

Department of
BOTANY AND PLANT PATHOLOGY

Addressing fundamental and applied questions in plant biology, the Department of Botany and Plant Pathology (BPP) equips plant scientists of the 21st century with skills and knowledge for increasing our understanding of the diversity and function of plants and plant-associated organisms in natural and working landscapes. BPP students learn at all levels of biological organization, from molecular and cellular processes to global ecosystems to provide information necessary to ensure agricultural competitiveness and resilience for an increasing global population.

Faces of AgSci

“One of the most profound skills I’ve gained is learning to communicate with people of different backgrounds, particularly when addressing the urban-rural divide that surrounds U.S. agriculture today.”



Gillian Bergman (left),
Presidential Scholar

Read more at agsci.oregonstate.edu

BOTANY AND PLANT PATHOLOGY AT A GLANCE

54



Faculty

371



Undergraduate Students

38

Graduate Students

Degree Programs

Undergraduate

- Biological Data Science
- Botany

Graduate

- Botany and Plant Pathology | M.S. | Ph.D.

Focus Areas

- Ecology, Evolution and Conservation
- Plant Pathology
- Molecular, Cellular and Genomic Botany
- Comprehensive Botany
- Customized study

Experiential Learning Opportunities

BPP offers a number of experiential learning opportunities, including:

- Undergraduate Botany and Plant Pathology Club
- OSU Mycology Club
- Undergraduate Research Experiences
- Undergraduate Curation Experiences

Research

2022 Research Expenditures: \$10,442,277

Research Focus Areas:

- Plant Development and Function
- Plant Health
- Ecology and Evolutionary Biology
- Biological Data Sciences
- Host-Microbe Interactions

Extension Highlights

BPP provides extension education in plant pathology to Oregon growers and the general public at research stations across the state. Other programs include:

- OSU Plant Clinic, a plant diagnostic center (like the CDC of plants)
- Insect ID Clinic (housed within the OSU Plant Clinic)
- OSU Nematode Testing Service
- OSU Herbarium: the largest and most active in Oregon, its worldwide collections of vascular plants, bryophytes, algae and fungi, provide public service through its identification and inquiry program
- OregonFlora shares knowledge about the plant diversity of Oregon

The Future of Botany and Plant Pathology

Botany and Plant Pathology is an inherently cross-disciplinary field of study that combines a robust understanding of plants and plant-associated organisms with modern data collection and analyses. The recent Botany undergraduate Ecampus degree allows hundreds of new students from around the world access to education in plant biology, further fulfilling the OSU land-grant mission, and we anticipate continued growth. The launch of the newly developed Biological Data Sciences (BDS) program offers a transdisciplinary undergraduate major and minor. Administered by the Department of Botany and Plant Pathology, the BDS program is offered in collaboration with faculty from Botany and Plant Pathology, Computer Science, Fisheries, Wildlife, and Conservation Sciences, Horticulture, Microbiology, and Pharmaceutical Sciences. BDS provides students with a strong foundation in quantitative skills to compete and succeed in an increasingly data-driven world.

As the College embarks on a new Plant Innovation Complex, this work will continue in its interdisciplinary fashion to train the next generation of scientists to advance discoveries that aim to predict and solve problems in a rapidly changing world. Society needs botanists, plant pathologists and plant scientists more than ever and BPP is here to meet the challenge.

