## 1) Published and in-press reports:

### <2018 >

<u>Hayashi T</u>, Lynch HE, Geyer SM, <u>Yoshida K</u>, Furudoi K, Sasaki K, Morishita Y, Nagamura H, Maki M, Hu Y, Hayashi I, <u>Kyoizumi S</u>, <u>Kusunoki Y</u>, Ohishi W, Fujiwara S, Misumi M, Shterev I, Nikolich-Zugich J, Murasko D, Hale LP, Sempowski GD, <u>Nakachi K</u>. Impact of early life exposure to ionizing radiation on influenza vaccine response in an elderly Japanese cohort. *Vaccine*, 2018; 36(45):6650-9.

<u>Hirai Y</u>, Cordova KA, <u>Kodama Y</u>, <u>Hamasaki K</u>, Awa AA, Tomonaga M, Mine M, Cullings HM, <u>Nakamura N</u>. Tooth enamel ESR doses and cytogenetic doses of Nagasaki atomic-bomb survivors in comparison with DS02R1 doses. *Int J Radiat Biol*, 2018; 1-24.

<u>Hirai Y, Noda A, Kodama Y</u>, Cordova KA, Cullings HM, Yonehara S, Fujihara M, Moriwaki S, Nishigori C, Mabuchi K, Kraemer KH, <u>Nakamura N</u>. Increased risk of skin cancer in Japanese heterozygotes of xeroderma pigmentosum group A. *J Human Genetics*, 2018; 63(11):1181-4.

<u>Kajimura J</u>, Lynch HE, Geyer SM, French B, Yamaoka M, Shterev ID, Sempowski GD, <u>Kyoizumi S</u>, <u>Yoshida K</u>, Misumi M, Ohishi W, <u>Hayashi T</u>, <u>Nakachi K</u>, <u>Kusunoki Y</u>. Radiation and age-associated changes in peripheral blood dendritic cell populations among aging atomic bomb survivors in Japan. *Radiat Res*, 2018; 189(1):84-94.

<u>Noda A</u>. Radiation-induced unrepairable DSBs: Their role in the late effects of radiation and possible applications to biodosimetry. *J Radiat Res*, 2018; 59 (Suppl 2): ii114–ii120.

<u>Hamasaki K</u>. Evaluation of radiation effects in in utero exposed populations using chromosome aberration assay. *Hiroshima Igaku [J Hiroshima Med Assoc]*, 2018; 71(4):257-60. (in Japanese)

<u>Hayashi T</u>, Lynch HE, Geyer SM, French B, <u>Yoshida K</u>, Furudoi K, Sasaki K, Morishita Y, Nagamura H, Maki M, Hu Y, Hayashi I, <u>Kyoizumi S</u>, <u>Kusunoki Y</u>, Ohishi W, Fujiwara S, Shterev I, Nikolich-Zugich J, Murasko D, Sempowski GD, <u>Nakachi K</u>. Influenza vaccine response among Hiroshima atomic-bomb survivors. *Hiroshima Igaku [J Hiroshima Med Assoc]*, 2018; 71(4):278-81. (in Japanese)

<u>Yoshida K</u>. Aging-related changes in the immune system – the potential link to radiation exposure, obesity, and metabolic pathways. *Hiroshima Igaku* [*J Hiroshima Med Assoc*], 2018; 71(4):261-4. (in Japanese)

### <In Press>

<u>Hamasaki K</u>, <u>Nakamura N</u>. Effect of fetal radiation exposures on hematopoietic cells. *Current Stem Cell Reports* 2019; 5: 92-99.

Jang S, Suto Y, Liu J, Liu Q, Zuo Y, Duy PN, Miura T, Abe Y, <u>Hamasaki K</u>, Suzuki K, Kodama S. Capabilities of the ARADOS-WG03 regional network for large scale radiological and nuclear emergency situations in Asia. *Radiat Prot Dosimetry* 2018;

# ncy279, https://doi.org/10.1093/rpd/ncy279

Nakamura N. History of radiation genetics: light and darkness. Int J Radiat Biol 2019; 95(7):999-1014.

