

# Initiative for Realizing Diversity in the Research Environment (Specific Correspondence Type) **Vigorous Development of the Next-Generation by Establishment** of the Hiroshima University Fellowship for Female Graduate **Students in Science and Technology**

Hiroshima University has been designated as an implementing organization for the "Initiative for Realizing Diversity in the Research Environment (Specific Correspondence Type)", a support project for the Development of Human Resources in Science and Technology [FY2021] conducted by the Ministry of Education, Culture, Sports, Science and Technology (MEXT).

The title of the chosen program is "Vigorous Development of the Next-Generation by Establishment of the Hiroshima University Fellowship for Female Graduate Students in Science and Technology".

As a result of Hiroshima University's implementation of various female research support-related projects over the years, the overall percentage of female faculty members is increasing every year, and there is a growing awareness towards actively hiring female faculty members in the Science, Technology, Engineering and Mathematics (STEM) fields as well

On the other hand, the number of female students in the STEM fields has not been increasing, and in order to further increase the number of female faculty members in the STEM fields in the future, there is an urgent need to create an attractive research environment that encourages more female students to enroll in the STEM fields.

To this end, Hiroshima University aims to increase the number of female students who aspire to be researchers in the STEM fields by implementing the following three initiatives through this program.



https://www.hiroshima-u.ac.jp/en/diversity\_stem/

### Initiatives 1 Hiroshima University Fellowship for Female Graduate Students in Science and Technology

Hiroshima University provides stipends (equivalent to living expenses) and research expenses to female graduate students who are motivated to play an active role in the science and technology fields. With this Fellowship, we provide an environment where students can concentrate on their research by alleviating them of the financial concerns they may have when going on to higher education, and supporting students to take on the challenge of undertaking the research which they want to do.

This support is offered to second year master's course students (STEM Female Junior Research Fellows) and doctoral course students (STEM Female Research Fellows). If a STEM Female Junior Research Fellow goes on to a doctoral course at Hiroshima University, we guarantee them that they will be continuously supported as a STEM Female Research Fellow. Through such efforts, we provide support to female graduate students who have high hopes and aspirations to become researchers in the STEM fields.

### Initiatives 2 Improvement of research efficiency of female researchers

Hiroshima University aims to improve the research efficiency of female researchers, and through this program, we will procced with the Digital Transformation (DX) of research activities which makes use of ICT (information and communication technology) and digital characteristics. Specifically, through this program, we will establish a system which will allow female researchers at the University to access the research data management platform, GakuNin RDM, operated by the Research Center for Open Science and Data Platform (RCOS) of the National Institute of informatics (NII) of the Research Organization of Information and Systems (an Inter-University Research Institute Corporation). By utilizing GakuNin RDM, research date can be guickly managed and shared with multiple researchers across organizational boundaries.

### Initiatives 3 Enhancement of transferable skills of female researchers

In collaboration with Vitae, a U.K. non-profit organization with an internationally proven track record in researcher development, Hiroshima University translated the Researcher Development Framework (RDF), which was developed by Vitae and has been used by more than 200 research institutes in 20 countries, into Japanese, building a foundation for researchers to perform self-assessments to enhance their transferable skills.

By utilizing the "Young Researchers' Portfolio" system or "HIRAKU-PF" for short, which has the RDF built-in as a professional development platform, researchers can objectively analyze their skills, and develop necessary skills.

### **Hiroshima University Gender Equality Promotion Office**

1-3-2 Kagamiyama, Higashi-Hiroshima City, Hiroshima Prefecture 739-8511 TEL: 082-424-4428 Website: https://www.hiroshima-u.ac.jp/en/gender/

### **Hiroshima University Research Center for Diversity and Inclusion** (8th Floor, Building B, Faculty of Education, Higashi-Hiroshima Campus)

1-1-1 Kagamiyama, Higashi-Hiroshima City, Hiroshima Prefecture 739-8524 TEL: 082-424-4559 Website: https://www.diversity.hiroshima-u.ac.jp/en/

# "Follow your" own path"

# Gender Equality Promotion in Hiroshima University (April 2023)

# **Basic action plan**

- educational research on gender equality

# Hiroshima University "Gender Equality Declaration"

1. Promotion of gender equality in the spheres of education, research and employment 2. Revision or overhaul of conditions and practices which encourage discrimination or 3. Promotion of gender equality in decision making process regarding administration of 4. Support for men and women to ensure feasibility of accommodating studying, 5. Promotion of gender equality through cooperation with local community and 6. Promotion of activities to raise awareness about gender equality; promotion of

(https://www.hiroshima-u.ac.jp/en/gender/overview/declaration/)



HIROSHIMA UNIVERSITY

# -Let's think about gender equality-

A "gender-equal society" is a society in which individuals are not restricted by their sex; a society in which people are free to develop and express their individuality; and a society in which men and women share the same rights and responsibilities to make and carry out decisions in a variety of social contexts such as at home, at workplace.

