
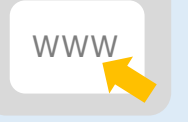



























2022 Kyoto University Amgen Scholars Program

List of Host Laboratories

No.	Name of PI	Affiliation	Research Topic of the Lab	Eligibility	Research Area (keywords)	URL
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	
2	Masatoshi Hagiwara	Graduate School of Medicine	Genetic diseases caused by aberrant RNA splicing	None	Drug Discovery Molecular Pharmacology Neuroscience	
3	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	
4	Douglas S. Campbell	Graduate School of Pharmaceutical Sciences	Our laboratory studies the cellular and molecular mechanisms underlying neuronal branching, synapse formation and degeneration critical for the normal function of the nervous system.	-	Neurobiology Neuroscience Molecular, Cell and Developmental Biology	
5	Ryu ABE	Graduate School of Engineering	Water Splitting for Hydrogen Production by using Semiconductor Photocatalysis	Be interested in photocatalysis	Chemistry	
6	Kazunari Akiyoshi	Graduate School of Engineering	Biomedical Polymer Chemistry	All students who are interested in biofunctional polymers for future medicine such as regenerative medicine.	Chemistry Chemical and Biomolecular Engineering Drug Discovery	
7	Yasuo Mori	Graduate School of Engineering	Elucidation of biological roles played by TRP channels as sensors and signal acuator.	Understanding of basic biochemistry is desirable (but this is not an aboslute necessity).	Biochemistry Molecular Genetics Molecular Medicine	
8	Itaru Hamachi	Graduate School of Engineering	chemical biology	Strong interests in research between chemistry and biology	Chemical and Biomolecular Engineering Biochemistry Neuroscience	
9	Hirofumi Sato	Graduate School of Engineering	Theoretical/Computational Chemistry	-	Chemistry	
10	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 an enzyme.	Biochemistry Biotechnology	
11	Hideaki Miyashita	Graduate School of Human and Environmental Studies	1) Isolation and characterization of microalgae which will be applicable for industrial use 2) Diversity of cyanobacteria and their phylogenetic evolution 3) Diversity of photosynthetic system in algae 4) Development of bioreactors for imcroalgae biofuel production	Basic knowledge of microbiology	Microbiology Biotechnology	
12	Takashi Sagawa	Graduate School of Energy Science	Light-emitting materials, Solar cells, Photocatalysts	Unrestricted	Chemistry Chemical and Biomolecular Engineering Bioengineering	
13	Benjamin C. McLellan	Graduate School of Energy Science	Energy, environment, resources and socio-economic systems	Students should be interested in energy and related economic, resource, environmental and social systems. Research in this lab is non-experimental.	Chemical and Biomolecular Engineering Statistics Chemistry	
14	Tomoichiro Miyoshi	Graduate School of Biostudies	Genome, Retrotransposon, DNA repair, Immune response	Applicants need English skills for communication.	Biochemistry Molecular, Cell and Developmental Biology Molecular Genetics	
15	Shige H. Yoshimura	Graduate School of Biostudies	1. How intracellular membrane organelle (e.g. nucleolus, mitotic chromosome, stress granule, P-body etc.) are formed and regulated via phase separation. 2. How viruses hijack host cell function via phase separation. 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	
16	Jun Suzuki	Graduate School of Biostudies	Biochemical Cell Dynamic	Highly-motivated students with passion	Biochemistry Molecular Medicine Neuroscience	
17	Naoki Watanabe	Graduate School of Biostudies	Mechanobiology, Live-cell single-molecule imaging, Super-resolution microsocopy 'IRIS', Real-time monitoring of drug action	Requires basic knowledge of cell biology. Participants who are interested in specific technologies and applications are recommended to do research on lab's previous papers beforehand.	Molecular, Cell and Developmental Biology Biotechnology Molecular Pharmacology	
18	Peter Carlton	Graduate School of Biostudies	Chromosome dynamics during meiotic prophase in C. elegans	Students majoring in life sciences	Molecular, Cell and Developmental Biology Bioinformatics	
19	Taeko Kobayashi	Graduate School of Biostudies	neural stem cells, quiescence, lysosomes	1.Those who have fundamental biological knowledge. 2. Those who are able to conduct team work. 3. Those who have interest in our research.	Biochemistry Molecular, Cell and Developmental Biology Neurobiology	
20	Tatsushi Igaki	Graduate School of Biostudies	Mechanism of cell competition; Genetic basis of tissue growth regulation; Molecular basis of tumor progression and metastasis	Those who are interested in our research.	Molecular, Cell and Developmental Biology	
21	Itaru Imayoshi	Graduate School of Biostudies	Brain Development and Regeneration	We would like to accept the students who are interested in brain development and function and who are willing to engage in research.	Molecular Genetics Neurobiology Neuroscience	
22	Liang Zhao	Graduate School of Advanced Integrated Studies in Human Survivability	Graph Learning and application (including chemical graph learning)	Practical experience in algorithm, machine learning and statistics.	Bioinformatics	
23	Yasuhiro Ohki	Institute for Chemical Research	Synthesis and Reactions of Metal-Containing Molecules	Interest in chemical synthesis	Chemistry Biochemistry	
24	NAMASIVAYAM Ganesh Pandian	Institute for Integrated Cell-Material Sciences, KUIAS	Bio-inspired therapeutics, Epigenetics	Candidate with strong acadmic performance enrolled in colleges or Universities that award a bachelor's degree (or its equivalent) in the field related to Molecular biology/genetics).	Molecular Genetics Medical Pharmacology Immunology	
25	Ken-ichiro Kamei	Institute for Integrated Cell-Material Sciences, KUIAS	Bioengineering to re-create living systems in vitro	We are looking for the students who are willing to break the boundaries of desciprines to open up the new research.	Bioengineering Biotechnology Molecular, Cell and Developmental Biology	
26	Fuyuhiko Tamanoi	Institute for Integrated Cell-Material Sciences, KUIAS	Nanodelivery and cancer radiation therapy	-	Drug Discovery Molecular, Cell and Developmental Biology Molecular Medicine	
27	Shuhei Furukawa	Institute for Integrated Cell-Material Sciences, KUIAS	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. We welcome candidates who love chemistry.	Chemistry	
28	Aiko Fukazawa	Institute for Integrated Cell-Material Sciences, KUIAS	We explore fundamentals on the design, synthesis, and properties of the novel organic molecules toward superb optoelectronic materials.	1) Basic knowledge of chemistry 2) Having had some practical training in a chemistry lab	Chemistry	