

EPI-CATCH is a COST action with the aim of defining, developing generating and sharing new breaking knowledge and methodologies for the investigation of epigenetic mechanisms underlying plant adaptation to environmental stresses driven by climate change. Our aim is to create a pan-European framework for networking in this under-investigated research field of plant genetics. This 2nd EPI-CATCH Conference is an extraordinary occasion for researchers to disseminate, discuss, connect and update on the latest research in plant epigenetics. The conference will host sessions dealing with: 1) epigenetic responses to environmental stresses, 2) epigenetic mechanisms driving stress memory, transgenerational effects, adaptation responses, 3) methodological approaches for the study of epigenetic diversity and stress responses. We will also host a joint session with Planted COST Action to explore mutually beneficial interactions.

This conference takes place during the second grant period, at around half time of the lifetime of the Action. MC meeting will take place at the end of the conference to start the coordination of activities over the second half of the Action and resume other events (training schools, workshops, STSMs) organized by EPI-CATCH in this 2nd year.

The conference will be carried out as a hybrid event, with physical presence as well as live streaming through an on line platform.

EPI-CATCH Working Groups:

WG1 Plant stress epigenetic responses

WG2 New frontiers and concepts

WG3 Methodologies and workflows

WG4 Dissemination and Communication

Organizing Committee

Prof. Federico Martinelli
University of Firenze



Dorita Galea
University of Malta



Prof. Eirini Kaiserli
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ARO - Volcani Center



EPI-CATCH WG1-4 leaders



CA19125
EPI-CATCH



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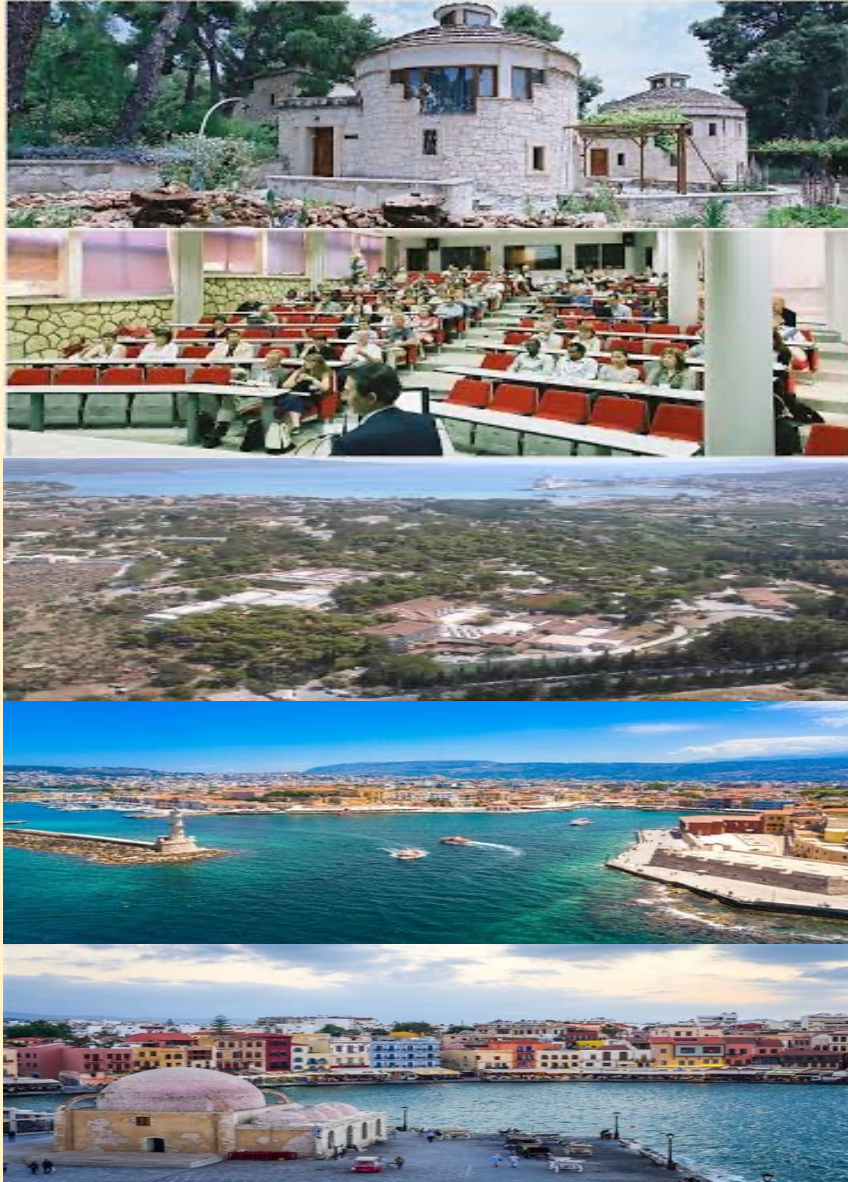
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*Conference venue: MAICH
The Mediterranean Agronomic Institute of Chania
Makedonias, 1st., Chania, Crete, 73100, Greece*



