CURRICULUM VITAE

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PERSONAL DATA

Home Address: 1206 North 130th Street
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EDUCATION & TRAINING

1983	I.Sc. (Intermediate in Science), RRM Campus, Tribhuvan University, Nepal 1989 B.S. (Pharmaceutics), China Pharmaceutical University, Nanjing, China
1992	Ph.D. (Pharmaceutics & Drug Delivery), University of Strathclyde, Glasgow, Britain
1992	**Research Associate**, Department of Pharmaceutical Sciences, University of Southern California, Los Angeles, USA
1993-94	**Postdoctoral Fellow**, Departments of Chemical Engineering and Ophthalmology, Washington University, St. Louis, USA
1994-96	**Research Scholar/Postdoctoral Fellow,** Department of Drug Delivery Sciences, Faculty of Pharmaceutical Sciences, Kyoto University, Japan

UNIVERSITY APPOINTMENTS

2013-Present	**Professor and Chair**, Department of Pharmaceutical Sciences, University of Nebraska Medical Center, Omaha
2013-Present	**Professor**, Buffett Cancer Center, University of Nebraska Medical Center, Omaha
2009-2013	**Professor**, Department of Pharmaceutical Sciences, University of Tennessee Health Science Center, Memphis
2005-2009	**Associate Professor**, Department of Pharmaceutical Sciences, University of Tennessee Health Science Center, Memphis
2001-2005	**Assistant Professor**, Department of Pharmaceutical Sciences, University of Tennessee Health Science Center, Memphis
2004-Present	**Adjunct Professor**, Department of Biomedical Engineering, University of Tennessee Health Science Center, Memphis
1999-2001	**Research Assistant Professor**, Department of Pharmaceutics and Pharmaceutical Chemistry, University of Utah, Salt Lake City

OTHER WORK EXPERIENCE

1999	**Manager, Pharmaceutical Development**, Copernicus Therapeutics, Inc.
1996-99	**Senior Scientist, Gene Delivery Sciences**, GENEMEDICINE, INC.

HONORS AND AWARDS

2015	**Distinguished Scientist**, University of Nebraska Medical Center
2013	**Chair**, AAPS Nanotechnology Focus Group

2011 **Fellow**, CRS College of Fellow**,** Controlled Release Society**.** 2011

Consultant, Nitto Denko Corp, Oceanside, CA

2010 **Fellow**, American Association of Pharmaceutical Scientists (AAPS)

2010 **Visiting Professor**, Institute for Integrated Cell Material Sciences, Kyoto University, Japan

2009 **Permanent Member**, BTSS Study Section of the NIH (July 1, 2009 to June 30, 2013) 2009

Invited, Diabetes and Obesity Global Therapeutic Expert Forum, Merck & Co., May 1-3, 2009, New York

2007 **Nominated** for the Scientific Advisor Committee, the Controlled Release Society 2006

Member, *Nonviral Gene Transfer Vectors Scientific Committee*, American Society of Gene Therapy

2003 Who'sWho in America; *Invited Speaker*, Challenges of Antisense Oligonucleotide Delivery, 30th Controlled Release Society (CRS) Annual Meeting (Glasgow, UK, 2003);

1995-96 Goho Foundation Fellowship, Japan

1994-95 Uehara Foundations Fellowship, Japan

1989-92 Cancer Research Campaign PhD Studentship of the United Kingdom

1986 International Student Award by China Pharmaceutical University, China

1984-89 Undergraduate studies supported by the Ministry of Education, Nepal

EDITORIAL ACTIVITIES

2015-Present Journal of Neuroimmune Pharmacology
2006-2013 Pharmaceutical Research

Editorial Advisory Board Memberships

2010-Present Advanced Drug Delivery Reviews

2010-Present Molecular Pharmaceutics

2010-Presnt Journal of Drug Delivery

2010-Present World Journal of Gastrointestinal Pathophysiology

2009-Present Transplantation & Risk Management

2009-Present Inflammation &Allergy-Drug Targets

2004-Present Expert Opinion on Drug Delivery

1999-Present Journal of Drug Targeting

Referee for Journals

Advanced Drug Delivery Reviews, American Journal of Drug Delivery, Antiviral Research, Biomacromolecules, Biophysical Journal, Chemistry and Physics of Lipids, Clinical Pharmacokinetics, Critical Reviews in Therapeutic Drug Carrier Systems, Diabetologica, Drug Development Industrial Pharmacy, Drug Discovery Today, Expert Opinion on Drug Delivery, European Journal of Pharmaceutical Sciences, European Journal of Pharmaceutics and Biopharmaceutics, Gene Therapy, Human Gene Therapy, International Journal of Pharmaceutics, Journal of Controlled Release, Journal of Drug Targeting, Journal of Electrochemical Society, Journal of Gene Medicine, Journal of Pharmacology and Experimental Therapeutics, Molecular Pharmaceutics, Molecular Therapy, Nucleic Acids Research, Pharmaceutical Research, Proceedings of the National Academy of Sciences, and Science Advances

PROFESSIONAL SOCIETY MEMBERSHIPS:

1991-present	Controlled Release Society
1996-present	American Association of Pharmaceutical Scientists
1998-present	American Society of Gene Therapy
2001-present	American Association of Colleges of Pharmacy
2002-present	American Chemical Society
2002-present	American Diabetes Association
2003-present	New York Academy of Science
2003-present	American Association for the Advancement of Science
1994-1996	Pharmaceutical Society of Japan

TEACHING EXPERIENCE:

- PHSC904: Delivery and Biocompatibility of Proteins and Nucleic Acid Drugs to graduate students
  Role: Course Coordinator and Instructor Direct
  Student Contact Hours: 20
  Credit Hours: 3 Period:
  2014-present

- PHSC 550: Introduction to Pharmaceutical Sciences to PharmD Students Role:
  Instructor
  Direct Student Contact Hours: 8 Credit
  Hours: 3
  Period: 2013-present

- PHSC885: Physical Pharmacy to Graduate Students
  Role: Instructor
  Direct Student Contact Hours: 8 Credit
  Hours: 3
  Period: 2014-present

- PHSC114: Pharmaceutical Principles to PharmD Students
  Role: Instructor and Course Director
  Direct Student Contact Hours: 20 Credit
  Hours: 5
  Period: 2010-2013

- PHSC114: Pharmaceutics 1: Dosage Forms to PharmD Students Role:
  Instructor and Course Director
  Direct Student Contact Hours: 16 Credit
  Hours: 5
  Period: 2005-2009

- PHSC222: Pharmacogenomics (2-0) Role: Instructor
  Direct Student Contact Hours: 2

- PHSC111: Intro to Pharmacy & Health Care Environment Role: Instructor Direct Student Contact Hours: 15

1. PHSC114.3: Pharmaceutics: Dosage Forms
   Course Director: Ram I Mahato, Ph.D.
   Role: Instructor
   Direct Student Contact Hours: 30 Credit
   Hours: 3
   Period: 2001-2004

2. PHSC911: Delivery and Biocompatibility of Protein and Nucleic Drugs to Graduate Students
   Course Director: Ram I. Mahato, Ph.D. Role:
   Instructor
   Direct Student Contact Hours: 45 Credit
   Hours: 4
   Period: 2002-2013

3. PHSC840: Special Topics on Site-specific Delivery of Proteins, Oligonucleotides and Genes
   Course Director: Ram I. Mahato, Ph.D. Role:
   Instructor
   Direct Student Contact Hours: 30
   Credit Hours: 3~5, depending on students
   Period: 2005-2008

4. PHCEU 7210: Biocompatibility [University of Utah]
   Course Director: Jindrich Kopecek, Ph.D.
   Role: Instructor
   Direct Student Contact Hours: 9 Credit
   Hours: 2
   Period: 2000-2001

5. PHCEU 7420: Delivery of Macromolecular Therapeutic Agents [University of Utah] Course
   Director: Sung Wan Kim, Ph.D.
   Role: Instructor
   Direct Student Contact Hours: 4 Credit
   Hours: 2
   Period: 1999-2001

RESEARCH ACTIVITIES

Our laboratory has expertise in molecular and cell biology, biochemistry, biophysics, polymer chemistry, colloid science, pharmaceutics, and medicine. This allows us to take a multidisciplinary approach for successful research and training students and post-doctoral fellows. Our research is focused on the following areas: (i) Micelle and Nanoparticulate Drug Delivery, (ii) Oligonucleotides, siRNA, miRNA, shRNA and Gene Delivery (iii) Synthesis of Novel Polymers, Lipopeptides, Lipopolymers and Cationic Lipids (iv) Construction of Plasmid and Adenovirus-based Gene and shRNA Expression Systems. These systems are being tested in various disease areas such as improving islet transplantation to treat type 1 diabetes, cancer (pancreatic, prostate, melanoma and medulloblastoma) and liver fibrosis.

We attempt to understand how the individual components of delivery and expression systems would influence the disease state by controlling gene regulation, transcription, translation, and replication. In addition to using stem cells as gene delivery vehicle for inducing immune tolerance in diabetes and fibrosis, we are also working to overcome multi drug resistance in tumors by targeting cancer stem cells.

RESEARCH ACCOMPLISHMENTS

1. *Delivery and Targeting of Oligonucleotide, siRNA and miRNA-based Therapies*: Contributed

extensively on the use of antisense and antigene oligonucleotides, siRNA and miRNA for treating liver fibrosis, diabetes and cancer.

2. *Cell-Based Therapeutics:* Contributed extensively on genetic modification of human islets for improved islet transplantation.
3. *Polymeric Nanomedicines and Combination Therapy*. Contributed extensively on polymeric micellar delivery using novel polymers and combination therapy for treating advanced prostate cancer.
4. *Cytokine Gene Therapy*: Contributed extensively on the use of interleukin-12 (IL-12), interferon-gamma (IFN-□), vascular endothelial growth factor (VEGF) and growth hormone gene delivery to tumor and diabetes animal models.
5. *Design of Gene Delivery Systems:* Developed polymer, lipid, lipopolymer and peptide- based systems to deliver and transfect oligonucleotides and genes to specific organs *in vivo* and different cell lines *in vitro*.
6. *Formulation Sciences:* Formulated various small drugs, proteins, oligonucledotides and plasmids for *in vitro* and *in vivo* studies.
7. *Drug Delivery and Pharmacokinetics:* Determined the pharmacokinetic profiles of small molecules, proteins, oligonucleotides and genes using mice, rats and rabbits.
8. *Synthesis:* Synthesized water soluble and insoluble lipopolymers, soluble steroidal peptides, cationic lipids, and conjugated galactose, mannose and FITC to polylysine for gene delivery.
9. *Particulate Carrier Systems:* Developed various polymeric nanoparticulate carrier systems.
10. *Lyophilization:* Lyophilized anticancer drugs and lipid/plasmid complexes.
11. *Intracellular Trafficking:* Investigated the mechanism of cellular uptake and intracellular trafficking of plasmids and oligonucleotides.
12. *Adenoviral vectors:* Compared both viral and nonviral vectors for gene delivery.
13. *Key Analytical Instrumentation and Assasys:* Laser Particle Sizer, Zeta Sizer, HPLC, GPC, UV Spectrophotometer, Real Time PCR, Luminometer, Gel Electrophoresis, Tissue Culture, ELISA, LC-MS/MS, Protein Assays, Plasmid Amplification and Purification, Light, Fluorescent, Electron and Atomic Force Microscopy, Autoradiography, Sucrose Gradient, Refractometer, Liposome Extruder, Ultracentrifugation, X-ray diffraction, Differential Scanning Calorimetry, Flow Cytometry, Immunohistochemistry, Liquid Scintillation Counter, Immunohistochemistry, and many more.

RESEARCH SUPPORT:

Received about $20M as PI/MPI/Co-I from federal agencies including NIH and the Department of Defense (DoD): 8 R01 and 2 R13 from the NIH, 1 Idea Award and 1 HBCU training grant from the DoD. Received 4 R01 as Co-I. In addition, received several grants from pharmaceutical industries as PI. In addition, 6 for mentee fellowships from the university and 1 K01 from the NIH. NIH and DoD funding to date as a PI/MPI/Co-I are summarized below. The federal projects addressed various aspects of nucleic acid and small molecule-based therapeutics (gene therapy, antisense oligonucleotides miRNA and small molecules) for the treatment of cancer, liver fibrosis and type 1 diabetes, design and synthesis of lipid and polymeric carriers, adenoviral vectors, formulations, biodistribution, and therapeutic efficacy.

ACTIVE

1. **Grant/Contract Number:** 1R01NS116037-01A1
   Principal Investigators: Ram I. Mahato, Ph.D. and Donald Coulter, MD
   Grant Title: Overcoming Resistance Mechanisms in Hedgehog and Myc-amplified Medulloblastoma
   Funding Agency: NIH/NINDS 12/01/20-11/30/25

Direct Cost: $261,480/year

2. **Grant Number: 2020-33**
   Principal Investigator: Ram I. Mahato 10/12/2018 - 10/11/2022
   Grant Title: In vitro prediction of in vivo performance of dry powder inhalation formulations
   Funding Agency: Genentech, Inc.
   Direct Cost: $80,000/year

3. **Grant Number:** 25477
   Principal Investigator: Ram I. Mahato 5/15/2021 - 5/14/2022
   Grant Title: In Vitro Assessment of Drug Absorption and Potency after Air Interface Deposition of Dry Powder Novel Drugs on Human Primary Bronchial Epithelial Cells
   Funding Agency: Genentech, Inc.
   Direct Cost: $115,000/year

4. **Grant Number:**
   Principal Investigator: Ram I. Mahato 01/01/2020 - 12/31/2021
   Grant Title: Targeting Chemoresistance in medulloblastoma using a hedgehog signaling pathway inhibitor
   Funding Agency: Child Health Research Institute
   Direct Cost: $50,000/year

5. **Grant Number:**
   Principal Investigator: Ram I. Mahato 07/01/2021 - 06/30/2023
   Grant Title: Overcoming the Resistance and Frailty in older adults with acute myeloid leukemia (AML)
   Funding Agency: Nebraska Research Initiative
   Direct Cost: $58,000/year

PENDING

6. **Grant/Contract Number:** 1 R01 CA266759-01
   Principal Investigators: Ram I. Mahato, Ph.D.
   Grant Title: Nanomedicine of Hedgehog and AKT/ERK Dual Inhibitors for Pancreatic Cancer
   Funding Agency: NIH/NCI 12/15/21-12/14/26 (pending administrative review)
   Direct Cost: $358,061/year

7. **Grant/Contract Number:** R01 DK129660-01
   Principal Investigators: Ram I. Mahato, Ph.D.
   Grant Title: Nanoformulation Development and Evaluation in Liver Fibrotic Mouse Models
   Funding Agency: NIH/NIDDK 04/01/21-03/31/27
   Direct Cost: $346,607/year
8. **Grant/Contract Number:** R01CA26896
   Principal Investigators: Ram I. Mahato, Ph.D.
   Grant Title: Novel Hedgehog Inhibitor Enhances the Efficacy of Gemcitabine and Hypoxia Targeting miRNA
   Funding Agency: NIH/NCI 04/01/21-03/31/27
   Direct Cost: $369,287/year

RESEARCH COMPLETED IN RECENT YEARS:

9. **Grant Number:**
   Principal Investigator: Ram I. Mahato 07/01/2020 - 06/30/2021
   Grant Title: Targeted Nanopaticulate Delivery of Hedgehog Inhibitor and siAPE1 for Treating

Medulloblastoma
Funding Agency: Nebraska Research Initiative (NRI)
Direct Cost: $65,000/year

- **Grant Number: 2020-33**
  Principal Investigator: Ram I. Mahato 07/01/2019 - 06/30/2021
  Grant Title: Targeted nanopaticulate delivery of hedgehog inhibitor and siAPE1 for treating medulloblastoma
  Funding Agency: Nebraska Research Initiative
  Direct Cost: $43,576/year

10. **Grant Number:**
    Principal Investigator: Ram I. Mahato 08/01/2020 - 07/31/2021
    Grant Title: Overcoming Medulloblastoma Resistance Through Suppression of FACT and Hedgehog Pathway Inhibitors
    Funding Agency: Child Health Research Institute
    Direct Cost: $50,000/year

11. **Project Title:** A Single Arm, Open Label, Phase II Study of Ruxolitinib in Sclerotic Chronic Graft-Versus-Host Disease after Failure of Systemic Glucocorticoids
    Principal Investigator: Vijaya Bhatta,Co-I: Mahato, Ram I.
    Agency: Incyte Corporation
    Period 11/01/18-08/31/21
    Total Direct: $121, 000

    12Principal Investigator: Ram I. Mahato 02/01/2019 - 12/31/2020
    Grant Title: Regulation of Metabolic Pathways in T Cells for Effective Immunotherapy in Medulloblastoma
    Funding Agency: Child Health Research Institute
    Direct Cost: $125,000

12. **Grant Number: 2020-33**
    Principal Investigator: Ram I. Mahato 07/01/2019 - 06/30/2020
    Grant Title: Targeted Polymeric Micelles for the Treatment of Metastatic Melanoma
    Funding Agency: NE DHHS - LB506
    Direct Cost per year: $50,000

13. **Grant Number:** R01 CA148706-01
    Principal Investigator: Wei Li, Co-I: Ram I. Mahato 01/15/2016 - 12/31/2020
    Grant Title: Targeting the colchicine site in tubulin for advanced melanoma
    Funding Agency: NCI (Subcontract from U. of Tennessee Health Science Center)
    Direct Cost per year: $20,733

14. **Principal Investigator:** Ram I. Mahato 12/01/16-12/30/18
    Title: Pilot Project: Combination of GDC-0449 Anaglogs with Topotecan for treating Neuroblastoma
    Agency: Pediatric Cancer Research Center, UNMC
    Total Direct: $225,000

15. **Grant/Contract Number:** 1R01GM113166
    Principal Investigators: Ram I. Mahato, Ph.D. and Surinder K. Batra, PhD
    Grant Title: Polymeric Nanomedicine of Hedgehog Inhibitor and miRNA for treating Pancreatic Cancer

Funding Agency: NIH/NIGMS 07/15/14-7/15/19
Direct Costs: 300,000/year

16. **Principal Investigator:** Rajan S Bhattarai (graduate student) 7/01/19-6/30/20
Title: Formulation and in vivo evaluation of novel microtubule inhibitor for treating pancreatic cancer
Agency: Bukey Memorial Fund
Total Direct: $25,000

17. **Grant/Contract Number:** R01 EB0178531
Principal Investigator: Ram I. Mahato, Ph.D.
Grant Title: Polymeric Nanomedicines of Small Molecules and miRNA for treating Pancreatic Cancer
Funding Agency: NIH/NIBIB/NCI 07/01/14-5/31/19 (CE)
Direct Costs: 225,000/year
The goal of this project is to determine whether polymeric nanomedicines of gemcitabine and miR-205 mimic can treat pancreatic cancer.

