

## Curriculum Vitae

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### **Education and Qualification:**

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|-------------|--|
| 12/98-04/02 | University of Bath, United Kingdom<br>PhD in Developmental Biology                           |
| 09/95-06/97 | National Yang-Ming University, Taiwan, R.O.C.<br>MSc in Biotechnology in Medicine            |
| 10/88-06/92 | National Sun Yat-Sen University, Taiwan, R.O.C.<br>BSc in Marine Biotechnology and Resources |

### **Academic Appointments:**

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|---------------|--|
| 07/16-present | Deputy Director of Administration, Genomics Research Center, Academia Sinica, Taipei, Taiwan   |
| 06/13-07/16   | Deputy Director of Academic Affairs, Genomics Research Center, Academia Sinica, Taipei, Taiwan   |
| 02/12-present | Associate Research Fellow, Genomics Research Center, Academia Sinica, Taipei, Taiwan   |
| 08/14-present | Adjunct Associate Professor, Department of Biotechnology & Laboratory Science in Medicine, National Yang-Ming University, Taiwan                       |
| 08/13-present | Joint appointed Associate Professor, Institute of Bioscience and Biotechnology, National Taiwan Ocean University, Taiwan                               |
| 02/09-present | Adjunct Assistant Professor, Institute of Clinical Medicine, Taipei Medical University, Taiwan   |
| 08/05-07/14   | Adjunct Assistant Professor, Department of Biotechnology & Laboratory Science in Medicine, National Yang-Ming University, Taiwan                       |
| 07/04-02/12   | Assistant Research Fellow, Genomics Research Center, Academia Sinica, Taipei, Taiwan   |
| 02/05-07/13   | Joint appointed Assistant Professor, Institute of Bioscience and Biotechnology, National Taiwan Ocean University, Taiwan                               |
| 01/04-02/04   | Visiting scholar, Dept. of Pathology and Dept. of Microbiology & Immunology, University of Texas Medical Branch, Galveston, Texas, United States       |
| 01/02-07/04   | Research officer (postdoctoral scientist), Centre for Regenerative Medicine, University of Bath, United Kingdom  |
| 01/99-12/01   | Practical demonstrator on the course of Developmental Biology & Molecular Biology, Dept. of Biology & Biochemistry, University of Bath, United Kingdom |

- 08/97-07/98      Research assistant, Institute of Biotechnology in Medicine, National Yang-Ming University, Taiwan
- 06/94-07/95      Research assistant, Department of Education and Medical Research, Taipei Veterans General Hospital, Taiwan

### **Honors and Awards:**

- 2015              Rotary International Presidential Charity Award 2014-2015
- 2012              Travel award of International Society of Stem Cell Research for attending 10<sup>th</sup> annual meeting
- 2010              Research work on Hepatic transdifferentiation has been listed as one of Main Significant Research Achievements in Academia Sinica
- 2007              Travel award of Japan Society for the promotion of science for attending NPG Nature Asia-Pacific network meeting
- 2002              Scholarship of International Society of Differentiation for attending the 12<sup>th</sup> International Conference of ISD at Lyon, France
- 2001              Travel Grant of British Society of Developmental Biology for attending 2001 Wellcome Trust Advanced Courses at Cambridge, England
- 2001              Entrant of January 2001 Santa Cruz Investigator Award
- 2000              Scholarship of International Federation of Cell Biology for attending International Congress on Differentiation, Cell and Molecular Biology at Gold Coast, Australia
- 2000              Travel Grant of British Society of Developmental Biology for attending BSDB 2000 Spring Symposium at Coventry, England
- 1999-2002      Overseas Research Student Award, Committee of vice-chancellors and principals of the Universities of the United Kingdom

### **Publications**

#### SCI Peer Review Article

*Cited by 1438/H-index: 20 (according to data of Scopus (April 9, 2017))*

*Cited by 2073/H-index 22 & i10 index: 34 (according to data of Google scholar (May 2, 2017))*

*(Five year's citation: Cited by 1013/H-index 18 & i10 index: 33)*

*Cited by 1790/Reads: 3483 (according to data of Research Gate (April 9, 2017))*

#### ***Stem cells, Somatic Cell Reprogramming and Tissue Repair/Regeneration***

1. S.C. Tang\*, **C.N. Shen\***, P.Y. Lin, S.J. Peng, H.J. Chien, Y.H. Chou, C. Chamberlain, P. Pasricha. 2017. Pancreatic neuro-insular network in young mice revealed by 3-D panoramic histology (*Accepted*) (\*corresponding author)
2. Chien, C.Y., H.S. Lee, Candy.H.H. Cho, K.I. Lin, D. Tosh, R.R. Wu, W.Y. Mao, and **C.N. Shen\***. 2016. Maternal vitamin A deficiency during pregnancy affects vascularized islet development. *J. Nutritional Biochemistry* 36:51-59 (\*corresponding author)
3. Chien, C.Y., T.A. Yuan, Candy.H.H. Cho, F.P. Chang, W.Y. Mao, R.R. Wu, H.S. Lee\*, and **C.N. Shen\***. 2016. All-trans retinoic acid ameliorates glycemic control in diabetic mice via modulating pancreatic islet production of vascular endothelial growth factor-A. *Biochem. Biophys. Res. Com.* 477 (4): 874-880 (\*corresponding author).
4. Chang F.P., Candy.H.H. Cho, C.R. Shen, L.W. Ting, and **C.N. Shen\*** 2016. PDGF Facilitate Reprogramming of Hepatocytes to Insulin-Secreting beta-like Cells induced by Pdx1 and Ngn3. *Cell Transplantation*. 25:1893-1909 (\*corresponding author)

5. Lien, H.W., R.Y.Yuan, C.M. Chou, Y.C. Chen, C. C. Hung, C.H. Hu, S.P. L. Hwang, P.P. Hwang, **C.N. Shen**, C.L. Chen, C.H. Cheng\*, and C.J.Huang\* 2016. Zebrafish cyclin Dx is required for development of motor neuron progenitors, and its expression is regulated by hypoxia-inducible factor 2 $\alpha$ . *Scientific Report* 6:28297
6. Chang H.M., W.Y. Huang, W.Y. Mao, C.R. Shen, and **C.N. Shen\***. 2016. ABCG2 deficiency in skin impairs re-epithelialization in cutaneous wound healing. *Experimental Dermatology* 25(5):355-61. (\*corresponding author)
7. Chen C.Y., Desy, S. Lee, Y.T. Yan, **C.N. Shen**, S.M. Hwang, S.T. Lee, and Patrick, C.H. Hsieh. 2015. Bcl3 Bridges LIF-STAT3 to Oct4 signaling in the Maintenance of Naïve Pluripotency. *Stem cells*. 33(12):3468-80. Times Cited: 4
8. Chen C.L., L.J. Wang, Y.T. Yan, H.W. Hsu, P.C. H.L. Su, Patrick, C.H. Hsieh, S.M. Hwang, and **C.N.Shen\*** 2014. Cyclin D1 acts as a barrier to pluripotent reprogramming by promoting neural progenitor fate switches *FEBS Letters* 588:4008-4017 (\*corresponding author). Times Cited:6
9. Chang, C.F., Hsu, K.H., Shen, C.N., Li, C.L., and Lu, J. (2014) Enrichment and characterization of two subgroups of committed osteogenic cells in the mouse endosteal bone marrow with expression levels of CD24. *J Bone Marrow Res* 2:144
10. Lee IC, Liu YC, Tsai HA, **Shen CN**, Chang YC. 2014. Promoting the selection and maintenance of fetal liver stem/ progenitor cell colonies by layer-by-layer polypeptide tethered supported lipid bilayer. *ACS Appl Mater Interfaces*. 6: 20654-20663. Times Cited: 5
11. Lin, Y.H., H.M. Chang, F.P. Chang, C.R. Shen, C.L. Liu, W.Y. Mao, C.C. Lin, H.S. Lee, **C.N.Shen\***. 2013. Protoporphrin IX Accumulation Disrupts Mitochondrial Dynamics and Function in ABCG2-Deficient Hepatocytes. *FEBS Letters* 587: 3202-3209. (\*corresponding author) Times Cited: 8
12. Tsai H.A., **C.N. Shen** and Y.C.Chang\*. 2012 Use of surface properties to control the growth and differentiation of mouse fetal liver stem/progenitor cell colonies. *Biomacromolecules* 13(11):3489-93. Times Cited: 4
13. Y.J. Liang, B.C. Yang, J.M. Chen, Y.H. Lin, C.L. Huang, Y.Y. Cheng, C.Y. Hsu, K.H. Khoo, **C.N. Shen**, J. Yu\*. 2011. Changes in glycosphingolipid composition during differentiation of human embryonic stem cells to ectodermal or endodermal lineages. *Stem Cells* 29(12):1995-2004. Times Cited: 19
14. C.F.Chen, C.Y. Chu, T.H. Chen, S.J. Lee, **C.N. Shen\***, and C.D. Hsiao\*. 2011. Establishment of a Transgenic Zebrafish Line for Superficial Skin Ablation and for Functionally Validation of Anti-Apoptotic Pathways *in vivo*. *PLoS One* 6(5): e20654 (\*corresponding author) Times Cited: 20
15. Al-Adsani A., Z.D. Burke, D. Eberhard, K. L. Lawrence, **C.N. Shen**, A K. Rustgi, H. Sakaue, J. M. Farrant and D Tosh. 2010. Dexamethasone treatment induces the reprogramming of pancreatic acinar cells to hepatocytes and ductal cells. *PLoS One* 5(10): e13650. Times Cited: 16
16. Wu, S.Y., C.C. Hsieh, R.R. Wu, J. Susanto, T.T. Liu, C.R. Shen, Y. Chen, C.C. Su, F.P. Chang, H.M. Chang, D. Tosh, and **C.N. Shen\*** 2010. Differentiation of pancreatic acinar cells to hepatocytes requires an intermediate cell type. *Gastroenterology* 138:2519-2530. (\*corresponding author) Times Cited: 13
17. Tsai H.A., R.R.Wu, I.C. Lee, H.Y.Chang, C.N. Shen\* and Y.C.Chang\*. 2010. Selection, enrichment and maintenance of Self-Renewal Liver Stem/Progenitor Cells utilizing Polypeptide Polyelectrolyte Multilayer Films. *Biomacromolecules* 11:994-1001 (\*corresponding author). Times Cited: 13
18. Yang, C-J., Liu, Y-K., Liu, C-L., C.N. Shen, M.L. Kuo, C.C.Su, C.P.Tseng, T.C.Yen, and C.R.Shen\*. 2009. Inhibition of acidic mammalian chitinase by RNA interference suppresses ovalalbumin-sensitized allergic asthma. *Human Gene Therapy* 20:1597–1606. Times Cited: 29
19. Huang Y.H ., C. C. Chin, H.N. Ho, C.K. Chou, C.N. Shen, H.C. Kuo, T.J Wu, Y.C. Wu, Y.C. Hung, C.C. Chang,, T.Y Ling. 2009. Pluripotency of Mouse Spermatogonial Stem Cells Requires IGF-1. *FASEB J*. 23(7): 2076-87. Times Cited: 55
20. Susanto, J., Y.H. Lin, Y.N. Chen, C.R.Shen, Y.T.Yan, S.T. Tsai, C.H Chen, and C.N. Shen\*. 2008. Porphyrin homeostasis maintained by ABCG2 regulates self-renewal of embryonic stem cells. *PLoS ONE*

