

Name: Bai-Shuan Liu
Telephone: (04)22391647 ext. 7112
Mail: bsliu@ctust.edu.tw
Education : Ph.D., Institute of Chemical Engineering, Chung-Hsing University M.D., Institute of Biomedical Engineering, Chung-Yuan University B.S., Department of Biomedical Engineering, Chung-Yuan University
Career Experience : 1. Professor: Department of Medical Imaging and Radiological Science, Central Taiwan University of Science and Technology (2012.02 ~ Present). 2. Associate professor: Department of Medical Imaging and Radiological Science, Central Taiwan University of Science and Technology (2004.08 ~ 2012.01). 3. Lecturer: Department of Medical Imaging and Radiological Science, Central Taiwan University of Science and Technology (1993.08 ~ 2004.07).
Courses Taught : Principle and Instrumentation of Radiodiagnostic Technology. Applied Mathematics. Calculus. Tissue Engineering.
Professional Fields : Biomaterials. Regenerative Medicine. Biomedical Engineering.
Research Interests : Bone Substitute. Nerve Conduit. Wound Dressing.
Representative Publication in 5 Years : 2016 1. C.C. Shen, W.Y. Cheng, M.T. Chiao, Y.J. Liang, T.F. Mao, B.S. Liu* . Two Novel Heparin-binding Vascular Endothelial Growth Factor Splices, L-VEGF144 and L-VEGF138 are Expressed in Human Glioblastoma Cells. Current Neurovascular Research 2016; 13(3). (SCI) 2015 2. J.R. Chou, Y.C. Yang, B.S. Liu* . Comparison of neural regeneration in a nerve conduit across a large gap of the transected sciatic nerve in rats with early or delayed therapeutic modalities of a low-level laser phototherapy. Chinese Journal of Radiologic Technology 2015;39(4): 187-196.

3. T.Y. Chen, Y.C. Lin, Y.C. Yang, **B.S. Liu***. Comparison of neural regeneration in a nerve conduit across a large gap of the transected sciatic nerve in rats with different therapeutic modalities of a low-level laser phototherapy. Chinese Journal of Radiologic Technology 2015;39(2):78-89.
4. T.Y. Chen, Y.C. Yang, Y.N. Sha, J.R. Chou, **B.S. Liu***. Far-Infrared Therapy Promotes Nerve Repair Following End-to-End Neurorrhaphy in Rat Models of Sciatic Nerve Injury. Evidence-Based Complementary and Alternative Medicine Volume 2015, Article ID 207245, 10 pages, 2015. (SCI)

2014

5. **B.S. Liu***, T.B. Huang, S.C. Chan. Roles of reinforced nerve conduits and low-level laser phototherapy for long gap peripheral nerve repair. Neural Regen Res. 2014;9(12):1180-1182. (SCI)
6. **B.S. Liu***, Y.C. Yang, C.C. Shen. Regenerative effect of adipose tissue-derived stem cells transplantation with nerve guide conduit therapy on sciatic nerve injury in rats. J. Tissue Eng. Regen. Med. 2014;8(5):337-350. (SCI)

2013

7. C.C. Shen, Y.C. Yang, M.T. Chiao, S.C. Chan, **B.S. Liu***. Low-level Laser Stimulation on Adipose-Tissue-derived Stem Cell Treatments for Focal Cerebral Ischemia in Rats. Evidence-Based Complementary and Alternative Medicine Volume 2013, Article ID 594906, 12 pages, 2013. (SCI)
8. C.C. Shen, Y.C. Yang, T.B. Huang, S.C. Chan, **B.S. Liu***. Neural regeneration in a novel nerve conduit across a large gap of the transected sciatic nerve in rats with low-level laser phototherapy. J. Biomed. Mater. Res. Part A 2013;101(10):2763-2777. (SCI)
9. C.C. Shen, Y.C. Yang, T.B. Huang, S.C. Chan, **B.S. Liu***. Low-Level Laser-Accelerated Peripheral Nerve Regeneration within a Reinforced Nerve Conduit across a Large Gap of the Transected Sciatic Nerve in Rats. Evidence-Based Complementary and Alternative Medicine Volume 2013, Article ID 175629, 12 pages, 2013. (SCI)
10. C.C. Shen, Y.C. Yang, **B.S. Liu***. Effects of large-area irradiated laser phototherapy on peripheral nerve regeneration across a large gap in a biomaterial conduit. J. Biomed. Mater. Res. Part A. 2013;101(1):239-252. (SCI)

2012

11. C.C. Shen, Y.C. Yang, **B.S. Liu***. Evaluation of peripheral nerve regeneration using a novel reinforced nerve conduit across a long gap of the transected sciatic nerve in rats. J. Neurosci. Neuroeng. 2012;1:105-117.
12. C.C. Shen, Y.C. Yang, **B.S. Liu***. Peripheral nerve repair of transplanted undifferentiated adipose tissue-derived stem cells in a biodegradable reinforced nerve conduit. J. Biomed. Mater. Res. Part A 2012;100(1):48-63. (SCI)