

REMPAN

e-NEWSLETTER

World Health
Organization

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Editorial

Dear Colleagues,

March 11, 2016, the world marked a five-year mark since the Fukushima Daiichi nuclear power plant accident. Time is passing but we are still looking for answers to questions on Fukushima recovery. This road is long but, as they say, a journey of a thousand miles begins with a single step. Enormous amount of work has been carried out since 2011 by the medical professionals of Japan towards mitigation of the consequences of the accident. The international community appreciates the transparent and open approach of our Japanese colleagues towards sharing their experiences and the lessons learnt from Fukushima. See WHO website for [updates on Fukushima](#).

In April, May and June – series of scientific events were held in commemoration of the 30-year mark since the Chernobyl nuclear power plant accident – see WHO website for [updates on Chernobyl](#). Three decades of Chernobyl research on health impact of the accident have made a substantial contribution to our knowledge on radiation health effects. This Newsletter offers the reports from these remarkable scientific forums and many other exciting and fascinating activities of the network members.

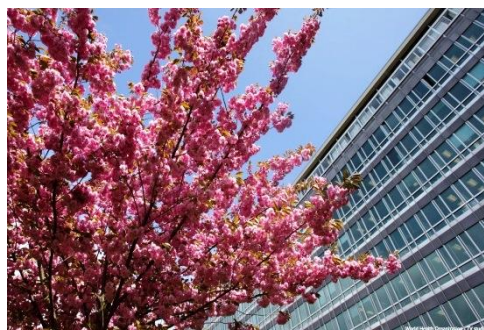
WHO Radiation Program continues enjoying collaboration with the national health authorities, international organizations, professional societies, research centers and academia, and other stakeholders and expert community. REMPAN and its members are the core asset of our Program. Your knowledge is our strength!

Many thanks to all contributors to the 13th issue of the Newsletter.

I hope you are using well your well-deserved holidays and wish you a fantastic summer!

With warmest regards,

Dr Zhanat Carr
WHO REMPAN
Secretariat



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News – From REMPAN Secretariat

By Zhanat Carr, WHO, Geneva, Switzerland

WHO continued working on the revision of the 1999 **Guidelines on Iodine Thyroid Blocking (ITB)** in case of a nuclear accident. On January 11-13, 2016, the Guidelines Development Group (GDG) met to derive the recommendations based on the outcome of the systematic reviews conducted in 2015, according to the WHO policy for guidelines development. The set of recommendations will constitute a new chapter of the WHO guide on Public Health Response (PHR) to radiation emergencies, which is due to be completed by the end of 2016. It was decided that the ITB recommendations will become an integral part of the WHO guideline for PHR to nuclear accidents and radiological emergencies, which is being currently drafted. The round of the external peer-reviews will start in October 2016. Should you be interested in becoming an external reviewer, please contact [Dr Zhanat Carr](#). ♦



GDG members 2nd meeting for ITB guidelines revision – Pisa, Italy – January 2016



In January 2016, **Prof. Noboru Takamura** of the WHO Collaborating Centre (CC) – University of Nagasaki, Japan, visited WHO Radiation Programme of the Department of Public Health, and Environmental and Social Determinants of Health for a bilateral discussion on strengthening collaboration with the WHO under the framework of REMPAN. The University of Nagasaki is one of the oldest CCs and has been providing continuing contribution and support to the WHO REMPAN. ♦

Z. Carr and N. Takamura – Geneva, Switzerland – January 2016

In February 2016, Dr Kazinori Kodama and Dr Hiroaki Katayama, **Radiation Effects Research Foundation** (RERF) in Hiroshima, Japan – WHO CC for Research of Radiation Effects in Humans visited the WHO for a bilateral discussion on the future collaboration between RERF and WHO, and delivered a talk at the lunch time seminar jointly organized by the WHO Department of Public Health and Environment and the Department of Non-Communicable Diseases. ♦



K. Kodama (left), H. Katayama – Geneva, Switzerland – February 2016

News – From REMPAN Secretariat

March 30-31, 2016, the International Agency for Research on Cancer (WHO/IARC) held a meeting of the **SHAMISEN** project participants and international experts to discuss the experience, studies and research needs for long-term medical follow-up of persons over-exposed to ionizing radiation.

The SHAMISEN project is funded by the EC under the **OPERRA** (Open Project for European Radiation Research Area) framework. IARC is one of the participating partners of this project.

The project aims to draw the lessons from the Chernobyl and Fukushima accidents in order to make recommendations for immediate and long-term response to radiation accidents, aiming in particular to respond to the needs of affected populations while minimising unnecessary anxiety.

Nuclear emergencies cause major and long-term upheaval in the lives of those affected (including emergency and recovery workers, evacuees and residents of contaminated regions). Some may suffer direct physical health impacts from radiation. Others may experience serious social and psychological consequences related to the immediate response to the accident (including evacuation and other exposure reduction measures), to long term measures (such as relocation and loss of home, social relations, work) and concerns and uncertainties about radiation levels and health.

