Curriculum Vitae

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Education and Qualification:

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

Workshop & Training courses:

12/21 Practical training courses and workshop for clinical Research Associate, Development Centre of Biotechnology
11/21 Practical training courses and workshop for Business Plan, National Biotechnology Research Park Academy
07/12 Program of Multidisciplinary Management of Technology Department of Industrial Technology, NCCU Graduate Institute of Technology, Innovation and Intellectual Property Management / Department of Industrial Technology of Ministry of Economic Affairs, Taiwan
07/11 Mouse colony breeding and management, National Laboratory Animal Center
09/08 The course program in legal studies, School of Professional and Continuing Studies, National Taiwan University
04/05 Managing biosafety Level 3 laboratory, Center of Disease Control
09/03 The European Union for RNA Interference Technology (Eurit) Workshop - RNAi the Method to Unravel Gene Function, Haus der Kulturen der Welt, Berlin, Germany.
05/03 Gene Spring training workshop, St George's Hospital Medical School, London, United Kingdom.
06/01 Wellcome Trust Advanced Courses: Functional Genomics, Wellcome Trust Genome Campus, Hinxton, Cambridge, United Kingdom.
09/99 Accredited training for personnel working under the Animals (Scientific Procedures Act 1986, Modules: 1-4, Species: Mouse, Rat, Guinea Pig, Rabbit), Institution of Biology, London, United Kingdom
07/96 Biotechnology Courses, Development Centre of Biotechnology

Academic Appointments:

05/22-present	Research Fellow, Genomics Research Center, Academia Sinica, Taipei, Taiwan
09/19-present	Acting Chief Executive Officer, Innovation Incubation Center, Biomedical Translation Research Center, Academia Sinica, Taiwan (BioHub Taiwan @ National Biotechnology Research Park https://nbrp.sinica.edu.tw/pages/48/members/1)
08/18-present	Adjunct Associate Professor, Institute of Biopharmaceutical Sciences, National Yang-Ming University, 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
02/12-04/22	Associate Research Fellow, Genomics Research Center, Academia Sinica, Taipei, Taiwan
08/18-04/21	Acting Division Director, Biotechnology Incubation Center, Genomics Research Center, Academia Sinica, Taiwan
06/13-09/19	Deputy Director, Genomics Research Center, Academia Sinica, Taipei, 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

Positions at the Professional Society:

2021-Present	Executive Supervisor, Taiwan Society for Stem Cell Research http://www.tsscr.org.tw
2020-Present	Member of Executive Director Board, Taiwan Association for Cell Therapy http://www.celltherapy.org.tw/
2020-Present	Member of Director Board, Formosa Association of Regenerative Medicine http://www.farm-taiwan.org.tw/info.html
2017-2021	President, Taiwan Society for Stem Cell Research
2017-2020	Member of Director Board, Taiwan Association for Cell Therapy
2016-2019	Member of Executive Director Board, BioTaiwan Foundation
2013-2021	Member of Executive Director Board, Taiwan Society for Stem Cell Research
2019-Present	Member, Formosa Association of Regenerative Medicine
2016-present	Member of American Association for Laboratory Animal Science (ID# 000081683)
2013-present	Member of American Chemical Society (ID# 30545903**)**
2013-present	Member of American Association for Cancer Research (ID# 275044**)**
2007-2013	Member of Director Board, Taiwan Society for Stem Cell Research
2005-2007	Secretary in General, Taiwan Society for Stem Cell Research
2017-present	Member of Taiwan Association for Cell Therapy.
2014-present	Member of Taiwan Society for Developmental Biology
2005-present	Member of Taiwan Society for Stem Cell Research
2004-present	Member of International Society for Stem Cell Research (ID# 6302)
2002-present	Member of Chinese Society of Molecular and Cellular Biology
2000-present	Member of International Society of Differentiation (ISD member number# 90227)
1998-present	Member of British Society of Developmental Biology

Academic Service:

Reviewer and Member of Editorial Board of SCI Journals:

2022 Reviewer, International Journal of Molecular Sciences
2022 Reviewer, Biomedicines
2021 Reviewer, Cancers
2020-present Reviewer, BBA - Molecular Basis of Disease
2010-present Reviewer, Acta Pharmacologica Sinica
2005-present Reviewer, Journal of Biomedical Sciences
2020 Reviewer, Biomaterials
2020 Reviewer, Computational and Structural Biotechnology Journal
2020 Reviewer, Aging
2019, 2020 Reviewer, Scientific Report
2014, 2020 Reviewer, Oncogene
2019 Reviewer, Journal of Biomedical Materials Research
2019 Reviewer, International Immunopharmacology
2019 Reviewer, BBA - Molecular Basis of Disease
2019 Reviewer, International Journal of Biological Macromolecules
2019 Reviewer, Molecular Imaging and Biology
2018, 2020 Reviewer, Cancer Cell International
2018 Reviewer, Gene
2018 Reviewer, Cell Transplantation
2017 Reviewer, Biochimie
2017 Reviewer, Marine Drugs
2016 Reviewer, Frontiers of Medicine
2016 Reviewer, Endocrine
2016 Reviewer, Journal of Functional Food
2016 Reviewer, Journal of Cancer Biology and Research
2016 Reviewer, Annals of Public Health and Research
2016 Reviewer, Philosophical Transactions of the Royal Society A
2016 Reviewer, Biotechnology and Applied Biochemistry
2016 Reviewer, Journal of Medical and Biological Engineering
2015 Reviewer, Chemical Research in Toxicology
2015 Reviewer, Journal of Heavy Metal & Chelation Therapy
2015 Reviewer, Chinese Journal of Integrative Medicine
2007,2015~17 Reviewer, Vaccine
2014-2018 Reviewer, Oncotarget
2014 Reviewer, Colloids and Surfaces B: Biointerfaces
2014, 2015 Reviewer, BioMed Research International
2014 Reviewer, British Journal of Medicine and Medical Research
2014 Reviewer, International Journal of Medical Sciences
2013 Reviewer, International Journal of Cell Biology
2013 Reviewer, Evidence-Based Complementary and Alternative Medicine
2013, 2019 Reviewer, Journal of Biomedical Materials Research
2011-2014 Guest Editor/Reviewer, Journal of Medical Science
2012-2019 Reviewer, PLoS One
2010 Reviewer, Biomacromolecules
2010 Reviewer, Molecular Nutrition and Food Research
2006 Reviewer, Differentiation

Serve as Reviewer:

2022-present Member of Review Committee, Section of Stem cells and Regenerative Medicine, Department of Life Science, Ministry of Science and Technology
2015-present Reviewer, A+ Industrial Innovative R&D Program, Ministry of Economic affairs
2009-present Serve as external reviewers for faculty recruiting/reappointment/promotion for NTU,

NYMU, NHRI, NCKU & TMU

2005-present Grant Reviewer, Department of Life Science, National Science Council (Ministry of Science and Technology)

2020-2021 Member of Review Committee, Section of Haematology, Immunology & Oncology, Department of Life Science, Ministry of Science and Technology

2021 Faculty promotion evaluator, David Geffen School of Medicine, University of California, Los Angeles (UCLA), U.S.A.

2017-2021 Member of Review Committee, Section of Stem cells and Regenerative Medicine, Department of Life Science, Ministry of Science and Technology

2019 Reviewer, Ministry of Science and Technology, Israel

2017 Reviewer, Research Proposal for NTU Core Consortium

2016 Reviewer, Medical Research Council, United Kingdom

2016 Member of Review Committee, Section of Haematology, Immunology & Oncology, Department of Life Science, Ministry of Science and Technology

2015-2016 Member of Review Committee, Section of Sensory System Medicine/Section of Oncology, Department of Life Science, Ministry of Science and Technology

2014-2015 Member of Review Committee, Section of Stem cells and Regenerative Medicine, Department of Life Science, Ministry of Science and Technology

2012-2013 Member of Review Committee, Section of Stem cells and Regenerative Medicine, Department of Life Science, National Science Council

2005-2018 Grant Reviewer, Department of Health, Taipei City Government

2010 Member of Grant Rebuttal Committee, Section of basic medical research, Department of Life Science, National Science Council

Teaching

2020-present Serve as lecturer in IRB courses organized by the Institutional Review Board on Biomedical Science Research (IRB-BM), Academia Sinica to teach Ethic issues on Gene and Cell Therapy

2020-present Serve as lecturer in IRB courses organized by The Joint Commission of Taiwan to teach Ethic issues on Gene and Cell Therapy.

