

Xiang Wang, PhD

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Education:

B.S.	Chemistry, University of Science & Technology of China Hefei, China	1999
Ph.D.	Organic Chemistry, Department of Chemistry Boston University, Boston, MA Advisor: John A. Porco, Jr.	2005
Postdoc	Department of Chemistry & Chemical Biology, Harvard University Chemical Biology Program, Broad Institute of Harvard & MIT, Cambridge, MA Advisor: Stuart L. Schreiber	2008

Employment:

Assistant Professor	Chemistry & Biochemistry, University of Colorado Boulder	2008–2016
Founder and CEO	Recreo Pharmaceuticals	2013– <i>present</i>
Associate Professor	Chemistry, University of Colorado Boulder	2016– <i>present</i>
Consultant	Tolmar Inc., Fort Collins, CO	2022– <i>present</i>
Adjoint Ass. Professor	Biochemistry & Molecular Genetics, CU Anschutz	2023– <i>present</i>
Adjoint Ass. Professor	Department of Pharmacology, CU Anschutz	2023– <i>present</i>
Co-CSO	Sieyax LLC, Aurora, CO	2023– <i>present</i>

Honors & Awards:

Sugata Ray Memorial Award, Boston University	2004
CRCW Junior Faculty Development Award, University of Colorado	2009
Butcher Award, BioFrontiers Institute, University of Colorado	2010
Golfers Against Cancer, University of Colorado Comprehensive Cancer Center	2012
Bioscience Discovery Evaluation Program Award, State of Colorado	2014
Lab Venture Challenge Award, State of Colorado	2022&2024
AB Nexus Award, University of Colorado	2022

Professional Affiliation:

Member	American Chemical Society
Member	American Society for Microbiology
Member	American Association for the Advancement of Science

Member Colorado Clinical & Translational Sciences Institute
Member University of Colorado Comprehensive Cancer Center
Member Network on Antimicrobial Resistance in *Staphylococcus aureus*

Conferences, Invited Lectures, Posters (2008–present):

05/2010 NIH Junior Faculty Workshop, Dallas, TX
12/2010 Molecular Oncology Retreat, University of Colorado Cancer Center, Boulder, CO
08/2011 242nd National Meeting of the American Chemical Society, Denver, CO
09/2011 Chemistry Seminar, Hoffmann-La Roche, Nutley, NJ
10/2011 30th Annual High School-University Chemistry Teachers' Conference, Boulder, CO
11/2011 Butcher Symposium, Westminster, CO
05/2012 Chemical Biology Seminar, Shandong University, Jinan, China
07/2012 Gordon Research Conference on Bioorganic Chemistry, Andover, NH
10/2012 Department of Chemistry, University of Toledo, Toledo, OH
03/2013 Chemical Epigenetics and Host Factors in Infectious Disease Symposium, Vienna, Austria
06/2013 Gordon Research Conference on High-throughput Chemistry and Chemical Biology, NH
06/2013 Department of Chemistry, Nanjing University, Nanjing, China
06/2013 Department of Chemistry, Peking University, Shenzhen, China
09/2013 Recent Advances in Modulating the Epigenome Symposia, 246th American Chemical Society National Meeting & Exposition, Indianapolis, IN
03/2014 Gordon Research Conference on New Antibacterial Discovery & Development, CA
04/2014 9th Annual Drug Discovery Chemistry Conference, Cambridge Healthtech Institute, CA
10/2014 Department of Chemistry, University of Denver, Denver, CO
01/2015 Department of Chemistry, Colorado State University, Fort Collins, CO
02/2015 Department of Biochemistry, UT Southwestern Medical Center, Dallas, TX
02/2015 Department of Chemistry, Texas A&M University, College Station, TX
02/2015 Department of Chemistry, Duke University, Durham, NC
02/2015 Department of Chemistry, North Carolina State University, Raleigh, NC
03/2015 Department of Chemistry, Purdue University, West Lafayette, IN
03/2015 Abbvie Symposium, Department of Chemistry, Boston University, Boston, MA
03/2015 Department of Chemistry, Boston College, Newton, MA
04/2015 Structural and Chemical Biology Department, Icahn School of Medicine at Mount Sinai, New York, NY
04/2015 Pharmacology and Oncology Department, Johns Hopkins School of Medicine, Baltimore, MD
05/2015 Department of Chemistry, University of California Santa Barbara, CA
07/2015 School of Chemistry, University of Science & Technology of China, Hefei, China
07/2015 College of Chemistry and Molecular Engineering, Peking University, Beijing, China
09/2015 Department of Chemistry and Biochemistry, University of Colorado, Boulder, CO
12/2015 Gold Catalysis Symposium, Pacificchem, Honolulu, Hawaii
02/2016 Department of Pharmacology, CU Anschutz, CO

