

Bryan Chen

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Research Assistant

I am a first-year Microbiology major at UC San Diego with three years of iGEM experience as a wet lab, dry lab, and human practices member, team leader, and instructor. I have hands-on skills in PCR, cloning, and data analysis and I am seeking an Undergraduate Research Assistant role in microbiology or synthetic biology.

WORK EXPERIENCE

WIST iGEM Team Instructor

01/2025 - 01/2025

- Returned to alma mater as an instructor for the WIST high school iGEM team, mentoring students in experiments, slide preparation, and wiki content.
- Taught basic lab skills, iGEM structure, research ethics and safety, experimental design, plasmid construction, Golden Gate assembly, and BioBrick-based cloning strategies.
- Guided the team to a Silver Medal at the 2025 iGEM High School Competition.

GEMS-Taiwan iGEM Team Student Leader

01/2024 - 01/2024

- Led a high school synthetic biology team in the international iGEM Competition, coordinating project direction, experimental progress, team communication, and all competition deliverables.
- Worked across wet lab, dry lab, and human practices, including PCR, gel electrophoresis, pipetting, bacterial culture, literature review, and scientific communication.
- Developed a dengue-control project using recombinant biolarvicidal toxins, a beetroot peel attractant, and Taiwan's first sticky ovitrap through synthetic biology.
- Helped the team earn Grand Prize Winner (1st place high school), Gold Medal, Best Wiki, Best Project Promotion Video, and Best New Basic Part in the High School section.

WIST iGEM Team Member

01/2023 - 01/2023

- Contributed to the school's first iGEM team as a wet lab, dry lab, and human practices member, supporting experiments, data analysis, and outreach activities.

EDUCATION

B.S. Microbiology

University of California, San Diego

06/2029

Relevant Coursework: Genetics (BICD 100); General Chemistry II-III (CHEM 6B, 6C); Mechanics (PHYS 1A); Data Analysis and Design for Biology (BILD 5); Analytical Writing (AWP 3); AP/transfer credit equivalent to introductory biology (BILD 1-3), general chemistry (CHEM 6A), and calculus (MATH 20A).

CERTIFICATIONS

iGEM Silver Medal – Instructor

10/2025 - 10/2025

International Genetically Engineered Machine (iGEM) Foundation

iGEM Grand Prize Winner & Gold Medal

10/2024 - 10/2024

International Genetically Engineered Machine (iGEM) Foundation

AWARDS & SCHOLARSHIPS

Silver Medal iGEM 2025, High School (WIST)	01/2025
Grand Prize Winner, High School iGEM 2024 (GEMS-Taiwan)	01/2024
Gold Medal iGEM 2024 (GEMS-Taiwan)	01/2024
Best Wiki, High School iGEM 2024 (GEMS-Taiwan)	01/2024
Best Project Promotion Video, High School iGEM 2024 (GEMS-Taiwan)	01/2024
Best New Basic Part, High School iGEM 2024 (GEMS-Taiwan)	01/2024
Best Education Nomination iGEM 2023, High School (WIST)	01/2023
AP Scholar with Honor	

PROJECTS

Dengue Prevention Synthetic Biology Project GEMS-Taiwan iGEM Team	01/2024 - 10/2024
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Developed a dengue-control system combining recombinant biolarvicidal toxins, a beetroot peel attractant, and a sticky ovitrap using synthetic biology. Led a 28-member team through experimental design, lab work, and documentation, contributing to a Grand Prize-winning project.

VOLUNTEERING & LEADERSHIP

Washington High School

Vice Class President

represented classmates, coordinated events, and worked with school staff on student concerns.

Global Youth Entrepreneurship Challenge

Team Leader

led a team to design a sustainable business idea, handling product concept, basic market analysis, and pitch preparation.

Crafting Joy for Elders

Event Organizer

organized crafts and games for elderly residents, coordinating volunteers and adapting activities to participants' needs.

SKILLS

Wet Lab: bacterial culture, basic experimental design, gel electrophoresis, lab safety and ethics, PCR, pipetting

Synthetic Biology & Project Work: BioBrick concepts, documentation and wiki editing, Golden Gate assembly, human practices and outreach planning, Plasmid construction, protocol optimization

Computational & Communication: Canva, Excel, literature review, Python, scientific writing, slide design and presentation development, video editing