"Program of Developing Human Resource for Rhizome-based Research"

Program Introduction

Project Manager: Takaaki Shigematsu
Tetsuo Kawakita

大阪公立大学
Osaka Metropolitan University

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"

- "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**

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

Fundamental Philosophy: **"To create a people is to nurture people"**

The goal of the program is to create new knowledge and cultivate complex 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**
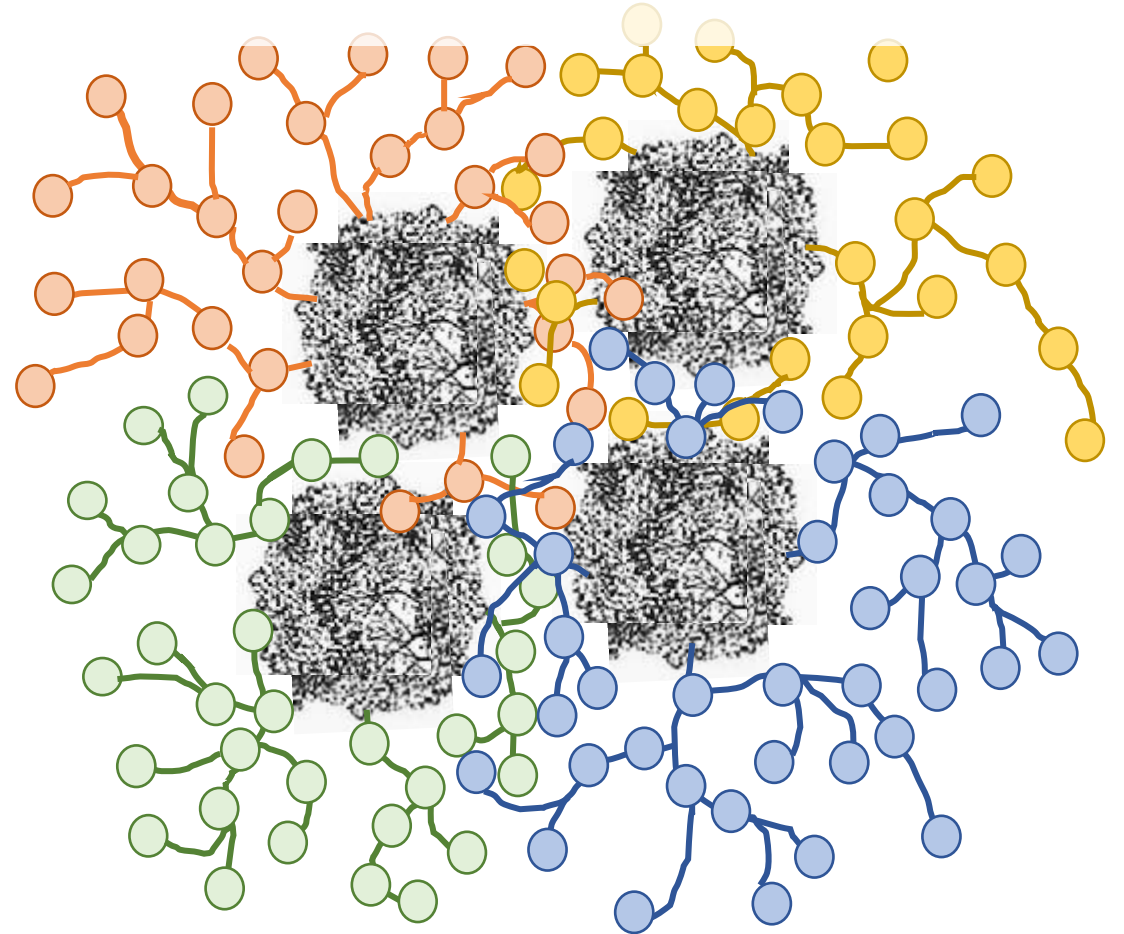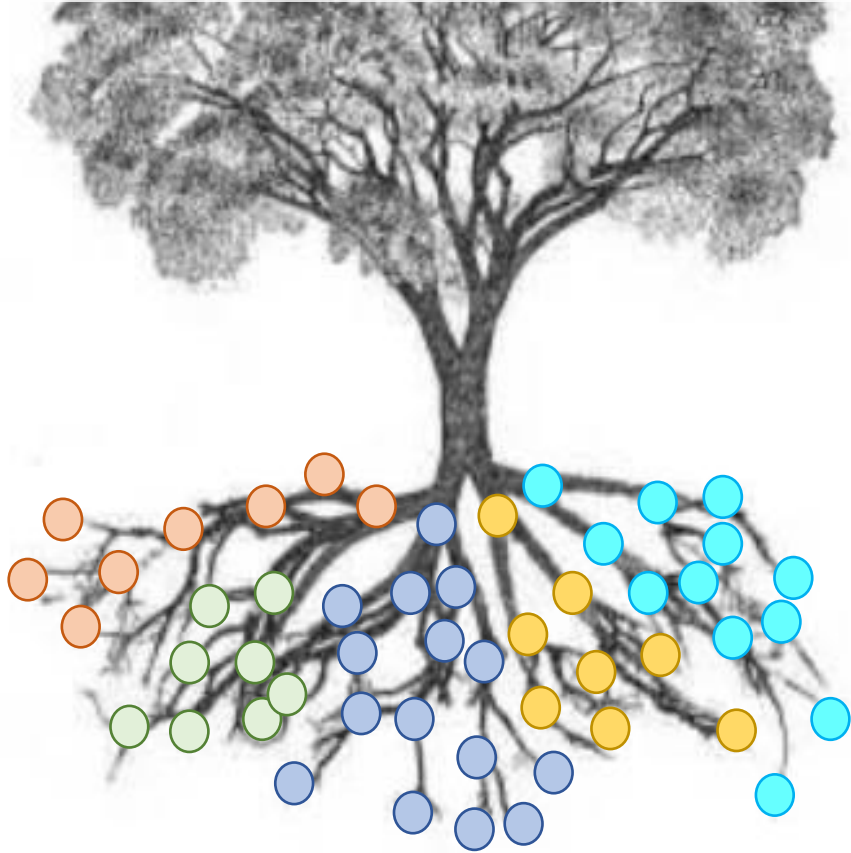
> Any research encompassed by these integrated issues is eligible.

