

# Workshop EPICATCH and EPITREE Epigenetics in Woody Plants

**28th-29th September 2023**

**Orléans, FRANCE**

**COST Action CA19125 EPICATCH: Epigenetic Mechanisms of Plant Adaptation to Climate Change**

**Organizers: Stéphane MAURY and Gloria PINTO (WG1 EPICATCH)**

**With the help of ANR EPITREE, LBLGC Orléans University and INRAE Centre Val de Loire, FRANCE**

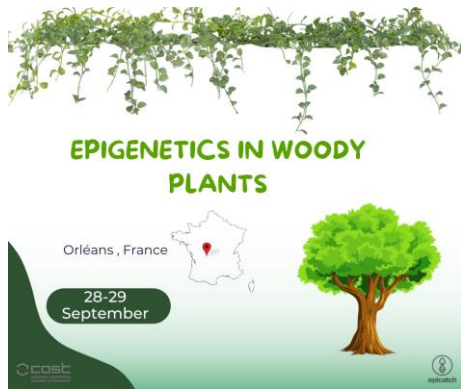
<https://6230751c6f201.site123.me/workshops/epigenetics-in-woody-plants>

**Conference venue:** INRAE Val de Loire, Conservatoire Européen des Échantillons de Sols (CEES), **Salle Dominique King**, 2163 Avenue de la pomme de pin, 45075 Ardon, France.



**INRAE**





## PROGRAM

### September 28 - INVITED TALKS - (zoom streaming for registered attendees only)

9:00h- **Registration** and sign-in (INRAE entrance, invited speakers only)

9:20h- **Welcome and Workshop introduction**

*Stéphane Maury (France) and Gloria Pinto (Portugal) - EPICATCH WG1 leaders and organizers*

**Stéphane Maury (8+2 min)** University Orléans INRAE (FRANCE)

"Epigenetics in woody plants: why?"

**Gloria Pinto (10+5 min)**, CESAM I Universidade de Aveiro (PORTUGAL)

"Plant Physiology crossed borders and meets epigenetics".

9:45h- **Session 1: EPITREE Evolutionary and functional impact of EPIgenetic variation in forest TREES**

*Chairperson: Gloria Pinto (WG1 EPICATCH)*

**Mamadou Dia Sow (20 +5 min)** INRAE Clermont-Ferrand GDEC (FRANCE)

" Epigenetic Variation in Tree Evolution: a case study in black poplar (*Populus nigra*)"

**Isabelle Lesur (10+5 min)** INRAE University Bordeaux UMR Biogeco (FRANCE)

" Strategy to study Epigenetics variability in natural populations: case study in Oak and Poplar"

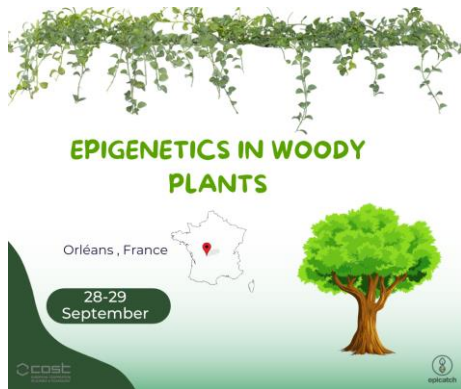
**Ludovic Duvaux (10+5min)** INRAE University Bordeaux UMR Biogeco (FRANCE)

"Is epigenetic variation involved in biological adaptation to climate in the sessile oaks?"

**Alexandre Duplan (10+5 min)**

"Short-term and interannual epigenetic memory in poplar after drought rewatering cycles"





11:00h- **COFFEE BREAK**

11:30h- **Session 2 Epigenetic memory and priming in woody plants.**

Chairperson: *Pilar Testillano (WG3 EPICATCH)*

**Philippe Gallusci (20+5 min)** INRAE University Bordeaux UMR EGFV (FRANCE)

"Investigating epigenetic memory of stresses in grapevine, a woody perennial"

**Luis Valledor (20+5min)** University of Oviedo (SPAIN)

"Priming, endurance, and resilience speak epigenetic language in conifers/woody species."

