Education
1998-2002 Ph.D. in Pharmaceutical Sciences
Department of Pharmaceutical Sciences, College of Pharmacy, University of Michigan, Ann Arbor, Michigan
1994-1998 Visiting Scholar in Molecular Pharmacology
Department of Pharmacology, University of Pennsylvania (Philadelphia, PA) and Vanderbilt University (Nashville, TN)
1989-1992 Master of Pharmacology
School of Pharmacy, Second Military Medical University, Shanghai, China
1982-1986 Bachelor of Pharmacy
School of Pharmacy, Second Military Medical University, Shanghai, China

Appointments
2022- Associate Dean for Research, College of Pharmacy
2021- Charles R. Walgreen, Jr. Professor of Pharmacy
Department of Pharmaceutical Sciences, College of Pharmacy, The University of Michigan, Ann Arbor, MI 48109
2017-2021 J.G. Searle Endowed Professor
Department of Pharmaceutical Sciences, College of Pharmacy, The University of Michigan, Ann Arbor, MI 48109
2014-2017 William I. Higuchi Collegiate Professor
Department of Pharmaceutical Sciences, College of Pharmacy, The University of Michigan, Ann Arbor, MI 48109
2013- Professor
Department of Pharmaceutical Sciences, College of Pharmacy, The University of Michigan, Ann Arbor, MI 48109
Director of Pharmacokinetics Core, College of Pharmacy and Comprehensive Cancer Center, University of Michigan
Member, Interdepartmental Program in Medicinal Chemistry, College of Pharmacy, University of Michigan
Member, Comprehensive Cancer Center, University of Michigan Medical School
Member, Chemical Biology Program, University of Michigan
2008-2013 Associate Professor
Department of Pharmaceutical Sciences, College of Pharmacy, The University of Michigan, Ann Arbor, MI 48109
Member, Interdepartmental Program in Medicinal Chemistry, College of Pharmacy
Member, Comprehensive Cancer Center, University of Michigan Medical School
Member, Chemical Biology Program, University of Michigan
1. Why Most Anticancer Nanomedicines Do Not Enhance Clinical Efficacy and How to Improve It?

This project develops a drug/nanocarrier-specific anticancer nanomedicine design strategy to enhance their clinical efficacy and improve clinical success rates.

Anticancer nanomedicines hope to act like biological missiles targeting tumors by (1) utilizing the enhanced permeability and retention (EPR) effect for increasing accumulation in tumors to improve efficacy, and (2) maintaining long bloodstream circulation for reducing accumulation in healthy organs to minimize toxicity. However, despite their outstanding efficacy in preclinical animal cancer models, most anticancer nanomedicines have not demonstrated superior clinical efficacy, sparking a decade long debate on current design strategies.

We found three key issues affecting their clinical efficacy: (1) EPR, while present in all animal and human tumors, may not always lead to the increased nanomedicine accumulation compared to free drugs depending on cancer models; (2) long circulation may reduce nanomedicine clearance by the mononuclear phagocyte system (MPS), but could negatively affect efficacy and alter, rather than reduce, toxicity; (3) the percentage of dose delivered to tumors and healthy organs may not be a reliable indicator for efficacy/toxicity.

We propose a drug/nanocarrier-specific nanomedicine design strategy to improve their clinical success: (1) Cancer-specific, identifying features of cancer types that can be used for targeted drug delivery; (2) Cell-specific, understanding the cell types to which drugs need to be delivered; (3) Drug-specific, identifying the intrinsic shortcomings of the delivered drugs that need to be overcome; and (4) Nanocarrier-specific, evaluating specific nanocarriers to overcome the specific limitations of the delivered drugs.
Currently, we are employing these new strategies to design anticancer nanomedicines that remodel the immune microenvironment in both tumors and lymph nodes for the immunotherapy of various type of cancers.

2. Why 90% Drug Development Fails and How to Improve It?

This project aims to improve drug development success through the integrated STAR system (structure-tissue/cell selectivity-activity-relationship) by addressing the 90% failure rate.

Drug development typically takes 10-15 years and $1-2 billion, with a 90% failure rate from Phase I to Phase III trials, often due to insufficient efficacy or high toxicity. Despite significant improvement in each stage of drug development using hundreds successful strategies/criteria, the overall success rate remains at 10%. It is crucial to reevaluate current strategies and eliminate non-essential criteria instead of continuously adding more. But which ones are essential or non-essential?

We found three critical deficiencies contributing to drug development failures: (1) insufficient disease target validation and on-/off-target effect assessment during structure-activity-relationship (SAR) optimization; (2) neglected structure-tissue/cell selectivity-relationship (STR) resulting in/from on/off-target engagement in disease vs. normal organs in drug-like property optimization; and (3) suboptimal dosing impacting clinical efficacy-toxicity balance, influenced by SAR and STR.

We introduce the STAR system to address drug development deficiencies by integrating three key aspects: (1) balancing potency/specificity/safety during SAR optimization; (2) optimizing tissue/cell selectivity in disease vs. normal organs for on-/off-target engagement in STR optimization; and (3) determining effective/safe doses as determined by SAR and STR. The STAR system categorizes candidates into four classes, prioritizing Class I candidates to enhance success rates, contrasting with the current focus on Class II candidates with high failure rate.

We are currently using STAR system to optimize PI3K inhibitors and other immune modulators for cancer immunotherapy, JAK inhibitors for treating inflammatory bowel disease, anti-viral drugs to treat COVID19 severe disease.

3. Why Most Anticancer Vaccines only Achieved Short-Term Effect and How to Improve It?

This project is focused on developing a cancer vaccine to achieve long-term tumor remission.

While current cancer vaccines, activating T cell immunity, have shown promising anticancer effects in melanoma, their efficacy in treating other types of cancer remains limited. In contrast, the role of B cell immunity in cancer vaccine design has been a topic of debate. Recent clinical studies, however, suggest that activating B cell immunity, particularly the interaction between B cells and CD4 T cells, is crucial for the long-lasting anticancer efficacy of immunotherapy. To address this, we have developed a virus antigen cluster mimicry nanovaccine (VAMVax), which enhances B cell and CD4 T cell cross-talk, to achieve long-term tumor remission in HER2-positive breast cancer.

4. What Are the Differences in Microbiome, Bile Salts, and Drug Release Between Human Small Intestine and Colon?
This project investigates the variations in the microbiome, bile salts, and drug release within the human stomach, small intestine, and colon, and studies how these differences influence drug product development and disease states.

During oral drug product development, optimizing in vitro and in vivo drug release in the human gastrointestinal (GI) tract is crucial. Bile salts in the GI tract, which change under fasting and fed conditions, influence drug release, disease states, and the microbiome. Additionally, the human GI tract's microbiome plays a role in regulating disease conditions and drug treatments.

We have directly measured drug release in various regions of the human GI tract (stomach, duodenum, jejunum, and ileum) for immediate-release, modified-release, and locally-acting drug products. We also compared the profiles of 15 bile salts in different regions of the human small intestine under fasting and fed conditions. Lastly, we examined the distinct microbiome profiles in different regions of the human small intestine and colon.

5. Pharmacokinetics Core

The pharmacokinetics and mass spectrometry (PKMS) core plays a pivotal role in advancing the drug discovery, clinical translation, and optimization of novel and existing therapeutics. The PKMS core supports: (1) quantitative LC-MS analysis of molecules and mass spectrometry imaging of spatial localization biomarkers in tissue section; (2) preclinical ADME and pharmacokinetics for lead compound optimization in drug discovery and development; (3) clinical pharmacokinetics and dosage regimen design for clinical trials. PKMS core has supported LC-MS analysis, pre-clinical ADME and PK of more than 7500 compounds; supported clinical pharmacokinetics of more than 55 compounds in clinical trials.

Current Grants

2022-2024 PARTNERSHIP: Developing a Dietary Approach in the Management of Inflammatory Bowel Disease
USDA 2022-67017-36303, PI: Grace Chen, Co-I: Duxin Sun

2022-2026 The Microbiome and Aging in Clostridioides Difficile
NIH R01 AI162787-01-A1, PI: Vincent Young, Raymond Yung, Co-I: Duxin Sun

2022-2027 Preclinical Development of First-in-Class GSTO1 Degraders for Colorectal Cancer
NIH R01 CA266513, PI: Nouri Neamati, Co-I: Duxin Sun

2022-2027 Preclinical Development of First-in-Class NDUFS7 Antagonists for the Treatment of Pancreatic Cancer
NIH R01 CA272641-01, PI: Nouri Neamati, Co-I: Duxin Sun

2021-2023 Development of Protein Degraders
Oncopia Therapeutics, Inc, co-I: Duxin Sun

2020-2023 Tissue localization of Cyclosporine and related metabolite in CD-1 mouse models
Aurinia Pharmaceuticals Inc., PI: Duxin Sun

2020-2023 Setting Patient-Centric Quality Standards (PCQS) for Modified Release (MR) Oral Drug Products with Biopredictive In Vitro Dissolution Models
FDA BAA-20-00123-A2, Co-PIs: Duxin Sun, Amit Pai

2020-2025 Virus-Like Nanoparticles for Non-Capsid Antigen Delivery with Virus Structure/Functional
Mimicry to Activate B Cell Immunity  
NIH R01 AI154072. PI: Duxin Sun

2019-2024 Development of ASH1L inhibitors for acute leukemia  
NIH R01 CA244254, PI: Jolanta Grembecka, Co-I: Duxin Sun

2019-2024 Small-molecule STAT3 degraders  
NIH R01 CA244509, PI: Shaomeng Wang, Co-I: Duxin Sun

2019-2023 Hit-to-lead optimization for heart failure drug discovery  
NIH R01 HL-148068-01, PI: Lennane Michel Espinoza-Fonseca, Co-I: Duxin Sun

2018-2023 Inhibiting Bcl-2 intestinal regulated intestinal fibrosis  
NIH R01 DK-118154-01, PI: Peter Higgins, Co-I: Duxin Sun

2018-2023 Targeting NSD1 in leukemia  
NIH R01 CA-226759-01-A1, PI: Thomasz Cierpicki, Co-I: Duxin Sun

**Finished Grants**

2018-2023 University of Michigan Comprehensive Cancer Center support grant  
NIH P30 CA-046592-29 PI: Eric Feiron, Co-I: Duxin Sun (PK SR Director)

2019-2023 New Strategy to Identify, Validate, and Eliminate Heterogeneity for Personalized Cancer Therapy  
Joint Institute UM/Peking Initiative J1 (UM-PKUHSC), Co-PI: Duxin Sun, Ning Zhang, Joseph Burnett

2018-2023 Development of a dual and selective small molecule inhibitor of EGFR and PI3 Kinase to treat BRAF mutant colorectal cancer  
NIH R01 CA-220199-01-A1, PI: Judith Leopold, Co-I: Duxin Sun

2018-2023 Develop a therapeutic nano-vaccine against head and neck cancer  
NIH R01 DE-026728-01-A1, PI: Yu Lei, Co-I: Duxin Sun

2017-2022 Small-molecule MDM2 degraders  
NIH R01 CA-219345, PI: Shaomeng Wang, Co-I: Duxin Sun

2018-2023 Targeting the menin-MLL complex for new therapeutics  
NIH R01 CA-208267-01-A1, PI: Shaomeng Wang, Co-I: Duxin Sun

2019-2023 Development of first-in-class ST2 inhibitors for treating graft-versus-host disease  
NIH 7R01 HL-141432-02, PI: Chao-Yie Yang, Co-I: Duxin Sun

