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Present position

2015~present: Professor, Institute of New Drug Development, China Medical University; Director, Integrative Stem Cell Center, China Medical University Hospital, Taichung, Taiwan

Education:

1990: M.D. National Yang-Ming University
1997: Ph.D. The University of Tokyo

ACADEMIC APPOINTMENTS:

2007-present: Professor, Institute of Clinical Medicine, School of Medicine, National Yang-Ming University, Taipei, Taiwan
2009-2015: Director, Management Center for Medical Science-Technical Building; 2001~present, Investigator, Stem Cell Laboratory, Dept. of Medical Research; Attending Physician, Orthopaedics, Taipei Veterans General Hospital, Taipei, Taiwan
2013~presnt: Joint Appointment Research Fellow, Institute of Biomedical Sciences, Academia Sinica
2004~2005: Senior Research Scientist, Center for Gene Therapy, Tulane University Health Science Center: Prof. Prockop-DJ
1996~1997: Postdoctoral Fellowship: Department of Biochemistry, The University of Tokyo
1993~1997: Research Fellowship: Department of Orthopaedics, Faculty of Medicine, The University of Tokyo
1992~2000: Residency, Department of Orthopaedics and Traumatology, Taipei Veterans General Hospital
1990~1992: Residency, Surgical Department, Fan-Lin Veterans Hospital, Hwa-Ling, Taiwan

Committee Appointments:

Co-Chair, the 2016 Tissue Engineering and Regenerative Medicine International Society- Asia Pacific Meeting (TERMIS-AP 2016), Sep. 3-6, 2016
醫工學門共同召集人，Ministry of Science and Technology(科技部), 2014.
Peer Review Committee, National Science Council, Division of Life Science 2000~present
Advisory Committee for the Orthopaedic Program in the Division of Life Science, National Science Council 2004~present
Advisory Committee for the Stem Cells/Regenerative Medicine Program in the Division of Life Science, National Science Council 2007~present

China Medical University, Taichung, Taiwan

Advisory Committee, Institute of Cell Biology and Anatomy, National Yang-Ming University, 2006, 2007.

Member of Directorate, Taiwan Association for Cell Therapy (TACT) 2014~present

Member of Directorate, the Taiwan Orthopedic Research Society (TORS) 2014~present

Member of Directorate, the Taiwan Society for Stem Cell Research (TSSCR) 2014~present

理事長, 台灣再生醫學會 (the Formosan Association of Regenerative Medicine) 2016~present

Advisory Committee, Institute of Cell Biology and Anatomy, National Yang-Ming University 2006~present

Committee member, 經濟部 SBIR 2006-2009

Editor Board: American Journal of Blood Research, 2013~present; Formosan Journal of Musculoskeletal Disorders, 2013~present

Reviewer of journal, Gut, Journal of Investigative Dermatology, Molecular Therapy, Stem Cells, Stem Cells Translational Medicine, PLoS ONE, Cell Transplantation, 2011-2016.

Reviewer of journal, Cell Transplantation, 2010

Reviewer of journal, Haematologica, 2009

Reviewer of journal, Stem Cells 2005, 2006, 2007, 2008

Reviewer of journal, Stem Cells Dev 2007, 2008

Reviewer of journal, Gene Therapy 2005, 2008

Reviewer of journal, Biochemical Journal 2005

Reviewer of journal, J Biomed Mater Res 2006, 2007

Reviewer of journal, Acta Pharmacologica Sinica 2006

Reviewer of journal, J Neuroscience Method 2006

Reviewer of journal, Molecular & Cellular Proteomics 2004

Reviewer of journal, J Orthop Res 2008

Reviewer of journal, Acta Biomaterialia 2008

Reviewer of journal, Pathology - Research and Practice 2007, 2008/9/25 The Chinese Reviewer of journal, The Chinese Journal of Physiology 2007

Honors:

2015：中華民國生物產業發展協會年度創新獎

2015：臺北生技獎-技轉合作獎之優勝

2014: The 2nd Award for Medical Technology Innovation, Taipei Veterans General Hospital

2012: The 1st place, best scientific paper award, Taipei Veterans General Hospital

