XUETING ZHOU

+1 626-715-9913 | Email: xtzhou@ucla.edu | 2433 Barry Ave, Los Angeles, CA, 90064

EDUCATION

University of California, Los Angeles, CA

09/2016- 03/2020

• M.S. in Microbiology, Immunology and Molecular Genetics

GPA:3.6/4

• **B.S.** in Microbiology, Immunology and Molecular Genetics

University of California, Irvine, CA

06/2013-09/2016

Major in Biological science

RESEARCH EXPERIENCE

Z. Hong Zhou Lab at UCLA, Los Angeles, CA

12/2017 - Present

Research Assistant

- CryoEM sample preparation optimization
 - Served as project leader and first author
 - Purified proteins using size exclusion chromatography and checked sample quality by TEM negative stain
 - o Used Vitrobot plunger and manual plunger to prepare CryoEM sample
 - Operated TEM such as TF20 to collect single particles data and electron cryotomography data
 - o Reconstructed tomograms and did statistics analysis for the results
 - Used Relion to do 2D classification and 3D refinement for single particle micrographs
 - Wrote manuscript and made figures for papers
 - Updated Batch Tomography protocol
- Parasite structure resolving
 - o Processed and modeled 3D structure of paraflagellar rod
 - Used subvolume averaging technique to reach high resolution.
 - Visualized and making figures using UCSF Chimera and ChimeraX
 - Predicted, aligned, and compared protein secondary structure
 - Wrote manuscript and made figures for papers

Shin Lin Lab at UCI, Irvine, CA

08/2014 - 06/2016

Undergraduate Researcher

- Studied the effects of traditional Chinese medicine on blood flow and body temperature using laser doppler monitor
- Operated the Laser Doppler Flowmeter, Infra-Red Thermography, Single Photon Counting System and Single Square Voltage Pulse

PUBLICATION

- 1. Chun Xu, Lan Xiao, Yuxue Cao, Yan He, Chang Lei, Yin Xiao, Wujin Sun, Samad Ahadian, <u>Xueting Zhou</u>, Ali Khademhosseini*, Qingsong Ye*, Mesoporous silica rods with cone shaped pores modulate inflammation and deliver BMP-2 for bone regeneration, **Nano Research**, **2020**, doi.org/10.1007/s12274-020-2783-z (IF 8.180, my contribution: electron tomography characterization of the nanoparticles)
- 2. <u>Xueting Zhou</u>, Ke Ding, Joon Kang, Z. Hong Zhou, Use surfactants to alter particle distribution and orientation in Cryo-electron Microscopy Samples, **2020**, under preparation
- 3. Jiayan Zhang*, Hui Wang*, Simon Imhof, <u>Xueting Zhou</u>, Ivo Atanasov, Wong H Hui, Kent Hill, Z. Hong Zhou, Structures of trypanosome flagellum paraflagellar rod and mechanism of eukaryotic cell motility, **2020**, ready to submit (my contribution: reconstruction and subtomoaveraging of CryoET, protein secondary structure production and comparison)

HONOR AND AWARDS

Dean's Honors List in UCLA	03/2019
 Departmental Scholar honor program in UCLA 	01/2019
Dean's Honors List in UCI	03/2016
 Dean's Honors List in UCI 	12/2015

TEACHING EXPERIENCE

TEACHING ASSISTANT

UCLA MIMG105: BIOLOGICAL MICROSCOPY

09/2018 - 12/2018

 Organized the lab session, coordinated with professors and staffs, and demonstrated the Vitrobot (for CryoEM sample preparation) operation for 50 students.

TUTOR

Advance Academy, Irvine, CA

09/2017 - 06/2019

 Tutored high school students in school classes, AP Biology, AP Chemistry, AP Physics, and SAT exam

LAB TECHNIQUES

- Operated TEM Microscope (FEI TF20) for CryoEM and CryoET
- Experienced with Titan Krios High resolution CryoET using serial EM
- Familiar with Linux environment and cluster computing
- Familiar with Etomo component of IMOD software package, including building tomogram and Subvolume Averaging (PEET) to process data
- Familiar with UCSF Chimera and Chimera X to interactive visualize and analyze molecular structure
- Familiar with RELION for 2D classification and 3D refinement
- Operated Vitrobot Mark IV cryo-sample plunger, Gatan Plasma system SOLARUS, and Manual Plunger
- Experienced with protein purification using AKTA size-exclusion chromatography system