2019-present Organizing the cell therapy physician training courses for Taiwan Society for Stem Cell Research (TSSCR), Taiwan Association for Cell Therapy (TACT) and Formosa Association for Regenerative Medicine (FARM).

2013-present Organizing the course of "Stem Cell Biology" for postgraduate students of NDMC/NTOU/NYMU/TMU & translational program of Academia Sinica together with NTU/NYMU/TMU/CMU/KMU/TZU

2005-Present Serve as the organizer or a member in either the PhD qualify committee, the PhD's thesis committee or the master's thesis committee of NTU, NTOU, NDMC, NCKU, NCHU, NCYU (NYMU), TMU, NCCU, CGU, TCU & CMU.

2005-present Serve as guest lecturer in course of Stem Cell Biology (NDMC/NTOU/NYMU/NTU/ NCHU/NTHU/NCKU), Genomics Science (NDMC/NYMU), Introduction of Life Science (NDMC), Special topics in Biomedical Science (NDMC), Postgraduate Student's Seminar (NYMU /NDMC/AS Program for Translational Medicine/ AS Program of Drug Discovery and Cancer Biology), Introduction of Biotechnology & Medical Technology (NYMU / CGU) , Stem Cells and Tissue engineering (TMU), Recent advances in Stem cells and Cancer Stem Cells (TMU), Stem cells and Medicine (TMU), Stem Cells and Translational Medicine (NTU), Molecular and Medicine (AS Program of Drug Discovery and Cancer Biology/CMU/TMU), Molecular Mechanisms of Tumor Metastasis (NYMU), The Frontiers in Molecular Diagnostics Technology (CGU/NYMU/NCCU), Biotechnology and Medical Technology (NYMU/NCCU), Developmental Biology (NTOU), Advance Cell Biology (TMU), Molecular Mechanisms of Tumor Metastasis (NYMU).

2005-present Organizing the course of "Special Topics in Stem cells and Cancer" for postgraduate students of NCYU (NYMU)

2007-2015 Member of advisory committee, Stem cells and Tissue Engineering Educational Center, Ministry of Education Advisory Office

Serve as a member or chair of Conference Organizing Committee

2021 International Conference of Developmental Biology, Stem Cells and Regenerative Medicine-From Evo Devo to Stem cells &17th annual meeting of Taiwan society for stem cell research, Virtual Meeting.
2020 International Conference on Stem cells & Gene Therapy & 16th annual meeting of Taiwan society for stem cell research, National Yang-Ming University, Taipei
2019 International conference of Developmental Biology, Stem Cells and Regenerative Medicine, 15th annual meeting of Taiwan society for stem cell research, National Taiwan University, Taipei
2018 International stem cell conference: From Pluripotency to 3D Organoids and Personalize Medicine. 14th annual meeting of Taiwan society for stem cell research, NHRI, Miaoli, Taiwan.
2017 International conference of Developmental Biology, Stem Cells and Regenerative Medicine 13th annual meeting of Taiwan society for stem cell research, Academia Sinica, Taipei
2015 International conference of stem cells and developmental biology & 11th annual meeting of Taiwan society for stem cell research, Academia Sinica, Taipei
2014 10th Annual meeting of Taiwan society for stem cell research, National Taiwan University Medical College, Taipei
2013 International symposium on morphogenesis, development, and stem Cells & 9th annual meeting of Taiwan society for stem cell research, National Yang-Ming University, Taipei
2012 International symposium on recent advance in stem cells and cancer & 8th Annual meeting of Taiwan society for stem cell research, Kaohsiung Medical University Chung-Ho Memorial Hospital, Kaohsiung
2011 International symposium on recent advance in pluripotent stem cells & 7th Annual meeting of Taiwan society for stem cell research, Taipei Medical University, Taipei
2010 6th Annual meeting of Taiwan society for stem cell research, Chung San University, Taichung
2009 International Symposium of Stem Cells and Bioengineering & 5th Annual meeting of Taiwan society for stem cell research, National Cheng-Kung University, Tainan.
2008 International Symposia on Stem Cells, Epigenetics and Development & 4th Annual meeting of Taiwan society for stem cell research, NTUH International Conventional Center, Taipei.
2007 3rd Annual meeting of Taiwan society for stem cell research, National Chung-Hsing University, Taichung.
2006 International symposium on recent advances in stem cell research & 2nd Annual meeting of Taiwan society for stem cell research, Taipei Medical University, Taipei
2005 1st Annual meeting of Taiwan society for stem cell research, National Yang-Ming University, Taipei

Other academic service:

2019-present Advisor Board Member, Regenerative Medicine and Cell Therapy Research Center, Kaohsiung Medical University.
2019-present Serve as a member of Conflict of Interest Committee of Academia Sinica
2015-present Serve as a member of the Center of Cell therapy and Regenerative Medicine, Taipei Medical University.
2009-present Serve as a member of Animal Care and Utilization Committee of Genomics Research Center.
2015-present Serve as a member of User Committee of NRPB iPSC consortium
2018-2020 A member of the Institutional Review Board on Biomedical Science Research (IRB-BM), Academia Sinica
2018-2019 CEO, Institutional Review Board on Biomedical Science Research (IRB-BM), Academia Sinica

2013-2021	Serve as a member of Institutional Animal Care and Utilization Committee of Academia Sinica
2015-2018	Serve as a member of User Committee of NRPB ChemBank and HTS Resource Center
2014-2018	Serve as a member of Organizing Committee of National Biotechnology Research Park.
2014-2015	Serve as a member of User Committee of NRPB ChemBank and HTS Resource Center
2014-2016	Serve as an International Collaborative Partner (ICP) of Universiti Tunku Abdul Rahman (UTAR) Global Research Network
2014-2018	Serve as a member of Flow Cytometry User Committee of Academia Sinica
2014-2015	Serve as a member of Instrument and Equipment Management Committee of Academia Sinica
2012-2013	Committee Member, Section of Regenerative Medicine of National Biotechnology Research Park
2012	Reviewer for evaluating new biotechnology company, Gre Tai Securities Market, Taiwan
2010-2011	Chairman of the Parent Association of Affiliated Kindergarten of Academia Sinica
2009	Review Committee, Oral Examination for Studying Abroad at Government Expense, Ministry of Education, Taiwan
2007-2009	Serve as a member of Electronic Microscopy User Committee of Academia Sinica
2007-2008	Chairman of the Management Committee, Academia Sinica Residential Complex for New Blood
2007	Reviewer for evaluating new biotechnology company, Gre Tai Securities Market, Taiwan
2006-2009	Serve as a member of Instrument committee of Genomics Research Center
2004-2006	Serve as a member of Bio-safety committee of Genomics Research Center

Honors and Awards:

2017	Keystone Symposia Best Poster Prize (Regenerative Biology and Applications 2017).
2015	Rotary International Presidential Charity Award 2014-2015
2012	Travel award of International Society of Stem Cell Research for attending 10th 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 12th 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 https://lsl.sinica.edu.tw/Collections/publication/publist.php?sysId=108006&myInst=37

SCI Peer Review Article
Cited by 2465/H-index: 28(according to data of Scopus January 2022)
Cited by 3333/H-index 30 & i10 index: 57(according to data of Google scholar January 2022)
Cited by 3057/H-index 30/ 13454 reads (according to data of Research Gate January 2022)

Publications in the field of somatic Cell Reprogramming and regenerative Medicine

