### Monday, 08 May 2017

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrival</td>
<td>Conference Office opened from 10:00 am until 12:00 midnight</td>
</tr>
<tr>
<td>07:00 pm</td>
<td>Icebreaker (Officers’ Mess, Goercke Haus, build. no. 09)</td>
</tr>
</tbody>
</table>

**Note:**

In the following time schedule only presenting authors are mentioned. Co-authorships are outlined in the abstracts section.
Tuesday, 09 May 2017

8:00 am – 12:10 pm  Welcoming Addresses
Radio-nuclear terrorism, threats and specific preparedness / Radiation emergency medical preparedness and response

1:15 – 5:25 pm  Key Session I: Biomarker of exposure and bioindicator of effect

8:00 – 8:30 am  Welcoming Addresses

8:30 – 9:45 am  Radio-nuclear terrorism, threats and specific preparedness (O1 – O5)

Chairpersons  XXX

8:30 – 8:45 am (O-1)  
**Chemical Terror: sudden changes in awareness - facts and medical consequences**  
*H. Thierrmann*, Bundeswehr Institute of Pharmacology and Toxicology, Germany

8:45 – 9:00 am (O-2)  
**CBRN event: pre-hostpital victims management at the Paris Fire Brigade**  
*D. Riccobono*, French Armed Biomedical Research Institute (IRBA), France

9:00 – 9:15 am (O-3)  
**Predicting the Public Health Consequences of Nuclear Terrorist Attacks**  
*T. Jorgensen*, Georgetown University, USA

9:15 – 9:30 am (O-4)  
**Triage and medical management of high-volume mass casualties after a nuclear detonation: Hiroshima revisited**  
*D. F. Flynn*, Adjunct Faculty Armed Forces Radiobiology Research Institute USA;  Visiting Faculty, REAC/TS USA

9:30 – 9:45 am (O-5)  
**The Decision Support Model LASAIR as a Useful Tool for Radiation Accident Management within the Scope of Terroristic Attacks**  
*H. Walter*, Federal Office for Radiation Protection, Germany

9:45 – 10:15 am  Coffee Break
10:15 – 12:00 noon  Radiation emergency medical preparedness and response (O6 – O12)

Chairpersons  XXX

10:15 – 10:30 am (O-6)
RENEB – contribution to individualised retrospective dosimetry
U. Kulka, Federal Office for Radiation Protection, Germany

10:30 – 10:45 am (O-7)
Early Triage for Radiological and Nuclear Events: The use of hand-held radiation detection instruments to rapidly triage internally contaminated Adults
R. Hugron, Department of National Defence, Canada

10:45 – 11:00 am (O-8)
Clinical triage of radiation victims - the hematological module of the Bundeswehr InstRadBioBw applied during the recent NATO exercise on clinical signs & symptoms
M. Port, Bundeswehr Institute of Radiobiology affiliated to the University of Ulm, Munich, Germany

11:00 – 11:15 am (O-9)
Filling Gaps in Public Health Radiological Preparedness
C. Case, Radiation Injury Treatment Network, USA

11:15 – 11:30 am (O-10)
European Blood and Transplant Group (EBMT) Preparednes for an RDD
R. Powles, Cancer Centre London, UK

11:30 – 11:45 am (O-11)
Study of the effect of repeated potassium iodide prophylaxis in an adult rat model
D. Lebsir, Institute for Radiological Protection and Nuclear Safty (IRSN), France

11:45 – 12:00 noon (O-12)
Deployment of the « Dosikit » system in operational conditions: experience from a French defence national nuclear exercise
F. Entine, French defense radiation protection service (SPRA), France

12:00 – 12:15 pm  Group Photo (inside Audimax)

12:15 – 1:15 pm  Lunch
1:15 – 3:10 pm Key Session I: Biomarker of exposure and bioindicator of effect (O13 – O18)

Chairpersons XXX

1:15 – 1:20 pm
Introduction
C. Beinke, Bundeswehr Institute of Radiobiology affiliated to the University of Ulm, Germany

1:20 – 1:35 pm (O-13)
Enhancing National Preparedness through Biodosimetry
L. Wathen, Biomedical Advanced Research and Development Authority (BARDA), USA

1:35 – 1:50 pm (O-14)
High-Throughput Microfluidics Automated Cytogenetic processing for effectively lowering biological process time and aid triage during Radiation Accidents.
A. Ramakumar, Armed Forces Radiobiology Research Institute (AFRRI), USA

