

“Program of Developing Human Resource for Rhizome-based Research”

Program Introduction

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The excellent doctoral students qualified by the project manager will be able to **devote themselves to their own liberal, challenging, and interdisciplinary research** with the portability of changing their affiliation, along with the **support funds and career development contents (cultivation of internationality, cultivation of interdisciplinarity, career development, acquisition of transferable skills, internship, etc.)**.

次世代研究者挑戦的研究プログラムは、
博士後期課程学生による挑戦的・融合的な研究を支援し、
優秀な博士人材が様々なキャリアで活躍できるように
研究力向上や研究者能力開発を促す事業です。



Background of the “Program of Developing Human Resource for Rhizome-based Research”

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- “Developmental Transmission of Traditions”
from Osaka City Univ. and Osaka Pref. Univ.
 - City facing a variety of challenges: OSAKA
 - Contribute to global society through solutions to local and social issues
 - Development and utilization of technology innovations based on human behavior patterns
 - Cultivate and rediscover the city's social and cultural resources
 - Enhance the city's new attractiveness (Branding)
 - The need for breakthrough power to invite Japanese society, with its strong sense of stagnation, to a new stage
 - Osaka Metropolitan University (OMU)
 - **Aiming to contribute to society in a way that only a public university rooted in the community can**

Philosophy and Objectives of the “Program of Developing Human Resource for Rhizome-based Research”

Fundamental Philosophy: “To create a city is to nurture people”

The goal of the program is to create new knowledge and cultivate Convergence of Knowledge, and to address all research issues that will lead global society through the solutions of regional and social issues.

- Research contributing to the resolution of social issues
- Research creating a leading-edge complex research field
- Research contributing to the creation of a future society

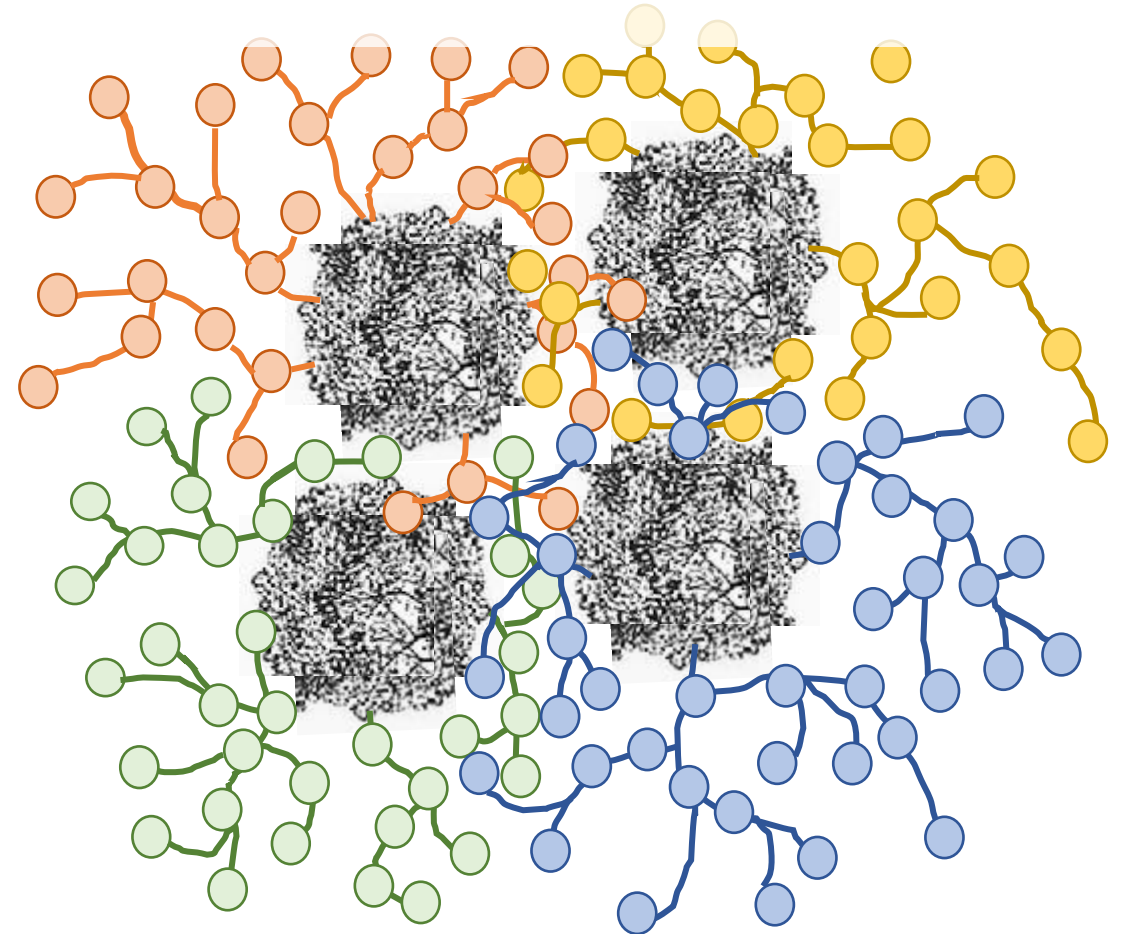
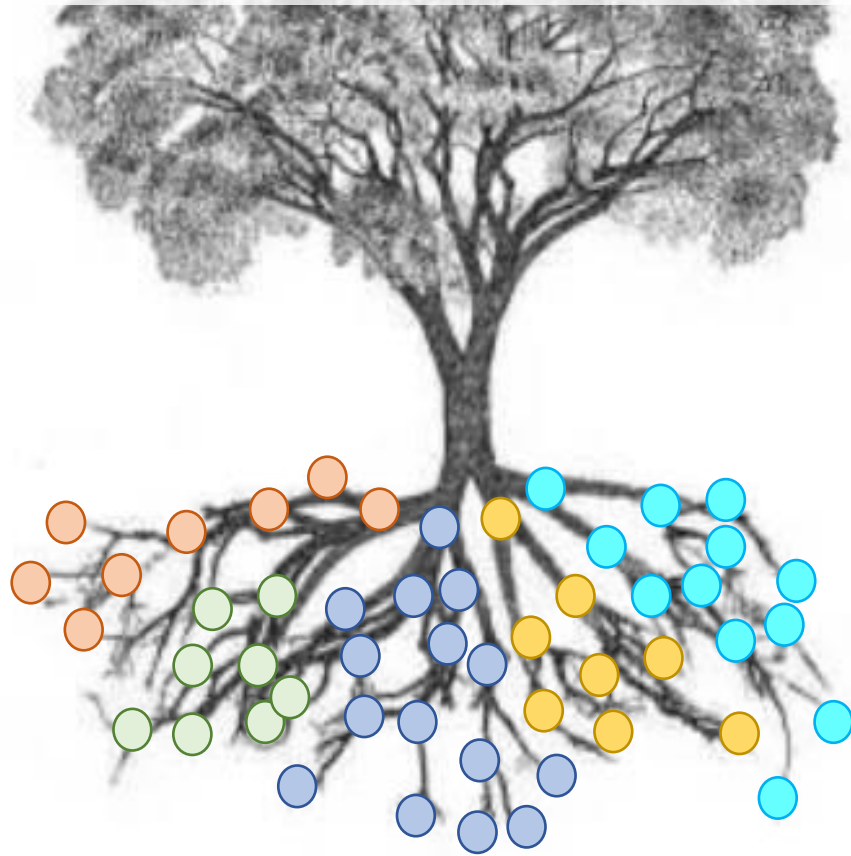
Any research encompassed by these integrated issues is eligible.

