Name: Professor Dr. Siriwan Suebnukarn
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Vice Rector for Research and Innovation
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EDUCATION and TRAINING
2005: Doctor of Philosophy, Asian Institute of Technology, School of Engineering and Technology, Computer Science and Information Management
2001: Master of Science, Asian Institute of Technology, School of Engineering and Technology, Computer Science and Information Management (Outstanding academic performance award, The James A. Linen III Prize)
1995: Graduate Diploma in Clinical Science, Chulalongkorn University, Faculty of Dentistry, Endodontology
1992: Doctor of Dental Surgery, Prince of Songkla University, Faculty of Dentistry

RESEARCH FELLOW and VISITING SCHOLAR

2017: Research Fellow, Hanse-Wissenschaftskolleg Institute of Advanced Study, Germany

2017: Visiting Professor, Bremen Spatial Cognition Center, University of Bremen, Germany

2000: Research Fellow, School of Dentistry, Asahi University, Japan

ACADEMIC POSITIONS

2013-present: Professor, Thammasat University, Faculty of Dentistry

2009-2013: Associate Professor, Thammasat University, Faculty of Dentistry

2006-2009: Assistant Professor, Thammasat University, Faculty of Dentistry

2006-present: Adjunct Faculty, Asian Institute of Technology, School of Engineering and Technology

1997-2006: Faculty, Thammasat University, Faculty of Dentistry

1992-1997: Faculty, Prince of Songkla University, Faculty of Dentistry

ADMINISTRATION POSITIONS

2018-present: Vice Rector for Research and Innovation, Thammasat University

2020: Acting Dean, College of Interdisciplinary Studies, Thammasat University

2014-2017: Vice Dean for Research, Thammasat University, Faculty of Dentistry

ROYAL THAI DECORATIONS

2020: Knight Grand Cordon (Special Class) of the Most Noble Order of the Crown of Thailand (มหาวชิรมงกุฎ)

2020: Companion (Fourth Class) of the Most Admirable Order of the Direkgunabhorn (จตุตถดิเรกคุณาภรณ์)

2014: Knight Grand Cross (First Class) of the Most Exalted Order of the White Elephant (ประถมาภรณ์ช้างเผือก)

2011: Knight Grand Cross (First Class) of the Most Noble Order of the Crown of Thailand (ประถมาภรณ์มงกุฎไทย)

HONORS

2020: National Outstanding Researcher Award in Education (นักวิจัยดีเด่นแห่งชาติ ประจำปี พ.ศ. 2563 สาขาการศึกษา)

2019: Platinum Education / Research Development Category Winner, Global Inventors & Innovators Network Awards 2019, London, United Kingdom

2019: Special Recognition Award, Global Inventors & Innovators Network Awards 2019, London, United Kingdom

2019: Gold Medal and Special Prize from World Invention Intellectual Property Associations (WIIPA), ICOH Mobile Dental Unit

2014: Distinguished Alumni Award, Prince of Songkla University

2013: Distinguished Alumni Award in Academia, Faculty of Dentistry Prince of Songkla University

2012: Gold Medal, Seoul International Invention Fair (SIIF) for Virtual Reality Dental Simulation

2012: Gold Medal, Seoul International Invention Fair (SIIF) for Intelligent Posture Trainer

2012: Inventor's Award, from National Research Council of Thailand, for the work on Dent-Sim-VR: Intelligent virtual reality for clinical training in dentistry

2009: Best paper award, the 20th SEAADE Annual Scientific Meeting

2008: Gold Medal, International Federation of Inventor Association (IFIA) for Computer Implemented Invention (held in China)

2007: Lady Prize for the Best Women-Invention, International Federation of Inventor Association (IFIA) (held in Taiwan)

2007: Inventor's Award, from National Research Council of Thailand, for the work on COMET: A collaborative intelligent tutoring system for medical problem-based learning.

2001: Outstanding academic performance award, The James A. Linen III Prize, Asian Institute of Technology

PATENT and COPYRIGHT

2016: Patent: Siriwan Suebnukarn, Peter Haddawy, Phattanapon Rhienmora. Intelligent Virtual Reality for Dental Skill Training (No. 49083)

2006: Copyright: Siriwan Suebnukarn. COMET: Intelligent Tutoring System for Medical Problem-Based Learning

PUBLICATIONS

Book

Suebnukarn S. (2013) Dental Informatics. Thammasat University Press, ISBN 978-616-314-023-4

Suebnukarn S. (2009) Clinical skill development in dentistry: Ergonomic approach. Thammasat University Press, ISBN 978-974-9900-75-8

Suebnukarn, S. (2010) Intelligent tutoring system for medical problem-based learning. In Nata R.V. (Ed.) Progress in Education, Nova Science Publishers, ISBN: 978-161122572-3, pp. 233-302.

Suebnukarn S. (2009) A Collaborative Medical Case Authoring Environment Based on the UMLS. In Hijon-Neira R. (Ed.) Advanced Learning. INTECH. ISBN: 978-953-370-010-0, pp. 61-76.

Journal Articles

Warin K, Limprasert W, Suebnukarn S, Jinaporntham S, Jantana P. Automatic classification and detection of oral cancer in photographic images using deep learning algorithms. Journal of Oral Pathology and Medicine 2021 (Article in Press).

Vannaprathip N, Haddawy P, Schultheis H, Suebnukarn S. Intelligent Tutoring for Surgical Decision Making: A Planning-Based Approach. International Journal of Artificial Intelligence in Education 2021 (Article in Press).

