

POLY 315

Education

University of Oregon Eugene, OR;

Expected September 2018

- Master of Science in Chemistry; Polymer Science

Willamette University Salem, OR;

May 2017

- Bachelor of Arts; Biochemistry
- Senior Thesis: Cloning Isoprene Synthase from Heath Star Moss

Research Experience

Summer Research Intern/Senior Thesis

May 2016 - May 2017

Willamette University Salem, OR

Homology-based RT-PCR of Heath Star moss

- Compiled literature involving sequencing of novel isoprene synthase proteins and adapted protocols for RT-PCR with Heath Star moss DNA.
- Optimized current homology-based PCR protocol and created a novel “nested-PCR” to increase product DNA concentration 3-fold, surpassing the threshold needed for DNA sequencing.
- Developed laboratory skills by creating solutions and pipetting volumes as small as 0.2 μ L for hundreds of PCR reactions.

Protocol development for Southern-blot screening of moss cDNA library

- Improved estimated screening time for a low-copy cDNA library from decades to years by applying results from homology-based PCR to develop a more efficient probe screening protocol.
- Condensed product manuals to generate a tailored protocol for screening of a Heath Star moss cDNA library that could be continued by future researchers with no prior screening experience.

Technical Skills

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|-----------------------|-----------------|-----------------------|
| • PCR | • GCMS | • Pipetting |
| • qPCR | • LCMS | • Media Preparation |
| • Gel Electrophoresis | • FT-IR | • Literature Research |
| • NMR | • RNA Isolation | |

Leadership Experience

Intramural Program Coordinator

2015-2017

Willamette University, Campus Recreation, Salem, OR

Oversaw a student-run program responsible for organizing, promoting, and operating all Intramural sports

- Constructed a diverse and dynamic team of students by identification of strengths and personality types in the hiring process, development of biannual trainings focusing on team dynamics, and mentorship of team members throughout the year.
- Increased Intramural program participation by 25% over a 2-year period as coordinator through improved marketing and establishment of a welcoming environment for participants of all skill levels.
- Overhauled program social media accounts and delegated marketing tasks to staff members resulting in an increase of program social media interactions by over 50%.
- Directed weekly staff meetings that accommodated the schedule of all staff members and facilitated problem solving discussions about current and potential Intramural Program issues.
- Represented the Intramural program at monthly student leadership meetings that informed the Vice President of Campus Life and other student leaders about the program’s progress and upcoming events.

Pre-Health Club Executive Board Member

2015-2017

Institute for Healthcare Improvement/Pre-Health Club, Willamette University, Salem, OR

Volunteer leadership in a student led club that provided mentorship and opportunities for Pre-Health students.

- Coordinated four Red Cross blood drives on campus that collected 400 units of blood by communicating with Red Cross supervisors, arranging space for the drive, scheduling donation times for members of campus, and coordinating volunteers for the day of the drive.
- Organized a campaign against homelessness in the Salem and Portland areas that involved creating simple “pledges” that a person could take to fight homelessness followed by garnering over 500 pledges through engaging with members of the community.
- Mentored younger students by advising on the best track for pre-health students, engaging in fun, stress relieving activities, and assistance with concepts of lower level courses.

Additional Experience

Bartender, Server

2016-2017

Creekside Pub, Salem, OR

- Responsible for taking food and drink orders, delivering them in a timely manner, and ensuring the guest has a high-quality experience through communication and excellent customer service.
- Collaborated with servers, kitchen staff, and bussers of various experience, to create a streamlined restaurant experience for guests.
- Stocked bar and restaurant supplies while simultaneously serviced guests and maintained restaurant aesthetic to a high standard.
- Instructed new bartenders about drink making techniques and mentored new employees through their training periods and beyond.

Retail Associate

2014-2016

Nike Inc., Bend, OR

- Engaged with customers on the sales floor with enthusiasm and addressed any needs as efficiently as possible.
- Worked with managers to organize product storage for more efficient stocking of the sales floor.
- Identified goals with managers and collaborated with other staff members to achieve these goals by the end of the day.

Collegiate Athlete

2013-2015

Willamette University Men's Basketball, Salem, OR

- Achieved lifelong dream of competing at the collegiate level.
- Instructed low income children of Costa Rica about the basics of basketball through multiple basketball day camps that were part of a team community service trip taken in the summer of 2013.
- Attended daily practice and traveled during weekdays to attend games while balancing a full course load.

Presentations

Senior Thesis

May 2017

Willamette University, Salem, OR

- Presented findings from senior research to the chemistry department as well as family and friends.
- Distilled research from a summer and full year of research into an efficient 12-minute oral presentation.
- Identified future directions of the project and efficiently addressed questions from the audience by recognizing possible questions or clarifications and preparing explanations prior to the presentation.

Willamette University Board of Trustees

May 2017

Willamette University, Salem, OR

- Promoted the summer research program by communicating research findings to a non-science audience while identifying student-faculty collaboration opportunities, integrating personal research experience, and explaining the benefits afforded to students made possible by further funding of the program.

Murdock Charitable Trust College Science Research Conference

November 2016

Gonzaga University, Spokane, WA

- Presented a 20-minute oral presentation in the biological sciences division to an audience of over 200 fellow research students and their research advisors.
- Selected to represent Willamette University from 15 other student presentations given at a prior summer research symposium.
- Conducted a 5-minute question and answer session to address questions from the audience.