



INTERNATIONAL CONFERENCE AGENDA

The Thai Society of Human Genetics 5th Annual Conference 2026 “Genomics Thailand and Beyond: Connecting the Dots with Multi-Omics for a Complete Picture of Human Health”

6th – 8th May 2026 at Infinity Ballroom, Pullman Bangkok King Power, Bangkok

DAY 1: 6TH MAY 2026

8.00 – 8.30 REGISTRATION

8.30 – 9.30 OPENING SESSION

Conference Report: *Jakris Eu-ahsunthornwattana (Mahidol University, Thailand)*

Opening Address: *Supachai Pathumnakul (Ministry of Higher Education, Science, Research and Innovation, Thailand)*

Opening Ceremony:

• Dignitaries on Stage:

• *Supachai Pathumnakul (Ministry of Higher Education, Science, Research and Innovation, Thailand)*

• *Vip Viprakasit (Ministry of Public Health, Thailand)*

• *Sura Wisetsak (Health Systems Research Institute, Thailand)*

• *Jakris Eu-ahsunthornwattana (President of the Thai Society of Human Genetics)*

Special Address: *Supachai Pathumnakul (Ministry of Higher Education, Science, Research and Innovation, Thailand)*

Award Ceremony
Group Photo

9.30 – 9.45 PRESIDENT’S ADDRESS : *Jakris Eu-ahsunthornwattana (Mahidol University, Thailand)*

9.45 – 10.30 INAUGURAL LECTURE : **Genomics Thailand: How It Began—and What It May Reveal (On-site only)**
Sirirung Songsivilai (Science, Research and Innovation Commission, Thailand)

10.30 – 11.00 BREAK

11.00 – 11.30 INDUSTRY SYMPOSIUM : **From Rare Disease to Population Genomics: Scaling Clinical Genomics with HiFi Sequencing in the Multi-Omics Era**
Jee Hian Lim (DKSH-Pacbio, Switzerland)

11.30 – 12.00 TSHG ANNUAL GENERAL MEETING 2026

12.00 – 13.30 LUNCH

13.30 – 15.00 ELSI SESSION (AI)

Moderator: *Prasit Powthongkum (Chulalongkorn University, Thailand)*

Wuttichart Kamolvisit (Chulalongkorn University, Thailand)

Panel Discussion

The Moral Code: Responsible AI in the Genomics Revolution

Prasit Phowthongkum (Chulalongkorn University, Thailand)

Touchapon Kraisingkorn (Amity Solutions Corporation Co., Ltd., Thailand)

Peerapat Chokesuwattanaskul (Chulalongkorn University, Thailand)

Wuttichart Kamolvisit (Chulalongkorn University, Thailand)

15.00 – 15.30 BREAK

15.30 – 16.15 KEYNOTE

IRUD and Related Programs in Japan: Large and Scalable Genomic Diagnosis and Novel Disease Discovery in Rare Diseases

Kenjiro Kosaki (Keio University School of Medicine, Japan)

16.15 – 17.00 PLENARY SESSION

Pharmacogenomic studies in the Estonian Biobank

Lili Milani (University of Tartu, Estonia)



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DAY 2: 7TH MAY 2026 (Part I)

8.00 – 8:30 REGISTRATION

8.30 – 10.00 PARALLEL SESSION
ROOM 1: RARE DISEASES
Moderator: *Thipwimol Tim-Aroon (Mahidol University, Thailand) and Rungroj Tangpong (Chulalongkorn University, Thailand)*

Genomics Across the Lifespan: Transforming Rare Disease Care from Diagnosis to Prevention
Vorasuk Shotelersuk (Chulalongkorn University, Thailand)

Implementing Expanded Newborn Screening for IEM by MS/MS in National Health Programs
Chulaluck Kuptanon (Queen Sirikit National Institute of Child Health, Thailand)
Thipwimol Tim-Aroon (Mahidol University, Thailand)

Fragile X Syndrome and Carrier Screening in Thailand: Challenges and Future Directions
Pornprot Limprasert (Prince of Songkla University, Thailand)

PARALLEL SESSION
ROOM 2: NON-COMMUNICABLE DISEASES (NCDS)
Moderator: *Chartchai Chaichana (Mahidol University, Thailand) and Phongthana Pasookhush (Mahidol University, Thailand)*

Familial Hypercholesterolemia: Insights from the Genomics Thailand
Weerapan Khovidhunkit (Chulalongkorn University, Thailand)

Unlock Genetics of Obesity
Pornpoj Pramyothin (Mahidol University, Thailand)

Genome-Wide Association Study and Metabolomics to Decode Gestational Diabetes Mellitus in Northeastern Thai Women
Apinya Jusakul (Khon Kaen University, Thailand)

PARALLEL SESSION
ROOM 3: CANCER
Moderator: *Dumnoensun Pruksakorn (Chiang Mai University, Thailand)*