Yin MS, Haddawy P, Suebnukarn S, Kulapichitr F, Rhienmora P, Jatuwat V, Uthaipattanacheep N. Formative Feedback Generation in a VR-based Dental Surgical Skill Training Simulator. Journal of Biomedical Informatics 2021;114(103659).

Thanathornwong B, Suebnukarn S. A Personalized Pre-operative and Intra-operative Ergonomic Feedback to Improve the Dental Work Posture. International Journal of Human–Computer Interaction 2021;37(6):528-533.

Thanathornwong B, Suebnukarn S. Automatic detection of periodontal compromised teeth in digital panoramic radiographs using Faster Regional Convolutional Neural Networks. Imaging Science in Dentistry 2020;50(2):169-174.

Dwisaptarini A, Suebnukarn S, Rhienmora P, Koontongkaew S, Haddawy P. Effectiveness of the multilayered caries model and visuo-tactile virtual reality simulator for minimally invasive caries removal: A randomized controlled trial. Operative Dentistry 2018;43(3):E110-E118.

Yin MS, Haddawy P, Suebnukarn S, Rhienmora P. Automated Outcome Scoring in a Virtual Reality Simulator for Endodontic Surgery. Computer Methods and Programs in Biomedicine 2018;153:53-59

Thanathornwong B, Suebnukarn S. A clinical decision support model to predict occlusal force in bruxism patients. Healthc Inform Res 2017 Oct;23(4):255-261.

Thanathornwong B, Suebnukarn S. Decision support system for predicting colour change after in-office tooth whitening. Computer Methods and Programs in Biomedicine. Comput Methods Programs Biomed. 2016 Mar;125:88-93.

Suebnukarn S, Chanakarn P, Phisutphatthana S, Pongpatarat K, Wongwaithongdee U, Oupadissakoon C. Understanding information synthesis in oral surgery care to design clinical information technology systems. British Journal of Oral and Maxillofacial Surgery. Br J Oral Maxillofac Surg. 2015 Dec;53(10):968-75.

Suebnukarn S, Chaisombat M, Kongpunwijit T, Rhienmora P, Construct validity and expert benchmarking of the haptic virtual reality dental simulator. Journal of Dental Education 2014;78(10):1442-50.

Wongsapai M, Suebnukarn S, Rajchagool S. Health-oriented electronic oral health record: development and evaluation. Health Informatics Journal 2014;20(2):104-17.

Thanathornwong B, Suebnukarn S, Ouivirach K. The system for predicting and preventing musculoskeletal disorders among dental students. The International Journal of Occupational Safety and Ergonomics 2014;20(3):463-75.

Thanathornwong B, Suebnukarn S, Songpaisan Y, Ouivirach K. A system for predicting and preventing work related musculoskeletal disorders among dentists. Computer Methods in Biomechanics and Biomedical Engineering 2014;17(2):177-85.

Rasheed A, Khawchareonporn T, Muengtaweepongsa S, Suebnukarn S. An unusual presentation of subdural empyema caused by Porphyromonas gingivalis. Ann Indian Acad Neurol. 2013;16(4):723-5.

Wongsapai M, Suebnukarn S, Rajchagool S, Kijsanayotin B. Health-oriented Electronic Oral Health Record for Health Surveillance. Studies in health technology and informatics 2013;192:763-7.

Kazi H, Haddawy P, Suebnukarn S. Clinical reasoning gains in medical PBL: an UMLS based tutoring system. Journal of Intelligent Information Systems 2013;41(2): 269-284.

Suebnukarn S, Rittipakorn P, Thongyoi B, Boonpitak K, Wongsapai M, Usability assessment of an electronic health record in a comprehensive dental clinic. Pakdeesan P. Springerplus. 2013, 12;2(1):220-7.

Inglam S, Chantarapanich N, Suebnukarn S, Vatanapatimakul N, Sucharitpwatskul S, Sitthiseripratip K. Biomechanical evaluation of a novel porous-structure implant: finite element study. Int J Oral Maxillofac Implants. 2013;28(2):e48-56.

Kazi H, Haddawy P, Suebnukarn S. Employing UMLS for Generating Hints in a Tutoring System for Medical Problem-Based Learning. Journal of Biomedical Informatics 2012;45(3):557-65.

Suebnukarn S, Hataidechadusadee R, Suwannasri N, Suprasert N, Rhienmora P, Haddawy P. Access cavity preparation training using haptic virtual reality and micro-CT tooth models. International Endodontic Journal 2011;44(11):983-9. **(Cover Page)**

Rhienmora, P., Haddawy, P., Suebnukarn, S., & Dailey, M. N. Intelligent Dental Training Simulator with Objective Skill Assessment and Feedback. Artificial Intelligence in Medicine 2011;52(2):115-21.

Suebnukarn S, Haddawy P, Rhienmora P, Jittimanee P, and Viratket P. Augmented Kinematic Feedback from Haptic Virtual Reality for Dental Skill Acquisition. J Dent Educ. 2010;74:1357-1366.

Inglam S, Suebnukarn S, Tharanon W, Apatananon T, Sitthiseripratip K. Influence of graft quality and marginal bone loss on implants placed in maxillary grafted sinus: a finite element study. Med Biol Eng Comput. 2010 Jul;48(7):681-9.

Rhienmora P, Haddawy P, Khanal P, Suebnukarn S, Dailey MN. A Virtual Reality Simulator for Teaching and Evaluating Dental Procedures. Methods of Information in Medicine. 2010;49(4):396-405.

