

GATERSLEBEN LECTURE



Speaker: Prof. Dr. Caixia Gao

State Key Laboratory of Plant Cell and Chromosome Engineering, Institute of Genetics and Developmental Biology, Chinese Academy of Sciences, Beijing, China



Title: Next Generation CRISPR Technologies and their Applications in Crop Improvement

Time: Tuesday, December 7, 2021, 11 am

Place: VCS Zoom: Meeting-ID: 845 6048 3943: Kenncode: 760547

<https://ipk-gatersleben-de.zoom.us/j/84560483943?pwd=aVISbEdORzQ1RVRwNkxXYTJETDJCUT09>

Skype for Business: <https://ipk-gatersleben-de.zoom.us/skype/84560483943>

Abstract:

Plant genome engineering is embarking towards the marriage of improved genome editing tools with an increasing knowledge of plant biology. As climate change continues to perturb atmospheric conditions on our planet, we face the dire challenge of ensuring crop adaptations to increasing droughts and limited nutrients. Furthermore, as the global population continues to grow every year, we need to ensure sufficient crop yields in the future to feed this growing planet. The use of CRISPR in agriculture should be considered as simply a new breeding method that can produce identical results to conventional methods in a much more predictable, faster and even cheaper manner.

CV

Caixia Gao is Principal Investigator of the Institute of Genetics and Developmental Biology (IGDB), Chinese Academy of Sciences. Prior to joining IGDB in 2009, she served as Research Scientist of DLF's biotechnology group in Denmark, where she worked in plant genetic transformation and molecular biology. She completed her Ph.D. in Plant Genetics from China Agricultural University, Beijing. Her current research area focuses on developing novel technologies to achieve efficient and specific genome engineering, and applying them to study the function of genes and modify plant traits for high-quality, disease resistance and stress tolerance in crop species. Caixia Gao's team has published over 70 papers on plant genome editing in *Science*, *Cell*, *Nature Biotechnology* and other journals. These papers have been widely cited by international science community with the total number of citations exceeding 7000.

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Prof. Dr. Nils Stein (*Organizer and Host*)