

**Jean Lu**

呂 仁

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**A. Education**

1995-2000, **Ph.D.** Institute of Microbiology, National Taiwan University, Taipei, Taiwan

1992-1994 **M. S.** Institute of Molecular Medicine, National Taiwan University, Taipei, Taiwan

1988-1992 **B.S.** Department of Medical Technology, National Taiwan University, Taipei, Taiwan.

**B. Positions:**

2018, Aug-present Adjunct Associate Professor

Graduate Institute of Medical Sciences, National Defense Medical Center, Taipei, Taiwan.

2016-present Adjunct Associate Professor,

Department of Life Science, Tzu Chi University, Hualien,Taiwan

2015-present Associate Research Fellow,

Stem Cell Program, Genomics Research Center, Academia Sinica, Taiwan

2015-present Adjunct Associate Professor,

Genomics and System Biology Program, College of Life Science, National Taiwan University,  
Taiwan

2007-2015 Assistant Research Fellow,

Stem Cell Program, Genomics Research Center,  
Academia Sinica, Taiwan

2010-2015 Adjunct Assistant Professor,

Genomics and System Biology Program, College of Life Science,  
National Taiwan University, Taiwan

2003-2007 Postdoctoral Fellow/Associate,

Molecular, Department of Cellular, and Developmental Biology,  
Yale University, USA

2001-2003 Postdoctoral Fellow,

Graduate Institute of Microbiology, College of Medicine,  
National Taiwan University, Taiwan

1994-1995 Research Assistant,

Graduate Institute of Microbiology, College of Medicine,  
National Taiwan University, Taiwan

**C. Honors:**

2024 Future Technology Award

2023 20th National Innovation Award

- 2017 keystone symposia scholarship. Regeneration Biology and applications: cell differentiation, tissue organization and biomedical engineering.
- 2003-2005 Ruth L. Kirschstein National Research Service Award Fellowship
- 2002 Outstanding Paper Award (National Taiwan University)

## D. Publications

### Accepted

1. Tsai YF, FangMC, Chen CH, Yu IS, Shun CT, Tao MH, Sun CP, **Lu J**, Sheu JC, Hsu YC, Lin SW. Enhancement of adult liver regeneration in mice through the hepsin-mediated epidermal growth factor receptor signaling pathway. *Commun Biol* 2024 Dec 19;7(1):1672. (impact factor 5.2)
2. Chen WJ, Chao YY, Huang WK, Chang WF, Tzeng CR, Chuang CH, Lai PL, Schuyler SC, Li LY\*, **Lu J\***. Identification of apelin/APJ signaling dysregulation in a human iPSC-derived granulosa cell model of Turner syndrome. *Cell Death Discovery* 2024 Nov 14;10(1):468. (Impact factor 6.1)
3. Chen WJ, Huang WK, Pather SR, Chang WF, Sung LY, Wu HC, Liao MY, Lee CC, Wu HH, Wu CY, Liao KS, Lin CY, Yang SC, Lin H, Lai PL, Ng CH, Hu CM, Chen I, Chuang CH, Lai CY, Lin PY, Schuyler SC, Axel S, Lu FL, **Lu J\***, Podocalyxin-Like Protein 1 Regulates Pluripotency through the Cholesterol Biosynthesis Pathway. *Adv. Sci.* 2022, Nov 14;10(1):e2205451 (Impact factor 17.521) (Chemistry 14/179; Materials Science 21/345)
4. Yadav A, Ramasamy TS, Lin SC, Chen SH, **Lu J**, Liu YH, Lu FI, Hsueh YY, Lin SP, Wu CC. Autologous Platelet-Rich Growth Factor Reduces M1 Macrophages and Modulates Inflammatory Microenvironments to Promote Sciatic Nerve Regeneration. *Biomedicines*. 2022 Aug 17;10(8):1991.(impact factor 4.757) (medicine 132/276)
5. Lai PL, Ng CH, Wu CH, Lai CY, Schuyler SC, Wang V, Lin H, Lee YC, Chuang MH, Yang CH, Chen WJ, Huang HC,\*, **Lu J\*** Development of a Chemical Cocktail that Rescues Mouse Brain 2 Demyelination in a Cuprizone-Induced Model. *Cells* 2022, 11, 1091 (Impact factor 7.666) (Cell biology 51/194)
6. Lin PY, Yang D, Chuang CH, Lin H, Chen WJ, Chen CY, Chuang TJ, Lai CY, Li LY, Schuyler SC, Lu FL, Liu YC, **Lu J\*** (2021) Comparative analyses of single-cell transcriptomic profiles between In vitro totipotent blastomere-like cells and In vivo early mouse embryonic cells. *Cells* 10(11); 3111 (Impact factor 7.666) (Cell biology 51/194)
7. Lai YP, Kuo LC, Lin BR, Lin HJ, Lin CY, Chen YT, Hsiao PW, Chang HT, Ko PCI, Chen HC, Chang HY, **Lu J**, Ho HN, Wu-Hsieh BY, Kung JT, Chen SC\* (2021) . CD28 engagement inhibits CD73-mediated regulatory activity of CD8<sup>+</sup>T cells. *Communications Biology*. 19;4(1):595-607 (Impact factor 6.548) (Biology 7/113)
8. Nguyen MT, Lin CH, Liu SM, Miyashita A, Ihn H, Lin H, Ng CH, Tsai JC, Chen MH, Tsai MS, Lin IY, Liu

- SC, Li LY, Fukushima S\*, Lu J\*, Ma N\*. (2020) miR-524-5p reduces the progression of the BRAF inhibitor-resistant melanoma *Neoplasia*. 22(12):789-799 (Impact factor 6.218) (Oncology 69/317)
9. Cheng, CL, Yang SC, Lai CY, Wang CK, Chang CF, Lin CY, Chen WJ, Wu HC, Ma NH., Lu FL\*, Lu J\*. (2020) CXCL14 maintains hESC self-renewal through binding to IGF-1R and activation of the IGF-1R pathway. *Cells*. 9(7):E1706 (Impact factor 7.666) (Cell biology 51/194)
  10. Lai PL, Chen TC, Feng CY, Lin H, Ng CH, Chen Y, Hsiao M, Lu J. \*, Huang HC\*. (2020) Selection of a malignant subpopulation from a colorectal cancer cell line. *Oncology Letters*. 20 (3): 2937-2945 (Impact factor 3.111) (Oncology 176/245)
  11. Yang SC, Liu JJ, Wang CK, Lin YT, Tsai SY, Chen WJ, Huang WK, Tu PA, Lin YC, Chang CF, Cheng CL, Lin H, Lai CY, Lin CY, Lee YH, Chiu YC, Hsu CC, Hsu SC, Hsiao M, Schuyler SC, Lu FL\*, Lu J. \* (2019) Down-regulation of ATF1 leads to early neuroectoderm differentiation of human embryonic stem cells by increasing the expression level of SOX2. *FASEB J.* 33(9):10577-10592 (Impact factor: 5.834) (Cell biology 77/194) (Biochemistry and molecular biology 79/296)
  12. Kuan II, Lee CC, Chen CH, Lu J, Kuo YS, Wu HC.(2019) The extracellular domain of epithelial cell adhesion molecule (EPCAM) enhances multipotency of mesenchymal stem cells through EGFR-LIN28-LET7 signaling. *J Biol Chem*, 294(19):7769-7786. (Impact factor 5.486) (Biochemistry and molecular biology 94/296)
  13. Chang, H.C., Huang, P.H., Syu, F.S., Hsieh, C.H., Chang, S.L., Lu, J.\*, Chen, H.C.\* (2018) Critical involvement of atypical chemokine receptor CXCR7 in allergic airway inflammation. *Immunology*. 154(2):274-284. (Impact factor 7.215) (Immunology 43/161)
  14. Liu, S.M., Lin, C.H., Lu, J., Lin, I.Y., Tsai, M.S., Chen, M.H., Ma, N.(2018) miR-596 Modulates Melanoma Growth by Regulating Cell Survival and Death. *J Invest Dermatol*. 138(4):911-921 (Impact factor 7.590) (Dermatology 5/68)
  15. Wang, C.K., Yang, S.C., Hsu, S.C., Chang, F.P., Lin, Y.T., Chen, S.F., Cheng, C.L., Hsiao, M., Lu, F.L., Lu, J\*. (2017) CHAC2 is essential for self-renewal and glutathione maintenance in human embryonic stem cells. *Free Radical Biology and Medicine*. 113:439-45 (Impact factor: 8.101) (Biochemistry and molecular biology 45/296) (Endocrinology and metabolism 22/146)
  16. Hsieh, M.H., Chen, Y.T., Chen,Y.T., Lee, Y.H., Lu, J., Chien, C. L., Chen, H.F., Ho, H.N., Yu, C.J., Wang, Z.Q., Teng, S.C.(2017) PARP1 controls KLF4-mediated telomerase expression in stem cells and cancer cells. *Nucleic Acids Research*. 45(18):10492-10503 (Impact factor: 19.160) (Biochemistry and molecular biology 8/296)
  17. Lin, Y.T., Wang, C.K., Yang, S.C., Hsu, S.C., Lin, H., Chang, F. P., Kuo, T. C., Shen, C. N., Chiang, P. M., Hsiao, M., Lu, F.L., Lu, J.\* (2017) Elimination of undifferentiated human embryonic stem cells by cardiac glycosides. *Scientific Reports*. 7: 5289 (Impact factor: 4.996) (Multidisciplinary sciences 19/73)
  18. Lai, P. L., Lin, H., Shang-Fu Chen, S.F., Yang, S.C., Hung, K.H., Chang, C.F., Chang, H. Y., Lu, F. L., Lee, Y. H., Liu, Y.C., Huang, H.C.\* , Lu, J.\*. (2017) Efficient Generation of Chemically Induced Mesenchymal Stem Cells from Human Dermal Fibroblasts. *Scientific Reports*. 7:44534 (Impact factor: 4.996) (Multidisciplinary sciences 19/73)

