

**Additional Application Guidelines for 2026 NIG-JOINT  
(Joint Research(A))  
National Institute of Genetics,  
Research Organization of Information and Systems**

**1. Application Guidelines**

NIG-JOINT

National Institute of Genetics solicits joint research to be conducted between researchers from other universities or institutes and NIG faculties using NIG facilities and equipment on the proposed project. We are currently accepting additional applications for 2026 NIG-JOINT (A).

As a general rule, travel expenses are provided to external collaborative researchers visiting NIG. NIG-JOINT projects should be conducted during the period of time from the date that acceptance notifications are sent out until March 31st, 2027. (However, if the acceptance date falls in March 2026, the research period will commence on April 1<sup>st</sup>, 2026.) Please note that for those who have already been accepted as a research representative for another NIG-JOINT project in FY2026 – (A), (B) or (I) – are not eligible to apply at this time.

NIG-JOINT (A)

- Eligible applicants are researchers affiliated with domestic or overseas universities or research institutes. Travel and research expenses (supplies and other expenses used within NIG) required for the joint research are provided.

Applications for NIG-JOINT (A) research expenses will be accepted as of FY2026.

- Up to 100,000 yen (JPY) can be requested per applicant for both travel and research expenses; however, research expenses are limited to a maximum of 30,000 yen.

\*For researchers coming from overseas, up to 150,000 yen (JPY) may be requested for combined travel and research expenses.

**2. Applicants**

The applicants should be, as a general rule, researchers affiliated with universities, inter-university collaborative research institutes and independent administrative organizations in Japan or researchers affiliated with overseas universities or research institutes. Please note that graduate students are not eligible to apply as the project representative, but they may be included as members of the joint research team.

**3. Application**

The application must be completed via the online application system called “Joint Research On-line Integrated System (JROIS)”.

JROIS: <https://jrois2.jrois.rois.ac.jp/>

(Instructions for operating the application system can be downloaded from the above URL.)

For more details regarding the online application system, please refer to the following

NIG webpage (NIG-JOINT page).

<https://www.nig.ac.jp/en/researchers/nig-joint/>

(1) Before submitting the application, the applicant must consult closely with the prospective NIG representative regarding the project subject, members, budget and other necessary matters. Overviews of research being conducted by researchers at NIG are described at the end of this application guideline.

For contact information, please refer to the NIG website.

<https://www.nig.ac.jp/en/public/research-infrastructure/>

(2) Approval from the head of your affiliated institution is not required. However, if your institution requires approval or other internal procedures, please be sure to complete all such procedures before submitting your application.

(3) Application forms must be uploaded and submitted in PDF · DOCX · ZIP format to JROIS.

The application form can be downloaded from the link below.

<https://www.nig.ac.jp/en/researchers/nig-joint/>

#### 4. Online Application Period

Mid-February, 2026 (tentative) to Friday, January 29th, 2027

Only proposals submitted within the above period will be accepted for review.

\* Proposals submitted by the end of each month will be reviewed the following month.

(Example: Proposals submitted by the end of April → Review and acceptance notification in May → Research begins on the date of notification.)

**\* Your application will not be accepted under any circumstances if not submitted within the above application period.**

**\* Regardless of the above period, please understand that this program may close early due to budget limitations.**

#### 5. Selection

The outcome of selection and amount of budget allocation are determined after screening by the NIG committee, and research representatives will be notified via e-mail in the month following the application. Applications from those who have been adopted as research representatives in the past, regardless of whether it is a new or a continuous project, will be reviewed with an emphasis on the status of the past budget implementation.

Please note that the implementation rate for proposals adopted in the past will be considered as one of the criteria in the evaluation of applications.

Please also note that the allocation amounts may be reduced due to limited budget.

#### 6. Change of Research Group

(1) If there is a change in the research representative's organization or position, the said researcher must change the registered information on the "Edit User" screen of JROIS website.

(2) If there is a change in research representative, addition or removal of joint research members, or a change in the joint research member's organization or position, action should be taken immediately either by submitting an addition/change form (only in Japanese) through the NIG representative, or the applicant should apply for the addition, removal or change by clicking the "Research organization change/Transfer application" button on the Edit Application screen of JROIS website, and then selecting the application type.

(3) The NIG representative must submit the cancelation form in the event that the joint research is unable to be conducted due to unavoidable circumstances.

## **7. Expenses Provided**

(1) The travel expenses are to be provided by NIG based on the rules of Research Organization of Information and Systems (ROIS). Because the expenses are allocated only to NIG, not to other organizations, they should be claimed through an NIG representative. Accommodation fees of 2,500JPY/night will be provided for those who stay at the NIG guest house, or 8,000JPY/night for those who stay at nearby hotels. (Outside researchers visiting NIG to conduct research should stay at the NIG guest house whenever possible.) Please note that travel expenses may not be fully provided if other business or private site visits are included in the trip.