[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
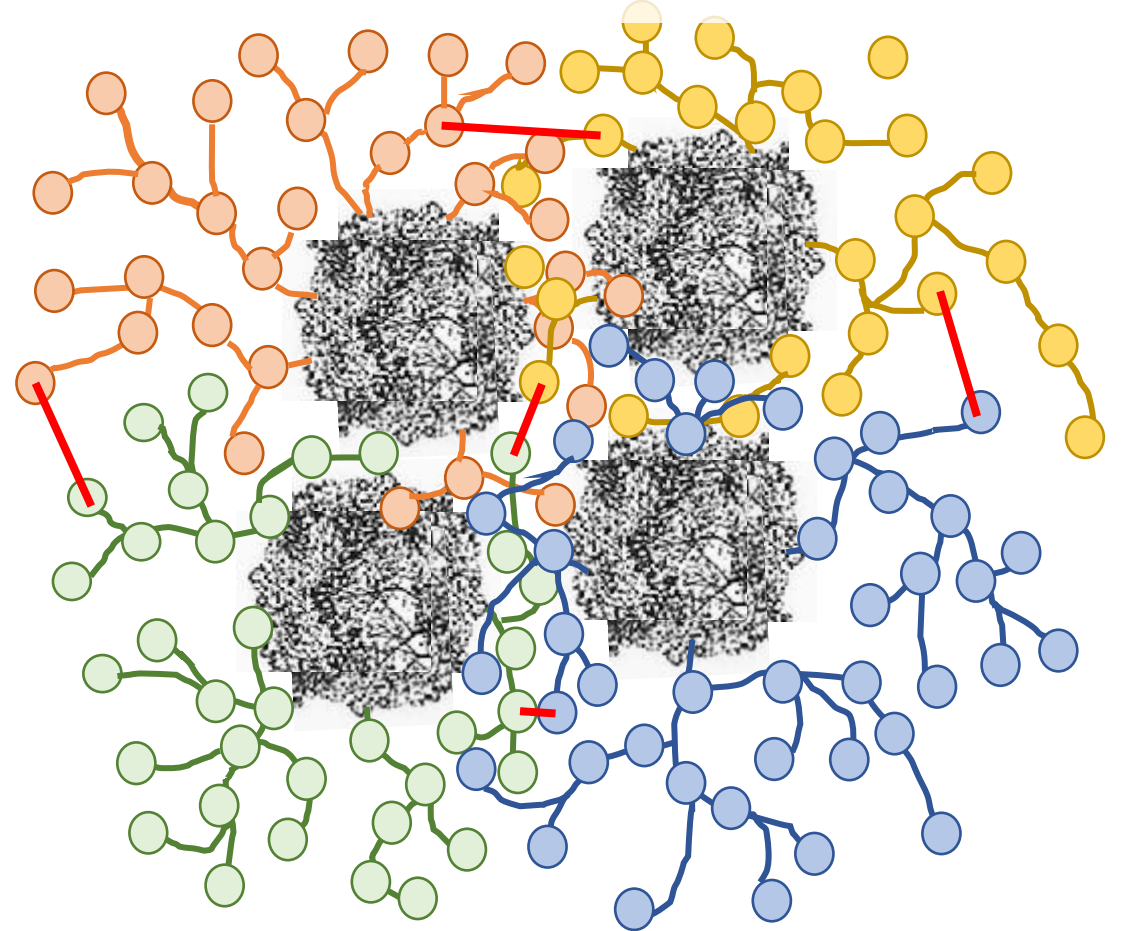
Rhizome

