Approach 1 Institutional Enhancement by Improved Existing Approaches

1. Placement of Research Supporters

For Hiroshima University researchers who are unable to secure adequate time for research due to pregnancy, childcare, or long-term home care, an improved balance of research and life events can be promoted by placing research supporters who can attend to various research support tasks under the instruction of researchers, and such support has thereby been provided since 2017. Moreover, this policy also presents a good opportunity for research supporters to learn about various elements pertaining to their future careers and thereby gain valuable experience. The implementation guide and criteria for the distribution of scores were established for selection purposes, in order for the continuation of this supporting system.

<Target>

Those among the following main categories who apply to one of the three application reasons and fulfill the application criteria: 1) university faculty members who have signed an employment contract with this university and are conducting research here (professors, associate professors, lecturers, assistant professors, assistants); and 2) full-time contract employees in educational research (limited to specially appointed professors, endowed chair faculty members, instructors of joint research courses, hospital assistant professors, foreign researchers, researchers, special researchers, hospital doctors).

< Application Reasons and Criteria >

- One of the Following Reasons from (1) to (3)
- (1) Pregnancy: Currently pregnant
- (2) Childcare: Caring for a child younger than 12 years old or a child who turned 12 before March 31 of the current fiscal year (3) Long-term Home Care: The applicant is the primary caregiver of a father, mother, or relative who has received long-term
 - care certification (including certification of needed support)
- Criteria Fulfills (a) and (b)

Women (a) Those not on leave before and after childbirth, maternity leave, long-term home care leave, or other leave

- (b) Those with a spouse working full-time, or those who are single or do not have a spouse
- Men (a) Those not on paternity leave, long-term home care leave, or other leave
 - (b) Those with a spouse working full-time as a researcher at a university, inter-university research institute, incorporated administrative agency, etc.

< Support Details >

Literature research, document drafting, document sorting, proof-reading, image check, sample making, experiment assistance, measuring, data entry, data analysis assistance, data analysis, statistic processing, etc.

Number of users (FY2019)					
	Total	Professor	Associate Professor	Assistant Professor	Others
Men	2	1	0	0	1
Women	25	1	10	10	4

Reasons	for	App	lication	(FY2019)	١
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	Pregnancy	Childcare	Long-term home care
Men	-	2	0
Women	1	23	1

<Voices of the Users/Effect on Driving forward the Research (excerpts)>

- I was able to free-up time and obtain valuable data and documents for writing papers by dividing extremely timeconsuming tasks with the research supporters. (medical faculty member)
- I was able to undertake a certain level of work and obtain a positive outcome, with the help of the research supporters, during what would normally be a busy summer term for me since I have many classes to teach and experiments can be difficult to undertake. (science faculty member)
- With the placement of the research supporters, I was able to present my research outcome. This was done despite normally having very limited time for the actual research, as people in my position usually need to take responsibility for educational activities, such as teaching and training in the university, practical exercises outside of the university, etc. (medical faculty member)
- My progression of research through systematic analysis was made possible thanks to the help I received in completing delayed tasks. Now I am in middle of submitting paper with the results I achieved. (science faculty member)
- I was able to submit my paper to an academic journal quicker than initially planned. This was made possible by asking for support in regard to the collection of research data. Prior to receiving support, it was almost inevitable that experiments were put on hold because of my limited time schedule with childcare. (science faculty member)

- I was able to publish my paper as a result of being able to write it and prepare a presentation. The supporter's help in providing experiment assistance and data analysis led to an efficient research progression, especially given my limited time situation for research with childcare. (medical faculty member)
- I was able to concentrate my time for where my expertise is needed. The supporter made it possible for me to progress the research efficiently in the situation where my work time is limited with childcare. (science faculty member)
- Cooperative research projects with researchers within and outside of the university and also with corporations have progressed swiftly thanks to the supporter's help in research. (science faculty member)
- < Voices of the Research Supporters/Reflections after Engaging in Research Support (excerpts) >
- I felt I was able to familiarize myself with experiments within labs. (science student (3rd year)/female)
- I feel lectures are more interesting as I am able to relate with the results of the literature research. (medical student (2nd year)/female)
- As a result of my work within the labs, I was able to deepen my understanding. I feel it is a valuable experience that I am able to physically visualize what I learn in lectures, within a lab. (medical student (3rd year)/male)
- Initially I was not so attracted by 'research' itself from listening to lectures, but by undertaking experiments I was able to understand the interesting features of research. (medical student (3rd year)/male)
- I deepened my understanding for my research topic. I was able to develop a logical way of thinking for proceeding with research, and felt a growing desire to strive for a researcher position as a future career, hence why going on to a doctorate program has become a big choice for me. (humanities student (M2)/female)

2. Care for Children Outside of School during School Holidays

With the aim of supporting the work–life balance of members of Hiroshima University, during the holidays at elementary schools (spring, summer and winter breaks), the Higashi-Hiroshima District (Higashi-Hiroshima campus) and Hiroshima District (Kasumi campus) opened a 'kids club' to support the care of children outside of school. The instructors (contracted) and student supporters (students undergoing teacher training are employed as contractors) operate the camp, and various activities are conducted within the program (e.g., mountain-climbing in the spring, catching crayfish or harvesting vegetables in the summer, making shimenawa (stylized ropes) in the winter). This support program also provides the opportunity for a setting where the university's students can also learn and gain practical experience.

