

## Publications:

### Journal articles (2010/01 ~ Present; \*corresponding or first author)

1. Huang-Kai Kao, Hsiang-Hao Hsu, Wen-Yu Chuang, Sheng-Chih Chen, Bin Chen, **Shinn-Chih Wu\***, **Lifei Guo\***. 2016. External Volume Expansion Modulates Vascular Growth and Functional Maturation in a Swine Model. Scientific Reports (final revision) (SCI, 5-year impact factor=5.597, and ranking on top 8.77%=5/57, based on 2014 JCR, subject categories of multidisciplinary sciences)
2. Guan-Yu Xiao, Chun-Chun Cheng, Yih-Shien Chiang, Winston Cheng, I-hsuan Liu, **Shinn-Chih Wu\***. 2016. Exosomal miR-10a derived from amniotic fluid stem cells preserves ovarian follicles after chemotherapy. Sci Rep. 2016 Mar 16;6:23120. doi: 10.1038/srep23120. Online published (in press) (SCI, 5-year impact factor=5.597, and ranking on top 8.77%=5/57, based on 2014 JCR, subject categories of multidisciplinary sciences)
3. Yuan-Hung Liu, Ling-Ping Lai, Shih-Yun Huang, Yi-Shuan Lin, **Shinn-Chih Wu**, Chih-Jen Chou & Jiunn-Lee Lin. 2016. Developmental origin of postnatal cardiomyogenic progenitor cells. Future Science OA ( FASO)120 in press
4. Chuang-Hsin Chiu, I-Hsun Li, Shao-Ju Weng, Yuahn-Sieh Huang, **Shinn-Chih Wu**, Ta-Kai Chou, Wen-Sheng Huang, Mei-Hsiu Liao, Chyng-Yann Shiue, Cheng-Yi Cheng, Kuo-Hsing Ma. 2016. PET Imaging of Serotonin Transporters With 4-[<sup>18</sup>F]-ADAM in a Parkinsonian Rat Model With Porcine Neural Xenografts. Cell Transplantation 25 301-311. (SCI: IF=3.257, ranking on top 30.89%=38/123, based on 2014 JCR; subject categories of medicine, research & experimental).
5. Kuang-Hsing Chiang, Wan-Li Cheng, Chun-Ming Shih, Yi-Wen Lin, Nai-Wen Tsao, Yung-Ta Kao, Chih-Ting Lin, Shinn-Chih Wu, Chun-Yao Huang, and Feng-Yen Lin. 2015. Statins, HMG-CoA Reductase Inhibitors, Improve Neovascularization by Increasing the Expression Density of CXCR4 in Endothelial Progenitor Cells. PLoS One 10(8): e0136405. (SCI, 5-year impact factor=3.702, and ranking on top 15.79%=9/57, based on 2014 JCR, subject categories of multidisciplinary sciences)
6. Lin, Kun Yi, Shao-Yu Peng, Chih-Jen Chou, Chia-Chu Wu, **Shinn-Chih Wu\***. 2015. Engraftment of mouse amniotic fluid-derived stem cells after in utero transplantation in mice. Journal of the Formosan Medical Association 2014 May 26 published online. 114: 1105-1115. (SCI, 5-year impact factor =1.602, Ranking on top 42.86% =66/154, based on 2014, JCR, subject categories of medicine, general & internal)

