



SCIENTIFIC PROGRAM ACGG2025

November 19, 2025	
8.30 – 9.00	Registration
9.00 – 9.30	Opening Ceremony
	Introduction of TCGG by <i>Atit Silsirivanit</i> (Khon Kaen University, Thailand)
	Session 1: Glycomedicine # 1 <i>Chairman: Atit Silsirivanit</i> (Khon Kaen University, Thailand) <i>Hyun Joo An</i> (Chungnam National University, Korea)
9.30 – 10.00	IL-1: Hyun Joo An , Chungnam National University, Korea “Integrated Glyco-analytical Strategies for Immunogenicity Assessment of Advanced Biotherapeutics”
10.00 – 10.30	IL-2: Pi-Hui Liang , National Taiwan University, Taiwan “Vaccine adjuvants: Carbohydrate chemists help a lot”
10.30 – 10.45	O-01: Charupong Saengboonmee , Khon Kaen University, Thailand “Glucose Analogues Inhibit Intracellular N-glycosylation of Cancer Cells: A Crosstalk Between Energy Metabolism and Glycosylation”
10.45 – 11.00	Coffee Break & Poster (Odd Number)
	Session 2: Glycomedicine # 2 <i>Chairman: Atsushi Kuno</i> (AIST, Japan) <i>Chian-Hui Lai</i> (National Chung Hsing University, Taiwan)
11.00 – 11.20	IS-1: Chian-Hui Lai , National Chung Hsing University, Taiwan “Mannoside Modified-Nano-Interface for Drug Delivery and Sensing”
11.20 – 11.40	IS-2: Muhamad Frendy Setyawan , Universitas Airlangga, Indonesia Exploration of Indonesian Natural Enzymes as Novel Candidates for Tuberculosis Drug Development
11.40 – 12.00	IS-3: Hsiang-Chi Huang , National Cheng Kung University, Taiwan “Targeting Host Glycosylation Pathways to Prevent Viral Co-infections”
12.00 – 13.00	Lunch
	Session 3: Glycosciences # 1 <i>Chairman: Ni Nyoman Tri Puspaningsih</i> (Universitas Airlangga, Indonesia) <i>Chatchai Phoomak</i> (Chulalongkorn University, Thailand)
13.00 – 13.30	IL-3: N. Siva Kumar , University of Hyderabad, India “Lysosomal Enzymes and Their Receptors from <i>Hydra vulgaris</i> ”
13.30 – 14.00	IL-4: Titi Candra Sunarti , IPB University, Indonesia “Role of Lignocellulolytic Microorganisms for Utilization of Agro-industrial Solid Wastes”
14.00 – 14.20	IS-4: Muhammad Adrian Natsir , Universitas Airlangga, Indonesia “Fusion and Characterization of CBM Amylase Thermophile Saccharification Enzyme from Gunung Pancar Hot Spring”



November 19, 2025		
14.20 – 14.35	O-02: Kittikhun Wangkanont , Chulalongkorn University, Thailand <i>“Biosynthesis of 2,3-Diaminoglucose in The Lipid A of Acidithiobacillus ferrooxidans and Campylobacter jejuni”</i>	
14.35 – 15.30	Coffee Break & Poster Session (Odd Number)	Steering Committee Meeting
	Session 4: Glycossiences # 2 Chairman: Chun-Fa Chang (National Chengkung University, Taiwan) Sakonwan Kuhaudomlarp (Mahidol University, Thailand)	
15.30 – 16.00	IL-5: N. Jayaraman , Indian Institute of Science, India <i>“Albumin-Mediated Delivery of Tn Antigen and Proliferation of Antigen-Specific Antibodies”</i>	
16.00 – 16.20	IS-5: Yasuhiro Kajihara , Osaka University, Japan <i>“Reinforcement of Protein-Protein Interaction by Glycosylation”</i>	
16.20 – 16.40	IS-6: Nur Maisarah Sarizan , Universiti Teknologi Malaysia, Malaysia <i>“The Glyco-Interface in Plant-Pathogen Interactions: Comparative Insights from Model and Crop Systems”</i>	
16.40 – 17.00	IS-7: Sukanya Luang , Khon Kaen University, Thailand <i>“Clinical Applications of Lectin–Glycan Interactions in Cholangiocarcinoma”</i>	
17.00 – 20.00	Welcome dinner for all participants	

