

Plant Epigenetics and Epigenome Engineering

October 13-16, 2025

This conference will feature recent discoveries illuminating the contribution of non-histone chromatin proteins and regulators, histones, and DNA modification on gene regulation, genome organization, development, and environmental and species interactions, with particular emphasis on innovative epigenome technologies that help uncover fundamental epigenetic mechanisms in diverse plant species.



Hilton Fort Collins | Fort Collins, CO, USA



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about this meeting.

Or visit,

<http://keysym.us/KSPlantEpigenetics26>

Scientific Organizers:

Doris Wagner, PhD: University of Pennsylvania

Xuehua Zhong, PhD: Washington University in St. Louis

Toshiro Ito, PhD: Nara Institute of Science and Technology

Claudia Köhler : Max-Planck-Gesellschaft



Plants sustain all life on earth. Being immobile, plants tune their growth and development to the environment and frequently mount stress and defense responses. As the interface between the environment and the genome, the epigenome is critical for plant survival and adaptability. Indeed, plants have a large arsenal of epigenome regulators, which has led and continues to lead to new discoveries in the regulation and plasticity of the epigenome. However, understanding the contributions of epigenome modifiers to cellular and nuclear processes remains incomplete. Recent new technologies allow ever more precise insight into the epigenome of entire organisms at all scales, throughout their lifecycle, and in various conditions.

This timely conference brings together international scientists from all career stages and research settings that develop and apply novel approaches to understand the role and regulation of the plant epigenome. The meeting will feature recent discoveries illuminating the contribution of non-histone chromatin proteins and regulators, histones, and DNA modification on gene regulation, genome organization, development, and environmental and species interactions, with particular emphasis on innovative epigenome technologies that help uncover fundamental epigenetic mechanisms in diverse plant species. A workshop by early career researcher talks followed by a panel discussion will focus on utilizing epigenome manipulation to enhance desirable traits in plants and foster interactions and collaborative investigations.

Session Topics:

- Epigenetic Regulation of Transposable Elements and Genome Organization
- Gene Regulation in the Context of Chromatin
- DNA Methylation and Noncoding RNAs in Epigenetics
- Panel Discussion: Epigenome Engineering
- Epigenetics in (de) Differentiation, Growth and Development
- Histone Variants, Occupancy, and Modifications
- Epigenetic Regulation of Environment/Stress Response and Memory
- Keystone Symposia Spotlight featuring late-breaking research presentations



KEYNOTE SPEAKER

Xiaofeng Cao

Chinese Academy of Sciences

CONFIRMED SPEAKERS

Nicolas Bouché
Aman Husbands
Toshiro Ito
Yannick Jacob
Steven E. Jacobsen
Hua Jiang
Claudia Köhler
Julie A. Law
Julia Questa
Eriko Sasaki
Robert Schmitz
R. Keith Slotkin
Nathan M. Springer
Taiko To
Jurriaan Ton
Fred van Ex
Doris Wagner
Jun Xiao
Binglian Zheng
Xuehua Zhong

**ABSTRACT /
SCHOLARSHIP
DEADLINE**
June 18, 2025

**EARLY
REGISTRATION
DEADLINE**
August 14, 2025

**POSTER ABSTRACT
DEADLINE**
September 18, 2025