

# Day 1 : 9 November 2022

Time	Program	
10:00 - 13:00	Registration and Poster Setup (All Posters)	
	Khum Kham Luang Room	
13:00- 13:30	<b>Opening Ceremony</b> - Dr. Chantragan Phiphobmongkol (President, Protein Society of Thailand) - Emeritus Prof. M.R. Jisnuson Svasti (Honorary Advisor, Protein Society of Thailand) - Prof. Bannakij Lojanapiwat, M.D. (Dean of Faculty of Medicine, Chiang Mai University) - Assoc. Prof. Dumnoensun Pruksakorn, M.D. (PST2022 Organizing Committee Chair, Faculty of Medicine, Chiang Mai University)	
13:30 - 14:30	<b>Plenary Lecture 1</b> (Chair: Emeritus Prof. M.R. Jisnuson Svasti) Prof. Richard Simpson La Trobe University Title: Extracellular Vesicles: Their Role in Cancer and Epithelial-Mesenchymal Transition (EMT)	
14:30 - 15:30	<b>Special Lectures</b> (Chair: Prof. James R. Ketudat-Cairns) <b>Awardees of the 2022 Professor M.R. Jisnuson Svasti Young Protein Scientist of Thailand Award</b> 1. Assoc. Prof. Varodom Charoensawan (Mahidol University) Title: Exploring the Evolution, Expression and Functions of Regulatory Proteins using Systems Biology 2. Dr. Chayasith Uttamapinant (VISTEC) Title: A Multiplexed Cas13-based Assay with Point-of-Care Attributes for Simultaneous COVID-19 Diagnosis and Variant Surveillance	
15:30 - 16:30	<b>Coffee Break &amp; Exhibition (Chiang Thong, Chiang Sean and Viang Kham Room)</b> PST Annual Meeting	
	<b>Khum Kham Luang 1 Room</b>	<b>Khum Kham Luang 2 Room</b>
	<b>Session 1 : Food and Agricultural Biotechnology and Related Topics Session 1</b>	<b>Session 2 :Cancer</b>
	<b>Chairs:</b> Assoc. Prof. Lalida Shank Dr. Pattanapong Thangsunan Chiang Mai University	<b>Chairs:</b> Assoc. Prof. Teera Chewonarin Chiang Mai University Dr.Voraratt Champattanachai Chulabhorn Research Institute
16:30 - 17:05	<b>Keynote lecture</b> Priv.-Doz. Dr. Thu-Ha Nguyen University of Natural Resources and Life Sciences Title: Lactic Acid Bacteria as Cell Factories for Production of Food Enzymes	<b>Keynote lecture (Withdrawn)</b> Assoc. Prof. Norie Araki Kumamoto University Title: Proteomics-Based Integrated Systems Biology for Tumor Research
17:05 - 17:30	<b>Invited lecture</b> Assoc. Prof. Wataru Saburi Hokkaido University Title: Expansion of Enzymatic Synthesis of Carbohydrates using Novel Carbohydrate-Acting Enzymes	<b>Invited lecture</b> Prof. Sarawut Jitrapakdee Mahidol University Title: Emerging Role of the Biotin-Dependent Carboxylase in Cancers
17:30- 17:55	<b>Invited lecture</b> Assoc. Prof. Pakorn Opaprakasit Thammasat University Title: Controlled Release Nanomaterials for Effective Treatment of COVID-19.	<b>Invited lecture</b> Prof. Tavan Janvilisri Mahidol University Title: Targeting Wnt Signaling Pathway in Nasopharyngeal Carcinoma
17:55 - 18:10	<b>Selected Oral Presentation 1</b> Bhumrapee Eiamthong VISTEC Title: Screening of Viable Consumer-Grade Polyethylene Terephthalate (PET) and Optimizing Conditions for Enzymatic PET Degradation by MG8 PET Hydrolase	<b>Selected Oral Presentation 2</b> Dr. Piriya Wongkongkathep Chulalongkorn University Title: Personalized Neoantigen Vaccine Generates Cancer-specific Immunological Responses in Thai Melanoma and Renal Cell Carcinoma Patients
18:10 - 20.00	Welcome Reception	