November 20, 2025		
8.30 – 9.00	Registration	
	Session 5: Glycossiences # 3 Chairman: Kohki Fujikawa (SUNTORY, Japan) Panupong Mahalapbutr (Khon Kaen University, Thailand)	
9.00 – 9.30	IL-6: Kohki Fujikawa , SUNTORY Foundation for Life Sciences, Japan <i>“Structure-activity Relationship Studies of The Glycolipid MPIase Essential for Membrane Protein Integration in E. coli”</i>	
9.30 – 10.00	IL-7: Zaher M.A. Judeh , Nanyang Technological University, Singapore <i>“Concise Total Synthesis of Phenylethanoid Glycoside Acteoside and Isoacteoside”</i>	
10.00 – 10.15	O-03: Guosong Chen , Fudan University, China <i>“Controlling Macromolecular Self-Assembly by Reactions and Structures of Saccharides”</i>	
10.15 – 10.30	O-04: Satsawat Visansirikul , Mahidol University, Thailand <i>“Chemical Synthesis of The Repeating Unit of Capsular Polysaccharide Staphylococcus aureus Type 5 and 8”</i>	
10.30 – 10.45	O-05: Thapakorn Jaroentomeechai , Mahidol University, Thailand	



November 20, 2025	
	<i>“Microbial Binding Module Employs Sophisticated Clustered Saccharide Patches to Selectively Adhere to Mucins”</i>
10.45 – 11.00	Coffee Break & Poster Session (Even Number)
	Session 6: Glycosciences # 4 Chairman: Kiyohiko Angata (Soka University, Japan) Jarunee Kaulpiboon (Thammasat University, Thailand)
11.00 – 11.20	IS-8: Heng Yin , DICP, Chinese Academy of Sciences, China <i>“Discovery, Modification and Application of Carbohydrate-Active Enzymes”</i>
11.20 – 11.40	IS-9: Wen Yi , Zhejiang University, China <i>“Understanding The Role of Core Fucosylation Using Chemical Tools”</i>
11.40 – 11.55	O-06: Yan Zhang , Shanghai Jiao Tong University, China <i>“The Significance of Precise Regulation of Protein O-GalNAc Glycosylation”</i>
12.00 – 13.00	Luncheon symposium hosted by SCIEX
	Session 7: Glycomics/Glycoproteomics Chairman: Kun Cho (KBSI, Korea) Morten Andersen (Macquarie University, Australia)
13.00 – 13.20	IS-10: Kun Cho , KBSI, Korea <i>“Advanced Mass Spectrometry for Comprehensive Glycan Profiling of Biotherapeutic Drugs”</i>
13.20 – 13.40	IS-11: Heeyeon Hwang , KBSI, Korea <i>“Glycoproteomic Search Engines with HCD and CID tandem MS Data”</i>
13.40 – 14.00	IS-12: Iqbal Jalaludin , Universiti Teknologi Malaysia, Malaysia <i>“Rethinking Sugar Profiling Using UV-Based Liquid Chromatography”</i>
14.00 – 14.20	IS-13: Morten Thaysen-Andersen , Macquarie University, Australia <i>“Systems Glycobiology Identifies HEXB as a Tumor-Promoting Glyco-Enzyme in Colorectal Cancer”</i>
14.20 – 14.35	O-07: Marissa Maciej-Hulm , Oslo Metropolitan University, Norway <i>Integration of Proteoglycan Glycoproteomics and GAGomics into Multi-Glycomics Towards Systems Glycobiology</i>
14.30 – 15.30	Coffee Break & Poster Session (Even Number)
	Session 8: Glycomedicine # 3 Chairman: Kan Ding (ISMM, Chinese Academy of Sciences, China) Somsiri Indramanee (Thammasat University, Thailand)
15.30 – 16.00	IL-8: Kan Ding , ISMM, Chinese Academy of Sciences, China <i>“The Function of Glucuronyl C5-epimerase in Metabolic-dysfunction-associated Steatohepatitis (MASH) and Kidney Fibrosis”</i>
16.00 – 16.20	IS-14: Sayaka Fuseya , AIST, Japan



