

Curriculum Vitae

First Name : Meng-Huang Last Name : Wu

姓名	吳孟晃			
學經歷	服務單位	職稱	起訖年/月	
現職	臺北醫學大學附設醫院 骨科部脊椎骨科	主任	109年8月	迄今
	臺北醫學大學附設醫院 創新前瞻中心	主任	111年2月	迄今
	臺北醫學大學 TMU Biodesign Center	執行長	110年10月	迄今
	臺北醫學大學醫學系骨科學科/人工 智慧/醫學人文學科/醫工院	助理教授	109年7月	迄今
	臺灣脊椎微創內視鏡醫學會	常務理事	111年9月	迄今
	臺灣醫學設計學會	理事	107年9月	迄今
	臺灣脊椎微創醫學會	理事	108年9月	迄今
	臺北醫學大學大台北地區校友會	理事長	111年9月	迄今
	強骨生醫器材股份有限公司	創辦人/醫療長	111年12月	迄今
經歷	臺北醫學大學附設醫院骨科部	專任主治醫師	104年7月	迄今
	嘉義長庚紀念醫院骨科部	住院醫師-主治醫師-講 師級主治醫師	95年9月	104年6月
	基隆長庚紀念醫院內科部	住院醫師	94年8月	95年8月
專長	1. 脊椎疾病 2. 醫材研究 3. 骨質疏鬆 4. 生醫設計創新(Biodesign)			
簡歷	<p>北醫畢業後於嘉義林口高雄長庚住院醫師訓練，於黃聰仁教授指導下成為嘉義長庚脊椎外科主治醫師，2015至北醫附醫骨科，現任台灣脊椎微創內視鏡醫學會常務理事、台灣脊椎微創醫學會及臺灣醫學設計學會理事，SCI期刊 Neurospine 主編，BMC Musculoskeletal Disorder 副編輯，Biomedical research international 學術編輯，AOSpine SEA Faculty, SRS candidate fellow, 500Global 及比翼加速器 mentor，現有 68 篇論文(53 篇 SCI, 35 篇第一/指導作者)，兩章英文書本章節，9 項發明專利(美國 2，日本 1，中國 1，台灣 4，歐洲 1)，長庚醫院優秀教學住院醫師，7 次全國論文比賽得獎，第十五屆及第十九屆國家新創獎，2020 生醫產業與新農業創新創業競賽生醫組金獎，2021 骨鬆百大良醫北區第一名，2022 FITI 創業競賽創業傑出獎(Top 3)，強骨生醫器材創辦人，五次公費國外進修(美國 Stanford University Biodesign, Thomas Jefferson University 衛生福利部醫材臨床試驗培訓人員，香港大學，韓國天主教大學，JSSR 訪問學者)，與工研院與 University of Illinois 簽有醫材開發合作備忘錄，開發 3D 列印薦骨固定系統及 3D 列印脊椎支架(已取證)，現正執行國科會計畫、台科大北醫計畫、北科大北醫計畫、教育部深耕計畫及 SPARK 與國科會育苗醫材創新開發計畫。</p>			
學術發表 (2021-2023)	<ol style="list-style-type: none"> Outcome analysis of lumbar endoscopic unilateral laminotomy for bilateral decompression in patients with degenerative lumbar central canal stenosis. Meng-Huang Wu(Co-first author), Po-Chien Wu, Ching-Yu Lee, Yen-Kuang Lin, Tsung-Jen Huang, Cheng-Li Lin, Yi-Hung Huang*. The Spine Journal, 2021, Jan;21(1):122-133. (SCI 28) (first/Corr. 16) Micronized sacchachitin promotes satellite cell proliferation through TAK1-JNK-AP-1 signaling pathway 			

- predominantly by TLR2 activation. Meng-Huang Wu; Chuang-Yu Lin; Chun-Yin Hou; Ming-Thau Sheu*; Hsi Chang*. *Chinese Medicine*, 2020, 15:10. (SCI 29) (first/Corr. 17)
3. Improved Bone Healing with Additive-Manufactured Pedicle Screw Implant by Using Ti-6Al-4V and Bioactive Glass Powder Composite. Tu Ngoc Lam, Minh Giam Trinh, Chih-Chieh Huang, Pei-Ching Kung, Wei-Chin Huang, Wei Chang, Lia Amalia, Hsu-Hsuan Chin, Nien-Ti Tsou, Shao-Ju Shih, San-Yuan Chen, Chun-Chieh Wang, Pei-I Tsai, Meng-Huang Wu*, E-Wen Huang *. *Int. J. Mol. Sci.* 2020, Oct, 9 (SCI 30) (first/Corr. 18)
 4. One-Pot Fabrication of Sacchachitin for Production of TEMPO-Oxidized Sacchachitin Nanofibers (TOSCNFs) Utilized as Scaffolds to Enhance Bone Regeneration. Meng-Huang Wu#, Weu Wang #, Fang-Ching Chao, Chien-Ming Hsieh, Ling-Chun Chen, Hong-Liang Lin, Hsiu-O Ho, Tsung-Jen Huang\$, and Ming-Thau Sheu\$. *Carbohydrate Polymers*. 2021, 254,117270 (SCI 31) (first/Corr. 19)
 5. Functional Outcomes of Full Endoscopic Spine Surgery for High-Grade Migrated Lumbar Disc Herniation: A Prospective Registry-Based Cohort Study With Over 5 Years of Follow-Up. Christopher Wu; Ching-Yu Lee; Sheng Chi Chen; Shao-Keh Hsu*; Meng-Huang Wu*. *BMC Musculoskeletal Disorders*. 2021. 22:58 (SCI 32) (first/Corr. 20)
 6. Mechanical, Electrochemical and Biological Behavior of 3D Printed-Porous Titanium for Biomedical Applications. Dalton Morris, Siva Kumar Mamidi, Sneha Kamat, Kai-yuan Cheng, Divya Bijukumar, Pei-I Tsai, Meng-Huang Wu, Alejandro A. Espinoza Orías, Mathew T. Mathew*. *Journal of Bio- and Tribo-Corrosion*. (2021) 7:39.
