

Globally needed studies on Renaissance from Radiation Disaster

Hiroshima University has established interdisciplinary PhD programs for “Phoenix Leader Education Program (Hiroshima Initiative) for Renaissance from Radiation Disaster”. This broad educational program was accepted as one of the “Programs for Leading Graduate Schools” by the Minister of Education, Culture, Sports, Science and Technology of Japan (MEXT). The Radiation Disaster Recovery Studies is a study field that has become a main focus of the world. Hiroshima University is taking the initiative in this field.

Radiation Disaster Recovery Studies

“Radiation Disaster Recovery Studies are an academic discipline with global needs. However, the human resources in this field are not systematically developed. Hiroshima University, placed in “Hiroshima as the world’s first city suffered from atomic bombing”, is going to take the initiative in this field. It’s very meaningful in this context.”

“Using radioactivity for industries, medicine and energy contributes to our lives. On the other hand, the significance of nuclear power as an energy resource has been growing, as the dangers of nuclear disaster have been increasing. Recently, there has been an increasing threat of nuclear terrorism. There is also a problem with low levels of radiation exposure in medical treatment. Radiation is a necessary tool for medical services and examinations, but it causes a problem if we are too frequently exposed to X-Ray and CT scanning. These are becoming a major problem worldwide. Still, the world has lagged behind in producing personnel who are capable of solving these problems comprehensively and scientifically.”

The origins of our program came from the idea that only Hiroshima University could set out such problems, and we have to produce experts in this field. Hiroshima University with the research institute for Radiation Biology and Medicine and University Hospital has been investigated and conducted research with broad vision of radiation disasters from the atomic bombing in 1945, and provided medical treatment for people who suffer from atomic bomb radiation. Based on this experience in Hiroshima University, we were about to build the program on Radiation Disaster Recovery Studies. Recently, the accident occurred at the Fukushima Daiichi Nuclear Power Station. This accelerated our program planning.”

Great meanings of disaster prevention

“Nuclear terrorism and accident should not be happened. However, these are risks that are likely to happen in the reality. When there is any risk, we have to prevent it. As the point of

necessary to predict and prevent a disaster, we need to develop personnel in a social recovery from radiation disaster.

We need support when disaster occurred, of course, and we also need support at the standpoint of prevention. It means that if there is not enough research done in this field, we cannot see where the problem is. When it is no clear about the place of the problem, we can hardly prevent it. Therefore, the research of the post-disaster regeneration is strongly related to the disaster prevention. In this sense, I think our graduate program for Phoenix Leader Education is much meaningful even in the world.”

Experts with a comprehensive vision

Phoenix (a secular bird seen in myths around the world. It is said that phoenix burns itself and reborn from its ashes with a new life once in million years), is a symbol of Hiroshima University. As a brief portrait of personnel we would like to develop in our program, he/she is capable of working for bringing recovery from the radiation disaster based on his/her knowledge and extensive prospect. I think that having a great knowledge in the broad fields cannot be regarded as an expert. One needs to have an axis in his/her specialized field. On the other hand, as deep as we seek expertise, our vision tends to be narrow even we try not to do so. With such a narrow vision, it is impossible to work for the post-disaster regeneration, which is related to many different aspects.

It could be a personnel with any specialization, which can be Nuclear Science, Radiation Medicine, Education, or Physics, and so on. Having such expertise, it should be a person who can deal with the problems and work comprehensively for the disaster prevention, response, and recovery. To lead the disaster regeneration, one should have an ability to realize his/her position and role with a basis of expertise. This is a characteristic of the studies of Radiation Disaster Recovery Studies.

It cannot be any persons without passion or aspiration for the prevention of radiation disaster and working for post-radiation disaster regenerations. I would like persons with such motive to be in our program.”

Toshimasa Asahara
President of Hiroshima University



System for interdisciplinary education

“Hiroshima University has a resource for the education regarding our program. Hiroshima University is a comprehensive University with 11 departments and 11 graduate schools. We have never used our educational resources for one comprehensive program in the past. It is the fact that there was no any interdisciplinary system on a basis of graduate schools. The present program has built the interdisciplinary educational network for making such a system. And this is our first attempt as Hiroshima University.