The objective of SHAMISEN is to:

- build upon lessons learned from experiences of populations affected by Chernobyl, Fukushima and other radiation accidents and
- develop recommendations for medical and health surveillance of populations affected by previous and future radiation accidents. ♦

News – From REMPAN Secretariat

April marked the **30th anniversary of the Chernobyl accident**. Number of commemoration events and scientific meetings took place in April, May and June. This newsletter offers reports from these events. WHO has attended several of them:

- April 18-19, 2016, Kiev, Ukraine: The International Conference “Health Consequences of the Chernobyl Accident” was hosted by the WHO Collaborating Center (CC) – [National Research Center for Radiation Medicine](#) (with participation of WHO and IARC).
- May 17-19, 2016, Obninsk, Russia: The International Conference “Health Effects of Chernobyl: Prediction and Actual Data 30 years after the Accident” was hosted by the WHO CC – [Medical-Radiological Research Center](#).



A. Barabanova, A. Gonzalez, T. Marchenko, Z. Carr, S. Yamashita and W. Weiss (left to right) have received commemorative medals for their contribution to the mitigation of the consequences of the Chernobyl accident – Obninsk, Russian Federation – May 2016

- June 11, 2016, Lyon, France: The WHO / IARC International Scientific Symposium “Chernobyl: 30 years after” was held in the frame of the International Conference for the 50th anniversary of [IARC](#).
- June 16-17, 2016, Wuerzburg, Germany: The 4th International Seminar “Radiation Medicine in Research and Practice: Health effects 30 years after Chernobyl, 5 years after Fukushima” was hosted by the WHO CC – [University of Wuerzburg](#). ♦

In April 2016, the delegation from WHO Department of Public Health and Environmental and Social Determinants of Health (PHE) visited the **Swiss Federal Office of Public Health (SFOPH)** for a bilateral discussion with the WHO CC for Radiation Health – SFOPH Division of Radiation Protection. The discussion focused on the ways to strengthen collaboration, technical support, resource mobilization, and preparations for the REMPAN-15 meeting in 2017. ♦



E. van Deventer, C. Murith, D. Storch, S. Baechler, P. Trueb, M. Neira, Z. Carr, M. Perez (left to right) – Berne, Switzerland – April 2016

News – From REMPAN Secretariat

On May 09-13, 2016, the WHO participated in the **14th Congress of the International Radiation Protection Association (IRPA)** held in Cape Town, South Africa by being a co-sponsor of the Congress, chairing sessions, holding workshops, presenting posters and delivering invited talks on a variety of issues from the medical use of radiation to emergency preparedness and response, and contributed to panel discussions. In the topical area of EPR (emergency preparedness and response) there were four sessions, which addressed a broad spectrum of the EPR related issues and sciences, including a session organized by the WHO focussed entirely on public health and medical response aspects of the EPR.



The Congress provided a unique opportunity to hear the latest innovations in science, regulation and practice in radiological protection from leading world scientists and practitioners, and provided an excellent platform for discussion and dissemination of WHO activities.

A number of the WHO REMPAN member institutions took part in the Congress and made a great contribution to the success of the event. ♦

News – From REMPAN Secretariat

In May 2016, Dr Klaus Gehrcke and Dr Thomas Jung visited WHO Headquarters in Geneva for a bilateral meeting of the BfS – **German Federal Office for Radiation Protection** – WHO CC for Radiation Health and the WHO Department of Public Health, Environmental and Social Determinants of Health to discuss collaboration in the areas of risk assessment and risk management for protecting public from over-exposure to ionizing and non-ionizing radiation, as well radiation emergency preparedness and response. ♦



Z. Carr, K. Gehrcke, E. van Deventer, T. Jung, M. Perez (left to right) – Geneva, Switzerland – May 2016

In 2015, the IHR Review Committee on Second Extensions for Establishing National Public Health Capacities and on IHR Implementation (WHA 68/22 Add.1) recommended “...to move from exclusive self-evaluation to approaches that combine self-evaluation, peer review and voluntary external evaluations involving a combination of domestic and independent experts.” In light of this development, WHO, in collaboration with partners and initiatives such as the Global Health Security Agenda (GHSA), developed the Joint External Evaluation (JEE) process as part of the **IHR (2005) Monitoring and Evaluation framework**.

The Joint External Evaluation Tool is intended to assess country capacity to prevent, detect, and respond to public health threats independently of whether they are naturally occurring, deliberate, or accidental. Countries can request a JEE mission to help them identify the most urgent needs within their health system. The JEE will help engage with stakeholders and partners initiatives to support country outbreak and health emergency preparedness.

In May 2016, the WHO conducted **Joint External Evaluation (JEE)** in **Doha, Qatar**. During the mission, WHO experts visited the Ministry of Municipality and Environment, Radiation & Chemicals Protection Department, Ministry of public Health, Hamad Medical Corporation, Qatar Civil Defence Department of the Ministry of Interior. Senior management and government officials were debriefed on the findings of the JEE mission. ♦



Joint External Evaluation (JEE) – Doha, Qatar – May 2016

News – From REMPAN Secretariat

On June 27-28, 2016, the 2nd meeting of the IAEA's **Emergency Preparedness and Response Standards Committee (EPRaSC)** took place in Vienna, Austria. EPRaSC is one of the five IAEA's Safety Standards Committees. EPRaSC, established in June 2015, makes recommendations on the emergency preparedness and response (EPR) aspects of the IAEA's programme for the development, review and revision of safety standards and on the activities to support the use and application of these standards.