November 20, 2025	
	<i>“Essential Role of Core 1–derived O-glycans in Podocyte Function and FSGS Pathogenesis”</i>
16.20 – 16.35	O-08: Jin Gao , DICP Chinese Academy of Sciences, China <i>“An LRR-only Protein Confers Disease Resistance by Mediating Cell Wall-Associated Kinase 1 to Perceive Oligogalacturonides in Arabidopsis thaliana”</i>
17.00 – 20.00	Invited dinner for Speakers, Steering committee, and Organizer

November 21, 2025	
8.30 – 9.00	Registration
	Session 9: Synthetic Glycosciences Chairman: Rungnapha Saeeng (Burapha University, Thailand) Mukram Mohamed Mackeen (National University of Malaysia, Malaysia)
9.00 – 9.30	IL-9: Rungnapha Saeeng , Burapha University, Thailand <i>“Synthesis of Propargyl Glycosides and Their Conversion to Triazole Glycosides for Bioactivity Studies”</i>
9.30 – 10.00	IL-10: Mukram Mohamed Mackeen , National University of Malaysia, Malaysia <i>“Short Cello-Oligosaccharide-Acting Recombinant Cellobiohydrolase from the Thermophilic Fungus Thielavia terrestris”</i>
10.00 – 10.20	IS-15: Xiao-Dong Gao , IPE, Chinese Academy of Sciences, China <i>“Precise preparation of lipid-linked oligosaccharides and their applications in Glycobiology study”</i>
10.20 – 10.35	O-09: Zirong Huang , City University of Hong Kong, Hong Kong <i>“Structure-Guided Design of Synthetic Conjugate Vaccines Based on K1 and K2 Capsular Polysaccharides of Klebsiella pneumoniae”</i>
10.35 – 11.00	Coffee Break
	Session 10: Glycomedicine # 4 Chairman: Sopit Wongkham (Khon Kaen University, Thailand)
11.00 – 11.30	IL-11: Norie Araki , Kumamoto University, Japan <i>“Glycoproteomics of The Cancer Stem Cells”</i>
	Session 11: Closing Ceremony Chairman: Atit Silsirivanit (Khon Kaen University, Thailand)
11.30 – 12.00	Presentation Awards Closing Remarks Announcement of the next ACGG (Japan)
12.00 – 13.00	Lunch
Afternoon	Excursion



LIST OF INVITED LECTURES

Invited Long Talk (IL)		
No.	Speakers	Title
IL-01	Hyun Joo An	Integrated Glyco-analytical Strategies for Immunogenicity Assessment of Advanced Biotherapeutics
IL-02	Pi-Hui Liang	Vaccine Adjuvants: Carbohydrate Chemists Help A Lot
IL-03	N. Siva Kumar	Lysosomal Enzymes and Their Receptors From <i>Hydra vulgaris</i>
IL-04	Titi Candra Sunarti	Role of Lignocellulolytic Microorganisms for Utilization of Agro-industrial Solid Wastes
IL-05	N. Jayaraman	Albumin-Mediated Delivery of Tn Antigen and Proliferation of Antigen-Specific Antibodies
IL-06	Kohki Fujikawa	Structure-Activity Relationship Studies of The Glycolipid Mpiase Essential for Membrane Protein Integration in <i>E. Coli</i>
IL-07	Zaher M.A. Judeh	Concise Total Synthesis of Phenylethanoid Glycoside Acteoside and Isoacteoside
IL-08	Kan Ding	The Function of Glucuronyl C5-epimerase in Metabolic-dysfunction-associated Steatohepatitis (MASH) and Kidney Fibrosis
IL-09	Rungnapha Saeeng	Synthesis of Propargyl Glycosides and Their Conversion to Triazole Glycosides for Bioactivity Studies
IL-10	Mukram Mohamed Mackeen	Short Cello-Oligosaccharide-Acting Recombinant Cellobiohydrolase from the Thermophilic Fungus <i>Thielavia terrestris</i>
IL-11	Norie Araki	Glycoproteomics of The Cancer Stem Cells