Furthermore, “global” is one “village in the planet”. Things happen in Japan may influence everywhere in the world. In this sense, it means with a village of the earth. There is no border-line especially in radiation disaster, and thus it is a village of the earth itself. Obviously, experts need to have a global vision, knowledge, and skills. Therefore, we are building a system in which the students could learn from excellent world-wide scholars and researchers. Internships in the international organizations (IAEA, WHO, etc.), and fieldwork in Japan and abroad will be good opportunities. We are going to cultivate experts in Radiation Disaster Recovery Studies with our global system.”

Tetsuji Okamoto

Program Director
Executive and Vice President of Hiroshima University (Industry-Academia-Government Collaboration, Community Relations, Public Relations, Academic Information)
Professor at Graduate School of Biomedical & Health Sciences, Hiroshima University



Vice President Okamoto is a program director at the Phoenix Leader Education Program. The original idea for the program comes from a long history of Hiroshima University, that engages with a recovery of Hiroshima from the atomic bomb.

Education of Experts for Post-Radiation Disaster Regeneration as a mission of Hiroshima University

“I think there has been a global task to develop experts for post-radiation disaster regeneration for a long time. Despite many discussions, the use of nuclear power still exists. Damage from the nuclear experiment facilities such as Semipalatinsk*, a nuclear accident in Chernobyl and Three Mile Island, as well as JCO accident in Tokai Mura, Ibaragi-prefecture. Not only these, but also there has been problems in regard to the medical use of the radiation. Although we have to prepare for a program dealing with these problems, such a program was considered a negative for aspects of nuclear power. However, it is not actually negative and the need for such a graduate program is increasing globally. In order to search for any collaboration and support for this program, we visited WHO (World Health Organization), IFRC (International Federation of Red Cross and Red Crescent Societies) in Geneva, IAEA (International Atomic Energy Agency), United Nations in Vienna, and presented our program. We received great expectations with comments such as “We wanted to engage in a program like this, but we couldn’t;” and “We’d like to support your program totally.” Even an executive in IAEA took his time to give advice. I found many other people who have similar ideas.

We should receive those expectations and demands, and develop experts in recovery from radiation disaster with a global perspective. My feeling is that only we can do this, as Hiroshima University has worked many years to recover from the atomic bomb. Hiroshima University is fated to execute this mission, as the first University founded in a city exposed to an atomic bomb.”

“We call the study on radiation disaster recovery “Hiroshima Studies”. It includes a broad area of academic studies, varying from research survey to medical care, social recovery, and psychological care. We will provide experts in the three fields of “Radiation Disaster Medicine,” “Radioactivity Environmental Protection,” and “Radioactivity Social Recovery”. There will not just be narrowly focused experts. The personnel will be able to work in different fields, that is, experts who can synthesize different fields of studies and can do so with a capacity of persuasion.

For personnel development, most of the research divisions of Hiroshima University will collaborate in this program. Moreover, there are collaborations with outside institutions such as Tohoku University, Fukushima University, Fukushima Medical University, Nagasaki University, Radiation Effects Research Foundation, and the National Institute of Radiological Sciences. This program is a global program collaborating with the IAEA and WHO. I feel expectations from those Universities and organizations, and it is a great responsibility.”

* A nuclear testing site in former Soviet Union now it is located in Kazakhstan. There were 456 nuclear tests during the past 40 years, and many residents of surrounding cities were exposed to radiation.

Kenji Kamiya

Program Coordinator
Vice President of Hiroshima University (Reconstruction Support / Radiation Medicine)
Professor at Research Institute for Radiation Biology and Medicine
Vice President of Fukushima Medical University



Since the Great East Japan Earthquake, Professor Kamiya goes back and forth between Fukushima and Hiroshima for “recovery from radiation disaster”. During this time, he took up the post of Vice President at Fukushima Medical University and has been a leader in post-radiation disaster regeneration. Professor Kamiya says “It is important to develop human resources who are capable of not only gaining a scientific knowledge but also becoming valuable for “people” in actual field.”