WHO has a status of Observer at EPRaSC and Dr Zhanat Carr was nominated as a WHO Focal Point for EPRaSC.



All presentations of the meeting are made publically available for **download in PDF** format. ♦

Scientific Events

International Symposium Five Years after the Triple Disaster of March 11, 2011, Fukushima, Japan

By Koichi Tanigawa, FMU, Fukushima, Japan

On March 08, 2016, Fukushima Medical University (FMU) held the international symposium [“Five Years Since the Great East Japan Earthquake, Tsunami, and Nuclear Crisis – Preserving and Conveying our Memories for Future Generations”](#) to commemorate the fifth anniversary of the Great East Japan Earthquake and Fukushima nuclear power plant accident. The symposium highlighted past efforts to reconstruct and revitalize Fukushima. Representatives from the IAEA, the International Commission on Radiological Protection (ICRP), the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR), and the WHO and experts from Japan and abroad attended the symposium.



Panel discussion chaired by K. Kamiya (right), Hiroshima University, and local Fukushima residents – Fukushima, Japan – March 2016

At the symposium, local residents with different backgrounds conveyed citizens' perspectives after Great East Japan Earthquake and Fukushima nuclear power plant accident, and two FMU physicians presented their initiatives and reflections as medical professionals and as mothers.

In a panel discussion, five women residents elaborated on their previous remarks in response to a series of thought-provoking questions. It was a vigorous exchange of opinions from panelists with different backgrounds, united by the common purpose of reconstructing life in Fukushima.

The symposium was an opportunity for people of Fukushima to express their sincere gratitude to the overseas experts who had provided generous support since the accident. ♦

Scientific Events

4th International Seminar, Würzburg, Germany

By Rita Schneider, Department of Nuclear Medicine, Würzburg, Germany

The 4th International Seminar “Radiation Medicine in Research and Practice: Health effects 30 years after Chernobyl, 5 years after Fukushima” held from June 16-17, 2014 in Würzburg, Germany, was hosted by the [WHO REMPAN Collaborating Center](#) at the [Department of Nuclear Medicine](#), University Hospital Würzburg. The 4th Seminar was organised in cooperation with the Burnasyan Federal Medical Biophysical Center (SRC – FMBC) of the [Federal Medical-Biological Agency \(FMBA of Russia\)](#) also a members of the WHO REMPAN network.

Participants from 16 countries – Australia, Austria, Belarus, Belgium, Croatia, France, Germany, Japan, the Netherlands, Norway, Russia, Sweden, Switzerland, the UK, Ukraine, and USA – attended the meeting.



4th International Seminar – Würzburg, Germany – June 2016

On the occasion of the 30th and 5th anniversary of the nuclear accidents in Chernobyl in 1986 and in Fukushima in 2011, respectively, topics of the two-day seminar focused on the health effects and lessons learned for the accidents in Ukraine and Japan. ♦

Scientific Events

Health Effects of the Chornobyl Accident – a Thirty Years Aftermath, Kiev, Ukraine

By Dmitry Bazyka, National RCRM, Kiev, Ukraine

The conference [“Health effects of the Chornobyl accident – a 30 years aftermath”](#) held on April 18-19, 2016 in Kiev, Ukraine was organized by the National Research Center for Radiation Medicine (RCRM) and supported by WHO. Participants were 277 scientists, including 27 experts from international organizations, scientific institutions from Germany, France, Japan, Korea, Turkey, the USA and international charities from Italy and Germany. Special talks were given on behalf of UNSCEAR and WHO. Dmitry Bazyka, RCRM, presented research results of radiation-associated health effects in Ukraine. Conference topics addressed epidemiology, molecular mechanisms, thyroid cancer, dosimetry and risk assessment, effects on biota.



International Conference “Health effects of the Chornobyl accident – a thirty years aftermath” – Kiev, Ukraine – April 2016

The following conclusions were approved:

- National dosimetry surveys showed a decrease of soil contamination by radionuclides and a decrease of annual doses under 0.5 mSv. Improvement of individual dose reconstruction and biological dosimetry is of crucial importance.
- Thirty years after the accident, the incidence of cancer and non-cancer diseases in cleanup workers is increased and continues to increase. There is significant rise in leukemia, including chronic lymphocytic leukemia, thyroid and breast cancer. As for non-cancer effects, the frequency of circulatory diseases is highest affecting disability and mortality.
- Thyroid cancer incidence in those exposed as children continues to rise, with total numbers exceeding 11.000. Latest data show radiation-associated thyroid cancer risks in those exposed as adults, especially in evacuees, due to radioactive iodine incorporation. There is no information on increased radiation-associated risk of other cancers in the general population. Follow-up has to continue, though.
- Substantial progress was made in understanding genetic and epigenetic mechanisms including gene expression and polymorphism of thyroid cancer, leukemia, cognitive deficiency and cerebrovascular disease. Studies did not find specific radiation-induced cancer markers; further studies on mechanisms of radiation effects are need.
- The conference also discussed future directions of scientific research and provision of health care to the exposed population.

