



UVic Forest Biology Update

Summer 2024

Summer 2024 FORB Convocation!

Congratulations to Emma Hayward (MSc) and Dr. Eerik Piirtola (PhD). Emma's topic was "Swiss Needle Cast and the Foliar Mycobiome of Coastal Douglas-fir (*Pseudotsuga menziesii*)" and Eerik's topic was "Chemistry and biochemistry of Populus leaf bud resin." Congratulations also to all the FORB undergraduate students convocating this term. Pictured below are: Dr. Eerik Piirtola, Bethany Robson, Dr. C. Peter Constabel, Sasha Plotnikoff, Dr. Jürgen Ehltling, Ezra Creasy, Dr. Barbara Hawkins, Freya Innes, and Dr. Patrick von Aderkas.



Dr. Will Hintz Memorial Gathering



On May 1, 2024 we gathered outside the Cunningham Building with family and friends to remember our colleague, Dr. Will Hintz. Following some lovely, touching speeches we dedicated this Dogwood Tree in his memory. Hopefully it will provide a space to gather and remember him and his contributions to the department and Centre.

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Learning Amongst the Trees!

Kailey Strachan has been featured in the university's coverage of this year's convocation. She held a Forest Biology Indigenous Summer Scholarship, then successfully completed her Honours on seaside juniper (*Juniperus maritima*) and is going on to a wonderful future. Read all about her here:

<https://www.uvic.ca/news/academics/science/2024+grad-learning-amongst-the-trees+news>



Successful MSc defense!



Congratulations to Emma Hayward on her successful MSc defence! Her topic was 'Swiss Needle Cast and the Foliar Mycobiome of Coastal Douglas-fir (*Pseudotsuga menziesii*)'.

New FORB Members



Ollie Antoniuk
Dr. de la Bastide
Research Assistant



Ricardo Moch
Dr's Constabel/Davey
Research Assistant



Kaela Whittingham
Dr's Ehltling/de la Bastide
Research Assistant



Eve Kenny
Dr. Ehltling/de la Bastide
Research Assistant



Sarah Rozanski
Dr. Hawkins
Research Assistant



Bree McElvaine
Dr. Hawkins
Directed Study

FORB Honours Defences

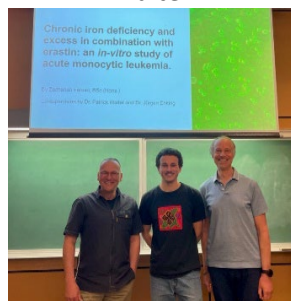
Congratulations to **Kailey Strachan**, who successfully defended her Honours thesis on maritime juniper. She is pictured here with her supervisor Dr. Patrick von Aderkas.



Kai Friele successfully defended his BSc Honours thesis on *Dryas* leaf morphology on April 18. He received an A+ for his excellent thesis and presentation! Kai was co-supervised by Drs. Terri Lacourse and Ken Marr (RBCM), and Dr. Gerry Allen served as External Examiner.



Congrats to **Zack Fenniri** on successfully defending his Honours thesis titled, "Chronic Iron Deficiency and Excess in Combination with Erastin: an in-vitro study of acute monocytic leukemia." Pictures with supervisors Dr. Jürgen Ehltling and Dr. Patrick Walter.



Congratulations to **Ezra Creasy** on successfully defending their Honours thesis titled, "Ammonium, Nitrate, and Proton Fluxes in Fern Gametophytes." Ezra is pictured below with Drs. von Aderkas, MacKinnon, and Hawkins.



Congratulations to **Freyja Innes** for successfully defending her Honours thesis, "Exploring fungal strategies: a comparative analysis of peroxidase enzyme secretion in ectomycorrhizal and arbuscular mycorrhizal fungi."



Field Work 2024!



Back in the field! Paul and FORB students (Eve Kenny, David Shen and Kaela Whittingham) are out collecting Douglas-fir samples in June at Jordan River, Lake Cowichan and Campbell River experimental plantation sites.



With new support through a GenomeBC GeneSolve grant, the Ehltung lab is continuing their study of coastal Douglas-fir to assess Swiss Needle Cast, an emerging pathogen of concern.



Together with collaborators at the BC Ministry of Forests and the Canadian Forest Service, this project will make Douglas-fir more resilient to this disease in times of changing climates.



Leafless Orchid!



Blooming in the greenhouse is the leafless epiphytic orchid *Chiloschista lunifera*, also known as "Moon Choloschista". The roots are responsible for the majority of photosynthesis as it is typically leafless, although it sometimes will produce a couple of tiny leaves. It is native to Eastern Himalayas, India, Assam, Burma, Thailand and Laos.

Recent Publications

Ausio, J., Knox, A., Kim, B.-Y., Humphrey, E., Gowen, B., Minamino, N., von Aderkas, P. 2024. **The sperm nuclear basic proteins of the sword fern (*Polystichum munitum*).** *Biochemistry and Cell Biology*. <https://doi.org/10.1139/bcb-2023-0343>

Westley, R., Ma, D., Hawkins, B.J., Constabel, C.P. 2024. **Tissue and cellular localization of condensed tannins in poplar roots and potential association with nitrogen uptake.** *Frontiers in Plant Science*. <https://doi.org/10.3389/fpls.2024.1388549>