[Vision to aim for]

Nurturing students who have the strong will and research vision to contribute to the creation of leading research and a future society by utilizing their multidisciplinary expertise

Rhizome

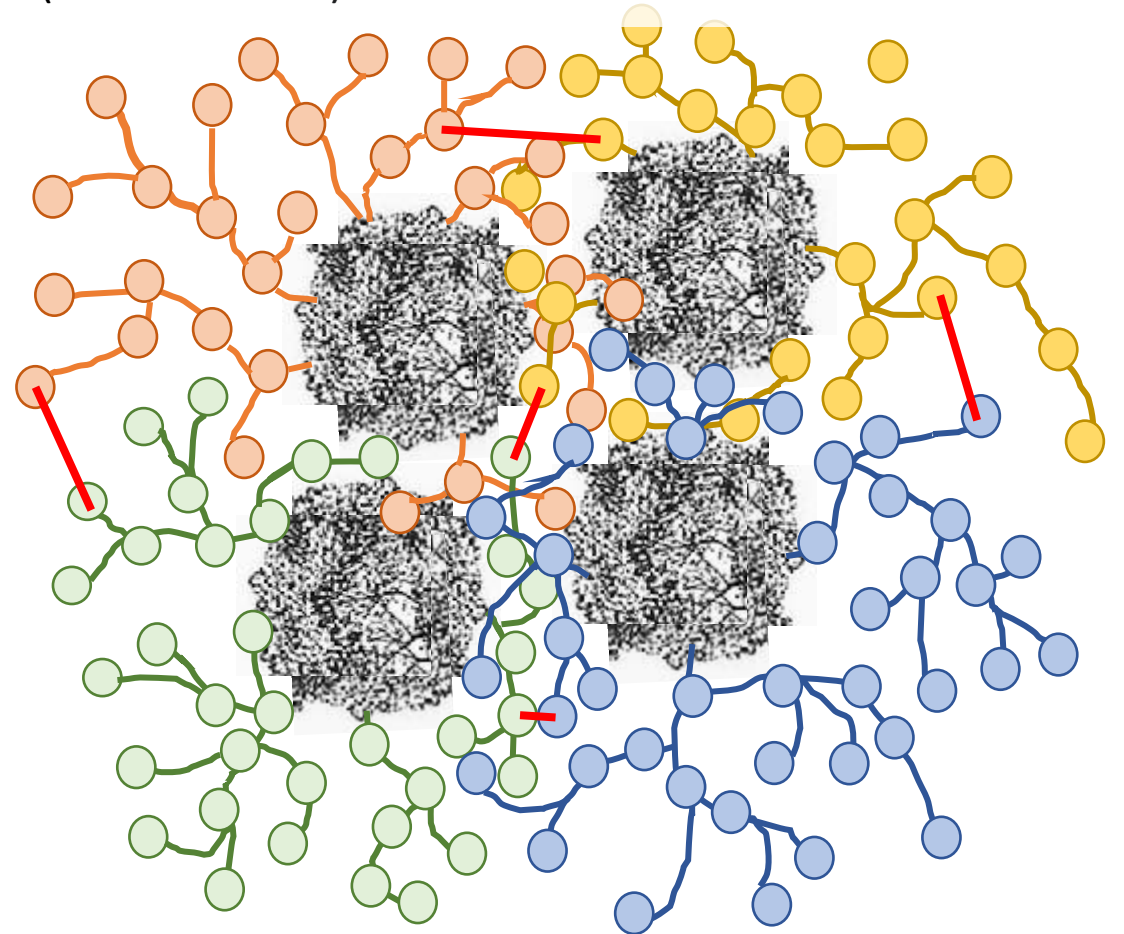
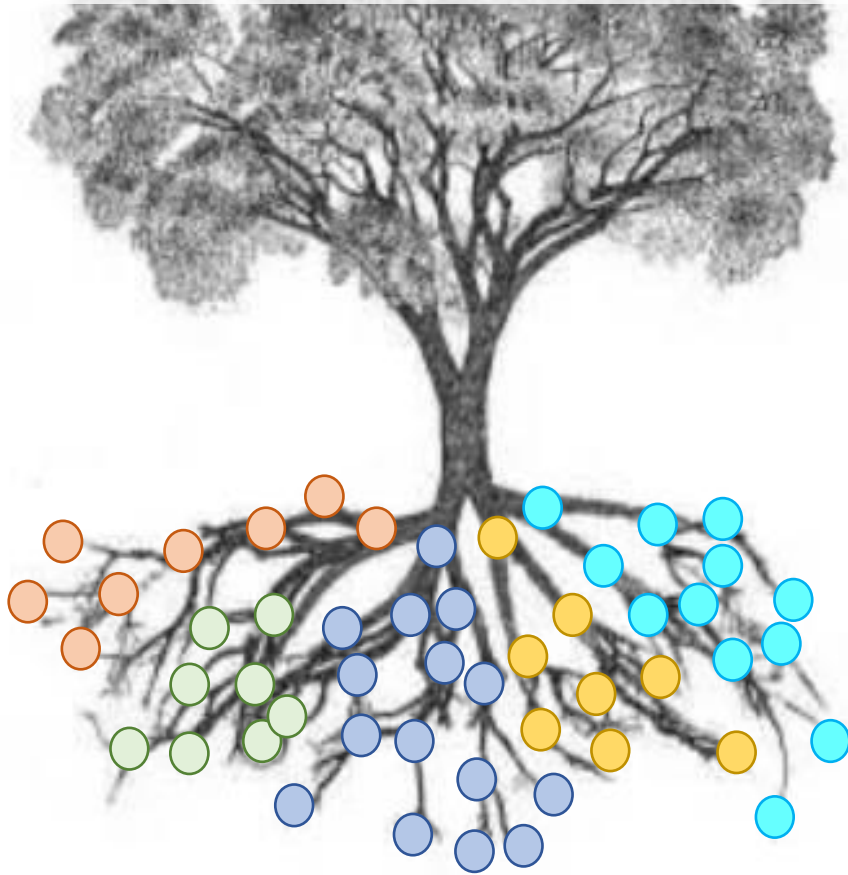
A concept that expresses the way in which dissimilar things that are not related to each other are connected not in a hierarchical relationship, but in a transversal, horizontal relationship.