(2) Research representatives are expected to spend the full amount of the budget as soon as possible. If you are unable to spend the full amount due to unavoidable circumstances, please submit a statement explaining the reason (free format) and return the unspent portion of the budget. Additionally, we request that you contact the Research Promotion Team as soon as it becomes obvious that the budget will not be fully spent.

## **8. Submission of Research Report**

The research representatives are required to fill in the "FOR MEXT Report (at the end of research)" on the Edit Application screen of JROIS by April 30th, 2027, and upload the research report in PDF•DOCX•ZIP format from the same screen for submission.

The research report form can be downloaded from the link below.

<https://www.nig.ac.jp/en/researchers/nig-joint/>

## **9. Publication of Research Result**

You are requested to acknowledge NIG joint research as follows when results based on this research project are published, and submit a copy of papers together with the research report via JROIS.

NIG-JOINT (reference number)

\*Reference number 【serial number + category (A) + year】 , will be issued in the "acceptance notification" which will be sent to the successful applicant.

Example: (Successful applicant : Taro Iden, reference number : 1A2026)

"This work was supported by NIG-JOINT (1A2026) to T. Iden."

## **10. Others**

(1) NIG facilities and common equipment are available to be used for the joint research.

Please refer to the following URL for the available common equipment.

<https://www.nig.ac.jp/en/researchers/equipment/>

(2) If gene recombination and/or animal experiments are planned, NIG representatives are requested to submit an “experiment on gene recombination plan” and/or “experiment on animals plan” application form to the Research Promotion Team after acceptance of the application. As for animal experiments, researchers directly handling experimental animals are requested to apply for an NIG qualification screening and undergo training regardless of their affiliation. We strongly hope that all researchers comply with regulations and conduct the research properly.

(3) Researchers who handle radioisotopes at NIG are requested to register as a radiation worker before using them.

(4) Ownership of intellectual property rights created through joint research at NIG will be considered based on the regulations of ROIS employee invention.

(5) NIG assures that private information submitted in the application shall be used only for screening the proposal. When a proposal has been accepted, the name of the research representative, his/her institute and the research project title will be posted on the NIG website and annual reports.

(6) As a general rule, in an effort to simplify procedures NIG does not issue a “business-trip request” form for joint research.

We sincerely ask outside researchers visiting NIG to follow appropriate business trip procedures according to the rules of their affiliated institute.

(7) Principal investigators or co-investigators who require temporary childcare may be eligible to use the temporary childcare services offered by NIG.

(Reference) Gender Equality Promotion Office Website:

<https://sites.google.com/site/nigdanjoenglish/4-day-care>

#### **【Contact Information】**

Research Promotion Team,  
Research Support Office,  
General Affairs and Project Section,  
Department of Administration  
National Institute of Genetics, Research Organization of Information and Systems  
Yata1111, Mishima, Shizuoka, 411-8540 JAPAN  
Phone: +81-55-981-6728  
E-mail: kyodo-mail@nig.ac.jp

## Research Outline

(Updated: May 1st, 2026)

| Department/Center                                      | Laboratory/Division              | Faculty   | Research outline   |
|--|----------------------------------|---|--|
| <b>Department of Informatics</b>                       | <b>Genetic Informatics</b>       | <b>KAWAMOTO, Shoko</b> /Associate Professor   | We are working on research and development of databases and information retrieval systems for the national bio-resource project (NBRP).  |
|  | <b>Genome Evolution</b>          | <b>KUROKAWA, Ken</b> / 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.                   |
|  | <b>Genome Diversity</b>          | <b>MORI, Hiroshi</b> / 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.   |
|  | <b>Biological Networks</b>       | <b>ARITA, Masanori</b> / Professor<br><b>KOSHIMIZU, Shizuka</b> / 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   |
|  | <b>Genome Informatics</b>        | <b>NAKAMURA, Yasukazu</b> / Professor   | Intelligent information technology for structural and functional annotations of large-scale nucleotide sequences.  |
|  | <b>Human Population Genomics</b> | <b>KAWAI, Yosuke</b> / 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.   |
| <b>Department of Genomics and Evolutionary Biology</b> | <b>DNA Data Analysis</b>         | <b>IKEO, Kazuho</b> / 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. |

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|  | <b>Plant Genetics</b>               | <b>SATO, Yutaka</b> / 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. |
|  | <b>Evolutionary Genetics</b>        | <b>AKASHI, Hiroshi</b> / 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.   |
|  | <b>Ecological Genetics</b>          | <b>KITANO, Jun</b> / Professor<br><b>YAMASAKI, Yo</b> / Assistant Professor                   | We use three-spined stickleback fish to investigate the genetic and molecular mechanisms underlying adaptation and speciation.  |
|  | <b>Comparative Genomics</b>         | <b>TOYODA, Atsushi</b> / 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.  |
|  | <b>Molecular Life History</b>       | <b>KURAKU, Shigehiro</b> / Professor<br><b>KAWAGUCHI, Akane</b> / 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.   |
| <b>Department of Gene Function and Phenomics</b> | <b>Symbiosis and Cell Evolution</b> | <b>MIYAGISHIMA, Shin-ya</b> / 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.  |
|  | <b>Plant Cytogenetics</b>           | <b>NONOMURA, Ken-ichi</b> / Professor<br><b>Harsha Somashekar</b> / Assistant Professor       | We aim to elucidate the regulatory system of plant germ-cell development and chromosome kinetics, mainly using seed-sterile rice mutants.   |
|  | <b>Mammalian Neural Circuits</b>    | <b>IWASATO, Takuji</b> / Professor<br><b>MATSUMOTO, Naoyuki</b> / Project Assistant Professor | We are studying molecular and cellular mechanisms of neuronal circuit development in the mammals, using mouse genetics and other related methods.   |