18. **Grant/Contract Number:** PC141560
Principal Investigator: Ram I. Mahato, Ph.D.
Grant Title: Collaborative Training of Undergraduate HBCU Students for Prostate Cancer Research
Funding Agency: DOD
Period 04/01/15-03/31/17
Direct Costs: 184,456

19. Principal Investigator: Ram I. Mahato
Project Title: Co-delivery of miR-29b and Hedgehog Inhibitor for treating Meduloblastoma Agency:The Edna Ittner Pediatric Research Support Fund Period 12/01/17-12/31/18
Total Direct: $30,000

20. **Grant Title:** Genetically modified stem cells and their exosomes as effective immunomodulators to prevent GvHD and support graft engraftment
Principal Investigator: Ram I. Mahato
Agency: Nebraska Research Initiative (NRI)
Period: 07/01/15-06/30/17
Total Direct: $100,000

21. **Project Title:** Pilot Project: Center for Cancer Experimental Therapeutics/Early Phase Trials (PK/PD/PG)
Principal Investigator: Ram I. Mahato
Funding Agency: Buffett Cancer Center, UNMC
Period 03/01/15-02/28/17
Total Direct: $100,000
The goal of this project is to work towards establishing a Canter for Cancer Experimental Therapeutics/Early Clnical trials (PK/PD/PG) to help carry out clinical pharmacokinetics and pharmacogenomics of cancer drugs.

22. **Grant/Contract Number: R13EB023095 Principal Investigator:** Ram I. Mahato, Ph.D.
Grant Title: Research and Development of Nucleic Acid-based Nanomedicines
Funding Agency: NIH/NIBIB
Funding Period: 07/15/2016 – 06/30/2017
Direct Costs: 10,000
The goal of this project is to host a two day symposium where speakers from the academia,

pharmaceutical industries and regulatory agencies ad students, postdocs and junior faculty will be invited to discuss the different aspects of drug delivery and approaches necessary for turning them in therapeutic products.

23. Principal Investigator: Ram I. Mahato
Agency: Otis Glebe Medical Research fund - NU Foundation
Period: 03/01/15-02/28/16
Total Direct: $100,000
The goal of this project is to determine whether genetically modified bone marrow derived stem cells and their exosomes can improve ethe outcome of islet transplantation.

24. Grant Number: R13 EB020461-01
Principal Investigator: Ram I. Mahato, Ph.D.
Grant Title: Research and Development of Novel Drug Delivery Systems Symposium
Funding Agency: NIH/NIBIB
Funding Period: 07/15/2015 – 06/30/2016
Direct Costs: 10,000
The goal of this project is to host a two-day symposium where speakers from the academia, pharmaceutical industries and regulatory agencies ad students, postdocs and junior faculty will be invited to discuss the different aspects of drug delivery and approaches necessary for turning them in therapeutic products.

25 W91ZSQ0209N6010001 09/20/10-9/19/15
Principal Investigator: Ram I. Mahato, Ph.D.
Micellar Drug Delivery and Proteomics Analysis for Effective Treatment of Resistant Prostate Cancer.
The goal of this project is to develop micellar drug delivery systems using novel polymers for effective treatment of resistant prostate cancer.
Total Direct: $ 450,000

26. Principal Investigator: Ram I. Mahato Agency: Kosten Foundation
Period" 09/01/11-08/31/14 Total
Direct:Direct cost $50,000 per year
The goal of this project is to develop combination therapy to simultaneously target cancer stem cells and bulk cancer cells to advanced pancreatic cancer.

27. Polymeric Nanomedicines for Co-Delivery of Gemcitabine and miRNA
Principal Investigator: Ram I. Mahato 0.12 calendar months
Agency: NIH 08/01/13-07/31/14 SPORE Grant, UNMC $50,000
The goal of this project is to develop micellar delivery of gemcitabine and miRNA for treating pancreatic Cancer.

28 2R01 DK069968-08 7/1/2005-5/31/2013
Principal Investigator: Ram I. Mahato, Ph.D. (40%)
Growth Factor and Antiapoptotic Gene Delivery to Human Islets
The goal of this competing renewal of R01 DK069968 is to develop adenovirus-based growth factor and antiapoptotic gene delivery to human pancreatic islets for treatment of type I diabetes. This proposal has received 15.4% and a priority score of 156. This is most likely to be funded.
Total Direct: $2,000,000

29 NIH/R01 EB003922 03/1/07– 12/31/11
Principal Investigator: Ram I. Mahato, Ph.D. (25%)
Targeted Delivery of TFOs for Treatment of Liver Fibrosis

The major goal of this project is to targeted delivery of □1(I) collagen gene promoter specific triplex forming oligonucleotides (TFOs) to liver fibrogenic cells in fibrotic rats after conjugation with mannose 6-phosphate-bovine serum albumin (M6P-BSA) via a disulfide bond.
Total Direct: **$**667,520

30 NIH/NCI 5R01CA148706 01/01/11– 12/31/2015

Co-I: Ram I Mahato (Co-I) (PI: Wei Li)

Discovery of Novel Thiazole Compounds for Treating Advanced Melanoma

The goal of this pilot project is to establish a center for develop novel thiazole analogs which can be used to treat melanoma and enhance their delivery to melanoma tumors using polymeric nanoparticles.

31. NIH/NIDDK RO1 DK064633 01/04/2004– 12/31/2008

Co-I: Ram I Mahato (Co-I) (PI: Ramareddy V. Guntaka)

A Promoter-specific TFO Prevents Liver Fibrosis

The goal of this pilot project is to investigate whether triplex forming oligonucleotide (TFO) targeting the transcription of type 1 collagen can inhibit liver fibrosis after systemic administration in rats.

Competitive Funding Received for Graduate Student Research

1. Fellowship award for the graduate research training of Rajan Sharma Bhattrai, UNMC. $25,000 (2019-2020). Project Title: Formulation and In vivo evaluation of novel microtubule inhibitors for treating pancreatic cancer.
2. Fellowship award for the graduate research training of Yang Peng, UNMC. $48,000 (2017-2018). Project Title: Hybrid fusion of anti-CD3 Single-chain antibody and elastin- like polypeptide as delivery vehicles of duvelisib for immunotherapy of type 1 diabetes
3. Fellowship award for the graduate research training of Ruinan Yang, UNMC. $48,000 (2016-2017). Project Title: Combination therapy of paclitaxel and cyclopamine drug- polymer conjugates to treat chemoresistant prostate cancer
4. Fellowship award for the graduate research training of Virender Kumar, UNMC. $23,100 (2015). Project Title: Combination of Small molecules and miRNA for treating liver fibrosis.
5. Fellowship award for the graduate research training of Vaibhav Mundra, UNMC. $23,100 (2014). Project Title: Cell surface engineered bone marrow derived mesenchymal stem cells as cell therapy for improving human islet transplataion.
6. Travel Award to Lin Zhu, AAPS Annual Annual Meeting in Los Angeles (2009)

Competitive Funding Received as Mentor

1. 1K01AA029763 Kumar, Virender (PI) 09/22/21-08/31/25

Funding Agency: NIH

Title: Targeting PI3K/BRD4 and Hedgehog Pathway in Alcohol Associated Liver Disease

The primary goal of this project is to determine the specific role of BRD4 and PI3K pathways in alcohol-induced liver injury and fibrosis. s.

SERVICE TO THE UNIVERSITY

1. Member, COP Executive Committee, University of Nebraska Medical Center (June 2013- Present)
2. Member, VC Research Meeting, University of Nebraska Medical Center (June 2013- Present)
3. Member, NCA Mission Subcommittee, University of Nebraska Medical Center (June 2014-Present)

4. Member, Dean's Advisory and Research Strategy Committees, University of Tennessee Health Science Center (UTHSC) (2012-2013)
5. Member, Molecular Resource Center (MRC), University of Tennessee Health Science Center (UTHSC) (2008-2013)
6. Member, Curriculum committees, University of Tennessee Health Science Center (UTHSC) (2003-present)
7. Member, Research Committee, UTHSC, College of Pharmacy (2004-present)
8. Member, Faculty Development Committees, UTHSC, College of Pharmacy (2005- present)
9. Member, Honors, Awards and Scholarships Committee, UTHSC, College of Pharmacy (2006-present)
10. Member, Faculty Search Committee, UTHSC College of Pharmacy (2006-present)Seminar Coordinator, UTHSC College of Pharmacy (2009-Present)

SERVICE TO PROFESSIONAL ASSOCIATIONS

2018 **Co-Chair,** Role of Nanotechnology in Immunotherapy, 5th Annual Biopharmaceutical Research & Development Symposium, Omaha (September 6-7, 2018)

2018 **Co-Chair,** Workshop on Drug Development Technologies, Omaha (March 6, 2018)

2017 **Co-Chair,** Research and Development of Nucleic Acid-based Nanomedicine, 4th Annual Biopharmaceutical R & D Symposium,Omaha (September 14-15, 2017)

2016 **Co-Chair,** Research and Development of Nucleic Acid based Nanomedicine, 3rdh Annual Biopharmaceutical R & D Symposium, Omaha (September 14-15, 2016)

2015 **Co-Chair,** Nanomedicine and Biopharmaceutical R & D Symposium, Guangzhou, China (March 9-10, 2015)

2014 **Co-Chair,** AAPS Worskshop on Emerging Trends in Nucleic Acid and Cell-Based Therapeutics, San Diego, CA (November 2, 2014)

2014 **Co-Chair,** AAPS Worskshop on Emerging Trends in Gene and Cell-Based Therapy and Drug Delivery, Fudan University, Shanghai, China (April 25-26, 2014)

2013 **Chair,** AAPS Nanottechnology Focus Group 2013 **Member**, AAPS Jamboree Meeting 2013

2012 **Session Chair**, 15th International Biotechnology Symposium & Exhibition, Daegu, Korea, 17-20, 2012

2012 **Session Chair**, SPIE Nanosystems in Engineering & Medicine Congress, Incheon, Korea, 9-13 Sepmetber, 2012

2012 **Chair**, AAPS Nanotechnology Focus Group (elected)

2011 **Session Chair**, Bioactive Materials: Regenerative Medicines, 32nd 38th Annual Meeting& Exposition of the Controlled Release Society, Washington DC, August 2, 2011.

2011 **Session Chair**, Plus/Minus Complexes, 15th International Symposium on Recent Advances in Drug Delivery Systems, Salt Lake City, UT, February 13-16, 2011

2008 **Session Chair**, Site-specific Delivery and Targeting of Nucleic Acids for treating Fibrosis, 2008 National Biotechnology Conference (NBC), Toronto, Canada (June, 2008)

2008 **Member**, CRS 2008 Educational Workshop Review Committee*, 35th Controlled Release Society Annual Meeting* (New York, NY, 2008

2007 **Member**, 2007 CRS/Jorge Heller Journal of Controlled Release Award Committee.

2007 **Session Chair**, Nanoencapsulation I, *34th Controlled Release Society Annual Meeting* (Long Beach, California, July, 2007)

2007 **Session Chair**, Solutions to Novel Drug Delivery System, 5th Annual Drug Discovery

Conference and Expo (IDDST), Shanghai, China, May 27-31, 2007.

2006 **Member**, Nonviral Gene Transfer Vectors Scientific Committee, American Society of Gene Therapy; *Controlled Release Society (CRS) Board of Scientific Advisors* (nominated) **Symposium Chair**, Biomaterials for Site-specific Delivery of Oligonucleotides and siRNA; and Emerging Trends in Cell-Based Therapeutics, *National Biotechnology Conferences* (June 18-21, Boston, MA)

2006 **Session Chair,** Delivery, Transport and Transcription, 9th Annual Meeting of American Society of Gene Therapy (ASGT), Baltimore, MD, May 31-June 4, 2006.

2005 **Short Course Chair**, Pharmaceutical Perspectives of Synthetic and Hybrid Vectors- based Nucleic Acid Therapeutics, 2005 AAPS Annual Meeting and Exposition (Nashville, 2005)

2004 **Workshop Chair**, Pharmaceutical Perspectives of Nucleic Acid-Based Therapeutics, 31st Controlled Release Society (CRS) Annual Meeting (Hawai, 2004)

2002 **Session Chair**, Therapeutic Gene/Oligonucleotide Delivery, 29th CRS Annual Meeting (Seoul, Korea, 2002)

1998 **Co-moderator**, Roundtable Presentation on Disposition of Nonviral Gene Delivery Systems, AAPS Annual Meeting (San Francisco, CA, 1998)

NATIONAL AND INTERNATIONAL SCIENTIFIC REVIEW PANELS

1. ZDK1 GRB-J1 (J1), NIH, Immune Cell Engineering for Type 1 Diabetes, November 15-16, 2021.
2. SEP-4: NCI Clinical and Translational Cancer Research, NIH, November 4-5, 2021.
3. BMBI Study Section meeting, NIH, June 10-11, 2021.
4. Pennsylvania's Department of Health Commonwealth Universal Research Enhancement Program (CURE) Grant Review, May 24, 2021.
5. Competitive Research Program, National Research Foundation, Singapore, May 2021.
6. Children's Cancer and Leukaemia Group (CCLG)< Great Britain, May 2021.
7. BST-M (50) Topics in Bioengineering Grant Review Panel, NIH. March 18-19, 2021
8. PAR-20-207 – Conference Grant application Special Emphasis Review Panel: R13 Conference Grant Review 2021-01, November 21, 2020.
9. Florida Department of Health Ed and Ethel Moore Alzheimer's Disease Research Program Panel Review, October 2020.
10. Special Emphasis Panel/Scientific Review Group **2020/10 AUD** meeting, June 25-26, 2020.
11. ZDK1GRB: Human Islet Research Network-- Consortium Targeting and Regeneration, June 5, 2019.
12. Innovative Research in Cancer Nanotechnology (IRCN) Study section of the NIH, September 6, 2019.
13. ZCA1 TCRB-D (O1), NCI Special Emphasis Panel on Biospecimen Science Technologies for Cancer Research, May 18, 2020.
14. SEP-2: Small Grant Program for Cancer Research of the NIH, October 6, 2019.
15. ZDK1 GRB-N (M3) Special Emphasis Panel: RFA-DK-17-020: Immune System Engineering Targeting Tolerance in Type 1 Diabetes. February 25, 2019.
16. Florida Department of Health Grant Review, OakRidge Review, December 2018.
17. ZDK1 GRB-N (O3) Special Emphasis Panel Meeting: RFA-DK-17-020: Immune System engineering

for targeted tolerance in Type 1 diabetes, July 25, 2018.

