

**1) Published and in-press reports (2021 - Current):****<2023 - Current>**

1. Gon Y, Kandou T, Tsuruyama T, Iwasaki T, Kitagori K, Murakami K, Nakashima R, Akizuki S, Morinobu A, Hikida M, Mimori T, Yoshifuji H. Increased number of T cells and exacerbated inflammatory pathophysiology in a human IgG4 knock-in MRL/lpr mouse model. *PLoS ONE*, 2023 (2); 18(2):e0279389. [No RP]
2. Hamasaki K, Matsumoto T, Cologne JB, Mukai M, Kodama Y, Noda A, Nakamura N. Translocations are induced in hematopoietic stem cells after irradiation of fetal mice. *J Radiat Res (Tokyo)*, 2023; 64(1):99-104. [RP-P4-17]
3. Hayashi T, Kato N, Furudoi K, Hayashi I, Kyoizumi S, Yoshida K, Kusunoki Y, Furukawa K, Imaizumi M, Hida A, Tanabe O, Ohishi W. Early-life atomic-bomb irradiation accelerates immunological aging and elevates immune-related intracellular reactive oxygen species. *Aging Cell* 2023; 22(10): e13940.[RP4-02, RP3-07, RP2-11]
4. Hiratsuka T, Ito S, Sakai R, Yokose T, Endo T, Daigo Y, Miyagi Y, Tsuruyama T. Proteome analysis of CD5-positive diffuse large B cell lymphoma FFPE tissue reveals downregulation of DDX3X, DNAJB1, and B cell receptor signaling pathway proteins including BTK and immunoglobulins. *Clin Proteomics* 2023 (9); 20:36. [No RP]
5. Hiratsuka T, Yoshizawa A, Endo T, Yamamoto T, Toyokuni S, Tsuruyama T. FFPE proteomics of malignant mesothelioma and new candidate biomarkers thioredoxin and superoxide dismutase 2 for immunohistochemistry. *Lab Invest*, 2023/11/25 [Epub]:100299 [No RP]
6. Kobayashi G, Hayashi T, Sentani K, Uraoka N, Fukui T, Kido A, Katsuya N, Ishikawa A, Babasaki T, Sekino Y, Nose H, Hinata N, Oue N. Clinicopathological significance of TUBB3 in upper tract urothelial carcinoma and possible application in urine cytology. *Pathol Int*, 2023; 73(9):444-55. [No RP]
7. Liu Z, Cologne JB, Amundson SA, Noda A. Candidate biomarkers and persistent transcriptional responses after low and high dose ionizing radiation at high dose rate. *Int J Radiat Biol*, 2023; 99(12):1853-64. [No RP]
8. Matsuda Y, Uchimura A, Satoh Y, Kato N, Toshishige M, Kajimura J, Hamasaki K, Yoshida K, Hayashi T, Noda A, Tanabe O. Spectra and characteristics of somatic mutations induced by ionizing radiation in hematopoietic stem cells. *Proc Natl Acad Sci USA*, 2023 (4); 120(15):e2216550120. [RP-P3-19]
9. Mika J, Yoshida K, Kusunoki Y, Candias SM, Polanska J. Sex- and age-specific aspects of human peripheral T-cell dynamics. *Front Immunol*, 2023 (October); 14:1224304. [RP-P1-14]
10. Mizutani T, Ano T, Yoshida Y, Mizuta S, Takemoto K, Ouchi Y, Morita D, Kitano S, Miyachi H, Tsuruyama T, Fujiwara N, Sugita M. Neutrophil S100A9 supports M2 macrophage niche

