

## CURRICULUM VITAE

**Chi-Chang Chang** Prof. PhD 張啟昌教授

School of Medical Informatics, Chung Shan Medical University, Taiwan

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### EDUCATION

Ph.D. Industrial Engineering and Management, Yuan Ze University, Taiwan, Aug 2001- Sep 2006.

M.S. Information Management, Ming Chuan University, Taiwan, Aug 1998- Jan 2001.

### FOUNDING CHAIRMAN ICMHI. ICHSM. HBAAI. JEBMI. MDSAT. ISMDS. DSIM

International Conference on Medical and Health Informatics (ICMHI) in 2017 [www.icmhi.org](http://www.icmhi.org)

International Conference on Healthcare Service Management (ICHSM) in 2018 [www.ichsm.org](http://www.ichsm.org)

Health Bigdata Analytics Artificial Intelligence Forum (HBAAI) in 2018 [HBAAI](http://HBAAI)

Joint Executive Board on Medical Informatics Taiwan (JEBMI) in 2018 [JEBMI](http://JEBMI)

Medical Decision Science Association of Taiwan (MEDSAT) in 2022 [www.mdsat.org.tw](http://www.mdsat.org.tw)

International Symposium on Medical Decision Science (ISMDS) in 2023 [www.mdsat.org.tw/ismds2023](http://www.mdsat.org.tw/ismds2023)

Decision Science in Medicine (DsiM) <https://rasayely-journals.com/index.php/dsim>

### RESEARCH CONTRIBUTIONS

Machine Learning in Prediction of Second Primary Cancers / Recurrent cancers • Bioinformatics

Predict Glaucoma development before disease onset • Digital Traditional Chinese Medicine (TCM)

Risk Prediction for Early Chronic Kidney Disease (CKD) • Posttraumatic Growth (PTG)

Shared Medical Decision Making (SMDM-TRUST-REGRET-CONFLICT) • Quality of Life (QoL)

Clinical Operational Research • Healthcare Service Innovation and Management (HSM)

### JOURNAL EDITORS

Editor-in-Chief Decision Science in Medicine (DsiM) • Diagnostics (SCI) • International Journal of Medical Sciences (SCI) • Therapeutics & Clinical Risk Management (SCI) • Frontiers in Genetics (SCI) • Journal of Universal Computer Science (SCI) • Open Medicine (SCI) • International

Journal of Computers and Applications (EI/ Scopus) • Journal of Quality (EI/Scopus) • Journal of Computing Science and Engineering (EI/ Scopus) • Intl Journal of Business and Systems

Research (EI/ Scopus) • ACM (EI/ Scopus) • Intl Journal of Management, Economics and Social Sciences (EI/ Scopus) • Journal of Electronic Science and Technology (INSPECT/

Scopus) • International Journal of Environmental Research and Public Health



## JOURNAL PAPERS

- Jiun-Yi Hsia, [Chi-Chang Chang\\*](#), Ying-Chen Chen (2024). Risk Factors Predicting Rectal Cancer Recurrence by machine learning model. *Chung Shan Medical Journal*.
- Frank Cheau-Feng Lin, Chia-Jung Wei, Zhe-Rui Bai, [Chi-Chang Chang](#) and Ming-Chuan Chiu\*, Developing an explainable diagnosis system utilizing deep learning model: a case study of spontaneous pneumothorax, *Physics in Medicine & Biology*, DOI 10.1088/1361-6560/ad5e31. (SCI)
- Tsu-Wang Shen, Ming-Chun Tsai, Ting-Mao Chen, [Chi-Chang Chang\\*](#), Photoacoustic method for measuring the elasticity of polydimethylsiloxane at various mixing ratios, *Heliyon*, Volume 10, Issue 11, 2024, e31726, ISSN 2405-8440, <https://doi.org/10.1016/j.heliyon.2024.e31726>. (SCI)
- Chen CC, Wei CJ, Tseng TY, Chiu MC, [Chi-Chang Chang](#). Applying Object Detection and Large Language Model to Establish a Smart Telemedicine Diagnosis System with Chatbot: A Case Study of Pressure Injuries Diagnosis System. *Telemed J E Health*. 2024 Mar 21. doi: 10.1089/tmj.2023.0715. Epub ahead of print. PMID: 38512470. (SCI)
- Ming-Chuan Chiu, Stella Chin-Shaw Tsai, Zhe-Rui Bai, Abraham Lin, [Chi-Chang Chang](#), Guo-Zhi Wang, Frank Cheau-Feng Lin, Radiographic chest wall abnormalities in primary spontaneous pneumothorax identified by artificial intelligence, *Heliyon*, Volume 10, Issue 9, 2024, e30023, ISSN 2405-8440, <https://doi.org/10.1016/j.heliyon.2024.e30023>. (SCI)
- Chen, Chun-Chia, Wen-Chien Ting, Hsi-Chieh Lee, [Chi-Chang Chang\\*](#), Tsung-Chieh Lin, and Shun-Fa Yang. 2024. "A Cost-Effective Model for Predicting Recurrent Gastric Cancer Using Clinical Features" *Diagnostics* 14, no. 8: 842. <https://doi.org/10.3390/diagnostics14080842> (SCI)
- Tsai, M.-C.; Lojanapiwat, B.; [Chi-Chang Chang](#); Noppakun, K.; Khumrin, P.; Li, S.-H.; Lee, C.-Y.; Lee, H.-C.; Khwanngern, K. Risk Prediction Model for Chronic Kidney Disease in Thailand Using Artificial Intelligence and SHAP. *Diagnostics* 2023, 13, 3548. <https://doi.org/10.3390/diagnostics13233548> (SCI)
- Chu YW, [Chi-Chang Chang](#). Editorial: Using physical & genomics markers for smart therapy via expert systems with computer learning. *Front Genet*. 2023 Nov 28;14:1336399. doi: 10.3389/fgene.2023.1336399. PMID: 38090152; PMCID: PMC10715404. (SCI)
- Lee, H.-C.; Lin, T.-C.; [Chi-Chang Chang\\*](#); Lu, Y.-C.A.; Lee, C.-M.; Purevdorj, B. Clinical Risk Factor Prediction for Second Primary Skin Cancer: A Hospital-Based Cancer Registry Study. *Appl. Sci*. 2022, 12, 12520. <https://doi.org/10.3390/app122412520> (SCI)
- Tian-Fu Lee, Xiucai Ye, Wei-Yu Chen and [Chi-Chang Chang\\*](#). Enhanced Authenticated Key Agreement for Surgical Applications in a Tactile Internet Environment. *Sensors* 2022, 22(20), 7941; <https://doi.org/10.3390/s22207941> (SCI)
- Chan, Chien-Lung, and [Chi-Chang Chang\\*](#). 2022. "Big Data, Decision Models, and Public Health" *International Journal of Environmental Research and Public Health* 19, no. 14: 8543. <https://doi.org/10.3390/ijerph19148543> (SCI; SSCI)
- T-F Lee, T-L Gao, [Chi-Chang Chang\\*](#) Constructing a secure encryption and secret sharing mechanism for Taiwan biobank of a medical center, *Journal of Technology*, 2022, Vol.37, No.3, pp.211-224. (EI)
- [Chi-Chang Chang\\*](#), Chi-Jie Lu. Preface for the Special Issue on Measuring Quality Improvement in Healthcare, *Journal of Quality*, 2022, 29(3), 177-179. (EI)
- Ying-Hui Yu, Chin-Fang Chang, [Chi-Chang Chang\\*](#), Chalong Cheewakriangkrai Factors influencing recurrence of colorectal cancer after Chemotherapy. *Journal of Quality*, 2022, 29(3), 235-249. (EI)
- Huang L, Hu SW, Lu CJ, [Chi-Chang Chang](#), Chen GD, Ng SC. The three-year evolution of overactive bladder syndrome in community-dwelling female residents aged 40 years and above. *Taiwan J Obstet Gynecol*. 2022;61(3):479-484. (SCI)
- H-Y Kao, [Chi-Chang Chang\\*](#), C-F Chang\*, Y-C Chen, Chalong Cheewakriangkrai, Y-L Tu Associations between sex and risk factors for predicting chronic kidney disease. *Int J Environ Res Public Health*. 2022, 19, 1219. (SCI; SSCI)



