พย.วชร. 628/2568
วันที่ 18 พฤศจิกายน 2568

วิทยาลัยเชียงราย

แบบรายงานการเข้าร่วมประชุม / สัมมนา / ฝึกอบรม / ศึกษาดูงาน

ชื่อ-สกุล ผู้ช่วยศาสตราจารย์ ดร.พัชรินทร์ เงินทอง		**ตำแหน่ง :** อาจารย์ประจำ
หน่วยงาน : คณะพยาบาลศาสตร์		
กิจกรรม	O การสัมมนา O การฝึกอบรม O การประชุมเชิงวิชาการ O การประชุมเชิงปฏิบัติการ ⊗ อื่นๆ(ระบุ) การเข้าร่วมเป็น Cohost มหาวิทยาลัยขอนแก่น อ้างอิงแบบคำขอไปเข้าร่วมประชุมสัมมนา/ฝึกอบรม เลขที่ พย.วชร 351/2567	
เรื่อง	Digital Health and Innovation in Nursing and Health Science: Shaping a Healthier Tomorrow and Global Sustainability	
หน่วยงานที่จัด	มหาวิทยาลัยขอนแก่น	
สถานที่จัด	โรงแรมพูลแมนขอนแก่น	
วัน เดือน ปี	5 – 7 พฤศจิกายน 2568	
ค่าใช้จ่าย	**งบประมาณที่เบิก** O ไม่มี ⊗ มี จำนวน..บาท **งบประมาณที่จ่ายจริง** O ไม่มี ⊗มี จำนวน.................................. บาท **งบประมาณที่ คืน/เบิกเพิ่ม** ⊗ ไม่มี O มี จำนวน.................................บาท	
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สรุปสาระสำคัญ

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ประโยชน์ที่ได้รับ

ได้เข้าร่วมเป็นผู้ทรงคุณวุฒิในการตัดสินการนำเสนองานวิจัยและการทำกิจกรรมต่างๆร่วมกับหลายสถาบัน

แนวทางในการนำความรู้ที่ได้รับมาปรับปรุงการทำงาน

หัวข้อการปรับปรุง / พัฒนา	หมายเหตุ
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เอกสารที่แนบมาด้วย

1. สรุปสาระสำคัญการประชุม

ผู้รายงาน

(ผู้ช่วยศาสตราจารย์ ดร.พัชรินทร์ เงินทอง)

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ความคิดเห็นของรองอธิการบดี ○ ฝ่ายบริหาร ○ ฝ่ายวิชาการ ○ ฝ่ายกิจการนักศึกษา

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the 5th International Conference on "Digital Health and Innovation in Nursing and Health Science: Shaping a Healthier Tomorrow and Global Sustainability" (DHIT 2025)

The Development of Modern Healthcare in Thailand

The development of modern healthcare in Thailand began in 1888 with the establishment of a hospital by a US missionary, marking the start of Western science-based medical treatment. This replaced traditional therapies. Key milestones include the founding of the Sri Lanka Medical School in 1892 and the significant support from the Rockefeller Foundation starting in 1917, which helped fully establish modern medical education and public health by 1932.

1. Modern healthcare in Thailand started in 1888 with the establishment of a hospital by a missionary from the U.S., introducing Western science-based medical treatment.
2. This new approach replaced traditional treatments that were based on the balance of earth elements.
3. The Sri Lanka Medical School was established in 1892 by Dr . George Bentley MacFarlane. In 1917, the Rockefeller Foundation was invited by Prince Mahidol to help develop medical science in Thailand. By 1932, modern medical education and public health were fully established, with significant support from the Rockefeller Foundation, which had relocated its efforts from China. In the 1960s and 70s, many Thai medical doctors and nurses were licensed and operating in the U.S.

The Acceleration of Digital Technology in Healthcare

The lecture highlights the rapid acceleration of digital technology, evolving from information technology to the Internet of Things (IoT) and Artificial Intelligence (AI). This transformation, which gained significant momentum in 2007-2008 with the advent of smartphones, is now profoundly strengthening human capabilities in healthcare.

1. Digital power has progressed from information technology to the Internet of Things (IoT) and Artificial Intelligence (AI) at a very fast pace.

2. The real acceleration began in 2007 and 2008 with the introduction of iOS and Android on handheld touchscreen phones. By 2023, AI has evolved into generalizing AI and engineering AI, which increasingly strengthens human capabilities.Technologies like MRI can perform tests, and robots can assist in or perform certain treatments and operations.