19. Kuan, I.-I. Liang, K. H., Wang, Y.-P., Kuo, T.-W. Meir, Y.-J. J., Wu S. C.-Y., Yang, S.C., Lu, J.\* Wu H. C\*. (2017) EpEX/EpCAM and Oct4 or Klf4 alone are sufficient to generate induced pluripotent stem cells through STAT3 and HIF2 $\alpha$ . *Scientific Reports*. 7: 41852 (Impact factor: 4.996) (Multidisciplinary sciences 19/73)
20. Chan, W. F., Hwu, Y. M., Xu, J , Lin, C. J., Wang, S.W., Cheng, A, S., Lu, J., Lu, C.H., Sung, L.Y. (2016) Derivation of Patient Specific Pluripotent Stem Cells Using Clinically Discarded Cumulus Cells . *PLoS One* 11(11):e0165715. (Impact factor: 3.752) (Multidisciplinary sciences 29/73)
21. Huang, Y.C., Lin, S.J., Lin, K.M., Chou, Y.C., Lin, C.W., Yu, S.C., Chen, C.L., Shen, T.L., Chen, C.K., Lu, J., Chen, M.R., Tsai, C.H. (2016) Regulation of EBV LMP1-triggered EphA4 downregulation in EBV-associated B lymphoma and its impact on patients' survival. *Blood*. 128(12):1578-89. (Impact factor: 25.476) (Hematology 2/78)
22. Chua, H.H., Tsuei, D.J., Lee, P.H., Jeng, Y.M., Lu, J., Wu, J.F., Su, D.S., Chen, Y.H., Chien, C.S., Kao, P.C., Lee, C.N., Hu, R.H., Ni, Y.H., Chang, M.H. (2015) RBMY, a novel inhibitor of glycogen synthase kinase 3 $\beta$ , increases tumor stemness and predicts poor prognosis of hepatocellular carcinoma. *Hepatology* 62(5):1480-96. (Impact factor: 17.298) (Gastroenterology and hepatology 6/93)
23. Chang, J.S., Su, C.Y., Yu, W.H., Lee, W.J., Liu, Y.P., Lai, T.C., Jan, Y.H., Yang, Y.F., Shen, C.N., Shew, J.Y., Lu, J., Yang, C.J., Huang, M.S., Lu, P.J., Lin, Y.F., Kuo, M.L., Hua, K.T., Hsiao, M.(2015) GIT1 promotes lung cancer cell metastasis through modulating Rac1/Cdc42 activity and is associated with poor prognosis. *Oncotarget* 6(34):36278-91 (Impact factor: 5.168) (Cell biology 48/190) (Oncology 44/217)
24. Wu, C. C., Wu, H. J., Wang, C. H, Lin, C. H., Hsu, S. C., Chen, Y.R., Hsiao, M., Schuyler, S. C., Lu, F. L., Ma, N., and Lu, J. \* (2015) Akt suppresses DLK for maintaining self-renewal of mouse embryonic stem cells. *Cell Cycle* 14(8):1207-17 (Impact factor: 5.173) (Cell biology 89/194)
25. Lin, S.J., Lo, M., Kuo, R.L., Shih, S.R., Ojcius, D.M., Lu, J., Lee, C.K., Chen, H.C., Lin, M.Y., Leu, C.M., Lin, C.N., Tsai, C.H. (2014) The pathological effects of CCR2+ inflammatory monocytes are amplified by an IFNAR1-triggered chemokine feedback loop in highly pathogenic influenza infection. *J Biomed Sci*. 21:99-17 (Impact factor 12.771) (Cell biology 24/194) (Medicine, research and experimental 11/139)
26. Chang, C.F., Hsu, K.H., Shen, C.N., Li, C.L.\* , and Lu, J.\* (2014) Enrichment and characterization of two subgroups of committed osteogenic cells in the mouse endosteal bone marrow with expression levels of CD24. *J Bone Marrow Res* 2:144
27. Liu, Y.C., Kao, Y.T., Huang, W.K., Lin, K.Y., Wu, S.C., Schuyler, S.C., Lu, F.L., Lu, J.\* (2014) CCL5/RANTES is important for inducing osteogenesis of human mesenchymal stem cells. *BioSci Trends* 8(3):138-43. (Impact factor: 9.083) (Biology 7/94)
28. Liu, S.M., Lu, J., Lee, H. C., Chung, F.H., Ma, N. (2014) miR-524-5p suppresses the growth of oncogenic BRAF melanoma by targeting BRAF and ERK2. *Oncotarget* 5(19):9444-59. (Impact factor: 5.168) (Cell biology 48/190) (Oncology 44/217)
29. Yang, Y.F., Jan, Y.H., Liu, Y.P., Yang, C.J., Su, C.Y., Lin, Y.F., Chang, Y.C., Lai, T.C., Chiou, J., Tsai, H.Y.,

