

**International Conference Agenda**  
**The Thai Society of Human Genetics 4<sup>th</sup> Annual Conference 2025**  
**“Genomics Thailand in Action: Transforming Healthcare in Thailand”**  
**30<sup>th</sup> April – 2<sup>nd</sup> May 2025 at Infinity Ballroom, Pullman Bangkok King Power, Bangkok**

Day 1: 30 <sup>th</sup> April 2025	
8.00-8.30	Registration
8.30-9.30	<b>Opening Session</b> <b>Conference Report:</b> <i>Jakris Eu-ahsunthornwattana (Mahidol University, Thailand)</i>  <b>Opening Remarks:</b> <i>Opart Karnkawinpong (Permanent Secretary, Ministry of Public Health), Supachai Pathumnakul (Permanent Secretary, Ministry of Higher Education, Science, Research and Innovation, MHESI) and Supakit Sirilak (Executive Director, Health Systems Research Institute, HSR)</i> <ul style="list-style-type: none"> <li>Opening Ceremony</li> <li>Award Ceremony</li> <li>Group Photo</li> </ul>
9.30-9.45	<b>Keynote 1:</b> <i>Supachai Pathumnakul (Permanent Secretary, Ministry of Higher Education, Science, Research and Innovation, MHESI)</i>
9.45-10.30	<b>Inaugural Lecture: Discourse Speech to Professor Emeritus Khun Supa Na-Nakorn Role of “New Target from Exome Data”</b> <i>Trairak Pisitkun (Chulalongkorn University, Thailand)</i>
10.30-11.30	<b>Keynote 2: Genomics Thailand Phase 2</b> <i>Supakit Sirilak (Health Systems Research Institute, Thailand)</i>
11.30-12.00	<b>TSHG Annual General Meeting 2025</b>
12.00-12.30	<b>Luncheon Symposium:</b>
12.30-13.30	Lunch
13.30-14.15	<b>Keynote 3: AI Session</b> <i>Piyalitt Ittichaiwong (Siriraj Informatics and Data Innovation Center, Thailand)</i>
14.15-14.30	<b>President’s Address</b> <i>Jakris Eu-ahsunthornwattana (Mahidol University, Thailand)</i>
14.30-15.00	<b>HLA Databases</b> <i>Seik-Soon Khor (Nanyang Technological University, Singapore)</i>
15.00-15.30	Break
15.30-16.30	<b>Keynote 4:</b>
<b>End of Day 1</b>	