Hiroshima University made its declaration of gender equality in 2006, and established the Gender Equality Promotion Office in 2008, since when it has developed systems to actively promote gender equality. Subsequently, Hiroshima University has worked to promote gender equality in order to provide sound working and learning environment in which its members can express their individuality and skills and bring the best out of each other. The role of a university is to create a place of learning and research, where people, irrespective of their sex, can develop skills suitable for organizational decision-making, and then send such people out into society. Therefore, it is extremely important that universities promote gender equality and create a 'right person for the right job' equal opportunity environment; have working staff that recognize this; and foster the next-generation based on this way of thinking.

The time will come when university students need consider their future directions and how they want to lead their lives. When considering these things, please think about gender equality and what you want and ought to do to lead a life that suits you irrespective of your sex.

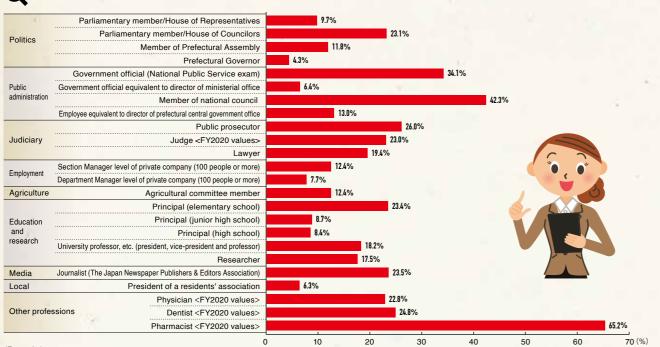
This pamphlet was produced to benefit you during such times. It briefly shows the current status of gender equality in Japan and outlines the activities conducted by Hiroshima University to promote gender equality.

# Gender equality in Japan

Japan has one of the highest levels of living and education in the world, but it faces a host of issues when it comes to the level of gender equality. Japan was ranked 19th in 2021 by the "Human Development Index" (HDI), which shows data for so-called prosperous nations. However, it was ranked 116th in 2022 by the "Gender Gap Index" (GGI) (by the World Economic Forum), which ranks the level of gender equality.

One of the main reasons for this could be the low rate of participation by women in politics (parliamentary members, Cabinet ministers). Other factors are the lack of women in executive and managerial positions with important decision-making authority in society.

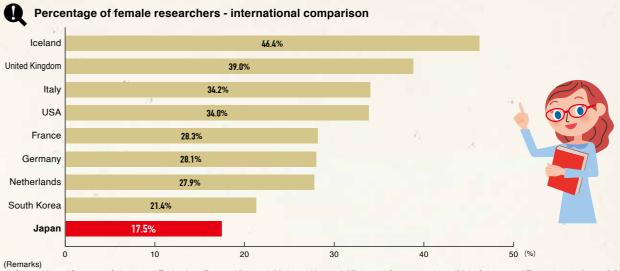
### Percentage of women in various fields



Definition of "position of leadership"...1) parliamentary member, 2) those in a position equivalent to or higher than section manager of a corporation or group, etc., or 3) those engaged in a specialized or technical profession requiring a particularly high level of skill. Fields and items given as those equivalent to the definition of "position of leadership" are ranked as typical examples and examples, and not being included in these does not mean that they are not in positions of leadership.

Quotation from "The White Paper on Gender Equality 2020

As shown in the figure below, the percentage of female researchers was only 17.5% in 2021, which is the lowest among the developed nations



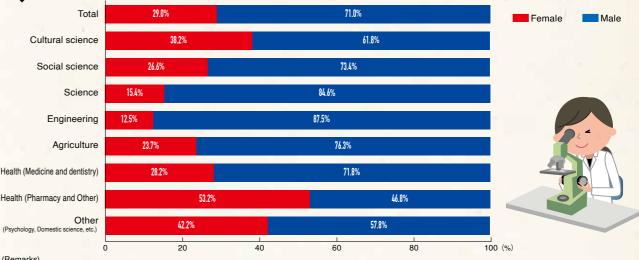
1. Created from: "Survey on Science and Technology Research", (2021), Ministry of Internal Affairs and Communications; "Main Science and Technology Indicators" OECD; "Science and Engineering Indicators", National Science Foundation (NSF) Estimated and provisional values are included.