9 -11 NOV 2022

The 17<sup>th</sup> International Symposium of The Protein Society of Thailand (PST2022)

Chiang Mai, Thailand

# Day 2 : 10 November 2022

Time	Program	
08:30 - 09:00	Registration	
	<b>Khum Kham Luang 1 Room</b>	<b>Khum Kham Luang 2 Room</b>
	<b>Session 3 : Pharmacology</b>	<b>Session 4 : Protein Structure and Function</b>
	<b>Chairs:</b> Assoc.Prof. Chadarat Ampasavate Dr. Pawitrabhorn samutrtai Chiang Mai University	<b>Chairs:</b> Assoc.Prof. Danaya Pakotiprapha Mahidol University Assist.Prof. Panchika Prangkio Chiang Mai University
09:00 - 09:35	<b>Keynote lecture</b> Prof.Young-Joon Surh Seoul National University Title: Role of Protein-Protein Interactions in the Tumor Progression: Research Highlights	<b>Keynote lecture</b> Prof. James R. Ketudat-Cairns Suranaree University of Technology Title: Structure and Application of Beta-Glucosidases to Glycosylate Bioactive Compounds by Hitch or by Click Leads to Insite into the Importance of Experimental Structural Biology
09:35 - 10:00	<b>Invited lecture</b> Prof. Wichitra Tassaneeyakul Khon Kaen University Title: HLA as Pharmacogenetic Markers of Drug-Induced Severe Cutaneous Adverse Drug Reactions	<b>Invited lecture</b> Dr. Leela Ruckthong King Mongkut's University of Technology Thonburi Title: Crystallographic and Spectroscopic Evidence of Pb(II) Binding in the Three-stranded Coiled Coil Region of the Human Line-1 ORF1p
10:00 - 10:25	<b>Invited lecture</b> Assoc.Prof. Supaart Sirikantaramas Chulalongkorn University Title: Discovery of Umami Compounds and Peptides in Plants using Multiplatform Metabolomics	<b>Invited lecture</b> Assoc.Prof. Piyarat Nimmanpipug Chiang Mai University Title: Interplay of Structure and Interactions in Functional Macromolecular Systems via Multiscale In-silico Approaches
10:25 - 10:40	<b>Selected Oral Presentation 3</b> Dr. Kriengsak Lirdprapamongkol Chulabhorn Research Institute Title: Dimer of Vanillin Exerts Antimetastatic Potential in HepG2 Liver Cancer Cells Through Inhibiting FAK/PI3K/Akt Signaling Pathway	<b>Selected Oral Presentation 4</b> Assoc.Prof. Sarin Chimnaronk Mahidol University Title: An e-ASIA JRP: Screening for Novel Chemotypes Against Dengue Virus from Marine Organisms
10:40 - 11:10	<b>Coffee Break &amp; Exhibition (Chiang Thong, Chiang Sean and Viang Kham Room)</b>	
	<b>Selected Oral Presentation 1</b>	<b>Selected Oral Presentation 2</b>
