

**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><br><b>Conference Report:</b> <i>Jakris Eu-ahsunthornwattana (Mahidol University, Thailand)</i><br><b>Opening Remark:</b> <ul style="list-style-type: none"> <li>Opening Ceremony<br/> <i>Opas Karnkawinpong (Ministry of Public Health)</i><br/> <i>Supakit Sirilak (Health System Research Institute, Thailand)</i></li> <li>Award Ceremony</li> <li>Group Photo</li> </ul> |
| 9.30-10.15                         | <b>Inaugural Lecture: Discourse Speech to Professor Emeritus Khun Supa Na-Nakorn Role of “New Target from Exome Data”</b><br><i>Trairak Pisitkun (Chulalongkorn University, Thailand)</i>   |
| 10.15-11.15                        | <b>Keynote 1: Genomics Thailand Phase 2</b><br><i>Supakit Sirilak (Health Systems Research Institute (HSRI), Thailand)</i>  |
| 11.15.-11.30                       | <b>President’s address</b><br><i>Jakris Eu-ahsunthornwattana (Mahidol University, Thailand)</i>   |
| 11.30-12.00                        | <b>TSHG Annual General Meeting 2025</b>   |
| 12.00-12.30                        | <b>Industry Symposium 1: SVP Population and Precision Health Powered by Oxford Nanopore Multiomics Solutions</b><br><i>Kathleen Barnes (Oxford Nanopore Technologies)</i>   |
| 12.30-13.30                        | Lunch   |
| 13.30-14.30                        | <b>Keynote 2: AI Session</b><br><i>Piyalitt Ittichaiwong (Siriraj Informatics and Data Innovation Center (SIData+), Thailand)</i>   |
| 14.30-15.00                        | <b>HLA Databases</b><br><i>Seik-Soon Khor (Nanyang Technological University, Singapore)</i>   |
| 15.00-15.30                        | Break   |
| 15.30-16.30                        | <b>Keynote 3: Transforming Genomics Medicine: From Bench to Clinical Applications</b><br><i>Thanyachai Sura (Mahidol University, Thailand)</i>  |
| End of Day 1                       |   |