Integration of broad areas of sciences and nurture of management ability in leading post-disaster regeneration

“This program is composed of three training courses to nurture personnel capable of key elements: (1) protecting lives from radiation disaster (Radiation Disaster Medicine Course), (2) protecting the environment from radioactivity (Radioactivity Environmental Protection Course), (3) consolidating knowledge based on Social sciences and Education for recovery of society as a whole, especially for the healthy development of children (Radioactivity Social Recovery Course).

This program is a very interdisciplinary. Radiation disaster is the subject that cannot be solved by only narrow academic fields. It requires knowledge of varied academic fields. In addition, an ability to synthesize or analyze a whole situation is necessary for overall disaster response management. These ideas are the origin of our program in post-disaster regeneration.”

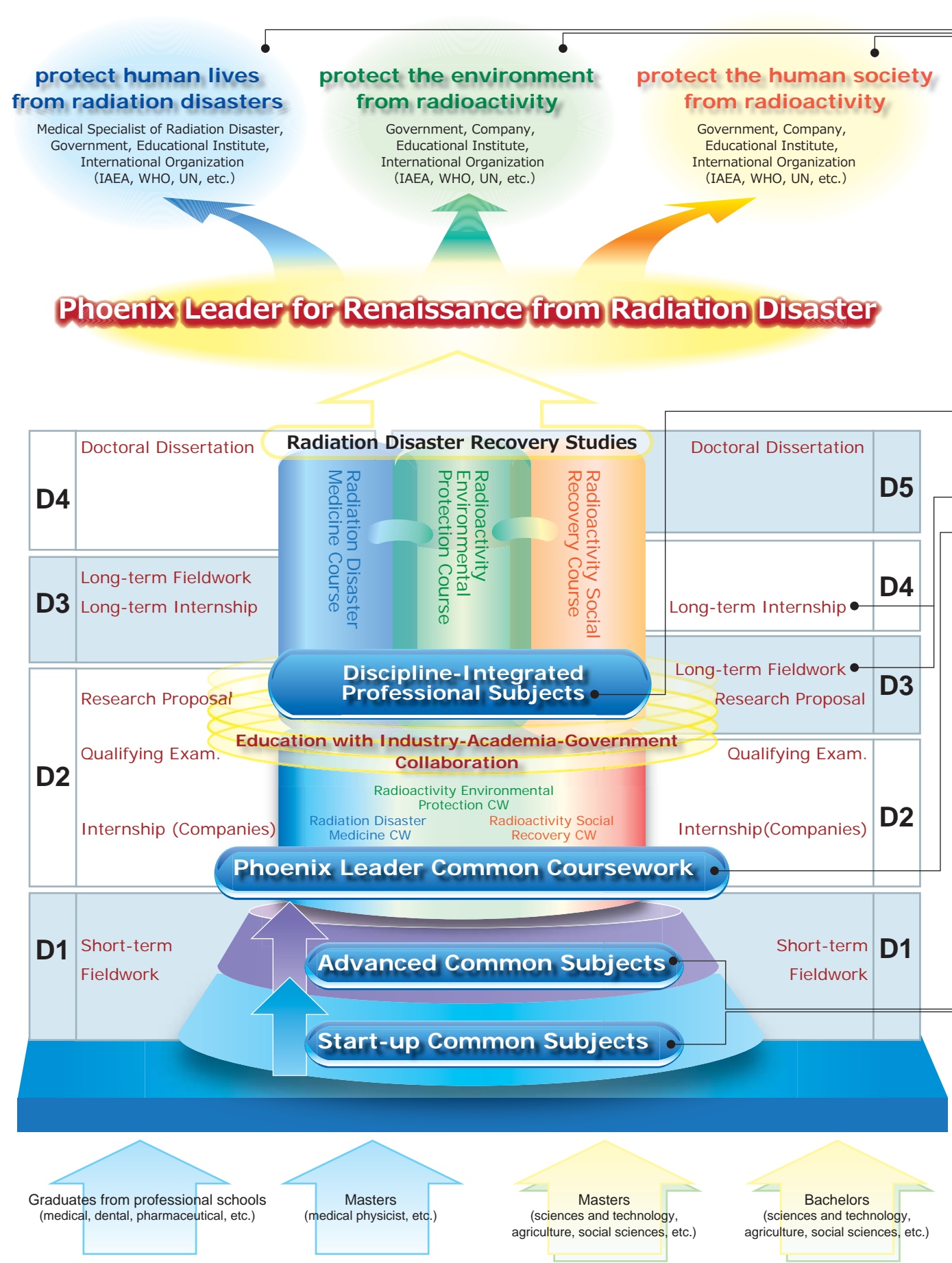
“When you look at the contents of the program, you will see that this program sets out to education very much focusing on the actual “field” such as internships and fieldworks. We focus on our education to develop the practical skills of students by going out to the field and gaining the actual knowledge and ability through these experiences.

