

Unit Name

Plant Epigenetics Unit
Professor Hidetoshi Saze

Research Personnel

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

Scholarly Contributions and Creative Productions (by Faculty)

Journal Article

1. Sadykova, M.; Saze, H.
Transcriptome and Epigenome Dynamics Underpin Cold Stress Priming in Arabidopsis. bioRxiv 2025.
<https://www.biorxiv.org/content/10.64898/2025.12.16.694799v1.abstract>
2. Juez, O.; Saze, H.
Nuclear Envelope Dysfunction Drives Premature Aging and Modulates Heterochromatic Methylome Drift in Arabidopsis. bioRxiv 2025.
<https://www.biorxiv.org/content/10.1101/2025.11.16.688749v1>
3. Fujie, M.; Kawamitsu, M.; Saze, H.
De Novo Genome Assembly of an Interspecific Hybrid Grapevine “Maeve.” bioRxiv 2025.

Presentation at Conference

1. Saze, H.
Transcriptome and Epigenome Dynamics Underpin Cold Stress Priming in Arabidopsis. The 97th annual meeting of genetics society of Japan 2025.
2. Saze, H.
RNA N6-Adenine Methylation Dynamics Impact Hyaloperonospora Arabidopsis Resistance in Arabidopsis. The 18th annual meeting of the Japanese society for Epigenetics 2025.

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
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
Hiroki Tsutsui	Poster Presentation at Conference	シロイヌナズナ種子発達における胚乳特異的 DNA メチル化酵素の機能解析	The 89th Annual meeting of the Botanical Society of Japan		2025
Hiroki Tsutsui	Poster Presentation at Conference	卵細胞との片側受精を示す精細胞特異的遺伝子変異体の解析	日本植物形態学会第 37 回大会		2025
Hiroki Tsutsui	Poster Presentation at Conference	Functional analysis of endosperm-specific DNA methyltransferases in Arabidopsis	The 67th Annual Meeting of the Japanese Society of Plant Physiologists	The Japanese Society of Plant Physiologists	2026
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
Kenji Osabe	Poster Presentation at Conference	Regulation of flowering by epigenome editing of Brassica rapa FLC using Arabidopsis thaliana as a model	Brassica 2025		2025
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
Anna Klarkowska	Poster Presentation at Conference	Modeling of regulatory networks governing stress response in Arabidopsis thaliana	Decoding the RNA Landscape	EpiSeedLink	2026
Leonardo Furci	Presentation at Conference	Rice epigenome manipulation for pathogen resistance	Plant Epigenetics and Epigenome Engineering	Keystone	2025
Leonardo Furci	Presentation at Conference	RNA N6-adenine methylation dynamics impact Hyaloperonospora arabidopsidis resistance in Arabidopsis	EPIPLANT 2024, Clermond-Ferrand, France		2024

Other Institutional Service

Term 1 2025 - Ongoing

Presentation to visitors from International Institute for Carbon-Neutral Energy Research, Kyushu University), (Research Units) [Fiscal Year: 2026-01-21]

Workshops and Seminars [Organized and Hosted by Faculty/Units]

Speaker Name(s)	Title	Location	Date
Dr. Leandro Quadrana	Windows of Opportunity: Developmental Niches and Epigenetic Control of Transposon Transmission	C700, Lab3	2026-03-19
Prof. Michael Lenhard	Understanding floral adaptations that promote outcrossing	C016, Lab1	2026-03-11
Prof. Isabel Bäurle	How do plants remember a stressful day? – Interplay of transcription factors and chromatin to regulate heat stress memory	C016, Lab1	2026-03-11
Sachihiro Matsunaga	Plant-Animal Hybrid Cells: Challenging the Creation of "Planimal" Cells	C700, Lab3	2025-11-07
Robert Feil	Epigenetic regulation of imprinted gene expression in mammals.	C700, Lab3	2025-09-18
Taiko To	Target selection and environmental stress control of epigenetic modifications in plants	C700, Lab3	2025-06-26