

Tuesday, September 15th, 2015

12:00-16:00 Introduction to Glycoscience - pre conference training course

Grand Dalmacija hall, Chairs: Gordan Lauc & Anne Dell

12:00 – 12:45 *Anne Dell* (Imperial College London, UK):

Introduction to glycan structure and analysis

12:45 – 13:30 *Gordan Lauc* (Faculty of Pharmacy and Biochemistry, University of Zagreb; Genos Glycoscience Research Laboratory, Croatia):

Ubiquitous importance of protein glycosylation in health and disease

13:30 – 14:15 *Rita Gerardy-Schahn* (Hannover Medical School, Germany):

Sialic acids in the fine tuning of neurological processes

14:15 – 14:30 **Coffee break**

14:30 – 15:15 *Sabine Flitsch* (University of Manchester, UK):

Glycan chip technology

15:15 – 16:00 *John A. Hanover* (NIDDK, National Institutes of Health, USA):

Mysterious world of O-GlcNAc

Grand Dalmacija Hall

17:30-17:45 **Opening Ceremony**

17:45-18:25 **IGO-Award Lecture - Taroh Kinoshita** (Research Institute for Microbial Diseases and WPI Immunology, Japan): Glycosylphosphatidylinositol-anchored proteins: biosynthesis, transport, shedding and deficiencies

17:25-18:05 **IGO-Young Scientist Award - Xing Chen** (College of Chemistry and Molecular Engineering, China): Chemical tools for probing glycosylation dynamics *in vivo*

18:30-20:00 **Welcome Reception**

Wednesday, September 16th, 2015

09:00-11:00 PLENARY SESSION 1

Grand Dalmacija hall, Chairs: Pauline Rudd & Fu-Tong Liu

- 09:00-09:40** *Plenary lecture* - **Nico Callewaert** (VIB; Ghent University, Belgium): Glycan customization for optimizing biopharmaceutical properties
- 09:40-10:20** *Plenary lecture* - **Anne Dell** (Imperial College London, UK): High sensitivity glycomics: windows to glycan function
- 10:20-11:00** *Plenary lecture* - **Chi-Huey Wong** (Academia Sinica, Taiwan): Glycosylation: chemical approach to disease biology

11:00-11:30 **Coffee break**

Poster Session I: POSTER AREA (BRAČ)

11:30-12:50 **Biosynthesis & Metabolism of Glycoconjugates I**

Grand Dalmacija hall I, Chair: Ken Kitajima

11:30-12:00

Keynote lecture: HUMAN GENETIC DISEASE OFFERS NOVEL INSIGHTS IN PROTEIN GLYCOSYLATION (23)

Dirk Lefeber (Radboud University Medical Center, The Netherlands)

12:00-12:20

STORY OF THE CYTOPLASMIC PEPTIDE: *N*-GLYCANASE (NGLY1) – BASIC SCIENCE ENCOUNTERS HUMAN GENETIC DISORDERS (28)

Tadashi Suzuki (RIKEN-Max Planck Joint Research Center for Systems Chemical Biology, Japan)

12:20-12:40

BIOSYNTHESIS OF THE O ANTIGEN REPEATING UNIT OF THE INTESTINAL PATHOGEN *ESCHERICHIA COLI* O104 (25)

Inka Brockhausen (Queen's University, Canada)

11:30-12:55 **Glycans and Cancer I**

Grand Dalmacija hall II, Chair: Michael Pierce

11:30-12:00

Keynote lecture: FACTORS IMPACTING ON COLORECTAL CANCER RISK AND SURVIVAL OUTCOMES: GENES, ENVIRONMENT AND IgG GLYCOSYLATION (84)

Malcolm Dunlop (University of Edinburgh, Western General Hospital, UK)

12:00-12:15

GANGLIOSIDE-DEPENDENT MEMBRANE ORGANIZATION CONTROLLING THE ADHESION AND MOTILITY OF HUMAN OVARIAN CANCER CELLS **(93)**

Alessandro Prinetti (University of Milan, Italy)

12:15-12:25

GLYCO-GENE REGULATION IN BREAST AND COLON CARCINOMA CELLS DURING INDUCED APOPTOSIS **(88)**

Subhash Basu (University of Notre Dame, USA)

12:25-12:35

IMMUNOGENICITY STUDY OF GLOBO H ANALOGUES WITH MODIFICATION AT THE REDUCING OR NON-REDUCING END OF THE TUMOR ANTIGEN **(95)**

Chung-Yi Wu (The Geomics Research Center, Academia Sinica, Taiwan)

12:35-12:45

PROTEIN *N*-GLYCOSYLATION IS AN EXCELLENT TARGET FOR DEVELOPING GLYCOTHERAPY FOR BREAST CANCER **(87)**

Dipak Banerjee (School of Medicine, University of Puerto Rico, USA)

12:45-12:55

HIGH-THROUGHPUT ANALYSIS OF PLASMA SAMPLES AND DETERMINATION OF CHANGES IN GLYCOMIC PATTERNS IN THE IMMUNOGLOBULINS OF PATIENTS AFTER IMAGE-GUIDED TUMOR ABLATION **(91)**

Djuro Josic (University of Rijeka, Croatia)

12:50-14:30 Lunch break

WATERS lunch seminar-A Smart Workflow for *N*-Glycan Analysis Combining Speed, Simplicity and Unrivaled Sensitivity – **GRAND DALMACIJA I**

Poster Session I: POSTER AREA (BRAČ)

14:30-15:30 Young Glycoscientists Symposium I

Grand Dalmacija hall I, Chair: Galit Alter

14:30-14:50

Keynote lecture: CHALLENGES OF HIGH-THROUGHPUT GLYCOMICS - WHAT TO EXPECT WITH LARGE DATASETS **(331)**

Maja Pučić Baković (Genos Glycoscience Research Laboratory, Croatia)

14:50-15:00

FLUORINATED CARBON TAG DERIVATIZATION COMBINED WITH FSPE FOR HIGHLY SENSITIVE AND SELECTIVE ANALYSIS OF *N*-GLYCANS BY MASS SPECTROMETRY **(352)**

Ying Zhang (Institutes of Biomedical Sciences, China)

15:00-15:10

ADVANCES IN HIGH-THROUGHPUT GLYCOSYLATION ANALYSIS BY MALDI-TOF-MS **(348)**

Karli Reiding (Leiden University Medical Center, The Netherlands)

