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Evaluation of the First Implementation of Virtual Reality Program in Clinical and Community Pharmacy Courses: A Single Centre Experience

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ABSTRACT

Introduction:

Due to the limited capacity of stakeholders to facilitate experiential learning for bachelor's students, an effort has been made by the Pharmacy Faculty of the University of Surabaya by implementing virtual reality technology (VRT) for the very first time. Concerns about the attainment of fundamental aspects of experiential learning, particularly the sense of immersion and situated learning, have been raised in our institution.

Objectives:

This study aims to describe the students' perception towards the fundamental aspects of VRT implementation.

Methods:

Nine cases in VRT were implemented in the integrated courses of respiratory and infection disorder (IC, third year course), responding to symptoms (RS, third year course), and prescription services (PS, fourth year course). Students could only access the VRT at a predetermined time. A questionnaire consisting of 16 closed-ended questions (with 7-Likert scale response) and two open-ended questions was distributed and verbal consents were obtained before students completed the questionnaire. The closed-ended questions were distributed in eight domains, including ease to use, enjoyment, general attitude, intention to use in the future, sense of immersion, experiential learning, situated learning, and constructivism.

Results:

A total of 395 responses were received (response rate 56.27%). The Cronbach's Alpha for all domains ranged from 0.836-0.941. Not more than 5% of total responses indicated disagreement (Likert scale <4) towards all questions. Moreover, no domains with average score below 5 was found. Among the three groups of cohorts, the lowest score in all domains was found in PS group, and this could be related to frequencies of using VRT. Internet connection was acknowledged as the main limitation to implement VRT.

Conclusions:

The VRT was well received by students without compromising the attainment of the fundamental aspects of experiential learning. Efforts to improve the speed of internet connection should be made to further enhance an optimal VRT implementation.

KEYWORDS: Experiential learning; Pharmacy education; Sense of Immersion; Situated Learning; Virtual Reality



Mahidol University
Faculty of Pharmacy

US-Thai
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Abstract Book

The 4th ASEAN PharmNET 2024 & the 2024 US-Thai Pharmacy Consortium Conference: The 30th Anniversary Commemoration

*Global Collaboration in Pharmacy Education, Practice & Research:
Bridging Borders for Health Innovation*



June 12-14, 2024



Eastin Grand Hotel Phayathai

Welcome Message

from

**President of Pharmacy Education Consortium
of Thailand (PECT)**

**Dean of the Faculty of Pharmacy,
Mahidol University, Thailand**



On behalf of Faculty of Pharmacy Mahidol University and Pharmacy Education Consortium of Thailand (PECT), I, Assoc. Prof. Surakit Nathisuwan, extend a heartfelt welcome to the 4th ASEAN PharmNET and the 2024 US-Thai Pharmacy Consortium Conference. This combined event celebrates not only the 30th Anniversary of the US-Thai Pharmacy Consortium but also the ongoing commitment to fostering global collaboration in pharmacy education, practice, and research.

Following the challenges of the recent pandemic, this gathering holds a special significance. It's especially gratifying to see us come together once more. This conference serves as a powerful testament to the enduring spirit of collaboration that transcends borders.

For three decades, the US-Thai Pharmacy Consortium has nurtured a dynamic exchange of knowledge and best practices between our two nations. Similarly, ASEAN PharmNET has facilitated groundbreaking research and knowledge dissemination across Southeast Asia. This combined conference signifies a fantastic opportunity to leverage the collective expertise of our diverse communities.

The theme, "Global Collaboration in Pharmacy Education, Practice & Research: Bridging Borders for Health Innovation," perfectly captures the essence of this gathering. Over the next few days, we'll delve into critical topics, share cutting-edge research, and forge connections that can propel our profession forward.

The program features renowned speakers from around the globe, offering a rich tapestry of perspectives on our shared goals. But this conference is much more than just a series of lectures. It's a space for vibrant discussions, exchange of ideas, and the building of lasting collaborations that will undoubtedly contribute to advancements in global health.

We encourage you to actively participate, network with your peers, and explore the exciting possibilities that emerge when passionate minds from around the world come together.

Welcome once again, and best wishes for a productive and inspiring conference

Assoc. Prof. Surakit Nathisuwan, PharmD
Dean, Faculty of Pharmacy, Mahidol University
President of Pharmacy Education Consortium of Thailand

Welcome Message



June, 2024



On behalf of the Board of Directors of the US-Thai Pharmacy Consortium, the member US and Thai Schools, Colleges and Faculties of Pharmacy, I bring you the warmest of greetings and welcome to this historic combined meeting of the US-Thai Pharmacy Consortium and ASEAN PharmNet 2024! This meeting marks the 30th Anniversary of the US-Thai Pharmacy Consortium and the 4th meeting of ASEAN PharmNet. Your presence and participation is making history! The collaboration between American and Thai pharmacy schools has resulted in remarkable changes in pharmacy education, practice and research. This is mostly due to the hard work, dedication and creativity of our Thai colleagues, and the American partners have gained tremendously from our 30 years of collaboration. The work of the ASEAN PharmNet members is equally remarkable, supporting cutting edge research and dissemination of new knowledge throughout Southeast Asia and the world.