- 11/2017 PISKL Symposium on Chemical Biology & Drug Discovery, Hong Kong Polytechnic University, Hong Kong
- 03/2019 Global Summit on Catalysis Research and Applications, Rome, Italy
- 05/2022 Department of Biochemistry & Molecular Genetics, CU Anschutz, CO
- 07/2022 Gordon Research Conference on “New Antibacterial Discovery and Development”, Lucca, Italy
- 09/2023 Departments of Pharmacology and Biochemistry & Molecular Genetics, CU Anschutz, CO

Publications:

42. “Extended Structure-Activity Relationship Studies of the [1,2,5]Oxadiazolo[3,4-*b*]pyrazine-Containing Colistin Adjuvants,” Harris, S. L.; Dutta, S.; Liu, N.; Wollenberg, T.; Wang, X. *Bioorg. Med. Chem. Lett.* **2025**, 115, 130008. <https://doi.org/10.1016/j.bmcl.2024.130008>. [[link](#)].
41. “Rational Design of Novel Allosteric EYA2 Inhibitors as Potential Therapeutics for Multiple Brain Cancers,” Gardner, L.; Rossi, J.; Armstrong, B.; Muse, M.; LaVeck, A.; Blevins, M.; Zhang, L.; Ford, H.; Zhao, R.; Wang, X. *ChemBioChem.* **2024**, e202400179. doi: 10.1002/cmde.202400179 [[link](#)].
40. “Practical Synthesis of Isoindolines Yields Potent Colistin Potentiators for Multidrug-Resistant *Acinetobacter baumannii*,” Dutta, S.; Eyolfson, S.; Zhu, Y.; Gao, Y.; Wang, X. *Org. & Biomol. Chem.* **2024**, 22, 4057–4061 [[link](#)].
39. “A Small-Molecule Membrane Fluidizer Re-sensitizes Methicillin-Resistant *Staphylococcus aureus* (MRSA) to β -Lactam Antibiotics,” Podoll, J. D.; Rosen, E.; Wang, W.; Gao, Y.; Zhang, J.; **Wang, X.** *Antimicrob. Agents Chemother.* **2023**, 67(10), e0005123. [[link](#)]
38. “Recent Developments of Isoindole Chemistry,” Weintraub, R. A.; **Wang, X.** *Synthesis* **2023**, 519. [[link](#)]
37. “Structure-Activity Relationship Studies of [1,2,5]Oxadiazolo[3,4-*b*]pyrazine-Containing Polymyxin-Selective Resistance-Modifying Agents,” Dutta, S.; Liu, N.; Gao, Y.; Beck, L.; **Wang, X.** *Bioorg. Med. Chem. Lett.* **2022**, 72, 128878. [[link](#)]
36. “Serendipitous Discovery of a Highly Active and Selective Resistance-Modifying Agent for Colistin-Resistant Gram-Negative Bacteria,” Gao, Y.; Dutta, S., **Wang, X.** *ACS Omega* **2022**, 7, 12442. [[link](#)]
35. “A Cell-Free Screen for Bacterial Membrane Disruptors Identifies Mefloquine as A Novel Antibiotic Adjuvant,” Olson, J., Podoll, J. D.; Wang, W.; **Wang, X.** *Antibiotics* **2021**, 10, 315. [[link](#)]
34. “One-Pot Synthesis of Polycyclic Isoindolines Using Isoindole Umpolung,” Weintraub, R. A.; He, W.; **Wang, X.** *Tetrahedron Lett.*, **2020**, 61, 152128-152131. [[link](#)]
33. “Tryptoline-Based Benzothiazoles Re-sensitize MRSA to β -Lactam Antibiotics,” Wang, X.; Chen, J.; Wang, W.; Jaunaraj, A.; **Wang, X.** *Bioorg. & Med. Chem.* **2019**, 27, 115095–115106. [[link](#)]
32. “Identification and Characterization of a Novel Anti-inflammatory Lipid Isolated from *Mycobacterium vaccae*, a Soil-Derived Bacterium with Immunoregulatory and Stress Resilience Properties,” Smith, D. G.; Martinelli, R.; Besra, G. S.; Illarionov, P. A.; Szatmari, I.; Brazda, P.; Allen, M. A.; Xu, W.; **Wang, X.**; Nagy, L.; Dowell, R. D.; Rook G. A. W.; Brunet, L. R.; Lowry, C. A. *Phycopharmacology*, **2019**, 236(5), 1653–1670. [[link](#)]