- C-C Shih, S-H Chen, G-D Chen, [Chi-Chang Chang\\*](#), Y-L Shih Development of a Longitudinal Diagnosis and Prognosis in Patients with Chronic Kidney Disease: Intelligent Clinical Decision-making Scheme. *Int J Environ Res Public Health*. 2021, 18, 12807. (SCI; SSCI)
- [Chi-Chang Chang\\*](#), T-H Huang, P-W Shueng, S-H Chen, C-C Chen, C-J Lu, Y-J Tseng Developing a Stacked Ensemble-based Classification Scheme to Predict Second Primary Cancers in Head and Neck Cancer Survivors. *Int J Environ Res Public Health*. 2021, 18, 12499. (SCI; SSCI)
- H-H Liao, [Chi-Chang Chang\\*](#), Y-X Wang, Chalong Cheewakriangkrai Predicting the risk factors of second primary cancer in patients with hepatocellular carcinoma. *Studies in health technology and informatics*, 289, 93-96, 2022. (MEDLINE/PubMed)
- [Chi-Chang Chang](#), Chen CC, Cheewakriangkrai C, Chen YC, Yang SF. Risk Prediction of Second Primary Endometrial Cancer in Obese Women: A Hospital-Based Cancer Registry Study. *Int J Environ Res Public Health*. 2021, 18, 8997. (SCI; SSCI)
- Chan, C.-L., [Chi-Chang Chang\\*](#) Big Data, Decision Models, and Public Health. *International Journal of Environmental Research and Public Health* 2020, 17(18), 6723. (SCI; SSCI)
- Ching-Hsuan Chien, [Chi-Chang Chang](#), Shih-Huan Lin, Chi-Wei Chen, Zong-Han Chang and Yen-Wei Chu\* (2020, Sep). N-GlycoGo: Predicting Protein N-glycosylation Sites on Imbalanced Data Sets by Using Heterogeneous and Comprehensive Strategy, *IEEE Access*, vol. 8, 165944-165950, 2020, doi: 10.1109/ACCESS.2020.3022629. (SCI)
- Chi-Chang Chang, Chi-Jie Lu, Chih-Te Yang\* (2020, Sep). Multistage Supply Chain Production–Inventory Model with Collaborative Preservation Technology Investment, *Scientia Iranica* 10.24200/SCI.2020.53357.3200. (SCI)
- [Chi-Chang Chang\\*](#), Chi-Jie Lu (2020, August). Preface for the Special Issue on Measuring Quality Improvement in Healthcare, *Journal of Quality*, 27(4). (EI).
- Chuen Chin, W-C Ting, [Chi-Chang Chang\\*](#), Yi-Xiang Zhang (2020, August). Prediction of risk factors for Synchronous Colorectal Cancer in Patients with Colorectal Cancer, *Journal of Quality*, 27(4). (EI).
- Sun-Long Cheng, [Chi-Chang Chang\\*](#) (2020, August). Effect on the Quality of Life in Patients with Oral Cancer after Orthopedic Surgery: A Longitudinal Study, *Journal of Quality*, Vol. 27, No. 4. (EI).
- Chin-Chuan Shih, Chi-Jie Lu, Gin-Den Chen, [Chi-Chang Chang\\*](#) (2020, July). Risk Prediction for Early Chronic Kidney Disease: Results from an Adult Health Examination Program of 19,270 Individuals, *International Journal of Environmental Research and Public Health*, 2020, 17(14), 4973. (SCI; SSCI)
- K-P Chang, John Wang, [Chi-Chang Chang\\*](#) and Y-W Chu (2020, May). Development of a Novel Tool for the Retrieval and Analysis of Hormone Receptor Expression Characteristics in Metastatic Breast Cancer via Data Mining on Pathology Reports. *BioMed Research International*, Vol. 2020, Article ID 2654815. (SCI)
- Zi-Wei Wang, [Chi-Chang Chang\\*](#), Quan Zou. (2020, April) COVID-19 Related Research by Data Mining in Single Cell Transcriptome Profiles. *Journal of Electronic Science and Technology*, Vol. 18, 1-5, 2020. (INSPECT/Scopus)
- Jehn-Hwa Kuo, [Chi-Chang Chang\\*](#), Chi-Wei Chen, Heng-Hao Liang, Chih-Yen Chang, Yen-Wei Chu\* (2020, April). Sequence-Based Structural B-cell Epitope Prediction by Using Two Layer SVM Model and Association Rule Features. *Current Bioinformatics*, 15(3), 246-252. (SCI)
- Wen-Chien Ting, Horng-Rong Chang, [Chi-Chang Chang\\*](#) and Chi-Jie Lu (2020, Feb) Developing a Novel Machine Learning-Based Classification Scheme for Predicting SPCs in Colorectal Cancer Survivors, *Applied Sciences*, 2020, 10(4), 1355. (SCI)
- [Chi-Chang Chang\\*](#) and Ssu-Han Chen (2019, Sep). Developing a Novel Machine Learning-based Classification Scheme for Predicting SPCs in Women with Breast Cancer, *Frontiers in Genetics*, 2019, 10:848. (SCI)
- Jone-Han Liu, [Chi-Chang Chang\\*](#), Chi-Wei Chen, Li-Ting Wong, Yen-Wei Chu\* (2019, June). Conservation region finding for influenza a viruse by machine learning methods of N-linked glycosylation sites and B-cell epitopes, *Mathematical Biosciences*, Vol. 315, 2019, 108217 (SCI).
- L Xu, C-R Liao, G-D Chen and [Chi-Chang Chang\\*](#) (2019, Jan). k-skip-n-gram-RF: A Random Forest based Method for Alzheimer's Disease Protein Identification, *Frontiers in Genetics*, 2019. (SCI)



- Y-T Chen, [Chi-Chang Chang\\*](#), C-W Chen, K-C Chen, Yen-Wei Chu (2019, Jan). MADS-Box Gene Classification in Angiosperms by Clustering and Machine Learning Approaches. *Frontiers in Genetics*, 2019(9), Article 707. (SCI)
- Lei Xu, Guangmin Liang, Changrui Liao, Gin-Den Chen and [Chi-Chang Chang\\*](#) (2018, Nov) An Efficient Classifier for Alzheimer's Disease Genes Identification, *Molecules* 2018, 23(12), 3140. (SCI)
- [Chi-Chang Chang](#), Chi-Hua Tung, Chi-Wei Chen, Chin-Hau Tu, Yen-Wei Chu\* (2018, Oct) SUMOgo: Prediction of sumoylation sites on lysines by motif screening models and the effects of various post-translational modifications, *Scientific Reports*, S8:15512. (SCI)
- [Chi-Chang Chang](#), Chi-Jie Lu, Chalong Cheewakriangkrai, Su-Hsin Chang (2018, June) Preface for the Special Issue on Computational Intelligence Technologies Meet Medical Informatics -From Prediction to Prognosis, *Journal of Universal Computer Science*, 24(6), 662-664. (SCI)
- C-W Chen, [Chi-Chang Chang](#), H-C Hung, S-Y Ho, H-P Chang and Y-W Chu\* (2018, June). Constructing Feature Models for Citrullination Sites Prediction. *Journal of Quality*, 25(3), 185-195. (EI).
- C-S Cheng, P-W Shueng, [Chi-Chang Chang\\*](#), C-W Kuo (2018, June) Adapting an Evidence-based Diagnostic Model for Predicting Recurrence Risk Factors of Oral Cancer, *Journal of Universal Computer Science*, 24(6), 742-752. (SCI)
- [Chi-Chang Chang](#) and Chi-Jie Lu (2018, June). Preface for the Special Issue on Computational Intelligence Technologies Meets Medical informatics. *Journal of Quality*, Vol. 25, No. 3, 141-142. (EI).
- W-C Ting, Y-C Lu, C-J Lu, C. Cheewakriangkrai, [Chi-Chang Chang\\*](#) (2018, June). Recurrence Impact of Primary Site and Pathologic Stage in Patients Diagnosed with Colorectal Cancer. *Journal of Quality*, 25(3), 166-184. (EI).
- C-C Huang, [Chi-Chang Chang](#), C-W Chen, S-Y Ho, H-P Chang, Y-W Chu\* (2018, Feb). PClass: Protein Quaternary Structure Classification by Using Bootstrapping Strategy as Model Selection, *Genes*, Vol. 9, No. 2, pii: E91. (SCI)
- Huan-Cheng Chang, Pin-Hsiang Chang, Sung-Chin Tseng, [Chi-Chang Chang\\*](#) (2018, Feb). A comparative analysis of data mining techniques for prediction of postprandial blood glucose: A Cohort Study. *International Journal of Management, Economics and Social Sciences*, Vol. 7(S1), 132-141. (EI)
- Sunanda Das, [Chi-Chang Chang](#), A. Kumar Das\*, A. Ghosh (2017, Dec). Feature Selection based on Biobjective Differential Evolution. *Journal of Computing Science and Engineering*, 11(4), 130-141. (EI).
- Chih-Jen Tseng, [Chi-Chang Chang\\*](#), Chi-Jie Lu (2017, June). Integration of ensemble learning and data mining techniques to predict risk factors for recurrent ovarian cancer. *Artificial Intelligence in Medicine*, 78, 47-54. (SCI)
- [Chi-Chang Chang](#), C-J Lu, C Cheewakriangkrai (2017, Dec). Preface for the Special Issue on Computational Intelligence Technologies Meets Medical informatics. *Journal of Computing Science and Eng.*, 11(4), 109110. (EI).
- Chih-Cheng Sun, [Chi-Chang Chang\\*](#) (2017, Nov) Multiple primary malignant neoplasms: Results from a 5Year Retrospective Analysis in a Metropolitan Hospital, *Formosan Journal of Surgery*, 50(6), 209-214.
- Yu-Ju Lin, Chiu- Hsiang Lee, [Chi-Chang Chang\\*](#) (2016). Evaluation of a Video-Based Intervention to Promote Condom Use Among College Students in Taiwan. *Studies in health technology and informatics*, 101-104. (MEDLINE/PubMed)
- Fang-Ching Liu and [Chi-Chang Chang\\*](#) (2016). Model-Based Individualized Treatment of Chronic Granulomatous Disease. *Studies in health technology and informatics*, 71-74. (MEDLINE/PubMed)
- H.H. Liao, S.L. Cheng, [Chi-Chang Chang\\*](#), C.H. Lin, F.C. Liu, C.S. Cheng, (2016) Decisional Trust and Regret Mediate the HRQL in Work-related Hand Injury Patients, *European Psychiatry*, 33, s595-596. (SCI)
- [Chi-Chang Chang\\*](#) (2015) Shared Decision Making and Regret Plays Critical Roles of Posttraumatic Growth: a Longitudinal Study, *Medical Decision Making*, 36(5), E78-E415 (SCI)
- Chih-Kuang Chang, [Chi-Chang Chang\\*](#) (2014) Bayesian Imperfect Information Analysis for Clinical Recurrent Data, *Therapeutics and Clinical Risk Management*, 2015:11, 17-26. (SCI)



- [Chi-Chang Chang\\*](#) (2014) Developing the First Validity of Shared Medical Decision- Making Questionnaire in Taiwan, *Global Journal of Medical Research*, 14(2), 9-15.
- C-J Tseng, C-J Lu, [Chi-Chang Chang\\*](#), G-D Chen (2013) Application of Machine Learning to Predict the Recurrence-Proneness for Cervical Cancer, *Neural Computing and Applications*, 24(6), 1311-1316. (SCI)
- [Chi-Chang Chang\\*](#) (2013) The effect on life quality of oral cancer patients after the orthopedic surgery, *European Psychiatry*, Volume 28, Supplement 1, 2013. (SCI)
- [Chi-Chang Chang\\*](#) (2011) Developing the first validation of the shared decision-making questionnaire in Taiwan, *Medical Decision Making*, 31(E54), E124-E125. (SCI)
- [Chi-Chang Chang\\*](#), Cheng, C-S. (2007) A Structural Design of Clinical Decision Support System for Chronic Diseases Risk Management, *Central European Journal of Medicine*, 2(2), 129-139. (SCI)
- [Chi-Chang Chang\\*](#), Cheng, C.-S., and Huang, Y.-S. (2006) A Web-Based Decision Support Systems for Chronic Diseases, *Journal of Universal Computer Science*, 12(1), 115-125. (SCI)
- [Chi-Chang Chang\\*](#), Cheng, C.-S. (2006) A Bayesian Decision Process with Fuzzy Interpretability for Aging Chronic Disease, *International Journal of Technology Management*, 40, 1/2/3, 176-191. (SSCI)
- Huang, Y.-S., [Chi-Chang Chang\\*](#) (2004) A Study of Defuzzification with Experts' Knowledge for Deteriorating Repairable Systems, *European Journal of Operational Research*, 157(3), 658-670. (SCI)

## CHAPTERS IN BOOKS

- [Chi-Chang Chang\\*](#), Chen, Y-F. (2007) Designing A CRM-based E-Government Usability Evaluation Framework: Integrating Internal and External Customers in Public Services, *Social Implications and Challenges of E-Business*, ISBN: 159-904-105-7, Idea Group, 2007.
- [Chi-Chang Chang\\*](#), Chen, RS. Sun, PR. (2010) Applying Fuzzy Bayesian Maximum Entropy to Extrapolating Deterioration in Repairable Sys., *Machine Learning*, 978-953-307-033-9, INTECH, 2010.