 7. Additive-manufactured Ti-6Al-4V/Polyetheretherketone composite porous cage for Interbody fusion: bone growth and biocompatibility evaluation in a porcine model. Tsai PI, Wu MH(Co-first author), Li YY, Lin TH, Tsai JSC, Huang HI, Lai HJ, Lee MH*, Chen CY*. *BMC Musculoskelet Disord*. 2021 Feb 11;22(1):171. (SCI 33) (first/Corr. 21)
 8. Effectiveness of shared decision-making intervention in patients with lumbar degenerative diseases: A randomized controlled trial. Chia-Hsien Chen, Yi-No Kang, Po-Yao Chiu, Yi-Jing Huang, Glyn Elwyn, Meng-Huang Wu, Jiunn-Horng Kang, Wen-Hsuan Hou, Ken N Kuo. *Patient Education and Counseling*, 2021, Mar 10;S0738-3991(21)00172-5. (SCI 34)
 9. Timing of Bisphosphonate (Alendronate) Initiation after Surgery for Fragility Fracture: A Population-Based Cohort Study. Wu, M.-H.(Co-first author); Lin, Y.-S.; Wu, C.; Lee, C.-Y.; Chen, Y.-C.; Huang, T.-J.; Cheng, J.-S. *J. Clin. Med.* 2021, 10(12), 2541. (SCI 35) (first/Corr. 22)
 10. 脊椎內視鏡手術發展現況及未來展望.吳孟晃*,李境祐,黃聰仁.台北市醫師公會會刊 (Journal of Taipei Medical Association). 2021. (first/Corr. 23)
 11. Simultaneous Bilateral Total Knee Arthroplasty Becomes Safer after Institution of Optimal Perioperative Management: A Longitudinal Cohort Study. Chen SH, Chen JY, Wong TH, Buechel F Jr, Wu MH*. *J Knee Surg*. 2021 Jul;34(9):941-951. doi: 10.1055/s-0039-1700979. Epub 2020 Jan 17. PMID: 31952092. (SCI 36) (first/Corr. 24)
 12. Intravenous Tranexamic Acid Reduces Blood Loss and Transfusion Volume in Scoliosis Surgery for Spinal Muscular Atrophy: Results of a 20-Year Retrospective Analysis. Chou, S.-H.; Lin, S.-Y.; Wu, M.-H.; Tien, Y.-C.; Jong, Y.-J.; Liang, W.-C.; Lu, Y.-M.; Shih, C.-L.; Lu, C.-C. *Int. J. Environ. Res. Public Health* 2021, 18, 9959. <https://doi.org/10.3390/ijerph18199959> (SCI 37)
 13. Risk factors for spine reoperation and joint replacement surgeries after short-segment lumbar spinal surgeries for lumbar degenerative disc disease: a population-based cohort study. Meng-Huang Wu(Co-first Author), Christopher Wu (Co-first Author), Jiann-Her Lin, Li-Ying Chen, Ching-Yu Lee, Tsung-Jen Huang*, Yi-Chen Hsieh*, Li-Nien Chien* *J. Clin. Med.* 2021, 10, 5138. <https://doi.org/10.3390/jcm10215138> (SCI 38) (first/Corr. 25)
 14. Uniportal Endoscopic Interlaminar Decompression in Lumbar Spinal Stenosis: A Comprehensive Review. Kuang-Yuan Goh, Jui-Chen Hsu, Ching-Yu Lee, Tsung-Jen Huang, Chien-Min Chen* and Meng-Huang Wu*. *International Journal of Spine Surgery*. December 2021, 15 (suppl 3) S54-S64; DOI: <https://doi.org/10.14444/8164> (first/Corr. 26)
 15. Comparison of Incidence of Adjacent Segment Pathology Between Anterior Lumbar Interbody Fusion and Transforaminal Lumbar Interbody Fusion Treatments for Lumbosacral Junction. Po-Kuan Wu, Meng-Huang Wu(Co-first Author), Cheng-Min Shih, Yen-Kuang Lin, Kun-Hui Chen, Chien-Chou Pan, Tsung-Jen Huang, Ching-Yu Lee, Cheng-Hung Lee*, *Tomography* 2021,7, 855–865. (SCI 39) (first/Corr. 27)