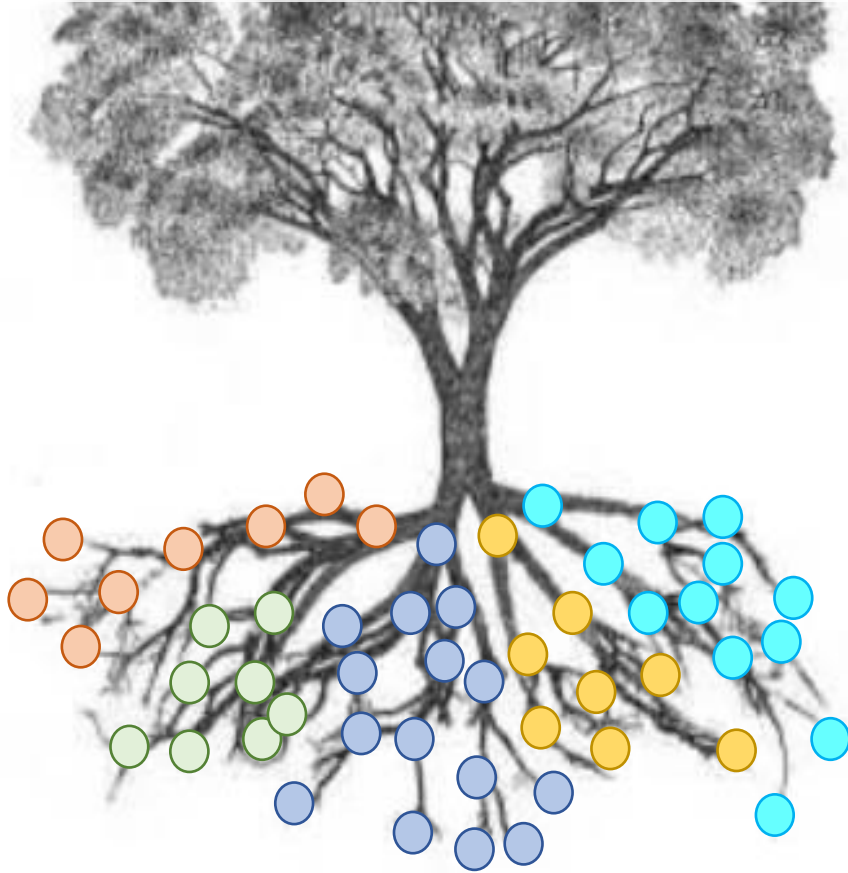A concept that expresses the way in which dissimilar things that are not related to each other are connected not in a hierarchical relationship, but in a transversal, horizontal relationship.