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- formation in granulomas. *iScience*, 2023; 26(3):106081 [No RP]
11. Nagao M, Mizukoshi K, Nakayama S, Namikawa M, Hiramatsu Y, Maruno T, Nakanishi Y, Tsuruyama T, Fukuda A, Seno H. p53 protects against formation of extrahepatic biliary precancerous lesions in the context of oncogenic Kras. *Oncotarget* 2023 (3); 14:276-9. [No RP]
  12. Nakamura N. Radiation-induced increases in cancer mortality result from an earlier onset of the disease in mice and atomic bomb survivors. *Int J Radiat Biol*, 2023; 99(8):1139-47. [RP1-75]
  13. Nakamura N, Yoshida N, Suwa T. Three major reasons why transgenerational effects of radiation are difficult to detect in humans. *Int J Radiat Biol* 2023/03/07 [Epub]:1-29. [RP1-07]
  14. Namikawa M, Fukuda A, Mizukoshi K, Iwane K, Kawai M, Yamakawa G, Omatsu M, Sono M, Masuda T, Araki O, Nagao M, Yoshikawa T, Ogawa S, Hiramatsu Y, Muta Y, Tsuda M, Maruno T, Nakanishi Y, Tsuruyama T, Taura K, Hatano E, Seno H. Simultaneous activation of Kras-akt and Notch pathways induces extrahepatic biliary cancer via mTORC1 pathway. *J Pathol*, 2023 (8); 260(4):478-92. [No RP]
  15. Nishida Y, Shirakashi M, Hashii N, Nakashima R, Nakayama Y, Katsushima M, Watanabe R, Onizawa H, Hiwa R, Tsuji H, Kitagori K, Akizuki S, Onishi A, Murakami K, Yoshifuji H, Tanaka M, Tsuruyama T, Morinobu A, Hashimoto M. Pathogenicity of IgG-Fc desialylation and its association with Th17 cells in animal model of systemic lupus erythematosus. *Mod Reumatol*, 2023/06/10 [Epub]:1-7. [No RP]
  16. Noda A, Muramoto K, Mishima S. ATM-dependent phosphorylation of CHD7 regulates morphogenesis-coupled DSB stress response in fetal radiation exposure. *Mol Biol Cell*, 2023; 34(5):ar39. [RP-A4-09]
  17. Spoto R, Cordova KA, Hamasaki K, Nakamura N, Noda A, Kodama Y. The association of radiation exposure with stable chromosome aberrations in atomic bomb survivors based on DS02R1 dosimetry and FISH methods. *Radiat Res* 2023 (2); 199(2):170-81.[RP8-93]
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  19. Tajima T, Hata K, Kusakabe J, Miyauchi H, Badshah JS, Kageyama S, Zhao X, Kim SK, Tsuruyama T, Kirchner VA, Watanabe T, Uemoto S, Hatano E. Anti-complement 5 antibody ameliorates antibody-mediated rejection after liver transplantation in rats. *Front Immunol*, 2023 (6); 14:1186653. [No RP]
  20. Takase Y, Shirakashi M, Nishida Y, Katsushima M, Onizawa H, Hiwa R, Tsuji H, Kitagori K, Akizuki S, Onishi A, Nakashima R, Murakami K, Yoshifuji H, Tanaka M, Tsuruyama T, Morinobu A, Hashimoto M. Enteric Toll-like receptor 7 stimulation causes acute

- exacerbation in lupus-susceptible mice. *Clin Rheumatol*, 2023 (4); 42(4):1185-1194. [No RP]
21. Toda R, Seo S, Uemoto Y, Morino K, Nishino H, Nakamura N, Okuno M, Iguchi K, Sato M, Nakamura K, Taura K, Nakagawa S, Nakagawa T, Tsuruyama T, Manabe T, Kawaguchi H, Iwaisako K, Ikegawa M, Uemoto S, Hatano E. Clinically relevant model of oxaliplatin-induced sinusoidal obstruction syndrome. *Hepatol Res*, 2023; 53(2):145-59. [No RP]
22. Tsuruyama T. Critical factors of infection wavy curve oscillation of COVID-19 and future predictions in Japan. *J Infect Dis Ther*, 2023; 11(1):526 [No RP]
23. Tsuruyama T. Kullback-Leibler divergence of an open-queuing network of a cell-signal-transduction cascade. *Entropy*, 2023 (2); 25(2):326. [No RP]
24. Tsuruyama T. Thermodynamics of signal transduction systems and fluctuation theorem in a signal cascade. *Eur Phys J Plus*, 2023; 138(3):269. [No RP]
25. Tsuruyama T. RNA polymerase in a unique Maxwell's demon that converts its transcribing genetic information to free energy for its movement. *Eur Phys J Plus*, 2023; 138(7):604. [No RP]
26. Tsuruyama T. Channel capacity: Limitation of entropy rate during cell signal transduction. *Eur Phys J Plus*, 2023; 138(7):665. [No RP]
27. Tsuruyama T, Hiratsuka T. Biophysical model for DNA mutations induced by retroviral genome insertion based on the probability density function of mutation distribution. *Eur Phys J Plus*, 2023 (11); 138:996. [No RP]
28. Yadav BK, Ng W, Vu H, Fachiyo J, Tsuruyama T, Zhou L, Henderson MK, Gokhale S, Furuta K. Improving public trust in biobanking: Roundtable discussions from the 2021 ISBER annual meeting. *Biopreserv Biobank*, 2023 (June); 21(3):308-12. [No RP]
29. Yamasaki N, Miura K, Ogata S, Miura S, Uchimura A, Satoh Y, Toshishige M, Hosomi N, Gamboa M, Kitamura N, Kaminuma O. *Exp Anim* 2023 (November); 72(4):454-9. [No RP]
30. Yoshida K, Misumi M, Yamaoka M, Kyoizumi S, Ohishi W, Sugiyama H, Hayashi T, Kusunoki Y. Naive CD4 T cells highly expressing the inflammatory chemokine receptor CXCR3 increase with age and radiation exposure in atomic bomb survivors. *Radiat Res* 2023/11/21 [Epub]:1-6. [RP-P1-22]
31. Nakamura N. Variations in somatic cell radiosensitivity among individuals. *JART[J Japan Association of Radiological Technologists]*, 2023; 70(5):47-52 (in Japanese) [No RP]
32. Nakamura N. IES can lead radiation effects research around the world. *IES 30years History*, 2023 (5); pp57. (in Japanese) [No RP]
33. Tsuruyama T. Biobank history and future. *Handbook of Human Bioresource and Data, Yo-*