Rhizome

“There is no point or position in the rhizome as found in structures, trees, roots, etc. There are only lines.”

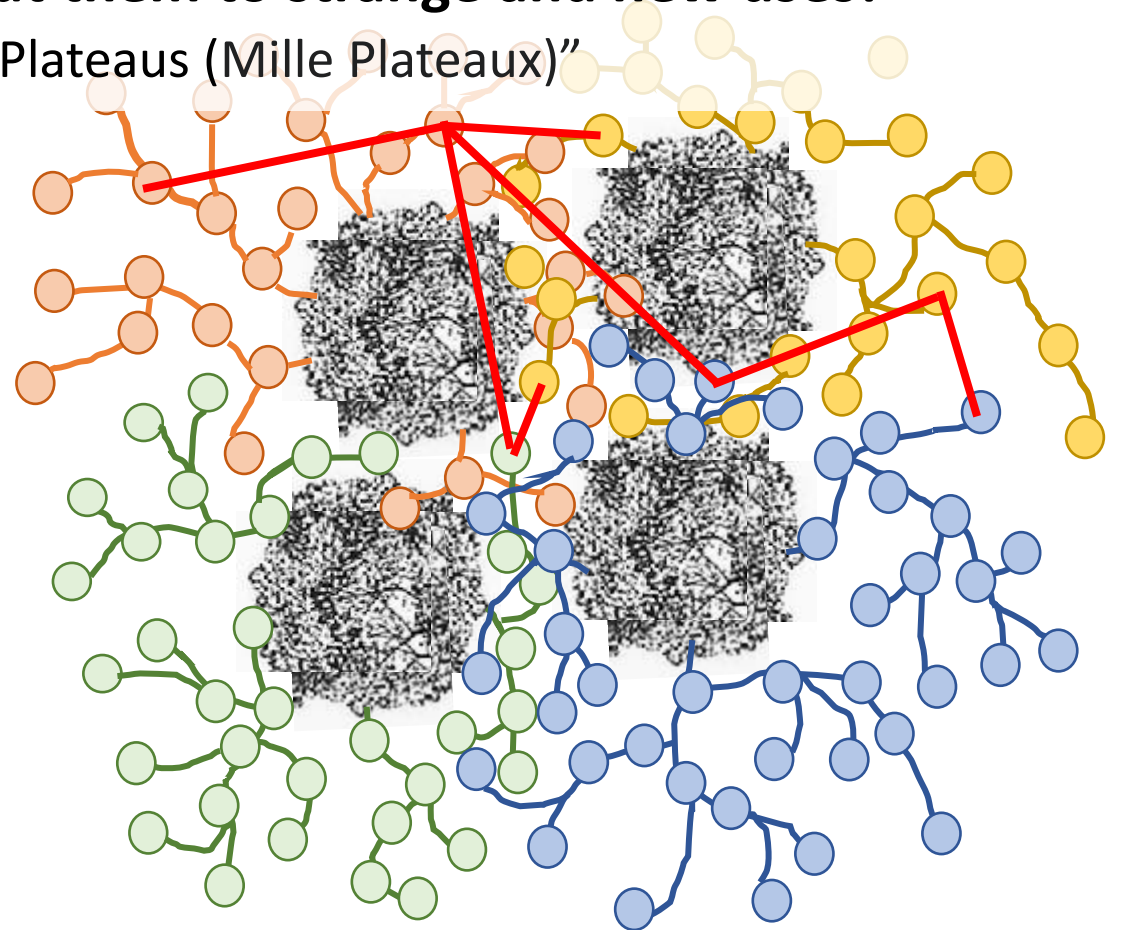
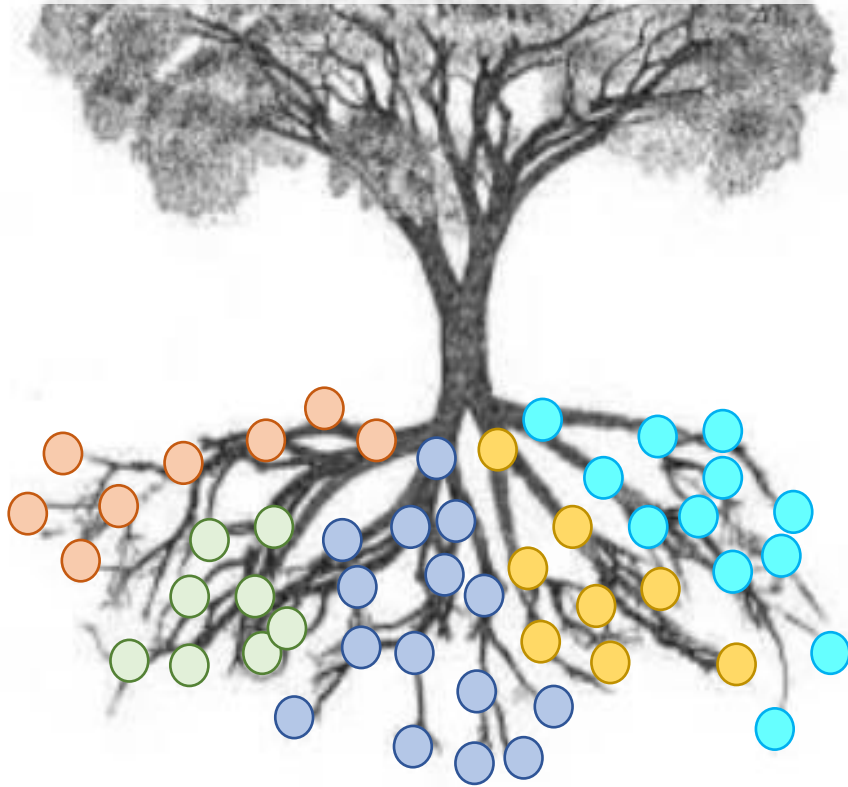
Gilles Deleuze, Pierre-Félix Guattari: “A Thousand Plateaus (Mille Plateaux)”