1:50 – 2:05 pm (O-15)
French Armed Forces Biological Dosimetry Laboratory – An overview of 8 years of research
M. Valente, French Armed Biomedical Research Institute (IRBA), France

2:05 – 2:30 pm (O-16)
Three-color FISH analysis using human peripheral blood lymphocytes for cytogenetic dose assessment
Y. Suto, National Institute of Radiological Sciences (NIRS), Japan

2:30 – 2:55 pm (O-17)
Transcriptional expression monitoring for rapid determination of dose exposure
C. Badie, Public Health England (PHE), UK

2:55 – 3:10 pm (O-18)
EPR Biodosimetry Based on Fingernails and Toenails in vivo
H. Swartz, Geisel School of Medicinae at Dartmouth, USA

3:10 – 3:40 pm Coffee Break

Chairpersons  XXX

3:40 – 3:55 pm (O-19)
Genomic signature of radiation-induced DNA-sequence alterations in human gingiva fibroblasts
A. Kuss, University Medicine Greifswald, Germany

3:55 – 4:10 pm (O-20)
Expression analysis of white blood cells from cancer patients treated with 131I-mIBG; identifying biomarkers of internalized radiation in patients with cancer
M. Coleman, Lawrence Livermore National Laboratory, USA

4:10 – 4:25 pm (O-21)
A Method for Personalized Measurement of Radiation-Induced Mutations
P. Okunieff, University of Florida, USA

4:25 – 4:40 pm (O-22)
MicroRNA signatures Associated with Neutron-Induced Neoplastic Transformation
A. Miller, Uniformed Services University of the Health Sciences (USUHS), USA

4:40 – 4:55 pm (O-23)
Establishing gene expression for prediction of the hematological acute radiation syndrome
M. Abend, Bundeswehr Institute of Radiobiology affiliated to the University of Ulm, Germany

4:55 – 5:10 pm (O-24)
Use of Proteomic and Hematology Biomarkers for Prediction of Hematopoietic Acute Radiation Syndrome in Baboon Radiation Models
W.F. Blakely, Armed Forces Radiobiology Research Institute (AFRRI), USA

5:10 – 5:25 pm (O-25)
Biomarkers for improving radiation therapy
P. Prasanna, National Cancer Institute (NCI), USA

6:00 pm  Departure to Conference Dinner at “Event-Stadt – Zur Alten Säge”
**Wednesday, 10 May 2017**

8:00 am – 10:15 pm  **Key Session II: Biological effects of electromagnetic fields/other non-ionizing radiation**

10:45 – 12:00 pm  **Poster Presentation**

8:00 – 10:15 am  **Key Session II: Biological effects of electromagnetic fields/other non-ionizing radiation (O26 – O32)**

**Chairpersons**  XXX

8:00– 8:05 am
**Introduction**

*A. Lamkowski,* Bundeswehr Institute of Radiobiology affiliated to the University of Ulm, Institute and Outpatient Clinic for Occupational, Social and Environmental Medicine, AllergieZENTRUM, Klinikum der Universität München, Germany

8:05 – 8:25 am (O-26)
**Biological Effects of Non-Ionizing Radiation: Measurement Environments and Dosimetry**

*M. Stiemer,* Helmut-Schmidt-University/University of the Federal Armed Forces Hamburg, Germany

8:25 – 8:45 am (O-27)
**Gene expression in human blood cells after Radiofrequency EMF exposure**

*A. Lamkowski,* Bundeswehr Institute of Radiobiology affiliated to the University of Ulm, Institute and Outpatient Clinic for Occupational, Social and Environmental Medicine, AllergieZENTRUM, Klinikum der Universität München, Germany

8:45 – 9:05 am (O-28)
**Genotoxic effects in human fibroblasts exposed to microwave radiation**

*V. Franchini,* Scientific Department - Policlinico Militare of Rome, Italy

9:05 – 9:25 am (O-29)
**Radiofrequency electromagnetic field induced effects on brain activity in sleep and waking state**

*H. Danker-Hopfe,* Charité - University Medicine Berlin, Germany

9:25 – 9:45 am (O-30)
**Synoptic analysis of the epidemiologic evidence on mobile phone EMF and cancer**

*N. Leitgeb,* formerly Institute of Health Care Engineering, Graz University of Technology, Austria

10:00 – 10:15 am (O-31)
**Growth factors and telomerase activity induced by low level laser therapy in chronic leg ulcer**

