

SYMPOSIUM PROGRAM

The 18th International Symposium of the Protein Society of Thailand

Wednesday, August 28, 2024

07:30 – 08:30 Registration & Poster Set up (all posters)

08:30 – 09:00 **Opening ceremony**

M.R. Jisnuson Svasti (Honorary Advisor)

Chantragan Phiphobmongkol (President)

Chairman: *M.R. Jisnuson Svasti*

09:00 – 09:40 **Keynote lecture 1:** “Study on the molecular signaling of cancer stem cells by proteomics-based integrated omics”

Norie Araki

09:40 – 10:10 **Invited Lecture 1:** “Advancing Drug Discovery through Chemical Proteomics”

Nattawadee Panyain

10:10 – 10:50 **Coffee/Tea Break**

Chairman: *Kittisak Yokthongwattana*

10:50 – 11:20 **Invited Lecture 2:** “Unravelling the secret weapons of sea creatures: a venomics approach”

Waeowalee Choksawangkar

11:20 – 11:40 **Oral 1:** “Andrographis paniculata standardized extract alleviates multi-Omics profiles alterations by SARS-CoV-2 Delta variant in golden hamster tissues”

Arnatchai Maiuthed

11:40 – 12:00 **Oral 2:** “Proteomic profiling of circulating β -thalassaemia/HbE extracellular vesicles reveals that the association of immunoglobulin induces membrane vesiculation”

Kunwadee Phongpao

12:00 – 13:00 **Luncheon Lecture by Genomax Technologies (Thailand):** “High-plex protein profiling Somascan technology and its application”

Caroline Chan

13:00 – 13:50 Protein Society of Thailand Annual Meeting

Chairman: *Voraratt Champattanachai*

13:50 – 14:20 **Invited Lecture 3:** “Discovery of brain tumor-associated serum glycomarkers using glycomic approaches”

Atit Silsirivanit

14:20 – 14:50 **Invited Lecture 4:** “Delineating components of N-linked glycosylation biosynthetic machinery using high-throughput screens”

Chatchai Phoomak

14:50 – 15:10 **Oral 3:** “Characterization and phosphorylation of SNW1 protein in serum and feces associated with equine melanocytic neoplasms”

Parichart Tesena

15:10 – 15:10 **Oral 4:** “Proteomic and phosphoproteomic profiling of highly metastatic cholangiocarcinoma cells unveils differential expression of molecular regulation involved in cancer development”

Metarsit Patchimaekapol

15:30 – 16:30 **Poster Session** (Odd number presentation)

15:30 – 17:00 **Coffee/Tea break/Welcome Reception**

Thursday, August 29, 2024

Chairman: *Chantragan Phiphobmongkol*

09:00 – 09:40 **Keynote lecture 2:** “Applications of artificial intelligence to data interpretation for mass spectrometry-based high-throughput proteomics”

Terence Chuen Wai POON

09:40 – 10:00 **Oral 5:** “Machine learning-assisted design of inhibitor against dengue NS3 protease”

Punyaporn Naranitus

10:00 – 10:20 **Oral 6:** “Integrating synthetic phage display and machine learning to identify novel nanobody sequences co-optimized for high affinity and specificity”

Karnpob Kanhasut

10:20 – 11:00 **Coffee/tea break**

Chairman: *James Ketudat Cairns*

11:00 – 11:30 **Invited Lecture 5:** “With changing research landscape, crystallographic education needs to change as well”

Ruslan Sanishvili

11:30 – 12:00 **Invited Lecture 6:** “A current update on the utilization of CryoEM to study proteins and complex biological systems in Thailand”

Puey Ounjai

12:00 – 13:00 **Luncheon Lecture by Chemical Express Co.,Ltd. and Merck Ltd.:**

“Advancing biomarker discovery and immuno-oncology with Milliplex® technology”

Naveen Kumar Nandan

Chairman: *Churat Weeraphan*

13:00 – 13:30 **Invited Lecture 7:** “Organ/tissue on-a-chip systems: emerging platforms advancing biomedical research”

Phatcharida Jantaree

13:30 – 13:50 **Oral 7:** “Anti-cancer effects of metformin in 3D pancreatic tumor organoids and pancreatic stellate cells”

Soojung Hahn

13:50 – 14:10 **Oral 8:** “Neoantigen: promising therapeutic targets for osteosarcoma”

Sutpirat Moonmuang

14:10 – 14:30 **Oral 9:** “Surfaceome profiling of osteosarcoma reveals potential therapeutic targets for poor responders”

Viraporn Thepbundit

14:30 – 15:30 **Poster Session** (Even number presentation)

14:30 – 15:30 **Coffee/tea break**

Chairman: *Atit Silsirivanit*

15:30 – 16:00 **Invited Lecture 8:** “Targeting cell cycle machinery proteins for therapeutic improvement of cholangiocarcinoma under diabetic glucose conditions”

Charupong Saengboonmee

16:00 – 16:20 **Oral 10:** “Conditional antimicrobial peptide therapeutics”

Chayanon Ngambenjwong

16:20 – 16:40 **Oral 11:** “Understanding the structural dynamic of *Opisthorchis viverrini* helminth defense molecule synthetic peptides: implications of lipopolysaccharide interactions”

Muhammad Fikri Heikal

16:40 – 17:00 **Oral 12:** “C-to-U RNA editing-driven genetic code expansion for location-specific labeling of proteins”

Pheerawat Chantanakool

Friday, August 30, 2024

Chairman: *Danaya Pakotiprapha*

09:00 – 09:30 **Invited Lecture 9:** “Sedolisin and eqolisin: from discovery to evolution of proteases that function at acidic pH”

Kohei Oda

09:30 – 10:00 **Invited Lecture 10:** “The timing of the acquisition of eukaryotic traits during eukaryogenesis”

Robert Robinson

10:00 – 10:30 **Invited Lecture 11:** “Understanding structure and function of chitin machinery in the marine *Vibrio* spp.”

Wipa Suginta

10:30 – 11:00 **Coffee/tea break**

Chairman: *Sittiruk Roytrakul*

11:00 – 11:30 **Invited Lecture 12:** “Applications of synthetic biology in chemical synthesis and health science”

Rung-Yi Lai

11:30 – 12:00 **Invited Lecture 13:** “Structure-based enzyme engineering of flavin-dependent enzymes for toxic waste degradation”

Panu Pimviriyakul

12:00 – 13:00 **Luncheon Lecture by Bio-Rad Laboratories:** “Introducing the ChemiDoc Go: a precise and compact design to advance your western blotting”

Alison Ong

Chairman: *James Ketudat Cairns*

13:00 – 13:30 **2024 MRJS Young PST Awardee 1:** “Innovative biocatalytic approaches for sustainable chemical production and environmental remediation”

Thanyaporn Wongnate

13:30 – 14:00 **2024 MRJS Young PST Awardee 2:** “Structural enzymology in infectious disease and host defense”

Kittikhun Wangkanont

14:00 – 14:40 **2023 MRJS Outstanding PST Awardee:** “Peptidoproteomics in agricultural and medical science research”

Sittiruk Roytrakul

14:40 – 15:10 **Oral award/Poster award / Closing ceremony
PST2025 Announcement**