

2023 Kyoto University Amgen Scholars Program

List of Host Laboratories

No.	Name of PI	Affiliation	Research Topic of the Lab	Eligibility	Research Area 1(keywords)	Research Area 2(keywords)	Research Area 3(keywords)	Website
1	Makoto Hayashi	Graduate School of Medicine	Telomere biology, Chromosome fusion and tumorigenesis	Those who are motivated to learn molecular biology techniques and hold ability to work well with other laboratory members.	Molecular, Cell and Developmental Biology			URL
2	Osamu Takeuchi	Graduate School of Medicine	Regularoty systems of innate immunity	Students who are interested in the molecular immunology research.	Immunology	Biochemistry	Molecular, Cell and Developmental Biology	URL
3	Ryu ABE	Graduate School of Engineering	Water Splitting for Hydrogen Production by using Semiconductor Photocatalysis	Be interested in photocatalysis	Chemistry			URL
4	Ryuji Yokokawa	Graduate School of Engineering	Microphysiological systems (MPS), Organoid, On-chip vascular network, Machine learning	We are seeking for highly-motivated students who are willing to integrate biology (vascular biology, developmental biology) and engineering (microfluidics) for MPS applications.	Bioengineering	Biotechnology	Molecular, Cell and Developmental Biology	URL
5	Yasuo Mori	Graduate School of Engineering	Elucidation of biological roles played by TRP channels as environmetal sensors and signal acuator.	Understanding of basic biochemistry is desirable (but this is not an absolute necessity).	Biochemistry	Drug Discovery	Molecular Medicine	URL
6	Itaru Hamachi	Graduate School of Engineering	chemical biology	Strong interests in research between chemistry and biology	Chemical and Biomolecular Engineering	Biochemistry	Neuroscience	URL
7	Hirofumi Sato	Graduate School of Engineering	Theoretical/Computational Chemistry	-	Chemistry			URL
8	Kiyoshi Yasukawa	Graduate School of Agriculture	Please see the following papers we published in 2021. doi: 10.1016/j.bbrc.2021.06.023 doi: 10.1093/bbb/zbab102 doi: 10.1016/j.jbiosc.2021.05.005	I would like a student who is interested in enzyme.	Biochemistry	Biotechnology		URL
9	Takashi Sagawa	Graduate School of Energy Science	Light-emitting materials, Photocatalysts, Photovoltaics	Unrestricted	Chemistry	Chemical and Biomolecular Engineering	Bioengineering	URL
10	Shigehiro Yoshimura	Graduate School of Biostudies	1. How intracellular membrane-less organelle (e.g. nucleolus, mitotic chromosome, stress granules, P-body etc.) are formed and regulated via phase separation. 2. How viruses hijack host cell function via phase sepparation. 3. How hyperphosphorylation of a disordered polypeptide changes its macroscopic behavior.	having interest on life science having strong eager to become international scientist	Biochemistry	Chemical and Biomolecular Engineering	Microbiology	URL
11	Jun Suzuki	Graduate School of Biostudies	Biochemical Cell Dynamic	Highly-motivated students with passion	Biochemistry	Molecular Medicine	Neuroscience	URL
12	Naoki Watanabe	Graduate School of Biostudies	Live cell single-molecule imaging (SIMS microscopy) and multiplexed super-resolution microscopy IRIS for elucidating cell structure remodeling, cell signaliing and drug effects	Basic knowledge in cell and molecular biology is required. We offer the opportunity to learn the above microscopic technique and how to use it to solve biological problems.	Biotechnology	Molecular, Cell and Developmental Biology	Molecular Pharmacology	URL
13	Peter Carlton	Graduate School of Biostudies	Chromosome pairing, recombination, and segregation during meiosis in the nematode C. elegans	biology or bioinformatics majors	Molecular, Cell and Developmental Biology	Molecular Genetics	Bioinformatics	URL
14	Liang Zhao	Graduate School of Advanced Integrated Studies in Human Survivability	Graph Learning algorithms and applications in chemical and biochemical studies.	Experience in algorithm design and program development (e.g., data science, machine learning, statistics, etc).	Bioinformatics			URL
15	Yasuhiro Ohki	Institute for Chemical Research	Synthesis and Reactions of Metal-Containing Molecules	Interest in chemical synthesis	Chemistry	Biochemistry		URL
16	Takashi MORII	Institute of Advanced Energy	Design of functional biomacromolecular assemblies, Artificial metabolic pathways, Fluorescent biosensors	Keen interest in science, basic knowledge in Chemistry and Biochemistry	Biochemistry	Chemistry	Chemical and Biomolecular Engineering	URL
17	Takahiro Ito	Institute for Life and Medical Sciences	understanding the operating principles of stem cells and cancer	Looking to work with a scholar with motivation and enthusiam for a study on stem cells and cancer.	Biochemistry	Molecular, Cell and Developmental Biology	Molecular Medicine	URL
18	Akitsu Hotta	Center for iPS cell Research and Application	The Hotta lab uses CRISPR-Cas genome editing, virus-like nanoparticle, and patient-derived iPS cell to develop a novel therapy for intractable genetic diseases, such as muscular dystrophy. We are seeking an enthusiastic student to participate in an ongoing research project in the lab.	A highly motivated student who would like to take the opportunity to seek a Ph.D. program in CiRA. Participate in daily experiments under guidance by a senior staff, lab meetings, and seminars. Experience in DNA cloning or tissue culture is a plus.	Bioengineering	Biotechnology	Molecular Genetics	URL
19	NAMASIVAYAM Ganesh Pandian	Institute For Integrated Cell-Material Sciences	Bio-inspired therapeutics, Epigenetics	Candidate with strong academic performance enrolled in colleges or Universities that award a bachelor's degree (or its equivalent) in the fields of biochemistry, genetics and pharmaceuticals.	Molecular Genetics	Medical Pharmacology	Bioinformatics	URL
20	Fuyuhiko Tamanoi	Institute For Integrated Cell-Material Sciences	Nanoparticles and cancer therapy	Tamanoi group has been developing novel cancer therapies using silica-based porous nanoparticles. During your stay, you will study basic mechanism of nanomaterial uptake by cancer cells and tumor spheroids as well as tumor accumulation of nanomaterilals using cancer-tansplanted chicken egg model. Candidate should have knowledge of basic biology and experience in cell, organoid or animal experiment. Experience in basic chemistry is desirable. Candidate should also have good communication skills in English.	Molecular, Cell and Developmental Biology	Chemistry	Drug Discovery	URL
21	Shuhei Furukawa	Institute For Integrated Cell-Material Sciences	We study chemistry of porous materials and transform them into game-changing solutions for health, environment and energy issues.	We look for students who are full of curiosity and do not hesitate to challenge crossdisciplinary science and innovations.	Chemistry			URL
22	Aiko Fukazawa	Institute For Integrated Cell-Material Sciences	We explore fundamentals on the design, synthesis, and properties of the novel organic molecules toward superb optoelectronic materials.	1) Basic knowledge of organic chemistry 2) Having had some practical training in a chemistry lab	Chemistry			URL