This is based on our experience. We could realize the actual problems only after going to the science of the disaster and facing actual situations there; worries and sufferings of people and their destroyed livelihoods. To feel something, which is just a “human” matter. At the same time, a sense of responsibility will arise: “We have to do something.”

We are exactly those who have had such an experience. Research Institute for Radiation Biology and Medicine, Hiroshima University is one of the top research institutes in the world. However, when we went out from “Laboratory” to the actual field and listened to people who were actually exposed or contaminated, we realized the reality was not things written in textbooks. For example, 10mSv has a risk of 10mSv of radiation literally in textbooks, but the meaning of the word varies depending on the person who is actually exposed, and its meaning is more serious for that person. We have to see a “holistic” problem. By facing this experience at the actual field, a sense of mission arose, and we could see the tasks to deal with more particularly.”

“I will welcome competent people who have passion and are highly motivated to this program. And in the future, I would like them to be active globally with career experience at international organizations such as the IAEA or the WHO and become the core of the post-disaster regeneration on the world’s stage. Eventually, I hope them to be valuable to “others” not only academically but actually, which carries a meaning to science and also learning. We’d like to develop such a human resource.”

Phoenix Leader Education Program (Hiroshima Initiative) for Renaissance from Radiation Disaster



Stages that Phoenix Leaders will be active

As stages that Phoenix Leaders would play an active role, various fields could be considered. It could be **international organizations** such as the IAEA and the WHO, **education/research institutes** of radiation, **national and local governments** where nuclear plants are located, **medical institutions** for radiation exposure and **hospitals** in cities affected by disaster, as well as **private enterprises** such as electric power supplier, media, equipment-makers of radiation-related devices. Because the Phoenix Leaders are the human resource with abilities that no one else has, it is expected there would be more fields where they could play an active role.

Discipline-Integrated Professional Subjects

This program will provide specialized subjects for students in becoming leaders in "protecting human lives from radiation disasters", "protecting the environment from radioactivity", or "protecting the human society from radioactivity", with three courses corresponding to the respective aim. To finalize the specialized subjects, all students of three courses will take Radiation Disaster Recovery Studies.

Radiation Disaster Recovery Studies

Radiation Disaster Medicine Course	Radioactivity Environmental Protection Course	Radioactivity Social Recovery Course
<ul style="list-style-type: none"> Radiological Disaster medicine Radiation Effect on Human Health Genome Disorder Sciences 	<ul style="list-style-type: none"> Radiation Physics Measurement and Detection of Radiation Radiation Chemistry Environmental Radiation Sciences Food Science Meteorology 	<ul style="list-style-type: none"> Theories of Adaptive Behavior Developmental Neuropsychology Child Health Risk Communication Project Management Cognitive Psychology

Phoenix Leader Common Coursework Hiroshima Phoenix Training Center (HIPTC)

All students will take cross-disciplinary practical coursework at the Hiroshima Phoenix Training Center (HIPTC). The coursework is designed to acquire practical skills, risk recognition and risk communication, by collaborating with the IAEA.