The participants visited the Chornobyl NPP and a construction site of the new safe confinement. ♦

Scientific Events

Chernobyl Conference in Obninsk, Russia

By Natalya Seleva, MRRC, Obninsk, Russia

The Conference [“Health Effects of Chernobyl: Prediction and Actual Data 30 Years after the Accident”](#) organized by the [A. Tsyb Medical Radiological Research Centre \(MRRC\)](#) was held on May 17-19, 2016 in Obninsk, Russia. International scientists presented studies on health effects after Chernobyl and mitigation of effects. The conference program addressed the course of the Chernobyl accident from the first hours to the present days. Currently, the annual radiation dose is less than 0.3 mSv in most affected settlements in Russia. While most affected territories provide normal living conditions, the speakers highlighted the issue of mental health disorders that occurred in the population affected by the radiological accidents in Chernobyl and Fukushima. They stressed the lessons learned from Chernobyl and Fukushima for radiation accident preparedness and improvement of response.



S. Yamashita (left) is awarded the medal “Chernobyl – 30 years” by Director General of MRRC, A. Kaprin (right) – Obninsk, Russia – May 2016

At the conference, the organizers awarded the medal ‘Chernobyl – 30 years’ to scientists for their personal contribution to assessment and mitigation of consequences of the Chernobyl accident. ♦

Exercise and Training

NIRS-KIRAMS Training Program on Radiation Emergency Medicine for Korean Medical Professionals 2016

By Masashi Sagara, Hiroko Ino and Hideo Tatsuzaki, QST-NIRS, Japan

The **National Institute of Radiological Sciences** (NIRS) organized the “NIRS-KIRAMS Training Program on Radiation Emergency Medicine for Korean Medical Professionals 2016” from April 19-21, 2016 at NIRS, Chiba Japan. 27 younger Korean medical professionals and administrative staff working at core hospitals from all over the country participated in the course in order to broaden their knowledge and skills of radiation emergency medicine. This was the 10th training course that NIRS has conducted since 2005 as requested by Korean Institute of Radiological & Medical Sciences (KIRAMS). ♦



NIRS-KIRAMS Training Program on Radiation Emergency Medicine for Korean Medical Professionals 2016 – Chiba, Japan – April 2016

Workshop for Radiation Protection Officers in Bandung, Indonesia

By Nastiti Rahajeng, Center for Radiation Safety and Metrology Technology, BATAN, Jakarta, Indonesia

On 26-27 May, 2016, the National Nuclear Energy Agency (BATAN) held its annual mworkshop for BATAN’s Radiation Protection Officers, which took place at the **Center for Applied Nuclear Science and Technology**, Bandung, Indonesia. Beside the materials of radiation protection, the participants also receive material on medical emergency response and basic life support in lectures and hands on. After the workshop, the participants were expected to be able for providing first aid to the victim in the event of nuclear emergencies. ♦



Participants of the Workshop for Radiation Protection Officers – Bandung, Indonesia – May 2016

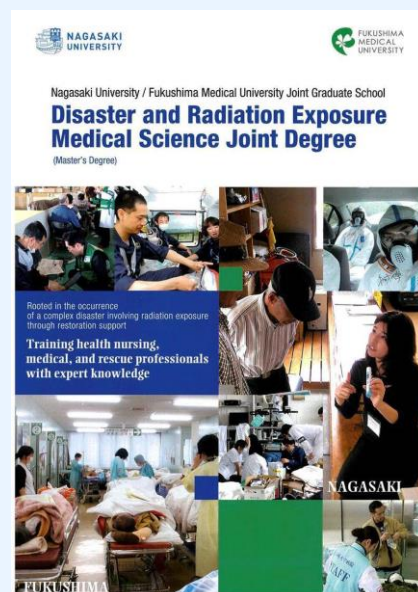
Exercise and Training

Joint Graduate School launched in Japan

By Shunichi Yamashita, Nagasaki University, Japan

Nagasaki University (NU) and Fukushima Medical University (FMU) newly launched a Joint Graduate School in April 2016. The new **Master's degree program of Disaster and Radiation Medical Sciences** has been formally launched following deliberation by Ministry of Education, Culture, Sports, Science and Technology. The development of the Division of Disaster and Radiation Medical Sciences represents the collaboration of the two universities over the years.

This new curriculum represents an important milestone towards new and ongoing collaboration. It will allow training of nurses, public health nurses, radiation exposure doctors, police officers, and firefighters.



To educate and encourage health care professionals and emergency workers such as first responders and officers, candidates who wish to learn on-site in Nagasaki and in Fukushima will be accepted widely from abroad. ♦

Exercise and Training

Staff trained through RITN, Minneapolis, USA

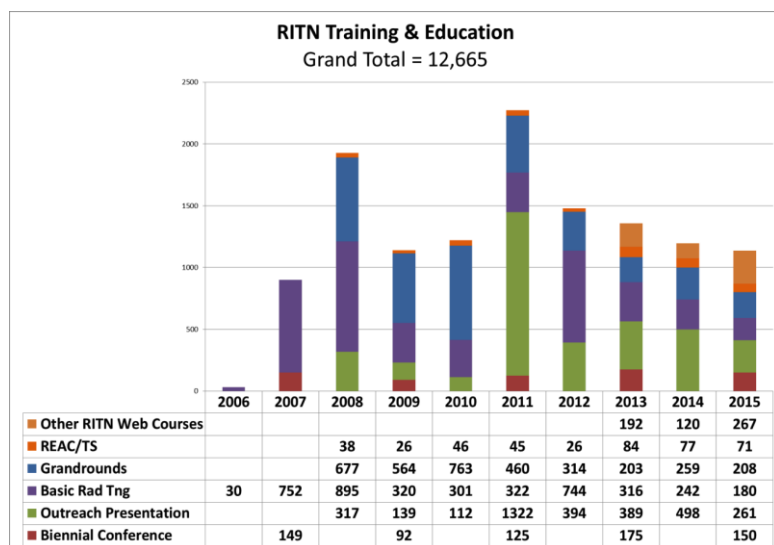
By Cullen Case, National Marrow Donor Program – RITN, Minneapolis, USA