Rhizome

“To be rhizomatic means to produce stems and fibers that look like roots, or better yet, to produce stems and fibers that invade the trunk and become connected to those roots, and which do not decline to put them to strange and new uses!”

Gilles Deleuze, Pierre-Félix Guattari: “A Thousand Plateaus (Mille Plateaux)”



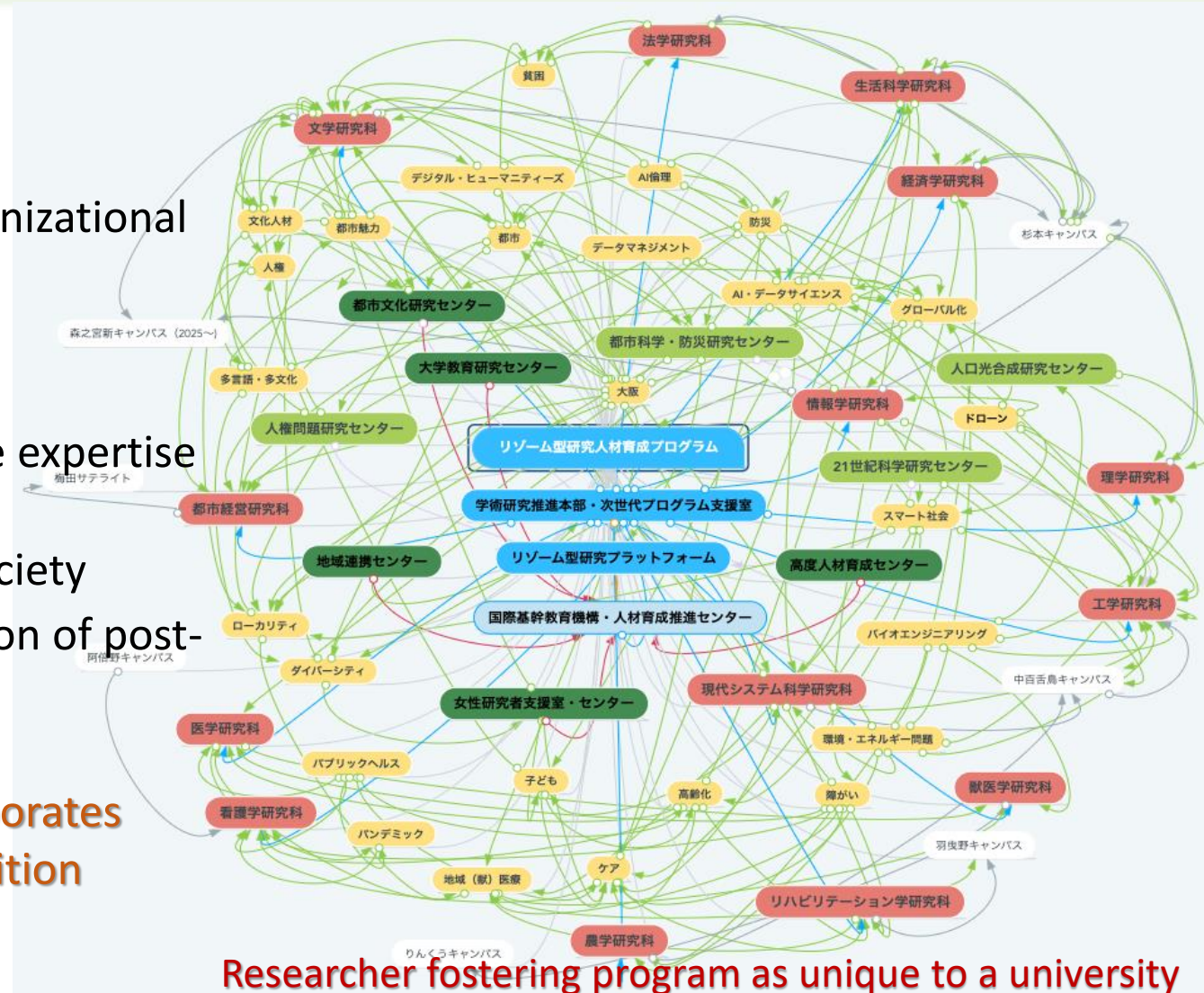
Vision of Fostering "Rhizome-type" Doctoral Students