*do sha*, 2023; 15-17. (in Japanese) [No RP]

**<Submitted for Publication>**

1. Hiratsuka T, Tsuruyama T. Management accounting for the sustainability of biobanks: sample storage and distribution. [No RP]
2. Kobayashi G, Ito R, Taga M, Koyama K, Yano S, Endo T, Hiratsuka T, Tsuruyama T. Identification of HNRNPA2/B1 and STT3B as candidate biomarkers for quality control in formalin-fixed paraffin-embedded samples. [No RP]
3. Nishida Y, Tsuruyama T. Pathogenicity of IgG desialylation in an animal model of systemic lupus erythematosus. [No RP]
4. Sasatani M, Xi Y, Kajimura J, Piao J, Masuda Y, Honda H, Karamfilova Zaharieva EK, Hamasaki K, Kusunoki Y, Shimura T, Shizuko Kakinuma S, Shimada Y, Sotomaru Y, Kamiya K. Rev1 overexpression increases the incidence and shortens the latency period of N-methyl-N-nitrosourea (MNU)-induced thymic lymphoma via acceleration of mutagenesis. [RP 3-87]
5. Taga M, Yoshida K, Yano S, Takahashi K, Kyoizumi S, Sasatani M, Suzuki K, Ogawa T, Kusunoki Y, Tsuruyama T. Hepatic stellate cell-mediated increase in CCL5 chemokine expression following X-ray irradiation determined In vitro and vivo. [No RP]
6. Takahashi R, Tsuruyama T. SOCS1 expression dynamics: Paradoxical implications for systemic lupus erythematosus pathogenesis. [No RP]
7. Tsuruyama T, Hiratsuka T, Suzuki M, Sato K. Trustee-beneficiary relation between biobank and donor. [No RP]

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1. Cologne J, Sugiyama H, Hamasaki K, Tatsukawa Y, French B, Sakata R, Misumi M. Chromosome aberrations among atomic-bomb survivors exposed in utero: Updated analysis accounting for revised radiation doses and smoking. *Radiat Environ Biophys*, 2022; 61(1): 59-72. [RP-S3-19]
2. Farne KK, Tsuruyama T. Epidermal growth factor receptor cascade prioritizes the maximization of signal transduction. *Sci Rep*, 2022; 12(1):16950. [No RP]
3. Fukunaga Y, Fukuda A, Omatsu M, Namikawa M, Sono M, Masuda T, Araki O, Nagao M, Yoshikawa T, Ogawa S, Hiramatsu Y, Muta Y, Tsuda M, Maruno T, Nakanishi Y, Ferrer J, Tsuruyama T, Masui T, Hatano E, Seno H. Loss of Arid1a and Pten in pancreatic ductal cells induces intraductal tubulopapillary neoplasm via the YAP/TAZ pathway. *Gastroenterol*, 2022; 163(2):466-80. [No RP]
4. Hiratsuka T, Yamamoto T, Yoshizawa A, Toyokuni S, Tsuruyama T. RhoA and vigilin are candidates for immunohistochemical markers for epithelioid malignant mesothelioma. *Sci Rep*, 2022; 12(1):18519. [No RP]