	Higashi-Hiroshima District (Higashi-Hiroshima campus)	Hiroshima District (Kasumi campus)
Spring Season Kids' Club	Period: March 26-April 5, 2019 (weekdays 8:00-19:00) Childcare Result: 18 schoolchildren of university faculty/staff (from 1st grade to 6th grade of elementary school)	Period: March 26-April 8, 2019 (weekdays 8:00-19:00) Childcare Result: 40 schoolchildren of university faculty/staff (from 1st grade to 6th grade of elementary school)
Summer Season Kids' Club	Period: July 22-August 29, 2019 (weekdays 8:00-19:00) Childcare Result: 30 schoolchildren of university faculty/staff (from 1st grade to 6th grade of elementary school)	Period: July 22-August 30, 2019 (weekdays 8:00-19:00) Childcare Result: 49 schoolchildren of university faculty/staff (from 1st grade to 6th grade of elementary school)
Winter Season Kids' Club	Period: December 24, 2019-January 6, 2020 (weekdays 8:00-19:00) Childcare Result: 13 schoolchildren of university faculty/staff (from 1st grade to 6th grade of elementary school)	Period: December 24, 2019-January 6, 2020 (weekdays 8:00-19:00) Childcare Result: 36 schoolchildren of university faculty/staff (from 1st grade to 6th grade of elementary school)

< Voices of the Participants (excerpts) >

- Since the staff looked after them quite well, the children were very happy with studying and being able to play. (parent/guardian)
- Summer vacation became meaningful as the children were able to participate in a practical study (making a glass muddler), an activity normally inaccessible to children. (parent/guardian)
- I am very thankful to the childcare, as I can pick my child up without being in a hurry and feel relieved from it being nearby. (parent/guardian)
- It was fun to read because there were new books. (school child)
- Since it was my first participation, I was a little nervous before going there. But eventually I began to look forward to being able to play various games with the staff every time. (school child)



3. Subsidiary Service to Support Usage Fees for Sick Child Care

Usage fee support is provided up to 16 times a year to each individual for periods when it is difficult for a child (younger than 6 years old or who turned 6 before March 31 of the current fiscal year) of a Hiroshima University faculty member to obtain group child care due to illness or recovery from an illness. Such support is the lower amount of 1,000 JPY or 2/3 of the fee paid for the use of sick child care facilities (cut-off is 100,000 JPY) or 1,000 JPY.

4. Support to Resume a Researcher Career

Exemption of the Admission Fees for the Doctoral Program

Financial support that does not require the collection of admission fees from women who have halted their research, have a Master's degree, and are PhD candidates who have passed the exam was utilized for 6 people. The program was continuously open for application of interest in 2019, and it was implemented as follows. (Made public on the application requirements website of each research department, the Diver Business website, and at the Diversity Promotion Conference)

- February 12, 2020 (Wed.) Held a committee meeting on the non-collection of admission fees (deliberated)
- Early March, 2020 Reported to the applicants about the non-collection of admission fees
- April 2020 Plan to implement non-collection of admission fees
- Result: Implemented for one person

Career Advancement Project Researchers (Hiroshima University) Recruitment and Employment

Utilizing the Career Advancement Project (CAP) researcher system that supports career resumption for women who have stopped working and possess a PhD degree and supports the continuation or resumption of research or spousal cohabitation for researchers working at Hiroshima University, one full-time and two part-time researchers were employed. Also, year-long continuous recruitment has been undertaken.

Name	CAP Researcher (full-time)	CAP Researcher (part-time)	
Those Who Apply	Women who possess a PhD degree and have stopped working	Spouse of a researcher at this university (either gender)	
Aim	To promote the resumption of research and career development for women researchers who halted their research (career development promotion model)	To promote the continuation and resumption of the careers of researchers who stopped working due to their spouse's work (balance support model)	
Expense	President's discretionary expense	President's discretionary expense	
Employment period	1 year from April 2020 (no renewal)	1 year from April 2020 (no renewal)	

5. Awareness Raising Seminar

- Topic: Measuring "The Gap" Gender gap analysis in the innovation process utilizing a patent and thesis data-
- Date/Time: December 10, 2019 (Tues.); 16 : 30-17 : 30
- Location: Small meeting room, Graduate School of Science, Higashi-Hiroshima Campus, Hiroshima University
- Instructor: Hara Yasushi (Specific Lecturer, Graduate School of Economics, Hitotsubashi University)
- Participants: 16 people
- Details: Submitting papers and applying for patents. These approaches are routine work for researchers. However, the Japanese recipients of the three Novel Science Prizes are predominantly male. The faculty members in many universities and research institutes today are also mostly male. In this lecture, the experimental analysis results using Japanese data was presented after introducing previous researches; that is, how researches on the gender gap in the scientific field are undertaken, using the analysis of academic data, such as patents and papers.

