## 2025 Kyoto University Amgen Scholars Program

## List of Host Laboratories

No.	Name of PI	Affiliation	Position	Research Topic of the Lab	Eligibility	Research Area 1(keywords)	Research Area 2(keywords)	Research Area 3(keywords)	URL
1	Makoto Hayashi	Graduate School of Medicine	Visiting Associate Professor/Junior Principle Invistigator	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			<u>https://www.mthayas</u> <u>hilab.com/</u>
2	Koh Ono	Graduate School of Medicine	Professor	Functions of non-coding RNAs in cardiovasucular diseases	High motivation for research	Molecular Pharmacology	Molecular, Cell and Developmental Biology	Medical Pharmacology	https://www.med.kyot o- u.ac.jp/en/research/fi eld/doctoral_course/r-
3	Yoshiki Arakawa	Graduate School of Medicine	Professor	neuroscience, neurosurgery, disorders in the nervous and vascular systems of the brain, spinal cord, and peripheral nerves	Students who are interested in the neuroscience and neurosurgery research.	Neurobiology	Neuroscience	Molecular Genetics	<u>https://www.med.kyot</u> <u>o-</u> <u>u.ac.jp/en/research/fi</u> <u>eld/doctoral_course/r-</u> <u>060</u>
4	Osamu Kikuchi	Graduate School of Medicine	Associate Professor	Exploring molecular vulnerabilities in cancer	Excellent written and verbal communication skills in English A strong interest in oncology and molecular biology	Molecular Medicine	Immunology	Molecular Pharmacology	https://www.ccii.med. kyoto-u.ac.jp/
5	Martin ROBERT	Graduate School of Pharmaceutical Sciences	Program-specific Associate Professor	We study bacterial biofilms (mainly E. coli) to learn about cell communities, their metabolic function and exchanges that allow higher level functions.		Microbiology	Molecular, Cell and Developmental Biology	Biochemistry	<u>https://sites.google.co</u> <u>m/kyoto-</u> <u>u.ac.jp/msb/home</u>
6	Masao Doi	Graduate School of Pharmaceutical Sciences	Professor	Research and Development of Circadian Clock-Based Medicine and Therapies to Combat Age- and Lifestyle-Related Diseases	A strong interest in oncology and molecular biology	Molecular Pharmacology	Neuroscience	Physiological Science	<u>https://systems-</u> <u>biology.pharm.kyoto-</u> <u>u.ac.jp/en</u>
7	Ryu ABE	Graduate School of Engineering	Professor	Water Splitting for Hydrogen Production by using Semiconductor Photocatalysis	Be interested in photocatalysis	Chemistry			<u>http://www.ehcc.kyoto-</u> <u>u.ac.jp/eh41/home/abe/</u> <u>en/</u>
8	Hirofumi Sato	Graduate School of Engineering	Professor	Theoretical/Computational Chemistry		Chemistry			<u>www.riron.moleng.kyo</u> <u>to-u.ac.jp/</u>
9	Itaru Hamachi	Graduate School of Engineering	Professor	chemical biology	Strong interests in research between chemistry and biology	Chemical and Biomolecular Engineering	Biochemistry	Neuroscience	<u>http://www.sbchem.kyot</u> <u>o-u.ac.jp/hamachi-lab/</u>
10	Fumito Tani	Graduate School of Agriculture	Professor	<ol> <li>Application of nano-technology to food dietary fibers for promotion of human health;</li> <li>Visualization of nutrient flow in the gastrointestinal tract by imaging mass spectroscopy;</li> </ol>		Biochemistry	Bioengineering	Biotechnology	<u>https://www.bioeng.kais.</u> <u>kyoto-u.ac.jp/index-</u> <u>e.html</u>
11	Masahiro Miyashita	Graduate School of Agriculture	Associate Professor	Characterization of toxins from venomous animals such as scorpions, spiders and insects	Students who are interested in chemical analysis and biological evaluation of animal toxins	Chemistry	Biochemistry	Toxicology	<u>https://www.seicho.ka</u> <u>is.kyoto-</u> u.ac.jp/eng/index.html
12	Takaaki Yasuhara	Graduate School of Biostudies	Professor	Cellular stress response, Genomic instability, DNA repair	Those who are interested in elucidating the fundamental, sophisticated molecular mechanisms by which cells maintain homeostasis	Molecular, Cell and Developmental Biology	Molecular Medicine	Biochemistry	<u>https://www.rbc.kyoto-</u> <u>u.ac.jp/genome_stress/e</u> <u>n/</u>
13	Shige H. Yoshimura	Graduate School of Biostudies	Associate Professor	<ol> <li>How phase separation forms and regulates intracellular membrane-less organelles (e.g. nucleolus, mitotic chromosome, stress granules, P-body etc.).</li> <li>How to utilize virus-like particles for drug delivery systems.</li> <li>How cell proliferation and cancer metastasis are regulated by protein phosphorylation.</li> </ol>	Strong interents in life science Solid desire to be a global-level scientist	Biochemistry	Chemical and Biomolecular Engineering	Bioengineering	<u>https://www.chrom.lif. kyoto- u.ac.jp/english/index. html</u>
