4 November, 2020 (Wed)	5 November, 2020 (Thu)	6 November, 2020 (Fri)
Registration & Posters Set Up (08:00-08:30)		
Opening Ceremony (08:40-09:00)		
Young Protein Scientist of Thailand Awards Assist. Prof. Atit Silsirivanit (09:10-09:40) Assist. Prof. Danaya Pakotiprapha (09:40-10:10)	Invited Lecture 4 (09:00-09:30) Dr. Chayasith Uttamapinant	Invited Lecture 8 (09:00-09:30) Dr. Sittiruk Roytrakul
	Invited Lecture 5 (09:30-10:00) Dr. Vorrapon Chaikeeratisak	Invited Lecture 9 (09:30-10:00) Assist. Prof. Hansuk Buncherd
Coffee/tea break (10:10-10:40)	Coffee/tea break (10:00-10:40)	Coffee/tea break (10:00-10:40)
Selected Oral Presentation Oral 1: Permkun Permsirivisarn (10:40-11:00) Oral 2: Rawiporn Amornloetwattana (11:00-11:20) Oral 3: Assist. Prof. Adisak Romsang (11:20-11:40) Oral 4: Dr. Aimorn Homchan (11:40-12:00)	Selected Oral Presentation Oral 5: Assist. Prof. Thanyada Rungrotmongkol (10:40-11:00) Oral 6: Chutipa Chiawpanit (11:00-11:20) Oral 7: Vimbai Irene Machimbirike (11:20-11:40) Oral 8: Peeranat Jatooratthawichot (11:40-12:00)	Selected Oral Presentation Oral 13: Nattapong Polpong (10:40-11:00) Oral 14: Lalita Lumkul (11:00-11:20) Oral 15: Nutnicha Sirikaew (11:20-11:40) Oral 16: Assoc. Prof. Dumnoensun Pruksakorn (11:40-12:0
Luncheon Lecture by SCIEX Justin Lim (12:00-13:00) CRISPR-Cas9 / SWATH [®] / TripleTOF [®]	Luncheon Lecture by World Tech Enterprise Jaran Jainhuknan (12:00-13:00) 4D Omics / timsTOF-fleX™ / Trapped-ion mobility MS	Luncheon Lecture by Cytiva (former GE) Hui Yee (12:00-13:00) Cell DIVE / Multiplex fluorescence Imaging / Tumor Microenvironment
Protein Society of Thailand Annual Meeting (13:00-14:00)	Poster Session (<i>Even Number</i>) (13:00-14:00)	Extracellular Vesicles Session Prof. Kovit Pattanapanyasat (13:00-13:30) Assoc. Prof. Arthit Chairoungdua (13:30-14:00)
Invited Lecture 1 (14:00-14:30) Assist. Prof. Kornkamon Lertsuwan	Invited Lecture 6 (14:00-14:30) Assist. Prof. Nuttee Suree	Dr. Somchai Chutipongtanate (14:00-14:30)
Invited Lecture 2 (14:30-15:00) Assoc. Prof. Chanitra Thuwajit	Selected Oral Presentation Oral 9: Kunwadee Phongpao (14:30-14:50)	Poster Awards & Closing Ceremony (14:30-15:00)
Invited Lecture 3 (15:00-15:30) Prof. Rasana W Sermswan	Coffee/tea break (14:50-15: 30)	
Posster Session (<i>Odd Number</i>) (15:30-16:30) &	Invited Lecture 7 (15:30-16:00) Assist. Prof. Wang Nguitragool Selected Oral Presentation Oral 10: Assist. Prof. Sarin Chimnaronk (16:00-16:20)	
Welcome Reception (15:30-17:30)	Oral 11: Kanokporn Sornsuwan (16:20-16:40)	

SYMPOSIUM PROGRAM

The 15th International Symposium of the Protein Society of Thailand

Wednesday, November 4, 2020

08:00 – 08:30 Registration & Poster Set up (all posters) 08:40 – 09:00 **Opening ceremony** *Emeritus Prof. Dr. M.R. Jisnuson Svasti*

Chairman: James Ketudat-Cairns

- 09:00 09:10 2020 MRJS Young PST Award
- 09:10 09:40 **2020 MRJS Young PST Awardee 1**: "Involvement of glycans and glycosylation in progression of cholangiocarcinoma" *Atit Silsirivanit*
- 09:40 10:10 **2020 MRJS Young PST Awardee 2:** "Addressing complex biological questions using integrative structural biology approach in Thailand" Danaya Pakotiprapha

10:10-10:40 Coffee/Tea Break

Chairman: Dumrongkiet Arthan

- 10:40 11:00 **Oral 1:** "Biochemical and structural characterization of transcription regulation by *Acinetobacter baumannii* HpaR" *Permkun Permsirivisarn*
- 11:00 11:20 **Oral 2:** "Crystal structures of a chitooligossacharide specific channel (*Sm*ChiP) from *Serratia marcescens*" *Rawiporn Amornloetwattana*
- 11:20 11:40 **Oral 3:** "Thiol-based redox circuit of reactive chlorine speciesresponsive elements in *Pseudomonas aeruginosa*" *Adisak Romsang*
- 11:40 12:00 **Oral 4:** "Biochemical characterization of Wss1 homolog from *Candida* albicans and its role in DNA-protein crosslink tolerance" Aimorn Homchan
- 12:00 13:00 Luncheon Lecture by Sciex Thailand: "Confirming gene mutation by CRISPR-Cas9 at the protein level and identifying proteome-wide changes using SWATH® acquisition on TripleTOF® systems" *Justin Lim*
- 13:00 14:00 Protein Society of Thailand Annual Meeting