Researcher to foster

- **Deepen "Knowledge", create diverse "Knowledge"**
 - From hierarchical towards Rhizome-type organizational structure and thinking process
- **Aggressive acquisition of "Convergence of Knowledge"**
 - Promoting the organic combination of diverse expertise and resources
 - More assured return of research results to society
 - Academic and research activities in anticipation of post-degree activities

⇒ **Foster Rhizome-type Researcher**

Foster researchers who can plan research that incorporates the expertise of the associate graduate school in addition to research projects that make use of the expertise cultivated in your main graduate school.



Sophistication we expect to students

Sophistication we expect to students

- To understand the position of one's own research in society
- Strong intellectual curiosity and desire and diverse perspectives
- Willingness to cultivate an international perspective
- Future contribution to society

Wide range of issue settings

- Research that contributes to solving social issues
- Research that creates cutting-edge research areas
- Research that contributes to the creation of future society

The program covers all research areas including above and will support those who are actively engaged in deepening and organic combination of expertise without being bound by the framework of the existing graduate school.

Application Requirements

- Persons who plan to apply or have applied for doctoral course (3-year or 4-year doctoral course) at the Graduate School of Osaka Metropolitan University (OMU) for admission in April 2023
- Persons who plan to apply for doctoral course (3-year doctoral course) at the Graduate School of OMU for admission in October 2023
- Doctoral students who enrolled in April 2022 (3-year course) or in April 2021 (4-year course)

However, the following students (as of support starting date) are excluded:

- Students who have been selected as a Research Fellowship for Young Scientists (DC) of the Japan Society for the Promotion of Science (JSPS)
- Foreign students supported by the Japanese Government (Japanese Ministry of Education, Culture, Sports, Science, and Technology [MEXT]) Scholarship Program
- International students who receive scholarships and/or other support from their home country
- Working students who have been eligible to receive a stable and enough amount of money as living expenses (2.4 million yen / year as a reference) from the company to which they belong.
- Students who are receiving support from the University Fellowship Founding Project for Innovation Creation in Science and Technology (Fellowship Program) or who have applied for the Fellowship Program and have been accepted as prospective students for FY 2023. See Application Guidelines for details.

The understanding of your academic supervisor is essential for the promotion of this program.

Before submitting your application, please obtain the consent of your prospective supervisor.

In addition, please make sure that you fully understand the objectives of this program by reviewing this Program Description materials beforehand before applying.



Projected Number of Students to be Accepted

- Students enrolling in April 2023: About 21 students
- Students enrolling in October 2023: About 2 students
- Students enrolled in April 2022 (3-year course) and 2021 (4-year course):
About 2 students

(1) The maximum period of support is 3 years (4 years in the case of 4-year doctoral course (medical and veterinary doctoral courses) since your admission to doctoral course. If you are enrolled in doctoral course for more than 3 years (or 4 years in 4-year doctoral course), including years before this support starts, you will not be eligible to receive supports after the end of standard years of study. If you take a leave of absence during the support period, supports may be terminated depending on the reasons.

(2) Support starts in April 2023 (October 2023 for students planning to enroll in October 2023).

(3) Support starts for those students who have passed this selection process and will be enrolled in the graduate school listed in “3. Application Requirements” and not in leave of absence as of the support starting date.



Selection Method and Schedule

Judged by the content of the essay (100 points) and an interview based on the essay (100 points)

- | | |
|-----------------------------|---|
| • December 23rd | Application Guidelines and Program Introduction Materials available |
| • January 20th ~ 31st | Application period |
| • February 10th | Notification of interview date and time |
| • February 14th ~ March 2nd | Interview (one day in this period) |
| • March 17 th | Announcement of Acceptance |

• Evaluation Perspectives

- Degree of understanding of the relationship between one's research and the solution of current social problems, the creation of leading research fields, and the creation of a future society
- Degree of awareness of the complex (multidisciplinary) knowledge considered necessary for one's own research and willingness to acquire it.
- Degree of ability to explain one's research to non-specialists
- Degree of understanding of the importance of transferable skills and willingness to acquire them.
- Degree of deliberation regarding post-completion utilization and contribution to society with an awareness of career paths.