From Cancer Genome to Candidate Drug: Redesigning Therapeutics Using Somatic Mutation Data
Surasak Sangkhatath (Mahidol University, Thailand)

Unlocking Genomic Alterations in B-ALL: Structural Variant Detection with Long-Read Technologies
Patcharawadee Thongkumkoon (Chiang Mai University, Thailand)

Mapping the Chromosomal Landscape and Specific Gene Signatures of Primary Liver Cancers for Diagnosis and Chemotherapy Response Prediction
Malinee Thanee (Khon Kaen University, Thailand)

10.00 – 10.30 BREAK

10.30 – 11.30 PARALLEL SESSION
ROOM 1: RARE DISEASES
Moderator: *Thipwimol Tim-Aroon (Mahidol University, Thailand) and Rungroj Tangpong (Chulalongkorn University, Thailand)*

Rare Disease Benefit Policies in Thailand: Lessons Learned and Future Directions
Cherdchai Nopmaneejumruslers (Mahidol University, Thailand)
Kanya Suphapeetiporn (Chulalongkorn University, Thailand)

Genetic Information Protection and Health Policy in Thailand: A GINA-Informed Perspective
Surakameth Mahasirimongkol (Ministry of Public Health, Thailand)

PARALLEL SESSION
ROOM 2: NON-COMMUNICABLE DISEASES (NCDS)
Moderator: *Chartchai Chaichana (Mahidol University, Thailand) and Phongthana Pasookhush (Mahidol University, Thailand)*

Kidney Disease
Chagriya Kitiyakara (Mahidol University, Thailand)

A Decade of Building Genomic Cohorts: Lessons & Next Steps
Korapat Mayurasakorn (Mahidol University, Thailand)

PARALLEL SESSION
ROOM 3: CANCER
Moderator: *Dumnoensun Pruksakorn (Chiang Mai University, Thailand)*

Decoding Tumor Complexity Through Organoids and Spatial Biology: A Translational Framework for Precision Oncology
Somponnat Sampattavanich (Mahidol University, Thailand)

Multi-Omic Approaches to Uncover the Molecular Landscape and Therapeutic Targets of Thai Osteosarcoma
Parunya Chaiyawat (Chiang Mai University, Thailand)

11.30 – 12.00 ROOM 1: LUNCHEON SYMPOSIUM 2

Illumina insight ecosystem: The path from innovation to impact
Thomas Patrick Klemm (Illumina Asia Pacific, Singapore and Bio-Active, Thailand)

ROOM 3: LUNCHEON SYMPOSIUM 3

Advancing Precision Genomics with Twist: Insights from Thailand
Thidathip Wongsurawat (Geneplus, Thailand and Twist Bioscience, United States of America)



12.00 – 13.30 LUNCH

13.30 – 14.30 ROOM 1: ORAL PRESENTAION
Moderator:

Diagnostic yield of singleton whole-exome sequencing in Thai children with developmental and epileptic encephalopathies and intractable seizures with intellectual disability

Phopthanaphon Sittichai (Mahidol University, Thailand)

Comprehensive genomic evaluation of pediatric neurogenetic disorders: insights from short-read whole-genome sequencing

Wattanawan Jaito (Mahidol University, Thailand)

Bridging Clinical Genetics to Regional Communities in Thailand: First-Year Outcomes of the Extended Rare Disease Center Model (ExtRA Model)

Thipwimol Tim-Aroon (Mahidol University, Thailand)

ROOM 2: ORAL PRESENTAION

Moderator: *Surakameth Mahasirimongkol (Ministry of Public Health, Thailand)*

Association between knowledge of genomic medicine and attitudes toward abortion among university students: a cross-sectional study

Ni-arkan Al-idreese (Prince of Songkla University, Thailand)

PG-ZEM Model: Pharmacogenomics to Prevent Adverse Effects of Carbamazepine in Children to Achieve Zero Events

Vitchayaporn Emarach Saengow (Maharat Nakhon Ratchasima Hospital, Thailand)

14.30 – 15.00 BREAK

15.00 – 16.30 PARALLEL SESSION
ROOM 1: PHARMACOGENOMICS

Moderator: *Chonlaphat Sukasem (Mahidol University, Thailand)*

Pharmacogenomics of Severe Cutaneous Adverse Reactions: Current Evidence and Clinical Implications

Nontaya Nakkam (Khon Kaen University, Thailand)

Pharmacogenomics-Driven Precision Medicine for Statin Therapy

Natchaya Vanwong (Chulalongkorn University, Thailand)

Pharmacogenomic and Modeling Approaches for Deferasirox Optimization in Thalassemia

Varalee Yodsurang (Chulalongkorn University, Thailand)

The Pharmacogenomic Landscape and Phenotypic Profiling of Thiopurine Toxicity in Pediatric Leukemia