 16. Comparison of Robotic and Conventional Unicompartmental Knee Arthroplasty Outcomes in Patients with Osteoarthritis: A Retrospective Cohort Study. Christopher Wu, Nobuei Fukui, Yen-Kuang Lin, Ching-Yu Lee, Shih-Hsiang Chou, Tsung-Jen Huang, Jen-Yuh Chen*, Meng-Huang Wu*. *J. Clin. Med.* 2022, 11(1), 220. (SCI 40) (first/Corr. 28)
 17. A Few-Shots Learning Approach Assists Prognosis Prediction of Magnetic Resonance-guided Focused Ultrasound for Bone Metastatic Lesions Local Control. Fang-Chi Hsu, Yin-Ju Chen, Yao-An Shen, Yi-Chieh Tsai, Meng-Huang Wu, Chia-Chun Kuo, Long-Sheng Lu, Shaoh-Der Yeh, Wen-Sheng Huang, Hsin-Lun Lee *, Chia-Ning Shen *, Jong-Fong Chiou *. *Cancers*. 2022, 14, 445. <https://doi.org/10.3390/cancers14020445> (SCI 41)
 18. Accuracy of Intraoperative Computed Tomography Navigation in One Registration Scan for Adolescent Idiopathic Scoliosis. Meng-Huang Wu(Co-first Author), Christopher Wu, Ching-Yu Lee, Yen-Yao Li, Tsung-Jen Huang*. *J. of Musculoskeletal Research*. 2022, Vol. 25, No. 02,

- <https://doi.org/10.1142/S021895772240005X> (first/Corr. 28)
19. In Vitro and In Vivo Comparison of Bone Growth Characteristics in Additive-Manufactured Porous Titanium, Nonporous Titanium, and Porous Tantalum Interbody Cages. Meng-Huang Wu(Co-first Author); Ming-Hsueh Lee; Christopher Wu; Pei-I Tsai; Wei-Bin Hsu; Shin-I Huang;Tzu-Hung Lin; Kuo-Yi Yang; Chih-Yu Chen; Shih-Hao Chen; Ching-Yu Lee; Tsung-JenHuang;Fang-hei Tsau; Chung-Sheng Shi; Yen-Yao Li. *Materials* 2022, 15(10), 3670 (SCI 42, first/Corr. 29)
 20. Comparison Between Lumbar Endoscopic Unilateral Laminotomy for Bilateral Decompression and Other Decompression Approaches for Lumbar Spinal Stenosis: A Systematic Review. Po-Lin Chiang#, Ying-Yu Chen#, Ko-Ta Chen#, Jason C. Hsu, Christopher Wu, Ching-Yu Lee, Tsung-Jen Huang, Yi-Hung Huang, Chien-Min Chen*, Meng-Huang Wu*. *World Neurosurgery*, 2022, 8, in press. (SCI 43, first/Corr. 30)
 21. Full-Endoscopic Transforaminal Decompression To Treat A High-Risk Patient With Lumbar Spinal Stenosis and Degenerative Spondylolisthesis: A Case Report And Literature Review. Pin-Yang Huang, Meng-Huang Wu, Tsung-Jen Huang and Ching-Yu Lee. *Journal of Musculoskeletal Research*Vol. 25, No. 02, 2240002 (2022)
 22. Detection of Lumbar Spondylolisthesis From X-Ray Images Using Deep Learning Network. Giam Minh Trinh, Hao-Chiang Shao, Kevin Li-Chun Hsieh, Ching-Yu Lee, Hsiao-Wei Liu, Chen-Wei Lai, Sen-Yi Chou, Pei-I Tsai, Kuan-Jen Chen, Fang-Chieh Chang, Meng-Huang Wu *, Tsung-Jen Huang *. *J. Clin. Med.* 2022, 11(18), 5450(SCI 44, first/Corr. 31)
 23. Inhibition of Neddylation Suppresses Osteoclast Differentiation and Function in vitro and Alleviates Osteoporosis in vivo. Meng-Huang Wu, Wei-Bin Hsu, Mei-Hsin Chen, Chung-Sheng Shi *. *Biomedicines*. 2022, *in press*. (SCI 45, first/Corr. 32)
 24. Anaerobic spondylodiscitis: a retrospective analysis. Chen CT, Wu MH, Huang TY, Li YY, Huang TJ, Lee CY, Lin CH, Lee CY. *BMC Musculoskelet Disord.* 2022 Aug 17;23(1):788. (SCI 46)