Rhizome

"There is no point or position in the rhizome as found in structures, trees, roots, etc. There are only lines."
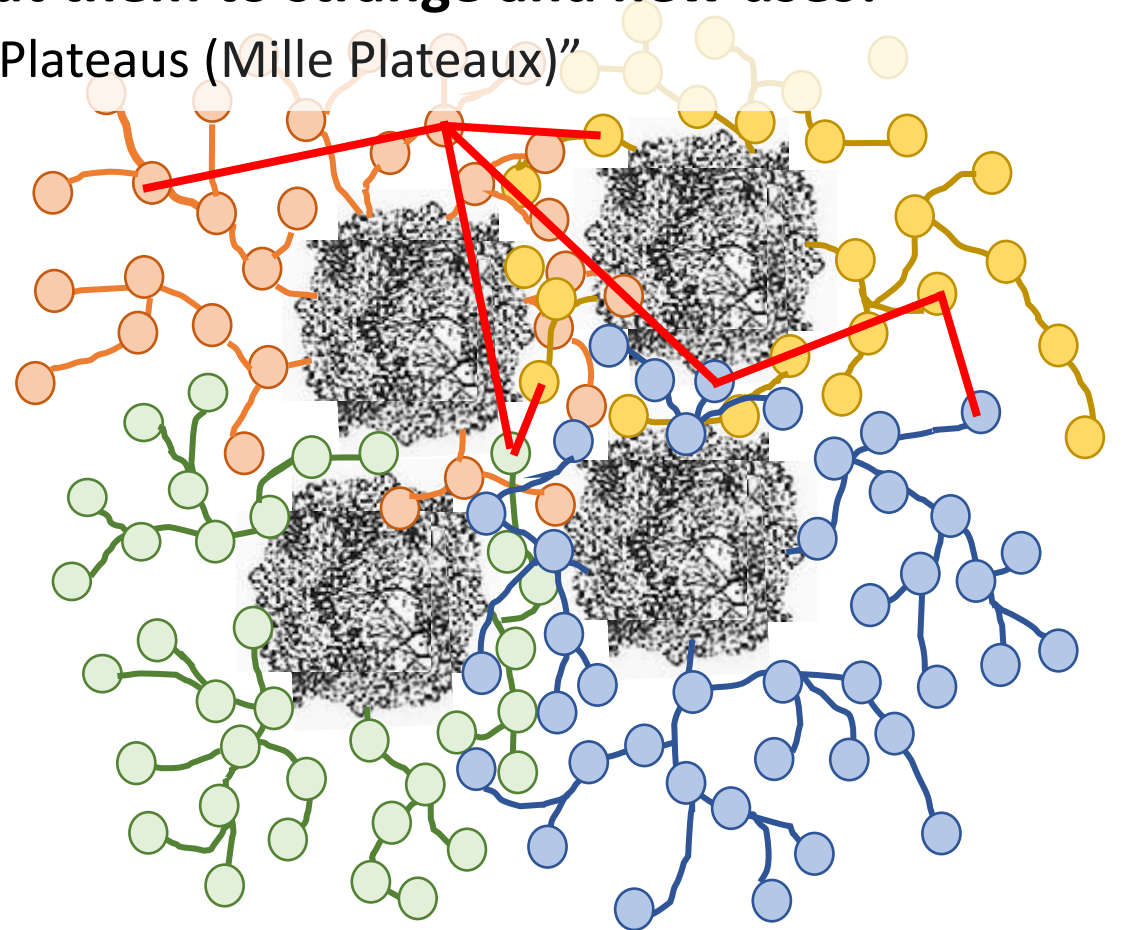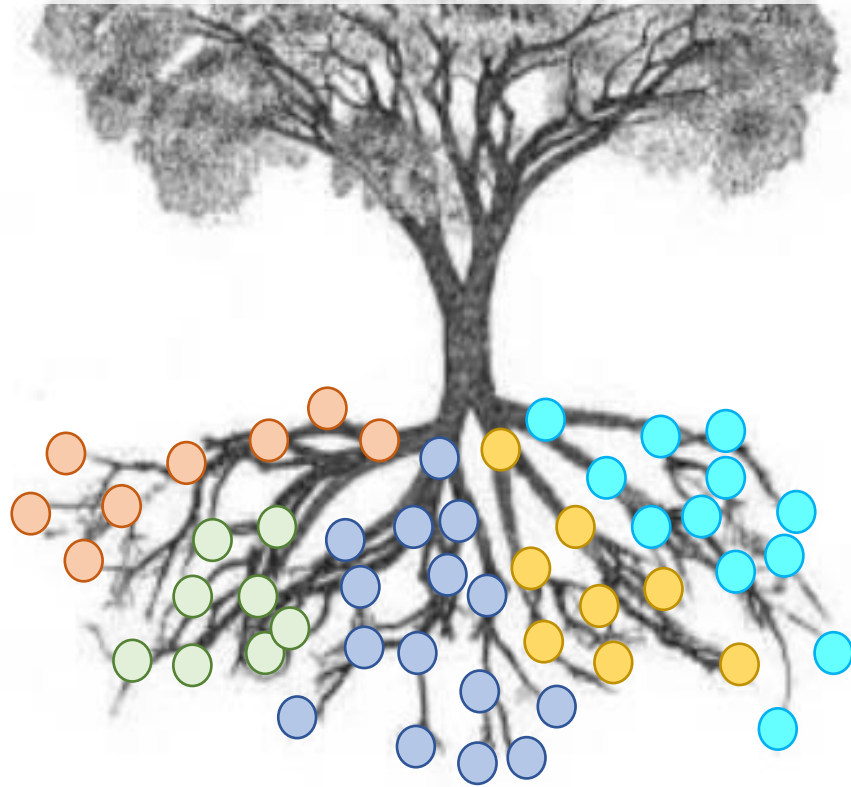Gilles Deleuze, Pierre-Félix Guattari: "A Thousand Plateaus (Mille Plateaux)"

