

• So much cutting-edge research in Sweden •

## Description

# **Junior scientists from North Carolina State University, USA, were impressed by the study tours to companies and departments in forestry and forest research in Stockholm, Sweden**

Four young researchers from his own college were present when professor Ronald R. Sederoff received the 2017 Marcus Wallenberg Prize at the end of October in Stockholm, Sweden. They are all active within forestry genomics. And the junior colleagues are proud of the laureate from North Carolina State University, USA.

## Walking in his shoes

Jose P. Jimenez is a PhD student working with the next generation of sequencing technologies to improve and conserve a tree that is endemic to the Caribbean lowlands.

• I have met Ron Sederoff on occasions. He is a pioneer. He started with things that we now take for granted. Although he has retired he is still active and keeps thinking about new ideas, Jose P. Jimenez says.

Eddie Lauer is a PhD student at the Tree Improvement Program. He is investigating genetic parameters for fusiform rust disease in loblolly pine, which is the most common species of planted tree in the southeast US. The disease causes multimillion-dollar losses to landowners.

• Ron Sederoff and his group developed some of the first markers for rust resistance. He laid the groundwork for the experiment I intend to carry out. I really admire his contribution to conifer genetics and especially to our understanding of the genetic architecture of disease resistance, Eddie Lauer says.

Lilian Matallana is a postdoc at the Department of Forestry and Environmental Resources, where she is focusing on the conifer genome. Customers prefer Christmas trees where the needles stay as long as possible. Lilian Matallana and her colleagues are trying to develop genetic marker systems to predict variations in needle retention and other traits of importance to the Christmas tree industry.

Lilian Matallana thinks it is always interesting to talk to Ronald R. Sederoff.

• He still attends our seminars and likes to be involved. He knows the basics but also what is new, she says.

Jack P. Wang is a postdoc in the Forest Biotechnology Group. He has a research experience in molecular genetics, particularly the integrative genomic and genetic analysis of plant metabolism for tree growth, development and defense against biotic and abiotic stresses.

“Ron Sederoff has been my research advisor and mentor for the past ten years. I am continuously amazed by his extraordinary insights and wisdom in all areas of plant sciences, Jack P. Wang says.

### **Picked by their college**

All of them were selected to represent their college at the ceremony, seminars and symposium in honour of the 2017 Marcus Wallenberg Prize laureate. The trip was supported by the Nicholson fund for interaction between US and Sweden.

Eddie Lauer was flattered by the fact that he was chosen.

“It gave me a chance to come closer to other researchers in forestry and broaden my perspective, he says.

Jose P. Jimenez had expected the Swedish forest industry to be very traditional. The visit to Wallenberg Wood Science Centre Academy, Cellutech and KTH, the Royal institute of technology, opened his eyes.

“So much cutting-edge research that was new to me, he comments.

Lilian Matallana agrees:

“It was like a completely new world. I was very impressed by all the products you can make from wood.

Jack P. Wang was excited to see how the Swedish forest research and industry actively develop novel applications.

“Wood is such an important renewable resource. It is really great to see its potential to replace petroleum-based products in the future, Jack P. Wang says.

### **Informal networking**

Jose P. Jimenez Madrigal also enjoyed the banquet and award ceremony.

“It provided a great opportunity to do some networking with academics and professionals in a more relaxed setting, he says.

From left Jose P. Jimenez, Eddie Lauer and Lilian Matallana enjoying a group discussion at one of the Young Researchers’ seminars.