2012: Award, 1st place, Cumulative SCI IF, Taiwan Orthopaedic Research Society

2012, 2016: Distinguished Research Award (傑出研究獎), NSC/MOST, Taiwan

2011: Award, 1st place, Cumulative SCI IF, Taiwan Orthopaedic Research Society

2010: The 2nd Award for Medical Technology Innovation, Taipei Veterans General Hospital

2007~2010: Outstanding award, National Yang-Ming University

2002: The best scientific paper award, Taipei Veterans General Hospital

2001: The best research award, Taiwan Orthopedic Association

1996: Award, Japanese Medical Association

1993~1997: National Scholarship for oversea PhD education

Publications: (*corresponding author)

1. HS-Hsu, CC-Liu, JH-Lin, TW-Hsu, JW-Hsu, Kelly Su, **SC-Hung***. Involvement of ER stress, PI3K/AKT activation, and lung fibroblast proliferation in bleomycin-induced pulmonary fibrosis. **Sci Rep.** 2017
2. CH-Ho, CW-LaN, CY-Liao, **SC-Hung**, HY-Li, YJ-sUNG. Mesenchymal stem cells and their conditioned medium can enhance the repair of uterine defects in a rat model. **J Chin Med Assoc.** S1726-4901(17)30200-9, 2017
3. HY-Chiu, YG-Tsay, **SC-Hung***. Involvement of mTOR-autophagy in the selection of primitive mesenchymal stem cells in chitosan film 3-dimensional culture. **Sci Rep.** 7(1):10113, 2017.
4. MY-Yeh, JY-Zhao, YR-Hsieh, JH-Lin, FY-Chen, Rajan Deepan Chakravarthy, PC-Chung, HC-Lin, **SC-Hung***. Reverse thermo-responsive hydrogels prepared from Pluronic F127 and gelatin composite materials. **RSC Advances.** 34, 2017.
5. Wu PK, Chen CF, Wang JY, Chen PC, Chang MC, **SC-Hung**, Chen WM. Freezing Nitrogen Ethanol Composite May be a Viable Approach for Cryotherapy of Human Giant Cell Tumor of Bone. **Clin Orthop Relat Res.** 475(6):1650-1663, 2017.
6. Chiu JH, Wen CS, Wang JY, Hsu CY, Tsai YF, **SC-Hung**, Tseng LM, Shyr YM. Role of estrogen receptors and Src signaling in mechanisms of bone metastasis by estrogen receptor positive breast cancers. **J Transl Med.** 15(1):97, 2017.
7. JY-Wang, WM-Chen, CS-Wen, **SC-Hung**, PW-Chen, JH-Chiu. Du-Huo-Ji-Sheng-Tang and its active component Ligusticum chuanxiong promote osteogenic differentiation and decrease the aging process of human mesenchymal stem cells. **Journal of Ethnopharmacology.** 198: 64–72, 2017.
8. CH-Lin, MC-Chang, **SC-Hung**, SY-Lee, YM-Lin. Bioactive surface modification of polycaprolactone using MG63-conditioned medium can induce osteogenic differentiation of mesenchymal stem cells. **Journal of Materials Science.** 52: 3967-3978, 2017.
9. CH-Su, KY-Hung, **SC-Hung**, WY-Tarn. RBM4 regulates neuronal differentiation of mesenchymal stem cells by modulating alternative splicing of pyruvate kinase M. **Mol Cell Biol.** 20 37(3). pii: e00466-16, 2017.
10. PK-Wu, JY-Wang, WM-Chen, **SC-Hung***. Early passage Mesenchymal Stem Cells display decreased radiosensitivity and increased DNA repair activity. **Stem Cells Translational Medicine,** 6(6):1504-1514, 2017.
11. WL-Tsai, PH-Yeh, CY-Tsai, CT-Ting, YH-Chiu, MH-Tao, WC-Li, **SC-Hung***. Efficient Programming of Human Mesenchymal Stem Cell Derived Hepatocytes by Epigenetic Regulations. **Journal of Gastroenterology and Hepatology.** 32(1):261-269, 2017.