2017-2022 Novel Mcl-1 inhibitors for overcoming therapeutic resistance is colorectal cancer  
NIH R01 CA-217141, PI: Zaneta Nikolovska-Coleska, Co-I: Duxin Sun

2017-2022 Sputum microbial markers of type 2-low asthma  
NIH R01 AI129958, PI: Yvonne Huang, Co-I: Duxin Sun
<table>
<thead>
<tr>
<th>Year</th>
<th>Project Description</th>
<th>Funding Details</th>
</tr>
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<tbody>
<tr>
<td>2017-2022</td>
<td>Development of novel anti-leukemia agents targeting the menin-MLL interaction</td>
<td>NIH R01 CA-160467-06, PI: Jolanta Grembecka, Co-I: Duxin Sun</td>
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<td>2017-2022</td>
<td>Small-molecule degraders of BET proteins</td>
<td>NIH R01 CA-215758-01, PI: Shaomeng Wang, Co-I: Duxin Sun</td>
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<td>2016-2021</td>
<td>Targeting the MLL complex in Castration Resistant Prostate Cancer</td>
<td>NIH R01 CA-200660-01-A1, PI: Jolanta Grembecka, Arul Chinnaiyan, Co-I: Duxin Sun</td>
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<td>2019-2021</td>
<td>Nanoformulations of anticancer drugs to eliminate cancer stem cells</td>
<td>NanoMedicine Innovation Center LLC, PI: Duxin Sun</td>
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<td>2019-2021</td>
<td>Drug Optimization altering tissue targeting to improve efficacy/safety</td>
<td>NanoMedicine Innovation Center LLC, PI: Duxin Sun</td>
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<td>2015-2020</td>
<td>Efficacy of PDI inhibitors in glioblastoma</td>
<td>NIH R01 CA193690-01, PI: Nouri Neamati, Co-I: Duxin Sun</td>
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<td>2015-2020</td>
<td>Wireless Pharmaceutical Analysis Device (WPAD) and computational model to determine in vivo drug dissolution in GI tract for distinguishing meaningful product differences and ensuring bioequivalence (BE)</td>
<td>FDA HHSF223201510146C, PI: Duxin Sun</td>
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<td>2015-2020</td>
<td>Mechanisms of Mycobacterium tuberculosis pH-driven adaptation</td>
<td>NIH R01 AI116605, PI: Robert Abramovitch, Consultant: Duxin Sun</td>
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<td>2019-2020</td>
<td>Enhancing CD8+ T-Cell Activation via Bispecific liposomes to Deliver PD-L1 mAb to TDLNs</td>
<td>UM Office of Research (UMOR), PI: Hongwei Chen, Co-I: Duxin Sun</td>
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<td>2014-2019</td>
<td>SPORE in prostate cancer</td>
<td>NIH 1P50CA186786-01, PI: Arul Chinnaiyan, Co-I: Duxin Sun</td>
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<td>2017-2020</td>
<td>Isozyme-selective ALDH inhibitors for sensitizing ovarian cancer stem-like cells to chemotherapy</td>
<td>NIH R01 CA-214567-01, PI: Scott Larsen, Co-I: Duxin Sun</td>
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<td>2016-2019</td>
<td>Tissue distribution and pharmacokinetics of tyrosine kinase inhibitors (TKI)</td>
<td>Celgene Corporation, PI: Duxin Sun</td>
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<td>2014-2019</td>
<td>Randomized controlled trial to improve oncology nurses’ protective equipment use</td>
<td>CDC R01 OH010582-01, PI: Christopher Friese, Co-I Duxin Sun</td>
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<tr>
<td>Year</td>
<td>Project Description</td>
<td>Funding Body</td>
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<tr>
<td>2015-2018</td>
<td>The development of small molecule inhibitors for Gaucher Disease Type 3</td>
<td>NIH UH2-NS-092981-01, UH3-NS-092981-02</td>
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<td>2012-2018</td>
<td>University of Michigan Comprehensive Cancer Center support grant.</td>
<td>NIH 2P30CA046592-24</td>
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<td>2013-2018</td>
<td>Targeted elimination of cancer stem cells for AML therapy</td>
<td>NIH R01 CA171972-01A1</td>
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<td>2017-2018</td>
<td>Development of small magnetic nanoparticles for cell isolation and DNA detection</td>
<td>IMRA America, Inc.</td>
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<td>2014-2018</td>
<td>Inhibition of the Rho/MRTF/SRF pathway as a new treatment for systemic sclerosis</td>
<td>NIH R01 AR066049</td>
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<td>2013-2018</td>
<td>Targeting the MLL-WDR5 protein-protein interaction</td>
<td>NIH R01 CA177307-01</td>
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<td>2014-2018</td>
<td>Discovering Novel Atypical PKC Inhibitors as in vivo Chemical Probes</td>
<td>NIH R01 EY023725</td>
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<tr>
<td>2016-2017</td>
<td>Pharmacokinetics and tissue distribution of Abraxane</td>
<td>Celgene Corporation</td>
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<tr>
<td>2015-2017</td>
<td>Drug tumor distribution impacts efficacy of tamoxifen analogs</td>
<td>Celgene Corporation</td>
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<tr>
<td>2014-2017</td>
<td>Targeting host deubiquitinases for broad spectrum anti-infective therapy</td>
<td>NIH R21/R33 Al102106-03</td>
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<td>2016-2017</td>
<td>Mechanisms of epigenetic regulation of transcription – new targets for cancer therapeutics</td>
<td>University of Michigan MCubed fund</td>
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<td>2016-2016</td>
<td>Altered elimination and metabolism of Abraxane in comparison with taxol in FcRn knockout and wild-type mice</td>
<td>Celgene Corporation</td>
</tr>
</tbody>
</table>
2012-2018  Mechanisms of motor neuron toxicity in Kennedy disease
NIH R01 NS055746-06A1, PI: Andrew Lieberman, Co-I: Duxin Sun

2015-2017  Menin-MLL Inhibitor Program
Kura Oncology, PI: Jolanta Grembecka, Co-I: Duxin Sun

2011-2017  Development of novel anti-leukemia agents targeting the menin-MLL interaction
NIH R01 CA160467-01, PI: Jolanta Grembecka, Co-I: Duxin Sun

2016-2016  Development of polymer-coated magnetic nanoparticles for in vitro diagnostics
IMRA America, Inc., PI: Hongwei Chen, Co-PI: Duxin Sun

2014-2016  Define and optimize tumor targeting properties to predict preclinical and clinical efficacy of anti-cancer agents
Celgene Corporation, PI: Duxin Sun

2013-2016  Investigation of Release Profiles of Bupropion and Pharmacogenomics of Metabolism Enzymes for Bioequivalence of Generic Bupropion Products in Healthy Volunteers
FDA HHSF223201310144C, PI: Duxin Sun

2013-2016  Novel Probes for Studying Treatment of CNS-based Lysosomal Storage Diseases
NIH R01 HD076004-01, PI: Scott D Larsen, Co-I: Duxin Sun

2012-2016  Potent and Highly Selective D3 Ligands for the Treatment of Cocaine Abuse.
NIH R01 DA032943, PI: Shaomeng Wang, Co-I: Duxin Sun

2014-2015  Pharmacokinetics and tumor distribution of different liposomal doxorubicin formulations
Celgene Corporation, PI: Duxin Sun

2010-2015  Correlation of mesalamine pharmacokinetics with local availability
FDA HHSF223201000082C, HHSF223201300460A, PI: Duxin Sun

2013-2015  Investigation of inequivalence of bupropion hydrochloride extended release tablets: In vivo metabolism quantification
FDA HHSF223201310183C, PI: Duxin Sun

2014-2015  BET Bromodomain Inhibitors
Oncofusion Therapeutics, 145038, PI: Shaomeng Wang, Co-I: Duxin Sun

2012-2014  In vivo proof of efficacy studies for a novel glucosylceramide synthase inhibitor with central nervous system activity
NIH R21 NS079633-01, PI: James Shayman, Co-I: Duxin Sun

2010-2015  Menin-MLL Fusion Inhibitor Program
Lymphoma and Leukemia Society. UM347450 /N013134-03. PI: Jolanta Grembecka. Co-I: Duxin Sun

2011-2015  Receptor Na/K-ATPase antagonists as novel therapeutics for renal/cardiac diseases
NIH R01 HL109015-01, PI: ZiJian Xie. Co-I: Duxin Sun
<table>
<thead>
<tr>
<th>Year</th>
<th>Project Description</th>
<th>Funding Agency/Details</th>
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<tr>
<td>2012-2014</td>
<td>Targeting breast cancer stem cells through combined PARP and Hsp90 inhibition</td>
<td>DOD W81XWH-12-1-0147. PI: Suling Liu, Co-I: Duxin Sun</td>
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<tr>
<td>2007-2013</td>
<td>An integrated system for both tumor imaging and targeted drug therapy of cancer</td>
<td>NIH R01 CA120023, PI: Duxin Sun</td>
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<tr>
<td>2012-2013</td>
<td>DUB Inhibitors for Treatment of B-cell Malignancies</td>
<td>Lymphoma and Leukemia Society. PI: Nick Donato. Co-I: Duxin Sun</td>
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<tr>
<td>2009-2011</td>
<td>New molecular target and its inhibitors for use against pancreatic cancer</td>
<td>NIH R21 CA143474, PI: Duxin Sun</td>
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<td>2010-2011</td>
<td>Chaperones and Small Molecules</td>
<td>NIH R01 NS059690-S1, Jason Gestwicki (PI), Duxin Sun (Co-I)</td>
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<tr>
<td>2009-2010</td>
<td>Novel inhibitors that disrupt the Hsp90-Cdc37 interaction for use against pancreatic cancer</td>
<td>UM Comprehensive Cancer Center Research Grant UM 314174, PI: Duxin Sun</td>
</tr>
<tr>
<td>2007-2008</td>
<td>Targeted delivery of microbubble encapsulated fluorophores for cancer imaging</td>
<td>Department of Defense (DOD) Concept Award BC062867, PI: Ronald Xu, Co-I: Duxin Sun</td>
</tr>
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<td>2006-2008</td>
<td>Chemical glycobiology of anthracyclines</td>
<td>NIH R01 CA118208, PI: PG Wang, Co-I: Duxin Sun</td>
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<tr>
<td>2007-2008</td>
<td>Electrical measurements of gold nanoparticles in biological tissue for cancer detection</td>
<td>Seed grant, Institute for Materials Research (IMR) Interdisciplinary Materials Research Grant of OSU PI: Joseph Heremans, Co-I: Duxin Sun</td>
</tr>
<tr>
<td>2005-2007</td>
<td>Targeted prodrug delivery for cancer therapy</td>
<td>Ohio Cancer Research Associate (20020750), New Investigator Award, PI: D Sun</td>
</tr>
<tr>
<td>2006-2007</td>
<td>An integrated system for tumor detection and targeted drug therapy</td>
<td></td>
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</table>
American Cancer Society (ACS) Institutional Research Grant (Seed grant) #IRG-67-003-44, PI: Duxin Sun

2004-2006  Site-specific activation of geldanamycin prodrug to target Hsp90 in cancer therapy
PhRMA Foundation (20012144), Research Starter Grant for New Investigators, PI: Duxin Sun

2005-2006  In vitro cell systems and in vivo animal models to evaluate BA/BE and drug absorption for inhalation drug formulation
FDA HHSF223200530511P, PI: Duxin Sun

2004-2005  Effect of excipients on permeability of transporter substrates for BCS class III compounds
FDA D3921804, PI: Duxin Sun

AACP New Investigator Program (NIP, 20020001), PI: Duxin Sun

2004-2005  Targeted Drug Delivery for cancer treatment
American Cancer Society (ACS) institutional grant (OSU Comprehensive Cancer Center Seed Grant), PI: Duxin Sun