31. "Enantioselective Tandem Cyclization of Alkyne-Tethered Indoles Using Cooperative Silver(I) and Chiral Phosphoric Acid Catalysis," Zhu, Y.; He, W.; Wang, W.; Pitsch, C. E.; Wang, X.; **Wang, X.*** *Angew. Chem. Int. Ed.* **2017**, *40*, 12206–12209. [[link](#)]
30. "Diastereoselective Synthesis and Biological Evaluation of Enantiomerically Pure Tricyclic Indolines," He, W.; Griffiths, B. M.; Wang, W.; **Wang, X.*** *Org. Biomol. Chem.* **2017**, *15*, 4241–4245. [[link](#)]
29. "Tetracyclic Indolines as a Novel Class of β -Lactam-Selective Resistance Modifying Agent for MRSA," Zhu, Y.; Cleaver, L.; Wang, W.; Podoll, J. D.; Walls, S.; Jolly, A.; **Wang, X.*** *Eur. J. Med. Chem.* **2017**, *125*, 130–142. [[link](#)]
28. "Bioinspired Discovery of Chemical Reactions and Biological Probes," Griffiths, B. M.; Burl, J. D.; **Wang, X.*** *Synlett* **2016**, *27*, 2039–2042. [[link](#)]
27. "Property-Guided Synthesis of Aza-Tricyclic Indolines: Development of Gold Catalysis En Route," Barbour, P. M.; Wang, W.; Chang, L.; Picard, K. L.; Rais, R. Slusher, B. S.; **Wang, X.*** *Adv. Synth. Catal.* **2016**, *358*, 1482–1490. [[link](#)]
26. "A Fluorescence Polarization Assay for A *Naegleria* DNA Hydroxylase Tet1," Marholz, L. M.; Wang, W.; **Wang, X.*** *ACS Med. Chem. Lett.* **2016**, *7*, 167–171. [[link](#)]
25. "Gold-Catalyzed Cyclization Leads to A Bridged Tetracyclic Indolenine That Represses β -Lactam Resistance," Xu, W., Wang, W., **Wang, X.*** *Angew. Chemie., Int. Ed.* **2015**, *54*, 9546–9549. [[link](#)]
24. "Novel Scaffolds of Cell-Active Histone Demethylase Inhibitors Identified from High-Throughput Screening," Wang, W.; Marholz, L. J.; **Wang, X.*** *J. Biomol. Screen.* **2015**, *20*, 821–827. [[link](#)]
23. "Development of Substrate-Selective Probes for Affinity Pulldown of Histone Demethylases," Marholz, L. J.; Chang, L.; Old, W. M.; **Wang, X.*** *ACS Chem. Biol.* **2015**, *10*, 129–137. [[link](#)]
22. "Discovery and Initial Structure-Activity Relationships of *N*-Benzyl Tricyclic Indolines as Antibacterials for Methicillin-Resistant *Staphylococcus Aureus*," Barbour, P. M.; Podoll, J. D.; Marholz, L. J.; **Wang, X.*** *Bioorg. Med. Chem. Lett.* **2014**, *24*, 5602–5605. [[link](#)]
21. "A Histone Demethylase Inhibitor, Methylstat, Inhibits Angiogenesis in vitro and in vivo," Cho, Y.; Kim, K. H.; Xu, W.; **Wang, X.**; Kwon, H. J. *RSC Adv.* **2014**, *4*, 38230–38233. [[link](#)]
20. "Structure-Activity Relationship Studies of the Tricyclic Indoline Resistance Modifying Agent," Le, C.; Podoll, J. D.; Wang, W.; **Wang, X.*** *J. Med. Chem.* **2014**, *57*, 3803–3817. [[link](#)]
19. "Gold Approaches to Polycyclic Indole Alkaloids," Barbour, P. M.; Marholz, L. J.; Chang, L.; Xu, W.; **Wang, X.*** *Chem. Lett.* **2014**, *43*, 572–578. [[link](#)]
18. "Bio-Inspired Synthesis Yields A Tricyclic Indoline That Selectively Resensitizes MRSA to β -Lactam Antibiotics," Podoll, J.; Liu, Y.; Chang, L.; Walls, S.; Wang, W.; **Wang, X.*** *Proc. Natl. Acad. Sci. U.S.A.*, **2013**, *110*, 15573–15578. [[link](#)] *Highlighted by PNAS; Recommended by Faculty of 1000.*
17. "Quantitative Analysis of Histone Demethylase Probes Using Fluorescence Polarization," Xu, W.; Podoll, J.; Dong, X.; **Wang X.*** *J. Med. Chem.* **2013**, *56*, 5198–5202. [[link](#)] *Highlighted in Nature SciBX.*
16. "A One-Pot Three-Component Reaction for the Preparation of Highly Functionalized Tryptamines," Yeo, S. J.; Liu, Y.; **Wang, X.*** *Tetrahedron.* **2012**, *68*, 813–818. [[link](#)]

