

Department of Biological Sciences Faculty of Science

ON-SITE BIOLOGY COLLOQUIUM

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Hosted by Prof Yu Hao

Spatiotemporal dynamics of glycerolipid metabolism in plant growth

By Yuki Nakamura

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Lipids fundamental biological are molecules for the constituents of biological membranes, energy storage and signal transduction. Recent studies have shown that lipids have diverse regulatory function in plant growth and development. Our teams have been addressing the function of glycerolipids in plant growth and developmental control. Based on the understanding of dymanic change of lipid metabolism at spatiotemporal resolution, we have shown the regulatory role of lipids in plant development and its potential to contribute to environmental sustainability through lipid metabolic engineering. In this seminar, I would like to introduce our team's recent effort in elucidating the metabolism and function of glycerolipids in plant growth.



About the Speaker

Yuki Nakamura obtained his PhD in Tokyo Institute of Technology and worked in Temasek Life Sciences Laboratory, National University of Singapore, Max Planck Institute for Plant Breeding Research, and University of Bonn for his less than 4 years of postdoc training. In 2011, he launched his lab in Institute of Plant and Microbial Biology, Academia Sinica, Taiwan with the research program on the glycerolipid function in plant growth and development. In 2014, he was elected as a member of EMBO Young Investigator Program. In 2022, he moved to Japan and started a new lab in RIKEN Center for Sustainable Resource Science, currently serving as a Team Leader and also a professor in The University of Tokyo. His current research interest is the spatiotemporal dynamics of plant lipid profiles in plant developmental control and plant lipid metabolic engineering for environmental sustainability.