15:10-15:20

COMPREHENSIVE PROFILING OF GLYCOSPHINGOLIPID HEAD GROUPS USING RECOMBINANT ENDOGLYCOCERAMIDASES IN A HIGH-THROUGHPUT SEMI-AUTOMATED GLYCAN ANALYTICAL PLATFORM **(335)**

Simone Albrecht (National Institute for Bioprocessing, Research and Training, Ireland)

15:20-15:30

INTERPLAY BETWEEN E-CADHERIN AND IR/IGF-IR SIGNALING IN THE REGULATION OF TUMOR CELL INVASION: A MECHANISM MEDIATED BY CHANGES IN BISECTED *N*-GLYCANS EXPRESSION **(339)**

Julio de-Freitas-Junior (Brazilian National Cancer Institute, Brazil)

15:30-16:30 Biosynthesis & Metabolism of Glycoconjugates II

Grand Dalmacija hall I, Chair: Dirk Lefeber

15:30-16:00

Keynote lecture: GLYCOSYLTRANSFERASE INHIBITORS: CHEMICAL TOOLS FOR GLYCOBIOLOGY **(24)**

Gerd Wagner (King's College London, UK)

16:00-16:15

FREE *N*-GLYCANS MODULATE PROTEIN FOLDING **(27)**

Yoshinobu Kimura (Graduate School of Environmental and Life Science, Okayama University, Japan)

16:15-16:30

A NOVEL METHOD TO DETERMINE PHOSPHOHEXOSE MUTASE ACTIVITY BY ANION-EXCHANGE CHROMATOGRAPHY WITH ELECTROCHEMICAL DETECTOR **(26)**

Heng Yin (Dalian Institute of Chemical Physics, Chinese Academy of Sciences, China)

14:30-15:30 Young Glycoscientists Symposium II

Grand Dalmacija hall II, Chair: Frederic Bard

14:30-14:50

Keynote lecture: *THE ROLE OF SIALYLATION FOR THE ANTI-INFLAMMATORY ACTIVITY OF INTRAVENOUS IMMUNOGLOBULIN (333)*

Inessa Schwab (Institute of Genetics, University of Erlangen-Nürnberg, Germany)

14:50-15:00

EXPRESSION OF OGT CORRELATES WITH MIGRATION AND PROLIFERATION OF COLON CELL LINES
(349)

Agata Steenackers (University of Lille 1, France)

15:00-15:10

SWEET ESCAPE: SIALIC ACIDS IN TUMOR IMMUNE EVASION **(337)**

Christian Büll (Radboud University Medical Center, The Netherlands)

15:10-15:20

EFFECT OF ABIRATERONE AND IONIZING RADIATION ON THE GLYCOHYDROLASE ACTIVITIES IN PROSTATE CANCER CELLS **(334)**

Valentina Murdica (University of Milan, Italy)

15:20-15:30

IMMOBILIZATION OF BACTERIAL EXOPOLYSACCHARIDE PROVIDES A NOVEL PLATFORM FOR PROTEIN INTERACTION STUDIES **(L1)**

Christian Toftgaard Hjuler (Centre for Carbohydrate Recognition and Signaling; University of Copenhagen, Denmark)

15:30-16:30 Glycobiology of Autoimmune and Inflammatory Diseases I

Grand Dalmacija hall II, Chair: Salome Pinho

15:30-16:00

Keynote lecture: HELMINTH GLYCANS AND TH2 RESPONSES **(192)**

Maria Yazdanbakhsh (Leiden University Medical Center, The Netherlands)

16:00-16:15

IMMUNOGLOBULIN GLYCOSYLATION ANALYSIS IN PREGNANCY AND RHEUMATOID ARTHRITIS **(193)**

Albert Bondt (Leiden University Medical Center; Erasmus University Medical Center, The Netherlands)

16:15-16:30

GLYCAN TARGETS FOR BIOMARKERS OF RHEUMATOID ARTHRITIS (195)

Róisín O'Flaherty (National Institute for Bioprocessing, Research and Training, Ireland)

16:30-17:00 Coffee break

Poster Session I: POSTER AREA (BRAC)

17:00-18:00 Glycolipids, Membrane Domains and Cell Signaling

Grand Dalmacija hall I, Chair: **Ronald Schnaar**

17:00-17:30

Keynote lecture: GLYCOSPHINGOLIPIDS IN HEALTH AND DISEASES: THE ROLE OF PLASMA MEMBRANE COMPOSITION AND ORGANIZATION (229)

Sandro Sonnino (University of Milan, Italy)

17:30-17:45

PROPERTIES AND FUNCTIONS OF ANTI-LacCer MONOCLONAL ANTIBODIES ARE HIGHLY DEPEND ON THE ORGANIZATION OF LacCer-ENRICHED DOMAINS (231)

Kazuhisa Iwabuchi (Juntendo University Graduate School of Medicine, Japan)

17:45-18:00

ROLES OF β -1,3-GALACTOSYLTRANSFERASE V, SSEA3, SSEA4 AND GLOBO H IN BREAST CANCER (230)

Po-Kai Chuang (Genomics Research Center, Academia Sinica; Institute of Basic Medical Sciences, Taiwan)

18:00-19:00 Structural & Chemical Glycobiology I

Grand Dalmacija hall I, Chair: **Haojie Lu**

18:00-18:30

Keynote lecture: STRUCTURE-FUNCTION STUDIES OF GLYCANS USING MASS SPECTROMETRY (277)

Sabine Flitsch (University of Manchester, UK)

18:30-18:40

RECENT APPLICATIONS OF THE INVERSE-ELECTRON-DEMAND DIELS-ALDER REACTION IN GLYCOBIOLOGY (283)

Valentin Wittmann (University of Konstanz, Germany)

18:40-18:50

TAU-DERIVED GLYCOPEPTIDES AS NOVEL INHIBITORS OF AMYLOID AGGREGATION **(282)**

Daniel Segal (George S.Wise Faculty of Life Sciences, Israel)

18:50-19:00

LIVE-CELL BIOORTHOGONAL RAMAN IMAGING OF GLYCANS **(279)**

Senlian Hong (College of Chemistry and Molecular Engineering, China)

17:00-18:00 Cell Biology of Protein Glycosylation

Grand Dalmacija hall II, Chair: Pascal Gagneux

17:00-17:30

Keynote lecture: ENCODING THE \mathcal{O} -GLYCOPROTEOME THROUGH GOLGI REORGANIZATION **(38)**

