도 정 태

Department of Stem Cell and Regenerative Biotechnology,
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Education

B.S.	Kon-Kuk University, Seoul, Korea	Animal Science	1996
M.S.	Kon-Kuk University, Seoul, Korea	Reproductive Physiology	1998
Ph. D.	Kon-Kuk University, Seoul, Korea	Reproductive Physiology	2002

Professional experience

2002-2004 Post doc fellow, Center for Animal Transgenesis and Germ Cell Research, University of Pennsylvania

2004-2009 Post-doc fellow, Max-Planck Institute for Molecular Biomedicine

2009-2012 Assistant professor, Department of Biomedical Science, CHA University

2012-2014 Assistant professor, Department of Animal Biotechnology, Konkuk University

2014-2016 Associate professor, Department of Animal Biotechnology, Konkuk University

2016-2019 Associate professor, Department of Stem Cell and Regenerative Biotechnology, Konkuk University

2019-present Professor, Department of Stem Cell and Regenerative Biotechnology, Konkuk University

Community service

- Editorial Board, Reproductive and Developmental Biology 2010-present
- Editorial Board, Scientific Reports (Nature Publishing Group) 2014-present
- Editorial Board, International Journal of Stem Cells 2016-present
- Secretary of Academic Affair Committee, Korean Society of Animal Reproduction 2017-present

[Recent papers since 2017]

1. Park HJ, Lee WY, Do JT, Park C, Song H. (2021. 5. 1.). Evaluation of testicular toxicity upon fetal exposure to bisphenol A using an organ culture method. Chemosphere. 270:129445. doi: 10.1016/j.chemosphere.2020.129445.

2. Han MJ, Lee WJ, Choi J, Hong YJ, Uhm SJ, Choi Y, Do JT. (2021. 2. 1). Inhibition of neural stem cell aging through the transient induction of reprogramming factors. Journal of Comparative Neurology. 529(3):595-604. doi: 10.1002/cne.24967.

3. Won Ji Lee, Jeong Eon Lee, Yean Ju Hong, Sang Hoon Yoon, Hyuk Song, Chankyu Park, Kwonho Hong, Youngsok, Choi, Jeong Tae, Do. (2020. 12. 1). Generation of brain organoids from mouse ESCs via teratoma formation. Stem Cell Research. 49:102100. doi:10.1016/j.scr.2020.102100

4. Ryu MJ, Seo BJ, Choi YJ, Han MJ, Choi Y, Chung MK, Do JT. (2020. 11. 1). Mitochondrial and Metabolic Dynamics of Endometrial Stromal Cells During the Endometrial Cycle. Stem Cells and Development 29(21):1407-1415. doi: 10.1089/scd.2020.0130.

5. Gurunathan S, Qasim M, Choi Y, Do JT, Park C, Hong K, Kim JH, Song H. (2020. 8. 21). Antiviral Potential of Nanoparticles-Can Nanoparticles Fight Against Coronaviruses? Nanomaterials. 10(9):1645. doi: 10.3390/nano10091645.

6. Seo BJ, Choi J, La H, Babib O, Choi Y, Hong K, Do JT. (2020. 9. 1). Role of mitochondrial fission-related genes in mitochondrial morphology and energy metabolism in mouse embryonic stem cells. Redox Biology. 36:101599. doi: 10.1016/j.redox.2020.101599

7. Park HJ, Zhang M, Lee WY, Hong KH, Do JT, Park C, Song H. (2020. 5. 15). Toxic Effects of Nonylphenol on Neonatal Testicular Development in Mouse Organ Culture. International Journal of Molecular Science. 21(10):E3491. doi: 10.3390/ijms21103491.

8. Yoon SH, Choi J, Lee WJ, Do JT. (2020. 3. 31). Genetic and Epigenetic Etiology Underlying Autism Spectrum Disorder. Journal of Clininical Medicine. 9(4):966. doi: 10.3390/jcm9040966.

9. Choi J, Seo BJ, La H, Yoon SH, Hong YJ, Lee JH, Chung HM, Hong K, Do JT. (2020. 2. 1). Comparative analysis of the mitochondrial morphology, energy metabolism, and gene expression signatures in three types of blastocyst-derived stem cells. Redox Biology. 30:101437. doi: 10.1016/j.redox.2020.101437.

10. Lee JE, Seo BJ, Han MJ, Hong YJ, Hong K, Song H, Lee JW, Do JT. (2020. 1. 28). Changes in the expression of mitochondrial morphology-related genes during the differentiation of murine embryonic stem cells. Stem Cells International. Volume 2020. Article ID: 9369268. doi:

10.1155/2020/9369268.

12. Gurunathan S, Jeyaraj M, La H, Yoo H, Choi Y, Do JT, Park C, Kim JH, Hong K. (2020. 1. 9). Anisotropic Platinum Nanoparticle-Induced Cytotoxicity, Apoptosis, Inflammatory Response, and Transcriptomic and Molecular Pathways in Human Acute Monocytic Leukemia Cells. International Journal of Molecular Science. 21(2): pii: E440. doi: 10.3390/ijms21020440.

13. Yoo H, Lee YJ, Park C, Son D, Choi DY, Park JH, Choi HJ, La HW, Choi YJ, Moon EH, Saur D, Chung HM, Song H, Do JT, Jang H, Lee DR, Park C, Lee OH, Cho SG, Hong SH, Kong G, Kim JH, Choi Y, Hong K. (2020. 1. 6). Epigenetic priming by Dot1l in lymphatic endothelial progenitors ensures normal lymphatic development and function. Cell Death & Disease. 11(1):14. doi: 10.1038/s41419-019-2201-1.

