

**Priyanka Bhatt, B.Pharm., M.Pharm., Ph.D.**

Dr. Priyanka is currently pursuing her Postdoctoral experience in Department of Pharmaceutical Sciences from College of Pharmacy, University of South Florida, Tampa, FL. Dr. Priyanka received Bachelor of Pharmacy from Gujarat University, Ahmedabad, India, and Master of Pharmacy as well as Ph.D. in Pharmacy from The Maharaja Sayajirao University of Baroda, Vadodara, Gujarat, India. She has almost 5 years of research experience in the field of formulation development and drug delivery for cancer. Dr. Priyanka was awarded Senior Research Fellowship by Government of India from year 2013 to 2017. She was also awarded Postdoctoral Fellowship from Florida High Tech Corridor Grant (University of South Florida), FL, USA, for the period of three years in 2017. She has 4 book chapters and around 20 peer reviewed publications in reputed journals to her credit. She has been a reviewer for 9 international journals and in editorial board of 3 international journals. In addition to research, Dr. Priyanka was instrumental in teaching various courses related to pharmaceuticals in B. Pharm./ M. Pharm curriculum. Priyanka's research is focused on development of novel drug delivery systems such as nanoparticles, liposome, dendrimers, lipoplexes, polyplexes, antibody conjugates nanocarriers and thermosensitive topical formulations.

## CURRICULUM VITAE

**Dr. Priyanka S. Bhatt,**  
M. Pharm, Ph.D.

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### **EDUCATION**

- 2013-2017 Ph.D. in Pharmacy, Faculty of Pharmacy, The Maharaja Sayajirao University of Baroda, Gujarat, India
- 2010-2012 Master of Pharmacy in New Drug Delivery System, Faculty of Pharmacy, The Maharaja Sayajirao University of Baroda, Gujarat, India
- 2006-2010 Bachelor of Pharmacy, Gujarat University, Gujarat, India

### **RESEARCH EXPERIENCE**

- 2018-till date Postdoctoral Research Scholar at Department of Pharmaceutical Sciences, USF College of Pharmacy, University of South Florida. Working on Florida High Tech Corridor Grant project under the supervision of Dr. Vijaykumar Sutariya.
- 2013-2017 During Ph.D at The M.S.University of Baroda, on research project entitled as "Development of target based therapy for ovarian cancer" under the guidance of Prof. Ambikanandan Misra and Dr. R. C. Mashru.
- 2011-2012 During M.Pharm project at The M.S.University of Baroda, on research project entitled as "Oral colon targeting p53 gene delivery for colon cancer." under the guidance of Prof. Ambikanandan Misra.
- March & May 2010 Training in Production Department in Kivi labs limited, Vadodara, Gujarat, India.
- May, 2009 Training in Production Department in Cadila healthcare ltd, Ahmedabad, Gujarat, India.

### **ACHIEVEMENTS AND AWARDS**

- 2017 Postdoctoral Fellowship from Florida High Tech Corridor Grant (University of South Florida), FL, USA, for the period of three years starting from May 2017.

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|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2016-2017 | Senior Research Fellowship (UGC BSR-SMS) by UGC (University Grants Commission), New Delhi, for the period of three years starting from 17 <sup>th</sup> Jan 2016.                                                          |
| 2016      | Invited as a judge to evaluate posters presented at national level pharmacy symposium Pharmafest-16 organized by Pharmacy Department, Parul University, Vadodara                                                           |
| 2014-2015 | Jounier Research Fellowship (UGC BSR-SMS) by UGC (University Grants Commission), New Delhi, for the period of two years starting from 17 <sup>th</sup> Jan 2014.                                                           |
| 2013      | Secured all India rank 1187 in GPAT (Graduate Pharmacy Aptitude test) examination held by AICTE (All India Council for Technical Education) in 2013.                                                                       |
| 2009      | Secured 3 <sup>rd</sup> prize in poster presentation on “Flow-cytometry” at National level Pharmacy symposium Pharmafest- 09 jointly organized by Baroda College of Pharmacy & Parul Institute of Pharmacy, Vadodara.      |
| 2009      | Obtained 1 <sup>st</sup> prize in model making competition on “Flow-cytometry” at National level Pharmacy symposium Pharmafest-09 jointly organized by Baroda College of Pharmacy & Parul Institute of Pharmacy, Vadodara. |