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5. Nagao M, Fukuda A, Omatsu M, Namikawa M, Sono M, Fukunaga Y, Masuda T, Araki O, Yoshikawa T, Ogawa S, Masuo K, Goto N, Hiramatsu Y, Muta Y, Tsuda M, Maruno T, Nakanishi Y, Taketo MM, Ferrer J, Tsuruyama T, Nakanuma Y, Taura K, Uemoto S, Seno H. Concurrent activation of Kras and canonical Wnt signaling induces premalignant lesions that progress to extrahepatic biliary cancer in mice. *Cancer Res*, 2022; 82(9):1803-17. [No RP]
6. Nakamura N. Mechanisms of radiation carcinogenesis: What is really induced? *Radiat Prot Dosimetry*, 2022; 198(13-15):1090-7. [RP1-75]
7. Pugh JL, Coplen CP, Sukhina AS, Uhrlaub JL, Padilla-Torres J, Hayashi T, Nikolich-Žugich J. Lifelong cytomegalovirus and early-LIFE irradiation synergistically potentiate age-related defects in response to vaccination and infection. *Aging Cell*, 2022; 21(7):e13648. [RP 4-09]
8. Shirakashi R, Kozlakidis Z, Yadav BK, Ng W, Fachiroh J, Vu H, Tsuruyama T, Furuta K. Decarbonization in biobanking: A potential new scientific area. *Biopreserv Biobank*, 2022; 20(5):446-50. [No RP]
9. Takase Y, Shirakashi M, Nishida Y, Katsushima M, Onizawa H, Hiwa R, Tsuji H, Kitagori K, Akizuki S, Onishi A, Nakashima R, Murakami K, Yoshifiji H, Tanaka M, Tsuruyama T, Morinobu A, Hashimoto M. Enteric Toll-like receptor 7 stimulation causes acute exacerbation in lupus-susceptible mice. *Clin Rheumatol*, 2022; [Epub]:1-10. [No RP]
10. Tsuruyama T. Nonlinear model of infection wavy oscillation of COVID-19 in Japan based on diffusion kinetics. *Sci Rep*, 2022; 12:19177. [No RP]
11. Uchimura A, Matsumoto H, Satoh Y, Minakuchi Y, Wakayama S, Wakayama T, Higuchi M, Hashimoto M, Fukumura R, Toyoda A, Gondo Y, Yagi T. Early embryonic mutations reveal dynamics of somatic and germ cell lineages in mice. *Genome Res*, 2022; 32(5):945-55 [No RP]
12. Uemoto Y, Taura K, Nakamura D, Xuefeng L, Nam NH, Kimura Y, Yoshino K, Fuji H, Yoh T, Nishio T, Yamamoto G, Koyama Y, Seo S, Tsuruyama T, Iwaisako K, Uemoto S, Tabata Y, Hatano E. Bile duct regeneration with an artificial bile duct made of gelatin hydrogel nonwoven fabrics. *Tissue Eng PartA*, 2022; 28(17-18):737-48. [No RP]
13. Yoshida K, Satoh Y, Uchimura A, Misumi M, Kyoizumi S, Taga M, Matsuda Y, Noda A, Kusunoki Y. Massive expansion of multiple clones in the mouse hematopoietic system long after whole-body X-irradiation. *Sci Rep*, 2022; 12(1):17276. [RP 1-08]
14. Yoshinaga M, Han K, Morgens DW, Horii T, Kobayashi R, Tsuruyama T, Hia F, Yasukura S, Kajiya A, Cai T, Cruz PHC, Vandenbon A, Suzuki Y, Kawahara Y, Hatada I, Bassik MC, Takeuchi O. The N6-methyladenosine methyltransferase METTL16 enables erythropoiesis through safeguarding genome integrity. *Nat Commun*, 2022; 13(1):6435. [No RP]