18. ZRG1 BST-U(10) Small Businness (SBIR/STTR) Review, March 22-23, 2017
19. NIDDK ZDK1 GRB-N (O1) Review Panel, "RFA-DK-17-003: Therapeutic Targeting of The Human Islet Environment (UC4) Review Panel, June 23, 2017.
20. NCI-IMAT 2017: ZCA TCRB-W O1 Special Emphasis Panel/Scientific Review Group, Washington, DC. June 30, 2017.
21. Pennsylvania Formula Grant Final Performance Review-17-18 Cycle A, Ocober 19-Nov 30, 2017
22. ZTR1 CG-8: R13/U15 NIH grant reviewer, November 8, 2017
23. New York Stem Cell Cancer I Generic Peer Review, Arlington, VA, September 26-28, 2016.
24. ZRG1 F05-D (21) Fellowship Cell Biology, Developmental Biology and Bioengineering Special Emphasis Panel, NIH, March 22-23, 2016 in Bethesda, MD.
25. Florida Department of Health, Oak Ridge Associated Universities, December 16, 2015
26. Co-Chair, SEP-12 ZCA1 TCRB-T (02) Study Section meeting, NIH, July 30, 2015.
27. Nazarbayev University Grant Review, Oak Ridge Associated Universities, 2015.
28. 2013 PCRP Laboratory Clinical Transition Award, Department of Defense, December 4-5, 2013.
29. Pennsylvania Final Review Performance Review, 12-13 Cycle A, Oak Ridge Associated Universities, 2012 and 2013.
30. National Institutes of Health, Bioengineering, Technology and Surgical Sciences (BTSS) Study Section, February, May and October, 2012 and 2013
31. 2011 PRCRP Discovery, Pancreatic Cancer-2, Department of Defense, January, 2012.
32. 2011 PCRP Clinical & Experimental Therapeutics #2 Panel Meeting, Department of Defense, October 12-14, 2011.
33. Pennsylvania Final Review Performance Review, 11-12 Cycle A, Oak Ridge Associated Universities, 2011.
34. National Institutes of Health, Bioengineering, Technology and Surgical Sciences (BTSS) Study Section, February 6-8, May 16-17 & Oct, 2011
35. 2010 Prostate Cancer Research Program - PRE-CET-D, Department of Defense, April 2010.
36. National Institutes of Health, Bioengineering, Technology and Surgical Sciences (BTSS) Study Section, February 11-12, May 17-18 & Oct 11-12, 2010.
37. Susan G. Komen for the Cure: Localized Chemotherapies, 2010
38. Estonian Science Foundation, September 2009
39. Nangyang Technological University, Singapore, August 2009

40. PCRP Clinical & Experimental Therapeutics #1 Panel Meeting, Department of Defense, July 26-28, 2009.
41. 2009/10 ZRG1 SBIB-V (58) RFA OD-09-003 NIH Challenge Panel#23 and BST-M (58) RFA OD-09-003 Challenge Grants Panel 4
42. National Institutes of Health, Bioengineering, Technology and Surgical Sciences (BTSS) Study Section, February 8-9, May 18-19 & October 6-7, 2009
43. World Class University (WCU) International Review Panel, WCU-KOSEF, Washington, DC., April 5-6, 2009.
44. 2009 Prostate Cancer Research Program - PRE-CET-B, April 2009.
45. Susan G. Komen for the Cure: Localized Chemotherapies, 2009.
46. National Institutes of Health, Bioengineering, Technology and Surgical Sciences (BTSS) Study Section, February 4-5, May 18-19 and October 6-7, 2008.
47. Clinical &Experimental Therapeutics-3 (CET-3) Panel Meeting, Department of Defense, July 20-22, 2008.
48. Susan G. Komen for the Cure Panel Meeting at Alexandria, VA, January 10-11, 2008.
49. National Institutes of Health, Special Emphasis Panel on Enzyme Assessment Core, NIDDK, November 15, 2007.
50. Clinical & Experimental Therapeutics-3 (CET-3) Panel Meeting, Department of Defense, August 15-17, 2007.
51. Israel Science Foundation, March 2007.
52. Wellcome Trust, Great Britain, January 2007.
53. Alberta Heritage Foundation for Medical Research, Canada, December 2006.
54. National Institutes of Health, Nanoscience and Nanotechnology, Washington D.C., July, 2004.
55. National Institutes of Health, Nanoscience and Nanotechnology (Washington D.C., March 2004
56. James and Esther King Biomedical Research Program, 2004-Present.
57. Engineering & Biological Systems (EBS) of Great Britain, April, 2004.
58. American Institute of Biological Sciences, October-November, 2002.
59. National Institutes of Health, Gene Therapy Panel, March, 2002.

PUBLICATIONS (Google Citations = 12,706 and h-index = 66)

Dr. Mahato has 165 peer-reviewed publications, 22 book chapters and 3 patents. He edited/co-edited/co-written 11 books and 14 journal theme issues. The 3rd Edition of his Textbook on Pharmaceutical Dosage Forms and Drug Delivery is suitable for teaching professional and graduate students. He is either corresponding or 1st authors in most of his publications. His total google citation is 12,761 and h-index 67 (accessed December 4, 2021).

JOURNAL THEME ISSUE EDITOR

1. Su Q, Kumar V and **Mahato RI** (Eds) Diabetes-associated Fibrosis, *Adv Drug Del Rev* **178:** 113968, 2021.
2. Li F and **Mahato RI** (Eds) Bioconjugate Therapeutics: Current Progress and Future Perspective (2017) *Mol Pharm* 14: 1321-1324, 20017.
3. Reynolds J and **Mahato RI** (Eds) Nanomedicines for the Treatment of CNS Diseases. J Neuroimmune Pharmacol. 12: 1-5, 2017.
4. Li F and **Mahato RI** (Eds) miRNAs as Targets for Cancer Treatment: Therapeutics Design and Delivery (2015). *Adv Drug Del Rev* **8:** 1-198.
5. Wang D and **Mahato RI** (Eds) Engineered Biomimetic Tissue Platforms for in vitro Drug Evaluation (2014). *Mol Pharm* 11(7): 1931-2.
6. Cheng K and **Mahato RI** (Eds) Biological and Therapeutic Applications of Small RNAs (2011). *Pharm Res* **28:** 2961-5.
7. Ye Z and **Mahato RI** (Eds) Emerging Trends in Gene- and Stem-Cell Based Combination Therapy (2011). *Mol Pharm* **8:** 1443-1445
8. Zhang X and **Mahato RI** (Eds) Targeting Cell Movement in Cardiovascular and Malignant Diseases (2011). *Adv Drug Del Rev* **63:** 555-557.
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10. Lee M and **Mahato RI** (Eds) Special Issue on the Gene Regulation for Effective Gene Therapy (2009) *Adv. Drug Del. Rev.* **61:** 487-488.
11. Cheng K and **Mahato RI** (Eds) Special Issue on siRNA Delivery (2009) Mol. Pharm. **6:** 649- 50.
12. Ye Z and **Mahato RI** (Eds) Special Issue on the Emerging Trends in Cell-Based Therapeutics (2008) *Adv. Drug Del. Rev.* 60: 89-90.
13. **Mahato RI** (Ed) Special Issues on Gene Delivery and Targeting (1999 and 2000) *J Drug Target* **7:** 241-313; **7:** 407-470; and **8:** 1-66.
14. **Mahato RI** (Ed) Theme Issue on Challenges of Turning Nucleic Acids into Therapeutics (2000) *Adv. Drug Del. Rev.* **44 (2-3):** 79-207.

BOOKS EDITOR/AUTHOR

1. Narang AS and **Mahato RI** (eds) *Drug Delivery and Targeting to the Lungs*, CRC Press (in Preparation)
2. Chitkara D, Mittal A and **Mahato RI** (eds) Molecular Medicines for Cancer: Concepts and Applications of Nanotechnology, CRC Press (2019)
3. **Mahato RI** and Narang AS. *Pharmaceutical Dosage Forms and Drug Delivery 3rd Edition: Revised and Expanded,* CRC Press, Inc., FL (2017)
4. Cheng K and **Mahato RI** (Eds) *Advanced siRNA Delivery* (2013) Wiley and Sons.
5. Danquah M and **Mahato RI** (Eds) *Emerging Trends in Cell and Gene Therapy* (2013) Springer, New York, NY.
6. **Mahato RI** and Narang AS. *Pharmaceutical Dosage Forms and Drug Delivery, 2nd Edition,* CRC Press, Inc., FL (2011)

7. Narang AS and **Mahato RI** (eds) *Targeted Delivery of Small and Macromolecular Drugs*, CRC Press (2010)
8. Lu Y and **Mahato RI** (eds) *Pharmaceutical Perspectives of Cancer Therapeutics*, Springer/AAPS Publication (2009)
9. **Mahato RI (**Au**)**. *Pharmaceutical Dosage Forms and Drug Delivery(2007)*, CRC Press, Inc., FL
10. **Mahato RI** (Ed) *Biomaterials for Delivery and Targeting of Proteins and Nucleic Acids* (2005), CRC Press, Inc., FL
11. **Mahato RI** and Kim SW (Eds) *Pharmaceutical Perspectives of Nucleic Acid-Based Therapeutics* (July 2002), Francis and Taylor, London

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1. Su Q, Kumar V and **Mahato RI** (Eds) Diabetes-associated Fibrosis, *Adv Drug Del Rev* **178:** 113968, 2021.
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3. Wang DA and **Mahato RI** (2014) A preface for engineered biomimetic tissue platforms for in vitro drug evaluation. *Mol Pharm.* **11:** 1931-2
4. Danquah M, Sigh S, Behrman S and **Mahato RI** (2012) Role of miRNA and cancer stem cells in chemoresistance and pancreatic cancer treatment. *Expert Opin Drug Deliv* **9:** 1443-7.Ye Z and **Mahato RI** (2011) Combining stem cells and genes for effective therapeutics. *Mol. Pharmaceutics* **8:** 1443-1445.
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1. Kumar V, Sethi B, Narang AS, Tso J, Cheong J, and **Mahato RI**. Effect of Surface coating with magnesium stearate on the aerosol performance of micronized fluticasone propionate from dry powder inhalers (*manuscript in preparation*)
2. Wang Q, Kumar V, Sethi B, Coulter DW and **Mahato RI**. ApoE mimetic peptide modified nanoparticles using for medulloblastoma immunotherapy by reducing CD47-SIRPα interaction and reversing immunosuppression (*manuscript in preparation*). *
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10. Wang, Q., Kumar, V., Lin, F., Sethi, B., Coulter, D. W., McGuire, T. R., & **Mahato, R. I.** (2020). ApoE mimetic peptide targeted nanoparticles carrying a BRD4 inhibitor for treating Medulloblastoma in mice. *J Control Release.* **323:** 463-474.
11. Kumar V, Dong Y, Kumar V, Almawash S and **Mahato RI** (2019) The use of micelles to deliver potential hedgehog pathway inhibitor for the treatment of liver fibrosis. *Theranostics.* 9: 7537-7555.
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13. Yang R, Chen H, Guo D, Dong Y, Miller DD, Li W and **Mahato RI** (2019) Polymeric micellar delivery of novel microtubule destabilizer and hedgehog signaling inhibitor for treating chemoresistant prostate cancer. *J Pharmacol Exp Ther*. 370: 864-875.

14. Xin X, Lin F, Wang Q, Yin L and **Mahato RI** (2019) ROS-Responsive polymeric micelles for triggered simultaneous delivery of PLK1 inhibitor/miR-34a and effective synergistic therapy in pancreatic cancer. *ACS Appl Mater Interfaces*. 11: 14647-14659.

15. Lin F, Wen D, Wang X and **Mahato RI** (2019) Dual responsive micelles capable of modulating miRNA-34a to combat taxane resistance in prostate cancer. ***Biomaterials***. 192: 95-108.

16. Kumar V, Kumar V, Luo J **and Mahato RI** (2018) Therapeutic potential of OMe-PS-miR-29b1 for treating liver fibrosis. *Mol Ther*. **26:** 2798-2811.

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19. Peng Y, Wen D, Lin F and **Mahato RI** (2018) Co-delivery of siAlox15 and Sunitinib for reversing type 1 diabetes in mice. *J Control Rel.* **292:** 1-12.

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BOOK CHAPTERS

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INVITED SPEAKERS (NATIONAL/INTERNATIONAL MEETINGS AND UNIVERSITIES):

1. Targeted Polymeric nanomedicine for effective treatment of medulloblastoma. 37th Southern Biomedical Engineering Conference, New Orleans, LA, December 3-5, 2021.
2. Redox-sensitive polymeric nanomedicine of small molecule and miRNA for effective treatment of pancreatic cancer. Global Congress on Advances in Polymer Sciences and Nanotechnology, May 27-28, 2021.
3. Overcoming Resistance Mechanisms in Hedgehog and Myc Amplified Meduloblastoma. Cisco Presentation, March 11, 2021.
4. Redox-sensitive Nanomedicine of miRNA and Gemcitabine for treating pancreatic cancer at the International Virtual Conference on Drug Discovery and Drug Delivery. BITS, Pilani, India, Nov 6-7, 2020.
5. Overcoming Resistance Mechanisms in Hedgehog and Myc Amplified Meduloblastoma. Child Health Research Imitative Forum, UNMC, March 6, 2020.
6. Design and Nanoformulations of Microtubule Inhibitor for treating Metastatic Melanoma. International Symposium on Biomedical Materials for Drug Del/Gene Delivery, in Honor of Prof. Jindrich Kopecek's 80th birth day, Salt Lake City, UT, February 7-8, 2020.
7. Nanoparticulate Delivery of Potent Microtubule Inhibitors for treating Metastatic melanoma, Shenyang Pharmaceutical University, China (October 14, 2019)
8. Nanoparticulate Delivery of Novel Microtubule Inhibitors for treating Lung Metastatic melanoma, China Pharmaceutical Concurrence, Yantai, China (October 12, 2019)
9. Targeted Nanoformulations for Biodistribution and Therapeutic Efficacy Studies in Orthotopic Meduloblastoma Mouse Model, PCRG Symposium, UNMC (August 27, 2019)
10. Polymeric Nanomedicine for Alcoholic and Nonalcoholic Fatty Liver Diseases, University of Iowa College of Pharmacy, Iowa City (April 9, 2019)
11. Dual Responsive Polymeric Micelles Capable of Modulating miR-34a to Treat Taxane Resistant

Prostate Cancer, *END2Cancer: Emerging Nanotechnology and Drug Delivery Applications for Cancer Conference,* Oklahoma City (December 5-7, 2018)

12. Polymeric Nanomedicine of Small Molecules and miRNA for treating Pancreatic Cancer. 2018 China Pharmaceutical Conference, Guangzhou (December 1, 2018)
13. pH and ROS Responsive Polymeric Nanomedicine of miRNA and Small Molecules for Cancer Treatment, West China School of Pharmacy, Sichuan University of Houston (November 29, 2018)
14. Polymeric Nanomedicine of miRNA and Small Molecules for Cancer Treatment, Department of Polymeric Materials, Tongji University, Shanghai, China (November 27, 2018)
15. Polymeric Nanomedicine of Small Molecules and Noncoding RNA for Pancreatic Cancer. College of Pharmacy, University of Houston (September 13, 2018)
16. Polymeric Nanomedicine of Small Molecules and Noncoding RNA for Pancreatic Cancer. University of Hong Kong (June 27, 2018)
17. Development of Nanomedicines for treating Liver Fibrosis: Formulation, Biodistribution and Therapeutic Efficacy in Animal Models. Shenzhen Institute for Drug Control, China (June 26, 2018)
18. Design of Polymeric Nanomedicine of Small Molecules and miRNA for Pancreatic Cancer. Sun Yat-Sen University, Guangzhou, China (June 25, 2028)
19. Dual Responsive Micelles Capable of Modulating miR-34a to Combat Taxane Resistance in Prostate Cancer. *Chinese Conference on Research and Development Technologies of Delivery Systems of Traditional Chinese Medicine*, Nanchang, Jianxi, China (June 22-24, 2018).
20. Nanomedicine for treating Prostate Cancer. GU Oncology Focus Group, UNMC, March 23, 2018.
21. Polymeric Nanomedicine of Small Molecules and miRNA for Treating Pancreatic Cancer. Kansas State University, March 13, 2018.
22. Nanomedicines in Cancer- What Does Nowrk in Translation to Clinic and Why?, AAPS Annual Meeting and Exposition, San Diego, CA, November 12- 15, 2017.
23. Role for miRNA-205 in Gemcitabine Resistant Pancreatic Cancer, 2017 TechConnect World Innovation Conference, Washington DC, May 15-17, 2017
24. Combination of Gene and Stem Cell Therapy for Improved Cell and Organ Transplantation, College of Pharmacy, University of Pittsburgh, April 18, 2017
25. Nanomedicines of miRNA and Small Molecules for treating Pancreatic Cancer, International Symposium on Drug Delivery and Pharmaceutical Sciences: Beyond the History, Kyoto, Japan, March 10, 2017
26. Role of microRNA-205 in Gemcitabine Resistant Pancreatic Cancer, Hanyang University, Seoul, Korea, March 8, 2017
27. Recent Advances in **Nucleic Acid-based Therapeutics, Hong Kong Pharmacy Conference**, February 18-19, 2017
28. Precision Medicine of Small Noncoding RNA and Small Molecules for treating Liver Fibrosis, **Chinese University of Hong Kong,** February 17, 2017.
29. Precision medicines of small noncoding RNA and small molecules for treating liver fibrosis. **Tongji University, Shanghai**, China, December 7, 2016.
30. Polymeric nanomedicines of miRNA and small molecules for treating pancreatic cancer. **China Pharmaceutical University**, Nanjing, December 6, 2016.
31. Combination therapy for treatment of advanced and metastatic cancer. **Nanjing University**, December 6, 2016.
32. Design, synthesis and evaluation of novel hedgehog inhibitors for treating advanced metatic cancer. **UNMC Pediatric Cancer Research Program (PCRP)**, December 1, 2016.
33. Polymer-drug conjugates for treating resistant and metastatic cancer. **Mayo Clinic Angiogenesis Symposium**, Amelia Island, FL, November 18-20, 2016.
34. Combination therapy of small molecule hedgehog inhibitor and miRNA for treating pancreatic

cancer. **Department of Cheimistry, University of Nebraska Omaha,** October 10, 2016.