7. Chia-Chun Chang, Wei-Cheng Lin, Li-Mei Pai, Hsuan-Shu Lee, **Shinn-Chih Wu**, Shih-Torng Ding, Ji-Long Liu, Li-Ying Sung. 2015. Cytoophidium assembly reflects upregulation of IMPDH activity. 2015. *J. Cell. Sci.* 2015 October 1; 128(19): 3550–3555. (SCI: IF=5.999, ranking on top 22.28%=41/184, based on 2014 JCR; subject categories of cell biology).
8. Chiu C. H. I. H. Li, S. J. Weng, Y. S. Huang, **S. C. Wu**, T. K. Chou, W. S. Huang, M. H. Liao, C. Y. Shiue, C. Y. Cheng, K. H. Ma. *Cell Transplant.* 2015. PET imaging of serotonin transporters with 4-[<sup>18</sup>F]-ADAM in a Parkinsonian rat model with porcine neural xenografts. (In press) (SCI: IF=3.257, ranking on top 30.89%=38/123, based on 2014 JCR; subject categories of medicine, research & experimental).
9. Peng, Shao-Yu, Yu-Sheng Yang, Chih-Jen Chou, Kun-Yi Lin and **Shinn-Chih Wu\***. 2015. Differentiation of enhanced green fluorescent protein-labeled mouse amniotic fluid-derived stem cells into cardiomyocyte-like beating cells. *Acta Cardiologica Sinica* 31: 209-214. (SCI, 5-year impact factor =0.629, Ranking on top 88.62% =109/123, based on 2014, JCR, subject categories of cardiac and cardiovascular system).
10. Shen, C. J., Y. A. Tsou, H. L. Chen, H. J. Huang, **S. C. Wu**, W. T. K. Cheng, H. L. Chen, C. Y. C. Chen, and C. M. Chen\*. 2014. Osteoponin promoter controlled by DNA methylation: Aberrant methylation in cloned porcine genome. *BioMed. Res. Int.* 2014: e327538. (SCI, 5-year impact factor =1.593, Ranking on top 67.48%=110/163, based on 2014, JCR, subject categories of Biotechnology & Applied Microbiology)
11. Chang, Wen-Chang, **Shinn-Chih Wu**, Kun-Di Xu, Bo-Chieh Liao, Jia-Feng Wu, and An-Sheng Cheng\*. 2015. Scopoletin Protects against Methylglyoxal-Induced Hyperglycemia and Insulin Resistance Mediated by Suppression of Advanced Glycation Endproducts (AGEs) Generation and Anti-Glycation. *Molecules* 20(2):2786-2801; doi:10.3390/molecules20022786 Received: 28 October 2014 / Accepted: 3 February 2015 / Published: 9 February 2015 (SCI, 5-year impact factor =2.791, Ranking on top 27.59% =16/58, based on 2014, JCR, subject categories of chemistry and organic).
12. Chang, Wei-Fang , Jie Xu, Chia-Chun Chang, Shang-Hsun Yang, Hsin-Yang Li, Hsiu Mei Hsieh-Li, Mong-Hsun Tsai, **Shinn-Chih Wu**, Winston T. K. Cheng, Ji-Long Liu, Li-Ying Sung. 2015. SMN is required for the maintenance of embryonic stem cells and neuronal differentiation in mice. *Brain Structure and Function* 220(3):1539-1553.(SCI, 5-year impact factor =6.935 Ranking on top 4.76% =1/21, based on 2014, JCR, subject categories of anatomy and morphology).

13. Peng, Shao-Yu, Chih-Jen Chou, Tse-Yang Tseng, Winston Teng-Kui Cheng, Po-Jen Cheng, S.W. Steven Shaw, **Shinn-Chih Wu**.\* 2015. Intramuscular transplantation of pig amniotic fluid derived progenitor cells has therapeutic potential in a mouse model of myocardial infarction. *Cell Transplantation* 24(6):1003-1012. (SCI: IF=3.257, ranking on top 30.89%=38/123, based on 2014 JCR; subject categories of medicine, research & experimental).
14. Chou, Chih-Jen, Shao-Yu Peng, Cho-Hua Wan, Sou-Fu Chen, Winston Teng-Kui Cheng, Kun-Yi Lin, and **Shinn-Chih Wu**.\*. 2015. Establishment of a DsRed-Monomer-Harboring ICR Transgenic Mouse Model and Effects of the Transgene on Tissue Development. *Chinese Journal of Physiology* 58(1):27-37. (SCI, 5-year impact factor =1.114, Ranking on top 87.95% =73/83, based on 2014, JCR, subject categories of physiology).
15. Lin, Y. S., C. C. Yang, C. C. Hsu, J. T. Hsu, **S. C. Wu**, C. J. Lin, W. T. K. Cheng. 2015. Establishment of a novel, eco-friendly transgenic pig model using porcine pancreatic amylase promoter-driven fungal cellulase transgenes. *Transgenic research* 24(1):61-71. (SCI, 5-year impact factor =2.208, Ranking on top 46.01% =75/163, based on 2014, JCR, subject categories of biotechnology & applied microbiology).
16. Xiao, Guan-Yu, I-Hsuan Liu, Chun-Chun Cheng, Chia-Chun Chang, Yen-Hua Lee, Winston Teng-Kuei Cheng, and **Shinn-Chih Wu**.\*. 2014. Amniotic Fluid Stem Cells Prevent Follicle Atresia and Rescue Fertility of Mice with Premature Ovarian Failure Induced by Chemotherapy. *PLoS One* 9: e106538 (SCI, 5-year impact factor=3.702, and ranking on top 15.79%=9/57, based on 2014 JCR, subject categories of multidisciplinary sciences)
17. Chou C. J., S. Y. Peng, M. H. Wu, C. C Yang, Lin Y. S., W. T Cheng., **S. C. Wu**\*, Y. P. Lin\*. 2014. Generation and characterization of a transgenic pig carrying a dsred-monomer reporter gene. *PLoS One* 9(9):e106864. (SCI, 5-year impact factor=3.702, and ranking on top 15.79%=9/57, based on 2014 JCR, subject categories of multidisciplinary sciences)
18. Liu Y.C., Kao Y.T., Huang W.K., Lin K.Y., **Wu S.C.**, Hsu S.C., C. Schuyler S., Li L.Y., Leigh Lu F., Lu J. 2014. CCL5/RANTES is important for inducing osteogenesis of human mesenchymal stem cells and is regulated by dexamethasone. *Bioscience Trends* 8(3):138-43. (SCI, 5-year impact factor =1.614, Ranking on top 48.24% =41/85, based on 2014, JCR, subject categories of biology).
19. Liao, Hung-Fu, Wendy S. C. Chen, Yu-Hsiang Chen, Tzu-Hao Kao, Yen-Tzu Tseng, Chien-Yueh Lee, Yu-Chiao Chiu<sup>4</sup>, Pei-Lung Lee<sup>1</sup>, Qian-Jia Lin, Yung-Hao Ching, Kenichiro Hata, Winston T. K. Cheng, Mong-Hsun Tsai<sup>1</sup>, Hiroyuki

