FY 2024 Annual Report

Unit Name

Cell Signal Unit

Research Personnel

Hiroaki Sako, Postdoctoral Scholar

Lea Picard, Postdoctoral Scholar

Masato Hirota, Postdoctoral Scholar

Haytham Mohamed, Postdoctoral Scholar

Akiko Nishiyama, Research Unit Technician

Atsuko Sato, Research Unit Technician

Saori Nishijima, Research Unit Technician

Risa Ishida, Research Unit Technician

Nao Ohmine, Research Unit Technician

Eriko Okamatsu, RUA

Scholarly Contributions and Creative Productions (by Faculty)

Journal Article

1. Cho, N.; Kontou, G.; Smalley, J.; Bope, C.; Dengler, J.; Montrose, K.; Deeb, T.; Brandon, N.; Yamamoto, T.; Davies, P.; Giamas, G.; Moss, S.

   The Brain-Specific Kinase LMTK3 Regulates Neuronal Excitability by Decreasing KCC2-Dependent Neuronal Cl− Extrusion. iScience 2024, 27.
2. Maipas, A.; Sato, A.; Moriyama, Y.; Yamamoto, T.; Kono, K.

   Knockdown of CNOT3, a Subunit of the CCR4-NOT Deadenylase Complex, Sensitizes A549 Human Non-Small Cell Lung Cancer Cells to Senescence-Inducing Stimuli. Biochemical and Biophysical Research Communications 2025, 748.
3. Sato, T.; Yamaguchi, T.; Minato, T.; Hoshizaki, M.; Yamamoto, A.; Morita, M.; Suzuki, T.; Fujio, Y.; Imai, Y.; Suzuki, Y.; Yamamoto, T.; Watanabe, H.; Kuba, K.

   CNOT6L Deadenylase Suppresses Cardiac Remodeling in Heart Failure through Downregulation of Tenascin-C mRNA. The Journal of Pharmacology and Experimental Therapeutics 2025, 392.
4. Setoguchi, R.; Sengiku, T.; Kono, H.; Kawakami, E.; Kubo, M.; Yamamoto, T.; Hori, S.

   Memory CD8 T Cells Are Vulnerable to Chronic IFN-γ Signals but Not to CD4 T Cell Deficiency in MHCII-Deficient Mice. Nature Communications 2024, 15.
5. Yamamoto, T.

   Silencing Dentate Newborn Neurons Alters Excitatory/inhibitory Balance and Impairs Behavioral Inhibition and Flexibility. Science Advances 2024.
6. Yamamoto, T.

   Mass Spectrometry-Based Proteomic Analysis of Proteins Adsorbed by Hexadecyl-Immobilized Cellulose Bead Column for the Treatment of Dialysis-Related Amyloidosis. Amyloid 2024.

Poster Presentation at Conference

1. Sako, H.; Yamamoto, T.
   Protein Truncation Mitigation. Annual Meeting of the Molecular Biology Society of Japan 2024.
2. Yamamoto, T.; Tara, Y.; Imai, H.; Yamashita, A.
   mRNA Turnover Mediated by RNA Modification Regulates Pancreatic β Cell Homeostasis. Annual Meeting of the Molecular Biology Society of Japan 2024.

Presentation at Conference

1. Tara, Y.; Imai, H.; Yamashita, A.; Yamamoto, T.
   mRNA Turnover Mediated by RNA Modification Regulates Pancreatic β Cell Homeostasis. Annual Meeting of the Molecular Biology Society of Japan 2024.
2. Tara, Y.; Yamamoto, T.
   Turnover of mRNA Mediated by RNA Modification Regulates Pancreatic β Cell Function and Identity. 60th European Association for the Study of Diabetes (EASD) 2024.

Honors, Awards & Fellowships

Jan 2021 - Ongoing	2020 JNTO Award for Contribution to the Invitation and Hosting of International Conferences, 2021, Japan National Tourism Organization (JNTO)
Jan 2014 - Ongoing	Tomizo Yoshida Award, 2014, The Japanese Cencer Association

External Service

2024 - Ongoing	Board member, Yasuda Memorial Medical Foundation
2024	Member of a research grant screening committee, Takeda Science Foundation
2024	Member of Development and Extension Committee, Comprehensive Support Program for Fostering Globally Competent Researchers、 Ministry of Education, Culture, Sports, Science and Technology