

University of British Columbia

Research Associate – Department of Wood Science (Deadline: December 10, 2017)

The Department of Wood Science, UBC-Vancouver Campus seeks a Research Associate to develop new tools and methods to engineer *Populus* spp. with altered wood traits resulting from the misregulation of the lignin biosynthetic pathway. In addition, the research associate will screen metabolite diversity in *Populus* spp., and integrate the metabolite information with a functional genomics approach to identify underlying genes responsible for the biosynthesis and regulation of metabolites. The objective of this research is to facilitate genetic improvement of *Populus* as a bioenergy feedstock, and will be conducted under the supervision of Dr. Shawn Mansfield.

Responsibilities include:

1. develop transgenic lines with altered wood traits using *Agrobacterium*-mediated transformation;
2. characterize metabolite composition using liquid and gas chromatography;
3. assess cell wall ultrastructural and chemical traits;
4. producing, and evaluating the enzymatic activity of recombinant proteins;
5. analyze large metabolite and genomics datasets;
6. supervise undergraduate and graduate students;
7. present results at national and international meetings;
8. prepare manuscripts for publication in high quality peer reviewed journals.

Qualifications required

Candidates must have a Ph.D. in Biology or related field (e.g. Plant Biology, Botany, Genetics, etc.) and 5 years of postdoctoral research experience in the fields of biotechnology and plant biochemistry, as well as expertise in tissue culture and molecular biology techniques. Candidates should have a good knowledge of tree physiology, lignin biosynthesis and cell wall formation as demonstrated by peer-reviewed publications. Expertise in generating and processing genomics/transcriptomics/proteomics data is required. Expertise in bioinformatics is considered a complementary asset. The candidate should be highly skilled in statistical software such as R. Other requirements for successful applicants include excellent oral communication skills, the ability to work in a dynamic research team, and the ability to work on a project with defined milestones and timelines.

How to apply

The appointment will initially be for one year, with options for renewal subject to funding sources effective January 1, 2018. Please direct inquiries, and applications consisting of cover letter, current CV and contact information of three references prior to 10th December 2017 to:

Martha Kertesz, Research Manager
4029- 2424 Main Mall
Department of Wood Science
Faculty of Forestry
University of British Columbia
Vancouver, BC, V6T 1Z4, Canada
e-mail: marthakertesz@ubc.ca

For more information, please see: <http://www.forestry.ubc.ca/2017/11/research-associate-department-of-wood-science/>

Equity and diversity are essential to academic excellence. An open and diverse community fosters the inclusion of voices that have been underrepresented or discouraged. We encourage applications from members of groups that have been marginalized on any grounds enumerated under the B.C. Human Rights Code, including sex, sexual orientation, gender identity or expression, racialization, disability, political belief, religion, marital or family status, age, and/or status as a First Nation, Metis, Inuit, or Indigenous person.

All qualified candidates are encouraged to apply; however Canadians and permanent residents will be given priority