Honors and Awards
2022  Fellow, American Association for the Advancement of Science (AAAS)
2014  Fellow, American Association of Pharmaceutical Scientists (AAPS)
2004  2004 AAPS meritorious Manuscript Award
2003  Triumph Award for innovative formulation prototypes and screening to overcome pH-interaction in vivo of a weak base compound. Pharmaceutical Research Institute, Bristol-Myers Squibb Company.
2002  Bristol-Myers Squibb On the Spot Award for establishment of canine absorption model for bioequivalence/bioavailability and formulation strategies studies in Biopharmaceutics R&D
2001  Poster Award in XXXIII Annual Pharmaceutics Graduate Student Research Meeting (PGSRM), June 14-16, 2001. University of Wisconsin, Madison, Wisconsin
2001  AFPE Fellowship Award (American Foundation of Pharmaceutical Education)
2000  Fred Lyons Jr. Fellowship Award in the College of Pharmacy, University of Michigan
1999  Merck Fellowship Award in the College of Pharmacy, University of Michigan
1991  Young Investigator Outstanding Paper Award in the National Conference of Cardiovascular Pharmacology (first place)

Review for Grant Agencies and Other Invited Reviews
2023  NCI Cancer Center Site Visit, 2023/10 NCI-A RTRB-G (E1), ad hoc member, NIH
2022 NCI Cancer Center Study Section A, NCI-A RTRB-0 (R1), ad hoc member, NIH
2022 Ontario Research Fund, Ontario Canada, guest proposal reviewer
2022 UMB MS Regulatory Science Program, Graduate School & School of Pharmacy, University of Maryland, Baltimore, virtual program review
2021 NCI Cancer Center Study Section A, NCI-A RTRB-G (K1), ad hoc member, NIH
2021 Joint Institute for Translational and Clinical Research, JI RFP Review
2021 NCI WFBCCC, ad hoc member, NIH
2021 NCI Alliance for Nanotechnology in Cancer, Special Emphasis Panel (ZRG1IMST-M (55)), ad hoc member, NIH
2020 Cancer Nanotechnology Study Section (ZRG1IMST-M (55)), ad hoc member, NIH
2020 Gene and Drug Delivery Systems Study Section, ad hoc member, NIH
2020 NCI Oncology Sciences Fellowship (ZRG1 F09B-M (20) L), ad hoc member, NIH
2019 Joint Institute for Translational and Clinical Research Symposium
2019 NCI The Experimental Therapeutics Clinical Trials Network (ZCA1 RPRB-N (J1)), ad hoc member, NIH
2018 Cancer Biotherapeutics and Development (ZRG1 OTC-E (10)), ad hoc member NIH
2018 NCI Omnibus Review R03 and R21 (ZCA1 TCRB-V (J1)), ad hoc member, NIH
2018 NCI Cancer Biotherapeutics Development Study Section, ad hoc member, NIH
2018 NANO Review panel, ad hoc member, NIH
2017 NIBIB Career Development (K) and Conference (R13) Applications panel, ad hoc member, NIH
2016 Career Development Award (K) Applications panel, ad hoc member, NIH
2016 NCI Special Emphasis Panel R50 (ZCA1 SRB-V (A1)), ad hoc member, NIH/NCI
2016 NCI Omnibus Review R02 and R21 (ZCA1 SRB-V (J1)), ad hoc member, NIH/NCI
2015 NCI Omnibus Exploratory (R21) and Small Grants (R03) Program – Cancer Biology (ZCA1 SRB-V (J1)), ad hoc member, NIH/NCI
2015 Prevent ToxPharm (ZCA1 TCRB-U (C3) B), ad hoc member, NIH/NCI
2014 Cancer Biology 3 study section (NCI Omnibus R21, ZCA1 SRLB-V (M1)), ad hoc member, NIH/NCI
2013 Development therapeutics study section, ad hoc member, NIH/NCI
2013 Omnibus Exploratory (R21) and Small Grants (R03) Program – Drug Development and Delivery (ZCA1 SRLB-2 (01)), ad hoc member, NIH
2013 NCI Omnibus and Cancer Developmental Therapeutics (ZCA1 SRLB-X (M1)), ad hoc member, NIH
2012 Developmental Therapeutics/Omnibus Review Committee (ZCA1 SRLB-D(J1)), ad hoc member, NIH
2012 Gene and drug delivery study section, ad hoc member, NIH
2012 University of Michigan OVRP program, ad hoc member
2011 Development therapeutics study section, ad hoc member, NIH/NCI
2011 Ohio Cancer Research Associate, Member
2011 Cancer Therapeutics (Special Emphasis Panel, ZRG1 OTC-K (05)), ad hoc member
2011 Innovative Technology Development (ZCA1 SRLB-Q (M1)), ad hoc member, NIH
2010 Health and Technologies Research, Department of Innovation, Italian Ministry of Health, Member, grant review
2010 Preclinical pharmacokinetic and pharmacological studies (ZCA1 SRLB-V (C1)), member, NIH
2010 Gene and drug delivery study section, ad hoc member, NIH
2010 French National Research Agency (JCJC SVSE5), reviewer, France
2010 Development of anticancer agents (ZCA1 SELB-D (C1)), ad hoc member, NIH
2009 Ohio Cancer Research Associates, Member.
2009 Development of anticancer agents SBIR (topic 251), ad hoc member, NIH
2008 Cancer Research UK, external grant reviewer
2008 Multidisciplinary Research Grant (MRG) Program, North Carolina Biotechnology Center, Science & Technology Development Program
2008 Cancer Drug Development and Therapeutics SBIR/STTR Study Section ONC-X (14), ad hoc member, NIH
2008 Development of anticancer agents SBIR (topic 251, ZCA1 SRRB-D), ad hoc member, NIH
2008 FDA Office of Women’s Health intramural scientific program, member, FDA
2007 Cancer Drug Development and Therapeutics SBIR/STTR Study Section, ad hoc member, NIH
2007 New Investigators Program for Pharmacy Faculty, AACP, member
2006 Xenobiotic and Nutrient Disposition and Action (XNDA) study section, ad hoc member, NIH
2006 The FDA Office of Women’s health intramural scientific program, member, FDA
2005 AIDS therapeutics study section, ad hoc member, NIH
2005 Cancer Drug Development and Therapeutics SBIR/STTR study section, ad hoc member, NIH
2004 National Cooperative Drug Discovery Groups for Cancer (NCDDG) study section, ad hoc member, NIH

Professional Affiliations

2020-2021 American Society of Clinical Oncology (ASCO), member
2014- American Association for the Advancement of Science (AAAS), member
2003- American Association of Cancer Research (AACR), member
2003- American Association of Colleges of Pharmacy (AACP), member
1998- American Association of Pharmaceutical Scientists (AAPS), member

Professional Association and Agency Service

2023- Chair, Nomination/Leadership Subcommittee, Section S Steering Committee, AAAS
2016- Member, Pharmaceutical Science and Clinical Pharmacology Advisory Committee, US Food and Drug Administration
2012-2012 Co-chairs, 47th Arden Conference, March 2012, West Point, New York, NY
2010-2010 Co-Chairs of a round table, Can nanoparticle be simultaneously used for tumor imaging and targeted drug delivery, 2010 AAPS annual meeting, Nov 2010, New Orleans, LA
2011-2012 Chair, Physical Pharmacy and Biopharmaceutics (PPB) Section, AAPS
2009-2010 Chair-Elect, Physical Pharmacy and Biopharmaceutics (PPB) Section, AAPS
2009-2009 Vice President, Chinese American Pharmaceutical Association (ACPA)
2009-2009 Organizing committee for 45th Annual Pharmaceutical Technologies Arden Conference Formulation Strategies for Poorly Soluble Drugs
2009-2009 AAPS Meritorious Manuscript Award selection committee
2009-2009 AAPS Annual meeting program committee for 2010
2009-2009 Co-chairs for two roundtables in 2009 AAPS annual meeting: (1) Latest developments of drug targeting to cancer stem cells. (2) Tumor targeting using nanotechnology-based drug delivery systems.
2009-2009 Co-chairs, AAPS Workshop on Evolving Science and Technology in Physical Pharmacy and Biopharmaceutics, May 2009
2008-2008 Vice Chair, Physical Pharmacy and Biopharmaceutics (PPB) Section, AAPS
2008-2008 Program committee for five symposia in 2008 AAPS annual meeting: (1) Tumor Imaging and Targeted Drug Delivery (sunrise session); (2) The World Within and Beyond P-gp: Do we Underestimate or Overestimate P-gp (roundtable); (3) Prodrug Approaches for Organ Specific Targeted Therapy (roundtable); (4) Rational Drug and Prodrug Design Via Computational Modeling (sunrise session); (5) Transporters as Prodrug Carriers for Oral Drug Delivery (roundtable)
2007-2008 Chair, Prodrug focus group, AAPS
2007-2007 Program committee, Prodrug approaches for site-specific cellular targets roundtable in 2007 AAPS annual meeting
2007-2007 Program committee, BE, BCS and Beyond, AAPS workshop
2006-2007 Chair-elect, Prodrug focus group, AAPS
2005-2007 Prodrug focus group steering committee, AAPS
2003-2006 Sub-chair, AAPS annual meeting abstract review committee (PDD section)
2004-2004 Organizing committee, Advances in biopharmaceutics and oral delivery, University of Michigan.

Journal Editorial Board

AAPS Journal

Molecular Pharmaceutics, Advisory Board Member
Molecular Pharmaceutics, Guest Editor of theme issue: Nanotheranostics Theranostics
Acta Pharmaceutica Sinica B

University Committee Service

2008- University of Michigan
2023- Member, NPDC/CCG Joint Advisory Committee, University of Michigan
2023- Member, Pharmacological Sciences Training Program (PSTP) Executive Committee, Department of Pharmacology, University of Michigan Medical School, Michigan Medicine
2023- Member, Research Administration Advisory Council (RAAC) Faculty Advisory Council, Office of Research and Sponsored Projects, University of Michigan.
2023- Executive Director of Development Search Committee, College of Pharmacy
2023- Member, Martin Clasby Faculty Launch Committee, Faculty Development Office,
Michigan Medicine
2022- Dean of Record, Research Resources and Shared Equipment Committee, College of Pharmacy
2022- Chair, Search Committee (PK faculty), Pharmaceutical Science, College of Pharmacy
2022- Member, Promotions Committee (Zhu), Pharmaceutical Science, College of Pharmacy
2022- Member, Promotions Committee (Hertz), Pharmaceutical Science, College of Pharmacy
2022- Member, Computational Faculty Search Committee, Department of Medicinal Chemistry, College of Pharmacy
2022- Dean of Record, Safety Committee, College of Pharmacy, University of Michigan
2022- Member, Space Committee, College of Pharmacy, University of Michigan
2022- Executive Committee, College of Pharmacy, University of Michigan
2022- Administrative Operations Committee, College of Pharmacy, University of Michigan
2021-2022 Dean Search Committee, College of Pharmacy
2020-2022 Member, NPDC/CCG Joint Advisory Committee, University of Michigan
2019-2021 President, Association of Chinese Professors (ACP)
2019- PharmD Curriculum and Assessment, College of Pharmacy, University of Michigan
2019- Chair, Strategic Planning Committee, College of Pharmacy, University of Michigan
2019- Pharmacy Building Workshop for Shared Instrumentation Space, University of Michigan, College of Pharmacy
2019- Michigan Drug Discovery Core Directors, University of Michigan
2019- Member, Predoctoral Fellowship Decision Committee, University of Michigan
2017-2017 U-M Faculty Grievance Panel
2016-2022 Research Resources and Shared Equipment Committee, College of Pharmacy
2016-2018 Graduate Recruitment and Admissions Committee, Department of Pharmaceutical Sciences, College of Pharmacy
2015-2016 Graduate Education Committee, College of Pharmacy
2013-2014 Dean Search Committee, College of Pharmacy
2012-2014 Executive Committee, College of Pharmacy
2012-2019 Core Leadership Team, Center for Discovery of New Medicines
2012-2016 Faculty Search Committee, Department of Clinical, Social, and Administrative Sciences, College of Pharmacy
2012-2016 Adjunct Faculty Appointments Committee, College of Pharmacy, Department of Pharmaceutical Sciences
2012-2016 Strategic Planning and Leadership Committee, Department of Pharmaceutical Sciences
2011-2012 Searle Professorship Search Committee, College of Pharmacy
2010- Operating Committee, Program in Chemical Biology
2009-2014 Faculty Development Committee, College of Pharmacy
2009-2012 Senate Assembly Representative
2009-2011 Academic Standing Committee, College of Pharmacy