Frederic Bard (IMCB, A-Star, Singapore)

17:30-17:40

REGULATION OF HEPATIC FATTY ACID SYNTHASE PROPERTIES BY \mathcal{O} -GlcNAcYLATION **(39)**

Steffi Baldini (Unité de Glycobiologie Structurale et Fonctionnelle, France)

17:40-17:50

VISUALIZING PROTEIN-SPECIFIC GLYCOSYLATION INSIDE LIVING CELLS **(40)**

Franziska Doll (University of Konstanz and Konstanz Research School Chemical Biology, Germany)

17:50-18:00

THE TRANSMEMBRANE DOMAIN OF TOBACCO *N*-ACETYLGLUCOSAMINYLTRANSFERASE I IS THE KEY DETERMINANT FOR ITS GOLGI SUB-COMPARTMENTATION **(41)**

Richard Strasser (University of Natural Resources and Life Sciences, Austria)

18:00-19:00 Comparative and Evolutionary Glycobiology

Grand Dalmacija hall II, Chair: Ajit Varki

18:00-18:30

Keynote lecture: GLYCANS AND GENE FLOW (REPRODUCTIVE AND INFECTIOUS) **(47)**

Pascal Gagneux (University of California, USA)

18:30-18:45

THE GLYCOPHYLOGENY OF MARINE ORGANISMS SHOWS DIFFERENCES IN ANIONIC AND ZWITTERIONIC MODIFICATIONS OF GLYCANS (49)

Katharina Paschinger (Universität für Bodenkultur Wien, Austria)

18:45-19:00

EXPERIMENTAL EVIDENCE FOR AN ARMS RACE BETWEEN DEFENSE LECTINS OF PREY AND GLYCOEPITOPES OF PREDATORY NEMATODES (48)

Markus Künzler (Institute of Microbiology ETH Zürich, Switzerland)

Thursday, September 17th, 2015

09:15-10:35 PLENARY SESSION 2

Grand Dalmacija hall, Chairs: Rita Gerardy-Schahn & Gerald Hart

09:15-09:55 *Plenary lecture* - **John A. Hanover** (NIDDK, National Institutes of Health, USA): A little sugar goes a long way: *O*-GlcNAc and epigenetics

09:55-10:35 *Plenary lecture* - **Jamey D. Marth** (Sanford-Burnham Medical Institute and the University of California, USA): Overlapping mechanisms of sepsis, diabetes and inflammatory bowel disease

10:35-11:05 Coffee break

Poster Session II: POSTER AREA (BRAČ)

11:05-12:35 Glyco(bio)informatics I

Grand Dalmacija hall I, Chair: Ken Kitajima

11:05-11:35

Keynote lecture: UTILIZING THE SEMANTIC WEB IN GlyTouCan (134)

Kiyoko F. Aoki-Kinoshita (Soka University, Japan)

11:35-11:50

NETWORK-BASED INFERENCE ON THE IgG GLYCOSYLATION PATHWAY (136)

Elisa Benedetti (Helmholtz Zentrum München, Germany)

11:50-12:05

MODELING IgG GLYCOSYLATION CHANGES IN AGING (140)

Aleksandar Vojta (Faculty of Science, University of Zagreb, Croatia)

12:05-12:20

MODELLING THE CONFORMATION OF BACTERIAL POLYSACCHARIDE ANTIGENS **(137)**

Michelle M. Kuttel (University of Cape Town, South Africa)

11:05-12:35 Developmental & Stem Cell Biology I

Grand Dalmacija hall II, Chair: Koichi Furukawa

11:05-11:35

Keynote lecture: INVESTIGATION OF A NOVEL PROBE FOR PLURIPOTENT STEM CELLS
rBC2LCN AND ITS APPLICATIONS TO REGENERATIVE MEDICINE **(54)**

Jun Hirabayashi (National Institute of Advanced Industrial Science and Technology, Japan)

11:35-11:50

GLYCOSPHINGOLIPIDS IN HUMAN EMBRYONIC STEM CELLS **(55)**

Angela Barone (Institute of Biomedicine, Sweden)

11:50-12:05

GLYCOSYLATION RELATED GENES INVOLVED IN REGULATION OF PRE-ADIPOGENESIS OF
MURINE SATELLITE CELLS **(58)**

Vincent Grassot (UMR1061-Génétique Moléculaire Animale, France)

12:05-12:20

UNRAVELING THE *N*-GLYCOSYLATION OF INDUCED PLURIPOTENT STEM CELLS FROM A
PMM2-CDG PATIENT **(56)**

Samanta Cajic (Max Planck Institute for Dynamics of Complex Technical Systems, Germany)

Poster Session II:POSTER AREA (BRAČ)

**AGILENT SEMINAR - "Strategies for high throughput *N*-Glycan preparation and analysis" –
GRAND DALMACIJA I**

14:30-15:30 Glyco(bio)informatics II

Grand Dalmacija hall I, Chair: Tadashi Suzuki

14:30-15:00

Keynote lecture: DATA CONNECTIVITY, THE UniCarbKB WAY! **(135)**

Matthew Campbell (Biomolecular Frontiers Research Centre, Australia)

15:00-15:15

AN E-WORKFLOW FOR GLYCOANALYTICAL MASS SPECTROMETRIC DATA **(139)**

Miguel Rojas-Macias (University of Gothenburg, Sweden)

15:15-15:30

HIGHER ORDER STRUCTURE AND ENCODING OF MASS SPECTROMETRY DATA FOR HIGH THROUGHPUT HUMAN FcIgG *N*-GLYCOSYLATION ANALYSIS **(138)**

Genadij Razdorov (Faculty of Pharmacy and Biochemistry, University of Zagreb, Croatia)

15:30-16:30 Young Glycoscientists Symposium III

Grand Dalmacija hall I, Chair: Daniel Kolarich

15:30-15:50

Keynote lecture: THE STRUCTURAL ROLE OF ANTIBODY *N*-GLYCOSYLATION IN RECEPTOR INTERACTIONS **(330)**

Adam Barb (Iowa State University, USA)

15:50-16:00

ENRICHMENT OF BREAST CANCER STEM CELLS WITH GLOBO-SERIES EPITOPES **(338)**

Sarah K.C. Cheung (Genomics Research Center and Institute of Biological Chemistry, Academia Sinica; National Tsing Hua University, Taiwan)