We are especially excited about the launch of the US-ASEAN Pharmacy Consortium at this meeting. Discussion about forming such a Consortium began in 2016, and we are thrilled that we will have a formal mechanism for pharmacy educators, practitioners and researchers from the US and 10 ASEAN countries to work together to advance our profession and improve the lives of our patients.

The joining of the Consortium and ASEAN PharmNet conferences will allow us to share best practices in pharmacy education, practice and research. As you review the program, I'm sure you will agree that we have a program of highly relevant topics presented by world class speakers from Thailand, the US and other ASEAN countries. In addition to a great educational program and over 250 scientific posters, the meeting will allow ample time for networking, to share ideas, meet new colleagues, renew friendships and establish new relationships and collaborations.

While many people have taken part in planning this conference, I want to give special recognition to the tireless efforts of Dr. Jennis Meanwatthana and Dean Surakit Nathisuwan from Mahidol University.

Welcome to this historic conference, and thank you for your participation! I look forward to meeting you.

A handwritten signature in blue ink, appearing to read 'Michael Katz'.

Michael Katz, PharmD

US-Thai Pharmacy Consortium Co-Chair

Professor and Director of International Programs.

R. Ken Coit University of Arizona College of Pharmacy

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Scientific Program



The 4th ASEAN PharmNET 2024

(International Conference on Pharmacy Education and Research Network of ASEAN)

**Held in Conjunction with
The US-THAI Pharmacy Consortium 2024:
The 30th Anniversary Commemoration**

Theme:

**Global Collaboration in Pharmacy Education, Practice and Research:
Bridging Borders for Health Innovation**

**Eastin Grand Phayathai Hotel
Bangkok, Thailand
June 12 – 14, 2024**

Conference Program: June 12, 2024

DAY 1: Wednesday (June 12, 2024)	
08.00 – 09.00	Registration
09.00 – 09.45	Opening Ceremony (Phayathai Grand Ballroom 1-3) <ul style="list-style-type: none"> • Cultural Performance & ASEAN Flag Parade & Sing Along • Commemoration of the 30th Anniversary of the US-Thai Pharmacy Consortium Welcome Opening Remark <ul style="list-style-type: none"> • Assoc.Prof.Dr. Chutamane Suthisisang, Ph.D. Founder of ASEAN Pharmnet, Acting for Director of ASEAN Institute for Health Development Former Dean, Faculty of Pharmacy, Mahidol University, Thailand • Prof. Michael Katz, Pharm.D. Director of International Programs, The R. Ken Coit College of Pharmacy, University of Arizona, USA Chairman, The US-Thai Pharmacy Consortium • Assoc.Prof. Surakit Nathisuwan, Pharm.D. President of Pharmacy Education Consortium of Thailand (PECT) Dean, Faculty of Pharmacy, Mahidol University, Thailand • Group Photos
09.45 – 10.15	Plenary Talk 1 Advancement of Pharmacy Education Through International Collaboration: US-Thai Pharmacy Consortium <ul style="list-style-type: none"> • Prof. Michael Katz, Pharm.D. Director of International Programs, the R. Ken Coit College of Pharmacy, University of Arizona, USA Chairman, The US-Thai Pharmacy Consortium • Assoc.Prof. Surakit Nathisuwan, Pharm.D. President of Pharmacy Education Consortium of Thailand (PECT) Dean, Faculty of Pharmacy, Mahidol University, Thailand
10.15 – 10.30	Coffee break & Exhibition (Pre-function area)

10.30 – 11.00	Plenary Talk 2 Fostering collaborative learning through integrated clinical services and pharmacy education <ul style="list-style-type: none">Prof. Edith A. Nutescu, Pharm.D., MS CTS, FCCP College of Pharmacy, University of Illinois Chicago, USA					
11.00 – 11.30	Plenary Talk 3 Trends & Application of Disruptive Technology on Pharmaceutical Science Research <ul style="list-style-type: none">Prof.Dr. R. Kip Guy, Ph.D. Dean, College of Pharmacy, University of Kentucky, USA					
11.30 – 12.00	Plenary Talk 4 Advancement of Pharmacy Practice: Global View <ul style="list-style-type: none">Prof. Alan Lau, Pharm.D. Director of International Clinical Pharmacy Education, College of Pharmacy, University of Illinois Chicago, USA					
12.00 – 13.00	Lunch break					
Concurrent session						
13.00 – 15.00	Symposium 1: Pharmacy Education and Practice (Auditorium)	Symposium 2: Biopharmaceutical Sciences and Pharmaceutical Biotechnology & Pharmacology, Toxicology, and Physiology (Phayathai Grand Ballroom 1)	Symposium 3: Pharmaceutical Technology and Drug Delivery (Phayathai Grand Ballroom 2)	Symposium 4: Pharmaceutical Chemistry (Ari)	Symposium 5: Phytopharmaceuticals and Nutraceuticals (Sena)	Symposium 6: Clinical Pharmacy and Personalized Medicine & Social Administrative Pharmacy (Phayathai Grand Ballroom 3)

