

Zihui Shen

25480138@life.hkbu.edu.hk



Research Interests

Marine Invertebrates
Genomic basis of deep-sea adaptations and diversity
Siboglinidae-bacteria symbiosis

Education

Hong Kong Baptist University

September 2025-present

Ph.D. (HKPFS) in Biology

Thesis: Multi-omics Analysis on Symbiosis, Adaptations and Diversity of Deep-sea Tubeworms

Principal Supervisor: Prof. Jianwen Qiu

Scripps Institution of Oceanography, University of California, San Diego

September 2022-August 2023

M.S. in Marine Biology

Thesis: Two New Species of Wood-Associated Sea Stars (Asteroidea: Caymanostellidae) from the Pacific Margin of Costa Rica

Principal Supervisor: Prof. Greg Rouse

University of California, San Diego

2018-2022

B.S. in Marine Biology

Cumulative GPA: 3.82/4.00 (Cum Laude)

Research Experience

Senior Research Assistant Hong Kong Baptist University

February 2025 – August 2025

Supervisor: Prof. Jianwen Qiu

Volunteer

Scripps Institution of Oceanography,
UC San Diego

November 2019 – March 2020;
October 2023 – October 2024

Supervisor: Prof. Greg Rouse

Student Volunteer

Scripps Institution of Oceanography,
UC San Diego

March 2022 – March 2023

Project Topic: Low oxygen effect on juvenile splitnose rockfish optomotor response

Supervisor: Dr. Lillian McCormick

Volunteer (Remote)

Hongshan Biodiversity Investigation
Program, Nanjing Hongshan Forest Zoo

July 2021 – October 2021

Research Assistant

Center for Research and Education on Biological
Evolution and Environment, Nanjing University

July – August 2021

Project topic: Construction of foraminifera image database

Supervisor: Prof. Yukun Shi

Research Intern

Wang Yaqiong Lab,
Nanjing Institution of Geology and Paleontology,
Chinese Academy of Sciences

December 2020 – April 2021

Project topic: Environmental factors affecting species distribution/zonation of ostracods in the sediments of East China Sea near Yangtze Estuary

Advisor: Prof. Yaqiong Wang

Student Volunteer

Benthic Invertebrate Collection at Scripps
Institution of Oceanography

October 2019 – December 2021

Supervisor: Dr. Charlotte Seid

Lab Assistant

Molpharm Laboratory, Nanjing University
Life Science Department

July – September 2019

Advisor: Prof. Qiang Xu

2024 **Sher, Z.**, Koch, N.M., Seid, C.A., Tilic, E. & Rouse, G.W. (2024) Three New Species of Deep-Sea Wood-Associated Sea Stars (Asteroidea: Caymanostellidae) from the Eastern Pacific. *Zootaxa* 5536, 351–388. <https://doi.org/10.11646/zootaxa.5536.3.1>

Scripps Student Symposium (S³) 2023 September 27 2023
Oral presentation: "Two New Species of Wood-Associated Sea Stars (Asteroidea: Caymanostellidae) from the Deep Sea at the Pacific Margin of Costa Rica"

Deep-Sea Biology Symposium (17DSBS) January 12 – 17 2025
Poster: Three New Species of Deep-Sea Wood-Associated Sea Stars (Asteroidea: Caymanostellidae) from the Eastern Pacific

Oral presentation: Transcriptomics and Proteomics of Tubeworms from Hong Kong Local Waters Unravel Tube Diversity and Evolution in Annelida

R/V Robert Gordon Sproul Cruise SP2407 May 18 – 23 2024
Southern California DDT ocean dumpsite characterization, benthic sampling Phase 2

Teaching Assistant Scripps Institution of Oceanography, March– June 2023
UC San Diego
Class: SIO 181 Marine Biochemistry (Dr. Lauren Shipp)

Summer Camp Assistant	Birch aquarium at Scripps Institution of Oceanography	June – August 2022
Campers age group: 5-10		

Tutor School of Biological Sciences, June – July 2022
UC San Diego
Class: BIEB 102 Intro to Ecology/Organisms & Habitats (Prof. Shannon Butler)

Undergraduate Instructional Apprentice	School of Biological Sciences, UC San Diego	January – March 2022
Class: BIEB 150 Evolution (Prof. Lin Chao)		

Popular Science Volunteer	Nanjing Hongshan Forest Zoo	December 2020 – October 2021
----------------------------------	-----------------------------	------------------------------

Tour Guide/Zookeepers Assistant “Feline in China” Enclosure,
Nanjing Hongshan Forest Zoo

Volunteer Guide	Nanjing Paleobiology Museum, Nanjing Institution of Geology and Paleontology, Chinese Academy of Sciences	2016-2018
------------------------	---	-----------