FY2017 Inter-University Exchange Project, Nagasaki University

Support for the Formation of Collaborative Programs with Russian Universities

[Name of Project] (Adopted year: FY2017, (Type A)) Japan-Russia Intercollegiate Cooperative Project for Nurturing Leaders in Disaster and Radiation Health Sciences.

[Summary of Project]

In this project, we aim to foster the development of specialists in the field of disaster and radiation health sciences through the cooperation of universities in Japan and Russia. Nagasaki University (NU), Fukushima Medical University (FMU), and North Western State Medical University named after I. I. Mechinikov (NWSMU), which experienced nuclear disasters, are establishing an education network in the field of disaster and radiation health sciences that is unique in the world.



[Summary of Exchange Program]

Students from the Disaster and Radiation Health Sciences (Master's degree courses) at NU and FMU will visit NWSMU and participate in lectures on radiation biology and regeneration medicine to earn graduate credits. At the same time, students from NWSMU will visit NU and FMU to participate in lectures on risk communication and radiation health effects. Based on these collaborations, the three universities will develop a double degree program to be offered in the future.

[Global Human Resources for the Project]

Based on the experiences at Chernobyl and Fukushima, NU, FMU, and NWSMU will empower specialists as follows: • Specialists will be able to prepare guidelines for use during a nuclear disaster and participate in the delivery of radiation emergency medicine during and after a nuclear disaster.

• Specialists will be able to conduct risk communications with the public according to the disaster cycle (before the disaster, at the end of the disaster, and during the recovery from the disaster).

• Specialists will be able to create scientific evidence and outline universal guidelines regarding radiation and nuclear disasters for international organizations and as members of scientific committees.

[Project Features]

This project will be implemented by three universities, each of which experienced a nuclear disaster. Based on the accumulated scientific evidence, these institutions will be able to foster specialists in the field of disaster and radiation health sciences from around the world, in addition to those living and working in Japan and the Russian Federation.

[Exchange Statistics]

		2017	2018	2019	2020	2021
	Outbound	6	10	10	10	10
	Inbound	0	10	10	10	10

1. FY2017 Progress

(ONagasaki University(NU) · Fukushima Medical University(FMU)) [Japan-Russia Intercollegiate Cooperative Project for Nurturing Leaders in Disaster and Radiation

Health Sciences (Adopted year: FY2017, (Type A, Russia))

Exchange Programs

- Preparing the executive office for program 1. implementation
- 2. Dispatching students to Russia and Belarus
- 3. Holding a Management Committee Meeting

Student-Mobility

O Outbound

4 master course students were dispatched to North-Western State Medical University named after I.I. Mechnikov(NWSMU) and attended the seminar "Health Protection for Population" with local students in Jan-Feb 2018.

5 undergraduate students were dispatched to Belarusian State Medical University (BSMU) and Gomel State Medical University (GSMU) and participated in field training and audited lectures in English in Jan-Feb and Feb-Mar 2018.

O Inbound

None in FY2017, as we prepared for credit exchange on and after FY2018.

Forming the University Network with Quality Assurance

1. Management Committee Meeting, Feb 2018

Inviting Rectors of cooperating universities from Russia and Belarus, with attendance of vice presidents of NU and FMU, we held a Management Committee Meeting in Nagasaki. We exchanged views and decided on the course and framework of this project.

2. Academic Exchange Agreement, Mar 2018

To start the exchange program, FMU and NWSMU signed an academic exchange agreement in Russia.

3. The 1st Curriculum Committee, Mar 2018

Being resolved at the Management Committee Meeting, Curriculum Committee gathered in Russia and started concrete discussion such as choosing classes or academic hours.



(Management Committee Meeting)

Promotion of Student-Mobility Environment



Supported by JASSO, students can reduce financial pressure and focus on learning.

Preparing for full and high-grade field training at our research base in Kawauchi village, we launched apparatus such as Geiger counters.

• NU's new guest house was completed and we secured accommodations for accepted students.

Internationalization of the university, Information disclosure and Publication of outcome

Preparing pamphlets of 'Disaster and Radiation Exposure Medical Science Joint Degree' in Russian, which is for the subject of this program, we distributed them to the cooperating universities and institutions.