	<p>Chair: Dr. Wannisa Dongtai Ubonratchathani University, Thailand Co-chair: Dr. Renukha Sellappans Taylor's University, Malaysia</p>	<p>Chair: Asst.Prof. Czarina Dominique R. Delos Santos University of the Philippines Manila, Philippines Co-chair: Asst.Prof.Dr. Arnatchai Maiuthed Mahidol University, Thailand</p>	<p>Chair: Prof.Dr. Yahdiana Harahap Universitas Indonesia, Indonesia Co-chair: Assoc.Prof.Dr.Jiraphong Suksiriworapong Mahidol University, Thailand</p>	<p>Chair: Assist.Prof.Dr. Satsawat Visansirikul Mahidol University, Thailand Co-chair: Dr. Chaipaywat Aonsri Mahidol University, Thailand</p>	<p>Chair: Prof.Dr. Triana Hertiani University Gadjah Mada, Indonesia Co-chair: Dr. Watchara Arthan Mahidol University, Thailand</p>	<p>Chair: Assoc.Prof.Dr. Francis R. Capule University of the Philippines Manila, Philippines Co-chair: Dr. Mohd Shahezwan Abd Wahab Universiti Teknologi MARA, Malaysia</p>
	<p>13.00 – 13.30 ▪ Quality Assurance Measures in Pharmacy Education for ASEAN Assoc.Prof. Surakit Nathisuwan, Pharm.D. Faculty of Pharmacy, Mahidol University, Thailand Prof. Dr. Apt. Daryono Hadi Tjahjono Asian Association of Schools of Pharmacy, Indonesia</p>	<p>13.00 – 13.30 ▪ Challenges and Recent Progress in Drug Discovery and Development for Tropical Diseases: The Role of Pharmacology Prof.Dr. Kesara Na-Bangchang President, Pharmacological and Therapeutic Societies of Thailand, Thailand</p>	<p>13.00 – 13.30 ▪ Innovations in Pharmaceutical Formulation Design for Aging Population Prof.Dr. Pornsak Sriamornsak Dean, Silpakorn University, Thailand</p>	<p>13.00 – 13.30 ▪ Exploring the Therapeutic Potential of Plant-Derived Polyphenols using Molecular Docking and Network Analysis Assoc.Prof.Dr. Pornchai Rojsitthisak Chulalongkorn University, Thailand</p>	<p>13.00 – 13.30 ▪ <i>Eurycoma Longifolia</i> and <i>Eurycoma Harmandiana</i>: Phytochemical Contents, Biological Activities Evaluation and <i>in vitro</i> Culture Prof.Dr. Waraporn Putalun Khon Kaen University, Thailand</p>	<p>13.00 – 13.30 ▪ Empowering Pharmacists: The Evolving Role as Vaccinators in Thailand Asst.Prof.Dr. Supatat Chumnumwat Mahidol University, Thailand</p>