15. "A Selective Inhibitor and Probe of the Cellular Functions of Jumonji C Domain-Containing Histone Demethylases," Luo, X.; Liu, Y.; Kubicek, S.; Myllyharju, J.; Tumber, A.; Ng, S.; Che, K.; Podoll, J.; Heightman, T. D.; Oppermann, U.; Schreiber, S. L.; **Wang, X.** * *J. Am. Chem. Soc.* **2011**, *133*, 9451–9456. [[link](#)] *Highlighted in Nature SciBX*.
14. "Selective Gold(I)-Catalyzed Formation of Tetracyclic Indolines: A Single Transition State and Bifurcations Lead to Multiple Products," Noey, E.; **Wang, X.**; Houk, K. *J. Org. Chem.* **2011**, *76*, 3477–3483. [[link](#)]
13. "Gold(I)-Catalyzed Tandem Cyclization Approach to Tetracyclic Indolines," Liu, Y.; Xu, W.; **Wang, X.** * *Org. Lett.* **2010**, *12*, 1448–1451. [[link](#)]
12. "AAK1 Identified as an Inhibitor of Neuregulin-1/ErbB4-Dependent Neurotrophic Factor Signaling Using Integrative Chemical Genomics and Proteomics," Kuai, L.; Ong, S. E.; Madison, J. M.; **Wang, X.**; Duvall, J. R.; Lewis, T. A.; Luce, C. J.; Conner, S. D.; Pearlman, D. A.; Wood, J. L.; Schreiber, S. L.; Carr, S. A.; Scolnick, E. M.; Haggarty, S. J. *Chem & Biol.* **2011**, *18*, 891–906.
11. "Chemical Genetics Identifies Small-Molecule Modulators of Neuritogenesis Involving Neuregulin-1/ErbB4 Signaling," Kuai, L.; **Wang, X.**; Madison, J. M.; Schreiber, S. L.; Scolnick, E. M.; Haggarty, S. J. *ACS Chem. Neurosci.* **2010**, *1*, 325–342.
10. "Syntheses of Aminoalcohol-Derived Macrocycles Leading to a Small-Molecule Binder to and Inhibitor of Sonic Hedgehog," Peng, L.F.; Stanton, B. Z.; Maloof, N.; **Wang, X.**; Schreiber, S. L. *Bioorg. Med. Chem. Lett.* **2009**, *19*, 6319–6325.
9. "Identifying the Proteins to Which Small-Molecule Probes and Drugs Bind in Cells," Ong, S.-E.; Schenone, M.; Margolin, A.; Li, X.; Do, K.; Doud, M.; Mani, D.; Kuai, L.; **Wang, X.**; Wood, J.; Tolliday, N.; Koehler, A.; Marcaurelle, L.; Golub, T.; Gould, R.; Schreiber, S. L.; Carr, S. *Proc. Natl. Acad. Sci. U. S. A.* **2009**, *106*, 4617–4622.
8. "A Small Molecule that Binds Hedgehog and Blocks its Signaling in Human Cells," Stanton, B.; Peng, L. F.; Maloof, N.; Nakai, K.; **Wang, X.**; Duffner, J. L.; Taveras, K. M.; Hyman, J. M.; Lee, S. W.; Koehler, A. N.; Chen, J. K.; Fox, J. L.; Mandinova, A.; Schreiber, S. L. *Nature Chem. Biol.* **2009**, *5*, 154–156.
7. "Diversity Synthesis of Complex Pyridines Yields a Probe of a Neurotrophic Signaling Pathway," Gray, B. L.; **Wang, X.**; Schreiber, S. L. *Org. Lett.* **2008**, *10*, 2621–2624.
6. "Small-Molecule Reagents for Cellular Pull-down Experiments," **Wang, X.**; Imber, B. S.; Schreiber, S. L. *Bioconjug. Chem.* **2008**, *19*, 585–587.
5. "Synthesis of the Tetracyclic Core of the Tetrapetalones *via* Transannular Oxidative [4+3] Cyclization," **Wang, X.**; Porco, J. A., Jr. *Angew. Chem., Int. Ed.* **2005**, *44*, 3067–3071; **2006**, *45*, 6607.
4. "Total Synthesis of the Salicylate Enamide Macrolide Oximidine III: Application of Relay Ring-Closing Metathesis," **Wang, X.**; Bowman, E. J.; Bowman, B. J.; Porco, J. A., Jr. *Angew. Chem., Int. Ed.* **2004**, *43*, 3601–3605.
3. "Total Synthesis of the Salicylate Enamide Macrolide Oximidine II," **Wang, X.**; Porco, J. A., Jr. *J. Am. Chem. Soc.* **2003**, *125*, 6040–6041.
2. "Modification of C-Terminal Peptides to Form Peptide Enamides: Synthesis of Chondriamides A and C," **Wang, X.**; Porco, J. A., Jr. *J. Org. Chem.* **2001**, *66*, 8215–8221.