Generating the homepage and contributing articles about dispatching students and Management Committee, we made the program public.

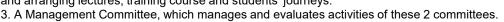
- Thanks to promoting the program to cooperative institutions, we gained prospective
- enrollees (FY2018) from Kazakhstan, one country of the Russian-speaking world.

Good Practice

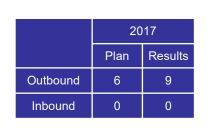
We went into action by establishing 3 functioning committees in which teachers from each university engaged. The three were as follows:

1. A Curriculum Committee, which engages in making the curriculum and training courses and establishing credit exchange and double-degree as the final goal in the future.

2. A Student Exchange Committee, which engages in improving the communicative ability of students and arranging lectures, training course and students' journeys.









(Academic Exchange Agreement)



(In-vehicle Radiation Monitoring System)



(Course pamphlet in Russian)

2. FY2018 Progress [ONagasaki University(NU) • Fukuoka Medical University(FMU)] [Japan-Russia Intercollegiate Cooperative Project for Nurturing Leaders in Disaster and Radiation Health Sciences (Adopted year: FY2017, (Type A, Russia))

Exchange Programs

- Starting to accept students from Russia 1.
- 2. Starting Credit Exchange toward the Double Degree system
- 3. Dispatching students to Belarus just as last year

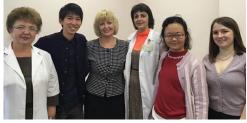
Student-Mobility

O Outbound

- 3 undergraduate students were dispatched to Belarusian State Medical University(BSMU) and Gomel State Medical University (GSMU) and participated in field training and visited local institutions in Apr-May 2018 and Jan-Feb 2019.
- 10 graduate students were dispatched to North-Western State Medical University named after I.I. Mechnikov (NWSMU) and took a seminar of "Biostatistics" in Jan-Feb 2019 and exchanged the credits to "Epidemiology" in Japan.
- A graduate student was dispatched to BSMU, GSMU and NWSMU as a representative of Japanese students and attended the program meetings and discussed about student exchange with local students in Jan 2019.

O Inbound

6 students from NWSMU were accepted by NU and took a lecture of "Radiation Protection" in Dec 2018.



(With GSMU teachers)



(Accepting NWSMU students at NU)

The 2nd Management Committee Meeting, Jan 2019 1.

We invited teachers in charge from NWSMU and GSMU and held annual Management Committee Meeting in Fukushima. Given progress report by each school and sharing problems which will occur in the DD system, we decided on the course toward next year.

2. The 1st External Review Board, Jan 2019

We invited 3 Review Board members and held an External Review Board in Fukushima. Receiving useful opinions as outcomes assessment or how to sustain the program after the termination, we worked on improving the program.

Promotion of Student-Mobility Environment

- The Medical Science course of Disaster and Radiation Medical Sciences (Master Degree) starts on October from 2018 so that there is no difference in academic year between Japan and Russia.
- We negotiated with NWSMU to utilize their facility and secured a safe and reasonable accommodation for Japanese exchange students.
- By inviting a teacher from NWSMU and sending teachers to NWSMU to accompany them, we secured the safety of the exchange students.

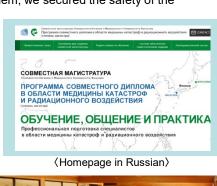
Internationalization of the university, Information disclosure and Publication of outcome

- We repaired our homepage to make it more readable and improved the accessibility. We also added the Russian web page because many of our international students are from Russian-speaking countries.
- By joining Study-in-Japan Fairs in Russia, promoting our program initiatively at domestic and overseas conferences, and cooperating with JICA, we gained an excellent international student in the master course.

Good Practices

- We opened the Gomel Training Center in Belarus in cooperation with GSMU. It is going to be the training base for Japanese and Russian students.
- We invited teachers from NWSMU to Fukushima and held a Kawauchi-village Training Workshop with local residents, local companies and officers from Ministry of the Environment. We discussed starting a training curriculum at Kawauchi Village.
- In order to sustain the program after its termination, NU and NWSMU set up a video teleconference system and made sure that we could give lectures via the system. We started to discuss which subjects to offer to each other.