Day 2: 1 <sup>st</sup> May 2025		
8.00-8.30	Registration	
8.30-10.00	<p><b>Parallel Session</b> <b>Room 1: Rare Diseases</b></p> <p><b>Moderator:</b> <i>Thipwimol Tim-Aroon (Mahidol University, Thailand) and Tim Phetthong (Phramongkutklao College of Medicine, Thailand)</i></p> <p><b>Past, Present, and Future Perspectives of Genomic Medicine in Rare Diseases</b> <i>Vorasuk Shotelersuk (Chulalongkorn University, Thailand)</i></p> <p><b>Setting Up a Clinical Genome Facility: Lessons Learned from Southern Thailand</b> <i>Surasak Sangkhathat (Prince of Songkla University, Thailand)</i></p> <p><b>Strange Teeth, Strange Gum, Strange Jaws in Medical Genetics</b> <i>Piranit Kantaputra (Chiang Mai University, Thailand)</i></p>	<p><b>Parallel Session</b> <b>Room 2: Population Genomics and Forensics</b></p> <p><b>Moderator:</b> <i>Metawee Srikumool (Naresuan University, Thailand) and Jatupol Kampaunsai (Chiang Mai University, Thailand)</i></p> <p><b>Genetic ancestry of the Sea Nomads from Southern Thailand</b> <i>Wibhu Kutanan (Naresuan University, Thailand)</i></p> <p><b>Molecular Autopsy: Integrating Genomic Medicine and Legal Frameworks</b> <i>Wisarn Worasuwannarak (Mahidol University, Thailand)</i></p> <p><b>Translating Forensic Insights into Medical Practice: Arrhythmogenic Genes and SUNDS</b> <i>Aummarin Chaloeinthanetphong (Chulalongkorn University, Thailand)</i></p>
10.00-10.30	Break	
10.30-11.30	<p><b>Parallel Session</b> <b>Room 1: Rare Diseases</b></p> <p><b>Moderator:</b> <i>Thipwimol Tim-Aroon (Mahidol University, Thailand) and Tim Phetthong (Phramongkutklao College of Medicine, Thailand)</i></p> <p><b>Genetic Landscape of Hereditary Red Cell Membrane Defects in Northeastern Thailand</b> <i>Khunton Wichajarn (Khon Kaen University, Thailand)</i></p> <p><b>Vascular Anomalies: Unraveling Molecular Mechanisms and Exploring Treatment Opportunities</b> <i>Parith Wongkittichote (Mahidol University, Thailand)</i></p>	<p><b>Parallel Session</b> <b>Room 2: Biobank</b></p> <p><b>Moderator:</b> <i>Thanastha Thanomchard (Mahidol University, Thailand)</i></p> <p><b>The Thai Biobanking Network and National-Level Proficiency Testing for Biobank Specimens: An Initiative</b> <i>Nilubol Singhto (Mahidol University, Thailand)</i></p> <p><b>The Role of Biobank in Advancing Translational Precision Medicine: the MED-PSU experiences</b> <i>Pasarat Khongkrow (Prince of Songkla University, Thailand)</i></p> <p><b>Biobank Roles in Genomic Data Governance: The MED CMU Experiences</b> <i>Arnat Pasena (Chiang Mai University, Thailand)</i></p>
11.30-12.00	Luncheon symposium: 2	
12.00-13.00	Lunch	
13.00-14.30	<p><b>Parallel Session</b> <b>Room 1: Cancer</b></p> <p><b>Moderator:</b> <i>Dumnoensun Pruksakorn (Chiang Mai University, Thailand)</i></p> <p><b>Genomic Landscape of Thai Cancer Patients</b> <i>Focus: Unique Somatic Mutations and Molecular Alterations Observed in Thai Cancer Patients.</i></p> <p><b>Multi-omics Landscape of Primary Liver Cancer</b> <i>Yotsawat Pomyen (Chulabhorn Research Institute, Thailand)</i></p>	<p><b>Parallel Session</b> <b>Room 2: Bioinformatics</b></p> <p><b>Moderator:</b> <i>Bhoom Suktitipat (Mahidol University, Thailand)</i></p> <p><b>Human Cell Atlas: Characterizing Cellular Complexity Beyond Genomes</b> <i>Varodom Charoensawan (Mahidol University, Thailand)</i></p> <p><b>Driving Precision Medicine Implementation with Genomics Thailand</b> <i>Sissades Tongsim (National Science and Technology Development Agency, Thailand)</i></p>

