

Autumn School

Epigenetics in tree populations

concepts, techniques, and hands-on training

30.09-02.10.2024 - Philipps University Marburg

Background

The role and impact of epigenetic mechanisms in tree populations is heavily debated. Epigenetic changes can lead to changes in gene expression and, ultimately, influence organismal responses to environmental drivers. Epigenetics variation can also provide a short-term evolution strategy to deal with new environmental conditions. Therefore, understanding epigenetic mechanisms in trees, and identifying the drivers for epigenetic changes and their functional implications are pressing topics in forest ecology and genetics.

This autumn school will encourage you to

- gain insight into research frontiers in forest epigenetics
- learn about the possibilities and challenges in epigenetic studies
- discuss strategies to approach the study of epigenetics in trees
- showcase how to analyze and interpret epigenetic data.

Program

Lectures: Plant/Tree Epigenetics

From Molecular mechanisms to Ecological epigenetics

Practicals: Handling raw data

Lectures: Whole genome bisulfite sequencing (WGBS) from raw sequencing data to differentially methylated regions

Practicals: Analyzing stress experimental data

Final: Discussion and Epigenetics outlook

Practicals: Statistical analysis and visualization

Registration

The Autumn School is open to MSc, & Ph.D. students, and PostDocs in forest research and related disciplines.

Expected prior knowledge:

Basic genetic background, & elementary skills in statistics and R programming.

Fee

Registration fee: 85€

(incl. snacks & coffee/tee in the coffee breaks)

register here: [autumnschool registration](#)

Accommodation: 180€

(in shared rooms for 4 nights)

University Guesthouse in the Old Botanical Garden (city center)

*Participants are expected to bear travel costs to the venue and food expenses.

Location

Creative Space

Philipps University Marburg

Bahnhofstr. 7

1st floor "Club Behring"

35037 Marburg (Lahn)

Organisation

The EVOLTREE network

Prof. Katrin Heer

Prof. Lars Opgenoorth

Dr. Robert Hovarth

Dr. Mona Schreiber

Dr. Julia Völker

Dr. Monica B. Berdugo

As an EVOLTREE training event, participants from EVOLTREE partner labs are eligible for financial support. See terms and conditions on the [EVOLTREE website](#).

for more information,
please contact the organisation team via

autumn-school-epigenetic-2024@uni-marburg.de

