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EDUCATION

Oregon State University **Expected Graduation: Spring 2026**
Bachelor of Science, Biology, Minors: Chemistry & Biochemistry/MB (GPA 3.32) *Corvallis, OR*

- **Relevant Coursework:** Principles of Biology, General Chemistry, Organic Chemistry, Genetics, Evolution, Statistics, Vertebrate Physiology, Python for Molecular Biologists, Intro. Biological Data Science, Computer Programming for non-CS Majors, Calculus (Differential & Integral).

EXPERIENCE

Oregon State University *Corvallis, OR*

Bioinformatics/Genomics Research, OSU Chang Lab **Dec. 2024 – Present**

- Generated and managed high-quality genome assemblies for *Phytophthora* isolates, handling 100+ isolates and 300+ assemblies across primary, hap1, and hap2 haplotypes.
- Executed large-scale comparative genomics workflows using GENESPACE, nf-core/pairgenomealign, and MUMmer to perform synteny and evolutionary analyses.
- Automated HPC workflows by writing SLURM batch and array scripts, integrating AGAT, Helixer, and other genome annotation tools in Singularity containerized environments.
- Produced data visualizations in R (phylogenetic trees, synteny dotplots, repeat-density plots) for research posters, presentations, and lab meetings.
- Collaborated with postdoctoral researchers to refine workflows, troubleshoot computational challenges, and contribute reproducible pipelines for departmental projects.

Undergraduate Research, Biology **Sep. 2023 – Dec. 2023**

- Designed and conducted an 8-week research project on nematode–vegetation relationships, analyzing population diversity and abundance under enriched vs. unenriched soil conditions.
- Applied molecular biology techniques (PCR, gel electrophoresis, microscopy) to identify nematode species and validate field observations.
- Performed quantitative data analysis using R and Excel to evaluate species diversity trends; synthesized results into a formal report and delivered an oral presentation to faculty.
- Strengthened project leadership skills by coordinating group responsibilities, experimental design, and data interpretation.

Chemistry Lab, General and Organic **Sep. 2023 – Jun. 2024**

- Mastered lab tools, software (LoggerPro, Excel), and techniques (titration, use of probes, photometers) for chemical property analysis in General/Organic Chemistry coursework.
- Developed competency in organic chemistry methods, including synthesis, structure determination (IR, NMR spectroscopy, melting point determination), prediction of theoretical & experimental reactions.

LEADERSHIP

Club Secretary, Vice-President **Jun. 2024 – Present**
Oregon State University Integrative Biology Club *Corvallis, OR*

- Lead operations and programming for a 500+ member student organization, collaborating with faculty and peers to expand academic and professional development opportunities.
- Organized and facilitated 3 professional workshops (50+ attendees each) and graduate school information sessions connecting undergraduates with faculty.
- Oversee communications for 400+ active Discord members and coordinate $2,000+ annual budget planning.

Biology Learning Assistant (LA) **Sep. 2024 – Present**
Oregon State University, College of Science *Corvallis, OR*

- Supported the BI 22X introductory biology series by facilitating active learning, assisting in lectures, and holding weekly office hours for 200+ students.
- Delivered individualized tutoring and small-group support to improve student comprehension and retention of core biology concepts.

Alumni Relations Chairman **Apr. 2025 – Feb. 2025**
Phi Kappa Psi Fraternity, Oregon Beta Chapter *Corvallis, OR*

- Managed communications with 1,000+ alumni through termly newsletters and event updates.
- Coordinated major events, including a flagship Alumni Golf Mixer (budget $1,500; 50+ attendees) and the annual Founder's Day Banquet (budget $20,000; 300+ attendees).