2. Values for Japan are as of March 31, 2021. Values for Iceland and France relate to 2017. Values for South Korea relate to 2020. Values for other countries relate to 2019. 3. Value for the United States is the percentage of women employed as scientists (including some cultural sciences and social sciences). When including engineers, the percentage of female scientists and engineers is 29.4%

4. Values are as of April 15, 2022. Source: "The White Paper on Gender Equality 2022", Gender Equality Bureau Cabinet Office

According to fields of research, the percentage of regular researchers at universities etc. of whom more than half are women is for the fields of health (pharmacy and other). On the other hand, it is only 12.5% for engineering and 15.4% for science, showing a deviation between fields.

### Percentages of female/male full-time researchers at universities according to field of specialty



1. Created from: "Survey on Science and Technology Research", (2021) Ministry of Internal Affairs and Communications 2. "Universities" relates to university faculties (incl. graduate school courses), junior colleges, technical colleges, university-attached research institutions, and inter-university research institutes. "Other" in "Health (Pha acy and Other)" excludes "Medicine and dentistry" and "Pharmacy" in the health field.

4. As of March 31, 2021

Source: "The White Paper on Gender Equality 2022", Gender Equality Bureau Cabinet Office

The 5th Basic Plan for Gender Equality of the Government of Japan sets the target figure so that the percentage of women in leadership positions will be at least 30% by 2020s.

The 6th Science, Technology, and Innovation Basic Plan gives the target figures by FY2025 : such as the proportion of women hired as researchers 20% for science; 15% for engineering: 30% for agriculture: 30% for medicine, dentistry, and pharmacology: 45% for cultural science, and 30% for social science.

Various Laws and References relating to Gender Equality.





References

<sup>1.</sup> Created from: "Examination of Status of Women's Participation in Policy and Decision-making" (FY 2021) with reference to the occupations and field listed in "Proportion o Women in major "leading positions" in each field" in "The White Paper on Gender Equality 2020 EY 2021 figures are used as a rule, except for "Judge" and "Other professions" (EY2020 date).

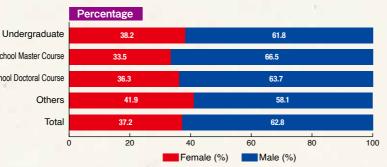
# **922** 2 Gender equality progress in Hiroshima University

### Proportion of male/female students and teachers at Hiroshima University

Let's take a look at the current status of Hiroshima University. The percentage of female students in Hiroshima University is 37.2%. On the other hand, the percentage of female teachers is 21.8%, which tells us that Hiroshima University has achieved the goal of "increasing the percentage of female teachers to 20%" set in its Third Mid-term Plan (FY2016-2021). Comparing to the female students' figure, the female teachers' is still low.

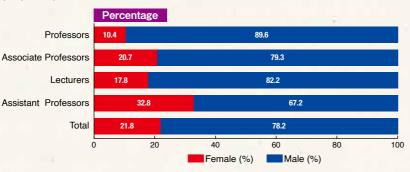
### Student Numbers and Percentage by Gender (May 2022)

Numbers				
	Female	Male	Total	
Undergraduate	4,053	6,550	10,603	Graduate Scl
Graduate School Master Course	847	1,683	2,530	Graduate Scho
Graduate School Doctoral Course	658	1,157	1,815	
Others	54	75	129	
Total	5,612	9,465	15,077	



### Teacher Numbers and Percentage by Gender (May 2022)

Numbers			
	Female	Male	Total
Professors	59	508	567
Associate Professors	100	384	484
Lecturers	19	88	107
Assistant Professors	219	448	667
Total	397	1,428	1,825



### Hiroshima University's gender equality promotion activities, which started from the "Neko-no-Te Project\*"

The current percentage of female students and teachers in Hiroshima University is as shown above, but the percentage of female students 70 years ago, when the university was established (1949), was about 7%. That percentage has since increased. The percentage of female undergraduates in 2008 was about 40%, and over 30% of postgraduate students are women. The percentage of female teachers did not reach 10% for a long time, but it finally reached the 10% level in 2007. It has since steadily increased, and as shown above, it is now 21.8%.

Against this backdrop, from the mid-1990s, efforts got underway to enable female teachers to balance childcare and work starting with the so-called Neko-no-te project. These activities led to the establishment of various systems including "the Declaration of Gender Equality" in 2006, and "the Gender Equality Promotion Committee" and "the Women's Research Committee" in 2007.

