

Joydeep Bhadury

Senior Research Scientist-Basic Life, Stem Cell Bio Regenerative Med Institute

Bio

LINKS

- Google Scholar: <https://scholar.google.com/citations?user=-3jNtOcAAAAJ&hl=en>
- The Nakauchi Lab: <http://med.stanford.edu/nakauchilab.html>

Publications

PUBLICATIONS

- **In vivo CRISPR screening identifies SAGA complex members as key regulators of hematopoiesis.** *Nature communications*
Shankar, A., Olender, L., Hsu, I., Miyauchi, M., Pálóvics, R., Meaker, G. A., Kaito, S., Rizq, O., Khoo, H. M., Bozhilov, Y., Igarashi, K. J., Bhadury, J., Munson, et al
2026
- **A genome-wide screen identifies *Runx2* as a novel regulator of hematopoietic stem cell expansion and T-cell commitment** *BLOOD*
Meaker, G. A., Nicholls, M., Chahrour, C., Hsu, I., Smith, A., Bozhilov, Y., Leung, M., Vassort, H., Olender, L., Beaven, O., Huang, X., Brown, E. J., Vanden Bempt, et al
2025; 146 (26): 3188-3200
- **FLT3 ligand facilitates long-term ex vivo expansion of human hematopoietic stem cells by maintaining lymphoid reconstitution potential**
Miyauchi, M., Banuelos, A., Mack, P., Suchy, F., Tan, T., Charlesworth, C., Homma, S., Zhang, J., Kayamori, K., Yilmaz, L., Bhadury, J., Karigane, D., Nakauchi, et al
ELSEVIER.2025: 4931-4932
- **Xenophagocytosis blockade enhances interspecies chimerism.** *bioRxiv : the preprint server for biology*
Wang, S., Niizuma, K., Liu, D. D., Suchy, F. P., Sato, H., Yanagida, A., Masaki, H., Miyauchi, M., Tabatabaee, S., Hidajat, N., Bhadury, J., Charlesworth, C. T., Zhang, et al
2025
- **Intercellular mRNA transfer alters the human pluripotent stem cell state.** *Proceedings of the National Academy of Sciences of the United States of America*
Yoneyama, Y., Zhang, R., Maezawa, M., Masaki, H., Kimura, M., Cai, Y., Adam, M., Parameswaran, S., Mizuno, N., Bhadury, J., Maezawa, S., Ochiai, H., Nakauchi, et al
2025; 122 (4): e2413351122
- **Identification of the Saga Complex As a Key Regulator of Hematopoiesis**
Haney, M., Shankar, A., Olender, L., Hsu, I., Miyauchi, M., Meaker, G., Kaito, S., Rizq, O., Khoo, H., Bozhilov, Y., Palovics, R., Igarashi, K., Bhadury, et al
ELSEVIER.2024: 5623
- **HYPDXIC/SCF-SUPPLEMENTED CULTURE IN POLYMER-BASED MEDIUM ENABLES STABLE EX VIVO HUMAN HEMATOPOIETIC STEM CELL EXPANSION**
Miyauchi, M., Mack, P., Bhadury, J., Tan, A., Suchy, F., Zhang, J., Charlesworth, C., Homma, S., Karigane, D., Nakauchi, H.
ELSEVIER SCIENCE INC.2024
- **Inter-cellular mRNA Transfer Alters Human Pluripotent Stem Cell State.** *bioRxiv : the preprint server for biology*
Yoneyama, Y., Zhang, R., Kimura, M., Cai, Y., Adam, M., Parameswaran, S., Masaki, H., Mizuno, N., Bhadury, J., Maezawa, S., Ochiai, H., Nakauchi, H., Potter, et al