- Lu, J.**, Shen, C.N., Shew, J.Y., Lu, P.J., Huang, M.S., Hsiao, M., (2014), Squalene Synthase Induces TNFR1 Enrichment in Lipid Rafts to Promote Lung Cancer Metastasis, *Am J Respir Crit Care Med* 190(6):675-87 (Impact factor: 30.528) (Respiratory system 3/65) (Critical care medicine 3/35)
30. Chung, F.H., Chiang, Y.R., Tseng, A.L., Sung, Y.C., **Lu, J.**, Huang, M.C., Ma, N., Lee, H.C. (2014) Functional Module Connectivity Map (FMCM): A framework for searching repurposed drug compounds for systems treatment of cancer and an application to colorectal adenocarcinoma. *PLoS One* 9: e86299 (Impact factor: 3.752) (Multidisciplinary sciences 29/73)
31. Huang H.N., Chen, S.Y., Hwang, S.M., Yu, C.C., Su, M.W., Mai, W., Wang, H.W., Cheng, W.C., Schuyler, S.C., Ma, N., Lu, F.L., and **Lu, J.\***. (2013) miR-200c and GATA binding protein 4 regulate human embryonic stem cell renewal and differentiation. *Stem Cell Res* 12, 338–353. (Impact factor: 1.587) (Biotechnology and applied microbiology 146/158) (Cell biology 185/194) (Cell and tissue engineering 28/29)
32. Wang, C.H., Ma, N., Lin, Y.T., Wu, C.C., Wu, H.J., Yu, C.C., Hsiao, M., Lu, F.L., Schuyler, S.C., and **Lu, J.\*** (2013) Array-based high throughput screen in mouse embryonic stem cells with shRNAs. *Curr Protoc Stem Cell Biol* 26: 5C.3.1 - 5C.3.19.
33. Lu, F.L., Yu, C.C., Chiu, H.H., Liu, H.E., Chen, S.Y., Lin, S.F., Goh, T.Y., Hsu, H.C., Chien, C.H., Wu, H.C., Chen, M.S., Schuyler, S.C., Hsieh, W.S., Wu, M.H., **Lu, J.\*** (2013) Sonic hedgehog antagonists induce cell death in acute myeloid leukemia cells in the presence of lipopolysaccharides, tumor necrosis factor- $\alpha$ , or interferons. *Invest New Drug* 31(4): 823-32. (Impact factor: 3.651) (Pharmacology and pharmacy 135/279) (Oncology 150/245)
34. Chen, H.W., Chen, H.Y., Wang, L.T., Wang, F.H., Fang, L.W., Lai, H.Y., Chen, H.H., **Lu, J.**, Hung, M.S., Cheng, Y., Chen, M.Y., Liu, S.J., Chong, P., Lee, O.K., Hsu, S.C. (2013) Mesenchymal stem cells tune the development of monocyte-derived dendritic cells toward a myeloid-derived suppressive phenotype through growth-regulated oncogene chemokines. *J Immunol* 190: 5065-77. (Impact factor: 5.446) (Immunology 65/161)
35. Liu, Y.P., Yang, C.J., Huang, M.S., Yeh, C.T., Wu, A.T., Lee, Y.C., Lai, T.C., Lee, C.H., Hsiao, Y.W., **Lu, J.**, Shen, C.N., Lu, P.J., Hsiao, M. (2013) Cisplatin selects for multidrug-resistant CD133+ cells in lung adenocarcinoma by activating Notch signaling. *Cancer Res* 73(1):406-416. (Impact factor: 13.312) (Oncology 20/245)
36. Wang, C.H., Ma, N.H., Lin, Y.T., Wu, C.C., Hsiao, M., Lu, F.L., Yu, C.C., Chen, S.Y., and **Lu, J.\*** (2012) A shRNA functional screening in embryonic stem cells reveals Nme6 and Nme7 signaling are crucial for stem cell renewal. *Stem Cells* 30: 2199-2211. (Impact factor: 5.845) (Hematology 25/78) (Cell biology 76/194) (Cell and tissue engineering 11/29) (Biotechnology and applied microbiology 33/158) (Oncology 75/245)
37. Chan, C.C., Cheng, L.Y., **Lu, J.**, Huang, Y.H., Chiou, S.H., Tsai, P.H., Huo, T.I., Lin, H.C., Lee, F.Y. (2012) The role of interferon- $\gamma$  inducible protein-10 in mice model of acute liver injury post induced pluripotent stem cells transplantation. *PLoS One* 7(12): e50577. (Impact factor: 3.752) (Multidisciplinary sciences 29/73)
38. Chou, Y.C., Chen, C.L., Yeh, T.H., Lin, S.J., Chen, M.R., Doong, S.L., **Lu, J.**, Tsai, C.H. (2012) Involvement of Recepteur d'Origine Nantais receptor tyrosine kinase in Epstein-Barr virus-

- associated nasopharyngeal carcinoma and its metastasis. *Am J Pathol* 181:1773-1781. (Impact factor: 5.770) (Pathology 12/77)
39. Chou, Y.C., Lin, S.J., **Lu, J.**, Yeh, T.H., Chen, C.L., Weng, P.L., Lin, J.H., Yao, M., Tsai, C.H. (2011) Requirement for LMP1-induced RON receptor tyrosine kinase in Epstein-Barr virus-mediated B-cell proliferation. *Blood* 118(5): 1340-1349. (Impact factor: 25.476) (Hematology 2/78)
40. Chang, Y., Lee, H.H., Chen, Y.T., **Lu, J.**, Wu, S.Y., Chen, C.W., Takada, K., Tsai, C.H. (2006) Induction of the early growth response 1 gene by Epstein-Barr virus lytic transactivator Zta. *J Virol* 80: 7748-7755. (Impact factor: 6.549) (Virology 11/37)
41. **Lu, J.**, Hou, R., Booth, C.J., Yang, S.H., Snyder, M. (2006) Defined culture conditions of human embryonic stem cells. *PNAS* 103: 5688-5693. (Impact factor: 12.779) (Multidisciplinary sciences 9/73)
42. **Lu, J.**, Lin, W.H., Chen, S.Y., Longnecker, R., Tsai SC., Chen C.L., and Tsai, C.H. (2006) Syk tyrosine kinase mediates Epstein-Barr virus latent membrane protein 2A-induced cell migration in epithelial cells. *J Biol Chem* 281: 8806-8814. (Impact factor: 5.486) (Biochemistry and molecular biology 94/296)
43. **Lu, J.**, Chua, H.H., Chen, S.Y., Chen, J.Y., and Tsai, C.H. (2003) Regulation of matrix metalloproteinase-1 by Epstein-Barr virus proteins. *Cancer Res* 63: 256-262. (Impact factor: 13.312) (Oncology 20/245)
44. Chen, S.Y., **Lu, J.**, Shih, Y.C., and Tsai, C.H. (2002) Epstein-Barr virus latent membrane protein 2A regulates c-Jun protein through extracellular signal-regulated kinase. *J Virol* 76: 9556-9561. (Impact factor: 6.549) (Virology 11/37)
45. **Lu, J.**, Chen, S.Y., Chua, H.H., Liu, Y.S., Huang, Y.T., Chang, Y., Chen, J.Y., Sheen, T.S., and Tsai, C.H. (2000) Upregulation of tyrosine kinase TKT by the Epstein-Barr virus transactivator Zta. *J Virol* 74: 7391-7399. (Impact factor: 6.549) (Virology 11/37)
46. Huang, Y.T., Sheen, T.S., Chen, C.L., **Lu, J.**, Chang, Y., Chen, J.Y., and Tsai, C.H. (1999) Profile of cytokine expression in nasopharyngeal carcinomas: a distinct expression of interleukin 1 in tumor and CD4+ T cells. *Cancer Res* 59: 1599-1605. (Impact factor: 13.312) (Oncology 20/245)
47. Chang, Y., Tung, C.H., Huang, Y.T., **Lu, J.**, Chen, J.Y., and Tsai, C.H. (1999) Requirement for cell-to-cell contact in Epstein-Barr virus infection of nasopharyngeal carcinoma cells and keratinocytes. *J Virol* 73: 8857-8866. (Impact factor: 6.549) (Virology 11/37)
48. Chang, Y., Sheen, T.S., **Lu, J.**, Huang, Y.T., Chen, J.Y., Yang, C.S., and Tsai, C.H. (1998) Detection of transcripts initiated from two viral promoters (Cp and Wp) in Epstein-Barr virus-infected nasopharyngeal carcinoma cells and biopsies. *Lab Invest* 78: 715-726. (Impact factor: 5.515) (Pathology 16/77) (Medicine, research and experimental 50/139)
49. Tsai, C.H., Liu, M.T., Chen, M.R., **Lu, J.**, Yang, H.L., Chen, J.Y., and Yang, C.S. (1997) Characterization of monoclonal antibodies to the Zta and DNase proteins of Epstein-Barr virus. *J Biomed Sci* 4: 69-77. (Impact factor 12.771) (Cell biology 24/194) (Medicine, research and experimental 11/139)

## E. Patents

- Defined culture conditions of human embryonic stem cells. Snyder, M and Lu, J. US patent (U.S. Patent No. 9,101,590) (2005-2025)
- Use of apolipoprotein A1 for promoting bone formation. Lu, J., Liu, Y. C. (Taiwan patent 102111968) (2013-2023)
- Method for removing undifferentiated pluripotent stem cells. Lu, J., Lin, Y. T. (apply)
- Method to generate induced oligodendrocyte-lineage cells and treatment using such cells. Lu, J., Huang, H.C., Lai, P.L, Ng, C.H. (apply PCT and TW)
- Method for regulating potency of pluripotent stem cells and the applications thereof. Lu, J., Chen, W.J. (apply)

#### **F. book chapter**

再生醫學：臨床與產業運用. 第四章：小分子藥物細胞再編程於再生醫學之發展與應用. 出版者：科技部生命科學研究發展司再生醫學科技發展計畫辦公室. 發行人再生醫學科技發展計畫辦公室主持人錢宗良.