Singularity in Healthcare and Its Challenges

The concept of 'Singularity, as defined by Stephen Hawking, refers to the merging of man and machine. This is now becoming a reality in healthcare, presenting numerous challenges that need to be addressed, including ethical considerations, data privacy, and sustainability.

1. We are approaching 'Singularity' in mankind and healthcare, symbolized by a machine hand and a human hand touching, as described by Stephen Hawking.
2. Japan's Society 5.0 serves as a good model for healthcare singularity, integrating the virtual and physical worlds for the betterment of mankind.

Ethical Digital Health, Universal Coverage, and Nursing Education Innovation in Thailand

This lecture covers ethical digital health governance, Thailand's universal coverage innovations, and nursing education transformation. It addresses AI ethics, digital divide, data colonialism, and global frameworks (WHO, UN). Thailand's 30/35 Baht policy, Health Wallet, kiosks, telemedicine growth, local medical devices, and inclusion of advanced technologies illustrate equitable access goals. Khon Kaen University's roadmap integrates digital tools, simulation, and global partnerships to develop "Smart Nurses. " Emphasis is on trust, transparency, accountability, inclusion, workforce readiness, and sustainable, evidence-based ecosystems.

1. Innovation and Global Health Challenges: Technology-driven solutions (AI, data science, digital connectivity) can reshape health systems and must be safe, ethical, and fair .

2. Global digital divide: Over 3.6 billion people lack internet access, causing exclusion from digital health benefits.

3. Data colonialism: Data from low-income countries is often used without local benefit, creating inequity.

4. Bias and governance gaps: AI trained on niche industry data can produce unfair outcomes; weak governance reduces trust and accountability.

5. Workforce readiness: Health workers fear replacement; they need training and support to adopt technology.

6. Global priorities: Ethical and accountable governance; equity and inclusion; sustainable and evidence-based ecosystems.7. WHO Global Strategy on Digital Health: Emphasizes trust, transparency, and accountability in technology.

8. UN Pact for the Future: Calls for a fair , inclusive digital and AI future that leaves no one behind.

9. PMAIC 2025 consensus: Urges sustainable, energy-driven, people-centered systems via state aid, USAID, and SDG.

10. Thailand's policy goals: Promote local innovation, digital equity, and ethical technology to make healthcare accessible without financial bankruptcy.

Global Digital Health Ethics and Governance

A framework underscoring that digital health technologies (AI, data science, connectivity) must be implemented with trust, transparency, accountability, equity, and inclusion. References include WHO Global Strategy on Digital Health, UN Pact for the Future, and PMAIC 2025 consensus promoting sustainable, energy-driven, people-centered systems via state aid, USAID, and SDG. Thailand's goals focus on local innovation, digital equity, ethical tech to ensure access without financial bankruptcy.

Keypoints

1. Trust, transparency, and accountability are essential for digital health.
2. Equity and inclusion must be ensured to avoid deepening inequality.
3. Sustainable, evidence-based ecosystems are needed.
4. Global guidance: WHO strategy, UN Pact for the Future, PMAIC 2025.
5. National framing: Health security viewed as investment to grow economy.

Thailand's Service Innovation: 30 Baht Treatment Anywhere

A flagship policy expanding access to care anywhere, reducing overcrowding, strengthening primary care, ensuring timely and accurate provider payments. One-year outcomes include convenience (care closer to home, beyond office hours), waiting time under 30 minutes, total visit time cut by more than half, and approximately 160 Baht saved per patient per visit.

Keypoints

1. Care access expanded geographically and temporally (beyond office hours).
2. Waiting time reduced to under 30 minutes.
3. Total visiting time reduced by more than half.
4. Savings of about 160 Baht per visit for patients.
5. Reduces hospital crowding and burdens on families.

Digital Innovation: Health Wallet (Krung Thai Bank partnership) A mobile application (within the Bao Tang app) enabling benefit access, appointments, telemedicine, report tracking. 30 million users, with higher engagement among younger users. Reduces financial burden for preventive services nationwide; in Bangkok average cost dropped from about 300 baht to 200 baht.

Keypoints

1. 30 million users indicate strong adoption.
2. Younger users show higher engagement, reflecting growing digital literacy.
3. Preventive service costs lowered; Bangkok average from about 300 baht to

200 baht.

4. Supports appointments, telemedicine, and record tracking.

Community Access: Health Station (Kiosk, Toowong Yai)

Urban-access kiosks offering health checks, telemedicine, and medicine delivery via partnership with Touch Technology. Within a month, 260 users and 219 received medication, demonstrating effective access.