	<b>Chair:</b> Assoc.Prof. Atit Silsirivanit Khon Kaen University	<b>Chair:</b> Dr. Sittiruk Roytrakul National Science and Technology Development Agency
11:10 - 11:25	<b>Selected Oral Presentation 5</b> Dr. Suyanee Thongchot Mahidol University Title: The Induction of Nucleolin-Specific T cells Against Triple Negative Breast Cancer by Immunogenic Nucleolin Short Peptides	<b>Selected Oral Presentation 8</b> Dr. Jittiporn Chaisaingmongkol Chulabhorn Research Institute Title: Landscape of DNA Methylation in Intrahepatic Cholangiocarcinoma Patients in Thailand
11:25 - 11:40	<b>Selected Oral Presentation 6</b> Dr. Charupong Saengboonmee Khon Kaen University Title: GABBR2 is a Potential Therapeutic Target for Cholangiocarcinoma with Diabetes Mellitus	<b>Selected Oral Presentation 9</b> Prakasit Khamsuwan Naresuan University Title: Targeting Upregulated-LAMB1 Derived from SRPK Inhibitors Treated-Cholangiocarcinoma Cell Proteome for Enhancing in vitro Growth Inhibition Through pERK/ERK/c-Jun axis
11:40 - 11:55	<b>Selected Oral Presentation 7</b> Preenapan Changpasuk Naresuan University Title: Inhibition of SR-protein Kinase Induces Cholangiocarcinoma Cell Apoptosis Through the Alteration of SR-rich Splicing Factor Phosphorylation	<b>Selected Oral Presentation 10</b> Orasa Panawan Khon Kaen University Title: Global- and Phospho-Proteomics Identify the Cholesterol and Fatty Acid Metabolic Pathway as a Specific Key Target of Glioma Stem-like Cells
11:55 - 12:55	<b>Luncheon Lecture by World Tech Enterprise Ltd.</b> <b>Dr. Jaran Jainhuknan</b> <b>Title: Enhancing the Workflow Capabilities of Translational and Life Science Mass Spectrometry: New Developments in Mass Spectrometry Imaging, and Proteomics</b>	<b>Luncheon Lecture by SCIEX</b> <b>Prof. Qingsong Lin</b> <b>Title: Drug Target Profiling by Chemical Proteomics</b>
	<b>Session 5 :Immunology and Inflammation</b>	<b>Session 6 :Bioinformatics and Statistics</b>
	<b>Chairs:</b> Assist.Prof. Hathairat Thananchai Assist.Prof. Aussara Panya Chiang Mai University	<b>Chair:</b> Assoc.Prof. Varodom Charoensawan Mahidol University
13:00 - 13:35	<b>Keynote lecture</b> Prof.Watchara Kasinrerak Chiang Mai University Title: Cannabinoid Receptors and T cell Regulation	<b>Keynote lecture</b> Dr. Pimlapas Leekitcharoenphon Technical University of Denmark Title: Bioinformatics for Fighting with Infectious Diseases

