



Hosu Sin

Basic Life Research Scientist, Obstetrics & Gynecology - Reproductive Endocrinology and Infertility (REI)

Bio

HONORS AND AWARDS

- Research Scholarship (Title: Elucidating fundamental regulators of male meiosis), the American Urological Association and the Urology Care Foundation (2016-2018)
- Travel Grant Award for Early Career Researchers in Overseas, 2015 Annual Meeting of the Japanese Biochemical Society & Molecular Biology Society of Japan (2015)
- Postdoctoral Fellowship (Controlling mechanism of sex-linked genes required for sperm function), the Lalor Foundation (2012-2014)
- Academic Award for Superior Publication, 56th Japan Society for Reproductive Medicine (2011)
- Academic Award for Graduate Students, 29th The Japanese Society of Andrology (2010)
- Monbukagakusho Scholarship, Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) (2006-2010)

Publications

PUBLICATIONS

- **SCML2 Establishes the Male Germline Epigenome through Regulation of Histone H2A Ubiquitination** *DEVELOPMENTAL CELL*
Hasegawa, K., Sin, H., Maezawa, S., Broering, T. J., Kartashov, A. V., Alavattam, K. G., Ichijima, Y., Zhang, F., Bacon, W. C., Greis, K. D., Andreassen, P. R., Barski, A., Namekawa, et al
2015; 32 (5): 574-588
- **Poised chromatin and bivalent domains facilitate the mitosis-to-meiosis transition in the male germline.** *BMC biology*
Sin, H., Kartashov, A. V., Hasegawa, K., Barski, A., Namekawa, S. H.
2015; 13: 53-?
- **The great escape Active genes on inactive sex chromosomes and their evolutionary implications** *EPIGENETICS*
Sin, H., Namekawa, S. H.
2013; 8 (9): 887-892
- **RNF8 regulates active epigenetic modifications and escape gene activation from inactive sex chromosomes in post-meiotic spermatids** *GENES & DEVELOPMENT*
Sin, H., Barski, A., Zhang, F., Kartashov, A. V., Nussenzweig, A., Chen, J., Andreassen, P. R., Namekawa, S. H.
2012; 26 (24): 2737-2748
- **Human postmeiotic sex chromatin and its impact on sex chromosome evolution** *GENOME RESEARCH*
Sin, H., Ichijima, Y., Koh, E., Namiki, M., Namekawa, S. H.
2012; 22 (5): 827-836
- **Polycomb protein SCML2 facilitates H3K27me3 to establish bivalent domains in the male germline** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Maezawa, S., Hasegawa, K., Yukawa, M., Kubo, N., Sakashita, A., Alavattam, K. G., Sin, H., Kartashov, A. V., Sasaki, H., Barski, A., Namekawa, S. H.
2018; 115 (19): 4957-62

