COST EPI-CATCH Conference

Epigenetic mechanisms in plant responses to environmental stresses

May 2-3rd, 2023 - Parma, Italy

Organizing Committee

Prof. Nelson Marmiroli – Director of Consorzio Interuniveritario Nazionale per le Scienze Ambientali (CINSA), University of Parma

Prof. Federico Martinelli - University of Firenze

Dott. Luca Pagano - CINSA, University of Parma

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 of plant adaptation to environmental stresses driven by climate change.

The Conference will take place in the beautiful city of **Parma** (Italy). The aim is to disseminate new insights into the epigenetic mechanisms of plant development and adaptation to environmental stresses linked to climate change. Other integrated multi-omics approaches with future perspectives of epigenetic analysis are also welcome. The Event, under the patronage of the Italian Society of Agricultural Genetics (**SIGA**), is an extraordinary occasion for researchers to disseminate, discuss, and update the latest research in plant epigenetics.

Two sessions are provided: 1) keynote speakers, 2) junior scientists.

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

PROGRAMME
Epigenetic mechanisms in plant responses to environmental stresses

Tuesday 2nd May 2023

12:30-13:30	**REGISTRATION**
	OPENING of the CONFERENCE
13:30-14:00	**Welcome of Organizing Institutions**
14:00-18:10	**Plant epigenetic responses to environmental stresses (Keynote session)**
14:00-14:20	*Frederic Berger* A synthetic view of chromatin organization
14:20-14:40	*Serena Varotto* Epigenetic-mediated cold development of fruit tree buds in the scenario of climate change
14:40-15:00	*Aline Probst* Role of TELOMERE REPEAT BINDING proteins in fine-tuning gene expression and plant development
15:00-15:20	*Roberta Lo Piero* The role of biocontrol agent in the onset of mal secco disease: analysis of lemon leaf transcriptome
15:20-15:40	*Marta Marmiroli* miRNA regulation and stress adaptation in plants
15:40-16:10	***Coffee break & poster viewing***
16:10-16:30	*Pagano Luca* Metal-based nanomaterials exposure and organellar DNA replication
16:30-16:50	*Philippe Gallusci* DNA methylation remodelling in grapevine triggered by nutritional and environmental stresses
16:50-17:10	*Giorgio Perrella* A dual epigenetic brake moderates plant stress responses
17:10-17:30	*Gianpiero Marconi* Investigating the role of DNA methylation in plant response to abiotic stresses
17:30-17:50	*Leonardo Bruno* An omics approach to investigate the impact of DNA methylation status on plant growth plasticity
17:50-18:10	*Cinzia Comino* *DNA methylome* changes in grafted eggplants
18:10-18:30	**Conclusions**
	FREE DINNER

