Symposia

1) Genome Functional Integrity

- ① Kyoko Miura (Kumamoto University), Carcinogenesis resistance in the longest-lived rodent, the naked mole-rat.
- ② Iwao Kukimoto (National Institute of Infectious Diseases) APOBEC mutagenesis associated with human papillomavirus carcinogenesis.
- ③ Shintaro Iwasaki (RIKEN), Genomic, biochemical, and structural bases of an mRNA-selective natural translation inhibitor.
- 4 Akihide Yoshimi (National Cancer Center), Splicing -associated mutations and aberrant splicing in cancer pathogenesis.
- ⑤ Hitoshi Ohtani (Nagoya University), DNA demethylating agents suppress the growth of cancer cells through the activation of retrotransposons.

2) New Modalities and Regulatory Science

- (1) Chinami Aruga (Mitsubishi Tanabe Pharma Corporation), Case Studies in Safety Evaluation for New Modalities.
- ② Takayoshi Suzuki (National Institute of Health Sciences), Safety assessment of genome editing in relation to mutation research.
- ③ Satoshi Yasuda (National Institute of Health Sciences), Current issues on quality and safety assessment of cell-based therapeutic products.
- 4 Akira Sassa (Chiba University), Understanding the innate immune response to nucleic acids using DNA repair-deficient models.
- ⑤ Kiyohiko Kawai (Osaka University), Single molecule analysis and diagnostics based on fluorescence blinking

3) New Development of Radiation Effects Research from the Perspective of Genome Analysis

- ① Toshiaki Nakano (National Institutes for Quantum Science and Technology), Direct visualization of isolated and clustered damage in genomic DNA in TK6 cells.
- ② Arikuni Uchimura and Yasunari Satoh (Radiation Effects Research Foundation), Germline de novo mutations and radiation effects.
- ③ Osamu Tanabe and Yukiko Matsuda (Radiation Effects Research Foundation), Frequencies and characteristics of somatic mutations in

- hematopoietic stem cells from mice exposed to X-ray radiation.
- 4 Kazuhiro Daino (National Institutes for Quantum Science and Technology), Characteristic genetic abnormalities revealed by genomic analysis of radiation-induced cancer.
- ⑤ Ritsu Sakata (Radiation Effects Research Foundation), Epidemiological study of atomic bomb survivors.