

YUHUI XIN

Institute of Biophysics, Chinese Academy of Sciences, Beijing, China

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EDUCATION

Institute of Biophysics, Chinese Academy of Sciences, China *2020 to present*

PhD student, Structure Biology, supervised by Zihao Rao (Member of the Chinese Academy of Sciences)

University of Science and Technology of China, China *2016 - 2020*

BSc Biosciences

Boston University, USA *July to September 2019*

Summer Internship, supervised by Jixin Cheng

RESEARCH EXPERIENCE & PUBLICATIONS

Research area: Structure and function of proteins associated with viral transcription and replication

Project experience:

1. Structure and function of virus-encoded DNA topoisomerase II (2020-present)
2. Structure and function of arenavirus polymerase (2020-2021)
3. Summer internship at Boston University (Label-free Raman spectral imaging, 2019)
4. The International Genetically Engineered Machine Competition (iGEM Bronze Award 2018)

Conference experience:

1. The 1st BSC-PC Symposia-Pathogens and Vaccine Medicine (China, 2024, poster presentation)
2. Frontiers in Biological Structures (China, 2024, poster presentation)
3. The 8th Chinese Protein Society Symposium (China, 2023)
4. Cell Symposia-Structure biology from the nanoscale to cellular mesoscale (China, 2023)
5. The 19th Chinese Biophysics Congress (China, 2021)

Publications:

1. Direct trapping of the Transport-segment DNA by the bacteriophage topoisomerase II. *Science*, 2024. (first author, in the submission)
2. Structural and functional insights into the T-even type bacteriophage topoisomerase II. *Nature Communications*, 2024. (first author, DOI: <https://doi.org/10.1038/s41467-024-53037-3>)
3. Structural insights into the DNA topoisomerase II of the African swine fever virus. *Nature Communications*, 2024. (Co-first author, DOI: <https://doi.org/10.1038/s41467-024-49047-w>)
4. Structural basis for recognition and regulation of arenavirus polymerase L by Z protein. *Nature Communications*, 2021. (Participant, DOI: <https://doi.org/10.1038/s41467-021-24458-1>)

SKILLS

Research Software

Cryosparc, Relion, Coot, PyMol, Chimera...

Wet lab Experiment

Protein purification, Crystallography and Single-particle Cryo-EM...

Language

Chinese (Native); English (IELTS:6.5, 2024)

Data Analysis

Origin, GraphPad Prism...

Office Software

Word, Excel, PowerPoint...

AWARDS & SCHOLARSHIPS

The first prize of Sinovac Life Medicine Excellent Postgraduate Scholarship	<i>2024</i>
Zhu Li Yuehua Scholarship, University of Chinese Academy of Sciences	<i>2024</i>
Merit student of Institute of Biophysics	<i>2023</i>
iGEM competition Bronze Award	<i>2018</i>
Excellent student scholarship of USTC	<i>2018</i>
Prize of the undergraduate academic paper competition of USTC	<i>2017</i>