Haddawy P, Suebnukarn S. Intelligent clinical training systems. Methods of Information in Medicine.2010;49(4):388-9.

Suebnukarn S, Ngamboonsirisingh S, Rattanabanlang A. A systematic evaluation of the quality of meta-analyses in endodontics. Journal of Endodontics. 2010 Apr;36(4):602-8.

Suebnukarn S, Haddawy P, Rhienmora P, Gajananan K. Haptic Virtual Reality for Skill Acquisition in Endodontics. Journal of Endodontics. 2010 Jan;36(1):53-5.

Suebnukarn S, Phattanasatheinkul N, Sombatveroj S, Rhienmora P, Haddawy P . Process and Outcome Measures of Expert /Novice Performance on a Haptic Virtual Reality System. Journal of Dentistry, 37(9): 658-665, 2009.

Suebnukarn S. Intelligent tutoring system for clinical reasoning skill acquisition in dental students. Journal of dental education, 73(10): 1178-1186, 2009.

Kazi H, Haddawy P, Suebnukarn S. Expanding the Space of Plausible Solutions in a Medical Tutoring System for Problem-Based Learning. International Journal of Artificial Intelligence in Education, 19(3): 309-334, 2009.

Suebnukarn S, Rungcharoenporn N, and Saengsuratham S. A Bayesian Decision Support Model for Assessment of Endodontic Treatment Outcome, Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology, and Endodontology, 106(3): e48-e58, 2008.

Suebnukarn S, Haddawy P and Rhienmora P. A Collaborative Medical Case Authoring Environment Based on the UMLS, Journal of Biomedical Informatics, 41(2):318-326, 2008.

Suebnukarn S, Haddawy P, Dailey M, Cao DN. Interactive Segmentation and Three-Dimension Reconstruction for Cone-Beam Computed-Tomography Images. NECTEC Technical Journal, 8(20): 154-161, 2008.

Rhienmora P, Haddawy P, Dailey M, Khanal P, Suebnukarn S. Development of a Dental Skills Training Simulator Using Virtual Reality and Haptic Device. NECTEC Technical Journal, 8(20): 140-147, 2008.

Suebnukarn S and Haddawy P. COMET: A collaborative tutoring system for medical problem-based learning. IEEE Intelligent Systems, 22(4): 70-77, 2007.

Suebnukarn S and Haddawy P. Modeling Individual and Collaborative Problem-Solving in Medical Problem-Based Learning. User Modeling and User-Adapted Interaction, 16(3-4):211-248, 2006.

Suebnukarn S and Haddawy P. A Bayesian Approach to Generating Tutorial Hints in a Collaborative Medical Problem-Based Learning System. Artificial Intelligence in Medicine, 38(1):5-24, 2006.

Suebnukarn S, Koontongkaew S, and Yapong B. (1999) Correlation between the Bacterial Culture Result in Root Canal and Postobturation Evaluation. Journal of the Dental Association of Thailand 49: 3, p 153-157.

Suebnukarn S. (1997) Vertical Root Fracture of an Endodontically Treated Tooth. Journal of the Dental Association of Thailand 47: 5-6, p 274-280.

Refereed Articles

Suebnukarn S. Intelligent Clinical Training during the COVID-19 Pandemic (2021) JCSSE 2021 - 18th International Joint Conference on Computer Science and Software Engineering: Cybernetics for Human Beings, art. no. 949384.

Vannaprathip N, Haddawy P, Schultheis H, Suebnukarn S, Limsuvan P, Intaraudom A, Aiemlaor N, Teemuenvai C. A Planning-Based Approach to Generating Tutorial Dialog for Teaching Surgical Decision Making. ITS 2018: 386-391.

Vannaprathip N, Haddawy P, Schultheis H, Suebnukarn S. Generating Tutorial Interventions for Teaching Situation Awareness in Dental Surgery – Preliminary Report. MIWAI 2017

Sararit N, Haddawy P, Suebnukarn S. A VR Simulator for Emergency Management in Endodontic Surgery. IUI 2017: 117-120.

Yin MS, Haddawy P, Suebnukarn S, Schultheis H, Rhienmora P. Use of Haptic Feedback to Train Correct Application of Force in Endodontic Surgery. IUI 2017: 451-455.

Vannaprathip N, Haddawy P, Suebnukarn S, Sangsartra P, Sasikhant N, Sangutai S. Desitra: A Simulator for Teaching Situated Decision Making in Dental Surgery. IUI 2016: 397-401.

Yin MS, Haddawy P, Suebnukarn S, Rhienmora P. Toward Intelligent Tutorial Feedback in Surgical Simulation: Robust Outcome Scoring for Endodontic Surgery. IUI 2016: 402-406.

Thanathornwong B, Suebnukarn S. The improvement of dental posture using personalized biofeedback. Stud Health Technol Inform. 2015;216:756-60.

Rhienmora P, Haddawy P, Suebnukarn S, Shrestha P, Dailey MN. Recognizing Clinical Styles in a Dental Surgery Simulator. Stud Health Technol Inform. 2015;216:163-7.

Yin MS, Haddawy P, Suebnukarn S, Rhienmora P. Automated outcome scoring in a dental surgical training simulator. The 2nd International Conference on Innovation in Education (ICIE 2015), Nakhon Pathom, Thailand

Vannaprathip N, Haddawy P, Suebnukarn S. A preliminary analysis of tutorial intervention strategies for teaching decision making in dental surgery. The 2nd International Conference on Innovation in Education (ICIE 2015), Nakhon Pathom, Thailand

Wongsapai M, Suebnukarn S, Rajchagool S, Kijsanayotin B. Health-oriented Electronic Oral Health Record for Health Surveillance. Studies in Health Technology and Informatics 2013;192:763-7.