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

| Day 2: 1 <sup>st</sup> May 2025 |   |   |
|---------------------------------|---|---|
|                                 | <p><b>Thai Colorectal Cancer Genome Landscape for Precision Medicine</b><br/>Amphun Chaiboonchoe (Mahidol University, Thailand)</p> <p><b>Mapping Cancer Genomes: The Power of Liquid Biopsy</b><br/>Sasimol Udomruk (Chiang Mai University, Thailand)</p>  | <p><b>Harnessing Long-Read Sequencing for Clinical Insights: Case Studies in Epilepsy and Muscular Dystrophy</b><br/>Monnat Pongpanich (Chulalongkorn University, Thailand)</p> <p><b>Solving Genetic Mysteries with Long-Read Sequencing</b><br/>Wanna Chetruengchai (Chulalongkorn University, Thailand)</p>  |
| 14.30-15.00                     | Break   |   |
| 15.00-16.30                     | <p><b>Parallel Session</b></p> <p><b>Room 1: Cancer</b></p> <p><b>Moderator:</b> Dumnoensun Pruksakorn (Chiang Mai University, Thailand)</p>  | <p><b>Parallel Session</b></p> <p><b>Room 2: Infectious Diseases</b></p> <p><b>Moderator:</b> Pisut Pongchaikul (Mahidol University, Thailand)</p>  |
|                                 | <p><b>Integrating Cancer Genomic Medicine into Clinical Practice in Thailand:</b></p> <p><b>Current and Future Trend of Precision Oncology</b><br/>Virote Sriuranpong (Chulalongkorn University, Thailand)</p> <p><b>The Role of Molecular Tumor Boards in Cancer Precision Medicine</b><br/>Chaiyut Charoentum (Chiang Mai University, Thailand)</p> | <p><b>HLA Variant and Susceptibility to Infection</b><br/>Seik-Soon Khor (Nanyang Technological University, Singapore)</p> <p><b>Round table discussion:</b><br/><b>Genetic and Infection Susceptibility</b><br/>Waradon Sungnak (Mahidol University, Thailand)<br/>Tiraput Poonpanichakul (Mahidol University, Thailand)<br/>Teerawit Audshasai (Mahidol University, Thailand)</p> |
| 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><br><b>Room 1: Pharmacogenomics</b><br><br><b>Moderator:</b> <i>Pajaree Chariyavilaskul (Chulalongkorn University, Thailand)</i>  | <b>Parallel Session</b><br><b>Room 2: Non-Communicable Diseases (NCDs)</b><br><br><b>Moderator:</b> <i>Chartchai Chaichana (Mahidol University, Thailand) and Phongthana Pasookhush (Mahidol University, Thailand)</i>   |
|   | <b><i>Bridging the Gap: Revolutionizing Personalized Medicine through Pharmacogenomics of Drug-Metabolizing Enzymes (Advance Research)</i></b><br><i>Suda Vannaprasaht (Khon Kaen University, Thailand)</i><br><br><b><i>Unveiling Genetic Insights: The Pharmacogenomic Landscape of the Thai Population Through Genome Sequencing (Advance Research)</i></b><br><i>Jittima Piriapongsa (National Science and Technology Development Agency, Thailand)</i><br><br><b><i>Pharmacogenomics Unleashed: New Variants and Insights Revealed Through Long-Read Sequencing (Advance Research)</i></b><br><i>Pajaree Chariyavilaskul (Chulalongkorn University, Thailand)</i> | <b><i>Stroke</i></b><br><i>Nijasri Charnnarong Suwanwela (Chulalongkorn University, Thailand)</i><br><br><b><i>Chronic Kidney Disease</i></b><br><i>Chagriya Kitiyakara (Mahidol University, Thailand)</i><br><br><b><i>Immunogenetics and Pathogenesis Study of Diabetes</i></b><br><i>Watip Tangjittipokin (Mahidol University, Thailand)</i><br><br><b><i>Role of Genomic Medicine in Transforming Obesity Care</i></b><br><i>Pornpoj Pramyothin (Mahidol University, Thailand)</i> |
| 10.00-10.30   | Break  |  |
| 10.30-11.30   | <b>Parallel Session</b><br><b>Room 1: Pharmacogenomics</b><br><br><b>Moderator:</b> <i>Chonlaphat Sukasem (Mahidol University, Thailand)</i>   | <b>Parallel Session</b><br><b>Room 2: Statistical Genetics</b><br><br><b>Moderator:</b> <i>Jakris Eu-ahsunthornwattana (Mahidol University, Thailand)</i>  |
|   | <b>Panel Discussion:</b><br><br><b><i>Integrating Pharmacogenomics for Seamless and Personalized Patient Care in Thailand: A Real-World Evidence and Practice</i></b><br><br><i>Nuttaporn Comying (King Narai Hospital, Thailand)</i><br><br><i>Thanaporn Likittientong (Samut Sakhon Hospital, Thailand)</i><br><br><i>Thoranit Pratangthato (Thongchai Pharmacy, Thailand)</i>   | <b><i>Mendelian Randomization</i></b><br><i>Pimphen Charoen (Mahidol University, Thailand)</i><br><br><b><i>Polygenic Risk Score</i></b><br><i>Jakris Eu-ahsunthornwattana (Mahidol University, Thailand)</i>  |
| 11.30-12.00   | <b>Luncheon Symposium 3: "PacBio HiFi in Pharmacogenomics: A Comparative Lens on Clinical Utility"</b><br><i>Jee Hian Lim (DKSH Limited, Switzerland)</i>  | <b>Luncheon Symposium 4: Driving the Multiomics Revolution with Illumina</b><br><i>Boon Siang Nicholas Tan (Illumina, United States of America)</i>  |
| 12.00-13.00   | Lunch  |  |
| <b>Scientific Session – ELSI (Insurance)</b><br><br><b>Moderator:</b> <i>Prasit Phowthongkum (Chulalongkorn University, Thailand)</i> |  |  |
| 13.00-13.15   | <b><i>Ethical and Legal Issues in Newborn Metabolics and Genomics Screening</i></b><br><i>Prasit Phowthongkum (Chulalongkorn University, Thailand)</i>   |  |
| 13.15-14.00   | <b><i>Newborn Metabolic Screening and Healthy Screening and Insurance Underwriting</i></b><br><i>Somsakul Sripisuth (AIA Company Limited, Thailand)</i>  |  |

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

### Scientific Session – ELSI (Informed Consent & Secondary Findings)

**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:**  
***Beyond the Signature: Informed Consent in Genetic Testing***  
*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