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 "Intelligence",
  create diverse "Intelligence"
    - Hierarchical to Rhizome-type organizational structure
      and thinking process
- Aggressive acquisition of
  "Complex Intelligence" (Complex 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.

Researcher fostering program as unique to a university

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.

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Application Requirements

- Persons who plan to apply for doctoral course (3-year or 4-year doctoral course) at the Graduate School of Osaka Metropolitan University for admission in April 2023

- 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 for admission in October 2022

  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.

  The understanding of your academic supervisor is essential for the promotion of this program.
  <u>Before submitting your application, please obtain the consent of your prospective supervisor.</u>
  In addition, please make sure that you fully understand the objectives of this program by reviewing this program introduction materials beforehand before applying.
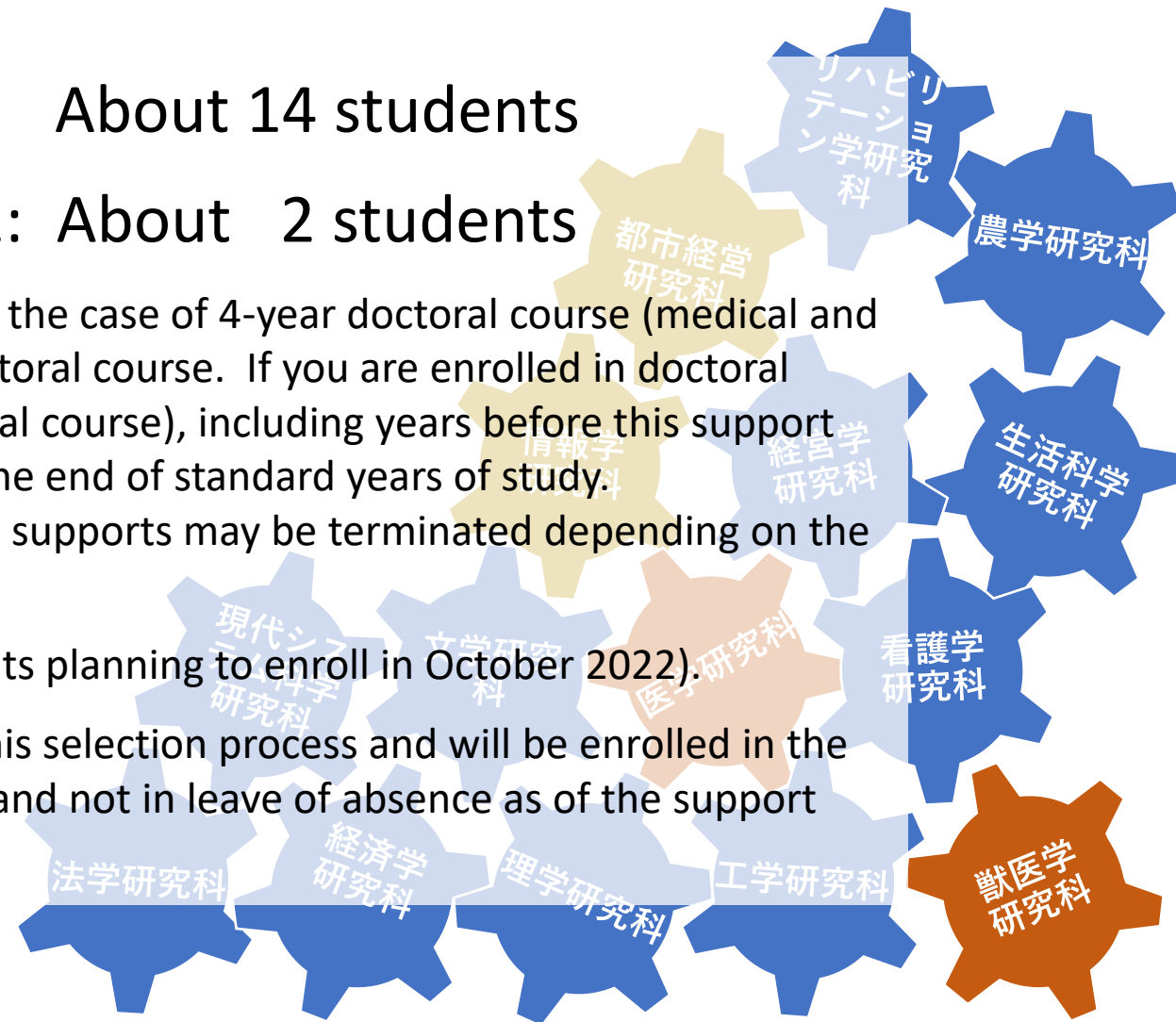
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Number of Students to be Accepted

- Students enrolling in April 2023:　　About 14 students

- Students enrolling in October 2022:　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 2022 for students planning to enroll in October 2022).

(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)

- June 15th — Application Guidelines and Program Introduction Materials available
- July 4th ∼ 11th — Application period
- July 22nd — Notification of interview date and time
- July 24th ∼ Aug. 5th — Interview (one day in this period)
- September 2nd — 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 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.

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Evaluation method

Section	Evaluation Items	Out of evaluation or unevaluable score: 0	Greatly below standard score: 1	Below standard score: 2	Standard score: 3	Above standard score: 4	Greatly above standard 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.

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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).