1. “Parallel Synthesis and Purification Using Anthracene-Tagged Substrates,” **Wang, X.**; Parlow, J. J.; Porco, J. A., Jr. *Org. Lett.* **2000**, 2, 3509–3512.

Patent:

1. “Histone Demethylase Inhibitors and Methods for Using the Same,” Xu, W.; **Wang, X.** US 2013/0137720 A1. (licensed to Sigma-Aldrich and EMD Millipore)
2. “Indoline Alkaloid Compounds,” Podoll, J. D.; Chang, L.; **Wang, X.** PCT/US14/32585. (licensed to Recreo Pharmaceuticals)
3. “Polycyclic Indoline and Indolenine Compounds,” Barbour, P. M.; **Wang, X.** PCT/US62/154,792. (licensed to Recreo Pharmaceuticals)
4. “1,3,4,9-Tetrahydro-2H-Pyrido[3,4-B]Indole Derivative Compounds and Uses Thereof,” Zhang, J.; Podoll, J. D.; **Wang, X.** US 62/719,048.
5. “Tryptoline-Based Benzothiazoles and their use as Antibiotics and Antibiotic Resistance-Modifying Agents,” Wang, X.; **Wang, X.** US 62/895,380.
6. “Re-Sensitizing Multidrug-Resistant (MDR) Gram-Negative Bacteria to Colistin Using Ionophores,” Gao, Y.; Somnath, D.; **Wang, X.** PCT/US23/62944.
7. “Small Molecules Targeting eIF3e to Inhibit Tumor Growth, Progression, and Metastasis,” Ford, H.; Zhao, R.; Old, W.; **Wang, X.** PCT US 63/311,808
8. “EYA2 Inhibitors and Methods for Using and Producing the Same,” Ford, H.; **Wang, X.**; Zhao, R. PCT US 63/582,521.