Shim H, Park B, Shin HJ, Joo J, Yoon KA, Kim YM, <u>Hayashi T</u>, Tokunaga K, Kong SY, Kim JY. Protective association of HLA-DRB1\*13:02, HLA-DRB1\*04:06, and HLA-DQB1\*06:04 alleles with cervical cancer in a Korean population. *Hum Immunol* 2019; 80(2):107-111.

<u>Yoshida K</u>, French B, Yoshida N, Hida A, Ohishi W, <u>Kusunoki Y</u>. Radiation exposure and longitudinal changes in peripheral monocytes over 50 years: The Adult Health Study of atomic-bomb survivors. *Br J Haematol* 2019; 185:107-115.

# 2) Meeting presentations (January 2018 – December 2018):

<u>Uchimura A</u>. Analysis of germline mutations and somatic mosaic mutations by using mutation accumulation mouse lines. Expanded Group Meeting, 2017, Scientific Support Programs for Genome Science. 11-12 January 2018, Chiba

<u>Noda A</u>. Visualization of in vivo occurring somatic and germline mutations in mice. FY2018 1st Council Meeting of the Japanese Radiation Society "Catch-up seminar". 16 June 2018, Tokyo

<u>Ito R</u>, <u>Yoshida K</u>, Kajimura J, <u>Kyoizumi S</u>, <u>Nakachi K</u>, <u>Kusunoki Y</u>. Morphological assessment of radiation effects on human thymus function. The 107th Annual Meeting of the Japanese Society of Pathology. 21-23 June 2018, Sapporo

<u>Satoh Y</u>, Tony K, Sese J, Nishimura M, Shimada Y, <u>Uchimura A</u>. Genome-wide analysis of transgenerational genetic effects of radiation exposure in mice. 43rd Annual Meeting of the Chugoku Area Radiation Research Society. 31 July 2018, Hiroshima

<u>Hayashi T</u>. Immune/inflammation and cancer genome studies in atomic bomb survivors. The 3rd Japonica Array Research Meeting. 15 September 2018, Tokyo

<u>Hayashi T</u>, Furukawa K, <u>Yoshida K</u>, <u>Kusunoki Y</u>, <u>Kyoizumi S</u>, Ohishi W. Effects of age and radiation on serum iron and intracellular ROS  $(H_2O_2)$  in blood of atomic-bomb survivors. The 25th Annual Meeting of the Japanese Society of Immunotoxicology. 18-19 September 2018, Tsukuba

<u>Noda A, Hirai Y, Hamasaki K, Nakamura N, Kodama Y</u>. Transcription factors implicated in fetus development and radiation-induced malformations. The 49th Annual Meeting of Environmental Mutagenesis and Genomics Society. 22-26 September 2018, San Antonio, Texas, USA

Hayashi T, Furukawa K, Ohishi W, Yoshida K, Kyoizumi S, Kusunoki Y. Effects of age and radiation on the production of reactive oxygen species in blood cells of Hiroshima

atomic-bomb survivors. The 64<sup>th</sup> Annual Meeting of the Radiation Research Society. 23-26 September 2018, Chicago, Illinois, USA

<u>Hayashi T</u>, Nakagawa H, Fujita M, Arihiro K, Fujihara M, Ozasa K. Genome sequencing of DNA isolated from long-term preserved FFPE thyroid cancer tissues. The 77th Annual Meeting of the Japanese Cancer Association. 27-29 September 2018, Osaka

<u>Yoshida K</u>, French B, Yoshida N, Hida A, Ohishi W, <u>Kusunoki Y</u>. Increases in Peripheral Blood Monocytes among Aging Atomic-bomb Survivors. Cold Spring Harbor Meeting: Mechanisms of Aging. 1-5 October 2018, Cold Spring Harbor, NY, USA

<u>Noda A</u>, Mishima S, <u>Hirai Y</u>, <u>Hamasaki K</u>, Mitani H, Haga K, Kiyono T, <u>Nakamura N, Kodama Y</u>. Impaired repair of DNA double strand breaks (DSBs) associated with nuclear envelop architecture in the fibroblasts from Hutchinson-Gilford progeria syndrome. The 63rd Annual Meeting of the Japan Society of Human Genetics. 10-13 October 2018, Yokohama

