

🝸 New PLANT 2030 ACADEMY Online Course / Epigenetics in Plants 🌿

The analysis of epigenetic mechanisms in plants has made tremendous progress in recent years and a wide range of developmental and physiological processes has been shown to be affected by epigenetic regulation. The research field moves fast from textbook knowledge to application and is expected to contribute to the fortification of crop resilience against environmental challenges and increased yield in the future.

Our new PLANT 2030 ACADEMY online course provides a compact introduction to the research field of epigenetic regulation in plants.

Week 1 provides an overview of the current scientific knowledge.

Dr. Franziska Turck heads the research group for *Epigenetic Regulation of Plant Development* at the Max-Planck-Institute for Plant Breeding Research (Cologne). Her lecture sets the stage by providing an introduction to plant epigenetics.

Dr. Ortrun Mittelsten Scheid just retired as head of the research group *Epigenetic Changes in Plants* at the Gregor-Mendel-Institute of Molecular Plant Biology in Vienna. With her wealth of experience in the research field, her lecture takes us on a deep dive into "Epig(re)enetics" and summarizes what scientists have learned from plants about epigenetics to date.

Week 2 is all about the analysis of epigenetic regulation in plants.

Dr. Duarte D. Figueiredo is a research group leader for *Seed Development and Apomixis* at the Max-Planck-Institute of Molecular Plant Physiology in Potsdam. His lecture provides an overview of methods and approaches available to study epigenetics in plants on different levels from single genes to chromatin domains.

Dr. Berhard T. Werner is bioinformatics expert and Post-Doc in the *EpiC-WHEATinterfere* research group at Justus-Liebig-University Gießen. Bernhard combines his lecture on how to get started with the analysis of omics-scale epigenetic datasets with a mini-workshop. He provides exercises and scripts that open the door to the analysis of data using the programming language R.



Bundesministerium für Bildung und Forschung

Participation in the course is open and free of charge. To enroll visit, please visit the <u>PLANT 2030 ACADEMY webpage</u>.