The 6th International Symposium of Nagasaki University Global COE Program
“Global Strategic Center for Radiation Health Risk Control”: A New Challenge of Radiation Health Risk Management

20-22 October, 2011
Venue: Ryojun Matsumoto Auditorium, Nagasaki University School of Medicine

Day 1 (20 October)

13:00-13:30
Opening ceremony
   Chair: Yuji Nagayama, Director, Atomic Bomb Disease Institute, Nagasaki University

13:00-13:10
Opening address
   Shigeru Katamine, President, Nagasaki University

13:10-13:30
Addresses
   Toshiteru Okubo, Chairman, Radiation Effects Research Foundation, Hiroshima and Nagasaki, Japan
   Kenji Kamiya, Director, Research Institute for Radiation Biology and Medicine, Hiroshima University/ President, The Japan Radiation Research Society, Hiroshima, Japan
   Shigenobu Nagataki, Professor Emeritus, Nagasaki University

13:30-14:00
Achievement of GCOE program
   A new challenge of radiation health risk management in Fukushima
   Shunichi Yamashita, GCOE program leader, Nagasaki University/ Vice President, Fukushima Medical University

14:00-17:00
Keynote lectures
   Chair: Ohtsura Niwa, Kyoto University, Kyoto, Japan
   Yoshisada Shibata, Nagasaki University

   Modulating factors for low dose radiobiology
   Tom K. Hei, Columbia University Medical Center, New York, NY, USA

   Stem cell radiobiology and its implication in radiation risk development of in utero exposures and low dose rate exposures
   Ohtsura Niwa, Kyoto University, Kyoto, Japan

   WHO role in global health security and international response to Fukushima nuclear accident
   Zhanat Carr, WHO/HQ, Geneva, Switzerland

   Recent findings by the Radiation Effects Research Foundation on the health of atomic bomb survivors and their offspring
   Roy E. Shore, Radiation Effects Research Foundation, Hiroshima and Nagasaki, Japan
Radiation health risks in medical imaging
   *Rethy K. Chhem*, IAEA, Vienna, Austria

Issues on radiation exposure in the Fukushima nuclear accident-health effects, radiation protection, and public communication
   *Kazuo Sakai*, National Institute for Radiological Sciences, Chiba, Japan

17:00-17:10
**Group photo**

18:30-20:30
**Reception**

**Day 2 (21 October)**

9:00-12:00
**Radiation Basic Life Sciences**
   Chair: *Robert Ullrich*, Colorado State University, Fort Collins, CO, USA
   *Alex J van der Eb*, Leiden University, Leiden, Netherlands

   9:00-9:20
   **Summary of the project**
   Summary of radiation basic life science project
   *Keiji Suzuki*, Nagasaki University

   9:20-10:40
   **Non-targeted effects**
   Microbeams as tools for low dose radiation studies
   *Kevin M. Prise*, Queen's University Belfast, Belfast, UK

   The complex regulation of insulin-like growth factor 1 after low level cell stress
   *David A. Boothman*, University of Texas Southwestern Medical Center, Dallas, TX, USA

   10:40-11:20
   **Effects on stem cells**
   New concepts related to low-level radiation-induced carcinogenesis: pre-and post-natal modulation of adult stem cells modify the risk
   *James E. Trosko*, Michigan State University, East Lansing, MI, USA

   11:20-12:00
   **Low-dose/low-dose rate effects**
   Low-dose/low-dose rate effects: an interim summary of studies performed in the Institute for Environmental Sciences (IES) using low-dose rate exposure facilities
   *Akihiro Shima*, Institute for Environmental Sciences, Aomori, Japan
12:00-13:00

**Lunch**

13:00-15:10

**Late effects, radiation sensitivity and others**

Chair: Koh-ichiro Yoshiura, Nagasaki University

*Vladimir Saenko*, Nagasaki University

13:00-13:50

**Special lecture**

Genetic epidemiology for the understanding of human diversity

*Toshihiro Tanaka*, RIKEN, Saitama, Japan

13:50-15:10

**Summary of the project**

Molecular epidemiology study of Chernobyl thyroid cancer from Belarus and Ukraine

*Vladimir Saenko*, Nagasaki University

Reactive oxygen species play dual roles in genomic stability of stem cells

*Tao-Sheng Li*, Nagasaki University

Copy number analyses in A-bomb survivor using formalin-fixed paraffin-embedded sample archive

*Koh-ichiro Yoshiura*, Nagasaki University

Genetically-modified mice for thyroid cancer study

*Yuji Nagayama*, Nagasaki University

15:10-15:20

**Coffee break**

15:20-17:00

**Atomic Bomb Disease Medicine Research**

Chair: Akihiko Suyama, Radiation Effects Research Foundation, Nagasaki, Japan

*Kunihiro Tsukazaki*, Nagasaki University

15:20-16:00

**Summary of the project**

Establishment of a data and peripheral blood sample bank of Nagasaki A-bomb survivors

*Yasushi Miyazaki*, Nagasaki University

Summary of pathologic projects on atomic bomb disease medicine research

*Masahiro Nakashima*, Nagasaki University

16:00-17:30

**Topics**

Recent epidemiological studies on RERF A-bomb survivor cohort: early onset of menopause observed among A-bomb survivor females

*Ritsu Sakata*, Radiation Effects Research Foundation, Hiroshima, Japan
Molecular mechanisms that produce radiation-induced or therapy-related MDS/AML by
\textit{RUNX1/AML1} point mutations

\textit{Hironori Harada}, Hiroshima University, Hiroshima, Japan

Long incubation period of cancer induced by internal exposure is attributed to the uneven
distribution of deposited radionuclides at the microscopic level