2003-2008 The Ohio State University
2003-2007 Strategic Planning Committee, College of Pharmacy
2005-2008 Pharm D. Program Committee, College of Pharmacy
2003-2005 Bachelor of Science of Pharmaceutical Science (BSPS) Program Committee, College of Pharmacy
2003-2008 Faculty Advisor of AAPS student chapter at the Ohio State University
2003-2008 Faculty Advisor of Biotechnology Focus Group

Teaching

2008- University of Michigan
2023 PharmSci 760, Advanced Pharmacokinetics
PharmSci 608, Basic and Clinical Pharmacokinetics
2022 PharmSci 608, Basic and Clinical Pharmacokinetics
2021 PharmSci 760, Advanced Pharmacokinetics & Biopharmaceutics
2020 PharmSci 718, Biopharmaceutics & Pharmacogenomics
PharmSci 608, Basic and Clinical Pharmacokinetics
2019 PharmSci 760, Advanced Pharmacokinetics
PharmSci 718, Biopharmaceutics & Pharmacogenomics
PharmSci 608, Basic and Clinical Pharmacokinetics
2018 PharmSci 718, Biopharmaceutics & Pharmacogenomics
PharmSci 718, Biopharmaceutics & Pharmacogenomics
PharmSci 700, Biopharmaceutics & Drug Disposition
PharmSci 718, Biopharmaceutics & Pharmacogenomics
2015 PharmSci 563, Biopharmaceutics & Pharmacogenomics
2014 PharmSci 700, Biopharmaceutics & Drug Disposition
2013 PharmSci 464, Pharmacokinetics & Biopharmaceutics
2012 PharmSci 464, Pharmacokinetics & Biopharmaceutics
2012 PharmSci 700, Biopharmaceutics and Drug Disposition
2011 PharmSci 464, Pharmacokinetics & Biopharmaceutics
2011 PharmSci 465, Biopharmaceutics and Pharmacogenomics
2011 ChemBio 602, Critical Analysis in Chemical Biology
2010 PharmSci 700, Biopharmaceutics and Drug Disposition
2010 PharmSci 464, Pharmacokinetics & Biopharmaceutics
2010 BME 321, Bioreaction Engineering and Design
2009 PharmSci 464, Pharmacokinetics & Biopharmaceutics
2009 PharmSci 762, Fundamentals of Drug Delivery
2009 PharmSci 757, Drug Transport
2009 BME 321, Bioreaction Engineering and Design

2003-2008 The Ohio State University
2003-2008 Pharmacy 804, Drug transport
2003-2008 Pharmacy 622, Drug delivery II
2003-2008 Pharmacy 732, Pharmacogenomics
2003-2008 Pharmacy 694, Drug discovery and development
2003-2008 Pharmacy 850, Ph.D student seminar for Pharmaceutics program
2006 OSBP 760, Ph.D. student seminar for Ohio State Biochemistry Program
2007 MCDB 800/890, Ph.D. student seminar for MCDB Program

Current PhD Graduate Students
2019- Yingzi Bu Ph.D. student
2019- Luchen Zhang Ph.D. student
Current Postdoctoral Research Fellows, Research Associates, and Visiting Scientists

2012- Bo Wen  Postdoctoral research fellow 2012-2013; Research lab specialist 2013-2019, Assistant Director 2019-

2014- Miao He  Visiting research investigator, 2013-2018; Research lab specialist associate, 2018-

2017- Lu Wang  Postdoctoral research fellow, 2017-2021, Research Lab Specialist Inter 2021-

2017- Wei Gao  Postdoctoral research fellow, 2017-2022, Asst Research Scientist 2022-

2018- Aleksas Matvekas  Laboratory tech general assoc, 2018-2021, Research Lab Tech Lead 2021-

2020- John Takyi-Williams  Postdoctoral research fellow
2020- Mohamed Abdelnabi  Clinical studies coordinator
2021- Zhongwei Liu  Postdoctoral research fellow
2021- Meilin Wang  Visiting research Scientist, 2021-2023, Research Lab Specialist, 2023-

2022- Shuai Mao  Visiting assoc research scientist
2022- Hong-Yi Zhao  Postdoctoral research fellow
2022- Ankhabayar Lkhagva  Postdoctoral research fellow
2022- Jinsong Tao  Postdoctoral research fellow
2022- Yi Jia  Postdoctoral research fellow
2022- Qiuxia Li  Laboratory tech general assoc
2022- Farzad Sarkari  Laboratory tech general assoc

Past Ph.D. Graduate Students (Year of graduation, their Current Positions)

2004-2007 Seth Gibbs  Ph.D. 2008, Senior Scientist, Battelle, Columbus, OH
2005-2010 Tao Zhang  Ph.D. 2010, Assistant Professor, Husson University
2005-2010 Yanyan Li  Ph.D. 2010, Co-advised with Steven Schwartz, Assistant Professor, Montclair State University
2008-2010 Yiqun Jiang  Ph.D. 2010, Thesis research, Associate Professor, Jilin University
2008-2010 Zhenkun Zhu  Ph.D. 2010, Thesis research, Lecturer, Shandong University
2008-2010 Mancang Gu  Ph.D. 2010, Thesis research, Lecturer, Zhejiang Traditional Chinese Medicine University
2006-2011 Yanke Yu  Ph.D. 2011, Senior Scientist, Eisai Co. Ltd
2006-2011 Peng Zou  Ph.D. 2011, Scientist, FDA
2006-2008 Shuwen Yu  Ph.D. 2012, Thesis research, Director of Pharmacy, Shandong University
2009-2011 Yiling Liu  Visiting Ph.D. student for thesis research; Jilin University
<table>
<thead>
<tr>
<th>Year(s)</th>
<th>Name</th>
<th>Title/Role</th>
</tr>
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<tbody>
<tr>
<td>2012-2014</td>
<td>Xiaoqing Ren</td>
<td>Visiting Ph.D. student for thesis research; Fudan University</td>
</tr>
<tr>
<td>2014-2014</td>
<td>Yue Liu</td>
<td>Visiting Ph.D. student for thesis research; Second Military Medical University</td>
</tr>
<tr>
<td>2014-2014</td>
<td>Chun Tao</td>
<td>Visiting Ph.D. student for thesis research; Second Military Medical University</td>
</tr>
<tr>
<td>2009-2015</td>
<td>Joseph Burnett</td>
<td>Ph.D. 2015; Assistant research scientist, University of Michigan College of Pharmacy</td>
</tr>
<tr>
<td>2010-2015</td>
<td>Jamie Connarn</td>
<td>Ph.D. 2015; Scientist I, Celgene Corporation</td>
</tr>
<tr>
<td>2010-2015</td>
<td>Hayley Paholak</td>
<td>Ph.D. 2015; Medical Writer II, MMS Holdings</td>
</tr>
<tr>
<td>2014-2015</td>
<td>Xin Luan</td>
<td>Visiting Ph.D. student for thesis research, 2015-2016; postdoctoral research fellow, University of Michigan College of Pharmacy</td>
</tr>
<tr>
<td>2011-2016</td>
<td>Rebecca Moody</td>
<td>Ph.D. 2016, Chief Scientific Officer, NanoMedicine Innovation Center</td>
</tr>
<tr>
<td>2017-2018</td>
<td>Ling Zhang</td>
<td>Visiting Ph.D. student for thesis research, 2017-2018</td>
</tr>
<tr>
<td>2013-2018</td>
<td>Alex Yu</td>
<td>Ph.D. 2018, Johnson and Johnson</td>
</tr>
<tr>
<td>2012-2018</td>
<td>Mari Gasparyan</td>
<td>Ph.D. 2018</td>
</tr>
<tr>
<td>2012-2018</td>
<td>Chang-Ching (Albert) Lin</td>
<td>Ph.D. 2018; Postdoctoral Researcher, UT Southwestern Medical Center</td>
</tr>
<tr>
<td>2017-2019</td>
<td>Ryan Clauson</td>
<td>Ph.D. 2019, Research Scientist, Torigen Pharmaceutical</td>
</tr>
<tr>
<td>2014-2020</td>
<td>Nathan Truchan</td>
<td>Ph.D. 2020, Research Scientist, NMIC</td>
</tr>
<tr>
<td>2015-2020</td>
<td>Garrett Johnson</td>
<td>Ph.D. 2020, Postdoctoral Fellow, University of Michigan</td>
</tr>
<tr>
<td>2016-2022</td>
<td>Hongxiang Hu</td>
<td>Ph.D. 2022, Research Investigator, BMS in Summit, NJ</td>
</tr>
</tbody>
</table>