12. CC-Liu, Jhan-Lin, TW-Hsu, JW-Chang, Kelly Su, HS-Hsu, **SC-Hung***. Collagen XVII/Laminin-5 Activates Epithelia-to-Mesenchymal Transition and is Associated with Poor Prognosis in Lung Cancer. **Oncotarget**, in print 2016.
13. YL-Wang, SP-Lin, Srinivasa R Nelli, FK-Zhan, Hsun Cheng, HC-Lin, **SC-Hung***. Self-assembled Peptide-based Hydrogels as Scaffolds for Proliferation and Multi-differentiation of Mesenchymal Stem Cells. **Macromolecular Bioscience**. 17(4). doi: 10.1002/mabi.201600192, 2017
14. TJ-Lu, FY-Chiu, HY-Chiu, MC-Chang, **SC-Hung***. Chondrogenic differentiation of mesenchymal stem cells in three-dimensional chitosan film culture. **Cell Transplantation**. 26(3):417-427, 2017.
15. JY-Wang, CW-Lee, PQ-Wu, Paul CH-Chen, WM-Chen, **SC-Hung***. Generation of Osteosarcomas from a Combination of Rb Silencing and c-Myc Overexpression in Human Mesenchymal Stem Cells. **Stem Cells Translational Medicine**, 6(2):512-526, 2017.
16. ER-Chiang, HL-Ma, JP -Wang, CL-Liu, TH-Chen, **SC-Hung***. Multi-lineage differentiation and angiogenesis potentials of pigmented villonodular synovitis derived mesenchymal stem cells - pathological implication. **J Orthop Res**. 34(3):395-403, 2016.
17. ER-Chiang, HL-Ma, JP-Wang, CL-Liu, TH-Chen, **SC-Hung***. Allogeneic Hypoxia-cultured Mesenchymal Stem Cells for Treatment of Osteoarthritis in Rabbits. **PLoS One**, 11(2):e0149835, 2016.
18. CC-Liu, SP-Lin , HS-Hsu, SH-Yang, CH-Lin, MH-Yang, MC-Hung, **SC-Hung***. Suspension survival mediated by PP2A-STAT3-Col XVII determines tumour initiation and metastasis in cancer stem cells. **Nature Communications**. 7:11798, 2016
19. Yeh, M.-Y.; Huang, C.-T.; Lai, T.-S.; Chen, F.-Y.; Chu, N.-T.; Tseng, D. T.-H.; **SC-Hung**; Lin, H.-C.* "The Effect of Peptide Sequences on Supramolecular Interactions of Naphthaleneimide/Triptide Conjugates" **Langmuir**. 32(30):7630-8. 2016
20. Yeh, M.-Y.; Huang, C.-W.; Chang, J.-W.; Huang, Y.-T.; Lin, J.-H.; Hsu, S.-M. ; **Hung, S.-C.**; Lin, H.-C.* "A novel nanostructured supramolecular hydrogel self-assembled from tetraphenylethylene-capped dipeptides" **Soft Matter**. 12(30):6347-51, 2016
21. Su, S.-M.; Wu, F.-Y.; Cheng, H.; Huang, Y.-T.; Hsieh, Y.-R.; Tseng, D. T.-H.; Yeh, M.-Y.; **Hung, S.-C.**; Lin, H.-C.* "Functional Supramolecular Polymers: A Fluorescent Microfibrillar Network in a Supramolecular Hydrogel for High-Contrast Live Cell-Material Imaging in 3D Environments" **Adv. Healthc. Mater**. 5(18):2406-12. 2016
22. KC-Chang, **SC-Hung***. Hypoxia-preconditioned allogeneic mesenchymal stem cells can be used for myocardial repair in non-human primates. **J Thorac Dis**. 8(7):E593-5, 2016.
23. YL-Wang, SP-Lin, Patrick C Hsieh, **SC-Hung***. Concomitant beige adipocyte differentiation upon induction of mesenchymal stem cells into brown adipocytes. **Biochem Biophys Res Commun**. 478(2):689-95, 2016.