<p>13.30 – 14.30</p> <ul style="list-style-type: none"> ▪ Tips & Best Practices in Designing New Curriculum: Experience from US and Thailand Prof.Dr. Paul W. Jungnickel, R.Ph. Auburn University, USA Asst. Prof. Thitima DOUNGNGERN Faculty of Pharmaceutical Science, Prince of Songkla University, Thailand <p>14.30 – 15.00</p> <ul style="list-style-type: none"> ▪ Implementation of Interprofessional Education in Pharmacy Curriculum: 	<p>13.30 – 14.00</p> <ul style="list-style-type: none"> ▪ Network Pharmacology and Cell-Based Assessments for Potential Cancer Targets Assoc.Prof.Dr. Laddawan Senggunprai Khon Kaen University, Thailand <p>14.00 – 14.30</p> <ul style="list-style-type: none"> ▪ Emerging Role of CAMSAP Family Proteins on Lung Cancer Metastasis Assoc.Prof.Dr. Varisa Pongrakhananon Chulalongkorn University, Thailand <p>14.30 – 15.00</p> <ul style="list-style-type: none"> ▪ Toxic or Tonic? Understanding the Pharmacological Actions of Emerging 	<p>13.30 – 14.00</p> <ul style="list-style-type: none"> ▪ Tailoring Hydroxyapatite Scaffolds for Dual Action: Bone Regeneration and Sustained Delivery of Antibiotics Asst.Prof.Dr. Amaraporn Wongrakpanich Mahidol University, Thailand <p>14.00 – 14.30</p> <ul style="list-style-type: none"> ▪ Development of pH-sensitive Zerumbone-encapsulated Liposomes for Lung Fibrosis Assoc.Prof.Dr. Foo Jhi Biau Taylor's University, Malaysia <p>14.30 – 15.00</p> <p>Poster Presentation</p>	<p>13.30 – 14.00</p> <ul style="list-style-type: none"> ▪ Computational Drug Discovery and Development of Novel Tubulin and Phosphatidylcholine-Specific Phospholipase C Inhibitors as Potential Anticancer Drug Candidates Asst.Prof.Dr. Chatchakorn Eurtivong Mahidol University, Thailand <p>14.00 – 15.00</p> <p>Poster Presentation</p>	<p>13.30 – 14.00</p> <ul style="list-style-type: none"> ▪ Hmong-Mien Cultural Uses of Exotic Medicinal Plants Asst.Prof.Dr. Methee Phumthum Mahidol University, Thailand <p>14.00 – 15.00</p> <p>Poster Presentation</p>	<p>13.30 – 14.00</p> <ul style="list-style-type: none"> ▪ Roles of Pharmacist in the Emergency Department Prof.Dr. Dang Nguyen-Doan-Trang University of Medicine and Pharmacy at Ho Chi Minh City, Vietnam <p>14.00 – 15.00</p> <p>Oral Presentation</p>
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	▪ Experience Sharing Prof.Dr. Paul W. Jungnickel, R.Ph. Auburn University, USA	New Psychoactive Substances Prof.Dr. Norazrina Azmi Universiti Kebangsaan, Malaysia				
15.00 – 15.15	Coffee break & Exhibition (Pre-function area)					
15.15 – 17.30	Poster Presentation & Networking (Phayathai Grand Ballroom 4)					

Conference Program: June 13, 2024

DAY 2: Thursday (June 13, 2024)		
08.30 – 09.00	Registration	
09.00 – 09.45	Country Status & Progress Report on Pharmacy Education & Practice (Phayathai Grand Ballroom 1-2) Moderator: Assist.Prof. Jennis Meanwatthana Faculty of Pharmacy, Mahidol University Pharmacy Education and Pharmacy Practice at UBD: Brunei Experience Dr. Nurolaini Pg Haji Muhd Kifli PAPRSB Institute of Health Sciences, Universiti Brunei Darussalam, Brunei	Theme: Drug Discovery and Development (Phayathai Grand Ballroom 3-4) Moderator: Assist.Prof.Dr. Satsawat Visansirikul Faculty of Pharmacy, Mahidol University Nanoparticles for Enhanced siRNA Delivery in Cancer Models Prof.Dr. Shirui Mao, Ph.D. Shenyang Pharmaceutical University, China
09.45 – 10.15	Transforming Pharmacy Education in the Philippines: A Strategic Framework for Roadmap Development Assoc.Prof.Dr. Margarita M. Gutierrez, Ph.D. College of Pharmacy, University of the Philippines Manila, The Philippines	The Key to Success in the Cannabinoid Drug Development Journey Prof.Dr. Hitoshi Sato, Ph.D. School of Pharmacy, Showa University, Japan
10.15 – 10.30	Coffee break & Exhibition (Pre-function area)	
10.30 – 11.15	Moderator: Dr. Thongtham Suksawat Faculty of Pharmacy, Mahidol University Cambodia, Myanmar, Laos PDR Dr. Chea Sin Faculty of Pharmacy, University of Puthisastra, Cambodia Prof. Dr. Thein May Saw University of Pharmacy, Mandalay, Myanmar	Navigating Pharmaceutical Impurity: Regulation Framework and Analytical Strategies Prof.Dr. Leena Suntornsuk Faculty of Pharmacy, Mahidol University

	Dr. Phoutsathaphone Sibounheuang Faculty of Pharmacy, University of health Sciences, Lao PDR					
11.15 – 12.00	Malaysia, Indonesia, Vietnam, Singapore, and Thailand Prof. Dr. Mohd Makmor Bakry Faculty of Pharmacy, Universiti Kebangsaan Malaysia, Malaysia Prof.Dr. Yandi Sukri The Association of Indonesian Pharmacy Higher Education, Indonesia Prof.Dr. Dinh Thi Thanh Hai Hanoi University of Pharmacy, Vietnam Prof.Dr. Paul John Gallaher Department of Pharmacy and Pharmaceutical Sciences, National University of Singapore, Singapore Assoc.Prof. Surakit Nathisuwan, Pharm.D. Faculty of Pharmacy, Mahidol University, Thailand		Exploring Metabolic Polymorphism of Antioxidant Phytochemicals in Plants Prof.Dr. Takayuki Tohge, Ph.D. Nara Institute of Science and Technology, Japan			
12.00 – 13.00	Lunch break					
Concurrent session						
13.00 – 15.00	Symposium 1: Pharmacy Education and Practice (Auditorium)	Symposium 2: Clinical Pharmacy and Personalized Medicine & Social Administrative Pharmacy (Phayathai Grand Ballroom 4)	Symposium 3: Phytopharmaceuticals and Nutraceuticals (Phayathai Grand Ballroom 3)	Symposium 4: Pharmaceutical Technology and Drug Delivery (Ari)	Symposium 5: Biopharmaceutical Sciences and Pharmaceutical Biotechnology & Pharmacology, Toxicology, and Physiology (Phayathai Grand Ballroom 2)	Symposium 6: Pharmaceutical Chemistry (Phayathai Grand Ballroom 1)

