

Yufan (Rory) WANG

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EDUCATION

University of California, Davis

Davis, CA

Bachelor of Science in Neurobiology, Physiology, and Behavior

08/2024 - 06/2028(Expected)

- **Relevant Courses:** General and Organic Chemistry, Calculus for Biology & Medicine, Introduction to Biology, Introduction to Python, General Psychology

INTERSHIP EXPERIENCE

Neuroplasticity and Neurotherapeutics: Brain Trauma, Alzheimer's Disease, and Depression

Online

Research Assistant under Prof. Ruyi Huang, University of California, Los Angeles

Aug. 2025-Present

- Conducting literature review on respiratory therapy-induced spinal cord stimulation as a treatment for neurodegenerative diseases.
- Learning and applying waveform analysis techniques to study neural activity patterns.
- Performing data analysis using DataView software to evaluate experimental datasets.

Yolo Cares

Davis, CA

Volunteer

Jul. 2025 - Present

- Assigned to one patient with a prognosis of \leq 6 months; conduct 1–2 home visits per week to monitor comfort and psychosocial needs.
- Provided emotional support and companionship through conversation and guided craft activities, tailoring each session to the patient's preferences.
- Mediated communication between patient and family members, balancing differing expectations and ensuring respectful dialogue.
- Collaborated with nursing staff to assist palliative patients in non-clinical tasks that promote well-being and dignified end-of-life care.
- Participated in specialized training on accompaniment through the dying process, deepening understanding of hospice philosophy and death awareness.

Qingdao Ruizi Group Co. Ltd

Qingdao, China

R&D Intern

Jul. 2023 – Aug 2023

- Assisted in the Research and Development Department of a leading enterprise in the sea cucumber breeding industry, contributing to research on the environmental conditions of sea cucumber cultivation.
- Investigated and evaluated seawater quality, analyzing the diversity and differential characteristics of seawater, providing essential data and scientific references for the management of sea cucumber culture.
- Supported research efforts at a scientific and technological innovation base for sea cucumber nursery culture, focusing on the management and improvement of sea cucumber breeding practices in northern China.

RESEARCH EXPERIENCE

Patent: Lactococcus lactis CX212, Bacteriocin Nisin Z and Its Applications (Pending)

Deposited: Dec 2024

Research Assistant

- Isolated Lactococcus lactis CX212 from Manila clam gut and identified its gene cluster for Nisin Z biosynthesis.
- Developed Nisin Z-based antimicrobial compositions and feed additives that effectively inhibit aquaculture pathogens (e.g., *Aeromonas salmonicida*, *Edwardsiella* spp., *Vibrio* spp.) as an antibiotic alternative in fish farming.

Frontiers in Biology in Clinical and Scientific Applications: From Cellular Mechanisms to Degenerative Diseases

Tenured Prof. Cheng, Brown University School of Medicine

Research Assistant

Apr. 2023 – Sept. 2023

- Conducted research on the mechanisms of Alzheimer's disease, exploring factors such as endoplasmic reticulum (ER) stress, oxidative stress, autophagic lysosomal degradation, cell death patterns, inflammation, and inflammasomes.
- Investigated human biological cellular organization, cellular progression in diseases, and innovative therapies; studied immune system regulation, inflammation, and cytokine responses in COVID-19.
- Utilized data collection, literature review, case studies, and interviews to derive insights, ensuring a comprehensive understanding of life science mechanisms and disease treatments.

- Demonstrated advanced skills in critical thinking, scientific research, and data analysis through the development and innovation of research methodologies and solutions.
- *WANG, "Different roles of microglia in Alzheimer's Disease", the 3rd International Conference on Biological Engineering and Medical Science [ICBioMed 2023]*

Yuwang

EXTRACURRICULAR ACTIVITIES

ITF Taekwondo at UC Davis

Founder

Davis, CA

Oct. 2025-Present

- Established the ITF club for recreational training and sparring (weekly/bi-weekly sessions)
- Planned quarterly competitions for members

UC Davis Symphony Orchestra

Cello Section

Davis, CA

Jun. 2024-Present

- Rehearsed 5 hours weekly; performed in three major concerts, interpreting European and Latin American repertoire
- Collaborated on sectional workshops to refine ensemble blend and stylistic nuance

Cycling UC Davis

Member

Davis, CA

Jun. 2024-Present

- Completed 1,200 km in league races; contributed to team's top-5 overall ranking
- Developed structured training plan: endurance rides, interval sprints, and elevation climbs

UC Davis Taekwondo Sports Club

Member

Davis, CA

Jun. 2024-Present

- Trained 6 hours weekly in fundamental techniques: takedowns, ground control, and submission defense
- Participated in intra-club sparring sessions, focusing on positional transitions and safety

SKILLS

Tools: Excel, SQL Databases, Google Colab, JupyterLab, Tableau

Languages: Native in Chinese, proficient in English

Hobbies: Cello, Taekwondo (ITF), volleyball, badminton and photography