24. YL-Lin, SF-Yet, YT-Hsu, GJ-Wang, **SC-Hung***. Mesenchymal stem cells ameliorate atherosclerotic lesions via restoring endothelial function. **Stem Cells Translational Medicine**, 4(1):44-55, 2015. (IF: 5.709; Rank: 8/18)
25. KC-Lee, HC-Lin, YH-Huang, **SC-Hung***. Allo-transplantation of mesenchymal stem cells attenuates hepatic injury through IL1Ra dependent macrophage switch in a mouse model of liver disease. **J Hepatol**, 63(6):1405-12, 2015. (IF: 11.336; Rank: 3/75)
26. HL-Wang, CH-Yang, HH-Lee, JC-Kuo, SS-Hur, S-Chien, OK-Lee, **SC-Hung**, ZF-Chang. Dexamethasone-induced cellular tension requires SGK1-stimulated Sec5/GEF-H1 interaction. **J Cell Sci**, 128(20):3757-68, 2015.
27. PM-Chen, CH-Lin, NT-Li, YM-Wu, MT-Lin, **SC-Hung**, ML-Yen. c-Maf regulates pluripotency genes, proliferation/self-renewal, and lineage commitment in ROS-mediated senescence of human mesenchymal stem cells. **Oncotarget**. 6(34):35404-18, 2015.
28. MC-Tsai, KC-Hung, **SC-Hung**, SH-Hsu. Evaluation of biodegradable elastic scaffolds made of anionic polyurethane for cartilage tissue engineering. **Colloids Surf B Biointerfaces**. 125:34-44, 2015
29. RY-Tsai, TY-Kuo, **SC-Hung**, CM-Lin, TY-Hsien, DM-Wang, HJ-Hsieh. Use of gum arabic to improve the fabrication of chitosan-gelatin-based nanofibers for tissue engineering. **Carbohydrate Polymers**, 115: 525-532, 2015
30. CC-Liu, JH-Lin, TW-Hsu, K-Su, Anna FY-Li, HS-Hsu, **SC-Hung***. IL-6 Enriched Lung Cancer Stem-like Cell Population by Inhibition of Cell Cycle Regulators via DNMT1 Up-regulation. **Int. J. of Cancer**, 136(3):547-59, 2015. (IF: 5.007; Rank: 34/203)
31. MW-Deng, SJ-Wei, TL-Yew, PH-Lee, TY-Yang, HY-Chu, **SC-Hung***. Cell therapy with G-CSF-mobilized stem cells in a rat osteoarthritis model. **Cell Transplantation**. 24(6):1085-96, 2015.
32. CC-Wei, Andrew Boyd Lin, **SC-Hung*** Mesenchymal stem cells in regenerative medicine for musculoskeletal diseases- bench, bedside and industry. **Cell Transplantation**. 23(4):505-12, 2014.
33. WH-Huang, HL-Chen, PH-Huang, TL-Yu, MW-Lin, SJ-Lin, **SC-Hung*** Hypoxic mesenchymal stem cells engraft and ameliorate limb ischemia in allogeneic recipients. **Cardiovascular Research**, 101(2):266-76, 2014. (IF: 5.808; Rank: 15/125)
34. RY-Tsai, **SC-Hung**, JY-Lai, HJ-Hsieha. Electrospun chitosan–gelatin–polyvinyl alcohol hybrid nanofibrous mats: Production and characterization. **Journal of the Taiwan Institute of Chemical Engineers**, 45:1975–1981, 2014
35. HS-Hsu, CC-Liu, JH-Lin, TW-Hsu, K-Su, **SC-Hung***. Repair of naphthalene-induced acute tracheal injury by basal cells depends on β -catenin. **J Thorac Cardiovasc Surg**. 148:322-332, 2014.
36. CC-Yen, CD-Hsiao, WM-Chen, YS-Wen, YC-Lin, TW-Chang, FY-Yao, **SC-Hung**, JY-Wang, JH-Chiu, HW-Wang, CH-Lin, TH-Chen, PC-Chen, CL-Liu, CH-Tzeng, JA- Fletcher. Cytotoxic effects of 15d-PGJ2 against osteosarcoma through ROS-mediated AKT and cell cycle inhibition. **Oncotarget**. 5(3):716-25, 2014.