35. Micellar delivery of miRNA and small molecules for treating pancreatic and prostate cancers. **35th Annual GRASP Conference, Florida A&M University College of Pharmacy**, July 22-24, 2016.
36. Combination therapy of small molecule hedgehog inhibitor and miRNA for treating pancreatic and prostate cancers. **Department of Cheimistry, University of Nebraska Lincoln,** April 25, 2016.
37. Combination of Hedgehog Inhibitor and siRNA/miRNA for treating Liver Fibrosis. **University of Utah College of Pharmacy, Salt Lake City,** February 22, 2016.'
38. Polymeric nanomedicines of miRNA and small molecules for treating pancreatic cancer.**University of Georgia,** Athens, GA, September 2, 2015
39. Adult mesenchymal stem cells and their exosomes: an immunoregulatory regeneration therapy for type 1 diabetes, **Sanford Research Alex Rabinovitch Type 1 Diabetes Symposium,** Sioux Falls, SD, June 18-19, 2015.
40. Polymeric nanomedicines of miRNA and small molecules for treating pancreatic cancer, **Nanomedicines and Biopharmaceutical R &D Symposium.** Guangzhou, China (March 9, 2015)
41. Nanomedicines of miRNA and hedgehog inhibitors for treating liver injury and fibrosis, **Institute of Life and Health Engineering, Jinan University**, Guangzhou, China (March 10,2015)
42. Polymeric mcelles of miRNA and small molecules for treating pancreatic cancer, **College of Pharmacy, Peking University, Beijing**, China (March 11, 2015)
43. Nanomedicines of miRNA and hedgehog inhibitors for Treating Liver Fibrosis, **Tsinghua University, Guangzhou, China** (March 12, 2015)
44. Nanomedicines of miRNA and small molecules for treating pancreatic cancer, **AAPS Workshop on Emerging Trends in Nucleic Acid and Cell-Based Therapeutics.** San Diego, CA (November 2, 2014)
45. Polymeric nanomedicines of small molecule drugs and miRNA for treating Advanced Pancreatic and Prostate Cancers. **Society of Biomaterials Student Chapter, University of South Dakota,** Vermillion, SD (October 3, 2014).
46. Polymeric Nanomedicines of Small Molecules and miRNA for treating Advanced Pancreatic and Prostate Cancers, **Mayo Clinic Angiogenesis Symposium**, Rochester, MN (August 22-24, 2014\
47. Combination of Gene and Cell-based Therapy for improving the Outcome of Islet Transplantation in Humanized Mice. AAPS Worskshop on **Emerging Trends in Gene and Cell-Based Therapy and Drug Delivery, Fudan University, Shanghai, China** (April 25- 26, 2014)
48. Polymeric Nanomedicines of Small Molecule Drugs and miRNA for Treating Pancreatic Cancer**, Eppley Science Hall, University of Nebraska Medical Center**, Omaha, January 16, 2014.
49. Delivery and Targeting of Small and RNA Molecules for Treating Liver Diseases, **VA Hospital, Omaha, NE**, September 13, 2013.
50. Emerging Trends in Development of Small Molecules, siNRA and miRNA-based Therapeutics, **East China Normal University, Shanghai, China**, September 12, 2013.
51. Roles of Chemoresistance, Cancer Stem Cells and miRNA in treating Cancer using Polymeric Nanomedicines, **Fudan University, Shanghai, China**, September 10, 2013
52. Nanomedicines Targeting Chemoresistance, Cancer Stem Cells and miRNA for effective treatment of Prostate and Pancreatic Cancer, **China Pharmaceutical University, Nanjing, China**, September 11, 2013.
53. Roles of Chemoresistance, Cancer Stem Cells and miRNA in treating Cancer using Polymeric Nanomedicines, Department of Pharmaceutical Sciences, **Mercer University**, **Atlanta, GA**, September 6, 2013**.**
54. Emerging Trends in Development of Small Molecules, siRNA and miRNA-based Therapeutics. **International Conference of Bioeconomy, Tianjin, China,** June 25-26, 2013**.**
55. Emerging Trends in Combination Therapy with RNAi. **14th Annual Meeting of American Society**

of Gene and Cell Therapy (ASGCT), Salt Lake City, May 15-18, 2013.

56. Combination of Stem Cells and Gene Therapy for Improving Islet Transplantation. **Seoul National University**, Korea, September 11, 2012.
57. Polymeric Nanomedicines for treating Pancreatic Cancer**, Pohang University of Science and Technology (POSTECH)**, Korea, September 18, 2012.
58. Roles of Cancer Stem Cells and miRNA in treating Cancer using Polymeric Nanomedicines. **Nanyang University, Singapore**, September 14, 2012.
59. Delivery and Targeting of RNA Molecules for Treating Liver Diseases. **15th International Biotechnology Symposium and Exhibition**, Daegu, Korea, September 16-21.
60. Emerging Trends in RNA-based Combination Therapy. Global RNAi Carrier Initiative Symposium and Workshop, **Korea Institute of Science & Technology (KIST)**, Seoul, Korea, July 4-6, 2012.
61. Impact of Polymeric Nanomedicine on miRNA, Cancer Stem Cells and Chemoresistance**. SPIE: Nanosystems in Engineering and Medicines, Incheon, Korea**, Sep 10-12, 2012,
62. Stem Cells and Gene Therapy for Improved Islet Transplantation. Endocrine Grand Round at the **University of Tennessee** Division of Endocrinology, Diabetes & Metabolism, May 3, 2012.
63. Roles of Chemoresistance, Cancer Stem Cells and miRNA in treating Cancer using Polymeric Nanomedicines, Center for Drug Delivery and Nanomedicine, **University of Nebraska Medical Center**, April 19, 2012Aaa
64. Biodistribution and Cellular Uptake of Oligonucleotides for treating Liver Fibrosis, **Bristol Myers Squibb, Princeton**, NJ, April 12, 2012.
65. Delivery and Targeting of siRNA and shRNA, **Bristol Myers Squibb**, Princeton, NJ, April 12, 2012.
66. Polymeric Nanomedicines for treating Pancreatic and Prostate Cancer, **North Dakota State University School of Pharmacy**, February 23, 2012.
67. Combination of Stem Cells and Gene Therapy for Improved Islet Transplantation. **University of Colorado School of Pharmacy**, Denver, CO, Sep 22, 2011.
68. Bench to Business: Innovate or Perish. Departmental Seminar, **University of Tennessee College of Pharmacy**, Aug 29, 2011.
69. Design Elements and Formulation Factors for Efficient Gene and siRNA Delivery. Workshop on Understanding the Organization of the Intracellular Region, **University of Memphis**, June 23-24, 2011.
70. Site-Specific Delivery of Oligonucleotides and siRNA for Treating Liver Fibrosis, **Nitto Denko Technological Corp**, Oceanside, CA, May 5, 2011.
71. Bioconjugation for Site-specific Delivery of Olinucleotides and siRNA for treating Liver Diseases, **UTHSC Nanodays**, March 30, 2011.
72. Polymeric Nanomedicines for treating Advanced Prostate Cancer. **National Institute of Pharmaceutical Research (NIPER), Mohali, Punjab, India**, March 21, 2011.
73. Hedgehog Inhibitors Attenuate Ischemia Reperfusion Injury in Normal and Cholestatic Rat Livers. **Postgraduate Institute of Medical Education & Research (PGIMER), Chandigarh, India**, March 21, 2011.
74. Polymeric Nanomedicines and Combination Therapy for treating Advanced Prostate Cancer. **Center for Biomedical Engineering, National Institute of Technology (IIT), New Delhi, India**, March 22, 2011.
75. Bioconjugation for Site-Specific Delivery of Oligonucleotides and siRNA for Treating Liver Fibrosis, **NIPER, Hydrabad, India**, March 23, 2011.
76. Mesenchymal Stem Cells as Gene Delivery Vehicles for Successful Islet Transplantation. **Delhi Institute of Pharmaceutical Sciences and Research (DIPSAR), New Delhi, India**, March 23, 2011.
77. Delivery and Targeting of Oligonucleotides and siRNA for treating Liver Diseases **International Conference on Biomaterials Science 2011: In Honor of Prof Kazunori Kataoka's 60th Birthday**, March 15-18, 2011.

78. Mesenchymal Stem Cell-based Gene Therapy for improving the Outcome of Islet Transplantation. **Division of Endocrinology Grand Rounds, University of Tennessee Health Science Center**, August 12, 2010.
79. Site-Specific Delivery and Targeting of Oligonucleotides and siRNA for treating liver diseases. **International Forum on Liver Disease, Huai'An, China**, June 11-13, 2010.
80. Polymeric Nanomedicines for Treating Advanced Prostate Cancer, Institute of Biological Sciences and Biotechnology, **Donghua University, Shanghai**, China, June 9, 2010.
81. Novel Amphiphilic Copolymers for Micellar Drug Delivery and Combination Therapy for Treating Prostate Cancer, **East China University of Science and Technology**, Shanghai, China, June 9, 2010.
82. Gene Expression and Silencing for Improved Islet Transplantation, **Shanghai Veterinary Research Institute, Chinese Academy of Agricultural Sciences**, June 10, 2010.
83. Polymeric Nanomedicines and Combination Therapy for the Treatment of Advanced Prostate Cancer, **Biomedical Polymers for Drug Delivery 2010: In Honor of Prof Jindrich Kopecek's 70th Birthday**, March 26-27, 2010.
84. Polymeric Nanomedicines and Combination Therapy for treating Resistant Prostate Cancer, **Institute for Innovative NanoBio Drug Discovery and Development, Kyoto University**, Japan, December 5, 2009.
85. Polymeric Micelle-based Combination Therapy for Treating Advanced Prostate Cancer. **California NanoSystems Institute, University of California**, Los Angeles, November 12, 2009.
86. Non-viral-based Gene Delivery: Obstacles, Challenges and O, **Annual American Physical Society Meeting,** Pittsburgh, PA, March 16-20, 2009.
87. Gene Delivery and Silencing for Improved Human Islet Transplantation, **SMi Group's 6th Conference on Controlled Release,** London, UK, March 11-12, 2009.
88. Gene Expression and Silencing for Improved Islet Transplantation, **14th International Symposium on Recent Advances in Drug Delivery Systems, in Salt Lake City, UT,** February, 2009.
89. Viral and Nonviral Gene Delivery, Department of Pharmacy Practice and Biopharmaceutical Sciences, **University of Illinois at Chicago**, January 21, 2008.
90. Site-Specific Delivery and Targeting of Oligonucleotides and siRNA for treating liver fibrosis, **NBC Meeting**, Toronto, Canada, June 22-25, 2008.
91. Site Specific Delivery and Targeting of Oligonucleotides and siRNA for Treating Liver Diseases, **2nd International Symposium for Intelligent Drug Delivery System, Seoul, Koreas**, May 8-9, 2008.
92. Synthesis and Characterization of Pyridinium cationic lipids for gene delivery. **Seoul National University**, May 7, 2008.
93. Targeted Delivery of Oligonucleotides and siRNA for Treating Liver Diseases, **Singapore National University,** May 6, 2008.
94. Gene Delivery and Silencing for treating Liver Diseases. School of Pharmacy, **Chinese University of Hong Kong**, May 5, 2008.
95. Targeted Delivery of Oligonucleotides and siRNA for Treating Liver Diseases, **Ambion**, Austin, Texas, April 17, 2008.
96. Site Specific Delivery and Targeting of Oligonucleotides and siRNA for Treating Liver Diseases, School of Pharmacy, **University of Minnesota**, Minneapolis, March 27, 2008.
97. Gene Expression and Silencing for Improved Human Islet Transplantation, School of Pharmacy, **University of Kentucky**, Lexington, KY, February 15, 2008.
98. Site Specific Delivery and Targeting of Oligonucleotides and siRNA for Treating Liver Fibrosis and Hepatitis, School of Pharmacy, **University of Manchester, United Kingdom**, October 18, 2007.
99. Site Specific Delivery and Targeting of Oligonucleotides and siRNA for Treating Liver Diseases,

Department of Pharmacy, Ludwig-Maximilians-Universität, Munich, Germany, October 16, 2007.

100. Delivery and Targeting of Oligonucleotides and siRNA, **Pfizer Global Research & Development, St Louis, MO**, September 27, 2007.
101. Site-specific Delivery of Oligonucleotides and siRNA, **Department of Macromolecular Science, Fudan University, Shanghai, China**, May 31, 2007.
102. Site-specific Delivery and Targeting of Nucleic Acid Drugs for Treating Liver Diseases,
103. **China Pharmaceutical University, Nanjing, China,** May 30, 2007.
104. Site-specific Delivery and Targeting of Oligonucleotides and siRNA for Treating Hepatitis and Liver Fibrosis, **5th Annual Drug Discovery Conference and Expo (IDDST)**, Shanghai, China, May 27-31, 2007.
105. Site-specific Delivery of Nucleic Acids (ODNs and siRNA) for Treating Liver Fibrosis**, University of London School of Pharmacy,** April 26, 2007.
106. ODN (antisense and antigene) and siRNA Delivery and Targeting**, Industry and Health Authority Conference on: Oligonucleotide-based Therapeutics,** Bethesda, MD, April 19-20, 2007.
107. Site-specific Delivery of Oligonucleotides and siRNA for treating Liver Fibrosis,
108. **Endocrinology Grand Round, University of Tennessee** Memphis, January 25, 2007
109. The Role of Scientific Journals on Our Travel to Gene and Nanoworld, **Universidade de Sao Paulo, Brazil**, August 29-31, 2006.
110. Gene Therapy and Gene Silencing in Islet Transplant, Division of Endocrinology,
111. **University of Tennessee Memphis**, August 22, 2006.
112. Site-specific Delivery of Oligonucleotides and siRNA for Treatment of Liver Fibrosis,
113. **Faculty of Pharmaceutical Sciences, Utretch University, Netherlands**, July 21, 2006
114. Site-specific Delivery of TFO and siRNA for Treatment of Liver Fibrosis, **School of Pharmacy, University of Southern California**, Los Angeles, CA, March 31, 2006.
115. Gene Expression and Silencing for Improved Islet Transplantation, **School of Pharmacy, University of Wisconsin**, WI, September 16, 2005
116. Targeted Delivery of Triplex Forming Oligonucleotides to Hepatic Stellate Cells for Treatment of Liver Fibrosis, **School of Pharmacy, University of Toronto**, Canada, June 2005.
117. Site-specific Delivery of Triplex Forming Oligonucleotides for Treatment of Liver Fibrosis.
118. **School of Pharmacy, University of Arkansas, Little Rock**, AR, April 2005
119. A Travel to Gene and Nanoworld: A seminar to PharmD students, **School of Pharmacy, University of Arkansas, Little Rock**, AR, April 2005
120. Gene Expression and Silencing for Improved Islet Transplantation, **School of Pharmacy, University of Wisconsin**, WI, September 16, 2005.
121. Targeted Delivery of Triplex Forming Oligonucleotides to Hepatic Stellate Cells for Treatment of Liver Fibrosis, **School of Pharmacy, University of Toronto**, Canada, June 2005.
122. Viral and nonviral approaches to growth factor gene delivery, **CRS Workshop, 31st Annual Meeting of the Controlled Release Society**, **Hawai**, June 2004.
123. Modulation of gene expression by antisense, antigene and sRNAi, **31st Annual Meeting of the Controlled Release Society, Hawai**, June 2004.
124. Viral Vector never!! Pearls of Wisdom, **31th Annual Meeting of the Controlled Release Society,** Hawai, July 2004.
125. Challenges for oligonucleotide delivery. **30th Annual Meeting of the Controlled Release Society,** Glasgow, **Great Britain**, July 2003.
126. Vascular endothelial growth factor gene delivery to human islets for neoangiogenesis after

transplantation, Department of Internal Medicinem Endocrinology and Diabetology, **Universitat Sklinikum, Giessen, Germany**, July 15, 2003.