- 3(12): e4023. (\*corresponding author) Times Cited: 40
21. Shen, C.N., A. Petiot, C.Y. Chien, C. Dickson, J. M.W. Slack, and D. Tosh. 2007. All-trans Retinoic Acid suppresses exocrine differentiation and branching morphogenesis in the embryonic pancreas. *Differentiation* 75: 62-74. (Editor chosen for online open) Times Cited: 23
  22. Tosh, D., C.N. Shen, M.R. Alison, C.E. Sarraf, and J.M.W. Slack 2007. Copper deprivation in rats induces islet hyperplasia and hepatic metaplasia in the pancreas. *Biol. Cell.* 99: 37-44. Times Cited: 7
  23. Burke, Z.D., C.N. Shen, K.L. Ralphs, and D. Tosh. 2006. Characterization of liver function in TD hepatocytes. *J. Cell. Physiol.* 206:147-159. Times Cited: 34
  24. Wang, R.Y.L., C.N. Shen, M.H. Lin, D. Tosh and C.H. Shih. 2005. Hepatocyte-like cells transdifferentiated from pancreatic origin can support hepatitis B virus. *J. Virol.* 79: 13116-13128. Times Cited: 15
  25. Kurash, J.K.<sup>1</sup>, Shen C.N.<sup>1</sup>, and D. Tosh 2004. Induction and expression of acute phase proteins in transdifferentiated hepatocyte. *Exp. Cell Res.* 292(2): 342-358. (<sup>1</sup>Authors contribute equally, Front cover) Times Cited: 33
  26. Burke, Z.D., C.N. Shen, and D. Tosh. 2004. Bile Ducts as a Source of Pancreatic  $\beta$  cells? *BioEssays* 26: 932-937. Times Cited: 13
  27. Shen, C.N., Z.D. Burke, and D. Tosh. 2004. Transdifferentiation, metaplasia and tissue regeneration. *Organogenesis* 1(2): 36-44. Times Cited: 22
  28. Shen, C. N., J.R. Seckl, J.M.W. Slack, and D. Tosh. 2003. Glucocorticoid suppresses beta cell development and induces hepatic metaplasia in embryonic pancreas. *Biochem. J.* 375(1): 41-50. (Front cover of the issue) Times Cited: 77
  29. Horb, M.E., C.N. Shen, D. Tosh, and J.M.W. Slack 2003 Experimental conversion of liver to pancreas. *Curr. Biol.* 13(2): 105-115. Times Cited: 254
  30. Shen C.N., M.E.Horb, J.M.W. Slack and D. Tosh 2003. Transdifferentiation of pancreas to liver. *Mech. Dev.* 120: 107-116. Times Cited: 82
  31. Tosh, D., C.N. Shen, and J.M.W Slack 2002. Differentiated properties of hepatocyte-like cells induced from the pancreatic cell. *Hepatology* 36:534-543. Times Cited: 54
  32. Tosh, D., C.N. Shen, and J.M.W. Slack 2002. Conversion of pancreatic cells to hepatocytes. *Biochem. Soc.Trans.* 30: 51-5. Times Cited: 25
  33. Shen, C.N., J.M.W. Slack, and D. Tosh. 2000. Molecular basis of transdifferentiation of pancreas to liver. *Nature Cell Biol.* 2: 879-887. Times Cited: 312

### ***Cancer Therapeutic Development & Cancer Stem Cells***

34. Hsieh, C.C., I.M. Shyu, W.Y. Liao, T.H. Chen, S.E. Wang, P.C. Lu, P.Y. Lin, Y.B. Chen, W.Y. Mao, H.Y. Han, M. Hsiao, W.B. Yang, W.S. Li, Y.P. Sher, and **C.N. Shen\*** 2017. Elevation of beta-galactoside alpha 2,6-sialyltransferase 1 modulated in a fructose-responsive manner promotes pancreatic cancer metastasis. *Oncotarget* 8(5) 7691-7709. (\*corresponding author).
35. P.Y. Lin, S.J. Peng, **C.N. Shen\***, P. Pasricha and S.C. Tang\*. 2016. PanIN-associated pericyte, glial, and islet remodeling in mice revealed by 3-D pancreatic duct lesion histology. *American Journal of Physiology - Gastrointestinal and Liver Physiology.* 311(3):G412-G422 (\*corresponding author)
36. C.M. Liu, C.L. Hsieh, **C.N. Shen**, C.C.Lin, K. Shigemura, S.Y. Sung. 2016. Exosomes from the tumor microenvironment as reciprocal regulators that enhance prostate cancer progression. *I.J. Urol.* 23(9):734-44
37. S.K.C. Cheung, P.K. Chuang, H.W. Huang, W.W. Hwang-Verslues, C. H.H. Cho, W.B. Yang, **C.N. Shen**, M.Hsiao, T.L.Hsu, C.F. Chang, C.H.Wong 2016. Stage-Specific Embryonic Antigen-3 (SSEA3) and  $\beta$ 3GALT5 are Cancer specific and Significant Markers for Breast Cancer Stem Cells. *Proc. Natl. Acad. Sci. U.S.A.* 113(4):960-965.

38. Chang, J.S., W.H. Yu, C.Y. Su, Y.P. Liu, T.C. Lai, Y.H. Jan, Y.F. Yang, **C.N. Shen**, J.Y. Shew, J. Lu, C.J. Yang, M.S. Huang, P.J. Lu, M.L. Kuo, K.T. Hua, and M. Hsiao. 2015. GIT1 Promotes Lung Cancer Cell Metastasis through Modulating Rac1/Cdc42 Activity and Is Associated with Poor Prognosis. *Oncotarget* 6(34): 36278-91.
39. Liaw, C.C., Yang, Y.L., Lin, C.K., Lee, J.C., Liao, W.Y., **Shen, C.N.**, Sheu, J.H., and Wu, S.H. 2015. New Meroterpenoids from *Aspergillus terreus* with Inhibition of Cyclooxygenase-2 Expression. *Organic Letters* 17(10):2330-3. Times Cited: 6
40. Yang, Y.F., Y.H. Jan, Y.P. Liu, C.J. Yang, C.Y. Su, Y.F. Lin, Y.C. Chang, T.C. Lai, J. Chiou, H.Y. Tsai, J. Lu, **C.N. Shen**, J.Y. Shew, P.J. Lu, Y.J. Chuang, M.S. Huang, M. Hsiao\* 2014. Squalene Synthase Induces TNFR1 Enrichment in Lipid Rafts to Promote Lung Cancer Metastasis. *American Journal of Respiratory and Critical Care Medicine* 190(6):675-687. Times Cited: 6
41. Tsai, H.Y., Y.F. Yang, A.T. Wu, C.J. Yang, Y.P. Liu, Y.H. Jan, C. H Lee, Y.W. Hsiao, C.T. Yeh, J. Lu, **C.N. Shen**, J.Y. Shew, P.J. Lu, M.S. Huang, M. Hsiao\* 2013. Endoplasmic reticulum ribosome binding protein 1 (RRBP1) overexpression is frequently found in lung cancer patients and alleviates intracellular stress-induced apoptosis through the enhancement of GRP78. *Oncogene* 32(41):4921-31. Times Cited: 20
42. W.Y. Liao, C.C. Liaw, Y.C. Huang, H.Y. Han, H.W. Hsu, S.M. Hwang, S.C. Kuo, and **C.N. Shen\*** 2013. Cyclohexylmethyl flavonoids suppress propagation of breast cancer stem cells via downregulation of NANOG. *Evidence-Based Complementary and Alternative Medicine (eCAM)* 2013: 170261. (\*corresponding author) Times Cited: 11
43. Y. Liu, Yang, M.S. Huang, C.T. Yeh, A.T. Wu, C.J. Yang, C. H Lee, Y.W. Hsiao, **C.N. Shen**, P.J. Lu, M. Hsiao\* 2013. Cisplatin selects multidrug-resistant CD133+ cells in lung adenocarcinoma by activating notch signaling. *Cancer Research* 73(1):406-416. Times Cited: 69
44. S.T. Tsai, C.C. Tsou, W.Y. Mao, W.C. Chang, H.Y. Han, W.L. Hsu, C.L. Li, C.N. Shen\*, C.H. Chen\* 2012. Label-free quantitative proteomics of CD133-positive liver cancer stem cells. *Proteome Science* 10(1): 69-78. (\*corresponding author, has been marked as Highly Accessed article by the editorial team) Times Cited: 5
45. Y.C. Wu, T.Y. Ling, S.H. Lu, H.C. Kuo, H.N. Ho, S.D. Yeh, **C.N. Shen\***, and Y.H. Huang\* 2012. Chemotherapeutic sensitivity of testicular germ cell tumors under hypoxic conditions is negatively regulated by SENP1-controlled sumoylation of OCT4. *Cancer Research* 72(19):4963-73. (\*corresponding author) Times Cited: 12
46. C.Y. Chu, C.F. Chen; R.S. Rajendran, C.N. Shen, T.H. Chen, C.C. Yen, C.K. Chuang, D.S. Lin and C.D. Hsiao. 2012 Overexpression of Akt1 Enhances Adipogenesis and Leads to Lipoma Formation in Zebrafish. *PLoS One* 7(5): e36474. Times Cited: 23
47. W.Y. Liao<sup>1</sup>, **C.N. Shen<sup>1</sup>**, L.H. Lin, Y.L. Yang, J.W. Chen, S.C. Kuo\*, S.H. Wu\* and C.C. Liaw\* 2012. Asperjinone, A Nor-Neolignan, and Terrein, A Suppressor Of ABCG2-expressing Breast Cancer Cells, from Thermophilic *Aspergillus terreus*. *J. Nat. Prod.* 75(4): 630-635. (<sup>1</sup>co-first author) Times Cited: 31
48. Liaw C.C\*., W.Y. Liao, C.S. Chen, Y.C. Wu, S.C. Jao, **C.N. Shen\***, and S.H. Wu\*. 2011. Calcium-Chelating Capability of Tetrahydrofuranic Moieties Modulates Cytotoxicity of Annonaceous Acetogenins. *Angewandte Chemie Intl Ed* 50(34): 7885-7891. (\*corresponding author) Times Cited: 5
49. Yang Y.L., W.Y. Liao, W.Y. Liu, C.C. Liaw, **C.N. Shen**, Z.Y. Huang, and S.H. Wu. 2009. Discovery of New Natural Products by Intact-Cell Mass Spectrometry and LC-SPE-NMR: Malbranpyrroles, Novel Polyketides from Thermophilic Fungus *Malbranchea sulfurea*. *Chemistry-A European Journal.* 15(43):11573-80. Times Cited: 22
50. Huang Y.C., T.L. Hwang, C.S. Chang, Y.L. Yang, **C.N. Shen**, W.Y. Liao, S.C. Chen, and C.C. Liaw. 2009. Anti-inflammatory flavonoids from the rhizomes of *Helminthostachys zeylanica*. *72(7): 1273-8.* Times Cited: 27