**Past Postdoctoral Research Fellows, Research Associates, and Visiting Scientists**

<table>
<thead>
<tr>
<th>Year(s)</th>
<th>Name</th>
<th>Title/Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>2022-2023</td>
<td>Wenjing Zhang</td>
<td>Postdoctoral research fellow</td>
</tr>
<tr>
<td>2018-2023</td>
<td>Krishani Rajanayake</td>
<td>Postdoctoral research fellow</td>
</tr>
<tr>
<td>2017-2023</td>
<td>Mady Traore</td>
<td>Postdoctoral research fellow, 2017-2022; Research Investigator 2022-2023</td>
</tr>
<tr>
<td>2021-2022</td>
<td>Alejandra Duran</td>
<td>Laboratory tech general assoc</td>
</tr>
<tr>
<td>2019-2022</td>
<td>Ruiting Li</td>
<td>Postdoctoral research fellow</td>
</tr>
<tr>
<td>2022-2022</td>
<td>Hamidreza Ardalani</td>
<td>Postdoctoral research fellow</td>
</tr>
<tr>
<td>2021-2022</td>
<td>Nathan Truchan</td>
<td>Postdoctoral research fellow, 2021-2022; Research Investigator 2022-2022</td>
</tr>
<tr>
<td>2020-2022</td>
<td>Djibo Mahamadou</td>
<td>Postdoctoral research fellow</td>
</tr>
<tr>
<td>2019-2022</td>
<td>Yudong Song</td>
<td>Postdoctoral research fellow</td>
</tr>
<tr>
<td>2014-2021</td>
<td>Hebao Yuan</td>
<td>Assistant research scientist, 2014-2019; Research Lab Specialist Senior, 2020-2021</td>
</tr>
<tr>
<td>2021-2021</td>
<td>Garrett Johnson</td>
<td>Postdoctoral research fellow</td>
</tr>
<tr>
<td>2015-2021</td>
<td>Joseph Burnett</td>
<td>Postdoctoral research fellow, 2015-2017; Assistant research scientist, 2017-2021</td>
</tr>
</tbody>
</table>
2021-2021  Xiang Gao         Research associate II
2016-2020  Jeremy Felton    Postdoctoral research fellow
2018-2020  Cai Liu          Postdoctoral research fellow
2016-2020  Lipeng Dai       Postdoctoral research fellow
2019-2020  Cao Yan          Visiting research scientist
2019-2020  Langdong Chen    Visiting research scientist
2018-2020  Yang Chen        Postdoctoral research fellow
                            Assistant research scientist, 2012-2018;
                            Research assistant Professor, 2018-2019
2018-2020  Jizhao Xie       Visiting research scientist
2017-2019  Praveen Kumar    Postdoctoral research fellow
2019-2019  Hongjuan Bi      Visiting research scientist
2015-2019  Yanyan Han       Research associate, 2015-2018
                            Research Lab specialist intermediate 2018-2019
2017-2019  Inkyung Jung     Postdoctoral research fellow
2018-2018  Qingshan Chen    Visiting research scientist
2015-2018  Jinhui Liao      Research associate
2015-2018  Pan Shu          Postdoctoral research fellow
2016-2018  Xin Luan         Postdoctoral research fellow
2014-2018  Miao-Chia Lo     Assistant research scientist
                            Senior research fellow, 2016-2018
2014-2017  Siwei Li         Postdoctoral research fellow
2015-2017  Feng Li          Postdoctoral research fellow
2013-2017  Ann Fioritto     Clinical study coordinator
2016-2017  Nicholas Stevers Lab technician
2016-2017  Takahiro Iwao    Visiting research scientist
2016-2017  Rebecca Moody    Postdoctoral research fellow
2016-2016  Jinhua He        Visiting research scientist
2015-2016  Hongwei Guo      Visiting research scientist
2015-2016  Yongtai Zhang    Visiting research scientist
2015-2016  Hongyan Zhu      Visiting research scientist, 2015-2016
2015-2016  Jianjun Zou      Visiting research scientist
2015-2016  Qingfa Tang      Visiting research scientist
2016-2016  Yanyan Li        Visiting research scientist
2015-2016  Tao Zhang        Visiting research scientist
2013-2016  Ruijuan Luo      Research associate
2015-2015  Anjie Dong       Visiting research scientist
2014-2015  Fangying Xu      Visiting research scientist
2014-2015  Jun Liao         Visiting research scientist
                            Visiting research scientist, 2015-2018
2011-2015  Ting Zhao        Research associate
2014-2015  Ying Wang        Visiting research scientist, 2014;
                            Postdoctoral research fellow, 2014-2015
2014-2015  Jiao Yang        Visiting research scientist
2014-2014  Yanqiang Zhong   Visiting research scientist
2014-2014  Liang Zhao       Visiting research scientist
2013-2014 Yi Wei    Research associate
2013-2014 Feng Ni   Visiting research scientist
2013-2014 Li Qiu    Visiting research scientist
2013-2014 Changhong Wang  Visiting research scientist
2011-2014 Mike Bly   Research lab specialist intermediate
2013-2014 Meng Lei   Visiting research scientist
2012-2014 Honglin Ren Visiting scientist
2012-2013 Lichao Sun  Postdoctoral research fellow
2012-2013 Hao Zou    Visiting scientist
2012-2013 Min Li     Visiting scientist
2012-2013 Masayuki Ito Visiting scientist
2012-2013 Yuki Ichikawa Visiting scientist
2010-2013 Xiaojin Li  Postdoctoral research fellow
2011-2012 Lei Duan   Visiting scientist
2011-2011 Hai Zhang  Visiting scientist
2011-2012 Yasuhiro Tsu Me Postdoctoral research fellow
2010-2011 Yiqun Jiang Postdoctoral research fellow
2009-2011 Wenpeng Zhang Postdoctoral research fellow
2009-2010 Young Ho Seo Postdoctoral research fellow
2007-2008 Bin Wang    Postdoctoral research fellow
2006-2007 Huifei Cui  Visiting scholar
2004-2006 Guisheng Zhang Postdoctoral research fellow
2003-2005 Hao Cheng  Postdoctoral research fellow

**Master Students and Undergraduate Students for Thesis Research**

2003-2005 Heather Miller (MS)  MS, Ohio State University
2010-2010 Anna Jenks (BS)   Research credit, University of Michigan
2011-2011 Maya Kalyan (BS)  Research credit, University of Michigan
2011-2011 Aditya Bharadwaj (BS) Research credit, University of Michigan
2011-2011 Jimmy Li (BS)     Summer Research, University of Michigan
2011-2011 Vivian Pang (BS)  Research credit, Eastern Michigan University
2011-2011 Neha Kaushal (MS) Research credit, University of Michigan
2012-2012 Jian Zhong (BS)   Summer Research, Xian Jiao Tong University
2012-2012 Jiwan Gurung (MS) Visiting student, University of Bath, UK
2013-2015 Nicholas Stevers Undergraduate student research assistant
2013-2014 Sara Brown    Undergraduate student research assistant
2014-2015 Huixia Zhang  Visiting MS student
2019-2019 Rachel O'Rourke Research Credit, University of Michigan
2023-2023 Nicholas Yang  Research Credit, University of Michigan
2023-2023 Shalaka Abhyankar Research Credit, University of Michigan
2023-2023 Albert Cao    Visiting BS student, Univ of Maryland Baltimore

**Ph.D. Students for Lab Rotation**

2023-2023 Xinyao Wang  Biomedical Engineering
2022-2022 Julia Catalano Pharm Sci student
2022-2022 Natalie Jusko  Pharm Sci student
2022-2022  Alexander Meyer  Pharm Sci student
2022-2022  Cecilia Specia  Pharm Sci student
2021-2021  Zhixin Yu  Pharm Sci student
2021-2021  Hanning Wen  Pharm Sci student
2021-2021  Namir Khalasawi  Pharm Sci student
2021-2021  Yunxuan Xie  Pharm Sci student
2021-2021  Vivian Juang  Pharm Sci student
2021-2021  Adaeze Eneli  Pharm Sci student
2021-2021  Andrea Villarreal  ChemBio student
2020-2020  Hannah Naldrett  Pharm Sci student
2020-2020  Mary Villarreal  ChemBio student
2020-2020  Zera Montemayor  Pharm Sci student
2020-2020  Antonela Rodriguez  Pharm Sci student
2019-2019  Fang Xie  Pharm Sci student
2019-2019  Chengyi Li  Pharm Sci student,
2019-2019  Sunny Min  Pharm.D. student
2019-2019  Ziyun Xia  Pharm Sci student
2019-2019  Manali Sawant  Pharm Sci student
2019-2019  Xin Ju  Pharm.D. student
2019-2019  Mery Vet George De la Rosa  Pharm Sci student
2018-2018  Kristen Hong  Pharm Sci student
2018-2018  Cameron White  Pharm Sci student
2018-2018  Xiao Liu  Pharm.D. student
2018-2018  Andrew Willmer  Pharm.D. student
2018-2018  Emily Makowski  Pharm Sci student
2017-2017  Jung Won Kwon  Pharm.D. student
2016-2017  Alyssa Loecher  Pharm.D. student
2013-2013  Khoa Nguyen  Pharm.D. student
2012-2012  Hsiao Ng  Pharm.D. student
2005--2005  Nancy Pham  Pharm.D. student
2003-2006  Sulk Chan  Pharm.D. student

