CA, is in the final processing step. The contract research projects will focus on drug delivery systems, formulation design, and delivery of biotechnology-based therapies in collaboration with Tamir Biotechnology, Inc., San Diego, CA. I will also serve as a consultant to provide expert inputs on the delivery of siRNA or peptide drug systems and the development of targeted delivery systems.
3. Medicxi Ventures, W1F 9LT London, United Kingdom, a European venture capital group associated with G.S.K., J&J, Google and Novartis. As a consultant, I provided expert inputs on the intranasal delivery of siRNA for human diseases.

Q4. Editorial Positions

Synopsis: I have served as a guest editor for five theme issues. I am the editorial board member of 5 international journals.

Guest Editor

1. Molecular Pharmaceutics, Theme issue - Interdisciplinary integration of biomaterials for drug and gene therapy	2021-Present 2017-2018
2. AAPS PharmSciTech, Theme issue - Translational multidisciplinary and gene delivery systems	2018-2019
3. Drug Development and Industrial Pharmacy, Theme issue - Targeted nanomedicine translational and industrial application	
4. AAPS PharmSciTech, Theme issue -Translational application of nano delivery systems: emerging cancer therapy	2014-2015
5. Journal of Biomolecular Research and Therapeutics, Theme issue - Nanotechnology based targeted delivery system	2013-2014

Editorial Board Memberships

1. Frontiers in Respiratory Pharmacology, part of the journal(s) Frontiers in Pharmacology	2018-present
2. Drug Development and Industrial Pharmacy	2014-present
3. Journal of Nanophamaceutical Delivery	2013-present
4. Advanced Science, Engineering, and Medicine	2013-present
5. AAPS PharmSciTech, An official journal of AAPS	2012-present

Q5. Service-Symposium Organization, Journal, Book, and International Thesis Reviewer

Synopsis: I have served on conference scientific program committees as an organizer, chair, moderator, and speaker at international scientific conferences. Also, I served as an editor of a book, an expert ad-hoc grant proposal reviewer on N.I.H. and DoD panels, a reviewer of 10 Ph.D. theses, an ad-hoc reviewer of research or review articles of 40+ international well-reputed high-impact factor journals and an international evaluator of 6 book proposals.

Conference Session Chair and Organization

1. Chair and organize a technical session on "Targeted Cancer-Biology/Biotechnology, Microenvironment" presented at the 35th Annual Southern Biomedical Engineering Conference, Hattiesburg, MS, Feb 22-24, 2019	2018
2. Chair and organizing of a themed technical session on "T.S.-"7: Novel Approaches to Target Tumor Microenvironment" at "2015 IEEE- N.A.N.O.M.E.D., November 15 - 18, 2015, Honolulu, HI	2015
3. Chair and organize a Session entitled 'Penetrating the Fortress of Microenvironment in Solid Tumors by Nanocarrier,' 206 Nanocarrier Technology Conference, AAPS, May 18, 2016, Boston, MA	2016

Scientific Conference Program Committee - member

1. 35th Annual Southern Biomedical Engineering Conference, Hattiesburg, MS	2018
2. IEEE- N.A.N.O.M.E.D. conference, November 15 - 18, 2015, Honolulu, HI.	2015

Ad –Hoc Reviewer for International Peer-Reviewed Journals (total 41) 2008-present

1. Scientific Reports, Nature publishing group journal (Total of seven articles)
2. A.C.S. Nano (Total of four articles)
3. Nature Communications (Total one article)
4. Mole Ther Nucleic acid Nature publishing group journal (One article)
5. Journal of Controlled Release (Total 10 articles)
6. Bioengineering & Translational Medicine (one article)
7. Journal of Biomedical Nanotechnology (Six articles)

8. Colloids and Surfaces B: Biointerfaces (three articles)
9. Nanomedicine (four articles)
10. AAPS Journal (Total one article)
11. Vaccine and immunotherapy (Total one article)
12. Molecular Pharmaceutics,(Total of four articles)
13. Int J of nanomedicine two articles)
14. Cancer letters total two articles)
15. Biomacromolecules (Total of two articles)
16. Journal of Drug Targeting (Total 12 articles)
17. Cancer gene therapy (Total one article)
18. Cancer (Total five articles)
19. British Journal of Pharmacology (Total two articles)
20. AAPS PharmSciTech (Total 20 articles)
21. Journal of Nanopharmaceuticals and Drug Delivery (Total 2 articles)
22. Journal of Pharmaceutical Sciences (Total 14 articles)
23. International Journal of Pharmaceutics (Total seven articles)
24. PLoS One (Total of six articles)
25. Pharmaceutical Research (Total ten articles)
26. Journal of Biomolecular Research and Therapeutics (Total 3 articles)
27. Drug Development and Industrial Pharmacy (Total 2 articles)
28. Pharmaceutical Development Technology (Total 12 articles)
29. Journal of Drug Delivery Science and Technology (Total four articles)
30. Journal of Microencapsulation (Total five articles)
31. Bioconjugate Chemistry (One article)
32. Journal of Drug Delivery (Total of four articles)
33. Pharmaceutical Patent Analyst (One article)
34. Recent Patent on Nanomedicine (One article)
35. Current Nanoscience (one article)
36. Critical Reviews™ in Therapeutic Drug Carrier Systems (one article)
37. Drug Discover today (one article)
38. Journal of Chromatographic Science (One article)
39. Oncotarget (One article)
40. Current Drug Delivery (Total of two articles)
41. Journal of Pharmacology and Experimental Therapeutics (One article)