The **Radiation Injury Treatment Network®** (RITN) comprises of 75 volunteer medical centers (hospitals, blood donor centers, and cord blood banks) with expertise in the management of bone marrow failure to provide comprehensive evaluation and treatment for victims of radiation exposure or other marrow toxic injuries due to a mass casualty incident.

The US National Marrow Donor Program (NMDP), US Navy and American Society for Blood and Marrow Transplantation (ASBMT) collaboratively developed RITN. The goals of RITN are:

- to develop treatment guidelines for managing hematologic toxicity among victims of radiation exposure,
- to educate health care professionals about pertinent aspects of radiation exposure management,
- to help coordinate the medical response to radiation events, and
- to provide comprehensive evaluation and treatment for victims at participating centers.

The disaster RITN primarily plans for is the detonation of an improvised nuclear device due to the mass casualties that would overwhelm the US medical system in the region of the detonation.



RITN – Participants in RITN coordinated / sponsored Training Courses, 2006-2015

Training has been a core component of RITN and this is evident by the numbers of staff (both medical and non-medical) that have been trained through RITN; from 2006 through the end of 2015 12,665 medical professionals and related response personnel completed RITN coordinated / sponsored training courses. ♦

Exercise and Training

Training and Drill in China

By Yuan Long, CCMRRE, Beijing, China

The annual national-level training of medical rescue in nuclear and radiological emergency was held in the city of Xi'an, capital of northwest China Shanxi province, on May 10-12, 2016. The training courses included national regulations for nuclear and radiological emergency, basic knowledge of radiological protection, decontamination and decorporation of contaminated / exposed people, and treatment of ARS and LRI. About 80 medical personnel from 30 provinces participated in the training.



In June and July, 2016, the **Chinese Center for Medical Response to Radiation Emergency** (CCMRRE) and seven provincial level medical emergency centers will conduct nuclear and radiological emergency response exercises. Further, the annual national-level training of dose assessment in nuclear and radiological emergency was held in July, 2016. ♦



Radiological emergency response exercises, China – July 2016



Exercise and Training

REAC/TS Celebrates 40th Anniversary

By Becky Murdock, REAC/TS, Oak Ridge, USA

It was 40 years ago, on July 01, 1976, when the [Radiation Emergency Assistance Center/Training Site \(REAC/TS\)](#) officially opened its doors for operation. Since its inception, this radiation accident management facility has provided an important capability for emergency treatment, including decontamination, radiation damage assessment and patient care during the critical days following a major radiation exposure.

The PAHO-WHO Collaborating Center for Radiation Emergency Assistance is a component of the Radiation Emergency Assistance Center/Training site (REAC/TS) and was initially designated in 1980. For 36 years REAC/TS has served as a WHO Collaborating Center. The Center has actively participated in numerous activities including response to radiation emergencies; development and delivery of continuing education courses; document review and development; REMPAN meetings; drills/exercises, education; and related activities.



REAC/TS - Team

A radiological emergency team consisting of physicians, nurses, paramedics, health physicists, radiobiologists, coordinators and the necessary support personnel is on 24-hour call to provide consultative or direct medical/radiological assistance at the REAC/TS facility or at the accident site. The REAC/TS team has expertise in:

- medical and radiological triage
- decontamination procedures, therapies for external contamination and treatment of combined injuries
- therapies for internally deposited radionuclides including specialized drugs such as Prussian blue and DTPA
- diagnostic and prognostic assessments of radiation-induced injuries
- radiation dose estimates by methods that include in vitro and bioassay and in vivo counting.

Training course at REAC/TS



REAC/TS serves as a center for continuing medical education and a demonstration unit wherein US and foreign medical, nursing, paramedical, and health physics personnel receive intense education in medical management for radiation accidents. A team is also available for off-site continuing education and for evaluation of emergency response exercises. ♦

Exercise and Training

Loviisa 16 – Finnish National Level Emergency Exercise

By Jukka Kupila, STUK, Helsinki, Finland

Finnish rescue services have established External Rescue Plans for all special risk facilities and they are tested every three years.

On April 27, 2016, exercise planning of the Finnish national level Emergency Exercise **Loviisa 16** was led by Eastern Uusimaa rescue service in cooperation with the licensee (Fortum Oyj), **Radiation and Nuclear Safety Authority (STUK)** and other authorities with role in response. Over 50 governmental, regional and local organisations were involved in the exercise along with media simulation and IAEA. The Loviisa 16 Emergency Exercise was an early phase exercise with real time and weather.