***Understand the role of gene & genome structure using aquatic organism***

51. Huang SP, Chen IS, **Shen CN**. 2016. The complete mitochondrial genome of the small-scaled Wu's goby *Wuhanlinigobius polylepis* (Perciformes, Gobiidae). *Mitochondrial DNA DNA Mapp Seq Anal.* 27(6):3823-3825.
52. Yang XG, Chen IS, Ren YP, Shen CN. 2016. The complete mitochondrial genome of Fujian rod gudgeon *Microphysogobio fukienensis* (Nichols) (Cypriniformes, Cyprinidae). *Mitochondrial DNA A DNA MappSeq Anal.* 27(2):1473-5
53. Chen IS, Liu GD, **Shen CN**, Prokofiev AM. 2016. The complete mitochondrial genome of altai osman *Oreoleuciscus humilis* Warpachowski (Cypriniformes, Cyprinidae). *Mitochondrial DNA A DNA MappSeq Anal.* 27(2):953-5.
54. Chen IS, Liu YW, Huang SP, **Shen CN**. 2016. The complete mitochondrial genome of the Korean minnow *Nipponocypris koreanus* (Cypriniformes, Cyprinidae). *Mitochondrial DNA.* 27(1):708-10
55. Huang SP, **Shen CN**, Chen IS. 2016. The complete mitochondrial genome of Hoveen's mullet-goby *Hemigobius hoveenii* (Bleeker) (Teleostei, Gobiidae). *Mitochondrial DNA.* 27(1):715-6.
56. Liu GD, Chen IS, Zhu JQ, **Shen CN**. 2016. The complete mitochondrial genome of small sliver gudgeon *Squalidus gracilis* (Teleostei, Cyprinidae). *Mitochondrial DNA.* 27(1):603-4
57. Liu GD, Chen IS, Zhu JQ, **Shen CN**. 2016. The complete mitochondrial genome of Chinese rod gudgeon *Abbottina rivularis* (Cypriniformes, Cyprinidae). *Mitochondrial DNA.* 27(1): 523-4.
58. Huang SP, **Shen CN**, Chen IS. 2016. The complete mitochondrial genome of the redigoby *Redigobius bikolanus* (Perciformes, Gobiidae). *Mitochondrial DNA.* 27(1):525-6.
59. Chen IS, Wen ZH, Liao CR, **Shen CN**. 2015. The complete mitochondrial genome of Plesiomyzon *baotingensis* Zheng & Chen (Cypriniformes, Balitoridae). *Mitochondrial DNA.* 26(6):899-901.
60. Chen IS, Wen ZH, **Shen CN**. 2015. The complete mitochondrial genome of beautiful stone loach *Traccatichtys pulcher* (Nichols & Pope) (Cypriniformes: Balitoridae). *Mitochondrial DNA.* 26(6):932-4.
61. Huang SP., **C. N. Shen**, and I. S. Chen 2015. The complete mitochondrial genome of the Java fat-nose goby *Pseudogobius javanicus* (Teleostei, Gobiidae). *Mitochondrial DNA.* 26(1): 159-61. Times Cited: 1
62. Huang SP., **C. N. Shen**, and Chen IS 2015. The complete mitochondrial genome of the Abe's mangrove goby *Mugilogobius abei* (Teleostei, Gobiidae). *Mitochondrial DNA.* 26(1):143-4. Times Cited: 1
63. Chen IS., M. Han, C.L. Wang, and C. N. **Shen** 2015. The complete mitochondrial genome of rainbow barbel *Acrossocheilus barbodon* (Nichols and Pope) (Teleostei, Cyprinidae, Barbinae). *Mitochondrial DNA.* 26(1):145-6
64. Han, M., C. L. Wang, C. N. **Shen**, and I.S. Chen 2015. The complete mitochondrial genome of half-spined barbel *Acrossocheilus hemispinus* (Nichols) (Teleostei, Cyprinidae, Barbinae). *Mitochondrial DNA.* 26(1):133-4.
65. Chen, I-S., S. P. Huang, N. H. Jang-Liaw, **C. N. Shen**, and J. H. Wu (2008) Molecular evidence for genetic differentiation of the *Opsariichthys bidens* complex (Teleostei: Cyprinidae) in southern China around South China Sea and the validity of *Opsariichthys hainanensis*. *Raffl. Bull. Zool. Suppl.* 19: 215-223.
66. Choo, K.B., C.M. Chen, **C.N. Shen**, and L.C. Au. 1995. Resolution of uncertainties in restriction maps of cosmid clones by sequencing stitching. *Anal. Biochem.* 228: 355-357.

### Patent

1. Kuo, H.C., Y.L.Chen, C.Y. Chuang, Y.T. Yan, **C.N.Shen**, S.H. Chen, J.Yu. 由單一分裂球取得多能幹細胞之方法 (Method of deriving pluripotent stem cells from a single blastomere). Taiwan Patent # 392736 (4/11/13~6/22/27)
2. Li, W.S., W. C. Hung, **C.N.Shen**. Selective Sialyltransferase Inhibitors Suppress Cancer Growth and Metastasis (*PCT filed*)

Thesis, Book Chapters & Popular Science Articles

1. 沈家寧等著 2013 您不可不知道的幹細胞科技 五南圖書公司 (\*corresponding author)
2. 吳瑞仁、沈家寧\* 2012 體細胞重新編程技術開發與應用 中央研究院週報(知識天地) 1390: 8-10. (\*corresponding author)
3. 沈家寧\*、陳志龍 2010. 體細胞重新編程技術與應用前景 中榮醫訊 142: 9-11 (\*corresponding author)
4. C.N. Shen\* and D. Tosh 2010 Chapter 14: Transdifferentiation of pancreatic cells to hepatocytes. Hepatocyte: Methods and Protocols. Humana Press (Edited by Patrick Maurel. ISBN 978-1-60761-687-0, DOI 10.1007/978-1-60761-688-7\_14) (also in *Methods in Molecular Biology* 640: 273-280). (\*corresponding author) Times Cited: 6
5. 沈家寧、謝綺哲、廖紋瑩 2009. 腫瘤幹細胞與癌症治療 科學月刊 40(7): 535-539. (\*corresponding author)
6. 沈家寧、林宇星、張曉旻、陳志龍、簡皎芸 2008. 第三章: 胚幹細胞體外培養與誘導分化 幹細胞學 幹細胞與組織工程教學資源中心主編.
7. Yang, C.J., C.R. Shen, M.L.Kuo, C.N. Shen and Y.K. Liu. 2008. RNA interference-mediated inhibition of acidic mammalian chitinase suppresses OVA-sensitized allergic asthma. *Clinical Immunology* 127: S44-S45. (Conference abstract) Times Cited: 2
8. 沈家寧 2007. 人造幹細胞 科學發展 414: 34-39. (\*corresponding author)
9. Shen, C.N., 2002. Molecular basis of hepatic metaplasia of the pancreas. PhD Thesis of University of Bath.
10. Slack, J.M.W., A.C. Percival, P.A. Seymour, C.N. Shen, W. Bennett, M. Horb, and D. Tosh. 2001. Pancreatic stem cells. **Seoul Symposium on Stem Cells & Therapeutic Cloning.**
11. 沈家寧 1997. 探討甲型腫瘤壞死因子在人類肝癌細胞之逆境訊息傳導 國立陽明大學醫學生物技術所碩士論文