## SELECTED CONFERENCE PRESENTATIONS

- [Chi-Chang Chang](#), Analysis of Risk Factors for Second Primary Cancer in Patients with Hepatocellular Carcinoma, The 23rd Conference of the International Federation of Operational Research Societies, July 10 - 14, 2023. Santiago, Chile.
- Ssu-Han Chen, [Chi-Chang Chang](#), Chih-Te Yang, An Explainable Predicting Model for Stomach Cancer Recurrence-proneness, Int'l Health Sciences and Management Conf., June 16-19, 2022, Üsküdar University, Rector, Turkey. (Online)
- Ying-Chen Chen, [Chi-Chang Chang](#), Wen-Chien Ting, Second Primary Esophageal Cancer among Head and Neck Cancer Survivors, Int'l Health Sciences and Management Conf., June 16-19, 2022, Üsküdar University, Rector, Turkey. (Online)
- H-H Liao, [Chi-Chang Chang\\*](#), Y-X Wang, Chalong Cheewakriangkrai Predicting the risk factors of second primary cancer in patients with hepatocellular carcinoma. *ICIMTH2021*, Oct. 16-17, 2021, Athens, Greece. (Online)
- [Chi-Chang Chang\\*](#), Ying-Chen Chen, Machine Learning Techniques to Predict Recurrent Breast Cancer in Taiwan, 2021 30th Wireless and Optical Communications Conference (WOCC), Oct. 7-8, 2021, Taipei, Taiwan. (Online)
- [Chi-Chang Chang\\*](#), Wen-Chien Ting, Wen-Chieh Lai, Risk of Second Cancers and Recurrent Cancers Among Cancer Survivors in the Taiwan, 6th International Health Sciences and Management Conference, 20-22 May. 2021, Süleyman Demirel Üniversitesi, Isparta, Turkey.
- Ssu-Han Chen, [Chi-Chang Chang](#), Using a Hybrid Classifier committee Method to Select Important Features for Head and Neck Cancer Recurrence-proneness, 6th International Health Sciences and Management Conference, 20-22 May. 2021, Süleyman Demirel Üniversitesi, Isparta, Turkey.
- [Chi-Chang Chang\\*](#), Yen-Chiao Angel Lu, Ying-Chen Chen, Prediction of Recurrence in Patients with Breast Cancer, 6th International Health Sciences and Management Conference, 20-22 May. 2021, Süleyman Demirel Üniversitesi, Isparta, Turkey.



- [Chi-Chang Chang\\*](#), Y-C Chen, Advanced Machine Learning in Prediction of Second Primary Cancer in CRC, *30th Medical Informatics Europe Conference*, April 24-May 2, 2020, Geneva, Switzerland. (Online)
- [Chi-Chang Chang\\*](#), C. Cheewakriangkrai and Ying-Chen Chen Media Health Literacy Plays Critical Role of Shared Decision Making: Mediating or Moderating? *INFORMS*, Oct. 20-23, 2019, Seattle, USA.
- [Chi-Chang Chang\\*](#), Ensemble Feature Learning for Predicting Risk Factors of Secondary Cancer, *Fifth Int'l Conf. on Machine Learning, Optimization, and Data Science*, Sep. 10-13, 2019, Siena-Tuscany, Italy.
- [Chi-Chang Chang\\*](#), D Ma, Y-C Lu, C. Cheewakriangkrai, eHealth Literacy Plays Critical Role of Shared Decision Making, *19th World Congress of Psychiatry*, Aug. 21-24, 2019, Lisbon, Portugal.
- W-C Ting, [Chi-Chang Chang\\*](#), S-H Chen, C-J Lu, G-D Chen, C. Cheewakriangkrai, Developing an Integrated Clinical Decision-making Scheme (ICDS) for Predicting SPCs in Women with Endometrial Cancer: A Retrospective Analysis in TW and Thai, *IACR Conference*, June 6-9, 2019, Vancouver, Canada.
- [Chi-Chang Chang\\*](#), S-H Chen, C-J Lu, W-C Ting, G-D Chen, C. Cheewakriangkrai. Developing an Integrated Clinical-Decision-making Scheme (ICDS) for Predicting the Risk Factors of Second Primary Cancers, *40th Ann. Conf. of the Int'l Assoc. of Cancer Registries*, Nov. 13-15, 2018, Arequipa, Peru.
- [Chi-Chang Chang\\*](#), W-C Ting, C. Cheewakriangkrai, P-W Shueng. A Nationwide Retrospective Analysis of SPMs in Taiwanese Women: 1996-2010, *The XXII FIGO*, Oct. 14-19, 2018, Rio de Janeiro, Brazil.
- [Chi-Chang Chang\\*](#), C. Cheewakriangkrai, Y-C Lu, Modelling Hcw's Strategic Behaviour For Healthcare Associated Infections, *3rd Int'l Health Sciences and Management Conf.*, Oct. 3-6, 2018, Sofia, Bulgaria.
- [Chi-Chang Chang\\*](#), Y-C Lu, Ch. Cheewakriangkrai. Combination of Assoc. Rules and Machine Learning Techniques for Predicting Recurrent Gynecologic Cancer, *17th IGCS*, Sep. 14-16, 2018, Kyoto, Japan.
- D. Tinnangwattana, C. Cheewakriangkrai, [Chi-Chang Chang](#). Etoposide Plus Platinum-based Adjuv. Chemother. on Small Cell Neuroendocrine Carcinoma of Cervix, *17th IGCS*, Sep. 14-16, 2018, Kyoto, Japan.
- Y.C. Lu, T.M. Lin, [Chi-Chang Chang\\*](#). Medical-seeking Behavior as Mediator in Relation to Posttraumatic Growth in Oral Cancer Survivors: A Longitudinal Study. *26th EPA*, Mar 3-6, 2018, Nice, French.
- [Chi-Chang Chang\\*](#), G-D Chen, W-C Ting, C. Cheewakriangkrai. Risk Factors of New Primary Cancers After Breast Cancer: 5-Year Retrospective Analysis in Taiwan, *20th ESGO*, Nov 4-7, 2017, Vienna, Austria.
- W-C Ting, [Chi-Chang Chang\\*](#), C. Cheewakriangkrai. Incidence Trends for MPMNs (2010-2014): Results from a Hospital-based Cancer Registry in Taiwan. *39th IACR*, Oct. 17-19, 2017, Utrecht, Netherland.
- S-L Cheng, H-H Liao, P-W Shueng, H-C Lee, C. Cheewakriangkrai, [Chi-Chang Chang\\*](#), Oral Cancer Patients' Preference in Medical Decision Making and QOL. *15th ICIMTH*, July 7-9, 2017, Athens, Greece.
- H-H Liao, S-L Cheng, P-W Shueng, H-C Lee, C. Cheewakriangkrai, [Chi-Chang Chang\\*](#), Decisional Conflict in Work-related Hand Trauma Patients. *15th ICIMTH*, July 7-9, 2017, Athens, Greece.
- [Chi-Chang Chang\\*](#), Decisional Trust and Regret Mediate the HRQL in Work-related Hand Injury Patients. *24th European congress of Psychiatry EPA 2016*, Mar 12-15, 2016, Madrid, Spain.
- Y-J Lin, C-H Lee, [Chi-Chang Chang\\*](#). Evaluation of a Video-based Intervention to Promote Condom Use among College Students in Taiwan. *14th ICIMTH*, July 1-3, 2016, Athens, Greece.
- F-C Liu, [Chi-Chang Chang\\*](#). Model-based Individualized Treatment of Chronic Granulomatous Disease. *14th ICIMTH*, July 1-3, 2016, Athens, Greece.
- [Chi-Chang Chang\\*](#), Shared Decision Making and Regret Plays Critical Roles of Posttraumatic Growth: a Longitudinal Study. *The 35th Society for Medical Decision Making*, Oct. 17-21, 2015, St. Louis, USA.
- P-S Su, T Teng, C-H Hsu, [Chi-Chang Chang\\*](#). Patients' Trust for Involvement in Shared Decision Making: A Longitudinal Study. *34th Society for Medical Decision Making*, Oct. 19-22, 2014, Miami, USA.
- [Chi-Chang Chang\\*](#) Factors affecting decisional conflict for patients with cervical cancer in Taiwan: an observational study, *5th World Congress on Women's Mental Health*, March 4-7 2013, Lima, Peru.
- [Chi-Chang Chang\\*](#) The Effect on Life Quality of Oral Cancer Patients after the Orthopedic Surgery, *21st European Congress of Psychiatry*, 6-9 April, 2013, Nice, French.
- [Chi-Chang Chang\\*](#) Analysis of prognostic factors in patients relapsed ovarian cancer, *2013 INFORMS Annual meeting*, Oct. 6-9, 2013, Minneapolis, United States of America.