# Day 2 : 10 November 2022

Time	Program	
	Khum Kham Luang 1 Room	Khum Kham Luang 2 Room
	Session 5 :Immunology and Inflammation	Session 6 :Bioinformatics and Statistics
13:35 - 14:00	<b>Invited lecture</b> Dr. Suangsuda Supasai Mahidol University Title: Persistent Neuropathology and Behavioral Defects in Rats After Status Epilepticus	<b>Invited lecture</b> Dr. Kwanjeera Wanichthanarak Mahidol University Title: Bioinformatics Meets Omics
14:00 - 14:25	<b>Invited lecture</b> Prof. Chanitra Thuwajit Mahidol University Title: The Immunotherapy of Triple Negative Breast Cancer	<b>Keynote lecture (14.00-14.35)</b> Assist.Prof. Balachandran Manavalan Sungkyunkwan University Title: Computational Identification of Therapeutic Peptides Using Several Machine Learning Frameworks
14:25 - 14:50	<b>Invited lecture</b> Dr. Surapun Tepasorndech NSTDA Title: Pyrogallol as the Novel Metabolite Inhibits Inflammatory Signaling Responses	<b>Selected Oral Presentation 11 (14.35-14.50)</b> Benjamaporn Sriwilai Mahidol University Title: Exploring B Cell Receptor Characteristics in COVID-19 Patients from Publicly Available Single-Cell Omics Data
14:50 - 15:50	Poster Session 1 (Odd Numbers) (Chiang Thong, Chiang Sean and Viang Kham Room)	
	<b>Coffee Break &amp; Exhibition (Chiang Thong, Chiang Sean and Viang Kham Room)</b>	
	Session 7 : Proteomics	Session 8 : Neurodegenerative Diseases
	<b>Chairs:</b> Dr. Chantragan Phiphobmongkol Chulabhorn Research Institute Asst. Prof. Anuchit Phanumartwiwath Chulalongkorn University	<b>Chair:</b> Assoc.Prof. Kittisak Yokthongwattana Mahidol University
15:50 - 16:25	<b>Keynote lecture</b> Prof. Ebrahim Razzazi-Fazeli University of Veterinary Medicine Title: From Mass Spectrometry to Proteomics: A Historical Perspective	<b>Keynote lecture</b> Prof. Tewin Tencomnao Chulalongkorn University Title: An Integrated Model and Approach for elucidating the Mechanisms of Natural Products for Anti-aging and Anti-neurodegeneration
16:25 - 16:50	<b>Invited lecture</b> Dr. Wararat Chiangjong Mahidol University Title: Reveal the Hidden Markers in Clinical Prognosis and the Underlying Molecular Mechanism by Mass Spectrometry	<b>Invited lecture</b> Prof. Narawut Pakaprot Mahidol University Title: Effect of Herbal Medicine on Learning and Memory, and Brain Injury
16:50 - 17:15	<b>Invited lecture</b> Assist.Prof. Sutin Kingtong Burapha University Title: Toxicity of DDT to the Hooded Oyster Saccostrea Cuccullata and the Molecular Mechanism of its Toxicity Revealed by a Proteomic Approach	<b>Invited lecture</b> Dr. Luca Lo Piccolo Chiang Mai University Title: Regulation of FUS homeostasis in proteinopathies: what can we learn from Drosophila models of FUSopathies?
17:15 - 17:30	<b>Selected Oral Presentation 12</b> Nuttamon Prompakdee Naresuan University Title: Transcriptomic and Proteomic Analyses of Rice Seedling Roots Treated with Piper Betle Extract: an In Silico Approach	<b>Selected Oral Presentation 13</b> Aiyarin Kittilukkana Chiang Mai University Title: Labile Iron Disrupts Cellular Lysosomal Clearance and Induces an Accumulation of Misfolding Protein in Neuronal Cells
	Selected Oral Presentation 3	Special Session: Precision Medicine for Pediatric Cancer Treament
	<b>Chair:</b> Dr. Pagkapol Pongsawakul Mahidol University	<b>Chairs:</b> Assoc.Prof. Usanarat Anurathapan Mahidol University Dr. Jeerawan Klangjorhor Chiang Mai University
17:40 - 17:55	<b>Selected Oral Presentation 14</b> Dr. Kanokwan Lowhalidanon Suranaree University of Technology Title: Production and Application of Monoclonal Antibodies Against Human LDL for Biomedical Research	<b>Invited lecture</b> Prof. Surasak Sangkhathat Prince of Songkla University Title: Molecular Pathogenesis of Pediatric Solid Tumors: Potential Windows for Target Discovery
17:55 - 18:10	<b>Selected Oral Presentation 15</b> Theerawat Ruenkam VISTEC Title: Progress Toward Yeast Display-Based Directed Evolution of Pyrrolysyl-tRNA Synthetase	<b>Invited lecture</b> Assoc.Prof. Dumnoensun Pruksakorn Chiang Mai University Title: Precision Approach for Osteosarcoma Treatment by Genomics Technologies
18:10 - 18:25	<b>Selected Oral Presentation 16</b> Narongyot Kittipanukul VISTEC Title: Controlling Genetic Code Expansion with Sequence-Specific RNA Binding Proteins	<b>Invited lecture</b> Dr. Praewa Suthapot Mahidol University Title: Genomics-Driven Precision Medicine in Pediatric Cancer
19:00 - 21:00	<b>Banquet (Speakers and Committee)</b>	