In addition, the Gender Equality Promotion Office was established in 2008 as an organization to implement such systems and activities. Subsequently, the Gender Equality Promotion Office has implemented the following: handling affirmative corrective action (positive action\*\*); promoting balance of childcare and work and participation of men in child-rearing; holding seminars to raise awareness of such issues; and supporting the research of female researchers.



- \* "Neko-no-te" is from Japanese idiomatic phrase which means extremely busy like wanting even the help of a cat (neko-no-te).
- \*\* Affirmative corrective action (positive action) is defined as "actively providing opportunities to both men and women to an extent necessary to remove sexual inequality" in the Basic Act for Gender Equal Society (enacted June 23, 1999).

# Gender equality promotion activities

Hiroshima University is promoting gender equality through various efforts for the purpose of human resource development and awareness raising regarding gender equality, positive action to correct gender disparity, and support for balancing work and family.

Human Recourses Development and Awareness Improvement •Conducting symposium/seminars	•
<ul> <li>for Female Researchers/Teachers</li> <li>Career consultation</li> <li>Career-up seminar</li> <li>Female researcher mailing-list</li> </ul>	•
<ul> <li>for Students</li> <li>Lesson on "Gender and Society"</li> <li>Text and brochure preparation</li> <li>Female postgraduate student mailing-list</li> </ul>	
<ul> <li>for Female Secondary School Students</li> <li>Participatory science lessons</li> <li>Consultation at Open Campus "tea session"</li> </ul>	

Course of lectures about "Gender and society" "Gender and society" is a series of lectures held as a general education course. These lectures seek to understand the various problems surrounding gender in today's society; why gender equality is necessary; and how a gender-equal society can be realized, so please be sure to attend.

### Expanding the range of female students who wish to be a researcher

### Open campus "tea session"

At the information exchange meetings with female undergraduate and graduate students, female high school students who are interested in entering Hiroshima University ask a variety of questions including how to study to pass the entrance examination; how they enjoy university life and research, etc.



Participatory science lessons for female high school students

Under the instruction of researchers and students, female high school students take part in actual lectures and experiments conducted in science and agricultural science laboratories. After the lesson, a social gathering is held for informal chatting among the university researchers and students and the high school students



### **Positive Action**

- Submit and implement a recommendation to reflect opinions from both men and women in decision making
- •Explanation about "Female researcher will be chosen when recognized as equivalent" is included in the recruitment documents
- Disclosure of recruitment percentage of female researchers by academic discipline
- Women-only recruitment
- •Women-only career-up system

### **Balancing Work and Family**

- Childcare facilities
- Children care after school hours during holidays Convalescent children care support Issue discount coupons for use of babysitter



# **922** 3 From Gender Equality to Diversity and Inclusion

We have so far talked about men and women in binary terms, but not all people are clearly divided into men or women. Some people have sexually mixed physical characteristics (sex characteristics). Some people are not sure about their gender identity (the gender with which you identify) and cannot tell clearly whether they are men or women. When it comes to sexual orientation (whom you are sexually attracted to), some people are attracted to the same sex or both sexes. In addition, some are attracted to others regardless of their sex, and some are not even attracted sexually to anyone. For gender expression (what kind of appearance you want in terms of gender and how you behave), some are masculine, while others are feminine, many shifting in between depending on places and occasions.

In the Yogyakarta Principles plus 10, announced in 2017, these four elements are designated as essential for each person's dignity and humanity. Hiroshima University released "Policies and Guidelines at Hiroshima University for Respecting Gender and Sexual Diversity - To Be Inclusive of LGBT+ Students, Faculty and Staff" to provide support for all our members to fully enjoy fulfilling their activities in peace free from worry without being discriminated against or eliminated on the basis of their gender, sex or sexuality.

### Policies for Gender and Sexual Diversity

- 1. We Respect Gender and Sexual Diversity. We respect each individual's diversity, such as gender identity, sexual orientation, gender expression, and sex characteristics.
- 2. We Do Not Discriminate on the Basis of Gender, Sex or Sexuality. Placing our cornerstone on gender and sexual diversity and equality, we do not discriminate on the basis of gender, sex or sexuality.
- 3. We Respect Each Individual's Gender and Sexual Autonomy. We respect each individual's gender and sexual autonomy. Each individual's gender, sex and sexuality, and also whether or not they will disclose them, should be controlled based on their autonomy.
- 4. We Foster an Inclusive Environment in Terms of Gender, Sex and Sexuality. We foster an inclusive environment for all our members.