**Day 2: 1<sup>st</sup> May 2025**

**Somatic Mutation Landscapes of Colorectal Cancer**

*Amphun Chaiboonchoe (Mahidol University, Thailand)*

**Mapping Cancer Genomes: The Power of Liquid Biopsy**

*Sasimol Udomruk (Chiang Mai University, Thailand)*

**Harnessing Long-Read Sequencing for Clinical Insights: Case Studies in Epilepsy and Muscular Dystrophy**

*Monnat Pongpanich (Chulalongkorn University, Thailand)*

**Solving Genetic Mysteries with Long-Read Sequencing**

*Wanna Chetruengchai (Chulalongkorn University, Thailand)*

14.30-15.00 Break

**Parallel Session  
Room 1: Cancer**

**Moderator:** *Dumnoensun Pruksakorn (Chiang Mai University, Thailand)*

**Parallel Session  
Room 2: Infectious Diseases**

**Moderator:** *Pisut Pongchaikul (Mahidol University, Thailand)*

**Integrating Cancer Genomic Medicine into Clinical Practice in Thailand:**

**Current and Future Trend of Precision Oncology**

*Virote Sriuranpong (Chulalongkorn University, Thailand)*

**The Role of Molecular Tumor Boards in Cancer Precision Medicine**

*Chaiyut Charoentum (Chiang Mai University, Thailand)*

**HLA variant and susceptibility to infection**

*Seik-Soon Khor (Nanyang Technological University, Singapore)*

**Panel discussion:**

**Genetic and infection susceptibility**

*Waradon Sungnak (Mahidol University, Thailand)*

*Tiraput Poonpanichakul (Mahidol University, Thailand)*

*Teerawit Audshasai (Mahidol University, Thailand)*

**End of Day 2**

**Day 3: 2<sup>nd</sup> May 2025**

8.00-8.30	Registration	
8.30-10.00	<b>Parallel Session</b> <b>Room 1: Pharmacogenomics</b> <b>Moderator:</b> Pajaree Chariyavilaskul (Chulalongkorn University, Thailand)	<b>Parallel Session</b> <b>Room 2: Non-Communicable Diseases (NCDs)</b> <b>Moderator:</b> Chartchai Chaichana (Mahidol University, Thailand) and Phongthana Pasookhush (Mahidol University, Thailand)
	<b>Bridging the Gap: Revolutionizing Personalized Medicine through Pharmacogenomics of Drug-Metabolizing Enzymes</b> Suda Vannaprasaht (Khon Kaen University, Thailand)	<b>Stroke</b> Nijasri Charnnarong Suwanwela (Chulalongkorn University, Thailand)
	<b>Unveiling Genetic Insights: The Pharmacogenomic Landscape of the Thai Population Through Genome Sequencing</b> Jittima Piriyaongsa (National Science and Technology Development Agency, Thailand)	<b>Chronic Kidney Disease</b> Chagriya Kitiyakara (Mahidol University, Thailand)
	<b>Pharmacogenomics Unleashed: New Variants and Insights Revealed Through Long-Read Sequencing</b> Pajaree Chariyavilaskul (Chulalongkorn University, Thailand)	<b>Immunogenetics and Pathogenesis Study of Diabetes</b> Watip Tangjittipokin (Mahidol University, Thailand)
		<b>Role of Genomic Medicine in Transforming Obesity Care</b> Pornpoj Pramyothin (Mahidol University, Thailand)
10.00-10.30	Break	
10.30-11.30	<b>Parallel Session</b> <b>Room 1: Pharmacogenomics</b> <b>Moderator:</b> Chonlaphat Sukasem (Mahidol University, Thailand)	<b>Parallel Session</b> <b>Room 2: Statistical Genetics</b> <b>Moderator:</b> Jakris Eu-ahsunthornwattana (Mahidol University, Thailand)
	<b>Panel Discussion: Integrating Pharmacogenomics for Seamless and Personalized Patient Care in Thailand: A Real-world Evidence and Practice</b> Nuttaporn Comying (King Narai Hospital, Thailand) Thanaporn Likittientong (Samut Sakhon Hospital, Thailand) Thoranit Pratangthato (Thongchai Pharmacy, Thailand)	<b>Mendelian Randomization</b> Pimphen Charoen (Mahidol University, Thailand)
		<b>Polygenic Risk Score</b> Jakris Eu-ahsunthornwattana (Mahidol University, Thailand)
11.30-12.00	<b>Luncheon Symposium: 4</b>	<b>Luncheon Symposium: 5</b>
12.00-13.00	Lunch	
	<b>Scientific Session – ELSI (Insurance)</b> <b>Moderator:</b> Prasit Phowthongkum (Chulalongkorn University, Thailand)	
13.00-13.15	<b>Ethical and Legal Issues in Newborn Metabolics and Genomics Screening</b> Prasit Phowthongkum (Chulalongkorn University, Thailand)	
13.15-14.00	<b>Newborn Metabolic Screening and Healthy Screening and Insurance Underwriting</b> Somsakul Sripisuth (AIA Company Limited, Thailand)	

## Day 3: 2<sup>nd</sup> May 2025

### Scientific Session – ELSI (Inform Consent and Secondary Finding)

**Moderator:** *Wuttichart Kamolvisit (Chulalongkorn University, Thailand)*

14.00-15.00 **Panel Discussion:**  
***When the Genome Speaks Twice: Ethical Implications of Secondary Findings in Genetic Testing***  
*Prasit Phowthongkum (Chulalongkorn University, Thailand)*  
*Thanyachai Sura (Mahidol University, Thailand)*  
*Parith Wongkittichote (Mahidol University, Thailand)*  
*Wuttichart Kamolvisit (Chulalongkorn University, Thailand)*

15.00-15.30 Break

15.30-16.00 **Moderator:** *Wuttichart Kamolvisit (Chulalongkorn hospital, Thailand)*

**Panel Discussion:**  
***Informed Consent in the Age of Complexity: Ethics and Challenges***  
*Jakris Eu-ahsunthornwattana (Mahidol University, Thailand)*  
*Wuttichart Kamolvisit (Chulalongkorn University, Thailand)*

16.00-16.15 **Sponsorship Certificate**

16.15-16.30 **Closing Ceremony**

End of Day 3