127. Development of novel gene carriers and expression systems for the treatment of diabetes and cancer, Pharmaceutics and Biopharmacy at the **Philipps-University, Marburg, Germany**, July 16, 2003.
128. Development of novel gene delivery systems for the treatment of diabetes and cancer, Department of Biopharmaceutics and Pharmaceutical Technology, **University of Saarland, Saarbrucken, Germany**, July 18, 2003.
129. From bench to business: Tips for academics considering industrial careers, **UT Graduate Research Student Day**, May 2, 2003.
130. Triplex forming Oligonucleotide Delivery, **Enzon, Inc**. in Piscataway, NJ., October 2, 2003
131. Viral and Non-viral Approaches to Human Islet Transplantation. **Department of Allergy and Immunology, University of Tennessee, Memphi**s, December 8th, 2003.
132. Functional Polymer and Lipid-based gene delivery for treatment of cancer and diabetes, **School of Biomedical Engineering, University of Tennessee Memphis**, October 4, 2002.
133. Development of gene delivery and expression systems for treatment of cancer and diabetes, **Vascular Biology Center of Excellence, University of Tennessee Memphis**, October, 2002.
134. Gene delivery and expression systems for treatment of cancer and diabetes, **Hepatitis C Group, University of Tennessee Memphis**, September, 2002.
135. Lipopolymeric Gene Delivery for the treatment of diabetes, Department of Materials Science, **University of Tokyo**, **Japan**, July 15, 2002
136. Nonviral Approaches for Gene Delivery to Human Islets, Division of Stem Cell Regulation Research, **Osaka University**, School of Medicine, **Japan**. July 17, 2002.
137. Development of Synthetic Gene Carriers, Department of Chemistry, College of Natural Sciences, **Seoul National University**, South Korea. July 24, 2002.
138. Polymeric Gene Delivery for the Treatment of Cancer and Diabeties, **University of Nebraska** at Omaha, March 11, 2002.
139. Functional and Biospecific Polymers for Therapeutic Gene Delivery at **AAPS Workshop on Critical Issues in the Design & Applications of Polymeric Biomaterials in Drug Delivery**, Arlington, VA. (February 28 ~ March 1, 2002).
140. Nonviral Gene Delivery, **St. Jude's Children's Hospital**, Memphis, November, 2001.
141. Introduction to Gene Therapy at Sunrise School of Pharmacy Session at the AAPS Annual Meeting (Indianapolis), 2000.
142. Tailor made polymeric gene carriers at the *3rd Congress of Eur Assoc Clin Pharmacol Ther (EACPT)*, **Jerusalem**, **Israel** (3-8, Oct' 99).

ABSTRACTS (*Speaker)

1. Sethi B, Kumar V, Wang Q, Lin F, Dong Y, Coulter DW and **Mahato RI** (2021) Overcoming Resistance Mechanisms in Hedgehog and Myc-amplified Medulloblastoma. AAPS Annual Meeting and Exhibition, Philadelphia, October 17-20, 2021.
2. Bariwal J, Kumar V, Chen H, Bhattarai RS, Li W and **Mahato RI**. Design and Nanoformulations of Microtubule Inhibitor for treating Metastatic Melanoma. International Symposium on Biomedical Materials for Drug Del/Gene Delivery, in Honor of Prof. Jindrich Kopecek's 80th birth day, Salt Lake City, UT, February 7-8, 2020.
3. Kumar V, Seth B, Kumar V, Mcguire TR, Coulter CW and **Mahato RI.** Targeting vismodegib-resistant medulloblastoma using novel hedgehog pathway inhibitor and miR-29b mimic. AACR meeting 2019 (Atlanta, GA)
4. Bhattarai RS, Bariwal J, Hao C, Li W and **Mahato RI**. Synergistic Combination of Novel Tubulin

Inhibitor and dual PI3K/AKT/mTOR-BRD4 Inhibitor to Treat Pancreatic cancer. AAPS 360 2019 (November 3-6, 2019, San Antonio, TX)

5. ***Mahato RI**. Nanoparticulate Delivery of Novel Microtubule Inhibitors for treating Lung Metastatic melanoma, China Pharmaceutical Conference, Yantai, China (October 12, 2019)
6. Bariwal J, Kumar V, Chen H, Bhattarai RS, Yang P, Li W and **Mahato RI**. Nanoparticulate Delivery of Potent Microtubule Inhibitor for Metastatic Melanoma Treatment. 6th Annual Biopharmaceutical Research and Development Symposium (BRDS), UNMC, September 6-7, 2019.
7. ***Mahato RI**. Dual Responsive Polymeric Micelles Capable of Modulating miR-34a to Treat Taxane Resistant Prostate Cancer, END2Cancer: Emerging Nanotechnology and Drug Delivery Applications for Cancer Conference*,* Oklahoma City, December 5-7, 2018.
8. ***Mahato RI**. Polymeric Nanomedicine of Small Molecules and miRNA for treating Pancreatic Cancer. 2018 China Pharmaceutical Conference, Guangzhou, December 1, 2018.
9. Peng Y, Wen D, Lin F and **Mahato RI**. Co-delivery of siAlox15 and Sunitinib for Reversing Type I Diabetes in Mice. 5th Annual Biopharmaceutics Research and Development Symposium, September 6-7, 2018.
10. **Mahato RI.** Bench to Business: How to Step Into the Business World? 5th Annual Biopharmaceutics Research and Development Symposium, September 6-7, 2018.
11. Kumar V, Kumar V, McGuire T, Coulter DW and **Mahato RI**. Co-delivery of Hedgehog Inhibitor and topotecan to treat medulloblastoma. 5th Annual Biopharmaceutics Research and Development Symposium, September 6-7, 2018.
12. Xin X, Lin F, Wang Qi, Yin L and **Mahato RI**. Combination Therapy of Small Molecule PLK1 Inhibitor and miRNA to treat Pancreatic Cancer. 5th Annual Biopharmaceutics Research and Development Symposium, September 6-7, 2018.
13. Bhattarai RS, Kumar V, Chaudhary AK and **Mahato RI**. Therapeutic intervention with miRNA and small molecule HH inhibitor for the management of pancreatic cancer. 5th Annual Biopharmaceutics Research and Development Symposium, September 6-7, 2018.
14. **Mahato RI.** Dual Responsive Micelles Capable of Modulating miR-34a to Combat Taxane Resistance in Prostate Cancer. *Chinese Conference on Research and Development Technologies of Delivery Systems of Traditional Chinese Medicine*, Nanchang, Jianxi, China, June 22-24, 2018.
15. Almawash SA, Mondal G and **Mahato RI**. Coadministration of Polymeric Conjugates of Docetaxel and Cyclopamine enhances inhibition of orthotopic Pancreatic Cancer . 4th Annual Biopharmaceutics R & D Symposium, Sep 7-8, 2017
16. Kumar V, Chaudhary AK, Dong Y, Zhong HA, Mondal G, Lin F, Kumar V and **Mahato RI**. Design, synthesis and biological evaluation of potent analogues of GDC-0449 for the treatment of pancreatic cancer. 4th Annual Biopharmaceutics R & D Symposium, Sep 7-8, 2017
17. Kumar V, Kumar V and **Mahato RI**. Delivery of chemically stabilized microRNA for treatment of liver fibrosis. 4th Annual Biopharmaceutics R & D Symposium, Sep 7-8, 2017.
18. Guo D, Yang R, Chen H, Dong Y, Li W and **Mahato RI**. Synergistic therapeutic effect of novel microtubule destabilizer and hedgehog signaling inhibitor against chemoresistant prostate cancer. AAPS Annual Meeting and Exhibition, San Diego, CA, November 12-15, 2017.
19. Chaudhary AK, Bhattalrai RS, Mondal G, Batra SK and **Mahato RI**. A therapeutic approach to treat pancreatic cancer using miR-let7b-5p and hedgehog pathway inhibitor. AAPS Annual Meeting and Exhibition, San Diego, CA, November 12-15, 2017.
20. Kumar V, Kumar V and **Mahato RI.** Delivery of chemically stabilized microRNA for treatment of liver fibrosis. 20th Annual Meeting of American Society of Gene and Cell Therapy (ASGCT), Washington DC, May 10-13, 2017.
21. Lin F, Wen D and **Mahato RI**. Multi-functional nanocarrier of docetaxel and miRNA-34a modulator for treating prostate cancer. 254th American Chemical Society National Meeting & Expo, Washington DC, August 20-24, 2017.

22. Almawash S, Mondal G and **Mahato RI** (2016) Combination of polymeric conjugate of paclitaxel and Cyclopamine for treating pancreatic cancer**.** *AAPS Annual Meeting, Denver. CO*, November 13-17, 2016.
23. Chaudhary AK, Kattel K and **Mahato RI** (2016) A therapeutic approach to treat chemoresistant pancreatic cancer using miR-205 and gemcitabine. *AAPS Annual Meeting, Denver. CO*, November 13-17, 2016.
24. Wen D, Peng Y, Liu D, Weizmann Y and **Mahato RI** (2016) Mesenchymal stem cell and derived exosome as small RNA carrier and immunomodulator to improve islet transplantation. *GPEN (Globalization of Pharmaceutics Education Network)* Annual Conference, Lawrence KS, November 9-12, 2016.
25. *Peng Y, Dong Y and **Mahato RI** (2016) Synthesis and characterization of a novel mycophenolic acid - quinic acid conjugate as an immunosuppressant with decreased toxicity. 51st ACS Midwest Regional Meeting in Manhattan, KS, October 28, 2016.
26. Dutta D, Peng Y, Kumar V, Evande RE, Grem JL and **Mahato RI** (2016) Biodistribution of GDC-0449 loaded micelles in liver fibrotic mice. *Controlled Release Society Annual Meeting*, Seattle WA, July 17-20, 2016.
27. Peng Y, Dong Y and Mahato RI (2016) Synthesis and characterization of a novel mycophenolic acid - quinic acid conjugate as an immunosuppressant. *Controlled Release Society Annual Meeting*, Seattle WA, July 17-20, 2016.
28. Chaudhary AK and **Mahato RI** (2016) Mechanisms and therapy of gemcitabine and miR-205 in pancreatic cancer. *COBRE Retreat***,** Nebraska City, June 1, 2016**.**
29. Yang R, Mondal G and **Mahato RI** (2015) Combination therapy of paclitaxel and cyclopamine polymer conjugates to treat chemoresistant prostate cancer. *AAPS Annual Meeting, Orlandao FL*, October 25-29, 2015.
30. Kumar V, Mondal G and **Mahato RI** (2015) Co-delivery of GDC-0449 and miR-29b1 for Treating Liver Injury and Fibrosis, *AAPS Annual Meeting, Orlandao FL*, October 25-29, 2015.
31. Kattel K, Mondal G, Evande R, Tan C and **Mahato RI** (2015) Impact of CYP2C19 Polymorphism on the Pharmacokinetics of Nelfinavir in Pancreatic Cancer Patients, *AAPS Annual Meeting, Orlandao FL*, October 25-29, 2015.
32. Mondal G, Kumar V and **Mahato RI** (2015) EGFR Targeted Polymeric Mixed Micelles Carrying Gemcitabine for Treating Pancreatic Cancer, *AAPS Annual Meeting, Orlandao FL*, October 25-29, 2015.
33. Mundra V, Peng Y, Rana S, Natarajan A and **Mahato RI** (2015) Micellar Formulation of Indocyanine Green for Photodynamic Therapy of Melanoma, *AAPS Annual Meeting, Orlandao FL*, October 25-29, 2015.
34. Wen D, Peng Y and **Mahato RI** (2015) Mesenchymal stem cell-derived exosomes as gene carriers for improving islet transplantation, *AAPS Annual Meeting, Orlandao FL*, October 25-29, 2015
35. Mahato RI (2014) Nanomedicines of miRNA and small molecules for treating pancreatic cancer, AAPS Workshop on Emerging Trends in Nucleic Acid and Cell-Based Therapeutics, *San Diego*, November 2-6, 2014.
36. Kumar V, Mundra V and **Mahato RI** (2013) Nanomedicines of hedgehog inhibitor and PPAR□□agonist for treating liver fibrosis. *AAPS Annual Meeting, San Antonio*, November 2- 6, 2013.
37. Mundra V, Wu H and **Mahato RI** (2013) Bone Marrow Mesenchymal Stem Cells and Gene Therapy for Successful Islet Transplantation. *AAPS Annual Meeting, San Antonio*, November 2-6, 2013.
38. Wen D, Wu H, Singh S and **Mahato RI** (2013) RNAi of FasL and miR375 for Human Islet Transplantation. *AAPS Annual Meeting, San Antonio*, November 2-6, 2013.
39. Mittal A, Wu H and **Mahato RI** (2013) Role of Monocytes in Immunomodulation Caused By Human Bone Marrow Stem Cells. *AAPS Annual Meeting, San Antonio*, November 2-6, 2013.

40. Chitkara D, Mittal A, Behrman SW and **Mahato RI** (2013) Polymeric Micelles for Co- delivery of Gemcitabine and miRNA-205. *AAPS Annual Meeting, San Antonio*, November 2-6, 2013.
41. Wu H, Wen D and **Mahato RI** (2013) Bone Marrow Derived Mesenchymal Stem Cells Prevented the Rejection of Islet Allografts in Humanized Mouse Model. *AAPS NBC meeting*, San Diego, May 19-21, 2013.
42. Danquah M, Fujiwara T and **Mahato RI** (2012) 'Biodegradable Crosslinked Polymeric Micelles for Drug Delivery. *AAPS Annual Meetin*g, Chicago, IL, October 14-18.
43. Wu H and **Mahato RI** (2012) Human Bone Marrow derived Mesenchymal Stem Cells for Improved Human Islet Transplantation. *AAPS Annual Meetin*g, Chicago, IL, October 14-18.
44. **Mahato RI** (2012) Delivery and Targeting of RNA Molecules for Treating Liver Diseases. **15th International Biotechnology Symposium and Exhibition**, Daegu, Korea, September 16-21.
45. **Mahato RI** (2012) Impact of Polymeric Nanomedicine on miRNA, Cancer Stem Cells and Chemoresistance**. SPIE: Nanosystems in Engineering and Medicines, Incheon, Korea**, Sep 10-12, 2012
46. Singh S, Chitkara D, Behrman SW and **Mahato RI** (2012) Chemoresistance in Prostate Cancer Cells is Regulated by miRNAs and Hedgehog Pathway. *39th CRS Annual Meeting & Exposition*, (Québec City, Canada).
47. Danquah M, Fujiwara T and **Mahato RI** (2012) Lactic acid and carbonate-based crosslinked polymeric micelles as drug delivery vehicles. *39th CRS Annual Meeting & Exposition*, (Québec City, Canada).
48. Chitkara D, Singh S, Behrman SW and **Mahato RI** (2012) Cyclopamine and Gefitinib Loaded Micelles for Combination Chemotherapy of Pancreatic Cancer. *39th CRS Annual Meeting & Exposition*, (Québec City, Canada).
49. Mundra V, Pratap A, Singh S and **Mahato RI** (2011) Vismodegib, a small-molecule inhibitor of Hedgehog (Hh) pathway can prevent liver fibrosis in a rat model. *AAPS Annual Meeting* (Washington, DC).
50. Danquah M, Li F, Duke III CB, Miller DD and **Mahato RI** (2011) Lactic acid and carbonate- based nanotherapies for treating chemoresistant tumors. AAPS Annual Meeting (Washington, DC).
51. Danquah M, Fujiwara T and **Mahato RI** (2011) Crosslinked Micellar Drug Delivery for Prostate Cancer. *PharmForum* (Memphis, TN, 2011)
52. Li F, Danquah M and **Mahato RI** (2011) Paclitaxel and Lapatinib loaded Lipopolymer Micelles for Treating Refractory Prostate Cancer. *PharmForum* (Memphis, TN, 2011)
53. Li F, Danquah M and **Mahato RI** (2011) Micelles-based Combination Therapy for Treating Refractory Prostate Cancer *15th International Symposium on Recent Advances in Drug Delivery Systems* (Salt Lake City, UT, 2011)
54. Yang N, Panakanti R and **Mahato RI** (2011) Treatment of Liver Fibrosis by M6P-HPMA- TFO. *15th International Symposium on Recent Advances in Drug Delivery Systems* (Salt Lake City, UT, 2011)
55. Li F, Danquah M and **Mahato RI** (2010) Amphiphilic lipopolymer micelles for drug delivery. *FIP PSWC/AAPS Annual Meeting* (New Orleans, LA)
56. Danquah M, Fujiwara T and **Mahato RI** (2010) Lactic acid and carbonate-based block copolymers for micellar drug delivery. *37th CRS Annual Meeting*, Portland, OR (July 10- 14).
57. Wu H, Yoon A-R, Yun C-O and **Mahato RI** (2010) Bipartite adenoviral vector encoding hHGF and hXIAP for improved human islet transplantation. 1*3th Annual Meeting of the American Society of Gene and Cell Therapy*, Washington, DC (May 17-22, 2010).
58. Yang Y and **Mahato RI** (2010) Hepatic stellate cell-specific TGF- 1 Gene Silencing for treating Liver Fibrosis. *13th Annual Meeting of the American Society of Gene and Cell Therapy*,

Washington, DC (May 17-22, 2010).