The scenario (PRISE, core damage) was very fast and rapidly changing, with direct radioactive release to the atmosphere. This challenging scenario tested organizations capabilities to evaluate situation and provide clear and timely information and make decisions on rapidly changing situation.



Emergency Exercise at Loviisa NPP – Finland – April 2016

Large scale national level exercises with relevant ministries, authorities and other actors are important to test and improve preparedness for large scale radiological accident situations. STUK's own arrangements are also evaluated and staff feedback is also analyzed in order to get most benefit from this kind of large and complex exercises. STUK staff is very motivated to take part in emergency exercises. Over 100 persons from STUK staff took part in this exercise. ♦

News – From the Network Members

Dr Young Woo Jin Newly Appointed as Director General of NREMC, KIRAMS, Korea

By Park Changyoun, NREMC, KIRAMS, Seoul, Korea

As of 7 March 2016, Dr Young Woo Jin has newly taken the post of Director General of **National Radiation Emergency Medical Center** (NREMC), Korea Institute of Radiological and Medical Sciences (KIRAMS).

Dr Young Woo Jin got his Ph.D. degree in preventive medicine from Seoul National University and Master's degree in occupational & environmental medicine from Catholic University of Korea. His areas of expertise include low dose radiation effect research (biology and epidemiology). He previously worked at Radiation Health Research Institute (RHRI), Korea Hydro & Nuclear Power Co., Ltd. (KHNP) as principal investigator for 14 years. Later, he moved to NREMC and served as the director for radiation emergency planning division since then.



Dr Young Woo Jin

NREMC is a Korean organization, which carries out the medical treatment for radiation-exposed patients, operates the national radiation emergency medical network, and provides education & training for relevant personnel. It was established in 2002, based on the Act on Measures for the Protection of Nuclear Facilities, etc. and prevention of radiation disasters. ♦

Dr Ohtsura Niwa appointed as chairman of the RERF, Hiroshima, Japan

By Kazunori Kodama, RERF, Hiroshima, Japan

Dr Ohtsura Niwa was appointed as a chairman of the **Radiation Effects Research Foundation** (RERF) in Hiroshima and Nagasaki, Japan in June, 2015 and became a director of WHO CC for Research on Radiation Effects on Humans (Reference Number JPN-32). Dr Niwa obtained B.Sc. from Kyoto University in 1967 and Ph.D. from Stanford University in 1975.

He has worked at a number of universities, a research institute and a private company, including Stanford University, Hiroshima University, Kyoto University, National Institute of Radiological Sciences, BioMedics Inc. Japan and Fukushima Medical University until taking a position at RERF in 2015. He has been a member of ICRP since 2001. He received the Roentgen Medal in 2005, the Dr. Nagai Peace Memorial Nagasaki Prize in 2014 and the Henry S. Kaplan Distinguished Scientist Award in 2015. ♦



Dr Ohtsura Niwa

New organizational structure in NIRS, Japan

By Masashi Sagara and Hideo Tatsuzaki, Radiation Emergency Medicine Center, NIRS-QST, Japan

An organizational structure in NIRS-QST was restructured. Radiation Emergency Medicine Center plays a main role in radiation emergency medicine and a main counterpart for REMPAN. **Dr Hideo Tatsuzaki** serves as the Director of the center. Dr Makoto Akashi continuously supervises the activities as the Deputy Director General of NIRS. ♦

News – From the Network Members

Dr L. Taliaferro Newly Appointed at NIAID

By Andrea L. DiCarlo-Cohen, RNCP, National Institute of Allergy and Infectious Diseases, NIH, Bethesda, USA

Dr Lany Taliaferro was named a Program Officer at the NIAID working with the RNCP in January 2016. She originally joined the RNCP in December 2014, under an American Association for the Advancement of Science (AAAS) fellowship. She serves as a program officer, product development manager, works with radiation and biodosimetry projects within the Centers for Medical Countermeasures against Radiation Consortium. ♦



Dr Lany Taliaferro

NIRS Became a Part of QST by Organizational Integration

By Masashi Sagara, Hiroko Ino and Hideo Tatsuzaki, Radiation Emergency Medicine Center, QST-NIRS, Japan

The National Institutes for **Quantum and Radiological Science and Technology (QST)** was established on April 01, 2016 to advance quantum science and technology. The new organization was established by integrating a part of the Japan Atomic Energy Agency (JAEA) to the National Institute of Radiological Sciences (NIRS).

NIRS is functioning as a division of QST and thus the name, NIRS, is still valid. The Headquarters of QST locates also in Chiba. QST-NIRS as a WHO Collaborating Centre for Radiation Emergency Medicine continues to serve as a centre for radiation emergency medicine. ♦

News – From the Network Members

Qatar Joined WHO REMPAN Network

By Walid Othman Abougalala, Ministry of Health, State of Qatar

As a representative of Qatar's Ministry of Health of the State of Qatar **Dr. Abougalala**, consultant in Emergency and Disaster Medicine at



Dr Walid Othman Abougalala

Hamad Medical Corporation since 1998 and consultant in Emergency Preparedness and Response at Ministry of Public Health since 2014, joined the WHO REMPAN network.