International Symposium Abstract

1. Kuo, T.C., C. H.H. Cho, K.T. Chen and C.N. Shen. 2017. Hepatic microRNAs promote generation of metabolically functioning hepatocytes from human pluripotent stem cells. 18<sup>th</sup> congress of the international society of developmental Biologist. Singapore.
2. Shen, C.N., C.C. Hsieh, C.J. Liang, M. Hsiao, Y.B. Chen, P.C. Lu. 2017. Mitochondrial OXPHOS activity is required for lung metastatic colonization of pancreatic cancer stem cells. Keystone Symposia: Tumor Metabolism: Mechanisms and Targets. Whistler, British Columbia, Canada.
3. Chang, F.P., C.R. Shen, H.K. Sytwu, C.N. Shen. 2017. Immune-tolerable  $\beta$ -like cells derived from autologous hepatocyte reprogramming reverse autoimmune diabetes. Asia Islet Biology and Incretin Symposium. Seoul, Korea. (*AIBIS Travel Award*)
4. Chang, F.P., C.Y. Chien, C.R. Shen, H.K. Sytwu, C.N. Shen. 2016. Immune-tolerable beta-like cells generated from direct hepatocyte reprogramming ameliorate autoimmune diabetes. 14<sup>th</sup> Annual Meeting of International Society of Stem Cell Research, San Francisco, U.S.A. (*ISSCR Travel Award*)
5. Shen, C.N., C.C. Hsieh, C.C., Li, W.S., M. Hsiao. 2016. Therapeutic implication of identifying pancreatic cancer stem cells possessing fructose metabolic signature. 107<sup>th</sup> Annual Meeting of American Association for Cancer Research, Philadelphia, U.S.A. (Abstract published in *Cancer Res* 2016;76(14 Suppl):Abstract nr 2489)
6. Shen, C.N., F.P. Chang, Sytwu, H.K. 2015. Amelioration of type I diabetes via transplantation of immune-tolerable pancreatic beta-like cells derived from autologous hepatocyte reprogramming. Keystone symposia on Molecular and Cellular Biology. Diabetes: New Insights into Molecular Mechanisms and Therapeutic Strategies. Kyoto, Japan

7. **Shen, C.N.**, F.P. Chang, Shen, C.R., Tsai, C.C., Sytwu, H.K. 2015. Amelioration of type I diabetes in mice transplanted with immune-tolerable pancreatic beta-like cells derived from autologous hepatocyte reprogramming. 13<sup>th</sup> Annual Meeting of International Society of Stem Cell Research, Stockholm, Sweden
8. Lin, P.Y., **C.N. Shen**, S.J Peng, Y.Y Fu, P. J. Pasricha, S.C Tang.2015. 3-D Imaging of Mouse Pancreatic Duct Lesion and Neurovascular Remodeling Digestive Disease week 2015, San Diego, California, U.S.A. (Abstract published in Gastroenterology 2015;148 (4 Suppl):Abstract nr 758)
9. Hsieh, C.C., Shyr, Y.M., Liao, W.Y., Chen, J., Li, W.S., Hsiao, M., Chen, C.L., Lin, P.Y., Chen, T.H., Sher, Y.P., and **Shen, C.N.** 2015 Identification of metastatic subsets of pancreatic cancer stem cells possessing metabolic features of pluripotent stem cells. 106<sup>th</sup> Annual Meeting of American Association for Cancer Research, Philadelphia, U.S.A. (Abstract published in Cancer Res 2015;75(15 Suppl):Abstract nr 1511)
10. Lin, P.Y., Su,C.C., Shyr, Y.M., Hsieh, C.C., Chen, T.H., Shyu, J.F., Hsiao, M.,and **Shen, C.N.** 2015 Activated glucocorticoid signaling in pancreatitis contributes to acinar-to-ductal metaplasia and Kras<sup>G12D</sup>-driven tumorigenesis. 106<sup>th</sup> Annual Meeting of American Association for Cancer Research, Philadelphia, U.S.A. (Abstract published in Cancer Res 2015;75(15 Suppl):Abstract nr 2325)
11. Chien C.Y., I.C. Lee, F.P. Chang, H.A. Tsai, Y.C. Chang, H.S. Lee, and **C.N. Shen** 2014. Reprogramming of adult hepatocytes to bipotential progenitors in spheroid cultures utilizing polyvinyl alcohol substrates. 12<sup>th</sup> Annual Meeting of International Society of Stem Cell Research, Vancouver, Canada
12. Lin, P.Y., C.C. Hsieh, C.C. Su, and **C.N. Shen**. 2014. Involvement of glucocorticoid signaling in acinar-to-ductal metaplasia and oncogenic Kras-mediated transformation in pancreas. Pancreatic Cancer: Innovations in Research and Treatment, New Orleans, LA, U.S.A
13. **Shen, C.N.**, Su, C.C., C.C.Hsieh, W.Y. Liao, W.Y. Mao, C.R.Shen, M. Hsiao 2014. Activated glucocorticoid signaling in pancreatitis contributes to acinar-to-ductal metaplasia and KrasG12D-driven tumorigenesis. RAS Oncogenes: From Biology to Therapy, Lake Buena Vista, FL, U.S.A. (Abstract published in Mol Cancer Res 2014;12(12 Suppl):Abstract nr B16)
14. **Shen, C.N.**, W.Y. Liao, H.Y. Han, S.C.Kuo, C.C. Liaw. 2013. Disruption of porphyrin homeostasis by inhibiting ABCG2 with cyclohexylmethyl flavonoids suppresses propagation of stem-like breast cancer cells. 2013 shanghai international symposium on cancer stem cells, Shanghai, China
15. **Shen, C.N.**, F.P. Chang, R.R. Wu, L.J. Wang, H.K. Sytwu. 2013. Generation of expandable transdifferentiated beta cells from hepatocytes of type I diabetic mice utilizing two define factors. CSHA/ISSCR joint conference on Stem Cells in Science and Medicine, Suzhou, China
16. Chang, H.M., Y.H. Lin, F.P. Chang, C.R. Shen, C.L. Liu, W.Y. Mao. and **C.N. Shen**, 2013 Protoporphrin IX Accumulation in ABCG2-Deficient Liver Impairs Mitochondrial Dynamics and Differentiation Potentials of Hepatic Stem/Progenitor Cells. 11<sup>th</sup> Annual Meeting of International Society of Stem Cell Research, Boston, U.S.A.
17. **Shen, C.N.**, H.M. Chang, Y.H. Lin, F.P. Chang, C.R. Shen, C.L. Liu, W.Y. Mao. 2013 Protoporphrin IX Accumulation Disrupts Mitochondrial Fusion/Fission Balance in ABCG2-Deficient Hepatocytes Cell Symposia: Mitochondria: From Signaling to Disease, Lisbon, Portugal
18. **Shen, C.N.**, C.C. Hsieh, W.Y. Liao, S.Y. Sung. 2012. Fructose enhances metastatic potentials of pancreatic cancer stem cells. Cell Symposia: Angiogenesis, Metabolic Regulation, and Cancer Biology in association with VIB. Leuven, Belgium.
19. **Shen, C.N.**, L.C. Lai, C.C. Su, R.R. Wu, P.Y. Lin. 2012. Glucocorticoids modulate acinar-to-ductal transdifferentiation in pancreatitis. 10<sup>th</sup> Annual Meeting of International Society of Stem Cell Research, Yokohama, Japan. (*ISSCR Travel Award*).
20. Chen, C.L., H.W. Hsu, Y.T.Yan, H.L.Su, H.C.Kuo, S.M.Hwang, J.Yu, C.H.Chen, and **C.N.Shen.** 2012. RNA-Seq analysis of mouse induced pluripotent stem cells reveals cyclin D1 negatively regulates the ground state pluripotency and cell cycle adaption. 10<sup>th</sup> Annual Meeting of International Society of Stem Cell Research, Yokohama, Japan. (*ISSCR Travel Award*).
21. Chien, C.Y., I.C. Lee, M.H.Tao, Y.C.Chang, H.S. Lee, and **C.N.Shen**. 2012. Propagation of adult liver



