

UTokyo Amgen Scholars Program 2024

Host Laboratory and Research Topic

Name of Faculty Member (Title)	Keiichi NAKAGAWA (Associate Professor)
Name of Graduate School/ Faculty/ Institute	Graduate School of Engineering
Research Topic & Description	<p>1) Ultrafast imaging: you will visualize the acoustic interaction with biological cells (pico- to nano-second timescales) to understand the therapeutic effects on the body in noninvasive acoustic wave therapy.</p> <p>2) Biophotonics: you will develop a new method to produce acoustic waves inside the body to manipulate the photons' behavior for optical biotechnologies.</p> <p>3) Biophysics: you will investigate the interactions between physical energies (photon and phonon) and biological cells/tissues to control the functions of our body.</p>
Academic Requirements & Expectations	1) Field(s) of Study
	None
	2) Knowledge/ Skill/ Proficiency
	Knowledge of Bioengineering and Optical Engineering is advantageous but not mandatory at the time of application. Once selected, I will recommend a specific field of study tailored to the student's interests and background and provide relevant study materials.
Lab Website & Relevant Information	3) Academic Background and Research Experience
	None
Lab Website & Relevant Information	https://sites.google.com/view/nakagawagroup/ http://www.bmpe.t.u-tokyo.ac.jp/en/index.html
Campus / Location	Hongo / Yayoi
Area of Research	<p>Bioengineering</p> <p>Biotechnology</p> <p>Neuroscience</p>