Apichaya Puangpetch (Mahidol University, Thailand)

PARALLEL SESSION
ROOM 2: BIOINFORMATICS

Moderator: *Chatarin Wangsanuwat (Mahidol University, Thailand)*

VEuPathDB: Multi-omics and AI for eukaryotic pathogen research

Andy Jones (University of Liverpool, England)

When One Size Doesn't Fit All: Population-Matched Reference Panels Improve Imputation Accuracy in the Thai Population

Pongsakorn wangkumhang (National Science and Technology Development Agency (NSTDA), Thailand)

An Ontology Design for Biological Network Representation and Scalable Multi-Omic Data Integration

Natapol Pornputtpong (Chulalongkorn University, Thailand)

PARALLEL SESSION
ROOM 3: POPULATION GENOMICS AND FORENSICS

Moderator: *Metawee Srikummool (Naresuan University, Thailand)*

Genomic population structure in Mainland Southeast Asia

Wibhu Kutanan (Naresuan University, Thailand)

Understanding Gut Microbiota in Different Ethnic Groups: Why It Matters (On-site only)

Siam Popluechai (Mae Fah Luang University, Thailand)

From Ethnicity to Genomics: The Mission of Ethnogenetics in Genomics Thailand (EnGeTH)

Jatupol Kampuansai (Chiang Mai University, Thailand)



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DAY 3: 8TH MAY 2026

8.00 – 8:30 **REGISTRATION**

8.30 – 10.00 **PARALLEL SESSION**

ROOM 1: ELSI SESSION (Integrity of access to genetics)

Moderator: *Prasit Powthongkum (Chulalongkorn University, Thailand)
and Wuttichart Kamolvisit (Chulalongkorn University,
Thailand)*

Panel Discussion

**Who Should Pay, Who Should Decide? Ethics of
Access to Genomic Testing**

*Duangrurdee Wattanasirichaigoon (Mahidol University, Thailand)
Kanya Suphapeetiporn (Chulalongkorn University, Thailand)
Prasit Phowthongkum (Chulalongkorn University, Thailand)
Wuttichart Kamolvisit (Chulalongkorn University, Thailand)*

PARALLEL SESSION

ROOM 2: BIOBANK

Moderator: *Nilubon Singhto (Mahidol University, Thailand)*

**Genomic Infrastructure and National Policy: The Role
of the Genomics Thailand Biobank**

Sukanya Wattanapokayakit (Ministry of Public Health, Thailand)

**National Proficiency Testing Program for Biobanks and
Beyond**

Dhitiwass Suvagandha (Ministry of Public Health, Thailand)

**Thailand Biobank Consortium: Establishing a National
Proficiency Testing Program for Biobank Quality**

Natini Jinawath (Mahidol University, Thailand)

10.00 – 11.00 **POSTER PRESENTATION (BREAK)**

11.00 – 11.45 **KEYNOTE: From Association to Causation in Biobank Research: Challenges and Opportunities**

Krista Fischer (University of Tartu, Estonia)

11.45 – 12.15 **INDUSTRY SYMPOSIUM: From Benchmark to Biological Insight: Germline and Somatic WGS in
Population Genomics**

Wilson Cheng (DKSH-PacBio, Switzerland)

12.15 – 13.45 **LUNCH**

13.45 – 15.15 **PARALLEL SESSION**

ROOM 1: ELSI SESSION (Data Governance)

Moderator: *Prasit Powthongkum (Chulalongkorn University, Thailand)
and Wuttichart Kamolvisit (Chulalongkorn University,
Thailand)*

Panel Discussion

**Whose Data, Whose Decisions? Power, Privacy, and
ELSI in Genomic Data Governance**

*Peerapat Chokesuwattanaskul (Chulalongkorn University,
Thailand)
Prasit Phowthongkum (Chulalongkorn University, Thailand)
Wuttichart Kamolvisit (Chulalongkorn University, Thailand)*

PARALLEL SESSION

ROOM 2: INFECTIOUS DISEASES

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

**How Human Genetics Shapes Infectious Disease
Susceptibility and Outcomes**

Anunya Opasawatchai (Mahidol University, Thailand)

**Mapping Host-Pathogen Movement and Coevolution: A
One Health Framework for Disease Surveillance**

Thachawech Kimprasit (Mahidol University, Thailand)

**Oral microbiome as a gatekeeper of oral and systemic
health**

Oranart Matangkasombut (Chulalongkorn University, Thailand)

15.15 – 15.35 **BREAK**

16.35 – 16.20 **PLENARY SESSION: The Undiagnosed Hackathon: Highlighting the 350 Million People Worldwide
Living with Undiagnosed Diseases**

Mikk and Helene Cederroth (Wilhelm Foundation, Sweden)

16.20 – 16.40 **SPONSORSHIP CERTIFICATE**

CLOSING CEREMONY