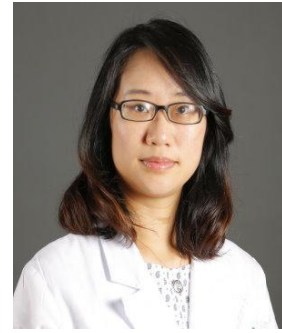


Curriculum Vitae

Wei-Nung Teng, M.D., Ph.D., FIPP (鄧惟濃)
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Brief Introduction

Dr. Wei-Nung Teng is a dedicated anesthesiologist specializing in regional anesthesia and pain management. As the leader of the Enhanced Recovery After Surgery (ERAS) team at Taipei Veterans General Hospital, she actively promotes regional anesthesia through education, workshops, and lectures. Her expertise includes non-intubated breast surgeries utilizing paravertebral blocks, having successfully performed over 1,000 cases within five years. Additionally, the ERAS team manages more than 3,500 ERAS cases per year, including more than 2,000 orthopedic regional anesthesia procedures, collaborating with over ten different medical specialties to optimize patient care.

Dr. Teng has contributed to two pain-related books, and has been interviewed by various media outlets. She has also published numerous peer-reviewed articles in the field of pain management and anesthesia. She has received numerous accolades for her contributions to anesthesiology and innovation. She won the Ministry of Science and Technology 2020 Future Technology Award for developing an innovative needle for plane blocks. She has also been awarded the Symbol of National Quality (SNQ) Certification twice for her work in non-intubated surgeries.

Dr. Teng has held key positions in professional organizations, including serving on the Taiwan Society of Anesthesiologists ERAS Promotion Committee and Taiwanese Society of Regional Anesthesia and Pain Management. Additionally, she runs a mindfulness program for pain management at Taipei Veterans General Hospital, integrating holistic approaches into patient care. Her other areas of interest include airway management, and biomedical engineering.

Current Affiliations

- Taipei Veterans General Hospital
 - Attending anesthesiologist, Department of Anesthesiology
 - Committee member, Pain Management Committee
 - Committee member, Clinical Innovation Center

- National Yang-Ming Chiao-Tung University
 - Assistant Professor
- Taiwan Society of Anesthesiologists
 - Committee member, ERAS Promotion Committee
 - Committee member, Academic Committee
- Taiwanese Society of Regional Anesthesia and Pain Management
 - Board Member
 - Committee chair, Regional block of trunk

Education

- Ph.D., Biomedical Engineering, National Yang-Ming University, Taiwan
- M.D., National Yang-Ming University, Taiwan

Clinical training

- Observership, Pain Management Centre at National Hospital for Neurology and Neurosurgery, University College London Hospitals, London, UK
- Observership, Anaesthesia Department, Great Ormond Street Hospital for Children, London, UK
- Resident, Department of Anesthesiology, Taipei Veterans General Hospital
- Resident, Department of Pediatrics, Taoyuan Veterans Hospital

Previous Professional Appointments & Committees

- Vice Chair, Airway Education Committee, Taiwan Society of Anesthesiologists (2020–2022)
- Committee Member, Medical Simulation Committee, Taiwan Society of Anesthesiologists (2012–2013)

Certifications & Licenses

- World Institute of Pain Fellow in Interventional Pain Practice (FIPP) (2024)
- Pain Medicine Specialist Certification (2023)
- Anesthesiology Specialist Certification (2012)
- Physician License, Taiwan (2006)

Awards

- Young Investigator Award, Taiwan Society of Cardiothoracic and Vascular Anesthesia, 2024
- Tubeless makes easy, non-intubation precise anesthesia, 2023 SNQ (Symbol of National Quality) Certification.

- Tubeless makes easy, non-intubation precise anesthesia, 2021 SNQ (Symbol of National Quality) Certification.
- Intelligent image-guiding needle puncture, Ministry of Science and Technology 2020 Future Technology Award.
- Medical bite block, Taipei Veterans General Hospital 2019 Physician Innovation Award (Honorable Mention).

Book contributions

- Strong Spine Handbook (龍骨強健手冊) ISBN13 : 9789864714117
- Treat the Brain First for Pain Management (疼痛先醫腦) ISBN13 : 9786263357860