2024

- **Unwanted Concatemeric Knock-Ins Occur Frequently with Cas9/AAV-Mediated Gene-Editing: Detection and Prevention**
Suchy, F. P., Karigane, D., Nakauchi, Y., Higuchi, M., Zhang, J., Pekrun, K., Hsu, I., Fan, A. C., Nishimura, T., Charlesworth, C. T., Bhadury, J., Nishimura, T., Wilkinson, et al
CELL PRESS.2024: 211-212
- **Genome engineering with Cas9 and AAV repair templates generates frequent concatemeric insertions of viral vectors.** *Nature biotechnology*
Suchy, F. P., Karigane, D., Nakauchi, Y., Higuchi, M., Zhang, J., Pekrun, K., Hsu, I., Fan, A. C., Nishimura, T., Charlesworth, C. T., Bhadury, J., Nishimura, T., Wilkinson, et al
2024
- **Age-related changes in the hematopoietic stem cell pool revealed via quantifying the balance of symmetric and asymmetric divisions.** *PLoS one*
Kawahigashi, T., Iwanami, S., Takahashi, M., Bhadury, J., Iwami, S., Yamazaki, S.
2024; 19 (1): e0292575
- **Secreted Particle Information Transfer (SPIT) - A Cellular Platform for In Vivo Genetic Engineering.** *bioRxiv : the preprint server for biology*
Charlesworth, C. T., Homma, S., Suchy, F., Wang, S., Bhadury, J., Amaya, A. K., Camarena, J., Zhang, J., Tan, T. K., Igarashi, K., Nakauchi, H.
2024
- **Physioxia improves the selectivity of hematopoietic stem cell expansion cultures.** *Blood advances*
Igarashi, K. J., Kucinski, I., Chan, Y. Y., Tan, T., Khoo, H. M., Kealy, D., Bhadury, J., Hsu, I., Ho, P. Y., Niizuma, K., Hickey, J. W., Nolan, G., Bridge, et al
2023
- **LARGE-SCALE IN VIVO CRISPR SCREENS IDENTIFY SAGA COMPLEX MEMBERS AS KEY REGULATORS OF HAEMATOPOIESIS**
Wilkinson, A., Haney, M., Shankar, A., Hsu, I., Miyauchi, M., Palovics, R., Olender, L., Khoo, H., Igarashi, K., Bhadury, J., Munson, C., Mack, P., Tan, et al
ELSEVIER SCIENCE INC.2023: S43
- **Chimpanzee and pig-tailed macaque iPSCs: Improved culture and generation of primate cross-species embryos.** *Cell reports*
Roodgar, M., Suchy, F. P., Nguyen, L. H., Bajpai, V. K., Sinha, R., Vilches-Moure, J. G., Van Bortle, K., Bhadury, J., Metwally, A., Jiang, L., Jian, R., Chiang, R., Oikonomopoulos, et al
2022; 40 (9): 111264
- **Streamlined and quantitative detection of chimerism using digital PCR.** *Scientific reports*
Suchy, F. P., Nishimura, T., Seki, S., Wilkinson, A. C., Higuchi, M., Hsu, I., Zhang, J., Bhadury, J., Nakauchi, H.
2022; 12 (1): 10223
- **Generating human artery and vein cells from pluripotent stem cells highlights the arterial tropism of Nipah and Hendra viruses.** *Cell*
Ang, L. T., Nguyen, A. T., Liu, K. J., Chen, A., Xiong, X., Curtis, M., Martin, R. M., Raftry, B. C., Ng, C. Y., Vogel, U., Lander, A., Lesch, B. J., Fowler, et al
2022
- **Generation of Functional Organs Using a Cell-Competitive Niche in Intra- and Inter-species Rodent Chimeras.** *Cell stem cell*
Nishimura, T., Suchy, F. P., Bhadury, J., Igarashi, K. J., Charlesworth, C. T., Nakauchi, H.
2020
- **Activated HoxB4-induced Hematopoietic Stem Cells from Murine Pluripotent Stem Cells via Long-Term Programming.** *Experimental hematology*
Izawa, K., Yamazaki, S., Becker, H. J., Bhadury, J., Kakegawa, T., Sakaguchi, M., Tojo, A.
2020
- **BET bromodomain inhibitors synergize with ATR inhibitors in melanoma in melanoma.** *Cell death & disease*
Muralidharan, S. V., Einarsdottir, B. O., Bhadury, J., Lindberg, M. F., Wu, J., Campeau, E., Bagge, R. O., Stierner, U., Ny, L., Nilsson, L. M., Nilsson, J. A.
2017; 8 (8): e2982
- **Global analysis of somatic structural genomic alterations and their impact on gene expression in diverse human cancers** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Alaei-Mahabadi, B., Bhadury, J., Karlsson, J. W., Nilsson, J. A., Larsson, E.

2016; 113 (48): 13768-13773

- **BET and HDAC inhibitors induce similar genes and biological effects and synergize to kill in Myc-induced murine lymphoma**
Bhadury, J., Nilsson, L. M., Somsundar, M., Green, L. C., Keller, U. B., McLure, K. G., Nilsson, J. A.
AMER ASSOC CANCER RESEARCH.2016
- **BET bromodomain inhibitors synergize with ATR inhibitors to induce DNA damage, apoptosis, senescence-associated secretory pathway and ER stress in Myc-induced lymphoma cells** *ONCOGENE*
Muralidharan, S. V., Bhadury, J., Nilsson, L. M., Green, L. C., McLure, K. G., Nilsson, J. A.
2016; 35 (36): 4689-4697
- **Hypoxia-regulated gene expression explains differences between melanoma cell line-derived xenografts and patient-derived xenografts** *ONCOTARGET*
Bhadury, J., Einarsdottir, B. O., Podraza, A., Bagge, R. O., Stierner, U., Ny, L., Lopez, M. D., Nilsson, J. A.
2016; 7 (17): 23801-23811
- **Cancer Differentiating Agent Hexamethylene Bisacetamide Inhibits BET Bromodomain Proteins** *CANCER RESEARCH*
Nilsson, L. M., Green, L. C., Muralidharan, S. V., Demir, D., Welin, M., Bhadury, J., Logan, D. T., Walse, B., Nilsson, J. A.
2016; 76 (8): 2376-2383
- **Small RNA deep sequencing discriminates subsets of extracellular vesicles released by melanoma cells - Evidence of unique microRNA cargos** *RNA BIOLOGY*
Lunavat, T. R., Cheng, L., Kim, D., Bhadury, J., Jang, S. C., Lasser, C., Sharples, R. A., Lopez, M. D., Nilsson, J., Gho, Y. S., Hill, A. F., Lotvall, J.
2015; 12 (8): 810-823
- **Melanoma patient-derived xenografts accurately model the disease and develop fast enough to guide treatment decisions** *ONCOTARGET*
Einarsdottir, B. O., Bagge, R. O., Bhadury, J., Jespersen, H., Mattsson, J., Nilsson, L. M., Truve, K., Lopez, M. D., Naredi, P., Nilsson, O., Stierner, U., Ny, L., Nilsson, et al
2014; 5 (20): 9609-9618
- **Identification of tumorigenic and therapeutically actionable mutations in transplantable mouse tumor cells by exome sequencing.** *Oncogenesis*
Bhadury, J., López, M. D., Muralidharan, S. V., Nilsson, L. M., Nilsson, J. A.
2013; 2