

Program for the HealGenCAR meeting on “Clonal forestry and breeding for resistance to pests and pathogens”.

Höör, Sweden, 12-14 June 2018

Tuesday the 12th of June

9.30 COFFEE

10.00 Welcome and introduction Torgny Persson and Jan Stenlid

10.15 Speed dating

10.50 Keynote 1. Björn Sundberg: To be announced. **Chair: Erik Dahl Kjær**

11.40 Jan Stenlid: Breeding for resistance or keeping track of host genotypes?

12.00 LUNCH

13.00 Keynote 2. Pär Ingvarsson: Benefits and risks of clonal forestry from a Swedish perspective
Chair: Malin Elfstrand

13.50 Curt Almqvist: Without seed – no clonal forestry

14.10 BREAK

14.20 Tuija Aronen: Somatic embryogenesis of Norway spruce in Finland – on a way to practical applications

14.40 Saila Varis: Somatic embryogenesis of Norway spruce (*Picea abies*) using primordial shoot explants

15.00 COFFEE

15.20 Hernan Capador: Evolution of LAR3, a resistance candidate locus in conifers

16.40 Sakari Välimäki: The development of cryopreservation methods for *Ulmus laevis* and *Ulmus glabra*

17.00 Business meeting

19.00 DINNER

Wednesday the 13th of June

8.30 Departure Höör

9.00 Trolleholm estate. Genetic variation to ash disease. Ash seed orchard Trolleholm

9.45 Short rotation forestry with poplars, Trolleholm. Poplar and hybrid aspen research at Skogforsk.

10.45 Visit at Skogforsk Reserach station

Including:

Inoculation with *Heterobasidion* (Norway spruce)

Somatic embryogenesis in Norway spruce

Clone propagation of Scots pine for breeding

Clone trial with Norway spruce

And other points of interest

12.00 Lunch

14.00 Departure Ekebo

14.30 Söderåsen National Park (Kopparhatten) *Phytophthora* disease in beech

15.30 Departure

16.00 Tykarpsgrottan Ignaberga

17.30 Arrival Höör

19.00 DINNER

Thursday the 14th of June

- 8.30 Keynote 3.** Fikret Isik: Fusiform Rust Disease in *Pinus taeda* in the Southern USA: A Success Story in Conifer Breeding. **Chair: Tuija Aronen**
- 9.20** Åke Olson: Genotypic diversity and reproductive biology of *Thekopsora areolata*, the causal agent of cherry spruce rust in Norway spruce seed orchards
- 9.40** Anneli Viherä-Aarnio: Clonal variation in growth and biomass properties of hybrid aspen – opportunities for versatile end-uses
- 10.00** COFFEE
- 10.20** Halldór Sverrisson: Breeding against poplar rust in Iceland
- 10.40** Erik Dahl Kjær: Establishment of a Danish breeding population of European ash for selection in favor of ash dieback resistance
- 11.00 Keynote 4.** Irene Barnes: Population genetics of *Dothistroma septosporum* attacking pines in Colombia. **Chair: Halldór Sverrisson**
- 12.00** LUNCH
- 13.00** Malin Elfstrand: Genome-wide association study of phyllosphere microbial community in Norway spruce: a new strategy to find host resistance?
- 13.20** Rajiv Chaudhary: Identification of candidate genes associated with the resistance QTLs in Norway spruce through a combined analysis of transcriptomics and genetic maps for *Pinaceae*
- 13.40** Karl Lundén: Large-scale phenotyping, identify novel resistance markers and show that selection for resistance to *Heterobasidion parviporum* is unlikely to affect growth and wood quality traits in mature Norway spruce trees
- 14.20** Jing Xu: Genetics of susceptibility to *Neonectria neomacrospora* and Christmas tree traits in *Abies* sp.
- 14.30** COFFEE and wrap up
- 15.00** End of meeting