Keypoints

1. Rapid uptake in first month (260 users).
2. High conversion to medication delivery (219).
3. Brings care closer to urban communities.

Telemedicine Scale-Up

Telemedicine expands access and reduces hospital crowding: home consultations, medication delivery, and referrals as needed. Usage increased from 33,000 to 79,000 in one year .

Keypoints

1. Increase from 33,000 to 79,000 indicates strong adoption.
2. Enables home-based consultations and medication.
3. Supports referrals to higher levels of care.

Thai-Made Medical Innovation under UCS Single Plan

Promotion of Thai-made devices to ensure access and stimulate the economy. Five devices have generated 300 and 37 million baht in government savings and benefited over 100,000 patients. Devices mentioned include dynamic positive fit; dental E-line; oscillating back; a cellular courtesy proxy or AP proxy; titanium strong plate; titanium back; lymphoclastic diagnosis.

Keypoints

1. Government savings cited as 300 and 37 million baht.Over 100,000 patients benefited.
2. Supports local industry and economic stimulation.
3. Ensures access to essential devices under UCS.

UCS Access to Cutting-Edge Technology

Inclusion of AI chest X-ray and proton beam therapy in the UCS benefits ensures equal rights for patients to access advanced technologies when needed, with specialized expertise and ethical governance.

Keypoints

1. AI chest X-ray included in benefits.
2. Proton beam therapy included.
3. Requires specialized expertise and ethical confidence.
4. Ensures fairness and safety in access.

30 Baht Program Coverage Clarification (Q&A)

Keypoints

1. One-time payment model covers most necessary treatments.
2. Exceptions: cosmetic surgery (UD surgery example); experimental treatments.
3. Designed as a health guarantee program equivalent to a one-time fee.

Health Wallet Nationwide Access (Q&A)

Keypoints

1. Nationwide availability.
2. Female 30–50 cancer self-check program with free registration and self- testing.
3. Results recorded; retest every five years.

Nursing Education Transformation at Khon Kaen University

A comprehensive roadmap to create KKU Smart Nurses by integrating digital technologies into curricula, strengthening infrastructure and global partnerships, and focusing on outcome-based education to build competencies for a rapidly changing healthcare environment.

Keypoints

1. Faculty of Nursing established in 1971; first in Northeastern Thailand.
2. Expanded from Bachelor to Master and Doctoral programs.
3. Post-COVID disruptions necessitate flexible, adaptive skills.
4. Smart Nurses: blend empathy, critical thinking, advocacy with digital
5. proficiency.
6. Student identity focus: knowledge, leadership, creativity, delight, diligence,
7. nursing service.
8. Strategic management: planning with measurable data; infrastructure
9. development (LMS); alliances; cybersecurity; data policy.
10. OBE focus: comprehensive knowledge, tech-enhanced efficiency,
11. accessibility to innovation.
12. Curricular restructuring: digital tech from first year; hybrid models;
13. workshops; structured simulation.
14. Technologies: VR, AR, AI/ML, simulation, digital health.
15. Infrastructure: Nursing Learning Center (beginning in 2022); labs; high-
16. fidelity rooms; simulation lab; four specialist units (gerontological,
17. midwifery, mental health, psychotic).
18. Simulation-based learning: AI-supported systems; life-size progressive
19. active learning.
20. AI-powered virtual simulation (NUKKU's body); Metaverse model
21. development.
22. Faculty support initiatives: upskill/reskill; simulation training; funds; visits;
23. contests; technician courses.
24. Student activities: M.U. Sink Club; collaborations with Chiang Mai University
25. and Prince Songkla University.

26. Global partnerships: MOUs with more than 90 international institutes.
27. Global skills: virtual simulation contexts for decision-making and literacy.
28. Achievement: A.M. Health Hackathon 2025 Best Innovation Project.
29. Ethical reminder: human hearts and lives central; less than 3% of patients is
30. essential note as recorded.
31. Future plans: dual-DP program; strengthen PhD in healthcare innovation;
32. grow PhD digital skills; smart learning environment; life-long learning.
33. Invitation: Doctor of Philosophy Program in Nursing and Healthcare
34. Innovation, International Program at Khon Kaen University.