- stem/progenitor cells in a serum-free three-dimensional culture system. 10<sup>th</sup> Annual Meeting of International Society of Stem Cell Research, Yokohama, Japan.
22. Hsieh, C.C., W.Y. Liao, S.Y. Sung, Y.M. Shyr, T.H.Chen, M.Hsiao and **C.N.Shen**. 2012. Elevated levels of sialylated c-Met induced by fructose replacement enhances metastatic potentials of pancreatic cancer stem cells. 10<sup>th</sup> Annual Meeting of International Society of Stem Cell Research, Yokohama, Japan.
  23. **Shen, C.N.**, T.A. Yuan, C.Y. Chien, R.R. Wu, and H.S. Lee. 2011. Retinoic acid ameliorates type I diabetes mellitus by increasing regulatory T cells and by promoting beta-cell differentiation. 9<sup>th</sup> Annual Meeting of International Society of Stem Cell Research, Toronto, Canada.
  24. Chang, F.P., R.R. Wu, H.K. Sytwu, and **C.N. Shen**. 2011. Neurogenin3 promotes proliferation of transdifferentiated beta cells. 9<sup>th</sup> Annual Meeting of International Society of Stem Cell Research, Toronto, Canada (*ISSCR Travel Award*).
  25. Chen, C.L., Y.T.Yan, H.C.Kuo, S.M.Hwang, H.L.Su, J.Yu, C.H.Chen, and **C.N.Shen**. 2011. Cyclin D negatively regulates the progression of intermediates to fully-reprogrammed pluripotent cells. KEY Forum in Developmental Biology and Regenerative Medicine. Kumamoto, Japan.
  26. Hsieh, C.C., P.Y. Lin, C.C.Su, S.Y. Sung, and **C.N.Shen**. 2011. Involvement of activated Kras in transdifferentiation of acinar cells toward ductal and neoplastic lineages. KEY Forum in Developmental Biology and Regenerative Medicine. Kumamoto, Japan.
  27. W.Y.Liao, J. Susanto, S.H.Wu, L.H.Lin, Y.C.Huang, S.C.Kuo, C.C. Liaw., and **C.N. Shen** 2010. Cyclohexylmethyl flavonoids downregulates self-renewal expansion of ABCG2<sup>+</sup>CD24<sup>low/-</sup>CD44<sup>+</sup> Breast Cancer Stem Cells. 8<sup>th</sup> Annual Meeting of International Society of Stem Cell Research. San Francisco Marriott, San Francisco, California, United states of America.
  28. H.Y. Hen, **C.N.Shen**, H.K.Liu 2010 Evaluation for the Impact of Penta-O-galloyl-glucopyranose Isoforms (PGG) on Each Stages of Adipocyte Life Cycle. 9<sup>th</sup> Annual Meeting of CGCM, Hong Kong Convention and Exhibition Centre, Wan Chai, Hong Kong.
  29. R.R. Wu, S.Y. Wu, J. Susanto, C.C. Hsieh, Susanto, D. Tosh, and **C.N.Shen**. 2010. Reprogramming of pancreatic acinar cells to multipotent progenitor cells. 43<sup>rd</sup> annual meeting of Japan Society of Developmental Biology. Kyoto, Japan.
  30. S.T. Tsai, **C.N. Shen**, C.C. Tsou, W.Y. Mao, W.C. Chang, W.L Hsu, and C.H. Chen 2009. Comparative proteomic analysis of liver cancer stem cells. 57<sup>th</sup> ASMS Conference on Mass Spectrometry. Philadelphia, Pennsylvania, United states of America.
  31. **Shen, C.N.**, Liao, W.Y., C.C. Su, C.C. Hsieh, S.C. Chen, C.C. Liaw. 2009. ABCG2-positive multipotent tumor-initiating cells isolated from pancreatic ductal adenocarcinomas. 7<sup>th</sup> Annual Meeting of International Society of Stem Cell Research, Barcelona, Spain.
  32. Liao, W.Y., C.C. Su, C.C. Hsieh, S.C. Chen, C.C. Liaw, and **C.N. Shen** 2008. Nestin-positive stem/progenitor cells derived from pancreatic neoplastic transformation. Keystone Symposia on Stem Cells, Cancer and Aging. Biopolis, Singapore, Singapore.
  33. **Shen, C.N.**, J. Susanto, Y.H. Lin, Y.N. Chen, Y.T. Yan, S.T. Tsai, C.H. Chen 2008. The genetic integrity of embryonic stem cells maintained by ABCG2-dependent defense machinery. Keystone Symposia on Stem Cells, Cancer and Aging. Biopolis, Singapore, Singapore.
  34. Chien, C.Y., R.R. Wu, Y.H. Lin, J.L. Chen and **C.N. Shen**. 2007. Islet vascularization elevated by retinoic acid signaling promotes pancreatic progenitor cells to differentiate into mature beta cells. 5<sup>th</sup> Annual Meeting of International Society of Stem Cell Research, Cairns, QLD, Australia.
  35. **Shen, C.N.**, Y.N. Chen, Y.H. Lin, J Susanto. 2007. Involvement of PI3K/Akt signaling and multidrug transporter ABCG2 in regulating pluripotency of embryonic stem cells. 5<sup>th</sup> Annual Meeting of International Society of Stem Cell Research, Cairns, QLD, Australia.
  36. Kuo, H.C., Y.L. Chen, Y.T. Yan, **C.N. Shen**, S.H. Chen, C.Y. Chuang, J. Yu, and D.P. Wolf. 2006. Derivation of pluripotent stem cells from single blastomeres of mouse four and eight stage embryos. 4<sup>th</sup> Annual Meeting of International Society of Stem Cell Research, Toronto, Canada.

37. **Shen, C.N.**, T.T. Liu, Cheng I. F., H.Y. Chang, C.R. Shen. 2006. Bipotential side-population progenitors derived from hepatic transdifferentiation. 4<sup>th</sup> Annual Meeting of International Society of Stem Cell Research, Toronto, Canada.
38. **Shen, C.N.**, H.M. Chang, K.W. Cheng, H.Y. Chang, E.C. Chan. 2006. Maintenance of the differentiation capability of mouse hair follicle stem cells with embryonic fibroblast feeders. 4<sup>th</sup> Annual Meeting of International Society of Stem Cell Research, Toronto, Canada.
39. Shen, C.N., H.-Y. Chang, C.-Y. Chien, and C.-R. Shen. 2005. Pancreatic Reprogram of multipotent progenitors isolated from liver. 3<sup>rd</sup> Annual Meeting of International Society of Stem Cell Research. San Francisco Marriott, San Francisco, California, United states of America.
40. Burke, Z., **C.N. Shen**, and D. Tosh. 2004. Transdifferentiated hepatocytes from pancreatic AR42J-B13 progenitor cells. FASEB Summer Research Conference. Snowmass Village, Colorado, United states of America.
41. **Shen, C. N.**, A. Petiot C. Dickson, J.M.W. Slack, and D. Tosh. 2004. All-*trans* retinoic acid induces islet formation and suppresses exocrine differentiation in the embryonic pancreas. 2<sup>nd</sup> Annual Meeting of International Society of Stem Cell Research. Boston Seaport Hotel, Boston, Massachusetts, United states of America.
42. **Shen, C. N.**, J.M.W. Slack, and D. Tosh. Effect of Retinoic Acid on differentiation and branching morphogenesis of the embryonic pancreas. Developmental Biology Annual Symposium and Genetics 2004. University of Warwick, Coventry, United Kingdom 2004
43. Burke, Z., **C.N. Shen**, and D. Tosh. Transdifferentiation of pancreatic cells to hepatocytes: A model for liver function. Developmental Biology Annual Symposium and Genetics. University of Warwick, Coventry, United Kingdom 2004
44. **Shen, C. N.**, J.R. Seckl, J.M.W. Slack, and D. Tosh. Glucocorticoid suppresses beta cell development and induces hepatic metaplasia in embryonic pancreas. BSDB/BSCB Joint Spring meeting on Cell and Developmental Biology. University of Warwick, Coventry, United Kingdom 2003
45. Burke, Z., **C.N. Shen**, and D. Tosh. Expression and regulation of liver proteins in transdifferentiated hepatocytes induced from pancreatic cells. BSDB/BSCB Joint Spring meeting on Cell and Developmental Biology. University of Warwick, Coventry, United Kingdom 2003
46. Tosh, D., **C.N. Shen**, and J.M.W. Slack. Conversion of pancreatic cells to liver. FASEB Summer Research Conference on: Mechanisms of liver growth and differentiation and molecular pathogenesis of hepatic diseases. Snowmass Village, Colorado, United states of America, 2002.
47. Horb, M.E., **C.N. Shen**, D. Tosh, and J.M.W. Slack 2002 Transdifferentiation of liver to pancreas. ISREC/EMBO workshop on Endoderm: Development, differentiation and cancer. Arolla Switzerland 2002.
48. Kurash, J., **C.N. Shen**, and D. Tosh. Induction of acute phase proteins in transdifferentiated hepatocyte. BSDB/BSCB Joint Spring Symposium on Evolution of Developmental Mechanisms and Cell Regulation through Molecular Machines. University of York, York, United Kingdom 2002
49. Horb, M.E., D. Tosh, **C.N. Shen**, and D. Tosh 2002 Transdifferentiation of liver to pancreas. BSDB/BSCB Joint Spring Symposium on Evolution of Developmental Mechanisms and Cell Regulation through Molecular Machines. University of York, York, United Kingdom 2002
50. **C.N. Shen**, J.M.W. Slack, and D. Tosh. Regulation of epithelia morphogenesis in hepatic transdifferentiation of pancreas. The 12<sup>th</sup> international conference of ISD on Cancer and Development with emphasis on neurobiology and cellular microenvironment. Lyon, France 2002. (*Selected abstract for Meeting scholarship; abstract was published on Differentiation 70: 363, 2002.*)
51. D. Tosh, **C.N. Shen**, and J.M.W. Slack. Conversion of pancreatic cells to liver. FASEB Summer Research Conference on: Mechanisms of liver growth and differentiation and molecular pathogenesis of hepatic diseases. Snowmass Village, Colorado, United states of America, 2002.
52. Horb, M.E., **C.N. Shen**, D. Tosh, and J. M. W. Slack 2002 Transdifferentiation of liver to pancreas. ISREC/EMBO workshop on Endoderm: Development, differentiation and cancer. Arolla Switzerland 2002

53. Horb, M.E., D. Tosh, **C.N. Shen**, and J. M. W. Slack. 2002 Transdifferentiation of liver to pancreas. BSDB/BSCB Joint Spring Symposium on Evolution of Developmental Mechanisms and Cell Regulation through Molecular Machines. University of York, York, United Kingdom 2002
54. **C.N. Shen**, J.M.W. Slack, and D. Tosh. Regulation of epithelia morphogenesis in hepatic transdifferentiation of pancreas. BSDB/BSCB Joint Spring Meeting Symposium: Cell & Tissue Morphogenesis. University of Sussex, Brighton, United Kingdom, 2001
55. Kurash, J., **C.N. Shen**, and D. Tosh. Induction of acute phase proteins in transdifferentiated hepatocyte. BSDB/BSCB Joint Spring Symposium on Evolution of Developmental Mechanisms and Cell Regulation through Molecular Machines. University of York, York, United Kingdom 2002
56. **C.N. Shen**, J.M.W. Slack, and D. Tosh. Molecular basis of hepatic metaplasia of pancreas. International Congress on Differentiation, Cell and Molecular Biology. Gold Coast, Queensland, Australia, 2000 (*Selected abstract for Meeting scholarship; Abstract was published in Cell Biol. Int. 24: 934, 2000*).
57. D. Tosh, **C.N. Shen**, and J.M.W. Slack. An *in vitro* model for the transformation of pancreas to liver. FASEB Summer Research Conference on: Mechanisms of liver growth and differentiation in health and disease Snowmass Village, Colorado, United states of America, 2000.
58. J.M.W. Slack, **C.N. Shen**, D. Tosh. Molecular mechanism of pancreas to liver metaplasia. NIH conference on: Stem Cells and Pancreatic Development. National Institutes of Health, Bethesda, Maryland, United states of America, 2000.
59. **C.N. Shen**, J.M.W. Slack, and D. Tosh. Pancreas to liver metaplasia induced by dexamethasone. BSDB Symposium: Pattern formation and control of cell number. University of Warwick, Coventry, United Kingdom, 2000.
60. D. Tosh, **C.N. Shen**, and J.M.W. Slack. Hepatic Metaplasia of Pancreas. BSDB Symposium: Pattern formation and control of cell number. University of Warwick, Coventry, United Kingdom, 2000.
61. D. Tosh, **C. -N. Shen**, and J. M. W. Slack. (1999) Hepatic Metaplasia of Pancreas. 8th Biennial International Congress on: Liver Development, Gene Regulation and Disease. June, 1999 Palazzo del Popolo - Orvieto, Italy