#### **G. Posters**

- Lu, J., Lee, Y. C., Lai, P.L., Lai, C.Y., Tsai, R.K. Reprogramming of human fibroblasts into retinal progenitor cells to rescue blindness. International Society for Stem Cell Research 2024 (ISSCR2024), Jul 10-13, 2024, Hamburg, Germany.
- Lee, Y. C, Wen, Y.T., Tsai, R.K. and Lu, J.\* Rescuing vision by direct reprogramming of human fibroblasts into retinal progenitor cells with small molecules. ARVO May5-9, 2024, Seattle, USA
- Chen WJ, Huang WK, Chiang FH, Lu J\*. A zinc-finger C2H2 type protein ZNF regulates pluripotency of human pluripotent stem cells. International Society for Stem Cell Research 2023 (ISSCR2023), Jun 14-7, 2023, Boston, USA
- Lee, Y. C, Tsai, R.K. and Lu, J.\* Direct Reprogramming of Human Fibroblasts into Retinal Progenitor Cells by Small Molecules to Treat Photoreceptor Degeneration. International Society for Stem Cell Research 2022 (ISSCR2022), Jun14-17, 2023, Boston, USA
- Lai, P.L., Lee, Y. C., Lai. C.Y., Tsai, R.K. Lu, J.\* Drug-induced differentiation for generating retinal progenitor cells to treat photoreceptor degenerative diseases. National Biotechnology Research Park (NBRP) Demo Day, May 4-5, 2023, Taipei, Taiwan.
- Chen, W. J., Huang, W.K. Pather, S.R., Chang, W.F., Sung, L.Y., Wu, H. C., Liao, M.Y., Lee, C.C., Wu, H.H., Wu, H. Y., Liao, K.S., Lin, C.Y., Yang, S.C., Lin, H., Schuyler, S.C., Axel, S., Lu, F.L., and Lu, J.\* Cholesterol biosynthetic signaling in regulating pluripotency and extended pluripotency. International Society for Stem Cell Research 2022 (ISSCR2022), Jun15-18, 2022, San Francisco, California, USA. (**Chen W. J. Oral Presentation 8 mins, Chen W. J. Travel award of ISSCR**).
- Lee, Y.C., Tsai, R.K., Lu, J.\* Direct Reprogramming of Human Fibroblasts into Retinal Progenitor Cells by

Small Molecules to Treat Photoreceptor Degeneration. National Biotechnology Research Park (NBRP) Demo Day, Apr 28-29, 2022, Taipei, Taiwan.

8. Chuang, C.H., Lin, P.Y., Yang, D., Chen, W.J., Lin, H., Lu, J.\*. Comparative analysis of the single cell transcriptomic profiles between in vitro totipotent blastomere-like cells and in vivo early developments. Pan Pacific Symposium on Stem Cells and Cancer Research (PPSSC), September 11-12, 2021, Hualien, Taiwan. (**Chuang, C.H., Gwo Xi Award for Stem Cells and Cancer Research.**)
9. Lu, J.\* Lai, P.L., Ng, C.H., Sung, H.H. Establishment of an mbp deletion mouse model by crispr/cas9 technology. International Society for Stem Cell Research 2021 (ISSCR2021), Jun 21-26, 2021, Virtual Meeting.
10. Lee, Y.C., Lu, J.\* Direct reprogramming of human fibroblasts into retinal progenitor cells by small molecules to treat photoreceptor degeneration. National biotech research park, Demo day, April 28-29, Taipei, Taiwan.
11. Cheng, C.L., Yang, S.C., Lai, C.Y. Lu, J.\* CXCL14 maintains hESC self-renewal through binding to IGF-1R and activation of the IGF-1R pathway. Taiwan society for stem cell research (TSSCR) annual meeting, Oct 30-31, 2020, Taipei, Taiwan (**Honorable mention**)
12. Lai, P.L., Chen, T.C., Feng, C.Y., Lin, H., Ng, C.H., Chen, y., Hsiao, M., Lu, J.\*, Huang, H.C\* Selection of a malignant subpopulation from a colorectal cancer cell line. Taiwan society for stem cell research (TSSCR) annual meeting, Oct 30-31, 2020, Taipei, Taiwan.
13. Lee, Y.C., Tsai, R.K., Lu, J.\* Direct Reprogramming of Human Fibroblasts into Retinal Progenitor Cells by Small Molecules to Treat Photoreceptor Degeneration. The 7th Annual Retreat of the Translational Medicine Degree Program, Sept, 2, 2020, Taipei, Taiwan. (**Lee, Y.C. Best Oral Presentation Award - First Prize**)
14. Chen, W.J., Huang, W.K., Chang, W.F., Sung, L.Y., Lin, C.Y., Yang, S.C., Lin, H., Axel, S., Wu, H.C., Lu, F.L., Lu, J.\* Podocalyxin-like Protein 1 Regulates Human Pluripotent Stem Cell Self-Renewal through the Cholesterol Biosynthesis Pathway. International Society for Stem Cell Research 2020 (ISSCR2020), Jun 23-27, 2020, Virtual Meeting
15. Chen, W.J., Chen, M.-J. M., Lai, P.L., Huang, W.K., Chiang, F.H., Lin, C.-Y., Shang-Chih Yang, S.C., Lu, J.\* A zinc-finger C2H2 type protein ZNF regulates pluripotency of human pluripotent stem cells. International Society for Stem Cell Research 2020 (ISSCR2020), Jun 23-27, 2020, Virtual Meeting
16. Chen, W.J., Huang, W.K., Chang, W.F., Sung, L.Y., Lin, C.Y., Yang, S.C., Lin, H., Axel, S., Wu, H.C., Lu, F.L., Lu, J.\* . Podocalyxin-like Protein 1 Regulates Human Pluripotent Stem Cell Self-Renewal through the Cholesterol Biosynthesis Pathway. Academia Sinica, Genomics Research Center, Dec 20, 2019, Taipei, Taiwan.
17. Chen, W. J., Lu, J.\* Podocalyxin like protein 1 regulates human pluripotent stem cell self-renewal through

cholesterol biosynthesis pathway. Taiwan society for stem cell research (TSSCR) annual meeting, Aug 23-24, 2019, Taipei, Taiwan.