Kazi H, Haddawy P, Suebnukarn S. METEOR: medical tutor employing ontology for robustness. IUI 2011: 247-256.

Kazi H, Haddawy P, Suebnukarn S. Leveraging a Domain Ontology to Increase the Quality of Feedback in an Intelligent Tutoring System. Intelligent Tutoring Systems 2010: 75-84

Rhienmora P, Haddawy P, Suebnukarn S, Dailey M. Providing objective feedback on skill assessment in a surgical dental training simulator. In Proceedings of the International Conference in Artificial Intelligence in Medicine, Verona, Italy. 2009: 305-314.

Rhienmora P, Haddawy P, Suebnukarn S, Dailey M. A VR Environment for Assessing Dental Surgical Expertise. In Proceedings of the International Conference in Artificial Intelligence in Education, Brighton, UK. 2009: 746-748.

Kazi H, Haddawy P, and Suebnukarn S. Expanding the Plausible Solution Space for Robustness in an Intelligent Tutoring System. In Proceedings of the 9th International Conference on Intelligent Tutoring Systems, Montreal , Canada, 2008: 583-592.

Suebnukarn S, Rhienmora P, and Haddawy P. A Collaborative Medical Case Authoring Environment Based on UMLS. In Proceedings of the 7th IEEE International Conference on Advanced Learning Technologies. Niigata, Japan, 2007: 26-30.

Kazi H, Haddawy P, and Suebnukarn S. Towards Human-Like Robustness in an Intelligent Tutoring System. In Proceedings of the 8th International Conference on Cognitive Modeling. Ann Arbor, Michigan, 2007: 247-252.

Kazi H, Haddawy P, and Suebnukarn S. Enriching Solution Space for Robustness in an Intelligent Tutoring System. In Proceedings of the 15th International Conference on Computers in Education. Hiroshima, Japan. 2007: 547-550.

Suebnukarn S and Haddawy P. Clinical-Reasoning Skill Acquisition through Intelligent Group Tutoring. In Proceedings of the 19th International Joint Conference on Artificial Intelligence. Edinburgh, UK, 2005: 1425-1430.

Suebnukarn S and Haddawy P. Modeling Individual and Collaborative Problem-Solving in Medical Problem-Based Learning. In Proceedings of the 10th International Conference on User Modeling. Edinburgh, UK, 2005: 377-386.

Suebnukarn S and Haddawy P. A collaborative intelligent tutoring system for medical problem-based learning. In Proceedings of the 9th International Conference on Intelligent User Interface. Madeira, Portugal, 2004: 14-21.

Suebnukarn S. Student Modeling for Collaborative Medical Problem-Based Learning. In Proceedings on the 6th International Conference on Cognitive Modeling, Pittsburgh, Pennsylvania, 2004: 416-417.

Suebnukarn S and Haddawy P. Intelligent Tutoring for Medical Problem-Based Learning: Student Clinical Reasoning Model. In Proceedings of the 4th Joint International Conference on Cognitive Science (ICCS2003), Sydney, Australia, 2003: 652-657.

Conferences

Thanathornwong B, Suebnukarn S. Improving Postural Balance in Dentoalveolar Malocclusion Patients using a Vibrotactile Posture Trainer Device The 17th World Congress on Medical and Health Informatics (Medinfo 2019), Lyon, France, Aug 25-30, 2019.

Suebnukarn S. University graduate startups strengthening research capacity and capability: the case of Thammasat University. The 14th Annual Strategic Summit for the Advancement of University Excellence in all its Forms, QS-APPLE 2018, 21–23 November 2018, Seoul, Republic of Korea.

Suebnukarn S, Srinaprom D, Poolthananunt P, Rangsantham P, Wongsapai M. Interoperability Evaluation of a Mobile Health-oriented Electronic Oral Health Record. The 94th International Association for Dental Research General Session & Exhibition, June 22-25, 2016, Seoul, Republic of Korea.

Dwisaptarini A, Suebnukarn S. Development and Face Validation of a Minimally Invasive Caries Removal Simulator With Haptic Feedback. The 94th International Association for Dental Research General Session & Exhibition, June 22-25, 2016, Seoul, Republic of Korea.

Thanathornwong B, Suebnukarn S, Klatt P. A Bayesian-based Decision Support System for Assessing the Need for Orthodontic Treatment. The 94th International Association for Dental Research General Session & Exhibition, June 22-25, 2016, Seoul, Republic of Korea.

Thanathornwong B, Suebnukarn S. The improvement of dental posture using personalized biofeedback. The 15th World Congress on Medical and Health Informatics (Medinfo 2015), São Paulo, Brazil, Aug 19-23, 2015.

Rhienmora P, Haddawy P, Suebnukarn S, Shrestha P, Dailey MN. Recognizing Clinical Styles in a Dental Surgery Simulator. The 15th World Congress on Medical and Health Informatics (Medinfo 2015), São Paulo, Brazil, Aug 19-23, 2015.

Suebnukarn S. Construct validity and expert benchmarking of the haptic virtual reality dental simulator. The 36th Asia Pacific Dental Congress (APDC 2014), Dubai, United Arabs Emirates, 17-19 June, 2014.