59. ***Mahato RI**, Danquah M, Li F, Fujiwara T, Lu Y and Miller DD (2010) Polymeric Nanomedicines and Combination Therapy for the Treatment of Advanced Prostate Cancer. *Biomedical Polymers for Drug Delivery 2010: In Honor of Prof Jindrich Kopecek's 70th Birthday*, March 26-27, 2010.
60. ***Mahato RI** (2009) Polymeric Nanomedicines and Combination Therapy for treating Resistant Prostate Cancer, *Institute for Inovative NanoBio Drug Discovery and Development, Kyoto University, Japan*, December 5, 2009.
61. Panakanti R and **Mahato RI** (2009) E1, E3 and E4 deleted Bipartite Adenoviral vector encoding hVEGF and hIL-1Ra for decreased immunogenicity and improved islet function. *AAPS Annual Meeting* (Los Angeles, CA, 2009). Received AAPS travel award.
62. Li F, Lu Y, Miller DD and **Mahato RI** (2009) Galactose-conjugated Polymeric Micelles for Targeted Drug Delivery. *AAPS Annual Meeting* (Los Angeles, CA, 2009)
63. Zhu L, Lu Y, Miller DD and **Mahato RI** (2009) Pyridinium cationic lipid-based gene and siRNA delivery. *AAPS Annual Meeting* (Los Angeles, CA, 2009). Received AAPS travel award
64. Wu H and **Mahato RI** (2009) Reversal of Cytokine-induced Pancreatic Beta Cell Death after XIAP Gene Expression. *AAPS Annual Meeting* (Los Angeles, CA, 2009)
65. ***Mahato RI**, Panakanti R, Li F and Cheng G (2009) Gene Delivery and Silencing for Improved Islet Transplantation, **14th International Symposium on Recent Advances in Drug Delivery Systems, in Salt Lake City, UT,** February 15-18, 2009.
66. Li F, Lu Y, Miller DD and **Mahato RI** (2008) Galactose-conjugated Polymeric Micelles for Targeted Drug Delivery. *35th Proc. Int. Symp. Control Rel. Bioact. Mater,* New York, NY (July 2008)
67. *Yang N, Ye Z and **Mahato RI** (2008) Delivery of TFO Using HPMA Polymer for Liver Fibrosis Treatment. *35th Proc. Int. Symp. Control Rel. Bioact. Mater,* New York, NY (July 2008) **podium**
68. Panakanti R, Cheng G and **Mahato RI** (2008) Construction of Bicistronic Adenoviral Vector for Improved Islet Transplantation. *11th Annual Meeting of the American Society of Gene Therapy*, Boston, MA (May 28-June 1, 2008)
69. Cheng G and **Mahato RI** (2008) Caspase-3 Gene Silencing for Improved Islet Transplantation. *11th Annual Meeting of the American Society of Gene Therapy*, Boston, MA (May 28-June 1, 2008)
70. Zhu L, Lu Y, Miller DD and **Mahato RI** (2007) Synthesis and Characterization of Pyridinium-based Cationic Lipids for Gene and siRNA Delivery. *AAPS Annual Meeting* (San Diego, CA, 2007)
71. Ye Z, Guntaka RV and **Mahato RI** (2007) **Quantification of Sequence-specific Triple Helix Formation.** *AAPS Annual Meeting* (San Diego, CA, 2007
72. Zhu L, Ye Z, Cheng K, Miller DD and **Mahato RI** (2007) Site-specific Delivery of Oligonucleotides to Hepatocytes**.** *34th Proc. Int. Symp. Control Rel. Bioact. Mater,* Long Beach, CA (July 2007).
73. Li F, Panakanti R and **Mahato RI** (2007) Gene Expression and Silencing for Successful Islet Transplantation. *10th Annual Meeting of the American Society of Gene Therapy*, Seattle, WA (May-June 2007)
74. Chen Y , Ye Z and **Mahato RI** (2007) siRNA Pool Targeting Different Sites of Human Hepatitis B Surface Antigen Efficiently Inhibits HBV Infection*, 10th Annual Meeting of the American Society of Gene Therapy*, Seattle, WA (May-June 2007)
75. Ye Z, Guntaka RV and **Mahato RI** (2007) Sequence-specific Triple Helix Formation with Genomic DNA, *10th Annual Meeting of the American Society of Gene Therapy*, Seattle, WA (May-June 2007)
76. Zhu L, Lu Y, Miller DD and **Mahato RI** (2007) Synthesis and Characterization of Pyridinium Cationic Lipids for Nucleic Acid Delivery. *AAPS PharmForum* (Memphis, TN, 2007)
77. Zhu L, Lu Y, Miller DD and **Mahato RI** (2007) Synthesis and Characterization of Pyridinium Cationic Lipids for Nucleic Acid Delivery. *AAPS PharmForum* (Memphis, TN, 2007)
78. Cheng K and **Mahato RI** (2007) TGF-β1 Gene Silencing for Treating Liver Fibrosis. *AAPS*

PharmForum (Memphis, TN, 2007)

79. *Cheng K and **Mahato RI** (2007) TGF-β1 Gene Silencing for Treating Liver Fibrosis. *AAPS PharmForum* (Memphis, TN, 2007)
80. ***Mahato RI**, Cheng K, Ye Z, Chen Yong and Zhu L (2007) Site-specific Delivery and Targeting of Oligonucleotides and siRNA for Treating Hepatitis and Liver Fibrosis, *5th Annual Drug Discovery Conference and Expo* (Shanghai, China, May , 2007).
81. ***Mahato RI**, De Paula D, Jia X, Cheng K and Narang AS (2007) Gene expression and silencing for improved islet transplantation. *Pharmaceutical Science World Congress* (Amsterdam, The Netherlands, April 2007).
82. Jia X, Cheng K and **Mahato RI** (2006) Construction of Bicistronic Plasmid Encoding Human Vascular Endothelial Growth Factor (hVEGF) and Interleukin-1 Receptor Antagonist (hIL- 1Ra) for Improving Human Islet Transplantation. *AAPS Annual Meeting* (San Antonio, TX, 2006)
83. Cheng K, Miller DD and **Mahato RI** (2006) Application of TGF-β1 Specific siRNA for the Treatment of Liver Fibrosis. *AAPS Annual Meeting* (San Antonio, TX, 2006)
84. Cheng K, Guntaka RV and ***Mahato RI** (2006) Conjugation with Cholesterol Enhances Hepatic Uptake and Bioactivity of Triplex Forming Oligonucleotides. *33rd Proc. Int. Symp. Control Rel. Bioact. Mater* (Vienna, Austria).
85. Ye Z, Guntaka RV and **Mahato RI** (2006) M6P-BSA-TFO for Treating Liver Fibrosis, National Biotechnology Conference (Boston, June 2006)
86. Ye Z, Cheng K, Guntaka RV and **Mahato RI** (2005) Hepatic uptake and subcellular distribution of a triplex forming oligonucleotide-bovine serum albumin conjugate in rats. *AAPS Annual Meeting* (Nashville, TN, 2005)
87. Cheng K, Ye Z, Guntaka RV and **Mahato RI** (2005) Hepatic uptake and subcellular distribution of a triplex forming oligonucleotide in rats. *AAPS Annual Meeting* (Nashville, TN, 2005).
88. Narang A, Sabek O, Gaber A and **Mahato RI** (2005) Effect of interleukin-1 receptor antagonist and vascular endothelial growth factor gene expression on human islet graft survival and function. *AAPS Annual Meeting* (Nashville, TN, 2005).
89. Narang A, Thoma L, Miller DD, Rao RK and **Mahato RI** (2005) Permeation of lipid-insulin conjugate across rat jejunum and Caco2 cell monolayer. *AAPS Annual Meeting* (Nashville, TN, 2005).
90. Narang A and **Mahato RI** (2005) Comparatice efficacy of interleukin-1 receptor antagonist and small interfering RNA mediated silencing of inducible nitric oxide synthase in rat pancreatic islets. *AAPS Annual Meeting* (Nashville, TN, 2005).
91. *Ye Z, Cheng K, Guntaka RV and **Mahato RI** (2005) Site-Specific Delivery of Triplex Forming Oligonucleotides to Hepatic Stellate Cells. 32nd *Proc. Int. Symp. Control Rel. Bioact. Mater* (Miami, FL, 2005).
92. *Narang AS, Fraga D, Gaber AO and **Mahato RI** (2005) Adenoviral Delivery of Interleukin-1 Receptor Antagonist Gene to Human Pancreatic Islets. 32nd *Proc. Int. Symp. Control Rel. Bioact. Mater* (Miami, FL, 2005).
93. Narang AS, Seth P, Rao RK, Miller DD and **Mahato RI** (2005) Transepithelial Permeation of Insulin and Insulin Derivatives. 32nd *Proc. Int. Symp. Control Rel. Bioact. Mater* (Miami, FL, 2005).
94. Cheng K, Ye Z, Guntaka RV and **Mahato RI** (2005) Biodistribution of Triplex Forming Oligonucleotides Against Type á1(I) Collagen Gene Promoter in Normal and Fibrotic Rats. 32nd *Proc. Int. Symp. Control Rel. Bioact. Mater* (Miami, FL, 2005).
95. Narang AS, Thoma L, Miller DD and **Mahato RI** (2004) Novel cationic liposomes for nonviral gene delivery. PharmForm2004, University of Tennessee, Memphis.
96. Ye Z, Guntaka RV and **Mahato RI** (2004) Targeting triplex forming oligonucleotides to hepatic stellate cells. *PharmForm2004*, University of Tennessee, Memphis.
97. Ye Z, Guntaka RV and **Mahato RI**. Targeting Triplex Forming Oligonucleotide to Hepatic Stellate

Cells 31st *Proc. Int. Symp. Control Rel. Bioact. Mater* (Hawai, 2004).

98. Narang AS, Thoma L, Miller DD and **Mahato RI**. Effect of Cationic Lipid Headgroups on Gene Transfer. 31st *Proc. Int. Symp. Control Rel. Bioact. Mater* (Hawai, 2004).
99. **Mahato RI**, Cheng K, Fraga D, Gaber AO and Guntaka RV. Adenovirus-Based Vascular Endothelial Growth Factor Gene Delivery to Human Pancreatic Islets. 31st *Proc. Int. Symp. Control Rel. Bioact. Mater* (Hawai, 2004).
100. ***Mahato RI** and Guntaka RV. Modulation of Gene Expression by RNAi, Antisense and Antigene. 31st *Proc. Int. Symp. Control Rel. Bioact. Mater* (Hawai, 2004).
101. Narang AS, Fraga D, Zhang C, Sabek O, Kotb M, A. Gaber AO and **Mahato RI**. *Ex vivo* vascular endothelial growth factor gene delivery to human pancreatic islets. *AAPS Annual Meeting*, Salt Lake City, Utah (October 26-30, 2003)
102. Cheng K, Fraga D, Guntaka RV, Kotb M, Gaber AO and **Mahato RI**. Adenovirus-based vascular endothelial growth factor gene delivery to human pancreatic islets. *AAPS Annual Meeting*, Salt Lake City, Utah (October 26-30, 2003)
103. ***Mahato RI** and Guntaka RV (2003) Challenges for Oligonucleotide Delivery. *Proc. Int. Symp. Control Rel. Bioact. Mater. 20:* (Glasgow, Great Britain).
104. Narang AS, Cheng K, Henry J, Zhang C, Fraga D, Sabek O, Kotb M, Gaber AO and **Mahato RI** (2003) Lipid-based gene delivery to human pancreatic islets. *Proc. Int. Symp. Control Rel. Bioact. Mater. 20:* (Glasgow, Great Britain).
105. Kumar N, Ye Z, Thoma L, Miller DD and **Mahato RI** (2003) Design of PEI-based lipopolymeric carriers for gene delivery. *Proc. Int. Symp. Control Rel. Bioact. Mater. 20:* (Glasgow, Great Britain).
106. Z Ye, N Kumar, L Thoma, DD Miller and **Mahato RI** (2003) Hydrophobization of cationic polymers for enhanced gene delivery. *6th Annual Meeting of the American Society of Gene Therapy* (Washington, D.C.). *Mol Ther.* **7:** S216.
107. Cheng K, Narang AS, Fraga D, Halim A-B, Kotb M, Gaber AO and **Mahato RI** (2003) Lipid- based hVEGF gene delivery to human pancreatic islets. *6th Annual Meeting of the American Society of Gene Therapy* (Washington, D.C.). *Mol Ther.* **7:** S208.
108. **Mahato RI**, Wang DA, Narang AS, Kotb M, Gaber AO, Miller DD and Kim SW (2002) Synthesis of T-shaped water soluble lipopolymers for gene delivery. *Proc. Int Symp. Control. Rel. Bioact. Mater.* 29: (Seoul, Korea).
109. **Mahato RI**, Henry J, Narang AS, Mitra S, Fraga D, Sabek O, Kotb M and Gaber AO (2002) Nonviral approaches for growth factor gene delivery to human pancreatic islet. *Proc. Int. Symp. Controlled Rel. Bioact Mater.* 29; (Seoul, Korea)
110. Narang AS, Henry J, Mitra S, Fraga D, Sabek O, Kotb M, Gaber AO and **Mahato RI** (2002) Synthetic Vector for grouwth factor gene delivery to human islets. *5th ASGT Annual Meeting* (Boston, MA).
111. Wang DA, Narang AS, Kotb M, Gaber AO and **Mahato RI** (2002) T-Shaped water soluble lipopolymers for gene delivery. *5th ASGT Annual Meeting* (Boston, MA)
112. Fugeson DY, Yokman J, **Mahato RI** and Kim SW (2002) Biodistribution of insoluble lipatticulate-based system. *Proc. Int. Symp. Control Rel. Bioact. Mater. 29:* (Seoul, Korea).
113. Han S-O, Lee M, **Mahato RI** and Kim SW (2001) Water-Soluble Lipopolymer/p2CMVmIL- 12 Complex for Cancer Treatment. *AAPS Annual Meeting, Denve*r (October, 2001).
114. Furgeson DY, **Mahato RI** and Kim SW (2001) Synthesis and characterization of insoluble lipopolymers for gene delivery. *AAPS Annual Meeting, Denve*r (October, 2001).
115. Maheshwari A, **Mahato RI** and Kim SW (2001) Design of novel steroidal peptides for gene delivery. *AAPS Annual Meeting, Denve*r (October, 2001).
116. **Mahato RI**, Lee M, Han S-O, Maheshwari A, and Kim SW (2001) Water soluble lipopolymers for

interleukin-12 delivery. *28th Int Symp on Control Rel Bioactive Materials*, San Diego (June 2001).

117. *Han S-O, **Mahato RI** and Kim SW (2001) Water soluble lipopolymer for gene delivery. 4th Annual Meeting of the American Society of Gene Therapy, Seattle (May 30-June 4, 2001) (*This abstract was selected as one of the top 3 abstract by the American Society of Gene Therapy and S-O Han was awarded $1000 at the symposium on May 30-June 3, 2001*).
118. **Mahato RI**, Lee M, Han S-O, Maheshwari A, and Kim SW (2001) Water soluble lipopolymer-based interleukin-12 delivery. *10th Int Symp on Recent Advances in Drug Delivery Systems*, Salt Lake City (February 2001).
119. **Mahato RI**, Maheshwari A, Furgesson DY, Han S-O and Kim SW (2000) Polymeric-gene carriers for cancer treatment. *Int Symp Biomat Drug Del Syst*, Cheju Island, Korea (20-22, Aug' 00).
120. Benns JM, Maheshwari A, Furgeson DY, **Mahato RI** and Kim SW (2000) Folate-PEG- folate-graft-PEI as a gene carrier. *Int Symp Biomat Drug Del Syst*, Cheju Island, Korea (20- 22, Aug' 00).
121. **Mahato RI**, Maheshwari A, McGregor J, Samlowski WE and Kim SW (2000) Polymeric carriers for intratumoral delivery of cytokine genes. *3rd Annual Meeting of American Society of Gene Therapy*, Denver (31 May-4 June'00).
122. ***Mahato RI** and SW Kim (1999) Tailor made polymeric gene carriers. *3rd Congress of Eur Assoc Clin Pharmacol Ther (EACPT)*, Jerusalem, Israel (3-8, Oct' 99)
123. ***Mahato RI**, Anwer K, Meaney C, Tagliaferri F, Smith LC and Rolland A (1998) Factors influencing cationic lipid-based systemic gene delivery and expression. *Proc Int Symp Control Rel Bioact Mater* **25:** 176-177.
124. Smith LC, Logan M, Tagliaferri F, Monera O, **Mahato RI**, Reimer D, Wilson E, Proctor B and Rolland A (1998) Size dependence for dispersion of DNA/cationic lipid complexes in solid tumors. *Fourth Cold Spring Harbor Gene Therapy Meeting,* Sept'98.
125. Freimark BD, Bishop JS, Blezinger HP, Deshpande DS, **Mahato RI**, Florack VJ and Pericle F (1998) *In vivo* administration of plasmid/cationic lipid complexes induces a cytokine pattern distinct from cationic lipids and plasmids. *Fourth Cold Spring Harbor Gene Therapy Meeting*, Sept' 98.
126. ***Mahato RI**, Kanamaru T, Takakura Y and Hashida M (1996) Stability and disposition of phosphorothioate oligonucleotides in mice. *116th Annual Meeting of Pharmaceutical Association of Japan*, Kanazawa.
127. **Mahato RI**, Takakura Y and Hashida M (1996) Disposition and gene expression of plasmid DNA complexed with cationic carriers. *Proc Intl Symp Control Rel Bioact Mater* **23:** 265- 266.
128. ***Mahato RI**, Takakura Y and Hashida M (1996) Disposition of antisense oligonucleotides to the hepatocytes using macromolecular carrier systems. *Jpn Soc Drug Del Sys*, July, Kyoto.
129. **Mahato RI**, Yoshida M, Nomura T, Kawabata K, Takakura Y and Hashida M (1995) Physicochemical and disposition characteristics of plasmid DNA complexed with cationic liposomes. *Proc Intl Symp Control Rel Bioact Mater* **22:** 418-419.
130. Takakura Y, **Mahato RI**, Kawabata K, Sawai K, Yoshida M and Hashida M (1994) Pharmacokinetics of oligonucleotides disposition in the body. *1st Intl Antisense Conf Jpn*, December, Kyoto.
131. **Mahato RI**, Thies C, Lubiniewski A and Ravi VN (1994) Polymer mixture nanoparticles for ocular drug delivery. *Invest Ophthalmol Vis Sci* **35:** 2218.
132. Lee VHL, Lee YH, Ohdo S, Zhu J and **Mahato RI** (1994) Dosing time influence on the ocular and systemic absorption on topically applied □-adrenergic antagonists in the pigmented rabbit. *Invest. Ophthalmol. Vis. Sci*. **35:** 1387.
133. Lee YH, **Mahato RI**, Chung RYB, and Lee VHL (1993) Corneal and noncorneal absorption of topically applied α-adrenergic antagonists in the pigmented rabbit. *Pharm. Res.* **10:** S359.
134. Thies C, **Mahato RI** and Ravi VN (1993) Ocular drug delivery systems. *Association of International Chemical Engineers Meeting*.
135. **Mahato RI**, Halbert GW, Willmott N and Whateley TL (1992) Preparation of microspheres for intra-

articular administration. *Proc Int Symp Control Rel Bioact Mater* **19:** 341-342.