16:00-16:10

STRUCTURAL MUC1 ALTERATION DETERMINED BY 2D NMR AGAINST MULTIPLE GLYCOSYLATED PEPTIDES **(347)**

Shobith Rangappa (Hokkaido University, Japan)

16:10-16:20

BISECTING GALACTOSE AS A FEATURE OF *N*-GLYCANS OF *CAENORHABDITIS ELEGANS* **(351)**

Shi Yan (Universität für Bodenkultur Wien, Austria)

16:20-16:30

Ca²⁺ RECOGNITION OF THE C-TYPE LECTIN RECEPTOR LANGERIN REVEALS AN INTRADOMAIN ALLOSTERIC NETWORK **(346)**

Christoph Rademacher (Max Planck Institute of Colloids and Interfaces, Germany)

14:30-15:30 Developmental & Stem Cell Biology II

Grand Dalmacija hall II, Chair: Jun Hirabayashi

14:30-15:00

Keynote lecture: THE ROLE OF (POLY)SIALIC ACID IN MORPHOGENESIS AND ORGAN FUNCTION (53)

Rita Gerardy-Schahn (Hannover Medical School, Germany)

15:00-15:15

T ANTIGEN IS ESSENTIAL FOR THE MAINTENANCE OF HEMATOPOIETIC STEM CELLS IN *DROSOPHILA* (59)

Shoko Nishihara (Faculty of Engineering, Soka University, Japan)

15:15-15:30

PROTEOMIC AND GLYCOMIC ANALYSIS OF EXTRACELLULAR MATRIX PRODUCED BY MURINE STROMAL CELLS UNDER HYPOXIC AND NORMOXIC CONDITIONS (57)

Satbir Kaur Gill (National University of Ireland, Ireland)

15:30-16:30 Young Glycoscientists Symposium IV

Grand Dalmacija hall II, Chair: Olga Gornik

15:30-15:45

SPECIAL TRICKS AND TREATS FOR THE SUCCESSFUL LC-MS/MS CHARACTERISATION OF GLYCOPEPTIDES (345)

Jonas Nilsson (University of Gothenburg, Sweden)

15:45-16:00

EVALUATION OF NORMALIZATION METHODS FOR GLYCOMICS DATA ANALYSIS (343)

Lucija Klarić (Genos Glycoscience Research Laboratory, Croatia)

16:00-16:15

STRUCTURES AND MEMBRANE MICRODOMAIN ASSOCIATION OF SHIGA TOXIN GLYCOSPHINGOLIPID RECEPTORS FROM AFRICAN GREEN MONKEY KIDNEY EPITHELIAL (VERO B4) CELLS (350)

Daniel Steil (Institute for Hygiene, University of Münster, Germany)

16:15-16:30

HUMAN BLOOD PLASMA O-GLYCOPROTEOMICS (342)

Marcus Hoffmann (Max Planck Institute for Dynamics of Complex Technical Systems, Germany)

16:30-17:00 Coffee break

Poster Session II: POSTER AREA (BRAČ)

17:00-19:00 Glycosylation in Bacteria I & II

Grand Dalmacija hall I, Chair: Stuart Haslam

17:00-17:30

Keynote lecture: APPLICATION OF GLYCAN ARRAY ANALYSIS IN THE DISCOVERY OF NOVEL BACTERIAL - HOST INTERACTIONS **(251)**

Michael Jennings (Institute for Glycomics Griffith University, Australia)

17:30-17:45

GLYCOPROTEIN EXPORT IN THE ORAL PATHOGEN *TANNERELLA FORSYTHIA* VIA A TYPE IX SECRETION SYSTEM **(253)**

Christina Schäffer (Universität für Bodenkultur Wien, Austria)

17:45-18:00

FUNCTIONAL AND STRUCTURAL CHARACTERIZATION OF RHAMNOSE BIOSYNTHESIS ENZYMES IN GROUP A STREPTOCOCCUS **(252)**

Samantha van der Beek (University Medical Center Utrecht, The Netherlands)

18:00-18:30

Keynote lecture: GLYCOMICS AND GLYCOPROTEOMICS: POWERFUL TECHNOLOGIES FOR MICROBIOLOGY **(250)**

Stuart Haslam (Imperial College London, UK)

17:00-18:00 Glycobiology of Autoimmune and Inflammatory Diseases II

Grand Dalmacija hall II, Chair: Jamey Marth

17:00-17:30

Keynote lecture: A KERATIN SULFATE AND ITS DERIVATIVES ATTENUATE INFLAMMATION AND THE PROGRESSION OF EMPHYSEMA IN THE MURINE LUNG BY TARGETING TO LANGERIN, C-TYPE LECTIN **(191)**

Naoyuki Taniguchi (RIKEN, Japan)

17:30-17:45

REGULATION OF T CELLS IMMUNE RESPONSE BY *N*-GLYCOSYLATION IN INFLAMMATORY BOWEL DISEASE **(196)**

Salomé S. Pinho (Institute of Molecular Pathology and Immunology of the University of Porto, Portugal)

17:45-18:00

THERAPEUTIC POTENTIAL OF LECTIN TO TARGET SIALIC ACID MODIFIED RECEPTORS ON OSTEOARTHRITIC CHONDROCYTES **(194)**

Maria D. Mayán (INIBIC-Hospital Universitario A Coruña, Spain)

18:00-19:00 Glycans and Cancer II

Grand Dalmacija hall II, Chair: Pauline Rudd

18:00-18:30

Keynote lecture: EPI TOPE-DEFINED ANTIBODIES AS NEW CLASS THERAPEUTIC AND DIAGNOSTIC REAGENTS: TOWARD PERSONALIZED MEDICINE FROM CHEMICAL GLYCOBIOLOGY **(85)**

Shin-Ichiro Nishimura (Faculty of Advanced Life Science, Hokkaido University, Japan)

18:30-18:40

INTRINSIC HEPATOCYTE DE-DIFFERENTIATION IS ACCOMPANIED BY UPREGULATION OF MESENCHYMAL MARKERS, PROTEIN SIALYLATION AND CORE α -1,6-LINKED FUCOSYLATION **(92)**

Anand Mehta (Drexel University College of Medicine, USA)

18:40-18:50

MALDI IMAGING MASS SPECTROMETRY OF GLYCANS IN FORMALIN-FIXED PARAFFIN-EMBEDDED OVARIAN TUMOURS ENABLES TISSUE DIFFERENTIATION **(89)**

Arun Everest-Dass (Faculty of Science, Macquarie University, Australia)

