

# Jim L. Zhang

## EDUCATION

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<b>Stanford University, School of Medicine</b> Ph.D. Candidate – Department of Structural Biology	Palo Alto, California
<b>Rice University, Wiess School of Natural Sciences</b> B.S. in Biochemistry and Cell Biology – <i>summa cum laude</i> <b>Honors:</b> Distinction in Research and Creative Work, President’s Honor Roll, Phi Beta Kappa, Honors Thesis M.S. in Biochemistry and Cell Biology <b>Thesis:</b> “ <i>Structure-function studies of the nematode-infecting Orsay virus</i> ”	Houston, Texas <b>GPA:</b> 3.99/4.00 <b>GPA:</b> 4.00/4.00

## RESEARCH

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<b>Feng Laboratory – Stanford School of Medicine, Palo Alto, CA</b> <i>Graduate Student Researcher</i>	October 2022 – Present
<b>Rogala Laboratory – Stanford School of Medicine, Palo Alto, CA</b> <i>Rotation Student</i>	August 2022 – October 2022
<b>Feng Laboratory – Stanford School of Medicine, Palo Alto, CA</b> <i>Rotation Student</i>	July 2022 – August 2022
<b>ADVANCE Summer Institute – Stanford School of Medicine, Palo Alto, CA</b> <i>Research Fellow</i>	June 2022 – August 2022
<b>Undergraduate Honors Research in Biochemistry and Cell Biology, Houston, TX</b> <i>Thesis: <u>Structural studies of a filamentous double-stranded RNA virus</u></i> <i>Advisor: Yizhi J. Tao</i>	August 2021 – June 2022
<b>Advanced Biosciences Summer Research Institute, Houston, TX</b> <i>Research Fellow and Student Mentor</i>	June 2020 – August 2021
<b>National Science Foundation - REU in Multi-Scale Biomolecular Networks, Houston, TX</b> <i>Research Fellow in Molecular Virology</i>	June 2019 - August 2019
<b>B.S.-M.S.-Ph.D. Candidate in Biochemistry and Cell Biology, Houston, TX</b> <i>Thesis: <u>Structure-function studies of the nematode-infecting Orsay virus</u></i> <i>Advisor: Yizhi J. Tao</i>	March 2019 – June 2022
<b>Tao Laboratory – Rice University, Houston, TX</b> <i>Researcher</i>	January 2019 – June 2022

## TEACHING

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<b>Department of Biochemistry and Cell Biology at Rice University, Houston, TX</b> <i>BIOS 302: Biochemistry II Teaching Assistant</i>	January 2022 – May 2022
<b>Wiess School of Natural Sciences at Rice University, Houston, TX</b> <i>Pilot Program for Improving STEM Retention Among Underrepresented Populations</i>	August 2021 – September 2021
<b>Department of Biochemistry and Cell Biology at Rice University, Houston, TX</b> <i>BIOS 301: Biochemistry I Teaching Assistant</i>	August 2020 – December 2021
<b>Department of Biochemistry and Cell Biology at Rice University, Houston, TX</b> <i>BIOS 450/550: Viruses and Infectious Diseases Teaching Assistant</i>	January 2021 – May 2021
<b>Office of Academic Advising at Rice University, Houston, TX</b> <i>Academic Fellow in Biochemistry and Cell Biology</i>	March 2020 – May 2022
<b>Department of Chemistry at Rice University, Houston, TX</b>	

<i>CHEM 211: Organic Chemistry I Teaching Assistant</i>	June 2019 – August 2019
<b>Breakthrough Collaborative</b> , Houston, TX <i>9<sup>th</sup> Grade Teaching Fellow in Biology; Department Chair of Science</i>	May 2018 – August 2018
<b>Breakthrough Collaborative</b> , Houston, TX <i>8<sup>th</sup> Grade Teaching Assistant in Chemistry and Algebra I</i>	May 2017 – August 2017
<b>EXTRACURRICULARS AND SERVICE</b>	
<b>Structural Biology Graduate Program at Stanford University</b> , Palo Alto, CA <i>Admissions Committee</i>	December 2023 – May 2024
<b>Structural Biology and Biophysics Graduate Programs at Stanford University</b> , Palo Alto, CA <i>Chair - Graduate Student Recruitment</i>	August 2023 – May 2024
<b>Stanford Biosciences Student Association</b> , Palo Alto, CA <i>NSF-GRFP Peer Mentor</i>	August 2023 – December 2023
<b>Graduate Life Office at Stanford University</b> , Palo Alto, CA <i>Community Associate</i>	May 2023 – Present
<b>Structural Biology and Biophysics Graduate Programs at Stanford University</b> , Palo Alto, CA <i>Social Media Manager</i>	February 2023 – Present
<b>Department of Structural Biology at Stanford University</b> , Palo Alto, CA <i>Diversity, Equity, and Inclusion Committee Member</i>	September 2022 – Present
<b>Structural Biology and Biophysics Graduate Programs at Stanford University</b> , Palo Alto, CA <i>Recruitment Committee Member</i>	September 2022 – May 2024
<b>Community College Outreach Program</b> , Palo Alto, CA <i>Science Small Group Mentor</i>	August 2022 – December 2022
<b>Project SHORT</b> , USA <i>Pre-Grad Mentor</i>	July 2022 – Present
<b>Office of Academic Advising at Rice University</b> , Houston, TX <i>Peer Academic Advisor</i>	February 2020 – May 2022
<b>Office of First Year Programs at Rice University</b> , Houston, TX <i>Orientation Week Coordinator – Will Rice College</i>	December 2019 – September 2020
<b>Office of Student Success Initiatives at Rice University</b> , Houston, TX <i>First-Generation and Low-Income Student Ambassador</i>	September 2019 – May 2020
<b>Rice Thresher</b> , Houston, TX <i>News Writer</i>	September 2018 – May 2019
<b>Rice Catalyst</b> , Houston, TX <i>Popular Science Writer and Discoveries Blogger</i>	September 2018 – May 2019
<b>Breakthrough Collaborative</b> , Houston, TX <i>High School Student Mentor</i>	August 2018 – May 2019