18. Lee, Y.C., Lai P.L., Wen, Y.T., Tsai R.K., Lu, J.\* Cell Plasticity: Reprogramming Eye Fibroblasts into Induced Retinal Lineage Cells with Small Molecules. Taiwan society for stem cell research (TSSCR) annual meeting, Aug 23-24, 2019, Taipei, Taiwan.
19. Chen, W. J., Lin, H., Lu, J.\* Podocalyxin like protein 1 regulates human pluripotent stem cell self-renewal through cholesterol biosynthesis pathway. International Society for Stem Cell Research 2019 (ISSCR 2019), Jun 26-29, 2019, Los Angeles, USA. (**Chen, W.J., ISSCR, TSSCR, and MOST Travel award**).
20. Lin, P.Y., Lin, P.H, Lai, P.L., Lin, H., Lu, J.\* Enhancing mesenchymal stem cell osteogenesis and adipogenesis by small molecules cocktails. International Society for Stem Cell Research 2019 (ISSCR 2019), Jun 26-29, 2019, Los Angeles, USA
21. Chen, W. J., Lin, H., Lu, J.\* Podocalyxin like protein 1 regulates human pluripotent stem cell self-renewal through cholesterol biosynthesis pathway. The 12th Pan Pacific Symposium on Stem Cells and Cancer Research (PSSC) 2019, May 4-5, 2019, Hualien, Taiwan.
22. Lin, P.Y., Lin, P.H, Lai, P.L., Lu, J.\* Small Molecule Cocktails Enhance MSC Osteogenesis and Adipogenesis The 34rd Joint Annual Conference of Biomedical Science, Mar 23-24, 2019, Taipei, Taiwan.
23. Lai, P.L., Chen S.F., Lin, H., Huang, H. C., Lu, J.\* Reprogramming of human skin cells to induced multipotent cells by small molecules. Taiwan society for stem cell research (TSSCR) annual meeting, Oct 26-27, 2018, Miaoli, Taiwan. (**Lai, P.L., Poster competition award honorable mentions**)
24. Liu, Y.C., Lu, J.\* Apolipoprotein A-I Prevents osteoporosis and promotes osteogenesis of mesenchymal stem cells via STAT3 and CXCL6/8. American society bone and mineral research Annual Meeting (ASBMR), Sept 28-Oct 1, 2018, Montreal, QC, Canada. (**Liu, Y.C., Travel award of ASBMR**)
25. Lai, P.L., Chen S.F., Lin, H., Huang, H. C., Lu, J.\* Reprogramming of human skin cells to induced multipotent cells by small molecules. International Society for Stem Cell Research 2018 (ISSCR 2018), Jun 20-23, 2018, Melbourne, Australia (**Lai, P.L., Travel Award of Taiwan Society for Stem Cell Research (TSSCR)**).
26. Chuang, C.H, Wang C.K., Yang, S.C, Chang, F.P., Lin, Y.T., Shang-Fu Chen, S.F., Hsu S.C., Lu, J.\* CHAC2 is essential for self-renewal and Glutathione maintenance in human embryonic stem cells. The 33rd Joint Annual Conference of Biomedical Science, Mar24-25, 2018, Taipei, Taiwan.
27. Lin, P.H., Chen S.F., Lai, P.L., Lu, J.\* Improving Differentiation Abilities of Mesenchymal Stem Cells by Small Molecule Cocktails. The 33rd Joint Annual Conference of Biomedical Science, Mar24-25,

2018, Taipei, Taiwan.

28. Lai, P.L., Ng, C.H., Chuang, C.H., Lin, P.H., Huang, H. C., Lu, J.\* Direct conversion of human skin fibroblasts into pre-oligodendrocytes by chemical cocktails. 11th Pan Pacific Symposium on Stem Cells and Cancer Research (PPSSC 2018), Mar 23-25, 2018, Hualien, Taiwan. (**Lai, P.L., Gwo Xi Poster Award USD 3000 and selected for oral presentation).**
29. Lai, P.L., Ng, C.H., Lin, P.H., Chuang, C.H., Huang, H. C., Lu, J.\* Direct conversion of human skin fibroblasts into pre-oligodendrocytes by chemical cocktails. EMBO Workshop-Neural Development, Mar 2-6, 2018, Taipei, Taiwan
30. Lai, P.L., Lin, H., Chen S.F., Huang, H. C., Lu, J.\* Efficient generation of chemically induced Mesenchymal Stem Cells from human dermal fibroblasts. 2017 International Conference on environmental medicine and the 14<sup>th</sup> symposium of the frontier of biomedical sciences. Nov 10-11, 2017, Kaohsiung, Taiwan. (**Lai, P.L., Best Poster Award**)
31. Chen S.F., Lai, P.L., Huang, H. C., Lu, J.\* Optimize the Methods of Reprogramming Chemically Induced Mesenchymal Stem Cells from Human Somatic Cells. Regenerative biology and applications: cell differentiation, tissue organization and biomedical engineering. Keystone symposia conference, Oct 15-19, 2017, Hong Kong. (**Chen, S.F., Keystone symposia travel award**)
32. Lu, J.\* Liu Y.C., Huang W.K., Chang C.F., Kao Y.T., Hsu S.C., Li L. Y., Lee Y. H., Lin H., Lu F.L. Apolipoprotein A-I revealed by a high throughput screen prevents osteoporosis and promotes osteogenesis though STAT3 and CXCLs. Regenerative biology and applications: cell differentiation, tissue organization and biomedical engineering. Keystone symposia conference, Oct 15-19, 2017, Hong Kong. (**Lu, J., Keystone symposia travel award**)
33. Wang,C.K., Yang, S.C., Chang F. P, Lin, Y.T, Chen, S.F., Hsu S.C., Lu, J.\* CHAC2 is essential for self-renewal and Glutathione maintenance in human embryonic stem cells. International Conference of Developmental Biology, Stem Cells and Regenerative Medicine-From Basic Research to Applications (DBSRM).Oct 4-5, 2017, Taipei, Taiwan. (**Wang, C. K., Best Paper Award**)
34. Lai, P.L., Lin, H., Chen S.F., Huang, H. C., Lu, J.\* Direct Conversion of Human Dermal Fibroblasts into Mesenchymal Stem Cells by Small Molecules. International Conference of Developmental Biology, Stem Cells and Regenerative Medicine-From Basic Research to Applications (DBSRM).Oct 4-5, 2017, Taipei, Taiwan. (**Lai, P.L., Best Paper Award, oral presentation.**)
35. Chen, S.F., Lai, P.L., Huang, H. C., Lu, J.\* Optimize the Methods of Reprogramming Chemically Induced Mesenchymal Stem Cells from Human Somatic Cells. Stem Cells and Regenerative Medicine-From Basic Research to Applications (DBSRM),Oct 4-5, Taipei, Taiwan (**Chen, S.F., oral presentation**)
36. Lai, P.L., Lin, H., Chen S.F., Huang, H. C., Lu, J.\* Efficient Generation of chemically induced

mesenchymal stem cells from human dermal fibroblasts. Annual meeting of International society for stem cell research (ISSCR) annual meeting, June14-17, 2017, Boston, MA, USA. (**Lai, P.L., Travel Award of Taiwan Society for Stem Cell Research (TSSCR)**).

37. Lin, H., Lin, Y.T., Wang, C. K., Yang, S.C., Hsu, C.S., Chang, F. P., Kuo, T.-C., Shen, C.N., Chiang, P. M., Hsiao, M., Lu, F.L., and **Lu, J.\***. Elimination of undifferentiated human embryonic stem cells by cardiac glycosides. International society for stem cell research (ISSCR) annual meeting, June14-17, 2017, Boston, MA, USA.
38. Liu, J.J., Yang, S.C., Wang C.K., Lin, Y.T., **Lu, J.\*** Downregulation of ATF1 Triggers neuroectoderm differentiation in human embryonic stem cells. International society for stem cell research (ISSCR) annual meeting, June14-17, 2017, Boston, MA, USA.
39. **Lu, J.\*** Liu Y.C., Huang W.K., Chang C.F., Lin, H., Lee Y. H., Lu, F.L. Apolipoprotein A-I pinpointed by a high throughput screen prevents osteoporosis in transgenic mice and treat osteoporosis by the application of I-BET151. International society for stem cell research (ISSCR) annual meeting, June14-17, 2017, Boston, MA, USA.
40. Lai P.L., Lin, H., Chen S.F., Huang, H. C., **Lu, J.\*** Efficient generation of chemically induced mesenchymal stem cells from human dermal fibroblasts. College of life science, National Taiwan University, Jun 4, 2017 Taipei, Taiwan. (**Lai, P.L., The Dean's Award**).
41. Chen S.F., Lai P.L., Lin, H., Huang, H. C., **Lu, J.\*** Optimization of Chemical Induced Mesenchymal Stem Cells Reprogrammed and Rejuvenated from Human Somatic Cells. National Taiwan University Department of Life science, May 26, 2017, Taipei, Taiwan. (**Chen, S.F., Excellence Awards**).
42. Liu Y.C., Huang W.K., Chang C.F., Kao Y.T., Snyder, M., Hsu S.C., Li L. Y., Lee Y. H., Hwang, S.-M., Lin K.-Y., Wu, S.-C., Huang, H.-N. Chien, C.-H., Lu, F.L., Schuyler, S.C., Ma, N.-H., **Lu, J.\*** Apolipoprotein A-I Prevents osteoporosis and promotes osteogenesis of mesenchymal stem cells via STAT3, CXCL6, and CXCL8. 44th European Calcified Tissue Society Congress ECTS 2017. May13-16, 2017, Salzburg, Austria. (**Liu, Y.C., New Investigator Award**).
43. Lai P.L., Lin, H., Chen S.F., Huang, H C., **Lu, J.\*** Efficient Generation of Chemically Induced Mesenchymal Stem Cells from Human Dermal Fibroblasts. 10<sup>th</sup> Pan Pacific Symposium on Stem Cells and Cancer Research (PPSSC), Apr 15-16, Hualien, Taiwan. (**Lai, P.L, Gwo Xi Poster Award, USD 3,000**).
44. Chen S.F., Lai P.L., Lin, H., Huang, H. C., **Lu, J.\*** Optimization of chemical induced mesenchymal stem cells reprogrammed and rejuvenated from human somatic cells. 10<sup>th</sup> Pan Pacific Symposium on Stem Cells and Cancer Research (PPSSC), Apr 15-16, Hualien, Taiwan. (**Chen, S.F, Oral presentation**).
45. Chen S.F., Lai P.L., Lin, H., Huang, H. C., **Lu, J.\*** Efficient generation of chemically induced mesenchymal stem cells from human dermal fibroblasts. Joint Annual Conference of Biomedical Science