# Day 3 : 11 November 2022

Time	Program	
08:30 - 09:00	Registration	
	<b>Khum Kham Luang 1 Room</b>	<b>Khum Kham Luang 2 Room</b>
	<b>Session 9 : Post-Translational Modifications and Synthetic Biology</b>	<b>Session 10 : Infectious Disease</b>
	<b>Chair:</b> Dr. Chayasith Uttamapinant VISTEC	<b>Chair:</b> Assist.Prof. Parameth Thiennimitr Chiang Mai University
09:00 - 09:35	<b>Keynote lecture</b> Prof. Matthew DeLisa Cornell University Title: Synthetic Glycobiology: Designing and Engineering Glycomolecules Inside and Outside of Living Cells	<b>Keynote lecture</b> Prof. Michael Hsieh The George Washington University Title: The Story of IPSE, a Parasite Immunomodulatory Protein That Provides Insights Into Host-Pathogen Protein Interactions
09:35 - 10:00	<b>Invited lecture</b> Dr. Sakonwan Kuhaudomlarp Mahidol University Title: Multivalent Glycomimetics Targeting Pathogenic Sugar-Binding Protein	<b>Invited lecture</b> Dr. Phoom Chairatana Mahidol University Title: Hijacking Salmonella Iron Uptake Machinery to Inhibit Their Infection
10:00 - 11:00	Poster Session 2 (Even Numbers) (Chiang Thong, Chiang Sean and Viang Kham Room)	
	<b>Coffee Break &amp; Exhibition (Chiang Thong, Chiang Sean and Viang Kham Room)</b>	
11:00 - 11:25	<b>Invited lecture</b> Dr. Chanat Aonbangkhen Chulalongkorn University Title: Engineered OGT and OGA Enzymes for Studying Protein O-GlcNAcylation in Cells	<b>Invited lecture</b> Assist.Prof. Vorrapon Chaikeeratisak Chulalongkorn University Title: Mechanism of Pre-killing (MOK): Antibacterial Discovery Through Bacteriophage Genomics
11:25 - 11:50	<b>Invited lecture</b> Assist.Prof. Julius Fredens Yong Loo Lin School of Medicine Title: Creating and Exploiting Genetic Incompatibility in E. coli for Synthetic Biology	<b>Invited lecture</b> Assist.Prof. Poochit Nonejuie Mahidol University Title: Bacterial Cytological Profiling (BCP): a Microscopy-Based Platform for Antibiotic Discovery
11:50 - 12:05	<b>Selected Oral Presentation 17</b> Benya Lakkanasirorat VISTEC Title: Progress Toward Evolving Biotin Ligase with Altered Substrate Specificity	<b>Selected Oral Presentation 18</b> Manita Yimcharoen Chiang Mai University Title: The Stress Response Regulation of Mycobacterium Tuberculosis with Different Drug Resistance Profiles in a Multi-stress Model
12:05 - 13:00	<b>Luncheon Lecture by SciSpec Co., Ltd.</b> <b>Dr. Ming-Yi Ho</b> <b>Title: Scale up Proteome Science with Thermo Scientific Orbitrap Mass Spectrometry</b>	<b>Luncheon Lecture by Cytiva</b> <b>Dr. Shu-Wen AN</b> <b>Title: Biacore New System Introduction</b>
	<b>Session 11 : Precision Medicine, Liquid Biopsy and Evs</b>	<b>Session 12 : Food and Agricultural Biotechnology and Related Topics Session 2</b>
	<b>Chairs:</b> Dr. Churat Weeraphan Chulabhorn Research Institute Dr. Parunya Chaiyawat Chiang Mai University	<b>Chair:</b> Assoc.Prof. Dumnoensun Pruksakorn Chiang Mai University
13:00- 13:35	<b>Keynote lecture</b> Prof. Kovit Pattanapanyasat Mahidol University Title: Invasion Proteins of Extracellular Vesicles from Malaria-Infected Red Blood Cells	<b>Keynote lecture</b> Prof. Chen Wei Ning, William Nanyang Technological University Title: Tech Innovations and Zero Waste Food Processing: role of food metabolomics
13:35 - 14:00	<b>Invited lecture</b> Assoc.Prof. Arthit Chairoungdua Mahidol University Title: Extracellular Vehicles as Biomarkers and Therapeutic Applications in Cancer	<b>Invited lecture</b> Assoc.Prof. Chartchai Khanongnuch Chiang Mai University Title: Important Role of Tannase and Tannase-producing Microbes on Successive Fermentation of Miang, a Traditional Fermented Tea Leaves of North Thailand
14:00 - 14:25	<b>Invited lecture</b> Dr. Sasimol Udomruk Chiang Mai University Title: Cell-Free DNA Fragmentomes: Breakthrough "Omics" in Molecular Diagnosis	<b>Invited lecture</b> Dr. Tippapha Pisithkul Maejo University Title: Heterologous Protein Expression for Food and Agricultural Applications
14:25 - 15:25	<b>Coffee Break &amp; Exhibition (Chiang Thong, Chiang Sean and Viang Kham Room)</b>	
	<b>Khum Kham Luang Room</b>	
15:25 - 16:25	<b>Plenary Lecture 2</b> (Chair: Dr. Chantragan Phiphobmongkol) Prof. Yu-Ju Chen Academia Sinica Title: Opportunity and Challenge of Proteomics-Guided Precision Oncology	
16:25 - 17:00	Closing Ceremony	