

## MEDIA RELEASE

*Embargoed until Monday, June 29, 2009 at 6:00 a.m. Pacific Time*

### **New genomic research to forecast the potential and pitfalls of an emerging forestry biofuels industry**

*Whistler, BC* - As Canada and the world begin to reduce their dependence on fossil fuels, the emerging bioenergy sector faces a key challenge: the sheer volume of biomass required to produce biofuels, and how to guarantee a steady supply.

A new research project largely funded by Genome Canada, Genome BC and Genome Alberta will tackle this problem, by developing genomic tools that will allow a more strategic approach to resource planning.

Canada's conifer forests form the largest renewable source of "woody plant" feedstock for the national bioenergy sector, for which BC and Alberta forests constitute a large percentage. Their sustainable use for biofuel production would help economically diversify the forestry sector and reduce dependence on fossil fuels.

But predicting and guaranteeing sources of feedstock is complicated by natural and environmental factors, such as the current mountain pine beetle epidemic which has devastated more than 14 million hectares of pine forests, crossed BC's Rocky Mountain barrier into Alberta, and is now poised to threaten Canada's vast boreal forest.

Dr. Joerg Bohlmann (UBC) is co-leading this project along with Dr. Janice Cooke (U of Alberta). "We are currently faced with millions of hectares of dead trees, and have a surplus of potential bioenergy feedstock, but this does not guarantee a supply for the future. The question is: what are we going replant with?" says Bohlmann.

The \$7.8 million dollar research project spans universities and scientific institutions across BC and Alberta, and will create tools for the prediction of available sources of feedstock so that investments in bioenergy are made in the right place and at the right time.

"This is where genomic tools can help us be more strategic in terms of how we plan feedstock development in our forests - taking into account a holistic approach: biodiversity of our forests, climate change and pest prevalence - to name a few," Dr. Bohlmann adds.

The research project titled, *Genomics-Enhanced Forecasting Tools to Secure Canada's Near-Term Lignocellulosic Feedstock Supply for Bioenergy using the Mountain Pine Beetle System*, will study the current mountain pine beetle epidemic in search of genomics information on pine trees, bark beetles, and associated fungal pathogens: all biological components of an overall disease system that has had devastating effects on feedstock quality and supply.

This work will form the basis of improved environmental risk assessment tools, which resource managers can use to help them determine the geographic areas that will be threatened next, and help inform long-term forecasts.

Government and industry will have immediate access to the resources and tools developed in this project, which will potentially lead to applications in less than five years of project completion, expected in the fall of 2012.

“The integrated genomics, risk modeling and economics approach of this project is innovative and novel on an international scale,” says Dr. Alan Winter, Genome BC’s President and CEO. “This project will build on well-established, multidisciplinary expertise and will further Canada’s international leadership in forest health genomics as it relates to renewable bioenergy production.”

The project will deliver a high level of preparedness far beyond the current MPB epidemic and into other jurisdictions of forestry and agriculture and will build on previous and ongoing studies of the mountain pine beetle through the Tria Project ([www.thetriaproject.ca](http://www.thetriaproject.ca)), also funded by Genome BC and Genome Alberta.

For more information about Genome Canada, visit [www.genomecanada.ca](http://www.genomecanada.ca)

For more information about Genome BC, visit [www.genomebc.ca](http://www.genomebc.ca)

For more information about Genome Alberta, visit [www.genomealberta.ca](http://www.genomealberta.ca)

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**NOTE TO EDITORS:**

Project leaders Dr. Joerg Bohlmann and Dr. Janice Cooke will be available for interviews following the announcement of this project at the *Whistler IUFRO Tree Biotech Conference*.

*Media are invited to attend. Telephone interviews and photos available on request.*

**Date/Time:** Monday, June 29<sup>th</sup>, 2009, 9:50 a.m.

**Place:** The Westin Resort and Spa, Whistler - 4090 Whistler Way, Whistler, BC

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