(JACBS), Mar, 25-26, 2017. (**Chen, S.F, Honorable Mentions, Oral presentation**).

46. Lai, P. L., Lin, H., Chen, S.F, Huang, H.C., **Lu, J.\*** Efficient generation of chemically induced mesenchymal stem cells from human dermal fibroblasts. Taiwan society for stem cell research (TSSCR) annual meeting, Oct 1, 2016, Taichung, Taiwan.
47. Chen, S.F, Lai, P. L., Huang, H.C., **Lu, J.\*** Optimized approaches for conversion induced mesenchymal stem cells from human fibroblasts with small molecules. Taiwan society for stem cell research (TSSCR) annual meeting, Oct 1, 2016, Taichung, Taiwan.
48. Wang, C.K., Yang, S.C., Huang, W.K., Chiu, J. J., Chen, Y.W., **Lu, J.\*** A novel gene enriched in cancer cells regulates oxidation/reduction and stemness pathways in stem cells. ISREC-SCCL Symposium 2016: Horizons of Cancer Biology and Therapy, Sept 07- 10, 2016, Lausanne, Swiss.
49. Lin, H., Lin, Y.T., Kao, Y.T., Wang, C.H., Wu, C.C., Lu, F. L., **Lu, J.\***. Nme6 and Nme7 simultaneously concurrently regulates eight key factors for mouse embryonic stem cell renewal and roles in early development. International society for stem cell research (ISSCR) annual meeting, June 22-25, 2016. San Francisco, USA.
50. Wang, C.K., Yang, S.C., Huang, W.K., Yang, B.C., Kuan, I. I., Wu, H. C., Yu, J., **Lu, J.\*** A novel gene regulates human embryonic stem cell renewal through GSH homeostasis. International society for stem cell research (ISSCR) annual meeting, June22-25, 2016. San Francisco, USA.
51. **Lu, J.\*** Lin, Y.T., Kao, Y.T., Ma, N. H., Wang, C.H., Wu, C.C. Nme6 concurrently regulates eight key factors for mouse embryonic stem cell renewal and is critical for embryonic development. Pluripotency: from basic science to therapeutic applications, Mar 22-24, 2016, Kyoto, Japan.
52. Liu, Y.C., Huang, W. K., Chang, C. F., Kao, Y. T., Snyder, M., Yang, S.C., Lin, K.Y., Wu, S.C., Hsu, S.C., Hwang, S.M., Li, L.Y., Huang, H.N., Chien, C.H., Lu, F.L, Schuyler, S.C., Ma, N., **Lu, J.\*** Apolipoprotein A-I prevents osteoporosis and promotes osteogenesis of mesenchymal stem cells via STAT3 and CXCLs. Taiwan Society for Stem Cell Research (TSSCR) annual meeting, Oct 16-17, 2015. Taipei, Taiwan. (**Liu, Y.C. Poster competition award honorable mentions**).
53. Lin, Y.T., Kao, Y.T., Wang, C.H., Wu, C.C., Liu, Y.C., Wang, C.K., Kuan, I.I., Wu, H.C., **Lu, J.\*** Functional screen identifies Nme6 is critical for maintenance of pluripotency in embryonic stem cell and embryonic development. International society for stem cell research (ISSCR) annual meeting, June23-27, 2015. Stockholm, Sweden. (**Lin, Y.T., ISSCR and MOST Travel award**).
54. Liu, Y.C., Kao, Y. T., Chang, C. F. Lin, K.Y., Wu, S.C., Hwang, S.M., Li, L.Y., Lu, F.L, Schuyler, S.C., Ma, N., **Lu, J.\*** Apolipoprotein A-I promotes osteogenesis of mesenchymal stem cells via STAT3, CXCL6, and CXCL8 International society for stem cell research (ISSCR) annual meeting, June23-27, 2015. Stockholm, Sweden. (**Liu, Y.C.,TSSCR Travel Award**).

55. Kuan, I.I., Liang, K. H, Wang, Y. P., Cheng, C.L., Yang, S.C., Lu, J., Wu, H.C\*. Epithelial cell adhesion molecular enhances reprogramming and pluripotency in induced pluripotent stem cells. International society for stem cell research (ISSCR) annual meeting, June23-27, 2015. Stockholm, Sweden.
56. Wang, C.K., Yang, S.C., Huang, W.K., Yang, B.C., Yu, J. Lu, J.\* Identification of a novel gene mediated human embryonic stem cell renewal through oxidation pathway. International society for stem cell research (ISSCR) annual meeting, June23-27, 2015. Stockholm, Sweden. (**Wang, C.K., MOST and NYMU Travel award).**
57. Wang, C.K., Yang, S.C., Huang, W.K., Bei-Chia Yang, B.C., Yu, J. Lu, J.\* Identification of a novel oxidation-related gene mediated hESC renewal from a high-throughput screen. Pan Pacific Symposium on Stem Cells and Cancer Research (PPSSC), April 11-13, 2015. Hsinchu, Taiwan.
58. Yang, S.C., Wang, C.K, Chen, W.J., Huang, W.K., Yang, B.C., Yu,J. Lu, J.\* Establish a shRNA functional screen in hESCs and reveal a novel method to generate NSCs. Pan Pacific Symposium on Stem Cells and Cancer Research (PPSSC), April 11-13, 2015. Hsinchu, Taiwan.
59. Liu, Y.C., Huang, W.K., Lin, K.Y., Wu, S.C., Hwang, S.M., Li, L.Y., Lu, F.L., Schuyler, S.C., Ma, N., Lu, J.\* Apolipoprotein A-I promotes osteogenesis of mesenchymal stem cells via STAT3, CXCL6, and CXCL8. Joint Annual Conference of Biomedical Science, March 21-22, 2015. Taipei, Taiwan. (**Liu, Y.C., Joint Annual Conference of Biomedical Science Poster Award-First prize).**
60. Yang, S.C., Wang, C.K, Chen, W.J., Huang, W.K., Yang, B.C., Yu,J. Lu, J.\* Efficiently Promote Human Embryonic Stem Cells Differentiation into Neural Stem Cells. Joint Annual Conference of Biomedical Science, March 21-22, 2015. Taipei, Taiwan. (**Yang, S.C., The Chinese society of cell and molecular biology- Best Poster Award).**
61. Wang, C.K., Yang, S.C., Huang, W.K., Yang, B.C., Yu,J. Lu, J.\* Identification of a novel gene mediated human embryonic stem cell renewal through oxidation pathway. Joint Annual Conference of Biomedical Science, March 21-22, 2015. Taipei, Taiwan.
62. Lu, J.\*, Liu, Y.C., Huang, W.K., Lin, K.Y., Lu, F.L., Wu, H.C. Apolipoprotein A-I enhances osteogenesis of mesenchymal stem cells and completely prevents the osteoporosis. International society for stem cell research (ISSCR) annual meeting, June18 - 21, 2014. Vancouver, Canada.
63. Liu, Y.C., Kao, Y.T., Huang, W.K., Lin, K.Y., Wu, S.C., Hsu, S.C., Li, L.Y., Schuyler, S.C., Lu, F.L., Lu, J.\* CCL5/RANTES is important for inducing osteogenesis of human mesenchymal stem cells. Taiwan Society for Stem Cell Research, Oct4, 2013, Taipei, Taiwan.
64. Wu, C.C., Wu, H.J., Wang, C.H., Lin, Y.T., Lu, J.\* Akt maintains mouse embryonic stem cell self-renewal by directly suppressing DLK activity. Taiwan Society for Stem Cell Research, Oct5-6, 2013, Taipei, Taiwan.