[Planned Subjects]

- Business Continuity Management (BCM)
- Exercise of Radiation Measurement
- Screening of Radiological Substances • Decontamination
- Risk Management in the Radiological Disaster
- Initial Radiation Exposure • Internal Exposure • Epidemiology etc.

Cross-discipline Common Subjects

This program admits students from different backgrounds – Medicine, Physical Sciences, Life Sciences, Social Sciences, Engineering, and so on. To fill cross-discipline gaps and obtain a common knowledge base, the following common subjects will be offered.

Start-up Common Subjects

- Hiroshima Peace Studies, History of Hiroshima Restoration, Theory of Social Behavior, Introduction to Radiation Biology, Advanced English, Pre Academic English II, etc.

Advanced Common Subjects

- Advanced Lectures on Radiation Biology, Natural Disasters and International Cooperation, Introduction to Environmental Radiation, Basic Studies for Environmental Sciences, History Review of Radiation Casualty, etc.

Internationalization Training

The program provides internationalization training in order to develop the world class "Global Leader (Phoenix Leader)". Basically, English is spoken in the courses, and there will be instructors invited from abroad. Moreover, specialized instructors provide exercise classes such as Current English, Scientific English Conversation, English Presentation, English Academic Writing, etc.

Radiation Disaster Recovery Studies

"Radiation Disaster Recovery Studies" is the final subject of this program that all students will attend at the end of the professional subjects. It includes scientific, interdisciplinary and comprehensive content as the final subject to foster experts for post-radiation disaster regeneration.

Interdisciplinary Integrated Seminars

"Interdisciplinary Integrated Seminars" will be held during Discipline-Integrated subjects. As a forum for students from each course to study together across courses, students are expected to deepen their knowledge in all different areas of their studies by presentation and discussion on comprehensive interdisciplinary themes in addition to the themes based on their professional field.

Fieldwork and Internships

These are the compulsory subjects in order to gain practical skills. Through experiences at the "actual place", students are expected to gain an ability to tackle tasks stemming from disaster.

Fieldwork

Short-term and long-term fieldwork units will be conducted in Fukushima, Chernobyl, or Semipalatinsk Nuclear Testing Facility, and so on. The purpose of the fieldwork is to develop the students' ability to identify and solve any problems relating to the disaster prevention/reduction systems through conducting psychological analysis and health study of people affected by disaster, and monitoring of environmental radioactivity and migration of radioactive substances.

Internships

For the short-term internship (approx. 1 month), students will go to the collaborating companies (Mitsubishi Heavy Industries, Ltd., Kobe Steel, Ltd., The Chugoku Electric Power Co., Inc., etc.). A long-term internship (approx. 3 months) will be held at an international organizations such as IAEA, WHO, ICRP (International Commission on Radiological Protection), UNSCEAR (United Nations Scientific Committee on the Effects of Atomic Radiation). Through these internships, students are expected to learn global thinking, problem solving, and practical skills. In addition to the companies and organizations mentioned above, other research institutes and companies will accept students as interns.

Research Projects

In addition to the Discipline-Integrated Professional Subjects, students will conduct a research project with a supervisor. Through the research project, more advanced and professional knowledge will be obtained. Students will start the project by making a "research proposal"

About “Program for Leading Graduate Schools” proposed by MEXT

In 2011, MEXT (Ministry of Education, Culture, Sports, Science and Technology) started recruitments for graduate programs in order to foster global leaders in various fields. The following is mentioned in their application advertisement.

“The Leading Programs in Doctoral Education works to advance the establishment of university graduate schools of the highest caliber by supporting the dramatic reform of their education programs in such a way that they will institute degree programs recognized as top quality around the world. To foster excellent students who are both highly creative and internationally attuned and who will play leading roles in the academic, industrial and governmental sectors across the globe, the program brings top-ranking faculty and students together from both in and outside Japan and enlists participation from other sectors in its planning

and execution, while creating continuity between master’s and doctoral programs and implementing curricula that overarches fields of specialization.”