Regional Anesthesia and Pain Management - related Publications

1. Liou JY, Wang HY, Yao YC, Chou PH, Sung CS, **Teng WN**, Su FW, Tsou MY, Ting CK, Lo CL. Erector spinae plane block level does not impact analgesic efficacy in enhanced recovery for lumbar spine surgery. *Spine J.* 2024 Aug;24(8):1416-1423. Epub 2024 Apr 12.
2. **Teng WN**, Lin YS, Sung CS, Tseng LM, Chang WK, Ting CK. Analgesia-nociception index accurately predicts inadequate pectoralis muscle fascia block (PECS) in patients undergoing breast surgery: A prospective observational study. *J Formos Med Assoc.* 2024 Mar 5:S0929-6646(24)00145-1. Epub ahead of print.
3. **Teng WN**, MC Kao, CK Ting, WC Kuo. (2021, Aug). Fiber-needle Swept-Source Optical Coherence Tomography for the Real-time Visualization of the Transversus Abdominis Plane Block Procedure in a Swine Model. *Anesthesia & Analgesia.*, 133(2):526-534.
4. Kuo WC, Kao MC, Ting CK, **Teng WN** (2021, Jul). Optical coherence tomography needle probe in neuraxial block application. *IEEE Journal of Selected Topics in Quantum Electronics*, 27(4) pp. 1-6.
5. Kuo WC, Kao MC, Chang KY, **Teng WN**, Tsou MY, Chang Y, Ting CK. Fiber-needle Swept-source Optical Coherence Tomography System for the Identification of the Epidural Space in Piglets. *Anesthesiology.* 2015 Mar;122(3):585-94.
6. Cheng HJ, Chen NF, Chen WF, Wu ZS, Sun YY, **Teng WN**, Su FW, Sung CS, Wen ZH. Intrathecal lactate dehydrogenase A inhibitors FX11 and oxamate alleviate chronic constriction injury-induced nociceptive sensitization through neuroinflammation and angiogenesis. *J Headache Pain.* 2024 Nov 25;25(1):207.
7. Wen ZH, Wu ZS, Cheng HJ, Huang SY, Tang SH, **Teng WN**, Su FW, Chen NF, Sung CS. Intrathecal Fumagillin Alleviates Chronic Neuropathy-Induced

- Nociceptive Sensitization and Modulates Spinal Astrocyte-Neuronal Glycolytic and Angiogenic Proteins. *Mol Neurobiol*. 2024 Jun 5. Epub ahead of print.
8. Hui-Hsuan Ke, Jing-Yang Liou, **Wei-Nung Teng**, Po-Kuei Hsu, Mei-Yung Tsou, Wen-Kuei Chang, Chien-Kun Ting (2023, Apr). Opioid-sparing anesthesia with dexmedetomidine provides stable hemodynamic and short hospital stay in non-intubated video-assisted thoracoscopic surgery: a propensity score matching cohort study . *BMC Anesthesiology*, 3;23(1):110.
 9. **Teng WN**, Wu CL, Tai YH, Lei HJ, Tsou MY, Chang KY (2021, Jan). Group-based trajectory analysis of postoperative pain and outcomes after liver cancer surgery. *Journal of the Chinese Medical Association*. , 84(1):95-100.
 10. Wang YC, **Teng WN**, Kuo IT, Chang KY, Chang WK, Tsou MY, Chan KH, Ting CK. Patient-machine interactions of intravenous patient-controlled analgesia in bilateral versus unilateral total knee arthroplasty: A retrospective study. *J Chin Med Assoc*. 2013; 76(6): 330-4.
 11. **Teng WN**, Su YP, Kuo IT, Lin SM, Tsou MY, Chan KH, Ting CK. Patient controlled epidural analgesia for bilateral versus unilateral total knee arthroplasty: a retrospective study of pain control. *J Chin Med Assoc*. 2012; 75(3): 114-20.

Other publications

12. Huang CL, Lu CC, Chiang C, Chao HS, Chiang TY, **Teng WN**, Chang WK, Ting CK. Determining the optimum high-flow nasal cannula flow rate to achieve the desired fraction of inspired oxygen: A bench study. *J Formos Med Assoc*. 2024 Aug 12:S0929-6646(24)00357-7. Epub ahead of print.
13. Cheng Chiang, **Wei-Nung Teng**, Ting-Yun Chiang, Chao-Lan Huang, Shi-Pin Lin, Wen-Kuei Chang, Chien-Kun Ting (2023, Dec). True intratracheal oxygen concentration delivered by SentriO Oxy™ masks under various respiratory conditions: a bench study. *Journal of Clinical Monitoring and Computing*, 37(6):1489-1495.
14. Fu-Kai Hsu, Hung-Wei Cheng, **Wei-Nung Teng**, Po-Kuei Hsu, Han-Shui Hsu, Wen-Kuei Chang, Chien-Kun Ting (2023, Oct). Total intravenous anesthesia decreases hospital stay but not incidence of postoperative pulmonary complications after lung resection surgery: a propensity score matching study. *BMC Anesthesiology*, 17;23(1):345.
15. Chi-Kang Chang, Edward Chesney, **Wei-Nung Teng**, Sam Hollandt , Megan Pritchard, Hitesh Shetty, Robert Stewart, Philip McGuire and Rashmi Patel (2023, Feb). Life expectancy, mortality risks and cause of death in patients with serious mental illness in South East London: a comparison between 2008-2012 and 2013-2017. *Psychological Medicine*, 53(3):887-896.