*S. Korraa,* National Center for Radiation Research and Technology – Egyptian Atomic Energy Authority, Egypt
10:15 – 10:30 am (O-32)  
**Exosomes or UV as candidate bystander signals: a unifying hypothesis**  
*C. Mothersill*, McMaster University, Canada

10:15 – 10:45 am  
**Coffee Break**

10:45 – 12:00 noon  
**Poster Presentation**

12:00 noon – 1:00 pm  
**Lunch**

1:00 – 3:05 pm  
**Radiation Epidemiology (O33 – O39)**

Chairpersons  
XXX

1:00 – 1:05 pm  
**Introduction**  
*M. Abend*, Bundeswehr Institute of Radiobiology affiliated to the University of Ulm, Germany

1:05 – 1:25 pm (O-33)  
**to be announced**  
*E. Cardis*, IS Global Barcelona Institute for Global Health, Spain

1:25 – 1:40 pm (O-34)  
**Epidemiology of Late Health Effects in Chornobyl Cleanup Workers**  
*D. Bazyka*, National Research Centre for Radiation Medicine; Ukraine

1:40 – 2:00 pm (O-35)  
"**New insights into thyroid cancer epidemiology: Chernobyl, Fukushima and beyond.**"  
*A. Kesminiene*, International Agency for Research on Cancer (IARC), France

2:00 – 2:20 pm (O-36)  
"**New Evidence on Radiogenic Risks of CLL - Where do we go from here?**"  
*L. Zablotska*, University of California San Francisco, USA

2:20 – 2:35 pm (O-37)  
**Radiation-epidemiological study of the incidence of complexes of disease of the circulatory system and comorbidities disease among Chernobyl recovery operation workers**  
*S. Karpenko, A. Tsyb Medical Radiological Research Center - branch of the National Medical Research Radiological Center of the Ministry of Health (A. Tsyb MRRC), Russia

2:35 – 2:50 pm (O-38)  
**Risks of cardio- and cerebrovascular diseases in Mayak PA worker cohort following occupational exposure to low dose rate radiation**  
*T. Azizova*, Southern Urals Biophysics Institute (SUBI), Russia
2:50 – 3:05 pm (O-39)
Incidence of cardiac disease after breast cancer radiotherapy: A retrospective cohort study on 12264 women
D. Wollschläger, Institute of Medical Biostatistics, Epidemiology and Informatics, Germany

3:05 – 3:35 pm  Coffee Break

3:35 – 5:30 pm  Radiation Health Effects and Countermeasures (O40 - O46)

Chairpersons  XXX

3:35 – 4:00 pm (O-40)
REAC/TS approach to rapid dose estimation and decontamination of plutonium following a puncture wound
N. Dainiak, Radiation Emergency Assistance Center Training Site (REAC/TS), USA

4:05 – 4:15 pm (O-41)
New paradigms of the treatment of acute radiation syndrome
M. Drouet, French Armed Biomedical Research Institute (IRBA), France

4:15 – 4:30 pm (O-42)
Animal Model Development of Gastrointestinal-Acute Radiation Syndrome (GI-ARS) in Minipigs: Approaches to Model Development, and Harmonization.
J. Esker, BARDA, US Dept of Health & Human Services, USA

4:30 – 4:45 pm (O-43)
Autologous adipose tissue derived stromal cells: a new strategy for muscles fibrosis management in cutaneous radiation syndrome
D. Riccobono, French Armed Biomedical Research Institute (IRBA), France

4:45 – 5:00 pm (O-44)
Delayed Treatment with Thrombopoietin or Eltrombopag after Acute Radiation Exposure
Y. Chen, University of Rochester, USA

5:00 – 5:15 pm (O-45)
Actinide-contaminated skin: comparing the decontamination efficacy of water, gels, DTPA and soap
N. Griffith, CEA Université de Paris-Saclay, France

5:15 – 5:30 pm (O-46)
Plasma-based Biomaterials for the Treatment of Cutaneous Radiation Injury
N. Jacob, Ohio State University Medical Center, USA
Thursday, 11 May 2017

8:00 – 11:45 am  Radiation Health Effects and Countermeasures / Effects of low dose ionizing radiation / Radiation Protection / Biomarker of exposure and bioindicator of effect / Radiation Biology-Radiation Physics

11:45 – 12:00 noon  Closing Remarks

8:00 – 9:30 am  Radiation Health Effects and Countermeasures (O47) Effects of low dose ionizing radiation (O48 - O52)