Wongsapai M., Suebnukarn S., Rajchagool S., Kijsanayotin B. Health-oriented Electronic Oral Health Record for Health Surveillance. The 14th World Congress on Medical and Health Informatics (Medinfo 2013), Copenhagen, Denmark, Aug 20-23, 2013.

Suebnukarn S. Recognition of Clinical Process in Dental Virtual Reality Environment. The 7th Asia Pacific Association of Medical Informatics Conference, Oct 22-25, 2012, Beijing, China.

Suebnukarn S., Thanathornwong B., Wongsapai M., Dental Informatics. The 21st Thai Medical Informatics Association Annual Meeting, Nov 21-23, 2012, Thailand.

Suebnukarn S. Decision support systems and knowledge representation under uncertainties. The 20th Thai Medical Informatics Association Annual Meeting, Jan 26-27, 2012, Thailand.

Thanathornwong B., Suebnukarn S, Songpaisan Y. An electronic instrumentation for predicting musculoskeletal disorders among dentists. The 25th IADR-SEA Annual Scientific Meeting, Oct 29-30, 2011, Singapore.

Thanathornwong B., Suebnukarn S. An electronic instrumentation for predicting musculoskeletal disorders among dentists, The 10th Dental Faculty Consortium of Thailand Academic Meeting and Research Presentation, Oct 13-14, 2011, Bangkok, Thailand.

Suebnukarn S, Yamaguchi T. Endodontic Training on Haptic Virtual Reality using Micro-CT Tooth Models. The 89th International Association for Dental Research General Session & Exhibition, March 16-19, 2011, San Diego, LA.

Suebnukarn S. Intelligence clinical training systems. The 19th Thai Medical Informatics Association Annual Conference, November 10-12, 2010, Bangkok, Thailand.

Suebnukarn S, Haddawy P, Rhienmora P, Jittimanee P, Viratket, P. Augmented feedback from haptic virtual reality for dental skill acquisition. The 88th International Association for Dental Research General Session & Exhibition, July 14-17, 2010, Barcelona, Spain.

Phattanapon Rhienmora, Kugamoorthy Gajananan, Peter Haddawy, Siriwan Suebnukarn, Matthew N. Dailey, Ekarin Supataratarn, Poonam Shrestha: Haptic augmented reality dental trainer with automatic performance assessment. IUI 2010: 425-426

Suebnukarn S, Haddawy P, Rhienmora P, Gajananan K. Haptic Virtual Reality for Clinical Skill Acquisition. The 20th SEAADE Annual Scientific Meeting, November 23-24, 2009, Chiang Mai, Thailand. **(Best paper award)**

Suebnukarn S, Songpaisan Y, Phantumvanit P. Clinical Skill Acquisition through Problem-based Learning and Haptic Virtual Reality. The 6th International Conference on PBL in Dentistry, November 13-15, 2009, Hong Kong.

Suebnukarn S, Phatthanasathienkul N, Sombatveroje S, Rhienmora P, Khanal P, Haddawy P, Dailey M. A Process-Outcome Study of Expert and Novice Clinical Performance. The 87th International Association for Dental Research General Session & Exhibition, April 1-4, 2009, Miami, USA.

Suebnukarn S. Process and Outcome Measure of Experts and Novices Clinical Performance, The 9th Dental Faculty Consortium of Thailand Academic Meeting and Research Presentation, Feb 18-20, 2009, Rayong, Thailand.

Suebnukarn S, Rungcharoenporn N, Saengsuratham S. A Decision Support Model for Assessment of Endodontic Treatment Outcome, The 86th International Association for Dental Research General Session & Exhibition, July 2-5, 2008, Toronto, Canada.

Suebnukarn S, Haddawy P, Sitthiseripratip K, Rhienmora P, Intelligent virtual reality for clinical skill training, NECTEC Annual Conference, Bangkok, Thailand. NECTEC, Volume 14, No.74 (Nov-Dec 2007) p. 23-25.

Inglam S, Suebnukarn S, Tharanon W, Sitthiseripratip K (2007) Effect of marginal bone loss on bone strains around implants placed in grafted maxillary sinuses: 3D-finite element analysis, International Bone and Dental Technology Symposium, Bangkok, Thailand.

Inglam S, Suebnukarn S, Tharanon W, Sitthiseripratip K (2007) Biomechanical Analysis of Implants Placed in Grafted Maxillary Sinuses. The IADR-SEA, Bali, Indonesia.

Suebnukarn S*, Haddawy P (2007) Predicting students' actions in web-based problem-based learning. The 85th International Association for Dental Research General Session and Exhibition, New Orleans, USA.

Suebnukarn S*, Haddawy P, Songpaisan Y, Phantumvanit P, Suksudaj N, and Chetpakdee-chit W (2005) A Bayesian Network Clinical Reasoning Model for an Automated PBL Tutor. The 4th International Symposium on Problem-Based Learning in Dental Education, Thailand.

Suebnukarn S*, Benjasupattananan S, Songpaisan Y, and Phantumvanit P (1998) SATV and GPF in Dental Education. The 9th Annual Scientific and General Meeting South-East Asia Association for Dental Education. Malaysia.

Suebnukarn S*, Koonthongkaew S, and Yapong B (1997) Correlation between the Bacterial Culture Result in Root Canal and Postobturation Evaluation. The 12th International Association for Dental Research Southeast Asian Division. Thailand.

Keynote Speakers/Invited Talks/Workshops

Global Smart Education Conference (GSE) 2021 - Smart Learning and Futures of Education, "Intelligence clinical training during the COVID-19 pandemic" 18-20 August 2021, Beijing, China (Hybrid).