Future of Nursing in Digital Health — Telehealth, mHealth, Hybrid Care, and Personalized Symptom Management (2014–2025)

Professor Nanda's lecture examines the future of nursing in the digital health era, prioritizing telehealth and mHealth (AI will be covered separately). It traces digital health from early electronic medical records in the 1960s, through internet-driven adoption in the 1990s, to COVID-19's acceleration in 2020. Core definitions and roles of telehealth and mHealth are clarified, underscoring that technology augments not replaces—nursing care. The session details a decade-long research program (2014–2025) creating personalized, digitally supported symptom management using wearables, ecological momentary assessment, virtual training, and a combined home exercise plus auricular acupressure approach. It includes feasibility pilots, randomized proof-of-concept trials, biomarker collection (blood and sweat patch), patient feedback loops, and weekly personalized recommendations. Practical challenges span cost, time, team expertise, rapid tech change, digital health literacy, equity, and data security. Trends projected for 2024–2030 include hybrid care, remote monitoring, smart sensors, digital therapeutics, precision health integration, virtual nursing teams, value-driven models, AI support, ethics and governance, and policy/infrastructure. Nurses are urged to lead ethical, human-centered digital care; co-design across disciplines; promote equity; uphold ethics; and evaluate impact. The talk concludes by affirming nursing's irreplaceable human connection and expressing gratitude to funding and implementation partners.

Social Robotics in Elderly Care and Digital Health Literacy Evidence, Co-Design, and AI

This combined session addressed the converging challenges of super-age societies, the role of social robotics and digital technologies in augmenting human care, and the essential foundations of health literacy in the digital age. Professor Dr . Wendy Moyles presented evidence and practice insights from Griffith University's Social Robotics Laboratory, focusing on co-design with older adults and caregivers, feasibility and affordability, and clinical outcomes—especially for people with dementia. She highlighted demographic pressures (with UN projections to 2054), care system strain, and the design and deployment of social robots for communication, engagement, pain distraction, exercise motivation, companionship, and telepresence, including lessons from robots like PARO, AIBO, PEPPER, and Telenoid. A gold-standard cluster randomized controlled trial demonstrated that PARO can improve engagement, pleasure, and reduce agitation versus plush toy and usual care, with secondary effects on family involvement and physical activity patterns. Moyles emphasized consumer involvement, nurse participation, and sustained funding and collaboration to achieve scalable, effective solutions. Professor Dr .Donald Nadim built on this by framing health literacy as an interaction between personal skills and environmental demands, tracing its evolution over four decades and applying it to digital contexts, including eHealth, mHealth, apps, social media, and AI (chatbots and large language models). He outlined benefits (personalization, readability, multilingual access at scale) and risks (bias, misinformation, inequities, overreliance on individuals), advocating for co-designed, accessible information environments and critical digital skills ("Trust It or Trash It": Who said it? When? Why?). Nadim provided actionable strategies to improve access, understandability, and actionability of health information, tailored to culture, language, and rural/urban contexts, and called for stronger evaluation, ethics, and regulation. The session underscored that technology's promise in elderly care depends on parallel workforce development, training, and equity-focused health communication. Content creation date: 2025-11-05.

Translational Digital Mental Health, fNIRS Biomarkers, and Objective ADHD Assessment in Asia

This session/lecture series centers on translating digital mental health innovations and neurobiomarkers into clinical practice to improve diagnosis, treatment monitoring, and outcomes across older adults and psychiatric populations, with a focus on Asia (Hong Kong, Singapore). Professor Dr . Sally Chan presents two completed translational projects from the Translational Research Center for Digital Mental Health at Tung Wah College: a large-scale Digital Inclusion program pairing 1,065 older adults with 157 trained student "digital buddies" via an evidence-based app and structured sessions to enhance digital and mental health literacy; and an immersive virtual reality (VR) program for frail older adults in long-term care, demonstrating selective improvements in well-being, depressive symptoms, and quality of life. Dr . Cyrus introduces functional near-infrared spectroscopy (fNIRS) as a portable, tolerable neuroimaging biomarker to aid psychiatric diagnosis, differentiation, severity assessment, treatment monitoring, and integration with multimodal biomarkers and machine learning. Professor Roger Hoang extends the clinical translation by demonstrating a multimodal, objective assessment workflow for adult ADHD—combining portable infrared brain scanning during verbal fluency, eye tracker anti-saccade tasks, and computerized attention tests—achieving up to 84% sensitivity/specificity and actionable cutoffs (e.g., ~69.5 integral threshold), while emphasizing complementarity with DSM-5 clinical interviews, scalability, and cost-effectiveness. Collectively, the session underscores the urgent need for validated digital interventions and biomarkers to address workforce shortages, diagnostic heterogeneity, and personalization of care; highlights community-based dissemination and commercialization pathways; and frames digital tools as stigma- reducing, patient-empowering complements to clinician expertise. A discussion/Q&A segment is planned/held addressing costs, implementation, and ethical considerations.