- [Chi-Chang Chang](#)\* T Teng, Predicting the Recurrent Factors of Cervical Cancer using C5, MARS and RF: a comparison study, *18th ESGO*, Oct. 19-22, 2013, Liverpool, United Kingdom.
- [Chi-Chang Chang](#)\* Determine Predictors of Life Quality Among Oral Cancer Patients with Orthopedic Trauma, *7th Annual Chicago Supportive Oncology Conference*, Oct. 28-29, 2011, Chicago, USA.
- [Chi-Chang Chang](#)\* Developing the First Validation of Shared Decision-making Questionnaire in Taiwan, *32st Annual Meeting of the Society for Medical Decision Making*, Oct. 24-27, 2010, Toronto, Canada.
- [Chi-Chang Chang](#)\* Bayesian Inference of a Nonhomogeneous Poisson Process with Exponential Model for Recurrent Events, *15th AMCIS*, Aug 6-9, 2009, San Francisco, United States of America.
- [Chi-Chang Chang](#)\* Measuring Taiwanese Patients' Readiness for Involvement in Medical Decision-making, *31st Annual Meeting of the Society for Medical Decision Making*, Oct 18-21, 2009, LA, USA.

## INVITED TALKS/ KEYNOTE SPEAKER

- New Future in Health: Integrated Health Services, 9th International Conference on Health Sciences and Management, 23-25 May 2024 in Istanbul, Turkiye.
- 人工智能用於癌症患者早期臨床風險預測：邁向多學科研究的未來, Dec. 11-14, 2023, Guangzhou University, China.
- Dialogue on the future of tradition: Reflections Towards the AI in Medical, Sivas Cumhuriyet University, Sivas, Turkiye, Dec. 1, 2023.
- Turkish Youth Dialogue: the emerging generation involved in international research, Selçuk Üniversitesi. Konya, Oct. 16, 2023.
- AI for Cancer Patients in the Early Clinical Risk, The 7th International Conference on Advances in Artificial Intelligence (ICAAI 2023) October 13-15, 2023 in Istanbul, Turkiye.
- The Past, Present and Future of Health Management: Celebrating the 100th anniversary of the Republic with innovation and excellence, 6th International and 16th National Health and Hospital Administration Congress, October 12-14 2023, Konya, Turkiye.
- Reflections Towards the Future of Medical Tourism in the Post-Pandemic, Health Tourism and Its Future in Turkiye, Faculty of Business Administration - Lamia Ergenekon Hall (Red Hall) ATILIM University 26 OCT. 2022, Ankara, Turkiye.
- New Approaches in Cancer Treatment, 6th International Health Sciences and Management Conference, 2022 May. 2021, Süleyman Demirel Üniversitesi, Isparta, Turkey.
- Evidence-based Prevention Practice in SPCs and Recurrence: Retro- and Prospect in Asia Pacific, Fu Jen Catholic University, April 8, 2020.
- Alas Risk Assessment Tool in Patients with SPC-CRC, Healthcare EXPO TAIWAN(台灣醫療科技展), Dec 8, 2019.
- 後現代臨床醫學殖民表象與林布蘭的前景，第三屆後現代整合學及通識教育研討會-AI 與社會
- Developing Interdisciplinary Research and Collaboration in Med. Science, Jen-Ai Hospital, Sep 20, 2019.
- Toward Cancer Data Ecosystems: Cancer Registry as Service, TW Society of Cancer Registry, Aug 30, 2019.
- Connecting Medical Informatics and Clinical Practice on Medicine Research- A viewpoint of Cancer Research Data Ecosystem, Chiang Mai University Hospital, Chiang Mai, Thailand, Jan 10, 2019.
- Toward Cancer Data Ecosystems: Cancer Registry as a Service, Fu Jen Catholic University, Nov 30, 2019.
- Connecting Medical Informatics and Clinical Practice on Medicine Research, NCHU, May 24, 2019.
- The International Conference on Soft Computing in Data Analytics (CSDA 2018), Sri Sivani College of Engineering, Srikakulam, Andhra Pradesh, India, March 10-11, 2018.
- 3rd Intl Conf. on Health, Medicine and Life Sciences (MEDLIFE2016), Hangzhou, China, Dec 12-14, 2017.
- World Congress on Biomedical Engineering and Medical Informatics, Hangzhou, China, Nov 22-23, 2017.



- Using Cancer Registry Data to Enhance MPMNs Control Programs Development, 9th International Conference on Machine Learning and Computing (ICMLC 2017) Singapore, Feb 24-26, 2017.
- Repairable System Reliability Modeling and Decision Analyses, 2nd Annual 2016 International Conference on Management Science and Engineering (MSE2016), Chengdu, China, Dec16-18, 2016.
- Application of Machine Learning to Predict the Colorectal Cancer Recurrence, 2016 2nd International Conference on Health, Medicine and Life Sciences (MEDLIFE2016), Shanghai, China, Dec. 13-14, 2016.
- Rethinking Behavior Change Strategies for Increasing Condom Use among College Students, Int. Conf. on Environmental Research and Public Health (ICERP2016), Shenzhen China, Oct. 21-23, 2016.
- Rethinking an In-service Training Program for Nurses' Strategic Hand Hygiene Behavior," 2016 International Conference on Psychology and Behavioral Sciences, Xi'an, China, July 28-29, 2016.
- Reliability Modeling and Decision Analysis in Repairable Systems," 2nd International Conference on Reliability Engineering (ICRE 2016) Chiang Mai, Chiang Mai University, Thailand, May 14-16, 2016.
- Application of Machine Learning to Predict the Female Cancers Recurrence, Tunghai Univ, Apr 29, 2016.
- Application of Machine Learning to Predict the Recurrent Cancers, 2016 International Conference on Biology and Pathology (ICBP2016) Guangzhou, Guangdong, China, June 25-26, 2016.
- Rethinking a In-service Training Program for Nurses' Strategic Hand Hygiene Behavior, 2016 International Conference on Modern Education and Social Science Wuhan China, April 16, 2016.
- Classification of Recurrent Ovarian Cancer Using Machine Learning Method, 8th International Conference on Machine Learning and Computing (ICMLC 2016) Hong Kong, Feb 22, 2016.
- Industry Engineering for Efficient, Effective, Equitable Decisions of Health Services Research in Taiwan, Industrial Engineering and Enterprise Information, Tunghai University, Taichung, Taiwan, Apr 12, 2015.
- Review of Health Services Research (HSR) in Taiwan, Department of Industrial Engineering and Management, Ming Chi University, Taipei, Taiwan, Jan 22, 2012.

## GRANTS

### □ Ministry of Science and Technology 科技部計畫

**NSTC 112-2221-E-040-007-MY2** - Validation of a longitudinal diagnosis and prognosis for early recurrence of hepatocellular carcinoma in Taiwan and Türkiye - a novel multimodal fusion and interpretable machine learning

**MOST 111-2321-B-040-001** 臨床資料庫與 AI 跨域開發加值應用- Cancer Registry AI-CDSS for Big Data Research (4/4)

**MOST 111-2321-B-040-001** 臨床資料庫與 AI 跨域開發加值應用- Cancer Registry AI-CDSS for Big Data Research (3/4)

**MOST 110-2321-B-040-001** 臨床資料庫與 AI 跨域開發加值應用- Cancer Registry AI-CDSS for Big Data Research (2/4)

**MOST 110-2221-E-040-004-MY2** Validation of a Longitudinal Diagnosis and Prognosis for Chronic Kidney Disease Patients in Taiwan and Thailand- Intelligent Clinical Decision-making Scheme

**MOST 109-2321-B-040-001**-臨床資料庫與 AI 跨域開發加值應用- Cancer Registry AI-CDSS for Big Data Research (1/4)

**MOST 109-2221-E-040-006**- Developing Evidence-based Clinical Diagnosis, Prediction and Prognostic for CKD and Cancers

**MOST 108-2321-B-040-001-MY2 [COPI]** 腦科學專案計畫 Through Investigating Comorbid Epilepsy and



Cerebrovascular Disease of Alzheimer's Disease by Animal Models and Clinical Subjects to Develop New Tools for Diagnosis and Treatment of Dementia

**MOST 108-2221-E-035-034-MY2 [COPI]** Photoacoustic Technology as a Non-Invasive Meth. to Detect the Degree of Carotid Vascular Sclerosis

**MOST 108-2221-E-040-004-** Exploring the Evidence-based Control Programs for Male with MPMNs in TW and US (II)

**MOST 107-2221-E-040-009-** Exploring the Evidence-based Control Programs for Male with MPMNs in TW and US (I)

**MOST 106-2218-E-040 -001 -MY2 新南向計畫** Evidence-based CDSS for Gynecologic Cancer in Northern Thailand-- Contributions to International Efforts

**MOST 106-2221-E-040-010-** Obesity and age-period-cohort analyses on mortality rate of endometrial cancer in TW and United States

**MOST 104-2633-E-040-001-** 百人拓荒計畫 The Maze Runner of HIV/AIDS: it's about you!

**MOST 102-2633-E-040-001-** 百人拓荒計畫 A Novel Prognostic Index Model and Health Technology Assessment in Endometrial Cancer

**MOST 101-2410- H-040-009-** Longitudinal Dynamic Analyse of PTG and QoL Regarding Cervical Cancer Treatment - A SEM Study

**MOST 99-2628-E-040-001-** Bayesian Inference for Cervical Cancer in Survival Analysis

**MOST 98-2410-H-040-006-MY2** A critical Stakeholder Analysis for Patient Shared Decision-making

▣ **Short-term Visit Grant 國際科技人士短期訪問**

**MOST 113-2912-I-040-501** Ahmet Murat Özbayolu (Turkiye)

**MOST 109-2912-I-040-501** Reinhold Haux (Germany)

**MOST 108-2912-I-005-501** (NCHU) Taka-Aki Sato (Japan)

**MOST 107-2912-I-040-501** Chou-Hong Chen (USA)

**MOST 106-2912-I-040-502** Tetsuya Sakurai (Japan)

**MOST 105-2816-B-040-001** Quan Zou (Tianjin University)

**MOST 102-2912-I-040-503** Chung-Li Tseng (Australia)

▣ **STD Ministry of Science and Technology 指導大專學生參與科技部計畫**

**MOST 109-2813-C-040-006-E** Prediction of Risk Factors for Synchronous CRC in CRC Patients

**MOST 106-2813-C-040-003-E** Risk Predictive Factors in SPMs for Colorectal Cancer Survivors

**MOST 104-2815-C-040-060-E** Integrated Architecture for Endometrial Cancer Relapse Prediction

**MOST 103-2815-C-040-028-E** Developing an Advanced Machine Learning and Ensemble Learning

**MOST 102-2815-C-040-005-H** Machine Learning to Predict Recurrence-Proneness for Cervical Cancer

**MOST 98-2815-C-040-006-E** Patient's Preferences for Involvement in Shared Decision-making

▣ **CSMU Hospital Project 中山醫學大學附設醫院計畫**

**CSH-2024-C-027** Development of Image-based Deep Learning System in Diagnosis of Liver Fibrosis and Recurrence Detection of HCC for Clinical Decision Support System

