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Professor Tzeng is currently Dean of College of Medicine at Taipei Medical University (TMU) since 2004, and chairman of Obstetrics and Gynecology at TMU since 1992. He graduated from the School of Medicine at Taipei Medical University from 1969 to 1976 and later obtained the master degree of Public Health in Maternal and Child Health from Harvard School of Public Health from 1980 to 1981. He completed his fellowship training in Department of Obstetrics and Gynecology at Brigham and Women's Hospital which is affiliated to Harvard Medical School from 1981 to 1983. Prof. Tzeng has undertaken two pioneering works in Taiwan, the first Test Tube baby in 1985 and the first Mitochondria Transfer in 2002, respectively.

Prof. Tzeng has been received numerous honors and awards such as Prize Poster Awards of Annual Meeting of European Society of Human Reproduction & Embryology (ESHRE) both in Switzerland (2001) and in Spain (2003); also the Prize Poster Awards of the 4th Conference of the Pacific Rim Society for Fertility and Sterility (PRSFS) in Japan, 2004. He was President of the Taiwan Society for Reproductive Medicine from 1996-1998. He served the Board of Organization Committee in 1996 of the Pacific Rim Society for Fertility and Sterility in Haiwaii, then in 2002, he was further committed to organize the 3rd Conference of The Pacific Rim Society for Fertility and Sterility (PRSFS) in Taipei. Lately, he was appointed to serve in the Board of Advisory Committee for The International Ovarian Conference in Japan in 2004 and 2005.

As Prof. Tzeng is free, he enjoys to be engaged in arts, architecture, reading, oil painting collection and internet for updated information. He is the counselor of Taipei Sinfornietta and Philharmonic Orchestra (the leading orchestra in Taiwan). For him, time is never enough. Nevertheless, he always can make the best use of it.

2004-now	Dean	Taipei Medical University, College of Medicine
2003-2004	Associate Dean	Taipei Medical University, College of Medicine
2002-2003	Director	Taipei Medical University, School of Medicine
1994-now	Director	Taipei Medical University, Reproductive Medicine & Science
1993-now	Professor & Chairman	Taipei Medical University, Obstetrics and Gynecology
1987-1991	Associate Professor	National Yang-Ming University, Obstetrics and Gynecology Taipei, Taiwan
1983-1990	Attending Physician	Veterans General Hospital, Obstetrics and Gynecology, Taipei,

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1981-1983	Research Fellow	Brigham & Women's Hospital/Harvard Medical School, USA Fertility & Endocrinology
1980-1981	M.P.H.	Maternal and Child Health, Harvard School of Public Health, USA
1978-1980	Resident	Taipei Medical University, Obstetrics and Gynecology, Hospital, Taipei, Taiwan
1969-1976	M.D.	Taipei Medical University, School of Medicine, Taiwan

The Use of Microarray in Reproductive Medicine

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The development of the cDNA microarray has been well-established and made this technique more reliable and available in the recent years. Lots of cDNA microarray-related studies have been published not only in field of basic studies, but also in clinical applications. During the past five years (2000~2005), the cDNA microarray has been used in reproductive medicine, including our group. We have some successful experiences in handing this technique, especially in several infertility-related subjects (pre-implantation embryo development, placental development, endometriosis, myoma...etc.).

In our previous study, the cDNA microarray was used to identify the differentially expressed gene profiles between deciduas endometrium and chorionic villi in the first trimester placenta. We have found that forty-nine genes (include cathepsin L) were expressed higher in deciduas; and seventy-five genes (include LIF-R) were expressed dominantly in chorionic villi via the human 9,600 cDNA microarray[1]. This result might be very helpful to understand the cross-talk between deciduas endometrium and chorionic villi during placenta development.

In the studies of endometriosis and myoma, several candidate genes have been identified via incorporating the clinical observation and cDNA microarray technique. The genes might be useful not only in improving our knowledge about the pathological mechanisms of these diseases, but also in clinical diagnosis, drugs development targets, and prognosis of treatment[2-4].

Otherwise, to study the gene expression-related embryo hatching in pre-implantation embryo development, we integrated the technologies of RNA amplification and microarray to over-come the trace amount of the RNA samples. According to cDNA microarray data, we have identified 85 genes that were expressed higher in hatched blastocyst as comparing with pre-hatched blastocyst. These genes including: cell adhesion and migration molecules, epigenetic regulators, stress response regulators, immuno-response regulators. This work provides the information for studying the mechanisms of blastocyst hatching and implantation, and also they might be useful as the new drug targets for controlling fertility[5].

Recently, several other new techniques (gene transfect, shRNA, 2-D electrophoresis, MALDI-TOF/MS) have also been established, and our mission will be in studying the functional genomics and protenomics in reproductive medicine in the coming future.

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