Leading Program contains three categories; “All round category” (programs integrate such as humanities, social sciences, life sciences, physical sciences, and engineering), “Composite category” (Cross-discipline programs on one of following seven themes: environment, life and health, safety and security, material objects, information, multi-cultural society, or cross-sectional theme), and “Only-one category” (singularly unique worldwide programs).

Hiroshima University Leading Graduate Program for Phoenix Leader Education Program was adopted as “Composite category (cross-sectional theme)” in December 2011.

Phoenix Leader Education Program

With our accomplishments and experiences in Hiroshima University, the purpose of “Phoenix Leader Education Program for Renaissance from Radiation Disaster” is to develop global leaders (Phoenix Leaders) who have the judgment and behavioral abilities to take appropriate actions in circumstances of radiation disaster and lead recovery with a clear philosophy and innovative knowledge across discipline.

Development of experts for post-radiation disaster regeneration with three courses

Recovery from a radiation disaster includes three key elements: “protecting human lives from radiation disasters”, “protecting the environment from radioactivity”, and “protecting the human society from radioactivity”. Phoenix Leader Program establishes the degree program that integrates master’s and doctoral programs, with three courses in “Radiation Disaster Medicine”, “Radioactivity Environmental Protection”, and “Radioactivity Social Recovery”.

These courses cover professional academic fields of medicine, environmental studies, engineering, biology, physics, chemistry, geoscience, sociology, education, psychology, etc.

Radiation Disaster Medicine Course – personnel for protecting lives from radiation disaster –

- (a 4-year program)
- Proper diagnosis and treatment of pathological conditions affected by the radiation
- Evaluation of the mechanism and risks of carcinogenesis and genetic damage caused by the radioactivity
- Assessment of the psychological effects of stress caused by the radiation contamination and delivery for mental care

Radioactivity Environmental Protection Course – personnel for protecting the environment from radioactivity –

- (a 5-year program)
- Proper analysis of nuclear fission reaction and chemical property of fission products
- Proper measurement, evaluation, and analysis of environmental and food contamination
- Proper decontamination and disposal/preservation of radioactive wastes

Radioactivity Social Recovery Course – personnel for protecting the human society from radioactivity –

- (a 5-year program)
- Alleviating social anxiety generated by radiation disasters and following harmful rumors or misinformation
- Supporting the regeneration of communities for people affected
- Construction of systems to support child-raising under the stress of radiation contamination

Characteristics of the program

Targeted Personality

Hiroshima University emphasizes three critical capabilities required for the Phoenix Leaders, and plans to develop personnel with following capabilities:

- 1. Global Skills** - a capability to tackle recovery with a global perspective
- 2. Interdisciplinary Skills** - a comprehensive cross-discipline knowledge
- 3. Management Skills** - an ability to build consensus by understanding the effects of radiation and convey these information to people

System for developing three capacities

There are following systems designed to develop Phoenix Leaders with global skills, interdisciplinary skills, and management skills.

- Practical education based on a cooperation among government, industry and academia (fieldwork, internships, etc.)
- Practical course work in order to acquire practical skills and risk management skills
- Discipline-integrated subjects to acquire a comprehensive knowledge across majors
- Drastic Internationalization Training provided from skilled instructors both from Japan and abroad

System of collaborations for the development of Phoenix Leaders

“Phoenix Leader Education Program” has built an educational system for collaborating with universities, research institutes, international organizations, and companies, in Japan and abroad. Especially, Fukushima University, Fukushima Medical University, the National Institute of Radiological Sciences, and the Radiation Effects Research Foundation, have been the core collaborating institutions involved since the early development of the program. Many researchers and experts of these institutions take part in the program and implement personnel training curriculums.