Funding:

Active

1R41CA291231 (NIH/NCI) X Wang, H Ford & R Zhao (PIs) 08/2024 – 07/2025
Total: \$399,709

Preclinical Studies to Develop an Eya2 Tyr Phosphatase Inhibitor as a Novel Medulloblastoma Therapeutic

We plan to scale up the synthesis of our lead Eya2 inhibitor and perform pharmacokinetic and pharmacodynamic studies both in vitro and in vivo.

Role: PI

SPARK (CU AMC & OEDIT) R Zhao, H Ford & X Wang (PIs) 04/2024 – 03/2026
Total: \$200,000

Developing a first-in-class allosteric EYA2 tyrosine phosphatase inhibitor for glioblastoma therapy

We are continuing to optimize a small molecule inhibitor (new version) that we have developed as an allosteric inhibitor against EYA2, to improve its properties to use as a research tool and potentially to move into preclinical and clinical trials for glioblastoma.

Role: PI

AB Nexus (University of Colorado) Wang & Ford (PIs) 12/01/2022–11/30/2025
Total: \$150,000

Optimizing A First-in-class Allosteric Eya2 Tyrosine Phosphatase Inhibitor for Glioblastoma Therapy

This project will develop novel first-in-class small-molecule inhibitor of Eya2 tyrosine phosphatase as a

therapeutic agent for glioblastoma.

Role: PI

Lab Venture Challenge (University of Colorado) Wang (PI) 04/01/2023–03/31/2025
Total: \$62,500

New Antibiotic Adjuvants for Multidrug-Resistant Bacteria

This project will conduct proof-of-concept studies to demonstrate the newly developed novel colistin adjuvant for the treatment of multidrug-resistant Gram-negative bacteria infections.

Role: PI

Lab Venture Challenge (University of Colorado) Arnoult (PI) 04/01/2024–03/31/2026
Total: \$62,500

New Antibiotic Adjuvants for Multidrug-Resistant Bacteria

This project will conduct proof-of-concept studies to demonstrate the newly developed novel colistin adjuvant for the treatment of multidrug-resistant Gram-negative bacteria infections.

Role: Collaborator

Pending

R41 CA291231 (NIH/NCI) Ford (PI) 10/01/2024-9/30/2025
Total: \$399,709

Preclinical Studies To Develop an Eya2 Tyr Phosphatase Inhibitor as A Novel Medulloblastoma Therapeutic

Role: contractor (PI)

SPARK (CU Anschutz) Zhao (PI) 5/01/2024-4/30/2026
Total: \$200,000

Developing A First-in-class Allosteric Eya2 Tyrosine Phosphatase Inhibitor for Brain Cancer Therapy

Role: contractor (PI)

R01 CA290317 (NIH/NCI) Ford, Wang, Zhao (PIs) 4/01/2024-3/31/2029
Total: \$3,870,177

Identifying and Targeting Therapeutic Vulnerabilities in Group 3 Medulloblastoma

Role: PI

Completed

R33 AI121581 (NIH/NIAID) Wang (PI) 12/01/2017-11/30/2022
Total: \$1,386,000

Development of Novel Resistance-Modifying Agents for MRSA

This project aims to use a medicinal chemistry approach to systematically develop novel resistant-modifying agents that re-sensitize methicillin-resistant *Staphylococcus aureus* (MRSA) to β -lactam antibiotics.

Role: PI

R33 AI121365 (NIH/NIAID) Detweiler and Wang (PIs) 12/01/2017-11/30/2020
Total Cost: \$1,379,609

A Novel Screen for Antibacterials that Are Non-Toxic to Mammals

This project aims to use an image-based high-content screen to identify therapeutics that target

nonessential bacterial virulence factors and will be effective against antimicrobial-resistant bacteria.

Role: PI

R01 GM098390 (NIH/NIGMS)

Wang (PI)

08/01/2012–07/31/2018

Total: \$1,311,132

Specific Chemical Probes for Histone Demethylases

This project will develop a series of specific chemical probes for the studies of the cellular functions and substrate scopes of the JmJc domain-containing histone demethylases.

Role: PI

R21 AI121581 (NIH/NIAID)

Wang (PI)

12/01/2015–11/30/2017

Total: \$411,061

Development of Novel Resistance-Modifying Agents for MRSA

This project aims to use a medicinal chemistry approach to systematically develop novel resistant-modifying agents that re-sensitize methicillin-resistant *Staphylococcus aureus* (MRSA) to β -lactam antibiotics.