- **Elucidation of the Fanconi Anemia Protein Network in Meiosis and Its Function in the Regulation of Histone Modifications** *CELL REPORTS*
Alavattam, K. G., Kato, Y., Sin, H., Maezawa, S., Kowalski, I. J., Zhang, F., Pang, Q., Andreassen, P. R., Namekawa, S. H.
2016; 17 (4): 1141-1157
- **FANCB is essential in the male germline and regulates H3K9 methylation on the sex chromosomes during meiosis** *HUMAN MOLECULAR GENETICS*
Kato, Y., Alavattam, K. G., Sin, H., Meetei, A. R., Pang, Q., Andreassen, P. R., Namekawa, S. H.
2015; 24 (18): 5234-5249
- **Sex chromosome inactivation in germ cells: emerging roles of DNA damage response pathways** *CELLULAR AND MOLECULAR LIFE SCIENCES*
Ichijima, Y., Sin, H., Namekawa, S. H.
2012; 69 (15): 2559-2572
- **A Novel Y Chromosome Microdeletion With the Loss of an Endogenous Retrovirus Related, Testis Specific Transcript in AZFb Region** *JOURNAL OF UROLOGY*
Sin, H., Koh, E., Taya, M., Iijima, M., Sugimoto, K., Maeda, Y., Yoshida, A., Iwamoto, T., Namiki, M.
2011; 186 (4): 1545-1552
- **Human endogenous retrovirus K14C drove genomic diversification of the Y chromosome during primate evolution** *JOURNAL OF HUMAN GENETICS*
Sin, H., Koh, E., Kim, D., Murayama, M., Sugimoto, K., Maeda, Y., Yoshida, A., Namiki, M.
2010; 55 (11): 717-725
- **Features of constitutive gr/gr deletion in a Japanese population** *HUMAN REPRODUCTION*
Sin, H., Koh, E., Shigehara, K., Sugimoto, K., Maeda, Y., Yoshida, A., Kyono, K., Namiki, M.
2010; 25 (9): 2396-2403
- **Azoospermia factor and male infertility.** *Reproductive medicine and biology*
Koh, E. n., Sin, H. S., Fukushima, M. n., Namiki, M. n.
2010; 9 (3): 129-37
- **Liquid Chromatography-tandem Mass Spectrometry (LC-MS/MS) Assay for Simultaneous Measurement of Salivary Testosterone and Cortisol in Healthy Men for Utilization in the Diagnosis of Late-onset Hypogonadism in Males** *ENDOCRINE JOURNAL*
Matsui, F., Koh, E., Yamamoto, K., Sugimoto, K., Sin, H., Maeda, Y., Honma, S., Namiki, M.
2009; 56 (9): 1083-1093
- **Measurement-specific bioavailable testosterone using concanavalin A precipitation: Comparison of calculated and assayed bioavailable testosterone** *INTERNATIONAL JOURNAL OF UROLOGY*
Yamamoto, K., Koh, E., Matsui, F., Sugimoto, K., Sin, H., Maeda, Y., Namiki, M.
2009; 16 (11): 894-901
- **Single Nucleotide Polymorphism Analysis of the Follicle-stimulating Hormone (FSH) Receptor in Japanese with Male Infertility: Identification of Codon Combination with Heterozygous Variations of the Two Discrete FSH Receptor Gene** *ENDOCRINE JOURNAL*
Shimoda, C., Koh, E., Yamamoto, K., Matsui, F., Sugimoto, K., Sin, H., Maeda, Y., Kanaya, J., Yoshida, A., Namiki, M.
2009; 56 (7): 859-865
- **Tissue-specific differentially methylated regions of the human VASA gene are potentially associated with maturation arrest phenotype in the testis** *JOURNAL OF HUMAN GENETICS*
Sugimoto, K., Koh, E., Sin, H., Maeda, Y., Narimoto, K., Izumi, K., Kobori, Y., Kitamura, E., Nagase, H., Yoshida, A., Namiki, M.
2009; 54 (8): 450-456
- **Endogenous retrovirus-related sequences provide an alternative transcript of MCJ genes in human tissues and cancer cells** *GENES & GENETIC SYSTEMS*
Sin, H., Huh, J., Kim, D., Kim, T., Ha, H., Kim, W., Park, H., Kim, C., Kim, H.
2006; 81 (5): 333-339
- **Transcriptional control of the HERV-H LTR element of the GSDML gene in human tissues and cancer cells** *ARCHIVES OF VIROLOGY*
Sin, H., Huh, J., Kim, D., Kang, D. W., Min, D. S., Kim, T., Ha, H., Kim, H., Lee, S., Kim, H.
2006; 151 (10): 1985-1994
- **Molecular evolution of the periphilin gene in relation to human endogenous retrovirus M element** *JOURNAL OF MOLECULAR EVOLUTION*
Huh, J., Kim, T., Yi, J., Park, E., Kim, W., Sin, H., Kim, D., Min, D., Kim, S., Kim, C., Hyun, B., Kang, S., Jung, et al
2006; 62 (6): 730-737