He is Board Certified in Emergency Medicine from Jordan Medical Council in 2007, and is holding a Master's Degree in Disaster Medicine, from Italy and, Belgium since 2004 and a Master's in Medical Education from Maastricht University, Netherlands since 2010. ♦

UAE Joined WHO REMPAN Network

By Jamila Salem AlSuwaidi DHA, Medical Education Department (MED), Dubai, UAE

The Dubai Health Authority (DHA) – Radiation Protection Committee joined the WHO REMPAN network recently and will be represented by Dr Jamila Salem AlSuwaidi, DHA Radiation Protection Committee chair, and Dr Sara Nooruddin Kazim, DHA Focal Point.



Both are members of the Emirates Medical Association (EMA) and of Emirates Society of Emergency Medicine (ESEM). ♦

Dr Sara Nooruddin Kazim



Dr Jamila Salem AlSuwaidi

Jean-Christophe Niel Appointed Director General of IRSN

IRSN Press Release, April 22, 2016, provided by Robert Dallendre, IRSN, Fontenay-aux-Roses, France

The President of the French Republic appointed **Jean-Christophe Niel** at the head of the French Institute of **Radiation Protection and Nuclear Safety** (IRSN), succeeding Jacques Repussard. Jean-Christophe Niel was till today Director General of the French Nuclear safety Authority (ASN). He held this position since 2007.



He held various positions in the field of control of nuclear safety and radiation protection and notably was head of the safety assessment department and Director of strategy, development and external relations at IRSN. From 2005 to 2006, he was head of the strategy mission at the Ministry of Equipment and Transport. ♦

Jean-Christophe Niel (Credits Photo: ASN/N, GOUHIER/ ABACA)

Obituary

Professor Theodor M. Fliedner (1929 - 2015) – Germany



Prof. Theodor M. Fliedner, a pioneer in hematopoietic stem cell and radiation research, died in Ulm, Germany, on 9 November 2015. He was a man of charisma and extraordinary vision and throughout his life he had a strong interest in radiation biology and transplantation. His doctoral dissertation was 'On the pathogenesis of acute bone marrow atrophy in rats after whole body irradiation with fast electrons'.

In 1957, he went to the Brookhaven National Laboratory, USA. At that time hematopoietic stem cells were postulated but had not been proved or identified. He showed that a large proportion of hematopoietic stem cells were in the resting stage of the cell cycle. Later, he and colleagues developed techniques to restore hematopoiesis by auto-transfusion of frozen bone marrow cells.

In 1967, the new **Ulm University** was inaugurated with Ted Fliedner as the youngest of eight founders. He became director of the Department of Clinical Physiology and later dean of the Theoretical Faculty of Medicine.

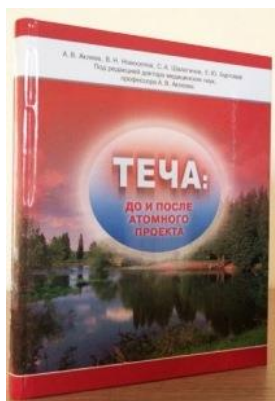
Prof. Fliedner is perhaps best known internationally for his work on evaluating victims of radiation accidents. He chaired a European Consortium that developed the **METREPOL** (MEDical TREatment ProtocOLs for Radiation Accident Victims) system for classifying injuries, estimating dose and selecting interventions including a **compendium**.

The haematology and radiation biology research communities have lost a pioneer and great scientist. He will be missed. ♦

New Publications

Two Monographs Address Techa River Radioactive Contamination

By Aleksander Akleyev, URCRM, Chelyabinsk, Russia



Two monographs in Russian language under the editorship of Aleksander V. Akleyev, Urals Research Center for Radiation Medicine (URCRM) of FMBA of Russia, were recently published.

The book **“The Techa River: Before and After the Atomic Project”** summarizes the results of long-term follow up of chronically exposed population inhabiting the Techa riverside settlements. Radioactive contamination of the river system resulted from the discharges of liquid radioactive wastes by “Mayak” PA in 1949-1956. The monograph presents

historical aspects of formation of the population of the Techa riverside villages as well as economic, social, demographic and other aspects of its life prior the construction of “Mayak” PA and after radioactive contamination of the river.

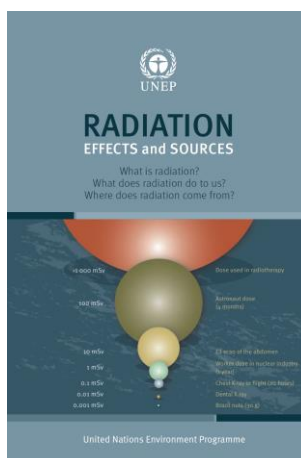
The book **“Consequences of Radioactive Contamination of the Techa River”** (Kniga Press), a multi-authored monograph of the researchers of the Urals Research Center for Radiation Medicine (URCRM) of FMBA of Russia integrates the results of long-term follow up of the health status of chronically exposed population of the Techa riverside villages. The monograph presents ecological, medical-biological, social and psychological consequences of radioactive contamination of the Techa River. ♦

New IRPA Guideline Protocol for Eye Dose Monitoring and Eye Protection of Workers