1. Lo, S.M., S.H. Hwang, C.L. Liu, **C.N. Shen**, W.H. Hong, W.C. Yang, M.H. Lee, C.R. Shen. 2022. Inhibiting TLR7 Expression in the Retinal Pigment Epithelium Suppressed Experimental Autoimmune Uveitis. *Frontiers in Immunology* 12:736251.
2. Hsu, L.J., C.L. Liu, M.L. Kuo, **C.N. Shen,** C.R. Shen*. 2021. An alternative cell therapy for cancers: induced pluripotent stem cell (iPSC)-derived natural killer cells. *Biomedicines* 9:1323.
3. Chu, E.P.F., C.H.H. Cho, W.J. Lee, I.T. Lee, I.F. Cheng, T.C. Kuo, R.Y. Chen, W.H.H. Sheu, **C.N. Shen*** 2020. Generation of three induced pluripotent stem cell lines from type 2 diabetic patients with ocular complications. *Stem Cell Res.* 49:102109 (*corresponding author).
4. Chu, E.P.F., C.H. Lin, C.H.H. Cho, I.F. Cheng, T.C. Kuo, R.Y. Chen, C.N. Liao, J.C. Cheng, J.I. Tsai, P.C. Wang, S.J. Chang, **C.N. Shen***. 2020. Establishment of three human induced pluripotent stem cell lines from a type 1 diabetic family harboring sequence variants associated with autoimmunity. *Stem Cell Res.* 49:102029 (*corresponding author).
5. Huang, C.Y. L.H. Li, W.T. Hsu, Y.C. Cheng, M.W. Nicholson, C.L. Liu, C.Y. Ting, H.W. Ko, S.H. Hsu, C.H. Wen, Z. Yan, H.P. Huang, H.L. Su, P.M. Chiang, **C.N. Shen**, H.F. Chen, B. L.J. Yen, H.E. Lu, S.M. Hwang, S.H. Chiou, H.N. Ho, J.Y. Wu, T. J. Kamp, J.C. Wu and P. C. H. Hsieh. 2020. Copy Number Variant Hotspots in Han Taiwanese Population Induced Pluripotent Stem Cell Lines - Lessons from Establishing the Taiwan Human Disease iPSC Consortium Bank. *J. Biomed. Sci.* 27:92.
6. Chuang, T. J., Chen, Y. J., Chen, C. Y., Mai, T. L., Wang, Y. D., Yeh, C. S., Yang, M. Y., Hsiao, Y. T., Chang, T. H., Kuo, T. C., Cho, H. H., **Shen, C. N.,** Kuo, H. C., Lu, M. Y., Chen, Y. H., Hsieh, S. C., Chiang, T. W., 2018. Integrative transcriptome sequencing reveals extensive alternative *trans*-splicing and *cis*-backsplicing in human cells. *Nucleic Acids Res.* 46(7): 3671-3691. Times Cited: 17
7. J.N. Sudhaker, H.H Lu, H.Y. Chang, C.S. Suen, M.J. Hwang, S.Y. Wu, **C.N. Shen**, Y.M. Chang, F.A. Li, F.T. Liu, and J.W. Shue. 2020. Lumenal galectin-9-Lamp2 interaction regulates lysosome and autophagy to prevent pathogenesis in the intestine and pancreas. *Nature Communication* 11:4286. Times Cited: 10
8. C.H. Peng. K. C. Huang, H.E. Lu., S.H. Syu, A.A. Yarmishyn, J.F. Lu., W. Buddhakosai., T.C. Lin, C.C. Hsu., D.K. Hwang., **C.N. Shen**, S.J. Chen, S.H. Chiou. 2018. Generation of induced pluripotent stem cells from a patient with X-linked juvenile retinoschisis. *Stem Cell Res.* 29:152-156. Times Cited: 3
9. Y.R. Wu, A.G. Wang, Y.T. Chen, A. Yarmishyn, W. Buddhakosai, D.K. Hwang, Y.P. Yang, **C.N. Shen**, H.C. Lee, S. H. Chiou, C.H. Peng, S.J. Chen. 2018. Bioactivity and Gene Expression Profiles of hiPSC-generated Retinal Ganglion Cells in MT-ND4 Mutated Leber's Hereditary 3 Optic Neuropathy. Exp. Cell. Res. 363:299-309. Times Cited: 2
10. S.C. Tang*, **C.N. Shen***, P.Y. Lin, S.J. Peng, H.J. Chien, Y.H. Chou, C. Chamberlain, P. Pasricha. 2018. Pancreatic neuro-insular network in young mice revealed by 3D panoramic histology. *Diabetologia* 61:158-167 (*corresponding author). Times Cited: 13
11. S.C. Tang, L. Baeyens, **C.N. Shen**, S.J. Peng, H.J. Chien, C.E. Chamberlain, M.S. German. 2018. Human pancreatic neuro-insular network in health and fatty infiltration. *Diabetologia* 61:168-181. Times Cited: 18
12. W.C. Yang, Y.S. Hwang, Y.Y. Chen, C.L. Liu, **C.N. Shen**, W.H. Hong, S.M. Lo, C.R. Shen. 2017. Interleukin-4 supports the suppression immune responses elicited by regulatory T cells. *Frontiers in Immunology* 8:1508. Times Cited: 6
13. Y.T. Lin, C.K. Wang, S.C. Yang, S.C. Hsu, H. Lin, F.P. Chang, T. C. Kuo, **C.N. Shen**, M. Hsiao, P.M. Chiang, F. L. Lu, and J. Lu. 2017. Elimination of undifferentiated human embryonic stem cells by cardiac glycosides. *Scientific Report* 7:5289. Times Cited: 3
14. 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) Times Cited: 3

15. 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: 874-880 (*corresponding author). Times Cited: 3
16. Chang F.P., Candy H.H. Cho, C.R. Shen, C.Y. Chien, L.W. Ting, H.S. Lee, and **C.N. Shen*** 2016. PDGF Facilitates Direct Lineage Reprogramming of Hepatocytes to Functional beta-like Cells induced by Pdx1 and Ngn3. *Cell Transplantation.* 25:1893-1909 (*corresponding author) Times Cited: 1
17. 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 2α. *Scientific Report* 6:28297.
18. H.M. Chang, W.Y. Huang, S.J. Lin, W.C. Huang, C.R. Shen, W.Y. Mao, and **C.N. Shen***. 2016. ABCG2 deficiency in skin impairs re-epithelialization in cutaneous wound healing. *Experimental Dermatology* 25:355-61. (*corresponding author) Times Cited: 1
19. 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* 33:3468-80. Times Cited: 11
20. 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 commitment. *FEBS Letters* 588:4008-4017 (*corresponding author). Times Cited: 6
21. 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.
22. 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: 9
23. 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. Protoporphyrin IX Accumulation Disrupts Mitochondrial Dynamics and Function in ABCG2-Deficient Hepatocytes. FEBS Letters 587: 3202-3209. (*corresponding author) Times Cited: 11
24. 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* 13:3489-93. Times Cited: 4
25. 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* 29:1995-2004. Times Cited: 27
26. 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: e20654 (**corresponding author*) Times Cited: 26
27. 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: e13650. Times Cited: 18
28. 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: 14

29. 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: 16
30. 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: 34
31. 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: 2076-87. Times Cited: 72
32. 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: e4023. (*corresponding author) Times Cited: 45
33. **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: 25
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5. **Shen, C.N.,** C.J. Liang, C.C. Hsieh, Y.M. Shyr, S.E. Wang, T.H. Chen,.2019 Mitochondrial OXPHOS activity is required for lung metastatic colonization of pancreatic cancer. Keystone symposia-Cancer Metastasis: The role of Metabolism, Immunity, and the Microenvironment. Florence, Italy.