Moreover, we have built a collaborating system with international organizations such as the International Atomic Energy Agency (IAEA), the World Health Organization (WHO), the Hiroshima International Council for Health Care of the Radiation-Exposed (HICARE), and the International Federation of Red Cross and Red Crescent Societies (IFRC). Additionally, we are collaborating with private companies as outlined in the figure in this page.

These collaborating organizations and companies will provide actual “field” and “opportunities” especially on “fieldwork” and “internships”. Some organizations will provide lecturers and seminar instructors and participate in personnel training directly. For business internships, our program provides support by collaborating with the “Hiroshima University Young Researchers Education Center”.



Support systems for committing on studies and research

In order to allow students to focus entirely on their academic achievement and research activities, we will provide financial support as well as other support systems.

Financial Support

- **Free student housing**
- **Scholarship** (from 180,000 yen to 200,000 yen/month; estimated)
*Note: Students who are receiving other scholarships etc, may not be able to receive this scholarship
(Japanese Government Scholarship Students and other students who receive scholarship must select whether to receive scholarship or their existing scholarship)
- **Support of necessary study cost** (internships, fieldwork, academic conference, etc.)

Support for academic achievement and research

- **e-Learning Portfolio** – guarantee a quality of the education program
- **Multiple supervisors system** – given advises from more than one supervisor
- **Career design counseling system** – given consultant from professional business people
- **Academic advisor system** – given support to ensure interdisciplinary research

Program Members

(October, 2013)

Program Director Tetsuji Okamoto

Graduate School of Biomedical & Health Sciences

Program Coordinator Kenji Kamiya

Research Institute for Radiation Biology and Medicine

Radiation Disasters Medicine Course

- Shinya Matsuura
Research Institute for Radiation Biology and Medicine
- Toshiya Inaba
Research Institute for Radiation Biology and Medicine
- Yoshihiro Takihara
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- Satoshi Tashiro
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Radioactivity Environmental Protection Course

- Kiyoshi Shizuma
Graduate School of Engineering
- Satoru Endo
Graduate School of Engineering
- Toshiyuki Sawa
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- Takashi Tsuchida
Graduate School of Engineering
- Ken-ichiro Nakarai
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- Takashi Yamamoto
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- Hironori Deguchi
Graduate School of Science
- Shuji Takahashi
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- Toshinori Okuda
Graduate School of Integrated Arts and Sciences
- Norihisa Kato
Fukushima University
- Takeshi Naganuma
Graduate School of Biosphere Science
- Satoru Nakashima
Natural Science Center for Basic Research and Development
- Kazuya Tanaka
Institute for Sustainable Sciences and Development
- Shoken Miyama
Office of President
- Akira Watanabe
Fukushima University

Radioactivity Social Recovery Course

- Kiriko Sakata
Graduate School of Integrated Arts and Sciences
- Makoto Iwanaga
Graduate School of Integrated Arts and Sciences
- Yoshinori Sugura
Graduate School of Integrated Arts and Sciences
- Hiroshi Nittono
Graduate School of Integrated Arts and Sciences
- Tsunekazu Toda
Graduate School of Social Sciences
- Yukio Urabe
Graduate School of Biomedical & Health Sciences
- Hirota Yamauchi
Graduate School of Letters
- Kazuo Tomozawa
Graduate School of Letters
- Takehiro Hayashi
Graduate School of Education
- Yasumasa Otsuka
Graduate School of Education
- Akiko Harano
Fukushima University
- Yuji Tsutsui
Fukushima University
- Itsuki Yoshida
Fukushima University
- Tamaki Honda
Fukushima University

Also, there will be additional specialists engaged from Japan and abroad

Visiting Professors

Hiroo Doi
Japanese Red Cross Society

Tomoyoshi Oikawa
Minami-sona City General Hospital

Special Contribution



Rethy K. Chhem
MD, PhD (Edu), PhD (His)
Director
Division of Human Health, IAEA

The “Phoenix leader education program for renaissance from radiation disaster” is the strategic response from Hiroshima University to nuclear disaster that raises global health and environmental challenges. The main goal of this educational program is to produce highly qualified leaders capable of responding to nuclear accidents during the crisis and recovery periods. By their unique recent history, both Hiroshima and Nagasaki cities have experienced the tragedy of dealing with radiation victims. As a consequence of those tragedies, Hiroshima University doctors and scientists have developed over the last six decades, a unique and superior expertise in dealing with radiation diseases.