**CSH-2024-C-029** Validation of a longitudinal diagnosis and prognosis for second primary cancer- a novel multimodal fusion model

**CSH-2023-C-026** A Second Primary Cancer Prediction Model based on Decision Curve Analysis and Clustering Machine Learning Methods for Lung Cancer Survivors

**CSH-2022-D-010** Exploring the Relationship between Immunity, Treatments and QOL following SARS-CoV-2 Vaccination Among Patients with Breast Cancer

**CSH-2022-C-003** Developing the Comprehensively Glaucoma Prognosis Program by Artificial Intelligence Method



**CSH-2022-C-038** Predicting the risk factors of second cancer and recurrence in patients with hepatocellular carcinoma: machine learning techniques

**CSH-2022-C-035** Developing Evidence-based Control Programs of Second Primary Cancer and recurrence for Patients with Head and Neck Cancer

**CSH-2021-D-012** The Implementation of Evidence-based Practice for Chronic Kidney Disease and Cancers in Taiwan and Thailand—A Bilateral International Cooperation Project

**CSH-2020-C020** Predicting the Risk Factors of Syn- and Meta- SPCs and Recurrent Colorectal Cancer

**CSH-2018-D-002** Developing Control Programs for Women with MPMNs: Multi-International Cooperation

**CSH-2018-A-015** Risk Factors of Multi-Primary Malignant Neoplasms (MPMNs) in Oral Cancer Survivors

**CSH-2018-A-008** Applying Data Mining Techniques for Prediction on Recurrent Oral Cancer

**CSH-2017-A-012** Risk of Second Primary Malignancies after Colorectal Cancer: Data Mining Technology

**CSH-2017-A12-1** The treatment of Health Technology Assessment in Recurrent Colorectal Cancer

**CSH-2017-A12-2** A Novel Prognostic Index Model of Recurrent CRC: (non)-Randomized Studies Construct

**CSH-2015-A-006** Applying Data Mining Techniques for Prediction on Recurrent Colorectal Cancer

**CSH-2015-A-014** A Video-based Intervention to Promote Condom Use among College Students in TW

**CSH-2015-A-017** Trauma and Life Quality in Work-Related Hand Injury Patients: Cross-Sectional Study

**CSH-2015-A-012** Exploring Plastic Surgery Patients' Preference in Medical Decision Making

**CSH-2014-C-018** A Systemic View of the Comprehensively Ovarian Cancer Prognosis Program

**CSH-2014-C18-1** Applying Data mining Techniques for Ovarian Cancer Prevention

□ **University Cooperative Research Project 跨校學術合作研究計畫**

**NCHU- CSMU 1090X** 中興大學 Automatic histological grading for brain cancer via deep learning

**NCHU- CSMU 1080X** 中興大學 AI Approaches for Constructing Disease Risk Factor Analysis Model

**FCU-CSMU 10701** 逢甲大學 Glycemic Control on Multiple Myeloma Using Photoacoustic Spectrum

**NCHU- CSMU 10705** 中興大學 A Word/Phrase Matching-Based Text Mining Program for Automatic Extraction of Hormone Receptor Data from Free-text Pathology Reports on Breast Cancer

**NCHU-CSMU-10612** 中興大學 Machine Learning Applications in MPMNs prediction

□ **Hospital Cooperative Research Project 跨院際產學合作計畫**

**CSMU-CM-110-04** 奇美醫院 Predicting the Risk Factors of Second Primary Cancer and Recurrent for Rectal Cancer Patients after Radiotherapy

**CSMU-TSMH-108-2** 屏東東港醫院 Machine Learning Techniques to Predict Risk Factor of Dialysis

**CSMU-JAH-103-001** 大里仁愛醫院 Bayesian Imperfect Information Analysis for Clinical Recurrent Data

**CSMU-POHAI-107-1** 羅東博愛醫院 Risk of SPMs after Local Advanced Rectal Cancer: DataMining Teches

**CSMU-JAH-107-001** 大里仁愛醫院 Comput. Intel. & Feature Select. for protein function and modification

**CSMU-LSH-107-002** 桃園聯新醫院 Prediction of postprandial blood glucose: machine learning techniques

**CSMU-JAH-107-002** 大里仁愛醫院 PTS disorder and PTG among cancer patients: cohort studies

**CSMU-JAH-106-001** 大里仁愛醫院 Data Mining applications in SPMs prediction

**CSMU-JAH-105-001** 大里仁愛醫院 MPMNS: a 5-Year Retrospective Analysis in a Metropolitan Hospital

**CSMU-JAH-105-016** 大里仁愛醫院 A prediction model of diabetic nephropathy and identify risk factors

**CSMU-JAH-104-001** 大里仁愛醫院 Exploring Patients' Preference in Medical Decision Making and QOL

**CSMU-LSH-102-002** 桃園聯新醫院 QOL after PTG for cervical cancer: a 18 months follow-up study

**CSMU-JAH-101-001** 大里仁愛醫院 Evaluation of the functional result and QOL after orthopedic surgery

**CSMU-TSMH-099-1** 屏東東港醫院 Dental Patients' Preference in Med. Decision Making between TW&UK

**HOSTING INTERNATIONAL ACADEMIC ACTIVITIES**



INTERNATIONAL CONFERENCES 創辦三項國際會議

**2017 International conference on Medical and Health Informatics (ICMHI)**

2017.5.20-22, Chung Shan Medical University, Taichung, Taiwan

*Theme: Medical Informatics Meets Quality Health Care - From Prediction to Prognosis*

**2018 International conference on Medical and Health Informatics (ICMHI)**

**2018 International conference on Healthcare Service Management (ICHSM)**

2018.6.8-10, University of Tsukuba, Japan

*Theme: Seamless Ubiquitous IT & Applications over the Evolution of Medical Informatics*

**2019 International conference on Medical and Health Informatics (ICMHI)**

**2019 International conference on Healthcare Service Management (ICHSM)**

2019.5.17-19, Xiamen, China

*Theme: Healthy data put to good use for better integrated care*

**2020 International conference on Medical and Health Informatics (ICMHI)**

**2020 International conference on Healthcare Service Management (ICHSM)**

2020.8.14-16, Kamakura, Japan (Online)

*Theme: Empowering Ecosystem Services throughout the World*

**2021 International conference on Medical and Health Informatics (ICMHI)**

**2021 International conference on Healthcare Service Management (ICHSM)** 2021.5.14-16,  
Kyoto, Japan (Online)

*Theme: Accelerating the Evolution of the Whole-evidence Approach to Promote Health*

**2022 International conference on Medical and Health Informatics (ICMHI)**

**2022 International conference on Healthcare Service Management (ICHSM)**

2022.5.13-15, Kyoto, Japan (Online) *Theme:*

*Validation, Let the evidence Speak!*

**2023 International conference on Medical and Health Informatics (ICMHI)**

**2023 International conference on Healthcare Service Management (ICHSM)**

2023.5.12-14, Kyoto, Japan (Physical and Online)

*Theme: Healthcare Management and Medical Decision Science in the Post-Pandemic Era*

**2023 International Symposium on Medical Decision Science (ISMDS)**

2023.8.28-31, Ulaanbaatar, Mongolia *Theme: Healthcare Management and Medical Decision Science in the PostPandemic Era*

**2024 International Symposium on Medical Decision Science (ISMDS)**

2024.2.14-17, Chiang Mai, Thailand *Theme: Transforming Healthcare Management and Medical Decision Science*

**2024 International conference on Medical and Health Informatics (ICMHI)**

2024.5.17-19, Yokohama, Japan (Physical and Online)

*Theme: Beyond the future Healthcare Delivery*

**2024 International conference on Healthcare Service Management (ICHSM)**

2024.9.6-8, Istanbul, Turkiye (Physical and Online)

*Theme: Beyond the future Healthcare Delivery*





### Honorary Chairs



### Conference Chairs



### Program Chairs



### Publicity Chairs



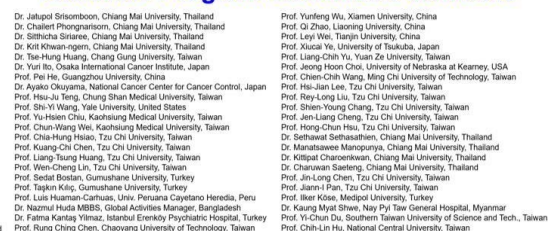
### Technical Program Committee Chairs



### Session Chairs



### Technical Program Committee Members



### KEYNOTE SPEAKERS









## ICMHI 2021. ICHSM 2021

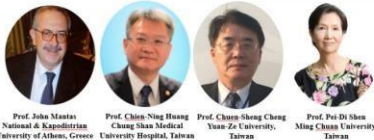




# ICMHI2022 ICHSM2022



## Honorary Chairs



2022

**ICMHI**  
2022 6th International Conference on  
Medical and Health Informatics

**ICHSM**  
2022 5th International Conference on  
Healthcare Service Management

May 13-15, 2022    Kyoto, Japan    Theme: Validation, Let the evidence speak!

