

**1) Published and in-press reports :****<2015-Current>**

Grant EJ, Ozasa K, Ban N, Berrington de Gonzalez A, Cologne J, Cullings HM, Doi K, Furukawa K, Imaoka T, Kodama K, Nakamura N, Niwa O, Preston DL, Rajaraman P, Sadakane A, Saigusa S, Sakata R, Sobue T, Sugiyama H, Ullrich R, Wakeford R, Yasumura S, Milder CM, Shore RE, A Report from the 2013 International Symposium: The Evaluation of the Effects of Low-Dose Radiation Exposure in the Life Span Study of Atomic Bomb Survivors and Other Similar Studies. *Health Physics*, 2015; 108(5):551-6.

Hamatani K, Takahashi K, Taga M. Thyroid cancer: Molecular characteristics of radiation-associated papillary thyroid cancer, with a special reference to of atomic radiation exposure. *J Thyroid disorders Therapy*, 2015; 4(2):1-7.

Hirabayashi Y, Tsuboi I, Nakachi K, Kusunoki Y, Inoue T. Experimentally induced, synergistic late effects of a single dose of radiation and aging: significance in LKS fraction as compared with mature blood cells. *J Appl Toxicol*, 2015; 35(3):230-40.

Hu Y, Yoshida K, Cologne JB, Maki M, Morishita Y, Sasaki K, Hayashi I, Ohishi W, Hida A, Kyoizumi S, Kusunoki Y, Tokunaga K, Nakachi K, Hayashi T. *CD14 and IL18* gene polymorphisms associated with colorectal cancer subsite risks among atomic bomb survivors. *Hum Genome Variat*, 2(15035) 2015:9 pages.

Joo J, Yoon KA, Hayashi T, Kong SY, Shin HJ, Park B, Kim YM, Hwang SH, Kim J, Shin A, Kim JY. Nucleotide excision repair gene ERCC2 and 5 variants increase risk of uterine cervical cancer. *Cancer Res Treat*, 2016; 48(2):708-14.

Kodama Y. Genetic effects of atomic bomb radiation on humans. In: Sutou S, eds. Fukushima Nuclear Accident: Global Implications, Long-Term Health Effects, and Ecological Consequences. Nova Science Publishers, Inc; 2015;77-88.

Kyoizumi S, Kubo Y, Misumi M, Kajimura J, Yoshida K, Hayashi T, Imai K, Ohishi W, Nakachi K, Young LF, Shieh JH, Moore MA, van den Brink MRM, Kusunoki Y. Circulating hematopoietic stem and progenitor cells in aging atomic bomb survivors. *Radiat Res*, 2016; 185(1):69-76.

Nezu T, Hosomi N, Takahashi T, Anno K, Aoki S, Shimamoto A, Maruyama H, Hayashi T, Matsumoto M, Tahara H. Telomere G-tail length is a promising biomarker related to white matter lesions and endothelial dysfunction in patients with cardiovascular Risk: A cross-sectional study. *EBioMedicine*, 2015; 2(8):958-65.

Noda A, Mishima S, Hirai Y, Hamasaki K, Landes RD, Mitani H, Haga K, Kiyono T, Nakamura N, Kodama Y. Progerin, the protein responsible for the Hutchinson-Gilford progeria syndrome, increases the unrepaired DNA damages following exposure to ionizing radiation. *Gene Environ*, 2015; 37(13):1-12.

Noda A, Suemori H, Hirai Y, Hamasaki K, Kodama Y, Mitani H, Landes RD, Nakamura N. Creation of mice bearing a partial duplication of HPRT gene marked with a GFP gene and detection of revertant cells in situ as GFP-positive mutant cells. *PLoS ONE*, 2015; 10(8): 1-18. pages.

Sasatani M, Xu Y, Kawai H, Cao L, Tateishi S, Shimura T, Li J, Iizuka D, Noda A, Hamasaki K, Kusunoki Y, Kamiya K. RAD18 activates the G2/M checkpoint through DNA damage signaling to maintain genome integrity after ionizing radiation exposure. *PLoS One*, 2015; 10(2):e0117845.