The IRPA **“Guideline protocol for eye dose monitoring and eye protection of workers”** provides practical recommendations to support the RP professionals about when and how eye lens dose should be monitored in the framework of the implementation of the new ICRP dose limit for the lens of the eye, as well as guidance on use of protective device depending on the exposure levels. ♦

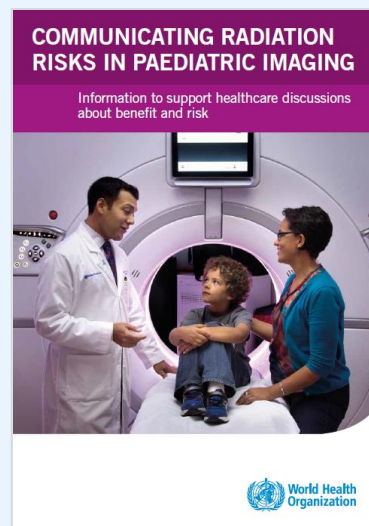
New UNEP Brochure “Radiation: Effects and Sources”

The new United Nations Environment Programme (UNEP) brochure **“Radiation: Effects and Sources”** has just been published. This publication is based on the major scientific reports of the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) published in the last 25 years and aims to expand public knowledge on levels of exposure to ionizing radiation and possible associated effects. This publication does not set, or even recommend, radiation safety standards, rather, it provides information on basic science related to radiation (origin, quantities and units), on radiation effects (on humans and the environment) and on radiation sources (natural and artificial). Helping the public understand what radiation is and how it affects life on this planet lies within the core mandate of UNEP. ♦



New Publications

WHO has released a new publication **“Communicating radiation risks in paediatric imaging”** intended to help health-care providers communicate both the benefits and the risks of paediatric imaging. It will raise awareness among medical professionals – not only about radiation risks, but also the importance of conducting risk-benefit discussions with patients and families – and equip professionals with the communication skills to best deliver the message.



This publication is also used by **AFROSAFE**, the campaign launched by the Pan African Congress of Radiology and Imaging to ensure all radiation-based medical procedures in Africa are necessary and performed safely. As part of the campaign, medical professionals are learning to conduct risk-benefit discussions about paediatric imaging with patients and families utilizing WHO's new risk communications tool.



The new communication tool will serve as a basis to further develop training packages to improve communication skills of health care workers, as well as advocacy and information materials. ♦

Upcoming Events

- **04-08 September, 2016, Amsterdam, Netherlands**
[42nd Annual Meeting of the European Radiation Research Society, ERRS2016](#)
- **19-23 September, 2016, Oxford, UK**
[Radiation Protection Week 2016](#)
- **15-17 October, 2016, Waikoloa Village, Big Island, Hawaii**
[Conference on Radiation & Health titled "Public Health Impact of Current Sources of Radiation Exposure: New Data and Insights from Biology, Epidemiology, and Statistics"](#)
- **07-08 November, 2016, Munich, Germany**
[EUROSAFE Forum 2016](#)
- **06-08 December, 2016, Seoul, Korea**
[2nd Asian REMPAN workshop on medical response to radiation emergencies](#)
For information and registration contact Mr [Park Chang-youn](#),
International Cooperation Coordinator KIRAMS

Upcoming Training Courses

- **09-12 August, 2016, Oak Ridge, USA**
[Radiation Emergency Medicine \(REM\)](#)
- **15-19 August, 2016, Oak Ridge, USA**
[Advanced Radiation Medicine](#)

Mark your Calendars!

The 5th International Expert Symposium in Fukushima

By Shunichi Yamashita, Nagasaki University, Japan

The 5th International Expert Symposium [“Chernobyl+30, Fukushima+5: Lessons and Solutions for Fukushima’s Thyroid Question”](#) will be held on September 26-27, 2016, in Fukushima, Japan and will be hosted by the Nippon Foundation, with the Sasakawa Memorial Health Foundation, Fukushima Medical University and Nagasaki University as co-hosts. The objective is to learn from the Chernobyl experiences and to discuss the complex issues of thyroid cancer in Fukushima with an emphasis on childhood and adolescent thyroid cancer. The [web registration](#) for the 5th International Expert Symposium is now open. The [1st International Expert Symposium](#) took place in September 2011. ♦

Announcing ConRad 2017 in Munich, Germany

By Matthias Port, Bundeswehr Institute of Radiobiology affiliated to the University of Ulm, Munich, Germany

The “Conference on Radiation Topics – Preparedness, Response, Protection and Research“, also known as the [“Medical Defence Conference”](#), will be hosted May 08-11, 2017 for the 22nd time by the Bundeswehr Institute of Radiobiology affiliated to the University of Ulm. Key sessions will summarize and update current knowledge of “Biomarker of exposure and bioindicator of effect” and “Effects of electromagnetic fields”. Abstract submission and registration will be open from September 2016. ♦

15th WHO REMPAN Coordination and Planning Meeting!

The 15th Coordination and Planning Meeting of the WHO REMPAN will take place in Geneva, Switzerland, on **July 03-05, 2017**. The meeting will be organized jointly and with the kind support of the Swiss Federal Office for Public Health.

Participation by invitation only! ♦

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Disclosure

The REMPAN e-NEWSLETTER is produced 2 times a year and circulated by WHO Secretariat to the network members to provide information about latest news on the network's activities, developments in radiation emergency preparedness and management.

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