65. Yang, S.C., Wang, C.K., Huang, W.K., Yang, B.C, Yu, J., Lu, J.\* Establish a high throughput shRNA screen in human embryonic stem cells. Taiwan Society for Stem Cell Research, Oct5-6, 2013, Taipei, Taiwan.
66. Liu, Y.C., Lu, J.\* Apolipoprotein A-I promotes osteogenesis through STAT3 activation and prevents osteoporosis in the mouse model. International society for stem cell research (ISSCR) annual meeting, June12 - 15, 2013. Boston, USA.
67. Huang, H.N., Chen, S.Y., Hwang, S.M., Ma, N., Lu, F. L., Lu, J.\* miR-200c direct target GATA4 to regulate human embryonic stem cell renewal and differentiation, International society for stem cell research (ISSCR) annual meeting, June12 - 15, 2013. Boston, USA.
68. Chang, C.F., Hsu, K.H., Liao, J.J., Yang, C.Y., Li, C.L., Lu, J.\* Prospective isolation and characterization of multipotential mesenchymal stem cells and committed osteoprogenitor cells in mouse bone marrow. International society for stem cell research (ISSCR) annual meeting, June12 - 15, 2013. Boston, USA. (**Chang, C.F., T SSCR and NSC Travel Award**).
69. Huang, H.N., Chen, S.Y., Hwang, S.M., Lu, J.\* The crucial role of miR-200c for maintaining pluripotency and preventing differentiation through GATA4 pathway. International society for stem cell research (ISSCR) annual meeting, June13 - 16, 2012, Yokohama, Japan. (**Huang, H.N., ISSCR, TSSCR, and NSC Travel Award**).
70. Huang, H.N., Chen, S.Y., Hwang, S.M., Lu, J.\* The crucial role of miR-200c for maintaining pluripotency and preventing differentiation through GATA4 pathway. Asia-Pacific Development Biology conference, Oct5-8, 2012, Taipei, Taiwan.
71. Lin, Y.C., Wang, C.H., Ma, N., Wu, C.C., Hsiao, M., Lu, F.L., Yu, C.C., Chen, S.Y., Lu, J.\* Functional screen identifies Nme6 and Nme7 as vital roles of embryonic stem cell pluripotency and renewal. Asia-Pacific Development Biology conference, Oct5-8, 2012, Taipei, Taiwan.
72. Huang, H.N., Chen, S.Y., Hwang, S.M., Lu, J.\* The crucial role of miR-200c for maintaining pluripotency and preventing differentiation through GATA4 pathway. Taiwan Society for Stem Cell Research, Oct13-14, 2012, Kaohsiung, Taiwan.
73. Wang, C.H., Wu, H.J., Ma, N., Lin, Y.T., Lu, F.L., Lu, J.\* Identification of novel renewal factors of embryonic stem cells by analyzing the off-target effects of a shRNA functional screen. Taiwan Society for Stem Cell Research, Oct13-14, 2012, Kaohsiung, Taiwan.
74. Lin, Y.C., Wang, C.H., Ma, N.H., Wu, C.C., Hsiao, M., Lu, F.L., Yu, C.C., Chen, S.Y., Lu, J.\* A functional screen identifies Nme6 and Nme7 are critical regulators for embryonic stem cell pluripotency and renewal. Taiwan Society for Stem Cell Research, Oct13-14, 2012, Kaohsiung, Taiwan.
75. Wang, C.H., Ma, N.H., Lin, Y.C., Wu, C.C., Hsiao, M., Lu, F.L., Yu, C.C., Chen, S.Y., Lu, J.\* Systemic

identification of kinases/phosphatases vital for embryonic stem cell renewal/pluripotency. National Health Research Institutes, Aug 13-14, 2012, Miaoli County, Zhunan, Taiwan.

76. Liu, Y.C., Huang, H.N., Lu, J.\* Identify ApoA-1 as a positive regulator in osteogenesis. Taiwan Society for Stem Cell Research, Oct1-2, 2011, Taipei, Taiwan.
77. Wu, C.C., Wang, C.H., Lin, Y.T., Lu, J.\* DLK suppression of mouse embryonic stem cell renewal is inhibited by Akt. Taiwan Society for Stem Cell Research, Oct1-2, 2011, Taipei, Taiwan.
78. Lin, Y.T., Wang, C.H., Ma, N., Wu C.C., and Lu, J.\* A shRNA functional screening in embryonic stem cells reveals Nme signaling is crucial for stem cell renewal. Taiwan Society for Stem Cell Research, Oct1-2, 2011, Taipei, Taiwan.
79. Huang, H.N., Chen, S.Y., Hwang, S.M., Lu, J.\* Regulation of transcriptional factor GATA4 by miR-200c in human embryonic stem cells. Taiwan Society for Stem Cell Research, Oct1-2, 2011, Taipei, Taiwan.
80. Lu, J.\*, Wang, C.H., Ma, N, Lin, Y. T. Systemic identification of kinases/phosphatases vital for embryonic stem cell renewal/pluripotency. National Health Research Institutes, Aug 13-14, Miaoli County, Taiwan.
81. Liu, Y.C., Huang, H.N., Lu, J.\* Identify ApoA-1 as a positive regulator in osteogenesis. Taiwan Society for Stem Cell Research, Oct1-2, 2011, Taipei, Taiwan.
82. Wu, C.C., Wang, C.H., Lin, Y.T., Lu, J.\*. DLK suppression of mouse embryonic stem cell renewal is inhibited by Akt. Taiwan Society for Stem Cell Research, Oct1-2, 2011, Taipei, Taiwan.
83. Lin, Y.T., Wang, C.H., Ma, N.H., Wu C.C., and Lu, J.\* A shRNA functional screening in embryonic stem cells reveals Nme signaling is crucial for stem cell renewal. Taiwan Society for Stem Cell Research, Oct1-2, 2011, Taipei, Taiwan.
84. Huang, H.N., Chen, S.Y., Hwang, S.M., Lu, J.\* Regulation of transcriptional factor GATA4 by miR-200c in human embryonic stem cells. Taiwan Society for Stem Cell Research, Oct1-2, 2011, Taipei, Taiwan.
85. Wang, C.H., Ma, N, H., Wu, C.C., Lin, Y.T., Lu, J.\* A shRNA functional screening of kinase and phosphatase in ESC renewal. International society for stem cell research (ISSCR) annual meeting, June 15-18, 2011, Toronto, Canada.
86. Wang, C.H, Wu, C. C., Liao, I.H., and Lu, J.\* Identification of kinases and phosphatases crucial for mouse embryonic stem cell renewal by functional screening. International society for stem cell research (ISSCR) annual meeting, July 8-12, 2009, Barcelona, Spain.
87. Lu, J., Hou, R, Snyder, M. An April/BAFF Signal Is Important for Human Embryonic Stem Cell

Maintenance. International society for stem cell research (ISSCR) annual meeting, June 11-14, 2007, Philadelphia, Pennsylvania, USA.

88. Lu, J., Hou, R., Booth, C. J., Yang, S-H., Snyder, M. Identification of exogenous factors required for human embryonic stem cell self-renewal. International society for stem cell research (ISSCR) annual meeting, June 28-July 1, 2006, Toronto, Canada.

