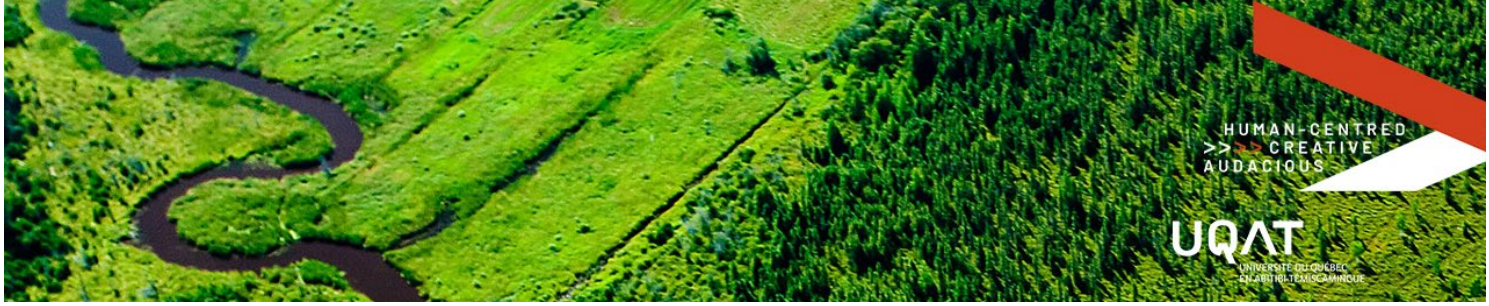

RESISTANCE AND RESILIENCE OF FOREST CARBON FOLLOWING CUMULATIVE NATURAL AND ANTHROPOGENIC DISTURBANCES

Background: Major natural disturbances such as wildfires and insect pest outbreaks are the major determinants of carbon dynamics in the boreal forest, and the likely increase in their frequency and severity in the future is the greatest uncertainty about the ability of these forests to play their full role in mitigating climate change. Forest management can reinforce these vulnerabilities, for example by decreasing the proportion of mature stands on the landscape, thus diminishing seed sources and increasing the risk of a regeneration deficit following wildfires. The objective of this project is to determine how stand initiation (fire, harvesting, planting), any interventions (salvage harvesting, reforestation) as well as the stand age and nature of the surrounding landscape influence the loss and the speed of recovery of carbon stocks after fire. It will combine cartographic analysis of inventory data and remote sensing products, combined with field sampling to validate soil organic carbon stocks and the actual age of old-growth stands.

Location: The selected candidate will become a member of the Forest Research Institute (IRF; http://www.uqat.ca/programmes/irf/) of the University of Québec in Abitibi-Témiscamingue, but based at the Center for experimentation and development in the boreal forest (CEDFOB) in Baie-Comeau, a small city cozily nested between the boreal forest and the estuary of St-Lawrence.

Financial support: 24,500 CAD per year for a duration of 4 years.

Start date: January 2027.

To apply: Send a resume, cover letter, grades and the name of two references to Xavier Cavard (xavier.cavard2@uqat.ca). A Master diploma or equivalent in ecology, biology or linked discipline is required.

Potential applicants must send the requested documents before July 17th 2026.

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