37. MC-Chang[#], CH-Tsao[#], WH-Huang, Paul CH-Chen, **SC-Hung***. Conditioned medium derived from mesenchymal stem cells overexpressing HPV16 E6E7 dramatically improves ischemic limb. **Journal of Molecular and Cellular Cardiology**, 72:339-49, 2014. (#Equal Contribution) (**IF: 5.218; Rank: 20/125**)
38. JY-Wang, PK-Wu, PC-Chen, CC-Yen, GY-Hung, CF-Chen, **SC-Hung**, SF-Tsai, CL-Liu, TH-Chen, WM-Chen. Manipulation therapy prior to diagnosis induced primary osteosarcoma metastasis-from clinical to basic research. **PLoS One**. 9(5):e96571, 2014.
39. MF-Wei, MW-Chen, KC-Chen, PJ-Lou, **SC-Hung**, M-Hsiao, CJ-Yao, MK-Shieh. Autophagy promotes resistance to photodynamic therapy-induced apoptosis selectively in colorectal cancer stem-like cells. **Autophagy**. 10(7):1179-92, 2014.
40. KT-Chou, KC-Su, SF-Huang, YH-Hsiao, CM-Tseng, VY-Su, **SC-Hung**, DW-Perng. Exhaled Nitric Oxide Predicts Eosinophilic Airway Inflammation in COPD. **Lung**, 192:499-504 2014.
41. YC-Kuo, **SC-Hung**, SH-Hsu. The effect of elastic biodegradable polyurethane electrospun nanofibers on the differentiation of mesenchymal stem cells. **Colloids Surf B Biointerfaces**, 122C:414-422, 2014.
42. KT-Chou, CC-Liu, HS-Hsu, SC-Chang, YM-Chen, DW-Perng, YT-Hsu, YC-Lee, **SC-Hung***. Nocturnal Stem Cell Mobilization in Patients with Obstructive Sleep Apnea. **European Journal of Clinical Investigation**, 44(12):1189-96, 2014.
43. JK-Lou, FM-Wang, CH-Tsai, **SC-Hung**, PH-Kung, SD-Lin, KT-Chen, CL-Lei. A social diffusion model with an application on election simulation. **Scientific World Journal**. 180590, 2014
44. FY-Chiu, SP-Lin, Y-Wang, SY-Kao, **SC-Hung***. Rb maintains quiescence and prevents premature senescence through up-regulation of DNMT1 in mesenchymal stem cells. **Stem Cell Reports**, 3(6):975-86, 2014 (Cell Press Journal)
45. SP-Lin, YT-Lee, SH-Yang, Stephanie A. Miller, SH-Chiou, MC-Hung*, **SC-Hung***. Colon Cancer Stem Cells Resist Antiangiogenesis Therapy-induced Apoptosis. **Cancer Letters**, 328(2):226-34, 2013. (**IF: 5.016; Rank: 33/203**)
46. TF-Huang, TL-Yew, ER-Chiang, HL-Ma, CY-Hsu, SH-Hsu, **SC-Hung***. Mesenchymal stem cells from hypoxic culture improve and engraft Achilles tendon healing. **Am J Sports Med**. 41(5):1117-25, 2013 (**IF: 4.669; Rank: 1/67**)
47. YF-Huang, MJ-Chen, MS-Wu, **SC-Hung***. The use of hypoxic cultured mesenchymal stem cell for oncolytic virus therapy. **Cancer Gene Therapy**. 20(5):308-16, 2013. (**IF: 2.802; Rank: 53/158**).
48. YL-Yu, RH-Chou, WC-Shyu, C-Hsieh, CS-Wu, SY-Chiang, WJ-Chang, JN-Chen, YJ-Tseng, YH-Lin, W-Lee, SP-Yeh, JL-Hsu, CC-Yang, **SC-Hung**, Hung MC. Smurf2-mediated degradation of EZH2 enhances neuron differentiation and improves functional recovery after ischaemic stroke. **EMBO Mol Med**. 5(4):531-47, 2013.