Zoom

Prof. Dr. President Yu-Chuan Jack Li  
International Medical Information Association

ICMHI2022-ICHSM2022

Keynote Speech  
**AI for the Future of Healthcare**

Topic: May 14, 2022    09:30 (GMT+8)

ORGANIZED BY

中山醫學大學  
Yuan Ze University

SUPPORTED BY

Various academic and research institutions

PUBLISHED AND INDEXED BY

Engineering Village, Scopus

## Conference Chairs



## Session Chairs





 **Welcome to ICMHI 2023**  
7<sup>th</sup> International Conference on Medical and Health Informatics  
May 12-14, 2023, Kyoto, Japan

# AI

## For The Future in Healthcare

Artificial Intelligence (AI) is likely one of the technologies that will reshape the future of medicine and healthcare in an unimaginable way. As Steven Hawking put it - "Our future is a race between the growing power of technology and the wisdom with which we use it." How we understand, develop, and utilize AI will significantly determine what will happen to our healthcare ecosystem and the overall well-being of humanity.

**Can AI be the silver bullet in healthcare?**



**Prof. Li**, one of the top 2% scientists in the world, is a pioneer of artificial intelligence in medicine and translational biomedical informatics. He has devoted himself to evolving the next generation of AI in patient safety and prevention ("Earlier Medicine"). He has also been deeply involved in international collaborations for biomedical informatics development in Asia, America, Europe, and Africa. He is currently President of the **International Medical Informatics Association (IMIA)** and previously served as Vice President of IMIA and President of the Asia-Pacific Association for Medical Informatics. In addition, he was elected as a fellow of the Australian College of Health Informatics in 2009, the American College of Medical Informatics in 2010, and the International Academy of Health Science Informatics in 2017.

**Position**

- Distinguished Professor, Taipei Medical University
- Dermatologist, Taipei Municipal Wanfang Hospital
- President, International Medical Informatics Association

**Education**

- Ph.D., Medical Informatics, University of Utah School of Medicine
- M.D., Medicine, Taipei Medical University

**Yu-Chuan Jack Li**  
jackli.cc bit.ly/jackwiki

 President International Medical Informatics Association

 www.icmhi.org

**2023 6th International Conference on Healthcare Service Management**  
**ICHSM 2023**  
Kyoto, Japan | May 12-14, 2023

## Welcome to ICHSM 2023

Theme: **The Future of Digital Health in the Post-Pandemic**  
6<sup>th</sup> International Conference on Healthcare Service Management  
May 12-14, 2023, Kyoto, Japan

**KEYNOTE SPEAKER**



**Prof. Dr. Dilaver Tengilimoglu**

- Head of Business,
- Atılım University, Türkiye
- Editor in Chief, International Journal of Health Management and Tourism (IJHMT)

**CALL FOR PAPERS before Jan. 10, 2023**

- Healthcare Management
- Health Policy and Practice
- Health Tourism Applications
- Big Data for Healthcare Practices
- Occupational Treatment
- Collaboration Technologies for Healthcare
- Survival Analysis & Health Hazard
- Personalized Health Promotion
- Psychiatric and Mental Health Nursing
- Epidemiological Modeling
- Health Informatics Education
- Rehabilitation Nursing
- Medical Insurance Analysis
- Statistics & Quality of Medical Data
- Anxiety and Sleep Disorders

**SUBMISSION**  
[www.easychair.org/conferences/?conf=ichsm2023](http://www.easychair.org/conferences/?conf=ichsm2023)

**PUBLICATIONS**

- Conference Proceedings (EI, SCOPUS)
- Open Medicine (SCI, IF 2.199)
- Int. J. of Environmental Research and Public Health (SCI, IF 4.614)
- Healthcare (SCI, IF 3.160)
- Journal of Quality (EI, ACI, Scopus)



 Conf. Website  
www.ichsm.org













數位匯流  
Digital Convergence







# The First International Symposium on Medical Decision Science (ISMDS2023)

Aug 28 - 31, 2023, National Cancer Center of Mongolia, Ulaanbaatar, Mongolia



## WELCOME TO ISMDS 2023

**1<sup>st</sup> International Symposium on Medical Decision Science (ISMDS 2023)**  
will be held in Ulaanbaatar during Aug 28-31, 2023.



**THEME: HEALTHCARE MANAGEMENT AND MEDICAL DECISION SCIENCE  
IN THE POST-PANDEMIC ERA**

The goal of the First International Symposium on Medical Decision Science (ISMDS) is to bring together theoretical and practical knowledge related to Medical Informatics and Healthcare Management and create a common forum for the exchange of ideas and for the future development of the field. The ISMDS 2023 will feature a series of keynotes, workshops and visits in addition to oral/poster presentations of original research.

### THEMES & TOPICS

- Healthcare Management
- Health Policy and Practice
- Epidemiological Modeling
- Psychiatric Health Nursing
- Occupational Treatment
- E-commerce in Healthcare
- Health Tourism
- Health Economics
- Emerging Technologies in Healthcare
- Maternal and Child Healthcare
- Big Data for Healthcare Practices
- AI in Clinical Decision Support
- Health Education
- Medical Insurance

### CONFERENCE PUBLICATIONS

- Conference Proceedings Journal of Data Analysis, ISSN 1819-2343/ACI, EconLit
- Open Medicine (SCI, IF 2.199)
- Int. J. of Env. Res. and Pub Health (SCI, IF 3.390)
- Journal of Quality (EI, ACI, Scopus)



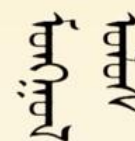
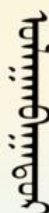
### CALL FOR PAPERS

- Submission Deadline: **May 20, 2023**
- Notification: before May 31, 2023



**Contact** Ms. Betty Huang  
secretary@mdsat.org.tw  
Tel: +886983508612 (TW)

Улаанбаатар









# Welcome to ISMDS 2024

## 2nd International Symposium on Medical Decision Science (ISMDS 2024)

Chiang Mai, Thailand FEB 14-17, 2024

ISMDS2024 will be a **hybrid symposium** that will run in-person and virtually

Theme: Transforming Healthcare Management and Medical Decision Science



The goal of the Second International Symposium on Medical Decision Science (ISMDS) is to bring together theoretical and practical knowledge and create a common forum for the exchange of ideas and for the future development of the field. The ISMDS2024 will feature a series of keynotes, workshops and visits in addition to oral/poster presentations of original research.

### TOPICS

- |                              |                                       |                       |
|------------------------------|---------------------------------------|-----------------------|
| • Healthcare Management      | • Health Tourism                      | • Health Education    |
| • Health Policy and Practice | • Health Economics                    | • Medical Insurance   |
| • Epidemiological Modeling   | • Emerging Technologies in Healthcare | • Biomedicine         |
| • Psychiatric Health Nursing | • Maternal and Child Healthcare       | • Machine Learning    |
| • Occupational Treatment     | • Big Data for Healthcare Practices   | • Hospital Management |
| • E-commerce in Healthcare   | • AI in Clinical Decision Support     | • Survival Analysis   |

### CONFERENCE PUBLICATIONS

- Conference Proceedings  
Journal of Data Analysis, ISSN1819-2343/ACI, EconLit
- Open Medicine (SCI, IF 2.199)
- Decision Science in Medicine (DSIM)



### CALL FOR PAPERS

- Submission Deadline: **Oct 27, 2023**
- Notification: before Oct 31, 2023



Contact Ms. Betty Huang  
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# Welcome To ISMDS2025

## 3rd International Symposium on Medical Decision Science (ISMDS 2025)

Theme: The Ubiquitous Uniqueness of Medical Decision making

Ming Chuan University, Taipei, Taiwan

October 10-12, 2025



The goal of the Third International Symposium on Medical Decision Science (ISMDS) is to bring together theoretical and practical knowledge and create a common forum for the exchange of ideas and for the future development of the field. The ISMDS2025 will feature a series of keynotes, workshops and visits in addition to oral/poster presentations of original research.

### TOPICS

- Healthcare Management
- Health Policy and Practice
- Epidemiological Modeling
- Psychiatric Health Nursing
- Occupational Treatment
- E-commerce in Healthcare
- Health Tourism
- Health Economics
- Emerging Technologies in Healthcare
- Maternal and Child Healthcare
- Big Data for Healthcare Practices
- AI in Clinical Decision Support
- Health Education
- Medical Insurance
- Biomedicine
- Machine Learning
- Hospital Management
- Survival Analysis

### CONFERENCE PUBLICATIONS

- Conference Proceedings  
Journal of Data Analysis, ISSN1819-2343/ACI, EconLit
- Open Medicine (SCI, IF 2.199)
- Decision Science in Medicine (DSIM)

### CALL FOR PAPERS

- Submission Deadline: **Aug 31, 2025**
- Notification: before Sep 15, 2025



Contact Ms. Betty Huang  
secretary@mdsat.org.tw Tel:+886979663982 (TW)





▣ HEALTH BIG DATA, ANALYTICS & ARTIFICIAL INTELLIGENCE FORUM (HBAAD) 健康大數據  
分析人工智慧論壇

[#HBAAI2017](#) with Japan 2017.12.28, Chung Shan Medical University, Taiwan

- Eigen-analysis Engine for Large-scale Simulation and Data Analysis *Prof. Sakurai, University of Tsukuba, Japan*
- Integrating Big Data, Analytics & Artificial Intelligence in CSMU Hospital *Prof. Vice President Chih-Jen Tseng, CSMU Hospital, Taiwan*
- Natural Computing & Bioinformatics Lab. *Prof. Yen-Wei Chu, NCHU, Taiwan*
- Efficient biometric authenticated key agreements based on extended chaotic maps for telecare medicine information systems  
*Prof. Tian-Fu Lee, Tzu Chi University, Taiwan*
- Unsupervised Feature Selection for Microarray Gene Expression Data Based on Discriminative Structure Learning  
*Prof. Xiucai Ye, University of Tsukuba, Japan*
- Integration of data mining classification techniques and ensemble learning to identify risk factors and diagnosis ovarian cancer recurrence  
*Prof. Chi-Jie Lu, Fu Jen Catholic University, Taiwan*