18:50-19:00

COMPUTER MODELING AND BIACORE ASSAY PREDICT THE INTERACTIONS BETWEEN CANCER ASSOCIATED GLOBO-H CERAMIDE AND TRAX, THEREBY ENHANCING ANGIOGENESIS **(96)**

John Yu (Institute of Stem Cell and Translational Cancer Research, Taiwan)

20:00-00:00 Conference dinner

Friday, September 18th, 2015

09:15-10:35 PLENARY SESSION 3

Grand Dalmacija hall , Chairs: Anne Dell & Michael Jennings

09:15-09:55 **Plenary lecture - Robert Sackstein** (Brigham & Women's Hospital/Harvard Medical School, USA): Glycoengineering cell migration: achieving the promise of cellular therapeutics

09:55-10:35 **Plenary lecture - Max Crispin** (University of Oxford, UK): The structure and organisation of the glycan shield of HIV

10:35-11:05 **Coffee break**

Poster Session III: POSTER AREA (BRAČ)

11:05-12:35 **General Glycoscience**

Grand Dalmacija hall I, Chair: Gerald Hart

11:05-11:35

Keynote lecture: SIGLECS: DISCOVERY, CLASSIFICATION, EVOLUTION AND FUNCTIONS (66)

Ajit Varki (Glycobiology Research and Training Center, University of California, USA)

11:35-12:05

Keynote lecture: EPIGENETIC REGULATION OF PROTEIN GLYCOSYLATION: IMPLICATIONS FOR COMPLEX DISEASES (67)

Vlatka Zoldoš (Faculty of Science, University of Zagreb, Croatia)

12:05-12:20

DECONSTRUCTION OF THE *N*-GLYCAN MATURATION PATHWAY IN THE MODEL LEGUME *LOTUS JAPONICUS* PAVES THE WAY FOR FURTHER UNDERSTANDING OF PROTEIN GLYCOSYLATION **(68)**

Svend Dam (Centre for Carbohydrate Recognition and Signalling, University of Aarhus, Denmark)

12:20-12:35

GLYCOCONJUGATES OF ANTIMICROBIAL PEPTIDE AS A STRATEGY FOR IMPROVING ACTIVITY AND REDUCING TOXICITY **(69)**

Mikkel B. Thygesen (Faculty of Science, University of Copenhagen, Denmark)

11:05-12:35 **Animal Lectins**

Grand Dalmacija hall I, Chair: Hakon Leffler

11:05-11:35

Keynote lecture: GALECTINS IN INNATE IMMUNITY (14)

Fu-Tong Liu (Institute of Biomedical Sciences, Academia Sinica, Taiwan)

11:35-12:00

GALECTIN LIGAND-BINDING, SPECIFICITY, MECHANISM AND FUNCTION **(16)**

Hakon Leffler (Lund University, Sweden)

12:00-12:25

THE MAMMALIAN LECTIN GALECTIN-8 INDUCES RANKL

EXPRESSION, OSTEOCLASTOGENESIS AND BONE MASS REDUCTION IN MICE **(17)**

Yehiel Zick (Weizmann Institute of Science, Israel)

12:25-12:35

ROLE OF GALECTIN-7 IN LUNG CANCER PROGRESSION **(15)**

Po-Cheng Chiang (Institute of Biomedical Sciences, Academia Sinica, Taiwan)

12:35-14:30 Lunch break

Poster Session III: POSTER AREA (BRAČ)

14:30-15:30 Guest Session of ACGG I

Grand Dalmacija hall I, Chair: Jin Won Cho

14:30-15:00

Keynote lecture: FUNCTIONAL SIGNIFICANCE OF GLYCAN-MEDIATED INTERACTIONS ON SPERM MICRODOMAINS DURING FERTILIZATION **(323)**

Ken Kitajima (Bioscience and Biotechnology Center; Graduate School of Bioagricultural Sciences, Nagoya University, Japan)

15:00-15:15

SEMI-QUANTITATIVE MEASUREMENT OF A SPECIFIC GLYCOFORM USING A DNA-TAGGED ANTIBODY AND LECTIN AFFINITY CHROMATOGRAPHY FOR GLYCO-BIOMARKER DEVELOPMENT **(327)**

Yong-Sam Kim (KRIBB, South Korea)

15:15-15:30

GALECTIN-3 PROTECTS INTRACELLULAR LISTERIA MONOCYTOGENES BY SUPPRESSING AUTOPHAGY ACTIVATION VIA HOST *M*-GLYCAN-DEPENDENT AND -INDEPENDENT PATHWAYS (329)

I-Chun Weng (Institute of Biomedical Sciences, Academia Sinica, Taiwan)

15:30-16:30 Guest Session of ACGG II

Grand Dalmacija hall I, Chair: Ken Kitajima

15:30-16:00

Keynote lecture: RATIONALES AND STRATEGIES FOR CANCER IMMUNOTHERAPY TARGETING GLYCOLIPIDS (324)

Alice L. Yu (Chang Gung Memorial Hospital, Taiwan)

16:00-16:15

A COMPREHENSIVE GLYCOMIC APPROACH TO OVERVIEW THE CAUSAL RELATIONSHIPS BETWEEN VARIOUS PHASES OF MULTISTEP TUMORIGENESIS AND GLYCOSYLATION STATUS BY USING A HUMAN BRAIN TUMOR/GLIOMA PROGRESSION MODEL (328)

Yasuro Shinohara (Graduate School of Advanced Life Science, Hokkaido University, Japan)

16:15-16:22

ANTIPROLIFERATIVE AND CYTOTOXIC EFFECT OF *ARECA CATECHU* (BETEL NUT) AGGLUTININ ON B16F10 MELANOMA CANCER CELL (325)

Bishnu P. Chatterjee (West Bengal University of Technology, India)

16:22-16:30

BIFIDOGENIC PREBIOTICS: COMPARISON BETWEEN SIALYLLACTOSE AND FUCOSYLLACTOSE AND THEIR IMPACT ON THE BACTERIAL METABOLIC NETWORK (326)

Jaehan Kim (Chungnam National University, Korea)

14:30-15:30 Guest Session of SFG I

Grand Dalmacija hall II, Chair: Pamela Stanley

14:30-15:00

Keynote lecture: INSIGHTS INTO THE ENZYMOLOGY AND STRUCTURAL BIOLOGY OF MAMMALIAN GLYCOSYLATION ENZYMES COMING FROM LARGE-SCALE EUKARYOTIC EXPRESSION PLATFORMS
(318)