16. Bor-Uei Shyr, Yi-Ting Yeh, **Wei-Nung Teng**, Chin-Su Liu, Paul Chih-Hsueh Chen, Ling-Ju Huang, Ling-Ming Tseng, Hsu Ma (2023, Jan). Minimally Required Personal Protective Equipment during Local Anesthesia Surgery in COVID-19: A Simulation Study. *Plastic and Reconstruction Surgery global open*, 18;11(1):e4792.
17. Hsin-Yi Wang, Chen Lin, Chien-Chang Chen, **Wei-Nung Teng**, Kun-Hui Chen, Men-Tzung Lo, Chien-Kun Ting (2022, Dec). Improvement in vocal-cord visualization with Trachway video intubating stylet using direct oxygen flow and effective analysis of the fraction of inspired oxygen: a bench study. *Journal of Clinical Monitoring and Computing*, 36(6):1723-1730.
18. Fu J, **Teng WN**, Li W, Chiou YW, Huang D, Liu J, Ting CK, Tsou MY, Yu L. (2022, Dec). Estimation of Respiratory Nasal Pressure and Flow Rate Signals Using Different Respiratory Sound Features . *IRBM*, 43 (6):694-704.
19. Man-Yun Chang, Jui-Hung Chen, Shih-Pin Lin, **Wei-Nung Teng**, Shu-Wei Liao, Chien-Kun Ting, Mei-Yung Tsou, Hui-Hua Kenny Chiang, Fu-Wei Su (2022, Jun). Fire safety study on high-flow nasal oxygen in shared-airway surgeries with diathermy and laser: simulation based on a physical model. *Journal of Clinical Monitoring and Computing*, 36(3):649-655.
20. Chang C, Hsu YT, Ting CK, Tsou MY, **Teng WN** (2021, Feb). Mandibular advancement devices decrease desaturation duration in patients at high risk for obstructive sleep apnea syndrome during intravenous propofol sedation. *Journal of the Chinese Medical Association*, 84(2):221-226.
21. **Teng WN**, Ting CK, Wang YT, Hou MC, Chang WK, Tsou MY, Chiang H, Lin CL. 2019 July. High-Flow Nasal Cannula and Mandibular Advancement Bite Block Decrease Hypoxic Events during Sedative Esophagogastroduodenoscopy: A Randomized Clinical Trial. *Biomed Research International*. 2019 Jul 16;2019:4206795. doi: 10.1155/2019/4206795. eCollection 2019.
22. **Teng WN**, Su BC, Cheng HW. 2019 Aug. Innovation in sedation and analgesia training. *Curr Opin Anaesthesiol*. 32(4):472-479.
23. **Teng WN**, Ting CK, Wang YT, Yang KY, Tsou MY, Orr JA, Burk KM, Chiang H, Lin CL. 2019 Jun. Novel mandibular advancement bite block with supplemental oxygen to both nasal and oral cavity improves oxygenation during esophagogastroduodenoscopy: a bench comparison. *J Clin Monit Comput*. 33(3):523-530.
24. Liou JY, Ting CK, **Teng WN**, Mandell MS, Tsou MY. 2018 Jun. Adaptation of non-linear mixed amount with zero amount response surface model for analysis of concentration-dependent synergism and safety with midazolam, alfentanil, and propofol sedation. *Br J Anaesth*. 120(6):1209-1218.

25. **Teng WN**, Ting CK, Wang YT, Hou MC, Tsou MY, Chiang H, Lin CL. 2018 Apr. Oral capnography is more effective than nasal capnography during sedative upper gastrointestinal endoscopy. *J Clin Monit Comput.* 32(2):321-326.
26. **Teng WN**, Tsou MY, Chen PT, Liou JY, Yu L, Westenskow DR, Ting CK. A desflurane and fentanyl dosing regimen for wake-up testing during scoliosis surgery: Implications for the time-course of emergence from anesthesia. *J Formos Med Assoc.* 2016 Nov 4.
27. Liou JY, Ting CK, Mandell MS, Chang KY, **Teng WN**, Huang YY, Tsou MY. Predicting the Best Fit: A Comparison of Response Surface Models for Midazolam and Alfentanil Sedation in Procedures With Varying Stimulation. *Anesth Analg.* 2016 Aug;123(2):299-308.
28. **Teng WN**, Lin SM, Niu DM, Kuo YM, Chan KH, Sung CS. Anesthetic management of comprehensive dental restoration in a child with glutaric aciduria type 1 using volatile sevoflurane. *J Chin Med Assoc.* 2014 Oct;77(10):548-51.
29. Ting CK, Johnson KB, **Teng WN**, Synoid ND, Lapierre C, Yu L, Westenskow DR. Response surface model predictions of wake-up time during scoliosis surgery. *Anesth Analg.* 2014; 118(3):546-53.
30. Wang SC, **Teng WN**, Chang KY, Susan Mandell M, Ting CK, Chu YC, Loong CC, Chan KH, Tsou MY. Fluid management guided by stroke volume variation failed to decrease the incidence of acute kidney injury, 30-day mortality, and 1-year survival in living donor liver transplant recipients. *J Chin Med Assoc.* 2012; 75(12): 654-9.