136. **Mahato RI**, Halbert GW and Willmott N (1992) Preparation and characterization of microspherical delivery systems. *ICI Science Link Meeting*, Mereside, England.
137. **Mahato RI**, Willmott N and Vezin WR (1991) Preparative techniques for albumin microspheres. *Proc Int Symp Control Rel Bioact Mater* **18:** 375-376
138. **Mahato RI**, Willmott N and Vezin WR (1991) Preparation and characterization of albumin microspheres. *British Colloid Science Student Meeting*, Nottingham.

STUDENT AND RESEARCH TRAINEES AND MENTORING

He is currently supervising seven graduate students, one postdoctoral fellow and one research assistant professor. He has mentored 16 PhD students, 24 postdoctoral fellows/visiting scientists and 28 summer and exchange students as a primary mentor. Most of them are now working at major national and international universities and pharmaceutical companies: three as full professors, eight as associate professors, one as Department Chair, one as Executive Vice President of a leading hospital, and one as Vice President of a pharmaceutical Company. Several students received AAPS Graduate Symposium Awards and UNMC fellowships. One of his former graduates received K01 award the other as Distinguished professorship from the University of Missouri Kansas City.

Graduate Student Committees

PhD Students (Role: Supervisor/Advisor/Chairman of the Advisory Committee)

Students Mentored, Recognitions, and Employment

1. **Ajit S. Narang (2001-2006)**. Department of Pharmaceutical Sciences, University of Tennessee Health Science Center. Nonviral and Adenoviral Gene Delivery to Human and Rat Islets. Synthesis of Novel Cationic Lipids for Gene Delivery. Graduated with a PhD in February 2006.
    - Founding Chair, UTHSC AAPS Student Chapter
    - Travel grant by the Controlled Research Society, 2003.
    - Podium Presentation at the Controlled Release Society Annual Meeting, 2005.
    - UTHSC studentship, 2001-2006.
    - His article on the cover page of Pharmacological Reviews.
    - Employment: Research Investigator, Bristol Myers Squibs, Inc., New Jersey (2008- 2016) and Genentech (June 2016-Sep 2021).
    - Presently working as Vice President at Oric Pharmaceuticals, Inc.
2. **Kun Cheng (2002-2007).** Department of Pharmaceutical Sciences, University of Tennessee Health Science Center. Adenoviral Gene Delivery to Human Islets & Biodistribution and Delivery Systems of Triplex Forming Oligonucleotides for treatment of Liver Fibrosis. Graduated with a PhD in May 2007.
    - Podium Presentation at the AAPS Mid-South Regional Meetings, 2004 and 2006.
    - UTHSC studentship, 2002-2006.
    - Employment: Professor, Department of Pharmaceutical Sciences, University of Missouri Kansas City, MO.

3. **Zhaoyang Ye (2002-2007).** Department of Pharmaceutical Sciences, University of Tennessee Health Science Center. Triplex Forming Oligonucleotide Delivery to Hepatic Stellate Cells. Graduated with a PhD in August 2007.

    - Podium Presentation at the NBC Meeting, Boston, 2006.
    - Co-edited a theme on Cell-based therapeutics for the Advanced Drug Delivery Reviews, 2008.
    - Postdoctoral Fellow, Department of Biomedical Engineering, John Hopkins University, Baltimore, MD.
    - Employment: Associate Professor, The State Key Laboratory of Bioreactor Engineering, East China University of Science and Technology, Shanghai, China.

4. **Lin Zhu (2005-2010)** Department of Pharmaceutical Sciences, University of Tennessee Health Science Center. Site-specific Delivery of siRNA for treatment of Hepatitis and Liver Fibrosis. Graduated with a PhD in June 2010. Associate Professor, Department of Pharmaceutical Sciences, College of Pharmacy, University of Texas A&M Health Science Center, Kingsville, TX.

5. **Ravikiran Panakanti (2005-2010)** Department of Pharmaceutical Sciences, University of Tennessee Health Science Center. Viral and Non-viral Gene Therapy for Improving Islet Transplantation. Currently working as an Associate Professor at Roosevelt University, Chicago, IL

6. **Ningning Yang (2006-2011)** Department of Pharmaceutical Sciences, University of Tennessee Health Science Center. Site-specific Delivery of siRNA and Oligonucleotides for treating Liver Fibrosis. Currently working as an Assistant Professor at Manchester College of Pharmacy, Fort Wayne, IN (2011-2015) and LECOM School of Pharmacy, Bradenton, FL (July 2015-Present).

7. **Feng Li (2006-2011)** Department of Pharmaceutical Sciences, University of Tennessee Health Science Center. Growth Factor and Antiapoptotic Gene Delivery to Human Pancreatic Islets for treating Type I Diabetes. Currently working as an Assistant Professor at Auburn University.

8. **Michael Kofi Danquah (2007-2012)** Department of Pharmaceutical Sciences, University of Tennessee Health Science Center. Polymeric Micelles for Treating Prostate Cancer. Currently working as an Associate Professor and Chair, Department of Pharmaceutical Sciences, Chicago State University, Chicago, IL

9. **Hao Wu (2008-2013)** Department of Pharmaceutical Sciences, University of Tennessee Health Science Center. Genetic Modifications of Human Islets for Improved Islet Transplantation. Currently working as a Senior Scientist at WuXi Biologics, a WuXi AppTec Affiliate, Shanghai, China

10. **Vaibhav Mundra (2010-2015)** Department of Pharmaceutical Sciences, University of Nebraska Medical Center. Polymeric Nanocarriers for Treatmentt of Melanoma and Genetically Modified Mesenchymal Stem Cells to improve Outcome of Islet Transplantation. Currently working as Assistant Professor, Manchester University, Fort Wayne, IN (Feb 2016-Present)

11. **Virender Kumar (2011-2016)** Department of Pharmaceutical Sciences, University of Nebraska Medical Center. Design and Synthesis of Polymers for Drug and miRNA Delivery. Currently working as a Research Assistant Professor at UNMC.

12. **Di Wen (2011-2017)** Department of Pharmaceutical Sciences, University of Nebraska Medical Center. Delivery of Small Molecule and RNA for the Treatment of Type 1 Diabetes and Prostate Cancer. Currently working as a postdoctoral fellow at the University of California Los Angeles.

13. **Ruinan Yang (2012-2018)** Department of Pharmaceutical Sciences, University of Nebraska Medical Center. Polymeric Nanocarriers Delivering Anticancer Agents for the Treatment of Chemoresistant Prostate Cancer and Lung Metastatic Melanoma. Currently working as a Senior Scientist at PPD Pharmaceuticals, Madison, WI.

14. **Yang Peng (2013-2019)** Department of Pharmaceutical Sciences, University of Nebraska Medical Center. Delivery of Small Molecule and RNA Using Synthetic Polymeric Micelles and Multifunctional Exosomes for the Treatment of Type 1 Diabetes. Currently working as a scientist at Platelet BioGenesis, Boston, MA.

15. **Feng Lin (2014-2020)** Department of Pharmaceutical Sciences, University of Nebraska Medical Center. Delivery of small molecule and RNA using polymeric micells for the treatment of cancers. Currently, a postdoctoral fellow at the University of Connecticut.

16. **Saud Almawash (2014-2020)** Department of Pharmaceutical Sciences, University of Nebraska Medical Center. Codelivery of small molecule conjugates using micelles for the treatment of pancreatic cancer. Currently working as Assistant Professor at Shaqra University in Saudi Arabia.

Postdocs/Visiting Scientists Mentored, Recognitions, and Employment

1. **Chukwuma Agubata (January 2021-Aoctober 2021)** was a Fulbright Scholar from Nigeria to work on drug delivery and targeting for cancer treatment. Currently working as Associate Professor at the University of Nigeria.

2. **Qiyue Wang (October 2017-July 2021**) worked as a visiting student from China Pharmaceutical University, Nanjing and then promoted to work as a visiting scholar on drug delivery for the treatment of medulloblastoma. He is funded by a pharmaceutical company. Currently working as Associate Professor in the Department of Pharmaceutical Sciences at Nanjing Institute of Technology, China.

3. **Xiaofei Xin** (**November 2017- July 2021**) worked as a visiting student from China Pharmaceutical University, Nanjing and then promoted to work as a visiting scholar on drug/gene delivery for the treatment of diabetes. She was funded by the China Scholarship Council for her training as a visiting student. She is currently working as an Associate Professor at China Pharmaceutical University, Nanjing.

4. **Jitender Bariwal (Sep 2017-Present)** He completed his PhD in Pharmaceutical Chemistry from Saurashtra University, Rajkot, Gujrat, India and Posdoctoral training from Katholieke Viversiteit, Leuvem Belgium. Currently he is working as a visiting scholar on the Design and Synthesis of Polymers for Drug and Nucleic Acid Delivery.

5. **Vinod Kumar (2016-2019)** He completed PhD in Biochemistry from the Department of Protein Chemistry and Technology, Central Food Technological Research Institute, Mysore, India. He is working as Instructor at the University of Pittsburgh.

6. **Amit Kumar Choudhary (May 2015-June 2018)**. He completed his PhD in Life Science and Biochemical Engineering from Soon Moon University, Korea. He worked on various aspects of gene silencing and miRN delivery for treating cancer. He is currently working as Research Scientist, Pfizer Biotechnology, Portage, Michigan.

7. **Dawei Guo (February 2017-January 2018)** He completed his PhD from Southeast University,

Nanjing, China is currently working as an Associate Professor. He worked as a visiting scholar on polymeric nanomedicines for treatment of prostate cancer. He was supported by the China Scholarship Council.

8. **Goutam Mondal (2014-2017).** He completed his PhD in Chemistry from Osmania University, India. He worked on various aspects of drug delivery for treating prostate cancer. He is currently working as Research Associate at the University of Mississippi School of Pharmacy, Oxford, MS.

9. **Geeta Singh (2016 September-August 2017)** She is Assistant Professor in Biomedical Department, Dheenbandu Chhotu Ram University, Murthal, Sonepat, India. She is working on drug delivery for treating cancer. She was a Raman Scholar and funded by the Government of India.

10. **Krishna Kattel (2014-2016).** He completed his PhD in Nanomaterials Chemistry from Kyungpook National University, Daegu, Republic of Korea. He worked on various aspects of drug delivery and pharmacokinetics for treating cancer. He was funded by Buffett Cancer Cancer of the University of Nebraska Medical Center Currently working as a Scientist at Pharmaceutics International, inc., Baltimore, MD (August 2016-Present).

11. **Rinku Datta (August 2014-2016)** She completed her PhD in Pharmaceutical Chemistry from North Dakota University. She worked on various aspects of drug delivery and copolymer synthesis for treating liver fibrosis. Currently working as a Research Associate in the Department of Molecular Sciences, University of South Florida, Tampa, FL.

12. **Timothy Martin (August 2014-February 2015).** He completed his PhD in Biomedical Enginering from the University of Nebraska Lincoln. He is working on various aspects of drug delivery for treating prostate cancer. His project was supported by the National Institute of Health.

13. **Deepak Chitkara, Ph.D.** (June 2013- June 2014). He completed his PhD in Pharmaceutics and Drug Delivery at the National Institutes of Pharmaceutical Education and Research (NIPER), Mohali, India. He was a research scholar in our lab at the Department of Pharmaceutical Sciences at UTHSC in 2011. He worked on various aspects of drug delivery for treating pancreatic cancer. He is currently working as an Assistant Professor at Birla Institute of Technology Pilani (BITS-Pilani), India.

14. **Anupama Mittal, Ph.D.** (June 2013- June 2014). She completed his PhD in Pharmaceutics and Drug Delivery at the National Institutes of Pharmaceutical Education and Research (NIPER), Mohali, India. She worked on various aspects of drug delivery for improving te outcome of human islet transplantation and pancreatic cancer. She is currently working as an Assistant Professor at Birla Institute of Technology Pilani (BITS- Pilani), India.

15. **Saurabh Singh, Ph.D.** (February 2011- August 2012). He completed his Doctorate degree in Biochemistry from Aligarh Muslim University, India. He has previously worked at the University of Louisville as a post-doctoral fellow and has experience in molecular toxicology, cell signaling and stem cell biology. Currently working as a Group Leader at Novartis India, Hydrabad, India.

16. **Ravikiran Panakanti, Ph.D.** (October 2010- February 2011). Following his PhD training in our laboratory at UTHSC, he is presently an Assistant Professor at Roosevelt University School of Pharmacy, Chicago, IL.

17. **Wenli Lu, Ph.D. (2009-2010)** Following her PhD training in Pharmaceutics and Drug Delivery at China Pharmaceutical University, she joined the same university as an Assistant Professor

in 2006. She is working on genetic modification of human islets for improved islet transplantation. She is currently Postdoctoral fellowship at UTHSC, Memphis.

18. **Guofeng Cheng, Ph.D. (2007-2009),** Following his PhD training in Molecular Biology from Chinese Academy of Agricultural Sciences, he joined the University of Colorado for a postdoctoral fellowship. He worked on Genetic Modification of Human Islets for Improved Islet Transplantation and construction of adenoviral vectors. Currently, he is working as a Professor at Shanghai Research Center for Animal Biotechnology, Shanghai, China.

19. **Rubi Mahato (2006-2008)** Following her B.Pharm. from India, she joined our laboratory to work as a visiting research assistant on gene delivery to islets. She received her PhD from the University of Missouri Kansas City, MO and is currently working as an Assistant Professor at Fairleigh Dickinson University School of Pharmacy, NJ.

20. **Yong Chen (2006-2007) M.S., M.D.,** Associate Professor and President of Huaian 4th People's Hospital, Huaian, Jiangxu, P.R. China. He is currently working on siRNA Delivery for Treating Hepatitis B.

21. **Xiangxu Jia (2005-2006)**, B.S. degree in Immunology from Chongqing Third Medical University in 1992. Following that, she obtained a M.S. degree in Immunology from Shanghai Second Medical University, in 2003. She worked on Genetic Modifications of Human Islets for Improved Transplantation. Currently she is working at Vanderbilt University, Nashville.

22. **Neeraj Kumar (2002-2003)**, Ph.D. in Organic Chemistry of Indian Institutes of Technology, Roorkee, India on Synthesis and Characterization of Water Soluble Lipopolymer. Currently working as an Assistant Professor, Department of Pharmaceutical Sciences, National Institute of Pharmaceutical Education & Research, SAA Nagar, Mohali 160-062, India.

23. **Dong-an Wang (2001-2002)**, Ph.D. in Polymer Science from Zhejiang University, Chinon Synthesis and Characterization of Water Soluble Lipopolymer. Currently working as a Professor, Department of Biomedical Engineering, City University of Hong Kong.

24. **Suchareeta Mitra (2001-2002)**, Ph.D. in Biochemistry/Zoology from Delhi University on Gene Delivery to Human Islets. Currently working as a postdoctoral fellow at the Department of Molecular Sciences, University of Tennessee Health Science Center, Memphis.

