

2ND AUSTRALASIAN GLYCOSCIENCE SYMPOSIUM

at

18th Human Proteome Organization
World Congress

(Adelaide, South Australia, 14th – 17th September)

2nd AGS Organising Committee

Morten Andersen (Chair)

Daniel Kolarich

Nicolle Packer

Benjamin Schulz

Stuart Cordwell

Malcolm McConville

International Advisory Committee

Koichi Fukase (Chair) – Japan

Jong Shin Yoo – Korea

Kay-Hooi Khoo – Taiwan

Pengyuan Yang – China

Margaret Brimble – New Zealand

Naoyuki Taniguchi – Japan

N. Jayaraman – India

Terry Nguyen-Khuong - Singapore

2nd Australasian Glycoscience Symposium

Bridging the Glycosciences to Proteome Research

@HUPO Adelaide

14th Sep 2019, HB Building (L8), UniSA, Adelaide, Australia
16-17th Sep 2019, Adelaide Convention Centre, Australia

SATURDAY 14TH SEPTEMBER 2019

Venue: HB8-18, Level 8, HB Building, UniSA, North Terrace, Adelaide, SA

Sponsored by:



PROTEIN METRICS

8:30AM-9:00AM: Arrival and registration

9:00AM-9:30AM: Opening keynote

Chair: Morten Andersen

9:00-9:30 NAOYUKI TANIGUCHI (30) Research and development on dynamic glycoproteome codes in health and disease that are coming of age again

9:30AM-12:45PM: Morning sessions - Glycoanalytics

Session 1: Opportunities in large-scale glycopeptide analysis

Chair: Daniel Kolarich

9:30-9:50 PENGYUAN YANG (20) Highly Efficient and Precise Glycoproteomic Analysis

9:50-10:10 SRINIVASA-GOPALAN SAMPATHKUMA (20) Enumerating the diversity and complexity of mucin type O-glycosylation on CD43 and its functions

10:10-10:25 MINGLIANG YE (15) New Searching Strategy for the Identification of O-linked Glycopeptides

10:25-10:40 REBECA KAWAHARA (15) Stage-specific N-glycosylation of abundant plasma proteins across four stages of colorectal cancer

10:40-10:55 HEEYOUN HWANG (15) Combining Mass Spectrometry with Machine Learning Algorithms to Classify Core and Outer Fucosylation in N-Glycoproteins

11:00AM-11:20AM: Coffee Break

Session 2: Advances in glycome profiling

Chair: Benjamin Schulz

11:20-11:40 NICLAS KARLSSON (20) Towards clinical O-glycomics

11:40-12:00 ARUN EVEREST-DASS (20) Differentiation of epithelial ovarian cancer subtypes using glycan mass spectrometry imaging

12:00-12:15 CHRISTOPHER ASHWOOD (15) An accessible and high-throughput mass spectrometry-based N-glycomics platform

12:15-12:30 LUCIA F ZACCHI (15) A suite of LC-MS/MS workflows to measure relative abundance of biotherapeutic proteins and their post-translational modifications during mammalian bioreactor culture

12:30-12:45 ANDREA ALMEIDA (15) Carcinoembryonic antigen targeted glycomics and glycoproteomics reveals novel features of human glycosylation

12:45PM-1:30PM: Lunch

1:30PM-4:30PM: Afternoon sessions - Glycoinformatics

Session 3: Software solutions in glycoproteomics

Chair: Niclas Karlsson

1:30-1:50 MORTEN THAYSEN-ANDERSEN (20) Outcomes of the 1st Human Glycoproteomics Initiative (HGI) Study, a Community Evaluation of Informatics Solutions for Intact Glycopeptide Identification

1:50-2:10 JONG SHIN YOO (20) Large-Scale Glycopeptide Analysis using Mass Spectrometry and GlycoProteomeAnalyzer (GPA)

2:10-2:30 CASSANDRA PEGG (20) Cellular glycoproteome and proteome during influenza infection

2:30-2:45 ATSUSHI KUNO (15) Visualization of a lectin microarray-based dataset for mouse tissue glycome mapping by a novel online tool, LM-GlycomeAtlas

2:45-3:00 TERRY NGUYEN-KHUONG (15) MAGMap: A visualization and precise Glycan Characterization tool for glycans using multi-attribute descriptors from HILIC Separation of released glycans and their measured behaviour with Ion Mobility Mass Spectrometry

3:00PM-3:20PM: Coffee break

Session 4: Glycoinformatics in glycomics and glycobiology – Workshop style

Chair/Moderator: Nicki Packer

3:20-3:35 KIYOKO AOKI-KINOSHITA (15) In Silico Simulation of Glycosylation Pathways

3:35-3:50 FREDERIQUE LISACEK (15) Glycoproteomics goes visual, interactive and analytical

3:50-4:05 MATTHEW CAMPBELL (15) GlyGen: Computational and Informatics Resources for Glycoscience Data Integration

4:05-4:30 Panel discussion: Demands and directions in glycoinformatics

4:30PM-5:00PM: AGS EMCR Award

Chair: Morten Andersen

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4:30-4:55 NAOKO KOMURA (25) Fully stereoselective α -glycosidation using macrobicyclic sialic acid donors

5:00PM-7:00PM: Drinks and mixer

7:00PM Dinner (by invitation)