**Graduate Student Thesis Committee**

2003-2003  Liang Zhao  Ph.D. Div. of Pharmaceutics, College of Pharmacy, OSU
2003-2003  Minoli Perera  Ph.D. Div. of Pharmaceutics, College of Pharmacy, OSU
2004-2004  Jongham Kim  Ph.D. Div. of Pharmaceutics, College of Pharmacy, OSU
2004-2004  Jiyun (Sunny) Chen  Ph.D. Div. of Pharmaceutics, College of Pharmacy, OSU
2004-2004  Adam Ogden  Ph.D. Div. of Pharmaceutics, College of Pharmacy, OSU
2004-2004  Greg Lyness  Ph.D. Div. of Pharmaceutics, College of Pharmacy, OSU
2004-2004  Scott Fisher  MS, Div. of Pharmaceutics, College of Pharmacy, OSU
2005-2005  Eun Joo Hurh  Ph.D. Div. of Pharmaceutics, College of Pharmacy, OSU
2005-2005  Jun Yang  Ph.D. Div. of Pharmaceutics, College of Pharmacy, OSU
2005-2005  Casey Bohl  Ph.D. Div. of Pharmaceutics, College of Pharmacy, OSU
2005-2005  Na Guan  MS, Div. of Pharmaceutics, College of Pharmacy, OSU
2006-2006  Yan Xin  Ph.D. Div. of Pharmaceutics, College of Pharmacy, OSU
2006-2006  Dan Lu  Ph.D. Div. of Pharmaceutics, College of Pharmacy, OSU
2006-2006 Jing Song Ph.D. Department of Microbiology, Shandong University
2006-2006 Xiaoangang Pan Ph.D. College of Pharmacy, OSU
2006-2006 Ju-Ping Lai Ph.D. candidate, College of Pharmacy, OSU
2006-2008 Qing Liu Ph.D. candidate, College of Pharmacy, OSU
2007-2007 Weiping Ye Ph.D. College of Veterinary Medicine, OSU
2006-2008 Jacqueline Lieblein Ph.D. candidate, OSBP, OSU
2007-2008 Jianning Yang Ph.D. candidate, College of Pharmacy, OSU
2007-2008 Liuqing Yang Ph.D. candidate, College of Pharmacy, OSU
2007-2008 Robbie Kidd Ph.D. candidate, College of Pharmacy, OSU
2006-2008 Ran Zhao Ph.D. candidate, OSBP, OSU
2007-2008 Ling Cen Ph.D. OSBP, OSU
2007-2007 Jie Shen Ph.D. Chemistry, OSU
2007-2008 Jian Yang Ph.D. candidate, Med Chem, College of Pharm, OSU
2008-2008 Xiaojuan Yang Ph.D. candidate, Pharmaceutics, College of Pharm, OSU
2008-2008 Amada Jones Ph.D. candidate, Pharmaceutics, College of Pharm, OSU
2008-2008 Sunjoo Ahn Ph.D. candidate, Pharmaceutics, College of Pharm, OSU
2008-2008 Jackie Ji Ph.D. candidate, Pharmaceutics, College of Pharm, OSU
2008-2008 Chien-Ming Li Ph.D. candidate, Pharmaceutics, College of Pharm, OSU
2008-2010 Shu Pei Wu Ph.D. candidate, Pharm Science, College of Pharm, UM
2009-2009 Kefeng Sun Ph.D. candidate, Pharm Science, College of Pharm, UM
2009-2009 Shweta Urva External reviewer of PhD dissertation, School of Pharm & Pharmaceutical Science, Univ Buffalo
2009-2009 Bei Yang Ph.D. candidate, Pharm Science, College of Pharm, UM
2009-2009 Maria Posada Ph.D. candidate, Pharm Science, College of Pharm, UM
2009-2009 Kyoung Ah Min Ph.D. candidate, Pharm Science, College of Pharm, UM
2009-2009 Lily Roy Ph.D. candidate, Pharm Science, College of Pharm, UM
2009-2011 Cara Hartz Ph.D. candidate, Pharm Science, College of Pharm, UM
2009-2011 Hugo Fung Ph.D. candidate, Chemical Biology, UM
2010-2015 Oluseyi Adeniyi Ph.D. candidate, Pharm Science, College of Pharm, UM
2010-2010 Anne Gillies Ph.D. candidate, Chemical Biology, UM
2010-2010 Fardokht Abulwerdi Ph.D. candidate, Chemical Biology, UM
2010-2010 Yehua Xie Ph.D. candidate, Pharm Science, College of Pharm, UM
2012-2012 Sharan Shrinivasan Ph.D. candidate, Chemical Biology, UM
2012-2015 Brian Larsen Ph.D. candidate, Chemical Biology, UM
2012-2016 Xiaomei Chen Ph.D. candidate, Pharm Science, College of Pharm, UM
2013-2016 Ahmed Mady Ph.D. candidate, Med Chem, Medical Ctr., UM
2013-2013 Max Mazzara Ph.D. candidate, Pharm Science, College of Pharm, UM
2013-2015 Yongjun Hu Ph.D. candidate, Pharm Science, College of Pharm, UM
2013-2016 Fengjuan Cao Ph.D. candidate, Pharm Science, College of Pharm, UM
2013-2017 Stephanie Gates Ph.D. candidate, Chemical Biology, UM
2013-2013 Chris Holt Ph.D. candidate, Med Chem, UM
2014-2017 Rui Kuai Ph.D. candidate, Pharm Science, College of Pharm, UM
2014-2017 Morgan Giles Ph.D. candidate, Pharm Science, College of Pharm, UM
2014-2017 Xiaoxing Wang Ph.D. candidate, Pharm Science, College of Pharm, UM
2014-2018 James Song Ph.D. candidate, Chemical Biology, UM
2014-2017 Jae Min Shin D.D.S./Ph.D. School of Dentistry, UM
2015-2015 Shuai Hu Ph.D. candidate, Med Chem, UM
2015-2019 Zhilin Chen Ph.D. candidate, Pharm Science, College of Pharm, UM
<table>
<thead>
<tr>
<th>Year</th>
<th>Name</th>
<th>Program</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015-2019</td>
<td>Daniel Epling</td>
<td>Ph.D. candidate</td>
<td>Pharm Science, College of Pharm, UM</td>
</tr>
<tr>
<td>2015-2020</td>
<td>Chengcheng Zhang</td>
<td>Ph.D. candidate</td>
<td>Chemistry, UM</td>
</tr>
<tr>
<td>2015-2015</td>
<td>Dan Li</td>
<td>Ph.D. candidate</td>
<td>Pharm Science, College of Pharm, UM</td>
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<tr>
<td>2015-2020</td>
<td>Nicholas Waltz</td>
<td>Ph.D. candidate</td>
<td>Pharm Science, College of Pharm, UM</td>
</tr>
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<td>2015-2019</td>
<td>Yuchen Fan</td>
<td>Ph.D. candidate</td>
<td>Pharm Science, College of Pharm, UM</td>
</tr>
<tr>
<td>2015-2019</td>
<td>Patrick Sinko</td>
<td>Ph.D. candidate</td>
<td>Pharm Science, College of Pharm, UM</td>
</tr>
<tr>
<td>2015-2016</td>
<td>Joseph Labuz</td>
<td>Ph.D. Biomedical Engineering, College of Engineering, UM</td>
<td></td>
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<tr>
<td>2015-2017</td>
<td>Yu Sui</td>
<td>Ph.D. EECS, College of Engineering, UM</td>
<td></td>
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<td>2016-2019</td>
<td>Sang Yeop Kim</td>
<td>Ph.D. candidate</td>
<td>Pharm Science, College of Pharm, UM</td>
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<td>2016-2019</td>
<td>Mikhail Murashov</td>
<td>Ph.D. candidate</td>
<td>Pharm Science, College of Pharm, UM</td>
</tr>
<tr>
<td>2016-2020</td>
<td>Lindsay Scheetz</td>
<td>Ph.D. candidate</td>
<td>Pharm Science, College of Pharm, UM</td>
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<tr>
<td>2016-2016</td>
<td>Lindsey Drake</td>
<td>Ph.D. candidate</td>
<td>Pharm Science, College of Pharm, UM</td>
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<tr>
<td>2016-2016</td>
<td>David Mertz</td>
<td>Ph.D. Biomedical Engineering, College of Engineering, UM</td>
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<tr>
<td>2016-2019</td>
<td>Karson Kump</td>
<td>Ph.D. candidate</td>
<td>Chemical Biology, UM</td>
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<tr>
<td>2017-2018</td>
<td>Deanna Montgomery</td>
<td>Ph.D. candidate</td>
<td>Med Chem, UM</td>
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<tr>
<td>2017-2020</td>
<td>Brian Thompson</td>
<td>Ph.D. candidate</td>
<td>Pharm Science, College of Pharm, UM</td>
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<tr>
<td>2017-2021</td>
<td>Chang Lee</td>
<td>Ph.D. candidate</td>
<td>Chemistry, LSA, UM</td>
</tr>
<tr>
<td>2018-2022</td>
<td>Minzhi Yu</td>
<td>Ph.D. candidate</td>
<td>Pharm Science, College of Pharm, UM</td>
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<tr>
<td>2018-2022</td>
<td>Xiaoqi Sun</td>
<td>Ph.D. candidate</td>
<td>Pharm Science, College of Pharm, UM</td>
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<tr>
<td>2018-2022</td>
<td>Matt Schnizlein</td>
<td>Ph.D. candidate</td>
<td>Michigan Medicine, UM</td>
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<tr>
<td>2017-2018</td>
<td>Jiqing Jiang</td>
<td>Ph.D. College of Engineering, UM</td>
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<td>2018-2022</td>
<td>Dan Li</td>
<td>Ph.D. candidate</td>
<td>Pharm Science, College of Pharm, UM</td>
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<tr>
<td>2018-2022</td>
<td>James Song</td>
<td>Ph.D. Chemical Biology, UM</td>
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<tr>
<td>2019-2023</td>
<td>Jingcheng Xiao</td>
<td>Ph.D. candidate</td>
<td>Pharm Science, College of Pharm, UM</td>
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<tr>
<td>2019-2023</td>
<td>Glory Velazquez</td>
<td>Ph.D. candidate</td>
<td>Medicinal Chemistry, UM</td>
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<td>2019-2021</td>
<td>Kai Wang</td>
<td>Ph.D. candidate</td>
<td>Pharm Science, College of Pharm, UM</td>
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<td>2019-2023</td>
<td>Junius Thomas</td>
<td>Ph.D. candidate</td>
<td>Chemical Biology, UM</td>
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<td>2019-2023</td>
<td>Mery Vet George De la Rosa</td>
<td>Ph.D. candidate</td>
<td>Pharm Science, College of Pharm, UM</td>
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<tr>
<td>2020-</td>
<td>Jin Xu</td>
<td>Ph.D. student</td>
<td>Pharm Sciences, UM</td>
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<td>2020-</td>
<td>Emily Briggs</td>
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<td>Pharm Sciences, UM</td>
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<td>2020-2021</td>
<td>Lucy Her</td>
<td>Ph.D. candidate</td>
<td>Pharm Science, College of Pharm, UM</td>
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<td>2021-</td>
<td>Tao Zheng</td>
<td>Ph.D. student</td>
<td>Pharm Sciences, UM</td>
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<td>2021-</td>
<td>Ziyun Xia</td>
<td>Ph.D. student</td>
<td>Pharm Sciences, UM</td>
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<td>2021-</td>
<td>Sunny Jung</td>
<td>Ph.D. student</td>
<td>PharmD, UM</td>
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<td>2021-</td>
<td>Jaylen Mans</td>
<td>Ph.D. student</td>
<td>Pharm Sciences, UNTHSC</td>
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<td>2022-</td>
<td>Ruheng Zhao</td>
<td>Ph.D. student</td>
<td>Med Chem, UM</td>
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<td>2022-</td>
<td>Shuhan Liu</td>
<td>Ph.D. candidate</td>
<td>Clinical Pharm, UM</td>
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<td>2022-2023</td>
<td>Andrew Willmer</td>
<td>Ph.D. candidate</td>
<td>Pharm Science, College of Pharm, UM</td>
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<td>2022-</td>
<td>Hanrui Zhang</td>
<td>Ph.D. student</td>
<td>Bioinformatics, UM</td>
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<td>2022-</td>
<td>Xingwu Zhou</td>
<td>Ph.D. student</td>
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<td>2022-</td>
<td>Fang Xie</td>
<td>Ph.D. student</td>
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<td>2022-</td>
<td>Adeaeze Eneli</td>
<td>Ph.D. student</td>
<td>Pharm Sciences, UM</td>
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<tr>
<td>2022-</td>
<td>April Kim</td>
<td>Ph.D. student</td>
<td>Pharm Sciences, UM</td>
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<tr>
<td>2022-</td>
<td>Swetha Kodamasimham</td>
<td>Ph.D. student</td>
<td>Pharm Sciences, UM</td>
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<tr>
<td>2023-</td>
<td>Yu-Ting Kao</td>
<td>Ph.D. student</td>
<td>Med Chem, UM</td>
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**High School Students for Summer Research**

<table>
<thead>
<tr>
<th>Year</th>
<th>Name</th>
<th>Program</th>
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<tbody>
<tr>
<td>2011-2012</td>
<td>Yuxuan Chen</td>
<td>Summer Research</td>
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</tbody>
</table>
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2012-2012 Jimmy Li Summer Research
2012-2012 Connie Yang Summer Research
2019-2019 Daeun Nam Summer Research
2022-2022 David Chen Summer Research

Patents
Issued


10 Duxin Sun, Hongwei Chen, Wei Qian, Yong Che, Masayuki Ito, Hayley Paholak, Kanokwan Sansanaphongpricha. ivingPEGylation to Control PEG-R Density and Composition on Gold Nanoparticles. US patent number 9234078 issued 1/12/2016. US patent number 9587071 issued 3/7/17.

11 Jolanta Grembecka, Tomasz Cierpicki, Dmitry Borkin, Jay L. Hess, Duxin Sun, Xiaoxin Li.


Submitted


Peer-Reviewed Publications (Google Scholar H-Index 66)
Google Scholar: https://scholar.google.com/citations?user=Ufab1aYAAAAJ&hl=en


44 **Sun D**. Correction to: Remdesivir for Treatment of COVID-19: Combination of Pulmonary and IV Administration May Offer Additional Benefit. AAPS J. 2020 Aug 2;22(5):102. PMID: 32743771.


50 **Sun D**. Remdesivir for Treatment of COVID-19: Combination of Pulmonary and IV Administration May Offer Aditional Benefit. AAPS J. 2020 May 26;22(4):77. PMID: 32458279.


145 Lichao Sun, Joseph P. Burnett, ChunGuang Guo, Yibin Xie, Jian Pan, Zhihua Yang, Yuliang Ran, **Duxin Sun**. CPA4 is a promising diagnostic serum biomarker for pancreatic cancer. Am J Cancer Res. 2015 Dec 15;6(1):91-96. PMID: 27073726.


151 Connarn JN, Zhang X, Babiskin A, **Sun D**. Metabolism of bupropion by carbonyl reductases in liver and intestine. Drug Metabolism and Disposition. 2015 Jul;43(7):1019-27. PMID: 25904761.


174 Hongwei Chen, Hayley Paholak, Masayuki Ito, Kanokwan Sansanaphongpricha, Wei Qian, Yong Che, **Duxin Sun**. Living PEGylation on gold nanoparticles to optimize cancer cell uptake by controlling targeting ligand and charge densities. Nanotechnology, 2013, 24(35):355101.


178 Peng Zou, Hong-Wei Chen, Hayley J Paholak, **Duxin Sun**. Burst Release of Lipophilic Drugs from Poly (Ethylene Oxide)-B-Polystyrene Micelles is not Caused by Micelle Disassembly. J of Tumor, 2013, 1 (2): 7.