#### Conference Speech

1. **Development of anti-cancer strategies for pancreatic ductal adenocarcinoma via targeting unique metabolic features of cancer stem cells. Pan Pacific Symposium on Stem Cells and Cancer Research. April 15<sup>th</sup> ~ 16<sup>th</sup>, 2017. Hualien, Taiwan.**
2. **Three-dimensional visualization of acinar-to-ductal reprogramming and neurovascular remodeling during pancreatic tumorigenesis. Taiwan Japan Nanomedicine Symposium. March 16<sup>th</sup> ~ 17<sup>th</sup>. Taipei Taiwan.**
3. **Immune-tolerable insulin-producing beta cells generated from developmentally related somatic tissues ameliorate type 1 diabetes. Asia Islet Biology and Incretin Symposium (AIBIS 2017). March 3rd ~ 4th, 2017. Seoul, Korea.**
4. **Are Stem Cell Therapies the Next Frontier for Diabetes Treatments? National Symposium and Workshop on Anti-Aging Medicine (NASWAAM 2017). February 24th ~ 26th, 2017. Bali, Indonesia.**
5. **Challenges to clinical translation of human induced pluripotent stem cells. National Symposium and Workshop on Anti-Aging Medicine (NASWAAM 2017). February 24th ~ 26th, 2017. Bali, Indonesia.**
6. Comparative Genome-Wide Profiling Analysis Identifies Unique Metabolic Signatures in Metastatic Subsets of Pancreatic Cancer Stem Cells. Multi-Institutional Pancreatic Cancer Research Conference. January 8<sup>th</sup>, 2017. Taichung, Taiwan.
7. **Amelioration of type I diabetes using direct hepatocyte reprogramming approaches. 11<sup>th</sup> international Diabetes Federation Western Pacific Region Congress and 8<sup>th</sup> Scientific Meeting of the Asian**

- Association for the study of Diabetes. October 27<sup>th</sup>~30<sup>th</sup>, 2016. Taipei, Taiwan (Abstract published in Diabetes Research and Clinical Practice 120S1 (2016) S18).**
8. Development of anti-cancer strategies for pancreatic ductal adenocarcinoma via targeting unique metabolic features of cancer stem cells. The 31th Symposium on Natural Products & Symposium on Pharmacy and Traditional Chinese Medicine. October 14<sup>th</sup>~15<sup>th</sup>, 2016. Kaohsiung, Taiwan.
  9. Patient-specific induced pluripotent stem cells for understanding and treating diabetes. Strategic Forum for Taiwan iPSC Research and Industrial Development: Current Progress and Future Directions. October 12<sup>th</sup>, 2016, Taipei, Taiwan.
  - 10. Immune-tolerable insulin-producing beta-cells generated from direct hepatocyte reprogramming ameliorate autoimmune diabetes. Bilateral Symposium of Genomic Research Center of Academia Sinica and Graduate School of Science of Osaka University. October 5<sup>th</sup> ~6<sup>th</sup> 2016, Osaka, Japan.**
  11. Comparative Genome-Wide Profiling Analysis Identifies Unique Metabolic Signatures in Metastatic Subsets of Pancreatic Cancer Stem Cells. CSH Asia Meeting on Cancer and Metabolism September 19<sup>th</sup>~23<sup>rd</sup>, 2016. Suzhou, China.
  - 12. Mitochondrial OXPHOS activity is required for lung metastatic colonization of pancreatic cancer stem cells. 41<sup>st</sup> FEBS Congress: Molecular and System Biology for a Better Life. September 3<sup>rd</sup>~8<sup>th</sup>, 2016. Ephesus/Kuşadası, Turkey.**
  - 13. Excessive porphyrin production induced by cyclohexylmethyl flavonoids suppresses self-renewal propagation of breast cancer stem cells. 5th IAPC Meeting: Emerging Technologies in Drug Discovery and Development. August 23<sup>rd</sup>~26<sup>th</sup>, 2016. Zhu Hai, China (Session Chair & Speaker)**
  14. The prospect of induced pluripotent stem cells for type 1 diabetes treatment. Continue education and post ADA workshop. The Endocrine Society and Diabetes Association of the Republic of China. July 30<sup>th</sup>, 2016, Taipei, Taiwan
  15. Unique Metabolic Gene Signatures of Metastatic Subsets of Pancreatic Cancer Stem Cells Identified by Comparative Genome-Wide Profiling Analysis. Symposium on Innovative Regeneration Medicine and Cancer Stem Cells. July 2<sup>nd</sup>, 2016, Kaohsiung, Taiwan
  - 16. Rejuvenating liver and pancreatic endocrine tissues through hepatocyte reprogramming 7th Japan-Taiwan Symposium on Nanomedicine. January 20<sup>th</sup> ~22<sup>nd</sup>, 2016. Kyoto, Japan**
  17. Visualization of acinar cell reprogramming and pancreatic cancer development using three-dimensional imaging techniques. 2015 International Conference on Developmental Biology Scientific & Drug Delivery System Program. November 10<sup>th</sup> ~17<sup>th</sup>, 2015. Taipei, Taiwan
  18. Amelioration of type I diabetes by direct hepatocyte reprogramming. International Conference on Stem cells and Developmental Biology. October 16<sup>th</sup> ~17<sup>th</sup> 2015. Taipei, Taiwan
  - 19. Amelioration of type I diabetes by direct liver cell reprogramming. 2015 Asia-Pacific Biomedical Symposium on Regenerative Medicine. July 5<sup>th</sup> ~6<sup>th</sup> 2015. Taipei, Taiwan**
  20. Are induced pluripotent stem cells ready for clinical applications? Stem Cell Summit 2015. September 20<sup>th</sup> 2015, Taipei, Taiwan.
  - 21. Activated glucocorticoid signaling promotes acinar-to-ductal metaplasia and Kras<sup>G12D</sup>-driven tumorigenesis. 5th Asia-Pacific Summit on Cancer Therapy. July 20<sup>th</sup>~22<sup>th</sup> 2015. Brisbane, Australia. (Session co-chair & Speaker) (Abstract published in Journal of Cancer Science & Therapy 7:6, 2015)**
  - 22. Amelioration of type I diabetes by direct liver cell reprogramming. 2015 Asia-Pacific Biomedical Symposium on Regenerative Medicine. July 5<sup>th</sup> ~6<sup>th</sup> 2015. Taipei, Taiwan**
  23. Stem cells and development of Pancreas and liver. 38<sup>th</sup> Annual meeting of Gastroenterological Society of Taiwan. July 4<sup>th</sup> 2015. Taipei, Taiwan
  - 24. Generation of pluripotent stem cells and multipotent neural progenitor through somatic cell reprogramming. 8th Pan Pacific Symposium on Stem Cells and Cancer Research (PPSSC 2015) April 11<sup>th</sup>-13<sup>th</sup>, 2015, Hsinchu, Taiwan**

25. Rejuvenating Damaged Liver and Pancreas through Direct Cell Reprogramming Symposium on New Advance in Inflammation, Cancer and Stem Cell March 31<sup>st</sup>, 215 Kaohsiung, Taiwan
26. **Hepatocyte Reprogramming in Spheroid Culture Using Polyvinyl Alcohol Substrates. Taiwan-Japan Nanomedicine Symposium. Jan 8-9, 2015, Taipei, Taiwan**
27. **Reprogramming of liver cells to insulin-producing beta cells. The 2<sup>nd</sup> Cross-straits Forum on Life Sciences. December 1-2, 2014, Taipei, Taiwan**
28. **Therapeutic implication of identifying pancreatic cancer stem cells possessing metabolic features of pluripotent stem cells. 5th Malaysian Tissue Engineering & Regenerative Medicine Scientific (MTERMS) Meeting. September 17-19, 2014, Kuala Lumpur, Malaysia (Abstract published in Regenerative Research 3(2) 2014 42)**
29. **G1-phase regulators act as a barrier to pluripotent reprogramming via promoting neural cell fate commitment. 5th Malaysian Tissue Engineering & Regenerative Medicine Scientific (MTERMS) Meeting. September 17-19, 2014, Kuala Lumpur, Malaysia. (Abstract published in Regenerative Research 3(2) 2014 6)**
30. Therapeutic implication of identifying pancreatic cancer stem cells possessing metabolic features of pluripotent stem cells. Translational Medical Research of Regenerative Medicine and Stem Cells at 103 Annual Meeting of Chinese Medical Association. June 28, 2014, Taipei, Taiwan
31. **BioTherapy-Stem cells and regenerative medicine. 7th France-Taiwan Frontiers of Science (FoS) Symposia. June 10-12, 2014, New Taipei City (Chair speech)**
32. **Generation of expandable transdifferentiated beta cells from hepatocytes of diabetic NOD mice utilizing two define factors. BIT's 4<sup>th</sup> Annual World Congress of Molecular & Cell Biology. April 25-29, 2014, Dalian, China (Chair & Speaker)**
33. To repair injured pancreatic islets utilizing somatic cell reprogramming approaches. 7th France-Taiwan Frontiers of Science Interim meeting. March 8-9, 2014, Kaoshiung, Taiwan (Keynote speaker)
34. **Reprogramming of adult hepatocytes to bipotential progenitors and insulin-producing clusters in spheroid cultures utilizing polyvinyl alcohol substrates. Taiwan-Japan Nanomedicine Symposium. Jan 13-14, 2014, Nagoya, Japan**
35. Reprogramming of adult hepatocytes to bipotential progenitors in spheroid culture on polyvinyl alcohol substrates. Technologies for Medical Diagnosis and Therapy Symposium. Oct 21-22, 2013, Taipei, Taiwan
36. **Roles of ABCG2 transporter in stem cells, liver metabolism and transdifferentiation. 2013 International Symposium on Wound Regeneration and Repair. Oct 8, 2013, Tainan, Taiwan**
37. Deciphering the physiological determinants that modulating cell fate commitment during somatic cell reprogramming. 2013 International Symposium on Recent Advance of Induced Pluripotent Stem Cells and Cell Therapy at 102 Annual Meeting of Chinese Medical Association. June 29, 2013, Taipei, Taiwan
38. Deciphering the key features of cancer stem cells of pancreatic ductal adenocarcinoma. Cancer Stem Cell Mini-symposium at NCKU Hospital, May 18, 2013, Tainan, Taiwan
39. Identification of Distinct Populations of Cancer Stem Cells that Determines Chemoresistance and Metastatic Potential of Pancreatic Ductal Adenocarcinoma. Cancer Stem Cell mini-Symposium, January 30, 2013, Taipei, Taiwan.
40. **The use of reprogramed cells in beta-cell replacement therapy. China-Taiwan Bilateral Symposium on Biomedical Sciences, September 10-12, 2012, Shanghai, China.**
41. **Pancreatic cell plasticity and its role in islet repairing and pancreatic carcinogenesis. Taiwan-UK conference on Life Science, September 1-2, 2012, Oxford, United Kingdom.**
42. Identification of cancer stem cells from pancreatic adenocarcinoma with higher metastatic potentials. International symposium on recent advance in pluripotent stem cells & 7th Annual meeting of Taiwan society for stem cell research, October 1-2, 2011, Taipei, Taiwan.
43. **The physiological role of ABCG2 in stem cells and stem-like breast cancer cells. The 7<sup>th</sup> Congress of Federations of Asian and Oceanian Physiological Societies, September 11-14, 2011, Taipei, Taiwan.**