	<p>Chair: Prof. Gary M. Oderda University of Utah, USA Co-chair: Prof. Dr. Li-Jiuan (Rita) Shen Associate Dean for International Affairs, College of Medicine, National Taiwan University, Taiwan</p>	<p>Chair: Prof. Dang Nguyen-Doan-Trang University of Medicine and Pharmacy at Ho Chi Minh City, Vietnam Co-chair: Assoc.Prof.Dr. Montarat Thavorncharoensap Mahidol University, Thailand</p>	<p>Chair: Assist.Prof.Dr. Somnuk Bunsupa Mahidol University, Thailand Co-chair: Dr. Nor Khaizan Anuar Universiti Teknologi MARA, Malaysia</p>	<p>Chair: Assoc.Prof.Dr. Foo Jhi Biau, Taylor's University, Malaysia Co-chair: Assoc.Prof.Dr. Waree Limwikrant Mahidol University, Thailand</p>	<p>Chair: Assoc.Prof.Dr. Wanvisa Udomsinprasert Mahidol University, Thailand Co-chair: Dr. Teerawit Audshasai Mahidol University, Thailand</p>	<p>Chair: Assoc.Prof.Dr. Chutima Phechkrajang Mahidol University, Thailand Co-chair: Dr. Salinthip Jarusintanakorn Mahidol University, Thailand</p>
	<p>13.00 – 13.30 ▪ Tips & Best Practices in Student Assessment: Experience Sharing Prof.Dr. Paul W. Jungnickel, R.Ph. Auburn University, USA</p>	<p>13.00 – 13.30 ▪ Application of Health Technology Assessment on Policy Decision Making for the Development of the Universal Health Coverage: Lesson Learnt from Thailand Assoc Prof.Dr. Usa Chaikledkaew Faculty of Pharmacy, Mahidol University, Thailand</p>	<p>13.00 – 13.30 ▪ Projecting Plantago Major as Phytopharmaceuticals for Diabetic Wound Prof.Dr. Triana Hertiani Universitas Gadjah Mada, Indonesia</p>	<p>13.00 – 13.30 ▪ Potential of cannabidiol as Nasal and Pulmonary Delivery Systems Prof.Dr. Teerapol Srichana Prince of Songkla University, Thailand</p>	<p>13.00 – 13.30 ▪ Pharmacogenomics of Drug Induced Liver Injury Assoc.Prof.Dr. Jiraphun Jittikoon Mahidol University, Thailand</p>	<p>13.00 – 13.30 ▪ Tailored Paper-based Devices through Surface Modification for Point-of-Need Applications Assoc.Prof.Dr. Nantana Nuchtavorn Mahidol University, Thailand</p>

	<p>13.30 – 14.00</p> <ul style="list-style-type: none"> Leadership essentials to Ensure Meaningful changes Prof. Donald E. Letendre, Dean, College of Pharmacy, University of Iowa, USA 	<p>13.30 – 14.00</p> <ul style="list-style-type: none"> Social Administrative Pharmacy and Pharmaconomics in Viet Nam: Development and Future Challenges Dr. Pham Nu Hanh Van, Hanoi University of Pharmacy, Vietnam 	<p>13.30 – 14.00</p> <ul style="list-style-type: none"> Black Rice (<i>Oryza Sativa</i> L.) and its Anthocyanins: Mechanisms, Food Applications, and Clinical Insights for Postprandial Glycemic and Lipid Regulation Prof.Dr. Sirichai Adisakwattana Chulalongkorn University, Thailand 	<p>13.30 – 14.00</p> <ul style="list-style-type: none"> Bioequivalence Studies to Ensure the Quality of Generic Product Prof.Dr. Yahdiana Harahap Universitas Indonesia, Indonesia 	<p>13.30 – 14.00</p> <ul style="list-style-type: none"> Insight Out: The Gut Microbiome Impact on Disease and Wellness Asst.Prof.Dr. Pagakrong Wanapaisan Mahidol University, Thailand 	<p>13.30 – 14.00</p> <ul style="list-style-type: none"> Transitioning From Local Wisdom to Pioneering Green Chemical/ Pharmaceutical Analysis Assoc.Prof.Dr. Chalermpong Saenjum Chiang Mai University, Thailand
	<p>14.00 – 15.00</p> <ul style="list-style-type: none"> Strategies & Best Practices in Preceptor Development: A Tale of Two Continents US and Thailand Prof. Monica L. Miller, Pharm.D. Purdue University, USA Assoc.Prof. Weerachai Chaijamorn, BCP, FACP Chulalongkorn University, Thailand 	<p>14.00 – 15.00</p> <p>Oral Presentation</p>	<p>14.00 – 15.00</p> <p>Oral Presentation</p>	<p>14.00 – 15.00</p> <p>Oral Presentation</p>	<p>14.00 – 14.30</p> <ul style="list-style-type: none"> Study on Bioactive Secondary Metabolites from Marine-derived Fungi Assoc.Prof.Dr. Elin Julianti Bandung Institute of Technology, Indonesia <p>14.30 – 15.00</p> <p>Oral Presentation</p>	<p>14.00 – 15.00</p> <p>Oral Presentation</p>