Evaluation method

Section	Evaluation Items	Out of evaluation or unevaluable	Greatly below standard	Below standard	Standard	Above standard	Greatly above standard
		score: 0	score: 1	score: 2	score: 3	score: 4	score: 5
Rhizome Program Field-specific	(1) Degree of understanding of the relationship between one's research and the solution of current social problems, the creation of leading research fields, and the creation of a future society	Doesn't understand the importance of one's own research.	Be prepared to understand the importance of one's own research.	Understands the importance of one's own research and be aware of its relationship to solving current social issues, creating lead research fields, and creating a future society.	To be able to explain how one's own research is related to the resolution of current social issues, the creation of leading research fields, and the creation of a future society.	To be able to logically explain how one's own research is related to the solution of current social issues, the creation of leading research fields, and the creation of a future society.	To be able to logically explain how one's own research is related to the resolution of current social issues, the creation of leading research fields, and the creation of a future society, and to be able to explain specific solutions and their effects.
	(2) Degree of awareness of the complex knowledge considered necessary for one's own research and willingness to acquire it.	Doesn't understand the need for compound knowledge.	Be prepared to understand the need for complex knowledge.	Understands the necessity of complex knowledge and be aware of their respective roles in one's own research.	To be able to explain the necessity of complex knowledge for solving current social issues, creating complex research fields, and creating a future society in one's own research.	Be able to logically explain the necessity of complex knowledge for solving current social issues, creating complex research fields, and creating a future society in one's own research.	To be able to explain the relationship between the research results to be obtained and the necessity of complex knowledge for solving the problems of the current society, creating complex research fields, and creating the future society in one's own research.
Common to all fields	(1) Degree of ability to explain one's research to non-specialists	Inadequate knowledge of one's own area of expertise.	Although has knowledge in one's own area of expertise, be unable to give explanations with non-specialists in mind.	Be knowledgeable in one's own area of expertise and be aware of people outside the field, but does not provide explanations that can be fully understood.	To have sufficient knowledge of one's own area of expertise and be able to explain the outline of one's own research so that non-specialists can gain a certain level of understanding.	Have sufficient knowledge of the area of expertise and be able to explain the originality, results, and usefulness of one's own efforts in a way that can be understood by non-specialists.	Be able to comprehensively explain the background of one's own research, the issues, the content of one's efforts, and one's contribution to society in a way that can be understood by non-specialists.
	(2) Degree of understanding of the importance of transferable skills and willingness to acquire them.	Doesn't know any transferable skills.	Has heard of transferable skills, but can't explain them.	Understands transferable skills and recognize their importance.	Awareness of the importance of transferable skills and a willingness to learn for specific skills is evident.	Recognizing the importance of transferable skills and coming up with a concrete plan to learn specific skills.	Be aware of the importance of transferable skills, and is able to plan and conduct activities to learn specific skills with a sense of purpose.
	(3) Degree of deliberation regarding post-completion utilization and contribution to society with an awareness of career paths.	Has never thought about one's career path or future prospects.	Has thought about one's career path, but has not come up with anything concrete yet.	Be aware of one's career path after completing the program and be ready to think about how to play an active role and contribute to society.	Be aware of one's career path after completing the program, and be able to explain in detail how to play an active role and contribute to society.	Be aware of one's career path after completing the program, and be able to explain how to be active and contribute to society, as well as own ideas.	Be aware of one's career path after completing the program, and be able to set specific goals and work toward a concrete image in society.



Application Process

- Where to apply
 - Please fill out and submit the application form provided in the application guidelines.
- Photo
 - Face Photo (above shoulders) (jpg, bmp, png format).
 - Please name the file "**Student ID Number_name.jpg**" (or bmp, png).
- Essay
 - Information about yourself and Research Outline
 - **Your name/ Affiliation (Graduate School, Major)/ Academic Supervisor**
(Make sure to consult with your academic supervisor before you apply)
 - **Subject of Research/ Research Keywords**
 - **Name of associate supervisor and/or associate graduate school (major)**
 - If you have not decided these at the application stage, be sure to enter the name of the expected candidate associate supervisor or the name of the expected associate graduate school, etc.
 - Essay using Form 1
 - Please name the file "**Student ID Number_Name.pdf**" (in .pdf format only).