## **PUBLICATIONS**

### **Research Articles:**

1. **Priyanka Bhatt**, Rohan Lalani, Imran Vhora, Shushilkumar Patil, Jitendra Amrutiya, Ambikanandan Misra, Rajashree Mashru. Liposomes encapsulating native and cyclodextrin enclosed Paclitaxel: Enhanced loading efficiency and its pharmacokinetic evaluation, **International Journal of Pharmaceutics** 536 (2018) 95-107. (Impact factor 4.22)
2. Jitendrakumar Patel, Jitendra Amrutiya, **Priyanka Bhatt**, Ankit Javia, Mukul Jain, Ambikanandan Misra. Targeted delivery of monoclonal antibody conjugated docetaxel loaded PLGA nanoparticles into EGFR overexpressed lung tumor cells. **Journal of Microencapsulation**, 2018, 35(2), 204-217. (Impact factor 1.54)
3. Chetan Yewale, Dipesh Baradia, Shushilkumar Patil, **Priyanka Bhatt**, Jitendra Amrutiya, Ravi Gandhi, Girish Kore. Docetaxel loaded immunonanoparticles delivery in EGFR overexpressed breast carcinoma cells. **Journal of Drug Delivery Science and Technology**, 2018, 45, 334-345. (Impact factor 1.19)
4. Shilpa Vasava, **Priyanka Bhatt**, Rajashree Mashru. To Study the Effect of Antibiotics on Nutritive Values of Probiotic Curd and Lactobacillus plantarum Fortified Probiotic Curd. **Inventi Rapid: Pharm Biotech & Microbio**, 2017(1):1-6, 2016.
5. **Bhatt P**, Lalani R, Mashru R, Misra A. Abstract 2065: Anti-FSHR antibody Fab' fragment conjugated immunoliposomes loaded with cyclodextrin-paclitaxel complex for improved efficacy on ovarian cancer cells. **Cancer research**. 2016; 76 (14 Supplement): 2065. (Impact factor 9.12)

6. Patil S, **Bhatt P**, Lalani R, Amrutiya J, Vhora I, Kolte A, et al. Low molecular weight chitosan-protamine conjugate for siRNA delivery with enhanced stability and transfection efficiency. **RSC Advances**. 2016;6(112):110951-63. (Impact factor 3.10)
7. Lalani RA, **Bhatt P**, Rathi M, Misra A. Abstract 2063: Improved sensitivity and in vitro efficacy of RGD grafted PEGylated gemcitabine liposomes in RRM1 siRNA pretreated cancer cells. **Cancer research**. 2016; 76(14 Supplement): 2063. (Impact factor 9.12)
8. **Bhatt P**, Khatri N, Kumar M, Baradia D, Misra A. Microbeads mediated oral plasmid DNA delivery using polymethacrylate vectors: an effectual groundwork for colorectal cancer. **Drug delivery**, 22(6), 2015, 849-61. (Impact factor 6.40)
9. Sushilkumar Patil, Rohan Lalani, **Priyanka Bhatt**, Imran Vhora, Jitendra Amrutiya, Hinal Patel, Ambikanandan Misra. Linear Polyethyleneimine for siRNA Delivery: Simple Modification to Overcome Poor Buffer Capacity, Toxicity and Transfection Efficiency. **International Journal of Pharmaceutics**. (Under review).
10. Imran Vhora, Rohan Lalani, **Priyanka Bhatt**, Sushil Patil, Hinal Patel, Vivek Patel and Ambikanandan Misra. Colloidally stable small unilamellar stearyl amine liposomes for effective BMP-9 gene delivery to stem cells for osteogenic differentiation. **AAPS PharmSciTech**. (Under review).
11. Manit Gandhi, **Priyanka Bhatt**, Gaurav Chauhan, Sarita Gupta, Ambikanandan Misra, Rajashree Mashru IGF-II conjugated nano carrier for brain targeted delivery of p11 gene for depression **AAPS PharmSciTech**. (Under review).

