

Madison Rieko Hi'ilani Murata

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CAREER OBJECTIVE

To serve the Hawaiian community as a physician scientist.

EDUCATION

Stanford University – B.S. Candidate in Human Biology	Sep. 2024 – Present
Kamehameha High School – Kapālama – High School Honors Diploma Valedictorian (Class Rank: 1 / 445)	Aug. 2020 – May 2024

RESEARCH EXPERIENCE

Stanford University – Schumer Lab	June 2025 – Present
<ul style="list-style-type: none">Studied the physiological impacts of mitonuclear incompatibilities on <i>Xiphophorus</i> swordtail hybrid fish	
Kamehameha Schools, Kapālama Campus – Laboratory of Gail Ishimoto	Apr. 2021 – Dec. 2023
<ul style="list-style-type: none">Studied the effects of zinc oxide (ZnO) mineral sunscreen exposure on endemic and invasive seaweeds in HawaiiDeveloped plant fertilizers out of invasive <i>G. salicornia</i> seaweed	

UNDERGRADUATE EXTRACURRICULAR ACTIVITIES

Christian Community Engagement	Aug. 2023 – Present
<ul style="list-style-type: none">Communications Director of Christian Union Caritas (CU)	
American Indian Science and Engineering Society (AISES)	March 2025 – Present
<ul style="list-style-type: none">Stanford AISES Intern	
Salvation Army Olakino Clinic – Volunteer	July 2024 – Present
<ul style="list-style-type: none">Assisted and shadowed physicians, providing care to approximately 70 men in the Salvation Army drug and alcohol rehabilitation program	
Harbor Honolulu Church – Youth Group Leader	June 2024 – Present
<ul style="list-style-type: none">Lead and participated in games and discussions	
Harbor Honolulu Church – Slides Technician	May 2022 – Present
<ul style="list-style-type: none">Managed audio, slides, and stage lights during church servicesTrained new volunteers	

HIGH SCHOOL EXTRACURRICULAR ACTIVITIES

Malama Limu Club – Founder/President	Aug. 2023 – May 2024
<ul style="list-style-type: none">Organized community service events to provide students with the opportunity to remove invasive Hawaiian (limu) from fishponds and beaches to repurpose it as fertilizerTestified in support of a bill to pass Limu Kala as Hawaii's state limu on behalf of the clubRecruited 90 Kamehameha Schools Kapālama students for volunteering efforts	
Girls Varsity Cross Country and Track & Field – Team Captain	Feb. 2019 – May 2024
<ul style="list-style-type: none">Led team workouts and stretchingTop scoring runner	
National History Day – Researcher and Website Developer	Nov. 2022 – June 2023
<ul style="list-style-type: none">Reserached Alice Ball, an African American woman who discovered the first effective treatment for leprosy, but did not initially receive credit for her workPresented at the 2023 National History Day competition in Maryland	

PRESENTATIONS

“Physiological impacts of mitonuclear incompatibilities in Swordtail (*Xiphophorus*) fish hybrids”
Poster presentation at the 2025 National American Indian Science and Engineering Fair (AISES)

“Studies on *Gracilaria salicornia*: Zinc Oxide Sunscreen Exposure and Use as Agricultural Fertilizer.”
Poster presentation at the 2023 International Science and Engineering Fair (ISEF).
Poster presentation at the 2023 National Junior Science and Humanities Symposium (NJSHS).

“Use of Invasive *Gracilaria salicornia* as Agricultural Fertilizer.”
Poster presentation at the 2023 National American Indian Science and Engineering Fair (AISES).

“Mineral Sunscreen Increases Growth of Invasive *Gracilaria salicornia*.”
Poster presentations at the 2022 National American Indian Science and Engineering Fair (AISES).

AWARDS AND SPECIAL RECOGNITION

<i>Stanford Biology Summer Undergraduate Research Program</i>	2025
<i>Regeneron Science Talent Search Scholar</i>	2024
<i>Kamehameha Schools Principal's Award (teacher-nominated top high-school student)</i>	2024
<i>College Board National Indigenous Recognition Award</i>	2024
<i>Kamehameha Schools Po'okula Scholarship</i>	2024
<i>Kamehameha Schools Pauahi Foundation Scholarship Winner</i>	2023
<i>4th Place in Earth and Environmental Sciences at the Regeneron International Science and Engineering Fair</i>	2023
<i>NOAA - Taking the Pulse of the Planet First Award at the International Science and Engineering Fair</i>	2023
<i>Arizona State University ISEF Scholarship</i>	2023
<i>4th Place in Environmental Sciences Poster Competition at the National Junior Science and Humanities Symposium</i>	2023
<i>3rd Place Grand Award Winner at the Hawaii State Science & Engineering Fair</i>	2023
<i>2nd Place at the Hawaii State History Day Website Competition, National History Day Qualifier</i>	2023
<i>Harvard Book Award</i>	2023
<i>3rd Place in the High School Poster Competition at the National American Indian Science and Engineering Fair</i>	2022