Stanford



Xinyu (Jenny) Liu

Lecturer, Chemistry

Bio

ACADEMIC APPOINTMENTS

- Lecturer, Chemistry

PROFESSIONAL EDUCATION

- Postdoctoral Scholar, Stanford University , Chemistry
- Ph.D., University of Wisconsin-Madison , Chemistry (2022)
- Bachelor of Arts, Macalester College , Applied Mathematics, Chemistry (2017)

LINKS

- ORCID: https://orcid.org/0000-0003-1395-9483
- LinkedIn: https://www.linkedin.com/in/xinyu-jenny-liu-chemicalbiology/

Teaching

COURSES

2026-27

- Chemical Principles I: CHEM 31A (Aut)
- Chemical Principles II: CHEM 31B (Win)
- Instrumental Analysis Principles and Practice: CHEM 131 (Spr)
- Teaching of Chemistry: CHEM 299 (Aut)

2025-26

- Chemical Principles II: CHEM 31B (Win, Sum)
- Instrumental Analysis Principles and Practice: CHEM 131 (Spr)
- Organic Chemistry Laboratory: CHEM 124 (Aut)

2024-25

- Organic Chemistry Laboratory: CHEM 124 (Aut)

Publications

PUBLICATIONS

- **Rational Design of a Foldon-Derived Heterotrimer Guided by Quantitative Native Mass Spectrometry.** *Journal of the American Chemical Society*

Liu, X., Roberts, D. S., Bingman, C. A., Ge, Y., Gellman, S. H.
2025

- **Polyacrylamide-Based Antimicrobial Copolymers to Replace or Rescue Antibiotics.** *ACS central science*
  Williams, S. C., Chosy, M. B., Jons, C. K., Dong, C., Prossnitz, A. N., Liu, X., Hernandez, H. L., Cegelski, L., Appel, E. A.
  2025; 11 (3): 486-496
- **Polyacrylamide-Based Antimicrobial Copolymers to Replace or Rescue Antibiotics** *ACS CENTRAL SCIENCE*
  Williams, S. C., Chosy, M. B., Jons, C. K., Dong, C., Prossnitz, A. N., Liu, X., Hernandez, H., Cegelski, L., Appel, E. A.
  2025
- **Vibrio cholerae RbmB is an α-1,4-polysaccharide lyase with biofilm-disrupting activity against Vibrio polysaccharide (VPS).** *PLoS pathogens*
  Weerasekera, R., Moreau, A., Huang, X., Nam, K. M., Hinbest, A., Huynh, Y., Liu, X., Ashwood, C., Pepi, L. E., Paulson, E., Cegelski, L., Yan, J., Olson, et al
  2024; 20 (12): e1012750
- **Biguanide-Vancomycin Conjugates are Effective Broad-Spectrum Antibiotics against Actively Growing and Biofilm-Associated Gram-Positive and Gram-Negative ESKAPE Pathogens and Mycobacteria.** *Journal of the American Chemical Society*
  Rahn, H. P., Liu, X., Chosy, M. B., Sun, J., Cegelski, L., Wender, P. A.
  2024
- **Vancomycin-Polyguanidino Dendrimer Conjugates Inhibit Growth of Antibiotic-Resistant Gram-Positive and Gram-Negative Bacteria and Eradicate Biofilm-AssociatedS.aureus.** *ACS infectious diseases*
  Chosy, M. B., Sun, J., Rahn, H. P., Liu, X., Brcic, J., Wender, P. A., Cegelski, L.
  2024
- **CPMAS NMR platform for direct compositional analysis of mycobacterial cell-wall complexes and whole cells.** *Journal of magnetic resonance open*
  Liu, X., Brčić, J., Cassell, G. H., Cegelski, L.
  2023; 16-17
- **Tailoring Reaction Selectivity by Modulating a Catalytic Diad on a Foldamer Scaffold (vol 144, pg 2225, 2022)** *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*
  Andrews, M., Liu, X., Gellman, S. H.
  2022; 144 (34): 15908
- **Tailoring Reaction Selectivity by Modulating a Catalytic Diad on a Foldamer Scaffold** *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*
  Andrews, M., Liu, X., Gellman, S. H.
  2022; 144 (5): 2225-2232
- **Structural and functional diversity among agonist-bound states of the GLP-1 receptor** *NATURE CHEMICAL BIOLOGY*
  Cary, B. P., Deganutti, G., Zhao, P., Truong, T. T., Piper, S. J., Liu, X., Belousoff, M. J., Danev, R., Sexton, P. M., Wootten, D., Gellman, S. H.
  2022; 18 (3): 256-+
- **Comparisons of beta-Hairpin Propensity Among Peptides with Homochiral or Heterochiral Strands** *CHEMBIOCHEM*
  Liu, X., Gellman, S. H.
  2021; 22 (18): 2772-2776
- **The role of beta-hairpin conformation in ester hydrolysis peptide catalysts based on a TrpZip scaffold** *RSC ADVANCES*
  Liu, X., Waters, R., Gilbert, H. E., Barroso, G. T., Boyle, K. M., Witus, L. S.
  2021; 11 (38): 23714-23718
- **Catalytic Intramolecular Conjugate Additions of Aldehyde-Derived Enamines to alpha,beta-Unsaturated Esters** *ORGANIC LETTERS*
  Girvin, Z. C., Lampkin, P. P., Liu, X., Gellman, S. H.
  2020; 22 (11): 4568-4573
- **Foldamer-templated catalysis of macrocycle formation** *SCIENCE*
  Girvin, Z. C., Andrews, M., Liu, X., Gellman, S. H.
  2019; 366 (6472): 1528-+

- **A colorimetric competitive displacement assay for the evaluation of catalytic peptides** *ORGANIC & BIOMOLECULAR CHEMISTRY*
  Gest, A. M. M., Aguiluz, E. M., Mays, M. T., Liu, X., Neidhart, E. K., Witus, L. S.
  2017; 15 (48): 10160-10163
- **Pre-monomer peptidomimetic synthesis using thiol-ene click chemistry**
  Liu, X., Witus, L.
  AMER CHEMICAL SOC.2017