Application Process

- Essay

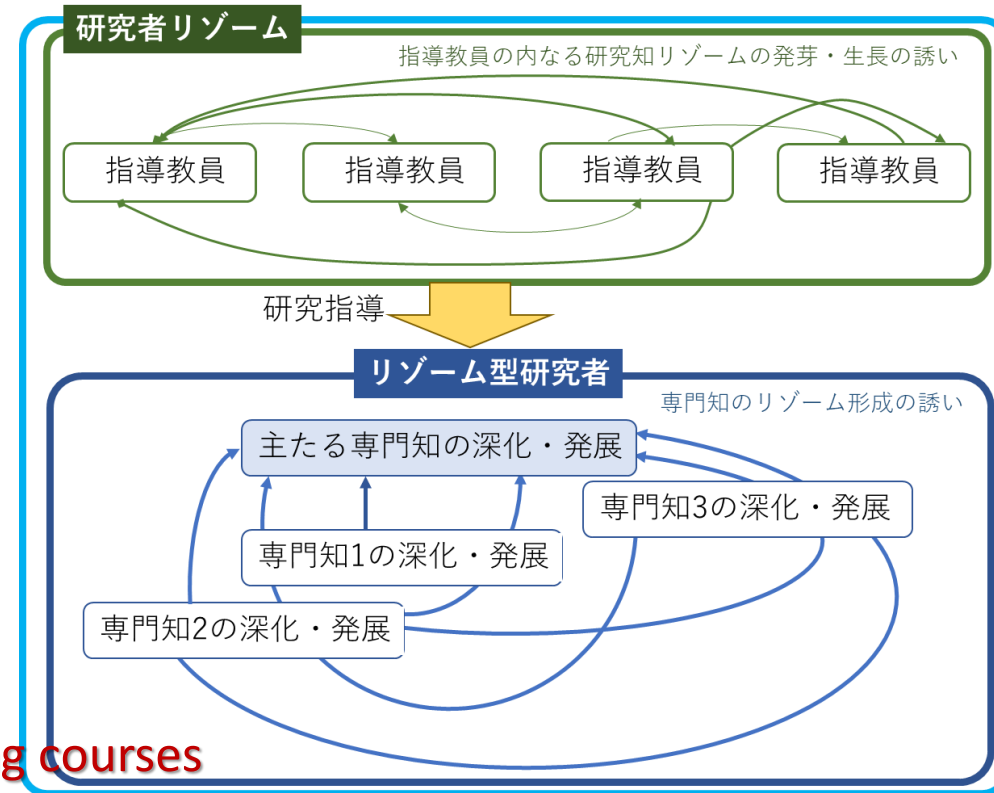
- Please use Form 1

- Instructions

- Describe your research in a concise and easy-to-understand manner, including the **purpose of your research**, **research methods**, **research content**, and the **characteristics and originality of your research** (comparison with previous research, expected impact upon completion of the research, future prospects, etc.). Then, please describe in detail **what and to what extent you intend to clarify by the time you receive your degree**. Those who have applied for JSPS Research Fellowship for Young Scientists (DC1) for FY2023 may attach the application form as supplemental materials.
 - Describe how you think the research results obtained through this program will result in **one or more of the following: (1) solutions to social issues, (2) creating leading research areas, and/or (3) creating a future vision of society** concretely.
 - Describe what kind of “complex (multidisciplinary) knowledge” you think is necessary **in accordance with the purpose of this Rhizome Program** and how you plan to acquire it.
 - Describe **the transferable skills* you plan to acquire** through this program and explain the reasons why you want to obtain these skills and how to acquire them.
 - *Transferable skills in this program include skills that can be widely transferred and applied, such as originality, flexible mindset, rising to challenges, ability to identify research needs, research management skills, data analysis skills, presentation ability, leadership skills to attract people, and other skills that are required in developing innovative human resources.)
 - Describe **your ideas about your career path after completing your doctoral course, and how you would like to be active and contribute to society.**

Student Obligations

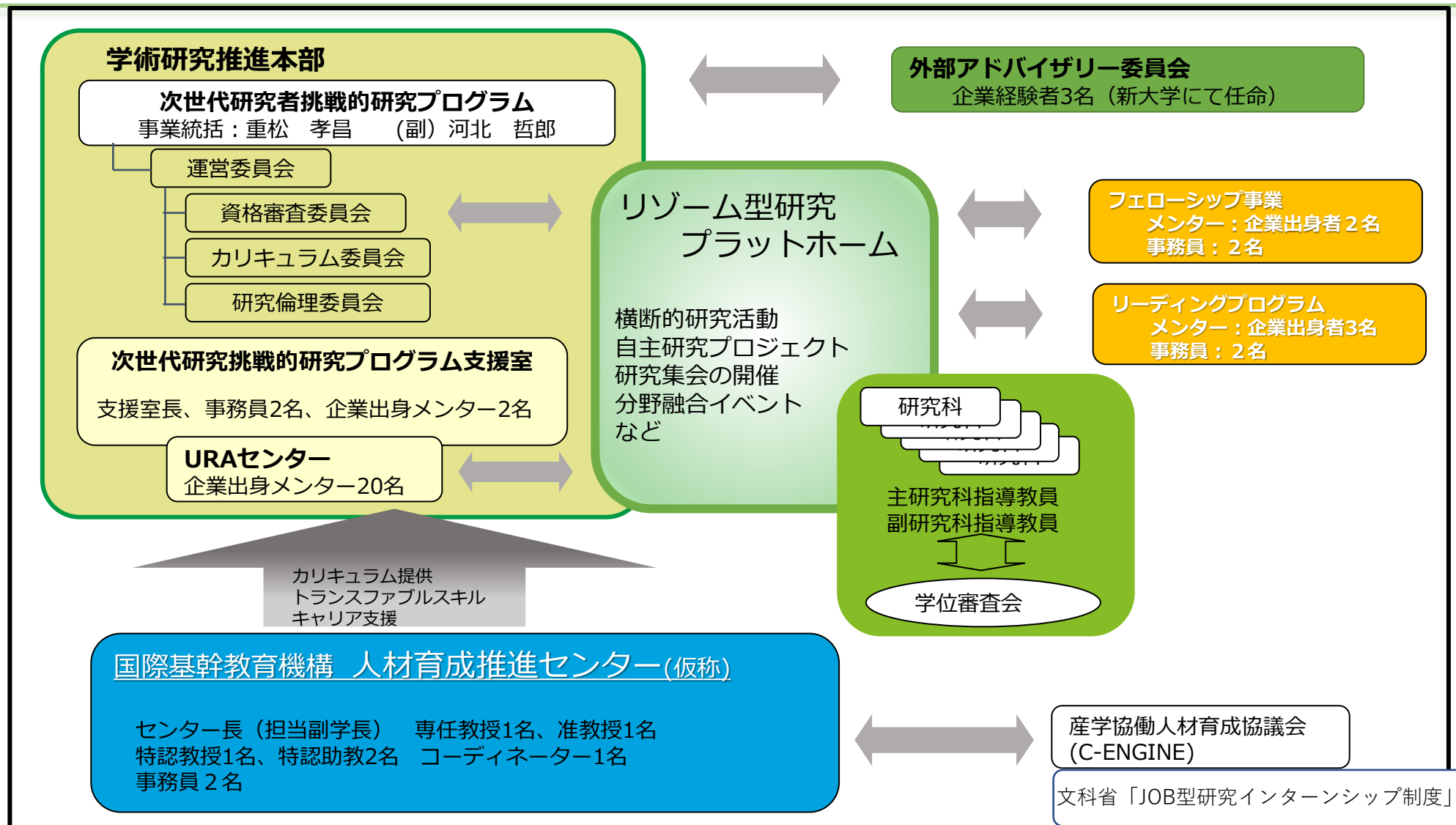
- Determine associate supervisor and promote the research activities of Complex Knowledge
- Attend research progress report meetings (every 6 months) and make progress report
 - Also performed as qualification screening meeting
 - Evaluated by Rhizome promotion supervisors (Main and associate academic supervisors)
- Obtaining a certain number of credits from common education courses at graduate school
 - Career development
- Study abroad or in Japan for approx. 3 to 6 months: Mandatory
 - Career and network development
- Long-term internship (approx. 3 months): Recommended
 - Career and network development
- Research Paper Presentations, Participation in International Conferences
 - Research promotion, career and network development
- Attend JST research integrity training and OMU compliance training courses
- Apply for JSPS Research Fellowship for Young Scientists (DC2)