2nd EPI-CATCH conference

Epigenetic mechanisms of crop adaptation to climate change

12-14 July 2022
Chania, Crete, Greece



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PROGRAMME

2nd EPI-CATCH conference

Tuesday 12 July

13:00-14:10	REGISTRATION
	OPENING of the CONFERENCE
14:10-14:20	Welcome of EPI-CATCH Chair
14:20-18:10	Plant epigenetic responses to environmental stresses
14:20-14:50	<i>Verhoeven Koen</i> Environmental and transgenerational dynamics of DNA methylation in asexually reproducing plants
14:50-15:10	<i>Iva Mozgova</i> PRC2 function in the seed-to-seedling transition: green or not-green
15:10-15:30	<i>Etienne Bucher</i> Molecular mechanisms of induced heritable genetic and epigenetic changes in Arabidopsis and crop plants
15:30-15:50	<i>Juriaan Ton</i> The epigenetic drivers of plant immune memory
15:50-16:20	Coffee break and poster viewing
16:20-16:50	<i>Monica Meijon</i> Epigenetics dynamics as central driver of heat stress response and memory acquisition processes in <i>Pinus radiata</i>
16:50-17:10	<i>Jerome Verdier</i> Epigenetic regulation of heat stress response during seed germination
17:10-17:30	<i>Stephane Maury</i> Trees facing climate change: DNA methylation involved in plasticity and adaptation
17:30-17:50	To be selected among submitted works
17:50-18:10	General discussion
19:00-20:30	WELCOME COCKTAIL

Wednesday 13 July

09:00-12:50	Biotechnological approaches for the study of plant adaptation to climate change
09:00-09:30	<i>Abhaya Dandekar</i> Engineering epigenetic resistance to plant disease
09:30-10:00	<i>Serena Varotto</i> Chromatin-mediated adaptive strategies to unfavourable environmental condition in crops
10:00-10:20	Light and warm temperature induce changes in the nuclear organization of Arabidopsis
10:20-10:40	<i>Michael Puruggunan</i> Integrating epigenetic and population genomic data: the fitness consequence map of rice
10:40-11:10	Coffee break and poster viewing
11:10-11:30	<i>Alejandro Solla</i> Maternal stress in forest trees affect susceptibility to stress in offspring
11:30-11:50	<i>Erna Karalija</i> Combat the future: seed priming and stress resilience
11:50-12:10	To be selected among submitted works
12:10-12:30	To be selected among submitted works
12:50-14:00	Lunch
14:00-15:50	Planted Cost Action session
14:00-14:20	<i>Kaushal Kumar</i> Lipid metabolic engineering through stress primed transcriptional reprogramming in seeds
14:20-14:40	<i>Marcel Kuntz</i> Worldwide plant biotechnology innovation landscape from patenting to marketing: what are the European weaknesses?
14:40-15:00	<i>Stephan Wenkel</i> Genome-engineering of microProteins in model and crop plants
15:00-15:20	<i>Angelo Santino</i> Impact of Cadmium on ER stress response and epigenetic changes in <i>A. thaliana</i>
15:20-15:50	General discussion
15:50-17:30	EPI-CATCH Working Groups meetings (WG1-WG4)
19:00-23:00	SOCIAL DINNER

Thursday 14 July

09:00-13:00	Methodological approaches for the study of epigenetic diversity and stress responses
09:00-09:30	<i>Daniel Zilberman</i> Epigenetic inheritance mediates phenotypic diversity in natural populations
09:30-10:00	<i>Ueli Grossniklaus</i> A role of epigenetic variation in plant adaptation
10:00-10:20	<i>Philippe Gallusci</i> Epigenetic memories in plants
10:20-10:40	<i>Georgi Bonchev</i> Epigenetic marks beyond genes – methylation pattern of transposable elements as a marker for assessing genetic diversity
10:40-11:00	To be selected among submitted works
11:00-11:30	Coffee break and poster viewing
11:30-11:50	<i>Katerina Kaduchova</i> Live analysis of barley nuclei and chromosomes using fluorescent marker lines
11:50-12:10	<i>Hidetoshi Saze</i> Epigenetic regulation of intragenic transposons and gene transcription in plant genomes
12:10-12:30	<i>Vernika Lancikova</i> Identification of DNA N6-methyladenine in amaranth (<i>Amaranthus</i> spp.) under heavy metal stress using the modified metA-MSAP approach
12:30-12:50	To be selected among submitted works
12:50-13:00	OFFICIAL CLOSING of the CONFERENCE
13:00-14:30	Lunch
14:30-16:30	EPI-CATCH 3 rd Management Committee Meeting