15.00 – 15.15	Coffee break & Exhibition (Pre-function area)
15.15 – 16.30	Oral Presentation (Phayathai Grand Ballroom 1-4, Sena, Ari, Mo Chit)
18.30 – 20.30	Welcome Dinner Reception & Performance from ASEAN countries (Phayathai Grand Ballroom 2-4) Hosted by Faculty of Pharmacy, Mahidol University

June 13, 2024	Pharmacology, Toxicology, and Physiology (Mo Chit)	June 13, 2024	Clinical Pharmacy and Personalized Medicine and Pharmacy Education and Practice (Sena)
14.00 – 16.45	Chair: Prof.Dr. Hitoshi Sato Showa University, Japan Oral Presentation	13.00 – 16.45	Chair: Asst.Prof.Dr. Supatat Chumnumwat Co-Chair: Asst.Prof.Dr. Yingrak boondam Chuayboon Mahidol University, Thailand Oral Presentation

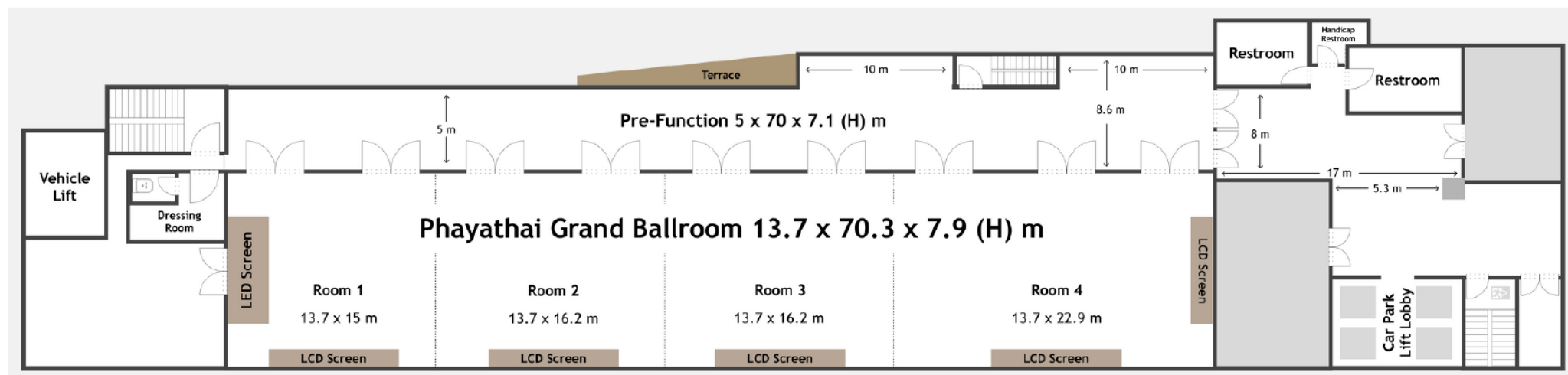
Conference Program: June 14, 2024

DAY 3: Friday (June 14, 2024)		
08.30 – 09.00	Registration	
09.00 – 09.30	Theme: Bridging Boundaries: Optimizing Pharmacy Education for a Globalized Future (Phayathai Grand Ballroom 1-2) Moderator: Dr. Pemmarin Potisarach Faculty of Pharmacy, Mahasarakham University Integrating Teaching of Basic Science and Pharmacy Practice Prof. Melody Ryan, Pharm.D., MPH, BCGP, BCPS Director of International Professional Student Education, and Assistant Provost for Global Health Initiatives College of Pharmacy, University of Kentucky, USA	Theme: Personalized Medicine (Phayathai Grand Ballroom 3-4) Moderator: Dr. Pongpol Thanuphol Faculty of Pharmacy, Mahidol University Clinical Pharmacogenomics Implementation in Thailand: A Dream Comes True Prof.Dr. Chonlaphat Sukasem, Ph.D. Faculty of Medicine Ramathibodi Hospital, Mahidol University, Thailand