15. Nakamura N. Cancer 1 (Risk, Animal experiments, Epidemiology). *JART [J Japan Association of Radiological Technologists]*, 2022; 69(1):96-9. (in Japanese) [No RP]
16. Nakamura N. Cancer 2 (Mechanism of radiation inflammation). *JART [J Japan Association of Radiological Technologists]*, 2022; 69(2):61-6. (in Japanese) [No RP]
17. Nakamura N. Radiation and heredity: The basics of genetics. *JART [J Japan Association of Radiological Technologists]*, 2022; 69(3):66-70. (in Japanese) [No RP]
18. Nakamura N. Radiation and heredity: Effects of radiation. *JART [J Japan Association of Radiological Technologists]*, 2022; 69(4):86-90. (in Japanese) [No RP]
19. Nakamura N. Abnormalities at birth as genetic effects caused by A-bomb radiation. *JART [J Japan Association of Radiological Technologists]*, 2022; 69(11):52-8. (in Japanese) [No RP]
20. Nakamura N. Radiation-induced mutation and cancer. *Radiation Effects Association News*, 2022; (110):7-12. (in Japanese) [RP1-75, RP7-85]
21. Nakamura N, Yoshida N, Suwa T. Why mouse resting oocytes are resistant to radiation mutagenesis. *Hoshasen Seibutsu Kenkyu [Radiat Biol Res Commun]*, 2022; 57(2):152-63. (in Japanese) [RP1-07]
22. Noda A, Nakamura N. Analysis of in vivo, in situ occurring mutations with genetically modified mice. *Hoshasen Seibutsu Kenkyu [Radiat Biol Res Commun]*, 2022; 57(3):192-201. (in Japanese) [RP1-08]
23. Noda A. RERF future genome studies on atomic bomb survivors and their children. *Hiroshima Igaku [J Hiroshima Med assoc]*, 2022; 75(4):173-7. (in Japanese) [No RP]
24. Uchimura A. Radiation and genetics, exposure and health. --Keisyo to tayosei no minamoto [Origin of inheritance and diversity] *Idengaku no hyakkajiten [Encyclopedia of genetics]*, 2022; 16-7. (in Japanese) [No RP]

## &lt;2021&gt;

1. Hayashi T, Furukawa K, Morishita Y, Hayashi I, Kato N, Yoshida K, Kusunoki Y, Kyoizumi S, Ohishi W. Intracellular reactive oxygen species level in blood cells of atomic bomb survivors is increased due to aging and radiation exposure. *Free Radical Biol Med*, 2021; 171:126-34. [RP 4-02, RP 3-07, RP 2-75, RP 2-11]
2. Nakamura N. Re-examining the role of tissue inflammation in radiation carcinogenesis: A hypothesis to explain an earlier onset of cancer. *Int J Radiat Biol*, 2021; 97(10):1341-51. [RP 1-75]
3. Noda A, Kato K, Tamura C, Biesecker LG, Imaizumi M, Inoue Y, Henderson GE, Wilfond B, Muto K, Naito M, Kayukawa J. Ethical, legal and social implications of human genome studies in radiation research: a workshop report for studies on atomic bomb survivors at the

Radiation Effects Research Foundation. *J Radiat Res (Tokyo)*, 2021; 62(4):656-61. [No RP]

4. Yeager M, Machiela MJ, Kothiyal P, Dean M, Bodelon C, Suman S, Wang M, Mirabello L, Nelson CW, Zhou W, Palmer C, Ballew B, Colli L, Freedman ND, Dagnall C, Hutchinson A, Vij V, Maruvka Y, Hatch M, Illienko I, Belayev Y, Nakamura N, Chumak V, Bakhanova E, Belyi D, Kryuchkov V, Golovanov I, Gudzenko N, Cahoon EK, Albert P, Drozdovitch V, Little MP, Mabuchi K, Stewart C, Getz G, Bazyka D, Berrington A, Chanock SJ. Lack of transgenerational effects of ionizing radiation exposure from the Chernobyl accident. *Science*, 2021; 372(6543):725-29. [No RP]
5. Yoshida K, Misumi M, Kusunoki Y, Yamada M. Longitudinal changes in red blood cell distribution width decades after radiation exposure in atomic-bomb survivors. *Br J Haematol*, 2021; 193(2):406-9. [RP 2-75]
6. Nakamura N. Bridging radiation epidemiology and radiation biology. *Hoshasen Seibutsu Kenkyu [Radiat Biol Res Commun]*, 2021; 56(1):86-102. (in Japanese) [RP 1-75]
7. Nakamura N. Chernobyl accident and genome study: A brief review. *JART [J Japan Association of Radiological Technologists]*, 2021; 68(827):47-9. (in Japanese) [RP 7-85]
8. Nakamura N. Radiation-induced DNA damage, repair and chromosome aberration. *JART [J Japan Association Radiological Technologists]*, 2021; 68(827):50-2. (in Japanese) [No RP]
9. Nakamura N. Radiation-induced cell death and mutagenesis. *JART [J Japan Association of Radiological Technologists]*, 2021; 68(828):66-8. (in Japanese) [No RP]
10. Satoh Y, Uchimura A. Analysis of transgenerational effects of radiation exposure using whole genome sequencing. *Isotope News [Japan Radioisotope Association]*, 2021; 773:44-6. (in Japanese) [RP 2-13]