Role: PI

R21 AI121365 (NIH/NIAID)

Detweiler and Wang (PIs)

12/01/2015–11/30/2017

Total: \$411,140

A Novel Screen for Antibacterials that Are Non-Toxic to Mammals

This project aims to use an image-based high-content screen to identify therapeutics that target nonessential bacterial virulence factors and will be effective against antimicrobial-resistant bacteria.

BDEG (State of Colorado)

Wang (PI)

07/01/2014–06/30/2016

Total: \$200,000

Development of Novel Resistance-Modifying Agents for the Treatment of MRSA

This project will conduct proof-of-concept studies to developing novel resistant-modifying agents that re-sensitize methicillin-resistant *Staphylococcus aureus* (MRSA) to β -lactam antibiotics.

Role: PI

Golfers Against Cancer Award (UCCC)

Taatjes and Wang (PIs)

11/01/2012–10/31/2013

Total: \$50,000

Develop Chemical Probes to Define and Control the p53-Mediator Interface

This project aims to develop a systematic screening approach to discover novel transcriptional regulators that selectively interact with transcription factor and Mediator.

Role: Co-PI

Butcher Award (BioFrontiers Institute)

Wang and Yi (PIs)

05/01/2010–04/30/2012

Total: \$100,000

A Chemical Genetics Approach to Study Epigenetic Regulation in Mammalian Skin

The project aims to develop selective histone demethylase inhibitors and use them to study epigenetic regulation in mouse skin development in vivo.

Role: Co-PI

Students and Postdoctoral Scholars

Graduate students received Ph.D. degrees

1. Wenqing Xu, 2014 – Chemistry
2. Jessica D. Podoll, 2015 – Biochemistry
3. Laura J. Marholz, 2015 – Chemistry

4. Patrick M. Barbour, 2016 – Chemistry
5. Rachel Weintraub, 2022 – Chemistry

Graduate students currently enrolled

1. Somnath Dutta – Chemistry
2. Alex LaVeck – Chemistry
3. Abby Rawlings – Chemistry
4. Maxwell Abreu – Chemistry
5. Madeline Herbrechtsmeier
6. Zachery Gekow
7. Diego Arredondo

Graduate student received Master degree

1. Patrick E. Castro, 2014 – Chemistry
2. Shane Walls, 2017 – Chemistry
3. Jessica D. Burl, 2017 – Chemistry
4. Brendan M. Griffiths, 2017 – Chemistry
5. Sara Robertson, 2020 – Chemistry
6. Justin Olson, 2021 – Chemistry
7. Lucas Gardner – Chemistry
8. Nianzi Liu – Chemistry

Postdoctoral Scholars

1. Yongxiang Liu, 2008–2012
2. Xuelai Luo, 2009–2010
3. Rebecca A. K. Friedman, 2010–2011
4. Le Chang, 2012–2014
5. Wei Wang, 2013–2020
6. Yugen Zhu, 2015–2017
7. Wei He, 2015–2018
8. Peijun Liu, 2016–2017
9. Xiaozu Liu, 2016–2017
10. Xinfeng Wang, 2017–2020
11. Jinsen Chen, 2016–2018
12. Yuhang Zhou, 2018–2020
13. Jessica Podoll, 2020–2020

Professional Research Assistant

1. Yuefeng Gao, 2020–2022

Undergraduate students (Awards)

1. Se Jeong Yeo, 2009–2011
2. Graham Watts, 2011–2012 (HHMI)
3. Zhe Fu, 2012–2013
4. Eunice H. Kim, 2012–2013
5. Shane Walls, 2012–2014 (BURST & HHMI)
6. Courtney P. O'Rourke, 2013–2014
7. Keira Miller, 2014
8. Shalini Jain, 2014–2015 (HHMI)