09.30 – 10.00	Foresight on Pharmacy Education in the Digital Age: Where do we go from here? Asst.Prof.Dr. Somchai Suriyakrai, Ph.D. Faculty of Pharmaceutical Sciences, Khon Kaen University, Thailand	From Bench to Bedside: Translating Research into Clinical Practice Prof.Dr. Jeremy J. Johnson, Pharm.D., Ph.D. College of Pharmacy, University of Illinois Chicago, USA
10.00 – 10.15	Coffee break & Exhibition (Pre-function area)	
10.15 – 10.45	Implementation and Experiences in Entrustable Professional Activities (EPA) for Pharmacy Education Prof. Ellen M. Schellhase, Pharm.D., FCCP College of Pharmacy, Purdue University, USA	Nutrigenomics: The Next Frontier in Personalized Nutrition Clinical Prof. Monica L. Miller, Pharm.D. College of Pharmacy, Purdue University, USA

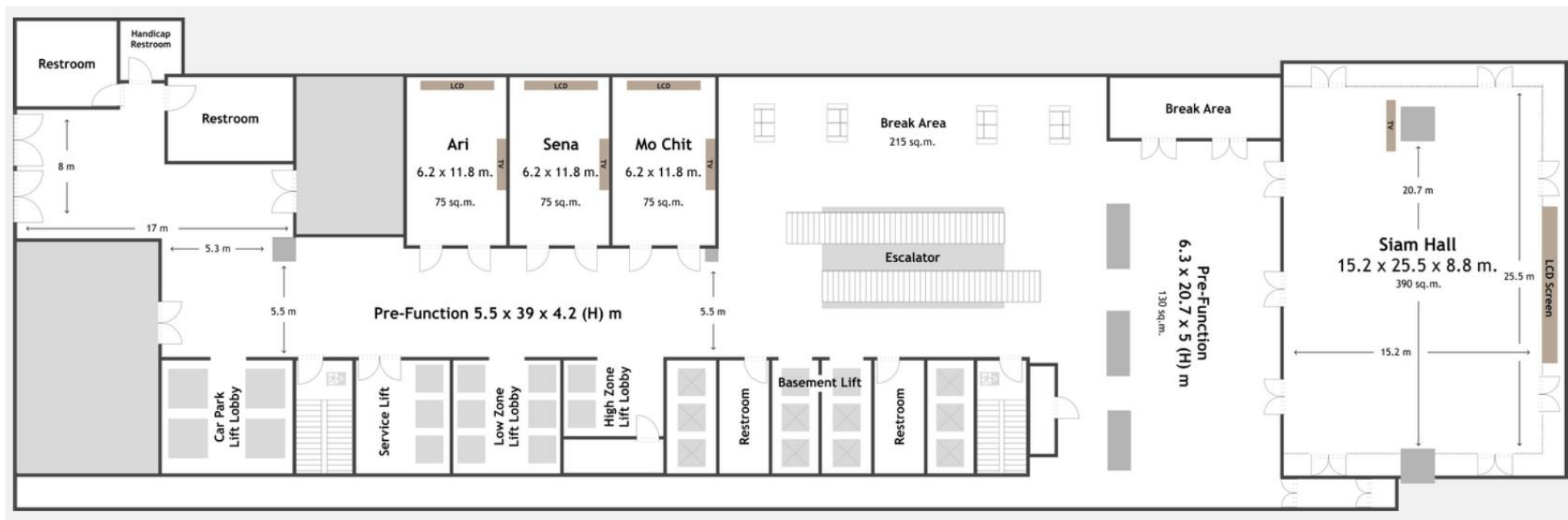
10.45 – 11.15	Accreditation Council for Pharmacy Education (ACPE) Curriculum Standards & Quality Criteria Prof. Michael Katz, Pharm.D. Director of International Programs, the R. Ken Coit College of Pharmacy, University of Arizona, USA Chairman, The US-Thai Pharmacy Consortium	Structural and Physicochemical Evaluation of Nanomedicine Prof.Dr. Kunikazu Moribe, Ph.D. Graduate School of Pharmaceutical Sciences, Chiba University, Japan
11.15 – 12.00	Awards & Closing Ceremony (Phayathai Grand Ballroom)	
12.00 – 14.00	Lunch break	