Seed TM, Xiao S, Manley NR, Nikolich-Zugich J, Pugh J, van den Brink MRM, Hirabayashi Y, Yasutomo K, Iwama A, Koyasu S, Shterev I, Sempowski G, Macchiarini F, Nakachi K, Kunugi KC, Hammer CG, Dewerd LA. An interlaboratory comparison of dosimetry for a multi-institutional radiobiological research project: Observations, problems, solutions, and lessons learned. *Int J Radiat Biol*, 2015; 92(2):59-70.

Wang C, Oshima M, Sashida G, Tomioka T, Hasegawa N, Mochizuki-Kashio M, Nakajima-Takagi Y, Kusunoki Y, Kyoizumi S, Imai K, Nakachi K, Iwama A. Non-lethal ionizing radiation promotes aging-like phenotypic changes of human hematopoietic stem and progenitor cells in humanized mice. *PLoS One*, 2015; 10(7):1-14. pages.

Kyoizumi S. Structure and function of human body, practical anatomy and physiology 2015. *The immune system*, 2015 (June) :pp 101-10. Kohdansha Scientific (in Japanese)

Hirabayashi Y, Tsuboi I, Kuramoto K, Kusunoki Y, Inoue T. Cell-cycle of primitive hematopoietic progenitors decelerated in senescent mice is reactively accelerated after 2-Gy whole-body irradiation. *Exp Biol Med*, 2016; 241(5):485-92.

Kajimura J, Ito R, Manley NR, Hale LP. Optimization of single and dual color immunofluorescence protocols for formalin-fixed, paraffin-embedded archival tissue. *J Histochem & Cytochem*, 2016; 64(2):112-24.

Hayashi T, Hu Y, Yoshida K, Ohishi W, Hida A, Hayashi I, Kyoizumi S, Kusunoki Y, Nakachi K. Radiation-associated breast cancer risk and ATM genotypes among atomic-bomb survivors. *Hiroshima Igaku [J Hiroshima Med Assoc]* , 2016; 69(4): 277-8 (in Japanese).

**2) Meeting presentations (January 2015 – December 2015):**

Sekihara K, Sakuma T, Yamamoto T, Noda A. New approaches to generate p53-GFP knock-in mice. Exchange Meeting with Students and Overseas PI. 18-19 February 2015, Kyoto

Kusunoki Y. Radiobiology studies using biosamples from A-bomb survivors-Immunological analyses and molecular oncology studies. Epidemiology conference for emergency workers of Tokyo Electric Power's Fukushima I Nuclear Power Plant, 11 March 2015, Kitakyushu

Hayashi T, Hu Y, Yoshida K, Ohishi W, Hida A, Hayashi I, Kyoizumi S, Kusunoki Y, Nakachi K. *ATM* genotyping modulates the risk of radiation-associated breast cancer among atomic-bomb survivors. The 106th Annual Meeting of the American Association for Cancer Research (AACR), 18-22 April 2015, Philadelphia, Pennsylvania, USA

Fujihara M, Sakatani A, Hayashi T. Study of DNA fragmentation preserved in formalin for over 55 years. The 104th Annual Meeting of the Japanese Society of Pathology, 30 April-2 May 2015, Nagoya

Hamasaki K, Landes RD, Noda A, Nakamura N, Kodama Y. Translocation frequencies in mouse thyroid cells vary with fetal stage at the time of irradiation. The 15th International Congress of Radiation Research. 25-29 May 2015, Kyoto

Hamatani K, Koyama K, Yano S, Taga M, Kusunoki Y. Dose-dependent induction of *EML4-ALK* fusion gene in human thyroid cells irradiated with X-rays *in vitro*. The 15th International Congress of Radiation Research, 25-29 May 2015, Kyoto

Hayashi T. Radiation effects studies on intracellular ROS levels in atomic-bomb survivors and mice. The 15th International Congress of Radiation Research, 25-29 May 2015, Kyoto

