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[Stem Cell] Research of Anti-Cancer Induced Pluripotent Stem Cell Generation and Reprogramming Will Further Develop Back in Taiwan

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[Stem Cell] Research of Anti-Cancer Induced Pluripotent Stem Cell Generation and Reprogramming Will Further Develop Back in Taiwan (Chinese Version)

The Liberty Times (2010/10/10) & udn.com (2010/10/11) Dr. Shi-Lung LIN, the distinguished alumnus of Chung Shan Medical University residing in the U.S., who succeeded in developing as well as taking out a medical patent from his novel method of introducing intronic microRNA (RNAi) to induce cells into pluripotent stem cell like the Mir-302-Induced Pluripotent Stem Cell in 2008. The method can be applied to anti-cancer treatments and its potential for further development and application is boundless. Chung Shan Medical University hopes to introduce this method back in Taiwan, while Professor Dr. Shi-Lung LIN addresses that in two years he will move the whole lab. team at the University of Southern California to Taiwan. Quoting his words: "the research result must root in Taiwan."

Chung Shan Medical University held a conference on stem cell on October 10, during which the school alumnus Dr. Shi-Lung LIN, who teaches as a professor at the University of Southern California now, participated in the event. He said, the technology to induce stem cells was initialized by Japanese researchers at first, who used four induction-genes, two of which are oncogenes and may cause cancers. Later, Korean researchers discovered the Mir-302 RNA in human embryo, and Dr. LIN introduced Mir-302 in skin cells and succeeded in inducing the Mir-302-induced pluripotent stem cell. This kind of induced pluripotent stem cell does not have the potential to cause cancer, while, besides, this technology can reproduce and reprogram pluripotent stem cells bypassing embryonic extraction. Hence, the method received wide academic recognition and get patented.

Shi-Lung LIN has already begun consulting with several institutes in Taiwan which are in possession of umbilical cord bank. Dr. Tai-yuan LIN, Secretary-General of Taiwan Society for Stem Cell Research said, the integration of stem cell technology and tissue engineering can greatly help with organ transplantation. There have been cases in the globe to transplant tissues developed from the patients' own tissues so that they do not need anti-rejection drugs. He believes, the research domain of stem cell is one of the domains in which Taiwan will play a leading role in the world.

## Related Historical Messages:

[Stem Cell] NHRI Presents Innovating iPSCs Generation Process, Producing Nononcogenic Stem Cells 2010/08/13 [Medicine] NTU Establishes Research Center for Developmental Biology and Regeneration Medicine 2010/07/29 [Medicine] The Stem Cell and Regeneration Medicine Research Team of China Medical University in Line with International Norm 2010/05/19

[Biomedical Engineering] Cheng-An Lin, the First Local Schlar interviewed by 《Nature》 2010/04/20 [Medicine] The Molecular Mechanism of the Maternal-fetal Blood Group Relationship Unfolded, NTU Research Team's Result Published in 《Blood》 2010/03/16

Further Information: The Liberty Times 2010/10/10 (Chinese) Udn.com 2010/10/11 (Chinese)
National Science Council International Cooperation Sci-Tech Newsbrief
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