**Carl Gunnar Fosdall (20+5 min)** Norwegian Institute of Bioeconomy Research (NIBIO), Forest Health, Ås (NORWAY)

"Induction of epigenetic memory in response to warmer temperature"

13:00h- **LUNCH**

14:15h **Session 3 Epigenetic and time in woody plants**

Chairperson: *Jérôme Salse (EPITREE)*

**Frank Johannes (20+5 min)** Plant Epigenomics - Technical University of Munich (Germany)

"An evolutionary epigenetic clock in plants"

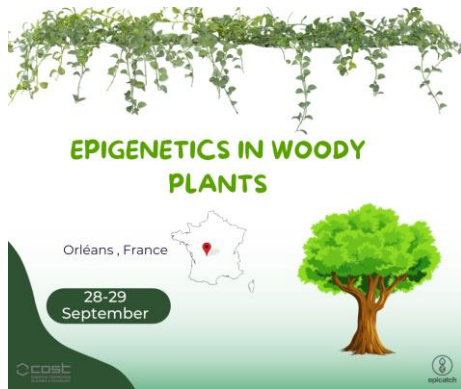
**Jean-Marc Celton (10+5 min)** IRHS INRAE Angers (FRANCE)

"Insights into the evolution of homologous sequences and their epigenetic marks post WGD in *Malus domestica*"

**Beata Plitta-Michalak (10+5min)** University of Warmia and Mazury in Olsztyn (POLAND)

"DNA Methylation as an Early Indicator of Aging in Stored Seeds"





**15:10h- Session 4 Epigenetic and development in Forest trees**

Chairperson: Harold Durufle (EPITREE)

**Pilar Testillano (10+5min)**, CIB Margarita Salas-CSIC Madrid (SPAIN)

"Small molecule epigenetic modulators for clonal propagation and breeding of Quercus suber"

**Raquel Santos (10+5min)** University Lisbon (PORTUGAL)

"Cork development - an epigenetic view"

**Rosa Sanchez-Luca (10+5 min)** University of Birmingham (UK)

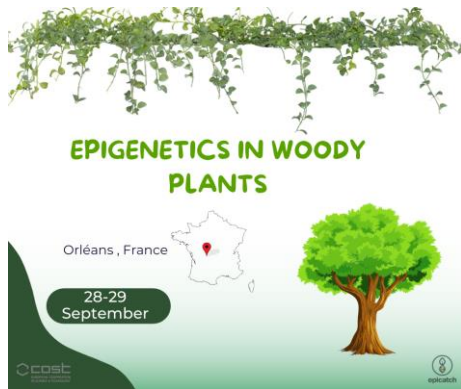
"Cytosine methylations in forest trees under elevated CO<sub>2</sub>: similarities and differences among species"

**16:00h- COFFEE BREAK**

**16:30h- General Discussion for day 1**

**17h30 Departure for Orléans city centre, break / visit and dinner**





## September 29- Workshop – (no zoom, speakers and invited guests only)

9h00: Welcome coffee and sign-in (invited speakers only)

### 9:30h- Networking session

*Chairperson: Véronique JORGE (INRAE, France)*

**Flash Talks** of participants (in presence only) 1 ppt slide, (10 min max : 5-7 minutes + 3min questions):  
collaboration interest : Jérôme Salse (France); Elena Carneros (Spain); Berdugo Monica (Germany);  
Marcin Michalak (Poland); Sophie Brunel-Muguet (France).

10:30h- Coffee break

**11h00 Discussion by groups** on collaboration opportunities in EPICATCH and other projects

### 13:00h- LUNCH

14h- Visit of The Joint Research Unit of Integrated Biology for the Development of Tree and Forest Diversity (INRAE-ONF; UMR BioForA 0588) [https://www6.val-de-loire.inrae.fr/biofora\\_eng/](https://www6.val-de-loire.inrae.fr/biofora_eng/): LICA [https://www6.val-de-loire.inrae.fr/biofora\\_eng/Resources2/LICA](https://www6.val-de-loire.inrae.fr/biofora_eng/Resources2/LICA) (Lab of Tree Biotechnology, Dr Gilles Pilate and Dr Annabelle Déjardin) and Phenobois [https://www6.val-de-loire.inrae.fr/biofora\\_eng/Resources2/PHENOBOIS](https://www6.val-de-loire.inrae.fr/biofora_eng/Resources2/PHENOBOIS) (phenotyping platform of wood physical and biochemical properties, Nathalie Boizot and Nassim Belmokhtar). Or Discussion by groups.

16:00h- **COFFEE BREAK and Official closing** (17h)