230 Hye-Ryoung Kim, Sung-Won Park, Hee-Jung Choa, Kyung-Ae Chaea, Ji-Min Sunga, Jin-Suk Kima, Christopher P. Landowski, Duxin Sun, A.M. Abd El-Aty, Gordon L. Amidon, Ho-Chul


239 Jim Xiao, Sara Horst, George Hinkle, Xianhua Cao, Ergun Kocak, Jing Fang, Donn Young, M. Khazaei, Doreen Agnese, Duxin Sun, and Edward Martin, Jr. Pharmacokinetics and Clinical Evaluation of 125I-Radiolabeled Humanized CC49 Monoclonal Antibody (HuCC49deltaCH2) in Recurrent and Metastatic Colorectal Cancer Patients. Cancer Biotherapy and Radiopharmaceuticals, 2005, 20; 16.


Book Chapters


7 Shin, Ho-Chul; Landowski, Christopher P.; Sun, Duxin; Amidon, Gordon L. Transporters in the GI tract. Methods and Principles in Medicinal Chemistry, 2003, 18, 245-287.


Meeting Abstracts


9 Nathan A. Truchan, Johann Buschhaus, Michael Brooks, Andre Halabu, Hongwei Guo, Hebao Yuan, Kathryn Luker, Max Wicha, Duxin Sun, Joseph P. Burnett. A novel CRISPR/Cas9 reporter system to monitor TNBC cancer stem cells in real time. 2018 AACR meeting in Chicago, IL, April 14-18, 2018.


34 Kanokwan Sansanaphongpricha, Hongwei Chen, Kai Sun, Bo Wen, and Duxin Sun. Janus nanostructures for magnetic resonance imaging and enhanced photothermal therapy for cancer treatment. 2016 AACR meeting in New Orleans, LA, April 16-20, 2016.


38 Jonathan Pollack, Dmitry Borkin, Kataryzna Kempinska, Trupta Purohit, Xiaolin Li, Bo Wen, Ting Zhao, Hongzhi Miao, Shirish Shukla, Miao He, Duxin Sun, Tomasz Cierpicki, Jolanta Grembecka. Structure-based optimization of small molecule inhibitors of the protein-protein interaction between menin and mixed lineage leukemia (MLL). 2016 AACR meeting in New Orleans, LA, April 16-20, 2016.


40 Huixia Zhang, Ting Zhao, Ruijuan Luo, Bo Wen, Ying Wang, Miao He, Siwei Li, Yang Liu, and Duxin Sun. Pharmacokinetics studies of echinomycin in a mouse xenograft model. 2015 AAPS meeting in Orlando, FL, October 25-29, 2015.

41 Ting Zhao, Bo Wen, Huixia Zhang, Ruijuan Luo, Siwei Li, Miao He, Christopher R. Friese, and Duxin Sun. A Sensitive and Selective LC-MS/MS Approach for Simultaneous Determination of 18 Cytotoxic Anticancer Agents in Human Plasma for the Assessment of Occupational Safety. 2015 AAPS meeting in Orlando, FL, October 25-29, 2015.

42 Siwei Li, Jing Lu, Ruijuan Luo, Bo Wen, Ting Zhao, Yujun Zhao, Bing Zhou, Donna McEachern, Miao He, Huixia Zhang, Shaomeng Wang, and Duxin Sun. QSPkR Regression Model to Predict Drug Distribution in Tumor of Anticancer Agents with Side Chain Modifications. 2015 AAPS meeting in Orlando, FL, October 25-29, 2015.


44 Ann F. Fioritto, Jason R. Baker, Kristen Collins, Bo Wen, Ying Wang, Ruijuan Luo, Barry Bleske, Mark Johnson, Mark Koenigsknecht, William L. Hasler, Duxin Sun. Contrasting Regional Availability of Different Mesalamine Products in the Gastrointestinal Tract in Healthy


56 Tao Zhang, Yanyan Li, Peng Zou, Jing-Yu Yu, Shaomeng Wang, Duxin Sun, Physiologically Based Pharmacokinetic and Pharmacodynamic (PBPK-PD) Modeling of an Antagonist (SM-


65 Tao Zhang, Peng Zou, Donna McEachern, Jing-ju (Jerry) Yu, Yanyan Li, David Z. D'Argeonio, Shaomeng Wang, and Duxin Sun. Physiologically Based Pharmacokinetic Modeling for a Small Molecule Mimetic (AT-406) of Smac in Tumor-Bearing Mice after Oral Administration. 2010 AAPS Annual Meeting, Nov 14-18, New Orleans, LA.

66 Yanke Yu, Suzanna Zick, XiaQin Li, Peng Zou, Duxin Sun· LC-MS/MS determination of 6-Gingerol, 8-Gingerol, 10-Gingerol and 6-Shogaol and their Pharmacokinetics in human clinical trial. 2010 AAPS Annual Meeting, Nov 14-18, New Orleans, LA.


69 Yanke Yu, Zhenkun Zhu, Yiqun Jiang, Yanyan Li, Peng Zou, Tao Zhang, Jason E. Gestwicki, and Duxin Sun· Synergistic anticancer effect of Withaferin A and Myricetin in pancreatic cancer cells through inhibition of Hsp70. 2010 AAPS Annual Meeting, Nov 14-18, New Orleans, LA.
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74 Yanyan Li, Tao Zhang, Steven Schwartz, Duxin Sun. Sulforaphane sensitizes pancreatic cancer to 17-AAG by interfering with Hsp90/co-chaperone interaction. AAPS annual meeting, Nov 8-12, 2009, Los Angeles, CA.

75 Tao Zhang, Yanyan Li, Peng Zou, Yanke Yu, Duxin Sun. Characterization of celastrol to inhibit Hap90/Cdc37 interaction. AAPS annual meeting, Nov 8-12, 2009, Los Angeles, CA

76 Peng Zou, Michelle M. Carlton, George H. Hinkle, Nathan C. Hall, Stephen P. Povoski, Ronald X. Xu, Cathy M. Mojzisik, Morgan A. Johnson, Michael V. Knopp, Edward W. Martin, Jr, and Duxin Sun. Comparison of $^{124}$I-HuCC49∆C112 and $^{18}$FDG for PET imaging of colorectal cancer. AAPS annual meeting, Nov 8-12, 2009, Los Angeles, CA.

77 Peng Zou, Duxin Sun. Metabolism of 17-(dimethylaminoethylamino)-17-demethoxygeldanamycin (17-DMAG) in Human and Rat Liver Microsomes by Liquid Chromatography Tandem Mass Spectrometry. AAPS annual meeting, Nov 8-12, 2009, Los Angeles, CA.


79 Hsiu-Fang Lee, B Newman, H. Korkaya, S. Liu, S. Clouthier, M Wicha, D Sun. HSP90 Inhibitor 17AAG Suppresses the Breast Cancer Stem/Progenitor Cell Population. AAPS annual meeting, Nov 8-12, 2009, Los Angeles, CA.

80 B Newman, HF Lee, Y Liu, D Sun, Y Wang. 17AAG-mediated Hsp90 Inhibition is an Effective Means against Lymphoma Cancer Stem Cells. AAPS annual meeting, Nov 8-12, 2009, Los Angeles, CA.

81 Yanyan Li, Tao Zhang, Steven J. Schwartz, and Duxin Sun. EGCG Inhibits Hsp90 Function by Impairing Hsp90 Association with Co-chaperones in Pancreatic Cancer Cells. AACR Annual meeting, Denver, CO, April 2009.

82 Tao Zhang, Yanyan Li, and Duxin Sun. Combination of Hsp90 inhibitors and MEK Inhibitors abrogates ERK Activation in Pancreatic Cancer Cells. AACR Annual meeting, Denver, CO, April 2009.

83 Sears, R. Bryan; Turro, Claudia; Heremans, Joseph; Sun, Duxin; Martin, Edward. Development of An Intra-Operative Probe for near-IR Detection of Occult Tissue. Abstracts, 40th Central Regional Meeting of the American Chemical Society, Columbus, OH, United States, June 10-14 (2008), CRM-306.

84 Ronald Xu, Jeff Xu, Joseph Ewing, Bei Wang, Duxin Sun, Stephen Povoski, Edward Martin Jr. Development of indocyanine green encapsulated microbubbles for dynamic imaging of
breast cancer. DOD Breast cancer program Era of Hope meeting, Baltimore, Maryland, June, 2008

85 Yanke Yu and **Duxin Sun**. Withaferin A that inhibits Hsp90 by disrupting Hsp90-Cdc37 interaction against pancreatic cancer cells. AAPS Annual Meeting, Atlanta, GA, November 2008


87 Jeff Xu, Peng Zou, **Duxin Sun**, Edward Martin, Stephen Povoski, Ronald Xu. Multimodal, intraoperative cancer imaging with microbubbles and antibody-fluorophore conjugates. BMES Annual Fall Meeting, St Louis, 2008

88 Chen, Wenlan; Zhang, Guisheng; Zhu, Lizhi; Fang, Lanyan; Cao, Xianhua; Kedenburg, James; Shen, Jie; **Sun, Duxin**; Wang, Peng George. Uncommon sugars and their conjugates to natural products. ACS Symposium Series (2007), 960(Frontiers in Modern Carbohydrate Chemistry), 15-33.

89 Tao Zhang, Adel Hamza, Xianhua Cao, Bing Wang, Shuwen Yu, Chang-Guo Zhan, **Duxin Sun**. A Novel Hsp90 inhibitor disrupts Hsp90-Cdc37 complex for pancreatic cancer therapy. AAPS Annual Meeting, San Diego, CA, November 2007

90 Lanyan Fang, Yanqiang Zhong, Ming Yang, Kenneth K. Chan, Edward T Martin Jr, and **Duxin Sun**. In Vivo Fluorescent Imaging for Antibody-Directed Enzyme Prodrug Therapy (ADEPT) and Tumor Detection Using HuCC49ΔCH2-β-galactosidase Conjugate. AAPS Annual Meeting, San Diego, CA, November 2007

91 Xianhua Cao, Mark Bloomston, Guang Jia, Wendy L. Frankel, Tao Zhang, Nathan Hall, Hao Cheng, Michael Knopp, and **Duxin Sun**. Simultaneously Targeting Hypoxic Cancer Cells by HSP90 Inhibitor and Glycolysis Inhibitor in Pancreatic Cancer Therapy. AAPS Annual Meeting, San Diego, CA, November 2007

92 Xianhua Cao, Bing Wang, Guang Jia, Ming Yang, Michael V. Knopp and **Duxin Sun**. Non-invasive tumor MRI imaging and synergistic anti-tumor effect of HSP90 inhibitor and glycolysis inhibitor in RIP1-Tag2 transgenic pancreatic tumor model. AAPS Annual Meeting, San Diego, CA, November 2007

93 Lanyan Fang, **Duxin Sun**. Predictive physiological based pharmacokinetic (PBPK) analysis for antibody directed enzyme prodrug therapy (ADEPT). AAPS Annual Meeting, San Diego, CA, November 2007

94 Seth Gibbs, Changgong Liu, Mark Bloomston, Lanyan Fang, Peng George Wang, Carlo Croce, **Duxin Sun**. miR-221 and miR-222 regulation of Kit protein provides a novel mechanism for drug resistance in leukemia. AAPS Annual Meeting, San Diego, CA, November 2007


97 Abdul Rana, Xianhua Cao, **Duxin Sun**, Ronald Xu. Monitoring Oxygen Dynamics During Pressure Induced Ischemia on Cancer Xenograft Models. 31st International Conference on Infrared and Millimeter Waves and 14th International Conference on Terahertz Electronics. September 18-22, 2006, Shanghai, China
98 Bo Qiang, Xuehai Zhu, Xianhua Cao, Guanglong He, **Duxin Sun**, Ronald Xu. Development of a Multi-modal Sensor for in vivo Monitoring of Tumor Oxygen Dynamics. 31st International Conference on Infrared and Millimeter Waves and 14th International Conference on Terahertz Electronics. September 18-22, 2006, Shanghai, China


103 Seth Gibbs, Lawrence X Yu, and **Duxin Sun**. In vitro cell systems to evaluate and predict drug absorption from the pulmonary system. AAPS Annual Meeting, San Antonio, TX, October 2006.


