

Chemistry S. Grad

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EDUCATION

St. Olaf College, Northfield, MN - Bachelor of Arts

Anticipated Graduation: 2024

Major: Chemistry

Language Proficiency: Intermediate Spanish

University of the West Indies, Mona, Jamaica: Medicinal Chemistry

January 2023

- Gained an appreciation for the drug development process and discussed issues relating to medicinal chemistry in a developing-world context through a virtual course

SCIENTIFIC SKILLS

Laboratory Proficiencies: DNA/RNA purification, QuickChange and Kunkel mutagenesis, DNA sequencing, SDS-PAGE, gel electrophoresis, Bradford assays, electroporation and heat shock transformations, ELISA, immuno-labeling, PCR, NMR, chromatography (thin layer, column, gas, HPLC, LC/MS), microscopy (electron, confocal fluorescence, dark and light field)

Computer Proficiencies: GIS, Endnote, Excel, Word, PowerPoint, OneNote, Discovery Studio Visualizer, Visual Molecular Dynamics (VMD), DNASTAR Lasergene 8, Swiss-PdbViewer, Scigrass, Jmol, ADAM, ChemDraw, and Dreamweaver

RESEARCH EXPERIENCE

Summer Research Assistant (Virtual), Mayo Clinic Research Foundation

June - August 2023

- Collaborated with local, state, and national public health authorities in an epidemiological and molecular outbreak investigation of the fungal disease, blastomycosis, in several counties in Minnesota
- Genetically typed fungal samples and paired results with exposure sites to identify possible outbreak sources
- Demonstrated spatial and temporal similarities in *B. dermatitidis* genetic haplotypes by mapping case locations with GIS software
- Presented preliminary findings at the summer internship symposium

Life Sciences Summer Undergraduate Research Program, University of Illinois Chicago

June - August 2022 & 2021

- Performed various lab techniques, including maintaining cell lines, running DNA gels, and purification assays
- Utilized new technology to construct proteins to create a gene knockdown for HIV research
- Tested and verified the sequences of the created protein constructs
- Created a research poster and presented information on new techniques in the field at a symposium in August

WORK EXPERIENCE

Introductory Biology Lab Teacher's Assistant, St. Olaf College -

September 2022 - May 2023

- Facilitated students in designing their own experiments
- Instructed a class of 20 students in the use of Excel and developed an Excel tutorial for future lab sections
- Demonstrated how to use lab time and space efficiently

Counselor, YMCA Day Camp, Madison, WI

June - August 2021

- Encouraged children ages 5 to 17 to experience the outdoors
- Collaborated with two other counselors on the daily activities for the 10 to 30 campers
- Effectively mediated conflict between campers
- Facilitated activities such as fishing, canoeing, archery, swimming, and supervised kayak rental money transactions

CAMPUS INVOLVEMENT

Sexual Assault Resource Network Educator, St. Olaf College

September 2021 - Present

- Helped construct safe and friendly atmosphere for discussion of important topics on campus
- Worked with team to construct informative media to disperse to student population Educated first-year students about school-supported resources and risk factors