9:30 – 10:15 am  Radiation Protection (O52 - O54)

Chairpersons  XXX

Radiation Health Effects and Countermeasures (O47)

8:00 – 8:15 am (O-47)
Development of the Toll-Like Receptor-5 Agonist, Entolimod, as a Medical Radiation Countermeasure
L. Miller, Cleveland BioLabs, Inc, USA

Effects of low dose ionizing radiation (O48 – O52)

8:15 – 8:30 am (O-48)
Automated dicentric chromosome detection - a new approach to investigate age dependent radiosensitivity after Computer Tomography
U. Oestreicher, Federal Office of Radiation Protection, Neuherberg, Germany

8:30 – 8:45 am (O-49)
Anaplastic lymphoma kinase (ALK) – rearrangements in radiation-induced papillary thyroid carcinomas: a study on post Chernobyl tissue samples
A. Arndt, Institute of Pathology and Molecular Pathology, Bundeswehrkrankenhaus Ulm, Germany

8:45 – 9:00 am (O-50)
Risk of Cataract Incidence in a Cohort of Mayak PA Workers following Chronic Occupational Radiation Exposure
E. Bragin, Southern Urals Biophysics Institute (SUBI), Russia
9:00 – 9:15 am (O-51)
Radiation effect on the murine brain
S. Tapio, Institute of Radiation Biology, German Research Center of Environmental Health, Germany

9:15 – 9:30 am (O-52)
DNA damage response to internal systemic low dose irradiation by beta and alpha emitters
H. Scherthan, Bundeswehr Institute of Radiobiology affiliated to the University of Ulm, Germany

Radiation Protection (O53 - O55)

9:30 – 9:45 am (O-53)
Development of gamma-tocotrienol as a radiation countermeasure
V. Singh, F. Edward Hébert School of Medicine/Armed Forces Radiobiology Research Institute, USUHS, USA

9:45 – 10:00 am (O-54)
BBT-059, a potential prophylactic radiation countermeasure as well as a mitigator – accelerates recovery from peripheral blood cytopenia
S. Ghosh, Armed Forces Radiobiology Research Institute (AFRRI), USA

10:00 – 10:15 am (O-55)
„Ärztliche Stelle der Bundeswehr“ national and international
M. Hoffmann, Bundeswehr Medical Service Headquarters, Germany

10:15 – 10:45 am Coffee Break

10:45 – 12:30 am Biomarker of exposure and bioindicator of effect (O55)
Radiation Biology-Radiation Physics (O56 – O61)

Chairpersons XXX

Biomarker of exposure and bioindicator of effect (O55)

10:45 – 11:00 am (O-56)
Immunologic biomarkers associated with chronic radiation exposure
V.L. Rybkina, Southern Urals Biophysics Institute (SUBI), Russia

Radiation Biology-Radiation Physics (O56 – O61)

11:00 – 11:15 am (O-57)
Radiobiological, genomic and epigenomic characteristics of a cell line with high tolerance towards genotoxic exposure
R. Ullmann, Bundeswehr Institute of Radiobiology affiliated to the University of Ulm, Germany
11.15 – 11:30 am (O-58)
Role of spatial organization of chromosome domains in ionizing radiation induced chromosomal aberrations
A. Balajee, Radiation Emergency Assistance Center and Training Site, Oak Ridge Institute for Science and Education, Oak Ridge Associated Universities, USA

11:30 – 11:45 am (O-59)
Impact of ionizing radiation on electrophysiological behavior of human iPS cardiomyocytes on a multi electrode array
B. Becker, Bundeswehr Institute of Radiobiology affiliated to the University of Ulm, Germany

11:45 – 12:00 noon (O-60)
A dose-dependent perturbation in cardiac energy metabolism is linked to radiation-induced ischemic heart disease in Mayak nuclear workers
O. Azimzadeh, Institute of Radiation Biology, German Research Center of Environmental Health, Germany

12:00 – 12:15 pm (O-61)
“Liquid Biopsy” from whole blood in testis tumor patients – “proof of principal”
M. Majewski, Bundeswehr Institute of Radiobiology affiliated to the University of Ulm, Germany

12:15 – 12:30 pm  
Closing Remarks

Colonel PD Dr. Matthias Port, InstRadBioBw, Munich, Germany
Conference Chairperson

12:30 – 1:15 pm  
Lunch