6. **Shen, C.N.**, F.P. Chang, C.R. Shen, E.P.F. Chu, H.K. Sytwu. 2018. Galectin-expressing beta-like cells derived from autologous hepatocyte reprogramming ameliorate autoimmune diabetes. 16th Annual Meeting of International Society of Stem Cell Research, Melbourne, Australia
7. Kuo, TC., C. H.H. Cho, K.T. Chen, I.F. Cheng, and **C.N. Shen**. 2018. MiR-4662a enhances generation of CYP2B6-expressing hepatocytes from human pluripotent stem cells. 16th Annual Meeting of International Society of Stem Cell Research, Melbourne, Australia
8. H.M. Chang, T.L. Chen, C.Y. Chien, H.S. Lee, W.Y. Mao, and **C.N. Shen**. 2017.ABCG2 deficiency in hepatocytes disrupts mitochondrial fusion/fission balance and impairs reprogramming-mediated liver repairing. 16th Annual Meeting of International Society of Stem Cell Research, Melbourne, Australia (***ISSCR Travel Award***)
9. **Shen, C.N.,** TC. Kuo, C. H.H. Cho, K.T. Chen, I.F. Cheng. 2018. MicroRNA expression profiling of metabolically functioning hepatocytes differentiated from human induced pluripotent stem cells. Keystone Symposia - iPSCs: A Decade of Progress and Beyond. California, U.S.A.
10. **Shen, C.N.,** Huang, C.R., Su, C.C., Hsieh, C.C., Shyr, Y.M., Wang S.E., Chen, T.H., 2018. Elevated Glucocorticoid Signaling in Pancreatitis Promotes Kras-Driven Pancreatic Tumorigenesis associated with Cachexia. Cell-Weizmann Institute of Science Symposium: Next Gen Immunology, Rehovot, Israel.
11. **Shen, C.N**., H.M. Chang, Y.H. Lin, C.Y. Chien, F.P. Chang, W.Y. Mao, C.R. Shen, H.S. Lee. 2017.ABCG2 deficiency in hepatocytes disrupts mitochondrial fusion/fission balance and impairs reprogramming-mediated liver repairing. Keystone Symposia on Regenerative Biology and Applications: Cell Differentiation, Tissue Organization and Biomedical Engineering. Hong Kong, China. (***Selected Teaser Talk and Post Award Winner***)
12. Kuo, TC., 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. 18th congress of the international society of developmental Biologist. Singapore (Abstract published in Mech Dev 2017;145(Suppl): S166).
13. **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.
14. Chang, F.P., C.R. Shen, H.K. Sytwu, **C.N. Shen**.2017. Immune-tolerable β-like cells derived from autologous hepatocyte reprogramming reverse autoimmune diabetes. Asia Islet Biology and Incretin Symposium. Seoul, Korea. (***AIBIS Travel Award***)
15. 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. 14th Annual Meeting of International Society of Stem Cell Research, San Francisco, U.S.A. (***ISSCR Travel Award***)
16. **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. 107th Annual Meeting of American Association for Cancer Research, Philadelphia, U.S.A. (Abstract published in Cancer Res 2016;76(14 Suppl): Abstract nr 2489)
17. **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
18. **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. 13th Annual Meeting of International Society of Stem Cell Research, Stockholm, Sweden
19. 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)

20. 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. 106th Annual Meeting of American Association for Cancer Research, Philadelphia, U.S.A. (Abstract published in Cancer Res 2015;75(15 Suppl): Abstract nr 1511)
21. 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 $Kras^{G12D}$ -driven tumorigenesis. 106th Annual Meeting of American Association for Cancer Research, Philadelphia, U.S.A. (Abstract published in Cancer Res 2015;75(15 Suppl): Abstract nr 2325)
22. 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. 12th Annual Meeting of International Society of Stem Cell Research, Vancouver, Canada
23. Lin, P.Y., C.C. Hsieh, C.C. Su, and **C.N. Shen**. 2014. Involvement of glucocorticoid signaling in acinar-to-ductal metaplasi and oncogenic Kras-mediated transformation in pancreas. Pancreatic Cancer: Innovations in Research and Treatment, New Orleans, LA, U.S.A
24. **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)
25. **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
26. **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
27. 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. 11th Annual Meeting of International Society of Stem Cell Research, Boston, U.S.A.
28. **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: Mitochondira: From Signaling to Disease, Lisbon, Portugal
29. **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.
30. **Shen, C.N.**, L.C. Lai, C.C. Su, R.R. Wu, P.Y. Lin. 2012. Glucocorticoids modulate acinar-to-ductal transdifferentiation in pancreatitis. 10th Annual Meeting of International Society of Stem Cell Research, Yokohama, Japan. (***ISSCR Travel Award***).
31. 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. 10th Annual Meeting of International Society of Stem Cell Research, Yokohama, Japan. (***ISSCR Travel Award***).
32. 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. 10th Annual Meeting of International Society of Stem Cell Research, Yokohama, Japan.
33. 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. 10th Annual Meeting of International Society of Stem Cell Research, Yokohama, Japan.
34. 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.

35. 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.
36. **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. 9th Annual Meeting of International Society of Stem Cell Research, Toronto, Canada.
37. Chang, F.P., R.R. Wu, H.K. Sytwu, and **C.N. Shen.** 2011. Neuogenin3 promotes proliferation of transdifferentiated beta cells. 9th Annual Meeting of International Society of Stem Cell Research, Toronto, Canada (***ISSCR Travel Award***).
38. 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 $ABCG2^{+}CD24^{low/-}CD44^{+}$ Breast Cancer Stem Cells. 8th Annual Meeting of International Society of Stem Cell Research. San Francisco Marriott, San Francisco, California, United states of America.
39. 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. 9th Annual Meeting of CGCM, Hong Kong Convention and Exhibition Centre, Wan Chai, Hong Kong.
40. 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. 43rd annual meeting of Japan Society of Developmental Biology. Kyoto, Japan.
41. 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. 57th ASMS Conference on Mass Spectrometry. Philadelphia, Pennsylvania, United states of America.
42. **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. 7th Annual Meeting of International Society of Stem Cell Research, Barcelona, Spain.
43. 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.
44. **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.
45. 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. 5th Annual Meeting of International Society of Stem Cell Research, Cairns, QLD, Australia.
46. **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. 5th Annual Meeting of International Society of Stem Cell Research, Cairns, QLD, Australia.
47. 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. 4th Annual Meeting of International Society of Stem Cell Research, Toronto, Canada.
48. **Shen, C.N**., T.T. Liu, Cheng I. F., H.Y. Chang, C.R. Shen. 2006. Bipotential side-population progenitors derived from hepatic transdifferentiation. 4th Annual Meeting of International Society of Stem Cell Research, Toronto, Canada.
49. **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. 4th Annual Meeting of International Society of Stem Cell Research, Toronto, Canada.
50. Shen, C.N., H.-Y. Chang, C.-Y. Chien, and C.-R. Shen. 2005. Pancreatic Reprogram of multipotent progenitors isolated from liver. 3rd Annual Meeting of International Society of Stem Cell Research. San Francisco Marriott, San Francisco, California, United states of America.

51. 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.
52. **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. 2nd Annual Meeting of International Society of Stem Cell Research. Boston Seaport Hotel, Boston, Massachusetts, United states of America.
53. **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
54. 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
55. **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
56. 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
57. 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.
58. 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.
59. 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
60. 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
61. **C.N. Shen**, J.M.W. Slack, and D. Tosh. Regulation of epithelia morphogenesis in hepatic transdifferentiation of pancreas. The 12th 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.)*
62. 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.
63. 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
64. 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
65. **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
66. 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
67. **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).*

68. 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.
69. 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.
70. **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.
71. 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.
72. D. Tosh, **C. -N. Shen**, and J. M. W. Slack. (1999) Hepatic Metaplasia of Pancreas. 8th Biennal International Congress on: Liver Development, Gene Regulation and Disease. June, 1999 Palazzo del Popolo - Orvieto, Italy

Conference Speech

1. The potential of application of induced pluripotent stem cells for treating patients with diabetes mellitus. Forum on Application and industrial Trends of Induced Pluripotent Stem Cells, Foundation of Medical Professionals Alliance in Taiwan. 20th October, 2021, Taipei, Taiwan.
2. Establishment of BioHub Accelerator in National Biotechnology Research Park to translate high quality basic research and to promote advanced medicinal industrial development. International Wu Ho-Su Memorial Congress. August 28th, 2021, New Taipei City, Taiwan
3. Application of induced pluripotent stem cells in disease modeling and regenerative medicine. Symposium for Tissue Engineering and Development of Products for Regeneration Medicine. April 20th, 2021, Kaohsiung, Taiwan.
4. Current progress in stem cell therapy for diabetes mellitus. The 42nd Annual Meeting of the Endocrine Society and the Diabetes Association. March 27th -28th, 2021, Taipei, Taiwan.
5. Reprogramming Cellular Identity for Liver Regenerative Medicine. International Symposium of Materials on Regenerative Medicine. December 12th-13th, 2020. Tainan, Taiwan.
6. Targeting the industry of precision healthcare utilizing multidisciplinary stem-cell technologies. Dassault Systems-Taiwan Customer Day. September 3rd,2020. Taipei, Taiwan
7. Modeling Human Gastrointestinal Diseases with Stem-Cell Derived Organoids. Annual meeting of the Gastroenterological Society of Taiwan July 11th, 2020. Taipei, Taiwan
8. Things to know about stem cell therapy. NTU Cell & Gene Therapy Symposium. November 23rd-24th, 2019. Taipei, Taiwan.
9. Elevated glucocorticoid signaling in pancreatitis regulates inflammatory ductal reprogramming and promotes KrasG12D-driven tumorigenesis. GRC-Osaka Bilateral Symposium. October 8th -9th 2019. Taipei, Taiwan.
10. **Derivation of Patient-specific induced pluripotent stem cells and their usage for validating & developing therapeutic strategies for metabolic disorders. iPSCs Symposium & Workshop: Future of Personalised Medicine. July 1st – 4th, 2019. Kuala Lumpur, Malaysia**.
11. Potential and clinical application of adipose-derived and epidermal stem cells. Workshop on stem cell application. Taiwan Society of Aesthetic Plastic Surgery. 28th April, 2019. Taichung, Taiwan
12. Application of flow cytometric techniques on stem-cell and immune therapies. Symposium on flow cytometry application. Mackay Memorial Hospital. 27th April, 2019. Taipei, Taiwan
13. Reprogramming Cellular Identity for Liver Regenerative Medicine. Annual meeting of Formosa Association of Regenerative medicine & Symposium of Regenerative therapy for Taiwan's New Special Management Regulation Amendment —Lessons and Experience from Experts. March 23rd-24th 2019. New Taipei City, Taiwan.