Kelley W. Moremen (Complex Carbohydrate Research Center, University of Georgia, USA)

15:00-15:30

AN UNUSUAL, PROTEIN-SPECIFIC *N*-GLYCAN WITH HIGH SENSITIVITY AND SPECIFICITY FOR PANCREATIC ADENOCARCINOMA **(321)**

Michael Pierce (University of Georgia, USA)

15:30-16:30 Guest Session of SFG II

Grand Dalmacija hall II, Chair: Kelley Moremen

15:30-16:00

Keynote lecture: ROLES FOR GLYCANS IN MAMMALIAN DEVELOPMENT **(319)**

Pamela Stanley (Albert Einstein College of Medicine, USA)

16:00-16:15

DISTRIBUTION AND EXPRESSION OF SIGLEC-8 AND SIGLEC-9 LIGANDS IN HUMAN AIRWAYS **(322)**

Ronald Schnaar (Johns Hopkins University School of Medicine, USA)

16:15-16:30

ROLE OF THE CONSERVED OLIGOMERIC COMPLEX (COG) AND ITS PARTNERS IN GLYCOSYLATION IN HUMAN CELLS **(320)**

Vladimir V. Lupashin (University of Arkansas for Medical Sciences, USA)

16:30-17:00 Coffee break

Poster Session III: POSTER AREA (BRAČ)

17:00-18:00 Intestinal glycoscience

Grand Dalmacija hall I, Chair: Thierry Hennet

17:00-17:30

Keynote lecture: A MILK-ORIENTED MICROBIOTA IN BREAST FED INFANTS: A GLYCAN-DRIVEN MICROBIAL ENRICHMENT **(257)**

David A. Mills (University of California, Davis, USA)

17:30-17:45

REGION-SPECIFIC *N*-GLYCAN MAPPING IN INFLAMMATORY BOWEL DISEASE AND CONTROL TISSUE USING PGC-LC-ESI-MS/MS **(258)**

Kathrin Stavenhagen (VU University Amsterdam, The Netherlands; Max Planck Institute of Colloids and Interfaces, Germany)

18:00-19:00 Neuroglycoscience

***Grand Dalmacija hall I*, Chair: Rita Gerardy-Schahn**

18:00-18:30

Keynote lecture: STRUCTURAL AND FUNCTIONAL CHANGES OF POLYSIALIC ACID RELATED WITH GENETIC ALTERATIONS OF ST8SIA2/STX IN PSYCHIATRIC DISEASES **(260)**

Chihiro Sato (Bioscience and Biotechnology Center, Nagoya University, Japan)

18:30-18:45

SIALYLTRANSFERASE ST3GAL IV DELETION PROTECTS AGAINST EPILEPSY, BUT INDUCES ANXIETY **(261)**

Keiko Kato (Kyoto Sangyo University, Japan)

18:45-19:00

BISECTING GlcNAc ON BACE1 IS A NOVEL THERAPEUTIC TARGET FOR ALZHEIMER'S DISEASE **(262)**

Yasuhiko Kizuka (RIKEN, Japan)

17:00-18:00 Glycoproteins and Glycolipids in Disease I

***Grand Dalmacija hall II*, Chair: Ronald Schnaar**

17:00-17:30

Keynote lecture: HIGH-THROUGHPUT GLYCOMICS IN PATIENT STRATIFICATION FOR PERSONALIZED MEDICINE **(237)**

Gordan Lauc (Faculty of Pharmacy and Biochemistry, University of Zagreb; Genos Glycoscience Research Laboratory, Croatia)

17:30-17:50

HYPER-*O*-GLICNAcyLATION IS A MAJOR MECHANISM OF GLUCOSE TOXICITY & DIABETES COMPLICATIONS **(239)**

Gerald Hart (Johns Hopkins Medical School, USA)

17:50-18:00

LECTIN-BASED TECHNIQUES FOR ANALYSIS OF GLYCOSYLATION

CHANGES USING MICROARRAY AND SURFACE PLASMON RESONANCE PLATFORMS (240)

Jaroslav Katrlík (Institute of Chemistry, Slovak Academy of Sciences, Slovakia)

18:00-19:00 Glycoproteins and Glycolipids in Disease II

Grand Dalmacija hall II, Chair: Naoyuki Taniguchi

18:00-18:30

Keynote lecture: GLYCOSYLATION IN MUSCULAR DYSTROPHY (236)

Tamao Endo (Tokyo Metropolitan Institute of Gerontology, Japan)

18:30-18:45

GLYCOSYLATION OF PLASMA PROTEINS IN HNF1A - MATURITY ONSET DIABETES OF THE YOUNG (238)

Olga Gornik (Faculty of Pharmacy and Biochemistry, University of Zagreb, Croatia)

18:45-19:00

HIPPOCAMPAL ABNORMALITIES IN A MOUSE MODEL FOR AN INHERITED HUMAN GOLGI-GDP-FUCOSE TRANSPORTER DEFICIENCY (241)

Christian Körner (Center for Child and Adolescent Medicine, Germany)

Saturday, September 19th, 2015

09:15-10:35 PLENARY SESSION 4

Grand Dalmacija hall, Chairs: Vlatka Zoldoš & Jianxin Gu

09:15-09:55 **Plenary lecture** - **Tim Spector** (Kings College London, UK): Integrated omic studies for common complex traits & personalized medicine

09:55-10:35 **Plenary lecture** - **Koichi Furukawa** (Nagoya University Graduate School of Medicine, Japan): Novel functions and mechanisms of complex carbohydrates elucidated by glycosyltransferase gene knockout

10:35-11:05 **Coffee break**

Poster Session IV: POSTER AREA (BRAČ)

11:05-12:35 Glyco(bio)technology I

Grand Dalmacija hall I, Chair: Nico Callewaert

11:05-11:35

Keynote lecture: CHEMICAL GLYCOBIOLOGY OF N-GLYCANS: TOOLS AND APPLICATIONS **(144)**

Niels-Christian Reichardt (CIC biomaGUNE, Spain)

11:35-11:50

ANALYSIS OF HUMAN MILK OLIGOSACCHARIDES AND INFANT FORMULA GALACTO-
OLIGOSACCHARIDES **(148)**

Johannis P. Kamerling (Groningen Biomolecular Sciences and Biotechnology Institute, University of Groningen, The Netherlands)