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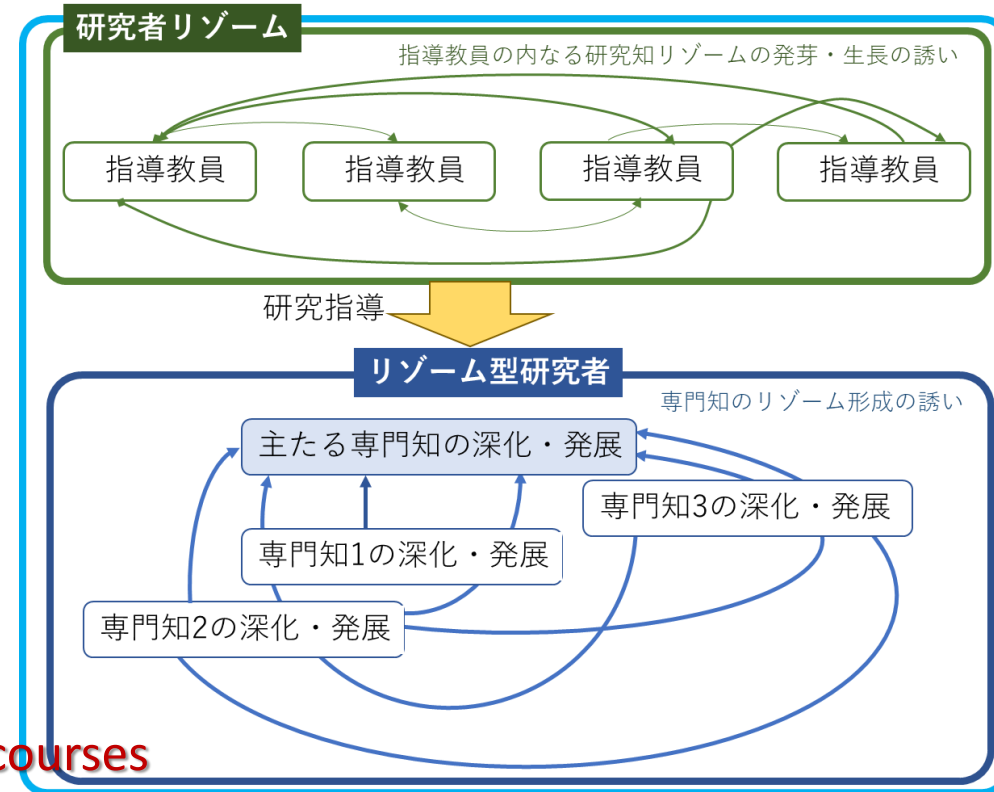Osaka Metropolitan University

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 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**.