The THE Asia Universities Summit 2021, Panel Discussion "What is the role of universities in supporting the SDGs? Are Asian universities making this a priority?" (2 June 2021), Fujita Health University, Aichi, Japan (Hybrid).

The 18th International Joint Conference on Computer Science and Software Engineering (2021), Keynote Speaker "Intelligent Clinical Training during the COVID-19 Pandemic" (30 June - 3 July 2021), Thammasat University, Lampang Campus, Thailand (Hybrid).

The 15th International Symposium on Artificial Intelligence and Natural Language Processing and International Conference on Artificial Intelligence & Internet of Things (2020), Keynote Speaker "Intelligent Clinical Training during the COVID-19 Pandemic" (18-20 November 2020), Bangkok, Thailand (Online).

The Asia Pacific Medical Education Conference (APMEC) 2020, Plenary Lecture "Artificial intelligence and its influence of dental education and student learning" (8-12 January 2020), Yong Loo Lin School of Medicine, National University of Singapore, Singapore.

The Asia Pacific Medical Education Conference (APMEC) 2020, Panel Discussion "Gathering evidence on student learning" (8-12 January 2020), Yong Loo Lin School of Medicine, National University of Singapore, Singapore.

The 2nd TCI-TRF-Scopus Thailand University Consortium, "Evidence-based Policy Making for Research Plan: A Case Study from Thammasat University" (5 July 2019), Bangkok, Thailand

The 21st Anniversary Global Inventors & Innovators Network (GWIIN), Conference, Showcase and Awards Ceremony 2019, "Intelligent Clinical Training Systems" (27 June 2019), Arab British Chamber of Commerce, London, United Kingdom

The IEEE 3rd International Conference on Engineering, Technologies and Social Sciences (ICETSS 2017), "Intelligent Clinical Training Systems" (7-8 August 2017) in Asian Institute of Technology, Thailand

The 3rd Dental Research Exhibition and Meeting (DREAM), "Virtual reality dental simulator" (6-7 May 2016), Yogyakarta, Indonesia (http://dreamumy2016.wixsite.com/home/blank-c1pna)

The 11th meeting of the Scientific Forum, "Virtual reality dental simulator" (9-11 April 2015), Faculty of Dentistry Universitas Trisakti, Balai Kartini, Jakarta, Indonesia

The 19th Anniversary of the Faculty of Dentistry Thammasat University, "Dental Informatics and Clinical Training" (20 February 2015).

The 3rd National Conference on Medical Informatics and the Annual Meeting of the Thai Medical Informatics Association (TMI-NCMedInfo 2014), "Healthcare Analytics" (26-28 November 2014), Chiang Mai, Thailand.

Research Unit, Faculty of Dentistry, Thammasat University, "Ethical guidelines for human subject research" (6-7 March 2014), Saraburi, Thailand.

The 2nd Asian Conference on Information Systems (ACIS 2013), "Virtual Reality Dental Simulator" (31 October-2 November 2013), Phuket, Thailand. (https://saki.siit.tu.ac.th/acis2013/front/show/keynote)

The 11th Dental Faculty Consortium of Thailand Academic Meeting and Research Presentation (DFCT2013), "Virtual Reality Dental Simulator" (7-9 May 2013), Chonburi, Thailand

Graduate School of Dentistry, Osaka University, "Virtual Reality Dental Simulator". (6-7 April 2013), Osaka, Japan.

Faculty of Dentistry, Chulalongkorn University, "Evidence-based dentistry and systematic reviews". (12 December 2012), Bangkok, Thailand

The 19th Thai Medical Informatics Association Annual Conference, "Artificial Intelligence and Medical Informatics" (10-12 November 2010), Bangkok, Thailand.

Graduate School of Dentistry, Osaka University, "Haptic dental education in Thailand". (18 January 2010), Osaka, Japan.

Faculty of Dentistry, Chulalongkorn University, "Quality of Meta-analyses in Endodontics". (8 January 2010), Bangkok, Thailand

Intercountry Center for Oral Health (ICOH), "Multidisciplinary and Clinical Skill for Dental Operator with MSD". (2-5 February 2009), Chiangmai, Thailand.

Poverty Reduction and Agricultural Management Program, "Problem-based Learning", (13-14 November 2008), Mukdaharn, Thailand.

Thammasat University Research Forum, "Intelligent Clinical Skill Training Systems", (12 November 2008), Thammasat University, Thailand.

Thammasat University Research Club, "Intelligent Clinical Skill Training Systems", (8 October 2008), Thammasat University, Thailand.

Shanghai Stomatology Disease Center, "Clinical Skill Program at Thammasat University Dental School". (26 September 2008), Shanghai, China.

Intercountry Center for Oral Health (ICOH), "pd Clinical skill program". (6 August 2008), Chiangmai, Thailand.

NECTEC Annual Conference 2008, "Intelligent virtual reality for clinical skill training". (25 March 2008), Bangkok, Thailand.

Health GIS 2008, "Distributed educational model for medical learning and instruction". (14-16 January 2008), Bangkok, Thailand.

Humanized health care in dentistry group, "Dental Ergonomics". (2-3 October 2007) Surin, Thailand.

Thammasat University (21 March 2007), "Computer Applications in Health Science".

Global Engineering Production Education and Collaboration (21-25 September 2006) Shengzen, Chaina, "Web-Based Problem-Based learning".

Intercountry Center for Oral Health (13-17 February 2006), "Proprioceptive Derivation Workshop".

Thai Medical Informatics Society, MED-IT (17 December 2004), "Dental Informatics".

