

Symposium Program: The 15th International Symposium of the Protein Society of Thailand

| 4 November, 2020 (Wed) | 5 November, 2020 (Thu) | 6 November, 2020 (Fri) |
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| 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 Chaikceratisak | 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 Permsirivisan (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: Chutipai 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 (11:40-12:00) |
| 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) (12:00-13:00) |
| Protein Society of Thailand Annual Meeting (13:00-14:00) | Poster Session (Even Number) (13:00-14:00) | Extracellular Vesicles Session Prof. Kovit Pattanapanyasat (13:00-13:30) Assoc. Prof. Arthit Chairoungdua (13:30-14:00) Dr. Somchai Chutipongtanate (14:00-14:30) |
| Invited Lecture 1 (14:00-14:30) Assist. Prof. Kornkamon Lertsuwan | Invited Lecture 6 (14:00-14:30) Assist. Prof. Nuttee Suree | Poster Awards & Closing Ceremony (14:30-15:00) |
| Invited Lecture 2 (14:30-15:00) Assoc. Prof. Chanitra Thuwajit | Selected Oral Presentation Oral 9: Kunwadee Phongpao (14:30-14:50) | |
| Invited Lecture 3 (15:00-15:30) Prof. Rasana W Sermswan | Coffee/tea break (14:50-15:30) | |
| Posster Session (Odd Number) (15:30-16:30) & Welcome Reception (15:30-17:30) | Invited Lecture 7 (15:30-16:00) Assist. Prof. Wang Nguitragool | |
| | Selected Oral Presentation Oral 10: Assist. Prof. Sarin Chimnaronk (16:00-16:20) Oral 11: Kanokporn Sornsuan (16:20-16:40) Oral 12: On-anong Juntit (16:40-17:00) | |

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 chitooligosaccharide specific channel (*SmChiP*) from *Serratia marcescens*”

Rawiporn Amornloetwattana

11:20 – 11:40 **Oral 3:** “Thiol-based redox circuit of reactive chlorine species-responsive 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 Chaikeratisak

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 cross-linked 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**