	2018	
	Plan	Results
Outbound	10	14
Inbound	10	6





(Teachers from NWSMU at Kawauchi Training Workshop)





(External Review Board)

Forming the University Network with Quality Assurance

3. FY2019 Progress

[Japan-Russia Intercollegiate Cooperative Project for Nurturing Leaders in Disaster and Radiation Health Sciences] (Adopted year: FY2017, (Type A, Russia)

Exchange Programs

- 1. We have accepted students to Japan from North-Western State Medical University named after I.I. Mechnikov (NWSMU) students since 2018.
- 2. We have sent Nagasaki University (NU) and Fukushima Medical University (FMU) students to Russia and Belarus since 2017.
- 3. We have implemented credit transfer toward the Double Degree.

Student-Mobility

Outbound

[Undergraduate Students]



 \langle Video Conference \rangle



⟨Accepting Russian students to NU⟩

•Two FMU and three NU students were sent to Belarusian State Medical University and Gomel State Medical University and participated in field training and visited local institutions from April through May, 2019 and January through February, 2020. [Graduate Students]

•Two students representing NU and FMU participated in "The Japan-Russia Student Forum" at M.V Lomonosov Moscow State University and discussed cross-cultural understanding with Russian students in Sep 2019.

•Nine students from NU and FMU were sent to NWSMU and took "Biostatistics" in Jan 2020 and received credits for

"Epidemiology" after returning to Japan.

	2019		
	Plan	Results	
Outbound	10	14	
Inbound	10	10	

Inbound

• Five incoming students from NWSMU received "Nagasaki University Training at Kawauchi Village" and "Fukushima Medical University Emergency Medical Training" with students from NU and FMU at Kawauchi Village, Futaba County, Fukushima, in October 2019.

 \cdot Another 5 incoming students from NWSMU took "Radiation Protection I-II " with NU international students at NU, in December 2019.

They toured medical facilities of Nagasaki University Hospital and interviewed its hospital director.

Forming the University Network with Quality Assurance

1. The 3rd Management Committee Meeting (Sep 2019)

•Discussed the implementation of the Double Degree Program (DDP) and future program management at NWSMU, and exchanged opinions about challenges facing Japan and Russia and their solutions. The universities decided the future specific action plans.

2. Video Conferences Between Japan and Russia Universities (Nov, Dec 2019 / Jan 2020) •Made arrangements for among NU, FMU, and NWSMU.

•Discussed the details about the number of inbound and outbound students, total learning hours, and credit transferable subjects for implementation of the DDP.

3. The Second Japan Russia Industry, Academia and Government Working-level Conference (Jan 2020)

• NU, FMU, and NWSMU attended the conference held in Tokyo, and presented the efforts regarding Japan-Russia cooperative activities.

Promotion of Student-Mobility Environment

• NWSMU offered Japanese exchange students a dormitory for safety and convenience. • Teachers accompanied the incoming and outgoing students from and to Russia, supported their lessons, and guaranteed their safety.

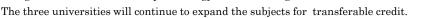
Internationalization of the University, Information Disclosure and Publication of Outcomes

•Activities related to the program were updated on program Home Page.

In Nov 2019, FMU joined Study-in-Japan Fairs in Khabarovsk, Russia, and provided program leaflets in English and Russian, gave lectures, and interviewed local students for this program's PR activities.
In October 2019, two international students enrolled in Division of Disaster and Radiation Medical Sciences, which is collaborating with the Japan International Cooperation Agency (JICA).

Good Practices

In October 2019, five incoming NWSMU students listened to Great Eastern Japan Earthquake experiences from the local victims, conducted radiation measurement of plants, and obtained knowledge of reconstruction activities. The NWSMU students evaluated this training as excellent.
In January 2020, nine outgoing students of NU and FMU took "Biostatistics" at NWSMU and they were evaluated on discussions and lecture reports from the on-site teachers, and NU and FMU have recognized those credits for "Epidemiology" based on the grade evaluations from NWSMU.