14. **Mitochondrial OXPHOS activity is required for lung metastatic colonization of pancreatic cancer. 2019 Keystone Symposia-Cancer Metastasis: The role of Metabolism, Immunity, and the Microenvironment. March 15th-19th 2019. Florence, Italy.**
15. Understanding and treating pancreatic neoplasia and autoimmune diabetes by direct cell reprogramming approaches. 2018 Tzu Chi-Academia Sinica Biomedical Conference. September 7th-8th, 2018. Hua-Lien, Taiwan.
16. Porphyrin homeostasis maintained by ABCG2 regulates hepatocyte reprogramming in liver regeneration and re-epithelialization in cutaneous wound healing. 2018 VGH conference on stem cells and regenerative medicine. May 4th, 2018. Taichung, Taiwan.
17. Reprogramming Strategies for Understanding Diabetes Mellitus and Developing Anti-Diabetic Therapeutics. 2018 UW Madison-Academia Sinica Stem Cell & Regenerative Medicine Symposium: Bridging Basic Biology and Future Therapy. March 16th, 2018. Taipei, Taiwan.
18. Reprogramming-based strategies to repair liver injury. 2018 Liver Cancer Symposium of Taiwan Oncology Society. March 12th, 2018. Taipei, Taiwan.
19. **Immune-tolerable insulin-producing beta cells derived from autologous hepatocyte reprogramming ameliorate type 1 diabetes. 2018 Pacific Rim Nano Medicine Symposium\ in conjunction with 9th Japan-Taiwan Symposium on Nanomedicine. January 24th~26th , 2018. Kobe, Japan**
20. **Lineage reprogramming-based strategies for the treatment of Type 1 diabetes mellitus. 12thAsia Pacific Diabetes & Obesity Symposium (APDO) in conjunction with 2017 Croucher Symposium on Immunometabolism. October 21st~22nd, 2017. Hong Kong.**
21. Visualization of neoplastic transformation and microenvironmental remodeling in pancreatic tumorigenesis by three-dimensional panoramic histology. Workshop on Advance Cell Culture and Analysis Technology. September 18th, 2017. Taipei, Taiwan.
22. 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 15th ~ 16th, 2017. Hualien, Taiwan.
23. **Three-dimensional visualization of acinar-to-ductal reprogramming and neurovascular remodeling during pancreatic tumorigenesis. 8th Taiwan-Japan Nanomedicine Symposium. March 16th ~ 17th. 2017. Taipei Taiwan.**
24. **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.**
25. **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.**
26. **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**.
27. Comparative Genome-Wide Profiling Analysis Identifies Unique Metabolic Signatures in Metastatic Subsets of Pancreatic Cancer Stem Cells. Multi-Institutional Pancreatic Cancer Research Conference. January 8th, 2017. Taichung, Taiwan.
28. **Amelioration of type I diabetes using direct hepatocyte reprogramming approaches. 11th international Diabetes Federation Western Pacific Region Congress and 8th Scientific Meeting of the Asian Association for the study of Diabetes. October 27th~30th, 2016. Taipei, Taiwan (Abstract published in Diabetes Research and Clinical Practice 120S1 (2016) S18).**
29. 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 14th~15th, 2016. Kaohsiung, Taiwan.
30. 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 12th , 2016, Taipei, Taiwan.

31. 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 5th ~6th 2016, Osaka, Japan.

32. 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 19th~23rd, 2016. Suzhou, China.

33. Mitochondrial OXPHOS activity is required for lung metastatic colonization of pancreatic cancer stem cells. 41st FEBS Congress: Molecular and System Biology for a Better Life. September 3rd~8th, 2016. Ephesus/Kuşadası, Turkey.

34. 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 23rd~26th, 2016. Zhu Hai, China (Session Chair & Speaker)

35. 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 30th, 2016, Taipei, Taiwan

36. 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 2nd, 2016, Kaohsiung, Taiwan

37. Rejuvenating liver and pancreatic endocrine tissues through hepatocyte reprogramming7th Japan-Taiwan Symposium on Nanomedicine. January 20th ~22nd, 2016. Kyoto, Japan

38. 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 10th ~17th, 2015. Taipei, Taiwan

39. Amelioration of type I diabetes by direct hepatocyte reprogramming. International Conference on Stem cells and Developmental Biology. October 16th ~17th 2015. Taipei, Taiwan

40. Amelioration of type I diabetes by direct liver cell reprogramming. 2015 Asia-Pacific Biomedical Symposium on Regenerative Medicine. July 5th ~6th 2015. Taipei, Taiwan

41. Are induced pluripotent stem cells ready for clinical applications? Stem Cell Summit 2015. September 20th 2015, Taipei, Taiwan.

42. **Activated glucocorticoid signaling promotes acinar-to-ductal metaplasia and Kras^{G12D} -driven tumorigenesis. 5th Asia-Pacific Summit on Cancer Therapy. July 20th~22th 2015. Brisbane, Australia. (Session co-chair & Speaker) (Abstract published in Journal of Cancer Science & Therapy 7:6, 2015)**

43. Amelioration of type I diabetes by direct liver cell reprogramming. 2015 Asia-Pacific Biomedical Symposium on Regenerative Medicine. July 5th ~6th 2015. Taipei, Taiwan

44. Stem cells and development of Pancreas and liver. 38th Annual meeting of Gastroenterological Society of Taiwan. July 4th 2015. Taipei, Taiwan

45. **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 11th-13th, 2015, Hsinchu, Taiwa**n

46. Rejuvenating Damaged Liver and Pancreas through Direct Cell Reprogramming Symposium on New Advance in Inflammation, Cancer and Stem Cell March 31st, 215 Kaohsiung, Taiwan

47. Hepatocyte Reprograming in Spheroid Culture Using Polyvinyl Alcohol Substrates. Taiwan-Japan Nanomedicine Symposium. Jan 8-9, 2015, Taipei, Taiwan

48. Reprogramming of liver cells to insulin-producing beta cells. The 2nd Cross-straits Forum on Life Sciences. December 1-2, 2014, Taipei, Taiwan

49. **Therapeutic implication of identifying pancreatic cancer stem cells possessing metabolic features of pluripotent stem cells. 5thMalaysian Tissue Engineering & Regenerative Medicine**

Scientific (MTERMS) Meeting. September 17-19, 2014, Kuala Lumpur, Malaysia (Abstract published in Regenerative Research 3(2) 2014 42)