#### **Review Articles:**

12. Ankit Javia, Jitendra Amrutiya, Rohan Lalani, Vivek Patel, **Priyanka Bhatt**, Ambikanandan Misra. Antimicrobial Peptide delivery: An emerging therapeutics for the treatment of burns and wounds, **Therapeutic Delivery**, 2018, 9(5), 375-386. (Impact factor 2.48)
13. Rohan Lalani, Ambikanandan Misra, Jitendra Amrutiya, Hinal Patel, **Priyanka Bhatt**, Vivek Patel. Challenges in Dermal Delivery of Therapeutic Antimicrobial Protein and Peptides, **Current Drug Metabolism**, 2017 Feb 22. (Impact factor 3.06)
14. **Priyanka Bhatt**, Imran Vhora, Sushilkumar Patil, Jitendra Amrutiya, Chandrali Bhattacharya, Ambikanandan Misra, Rajashree Mashru. Role of antibodies in diagnosis and treatment of ovarian cancer: Basic approach and clinical status, **Journal of Controlled release**, vol. 226, 2016, 148-167. (Impact factor 8.45)
15. Rohan Lalani, Jitendra Amrutiya, Hinal Patel, **Priyanka Bhatt**, Sushil Patil and Ambikanandan Misra. Approaches and Recent trends in Gene delivery for treatment of Atherosclerosis, **Recent Patents on Drug delivery and formulations**, vol. 10 (2), 2016, 141-55.

16. Jitendra Amrutiya, Rohan Lalani, **Priyanka Bhatt**, Krupa Siddhapura, Ambikanandan Misra. Nucleic acid carriers for Pulmonary gene delivery, **Journal of Pharmaceutical Sciences and Technology Management**, 1(2), 2015.
17. Vhora I, Patil S, **Bhatt P**, Gandhi R, Baradia D, Misra A. Receptor-targeted drug delivery: current perspective and challenges. **Therapeutic Delivery**, 5(9), 2014, 1007-24. (Impact factor 2.48)

### **BOOK AND BOOK CHAPTERS**

1. Vhora I, Patil S, **Bhatt P**, Misra A. Chapter One - Protein- and Peptide-Drug Conjugates: An Emerging Drug Delivery Technology. In: Rossen D, editor. *Advances in Protein Chemistry and Structural Biology*: Academic Press-Elsevier; vol. 98, 2015, 1-55.
2. Tandel H, **Bhatt P**, Jain K, Shahiwala A, Misra A. In-Vitro and In-Vivo Tools in Emerging Drug Delivery Scenario: Challenges and Updates. In *In-Vitro and In-Vivo Tools in Drug Delivery Research for Optimum Clinical Outcomes 2018 Jun 22* (pp. 19-42). CRC Press.
3. Aditi Pandhare, **Priyanka Bhatt**, Hardeep Singh Saluja, Yashwant Pathak. Chapter Fifteen- Biodegradable polymeric implants for retina and posterior segment disease; *Drug Delivery for the Retina and Posterior Segment Disease*, Springer Publisher Inc USA. (Publication in process).
4. At University of South Florida, Editors: **Priyanka Bhatt**, Maryam Sadat Miraghajani, Sarvadaman Pathak, Yashwant Pathak. *Nutraceuticals for Prenatal, Maternal and Offspring's Nutritional Health* (a volume in the *Nutraceuticals: Basic Research/Clinical Applications* series), CRC press, Taylor & Francis Group. (In Preparation)

### **PRESENTATIONS**

1. P. S. Bhatt, R. A. Lalani, A. N. Misra, R. C. Mashru. Native and Cyclodextrin Enclosed Paclitaxel in Liposomes: A Double Loading Approach in Improving Loading Efficiency and Anticancer Activity. **AAPS annual meeting & exposition 2017**, 12-15 November 2017, at San Diego, California, USA.
2. R. A. Lalani, P. S. Bhatt, R. C. Mashru, A. N. Misra. Antibody Functionalized Paclitaxel Liposomes: An Assessment of Selective Uptake and Cytotoxic Potential in FSHR Expressing Ovarian Cancer Cell Lines. **AAPS annual meeting & exposition 2017**, 12-15 November 2017, at San Diego, California, USA.
3. Presented a research paper entitled "Antibody fab' fragment armed immunoliposomes of paclitaxel for targeted delivery to ovarian cancer cells" for **Sun Pharma Science Scholar award-2016** on 21st January 2017 at Gurgaon, Haryana (India).
4. Priyanka Bhatt, Rohan Lalani, Rajashree Mashru, Ambikanandan Misra. "Anti-FSHR antibody Fab' fragment conjugated immunoliposomes loaded with cyclodextrin-paclitaxel complex for

improved *in vitro* efficacy on ovarian cancer cells." Poster presentation in **AACR annual meeting 2016** held at Ernest N. Morial Convention Center, New Orleans, Louisiana, USA, from 16th to 20th April, 2016.