- Sasaki, Hong-Nerng Ho, **Shinn-Chih Wu**, Yen-Hua Huang, Pauline Yen and Shau-Ping Lin\*. 2014 141(12):2402-2413. DNMT3L promotes quiescence in postnatal spermatogonial progenitor cells. *Development* (Posted online, 21 May) (SCI, 5-year impact factor =6.741, Ranking on top 9.76% =4/41, based on 2014, JCR, subject categories of developmental biology).
20. Lin, Yuan Yu, Ching Yi Chena, Tai Yuan Chuang, Yun Lina, Hui Yu Liua, Harry John Mersmanna , **Shinn Chih Wu**, and Shih Torng Ding\*. 2014. Adiponectin receptor 1 regulates bone formation and osteoblast differentiation by GSK-3 $\beta$ / $\beta$ -Catenin signaling in mice. *Bone* 64:147-154. (Ref. No. BONE-D-14-00081R1) (SCI, 5-year impact factor =4.312, Ranking on top 25.00% =32/128, based on 2014 JCR, subject categories of endocrinology & metabolism).
  21. Yuan-Yu LIN, Ching-Yi Chen, Chih-Chien Chen, Han-Jen Lin, Harry John Mersmann, **Shinn-Chih Wu**, Shih-Torng Ding. 2014. The effects of adiponectin on bone metabolism. *J. Bioscience and Tissueengineering* 7:621-630.
  22. Peng, Shao-Yu, Chih-Jen Chou, I-Chen Ko, Yi-Jung Kao, Yu-Shi Chen, Winston Teng-Kui Cheng, S.W. Steven Shaw\*, **Shinn-Chih Wu\***. 2014.. Therapeutic potential of amniotic fluid-derived progenitor cells on liver fibrosis model in mice *Taiwanese Journal of Obstetrics & Gynecology* 53(2):151-157. (SCI, impact factor=0.929, and ranking on top 83.54%=66/79, based on 2014 JCR, subject categories of obstetrics & gynecology).
  23. Shih C. M., Chen Y. H., Yi W. L., Tsao N. W., **Wu S. C.**, Kao Y. T., Chiang K. H., Li C. Y., Chang N. C., Lin C. Y., Huang C. Y., Lin F. Y. 2014. MK-0626, A Dipeptidyl Peptidase-4 Inhibitor, Improves Neovascularization by Increasing Both the Number of Circulating Endothelial Progenitor Cells and Endothelial Nitric Oxide Synthetase Expression. *Current Medicinal Chemistry* 21:2012-2022. (SCI, 5-year impact factor =4.115, Ranking on top 8.47% =5/59, base on 2014, JCR, subject categories of chemistry, medicinal)
  24. Wen S. T , Chen W., Chen H. L., Lai C. W., Yen C. C., Lee K. H., **Wu S. C.**, Chen C. M. 2013. Amniotic fluid stem cells from EGFP transgenic mice attenuate hyperoxia-induced acute lung injury. *PLoS One*. 2013 Sep 11: 8 (9):e75383. (SCI, 5-year impact factor=3.702, and ranking on top 15.79%=9/57, based on 2014 JCR, subject categories of multidisciplinary sciences)
  25. Chen, C.H., B.H. Jiang, S.Y. Huang, T.S. Yang, K.H. Lee, C.F. Tu, **S.C. Wu\***. 2013. Genetic polymorphisms, growth performance, hematological parameters, serum enzymes and reproductive characteristics in phenotypically normal Landrace boars produced by somatic cell nuclear transfer. *Theriogenology* 167:1088-1096. (SCI, 5-year impact factor=2.154, Ranking on top 12.78% =17/133, base on 2014, JCR, subject categories of Veterinary sciences )