Chairman: Danaya Pakotiprapha

- 14:00 14:30 **Invited Lecture 1:** "Unveiling molecular mechanisms of iron overload and thalassemia-induced osteoporosis: from ion transport and bone metabolism to potential therapeutics" *Kornkamon Lertsuwan*
- 14:30 15:00 **Invited Lecture 2:** "Peptide-based immunotherapy for triple negative breast cancer" *Chanitra Thuwajit*
- 15:00 15:30 **Invited Lecture 3:** "Cyclic lipopeptides with antimicrobial activity from a soil bacterium, *Bacillus amyloliquefaciens*" *Rasana W Sermswan*
- 15:30 16:30 Poster Session (odd number presentation)
- 15:30 17:30 Coffee/Tea break/Welcome Reception

Thursday, November 5, 2020

Chairman: Kittisak Yokthongwattana

- 09:00 09:30 **Invited Lecture 4:** "Genetic code reprogramming with engineered translation machineries" *Chayasith Uttamapinant*
- 09:30 10:00 **Invited Lecture 5:** "Phage nucleus and spindles: the defining structure of nucleus-forming giant phages" *Vorrapon Chaikeeratisak*

10:00 - 10:40 Coffee/tea break

Chairman: Hansuk Buncherd

- 10:40 11:00 **Oral 5:** "Mechanism of action and screening for candidate repurposable drugs against COVID-19" *Thanyada Rungrotmongkol*
- 11:00 11:20 **Oral 6:** "Characterization of human single chain variable fragment (ScFv) antibody targeting c-Met receptor tyrosine kinase in cholangiocarcinoma cell lines for development of immunotherapy" *Chutipa Chiawpanit*
- 11:20 11:40 **Oral 7:** "Design and expression of the antigenic multi-epitope chimeric protein (*EiCh*) specific to *Edwardsiella ictaluri* in *Escherichia coli*" *Vimbai Irene Machimbirike*
- 11:40 12:00 Oral 8: "The effect of human glucosylceramidase on sphingolipid levels in cells" *Peeranat Jatooratthawichot*
- 12:00 13:00 Luncheon Lecture by World Tech Enterprise: "Innovation for Comprehensive Omics Solution from Bruker based on trapped-ion mobility MS" Jaran Jainhuknan
- 13:00 14:00 **Poster Session** (Even number presentation)

Chairman: Kriengsak Lirdprapamongkol

14:00 – 14:30 **Invited Lecture 6:** "Decoding protein target vulnerability: An integrated dynamics-based drug discovery towards a cure for HIV/AIDS"

Nuttee Suree

 14:30 – 14:50 Oral 9: "Hemoglobin-containing microparticles from splenectomized β-thalassemia/HbE patients reduce endothelial cell nitric oxide production" *Kunwadee Phongpao*

14:50 - 15:30 Coffee/tea break

Chairman: Rudee Surarit

- 15:30 16:00 **Invited Lecture 7:** "A novel blood stage antigen of malaria parasite *Plasmodium vivax*" *Wang Nguitragool*
- 16:00 16:20 **Oral 10:** "Interference of dengue viral replication by blocking the access of viral genome to the RNA-dependent RNA polymerase" *Sarin Chimnaronk*
- 16:20 16:40 Oral 11: "Investigation of antiviral activity of modified ankyrin scaffold protein against HIV-1 capsid protein"
 Kanokporn Sornsuwan
- 16:40 17:00 **Oral 12:** "Dimerization of ankyrin specific to HIV-1 capsid significantly enhances binding force" *On-anong Juntit*

Friday, November 6, 2020

Chairman: Voraratt Champattanachai

- 09:00 09:30 **Invited Lecture 8:** "Identification and characterization of novel bioactive peptides" *Sittiruk Roytrakul*
- 09:30 10:00 **Invited Lecture 9:** "Development of enrichment methods for crosslinked peptides to map protein-protein interactions by mass spectrometry" *Hansuk Buncherd*

10:00 - 10:40 Coffee/tea break

Chairman: Sittiruk Roytrakul

- 10:40 11:00 Oral 13: "Fabrication of lateral flow-based immuno-assay for screening of autoantibody to interferon-gamma causing primary immunodeficiency in adult" *Weeraya Thongkum*
- 11:00 11:20 **Oral 14:** "Inhibition of CD47 in breast cancer mammospheres enhances phagocytosis through macrophage engulfment" *Lalita Lumkul*
- 11:20 11:40 **Oral 15:** "High IMPDH/HPRT ratio mediated the aggressive feature and poor prognosis in Osteosarcoma patients" *Nutnicha Sirikaew*
- 11:40 12:00 **Oral 16:** "Chemotherapeutic sensitivity test in patient-derived osteosarcoma cell as an early predictor for clinical outcomes" *Dumnoensun Pruksakorn*
- 12:00 13:00 Luncheon Lecture by Cytiva: "Unlock the secret of tumor microenvironment with high capacity multiplexed tissue imaging" *Hui Yee, Chua*

Extracellular Vesicles Session

Chairman: Chantragan Srisomsap

13:00 – 13:30 **Invited Lecture 10:** "Extracellular vesicles and pathophysiology in thalassemia"

Kovit Pattanapanyasat

- 13:30 14:00 **Invited Lecture 11:** "Analysis of extracellular vesicles as theranostic platform strategy for cancer" *Arthit Chairoungdua*
- 14:00 14:30 **Invited Lecture 12:** "Advances and challenges in extracellular vesicle applications as stem cell-free therapy" *Somchai Chutipongtanate*
- 14:30 15:00 Poster award / Closing ceremony