**Fostering Health Big Data, Analytics &  
Artificial Intelligence (HBAAI) :**  
**Connectivity with Taiwan and Japan**



指導與補助單位/ 科技部/ 中山醫學大學健康管理學院

主辦單位/ 中山醫學大學 中山醫學大學附設醫院

協辦單位/ 筑波大學 元智大學 中興大學 慈濟大學 健行科技大學



2017.12.28





[#HBAAI2018](#) with Thailand 2018.6.6, Chung Shan Medical University Taiwan

- Predicting Second Primary Cancer and Identifying Risk Factors for Breast Cancer Patients  
*Prof. Ssu-Han Chen, Ming Chi University of Technology, Taiwan*
- BreastExtractor: A Word/Phrase Matching-Based Text Mining Program for Automatic Extraction of Hormone Receptor Data from Free-text Pathology Report in Breast Cancer  
*Prof. Yen-Wei Chu & Dr. Kai-Po Chang, National Chung Hsing University, Taiwan*
- How to Integrate the ICT with Healthcare Administration in Research?  
*Prof. Hao-Yun Kao, Kaohsiung Medical University, Taiwan*
- Integrative Medicine and Complementary Therapies in Lung Cancer  
*Dr. Tse-Hung Huang, Chang Gung Memorial Hospital, Taiwan*
- Clinical Aspects of Recurrence Analysis in Endometrial Cancer  
*Dr. Chalong Cheewakriangkrai, Chiang Mai University, Thailand*





**#HBAAI2019 with Thailand 2019.1.5**, Chiang Mai University, Thailand

- How to begin and apply medical informatics to clinical practice & research  
Prof Chi-Chang Chang, CSMU, Taiwan
- Gynecologic cancer aspects and situation in Thailand  
Prof. Jatupol Srisomboon, M.D., Division of Gynecologic Oncology, Chiang Mai University, Thailand;  
Chairman of Thai Gynecologic Cancer Society
- Current and future trends in gynecologic cancer research  
Assoc. Prof. Prapaporn Suprasert, M.D., Division of Gynecologic Oncology; Head of Department of Obstetrics & Gynecology, Chiang Mai University, Thailand
- Faculty operation center and hospital informatics for administrative management  
Asst. Prof. Krit Khwanngern, M.D., Associate dean for Information Technology Service Center (ITSC), Department of Surgery, Chiang Mai University, Thailand
- Research collaboration and endometrial cancer informatics  
Asst. Prof. Chalong Cheewakriangkrai, M.D, Division of Gynecologic Oncology, Chiang Mai University, Thailand
- Machine Learning Applications for Recurrent Endometrial Cancer in Taiwan and Thailand: An Interdisciplinary Research (IDR)  
Prof. Chi-Jie Lu, Chien Hsin University of Science and Technology, Taiwan
- Developing an Integrated Clinical Decision-making Scheme (ICDS) for Predicting SPCs in Women with Endometrial Cancer: A Retrospective Analysis in Taiwan and Thailand  
Prof. Ssu-Han Chen, Ming Chi University of Technology, Taiwan





**#HBAAI2019 with Japan (student) 2019.6.25**, University of Tsukuba, Japan

Medical robot development using deep learning.

*Su-Jung Wu, Chung Shan medical university, Taiwan*

Design of Assistant Long-Term Care System

*Li-Chieh Chen, Ming Chuan University, Taiwan*

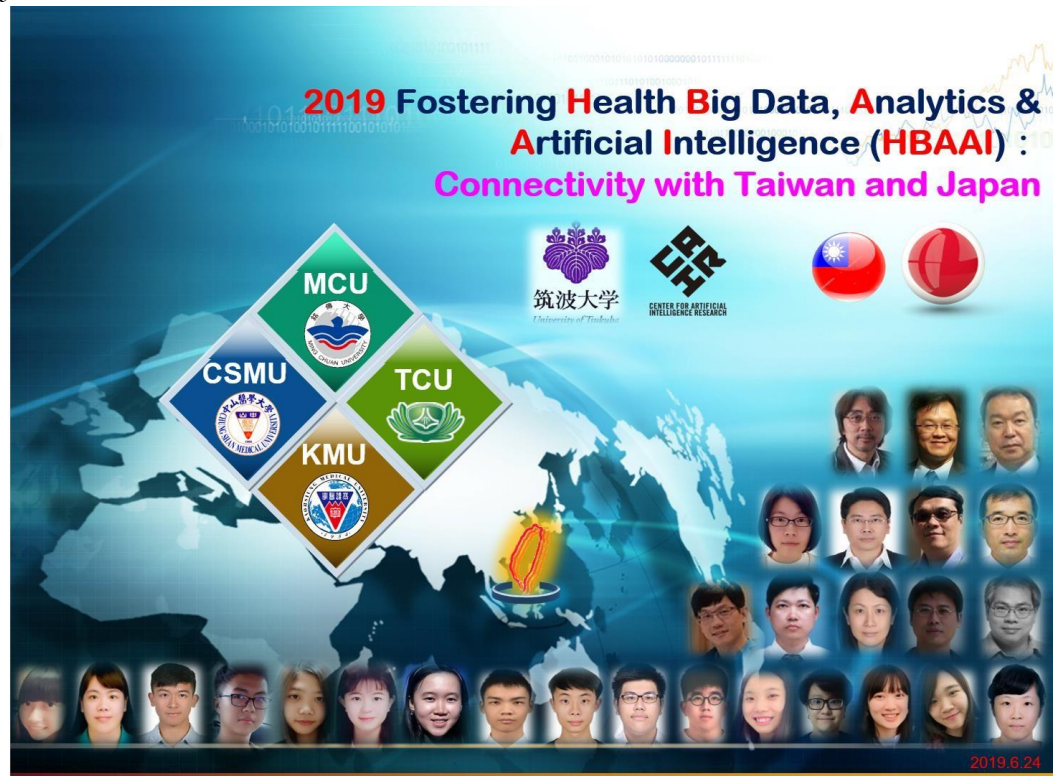
- Design of Assisted Visually Impaired System *Yuan-Rong Li, Ming Chuan University, Taiwan*
- Enhanced Lightweight Dynamic Pseudonym Identity Based Authentication and Key Agreement Scheme Using Wireless Sensor Networks for Agriculture Monitoring *Meriske Chen, Tzu Chi University, Taiwan*



June 24-27, 2019  
University of Tsukuba,  
Japan



筑波大学  
University of Tsukuba





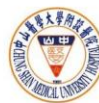
#HBAAI2020 with Formosa 2020.7.30, Chung Shan Medical University, Taiwan

- Forecasting Influenza Outbreak using Decision Tree Scheme  
*Prof. Chi-Jie Lu, Fu Jen Catholic University*
- Augmented Intelligence for Precision Cancer Treatment  
*Prof. Wei-Chih Shen, Chung Shan Medical University*
- Class-specific Antibody Prediction for Linear B-cell Epitopes  
*Prof. Yen-Wei Chu, National Chung Hsing University*
- Lightweight Authentication/Key Agreement for Medical IOT  
*Prof. Tian-Fu Lee, Tzu Chi University, Taiwan*
- The Data Connection between Research and HIS  
*Director, Computer and Communications Center of Taichung Veterans General Hospital*
- Development & Construction of Therapeutic Product Design  
*Prof. Chi-Hung Lo, Tunghai University*
- Possible role of exosomes in ocular disease  
*Prof. Dr. Min-Yen Hsu, Chung Shan Medical University Hospital*

**2020第四屆健康大數據分析人工智慧論壇**  
**Fourth Fostering Health Big Data, Analytics & Artificial Intelligence Forum**  
**HBAAI with FORMOSA**



日期：2020/7/30 15:30-17:40  
地點：中山醫學大學 正心樓 0922會議室  
主辦：中山醫學大學醫療決策科學實驗室



**第四屆健康大數據分析人工智慧論壇**





#HBAAI2020 with TCM 2020.8.26, Chung Shan Medical University, Taiwan

- Traditional Chinese Medicine (TCM) on a Smartphone  
Prof. Kun-Chan LAN, National Cheng Kung University
- Traditional Chinese Medicine (TCM) Meets Technology -A Pulse Diagnosis Pen Combining with TCM Diagnostic Analysis  
Prof. Tsu-Wang SHENG, Feng Chia University
- A Fuzzy Syndrome Differentiation System for Traditional Chinese Medicine  
Prof. Nai-Wei LIN, National Chung Cheng University
- An Astragalus-based Chinese herbal medicine inhibits cancer stem cell growth and improves the efficacy of cisplatin-based chemotherapy in non-small cell lung cancer  
Prof. Tse-Hung HUANG, Chang Gung Memorial Hospital
- Survival Analysis of Combined Traditional Chinese and Western Medicine Therapy for Colorectal Cancer  
Prof. Hung-Pin CHIU, Nanhua University



The poster features the title "2020第五屆健康大數據分析人工智慧論壇" (2020 Fifth Fostering Health Big Data, Analytics & Artificial Intelligence Forum) in blue and red, followed by "HBAAI with Digital TCM" in green. It includes the date "2020/8/26 15:00-18:40", location "中山醫學大學 正心樓 0922會議室", and organizer "中山醫學大學醫療決策科學實驗室". A row of 12 circular portraits of speakers is shown above a row of 12 institutional logos, including Chung Shan Medical University, National Cheng Kung University, Feng Chia University, National Chung Cheng University, Chang Gung Memorial Hospital, Nanhua University, and others.