## **H. Invited talks**

1. The potential of stem cells in regenerative medicine. National Taiwan Normal University, Sep, 13, 2024
2. Human embryonic stem cell self-renewal signals- cholesterol and redox pathways. Chang Gung Memorial Hospital, Nov, 7, 2023. Linkou, Taiwan.
3. Embryonic stem cell self-renewal signals-PODXL/cholesterol. Taiwan Society for Stem Cell Research. Nov 2, 2023, Tainan, Taiwan.
4. Identification of signals critical for human embryonic stem cell renewal. Taipei Veterans General Hospital, Aug 30, 2022, Taipei, Taiwan
5. Human embryonic stem cell self-renewal signals. Academia Sinica. Jun 15, 2022, Virtual meeting.
6. Efficiently alter stem cell fates with druggable targets identified by high-throughput functional screens and the applications in translational medicine. Chung Yuan Christian University, Mar 17, 2022 Virtual meeting.
7. 生命關懷-幹細胞的美好世界. National Taiwan Normal University, Jun 17, 2021 Taipei, Taiwan
8. A high-throughput functional screen reveals human embryonic stem cell self-renewal signals. (keynote speech) GibcoTM 5 days of Stem Cells Virtual Event. Oct 12, 2020. Virtual meeting.
9. Efficiently alter stem cell fates with druggable targets identified by high-throughput functional screens and the applications in translational medicine. National Health Research Institutes. Oct, 3, 2019, Miaoli, Taiwan
10. Cell therapy in neurological diseases. Ministry of Science and Technology. 神經醫學學門與形態及生理醫學學門交流促進會議. Nov 17, 2018, Taipei, Taiwan.
11. The superiority of using Current Protocol for R&D. Wiley Research Forum: Biotec. Taiwan Research-based Biopharmaceutical Manufacturers Association. Oct 18, 2018, Taipei, Taiwan.
12. Identification of key factors regulate human stem cells renewal and differentiation by high throughput screens. National Health Research Institutes. Aug 15, 2018, Miaoli, Taiwan.
13. Efficiently alter stem/somatic cell fates by the combinations of key factors revealed by high-throughput functional screens. Taipei Medical University, Center for Cell Therapy and Regeneration Medicine (CCTR). May 23, 2018, Taipei, Taiwan
14. Alteration of Stem Cell Fates by Druggable Targets Pinpointed by High-Throughput Functional Screens. 2018 UW Madison-Academia Sinica Stem Cell & Regenerative Medicine Symposium--Bridging Basic Biology and Future Therapy, Mar 16, 2018, Taipei, Taiwan. Efficiently alter stem cell fates by druggable targets revealed by high-throughput functional screens. Kaohsiung Chang Gung Memorial Hospital. Mar 1, 2017, Kaohsiung, Taiwan.
15. Efficiently alter stem/somatic cell fates by the combinations of key factors revealed by high-throughput functional screens. Yang-Ming University. Mar 30, 2017. Taipei, Taiwan.
16. Efficiently alter stem cell fates by druggable targets revealed by high-throughput functional screens. National Health Research Institutes. Jan 9, 2017, Miaoli, Taiwan

17. Efficient regulation of stem cell renewal/differentiation/reprogramming by key factors pinpointed by high - throughput functional screens. Taiwan society for stem cell research (TSSCR) annual meeting, Oct 1, 2016, Taichung, Taiwan.
18. Identification of druggable targets for regenerative medicine by high throughput screens in stem cells. National Taiwan University, Department of life science. Sept 30, 2016, Taipei, Taiwan.
19. Have problems with your experiment? Try the cutting-edge recipes from Current Protocol! BioTaiwan Exhibition. July 22, 2016, Taipei, Taiwan
20. Identification of druggable targets for regenerative medicine by high throughput screens in stem cells. National Taiwan University, Department of laboratory clinical science and medical technology. Mar 4, 2016, Taipei, Taiwan
21. Efficiently alter stem cell and somatic cell fates with druggable targets identified by high throughput functional screens and the applications in translational medicine. Shuang Ho Hospital, Feb 12, 2016. New Taipei, Taiwan.
22. Efficiently alter stem cell fates by the combinations of key factors revealed by functional screens. Institute of stem cell and translational cancer research of Chang Gung Memorial Hospital, Feb, 4, 2016. Linkou, Taiwan.
23. Efficient generation of neuroectoderm or oligodendrocyte lineage cells from human embryonic stem cells or skin cells. Retreat of TIGP-interdisciplinary Neuroscience. Jan 30, 2016. Tainan, Taiwan.
24. Identification of key regulators for stem cell renewal and differentiation by high throughput functional screens. Third annual 24 Hours of Stem Cells, Thermo fisher, Dec, 3, 2015.
25. Efficiently alters the cell fates of stem cells and somatic cells for disease modeling and treatments. National Defense Medical Center. Nov. 11, 2015, Taipei, Taiwan.
26. Efficiently direct the cell fates of stem cells and somatic cells for disease treatments. Department of Life Sciences, Tzu Chi University. Sept. 30, 2015, Hualien, Taiwan..
27. Efficiently triggers stem cell differentiation and somatic cell dedifferentiation by multiple key regulators. College of medicine, National Taiwan University, Aug. 24, 2015, Taipei, Taiwan
28. Current Protocols: the fine art of experimentation. BioTaiwan Exhibition. July. 23, 2015, Taipei, Taiwan.
29. Systematic gain-of-function and loss-of-function screens in stem cells. National Taiwan University. Jan. 21, 2015, Taipei, Taiwan.
30. Gain-of-function and loss-of-function screens in stem cells. Genomics Research Center, Academia Sinica. Oct. 30, 2014 Taipei, Taiwan
31. Cell fate determination in stem cells by functional screens and smart guess. National Taiwan Normal University, Jul.12, 2014, Taipei, Taiwan.
32. Function screens in stem cells reveal key determinates of stem cell fate. 4<sup>th</sup> World Congress on Cell Science and Stem Cell Research, Jun. 25, 2014, Valencia, Spain.
33. Systematic gain-of-function and loss-of-function screens in stem cells. Mackay Memorial Hospital, May. 18, 2014, Taipei, Taiwan.
34. Nme6 and Nme7 is essential for mouse embryonic stem cell renewal. International society for stem cell research (ISSCR) annual meeting, Jun. 16, 2012, Yokohama, Japan
35. Functional screening in stem cells. National Taiwan University, Mar. 31, 2011, Taipei, Taiwa
36. Stem cells. Taipei Biotech Association, Nov. 25, 2010, Taipei, Taiwan.
37. Stem cells. Department of Health, Executive Yuan, Sept. 28, 2010, Taipei, Taiwan

38. Functional screening in stem cells. Industrial Technology Research Institute, June 4, 2010, Hsinchu, Taiwan.
39. Functional screening in stem cells. Academia Sinica, Aug. 18, 2009, Taipei, Taiwan.
40. Functional screening of regulators mediates stem cell renewal and differentiation. Tunghai University. June 3, 2009, Taichung, Taiwan
41. Identification of embryonic stem cell self-renewal signals by systematically functional screening. International Symposium of Stem Cells and Bioengineering. Taiwan Society for Stem Cell Research. May 16, 2009, Tainan, Taiwan.
42. Stem Cell and Cardiovascular Biology Seminar Series. Stem Cell Research Center, National Health Research Institutes. Nov. 9, 2007, Miaoli, Taiwan.
43. "Stem cell? Stem cell!" Open House, Academia Sinica. Oct 19, 2007, Taipei, Taiwan.
44. Defined culture condition for human embryonic stem cells. Annual Meeting of Taiwan Society for Reproductive Medicine. Aug. 25, 2007, Taipei, Taiwan.
45. Human embryonic stem cell self-renewal mechanism. Biology Retreat 2007 溪頭夏令營, Aug 24, 2007, Nantou, Taiwan.

### **I. Teaching**

Various lectures in stem-cell biology and technology at National Taiwan University, National Yang-Ming University, National Chung-Kung University, National Central University, Chung-Hsing University, Tunghai University, Tzu Chi University, China Medical University, and Chung Shan Medical University.