50. **G1-phase regulators act as a barrier to pluripotent reprogramming via promoting neural cell fate commitment. 5thMalaysian Tissue Engineering & Regenerative Medicine Scientific (MTERMS) Meeting. September 17-19, 2014, Kuala Lumpur, Malaysia. (Abstract published in Regenerative Research 3(2) 2014 6)**
51. 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
52. **BioTherapy-Stem cells and regenerative medicine. 7th France-Taiwan Frontiers of Science (FoS) Symposia. June 10-12, 2014, New Taipei City (Chair speech)**
53. **Generation of expandable transdifferentiated beta cells from hepatocytes of diabetic NOD mice utilizing two define factors. BIT's 4th Annual World Congress of Molecular & Cell Biology. April 25-29, 2014, Dalian, China (Chair & Speaker)**
54. 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)
55. **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**
56. 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
57. **Roles of ABCG2 transporter in stem cells, liver metabolism and transdifferentiation. 2013 International Symposium on Wound Regeneration and Repair. Oct 8, 2013, Tainan, Taiwan**
58. 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
59. 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
60. 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.
61. **The use of reprogramed cells in beta-cell replacement therapy. China-Taiwan Bilateral Symposium on Biomedical Sciences, September 10-12, 2012, Shanghai, China.**
62. **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.**
63. 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.
64. **The physiological role of ABCG2 in stem cells and stem-like breast cancer cells. The 7th Congress of Federations of Asian and Oceanian Physiological Societies, September 11-14, 2011, Taipei, Taiwan.**
65. **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.**
66. Clonal evolution of pancreatic tumors and metastatic cancer stem cells. The 4th International Conference for the Treatment of Pancreatic Cancer, June 25, 2011, Tainan, Taiwan.
67. In search of cancer stem cells from pancreatic ductal adenocarcinoma. Asia-Pacific Congress on Pancreas and Biliary Tract Cancer (In conjunction with the 14th Annual Meeting of the Taiwan Cooperative Oncology Group. November 20-21, 2010, Taipei, Taiwan.

68. 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.
69. **Reprogramming of pancreatic acinar cells to multipotent progenitor cells. 43rd annual meeting of Japan Society of Developmental Biology. June 22-24, 2010, Kyoto, Japan.**
70. Application of epidermal stem cells for healing diabetic wound 5th Annual Meeting of Taiwanese Society for Investigative Dermatology. National Defense Medical Center, May 14, 2010, Taipei, Taiwan.
71. Activation of glucocorticoid pathway in chronic pancreatitis promotes development of pancreatic neoplasm. Inflammation, Stem cell and Carcinogenesis Symposium. Kaohsiung Medical University, May 14th, 2010, Kaohsiung, Taiwan.
72. **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
73. **Reprogramming of pancreatic acinar cells into multipotent progenitor cells. Academia Sinica-Kumamoto University Joint conference on Organogenesis. Academia Sinica, April 9, 2010, Taipei, Taiwan.**
74. 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.
75. 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.
76. 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.
77. 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.
78. 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.
79. Isolation and application of dermal stem cells. Annual meeting of Taiwan Academy of liposuction surgery. May 4, 2008, Taipei, Taiwan.
80. 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.
81. 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.
82. 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.
83. **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, 3007, Shanghai, China.**
84. Isolation of multipotent stem cells from skin. Annual Symposium on autologous stem cell therapy. Taiwan Mesotherapy Research Society, June 24, 2007, Taipei, Taiwan.
85. **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.**
86. **Role of retinoids in pancreas development. Taiwan-Scotland Bilateral Developmental Biology Symposium. September 4-7, 2006, Taipei, Taiwan.**

87. 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.
88. Derivation of multipotent progenitors from pancreas-to-liver transdifferentiation. 14th Symposium on recent advance in cellular and molecular biology. January 17-19, 2006, Pintung, Taiwan.
89. Somatic cells plasticity and Transdifferentiation. The symposium on Recent Advances in Medical Biotechnology. September 24-25, 2005, Taipei, Taiwan.
90. Reprogramming of somatic cells and stem cell plasticity. 21st Summer Camp of Biology. August 23-25, 2005, Rui-Li, Chia-Yi, Taiwan.
91. Molecular Basis of the plasticity of pancreatic cells and the hepatic transdifferentiation differentiation. Joint Meeting of 3rd NHRI conference on Signal Transduction & 4th NHRI Conference on Developmental Biology. June 27-28, 2005, Zhunan, Miaoli, Taiwan
92. **Plasticity of Pancreatic Differentiation. Centre for Molecular Medicine Symposium on Endoderm formation, May 27, 2004, Biopolis, Singapore**.

Institutional lecture invitation

1. Development and Challenge of Cell therapeutic Industry. Invited by Chang-Gung Memorial Hospital. November 26th 2021.
2. 3D platforms to characterize cancer stem cells & to monitor cancer metastasis in pancreas & colon. Invited by Department of Life Science, National Yang-Ming Chiao-Tung University. October, 13th 2021.
3. Men-made stem cells-Development of Cell Reprogramming Technologies & The Future of Regenerative Medicine. Invited by National Museum of Natural Science. April 16th 2021.
4. Development of novel therapeutics for diabetes utilizing somatic cell reprogramming approaches. Invited by Development Center for Biotechnology. November 12th, 2020.
5. Development and application of stem cell technologies Invited by Taipei Yanping Rotary Club. September 1st, 2020.
6. Current status and developmental challenges for stem cell therapy. Invited by School of Dentistry, National Yang-Ming University. January 2nd, 2020.
7. Derivation of Patient-Specific iPSCs & Their Usage for Developing Novel Therapeutic Strategies. Invited by China Medical University Hospital. December 28th, 2019.
8. Developing Therapeutic Strategies for Diabetes Utilizing Reprogramming Approaches in combination with Optogenetic Imaging Technologies. Invited by Center of Tissue Engineering , Chang-Gung Memorial Hospital. September 7th, 2019.
9. Developing Cellular Therapeutic Strategies & Understanding Diabetes Complications Utilizing Reprogramming Approaches. Department of Education and Research. Taipei Veterans General Hospital, Taiwan. July 19th, 2019.
10. Reprogramming Strategies for Understanding and Developing Treatment for pancreatic diseases. Invited by Department of Life Sciences, Tung-Hai University. April 10th, 2019.
11. **Mitochondrial energetics and fructose metabolism in metastatic pancreatic cancer. Invited by Hanoi Medical University. April 5th, 2019.**
12. **Mitochondrial energetics and fructose metabolism in metastatic pancreatic cancer. Invited by Thai Nghyen University of Agriculture and Forestry. April 4th, 2019**
13. Naturally occurring lineage reprogramming and tissue regeneration. Invited by Doctoral Degree Program in Marine Biotechnology. National Sun Yet-Sen University. December 12th, 2018.
14. Ameliorating autoimmune diabetes utilizing insulin-producing beta cells derived from direct cell reprogramming. Invited by Department of Chemical and Materials Engineering. National University of Kaohsiung. December 11th, 2018.
15. Reprogramming Strategies for Understanding and Developing Treatment for pancreatic diseases. Invited by Department of Bioscience and Biotechnology, National Taiwan Ocean University. November 21st, 2018.

16. Briefing cell therapy regulation in Taiwan & the potentials of Somatic cell reprogramming technologies, Invited by Center of Precision Medicine, Shin-Kong Wu Ho-Su Memorial Hospital. August 16th, 2018
17. Cellular reprogramming for understanding and treating Diabetes Mellitus. Invited by Kaohsiung Veterans General Hospital. April 17th, 2018.
18. From defining somatic stemness to developing Invited by Program in Clinical Pharmacogenomics and Pharmacoproteomics, Taipei Medical University. March 5th, 2018.
19. Rejuvenating liver through direct cell reprogramming approaches. Invited by Center for Cell Therapy and Regeneration Medicine (CCTRM), Taipei Medical University. November 1st, 2017
20. 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 18th, 2017
21. 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 30th, 2016
22. Patient-specific induced pluripotent stem cells for understanding and treating diabetes. Invited by Department of Endocrinology and Metabolism, Chia Medical University Hospital. September 2nd, 2016
23. Making insulin-producing beta cells from different cell resources. Invited by Department of Endocrinology and Metabolism, Taichung Veterans General Hospital. January 13th, 2016
24. 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 24th, 2015
25. How cells can change their fate? Elucidating the molecular features of somatic cell reprogramming utilzing multidisciplinary approaches. Invited by Department of Physics, National Chiao-Tung University. December 3rd, 2015
26. Development of cell therapeutic strategies for diabetes utilizing direct hepatocyte reprogramming approache. Invited by Department of Life Sciences, Fu Jen Catholic University. October 6th, 2015
27. Cellular reprogramming for understanding and treating human diseases. Invited by Medical Research Department, Mackay Memorial Hospital. September 25th, 2015
28. 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 20th, 2015
29. 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 16th, 2015
30. Acinar cell reprogramming and development of pancreatic cancer. Invited by Graduate Institute of Basic Medicine, Fu Jen Catholic University. May 28th, 2015
31. Liver cell reprogramming: A New Strategy for the Treatment of Type I Diabetes. Genomics Research Center, Academia Sinica, Taipei, Taiwan. April 2nd, 2015
32. 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 12th, 2014.
33. Reprogrammed Cells for Disease Modeling & Regenerative Medicine. Invited by Department of Environmental Engineering, National Cheng Kung University, Taiwan, November 26th, 2014
34. **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 15th, 2014**.
35. 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 14th, 2014
36. Cell Reprogramming and Pancreatic Diseases. Invited by Department of Biotechnology in Medicine and Laboratory Science, National Yang-Ming University, Taipei, Taiwan. March 24th, 2014

