

Applications are invited for a PhD position in the Department of Renewable Resources at the University of Alberta to study drought effects on forest growth.

Recent drought events in North America and elsewhere indicate that many forests and woodlands may be at increasing risk of drought-induced dieback. Although the magnitude of research on this topic has rapidly increased, significant knowledge gaps remain. How do different species respond to drought and how are they affected by climate change? How much does drought tolerance vary within a species (and across populations)? How does xylem blockage (reduced water transport capacity) impact branch dieback and mortality? The successful candidate will assess the drought tolerance of important North American tree species. Emphasis will be placed on xylem function (<http://www.ualberta.ca/~hacke/>). The successful candidate will also be able to develop skills in using bioclimate models (<http://www.ualberta.ca/~ahamann/>).

Funding: Salary CAN\$ 25,000 in the 1st year and \$30,000 in the 2nd year; this being the year in which the student spends some time at a collaborating institution in Europe. Funding (CAN\$ 25,000 p.a.) for two additional years is dependent on academic progress.

Candidates interested in plant physiology, ecology, forestry and/or climate change are encouraged to apply. Selection of students will be based on academic achievements and reference letters. A MSc degree (or equivalent) is required. Excellent English skills are important. The applicant must meet the entrance requirement for the University of Alberta, Department of Renewable Resources (<http://www.rr.ualberta.ca/GraduateProgram/ApplyingandAdmission.aspx>).

Anticipated start date: September 2014 or January 2015. Interested candidates should e-mail their transcripts (scanned would be fine for the unofficial application), CV, a letter describing their research experience and interests (2-page limit), recent TOEFL scores (if appropriate), and the names and contact information of three references to both Dr. Uwe Hacke (uwe.hacke (at) [ualberta.ca](http://www.ualberta.ca)) and Dr. Andreas Hamann (andreas.hamann (at) [ualberta.ca](http://www.ualberta.ca)).