< Voices of the participants (excerpts) >

- In the middle of the lecture, an English speaking student who was interested in data science came in. I thought it must have been intriguing content for him if he was able to understand Japanese.
- I would like to share the information from the lecture for my colleague who works in the area of Institutional Research.



6. Interim General Symposium

Topic: Development of internationally active women researchers who are established within the local community
Date/Time: September 27, 2019 (Fri.); 13:30-17:10

Location: Small Hall, Higashi Hiroshima Arts & Culture Hall Kurara

 Participants: 80 people, specifically collaborating and member organizations of the Initiative for the Implementation of the Diversity Research Environment (Collaboration Type), nationwide organizations that are involved in promoting diversity, faculty members and students of this university, members of the public

Schedule: Opening/Lecture

Opening Remarks: Makoto Miyatani (Executive Vice President for Education)

Guest Remarks: Fumihiro Arizono (Deputy Director, Office of Human Resources Development for Science and Technology, Human Resource Policy Division, Science and Technology Bureau, MEXT) Keynote Speech: Kaori Maeda (Professor, Graduate School of Information Sciences, Hiroshima City University) "Presenting IT innovation from Hiroshima, nation-wide and to the world"

Business Report: Misako Aida (Executive Vice President for University Reform, Hiroshima University) Introduction of researches who were supported by the business:

Hikaru Yabuta (Professor, Graduate School of Science, Hiroshima University)

Hitomi Ogata (Associate Professor, Graduate School of Science, Hiroshima University)

Tomomi Yamane (Researcher, Graduate School for International Development and Cooperation, Hiroshima University) Panel Discussion: "Aim of International Diversity Research Environment Implementation Program"

Panelists: Yoko Nishina (Professor, Graduate School of Education, Hiroshima University)

Akiko Yorozu (Manager, Human Resources Solution Group at Mazda Motor Corporation) Michio Watanabe (General Manager of International Development Center) Nao Yoshida (Manager, D&I, Micron Memory Japan)

Keiko Nishino (Chairperson of Third-Party Evaluation Committee/ Professor, Kwansei Gakuin University) Commentator: Kaori Maeda (Professor, Graduate School of Information Sciences, Hiroshima City University)

Yasuko Yamamura (Program Officer, Japan Science and Technology Agency)

Coordinator: Yoko Ishida (Hiroshima University Deputy Director of Gender Equality)

The symposium themed "development of internationally active women researchers who are established within the local community" started with the keynote speech titled, "presenting IT innovation from Hiroshima, nation-wide and to the world" by Ms. Kaori Maeda, professor of the graduate school of Information Sciences, Hiroshima City University. Ms. Misako Aida, executive vice president for university reform, Hiroshima University, the executive person in charge, presented the business report, and three women researchers who were supported by the program also presented their research activities.

In the panel discussion themed "aim of international diversity research environment implementation program", Ms. Keiko Nishino, chairperson of the third-party evaluation committee of this business and a professor of Kwansei Gakuin University reported the result of the interim evaluation. Thereafter, Mazda Motor Corporation, International Development Center, Micron Memory Japan, and Hiroshima University respectively presented their approaches and its results, expectation for the business, and general future direction, etc. Following an active opinion exchange with the participants in the Hall, the comments of summarization from Ms. Yasuko Yamamura, program officer of Japan Science and Technology Agency and Ms. Kaori Maeda of Hiroshima City University. Altogether, the symposium was an event which was extremely beneficial for the exchange of vital information.

< Voices of the Participants (excerpts) >

- I was surprised by the fact that information technology is formally utilized in a medical emergency situation. I look forward to the future development of the Internet of Things (IOT) design project in Hiroshima. I would like Hiroshima to undertake a big change.
- I understood the activities of the Industry, Academia, and Government Diversity Promotion Conference. I have a positive expectation for the future development of 'positive action' and the career reinstatement support program, and I look forward to its subsequent results.
- I thought the researches were interesting and hopeful. I got to know about the activities undertaken by women researchers in various fields.
- It was good to listen to the approaches of each corporation and witness the current, available results.
- I thought the panel discussion was quite good because I felt the panelists were enlightened by each other' s presentation.



(Keynote speech by Hiroshima City University Professor Maeda)



(Business report by Hiroshima University Executive Vice President Aida)



(Panel discussion with collaborating organizations and commentators)