Hayashi T, Hu Y, Yoshida K, Ohishi W, Hida A, Hayashi I, Kyoizumi S, Kusunoki Y, Nakachi K. Functional significance of *IL6R* genotypes with special reference to radiation-associated cancer risks among atomic-bomb survivors. The 15th International Congress of Radiation Research, 25-29 May 2015, Kyoto

Ito R, Hamatani K, Yano S, Shinohara T, Takahashi K, Oue N, Yasui W, Nakachi K, Kusunoki Y. Histological and molecular characteristics in colorectal cancer cases with high microsatellite instability among atomic-bomb survivors. The 15th International Congress of Radiation Research, 25-29 May 2015, Kyoto

Niwa Y, Murakami H, Ohishi W, Misumi M, Kusunoki Y, Nagamachi A, Inaba T, Tanaka S, Tanaka I, Takahashi N. Study of radiation-related circulatory diseases using animal models to evaluate the feasibility of spontaneous hypertensive rat (SHR) as an animal model. The 15th International Congress of Radiation Research, 25-29 May 2015, Kyoto

## PUBLICATIONS AND MEETING PRESENTATIONS

Department of Molecular Biosciences

Page 4

---

Noda A, Suemori H, Hirai Y, Hamasaki K, Mitani H, Landes RD, Kodama Y, Nakamura N. Next generation transgenic mouse models for detecting radiation-induced somatic and germ cell mutations. The 15th International Congress of Radiation Research. 25-29 May 2015, Kyoto

Sekihara K, Noda A. Hypertonic treatment increases radiation-induced unreparable DNA damages in cultured human cells. The 15th International Congress of Radiation Research. 25-29 May 2015, Kyoto

Taga M, Hamatani K, Ito R, Misumi M, Kusunoki Y. Detection of *ALK* fusion genes in archival lung adenocarcinoma specimens among atomic bomb survivors. The 15th International Congress of Radiation Research, 25-29 May 2015, Kyoto

Ukai A, Hamasaki K, Kodama Y, Noda A, Kusunoki Y, Honma M. Genome mapping of chromosome regions damaged by ionizing irradiation of human blood T-cells, using CGH-microarray analysis. The 15th International Congress of Radiation Research, 25-29 May 2015, Kyoto

Yoshida K, Kusunoki Y, Yamaoka M, Maki M, Hayashi T. Relationship between radiation exposure doses and IL7 receptor protein expression levels, based on *IL7R* genotype. The 15th International Congress of Radiation Research, 25-29 May 2015, Kyoto

Hayashi T, Hu Y, Yoshida K, Ohishi W, Hida A, Hayashi I, Kyoizumi S, Kusunoki Y, Nakachi K. Functional significance of *ATM* genotypes and radiation-associated breast cancer risk by genotype among atomic-bomb survivors. Scientific Meeting for Cancer Prevention 2015 Saitama, 5-6 June 2015, Saitama

Hayashi T, Hu Y, Yoshida K, Ohishi W, Hida A, Hayashi I, Kyoizumi S, Kusunoki Y, Nakachi K. Radiation-associated breast cancer risk and *ATM* genotypes among atomic-bomb survivors. The 56th Late A-bomb Effects Research Meeting, 7 June 2015, Hiroshima

Satoh Y, Fujimoto A, Abe T, Hamasaki K, Misumi M, Asakawa J. The 40th Annual Meeting of Chugoku-area Local Radiation Research Society. 17 July 2015, Hiroshima

Hayashi T. Molecular epidemiology study of cigarette smoking effects on immunity- and inflammation-related biomarkers and lifestyle-related disease development. FY2014 Research Meeting of Smoking Research Foundation, 23 July 2015, Tokyo

Hayashi T, Yoshida K, Morishita Y, Sasaki K, Maki M, Nagamura H, Furudoi K, Hayashi I, Kyoizumi S, Kusunoki Y. Effects of aging, radiation, and genetic background on intracellular ROS levels in atomic-bomb survivors and mice. The 22nd Annual Meeting of the Japanese Society of Immunotoxicology, 10-11 September 2015, Kyoto