Invited Short Talk (IS)		
No.	Speakers	Title
IS-01	Chian-Hui Lai	Mannoside Modified-Nano-Interface for Drug Delivery and Sensing
IS-02	Muhamad Frendy Setyawan	Exploration of Indonesian Natural Enzymes as Novel Candidates for Tuberculosis Drug Development
IS-03	Hsiang-Chi Huang	Targeting Host Glycosylation Pathways to Prevent Viral Co-Infections
IS-04	Muhammad Adrian Natsir	Fusion and Characterization of CBM Amylase Thermophile Saccharification Enzyme from Gunung Pancar Hot Spring
IS-05	Yasuhiro Kajihara	Reinforcement of Protein-Protein Interaction by Glycosylation
IS-06	Nur Maisarah Sarizan	The Glyco-Interface in Plant-Pathogen Interactions: Comparative Insights from Model and Crop Systems
IS-07	Sukanya Luang	Clinical Applications of Lectin–Glycan Interactions in Cholangiocarcinoma
IS-08	Heng Yin	Discovery, Modification and Application of Carbohydrate-Active Enzymes
IS-09	Wen Yi	Understanding The Role of Core Fucosylation Using Chemical Tools
IS-10	Kun Cho	Advanced Mass Spectrometry for Comprehensive Glycan Profiling of Biotherapeutic Drugs
IS-11	Heeyeon Hwang	Glycoproteomic Search Engines with HCD and CID tandem MS Data
IS-12	Morten Thaysen-Andersen	Systems Glycobiology Identifies HEXB as A Tumor-Promoting Glyco-Enzyme in Colorectal Cancer
IS-13	Iqbal Jalaludin	Rethinking Sugar Profiling Using UV-Based Liquid Chromatography
IS-14	Sayaka Fuseya	Essential Role of Core 1–derived O-glycans in Podocyte Function and FSGS Pathogenesis
IS-15	Xiao-Dong Gao	Precise Preparation of Lipid-Linked Oligosaccharides and Their Applications in Glycobiology Study



LIST OF SELECTED ORAL PRESENTATIONS

No.	Presenters	Title
O-01	Charupong Saengboonmee	Glucose Analogues Inhibit Intracellular <i>N</i> -Glycosylation of Cancer Cells: A Crosstalk Between Energy Metabolism and Glycosylation
O-02	Kittikhun Wangkanont	Biosynthesis of 2,3-Diaminoglucose in The Lipid A of <i>Acidithiobacillus Ferrooxidans</i> and <i>Campylobacter Jejuni</i>
O-03	Guosong Chen	Controlling Macromolecular Self-Assembly by Reactions and Structures of Saccharides
O-04	Satsawat Visansirikul	Chemical Synthesis of The Repeating Unit of Capsular Polysaccharide <i>Staphylococcus Aureus</i> Type 5 And 8
O-05	Thapakorn Jaroentomeechai	Microbial Binding Module Employs Sophisticated Clustered Saccharide Patches to Selectively Adhere to Mucins
O-06	Yan Zhang	The Significance of Precise Regulation of Protein <i>O</i> -GalNAc Glycosylation
O-07	Marissa Maciej-Hulm	Integration of Proteoglycan Glycoproteomics and Gagomics into Multi-Glycomics Towards Systems Glycobiology
O-08	Jin Gao	An LRR-only Protein Confers Disease Resistance by Mediating Cell Wall-Associated Kinase 1 to Perceive Oligogalacturonides in <i>Arabidopsis Thaliana</i>
O-09	Zirong Huang	Structure-Guided Design of Synthetic Conjugate Vaccines Based on K1 and K2 Capsular Polysaccharides of <i>Klebsiella pneumoniae</i>