11:50-12:05

ANTIBODIES PRODUCED IN PLANTS: GLYCAN-ENGINEERING AND MODULATION OF FUNCTIONAL
ACTIVITIES **(150)**

Herta Steinkellner (Department of Applied Genetics and Cell Biology, Austria)

12:05-12:20

NMR CHARACTERIZATION OF BIOCONJUGATE VACCINES **(149)**

Neil Ravenscroft (University of Cape Town, South Africa,)

12:20-12:35

PRODUCTION OF MUCIN TYPE O-GLYCANS IN *NICOTIANA BENTHAMIANA* PLANTS **(145)**

Martina Dicker (Department of Applied Genetics and Cell Biology, Austria)

11:05-12:35 Glycobiology of Infectious Disease I

Grand Dalmacija hall II, Chair: Nicolai Bovin

11:05-11:35

Keynote lecture: IMMUNE EVASION MEDIATED BY PATHOGEN-GLYCANS AND RELATED
IMMUNOTHERAPY STRATEGY **(201)**

Xiao-Lian Zhang (Wuhan University School of Medicine, China)

11:35-11:50

A STRATEGY FOR O-GLYCOPROTEOMICS OF ENVELOPED VIRUSES – THE O-GLYCOPROTEOME OF
HERPES SIMPLEXVIRUS TYPE 1 **(205)**

Hans H. Wandall (Institute of Cellular and Molecular Medicine, University of Copenhagen, Denmark)

11:50-12:05

O-LINKED GLYCOSYLATION OF THE MUCIN DOMAIN OF THE *HERPES SIMPLEXVIRUS* TYPE 1 SPECIFIC GLYCOPROTEIN gC-1 IS TEMPORALLY REGULATED IN A SEED-AND-SPREAD MANNER **(204)**

Rickard Nordén (Institute of Biomedicine University of Gothenburg, Sweden)

12:05-12:20

CHARACTERISATION AND LOCALISATION OF GLYCANS IN NEWLY EXCYSTED JUVENILE *FASCIOLA HEPATICA* **(202)**

Andres Garcia-Campos (School of Veterinary Medicine, University College Dublin, Ireland)

12:20-12:35

ANTIBODY RESPONSES TO SCHISTOSOME GLYCAN ANTIGENS AND THEIR ROLE IN IMMUNITY **(203)**

Cornelis H.Hokke (Leiden University Medical Center, The Netherlands)

12:35-14:30

Lunch break

Poster Session IV: POSTER AREA (BRAČ)

14:30-15:30

Glyco(bio)technology II

Grand Dalmacija hall I, Chair: Niels-Christian Reichardt

14:30-15:00

Keynote lecture: TARGETED DRUG DELIVERY BY CARBOHYDRATE MIMETIC PEPTIDE OVERCOMES BLOOD BRAIN BARRIER IN MOUSE BRAIN TUMOR MODELS **(143)**

Michiko N. Fukuda (National Institute for Advanced Industrial Science and Technology, Japan)

15:00-15:15

METAL ION RESPONSIVE NEOGLYCOCONJUGATE SELF-ASSEMBLIES: CONTROLLING THE NANO-SCALE PROPERTIES OF BIOPHARMACEUTICALS **(147)**

Knud J. Jensen (University of Copenhagen, Denmark)

15:15-15:30

COMBINATION OF ENZYME MODULES FOR THE *IN VITRO* SYNTHESIS OF HYALURONIC ACID **(146)**

Anna Eisele (Institute of Biotechnology and Helmholtz-Institute for Biomedical Engineering, Germany)

15:30-16:30

Structural & Chemical Glycobiology II

Grand Dalmacija hall I, Chair: Jianxin Gu

15:30-16:00

Keynote lecture: NOVEL APPROACHES FOR MS-BASED *N*-GLYCOPROTEOME AND *N*-GLYCOME ANALYSIS (278)

Haojie Lu (Institutes of Biomedical Sciences and Key Laboratory of Glycoconjugates MOH, China)

16:00-16:10

STRUCTURAL CHARACTERIZATION AND MEMBRANE BINDING PROPERTIES OF MGD1, THE MAJOR GALACTOLIPID SYNTHASE IN *ARABIDOPSIS* (281)

Joana Rocha (Univ. Grenoble Alpes, France)

16:10-16:20

LUBRICIN AND HOW ITS CARBOHYDRATE PROTEIN AND PROTEIN PROTEIN INTERACTIONS PROVIDE ITS FUNCTIONALITY (280)

Niclas Karlsson (Gothenburg University, Sweden)

16:20-16:30

SINGLE ENTITY HEPARAN SULFATE GLYCOMIMETIC CLUSTERS FOR THERAPEUTIC APPLICATIONS (284)

Olga V. Zubkova (Victoria University of Wellington, New Zealand)

14:30-15:30 Glycobiology of Infectious Disease II

Grand Dalmacija hall II, Chair: Xiao-Lian Zhang

14:30-15:00

Keynote lecture: GLYCAN BINDING SPECIFICITY OF HIGHLY PATHOGENIC INFLUENZA VIRUSES (200)

Nicolai Bovin (Shemyakin Institute of Bioorganic Chemistry, Russia)

15:00-15:15

OVERLAPPING SUBSTRATE SPECIFICITY OF NUCLEOTIDE SUGAR TRANSPORTERS IN THE FUNGAL PATHOGEN, *ASPERGILLUS FUMIGATUS* (207)

Juliana Yeung (Simon Fraser University, Canada)

15:15-15:30

NEW LECTIN FROM INSECT PATHOGEN *PHOTORHABDUS LUMINESCENCE*: STRUCTURAL AND FUNCTIONAL STUDIES (206)

Michaela Wimmerova (Central European Institute of Technology, Masaryk University, Czech Republic)

15:30-16:30 Glycoimmunology I

Grand Dalmacija hall II, Chair: Max Crispin

15:30-16:00

Keynote lecture: IMPACT OF GLYCOSYLATION AND IMMUNE COMPLEX SIZE ON IMMUNOGLOBULIN G ACTIVITY **(215)**

Falk Nimmerjahn (University of Erlangen-Nürnberg, Germany)

16:00-16:15

SURFACE GLYCOSYLATION SIGNATURE OF REGULATORY T CELLS (T-REG) CORRELATES WITH AND CONTRIBUTES TO THEIR SUPPRESSIVE FUNCTION **(217)**

Joana Cabral (Regenerative Medicine Institute, School of Medicine, National University of Ireland, Ireland)