49. **SC-Hung***. Effects of hypoxic culture on bone marrow mesenchymal stem cells: from bench to bedside. **Formosan Journal of Surgery** 2013 (review)
50. CM-Chen, HH-Lin, **SC-Hung**, TF-Hung, WM-Chen, CL-Liu, TH-Chen. Surgical Treatment for Septic Arthritis of the Knee Joint in Elderly Patients: A 10-year Retrospective Clinical Study. **Orthopedics**. 36(4):e434-43, 2013 (IF: 1.054; Rank: 38/63).
51. Sunny LY-Chang, RH-Chou, HJ-Zeng, YH-Lin, TY-Chiu, DM-Yang, **SC-Hung**, CH-Lai, JT-Hsieh, WC-Shyu, YL-Yu. Downregulation of DAB2IP Promotes Mesenchymal-to-Neuroepithelial Transition and Neuronal Differentiation of Human Mesenchymal Stem Cells. **PLoS One**, 8(9):e75884, 2013
52. HH-Lee, M-J-Shieh, J-P-Wang, YT-Chen, SS-Wu, TH-Young, **SC-Hung***. Hypoxia Enhances Chondrogenesis and Prevents Terminal Differentiation through PI3K/Akt/FoxO Dependent Anti-Apoptotic Effect. **Scientific Reports**. 3:2683, 2013 (IF: 5.078; Rank: 5/55)
53. WH-Huang, MC-Chang, KS-Tsai, MC-Hung, HL-Chen, **SC-Hung***. Mesenchymal Stem Cells Promote Growth and Angiogenesis of Tumors in Mice. **Oncogene**, 32(37):4343-54, 2013. (IF: 8.559; Rank: 12/203)
54. TL-Yew, MC -Chang, YT-Hsu, FY-He, WH-Weng, CC-Tsai, FY-Chiu, **SC-Hung***. Efficient expansion of mesenchymal stem cells from mouse bone marrow under hypoxic conditions. **Journal of Tissue Engineering and Regenerative Medicine**. 7(12):984-93, 2013. (IF: 3.534; Rank: 6/69)
55. CC-Tsai, TF-Huang, HL-Ma, ER-Chiang, **SC-Hung***. Isolation of mesenchymal stem cells from shoulder rotator cuff: potential source for muscle and tendon repair. **Cell Transplantation**. 22(3):413-22, 2013. (IF: 6.204; Rank: 1/25)
56. HL-Ma, ER-Chiang, HT-Wu, **SC-Hung**, ST-Wang, CL-Liu, TH-Chen. Clinical Outcome and Imaging of Arthroscopic Single-Row and Double-Row Rotator Cuff Repair: A Prospective Randomized Trial. **Arthroscopy**. 28(1):16-24. 2012 (IF: 3.024; Ranking: 6/65)
57. YL-Chang, SJ-Chen, CL-Kao, **SC-Hung**, DC-Ding, CC-Yu, YJ-Chen, HH-Ku, CP-Lin, KH-Lee, YC-Chen, JJ-Wang, CC-Hsu, LK-Chen, HY-Li, Sh-Chiou*. Docosahexaenoic Acid Promotes Dopaminergic Differentiation in Induced Pluripotent Stem Cells and Inhibits Teratoma Formation in Rats with Parkinson-like Pathology. **Cell Transplantation**. 21(1):313-32, 2012. (IF: 6.204; Rank: 1/25)
58. HS-Hsu, JHan-Lin, TW-Hsu, Kelly Su, CW-Wang, KY-Yang, SH-Chiou, **SC-Hung***. Mesenchymal Stem Cells Enhance Lung Cancer Initiation Through Activation of IL-6/JAK2/STAT3 Pathway. **Lung Cancer**, 75(2):167-77, 2012. (IF: 3.356; Rank: 11/46)
59. CY-Wang, HB-Yang, HS-Hsu, LL-Chen, CC-Tsai, KS-Tsai, TL-Yew, YH-Kao, **SC-Hung***. Mesenchymal Stem Cell-Conditioned Medium Facilitates Angiogenesis and Fracture Healing in Diabetic Rats. **Journal of Tissue Engineering and Regenerative Medicine**. 2012 Jul;6(7):559-69. (IF: 3.534; Rank: 6/69)
60. TL-Yew, TF-Huang, HL-Ma, YT-Hsu, CC-Tsai, CC-Chiang, WM-Chen, **SC-Hung***. Scale-up