26. Liu, B. H., Y.Y. LIN, Y.C. Wang, C.W. Huang, C.C. Chen, **S. C. Wu**, H.J. Mersmann, W.T.K. Cheng, and S.T. Ding. 2013. Porcine adiponectin receptor 1 transgene resists high-fat/sucrose diet-induced weight gain, hepatosteatosis and insulin resistance in mice. *Exp. Anim. Tokyo.* 62: 347-360. (SCI, 5-year impact factor=1.102, based on 2014 JCR, subject categories of Veterinary sciences, 49.62%=66/133)
27. Peng S. Y., Y. Shi. Chen, C. J. Chou, Y. H. Wang, W. T. K. Cheng, S. W. S. Shaw, **S. C. Wu\***. 2014. Cell fusion phenomena detected after in utero transplantation of Ds-red harboring porcine amniotic fluid stem cells into EGFP transgenic mice. *Prenatal Diagnosis* 34:1-9 (SCI, 5-year impact factor=2.689, and ranking on top 26.58%=21/79, based on 2014 JCR, subject categories of obstetrics & gynecology)
28. Lin, Yuan Yu, Ching Yi Chen, Yun Lin, Yao Pang Chiu, Chih Chien Chen, Bing Hsien Liu, Harry John Mersmann, **Shinn Chih Wu\*** and Shih Torng Ding\*. 2013. Modulation of glucose and lipid metabolism by porcine adiponectin receptor 1-transgenic mesenchymal stem cells in diet-induced obese mice. *Cytotherapy* 15: 971-978 (SCI, 5-year impact factor =3.160, and ranking on top 25.77%=42/163, based on 2014 JCR, subject categories of biotechnology & applied microbiology) CI=3
29. Chen, C.H., F. Du, J. Xu, W.F. Chang, C.C. Liu, H.Y. Su, T.A. Lin, J.C. Ju, W.T.K. Cheng, **S. C. Wu**, Y.E. Chen, L.Y. Sung. 2013. Synergistic effect of trichostatin A and scriptaid on the development of cloned rabbit embryos *Theriogenology* 79: 1284-1293. (SCI, 5-year impact factor=2.154, Ranking on top 12.78% =17/133, base on 2014, JCR, subject categories of Veterinary sciences )
30. Cheng C. I., Hsiao C. C., **Wu S. C.**, Peng S. Y., Yip H. K., Fu M., Wang F. S. 2013. Valsartan impairs angiogenesis of mesenchymal stem cells through Akt pathway. *Int. J. Cardiol.* 2013 167(6):2765-74.Jul 15 (SCI, 5-year impact factor=4.093, and ranking on top 21.95%=27/3based on 2014 JCR, subject categories of cardiac & cardiovascular systems)
31. Huang C. Y., C. M. Shih, N. W. Tsao, Y. W. Lin, P. H. Huang, **S. C. Wu**, A. W. Lee, Y. T. Kao, N. C. Chang, H. Nakagami, R. Morishita, K. L. Ou, W. C. Hou, C. Y. Lin, K. G. Shyu, F. Y. Lin. 2012. Dipeptidyl peptidase-4 inhibitor improves neovascularization by increasing circulating endothelial progenitor cells. *Br J Pharmacol.* 167 1506-1519. (SCI, 5-year impact factor=4.957 and ranking on top 9.41%=24/255, based on 2014 JCR,; subject categories of pharmacology & pharmacy) CI=30
32. Cheng C. C., Felix S. H. Hsiao, W. S. Lian, I. H. Liu, S. P. Lin, Y. H. Lee, C. C. Chang, G. Y. Xiao, H. Y. Huang, C. F. Cheng, W. T. K. Cheng, **S. C. Wu\***. 2012. Isolation and characterization of novel murine epiphysis derived mesenchymal

- stem cells. Plos One 7 (4): e36085 (SCI, 5-year impact factor=3.702, and ranking on top 15.79%=9/57, based on 2014 JCR, subject categories of multidisciplinary sciences) CI=13
33. Shen C. J., Cheng W. T., **Wu S. C.**, Chen H. L., Tsai T. C., Yang S. H., Chen C. M. 2012. Differential differences in methylation status of putative imprinted genes among cloned swine genomes. PLoS One 7(2):e32812. Epub 2012 Feb 29. (SCI, 5-year impact factor=3.702, and ranking on top 15.79%=9/57, based on 2014 JCR, subject categories of multidisciplinary sciences)
  34. Chen C. H., W. F. Chang, C. C. Liu, H. Y. Su, S. K. Shyue, W. T. Cheng, Y. E. Chen, **S. C. Wu**, F. Du, L.Y. Sung, J. Xu. 2012. Spatial and temporal distribution of Oct-4 and acetylated H4K5 in rabbit embryos. Reprod. Biomed. Online 24: 433-442. (SCI, 5-year impact factor =2.709, and ranking on top 25.32%=20/79, based on 2014 JCR; subject categories of OBSTETRICS & GYNECOLOGY)
  35. Sung L. Y., C. H. Chen, J. Xu, T. A. Lin, H. Y. Su, W. F. Chang, C. C. Liu, Y. S. Sung, W. T.K. Cheng, J. Zhang, X. C. Tian, J. C. Ju, Y. E. Chen, **S. C. Wu\***, and Fuliang Du\*. 2011. Follicular Oocytes better Support Development in Rabbit Cloning than Oviductal Oocytes. Cellular Reprogramming 13 (6) 1-10. (SCI, 5-year impact factor =2.147 and ranking on top 49.08%=80/163, based on 2014 JCR, subject categories of biotechnology & applied microbiology)
  36. Hsiao, F. S., W. S. Lian, S. P. Lin, C. J. Lin, Y. S. Lin, E. C. Cheng, C. W. Liu, C. C. Cheng, P. H. Cheng, S. T. Ding, K. H. Lee, T. F. Kuo, C. F., Cheng, W. T. K. Cheng, and **S. C. Wu\***. 2011. Towards an ideal animal model to trace donor cell fates after stem cell therapy: production of stably labeled multipotent mesenchymal stem cells from bone marrow of transgenic pigs harboring enhanced green fluorescence protein gene. J Anim Sci. 89: 3460-3472. (SCI, 5-year impact factor= 2.586; Ranking on top 7.02% = 4/57, based on 2014 JCR, subject categories of Agriculture, Dairy & Animal Science)
  37. Yu Y. H., **S. C. Wu**, W. T. K. Cheng, H. J Mersmann, T. L. Shen, and S. T. Ding. 2011. The function of porcine PPAR<math>\gamma</math> and dietary fish oil effect on the expression of lipid and glucose metabolism related genes. Journal of Nutritional Biochemistry 22:179-186. (5-year impact factor =3.989 and ranking Top 19.48% =15/77, Nutrition and Dietetics, JCR 2014).
  38. Lee C. M., L. C. Chen, C. C. Chen, **S. C. Wu**, Y. S. Chang. 2011. A novel role of RASSF9 in maintaining epidermal homeostasis. PLOS ONE PLoS ONE 6: e17867. (SCI, 5-year impact factor=3.702, and ranking on top 15.79%=9/57, based on 2014 JCR, subject categories of multidisciplinary sciences)
  39. Lian W. S., W. T. K. Cheng, C. C. Cheng, F. S. H. Hsiao, J. J. Chen, C. F. Cheng, **S. C. Wu\***. 2011 In vivo therapy of myocardial infarction with mesenchymal stem

