

August 3, 2026

Call for Urgent Joint Research with Researchers
in Kumamoto Earthquake Disaster Area

We would like to offer our sincere sympathy to the people living in Kumamoto hit by the earthquake.

All of the staff at our institute are wishing for earliest relief and restoration on the affected areas and will try to provide the best possible support. We understand that universities and research institutes in Noto Peninsula were severely damaged and have a lot of trouble with their research activities. National Institute of Genetics (hereafter, NIG) will provide an opportunity for the researchers and students who are suffering from the disaster to continue their research in our institute for a certain period of time. For this reason, the NIG is inviting proposal for the “Urgent Joint Research” as follows.

“Urgent Joint Research”

We offer research opportunity for those who have difficulty in conducting research due to damage to their laboratories. If you are interested in this program, please refer to the list of our faculty members and their research outlines shown below and contact a member whose research is most closely related to your own. If you have any trouble finding your host partner, please contact Research Promotion Team at kyodo-mail@nig.ac.jp

1. How to apply

Application will be accepted in accordance with the annual National Institute of Genetics NIG-JOINT (A) and (B).

Please download an application form from the link below and submit it in Word or PDF format to the address below.

Application Form for Urgent Joint Research [\(Word\)](#) / [\(PDF\)](#)

【Send your application to】 kyodo-mail@nig.ac.jp (Research Promotion Team)

2. Application

Beginning from today, you can submit your application to our office. Screening will be held immediately and the result will be informed by e-mail.

3. Expenses

The NIG will provide up to five hundred thousand yen per project within its budget. It can be used for transportation of materials, research expenses at the NIG, or travel expenses (transportation and accommodation) for visiting the NIG. Travel and other expenses should be decided based on our regulations.

4. Research Term

Up to 3 months, in principle.

5. Report

Research report should be submitted within 30 days after finishing the research.

- Report Form [\(Word\)](#)

【Contact/Inquiry】

Research Organization of Information and System

National Institute of Genetics
Research Promotion Team
1111 Yata, Mishima, Shizuoka-ken, 411-8540
Phone: 055-981-6728
E-mail: kyodo-mail@nig.ac.jp

Shigeru Kondo
Director-General, National Institute of Genetics
Research Organization of Information and Systems
Inter-University Research Institute Corporation

Research Outline

(Updated: August 1st, 2026)

Department/Center	Laboratory/Division	Faculty	Research outline
Department of Informatics	Genetic Informatics	KAWAMOTO, Shoko /Associate Professor	We are working on research and development of databases and information retrieval systems for the national bio-resource project (NBRP).
	Genome Evolution	KUROKAWA, Ken / Professor	We are interested in understanding microbial genome evolution and microbial community dynamics, and we are currently pursuing the following two major research directions; I. Facilitate the development of an integrated database “MicrobeDB.jp”, II. Microbial community dynamics.
	Genome Diversity	MORI, Hiroshi / Associate Professor	Our main research goal is to understand the relationships between the habitat of organisms and genome diversity. To facilitate the studies using comparative genomics and metagenomics, we are also developing various bioinformatics methodologies.
	Biological Networks	ARITA, Masanori / Professor KOSHIMIZU, Shizuka / Assistant Professor	Network analysis of metabolic pathways based on comprehensive identification and quantification of metabolites (metabolomics); Bioinformatics related to plant secondary metabolism and lipid metabolism
	Genome Informatics	NAKAMURA, Yasukazu / Professor	Intelligent information technology for structural and functional annotations of large-scale nucleotide sequences.
	Human Population Genomics	KAWAI, Yosuke / Professor	By leveraging data from large-scale genomic analyses, we pursue both fundamental studies of human population history and evolution, as well as applied research to elucidate the mechanisms underlying human diseases.
Department of Genomics and Evolutionary Biology	DNA Data Analysis	IKEO, Kazuho / Associate Professor	Evolutionary study of genomic structure and gene expression patterns to elucidate the evolutionary mechanism of central nervous system and sensory organs. Evolutionary genomics analysis of various species. Metagenome analysis. Developing databases and computer software for biological research.