<u>Hayashi T</u>, Furukawa K, <u>Yoshida K</u>, <u>Kusunoki Y</u>, <u>Kyoizumi S</u>, Ohishi W. Effects of age and radiation on atomic bomb survivors' intracellular ROS in blood and serum iron. The 61st Annual Meeting of the Japanese Radiation Research Society. 7-9 November 2018, Nagasaki

<u>Hirai Y</u>, <u>Noda A</u>, <u>Nakamura N</u>. Japanese heterozygotes bearing a founder mutation in the *XPA* gene are at an increased risk of basal cell carcinoma of the skin. The 61st Annual Meeting of the Japanese Radiation Research Society. 7-9 November 2018, Nagasaki

<u>Kusunoki Y</u>, <u>Yoshida K</u>. Approaches to understanding the biological mechanisms of radiation-associated diseases in A-bomb survivors. The 61st Annual Meeting of the Japanese Radiation Research Society. 7-9 November 2018, Nagasaki

<u>Nakamura N</u>. Low doses of radiation may not induce cancers but make them appear earlier. The 61st Annual Meeting of the Japanese Radiation Research Society. 7-9 November 2018, Nagasaki

Ohishi W, Ueda K, Cullings HM, Fujiwara S, Suzuki G, <u>Hayashi T</u>, Hida A, Ozasa K, Tahara E. Impact of chronic atrophic gastritis on radiation risk of noncardia gastric cancer. The 61st Annual Meeting of the Japanese Radiation Research Society. 7-9 November 2018, Nagasaki

<u>Satoh Y</u>, Tony K, Sese J, Nishimura M, Shimada Y, <u>Uchimura A</u>. Irradiation of mouse spermatogonia cells and mature oocytes induces small size deletions and multisite mutations in the genome of offspring. The 61st Annual Meeting of the Japanese Radiation Research Society, 7-9 November 2018, Nagasaki

<u>Uchimura A</u>, Higuchi M, Minakuchi Y, <u>Satoh Y</u>, Tsuji T, Nakamoto Y, Imanaka M, Miura A, Toyoda A, Yagi T. Characteristics of de novo small insertions are deletions in the mouse genome. The 61st Annual Meeting of the Japanese Radiation Research Society. 7-9 November 2018, Nagasaki

Ito R, Yoshida K, Kajimura J, Kyoizumi S, Nakachi K, Kusunoki Y. Long-term effects of

A-bomb radiation on the histological structure of the human thymus. The 64th Autumn Annual Meeting of the Japanese Society of Pathology. 22-23 November 2018, Kure

Matsumoto T, <u>Kodama Y</u>, <u>Hamasaki K</u>. Chromosome study for biological dose assessment. 51st Japanese Association of Medical Technologists Chu-Shikoku area Congress 2018. 24-25 November 2018, Takamatsu

<u>Hayashi T</u>, Furukawa K, <u>Yoshida K</u>, <u>Kusunoki Y</u>, <u>Kyoizumi S</u>, Ohishi W. Relationship between intracellular ROS levels in human blood cells and serum ferritin and iron. The 41st Annual Meeting of the Molecular Biology Society of Japan. 28-30 November 2018, Yokohama

<u>Uchimura A</u>, Higuchi M, Minakuchi Y, Matsumoto H, Wakayama T, <u>Satoh Y</u>, Fukumura R, Tsuji T, Imanaka M, Nakamoto Y, Miura A, Gondo Y, Toyoda A, Yagi T. Characterization of de novo germline mutations in mice and mammalian genome evolution. The 41st Annual Meeting of the Molecular Biology Society of Japan. 28-30 November 2018, Yokohama

<u>Hayashi T</u>, Lustig A, Shterev I Geyer S, Shi A, <u>Yoshida K</u>, <u>Kyoizumi S</u>, <u>Kusunoki Y</u>, Ohishi W, Weng N. Effects of aging and radiation exposure on leukocyte telomere length and associated biomarkers among atomic-bomb survivors. The 47th Annual Meeting of the Japanese Society for Immunology. 10-12 December 2018, Fukuoka

<u>Uchimura A</u>. Characterization of mouse germline mutations and development of a new cell lineage analysis method with a mutation accumulation experiment. Expanded Group Meeting, 2018, Scientific Support Programs for Genome Science. 20-21 December 2018, Fukuoka