Ministry of Health, Dental health division (25 March 2001), "Ergonomic in Dentistry".

Asahi University (10 March 2000), "Skill Acquisition Transfer and Verification".

Chulalongkorn University (24 January 2000), "Vertical Root Fracture of Endodontically Treated tooth".

Dental Association of Thailand (17 July 1998), "SATV and GPF in Dental Education".

Dental Association of Thailand (16 June 1995), "Endodontic Success and Failure".

RESEARCH

Research Interested
Medical Informatics, Intelligent Clinical Training, Virtual Reality, Clinical Decision Making

Research Projects

Co-Principal Investigator with Yanika Kowitlawakul (2021-2023), Development and effectiveness of Artificial Intelligence -Teaching Assistance System (AI-TAS) in enhancing nursing students' engagement, intrinsic motivation, and knowledge applications, Grant: MOE Tertiary Education Research Fund, Singapore, MOE2020-TRF-043.

Research Advisor for Kritsasith Warin and Wasit Limprasert (2021), Application of deep learning in diagnosis of oral potentially malignant disorders and oral cancer, Grant: Thammasat University Research Grant, TUFT24/2564.

Principal Investigator (2017-2018), A virtual reality system for dental skill training, Grant: Thailand Research Fund, RDG6050029.

Principal Investigator (2018), Development micro-computed tomography carious tooth model used and virtual reality for minimal intervention caries removal, Grant: National Research Council of Thailand (NRCT).

Co-Principal Investigator with Mansuang Wongsapai (2015-2016) Development of Mobile Health-oriented Electronic Oral Health Record for Surveillance System, Ministry of Public Health.

Co-Principal Investigator with Bhornsawan Thanathornwong (2015), Research to develop a personalized wireless splint for detection, monitoring and preventing bruxism, Grant: National Research Council of Thailand (NRCT).

Principal Investigator (2015), Intelligent dental simulation research group, Grant: National research university project, Office of the higher education commission of Thailand.

Principal Investigator (2014), Intelligent dental simulation research group, Grant: National research university project, Office of the higher education commission of Thailand.

Co-Principal Investigator with Bhornsawan Thanathornwong (2014), Computerized models for prediction of work related musculoskeletal disorders among dentists, Grant: National Research Council of Thailand (NRCT).

Co-Principal Investigator with Mansuang Wongsapai (2013-2014), Research and Developing of Mobile Electronic Health Records, Ministry of Public Health.

Co-Principal Investigator with Stanislav Makhanov (2013-present), Biomedical Informatics Excellence Center, Thammasat University.

Principal Investigator (2011-2013), Intelligent dental simulation research group, Grant: National research university project, Office of the higher education commission of Thailand.

Co-Principal Investigator with Bhornsawan Thanathornwong (2012-2013), Wireless sensor system for monitoring and guiding dental postures, Grant: National Research Council of Thailand (NRCT).

Principal Investigator (2011-2012), Development and evaluation of a virtual reality simulator using computed tomography models and dental surgery preoperative planning, Thailand Research Fund, MRG5480204.

Co-Principal Investigator with Bhornsawan Thanathornwong (2012), Research development of postural monitorial device for dentist, Grant: National Research Council of Thailand (NRCT).

Co-Principal Investigator with Mansuang Wongsapai (2011-2012), Research and Developing Dental Decision Supported Health 09 (DDSH09) Program for Decision Supported in Treatment Planning, Control and Assessment of the quality in dental services, Ministry of Public Health.

Principal Investigator (23 May 2007 - 22 November 2008), Intelligent virtual reality haptic device for clinical dentistry, Grant: National Electronics and Computer Technology Center (NECTEC) No. NT-B-22-MS-14-50-04.

Principal Investigator (1 October 2007 - 30 September 2008), Web-based clinical skill training in dentistry, Grant: National Research Council of Thailand (NRCT).

Principal investigator (2000), Asahi University Research Grant, "Skill Acquisition Transfer and Verification".

Principal investigator (1997), Price of Songkla University Research Grant, "Correlation between the Bacterial Culture Result in Root Canal and Postobturation Evaluation".

Other research related activities

2015-present: Editor-in-Chief, Journal of the Thai Medical Informatics Association

2014-present: Editorial board, Mahidol Dental Journal

2014-present: Editorial board, Srinakharinwirot University Dental Journal

2011-present: Editor, Thai Medical Informatics Association Newsletter

2009: Guest editor, Methods of Information in Medicine, Special issue on Intelligent Clinical Training Systems.

2006-present: Reviewer: International Journal of Computer Assisted Radiology and Surgery, Journal of Biomedical Informatics, Journal of Public Health and Development, Journal of Dental Education, Thai Journal of Oral and Maxillofacial Surgery, International Workshop on Artificial Intelligence and NetMedicine (NetMed), Multi-Disciplinary International Workshop on Artificial Intelligence, National Conference on Medical Informatics, Mahidol Dental Journal

2006-present: Program committees: International Workshop on Artificial Intelligence and NetMedicine (NetMed), Multi-Disciplinary International Workshop on Artificial Intelligence, National Conference on Medical Informatics, the 14th International Conference on Intelligent User Interface, the 11th International Conference on Intelligent User Interface

TEACHING

Doctoral Students

Dr. Dennis Dennis (2019)

Dr. Awiruth Klaisiri (2016)

Dr. Wiwiek Poedjiastoeti (2015), Dissertation: Case-based Reasoning for Clinical Decision Support for Diagnosis of Benign Pathological Lesions of the Jaws