	Plant Genetics	SATO, Yutaka / Professor	The goal of our research is to understand molecular mechanisms governing early processes of plant development using a series of rice embryogenesis defective mutants. Currently we are focusing on the mechanism of regulating the cell division pattern and plasticity in cellular differentiation in rice embryo.
	Evolutionary Genetics	AKASHI, Hiroshi / Professor	We infer mechanisms of genome evolution using population genetic and comparative genomic approaches. Current interests include global forces such as biosynthetic constraints that underlie weak selection.
	Ecological Genetics	KITANO, Jun / Professor YAMASAKI, Yo / Assistant Professor	We use three-spined stickleback fish to investigate the genetic and molecular mechanisms underlying adaptation and speciation.
	Comparative Genomics	TOYODA, Atsushi / Project Professor	We have been conducting advanced genomics research on the plasticity of genome structure and functions using advanced genome technologies such as New-Generation Sequencers.
	Molecular Life History	KURAKU, Shigehiro / Professor KAWAGUCHI, Akane / Assistant Professor	We focus on vertebrates and bridge molecular-level laboratory approaches and genome informatics, in order to document genome evolution and elucidate its mechanism.
Department of Gene Function and Phenomics	Symbiosis and Cell Evolution	MIYAGISHIMA, Shin-ya / Professor	In order to understand endosymbiotic evolution of eukaryotes, we are studying coordinating mechanisms of eukaryotic cell and organelle/endosymbiont proliferation using algae, plants, and protists.
	Plant Cytogenetics	NONOMURA, Ken-ichi / Professor Harsha Somashekar / Assistant Professor	We aim to elucidate the regulatory system of plant germ-cell development and chromosome kinetics, mainly using seed-sterile rice mutants.
	Mammalian Neural Circuits	IWASATO, Takuji / Professor MATSUMOTO, Naoyuki / Project Assistant Professor	We are studying molecular and cellular mechanisms of neuronal circuit development in the mammals, using mouse genetics and other related methods.

	Neurobiology and Pathology	ASAKAWA, Kazuhide / Associate Professor NAKAJO, Haruna / Assistant Professor	Using zebrafish as a primary model, we study the biology and disease of the motor system at the behavioral, circuit, cellular, and molecular levels. The ultimate goal is to identify the root causes of ALS and to develop therapeutic strategies through comprehensive and multidimensional basic research.
	Multicellular Organization	SAWA, Hitoshi / Professor NEGISHI, Takefumi / Assistant Professor	We are studying the mechanisms that produce a variety of cell types through asymmetric cell divisions using the nematode <i>C. elegans</i> .
	Brain Function	HIRATA, Tatsumi / Professor	Development of the vertebrate nervous system with special focus on neuronal network formation.
	Mouse Genomics Resource	KOIDE, Tsuyoshi / Associate Professor	For understanding genetic basis of behavioral diversity, behavioral and genetic analyses are applied on a variety of mouse resources including wild-derived strains. We are developing genome editing methods in mice for analyzing function of genes.
		MATSUMOTO, Akihiro / Assistant Professor	We use mice and marmosets to understand the structure, function, development, disease, and environmental adaptation of visual neural circuits at multiple levels, including genes, neural circuit physiology, and behavior.
Department of Chromosome Science	Genome Dynamics	MAESHIMA, Kazuhiro / Professor	Our research interest lies in determining how a long string of genomic DNA is three-dimensionally organized in living cells, and how the organized genome functions during cellular proliferation, differentiation, and development. We are using a novel combination of molecular cell biology and biophysics to elucidate 3D-organization and dynamics of human genome chromatin.
	Cell Architecture	KIMURA, Akatsuki / Professor TORISAWA, Takayuki / Assistant Professor	To understand the three-dimensional architecture of the cell and its dynamics, quantitative imaging and modeling approaches are employed. Specific targets of the research are size and shape of organelles, the mechanics of cytokinesis, and cytoplasmic streaming in the <i>C. elegans</i> embryo.
	Chromosome Biochemistry	MURAYAMA, Yasuto / Professor KUROKAWA, Yumiko / Assistant Professor	We investigate the molecular mechanisms underlying regulation of chromosome organization and dynamics by recapitulating their biochemical reactions using purified proteins. We now especially focus on SMC complexes.