14. Shin WJ, Seo JH, Choi HW, Hong YJ, Lee WJ, Chae JI, Kim SJ, Lee JW, Hong K, Song H, Park C, Do JT. (2019. 12. 15). Derivation of primitive neural stem cells from human induced pluripotent stem cells. Journal of Comparative Neurology. 572(18):3023-3033. doi: 10.1002/cne.24727.

15. Hong YJ, Do JT. (2019. 12. 6). Neural Lineage Differentiation From Pluripotent Stem Cells to Mimic Human Brain Tissues. Frontiers in Bioengineering and Biotechnology. 7:400. doi: 10.3389/fbioe.2019.00400.

16. Seo BJ, Jang HS, Song H, Park C, Hong K, Lee JW, Do JT. (2019. 10. 31). Generation of Mouse Parthenogenetic Epiblast Stem Cells and Their Imprinting Patterns. International Journal of Molecular Science. 20(21). pii: E5428. doi: 10.3390/ijms20215428.

17. Gurunathan S, Arsalan Iqbal M, Qasim M, Park CH, Yoo H, Hwang JH, Uhm SJ, Song H, Park C, Do JT, Choi Y, Kim JH, Hong K. (2019. 7. 2). Evaluation of Graphene Oxide Induced Cellular Toxicity and Transcriptome Analysis in Human Embryonic Kidney Cells. Nanomaterials. 9(7). pii: E969.

18. Seo BJ, Yoon SH, Do JT. (2018. 12. 01). Mitochondrial Dynamics in Stem Cells and Differentiation. International Journal of Molecular Science. 19(12). pii:E3893.

19. Zhang X, Kim GJ, Kang MG, Lee JK, Seo JW, Do JT, Hong K, Cha JM, Shin SR, Bae H. (2018. 12. 4). Marine Biomaterial-Based Bioinks for Generating 3D Printed Tissue Constructs. Mar Drugs. 16(12): E484.

20. Hong YJ, Hong K, Byun S, Choi HW, Do JT. (2018. 10. 01). Reprogramming of Extraembryonic Trophoblast Stem Cells into Embryonic Pluripotent State by Fusion with Embryonic Stem Cells. Stem Cells and Development. 27(19):1350-1359.

21. Kim AY, Lee EM, Lee EJ, Kim JH, Suk K, Lee E, Hur K, Hong YJ, Do JT, Park S, Jeong KS. (2018. 08. 30). SIR2 is required for efficient reprogramming of mouse embryonic fibroblsts toward pluripotency. Cell Death and Disease. 9(9):899.

22. Huh S, Song HR, Jeong GR, Jang H, Seo NH, Lee JH, Yi JY, Lee B, Choi HW, Do JT, Kim JS, Lee SH, Jung JW, Lee T, Shim J, Han MK, Lee TH. (2018. 02.23). Suppression of the ERK-SRF axis facilitate somatic cell reprogramming. Experimental Molecular Medicine. 50(2):e448.

23. Park HJ, Lee R, Lee WY, Kim JH, Do JT, Park C, Song H. (2017. 10. 01). Stage-specific expression of Sal-like protein 4 in boar testicular germ cells. Theriogenology. 101:44-52.

24. Le TM, Le QVC, Truong DM, Lee HJ, Choi MK, Cho H, Chung HJ, Kim JH, Do JT, Song H, Park C. (2017. 08. 16). β2-microglobulin gene duplication in cetartiodactyla remains intact only in pigs and possibly confers selective advantage to the species.PLoS One. 12(8):e0182322.

25. Lee WY, Lee R, Park HJ, Do JT, Park C, Kim JH, Jhun H, Lee JH, Hur T, Song H. (2017. 07. 01). Characterization of male germ cell markers in canine testis. Animal Reproduction Science. 182:1-8.

26. Jang HS, Shin WJ, Lee JE, Do JT.(2017. 05. 23). CpG and Non-CpG Methylation in Epigenetic Gene Regulation and Brain Function. Genes. 8(6):E148.

27. Kim BJ, Kim YH, Lee YA, Jung SE, Hong YH, Lee EJ, Kim BG, Hwang S, Do JT, Pang MG, Ryu BY (2017. 05. 02). Platelet-derived growth factor receptor-alpha positive cardiac progenitor cells derived from multipotent germline stem cells are capable of cardiomyogenesis in vitro and in vivo. Oncotarget. 8(18): 29643-29656.

28. Seo BJ, Hong YJ, Do JT. (2017. 03. 03). Cellular Reprogramming Using Protein and Cell-Penetrating Peptides. International J Molecular Science. 18(3):E552.

29. Kim JS, Hong YJ, Choi HW, Song H, Byun SJ, Do JT. (2017. 01. 27) Generation of in vivo neural stem cells using partially reprogrammed cells defective in in vitro differentiation potential. Oncotarget. 8(10):16456-46462.

30. Choi HW, Hong YJ, Kim JS, Song H, Cho SG, Bae H, Kim C, Byun SJ, Do JT. (2017. 01. 31). In vivo differentiation of induced pluripotent stem cells into neural stem cells by chimera formation. PLoS One. 12(1):e0170735.