- cells modified with prostaglandin I synthase gene improves cardiac performance in mice. *Life Sciences* 88: 455~464. (SCI, 5-year impact factor =2.670 ; Ranking 106/255=41.57%, base on 2014 JCR; subject categories of pharmacology & pharmacy ) \*Corresponding author.
40. Wang D. Y\*., **S. C. Wu\***, S. P. Lin, S. H. Hsiao, T. W. Chung, Y. Y. Huang. 2011. Evaluation of transdifferentiation from mesenchymal stem cells to neuron-like cells using microfluidic patterned co-culture system. *Biomed Microdevices* 13(3):517-26. (SCI, 5-year impact factor=2.768, Ranking on top 34.21% =26/76, base on 2014 JCR, subject categories of engineering, biomedical). ( \* **These authors contributed equally**)
  41. Senatore, E. M., J. Xu, M. V. S. Novoa, G. Gong, T. Lin, A. Bella, M. E. Mannino I, Cindy Tian, G. A. Presicce, **S. C. Wu\***, and Fuliang Du\*. 2010. Improved in vitro Development of OPU derived bovine (*Bos taurus*) embryos by group culture with helper embryos embedded in agarose chips. *Theriogenology* 74: 1643-1651. (SCI, 5-year impact factor=2.154, Ranking on top 12.78% =17/133, base on 2014, JCR, subject categories of Veterinary sciences )
  42. Hung, C. M\*., **S. C. Wu\***, C. C. Yen, M. F. Lin, Y. T. Tung, H. L. Chen, and C. M. Chen. 2010. Porcine lactoferrin as feedstuff additive elevates avian immunity and potentiates vaccination. *BioMetals* 23: 579-587. ( \* **These authors contributed equally**), (SCI, 5-year impact factor= 3.004; Ranking on top 47.42 % = 138/291, based on 2013 JCR, subject categories of biochemistry & molecular biology).
  43. Hsiao, F. S. H., C. C. Cheng, S. Y. Peng, H. Y. Huang, W. S. Lian, M. L. Jan, , Y. T. Fang, , E. C. S. Cheng, K. H. Lee, W. T. K. Cheng, S.-P. Lin, and, **S. C Wu\***. 2010. Isolation of therapeutically functional mouse bone marrow Mesenchymal stem cells within 3 hours by an effective single-step plastic-adherent method. *Cell Proliferation* 43: 235-248. (SCI, 5-year impact factor =2.897, ranking on top 59.46%=110/185, based on 2013 JCR, subject categories of cell biology).
  44. Yu Y. H., P.H. Wang, W. T. K. Cheng, H. J. Mersmann, **S. C. Wu\***, and S. T. Ding\*. 2010. Porcine peroxisome proliferator-activated receptor  $\delta$  mediates the lipolytic effects of dietary fish oil to reduce body fat deposition. *J. Anim. Sci.* 88: 2009-2018. (SCI, 5-year impact factor= 2.59; Ranking on top 7.02% = 4/57, based on 2014 JCR, subject categories of Agriculture, Dairy & Animal Science)
  45. Cheng, Y. H., S. H. Yang, W. Y. Su, Y. C. Chen, K. C. Yang, W. T. K. Cheng, **S. C. Wu**, and F. H. Lin. 2010. Thermosensitive chitosan-gelatin-glycerol phosphate hydrogels as a cell carrier for nucleus pulposus regeneration: an in-vitro study. *Tissue Engineering (Part A)* 16 (2):695-703. (SCI, 5-year impact factor = 4.667, ranking on top 12.73% = 21/165, based on 2013 JCR, subject categories of biotechnology & applied microbiology).
  46. Yang, C. C., Y. S. Lin, C. C. Hsu, **S. C. Wu** and W. T. K. Cheng. 2010. Seasonal effect on spermatozoal messenger RNA profile of domestic swine (*Sus Scrofa*)