#HBAAI2020 with SPC 2020.9.4, Fu Jen Catholic University, Taiwan

- Evidence-based Prevention Practice in SPCs and Recurrence: Retro- and Prospect in Asia Pacific  
Prof. Chi-Chang CHANG, Chung Shan Medical University
- Developing a Novel Machine Learning-Based Classification Scheme for Predicting SPCs in Colorectal Cancer Survivors  
Prof. Chi-Jie LU, Fu Jen Catholic University
- Developing a Novel Machine Learning-based Classification Scheme for Predicting SPCs in Breast Cancer Survivors  
Prof. Ssu-Han CHEN, Ming-Chi University of Technology
- Introduction and Application of Taiwan Cancer Registry Database  
Prof. Chun-Ju CHIANG, Taiwan Cancer Registry, Health Promotion Administration, Health Promotion Administration Annual

**2020第六屆健康大數據分析人工智慧論壇**  
Sixth Fostering Health Big Data, Analytics & Artificial Intelligence Forum  
**HBAAI with Second Primary Cancer**

日期：2020/9/4 14:00-17:30  
地點：輔仁大學羅耀拉大樓245(SL245)  
主辦：輔仁大學商學研究所



**2020第七屆健康大數據分析人工智慧論壇**  
Seventh Fostering Health Big Data, Analytics & Artificial Intelligence Forum  
**HBAAI with Chia Nan University of Pharmacy and Science**

Date: 2020/10/23 14:00-17:00  
Site: Q323  
Host: Chia Nan University of Pharmacy and Science





## 2020第八屆健康大數據分析人工智慧論壇

Eighth Fostering Health Big Data, Analytics & Artificial Intelligence Forum

### *HBAAI with Tzu Chi University*

Date: 2020/10/29 14:50-17:30

Site: H305

Host: Tzu Chi University



中山醫學大學 附設醫院  
Chung Shan Medical University Hospital



佛教慈濟醫療財團法人

慈濟醫院

## 2020第九屆健康大數據分析人工智慧論壇

Ninth Fostering Health Big Data, Analytics & Artificial Intelligence Forum

### *HBAAI with Quemoy University*

Date: 2020/11/11 11:00-15:00

Site: 301 Meeting Room, College of Science & Engineering

Host: National Quemoy University



中山醫學大學 附設醫院  
Chung Shan Medical University Hospital



國立金門大學  
NATIONAL QUEMOY UNIVERSITY



## 2020第十屆健康大數據分析人工智慧論壇

Tenth Fostering Health Big Data, Analytics & Artificial Intelligence Forum

**HBAAI with National Chung Cheng University**

Date: 2020/11/19 14:00-18:30

Site: 105 Meeting Room

Host: National Chung Cheng University



中山醫學大學附設醫院  
Chung Shan Medical University Hospital



奇美醫療財團法人  
奇美醫院  
Chi Mei Medical Center



嘉義長庚紀念醫院  
Chang Gung Memorial Hospital, Chiayi



## 2020第十一屆健康大數據分析人工智慧論壇

Eleventh Fostering Health Big Data, Analytics & Artificial Intelligence Forum

**HBAAI with FCU**

Date: 2020/12/10 14:00-17:40

Site: Feng Chia University

Host: 418 Meeting Room



中山醫學大學附設醫院  
Chung Shan Medical University Hospital



逢甲大學  
Feng Chia University



THE UNIVERSITY OF  
WAIKATO  
Te Whare Wānanga o Waikato



## 2020第十二屆健康大數據分析人工智慧論壇

Twelfth Fostering Health Big Data, Analytics & Artificial Intelligence Forum

### *HBAAI with KMU*

Date: 2020/12/18 13:00-17:30

Site: 勵學大樓3樓半視聽中心

Host: K.M.U Center for Big Data Research



## 2020第十三屆健康大數據分析人工智慧論壇

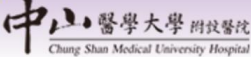
Thirteenth Fostering Health Big Data, Analytics & Artificial Intelligence Forum

### *HBAAI with Jen-Ai Hospital*

Date: 2020/12/19 14:00-17:00

Site: Meeting Room 10 F

Host: Jen-Ai Hospital







## STUDY VISIT 國外移地研究



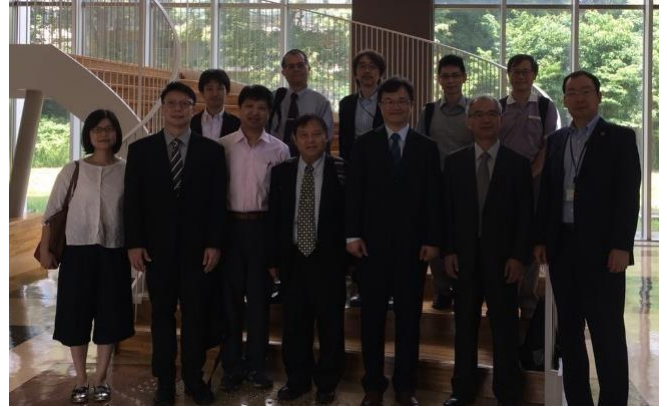
1st Study Visit CMU, Dec 8-11th, 2017

2nd Study Visit CMU Jan 4-7th, 2019



Chiang Mai University visited Chung Shan Medical University Sep 27 2019





Study Visit at Research and Development Center for Precision Medicine (PMC) in University of Tsukuba, Japan. June 7 2018

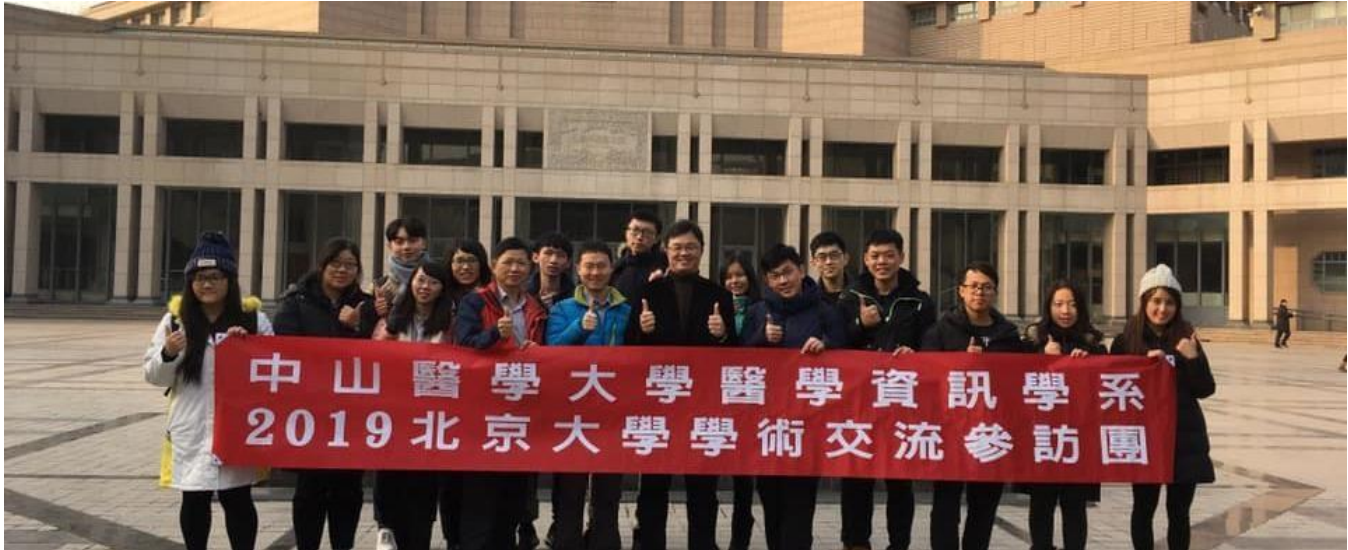


Study Visit at Center for Innovative Medicine and Engineering (CIME) in University of Tsukuba, Japan. June 7 2018



Study Visit at Center for Innovative Medicine and Engineering (CIME) in University of Tsukuba, Japan (Taiwan Medical Informatic Team) June 27 2019





1<sup>st</sup> Study Visit in Peking University, China. Jan 11-13<sup>th</sup>, 2019



2<sup>nd</sup> Study Visit in Peking University, China. Jan 11-15<sup>th</sup>, 2020

## □ MEMORANDUM OF UNDERSTANDING 合作備忘錄簽訂





Between School of Medical Informatics, CSMU and Center For Artificial Intelligence Research (C-AIR), University of Tsukuba (2019.7.1)



Between Medicine School, CSMU and Medicine School, Chiang Mai University (2019.9.6)



# MDSAT

Medical Decision Science Association of Taiwan



Medical Decision Science Association of Taiwan  
• Medical Decision • Sustainable • Embracing Global Health

## Vision

Our vision is to create a better medical decision making by connecting people to real world.

## Mission

Our mission is to foster substantive international cooperation and to embrace global health.





Reflections Towards the Future of Multidisciplinary Research







Taka-Aki Sato, PhD  
University of Tsukuba,  
Japan



Dilaver Tengilimoğlu,  
PhD  
Atılım University, Türkiye



Su-Hsin Chang, PhD  
Washington University in  
St. Louis, USA



Jason Chou-Hong  
Chen, PhD  
Gonzaga University, USA



Ming-Che Tsai, MD,  
PhD  
Chung Shan Medical  
University Hospital,  
Taiwan



Michael Tian-Shyug  
Lee, PhD  
Fu Jen Catholic  
University, Taiwan



Gin-Den Chen, MD,  
PhD  
Chung-Shan Medical  
University Hospital,  
Taiwan



Chuen-Sheng Cheng,  
PhD  
Yuan Ze University,  
Taiwan



Emilia Zankina, PhD  
Temple University Rome,  
Italy



Mohammad Ali Jalali  
Far, MD, PhD  
Ahvaz Jundishapur  
university of medical  
sciences, Iran



William Yu-Chung  
Wang, PhD  
University of Waikato,  
New Zealand



Ramazan Erdem,  
PhD  
Suleyman Demirel  
University, Türkiye



Sedat Bostan, PhD  
Karadeniz Technical  
University, Türkiye



Chalong  
Cheewakriangkrai,  
MD, FRTCOG  
Chiang Mai University,  
Thailand



Bolormaa Purevdorj,  
MD  
Population Health  
Research Center,  
Mongolia



Supat Chupradit,  
MD, PhD  
Chiang Mai University,  
Thailand



Chien-Lung Chan,  
PhD  
Yuan Ze University,  
Taiwan



Yang Xu, PhD  
Peking University, China

## JOINT EXECUTIVE BOARD ON MEDICAL INFORMATICS IN TAIWAN (JEBMI)

### 台灣醫學資訊系所主管聯席會

### 議

#### 台灣醫學資訊學系所主管聯席會議

#### The Joint Executive Board on Medical Informatics in Taiwan (JEBMI)

本會創立於2018年

本主管聯席會議的宗旨

#提昇國內醫療資訊教育品質

#掌握醫療資訊技術專業發展及產業需求趨勢

秉持前瞻與精進的目標

持續年度聯席會議 使命

#整合台灣醫療資訊實務

#培育具國際宏觀視野

#課程設計與師資交流

#創新靈活及應變能力

#跨領域醫療資訊與管理人才

共同攜手團結精進：教學研究、行政服務與國際交流





First JEBMI in CSMU 2018.10.11



Second JEBMI in KMU 2019.8.29



Third JEBMI in CSMU 2020.7.2



Fourth JEBMI in Virtual Meeting 2021.10.1