5. Priyanka Bhatt, Ambikanandan Misra, Rajashree Mashru. "Entrapment of Paclitaxel-Cyclodextrin Inclusion Complex In Liposomes: The Role In Improving Loading Efficiency and *In Vitro* Cytotoxicity". Poster presentation at **TMC platinum jubilee conference** entitled "A Conference of New Ideas in Cancer – Challenging Dogmas" held at Tata Theatre, National Centre for the Performing Arts (NCPA) from 26<sup>th</sup> to 28<sup>th</sup> February, 2016 in Mumbai.
6. Delivered a lecture on "Liposomal Technologies and Applications" at **Pharmacy Department, Parul University, Vadodara** on 20<sup>th</sup> April 2015.
7. Presented a poster on "Microemulsion based delivery of atorvastatin" in 61<sup>th</sup> **Indian Pharmaceutical Congress 2009** held at Nirma University, Ahmedabad.

### **KEY SKILLS AND COMPETENCIES**

- Instrumentation and interpretation: High pressure homogenizer (Avestin), Rotavapor, Cascade impactor (Anderson), Spray dryer (Lab-ultima), Lyophilizer (Vertis), Globule size analyser (Sympatech), Malvern Particle size analyzer (Zeta-sizer & Mastersizer), Rotary compression machine, Tablet coating machine, HPLC, Gel electrophoresis unit, Gel Doc, Real Time PCR, Confocal microscopy, TEM, FACS, Fluorescence microscopy, FTIR, DSC
- Expert in formulation development and evaluation of novel drug delivery systems like microparticles, nanoparticles, liposomes, solid lipid nanoparticles, gene delivery and conventional formulations like solid oral dosage forms, liquid dosage forms, injectables and OTC products.
- Expertise in cell culture methodology and *in vitro* cell line studies.
- Conversant with NDA, ANDA, clinical trials, ICH Guidelines.
- Well versed with Quality by Design (QbD).
- Knowledge of MS Office, Graphpad Prism, Design Expert, Minitab, Chem Draw, EndNote, ChemSketch, ImageJ.
- **Interpersonal Skills:** Integrity, Patience, Team player, Quick learner, Good listener, Punctual, Hard worker, Self-motivated, Resourceful, Innovative with ability to share and exchange ideas, Critical analysis of research articles and patents, Report writing, Flexible and adaptable to change.

### **REVIEWER IN SCIENTIFIC JOURNALS**

- International Journal of Pharmaceutics (Publisher; Elsevier, IF 4.22)
- Nanomedicine (Publisher; Future Medicine, IF 4.72)
- Drug Delivery and Translational Research (Publisher; Springer, IF 3.09)
- AAPS PharmSciTech (Publisher; Springer, IF 2.66)
- Journal of Drug Delivery Science and Technology (Publisher; Elsevier, IF 2.29)
- Drug Development and Industrial Pharmacy (Publisher; Taylor and Francis group, IF 2.29)
- Pharmaceutics & Drug Delivery Research (Publisher; SciTechnol IF 1.84)

- International Journal of Pharmaceutical Sciences and Drug Research (Publisher; MRI Publication Pvt. Ltd. Scientific Journal Impact Factor (SJIF) 2016: 6.542)
- International Journal of Pharmaceutical Sciences and Developmental Research (Publisher; Peertechz)
- AAPS 2018 PharmSci 360 (abstract screener)
- Modern Applications in Pharmacy & Pharmacology (Publisher; Crimson)
- SEJ Biopharmaceutics (Publisher; Scientific Exhalters)
- Journal of Medicinal Chemistry and Drug Design (Publisher; Scholarena)

#### **EDITORIAL BOARD MEMBER SCIENTIFIC JOURNALS**

- ARC Journal of Neuroscience (ARC publications)
- Enliven: Biosimilars and Bioavailability (Eliven Archive publication)
- International Journal of Pharmaceutical Sciences and Developmental Research (Publisher; Peertechz)
- Nanomaterial Chemistry and Technology (Edelweiss Publications) (In processing)

#### **PROFESSIONAL MEMBERSHIP**

- ICORP member of the 2018 Spring cohort of USF I-Corps Fellows
- Member of Advisory Board, Sigma Group of Institute.
- American Association of Cancer Research (AACR)
- American Association of Pharmaceutical Scientists (AAPS)