- of MSCs under hypoxic conditions for allogeneic transplantation and enhancing bony regeneration in a rabbit calvarial defect model. **J. Orthop Res**, 30:1213-20, 2012. (IF: 2.976; Rank: 5/61)
61. JY-Wang, CC-Chang, CC-Chiang, WM-Chen, **SC-Hung***. Silibinin suppresses the maintenance of colorectal cancer stem-like cells by inhibiting PP2A/AKT/mTOR pathways. **Journal of Cellular Biochemistry**, 113(5):1733-43, 2012 (IF: 3.122; Rank: 125/286)
62. YF-Huang, JJ-Lin, CH-Lin, Y-Su, **SC-Hung***. c-Jun N-terminal kinase 1 negatively regulates osteoblastic differentiation induced by BMP-2 via phosphorylation of Runx2 at Ser104. **Journal of Bone and Mineral Research**. 27(5):1093-105, 2012 (IF: 6.128; Rank: 14/121)
63. GY-Chiou, JY-Cherng, HS-Hsu, ML-Wang, CM-Tsai, KH-Lu, Y-Chien, **SC-Hung**, YW-Chen, CI-Wong, LM-Tseng, PI-Huang, CC-Yu, WH-Hsu, Chiou SH-Chiou. Cationic polyurethanes-short branch PEI-mediated delivery of Mir145 inhibited epithelial-mesenchymal transdifferentiation and cancer stem-like properties and in lung adenocarcinoma. **J Control Release**. 159(2):240-50, 2012 (IF: 7.164; Rank: 10/252)
64. CC-Tsai, PF-Su, YF-Huang, TL-Yew, **SC-Hung***. Oct4 and Nanog directly regulate Dnmt1 to maintain self-renewal and undifferentiated state in mesenchymal stem cells. **Molecular Cell**, 47: 169–182, 2012 (IF: 15.280; Rank: 4/290) suggested and recommended by Faculty 1000-Prime.
65. HL-Ma, HK-Huang, ER-Chiang, ST-Wang, **SC-Hung**, CL-Liu. Arthroscopic pancapsular plication for multidirectional shoulder instability in overhead athletes. **Orthopedics**. 35:e497-502. 2012(IF: 0.903; Rank: 40/65)
66. SP-Lin, YT-Lee, JY-Wang, Stephanie A. Miller, SH-Chiou, MC-Hung*, **SC-Hung***. Survival of cancer stem cells under hypoxia and serum depletion via decrease in PP2A activity and activation of p38-MAPKAPK2-Hsp27. **PLoS One**, 7(11): e49605, 2012. (IF: 4.092; Rank: 12/85)
67. CC-Tsai, **SC-Hung***. Functional roles of pluripotency transcription factors in mesenchymal stem cells. **Cell Cycle**, 11(20):3711-2, 2012. (IF: 5.359; Rank: 44/180)
68. HH-Lin, WH-Chang, TF-Huang, **SC-Hung**, HL-Ma, CL-Liu. Bilateral stress fractures of the ulna in a young adolescent. **J Pediatr Orthop B**. 78(5):592-6, 2012 (IF: 5.359; Rank: 44/180)
69. CC-Tsai, TL-Yew, DC-Yang, WH-Huang, **SC-Hung***. Benefits of hypoxic culture on bone marrow multipotent stromal cells. **Am J Blood Res**. 2(3):148-59, 2012. (review)
70. Lin YP, Huang TF, **Hung SC**, Ma HL, Liu CL. Rotator cuff tears in patients younger than 50 years of age. **Acta Orthop Belg**. 78(5):592-6, 2012.
71. TL-Yew, FY-Chiu, CC-Tsai, HL-Chen, YJ-Chen, MC-Chang, **SC-Hung***. Knockdown of p21^{Cip1/Waf1} enhances proliferation, the expression of stemness markers and osteogenic potential in human mesenchymal stem cells. **Aging Cell**, 10(2):349-361, 2011. (IF: 7.18; Rank: 2/14)
72. YL-Yu, RH-Chou, LT-Chen, WC-Shyu, SC-Hsieh, CS-Wu, HJ-Zeng, SP-Yeh, DM-Yang, **SC-Hung**, MC-Hung. EZH2 regulates neuronal differentiation of mesenchymal stem cells through

PIP5K1C-dependent calcium signaling. **J Biol Chem.** 286(11):9657-67, 2011. (IF: 5.328;Rank: 50/286)

73. DC-Yang, MH-Yang, CC-Tsai, TF-Huang, YH-Chen, **SC-Hung***. Hypoxia inhibits osteogenesis in human mesenchymal stem cells through direct regulation of RUNX2 by TWIST. **PLoS ONE**, 6, e:23965, 2011. (IF: 4.411; Ranking: 12/85)