## PUBLICATIONS AND MEETING PRESENTATIONS

Department of Molecular Biosciences

Page 5

---

Kajimura J, Yamaoka M, Lynch H, Kyoizumi S, Sempowski G, Geyer S, Nakachi K, Kusunoki Y. Effects of radiation exposure and aging on the number of circulating dendritic cells among atomic-bomb survivors. The 61st Annual Meeting of the Radiation Research Society, 19-22 September 2015, Weston, Florida, USA

Hayashi T. Radiation effects on aging-associated elevation of biomarkers among atomic-bomb survivors. PROJECT Kyoto 2015, 3 October 2015, Kyoto

Hamatani K, Taga M, Takahashi K, Kusunoki Y. Incidence of EML4-ALK fusion increases dose-dependently in human thyroid cells irradiated with X-ray *in vitro*. The 74th Annual Meeting of the Japanese Cancer Association, 8-10 October 2015, Nagoya

Hayashi T, Kyoizumi S, Kusunoki Y, Ohishi W, Nakachi K. Radiation-associated cancer risks in atomic-bomb survivors as related to *IL6R* gene polymorphism and radiation exposure dose. The 74th Annual Meeting of the Japanese Cancer Association, 8-10 October 2015, Nagoya

Hamatani K, Koyama K, Yano S, Taga M, Kusunoki Y. *In vitro* X-ray irradiation induces rearrangements not only of *RET*, but also of *ALK* in human thyroid epithelial cells. The 15th International Thyroid Congress, 18-23 October 2015, Orland, Florida, USA

Hamatani K. Characteristics of gene alterations in solid cancers developing in atomic bomb survivors: With a focus on adult-onset papillary thyroid cancer. One Health Conference in Nagasaki, 6-7 November 2015, Nagasaki

Niwa Y, Murakami H, Ohishi W, Misumi M, Kusunoki Y, Nagamachi A, Inaba T, Tanaka S, Tanaka I, Takahashi N. Study of radiation-related circulatory diseases using animal models: Evaluating the feasibility of spontaneous hypertensive rat (SHR) as an animal model. The 7th International MELODI (Multidisciplinary European Low Dose Initiative) Workshop, 9-11 November 2015, Munich, Germany

Hayashi T, Yoshida K, Kyoizumi S, Kusunoki Y. Long-term effects of aging, radiation, and genetic background on blood inflammation-related marker and intracellular ROS levels in atomic-bomb survivors and irradiated mice. The 44th Annual Meeting of the Japanese Society for Immunology, 18-20 November 2015, Sapporo

Kyoizumi S, Yoshida K, Hayashi T, van den Brink MRM, Kusunoki Y. The role of Notch1 signaling in differentiation of human innate lymphoid cells from circulating CD34<sup>+</sup>hematopoietic progenitor and CD34<sup>-</sup> precursor cells. The 44th Annual Meeting of the Japanese Society for Immunology, 18-20 November 2015, Sapporo

Noda A, Suemori H, Hirai Y, Hamasaki K, Mitani H, Landes RD, Kodama Y, Nakamura N. Next generation transgenic mouse models for detecting somatic and germ cell mutations *in situ* at whole body level. 2015 American Society for Cell Biology Annual Meeting. 12-16 December 2015, San Diego, California, USA

## PUBLICATIONS AND MEETING PRESENTATIONS

Department of Molecular Biosciences

Page 6

---

Hayashi T, Furukawa K, Ohishi W, Hayashi I, Yoshida K, Kyoizumi S, Kusunoki Y, Nakachi K. Age, smoking, and radiation effects on the production of reactive oxygen species in blood cells of atomic-bomb survivors and their association with immune-related biomarkers. The International Chemical Congress of Pacific Basin Societies, 15-20 December 2015, Honolulu, Hawaii, USA