

Genetic studies presented to honour a pioneer

## **Description**

### **Studies on forest genetics dominate the projects presented during the celebrations of the 2017 Marcus Wallenberg Prize. Young researchers from four countries took part of the symposium and seminars.**

The Marcus Wallenberg Prize Selection Committee had invited 36 postdocs and PhD students from different universities and research institutes in Canada, Finland, Sweden and USA to the Prize Event at the end of October in Stockholm, Sweden. During four days in the Swedish capital the junior researchers exhibited their research and met the prize winner, senior researchers and business representatives.

#### **Molecular genetics of forest trees**

The laurate Professor Ronald R. Sederoff, North Carolina State University, has been described as the father of tree genomics. Many of the young scientists participating in the celebrations and seminars are also active in the field of molecular genetics of forest trees.

Sacha Escamez is a researcher in a group at Umeå Plant Science Centre that has identified diagnostic traits for guiding the engineering or breeding of poplar lines with increased growth and superior bioprocessing qualities.

Ainhoa Calleja-Rodriguez at Skogforsk, the Forestry Research Institute of Sweden, has started a study on genomic selection in a Scots pine breeding program.

Lignin is another research area of great interest for the laureate Ronald R. Sederoff. He is one of the co-authors of a paper presented by Jack P. Wang, North Carolina State University. Their group analyses lignin biosynthesis to improve wood properties for wood utilization.

Mijung Cho, University of British Columbia, Vancouver, Canada, presented an abstract on her work on the transformation of lignin into fibrous carbon materials.

#### **Sustainable forestry**

A sustainable use of renewable forest resources is important to The Marcus Wallenberg Foundation. Several young researchers share this ambition.

Vinay Kumar, Åbo Akademi University, investigates a coating of nanocellulose which can be a green alternative to oil-based materials.

Reza Hosseinpourpia, Linnaeus University, examines wood-based panels bonded with starch-based adhesives to decrease the usage of formaldehyde-based adhesives.

The Marcus Wallenberg Young Researchers' Program is sponsored by Erik Johan Ljungbergs

utbildningsfond, supporting education within forestry and the forest products industry in Sweden.

A group of ten PhDs or postdocs from Finland were sponsored by Forest Products Engineers, Foundation of Jaakko Pöyry, VTT Technical Research Centre of Finland and Natural Resources Institute Finland.

The Nicholson fund for interaction between US and Sweden supported the presence of four participants from North Carolina State University. Read more [here](#).

All the abstracts presented by the Young Researchers 2017 can be found [here](#).