〈Outgoing students from Japan to Russia〉



⟨Radiation Measurement in Fukushima⟩

[Japan-Russia Intercollegiate Cooperative Project for Nurturing Leaders in Disaster and Radiation Medical Sciences] (Adopted year: FY2017, (Type A, Russia)

Exchange Programs

- (1) Online lectures and practical training by the Joint Major of Disaster and Radiation Medical Sciences (hereinafter, Joint Graduate School).
- (2) Online lecture by North-Western State Medical University named after I.I. Mechnikov (hereinafter, NWSMU).
- (3) Signing of Trilateral Agreement with FMU and NWSMU on Academic Cooperation to establish Double Degree Program (hereinafter, DDP).

Student-Mobility

O (Online) Outbound

• In February 2021, a Japanese student and six international students in the Joint Major course of NU and FMU took the "Biostatistics" course offered by NWSMU. And the credits of "Biostatistics" were transferred to the credits of "Epidemiology" of the Joint Major.

O (Online) Inbound

- Four master's students from NWSMU participated in "Risk Communication" in early October 2020.
- Three master's students from NWSMU participated in "Radiation Protection I·II" in early December 2020.
- As for practical training, six master's students from NWSMU participated in "Advanced Risk Communication and Management Training" and "Emergency Medical Training" on a video-on-demand manner in the middle of October. On the final day of the training, all the participants exchanged their opinions via online in real time.

Forming the University Network with Quality Assurance

(1) Video Conferences Among The Three Universities (July, August, October, December 2020)

- Until last year, outbound and inbound students traveled to take lectures at each of the three universities, however, considering COVID-19, and the time difference between Japan and Russia, we discussed the studying methods such as online and video-on-demand styles.
- We also discussed Trilateral Agreement on Academic Cooperation to establish DDP among the three universities.

(2) The 4th Annual Management Committee Meeting (March 2021)

• The three universities confirmed the 2020 activity reports and the future DDP students exchange plans.

Promotion of Student-Mobility Environment

- The practical training conducted by NU and FMU in Kawauchi Village, Fukushima Prefecture, by making online lectures through the on-demand and a real-time types, we have established an educational system that allows students to take classes remotely and study at any time.
- FMU has developed simulation software for disaster responses, and established a new educational system to conduct the online practical training.
 By conducting the online practical training, we expect to promote the increase of further compatible subjects.
- "Biostatistics" offered by NWSMU has newly delivered the lecture to use the SAS since 2020. This series of lecture was highly evaluated by students from NU and FMU and established the new educational systems.

Internationalization of the University, Information Disclosure and Publication of Outcomes

- Continuing from last year, two researcher students selected by JICA have enrolled in this Joint Graduate School at NU.
- FMU has posted the PR video and public relations materials related to Joint Graduate School at Japan Study Abroad Fair in Russia Far East in the early November.
- A NU faculty professor and an alumni of the Joint Graduate School who completed this master's course have delivered their presentations about this joint major at the Japan Study Abroad Fair in Central Asia (Kyrgyzstan and Kazakhstan) in the end of November 2020.
 FMU has also posted the public relations materials related to the Joint Graduate School on the websites of the Japan Study Abroad Fair.
- The above activities have been published on the homepages of NU and FMU.

Good Practices

- · [October 2020] NWSMU students have taken "Risk Communication" offered by NU.
- [October 2020] "Advanced Risk Communication and Management Training" and "Emergency Medical Training" obtained high praise from about 120 experts and students from international institutions such as IAEA. And some people are hoping to enroll in this Joint Graduate School.

Furthermore, the simulation software newly developed in the "Emergency Medical Training" has been highly evaluated in the student questionnaire, and the teachers also regard it as part of the new educational system.

- [November 2020] After the Japan Study Abroad Fair for Central Asia in November 2020, both NU and FMU agreed on a opinion exchange meeting in 2021 with the Kyrgyz National Medical Academy.
- [February 2021] In "Biostatistics" class held in English by NWSMU, students worked on data analysis exercises using the cloud statistical software, SAS (Statistical Analysis System), and all of them were able to obtain excellent evaluations.

