July 13 (Friday)

9:00- Opening remarks
Tsutomu Sugahara, Chairperson of International Symposium on Radiation and Homeostasis
President of Health Research Foundation

Plenary Symposium I. Room D

Epidemiological Findings of Radiation Carcinogenesis
Chairpersons: Roy Shore (USA)
Kiyohiko Mabuchi (USA)

9:15- I-1 Current Results on Mortality and Cancer Incidence among Atomic Bomb Survivors
Preston DL, Shimizu Y, Pierce DA, Koyama K, Soda M (Japan)

9:45- I-2 Risk Estimates for Fast Neutrons and Implications for Radiation Protection
Kellerer AM (Germany)

10:15- I-3 Gaps in the Epidemiology of In Utero Exposure Effects
Shore R (USA)

10:45-11:00 < Coffee break >

11:00- I-4 New Epidemiologic Data from the Former Soviet Union
Ron E (USA)

11:30- I-5 Genetic Susceptibility and Second Cancer Risks
Tucker MA (USA)

12:00-13:00 < Lunch time >

Plenary Symposium II. Room D

Low Dose Radiation Carcinogenesis
Chairpersons: Colin R. Muirhead (UK)
Taisei Nomura (Japan)

13:00- II-1 Methodological Aspects of Low Dose Epidemiological Studies
Muirhead CR (UK)

13:30- II-2 Recent Advances of "Epidemiological Study in High Background Radiation Area in Yangjiang, China"
Wei LX, Sugahara T (China)
July 13 (Friday)

14:00- II-3 Induction of Myeloid Leukemias in C3H/He Mice with Low Dose Rate γ-Irradiation
Furuse T, Ohtsu H, Noda Y (Japan)

14:30- II-4 Dose and Dose Rate Effect in Mutagenesis, Teratogenesis and Carcinogenesis
Nomura T (Japan)

15:00-15:15 < Coffee break >

Plenary Symposium III. Room D

Molecular Analysis of Radiogenic Tumors: Experimental

Chairpersons: Cristian Streffer (Germany)
               Robert L. Ullrich (USA)

15:15- III-1 Positional Cloning for Genes Involved in Radiation Induced Thymic Lymphoma
Kominami R, Wakabayashi Y, Inoue J, Matsuki A, Kosugi-Okano H, Matsuki A,
Saito Y, Ochiai Y, Kodama Y, Takahashi Y, Mishima Y, Niwa O (Japan)

15:45- III-2 Molecular Analysis of Radiation Induced Thymic Lymphomas in Scid Mice
Ogiu T, Ishii-Ohba H, Kobayashi S, Nishimura M, Shimada Y, Tsuji H, Ukai H,
Watanabe F, Suzuki H, Sado T (Japan)

16:15- III-3 7636del9 (delSRI) Atm Mutation Predisposes to Cancer
Lavin MF, Spring K, Ahangari F, Scott S, Chen PC, Watters D, Hourigan K,
MacKinnon P, Swift M (Australia)

16:45- III-4 Impaired Telomere Function, Radiation-induced Instability and Tumorigenesis
Bailey SM, Ponnaiya B, Ullrich RL, Goodwin EH (USA)

17:15- III-5 Genetic Analysis of Radiation-induced Mouse Hepatomas
Kamiya K, Masuda Y, Sumii M, Koike N, Takahashi M, Teishima J (Japan)

17:45- III-6 Analysis of Tsc2 Gene in Radiation Induced Kidney Tumors of Eker Rat
Hino O (Japan)

18:15- III-7 PTCH (patched) and XPA Genes in Radiation-induced Basal Cell Carcinomas
Burns FJ, Shore RE, Roy N, Loomis C, Zhao P (USA)
July 14 (Saturday)

**Plenary Symposium IV.**

**Room D**

**Molecular Analysis**

Charipersons: Monica Hollstein (Germany)  
Yuichi Ishikawa (Japan)

9:00-IV-1 Transgenic Murine Models of Human Cancer: Bridging the Gap from Mouse to Man  
* Luo JL, Zielinski B, Hergenhahn M, Hollstein M (Germany)  