## **2) Meeting presentations (January 2023 - December 2023):**

Uchimura A. Genome-wide analysis for the transgenerational effects of low-dose radiation exposure. 4<sup>th</sup> Workshop of Network-type Joint Usage/Research Center for Radiation Disaster Medical Science. 21 February 2023, Hiroshima [RP2-13]

Noda A, Muramoto K, Mishima S. ATM-dependent phosphorylation of CHD7 regulates morphogenesis-coupled DSB stress response in fetal radiation exposure. 19<sup>th</sup> Ataxia-Teleangiectasia Workshop 2023. 2-5 March 2023, Kyoto [RP-A4-09]

Hayashi T, Kato N, Maki M, Morishita Y, Yoshida N, Tanabe O, Ohishi W. Preliminary study for SNP array analysis of DNA derived from blood smears stored for more than 50 years. International Society for Biological and Environmental Repositories Annual Meeting and Exhibits. 3-6 May 2023, Seattle, Washington, USA [RP-P1-19]

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Nakamura N. Radiation-induced cancers should be preventable. 2<sup>nd</sup> International Conference on Cancer Research and Oncology. 15-16 May 2023, Online [RP1-75] O (Online participation)

Uchimura A. Characteristics of de novo germline mutations and their effects on descendants. Research meeting by the JSPS Industry-Academia Cooperative Research Committee 195<sup>th</sup> Committee on Radiation Application and Biological Effects. 30 May 2023, Aomori [RP2-13]

Tsuruyama T. Hierarchical cluster and region of interest analyses based on mass spectrometry imaging of human tumors. 9<sup>th</sup> Digital Pathology & AI Congress. 22-23 June 2023, New York, USA [No RP]

Matsuda Y, Uchimura A, Satoh Y, Kato N, Toshishige M, Kajimura J, Hamasaki K, Yoshida K, Hayashi T, Noda A, Tanabe O. Analysis of radiation-induced mutational signatures in mouse long-term hematopoietic stem cells by whole-genome sequencing. 47<sup>th</sup> Annual Meeting of the Chugoku Area Radiation Research Society. 18 August 2023, Hiroshima [RP-P3-19]

Nakamura N. Irradiation increases cancer risks but would not induce excess cancers. 47<sup>th</sup> Annual Meeting of the Chugoku Area Radiation Research Society. 18 August 2023, Hiroshima [RP1-75]

Noda A, Muramoto K, Mishima S. Morphogenesis and DSB stress response are coupled during mammalian embryogenesis. 47<sup>th</sup> Annual Meeting of the Chugoku Area Radiation Research Society. 18 August 2023, Hiroshima [RP-A4-09]

Satoh Y, Toshishige M, Nishimura M, Minakuchi Y, Higuchi M, Shimada Y, Toyoda A, Yagi T, Uchimura A. Detection of de novo mutations to analyze transgenerational effects of radiation exposure. 47<sup>th</sup> Annual Meeting of the Chugoku Area Radiation Research Society 18 August 2023, Hiroshima [RP2-13]

Kusunoki Y, Miura M, Nagamura H, Yamaoka M, Yoshida K, Study of a lymphoma-bearing mouse in experiments for radiation-associated clonal hematopoiesis. 47th Annual Meeting of the Chugoku Area Radiation Research Society 18 August 2023, Hiroshima [RP 1-23-3]