- 44. Pancreatic cell plasticity and its role in islet repairing and carcinogenesis KEY Forum in Developmental Biology and Regenerative Medicine, September 8-9, 2011, Kumamoto, Japan.**
45. Clonal evolution of pancreatic tumors and metastatic cancer stem cells. The 4<sup>th</sup> International Conference for the Treatment of Pancreatic Cancer, June 25, 2011, Tainan, Taiwan.
46. In search of cancer stem cells from pancreatic ductal adenocarcinoma. Asia-Pacific Congress on Pancreas and Biliary Tract Cancer (In conjunction with the 14<sup>th</sup> Annual Meeting of the Taiwan Cooperative Oncology Group. November 20-21, 2010, Taipei, Taiwan.
47. Generation of insulin-producing cells from pluripotent reprogramming and lineage reprogramming of somatic cells. Millipore Asia Bioforum on “Recent Advances in Stem Cell & Epigenetics”. September 9, 2010, Taipei, Taiwan.
- 48. Reprogramming of pancreatic acinar cells to multipotent progenitor cells. 43<sup>rd</sup> annual meeting of Japan Society of Developmental Biology. June 22-24, 2010, Kyoto, Japan.**
49. Application of epidermal stem cells for healing diabetic wound 5<sup>th</sup> Annual Meeting of Taiwanese Society for Investigative Dermatology. National Defense Medical Center, May 14, 2010, Taipei, Taiwan.
50. Activation of glucocorticoid pathway in chronic pancreatitis promotes development of pancreatic neoplasm. Inflammation, Stem cell and Carcinogenesis Symposium. Kaohsiung Medical University, May 14<sup>th</sup>, 2010, Kaohsiung, Taiwan.
- 51. Porphyrin homeostasis maintained by ABCG2 transporter regulates self-renewal of embryonic stem cells and cancer stem cells.** The international conference of Stem cells and regenerative medicine for neurodegenerative diseases. Buddhist Tzu-Chi General Hospital, April 22-24, 2010, Hualien, Taiwan
- 52. Reprogramming of pancreatic acinar cells into multipotent progenitor cells. Academia Sinica-Kumamoto University Joint conference on Organogenesis. Academia Sinica, April 9, 2010, Taipei, Taiwan.**
53. Generation of insulin-producing cells from pluripotent reprogramming and lineage reprogramming of somatic cells. Biotechnology Taiwan 2009: International Symposium of Stem cells, Vaccine, and molecular Medicine. Chang Yung-Fa Foundation International Convention Center, November 6, 2009, Taipei, Taiwan.
54. Generation of insulin-producing cells from pluripotent reprogramming and lineage reprogramming of somatic cells. Regenerative Medicine 2009: From stem cells to disease models. National Yang-Ming University, October 23-24, 2009, Taipei, Taiwan.
55. Therapeutic potential of stem cells in skin repair and regeneration. The Symposium of Integrated Aesthetic Medicine. NTUH International Conference Center, July 6, 2009, Taipei, Taiwan.
56. ABCG2-positive plastic progenitor generated from pancreatic transdifferentiation and intraepithelial neoplasia. International Symposium of Stem cells and Bioengineering. NCKU Medical College, May 12-13, 2009, Tainan, Taiwan.
57. Generation of ABCG2-positive multipotent precursor cells in pancreatic neoplastic transformation. International Symposium on Stem cells, epigenetic and Development. NTUH International Conference Center, October 13-14, 2008, Taipei, Taiwan.
58. Isolation and application of dermal stem cells. Annual meeting of Taiwan Academy of liposuction surgery. May 4, 2008, Taipei, Taiwan.
59. Isolation and application of skin stem cells. Annual Symposium on modern trend of autologous stem cell therapy. Taiwan Mesotherapy Research Society. NTUH International Conference Center, April, 2008, Taipei, Taiwan.
60. Transdifferentiation, a potential solution for diabetic and pancreatic cancer therapy. Special Seminars in Cell Therapy. Joint symposium of Taiwan Surgical Society, March 29-30, 2008, Kaohsiung, Taiwan.
61. Role of Multipotent Stem/Progenitor Cells in Ductal Neoplasia & Hepatic Metaplasia of Pancreas. Special Seminars in Cancer stem cells. Taiwan Medical Week, November 9, 2007, Taipei, Taiwan.

62. **Involvement of PI3k/Akt Signaling in Derivation of Multipotent Stem/Progenitor Cells from Pancreas-to-Liver Transdifferentiation. The Sixth Cross Strait Symposium on Biomedical and Bioengineering Research. China Academy of Science, August 30-31, 2007, Shanghai, China.**
63. Isolation of multipotent stem cells from skin. Annual Symposium on autologous stem cell therapy. Taiwan Mesotherapy Research Society, June 24, 2007, Taipei, Taiwan.
64. **Bipotential stem/progenitor cells and transdifferentiation in pancreas. Japan-Taiwan Bilateral Symposium on Cell and Developmental Biology. Academia Sinica, January 17-18, 2007, Taipei, Taiwan.**
65. **Role of retinoids in pancreas development. Taiwan-Scotland Bilateral Developmental Biology Symposium. September 4-7, 2006, Taipei, Taiwan.**
66. Bipotential stem/progenitor cells and pancreatic metaplasia. Annual symposium on plasticity and application of stem cells. Chinese Medical Association, June 23-24, 2006, Taipei, Taiwan.
67. Derivation of multipotent progenitors from pancreas-to-liver transdifferentiation. 14<sup>th</sup> Symposium on recent advance in cellular and molecular biology. January 17-19, 2006, Pintung, Taiwan.
68. Somatic cells plasticity and Transdifferentiation. The symposium on Recent Advances in Medical Biotechnology. September 24-25, 2005, Taipei, Taiwan.
69. Reprogramming of somatic cells and stem cell plasticity. 21<sup>st</sup> Summer Camp of Biology. August 23-25, 2005, Rui-Li, Chia-Yi, Taiwan.
70. Molecular Basis of the plasticity of pancreatic cells and the hepatic transdifferentiation differentiation. Joint Meeting of 3<sup>rd</sup> NHRI conference on Signal Transduction & 4<sup>th</sup> NHRI Conference on Developmental Biology. June 27-28, 2005, Zhunan, Miaoli, Taiwan
71. **Plasticity of Pancreatic Differentiation. Centre for Molecular Medicine Symposium on Endoderm formation, May 27, 2004, Biopolis, Singapore.**

*Institutional lecture invitation*

1. From learning the rule of the cell-fate conversion to understanding and treating disorders of pancreas. Invited by College of Life Science, National Tsing-Hua University. May 18<sup>th</sup> 2017
2. Are Stem Cells the Next Frontier for Diabetes Treatment, Workshop on “ Better Achievement Journey to better glycemic control”, Invited by Department of Endocrinology and Metabolism, Taichung Veterans General Hospital. December 30<sup>th</sup>, 2016
1. Patient-specific induced pluripotent stem cells for understanding and treating diabetes. Invited by Department of Endocrinology and Metabolism, Chia Medical University Hospital. September 2<sup>nd</sup>, 2016
2. Making insulin-producing beta cells from different cell resources. Invited by Department of Endocrinology and Metabolism, Taichung Veterans General Hospital. January 13<sup>th</sup>, 2016
3. Cellular reprogramming for understanding and treating human diseases. Joint Forum of Moon-Shan Biomedical Research, Cell Therapy and Regenerative medicine, Biochemistry and Molecular Cell Biology, Taipei Medical University. December 24<sup>th</sup>, 2015
4. How cells can change their fate? Elucidating the molecular features of somatic cell reprogramming utilizing multidisciplinary approaches. Invited by Department of Physics, National Chiao-Tung University. December 3<sup>rd</sup>, 2015
5. Development of cell therapeutic strategies for diabetes utilizing direct hepatocyte reprogramming approach. Invited by Department of Life Sciences, Fu Jen Catholic University. October 6<sup>th</sup>, 2015
6. Cellular reprogramming for understanding and treating human diseases. Invited by Medical Research Department, Mackay Memorial Hospital. September 25<sup>th</sup>, 2015
7. Amelioration of type 1 diabetes using direct hepatocyte reprogramming approaches. Invited by Institute of Stem Cell and Translational Cancer Research (ISCTCR), Chang Gung Memorial Hospital (CGMH). August 20<sup>th</sup>, 2015

