Jon Snow

1600 Pennsylvania Ave NW, Washington, DC, 20500 | XXX-XXX-XXXX Portfoliowebsiteinserthere.com | <u>jon.snow@example.com</u>

PROFESSIONAL SUMMARY

Committed and active student with relevant research experience in optical physics and materials science including publication in the Journal of Comparative Physiology. Capable of professionally presenting research material both fulfilled individually and by the team to achieve a shared goal.

EDUCATION

Bachelor of Science in Optical Physics, Minor in Statistics

Oregon State University, Corvallis OR

Expected Dec. 2025

RESEARCH EXPERIENCE

Undergraduate Researcher

Oct 2023 – Present

Dr. Ostroverkhova's Laboratory, Oregon State University

Corvallis, OR

- Conducted research on the preferential excitation of bumble bee photoreceptors in an optical physics lab, focusing on the role of ultraviolet, blue, and green photoreceptors in bumble bee compound eyes.
- Performed statistical and data analysis on 400+ data points related to bee responses to specific light wavelengths
- Analyzed the effects of subtle changes in trap spectral characteristics on bee captures, revealing a preference for strong excitation at 430–480 nm over the 400–420 nm region
- Characterized color vanes independently utilizing a calibrated fiber-coupled spectrometer
- Maintained traps and vanes used for field study to keep consistent design parameters and characterized
- Collaborated in team meetings to give input for the project applying gathered literature

SURE Science Program Scholar

June 2022 – Sept. 2022

Dr. Hazboun's Laboratory, Oregon State University

Corvallis, OR

- Updated 15-year isotropic gravitational-wave background analyses and corresponding code representations to improve the understanding of the PTA likelihood structure and model building
- Recovered and compiled raw 50+ metadata files practicing recovery techniques for use in the binary fit model
- Summarized recent advances and tests on the optimal statistic from literature for both GWB detection and parameter estimation perspectives
- Contributed work aided in the development of a tool for finding gravitational waves produced by in spiraling black hole binaries
- Presented research in a poster presentation during the Experiential Learning Symposium to a group of 200+ new and current students, faculty, and staff
- Participated in 3 professional development workshops to gain skills in resume/CV writing, poster development, and science communication skills

VOLUNTEER EXPERIENCE

Vice President Sept. 2021 – June 2023

Oregon State University's Archery Club

Corvallis, OR

- Instructed weekly 2-hour drop-in practice sessions with an average of 6 students utilizing 4+ years of knowledge in the skill for community education.
- Fundraised \$2,000 by organizing a community tournament to purchase loaner equipment for drop in students.
- Actively led in club meetings by supporting and collaborating with the president in activity coordinating and scheduling.

SKILLS

Optical Instrument Training | Programming C++ and MatLab | Pulsar timing TEMPO2 software Technical Writing | Presenting | Statistical Analysis | Public Speaking | Adaptability

PRESENTATIONS

Fall Virtual Symposium

Oct. 2023

• Virtual presentation through Zoom on bumble bee photoreceptor preferential excitation

Experiential Learning Symposium Presenter

Sept. 2022

 Presented a poster on contributed work towards the 15-year isotropic gravitational-wave background analyses project

SCHOLARSHIPS AND AWARDS

Hetherington Physics Scholarship

June 2023

For Juniors and Seniors majoring in physics with a GPA of 3.0 or higher who can benefit from reducing the need to work to focus on research.

Summer Undergraduate Research Experience (SURE) Program

June 2022

Competitive scholarship awarding 400 hours of paid research time and \$500 for research supplies, for a totally of \$6,600 award funds.

Oregon Bow Hunters State Champion 1st Place

Aug 2022

Awarded 1st place in Traditional Freestyle for the State of Oregon

PUBLICATIONS

Ostroverkhova, Oksana, et al. "Understanding Innate Preferences of Wild Bee Species: Responses to Wavelength-Dependent Selective Excitation of Blue and Green Photoreceptor Types." Journal of Comparative Physiology A, vol. 204, July 2024, pp. 1–9. https://doi.org/10.1007/s00359-018-1269-x.