 25. Minimally Invasive Surgical Treatment of Extensive Spinal Epidural Abscess with Unilateral Laminotomy for Bilateral Decompression Using an Ultrasonic Bone Curette: A Technique Note. Ching-Yu Lee, Meng-Huang Wu, Pei-Chin Chen, Tseng-Jen Huang, Chun-Chao Chang, Po-Yao Wang, Yuarn-Jang Lee, MD*. *World Neurosurgery*, 2022, 9, Sep 23;S1878-8750. (SCI 47)
 26. Hypertrophic Ligamentum Flavum in Lumbar Spine Stenosis Is Associated With the Increased Expression of Secreted Protein Acidic and Rich in Cysteine. Lee CY, Wu MH, Huang TJ, Wang PY, Wu ATH. *Global Spine J.* 2022 Nov 10:21925682221138766. (SCI 48)
 27. High Accuracy and Safety of Intraoperative CT-Guided Navigation for Transpedicular Screw Placement in Revision Spinal Surgery. Li YY, Chen SH, Huang KC, Lee CY, Cheng CC, Lee CY, Wu MH, Huang TJ. *J Clin Med.* 2022 Oct 2;11(19):5853. doi: 10.3390/jcm11195853. PMID: 36233720; PMCID: PMC9573638. (SCI 49)
 28. Cross-cultural adaptation and validation of the Traditional Chinese Version of the Core Outcome Measures Index in patients with low back pain. Po-Chien Wu1, Jui-Chen Hsu1, Anne F. Mannion, Christopher Wu, Ching-Yu Lee, Tsung-Jen Huang, Yen-Kuang Lin*, Meng-Huang Wu* *European Spine Journal*, (2023). <https://doi.org/10.1007/s00586-022-07508-0> (SCI 50, first /Corr. 33)
 29. Effects of Porosity Percentages and Heat Treatment on Mechanical Properties of Additive Manufactured CoCrMo Alloys. Tu-Ngoc Lam, Kuang-Ming Chen, Cheng-Hao Tsai, Pei-I Tsai, Meng-Huang Wu, Ching-Chi Hsu, Jayant Jain, E-Wen Huang * *Materials* (SCI 51)(in press)
 30. A 30-year Worldwide Research Productivity of Scientific Publication in Full-endoscopic Decompression Spine Surgery: Quantitative and Qualitative Analysis. *Neurospine*. co-author. (In press) (SCI 52)
 31. Effect of calcium silicate and β -tricalcium phosphate reinforcement on the mechanical-biological properties of freeze-dried collagen composite scaffolds for bone tissue engineering applications. Temesgen Yiber Animut, Henni Setia Ningsih, Hsueh-Huan Shih, Meng-Huang Wu *, Shao-Ju Shih *. *Ceramics* 2023, 6(1), 548-560. (first /Corr. 34)
 32. Ethnic Differences in Asian and Caucasian Sacroiliac Joint Anatomy or Surgical Planning of Minimally Invasive Sacroiliac Joint Fusion. Christopher Wu, Yu-Cheng Liu, Hiroaki Koga, Ching-Yu Lee, Po-Yao Wang, Daniel Cher, W. Carlton Reckling, Tsung-Jen Huang, Meng-Huang Wu **Diagnostics, in press* (SCI 53, first /Corr. 35)
 33. Comparison of local ablative therapies, including radiofrequency ablation, microwave ablation, stereotactic ablative radiotherapy, and particle radiotherapy, for inoperable hepatocellular carcinoma: a systematic review and meta-analysis. *Exp Hematol Oncology*. Po-Lung Cheng, Ping-Hsiu Wu, We-Yu Kao, Yen-Ting Lai, Jason C. Hsu, Jeng-Fong Chiou, Meng-Huang Wu* & Hsin-Lun Lee*.*Exp Hematol Oncol* 12, 37 (2023). (SCI 54, first/Corr. 36)
 34. **Indications for and outcomes of three unilateral biportal endoscopic approaches for the decompression of degenerative lumbar spinal stenosis: A systematic review.** Anh Tuan Bui, Giam Minh Trinh, Meng-Huang Wu, Tung Thanh Hoang, Ming-Hsiao Hu, Jwo-Luen Pao*. *Diagnostics (Basel)*. 2023 Mar 14;13(6):1092.(SCI 55)