Prof. Dr. Li-Jia Qu
University of Peking (Beijing, China)

“Peptide-mediated signalling controls male-female interactions in Arabidopsis”

Since many years, the Qu lab works on phytohormones, E3 ligases and transcription factors in plant development and stress responses. The lab also contributed to the development of new technologies to improve rice breeding. However, in most recent years, male gametophyte development, fertilization mechanisms and early seed development in the model plant Arabidopsis caused their specific attention. Prof. Qu will therefore focus his talk on peptide/receptor-like kinase-mediated signaling that has been found to play especially important roles in male-female interactions. He will report recent progress made on the regulatory roles of peptide/receptor interactions in critical stages during reproduction in higher plants including pollen-stigma interactions, pollen tube growth, guidance and reception taking also aspects of speciation and structures of complexes into consideration.