LIST OF POSTER PRESENTATIONS

Poster Presentations		
No.	Presenters	Title
P-01	Dinesh Kumar Jagannathareddy	Design and Simulation of Polysaccharide based Membrane for Food Packaging Applications
P-02	Karuntarat Teeravirote	Glycomics and Glycoproteomics reveal the role of O-Glycosylation of Chloride Channel CLIC-Like 1 in Melanogenesis
P-03	Prasan Tangyuenyongwatana	Phytoestrogen Binding to Estrogen Receptor Beta: A Deep Learning Docking Study with GNINA 1.0 to Predict Bcl-xL Activation
P-04	Nguyen Anh Nhung Tran	Inhibition of Polymerase Chain Reaction by Hydrogel Monomers
P-05	Anh Dinh Xuan Tuan	Multi-Omics in Single-Cell Profiling Reveals Glycomic and Transcriptomic of Pancreatic Cancer
P-06	Narong Arunrut	Development of a Real-Time RT-LAMP Assay for Rapid Detection of Yellow Head Virus (YHV) in Shrimp
P-07	Zhengyang Xu	Chitosan Nanoparticles Loaded with Rice Chitinase OsChiA1c: Enhanced Disease Resistance through Direct Antimicrobial Activity and Plant Immunity Induction
P-08	Soichiro Magara	Analysis of Glycosphingolipid Transport and Metabolism in the Plasma Membrane Using Fluorescent Glycosphingolipid Probes
P-09	Ming-Fei Tsai	Design of a Fluorescent Probe Enabling Accurate Senescence Detection under Melanin Interference
P-10	Yi-Cheng Wang	Drug Efficacy Assessment of pH-Responsive ManBC60@G5Dox in MDA-MB-231 Cell Line
P-11	Mochammad Aqilah Herdiansyah	Dual Mechanism of <i>Alpinia purpurata</i> Extract as Antidengue Virus Serotype-3 Againsts NS2B-NS3 and Envelope Protein: <i>In Vitro</i> and <i>In Silico</i> Approach
P-12	Riki Haryanto	Microwave-Assisted Extraction of Fucoidan from <i>Hormophysa cuneiformis</i> and Its Biological Activities
P-13	Xingming Zhao	Role of O-glycosyltransferase GalNAc-T18 in Regulating Maturation and Secretion of Pulmonary Surfactant Proteins
P-14	Mai Ha Thi Thao	MTHFR Genes Characteristics in Psoriasis Patients at Can Tho Dermato-Venereology Hospital: MTHFR Characteristics
P-15	Jarinya Promjaro	One-pot Synthesis of <i>O</i> -glycosyl Propargylamine Derivatives