\textit{Manabu Fukumoto}, Tohoku University, Sendai, Japan

17:30

\textbf{Closing Remarks}

\textit{Yuji Nagayama}, Nagasaki University

\textbf{Day 3 (22 October)}

9:00-12:00

\textbf{Fukushima Daiichi Nuclear Power Plant accident-related issues}

Chair: \textit{Hideo Tatsuzaki}, National Institute for Radiological Sciences, Chiba, Japan

\textit{Akira Ohtsuru}, Nagasaki University

9:00-9:30

\textbf{Keynote lecture}

Outline of TEPCO Fukushima Daiichi Nuclear Power Plant accident

\textit{Hideo Tatsuzaki}, National Institute for Radiological Sciences, Chiba, Japan

9:30-12:00

\textbf{Topics}

Fukushima Daiichi Nuclear Power Plant accident and emergency medical response at Fukushima
Medical University Hospital

\textit{Arifumi Hasegawa}, Fukushima Medical University, Fukushima, Japan

Development of novel treatments for radiation-related diseases in nuclear accident

\textit{Akira Ohtsuru}, Nagasaki University

Six days in Fukushima: Initial activities as a member of REMAT from Nagasaki

\textit{Naoki Matsuda}, Nagasaki University

Technology for establishing a cancer radiation risk group based on the methods of molecular and
radiation epidemiology

\textit{Valery V. Kashcheev}, Federal State Institution Medical Radiological Research Center,
Obninsk, Russia

Pathology review of childhood thyroid cancer around Chernobyl

\textit{Masahiro Ito}, National Nagasaki Medical Center, Nagasaki, Japan
12:00-13:00
Lunch

13:00-15:00
International Radiation Health Sciences Research
Chair: Geraldine A. Thomas, Hammersmith Hospital, London, UK
Saenko Vladimir, Nagasaki University

13:00-13:20
Summary of the project
Project report within a framework of International Radiation Health Sciences Research
Noboru Takamura, Nagasaki University

13:20-15:00
Topics
The Chernobyl Tissue Bank – integrating research on radiation-induced thyroid cancer
Geraldine A. Thomas, Imperial College London, UK

Chernobyl, 25 years after – what have we learnt and what are next steps?
Ausrele Kesmeniene, IARC, Paris, France

Thyroid cancer in Ukraine after the Chernobyl catastrophe (25-year experience of follow-up)
Mykola Tronko, Institute of Endocrinology and Metabolism, Academy of Medical Sciences of Ukraine, Kiev, Ukraine

International cooperation in early diagnosis and management of radiation-induced thyroid cancer patients in Belarus
Valentina Drozd, Belarusian Medical Academy of Post-graduate Education, Minsk, Belarus

Psychiatric legacy of the Chernobyl disaster; current state of evidences 25 years after
Vladymyr G. Bebeshko, Institute of Radiation Medicine, Academy of Medical Sciences of Ukraine, Kiev, Ukraine

15:00-15:10
Coffee break

15:10-16:30
Risk Communication and Radiation Protection
Chair: Naoki Matsuda, Nagasaki University
Hiroki Ozawa, Nagasaki University

Topics
Factors influencing perception of radiation risk in people around Chernobyl: a survey in Ukraine
Yoshisada Shibata, Nagasaki University

Radiation risk associated with advanced diagnostic imaging
Takashi Kudo, Nagasaki University
Assessment of individual dose in high background radiation area of Tamil Nadu, India
Subramaniyan Selvasekarapamdian, Karasaringam University, India

Disaster psychiatry on earthquake and nuclear crisis in Fukushima
Hiroki Ozawa, Nagasaki University

16:30-17:00
Discussion for Future Project and International Collaboration
Chair: Shunichi Yamashita, GCOE program leader, Nagasaki University/ Vice President, Fukushima Medical University
Satellite Symposium

Health Effects of the Chernobyl Accident and Semipalatinsk Nuclear Testing: Message from Nagasaki

19 October, 2011
Venue: Ryojun Matsumoto Auditorium, Nagasaki University School of Medicine

15:00-16:00

Thyroid and Other Diseases

Chair: Noboru Takamura, Nagasaki University
Larisa I. Danilova, Belarussian Medical Academy of Post-graduate Education

Thyroid diseases in Belarus after Chernobyl Nuclear Power Plant accident
Larisa I. Danilova, Belarussian Medical Academy of Post-graduate Education

Long-term risk of thyroid nodules in population around Chernobyl Nuclear Power Plant
Oleksandr Gutevych, Zhitomir Inter-Area Medical Diagnostic Center

Alteration of vasoactive intestinal polypeptide, substance P and neuropeptide Y expression in the human thymus after chronic thyroiditis
Vasili Roudenok, Belarussian State Medical University

16:00-16:10

Discussion

16:10-16:25

Coffee Break

16:25-17:25

Dosimetry and Mental Health

Chair: Yoshisada Shibata, Nagasaki University
Nataliya Korol, Academy of Medical Sciences of Ukraine

$^{137}$Cs body burden in inhabitants of Bryansk Oblast, Russia: evaluation of radiation effect caused by the Chernobyl accident
Irina V. Karevskaya, Bryansk Consultative-Diagnosis Center

Tobacco smoking among youth of Slavutych
Nataliya Korol, Institute of Radiation Medicine, Academy of Medical Sciences of Ukraine

Mental health status of the young people in Chernobyl-affected areas after 25 years from the accident
Alexander Kozlovsky, Gomel State Medical University
Current concentration of artificial radionuclides and estimated radiation doses from $^{137}\text{Cs}$ around the Semipalatinsk nuclear testing site

Tolebay Rakhybekov, Semey Medical Academy

17:25-17:35

Discussion

17:35-17:40

Closing Remarks

Noboru Takamura, Nagasaki University