Reviewer for Book Proposal

1. A book titled "Nucleic Acids as Gene Anticancer Drug Delivery Therapy," Elsevier Science and Technology Books, New York City, NY	Spring 2019
2. A book titled "Nanotechnology-based Targeted Drug Delivery Systems for Lung Cancer," Elsevier Science and Technology Books, New York City, NY	Fall 2017
3. A book titled "Plant as Promising Future for Health," C..C. Press, Taylor & Francis books	Spring 2017
4. A book titled "Antioxidant Nutraceuticals: Preventive and Healthcare Applications," C.".C. Press, Taylor and Francis, Boca Raton, FL	
5. A book titled "Nanotechnology in Nutraceuticals and Functional Foods: Production to Consumption," C.".C. Press, Taylor and Francis Group, Boca Raton, FL	Fall 2014
6. A book titled "Inhalation Drug Delivery: Techniques and Products," John Wiley and Sons Limited, U.K.	Fall 2011

Reviewer for Ph. D. Theses

1. Thesis titled "Development and Validation of Stability Indicating Assay Methods for Estimation of Anti-diabetic Drugs," Gujarat Technology University, Chandkheda, Ahmedabad- 382424, India	Spring 2019

2. Thesis titled "Nutritional Characterization and Pharmacological Properties of Fagopyrm Esculentum Moench Seed Flour," Bharathiar University, Coimbatore, 641 046, Tamil Nadu, India — Fall 2018
3. Thesis titled "Novel Approaches for Development of Oral Controlled Release Drug Delivery System for Selective Central Nervous System Acting Drugs," Birla Institute of Technology, Mesra-835215, Ranchi, Jharkhand, India — Fall 2016
4. Thesis titled "Mucoadhesive Microemulsion Drug Delivery System: Design & Development for the Brain Delivery of NSAIDs for the Treatment of Parkinson" Sisha 'O" O'sandhan University Bhubaneswar-751030, Odisha, India — Fall 2016
5. Thesis titled "Design and development of functionalized nanoparticles for combination therapy in Breast cancer," National Institute Of Pharmaceutical Education And Research, Sector 67, S.A.S Nagar -160062, Punjab, India — Fall 2015
6. Thesis titled "Organoleptic, physiochemical and Toxicological standardization of marketed herbal formulations," P.". I.S.T. University, Vallam, Thanjavur-613403, Tamil Nadu, India — Summer 2015
7. Thesis titled "Development of a Sustainable Model for access to Medicines in the Caribbean: The Chronic Disease Assistance Programme as a Case Study," Of" ice of Graduate Studies and Research, The University of the West Indies St. Augustine, Trinidad, W.I. — Spring 2014

Scientific Abstract Reviewer or Associate Chair for International Scientific Conference

1. 2015 Controlled Release Society Meeting abstract screening section
2. *Associate-Chair*, 2013 AAPS Annual Meeting abstract screening section
3. *Associate-Chair*, 2012 AAPS Annual Meeting abstract screening section
4. 2010 AAPS Annual Meeting and Exposition abstract screening section
5. 2009 AAPS National Biotechnology Conference abstract screening section
6. 2009 AAPS Annual Meeting and Exposition abstract screening section
7. 2008 AAPS Annual Meeting and Exposition abstract screening section

R. COMMUNITY PUBLIC SERVICE

Synopsis: My community public service includes assisting elementary and middle school teachers in advancing students' learning and guiding students in the community to pursue higher education, contributing as a research mentor for next-generation four high school students, contributing to community activities and events for kids and families, contributing to annual health fairs, and contributing in temple religious activities such as serving food, cleaning, and event leader.

1. Guiding students in the community to pursue higher education
2. Significantly contributed as a research mentor for next-generation four high school students
3. Significantly contributed to community activities, educational workshops, get-togethers, and events for kids
4. Significantly contributed to annual health fair and temple religious activities such as serving food, cleaning, and

The Mercer University College of Pharmacy, Atlanta, GA

1. Yash Vyavahare, High School student, Memphis, Tennessee — Summer 2022 and 2023

2. Aaditya Jagtap, High School student, San Francisco, California — Summer 2023

The University of Mississippi School of Pharmacy

3. Akshaya Vijay, Oxford High School, Oxford — Fall 2017-Spring 2018

The University of Hawaii College of Pharmacy — Spring 2012-Fall 2013

4. Natalie Hagemann, Kea'au High School, Hilo.

Research Advisor and Mentor of Next-Generation High School Students
Local Community and Public Service

Fall 2014

Advisor for U.H. Hilo AAPS Student Chapter in the Annual Healthy Keiki Fun Run, Health Services Academy of Waiakea High School, Hilo, HI, December 14, 2013.

Spring 2013

Organization and participation in the U.H. Hilo AAPS Student Chapter at the D.K.I.C.P., U.H. Hilo annual health fair, Hilo, HI, October 13, 2013.

R. ADDITIONAL INFORMATION

Google Scholar Profile - https://scholar.google.com/citations?user=jYxYewIAAAAJ&hl=en&oi=ao

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