14	Peter Carlton	Graduate School of Biostudies	Associate Professor	Chromosome dynamics during meiosis	Familiarity with molecular and cell biology; previous wet lab research strongly recommended	Molecular, Cell and Developmental Biology			<u>https://www.carltonlab.o</u> <u>rg/</u>
15	Kazuhiro Aoki	Graduate School of Biostudies	Professor	Quantitative live cell imaging	Applicants should demonstrate a proficiency in English. Prior experience in laboratory research or relevant coursework in biological sciences is preferred but not mandatory.	Molecular, Cell and Developmental Biology	Biotechnology	Biochemistry	<u>https://sites.google.com/</u> kyoto-u.ac.jp/cellcycle
16	Liang Zhao	Graduate School of Advanced Integrated Studies in Human Survivability	Associate Professor	machine learning methods for graphs and its application to drug discovery	Programming experience	Bioinformatics Cheminformatics			<u>https://aw.gsais.kyoto-</u> <u>u.ac.jp/</u>
17	Yasuhiro Ohki	Institute for Chemical Research	Professor	synthesis and reactions of transition metal complexes	Interest in synthetic chemistry	Chemistry			<u>http://om.kuicr.kyoto-</u> u.ac.jp/en/index.html
18	Motonari Uesugi	Institute for Chemical Research	Professor of ICR & Director of iCeMS	Chemical Biology (Chemoproteomics, Bioactive molecule discovery and design, Chemical immunology, Self-assembling molecules, Cellular self-assembling matters)	The Uesugi group's official language is English, and high English proficiency is required.	Biochemistry	Drug Discovery	Molecular, Cell and Developmental Biology	<u>https://www.scl.kyoto</u> - <u>u.ac.jp/~uesugi/index.</u> <u>php</u>
19	Eiji Nakata	Institute of Advanced Energy	Associate Professor	Design of functional biomacromolecular assemblies, Artificial metabolic pathways, Fluorescent biosensors	Keen interest in science, basic knowledge in Chemistry and Biochemistry	Biochemistry	Chemical and Biomolecular Engineering	Chemistry	<u>http://www.iae.kyoto-</u> u.ac.jp/material/index <u>-En.html</u>
20	Takahiro Ito	Institute for Life and Medical Sciences	Professor	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	<u>https://cellfate.infront</u> .kyoto-u.ac.jp/
21	Hirofumi Shintaku	Institute for Life and Medical Sciences	Professor	Exploration of cancer biology via nano-electrokinetic transcriptomics. We will profile the progressive functions of cancer cells with cutting-edge single-cell assays empowered by nano-electrokinetics and	full of curiosity to innovate new biotechnology in collaborating with experts from multiple disciplines: biophysics, cancer biology, biochemistry, mechanical engineering	Biotechnology	Bioengineering	Bioinformatics/Cheminf ormatics	https://www.infront.ky oto- u.ac.jp/en/laboratory/ lab44/
22	NAMASIVAYAM Ganesh Pandian	Institute For Integrated Cell-Material Sciences	Junior Associate Professor / PI	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.	Bioengineering	Medical Pharmacology	Molecular Genetics	https://www.namasivaya m.icems.kyoto-u.ac.jp/
23	Jun Suzuki	Graduate School of Biostudies	Professor	Biochemical Cell Dynamic	Highly-motivated students with passion	Biochemistry	Molecular Medicine	Neuroscience	http://www.suzuki.icems .kyoto-u.ac.jp/en/
24	Shuhei Furukawa	Institute For Integrated Cell-Material Sciences	Professor	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. Talented and enthusiastic candidates with prior experience and	Chemistry	Chemical and Biomolecular Engineering		<u>https://www.furukawa.ic</u> ems.kyoto-u.ac.jp/
25	Cantas ALEV	Institute For Integrated Cell-Material Sciences	Professor	"Towards synthetic embryogenesis' - reconstituting human development and organogenesis from pluripotent stem cells We explore fundamentals on the design curtherin	exposure to stem cell biology, molecular biology, cell biology, genomics and/or developmental biology research. Both wet-lab and dry-lab (in silico) experience welcome.	Molecular, Cell and Developmental Biology	Bioengineering	Molecular Medicine	<u>https://ashbi.kyoto-</u> u.ac.jp/groups/alev/
26	Aiko Fukazawa	Institute For Integrated Cell-Material Sciences	Professor	and properties of the novel organic molecules toward superb optoelectronic materials.	<ol> <li>Basic knowledge of organic chemistry</li> <li>Having had some practical training in a chemistry lab</li> </ol>	Chemistry			<u>https://fukazawa.icems.k</u> <u>yoto-u.ac.jp/</u>