9:30-IV-2 Cancers Induced by Alpha-particles from Thorotrast  
* Ishikawa Y, Wada I, Fukumoto M (Japan)  

10:00-IV-3 The p53 and M6P/IGF2r Genes of Thorotrast- and Atomic Bomb-induced Liver Cancers: A Glimpse into the Mechanisms of Radiation Carcinogenesis  
* Iwamoto K (USA)  

10:30-10:45 < Coffee break >

10:45-IV-4 Molecular Epidemiology of Childhood Thyroid Cancer around Chernobyl  
* Yamashita S (Japan)  

11:15-IV-5 Molecular Analysis of Radiation-induced Thyroid Carcinomas in Humans  
* Rabes HM (Germany)  

**Poster Session**

**Room D**

11:45-13:45 Brief introduction of posters. Poster presenters (P-1 - P-35) will make 3-minute oral presentation to outline their posters. An overhead projector will be available. Lunch box will be served for all participants.

**Plenary Symposium V-1.**

**Room D**

**Molecular and Cellular Mechanism of Radiation Responses**

Charipersons: Jurgen Kiefer (Germany)  
Masao S. Sasaki (Japan)

13:45-V-1 Transmission of Damage Signals from Irradiated to Non-irradiated Cells  
* Little JB, Azzam EI, Nagasawa H, deToledo SM (USA)  

14:15-V-2 Specific Gene Expression by Extremely Low-dose Ionizing Radiation which is Related to Enhances Proliferation of Normal Human Diploid Cells  
* M. Watanabe, Suzuki K, Kodama S (Japan)  

14:45- V-3  The Yin and Yan of Bystander versus Adaptive Response: Lessons from the Microbeam Studies  
   Hei TK, Zhou HN, Suzuki M, Randers-Pehrson G, Waldren CA, Hall EJ (USA)

15:15- V-4  Deficient PCNA Expression and Radiation Sensitivity  
   Woloschak GE, Paunesku T, Protic M (USA)

15:45- V-5  p53 and IGFBP-3 Regulation in the DNA Damage Response  
   Clark MA, Perks CM, Farndon JR, Norbury CJ, Holly JMP, Winters ZE (UK)

16:15-16:30  < Coffee break >

Plenary Symposium V-2. Room D

Molecular and Cellular Mechanism of Radiation Responses

   Chairpersons: Tom K. Hei (USA)  
   Seiji Kodama (Japan)

16:30- V-6  Apoptotic Regulation, Mutagenesis and Homologous Recombinational Repair in Human Lymphoid Cells Exposed to Ionizing Radiation  

17:00- V-7  Mutation Induction by Very Low Dose Rate Gamma-rays in Human Cells  
   Kiefer J, Kohlpoth M, Kuntze M (Germany)

17:30- V-8  DNA-PK Activity Depressed Radioadaptation of Apoptosis Induced by Pre-irradiation at Low-dose or Low-dose Rate in Mouse Spleen  
   Ohnishi T, Takahashi A, Ohnishi K (Japan)

18:00- V-9  The Responses of the Haemopoietic System to Ionizing Radiation  
   Wright EG (UK)

18:30- V-10 Gene Expression Profile Analysis of ATM and p53 Knockout Mice  
   Abe M (Japan)
**July 15 (Sunday)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Presenter(s)</th>
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<tbody>
<tr>
<td>9:00</td>
<td>VI-1</td>
<td>A Retrospective Analysis of Tumor Induction in Mice after Fractionated Irradiation with</td>
<td>Koike S, Ando K, Oohira C, Ogiu T (Japan)</td>
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<td>Carbon Ions</td>
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<tr>
<td>9:30</td>
<td>VI-2</td>
<td>Intestinal Metaplasia Induced by X-irradiation -Its biological characteristics-</td>
<td>Watanabe H (Japan)</td>
</tr>
<tr>
<td>10:00</td>
<td>VI-3</td>
<td>Aberrant Extracellular Signaling in the Progeny of Irradiated Human Cells</td>
<td>Barcellos-Hoff MH (USA)</td>
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<td>10:30</td>
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<td>&lt; Coffee break &gt;</td>
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<tr>
<td>10:45</td>
<td>VI-4</td>
<td>Apoptosis Induced in Small Intestinal Crypts by Low Doses of Radiation Protects the</td>
<td>Potten CS (UK)</td>
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<td>Epithelium from Genotoxic Damage</td>
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<tr>
<td>11:15</td>
<td>VI-5</td>
<td>Radiation-induced Apoptosis and its Role in Tissue Responses</td>
<td>Hendry JH (UK)</td>
</tr>
<tr>
<td>11:45</td>
<td>VI-6</td>
<td>Essential Role of p53 Gene in Apoptotic Tissue Repair for Radiation-induced Teratogenic</td>
<td>Norimura T, Kato F, Nomoto S (Japan)</td>
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<td>Injury</td>
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**Poster Session**