108 Xianhua Cao, Ping Wen, Zunyan Dai, Ying Huang, Edward w. Martin Jr, Peng George Wang, Wolfgang Sadee, and **Duxin Sun**. Expression of GLUT1 in tumors promotes cancer cell survival. AACR Annual meeting, Anaheim, CA, April 2005

109 Jim J Xiao, Xianhua Cao, Jing Fang, George H Hinkle, Sara N Horst, Ergun Kocak, Donn Young, Doreen M Agnese, **Duxin Sun**, and Edward W Martin Jr. Pharmacokinetics and clinical evaluation of 125-I Radiolabeled Humanized CC49 Monoclonal Antibody (HuCC49DeltaCH2) in Recurrent and Metastatic Colorectal Cancer Patients. AACR Annual meeting, Anaheim, CA, April 2005


125 **Sun D**, Rui YC. PAF and cerebrovascular endothelium injuries. The First conference of
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**Invited Presentations**


2 Sun D. Why Most AntiCancer NanoMedicines Failed to Show Superior Clinical Efficacy and How to Improve It to Achieve Long-Term Tumor Remission? The Targeted Delivery Interest Group, NIH, online. February 17, 2023.


4 Sun D. Why 90% Drug Development Fails and how to improve it? WenDaoShenNong Innovative Research Forum. Drug Clinical Trial Center, Peking University Third Hospital, online. November 23, 2022.

5 Sun D. Improve Clinical Success of Anticancer NanoMedicine by Correcting Flawed Design. Nanoscience Approaches to Cancer, Brooklyn College Cancer Center, online. October 7, 2022.

6 Sun D. Why 90% of clinical drug development fails and how to improve it? Gulf Coast Consortia Innovative Drug Discovery and Development Conference, Houston, TX. May 3, 2022.

7 Sun D. What went wrong with anticancer nanomedicine design and how to make it right? The 8th International Symposium in Quantitative Pharmacology, online. December 6, 2021.

8 Sun D. Overlooked Biopharmaceutics of Nanomedicines/Nanovaccines Impacts Clinical Dose/Efficacy/Safety. 5th FDA/PQRI Conference on Advancing Product Quality: Advancing Quality & Technology of Future Pharmaceuticals, online. December 1, 2021.

9 Sun D. What went wrong with anticancer nanomedicine design and how to make it right. China Agriculture University, online. March 5, 2021.


13 Sun D. Why most nanomedicines fail to improve efficacy, but only alter toxicity. National Taiwan University School of Pharmacy Research Day and International Conference in Taipei, Taiwan. June 2, 2018.

14 Sun D. Real-time visualization of cancer stem cell plasticity, asymmetrical division, differentiation, and response to treatment to generate cancer cell heterogeneity. Cancer Center Grand Rounds at NCRC, University of Michigan, Ann Arbor, MI. March 19, 2018.


22 Sun D. Modeling dynamic gastrointestinal fluid transit as a basis for dissolution and absorption. 2016 AAPS meeting in Denver, CO. November 16, 2016.


28 Sun D. Natural products and nanomedicine to eliminate cancer stem cells. Department of Pharmaceutical Sciences, Wayne State University, Detroit, MI. March 16, 2016.

29 Sun D. Natural products and nanomedicine to eliminate cancer stem cells for cancer therapy. Fudan University, Shanghai, China. October 21, 2015.

30 Sun D. Nanomedicine to eliminate cancer stem cells. Tianjin University, Tianjin, China. October 15, 2015.

31 Sun D. Natural products to eliminate cancer stem cells for cancer therapy. Qingdao Agricultural University, Qingdao, China. October 12, 2015.


33 Sun D. Nanomedicine and natural products for elimination of cancer stem cells. Second Annual Meeting of the International Ovarian Cancer Consortium, University of Oklahoma Health Sciences Center, Oklahoma City, OK. August 18, 2015.

34 Sun D. In vivo drug dissolution in human GI tract for controlled release and locally acting drug
35 Sun D. Therapeutics of cancer stem cells using natural products. School of Medicine,
University of Louisville, Louisville, KY. April 14, 2015.
36 Sun D. Direct Measurement of In Vivo Drug Dissolution in Human GI Tract. Department of
Pharmaceutical Sciences, College of Pharmacy, University of Michigan, Ann Arbor, MI.
August 5, 2014.
37 Sun D. Direct Measurement and Computational Modeling of In Vivo Drug Dissolution in
Human GI tract for Accurate BA/BE Study and Prediction of Generic Drugs. Food and Drug
38 Sun D. Nano Satellite for Tumor Imaging and Photothermal Cancer Therapy. Tianjin Medical
University, Tianjing, China. May 8, 2014
39 Sun D. Inhibition of Cancer Stem Cell Targets by Natural Products for Anticancer Therapy.
Guangxi Medical University, Nanning, China. April 30, 2014.
40 Sun D. Natural products to inhibit cancer stem cells for cancer therapy. Jinan University.
41 Sun D. Inhibition of Cancer Stem Cell Targets by Natural Products for Anticancer Therapy.
Chinese Pharmaceutical University, Nanjing, China. April 23, 2014.
42 Sun D. Small Molecules to Inhibit Cancer Stem Cell Targets and Protein-Protein Interactions
43 Sun D. Small Molecules to Inhibit Cancer Stem Cell Targets and Protein-Protein Interactions
for Cancer Therapy. University of Iowa, Iowa City, Iowa. Feb 27, 2014
44 Sun D. Novel cancer stem cell target and therapeutics for Herceptin-resistant Her2+ breast
cancer. Translational Oncology Program, University of Michigan, January 30, 2014
45 Sun D Disruption of Protein-Protein Interactions in Hsp90 Complex for Cancer Therapy,
Center for the Discovery of New Medicines, University of Michigan, September 13, 2013.
46 Sun D Antibody-Enzyme Conjugate for Prodrug Activation, AAPS Annual Meeting, October
14-18, 2012.
47 Sun D. Therapeutic of Cancer Stem Cells Using Natural Products, University of Pittsburgh,
Pittsburgh, PA. January 21-22, 2013
48 Sun D. Nanotheranostics for cancer imaging and targeted drug delivery. 47th Annual Arden
Conference, March 11-14, 2012, West point, NY
49 Sun D. Targeting breast cancer stem cells. 2011 AAPS annual meeting, Washington DC, Oct
2011.
50 Sun D. Nature products for therapeutics of cancer stem cells. 2011 International Symposium
on Agricultural Biotechnology: Herbal Medicines for Immunity and Cancer. 10/20/2011,
Taipei, China
51 Sun D. PET and Fluorescent Imaging to Study ADME of Tumor Targeting Antibody. AAPS
webinar. August 2011.
52 Sun D. Therapeutics of cancer stem cells using natural products. International Meeting on
Natural Products and Cancer Targets: Progress and Promise. August 24-25th , 2011;
Zhengzhou, China
53 Sun D. TCM and cancer stem cells. The Consortium for Globalization of Chinese Medicine
(CGCM), Shanghai, China. August 26-28, 2011.
54 Sun. D. Drug discovery and natural products for therapeutics of cancer and cancer stem
cells. Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences. August,
2011
55 Sun D. Biological factors influencing bioavailability and bioequivalence (BA/BE). International
Workshop on Bioavailability and Bioequivalence, June 20-21, 2011. Suzhou, China.
56 Sun D. Hsp90 inhibitors for therapeutics of cancer and cancer stem cells. Guangzhou
Institutes of Biomedical and Health, Chinese Academy of Sciences, Guangzhou, China, June 2011

57 Sun D. PET and fluorescent imaging to study ADME of tumor targeting antibody. AAPS Annual Meeting, New Orleans, LA, November 2010

58 Sun D. Nanotheranostics for targeted drug delivery and tumor imaging. AAPS Annual Meeting, New Orleans, LA, November 2010

59 Sun D. Lead optimization and drug absorption prediction. Roche R&D Center (China) Ltd. June 17, 2010, Shanghai, China.

60 Sun D. Novel Hsp90 Inhibitors That Disrupt Protein-Protein Interaction for Cancer Therapy. Roche R&D Center (China) Ltd. June 17, 2010, Shanghai, China.


63 Sun D. Lead optimization in drug discovery and development. The First International Research and Development of Innovative Drugs and Generic Drugs and the Assessment Process Forum, June 20-23, 2010, Guangdong, China.

64 Sun D. Hsp90 inhibitors for cancer and cancer stem cells, June 6, 2010, College of Pharmacy, Shandong University, Jinnan, China.

65 Sun D. Hsp90 inhibitors for cancer and cancer stem cells, June 12, 2010, College of Pharmacy, Nankai University, Tianjin, China.

66 Sun D. Hsp90 Inhibitors for Therapeutics of Cancers and Cancer Stem Cells, Jan 21, 2010, College of Pharmacy, University of Wisconsin, Madison, WA.

67 Sun D. pH-dependent solubility and absorption. 45th Annual Arden Conference, Feb 1-5, 2010, West point, NY

68 Sun D. Prediction of human hepatic metabolism and clearance from in vitro and in vivo animal experiments. AAPS annual meeting, Nov 8-12, 2009, Los Angeles, CA

69 Sun D. Targeted therapy and chemoprevention for cancer stem cells. AAPS annual meeting, Nov 8-12, 2009, Los Angeles, CA

70 Sun D. Predict Oral Bioavailability in Human: Forming an Interface between Preclinical Data and Clinical Outcome. AAPS PPB workshop, Baltimore, MD, May 2009

71 Sun D. Antibody and FDG for PET Tumor Imaging and Targeted Drug Delivery, AAPS Annual Meeting, Atlanta, GA, November 2008

72 Sun D. P-gp And microRNA in Drug Resistance AAPS Annual Meeting, Atlanta, GA, November 2008


75 Sun D. Tumor detection and targeted drug therapy using monoclonal antibody and Hsp90 inhibitor in colorectal and pancreatic cancers. Department of Pharmaceutical Chemistry, College of Pharmacy, University of Kansas, April, 2008.

76 Sun D. Chemical biology and microRNA to overcome drug resistance. Department of Pharmacology, The Ohio State University, Feb. 2008.

77 Sun D. Transporter, bioavailability prediction and BCS. BA/BE, BCS, and IVIVC symposium, Johnson & Johnson Pharmaceutical Research Development, New Jersey, October, 2007
79 Sun D. Pharmaceutical industry job application. The Society for Biological Engineering at OSU. Department of Chemical Engineering, College of Engineering, The Ohio State University, May 2007
80 Sun D. Tumor detection and targeted drug therapy using Hsp90 inhibitors in colorectal and pancreatic cancer. College of Pharmacy, University of Michigan, April, 2007.
81 Sun D. Tumor imaging and chemical biology in drug resistance. College of Biomedical Engineering, The Ohio State University. January, 2007
83 Sun, D. New strategies for anticancer drug development, College of Pharmacy, Shandong University, Jinan, China, August, 2006
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