	Physics and Cell Biology	SHIMAMOTO, Yuta / Associate Professor TANAKA, Masahito / Assistant Professor	Our laboratory studies self-organization and mechanical properties of subcellular structures, such as the nucleus and the mitotic spindle. We develop and use quantitative subcellular micromanipulation, optical tweezers, single-molecule imaging and in vitro reconstitution to unveil the underlying biophysical mechanisms.
	Molecular Cell Engineering	KANEMAKI, Masato / Professor YAMAGUCHI, Kosuke / Assistant Professor	To understand DNA transactions in human cells, we generate conditional cells using the auxin-inducible degron technology for genetic and cytological analyses. We also develop new technologies for construction of mutant human cells.
	Invertebrate Genetics	SAITO, Kuniaki / Professor	We are conducting research on the physiological significance of the epitranscriptome and human rare diseases, using <i>Drosophila melanogaster</i> as a model.
Department of Frontier Research	Gene Quantity Biology	SASAKI, Mariko / Associate Professor	We study molecular mechanisms underlying genomic changes in eukaryotic cells. We mainly use budding yeast and human cell cultures and analyze genomic changes that result in changes to DNA quantity, using genetic and molecular biology tools. We specialize in isolating Mbp-sized DNA and separating it by Pulsed-Field Gel Electrophoresis.
	Plant Evolution	FUKUSHIMA, Kenji / Associate Professor	Our research aims to demystify evolutionary innovations by integrating computational and experimental approaches to study a wide range of organisms, with a particular focus on plants.
	Theoretical Ecology and Evolution	YAMAMICHI, Masato / Associate Professor	We combine mathematical models, microcosm experiments, and meta-analyses to investigate complex feedbacks between rapid evolution and ecological processes.
Chemical and Radioisotope Management Unit		ANDACHI, Yoshiki / Assistant Professor	We study microRNA-mediated post-transcriptional regulation in <i>C. elegans</i> using our original methods for the detection of microRNAs and target genes.

BioData Science Initiative(BSI)	Database Division for Life Science (DBCLS)	GOTO, Susumu / Professor KATAYAMA, Toshiaki / Project Professor KAWASHIMA, Shuichi / Project Associate Professor KAWASHIMA, Minae / Project Associate Professor KIM, Jin-Dong / Project Associate Professor HATANAKA, Hideki / Project Associate Professor FUJIWARA, Toyofumi / Project Associate Professor MINOWA, Mari / Project Associate Professor MORIYA, Yuki / Project Associate Professor YAMAMOTO, Yasunori / Project Associate Professor CHIBA, Hirokazu / Project Assistant Professor HOSODA, Masae / Project Assistant Professor MORIOKA, Masaki / Project Assistant Professor	We are conducting research and development for promoting (re)usability of life science, medical and pharmaceutical data, and building databases. We also aim to connect these databases and applications to applied research, including drug discovery.
Integrated Research Core(NIGiRC)	Advanced Genomics Division Sequencing Laboratory	TOYODA, Atsushi / Project Professor GOTOH, Yasuhiro / Associate Professor	We study bacterial diversity and evolution using genomics based approaches to understand selection mechanisms driving them and their actual state in the environment.
	Advanced Genomics Division Data Analysis Laboratory	NOGUCHI, Hideki / Project Professor MORI, Hiroshi / Associate Professor KOSUGI, Shunichi / Project Associate Professor KRYUKOV, Kirill / Project Associate Professor TERAUCHI, Makoto / Project Assistant Professor	Development of new algorithms for <i>de novo</i> sequence assemblies, and analytical tools for comparative genomics employing massive data produced from next generation sequencers.