74. CC-Tsai, DC-Yang, HC-Fu, HJ-Tsay, YF-Liao, TF-Huang, YH-Chen, **SC-Hung***. twist controls skeletal development and dorsoventral patterning by regulating runx2 in zebrafish. **PLoS ONE**, 6, e27324, 2011. (IF: 4.411; Ranking: 12/85)

75. YH-Chen, FL-Yeh, SP-Yeh, HT-Ma, **SC-Hung**, MC-Hung, LY-Li. MITR is a switch that promotes osteogenesis and inhibits adipogenesis of mesenchymal stem cells by inactivating PPAR γ -2. **J Biol Chem.** 286(12):10671-80, 2011. (IF: 5.328;Rank: 50/286)

76. JP-Wang, YJ-Hui, ST-Wang, YC-Huang, ER-Chiang, CL-Liu, TH-Chen, **SC-Hung***. Fibromatosis stem cells rather than bone-marrow mesenchymal stem cells recapitulate a murine model of fibromatosis. **Biochem Biophys Res Commun.** 408: 269–275, 2011 (IF: 2.595; Ranking: 38/73)

77. KS-Tsai, SH-Yang, YP-Lei, CC-Tsai, HW-Chen, CY-Hsu, LL-Chen, HW-Wang, Stephanie A. Miller, SH-Chiou, MC-Hung, **SC-Hung***. Mesenchymal Stem Cells Promote Formation of Colorectal Tumors in Mice. **Gastroenterology**, 141(3):1046-56, 2011. (IF: 12.821;Rank: 1/74)

78. HJ-Chiou, **SC-Hung**, SY-Lin, TK-Wu, YT-Huang. FT-IR microscopic imaging of calcified deposit of rotator cuff tendonitis: A pilot study and a randomised identification of the compositional components after extrusion from tendon to muscle. **Vibrational Spectroscopy.** 57:135-139, 2011. (IF: 2.083;Rank: 30/71)

79. ER-Chiang, HL-Ma, ST-Wang, **SC-Hung**, CL-Liu, TH-Chen. Hamstring graft sizes differ between Chinese and Caucasians. **Knee Surg Sports Traumatol Arthrosc.** 20(5):916-21, 2012. (IF: 2.209;Rank:17/85)

80. JP-Wang, YJ-Hui, ST-Wang, HH-Yu, YC-Huang, ER-Chiang, CL-Liu, TH-Chen, **SC-Hung***. Recapitulation of fibromatosis nodule by multipotential stem cells in immunodeficient mice. **PLoS One.** 6:e24050, 2011. (IF: 4.411; Ranking: 12/85)

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Books:

1. Mesenchymal stromal cells as tumor stromal modulators. Edited by Marcela F. Bolontrade and Mariana G. Garcia. Chapter 12: Mesenchymal stromal cells and tumor angiogenesis.
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Patents:

	Title of patent	Nation	Application No.	Status
方法	Novel method for MSC isolation	Taiwan	089121676 481672	Issued
	Method of isolating Mesenchymal Stem Cells	USA	09/761,893 US 2002/0045260 A1	applied
	低密度合併低氧培養擴增間質幹細胞的方法	Taiwan	098142403 I428446	Issued
	Method for Expanding Mesenchymal Stem Cells in Low density and Hypoxic Culture	USA	US8900860	Issued
	Preparation of cell transplant	EU	12199521.1 EP 2 612 907 A1	applied
	Method for Reducing Rejection of Allogeneic Cell Transplant	USA	13/729,551 US 2013/0226312 A1	applied
	細胞移植物的制备	China	201210591807.8 CN 103194426 A	Issued
細胞移植植物之製備	Taiwan	102100273 TW 201329237 A1	Issued	
適應症	MSCs for Treating Musculoskeletal Disorder	US provisional	62/118,827	applied
	MSCs for Treating Atherosclerotic Lesions	US provisional	62/068,491	applied

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	MSCs for Treating Immune-mediated Hepatic Injury	US provisional	62/099,736	applied
癌症	Method for inhibiting survival, tumorigenesis and metastasis of cancer cells/cancer stem cells	USA		applied
	抑制癌細胞及/或癌症幹細胞之存活、癌化及轉移之方法	Taiwan		applied