



Université du Québec  
à Chicoutimi

## **Postdoctoral Fellowship in ecological modelling**

We are seeking a post-doctoral research scientist to develop growth mathematical models based on our long-term anatomical chronologies of intra-annual xylem formation collected across the whole latitudinal range of the closed boreal forest in Quebec, Canada. The selected candidate will be based at the Université du Québec à Chicoutimi (QC, Canada) and will participate to several projects of the lab by (1) building, calibrating and testing process-based models including xylem and bud phenology, cambial activity, and wood formation, (2) finding relationships between climate and growth, (3) simulating the dynamics of xylem formation under climate change scenarios. All activities are included in the NSERC Industrial Research Chair on black spruce growth and the influence of spruce budworm on landscape variability in boreal forests (chairholder Prof. Hubert Morin).

We are seeking applicants with a PhD in mathematics, physics or other related disciplines, associated to a demonstrated experience in plant ecology or ecophysiology. Competitive applicants should have prior experience in programming (any language) and modelling, good knowledge of ordinary differential equations models (and numerical solvers), ability to interact and collaborate with other scientists and students, record of publication in the peer-reviewed literature as a first author, self-motivation, critical thinking, problem solving and communication skills. A fluent written and oral English is required.

We expect that the selected post-doctoral scientist (1) develops his/her own project in an autonomous and independent way, (2) works in close collaboration and stimulates critical discussions with the other colleagues and students of the lab, (3) creates original scientific manuscripts based on the results of the research, (4) provide enthusiastic guidance and assistance to students and postdocs carrying out related works.

Review of applicants will begin immediately, but the position will remain open until a suitable candidate is found. Beginning: as soon as the position is filled. The stipend is guaranteed for two years and set at \$ 40,000 per year (plus employer fees).

Interested applicants should contact Sergio Rossi ([sergio.rossi@uqac.ca](mailto:sergio.rossi@uqac.ca)) by sending the candidature in form of a single pdf including (1) a cover letter explaining how the skills required for this position are met, (2) a complete CV, (3) transcripts of master and PhD, and (4) names and contact information for three references.

For more information, please see the description of the scientists involved in the project:

[www.cef-cfr.ca/index.php?n=Membres.SergioRossi](http://www.cef-cfr.ca/index.php?n=Membres.SergioRossi)

[www.cef-cfr.ca/index.php?n=Membres.HubertMorin](http://www.cef-cfr.ca/index.php?n=Membres.HubertMorin)

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