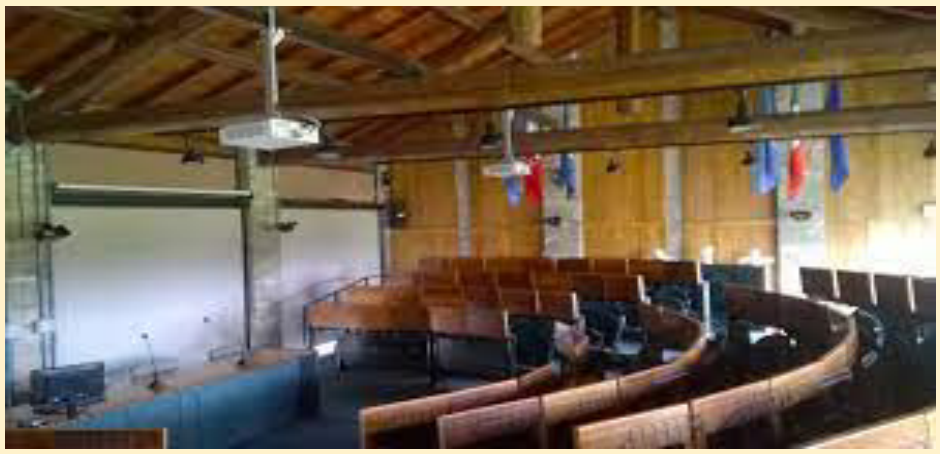
Wednesday 3rdMay 2023

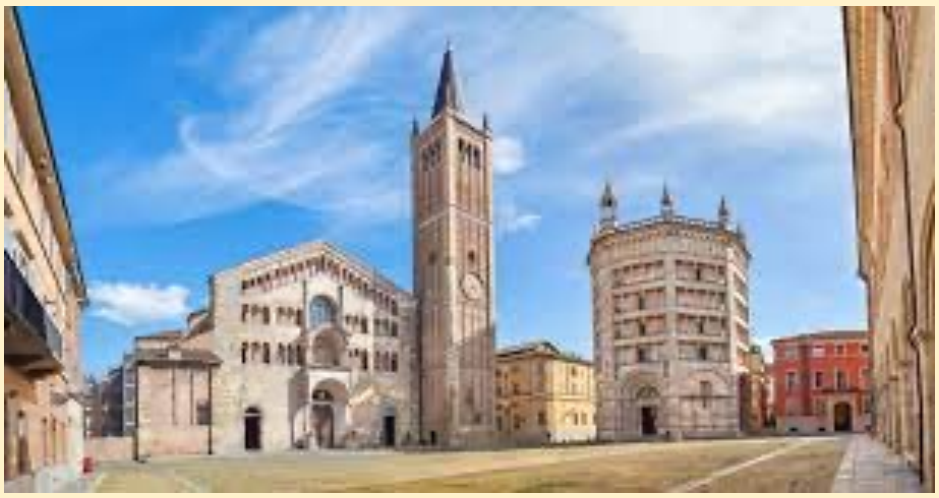
08:15-09:00	**Welcome coffee**
	OPENING of the CONFERENCE
09:00-9:20	*Nelson Marmiroli* Epigenetics: the rise and fall of Lamarck **(Keynote speaker)**
09:20-13:05	**Multi-omics and biochemical analysis for plant epigenetics (Junior session)**
09:20-09:35	*Anna Fiorillo* Unravelling the function of a novel epigenetic regulator of photomorphogenesis in plants
09:35-09:50	*Diego Piacentini* Nitric oxide and phytohormones interaction in the response of the rice root to toxic metals
09:50-10:05	*Miriam Negussu* Investigating epigenetic and molecular responses to drought stress in chickpea
10:05-10:20	*Emanuela Palomba* Arabidopsis thaliana response to extracellular DNA: metabolic profile analyses after exposure to self-DNA
10:20-10:35	*Irene Luzzi* Stress memory a key player in priming plants in a changing environment
10:35-10:50	*Francesco Guarino* A comparative analysis of DNA methylation changes through MSAP-NGS
10:50-11:20	***Coffee break & poster viewing***
11:20-11:35	*Mara Cucinotta* Modulation of DNA methylation by DRM1/2 improves ovule number and fertility under drought stress
11:35-11:50	*Angelo Sicilia* The environment effect on the transcriptomic profile of Vitis vinifera: the case study of Aglianico and Cabernet sauvignon grown in southern Italy
11:50-12:05	*Lorenzo Salvatore Frisullo* How does the parental genome influence the fruit quality of progenies via epigenetics?
12:05-12:20	*Weiwei Fang* Unravelling the function of a novel epigenetic regulator of photomorphogenesis in plants
12:20-12:35	*Alberto Tassinari* Insights into the regulatory mechanisms of an important flowering time QTL in maize
12:35-12:50	*Elisa Cappetta* Dissecting common and divergent molecular pathways involved in plant cell response to abrupt or gradual water deficit in potato
12:50-13:05	*Francesca De Marchi* Investigating the role of epigenetic variation in eggplant's fruits differing in anthocyanin content
13:05-13:30	**Conclusions**

Conference venue:

Centro S. Elisabetta, Università di Parma,

Parco Area delle Scienze, 95, 43124 Parma





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