## PRESENTATIONS AND CONFERENCES

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<b>Rice University Shapiro Showcase</b> , Houston, TX <i>Selected Speaker – “Visualizing a Virus at Molecular Resolution”</i>	April 2022
<b>Rice IBB Summer Research Symposium</b> , Houston, TX <i>Poster - “Virus-like Particles from a Double-stranded RNA Virus with Filamentous Capsid Morphology”</i>	August 2021
<b>Rice Undergraduate Research Symposium</b> , Houston, TX <i>Speaker - “Structural and Functional Studies of a Covalently Linked Viral Fiber”</i>	April 2021
<b>Cellular and Molecular Biophysics Conference</b> , Houston, TX <i>Speaker - “Cryo-EM Reconstruction of a Covalently Linked Viral Fiber”</i>	December 2020
<b>BioSciences Summer Research Institute Symposium</b> , Houston, TX <i>Speaker - “A Preliminary Cryo-EM Model of the Orsay Spike Protein CP-<math>\delta</math>”</i>	August 2020
<b>Rice Undergraduate Research Symposium</b> , Houston, TX <i>Poster - “The Structure and Entry Mechanism of the Nematode Virus Orsay”</i>	April 2020
<b>Emerging Trends in Cellular and Molecular Biophysics</b> , Houston, TX <i>Poster - “Native-Condition Structural Studies of the Nematode Virus Orsay”</i>	December 2019
<b>Rice REU Research Symposium</b> , Houston, TX <i>Poster - “A Purification Scheme Enabling Native-Condition Structural Studies of the Nematode Virus Orsay”</i>	October 2019
<b>Rice IBB Summer Research Symposium</b> , Houston, TX <i>Poster - “An Iodixanol-based Density Gradient Isolates Orsay Virions with Substantial Yield and Purity”</i>	July 2019

## PUBLICATIONS

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1. Guo, YR, Fan, Y, Zhou, Y, Jin, M, **Zhang, JL**, Jiang, H, Holt, MV, Wang, T, Young, NL, Wang, D, Zhong, W, & Tao, YJ. 2020. Orsay CP- $\delta$  adopts a novel  $\beta$ -bracelet structural fold and incorporates into virions as a head fiber. *Journal of Virology*.
2. **Zhang, JL\***, Pan, J\*, Zhou, Y, Fan, Y, Guo, YR, Zhong, W, & Tao, YJ. (*In Preparation*). The structure of a covalently linked pentameric viral fiber revealed by cryo-electron microscopy reconstruction. \*Equal contribution.

## FELLOWSHIPS AND GRANTS

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1. Barry M. Goldwater Foundation. Goldwater Scholar. March 2021 – May 2022, \$7,500.
2. Rice University. George J. Schroepfer Jr. Summer Undergraduate Research Fellowship. May 2021 – August 2021, \$5,000.
3. National Science Foundation. Graduate Research Fellowship Program. April 2022 – December 2027, \$138,000.

## HONORS AND AWARDS

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<b>Shapiro Prize</b> , Houston, TX	April 2022
<b>George J. Schroepfer Jr. Award for Excellence in Undergraduate Research in Biochemistry</b> , Houston, TX	April 2022
<b>Worden Endowed Award</b> , Houston, TX	April 2022
<b>Rice Excellence in Academic Advising Award</b> , Houston, TX	April 2022
<b>Rice IBB Research Symposium</b> , Houston, TX <i>Outstanding Poster Presentation</i>	August 2021
<b>Rice Undergraduate Research Symposium</b> , Houston, TX <i>Outstanding Oral Presentation</i>	April 2021
<b>James Street Fulton and Edythe King Fulton Endowed Prize</b> , Houston, TX	December 2020
<b>Willis Service Award</b> , Houston, TX	November 2020

**BIOC 211 Student Research Presentations, Houston, TX**  
*Outstanding Poster Presentation*

November 2019

**Rice REU Research Symposium, Houston, TX**  
*Outstanding Poster Presentation*

November 2019

**Comcast Leaders and Achievers Scholar, Houston, TX**

June 2018

**HISD Board of Education Award, Houston, TX**  
*Outstanding Student*

May 2018