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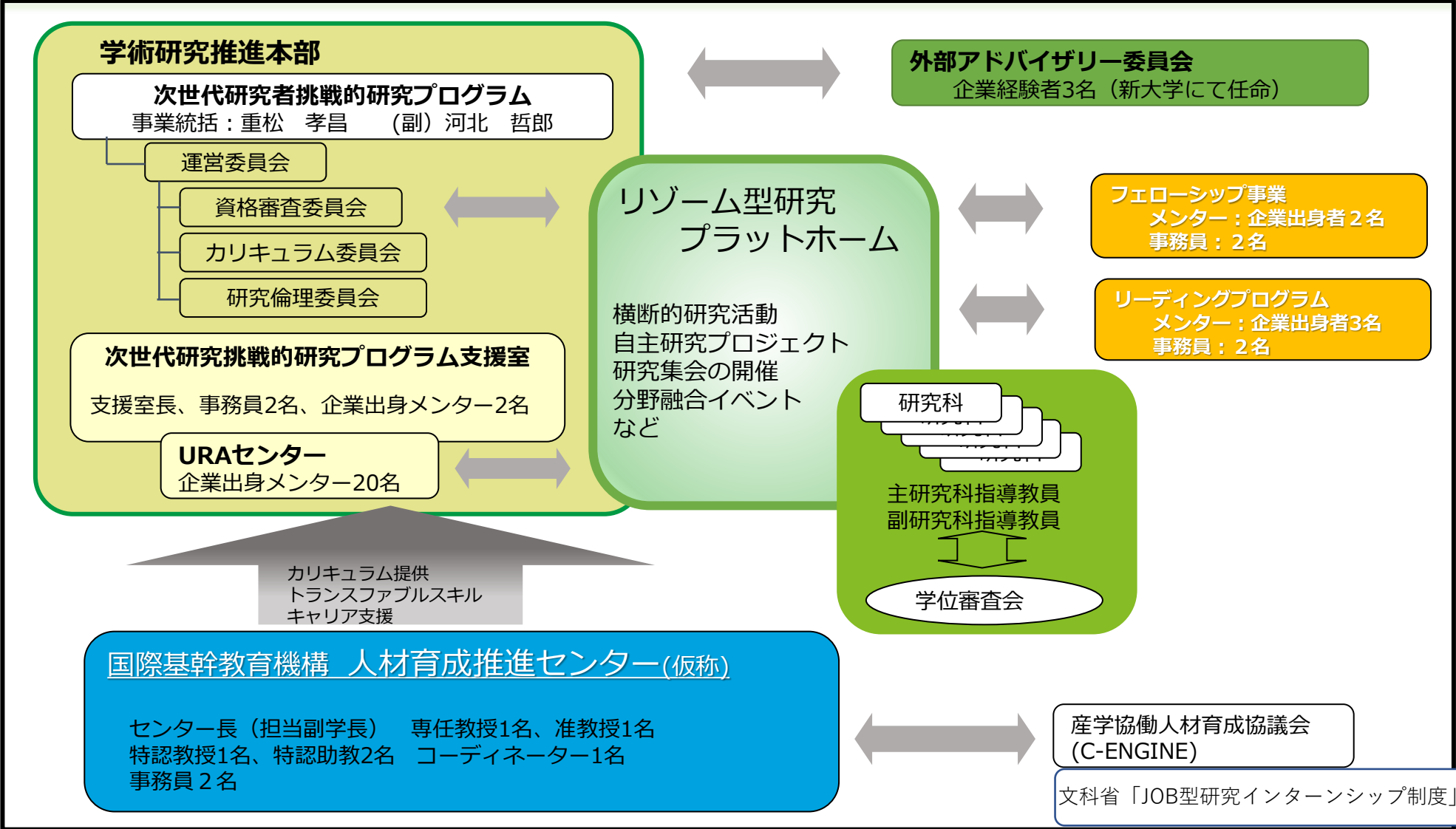
Student Obligations

- **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 ethics training and OMU compliance training courses**
- **Apply for JSPS Research Fellowship for Young Scientists (DC2)**

研究者リゾーム
指導教員の内なる研究知リゾームの発芽・生長の誘い
指導教員　指導教員　指導教員　指導教員
研究指導
リゾーム型研究者
専門知のリゾーム形成の誘い
主たる専門知の深化・発展
専門知3の深化・発展
専門知1の深化・発展
専門知2の深化・発展

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Details of Support

- Grant-in-aid for Rhizome Research: JPY 2.2 million yen per year (including 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

学術研究推進本部

次世代研究者挑戦的研究プログラム
事業統括：重松　孝昌　　（副）河北　哲郎

- 運営委員会
  - 資格審査委員会
  - カリキュラム委員会
  - 研究倫理委員会

次世代研究挑戦的研究プログラム支援室

支援室長、事務員2名、企業出身メンター2名

URAセンター
企業出身メンター20名

カリキュラム提供
トランスファブルスキル
キャリア支援

外部アドバイザリー委員会
企業経験者3名（新大学にて任命）

リゾーム型研究
プラットホーム

横断的研究活動
自主研究プロジェクト
研究集会の開催
分野融合イベント
など

フェローシップ事業
メンター：企業出身者２名
事務員：２名

リーディングプログラム
メンター：企業出身者3名
事務員：２名

研究科

主研究科指導教員
副研究科指導教員

学位審査会

国際基幹教育機構　人材育成推進センター(仮称)

センター長（担当副学長）　　専任教授1名、准教授1名
特認教授1名、特認助教2名　コーディネーター1名
事務員２名

産学協働人材育成協議会
(C-ENGINE)

文科省「JOB型研究インターンシップ制度」

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We look forward to your application!