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<tr>
<th>Time</th>
<th>Activity</th>
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<tr>
<td>12:15</td>
<td>Brief introduction of posters. Poster presenters (P-36 - P-66) will make 3-minute oral presentation to outline their posters. An overhead projector will be available. Lunch box will be served for all participants.</td>
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### Plenary Symposium VII.

#### Susceptibility

**Chairpersons:** Harvey W. Mohrenweiser (USA)
Ryo Kominami (Japan)

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Presenters</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00</td>
<td>VII-1</td>
<td>Individual Differences in Chromosomal Radiosensitivity: Implications for Radiogenic Cancer</td>
<td>Scott D (UK)</td>
</tr>
<tr>
<td>14:30</td>
<td>VII-2</td>
<td>Variation in DNA Repair Genes in the Human Population: Potential Relationships to Cancer Risk</td>
<td>Mohrenweiser HW, Jones IM (USA)</td>
</tr>
<tr>
<td>15:00</td>
<td>VII-3</td>
<td>Identification of Genes Influencing Individual Sensitivity to Radiation-induced Osteosarcoma</td>
<td>Rosemann M, Kuosaite V, Nathrath M, Aitkinson MJ (Germany)</td>
</tr>
<tr>
<td>15:30</td>
<td>VII-4</td>
<td>Susceptibility Loci for Radiation-induced Lymphomas in Mice</td>
<td>Mori N, Okumoto M (Japan)</td>
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<tr>
<td>16:00</td>
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<td>&lt; Coffee break &gt;</td>
<td></td>
</tr>
<tr>
<td>16:15</td>
<td>VII-5</td>
<td>Genetic Control of Susceptibility to Radiation-induced Breast Cancer</td>
<td>Ullrich RL (USA)</td>
</tr>
<tr>
<td>16:45</td>
<td>VII-6</td>
<td>Age-dependence of Susceptibility for Long-term Effects of Ionizing Radiation</td>
<td>Sasaki S (Japan)</td>
</tr>
<tr>
<td>17:15</td>
<td>VII-7</td>
<td>Nutrition Status and Radiation Induction of Cancer in Mice</td>
<td>Yoshida K, Hirabayashi Y, Sado T, Inoue T (Japan)</td>
</tr>
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#### Poster Session

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>17:50-18:30</td>
<td>Poster presenters will stand in front of their posters and answer questions from participants.</td>
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<tr>
<td>18:30-18:50</td>
<td>Poster Removal</td>
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<td>19:00</td>
<td>&lt; Banquet &gt;</td>
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<td>Banquet Hall “Sakura”</td>
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July 16 (Monday)

Plenary Symposium VIII. Room D

General Discussion

Chairpersons: John B. Little (USA)
               Tsutomu Sugahara (Japan)

Six speakers will give a short note related to the current radiation policy, and then discussion follows.

9:00- Cristian Streffer (Germany)
9:20- Dudley T. Goodhead (UK)
9:40- Hiromichi Matsudaira (Japan)
10:00- Lowell G. Ralston (USA)
10:20- Masao S. Sasaki (Japan)
10:40- Warren K. Sinclair (USA)
11:00-12:00 Free discussion and summary of the session

12:00 Closing of the Symposium