9. Geanat Solomon, 2014–2015 (workstudy)
10. Kasey Pickard, 2014–2016 (BURST)
11. Austin Jolly, 2014–2016 (HHMI)
12. Ali Hakimi, 2014–2016 (UROP)
13. Kevin Xie, 2015–2017 (UROP & HHMI)
14. Lakota Cleaver, 2015–2017 (BSI & UROP)
15. Anna Jaunarajs, 2015–2018 (BSI & UROP)
16. Meghan R. Finke, 2016–2018 (UROP)
17. Maddison Wheatley, 2020–2021 (UROP)
18. Rana Marghalani, 2020–2021
19. Nianzi Liu, 2020–2022
20. Lily Becker, 2021–2022 (UROP)
21. Timothy Hutama, 2022 (UROP)
22. Julia Papaianachi, 2022 (Toji)
23. Tilmann Wollenberg, 2022–2023 (UROP)
24. Susan Harris, 2022–*present* (UROP, Astronaut Scholarship)
25. Tyler Hager, 2022
26. Mia Muse, 2023
27. Thomas Hartman, 2023
28. Ella Todd, 2024–*present*
29. Dylan Srodes, 2024–*present*
30. Whitney Thong, 2024–*present*

High school students

1. Annie Kim (Peak to Peak Charter), 2011
2. Oak Nelson (Boulder High), 2012
3. Kevin Phan (Boulder High), 2013
4. Davis Conklin (Boulder High), 2013
5. Arif Nadiani (Boulder High), 2013
6. Yi Yang (Monarch High), 2015
7. Zachary Gao (Cherry Creek High), 2022
8. Michael Gao (Fairview High), 2022

Classes Taught:

CHEM 3451, Organic Chemistry I for Majors	Spring, 2025
CHEM 3471, Organic Chemistry II for Majors	Fall, 2024
CHEM 3451, Organic Chemistry I for Majors	Spring, 2024
CHEM3321 Lab/Organic Chemistry I & & CHEM 3341, Lab/Organic Chemistry II	Spring 2023
CHEM3471 & BCHM 3491, Organic Chemistry II for Majors	Fall, 2022
CHEM 3451, Organic Chemistry I for Majors	Spring, 2022
CHEM 3311 section 100 Organic Chemistry I	Fall, 2021
CHEM 3311 section 100 Organic Chemistry I	Spring, 2021
CHEM 3311 section 200 Organic Chemistry I	Fall, 2020
CHEM 3311 section 100 Organic Chemistry I	Spring, 2020
CHEM 3311 section 300 Organic Chemistry I	Fall, 2019
CHEM 5311 Advanced Synthetic Organic Chemistry	Fall, 2018
CHEM 5311 Advanced Synthetic Organic Chemistry	Fall, 2017

CHEM 3321 Organic Chemistry Lab	Spring, 2017
CHEM 3311 sections 100 & 200 Organic Chemistry I	Fall, 2015
CHEM 3311 sections 100 & 200 Organic Chemistry I	Fall, 2014
CHEM 3331 Organic Chemistry II	Spring, 2014
CHEM 3311 Organic Chemistry I	Fall, 2013
CHEM 6311 Special Topics in Synthetic Organic Chemistry	Spring, 2013
CHEM 5311 Advanced Synthetic Organic Chemistry	Fall, 2012
CHEM 3331 Organic Chemistry II	Spring, 2012
CHEM 3351 Organic Chemistry I for Chemistry and Biochemistry Majors	Fall, 2011
CHEM 3331 Organic Chemistry II	Spring, 2011
CHEM 5311 Advanced Synthetic Organic Chemistry	Fall, 2010
CHEM 5311 Advanced Synthetic Organic Chemistry	Fall, 2009
CHEM 5311 Advanced Synthetic Organic Chemistry	Fall, 2008

Other Professional Activities:

Journal Refereeing

1. *Journal of the American Chemical Society*
2. *Organic Letters*
3. *Journal of Organic Chemistry*
4. *Chemical Reviews*
5. *Journal of Medicinal Chemistry*
6. *Chemical Communications*
7. *Bioorganic & Medicinal Chemistry Letters*
8. *Tetrahedron*
9. *Tetrahedron Letters*
10. *ChemBioChem*
11. *ChemMedChem*
12. *Synlett*
13. *International Journal of Molecular Sciences*
14. *Macromolecules*
15. *Chemistry & Biology*
16. *ACS Chemical Biology*
17. *Current Drug Research Reviews*