Anim. Reprod. Sci. 119 76-84. (SCI: 5-year impact factor = 1.854, ranking on top19.23% = 10/52, based on 2013, JCR; subject categories of agriculture, dairy & animal science)

#### Patents :

1. **吳信志** 蕭士翔 鄭淳淳 周志任 彭劭于 林育聖 鄭敬薰 鄭登貴。 2014。可表現螢光蛋白質之豬骨髓間葉幹細胞 (Fluorescent protein-expressing swine bone marrow mesenchymal stem cells.) 專利權期間：自 2014 年 5 月 11 日至 2030 年 11 月 29 日【中華民國專利發明第 I 437097】
2. 鄭登貴、吳信志、林育聖、林之任、徐啟真、鄭國展、徐濟泰。新穎之豬胰澱粉酶基因啟動子及表現異源性消化酵素之基因轉殖豬。【台灣專利證號：I 350851，專利期間：2011 年 10 月 21 日-2026 年 5 月 16 日】
3. Winston Teng-Kuei Cheng, **Shinn-Chih Wu**, Chi-Chen Hsu, Yu-Sheng Lin, Chih-Jen Lin, Kuo-Joan Cheng, Jih-Tay Hsu. 2011. Novel Porcine Pancreatic Amylase Gene Promoter and Transgenic Pigs Expressing Heterologous Digestive Enzymes.( 美國專利申請案第 11/438,979 號, Patent No. US7956238B2, Jun. 7, 2011; 2011~2031).
4. Winston Teng-Kuei Cheng, Chuan-Mu Chen, Shu-Wha Lin, Chih-Hong Wang, Chih-Jen Lin, **Shinn-Chih Wu**, Transgenic mammal secreting B-domain deleted human FVIII in its milk. (Patent No.: US7,667,089 B2, Date of patent: Feb. 23, 2010).
5. 鄭登貴、陳全木、林淑華、王志宏、林之任、**吳信志**。利用乳腺表現型基因轉殖動物系統生產具生物功能之人類第八凝血蛋白的方法。【台灣專利證號：I 287578，專利期間：2007 年 10 月 1 日-2024 年 2 月 5 日】。
6. **吳信志**、鄭登貴、陳全木、林劭品、顏重河、楊平政。於非人類之基因轉殖哺乳動物乳汁中表現多種外源蛋白質之方法【台灣專利證號：I 273136，專利期間：2006 年 2 月 11 日-2023 年 11 月 19 日】(榮獲國科會評選為 2006 年台北國際發明暨技術交易展代表專利)。2011 年一月技轉於東洋製藥，技轉金額 7000 萬元台幣。
7. **Wu Shinn-Chih**, Winston Teng-Kuei Cheng, Chuan-Mu Chen, Shau-Ping Lin, Chon-Ho Yen, Ping-Cheng Yang. 2006. Method for Expressing Multiple Recombinant Proteins in the Milk of Transgenic Non-Human Mammals. (US patent 2006~2025, Patent No. US7087808)(榮獲國科會評選為 2006 年台北國際發明暨技術交易展代表專利)。2011 年一月技轉於東洋製藥，技轉金額 7000 萬元台幣。

#### Conference papers (2010~)

1. Xiao, G. Y., I. H. Liu, **S. C. Wu**. Exosome as critical agents of ovarian regeneration achieved by stem cell therapy. 2015 International Conference on Stem Cells and Developmental Biology P.83. (2015)
2. Chang, L. B., C. J. Chou, J. S. Shiu, S. X. Gao, S. Y. Peng and **S. C. Wu**. 2015. The study of developmental capacity of Holstein dairy cow embryos are produced by using X-sex sorted semen combine intracytoplasmic sperm injection. J. Chin Soc. Anim. Sci.44 (Suppl.): P.227.
3. Kun-Yi Lin, Shao-Yu Peng, Chih-Jen Chou, **Shinn-Chih Wu**. Intraperitoneal



injection of amniotic fluid stem cells for ameliorating experimental colitis in mice. Universiti Tunku Abdul Rahman (UTAR) National Postgraduate Fundamental and Applied Sciences Seminar 2013 (UTAR NPFASS 2013), UTAR Perak Campus, Kampar, Malaysia, 13-14th May 2013, P35