Details of Support

- Rhizome Research Incentive Payments: JPY 2.2 million yen per year
This includes JPY 2,000,000 for incentive payments (equivalent to living expenses) and JPY 200,000 for research expenses.
- Rhizome Activity Support Fund: application basis (with review)
 - Financial support for studying abroad or in Japan (approximately 3-6 months, up to JPY 1.5 million during support period)
 - Financial support for long-term internship (approximately 3 months)
 - Financial support for travel and participation expenses for international conferences and summer school overseas
 - Financial support for submitting research papers (includes translation costs)
 - Financial support for organizing and managing independent projects
 - Support for career and network development

Program Operation Organization



We look forward to your application!

Q & A Convergence of Knowledge

- **What exactly is Convergence of Knowledge?**

- Diverse “knowledge” gathers to generate “knowledge vitality” that creates new value
 - ✓ “Convergence of Knowledge” is to produce “knowledge vitality”
- “Knowledge” that fuses all “knowledge” including humanities/social sciences and natural sciences

Source: 『「総合知」の基本的考え方及び戦略的に推進する方策 中間とりまとめ』

“Basic concept of “Convergence of Knowledge” and measures to be strategically promoted, Interim Report”

Cabinet Office Secretariat of Science, Technology and Innovation Policy, March 17, 2022

- It should be distinguished from “knowledge” that just crosses multiple fields and “knowledge” that simply combines specialized knowledge from multiple fields.
- New “knowledge” created to solve problems and develop new fields based on “knowledge” cultivated in multiple fields

Q & A Complex (multidisciplinary) Knowledge

- **What exactly is complex (multidisciplinary) knowledge?**
 - “Knowledge” created by utilizing “knowledge” cultivated in one’s own specialized area and “knowledge” cultivated in other areas
 - By incorporating the "knowledge" of a field that has not been found to be related to one's own field of expertise, it will be useful in developing a new field of expertise and returning research results to society.

Q & A Associate Graduate School, etc.

- **What criteria should I use to find an associate graduate school and its supervisor?**
 - Please search based on the following criteria: (1) to make use of research knowledge outside of your own area of expertise in your own research, (2) to seek knowledge that may be necessary to return research results to society, and (3) to make use of it in your own career path.
 - If necessary, we will introduce you to a mentor, so please consult with us.
- **When should I make a decision?**
 - The sooner the better, but please decide by the Research Progress Report Meeting which will be held at the end of first semester after the support starts.
- **Is it possible to designate a graduate school or laboratory of another university as an associate graduate school, etc.?**
 - As long as it complies with the purpose of this program, it is acceptable upon agreement with your main supervisor.

Q & A Associate Graduate School, etc.

- **Can I ask an Associate supervisor who belongs to my same department of the graduate school and whose main theme or field of study is different from that of my main research theme?**
 - As long as it is in accordance with the purpose of this program, it is fine.
- **How much guidance is required from my supervisor at the associate graduate school, etc.?**
 - It is not possible to give a general answer to this question, because the situation may differ from person to person. In some cases, it may develop into joint research, and in other cases, it may be limited to learning the specialized knowledge of the associate graduate school. Please think first of all that it is useful for your own research and career path.
 - Please note that this program does not intend to be a double degree program.

Q & A Study Abroad & Internships

- **Destination, duration, and timing of study abroad: Please take into account your research content, research plan, and career path.**
 - Consult with your main academic supervisor
 - Referral to a mentor if further advice is needed
 - Up to 1.5 million yen will be provided. A plan (period, or multiple plans) must be drawn up within this range.
 - You may study abroad in any country.
 - Note that there are budget constraints from year to year.
- **Please let me know about internship activities.**
 - Consult with your main academic supervisor.
 - Have a strong sense of career path.
 - Consider a wide range of internship opportunities, including companies, government agencies, and universities.
 - Introduce you to a mentor after your support starts if you need an advice

Q & A Research Incentive Payments and Rhizome Activity Support Funds

- **Tax and social insurance treatment**
 - The incentive payment (equivalent to living expenses) included in the Rhizome Research Incentive Payments will be treated as personal miscellaneous income under the tax law. Please follow the necessary procedures, such as filing a tax return, by yourself.
 - If you are a dependent of your supporter (e.g., your parent) and covered by the supporter's health insurance and other benefits, please inform the supporter that the incentive payment is treated as miscellaneous income. Please have the supporter consult with a person in charge at the supporter's workplace regarding your status as a dependent in terms of health insurance, support allowance, etc.
 - Please inquire at the local tax office as well regarding the status as a dependent in terms of income tax purposes.
- **Are there any restrictions on the use of the Rhizome Research Incentive Payments?**
 - Please keep in mind that this project is funded by taxpayers' money and use it effectively.
 - There are no restrictions on the use of incentive payment (equivalent to living expenses).
 - All research expenses are allowed to be used only after the purpose of use is clarified.
- **Are there any restrictions on the use of the Rhizome Activity Support Funds or the number of times they can be used (e.g., for submitting papers, editing English, etc.)?**
 - The budget is limited, but we will support as much as possible.
 - Extremely large expenditures may be taken into account.

Q & A Research Incentive Payments and Rhizome Activity Support Funds

- **Please let me know how I can take a leave of absence.**
 - If it becomes difficult to continue your research activities due to childbirth, childcare, injury or illness, etc., we will determine whether to suspend or extend the period of support according to individual circumstances. Please contact us if you find yourself in such a situation. Please understand that the purpose of this program is to prevent stagnation of research activities due to financial reasons.