

Unit Name

Plant Epigenetics Unit

Research Personnel

Kenji Osabe, Senior Staff Scientist
Hiroki Tsutsui, Staff Scientist
Atsushi Shimada, Staff Scientist
Oscar Eduardo Juez Neira, PhD Student
Yoshiko Harukawa, Research Unit Technician
Anna Magdalena Klarkowska, PhD Student
Munissa Sadykova, PhD Student
Leonardo Furci, Research Fellow
Yoko Fujitomi, Research Unit Administrator
Giulia Ducceschi, Research Intern

Scholarly Contributions and Creative Productions (by Faculty)

Journal Article

1. Saze, Hidetoshi. 2024. "ARGONAUTE1-Binding Tudor Domain Proteins Function in Small Interfering RNA Production for RNA-Directed DNA Methylation." *Plant Physiology*, May.
2. Saze, Hidetoshi. 2024. "RNA N6-Adenine Methylation Dynamics Impact Hyaloperonospora Arabidopsidis Resistance in Arabidopsis." *Plant Physiology*, October.
3. Saze, Hidetoshi, and Atsushi Shimada. 2024. "RNA Quality Control by CCR4 Safeguards Chromatin Integrity Andcentromere Function in Arabidopsis." *BioRxiv*, August.

Presentation at Conference

1. Saze, Hidetoshi. 2024. "Epitranscriptome Dynamics in Plants." U of Ryukyu-OIST RNA Symposium.
2. Saze, Hidetoshi. 2024. "Transcriptional Regulation of Intragenic Transposons in Plant Genomes." The 47th Molecular Biology Society Japan Annual Meeting, November.
3. Saze, Hidetoshi. 2024. "Epigenetic Regulation of Intragenic Transposons and Gene Transcription in Plant Genomes." The 17th Annual Meeting of the Japanese Society for Epigenetics, June.
4. Saze, Hidetoshi. 2024. "Epigenetic Regulation of Intragenic Transposons and Gene Transcription in Plant Genomes." International Plant Molecular Biology Congress., June.

Seminars

1. Saze, Hidetoshi. 2024. "Transcriptional Regulation of Intragenic Transposons in Plant Genomes."

Scholarly Contributions (by Unit Members)

Name of Unit Member	Type	Title	Outlet	Publisher	Year Pub
Atsushi Shimada , Leonardo Furci	Book Chapter	RNA methylation	Plant Transcriptomics and Epitranscriptomics – Decoding the RNA Landscape	SpringerNature	2025
Hiroki Tsutsui	Journal Article	Harnessing Virus Vectors for Heritable Tissue Culture-free Gene Editing	Plant and Cell Physiology	Oxford university press	2024
Hiroki Tsutsui	Journal Article	PCP Research Highlights—Plant Systemic Signaling: Bridging Distances with Mobile Molecules	Plant and Cell Physiology	Oxford university press	2024
Atsushi Shimada*, Leonard Furci, Hidetoshi Saze	Poster Presentation at Conference	Post-transcriptional regulation of hypoxia and plant defense by mRNA deadenylase CCR4	4th Young Researchers Meeting: Plant Resilience under Fluctuating Environment, Aizu-Wakamatsu, Japan		2024
Anna Klarkowska	Poster Presentation at Conference	Enhancer networks in Arabidopsis: Investigating cis-regulatory dynamics in stress	4th Young Researchers Meeting: Plant Resilience under Fluctuating, Aizu-Wakamatsu, Japan		2024
Kenji Osabe	Poster Presentation at Conference	Understanding the role of epigenetic regulation in cell fusion between Arabidopsis species	9th Area Meeting(Final Report): Plant Resilience under Fluctuating, Yamagata		2024
Kenji Osabe	Poster Presentation at Conference	Functional assessment and epigenome editing of Brassica rapaFLC in Arabidopsis thaliana	International Plant Molecular Biology Congress. Cairns, Australia		2024
Hiroki Tsutsui	Poster Presentation at Conference	Functional analysis of endosperm-specific DNA methyltransferases in Arabidopsis	The 66th Annual Meeting of the Japanese Society of Plant Physiologists, Kanazawa, Japan		2025
Atsushi Shimada*, Hidetoshi Saze	Poster Presentation at Conference	RNA quality control ensures epigenome and function of the Arabidopsis centromeres	Post-transcriptional Gene Regulation in Plants 2024, Banuyls-sur-mer, France		2024
Kenji Osabe	Poster Presentation at Conference	The role of epigenetic regulation in genome stability of interspecific hybrids of Arabidopsis	10th Area Meeting(Final Report): Plant Resilience under Fluctuating, Ishigaki Island, Okinawa, Japan		2025
Atsushi Shimada* , Hidetoshi Saze	Poster Presentation at Conference	RNA quality control ensures epigenome and function of the Arabidopsis centromeres	The 17th Annual Meeting of the Japanese Society for Epigenetics, Osaka, Japan		2024
Leonardo Furci	Poster Presentation at Conference	RNA N6-adenine methylation dynamics impact Hyaloperonospora arabidopsidis resistance in Arabidopsis	4th Young Researchers Meeting: Plant Resilience under Fluctuating, Aizu-Wakamatsu, Japan		2024

Name of Unit Member	Type	Title	Outlet	Publisher	Year Pub
Kenji Osabe	Poster Presentation at Conference	Understanding the role of epigenetic regulation in cell fusion between Arabidopsis species	4th Young Researchers Meeting: Plant Resilience under Fluctuating, Aizu-Wakamatsu, Japan		2024
Leonardo Furci	Poster Presentation at Conference	RNA N6-adenine methylation dynamics impact Hyaloperonospora arabidopsidis resistance in Arabidopsis	10th Area Meeting(Final Report): Plant Resilience under Fluctuating, Ishigaki Island, Okinawa, Japan		2025
Leonardo Furci	Presentation at Conference	RNA N6-adenine methylation dynamics impact Hyaloperonospora arabidopsidis resistance in Arabidopsis	EPIPLANT 2024, Clermond-Ferrand, France		2024
Munissa Sadykova	Presentation at Conference	Epigenetic regulation of plants cold stress tolerance and memory	4th Young Researchers Meeting: Plant Resilience under Fluctuating, Aizu-Wakamatsu, Japan		2024

Other Institutional Service

2025-01-25	Presentation for Local High School Female Students, (University)
2024-11-18	Presentation for Ambassador of the Lao People's Democratic Republic, (University)
2024-11-15	Presentation for Chairman of Fukushima Prefectural Assembly, (University)
2024-09-27	Presentation for web news media "Newspicks" , (University)
2024-09-27	Preseantation in Visit Program for Ministry of Agriculture and Cooperatives (MOAC), Thailand, (University)