Poster Presentations		
No.	Presenters	Title
P-16	Proudpalin Suriyabhivadh	Edible Insects as Sustainable Protein: Global Perspectives and Thailand's Culinary Potential for Soft Power
P-17	Digvijay Singh	Adsorption Studies of a Chitinase from Endophytic <i>Alcaligenes sp.</i> using Acetone and Ethanol activated TiO ₂
P-18	Kanyanat Losakul	Synthesis of Ethyl Glycosides Catalyzed by Cyclodextrin Glycosyltransferase and Their Potential Application in Antibacterial Wound-Healing Patches
P-19	Patcharaporn Boottanun	Lectin Microarray-Based Tissue Glycome Mapping Reveals Opposing Expression of Disialyl-T in Heart and Kidney of Type 4 Cardiorenal Syndrome
P-20	Kiyohiko Angata	ACGG-DB evolves into a FAIR-driven Data Infrastructure along with LM-GlycoRepo and LM-GlycomeAtlas for Spatial Glycomics
P-21	Atsushi Kuno	Realizing Clinical Glycan Profiling With a Lectin Array Using Glycobist
P-22	Chatchai Phoomak	ALG1-Mediated <i>N</i> -Linked Glycosylation Promotes Aggressiveness of Lung Adenocarcinoma Cells
P-23	Sopita Visamol	Mannose-Binding Lectins as Therapeutic Strategy Against SARS-CoV-2 Infection
P-24	Praepan Lapphaisal	Exploring the Impact of Oligosaccharide Binding Sites on the Catalytic Activity of a GH149 Beta-(1,3)-Glucan Phosphorylase
P-25	Narut Veerawong	Comparative Anti-Glycation Activity of Natural Extracts and Reference Compounds Using BSA Models from Durian, Thai Bao Mango, and Pomegranate Peel Extracts from Wastes
P-26	Jeong Won Kim	Label-Free Quantitative Platform for Rapid Separation and Structural Characterization of Uronic Acids in Marine Polysaccharides
P-27	Yong Heum Na	Retrosynthetic Mapping of Age-Dependent <i>N</i> -Glycan Remodeling in <i>C. elegans</i>
P-28	Zhijue Xu	High-Throughput Analysis of Key Residues Controlling Acceptor Substrate Selectivity in O-Glycosyltransferase GalNAc-Ts
P-29	Long Li	Precise Protein Assembly Driven by Inducing Ligand Strategy
P-30	Sunanda Keisham	Droplet-Based Glycan and RNA Sequencing for Profiling The Distinct Cellular Glyco-States in Single Cells

LIST OF PROCEEDING ARTICLES

Poster Presentations		
No.	Presenters	Title
P-03	Prasan Tangyuenyongwatana	Phytoestrogen Binding to Estrogen Receptor Beta: A Deep Learning Docking Study with GNINA 1.0 to Predict Bcl-xL Activation
P-16	Proudpalin Suriyabhivadh	Edible Insects as Sustainable Protein: Global Perspectives and Thailand's Culinary Potential for Soft Power



Presentation guide

Invited Talks

1. Long Talk: 30-minute talk/Q&A using PowerPoint 97-2003 or a later version.
2. Short Talk: 20-minute talk/Q&A using PowerPoint 97-2003 or a later version.
3. We will prepare the main computer (Windows) and laser pointer for your presentation on the stage. Please submit your presentation slides to the slide submission desk in the conference hall (near the stage) at least 30 minutes before your session starts.
4. You may use your own computer for the presentation. However, please also prepare your own connector. We will prepare the laser pointer for you at the podium.
5. At least 1 hour before your session, you may test and submit your slide at the “File Testing Room” near by the registration area.

Selected oral presentation

1. The oral presentation will be selected from the poster presentations. The academic committee will contact the candidate for oral presentation via email. Please prepare a 12-minute talk/Q&A using PowerPoint 97-2003 or a later version.
2. We will prepare the main computer (Windows) and laser pointer for your presentation on the stage. Please submit your presentation slides to the slide submission desk in the conference hall (near the stage) at least 30 minutes before your session starts.
3. You may use your own computer for the presentation. However, please also prepare your own connector. We will prepare the laser pointer for you at the podium.
4. At least 1 hour before your session, you may test and submit your slide at the “File Testing Room” near by the registration area.

Poster presentation

1. Please prepare your poster as a PDF file to present as an E-Poster
2. Poster Size: A4, Portrait.
3. We provide the LCD monitor for the presentation.
4. Please submit your poster (PDF file) to 14thacgg2025@gmail.com before November 17, 2025 or submit onsite at the “File Testing Room” near by the registration area.
5. Please be at your poster to give a short presentation (3-5 min) during the poster session:
 - Odd number posters: November 19, 2025
 - Even number posters: November 20, 2025