

UTokyo Amgen Scholars Program 2026

Host Laboratory and Research Topic

Name of Faculty Member (Title)	Sadao Ota (Professor)
Name of Graduate School/ Faculty/ Institute	Research Center for Advanced Science and Technology
Research Topic & Description	<p>We develop innovative bio-measurement technologies by integrating optics, fluidics, information science, chemistry, bioengineering and life science.</p> <p>Our goal is to create new ways to observe and understand living systems — from single molecules to cells and organoids — and to apply these discoveries to next-generation medical diagnostics and therapeutics, and synthetic biology beyond the limit of human and nature.</p> <p>Current projects include high-throughput optical analysis of mammalian and bacterial cells, extracellular nanoparticles, and organoids.</p>
Academic Requirements & Expectations	<p>1) Field(s) of Study</p> <p>We welcome applicants from a wide range of disciplines, including physics, electrical or mechanical engineering, chemistry, biotechnology, and biological or medical sciences.</p> <p>Curiosity and enthusiasm for connecting engineering with biology are very important.</p> <p>2) Knowledge/ Skill/ Proficiency</p> <p>Students with background in either</p> <p>(i) optics, photonics, spectroscopy, or data science, or</p> <p>(ii) molecular/cellular biology, biochemistry, or bioengineering are encouraged to apply.</p> <p>Basic coding skills and interest in computational analysis are advantageous but not mandatory.</p> <p>3) Academic Background and Research Experience</p> <p>Strong academic performance and motivation to engage in creative, cross-disciplinary research are highly valued. Prior research experience is helpful but not essential.</p>
Website & Relevant Information	https://www.sadaotalab.net/
Campus / Location	Komaba II
Area of Research	<p>Biotechnology</p> <p>Bioengineering</p> <p>Chemical and Biomolecular Engineering</p>