1) Published and in-press reports:

<2017>

Cullings HM, Grant EJ, Egbert SD, Watanabe T, Oda T, Nakamura F, Yamashita T, Fuchi H, Funamoto S, Marumo K, Sakata R, <u>Kodama Y</u>, Ozasa K, Kodama K. DS02R1: Improvements to atomic bomb survivors' input data and implementation of Dosimetry System 2002 (DS02) and resulting changes in estimated doses. *Health Phys*, 2017; 112(1):56-97.

Ito R, Hale LP, Geyer SM, Jie Li, Sornborger A, Kajimura J, Kusunoki Y, Yoshida K, van den Brink MRM, Kyoizumi S, Manley NR, Nakachi K, Sempowski GD. Late effects of exposure to ionizing radiation and age on human thymus morphology and function. *Radiat Res*, 2017; 187(5):589-98.

<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>Kodaira M</u>, Asakawa J, <u>Nakamura N</u>. Radiation-induced deletions in mouse spermatogonia are usually large (over 200kb) and contain little sequence similarity at the junctions. *Radiat Res*, 2017; 187(6):722-31.

Kyoizumi S, Kubo Y, Kajimura J, Yoshida K, Hayashi T, Nakachi K, Moore MA, van den Brink MRM, Kusunoki Y. Fate decision between group 3 innate lymphoid and conventional natural killer cell lineages by Notch signaling in human circulating hematopoietic progenitors. *J Immunol*, 2017; 199(8):2777-93.

<u>Nakamura N</u>. Why genetic effects from radiation are observed in mice but not in humans. *Radiation Res*, 2018; 189(2):117-127.

<u>Nakamura N, Hirai Y, Kodama Y, Hamasaki K, Cullings HM, Cordova KA, Awa A.</u> Cytogenetic reconstruction of gamma-ray doses delivered to atomic bomb survivors: Dealing with wide distributions of photon energies and contributions from hematopoietic stem/progenitor cells. *Radiat Res*, 2017; 188(4):412-8.

<u>Noda A</u>. Radiation-induced unrepairable DSBs: Their role in the late effects of radiation and possible applications to biodosimetry. *J Radiat Res*, 2017; 1-7.

Sasatani M, Xi Y, <u>Kajimura J</u>, Kawamura T, Piao J, Masuda Y, Honda H, Kubo K, Mikamoto T, Watanabe H, Xu Y, Kawai H, Shimura T, <u>Noda A, Hamasaki K, Kusunoki Y</u>, Zaharieva EK, Kamiya K. Overexpression of Rev1 promotes the development of carcinogen-induced intestinal adenomas via accumulation of point mutation and suppression of apoptosis proportionally to the Rev1 expression level. *Carcinogenesis*, 2017; 38(5):570-8.

<u>Yoshida K</u>, Cologne JB, Cordova KA, Misumi M, Yamaoka M, <u>Kyoizumi S</u>, <u>Hayashi T</u>, Robins H, <u>Kusunoki Y</u>. Aging-related changes in human T-cell repertoire over 20 years delineated by deep sequencing of peripheral T-cell receptors. *Exp Gerontol*, 2017; 96:29-37.

<u>Uchimura A</u>, Higuchi M, Yagi T. Analysis of mammalian germline mutation's effects on future generations by using mutation accumulation experiment. *Hosyasen Seibutsugaku Kenkyu* [*Radiat Biol Res Commun*], 2017; 52(4):402-415. (in Japanese)

<u>Yoshida K, Kusunoki Y</u>. Long-term effects of atomic-bomb radiation on peripheral blood immune cells and potential effect modifiers. *Hosyasen Seibutsugaku Kenkyu [Radiat Biol Res Commun*], 2017; 52(4):350-363. (in Japanese)

<In Press>

<u>Hamasaki K.</u> Evaluation of radiation effects in in utero exposed populations using chromosome aberration assay. *Hiroshima Igaku [J Hiroshima Med Assoc]* (in Japanese)

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

<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*] (in Japanese)

< Submitted for Publication>

<u>Hayashi T</u>, Lynch HE, Geyer S, <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.

<u>Nakamura N</u>. An earlier onset model of radiation carcinogenesis can explain changing patterns of excess risks associated with years since an exposure, and predicts practically no excess number of individuals would suffer from cancers at low doses.

2) Meeting presentations (January 2017 – December 2017):

<u>Hamasaki K.</u> Evaluation of radiation effects *in utero* exposed populations using chromosome aberration assay. The 58th Late A-bomb Effects Research Meeting. 4 June 2017, Hiroshima

<u>Hayashi T, Lynch H, Geyer S, French B, Yoshida K, Furudoi K, Sasaki K, Morishita Y, Nagamura H, Maki M, Hu Y, Hayashi I, Kyoizumi S, Kusunoki Y, Ohishi W, Fujiwara S, Shterev I, Nikolich-Zugich J, Murasko D, Sempowski G, Nakachi K. Influenza vaccine response among Hiroshima atomic-bomb survivors. The 58th Late A-bomb Effects Research Meeting. 4 June 2017, Hiroshima</u>

<u>Yoshida K.</u> Aging-related changes in the immune system – the potential link to radiation

Department of Molecular Biosciences

exposure, obesity, and metabolic pathways. The 58th Late A-bomb Effects Research Meeting. 4 June 2017, Hiroshima