An inclusive environment here means one in which each individual is respected, enabling them to live as their true self without any worry, fully demonstrate their characteristics, and engage in the production of new knowledge without any hesitation. Gender, sex and sexuality are particularly important elements for establishing each individual's identity. We foster an environment in which all our members can engage in their activities without any worry and unnecessary restraints, irrespective of gender, sex and sexuality.

Policies and Guidelines at Hiroshima University for Respecting Gender and Sexual Diversity – To Be Inclusive of LGBT+ Students, Faculty and Staff https://www.hiroshima-u.ac.jp/en/about/initiatives/lgbtetc/



Leafle

Guidelines

Actually, our society abounds with various types of differences not only in terms of gender, sex and sexuality but also in terms of age, disability, ethnicity, plus values, religion, political beliefs, occupation, specialty, etc.

In modern society, you need to learn to live with such a diverse range of people and with nature, and the U.N. Sustainable Development Goals (SDGs) have been established as specific targets for doing so. The SDGs are a set of goals currently being tackled by more than 150 countries around the world to achieve by 2030 in 17 interrelated fields, such as gender equality, poverty and hunger, energy, climate change, and peace institutions. We hope that you will expand your perspective at the university and consider a gender equal society and diversity from a global point of view.

At the Research Center for Diversity and Inclusion, Hiroshima University, we work on research and education for creating new value from diversity. In Introduction to Diversity, a Liberal Arts Education subject, you will learn about the significance and practice of diversity and inclusion. We also offer the Specific Diversity Program, in which you can take a wide variety of classes provided by the schools of Hiroshima University to learn conceptual tools for diversity and inclusion as well as different issues concerning diversity and inclusion such as gender and sexuality; disability, aging, and illness; and ethnicity and culture. At the beginning of the program, you will set up your own study target, toward which you can make your own choice freely



from among the wide range of designated classes. Why don't you venture out from your school and deepen your study while communicating with a wide variety of students at other schools in an environment different from your school's?

# **91** 4 Walking their own paths –To all students–

When finishing your studies at university, you will all follow your own paths. Learn from the stories of those who are walking their own paths. Here are story excepts and the entire stories are available through the "QR code".



Women tend to think that once they get married or have a child, they will have to take care of all the housework and childcare. That's not true. Even if

you get married or have a child, you can continue to pursue your dreams and goals. I want you to enjoy your life passionately without giving up. And men, I would urge you to play an active role in childrearing, not just as a helper, when you become a father. I believe that childrearing experience will make your life fulfilling and surely bring a new perspective to your work.

## Taking childcare leave is not the only answer



from person to person.

For me, happiness is the state of mind in which my heart is filled with warmth. That's

just for me.

Therefore, I think that it's better to take childcare leave if you feel fulfilled spending time with your child; if you don't, then I don't think you need to take childcare leave.

Rather than taking childcare leave just because others take it, take a good look at yourself and think about what happiness means to you and in what kind of moments you feel fulfilled.

### MESSAGE3 Haruna Suwa san, Administration Staff, Hiroshima University



### • "Difference" is also "originality"

Differences between people might cause anxiety and difficulties. I myself have a disability so I sometimes face hard situations and difficult obstacles. But I believe that "difference" can be considered "originality", as my teacher told me when

I was a student. Being different to other people can be helpful and useful in some way while in education and work. I would like you students not to see differences negatively, but to see differences as something positive which should give you new discoveries and show you way forward.

### MESSAGE4 Atsuki Toyama san, Joint Representative, Cocoiro hiroshima



In an effort to create a society that accepts diverse genders, I started my

activities with small lectures, and now, at "Cocoiro hiroshima," I plan playgrounds with children and visit schools to teach.

I currently work in the welfare sector, which I do alongside my activity work. My job is providing after-school day services, which involves interacting with children with disabilities. People with disabilities have different difficulties and hardships in their lives, dipending on the type of disabilities they have. That's why I work face-to-face with the kids and every day is trial-and-error. I have made many mistakes, but seeing changes in children at close-up stimulates me.

My welfare job, my lectures and Cocoiro hiroshima activities are important for society and for "somebody". I hope that you all live your lives without regret while asking yourself "What kind of person do I want to be" and "What should I do to make that happen?".

MESSAGE1 > Asami Ogura san, Associate Professor, Faculty of Humanities and Social Sciences, National Institute of Technology (KOSEN), Kure College

MESSAGE2 Masanori Hinaoka san, Water and Sewer Department, Construction Division, Akitakata City

I've talked about childcare leave, but I don't think taking childcare leave is the only right answer. How we think and how we feel mentally fulfilled differ

### Taking on an important role for "somebody"