Dr. Ade Prijanti (2014), Dissertation: Development of micro-computed tomography caries model for virtual reality training of minimally invasive dentistry

Dr. Mansuang Wongsapai (2013), Dissertation: Health-oriented electronic oral health record: development and evaluation, Best paper award, The 7th National Health Promotion and Environmental Health Congress (2014), Very good thesis award, Thammasat University (2014)

Dr. Bhornsawan Thanathornwong (2012), Dissertation: A system for predicting and preventing work related musculoskeletal disorders among dentists, Gold Medal, Seoul International Invention Fair (2012), Silver Medal, Geneva Inventions (2013)

Dr. Samroeng Inglam (2009), Dissertation: Influence of graft quality and marginal bone loss on implants placed in maxillary grafted sinus: a finite element study, Very good thesis award, Thammasat University (2010)

Courses

2006-present: PhD Thesis Supervisor, Doctor of Dental Science, Faculty of Dentistry, Thammasat University

2006-present: Undergrad research supervisor, Faculty of Dentistry, Thammasat University

2006-present: Master and Doctoral Thesis committee, School of engineering and Technology, Asian Institute of Technology

2015-present: The Summer Education Camp and Education Tour, Asian Institute of Technology

2012-2014: Lecturer, Clinical decision making and clinical decision support systems, Chief Information Officer Program, Ramathibordi Hospital.

2010-2015: Lecturer, Clinical skill development course, Intercountry for Oral Health, Chiang Mai, Thailand

1997-present: Lecturer, pre-clinical instructor in Clinical skill development for dental students, Faculty of Dentistry, Thammasat University

1997-present: Lecturer, pre-clinical and clinical instructor in Endodontics, Faculty of Dentistry, Thammasat University

1997-present: Clinical instructor for 5th and 6th year undergrad students, Faculty of Dentistry, Thammasat University

1992-1997: Lecturer, pre-clinical and clinical instructor in Endodontics, Faculty of Dentistry, Prince of Songkla University

Theses

Siriwan Suebnukarn (2005), "Intelligent Tutoring for Medical Problem-Based Learning". IM-05-01, Doctoral Dissertation, Asian Institute of Technology.

Siriwan Suebnukarn (2001), "E-Collaborative Telemedicine". IM-01-11, Master Thesis, Asian Institute of Technology.

Media Coverage

Television

Morning News, Channel 3 (3 September 2013), "Virtual Reality Dental Simulator".

National Broadcast Television (24 February 2013), "Virtual reality dental simulator and intelligent posture trainer".

Mai Kae Klong, Channel 7 (15 December 2011), "Haptic virtual reality for dental clinical practice".

National Broadcast Television (4 October 2011), "DentSim-VR: Intelligent clinical training system for dentistry".

The Nation Channel (26 June 2005), "Laser Root Canal Treatment".

Magazine

APEX-Dental Learning Hub (UK) (June 2009), "Measuring the learning impact of virtual reality education".

News Paper

ประชาชาติธุรกิจ (23 September 2020), "ธรรมศาสตร์ แจก 80 ทุน เฟ้นหาคนเก่งนวัตกรรม เทคโนโลยี"

สยามรัฐ (4 February 2020), "ธรรมศาสตร์คว้า 'นักวิจัยดีเด่นแห่งชาติ' ปี 63 แนะมหาลัยผนึก 'เอกชน-ตปท.' แก้ปัญหาชาติ"

สยามรัฐ (10 January 2020), "บทบาทมหาวิทยาลัยกับการวิจัยเพื่อแก้ปัญหาชาติ"

The Bangkok Insight (28 October 2018), "เปลี่ยนผ่านมหาวิทยาลัยการเมืองสู่ธรรมศาสตร์แห่งอนาคต"

Thairath (9 September 2018), "มธ.เผย 3 นวัตกรรมเด่นช่วยยกระดับสินค้าเกษตร"

The Bangkok Insight (23 August 2018), "'ตลาดไทเอ็มโอยูธรรมศาสตร์ด้านวิจัยและพัฒนานวัตกรรม"

Bangkok Post (18 January 2006), "A TRAIL-BLAZING COMET-A new collaborative tool is helping train doctors at Thammasat University".

Daily News (15 May 1998), "Clinical Education in Thammasat University School of Dentistry"

ADMINISTRATION

2018-present: Vice Rector for Research and Innovation, Thammasat University

2020: Acting Dean, College of Interdisciplinary Studies, Thammasat University

2015-2016: Vice Dean for Academic Affair, Faculty of Dentistry, Thammasat University

2014-2015: Vice Dean for Informatics, Faculty of Dentistry, Thammasat University

2012-2014: Vice Dean for Research, Faculty of Dentistry, Thammasat University

1998-2000: Assistant Dean for Academic Affairs, Faculty of Dentistry, Thammasat University

1996-1997: Assistant Dean for Academic Affairs, Faculty of Dentistry, Prince of Songkla University

SERVICE

Hospital and Dental School

1997-present: Dental department, Thammasat Chalermprakiart hospital, Thammasat University

1992-1997: Dental hospital, Prince of Songkla University

MEMBERSHIPS in PROFESSIONAL and SCIENTIFIC SOCIETIES

2003-present: Thai Medical Informatics Association

2003-present: International Medical Informatics Association

2008-present: Dental Informatics online community

1992-present: Thai Dental Association

1995-present: Thai Endodontics Association

2008-present: Thai Dental Faculty Consortium

2001-present: International Artificial Intelligence in Education Society

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