Call for Application of "J-GlycoNet Joint Research Program" in FY2025

The following three institutions are accredited by the Minister of Education, Culture, Sports, Science and Technology in Japan as The Glyco Science Network, J-GlycoNet; that is, J-GlycoNet is one of the official Joint Usage/Research Centers of Japan:

- 1.Institute for Glyco-core Research (iGCORE) in Tokai National Higher Education and Research System (THERS),
- 2.The Exploratory Research Center on Life and Living Systems (ExCELLS) in The National Institutes of Natural Sciences (NINS)
 - 3. Glycan and Life Systems Integration Center (GaLSIC) at Soka University,

The J-GlycoNet cooperative network accelerates life science research through advanced glycan research capabilities and offers comprehensive research support to both glycan specialists and non-specialists through a co-creative research platform and joint projects.

1. Introduction

In all living organisms, there are three essential bio-chains of molecules: genomes (nucleic acids), proteins, and glycans. However, despite the critical roles of glycans, they have received limited attention both socially and academically. This has created a barrier that has forced researchers in other fields to avoid studying glycans.

J-GlycoNet aspires to break down this barrier, opening the door to a new era of glycoscience, promoting multidisciplinary research, and advancing life sciences. J-GlycoNet offers collaborative research opportunities with host faculty members belonging to J-GlycoNet, leveraging our research resources, know-how, and state-of-the-art facilities to support cutting-edge research on glycans.

2. Joint Research Program

1. Normal Type (maximum grant amount: 200,000 JPY)

This is a bottom-up and proposal type of collaborative research based on free ideas and approaches, which will be the germ of a new fusion research area of glycans. We invite applications for a wide range of research themes involving glycans and support a variety of research in the life sciences and related fields.

2. Topic proposals Type (maximum grant amount: 500,000 JPY)

This is a joint research project in which the applicant joins a research team with J-GlycoNet researchers from two or more institutions to conduct research on a research theme proposed by J-GlycoNet (see below).

The aim is to develop diverse life sciences from glycoscience through multifaceted perspectives, to promote human resource exchange, and to develop into original research.

*The research team will be composed of researchers from two different facility, so please decide on a main research area and a secondary research area, and consult with the host researcher before applying for this program.

[Theme]

- 1. Research on molecular mechanisms of diseases involving glycans
- 2. Basic Research on biological function of Glycans
- 3. Research on various glycan-related molecules
- 4. Development of new technologies for structural analysis of glycans
- 5. Development o resources or glycan analysis using information science

3. Collaborative Fellow (CF) Cooperative Type (maximum grant amount: 300,000 JPY)

This is a cross-disciplinary fusion type research conducted by researchers in various fields, Collaborative Fellows (CFs), and J-GlycoNet researchers.

We aim to create a new life science by connecting and collaborating with various glycotechnologies, know-how, facilities, and human networks possessed by J-GlycoNet and CF.

*CF will be the applicant, team up with researchers in other fields, and set up a J-GlycoNet host researcher for the application.

4. Deciphering human glycan information type (maximum grant amount: 500,000 JPY)

This type will promote basic or applied fusion research in collaboration with the Human Glycome Atlas Project (HGA).

*The "Human Glycome Atlas Project" (https://human-glycome-atlas.org/) is a large-scale academic frontier promotion project of the Ministry of Education, Culture, Sports, Science and Technology (MEXT).

3. Initiatives for Internationalization

For research in which overseas co-researchers are invited to Japan in the research plan, additional support will be provided for travel expenses for overseas travel in addition to the amount provided for the above joint research. (Maximum 200,000 JPY per project)

*Please consider the actual travelers and travel plans at the planning stage before applying. If the planned travel is not carried out, this aid will be refunded in principle.

Host Researchers

The following three institutes will be the host institutions.

Please refer to https://j-glyconet.jp/about/member/ (or the attached table) for a list of research themes, etc. of researchers affiliated with these institutes, and use it to select a joint researcher and institute.

Before applying, the applicant should have a thorough discussion with the desired host researcher or the J-GlycoNet Research Promotion Office (https://j-glyconet.jp/consult/) about the purpose and plan of the research project. Depending on the content of the application, we may adjust a more appropriate research institute or host researcher.

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Use of research funds

The funds can be used for travel and supplies necessary to conduct the joint research.

Research expenses will not be paid directly to the applicant. After the research grant is approved, the Promotion office of the host institution will contact you regarding the research expenses, so please follow the instructions and use the funds appropriately.

6. Eligibility requirements

Teachers and researchers affiliated with national, public, and private universities, public research institutions, or their equivalents.

7. Research period

April 1, 2025 - March 31, 2026

8. Application Procedure and Application Period

- (1) Before applying, please arrange a meeting with the J-GlycoNet Research Promotion office or a J-GlycoNet researcher to determine your research partner.
- (2) Please download the application forms from the J-GlycoNet website.
- (3) Applicants are required to obtain approval from the head of the institution they belong to before applying through the "Application Form for Joint Research Opportunity" on the J-GlycoNet website.
- *If you have any questions about the application process or the application, please contact us at the contact information in 16. below.
- **Please submit the application form as a PDF file (up to 5 MB) with the file name [your affiliation/representative's name].

Application deadline: February 10, 2025

9. Selection

Applicants will be notified of the selection results by April 2025 (tentative) after deliberation and decision by the J-GlycoNet.

Applicants will be notified of the results of the selection process by April 2025 (tentative).

10. Acknowledgements and publications

The performance of J-GlycoNet is evaluated through the number and quality of publications that are supported by the J-GlycoNet Joint Research Program. Therefore, it is requested that research papers reporting on results produced from J-GlycoNet joint research clearly accredit this joint research program in the acknowledgements as shown below. In addition, please send a PDF file of the published paper to j-glyconet@igcore.nagoya-u.ac.jp, the J-GlycoNet Research Promotion Office.

Examples:

- This work was supported by the joint research program of the J-GlycoNet cooperative network, which is accredited by the Minister of Education, Culture, Sports, Science and Technology, MEXT, Japan, as a Joint Usage/Research Center.
- This work was performed using the facilities of the J-GlycoNet cooperative network, which is accredited by the Minister of Education, Culture, Sports, Science and Technology, MEXT, Japan, as a Joint Usage/Research Center.

11. Research presentation meeting

The applicant are required to participate in the research presentation meeting to be held by J-GlycoNet. Details will be announced separately.

12. Report of research results

The applicant is required to submit a report of the research results within two weeks (by April 30th) after the end of the research period (March 31st). The report will be posted on online, such as on the J-GlycoNet website.

13. Intellectual Property Rights

In principle, the handling of intellectual property rights shall conform to the handling standards for intellectual property rights of the respective J-GlycoNet Institution involved in the research project (see appendix).

14. Security Export Control

When providing research equipment, samples, technical guidance, etc. overseas, or conducting joint research with overseas researchers, the application may be required to follow the procedures under the security export control regulations of the host researcher's institution.

15. Gender Equality

Please take gender equality into consideration when planning and conducting joint research.

16. Personal Information

Personal information provided through the call for proposals will be used only for the purpose of reviewing proposals. Please be aware that information of proposals funded, such as the name of the applicant, affiliation, title of research project, etc., may be published in publicity materials and on the J-GlycoNet website.

17. Contact Information

For inquiries, please contact the J-GlycoNet Research Promotion Office (Contact: Dr. Go).

E-mail: j-glyconet@igcore.nagoya-u.ac.jp