

Methichit

WATTANAPANITCH Ph.D.



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Dr. Methichit is an Associate Professor at Siriraj Center for Regenerative Medicine (SiCRM), Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand. She is interested in developing cell-based therapy for regenerative medicine and studying disease pathogenesis using patient-specific stem cells. She is also use genome engineering strategy to correct genetic mutations or enhance the functions of the cells to develop new therapeutic approaches to treat degenerative diseases, genetic diseases, infectious diseases as well as cancers.

EDUCATION

- **2010** : Ph.D. Psychiatry (Stem cell biology), University of New South Wales, Sydney, Australia
- **2005** : B.Sc. (Biotechnology), First Class Honors, University of New South Wales, Sydney, Australia

EXPERTISE

- Generation of patient-specific induced pluripotent stem cells (iPSCs)
- Differentiation of PSCs to blood cells
- Genome editing

OTHERS

- Committee, Molecular Genetics Network, Genetics Society of Thailand
- Member, Genetics Society of Thailand
- Committee, Thai Society for Stem Cell Research
- Associate Member, International Society for Stem Cell Research

ACADEMIC APPOINTMENTS

- **2022 - present** : Associate Professor, Research Department, Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand
- **2018 - 2022** : Assistant Professor, Research Department, Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand
- **2017 - present** : Principal investigator, Siriraj Center of Regenerative Medicine, Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand
- **2015 - 2018** : Lecturer, Research Department, Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand
- **2010 - 2015** : Senior Researcher, Siriraj Center of Excellence for Stem Cell Research (SiSCR), Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand

AWARDS AND HONORS

- **2022** : Siriraj Award of Honor 2022, Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand
- **2021** : Research Excellence Award for Preclinical Research 2021, Faculty of Medicine Siriraj Hospital, Mahidol University
- **2019** : Research Excellence Award for Young Investigator 2019, Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand

SELECTED PUBLICATIONS

1. cWattanapanitch, M., Chailangkarn, T., Miranda, H.C., Muotri, A.R. 2023. Editorial: Advances in iPSC technology for disease modeling and therapeutic applications. *Frontiers in Cell and Developmental Biology*. 11: 1261279.
2. Thongsin, N., Suwanpitak, S., Wattanapanitch, M. 2023. CRISPR-Cas9-mediated disruption of B2M and CIITA genes eliminates HLA class I and II expression in human induced pluripotent stem cells (MUSi001-A-2). *Stem Cell Research*. 71: 103138.
3. Kaewboonlert, N., Wattanapanitch, M., Praditsap, O., Deejai, N., Chanprasert, C., Sawasdee, N., Nettuwakul, C., Wanachiwawan, W., Sritippayawan, S., Thamtarana, P.J., Yenchitsomanus, P.T., Rungroj, N. 2023. An induced pluripotent stem cell line (MUSi019-A) generated from a patient with distal renal tubular acidosis carrying a compound heterozygous mutation in solute carrier family 4 member 1 (SLC4A1) gene. *Stem Cell Research*. 67: 103043.