<u>Current</u> PhD Students Continuing (Role: Supervisor; Chairman of the Advisory Committee)

1. **Rajan Sharma Bhattarai** (2016-Present) Department of Pharmaceutical Sciences, University of Nebraska Medical Center. Design and Synthesis of Novel Polymeric Carriers for Anticancer Drug and miRNA Delivery.

2. **Bharti Setthi** (2017- Present) Department of Pharmaceutical Sciences, University of Nebraska Medical Center. Polymeric Nanomedicine for treatment of Medulloblastoma.

3. **Jingyi Ma** (2018- Present) Department of Pharmaceutical Sciences, University of Nebraska Medical Center. Exosomes and miRNA for treatment of type 1 diabetes.

4. **Aditya Gupta** (2021- Present) Department of Pharmaceutical Sciences, University of Nebraska Medical Center. Polymeric nanomedicine for treating pancreatic cancer.

5. **Yashwardhan Y. Ghanwatkar** (2021- Present) Department of Pharmaceutical Sciences, University of Nebraska Medical Center. Pulmonary drug delivery systems and effect of particle size and surface

morphology on lung deposition by inhalation.

6. **Qiaoyu Pan** (2021- Present) Department of Pharmaceutical Sciences, University of Nebraska Medical Center. Exosomes and miRNA for treatment of type 1 diabetes.

7. **Dalton Staller** (2021- Present) Department of Pharmaceutical Sciences, University of Nebraska Medical Center. Polymeric nanomedicine of miRNA and small molecule drugs for treating liver fibrosis.

Current Post-doctoral Fellows and Technicians (Role: Supervisor)

1. **Virender Kumar (2016-Present)** He completed his PhD from the Department of Pharmaceutical Sciences, University of Nebraska Medical Center. Currently he is working as a Research Assistant Professor on the Design and Synthesis of Polymers for Drug and miRNA Delivery. He is funded by K01 award from the NIH.

2. **Altab Sheikh (November 2021-Present**) is a Research Assistant from ICR Institute, Hyderabad, India and is currently working on synthesis and characterization of polymers and lipids for drug and miRNA delivery and targeting.

SUMMER STUDENTS AND EXCHANGE STUDENTS (Role: Supervisor)

1. **Yanfei Chen (November 2019 – December 2020)** was a visiting graduate student from China Pharmaceutical University. She worked on drug delivery to Medulloblastoma.

2. **Ge Liu (January 2019-May 2019)** was a visiting undergraduate student from China Pharmaceutical University and worked for her dissertation project.

3. **Tingting Su (June 2019-July 2019)** was a summer student from Jiaotong University, Shanghai, China. She worked on miRNA delivery.

4. **Haichang Zhang (October 2019-November 2019)** was a summer student from Jiaotong University, Shanghai, China. He worked on drug delivery.

5. **Jeremy Butsyak (June 2019-August2019)** was a summer student from the University of Nebraska Omaha. He worked on polymer synthesis and characterization.

6. **Chuhan Zhang** (Nov 2018-December 2018) is a rotating graduate student from the University of Nebraska Medical Center and is currently working on drug delivery for the treatment of diabetes.

7. **Ao Yu** (Nov 2017-January 2018) is a rotating graduate student from the University of Nebraska Medical Center and worked g on drug delivery for the treatment of diabetes.

8. **Benjamin K Lundberg (June 2016-July 2016)** was a summer student and is currently a BS student at the University of Nebraska Lincoln. He was partly funded by UNMC College of Pharmacy to work on drug delivery.

9. **Andrea Vincent (June 2016-July 2016)** was a HBCU summer student from Hampton University. She was funded by US Army.

10. **Starr Shands (June 2015-July 2015)** was a HBCU summer student from Hampton University. She was funded by US Army.

11. **Melek Karaca (September 2014-December 2015)** is a doctoral candidate at Istambul University

Faculty of Pharmacy, Turkey. She was funded by Turkey government to work on drug delivery.

12. **Cassie Liu (rotating MD/PhD student) (July 2015-August 2015)** is a MD/PhD candidate at the University of Nebraska Medical Center rotated in our lab.

13. **Leslie Harden (June 2015-July 2015)** was a HBCU summer student from Hampton University. She was funded by US Army.

14. **Duc Ha (June 2015-July 2015)** was a HBCU summer student from Hampton University. He was funded by US Army.

15. **Paige Slavik (Summer student)Melek Karaca (June 2014-August 2014)** was a summer student. She was partly funded by UNMC College of Pharmacy to work on drug delivery.

16. **Paige Slavik (June 2014-August 2014)** was a summer student. She was partly funded by UNMC College of Pharmacy to work on drug delivery.

17. **Noah Bastola (June 2014-August 2014)** was a high school summer student.

18. **Deepak Chitkara (December 2011-2013)** is a doctoral candidate at National Institutes of Pharmaceutical Education and Research (NIPER), Mohali, India. He became a research scholar in our lab at the Department of Pharmaceutical Sciences at UTHSC in 2011. He is working on various aspects of drug delivery for treating pancreatic cancer. He is funded by Kosten Foundation.

19. **Cheng Tian (2012-May 2013)** Department of Pharmaceutical Sciences, University of Nebraska Medical Center. Design and Synthesis of Polymers for Drug and siRNA Delivery for treating Liver Fibrosis.

20. **Liming Sun (August 2011-August 2012)** is a doctoral candidate in the College of Life Sciences and Technology at Tongji University. He became a research scholar in our lab at the Department of Pharmaceutical Sciences at UTHSC in 2011. He worke on various aspects of drug delivery. He was funded by the Chinese Scholarship Programs.

21. **Jade M. Readus** (June-August 2010) Second year undergraduate student from Tennessee State University, Nashville in my laboratory as a summer student to work on the Interaction of Hedgehog Pathway and MAP-Kinases in Hepatic Stellate Cells.

22. **Hashani Perkins (June-August 2010)** First year medical student from UTHSC worked in my laboratory as a summer student to work on gene delivery to pancreatic □-cells.

23. **Daniel de Paula (February-August 2006)** Visiting graduate student from the Faculty of Pharmaceutical Sciences of Ribeirão Preto at the University of São Paulo in Brazil. Working in my laboratory as a Research Scholar to conduct research on Protein and siRNA Delivery. Postdoctoral Fellow at the University of São Paulo in Brazil. Currently an Assistant Professor at Universidade Estadual do Centro-Oeste - UNICENTRO, PR, Brazil.

24. **Houssam Hajj Houssein (June-July, 2006)**, B.S. student from Delta State University, Cleveland, Mississippi on a project entitled, "Site-specific Delivery of TFO for Treating Liver Fibrosis (100% responsibility). PharmD from the University of Tennessee Health Science Center.

25. **Brandon Kyle Slaughter (June-July, 2005)**, B.S. (Biology) student from the University of Memphis on a project entitled "Genetic Modifications for Improved Islet Transplantation" (100%

responsibility)

26. **Margaret M Thomson (June 25~July 18, 2003)** PharmD/PhD student, Department of Pharmaceutical Science, University of Tennessee on a project entitled, “Design and synthesis of cationic lipid and liposome preparation for gene delivery (100% responsibility). Currently a PharmD/PhD student at the University of Tennessee Health Science Center.

27. **Altovise Ewing (June-July2003),** B.S. student from Rhodes College, Memphis on a project entitled **"**Adenovirus-Based hVEGF Gene Delivery to Human Islets” (100% responsibility)

28. **Deependra Mahato (January-July2002),** B.S. student from Rhodes College, Memphis on a project entitled "Polymeric Carriers for Gene Delivery”(100% responsibility). Currently a MD student in California.

PhD Committee Member:

1. **Pan Qiaoyu** (2019-Present) Department of Pharmaceutical Sciences, University of Nebraska Medical Center. Drug Delivery and Targeting.
2. **Weimin Tang** (2016-Present) Department of Pharmaceutical Sciences, University of Nebraska Medical Center. Biochemistry and Protein Binding.
3. **Weimin Tang** (2016-Present) Department of Department of Pharmaceutical Sciences, University of Nebraska Medical Center. Drug Delivery and Targeting.
4. **Weimin Tang** (2016-Present) Department of Department of Pharmaceutical Sciences, University of Nebraska Medical Center. Drug Delivery and Targeting.
5. **Rasangi Pathirage** (20020-Present)
6. **Weimin Tang** (2016-Present) Department of Department of Pharmaceutical Sciences, University of Nebraska Medical Center. Drug Delivery and Targeting.

7. **Swagat Sharma** (2016-Present) Department of Department of Pharmaceutical Sciences, University of Nebraska Medical Center. Drug Design and Synthesis.

8. **Denise Cobb** (2015-Present) Department of Department of Pharmacology and Experimental Neuroscience, University of Nebraska Medical Center. Polymeric nanomedicines of antiviral drugs.

9. **Lin Zhiyi** (2014-2019) Department of Pharmaceutical Sciences, University of Nebraska Medical Center. Polymeric nanomedicines of antiviral drugs.

10. **Garima Kaushik** (2014-2019) Department of Biochemistry and Molecular Biology, University of Nebraska Medical Center. Combination therapy for treating pancreatic cancer.

11. **Kruti Soni** (2013-2018) Department of Pharmaceutical Sciences, University of Nebraska Medical Center. Polymeric nanomedicines for cancer treatment.

12. **Dhirender Singh** (2013-2016) Department of Pharmacology and Experimental Neuroscience, University of Nebraska Medical Center. HIV nanomedicines.

13. **Amira Ahmed** (2009-2013) Department of Clinical Pharmacy, University of Tennessee Health Science Center. Cancer Therapy

14. **Chao Huang** (2010-2013) Department of Biomedical Engineering, University of Tennessee Health Science Center. Cancer Therapy

15. **Wararat Limothai** (2008-Present) Department of Pharmaceutical Sciences, University of Tennessee Health Science Center. Population Pharmacokinetics.

16. **Chikezie O. Madu** (2007-2012) Department of Pathology and Laboratory Medicines, University of Tennessee Health Science Center. Cancer Gene and Drug Therapy.

17. **Vinayagam Kannan** (2006-2010) Department of Pharmaceutical Sciences, University of Tennessee Health Science Center. Drug Delivery and Lyophilization.

18. **Hari Desu (2005-2009)** Department of Pharmaceutical Sciences, University of Tennessee Health Science Center. Drug Delivery and Lyophilization.

19. **Murali K. Divi (2004-2007)** Department of Pharmaceutical Sciences, University of Tennessee Health Science Center. Targeted Drug Delivery to Glioma Brain Tumors. Currently working in a Pharmaceutical Company.

20. **Krishna Bhandari (2007-2008)** Department of Pharmaceutical Sciences, University of Tennessee Health Science Center. Site-specific Delivery of miRNA for treating hepatocellular Carcinoma.

21. **Chad Batson (2003-2005)**. Department of Molecular Sciences, University ot Tennessee Health Science Center.

22. **Rauan Sakenov (2010-11)** Department of Pharmaceutical Sciences, University of Tennessee Health Science Center. Bioconjugation for site-specific delivery of siRNA, Oligonucleotides and small molecules for treating livers disorders.Outside PhD Committee Member

23. **Darin Y. Furgeson (2000-2003)**. Department of Pharmaceutics and Pharmaceutical Chemistry, University of Utah. Structural and Functional Effects of Polyethylenimine Gene Carriers. Currently working as an Assistant Professor, Department of Pharmaceutical Sciences, University of Wisconsin, Madison, WI

24. **Jonathan M. Benns (1998 - 2001)**. Department of Pharmaceutics and Pharmaceutical Chemistry, University of Utah. Polymeric Gene Carriers. Currently studying law at the University of Utah, Salt Lake City

OUTSIDE EXAMINER (PH.D. STUDENTS)

1. **Rahmat Asfiya (2020)** PhD from the Department of Organic Chemistry, Indian Institute of Science, Bangalore. Thesis Title: Design and Synthesis of New Delivery Vehicles for Anti-Cancer Therapeutics.

2. **Doppalapudi Sidhu (2017)** PhD in Pharmaceutical Sciences from the National Institute of Pharmaceutical Education and Research (NIPER), Hyderabad, India under the supervision of Drs Anjali Jain and Wahid Khan. Thesis title: Development and Evaluation of Formulations for Dermatological Disorders

3. **Partha Laskar (2016)** PhD in Chemistry, Indian Institute of Technology (IIT) Kharagpur, India under the supervision of Drs Joykrishna Dey and and Sudip Kumar Ghosh. Thesis title: Self-Assembled Nanostructures of Novel PEG-Based Stimuli-Sensitive Amphiphilic Ratandom Copolymers as Drug Delivery Systems.

4. **Rajan (2011-2016)** PhD in Drug Delivery, CSIR Indian Institute of Chemical Technology, and National Institute of Pharmaceutical Education and Research (NIPER), Hyderabad, India under the supervision of Drs Ramakrishna Sistila and Wahid Khan. Thesis title: Surface Conjugated

Nanotherapeutics as Potential Carriers for Targeted Drug Delivery.

5. **Nitin Bharti (2016)** PhD in Pharmaceutics and Drug Delivery, Shoolini University of Biotechnology and Management Sciences, Solan, H.P., India under the supervision of Drs Abhishek Budhiraja and S.L. Harikumar. Thesis title: A Study of Targeted Pulmonary Drug Delivery System containing Nanoparticles.

6. **Santosh Kumar Misra (2007-12)** PhD in Chemistry, Department of Organic Chemistry, Indian Institute of Sciences, Bangaore, India under the supervision of Prof Shantanu Bhattacharya. Thesis title: Synthesis and Characterization of Cationic Lipids and Carbon Nanomaterials based Composites for the Delivery of Bioactive Oligo/polynucleotides and Drugs in vitro and in vivo.

7. **Rohan Rajeev Varshney (2005-2010).** PhD in Pharmaceutics, School of Chemical and Biomedical Engineering, Nanyang Technological University.TGF-□3 Mediated Chondrogenic Differentiation of Synovial Mesenchymal Stem Cells in Gene Transferred Co-culture Systems. Graduated in 2010.

8. **Jay Prakash Jain (2005-2010).** PhD in Pharmaceutics, Department of Pharmaceutics, National Institute of Pharmaceutical Education, India. Amphotericin B-Loaded Polymerosomes as Drug Delivery System: Polymer Synthesis, Formulation Development, in Vitro and in Vivo Evaluation. Graduated in 2010.

Outside Examiner (Promotion and Tenure of Faculty)

1. **Feng Qian (2021)** College of Pharmacy, Tsinghua University, Beijing, China for promotion to Professor with tenure.
2. **Ravikumar Majeti (2020)** Department of Pharmaceutical Sciences, Irma Lerma Rangel College of Pharmacy, Texas A&M University for promotion to Professor with tenure.
3. **Hamidreza Montazeri Aliabadi (2020)** Department of Biomedical and Pharmaceutical Sciences, Chapman University School of Pharmacy (CUSP), Irvine, CA for promotion to Associate Professor with tenure.
4. **Oleh Taratula (2020)** Department of Pharmaceutical Sciences, College of Pharmacy, Oregon State University for promotion to Professor with tenure.
5. **Jennica Zaro (2019)** Department of Pharmacology and Pharmaceutical Sciences, University of Southern California for promotion to Associate Professor with tenure.
6. **Guohua An (2019)** Department of Pharmaceutical Sciences and Experimental Therapeutics, College of Pharmacy, University of Iowa from promotion to Associate Professor with tenure.
7. **Mohammad Altamini (2019)** Department of Pharmaceutics, King Saud University of Saudi Arabia for promotion to Professor.
8. **Tao Lu Lowe (2018)** Department of Pharmaceutical Sciences, University of Tennessee Health Science Center, Memphis for promotion to professor.
9. **Chalet Tan (2018)** Department of Pharmaceutics and Drug Delivery, University fo Mississippi, Oxford, MS for tenured Associate Professor.
10. **Won Jong Kim (2017)** Pohang University of Science and Technology, Korea for promotion to professor**.**
11. **Richard A. Gemeinhart (2016)** Department of Pharmaceutical Sciences, University of Illinois at Chicago
12. **Khawaja Khawaja Ghulam Haider (2015)** King Saud University, Saudi Arabia

13. **Arash Hatefi' (2015)** Department of Pharmaceutics, Rutgers: The State University of New Jersey
14. **Seungpyo Hong (2015)** Department of Pharmaceutical Sciences, University of Illinois at Chicago
15. **Marc Ilies (2014)** Temple University College of Pharmacy
16. **Sung Wan Kim (2014)** Department of Chemistry, Pohan University of Science and Technology (POSTECH), South Korea
17. **Malavosklish (Liz) Bikram (2013)** College of Pharmacy, University of Houston
18. **Shu Wang (2012)** Department of Biological Sciences, National University of Singapore
19. **Chun Wang (2009)** Departments of Pharmaceutics and Bioengineering, University of Minnesota.
20. **Patrick Kiser (2009)** Department of Bioengineering, University of Utah