8. Therapeutic implication of identification of cancer stem cells in pancreatic ductal adenocarcinoma. Invited by Department of Traditional Chinese Medicine, Keelung Chang Gung Memorial Hospital. July 16<sup>th</sup> , 2015
9. Acinar cell reprogramming and development of pancreatic cancer. Invited by Graduate Institute of Basic Medicine, Fu Jen Catholic University. May 28<sup>th</sup> , 2015
10. Liver cell reprogramming: A New Strategy for the Treatment of Type I Diabetes. Genomics Research Center, Academia Sinica, Taipei, Taiwan. April 2<sup>nd</sup> , 2015
11. Somatic cell reprogramming occurs under physiological and pathological conditions in pancreas. Invited by Institute of Biochemistry and Molecular Biology, National Yang-Ming University, Taiwan. December 12<sup>th</sup> , 2014.
12. Reprogrammed Cells for Disease Modeling & Regenerative Medicine. Invited by Department of Environmental Engineering, National Cheng Kung University, Taiwan, November 26<sup>th</sup> , 2014
13. **Development of cell-based therapeutics for type I diabetes mellitus via turning liver cells into insulin-producing beta cells. Invited by Centre for Stem Cell Research, Universiti Tunku Abdul Rahman (UTAR), Kuala Lumpur, Malaysia, September 15<sup>th</sup> , 2014.**
14. Mouse models to deciphering genetic components and risk factors of pancreatic cancer and to evaluate efficacy of cell-based therapeutics for diabetes. Invited by College of Life Science, National Tsing-Hua University, Taiwan. May 14<sup>th</sup> , 2014
15. Cell Reprogramming and Pancreatic Diseases. Invited by Department of Biotechnology in Medicine and Laboratory Science, National Yang-Ming University, Taipei, Taiwan. March 24<sup>th</sup> , 2014
16. Deciphering genetic components and risk factors that predispose individuals to pancreatic cancer. Invited by Research Center for Applied Sciences, Academia Sinica, Taipei, Taiwan. March 6<sup>th</sup> , 2014.
17. Cell Reprogramming and Pancreatic Diseases. Invited by Graduate Institute of Aerospace and Undersea Medicine, National Defense Medical Center, Taipei, Taiwan. December 18<sup>th</sup> , 2013.
18. The Implication of Nobel prize in Medicine and Physiology and The Future of Regenerative Medicine. Invited by Department of Biotechnology in Medicine and Laboratory Science, National Yang-Ming University, Taipei, Taiwan. March 7<sup>th</sup> , 2013
19. The Nobel Prize in Medicine 2012 and Recent Developments in Regenerative Medicine. Invited by Graduate, Institute of BioMedical Engineering, National Central University, Taoyuan, Taiwan. December 11<sup>th</sup> , 2012
20. **Acinar cell reprogramming in pancreatitis and in pancreatic neoplasia. Invited by Department of Biology and Biochemistry, University of Bath, Bath, United Kingdom. August 30<sup>th</sup> , 2012**
21. Identification of cancer stem cells from pancreatic adenocarcinoma with higher metastatic potentials. Invited by School of Dentistry, National Yang-Ming University, Taipei, Taiwan. March 28<sup>th</sup> 2012.
22. Cellular reprogramming and pancreatic carcinogenesis. Invited by Institute of Medical Sciences, Tsu Chi University, Hualien, Taiwan. December 8<sup>th</sup> , 2011
23. Pancreatic cell plasticity and its role in pancreatic carcinogenesis. Invited by Department of Education and Research, Shuang-Ho Hospital, New Taipei City, Taiwan. May 12<sup>th</sup> 2011.
24. Cellular plasticity of the pancreas. Invited by Center of Developmental Biology and Regenerative Medicine, National Taiwan University, Taipei, Taiwan. May 11<sup>th</sup> 2011.
25. The multidrug-transporter ABCG2: A functional marker important for maintenance of stem cell integrity and for targeting stem-like cancer cells. Invited by Department of Education and Research, Shuang-Ho Hospital, New Taipei City, Taiwan. May 12<sup>th</sup> , 2011.
26. The multidrug-transporter ABCG2: A functional marker important for maintenance of stem cell integrity and for targeting cancer stem/initiating cells Invited by Department of Education and Reserach, Kaohsiung Chang-Gung Memorial Hospital, Kaohsiung, Taiwan. December 7<sup>th</sup> , 2010.
27. The role of acinar transdifferentiation in pancreatic carcinogenesis and its implication on derivation of pancreatic cancer stem cells. Invited by Stem Cell Study Group, Chang-Gung Memorial Hospital, Taoyuan, Taiwan. April 19<sup>th</sup> , 2010.
28. Reprogramming of pancreatic acinar cells to multipotent progenitors Invited by Institute of Cellular and



- System Medicine, National Health Research Institutes, Zhunan, Miaoli, Taiwan. April 8<sup>th</sup>, 2010.
29. CD44-positive neoplastic precursor cells derived from mice conditionally expressing active Kras mutant in pancreatic acinar lineages. Invited by Department of Education and Research, Taipei Veteran General Hospital, Taipei, Taiwan. November 27<sup>th</sup>, 2009.
  30. Therapeutic potential of stem cells in skin repair. Invited by Department of Plastic Surgery. Tri-Service General Hospital, Taipei, Taiwan. August 27<sup>th</sup>, 2009.
  31. The multidrug-transporter ABCG2: a functional stem cell marker utilizing for identification of drug-resistant pancreatic cancer stem/initiating cells. Invited by Department of Surgery, Taipei Veteran General Hospital, Taipei, Taiwan. April 21<sup>st</sup>, 2009.
  32. Prospectives of stem cell study and application. Invited by Department of Physiology, National Defense Medical Center., Taipei, Taiwan. November 13<sup>th</sup>, 2008.
  33. Alternate strategies for derivation of mature hepatocytes. Invited by Cathay General Hospital, Taipei, Taiwan. March 7, 2008.
  34. Stem cells and transdifferentiation in pancreatic neoplastic transformation. Invited by Department of Surgery, Kaohsiung Medical University Hospital, Kaohsiung, Taiwan. January 31<sup>st</sup>, 2008.
  35. Isolation of multipotent stem cells from skin. Invited by Department of Education and Research, Taichung Veteran General Hospital, Taichung, Taiwan. December 5, 2007.
  36. Identification of the origin of pancreatic cancer stem/progenitor cells. Invited by Department of Education and Research, Markay Memorial Hospital, Taipei, Taiwan. September 10<sup>th</sup>, 2007.
  37. Alternate strategies for derivation of mature hepatocytes. Invited by Department of Surgery, National Taiwan University Hospital, Taiwan. December 11<sup>th</sup>, 2006.
  38. Bipotential Stem/Progenitors Cells and Pancreatic Metaplasia. Invited by Department of Marine Biotechnology and Resources, National Sun Yat-Sen University, Kaohsiung, Taiwan. October 14<sup>th</sup>, 2006.
  39. Alternate strategies for derivation of mature hepatocytes. Invited by Institute of Biomedical Technology and Device Research Laboratories, Industrial Technology Research Institutes, Hsinchu, Taiwan. September 11<sup>th</sup>, 2006.
  40. Bipotential progenitors derived from transdifferentiation reprogramming. Invited by Department of Education and Research, Taipei Veteran General Hospital, Taipei, Taiwan. April 14<sup>th</sup>, 2006.
  41. Molecular and Cellular Basis of Pancreatic-Hepatic switches. Invited by College of Life Science, Tzu-Chi University. January 10<sup>th</sup>, 2006.
  42. Molecular and Cellular Basis of Pancreatic-Hepatic switches. Invited by molecular Biology. National Chung-Cheng University. November 25<sup>th</sup>, 2005.
  43. Reprogramming of pancreatic exocrine cells into multipotent progenitor during hepatic transdifferentiation. Invited by Department of Chemistry, National Chung-Hsing University, Taichung, Taiwan. October 19<sup>th</sup> 2005.
  44. New tissues from our own organs: Transdifferentiation of pancreas and liver. Invited by Department of Medical University, China Medical University, Taichung, Taiwan. June 8<sup>th</sup>, 2005.
  45. Stem cells and pancreatic differentiation. Invited by Chang-Gung Children Hospital, Taoyuan, Taiwan. January 5<sup>th</sup>, 2005.
  46. Stem cells and hepatic differentiation. Invited by Institute of Biotechnology in Medicine, National Yang-Ming University, Taipei, Taiwan. November 25<sup>th</sup>, 2004.
  47. Plasticity of tissue stem cells. Invited by Institute of Zoology, Academia Sinica, Taipei, Taiwan. August 11<sup>th</sup>, 2004.
  48. Transdifferentiation of pancreas to liver. Invited by Institute of Molecular and Cell Biology, Biopolis, Singapore. December 3<sup>rd</sup>, 2003.
  49. Transdifferentiation of pancreas to liver. Invited by Graduate Institute of Biotechnology & Biosciences, National Taiwan Ocean University, Keelung, Taiwan. October 22<sup>nd</sup>, 2002.
  50. Glucocorticoids suppress beta cell development and induce hepatic metaplasia in embryonic pancreas. Invited

by Graduate Institute of Medical Biotechnology, Chang-Gung University, Taoyuan, Taiwan. October 17<sup>th</sup>, 2002.

51. Transdifferentiation of pancreas to liver. Invited by Stem Cell Program, Institute of Zoology, Academia Sinica, Taipei, Taiwan. October 15<sup>th</sup>, 2002.
52. Molecular Basis of hepatic transdifferentiation of the pancreas. Invited by Institute of Biochemistry and Molecular Biology, College of Medicine, National Taiwan University, Taipei, Taiwan. July 25<sup>th</sup>, 2002
53. Molecular Basis of hepatic transdifferentiation of the pancreas. Invited by Institute of Biotechnology in Medicine, National Yang-Ming University, Taipei, Taiwan. July 23<sup>rd</sup>, 2002.