

UTokyo Amgen Scholars Program 2026
Host Laboratory and Research Topic

Name of Faculty Member (Title)	Yuichiro NAKAJIMA (Associate Professor)
Name of Graduate School/ Faculty/ Institute	Graduate School of Pharmaceutical Sciences
Research Topic & Description	Understanding cellular and organismal plasticity in response to environmental changes Living organisms constantly encounter fluctuating environmental conditions such as temperature shifts, nutrient changes, and physical stress. To maintain homeostasis and ensure survival, cells and tissues exhibit remarkable plasticity—altering their states, functions, and interactions in a context-dependent manner. Our research aims to elucidate how environmental stimuli are sensed and integrated across biological scales, from molecular and cellular levels to whole-organism physiology. By combining genetic perturbations, imaging, and comparative studies across model systems, we seek to uncover the principles that govern reversible cell state transitions and adaptive tissue remodeling. Understanding these multiscale mechanisms will provide insight into how plasticity contributes to regeneration, stress tolerance, and long-term adaptation in diverse organisms.
Academic Requirements & Expectations	1) Field(s) of Study
	Developmental and Cell Biology; Molecular Biology, Genetics
	2) Knowledge/ Skill/ Proficiency
	Knowledge about basic biology (developmental Biology, cell Biology, molecular biology). Experience with biology experiments are expected (not required). Communication skills and willing to work as a team member.
	3) Academic Background and Research Experience
	Academic background and research experiences with the above fields (Life Science-related department, such as Pharmaceutical Sciences, Agriculture, Biology, and Basic Medicine)
Website & Relevant Information	https://researchmap.jp/nakaji97?lang=en https://idenut.f.u-tokyo.ac.jp/styled-12/
Campus / Location	Hongo / Yayoi
Area of Research	Molecular, Cell and Developmental Biology Biology Bioinformatics