4. Shao-Yu Peng, Kun-Yi Lin, Tse-Yang Tseng, Chih-Jen Chou, Winston Teng-Kuei Cheng, **Shinn-Chih Wu**. 2013. Remote intramuscular injection of pig derived amniotic fluid stem cells in myocardial infarction mouse model. UTAR National Postgraduate Fundamental and Applied Science Seminar 2013, 13-14th May 2013. P.76. (Malaysia)
5. Chen, C. H., **S. C. Wu**, B. H. Jiang, S. Y. Huang, Y. H. Guo, M. S. Liu, C. Z. Yu, W. T. Lien, Y. L. Chang, L. L. Ho, C. G. Chiou, S. T. Liu, W. D. Fong, and C. F. Tu. 2012. Preservation of superior boars with preferred characteristics by somatic cell nuclear transfer. J. Chin Soc. Anim. Sci.39 (Suppl.): P.202. (poster)
6. Xiao, G. Y., C. C. Chang, S. Y. Peng, and **S. C. Wu**. 2012. The potential of mice amniotic fluid derived stem cells rescue fertility in the mouse model of chemotherapy-induced premature ovarian failure. J. Chin Soc. Anim. Sci.39 (Suppl.): P.70. (oral presentation award)
7. Huang, S. C., C. C. Cheng, Kenichi Kimura, Osamu Ohneda, and **S. C. Wu**. 2012. The effect of hypoxia on epiphysis-derived mesenchymal stem cells. J. Chin Soc. Anim. Sci.39 (Suppl.): P.71. (oral presentation)
8. Peng, Shao-Yu, Chih-Jen Chou, Kun-Yi Lin, Winston Teng-Kuei Cheng, **Shinn-Chih Wu**. 2012. Cell fusion phenomenon was detected after xenogenic intra-uterus transplantation of Ds-red porcine amniotic fluid derived stem cells into EGFP bearing mice. Experimental Biology 2012 Annual Meeting. P. 298. (USA, San Diego) 2012 Apr 21th -25th.
9. Xiao, G. Y., C. C. Chang, S. Y. Peng, Y. H. Lee and **S. C. Wu**. 2012. The Potential of Mouse Amniotic Fluid Stem Cells to Rescue Fertility of Ovarian Failure Mice. A. A. A. P. S04-PP-127.
10. Ko, I. C., C. C. Chang, G. Y. Xiao, W. T. K. Cheng, S. T. Ding and **S. C. Wu**. 2012. The Potentiality of Porcine Adipose-Derived Stem Cells Apply in Xeno-Transplantation to Improve Liver Fibrosis in Mice. A. A. A. P. S17-PP-489.
11. Chang, C. C., C. S. Chou, L. Y. Sung and **S. C. Wu**. 2012. Purification and Characterization of Gonocytes Isolated from DSRED Transgenic Pigs. A. A. A. P. S17-PP-488.
12. Kao, Y. J., Y. C. Ke, S. Y. Peng, S. T. Ding and **S. C. Wu**. 2012. Therapeutic Potential of Amniotic Fluid-Derived Stem Cells on Liver Fibrosis Mice. A. A. A. P. S04-PP-130. (Poster award)
13. Cheng, C. C., W. S. Lian, F. S. H. Hsiao, S. P. Lin, W. T. K. Cheng, and **S. C. Wu**. 2011. A novel type of mesenchymal stem cells directly isolated from the epiphysis. ASCR. P80. Paris.
14. Peng, Shao-Yu, Chih-Jen Chou, Kun-Yi Lin, and **Shinn-Chih Wu**. 2011. Cell fusion phenomena are detected after intra-uterus transplantation with mice amniotic fluid derived stem cells. Animal Science Days. P.78. (Croatia)