Morishita Y, Maki M, Sasaki K, Nagamura H, <u>Yoshida K</u>, Hayashi I, Ohishi W, Hida A, <u>Kyoizumi S</u>, Yasunami M, Tokunaga K, <u>Hayashi T</u>. *CHEK2* gene polymorphisms associated with colon cancer risk among A-bomb survivors. Scientific Meeting for Cancer Prevention 2017 Osaka. 16-17 June 2017, Osaka

<u>Uchimura A.</u> New approach for understanding mammalian evolutionary process by using experimental evolution model. The 10th meeting of the rising generation of Evo-Devo Biologists. 17-18 June 2017, Mishima

<u>Nakamura N</u>. The path to better understanding of radiation risk of cancer: not by an induction but an earlier onset? 50th Annual Meeting of Japan Health Physics Society. 28-30 June 2017, Oita

<u>Hayashi T</u>. Molecular epidemiology study of cigarette smoking effects on immunity-and inflammation-related biomarkers and lifestyle-related disease development. FY2016 Research Meeting of Smoking Research Foundation. 27 July 2017, Tokyo

<u>Uchimura A</u>, Higuchi M, Minakuchi Y, Toyoda A, Nishino J, Yagi T. Analysis of germline mutations by using mutation accumulation mouse lines. The 42nd Annual Meeting of the Chugoku Area Radiation Research Sociey. 27 July 2017, Hiroshima

<u>Hamasaki K, Noda A, Kodama, Y, Nakamura N</u>. Chromosomal translocations induced in mouse blood cells before and after birth following fetal irradiation. The 42nd Annual Meeting of the Chugoku Area Radiation Research Sociey. 27 July 2017, Hiroshima

Noda A, Hamasaki K, Hirai Y, Kodama Y, Cullings HM, Nakamura N. Mouse spermatogonia stem cell culture: A model system to study hereditary effects of radiation exposure. The 48th Annual Meeting of Environmental Mutagenesis and Genomics Society. 9-13 September 2017, Raleigh, North Carolina, USA

<u>Hayashi T</u>, Ohishi W, <u>Kyoizumi S</u>. Increased risk of proximal colon cancer among A-bomb survivors based on *CHEK2* gene polymorphism and radiation dose. The 76th Annual Meeting of the Japanese Cancer Association. 28-30 September 2017, Yokohama

<u>Kodama Y</u>. Atomic bomb radiation and chromosome aberrations. The 68th Annual Meeting of Chromosome Research Society, Public lecture. 7 October 2017, Hiroshima

<u>Hamasaki K, Noda A, Kodama Y, Nakamura N</u>. Induction of translocations following fetal irradiation: The frequency declines in hematopoietic stem/progenitor cells after birth, while it persists in T-lymphocyte. The 63rd Annual Meeting of the Radiation Research Society. 15-18 October 2017, Cancun, Mexico

<u>Hayashi T</u>, Lustig A, Shterev I, Geyer S, Shi A, Hu Y, Morishita Y, Nagamura H, Hayashi I, <u>Yoshida K, Kyoizumi S</u>, <u>Kusunoki Y</u>, Ohishi W, <u>Nakachi K</u>, Weng N. Longitudinal study of effects of radiation exposure on leukocyte telomere lengths among atomic-bomb survivors.

The 63rd Annual Meeting of the Radiation Research Society. 15-18 October 2017, Cancun, Mexico

<u>Hamasaki K, Noda A, Kodama Y, Nakamura N</u>. Translocations induced in blood cells following fetal irradiation of mice: The frequency changes over time. The 60th Annual Meeting of the Japan Radiation Research Society. 25-28 October 2017, Chiba

<u>Nakamura N</u>. Why genetic effects from radiation are observed in mice but not in humans. The 60th Annual Meeting of the Japan Radiation Research Society. 25-28 October 2017, Chiba

Noda A, Hirai Y, Hamasaki K, Kodama Y, Nakamura N. Radiation stress response during fetus development. The 60th Annual Meeting of the Japan Radiation Research Society. 25-28 October 2017, Chiba

<u>Satoh Y</u>, Misumi M, Fujimoto A, <u>Uchimura A</u>. Preliminary analysis of base substitution mutations occurred on irradiated human cultured cells by whole genome sequencing. The 60th Annual Meeting of the Japan Radiation Research Society. 25-28 October 2017, Chiba

<u>Uchimura A</u>, Higuchi M, Minakuchi Y, Fukumura R, Nishino J, Toyoda A, Gondo Y, Yagi T. Mutation accumulation study using laboratory mice provides a new approach for assessing genetic effects of radiation exposure. The 60th Annual Meeting of the Japan Radiation Research Society. 25-28 October 2017, Chiba

<u>Yoshida K</u>, Misumi M, Yamada M, <u>Kusunoki Y</u>. Radiation exposure and hematopoietic cell homeostasis: analysis of longitudinal data of red blood cell distribution width (RDW) among A-bomb survivors. The 60th Annual Meeting of the Japan Radiation Research Society. 25-28 October 2017, Chiba

<u>Hayashi T</u>, Fujihara M, Nakagawa H, Morishita Y, Sasaki K, Maki M, Nagamura H, Fujita M, Wagner S, Jones K, Hicks B, Chanock SJ, Mabuchi K, Ozasa K. Study on the genomic sequence of DNA extracted from long-term preserved FFPE thyroid cancer tissues. Consortium of Biological Science 2017. 6-9 December 2017, Kobe

<u>Hayashi T, Yoshida K, Kyoizumi S, Kusunoki Y</u>. Relationship between T-cell frequencies before vaccination, cytokine levels, and influenza vaccine response. The 46th Annual Meeting of the Japanese Society for Immunology. 12-14 December 2017, Sendai

<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 Jan 2018, Chiba