Matsuda Y, Uchimura A, Satoh Y, Kato N, Toshishige M, Kajimura J, Hamasaki K, Yoshida K, Hayashi T, Noda A, Tanabe O. Genome-wide frequencies and signatures of somatic mutations introduced by whole-body X-irradiation in mouse long-term hematopoietic stem cells. 17<sup>th</sup> International Congress of Radiology. 27-30 August 2023, Montreal, Canada [RP-P3-19]

Yoshida K, Uchimura A, Satoh Y, Matsuda Y, Tanabe O, Noda A, Misumi M, Kusunoki Y. Longitudinal trajectories of clonal hematopoiesis before and after 3-Gy whole-body irradiation in mice. 17<sup>th</sup> International Congress of Radiation Research. 27-30 August 2023, Montreal, Canada [RP1-23-1]

Noda A, Muramoto K, Mishima S. The morphogenic transcription factor CHD7 controls morphogenesis coupled DSD stress response in mammalian early development. Environmental Mutagenesis & Genomics Society 54<sup>th</sup> Annual Meeting. 9-3 September 2023, Chicago, Illinois, USA [RP-A4-09]

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Gondo Y, Uchimura A, Yoneya M, Tanaka S, Komura J, Kimura M, Ohno M, Toki H, Bando M, Tsunoyama, Y, Matsumoto Y, Maki H, Shimada Y. High-precision detection of de novo mutations and application to risk assessment for the low-dose longtime exposure to radiation. 14<sup>th</sup> International Workshop on Advanced Genomics. 4-6 October 2023, Tokyo [No RP]

Noda A, Muramoto K, Mishima S. CHD7, the causative gene of CHARGE syndrome, has a DSB repair function coupled with morphogenesis in fetal development. 68<sup>th</sup> Annual Meeting of the Japan Society of Human Genetics. 11-14 October 2023, Tokyo [RP-A4-09]

Matsuda Y, Uchimura A, Satoh Y, Kato N, Toshishige M, Kajimura J, Hamasaki K, Yoshida K, Hayashi T, Noda A, Tanabe O. Somatic mutations induced by whole-body X-irradiation in mouse hematopoietic stem cells and their clonal expansion. 85<sup>th</sup> Annual Meeting of the Japanese Society of Hematology. 13-15 October 2023, Tokyo [RP-P3-19]

Kusunoki Y, Kyoizumi S, Nagamura H, Yamaoka M, Kubo Y, Miura M, Misumi M, Yoshida K, Both spontaneous and radiation-induced mutations clonally expand in irradiated mouse hematopoiesis. 85th Annual Meeting of the Japanese Society of Hematology. 13-15 October 2023, Tokyo [RP 1-23-3]

Matsuda Y, Uchimura A, Satoh Y, Kato N, Toshishige M, Kume K, Kajimura J, Hamasaki K, Yoshida K, Hayashi T, Noda A, Tanabe O. Genome-wide analysis of radiation-induced somatic mutations in mouse long-term hematopoietic stem cells. 75<sup>th</sup> Annual Meeting of the American Society of Human Genetics. 1-5 November 2023, Washington, DC, USA [RP-P3-19]

Hayashi T, Kato N, Furudoi K, Hayashi I, Kyoizumi S, Tanimoto K, Yoshida K, Imaizumi M, Hida A, Tanabe O, Ohishi W. Early-life irradiation accelerates immunological aging and elevates immune-related intracellular reactive oxygen species. 66<sup>th</sup> Annual Meeting of the Japanese Radiation Research Society. 6-8 November 2023, Tokyo [RP4-02, RP3-07, RP2-75, RP2-11]

Kusunoki Y, Miura M, Nagamura H, Yamaoka M, Kubo Y, Koyama K, Toshishige M, Misumi M, Kyoizumi S, Satoh Y, Uchimura A, Yoshida K. Next generation sequencing assessments of recurrent somatic mutations and lymphocyte receptors in mouse bone marrow cells following whole-body X-irradiation. 66<sup>th</sup> Annual Meeting of the Japanese Radiation Research Society 6-8 November 2023, Tokyo [RP1-23-3]

Matsuda Y, Uchimura A, Satoh Y, Kato N, Toshishige M, Kajimura J, Hamasaki K, Yoshida K, Hayashi T, Noda A, Tanabe O. Somatic mutations and clonal proliferation induced in mouse hematopoietic stem cells by X-irradiation. 66<sup>th</sup> Annual Meeting of the Japanese Radiation Research Society 6-8 November 2023, Tokyo [RP-P3-19]

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