37. Deciphering genetic components and risk factors that predispose individuals to pancreatic cancer. Invited by Research Center for Applied Sciences, Academia Sinica, Taipei, Taiwan. March 6th, 2014.
38. Cell Reprogramming and Pancreatic Diseases. Invited by Graduate Institute of Aerospace and Undersea Medicine, National Defense Medical Center, Taipei, Taiwan. December 18th, 2013.
39. 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 7th, 2013
40. 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 11th, 2012
41. **Acinar cell reprogramming in pancreatitis and in pancreatic neoplasia. Invited by Department of Biology and Biochemistry, University of Bath, Bath, United Kingdom. August 30th, 2012**
42. Identification of cancer stem cells from pancreatic adenocarcinoma with higher metastatic potentials. Invited by School of Dentistry, National Yang-Ming University, Taipei, Taiwan. March 28th, 2012.
43. Cellular reprogramming and pancreatic carcinogenesis. Invited by Institute of Medical Sciences, Tsu Chi University, Hualien, Taiwan. December 8th, 2011
44. Pancreatic cell plasticity and its role in pancreatic carcinogenesis. Invited by Department of Education and Research, Shuang-Ho Hospital, New Taipei City, Taiwan. May 12th, 2011.
45. Cellular plasticity of the pancreas. Invited by Center of Developmental Biology and Regenerative Medicine, National Taiwan University, Taipei, Taiwan. May 11th, 2011.
46. 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 12th, 2011.
47. 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 Research, Kaohsiung Chang-Gung Memorial Hospital, Kaohsiung, Taiwan. December 7th, 2010.
48. 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 19th, 2010.
49. Reprogramming of pancreatic acinar cells to multipotent progenitors Invited by Institute of Cellular and System Medicine, National Health Research Institutes, Zhunan, Miaoli, Taiwan. April 8th, 2010.
50. 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 27th, 2009.
51. Therapeutic potential of stem cells in skin repair. Invited by Department of Plastic Surgery. Tri-Service General Hospital, Taipei, Taiwan. August 27th, 2009.
52. 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 21st, 2009.
53. Prospectives of stem cell study and application. Invited by Department of Physiology, National defense Medical Center., Taipei, Taiwan. November 13th, 3008.
54. Alternate strategies for derivation of mature hepatocytes. Invited by Cathay General Hospital, Taipei, Taiwan. March 7th, 2008.
55. Stem cells and transdifferentiation in pancreatic neoplastic transformation. Invited by Department of Surgery, Kaohsiung Medical University Hospital, Kaohsiung, Taiwan. January 31st, 2008.
56. Isolation of multipotent stem cells from skin. Invited by Department of Education and Research, Taichung Veteran General Hospital, Taichung, Taiwan. December 5th, 2007.
57. Identification of the origin of pancreatic cancer stem/progenitor cells. Invited by Department of Education and Research, Markay Memorial Hospital, Taipei, Taiwan. September 10th, 2007.
58. Alternate strategies for derivation of mature hepatocytes. Invited by Department of Surgery, National Taiwan University Hospital, Taiwan. December 11th, 2006.

59. Bipotential Stem/Progenitors Cells and Pancreatic Metaplasia. Invited by Department of Marine Biotechnology and Resources, National Sun Yat-Sen University, Kaohsiung, Taiwan. October 14th, 2006.
60. Alternate strategies for derivation of mature hepatocytes. Invited by Institute of Biomedical Technology and Device Research Laboratories, Industrial Technology Research Institutes, Hsinchu, Taiwan. September 11th, 2006.
61. Bipotential progenitors derived from transdifferentiation reprogramming. Invited by Department of Education and Research, Taipei Veteran General Hospital, Taipei, Taiwan. April 14th, 2006.
62. Molecular and Cellular Basis of Pancreatic-Hepatic switches. Invited by College of Life Science, Tzu-Chi University. January 10th, 2006.
63. Molecular and Cellular Basis of Pancreatic-Hepatic switches. Invited by molecular Biology. National Chung-Cheng University. November 25th, 2005.
64. Reprogramming of pancreatic exocrine cells into multipotent progenitor during hepatic transdifferentiation. Invited by Department of Chemistry, National Chung-Hsing University, Taichung, Taiwan. October 19th, 2005.
65. New tissues from our own organs: Transdifferentiation of pancreas and liver. Invited by Department of Medical University, China Medical University, Taichung, Taiwan. June 8th, 2005.
66. Stem cells and pancreatic differentiation. Invited by Chang-Gung Children Hospital, Taoyuan, Taiwan. January 5th, 2005.
67. Stem cells and hepatic differentiation. Invited by Institute of Biotechnology in Medicine, National Yang-Ming University, Taipei, Taiwan. November 25th, 2004.
68. Plasticity of tissue stem cells. Invited by Institute of Zoology, Academia Sinica, Taipei, Taiwan. August 11th, 2004.
69. Transdifferentiation of pancreas to liver. Invited by Institute of Molecular and Cell Biology, Biopolis, Singapore. December 3rd, 2003.
70. Transdifferentiation of pancreas to liver. Invited by Graduate Institute of Biotechnology & Biosciences, National Taiwan Ocean University, Keelung, Taiwan. October 22nd, 2002.
71. 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 17th, 2002.
72. Transdifferentiation of pancreas to liver. Invited by Stem Cell Program, Institute of Zoology, Academia Sinica, Taipei, Taiwan. October 15th, 2002.
73. 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 25th, 2002
74. Molecular Basis of hepatic transdifferentiation of the pancreas. Invited by Institute of Biotechnology in Medicine, National Yang-Ming University, Taipei, Taiwan. July 23rd, 2002.

Research grants:

Serve as PI

Source: Ministry of Science & Technology (MOST 108-2319-B-001-005 109-2740-B-001-005 110-2740-B-001-005)
Title: Translational biomedical imaging platform https://tbip.genomics.sinica.edu.tw
Period: 05/01/19-04/30/22

Source: Ministry of Science & Technology (MOST 106-2321-B-001-048 / 107-2321-B-001-024 / 108-2321-B-001-009 / 109-2326-B-001-006 / 110-2321-B-001-004)
Title: Roles of fructose-triggered metabolic reprogramming in pancreatic metastasis
Period: 08/01/17-07/31/22

Source: Academia Sinica (AS-KPQ-111-KNT)
Title: Development of cancer immune-cell therapies utilizing circulating dendritic cells and chimeric antigen receptor (CAR)-engineered T cells
Period: 01/01/22-12/31/25

Source: Academia Sinica (AS-IDR-110-07)
Title: Understanding gastrointestinal symptoms caused by SARS-CoV-2 infection and identifying therapeutic targets using colonic organoids derived from colorectal cancer patients' specimen and crypt stem cells
Period: 01/01/21-12/31/24

Source: Academia Sinica (AS-KPQ-110-EIMD-54H31)
Title: Development of small molecule-based targeted therapy for pancreatic cancer
Period: 01/01/21-12/31/21

Source: Academia Sinica
Title: NBRP-Core Facilities for Translational Medicine https://cftm.biotrec.sinica.edu.tw/
Period: 01/01/19-12/31/22

Source: Academia Sinica (AS-107-TP-L15)
Title: Main Project: From exploiting pancreatic tumorigenesis to developing new therapeutics
Component project 3: The roles of anti-inflammatory hormone glucocorticoids in pancreatic tumorigenesis and metastasis
Period: 01/01/18-12/31/20