The “Phoenix leader education program for renaissance from radiation disaster” offers three academic programs. The first focuses on the education and training of scientists with expertise in radiation medicine. The second produces experts in radiation ecology while the third offers a holistic education dimension focusing on the social aspects of radiation disaster response and recovery. This third program is an integrative and interdisciplinary program that combines natural and social sciences. These three programs are open to international students leading to an increase of the university student diversity. It also aims at exploring the impact of science and technology on society by drawing some concepts from the emerging field of Science and Technology Studies (STS) in radiation disaster. Beyond acquiring knowledge from the scientific content of each program, students will have been equipped with strong and global leadership through specialized workshops and seminars in leadership development. The “Phoenix leader education program for renaissance from radiation disaster” draws its academic staff from Hiroshima University, and other relevant academic and research institutions from Japan and abroad.

There is no doubt that the unique history of Hiroshima University, the wealth of its experience in educating physicians and scientists and its expertise in radiation effects on people and the environment as well, would allow the “Phoenix leader education program for renaissance from radiation disaster” to grow over the next few years. The combination of the STS approach and additional leadership training to the existing solid science foundation in radiation medicine and radioecology will further enhance the capacity building of Hiroshima University in developing future global leaders in radiation disaster management and recovery.

Student Interview

Hiroshima being my hometown, I feel strong urge to take part in the post-disaster reconstruction



2012 Enrolled Student
Mariko Komatsu

After graduating from McGill University with Bachelor of Education, I worked as a teacher in a very multicultural public daycare in Toronto, Canada. I then came back to Hiroshima and started Master Program at Graduate School of Education in Hiroshima University. During my post-graduate study, I had the opportunities to work as an intern in UNICEF Sierra Leone and as an interpreter / campaign coordinator with Japanese NGOs. When the Great East Japan Earthquake struck the Tohoku region, I took a leave of absence from University and joined an emergency assistance of Japan Committee of UNICEF in Iwate for 4 months. Over there, in addition to delivering material support for prompt reopening of child care facilities, I was assigned to manage refresh daytrips for children and to organize workshops for nursery school teachers on psychological care of children.

The importance of psychological care during and after the disaster has come to be well recognized. Especially in the afflicted area, the need is great. As I worked in Tohoku and met with those affected by the disaster in person, however, so many times I was genuinely touched by their kindness, perseverance and strong will to carry on forward. That reminded me of very personal and human aspects of this catastrophe, and of Hiroshima. Having grown up in a city once completely destroyed by war and then rebuilt as Peace City, I had always felt strong urge and encouragement to join the post-disaster reconstruction. Working with those affected yet courageous people taught me so much, as much as I have learnt from Hiroshima survivors, and that made me wish to find a meaningful contribution of my part in the path of resurrection along with them.

When I came back from the Tohoku mission, I read on the newspaper about “Phoenix Leader Education Program” proposal that Hiroshima University had submitted to the MEXT. I was very moved and resonated with its concepts and endeavor. I decided to apply at once when the program was approved. The entrance examination was challenging, but it also was a great opportunity to sort and express myself. I am hopeful that this Radiation Disaster Recovery Studies be of contribution for not only disaster recovery but also inheritance of the legacy and prevention from disaster.

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Ministry of Education, Culture, Sports, Science & Technology (MEXT)
“Program for Leading Graduate Schools”

Phoenix Leader Education Program (Hiroshima Initiative) for Renaissance from Radiation Disaster

Development of global personnel who manage recovery
from breakdown of people, society,
and environment, caused by radiation disaster



Hiroshima University

<http://www.hiroshima-u.ac.jp/en/lp/po/ra/>