2011/9/19-2011/9/23

15. Xiao, Guan-Yu, Shao-Yu Peng and **Shinn-Chih Wu**. 2011. The possibility of mice amniotic fluid derived stem cells differentiate into germ cells. Animal Science Days. P76. (Croatia). 2011/9/19-2011/9/23
16. Peng, Shao-Yu, Chih-Jen Chou, Kun-Yi Lin, Winston Teng-Kuei Cheng, **Shinn-Chih Wu**. 2011. The potentiality of mouse amniotic fluid derived stem cells and cell fusion phenomena are detected after intra-uterus transplantation. The 6th Tsukuba Medical Science Research Meeting and The 2nd Leading Graduate Schools International Conference. P.91 (Japan)
17. Xiao, G. Y., Y. H. Lee, S. Y. Peng, and **S. C. Wu**. 2011. Possibility of mice amniotic fluid derived stem cells differentiate into germ cells. J. Chin Soc. Anim. Sci. 39 (Suppl.): P.86. (oral presentation)
18. Kao, Y. J., S. Y. Peng, W. T. K. Cheng, and **S.C. Wu**. 2011. The potentiality of amniotic fluid stem cells and the phenomena of cell fusion after xenogenic intra-uterus transplantation. J. Chin. Soc. Anim. Sci. 39 (Suppl.): P.90. (oral presentation award)
19. Lai, L. W., S. Y. Peng, W. T. K. Cheng, and S. C. Wu. 2011. Transplantability effect of xenogenic pig amniotic fluid derived stem cells in mice with osteoporosis. J. Chin Soc. Anim. Sci. 39 (Suppl.): P.215. (poster)
20. Ko, I. C., C. C. Chang, K. U. Xiao, W. T. K. Cheng, and **S. C. Wu**. 2011. The potentiality of porcine adipose-derived stem cells apply in xenotransplantation of improve liver fibrosis in mice. J. Chin. Soc. Anim. Sci. 39 (Suppl.): P.222. (poster award)
21. Chang, C. C., C. S. Chou, L. Y. Sung, and **S. C. Wu**. 2011. The possibility of purifying gonocytes from red fluorescent transgenic pigs by cell sorter. J. Chin. Soc. Anim. Sci. 39 (Suppl.): P.82. (oral presentation award)
22. Yang, T. H., T. H. Lin, Y. H. Lee, S. Y. Peng P. C. Shen and **S. C. Wu**. 2010. Adipogenic differentiation ability of mouse bone marrow-derived, amniotic fluid-derived and placenta-derived mesenchymal stem cells. J. Chin Soc. Anim. Sc.i 39 (Suppl.): P.107.
23. Lin, T. H., T. H. Yang, Y. H. Lee, S. Y. Peng P. C. Shen and **S. C. Wu**. 2010. Osteogenic differentiation ability of mice bone marrow-derived, amniotic fluid-derived and placenta-derived mesenchymal stem cells. J. Chin Soc. Anim. Sc.i 39 (Suppl.): P.108.
24. Lee, Y. H., C. C. Cheng, S. Y. Peng, C. Y. Lin, and **S. C. Wu**. 2010. The effect of low energy red light irradiation on proliferation and differentiation of mouse marrow-derived mesenchymal stem cells. J. Chin Soc. Anim. Sc.i 39 (Suppl.): P.220.
25. Wu, C. P., L. L. Ho, M. S. Leu, W. T. Lien, **S. C. Wu**, W. T. K. Cheng, C. N. Weng, C. F. Tu. Genetic stability of integrate site of 8-3 line bLA-hFIX/bLA-pLF dual transgenic pigs individual via multiplex-PCR analysis. J. Chin Soc. Anim. Sc.i 39 (Suppl.): P.146.
26. Shen, Y. W., F. S. H. Hsiao, C. C. Cheng, H. S. Lee, Y. M. Wu, I. H. Liu, W. T. K. Cheng, and **S. C. Wu**. 2010. Bone Marrow-Derived Mesenchymal Stem Cells Reduce Liver Fibrosis in Carbon Tetrachloride-Treated Mice. The

14th Asian-Australasian Association of Animal Production Societies.  
(Abstract) P320. Pingtung, Taiwan.

27. Cheng, C. C., F. S. H. Hsiao, W. S. Lian, S. P. Lin, W. T. K. Cheng, and **S. C. Wu**.  
2010. Identification and Characterization of a Novel Subtype of  
Mesenchymal Stem Cells Derived from the Endosteum. The 14th Asian-  
Australasian Association of Animal Production Societies. Oral Presentation.  
(Congress Program) P91. Pingtung, Taiwan.

List of grants for the last five years of principle investigator (2010~2015)

Name of Personnel	Title of Project	Role in Project	Project Period (mm/yy)	Funding Agency and budget
S. C. Wu	Holstein dairy cow embryos are produced by using X-sex selected semen to increase milk efficiency and female birth rate 104農科-2.1.4-牧-U1	PI	01/15~1 2/15	COA 875,000
S. C. Wu	Establishment of long-term culture system and preservation on primordial germ cell in Muscovy duck 104農科-2.2.2-牧-U1(Z)	PI	01/15~1 2/15	COA 400,000
S. C. Wu	Studies for therapeutic mechanism of amniotic fluid stem cells for ameliorating liver fibrosis mice (NSC 101-2313-B-002-017-MY3)	PI	08/12~0 7/15	NSC 4,500,000
S. C. Wu	Establishing therapeutic model of amniotic fluid stem cells for ameliorating mouse liver fibrosis(NSC 100-2313-B-002-044)	PI	08/11~0 7/12	NSC 1,000,000
S. C. Wu	Generation of transgenic Binlang pigs expressing EGFP by gene microinjection and somatic cell nuclear transfer for the research of biomedicine (101 農科-1.2.2-科-a5)	PI	01/12~1 2/12	COA 2,667,000
S. C. Wu	Generation of transgenic Binlang pigs expressing EGFP by gene microinjection and somatic cell nuclear transfer for the research of biomedicine (100 農科-1.2.3-科-a6)	PI	01/11~1 2/11	COA 2,233,000
S. C. W.	Germ-plasma preservation of fluorescent pigs and application in biomedical materials (99 農科-1.2.3-科-aM)	PI	09/10~1 2/10	COA 1,500,000