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|   | <b>Neurobiology and Pathology</b> | <b>ASAKAWA, Kazuhide</b> / Associate Professor<br><b>NAKAJO, Haruna</b> / 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.   |
|   | <b>Multicellular Organization</b> | <b>SAWA, Hitoshi</b> / Professor<br><b>NEGISHI, Takefumi</b> / 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> .  |
|   | <b>Brain Function</b>             | <b>HIRATA, Tatsumi</b> / Professor   | Development of the vertebrate nervous system with special focus on neuronal network formation.  |
|   | <b>Mouse Genomics Resource</b>    | <b>KOIDE, Tsuyoshi</b> / 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.  |
|   |                                   | <b>MATSUMOTO, Akihiro</b> / 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.   |
| <b>Department of Chromosome Science</b> | <b>Genome Dynamics</b>            | <b>MAESHIMA, Kazuhiro</b> / 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. |
|   | <b>Cell Architecture</b>          | <b>KIMURA, Akatsuki</b> / Professor<br><b>TORISAWA, Takayuki</b> / 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.   |
|   | <b>Chromosome Biochemistry</b>    | <b>MURAYAMA, Yasuto</b> / Associate Professor<br><b>KUROKAWA, Yumiko</b> / 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.  |

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|  | <b>Physics and Cell Biology</b>          | <b>SHIMAMOTO, Yuta</b> / Associate Professor<br><b>TANAKA, Masahito</b> / 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.                 |
|  | <b>Molecular Cell Engineering</b>        | <b>KANEMAKI, Masato</b> / Professor<br><b>YAMAGUCHI, Kosuke</b> / 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.  |
|  | <b>Invertebrate Genetics</b>             | <b>SAITO, Kuniaki</b> / Professor<br><b>MIYOSHI, Keita</b> / Assistant Professor              | We are conducting research on the physiological significance of the epitranscriptome and human rare diseases, using <i>Drosophila melanogaster</i> as a model.   |
| <b>Department of Frontier Research</b>           | <b>Gene Quantity Biology</b>             | <b>SASAKI, Mariko</b> / 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. |
|  | <b>Plant Evolution</b>                   | <b>FUKUSHIMA, Kenji</b> / 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.  |
|  | <b>Theoretical Ecology and Evolution</b> | <b>YAMAMICHI, Masato</b> / Associate Professor  | We combine mathematical models, microcosm experiments, and meta-analyses to investigate complex feedbacks between rapid evolution and ecological processes.  |
| <b>Chemical and Radioisotope Management Unit</b> |  | <b>ANDACHI, Yoshiki</b> / 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.  |

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| <b>BioData Science Initiative(BSI)</b>  | <b>Database Division for Life Science (DBCLS)</b>          | <b>GOTO, Susumu</b> / Professor<br><b>KATAYAMA, Toshiaki</b> / Project Professor<br><b>KAWASHIMA, Shuichi</b> / Project Associate Professor<br><b>KAWASHIMA, Minae</b> / Project Associate Professor<br><b>KIM, Jin-Dong</b> / Project Associate Professor<br><b>HATANAKA, Hideki</b> / Project Associate Professor<br><b>FUJIWARA, Toyofumi</b> / Project Associate Professor<br><b>MINOWA, Mari</b> / Project Associate Professor<br><b>MORIYA, Yuki</b> / Project Associate Professor<br><b>YAMAMOTO, Yasunori</b> / Project Associate Professor<br><b>CHIBA, Hirokazu</b> / Project Assistant Professor<br><b>HOSODA, Masae</b> / Project Assistant Professor<br><b>MORIOKA, Masaki</b> / 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. |
| <b>Integrated Research Core(NIGiRC)</b> | <b>Advanced Genomics Division Sequencing Laboratory</b>    | <b>TOYODA, Atsushi</b> / Project Professor<br><b>GOTOH, Yasuhiro</b> / 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.   |
|   | <b>Advanced Genomics Division Data Analysis Laboratory</b> | <b>NOGUCHI, Hideki</b> / Project Professor<br><b>MORI, Hiroshi</b> / Associate Professor<br><b>KOSUGI, Shunichi</b> / Project Associate Professor<br><b>KRYUKOV, Kirill</b> / Project Associate Professor<br><b>TERAUCHI, Makoto</b> / 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.  |