Implementation Status of Exchange Program

	2020 FY	
	Plan (Travel)	Results (Online)
Outbound	10	7
Inbound	10	13

Interview to Juichi IDE,

A student who took Biostatistics

(Second from the left-side)

executive director of Kawauchi Lab





The Food Monitoring Center

Lectures by Yuko ENDO, Kawauchi village mayor



5.FY2021 Progress

(Japan-Russia Intercollegiate Cooperative Project for Nurturing Leaders in Disaster and Radiation Medical Sciences**)** (Adopted year: FY2017, (Type A, Russia)

Exchange Programs

- Online lectures and practical training by the Joint Major of Disaster and Radiation Medical Sciences (hereinafter, Joint Graduate School).
- (2) Online lecture by North-Western State Medical University named after I.I. Mechnikov (hereinafter, NWSMU).
- (3) Start of Double Degree Program (hereinafter, DDP).

Student-Mobility

O (Online) Outbound

• In February 2022, a Japanese student and six international students in the Joint Graduate School, and three PhD students took the "Biostatistics" course offered by NWSMU. The credits of "Biostatistics" were transferred to the credits of "Epidemiology" of the Joint Graduate School.

O (Online) Inbound

- Two master's students from NWSMU participated in "Radiation Protection I II" in October 2021.
- Two master's students from NWSMU participated in "Advanced Risk Management" in November 2021.
- Two master's students from NWSMU participated in "Risk Communication" from November to December 2021.
- As for practical training, three master's students from NWSMU participated in "Advanced Risk Communication and Management Training" and "Emergency Medical Training" on a video-on-demand manner in the middle of October. On the final day of the training, all the participants exchanged their opinions via online in real time.

O Start of DDP

• We conducted the admission examination for DDP in August 2021, and a NWSMU student was accepted to the Joint Graduate School as first DDP student in October 2021.

Forming the University Network with Quality Assurance

(1) Video Conferences Among The Three Universities (May, September 2021)

- Considering the points improved from last year, we planned and conducted lectures in both online and video-on-demand styles.
 Concluding the Trilateral Agreement with FMU and NWSMU on Academic Cooperation and Mutual Agreement about DDP in July 2021.
- Guideline for DDP was approved in September 2021.

(2) The 5th Annual Management Committee Meeting (January 2022)

- The three universities confirmed the 2021 activity reports and the future DDP students exchange plans.
- (3) The 2nd External Evaluation Committee Meeting (January 2022)
- Our activities such as online student exchange amid COVID-19 pandemic and starting DDP were highly rated.

Promotion of Student-Mobility Environment

- Even though students could not interact directly due to COVID-19 pandemic,
- development of online education enabled master's students from NWSMU to participate in "Advanced Risk Management".
- As to DDP, the admission examination and lectures of Joint Graduate School were conducted online.
- From now on, as to the methods of thesis research and defense for DDP, we will improve the quality of education and make it online style as much as possible to reduce students' burden.

Internationalization of the University, Information Disclosure and Publication of Outcomes

- · Three students selected by JICA and three MEXT students have enrolled in Joint Graduate School at NU.
- (June and December 2021) We participated in Japan Study Abroad Online Fair for Russia Far East.
- (November 2021) We participated in Japan Study Abroad Online Fair for Central Asia (Kyrgyzstan and Kazakhstan).
- The above activities have been published on the homepages of NU and FMU.

Good Practices

- (October 2021) DDP which was the biggest goal for this project finally started, and a NWSMU student was accepted to the Joint Graduate School as first DDP student.
- (October 2021) "Advanced Risk Communication and Management Training" and "Emergency Medical Training" were held as international seminar and about 100 people including the experts from international institutions such as IAEA, professors and students from overseas countries participated.
 An Indian and a Molevian who had interact in the field of Disacter and Rediction Medicine through this seminar.
- An Indian and a Malaysian who had interest in the field of Disaster and Radiation Medicine through this seminar enrolled in Graduate School of NU.
- (November 2021) NWSMU students have taken "Advanced Risk Management" offered by NU.
- (November 2021) After the Japan Study Abroad Fair for Central Asia, both NU and FMU started interacting with the Kyrgyz National Medical Academy.

Implementation Status of Exchange Program

	2021 FY	
	Plan (Travel)	Results (Online)
Outbound	10	10
Inbound	10	10

Advanced Risk Communication and Management Training at the Great East Japan Earthquake and Nuclear Disaster Memorial Museum



Advanced Risk Communication and Management Training Interacting with residents in Tomioka town



Advanced Risk Communication and Management Training Monitoring the radiation in environment



The 5th Annual Management Committee Meeting Greeting from President of NU

