Jonathan Yuin-Han LOH Ph.D.

yhloh@imcb.a-star.edu.sg

Dr. Loh is a principal investigator at the Institute of Molecular and Cell Biology (IMCB), and he also holds the responsibility of being the director of cell fate engineering and therapeutics unit of IMCB. He pioneered the use of human blood cells for reprogramming of induced pluripotent stem cells (iPSCs) and the modeling of congenital and somatic hematologic diseases using iPSCs. He is interested in dissecting the mechanisms regulating cell fate changes and developing novel tools for deriving reprogrammed and differentiated cell types.

EDUCATION

- **2008:** Ph. D. in Biological Chemistry and Molecular Pharmacology from the National University of Singapore (NUS)
- **2002:** B.Sc. in Cellular and Molecular Biology (1st Class honours) from the National University of Singapore (NUS)

ACADEMIC APPOINTMENTS

- Post-doctoral Fellowship, Stem cell Biology, Harvard Medical School
- Senior Principal Investigator at the Institute of Molecular and Cell Biology
- Senior of Programme Coordinator for the Stem cell, Regenerative Medicine and Ageing research
- Associate Professor (Adjunct) at the NUS Yong Loo Lin School of Medicine Department of Physiology, NUS Faculty of Science Department of Biological Sciences, as well as a Faculty member of the NUS Graduate School of Integrative Sciences and Engineering

EXPERTISE

- Stem cell biology
- Cell fates engineering, cellular reprogramming and trans-differentiation
- Human diseases
- Gene-therapy
- Transcription and epigenetic regulation

AWARDS AND HONORS

- **2018** : National Research Foundation Investigatorship Award, NRF
- **2017** : Susan Lim Outstanding Young Investigator Award, Stem Cell Society Singapore
- **2016** : Star Employee Award, A*STAR
- **2016** : Top 10 Finalists, One-Start Europe funding, Oxbridge Biotech Roundtable
- **2015** : SG50 Celebration Fund Award, Ministry of Culture, Community and Youth

SELECTED PUBLICATIONS

1. Fang, H.T., El-Farran, C.A., Xing, Q.R., Zhang, L.F., Li, H., Lim, B., Loh, Y.H. 2018. Global H3.3 dynamic deposition defines its bimodal role in cell fate transition. ***Nature Communications***. 9(1): 1537.
2. Cheng, H., Ang, H.Y., Farran, C., Li, P., Fang, H.T., Liu, T.M., Kong, S.L., Chin, M.L., Ling, W.Y., Lim, E.K., Li, H., Huber, T., Loh, K.M., Loh, Y.H., Lim, B. 2016. Reprogramming mouse fibroblasts into engraftable myeloerythroid and lymphoid progenitors. ***Nature Communications***. 7: 13396.
3. Yang, B.X., Farran, C.A., Guo, H.C., Yu, T., Fang, H.T., Wang, H.F., Schlesinger, S., Seah, Y.F., Goh, G.Y., Neo, S.P., Li, Y., Lorincz, M.C., Tergaonkar, V., Lim, T.M., Chen, L., Gunaratne, J., Collins, J.J., Goff, S.P., Daley, G.Q., Li, H., Bard, F.A., Loh, Y.H. 2015. Systematic identification of factors for provirus silencing in embryonic stem cells. ***Cell***. 163(1): 230-245.
4. Loh, Y.H., Hartung, O., Li, H., Guo, C., Sahalie, J.M., Manos, P.D., Urbach, A., Heffner, G.C., Grskovic, M., Vigneault, F., Lensch, M.W., Park, I.H., Agarwal, S., Church, G.M., Collins, J.J., Irion, S., Daley, G.Q. 2010. Reprogramming of T cells from human peripheral blood. ***Cell Stem Cell***. 7(1): 15-19.