Conference Venue

Floor 6th: Phayathai Grand Ballroom 1-4

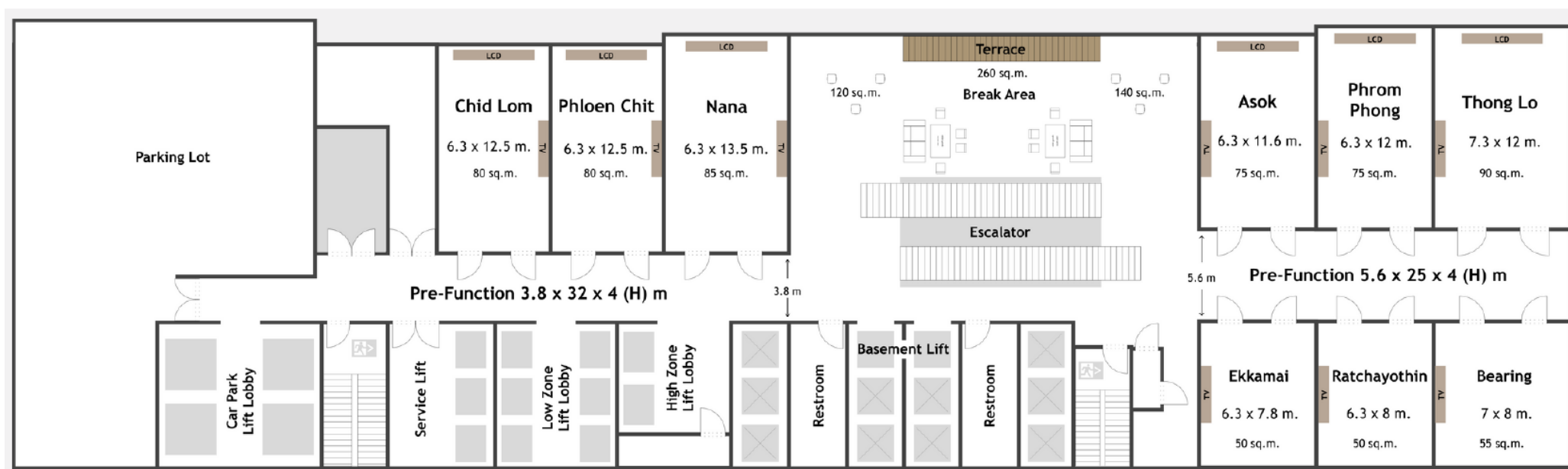


Floor 6th: Ari, Sena, Mo Chit Room

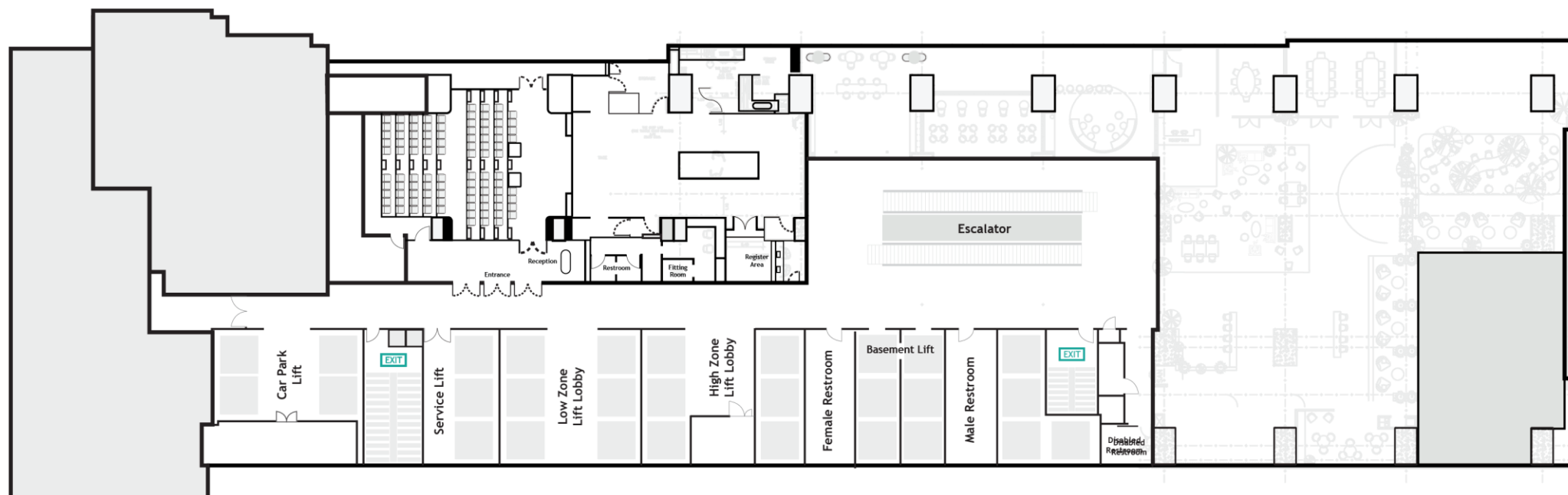


Floor 5th: The Market



Floor 4th:**Chid Lom, Phloean Chit, Nana: Banquet****Ekkamai: Prayer room**

Floor 3rd: Auditorium



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