Source: National Science & Technology Development Foundation (MOST 107-3111-Y-001-047)
Title: Establishment of optogenetic imaging technologies to control and measure insulin secretion kinetics for improving anti-diabetic medication
Period: 04/01/18-7/31/19

Source: Ministry of Science & Technology (MOST 106-2314-B-001-001)
Title: Metabolically functioning hepatocytes derived from human pluripotent stem cells as a platform for evaluating drug-induced hepatotoxicity
Period: 08/01/17-07/31/18

Source: Ministry of Science & Technology (MOST 105-2314-B-001-004)
Title: Deciphering the metabolic determinants that modulating differentiation capability of induced pluripotent stem cells
Period: 08/01/16-07/31/17

Source: Academia Sinica (AS-105-TP-A06)
Title: Integrative platforms for investigation of cell-cell communications and cell transformation under physico-chemical stimulations -Component project 4: The role of membrane tunneling nanotubes in establishing intercellular communication of pancreatic cancer stem cells
Period: 01/01/16-12/31/18

Source: Academia Sinica/ Veteran General Hospital/Tri-Service General Hospital (VTA105-T-4-4, VTA106-T-7-3)
Title: To explore the potential application of iPSCs (inducible pluripotent stem cells) on the pathogenesis and therapeutic strategy of obesity-associated type 2 DM -Component project 4: Derivation of type 2 diabetic patient-specific induced pluripotent stem cells for diseases modelling and for developing personalized therapeutic strategies
Period: 01/01/16-12/31/17

Source: National Science & Technology Development Foundation (MOST 104-3111-Y-001-033)
Title: Novel nanoparticle-based strategies developing for cancer stem-cell targeting and for niche visualization
Period: 05/01/15-4/30/16
Funding: NT. 2,884,000

Source: Research and Development Program of New Drug and Vaccine for Critical Diseases, Academia Sinica (MOST 104-0210-01-09-02, 105-0210-01-13-01, 106-0210-01-15-02)
Title: Capturing circulating cancer stem cells and deconstructing their vascular niche signaling-Component project 3: Development of preclinical mice models for validating the strategies targeting circulating cancer stem cells & their niche components
Period: 01/01/15-12/31/17

Source: Ministry of Science & Technology (MOST 103-2321-B-001 -061, 104-2321-B-001 -028 -)
Title: Post-translational modification in regulating stem cell properties during cancer progression-Subproject 3: Roles and regulation of sialylation on cancer stem/initiating cells of pancreatic ductal adenocarcinoma (1/2, 2/2)
Period: 08/01/14-07/31/16

Source: National Science Council (NSC 102-2314-B-001-006-MY3)
Title: Direct conversion of fibroblast to functional beta cells by define transcriptional factors
Period: 08/01/13-07/31/16
Source: National Health Research Institute (NHRI-EX101-10134BI, NHRI-EX102-10134BI , NHRI-EX103-10134BI)
Title: Roles of pancreatitis in the progression of Kras-driven pancreatic ductal adenocarcinoma
Period: 01/01/12-12/31/14

Source: National Science Council (NSC 100-2321-B-001 -034, NSC 101-2321-B-001 -018, NSC 102-2321-B-001 -011)
Title: Establishment of pancreatic adenocarcinoma mice models for predicting pancreatic cancer risk factors, validating specific biomarkers and monitoring progressive neoplastic transformation
Period: 08/01/11-07/31/14

Source: National Science Council (NSC 99-3111-B-001 -008)

Title: Specific Markers, Pluripotency and Epigenetic Control in Stem Cells: Subproject#3 Investigation of the molecular mechanisms regulating pluripotency of stem cells
Period: 12/01/10-09/30/11

Source: National Science Council (NSC 99-2314-B-001 -002 -MY3)
Title: Development of cell therapies for type 1 diabetes mellitus utilizing reprogrammed somatic cells
Period: 08/01/10-07/31/13

Source: National Science Council (NSC 97-2622-B-001 -002 -CC1)
Title: Derivation of human dermal fibroblasts for therapeutic application on skin wound healing
Period: 08/01/08-07/31/09

Source: National Science Council (NSC 95-2311-B-001 -057 -MY3)
Title: The functional studies on the differentiation plasticity of intermediate progenitors generated from pancreatic-hepatic switches
Period: 08/01/06-07/31/09

Source: National Science Council (NSC 94-2311-B-001-043 & 94-2311-B-001-044)
Title: The study of molecular mechanism involved in regulating the cellular transdifferentiation of pancreas to liver
Period: 03/01/05-07/31/06

Serve as Co-PI

Source: Ministry of Science & Technology (110-2124-M-001-004)
Title: Label-Free Drug Screening Platform: Development of Force Nanosensor Arrays(1/3)
Period: 08/01/21-07/31/24

Source: Academia Sinica (AS-KPQ-110-EIMD-54H17)
Title: EGFR-vIII-based immune cells therapy for cancer
Period: 01/01/21-12/31/21

Source: Ministry of Science & Technology (108-2314-B-038-064)
Title: Investigating the dynamic change of genotype and phenotype in circulating tumor cells and its clinical significance in cancer progression
Period: 08/01/18-07/31/19

Source: Ministry of Science & Technology (106-2321-B-016-003; 107-2321-B-400-016; 108-2321-B-400-018)
Title: Stem cell-based approaches and organotypic culture system for dissecting pathogenic mechanisms and establishing therapeutic strategies for inflammatory bowel diseases and gastrointestinal cancer
Period: 08/01/17-07/31/20

Source: Ministry of Science & Technology (106-2320-B-038-039; 107-2119-M-001-007; 108-2119-M-001-003)
Title: Nanostructured Organic Devices for the Isolation and Drug Screening of Circulating Tumor Cells
Period: 08/01/17-07/31/20

Source: Ministry of Science & Technology (106-2320-B-038-039)

Title: Evaluating the biological characteristics and clinical significance of circulating tumor stem cells in cancer progression
Period: 08/01/17-07/31/18

Source: Ministry of Science & Technology (106-2314-B-010-009)
Title: Study the therapeutic effect of Human Wharton's jelly mesenchymal stem cells cultured under special condition in hyperglycemic pig
Period: 08/01/17-07/31/18

Source: Ministry of Science & Technology (106-3114-B-010-002; 107-2321-B-010-007; 108-2321-B-010 -006)
Title: Advanced Translation of cellular reprogramming technologies in regenerative medicine
Period: 05/01/17-04/30/20

Source: Ministry of Science & Technology (105-2314-B-010 -010 -MY3)
Title: Study of pig bone marrow mesenchymal stem cells cultured under hypoxic condition in treating hyperglycemic pig
Period: 08/01/16-07/31/19

Source: Ministry of Science & Technology (105-2221-E-182-017)
Title: The study of 2D and 3D hypoxic microenvironment on the label-free selection and regulation of pancreatic cancer stem cells for tumor model establishment and the application of therapeutic target
Period: 08/01/16-07/31/17

Source: Academia Sinica (AS-104-TP-A11)
Title: Biomedical Applications of Multi-functional Organic Bioelectronic Devices
Period: 01/01/15-12/31/17

Source: National Science Council (103-2221-E-182-011)
Title: The study of establishment of a label free cancer stem cell selection (II)
Period: 08/01/14-07/31/15

Source: National Science Council (102-2320-B-001-027-MY3)
Title: Adenylate Kinase Mechanistic Study in Human Lung Cancer Metastasis and Its Translation Medicine Research
Period: 08/01/13-07/31/16

Source: National Science Council (102-2221-E-182-007)
Title: The study of establishment of a label free cancer stem cell selection
Period: 08/01/13-07/31/14
Source: National Science Council (97-3111-B-001-005)
Title: Specific Markers, Pluripotency and Epigenetic Control in Stem Cells: Subproject#3 Investigation of the regulatory mechanisms controlling the totipotency -pluripotency transition during early embryonic development
Period: 12/01/08-11/30/10

Source: National Science Council (96-2320-B-039-025)
Title: Investigation of the functional properties of anti-cancer and anti-inflammatory components extracted from herb medicine in the pathogenesis of pancreatic adenocarcinoma
Period: 08/01/07-07/31/08