16:15-16:30

PHOSPHOGLUCOMUTASE 3 (PGM3) MUTATIONS IMPAIR *N*-GLYCOSYLATION IN HYPER IgE SYNDROMES **(219)**

Linlin Yang (University Medical Center Freiburg, Germany)

16:30-17:00 Coffee break

Poster Session IV: POSTER AREA (BRAČ)

17:00-18:00 Proteoglycans

Grand Dalmacija hall I, Chair: Sandro Sonnino

17:00-17:30

Keynote lecture: FUNCTION AND BIOSYNTHESIS OF DERMATAN SULFATE **(271)**

Anders Malmström (Lund University, Sweden)

17:30-17:45

THE CONTROL OF HYALURONAN SYNTHESIS **(273)**

Alberto Passi (Department of Surgery and Morphological Sciences, Italy)

17:45-18:00

ESTROGEN-INDUCED OSTEOANABOLISM IS MEDIATED VIA ENHANCED PRODUCTION OF CHONDROITIN SULFATE-E **(272)**

Hiroshi Kitagawa (Kobe Pharmaceutical University, Japan)

18:00-19:00 Glyco(proteo)mics I

Grand Dalmacija hall I, Chair: Iain Wilson

18:00-18:30

Keynote lecture: DEVELOPMENT AND APPLICATIONS OF ADVANCED LC-MS/MS BASED GLYCO(PROTEO)MICS **(171)**

Kay-Hooi Khoo (Institute of Biological Chemistry, Academia Sinica, Taiwan)

18:30-18:45

GLYCOARRAYS CONSTRUCTED WITH ENGINEERED GLYCOPHAGE NANOPARTICLES **(173)**

Eda Celik (Department of Chemical Engineering, Hacettepe University, Turkey)

18:45-17:00

CHARACTERIZATION OF THE FIRST ALGAE-MADE HUMAN ANTIHEPATITIS B ANTIBODIES USING A GLYCOPROTEOMIC APPROACH **(176)**

Gaetan Vanier (Université de Rouen; Normandie Université, France)

17:00-18:00 Glycoimmunology II

Grand Dalmacija hall II, Chair: Gordan Lauc

17:00-17:30

Keynote lecture: PROGRAMMING B CELL GLYCOSYLATION VIA VACCINATION **(214)**

Galit Alter (Ragon Institute of MGH, MIT, and Harvard, USA)

17:30-17:45

RECOGNITION OF LPS O-ANTIGEN BY C-TYPE LECTIN RECEPTOR DECTIN-2 SHAPES TLR4 RESPONSE **(218)**

Alexandra Wittmann (Institute of Food Research, UK)

17:45-18:00

DEVELOPMENT OF DIFFERENTIALLY GLYCOSYLATED IgG ANTIBODIES IS DEPENDENT ON CO-STIMULATORY SIGNALS **(216)**

Yannic Bartsch (Institute for Systemic Inflammation Research, University of Luebeck, Germany)

18:00-19:00 Glycans in Signaling and Cellular Communication I

Grand Dalmacija hall II, Chair: Rüdiger Horstkorte

18:00-18:30

Keynote lectures: ROLE OF GLYCANS IN GASTRIC CANCER: FUNCTIONAL AND BIOMARKER APPLICATIONS (125)

Celso A. Reis (Institute of Molecular Pathology and Immunology of the University of Porto, Portugal)

18:30-18:45

SOLUBLE CD52 GLYCAN SEQUESTERS THE DAMP PROTEIN HMGB1 TO MEDIATE T-CELL SUPPRESSION THROUGH SIGLEC-10 (127)

Leonard C. Harrison (Walter and Eliza Hall Institute of Medical Research, Australia)

18:45-19:00

GENETIC DISRUPTION OF THE A4GALT (α -1,4-GALACTOSYLTRANSFERASE) GENE DEPLETES GLOBOSIDES AND P1 IN IGROV1 OVARIAN CANCER CELLS (126)

Shahidul Alam (University Hospital Basel, University of Basel, Switzerland)

Sunday, September 20th, 2015

09:15-10:35 PLENARY SESSION 5

Grand Dalmacija hall, Chairs: Ken Kitajima & Johannis P. Kamerling

09:15-09:55 *Plenary lecture* - **Jin Won Cho** (Yonsei University, Korea): Identification of NLS of *O*-GlcNAc transferase and its translocation into nucleus

09:55-10:35 *Plenary lecture* - **Pauline Rudd** (National Institute for BioProcessing Research and Training, Ireland): Glycoscience and the systems biology of cancer

10:35-11:05 **Coffee break**

11:05-12:05 Glyco(proteo)mics II

Grand Dalmacija hall I, Chair: Anne Dell

11:05-11:35

Keynote lecture: ISOMER SPECIFIC GLYCAN AND GLYCOPEPTIDE SEQUENCING AS TOOLS FOR UNRAVELING DISEASE GLYCOSYLATION SIGNATURES (172)

Daniel Kolarich (Max Planck Institute of Colloids and Interfaces, Germany)

11:35-11:50

NEW APPROACHES FOR THE ANALYSIS OF GLYCANS OF GLYCOPROTEINS (174)

Bernd Meyer (University of Hamburg, Germany)

11:50-12:05

ULTRASENSITIVE IMPEDIMETRIC GLYCAN AND LECTIN BIOSENSORS AS DIAGNOSTIC TOOLS **(175)**

Jan Tkac (Institute of Chemistry, Slovak Academy of Sciences, Slovakia)

12:05-13:05 Young Glycoscientists Symposium V

Grand Dalmacija hall I, Chair: Niclas Karlsson

12:05-12:20

THE SWEET CHARACTERIZATION OF THERAPEUTIC PROTEIN *N*-GLYCOSYLATION USING xCGE-LIF **(341)**

René Hennig (glyXera GmbH; Max Planck Institute for Dynamics of Complex Technical Systems, Germany)

12:20-12:35

GLYCOMIC & GLYCOPROTEOMIC CHARACTERISATION OF AN IMPORTANT GASTROINTESTINAL TUMOUR MARKER FOR THE ANALYSIS OF CANCER-SPECIFIC GLYCOSYLATION FEATURES **(336)**

Andreia Almeida (Max Planck Institute of Colloids and Interfaces; Free University Berlin, Germany)

12:35-12:50

IgCarbKB: A GLYCOMICS AND GLYCOPROTEOMICS FOCUSED IMMUNOGLOBULIN KNOWLEDGE BASE **(334)**

Kathirvel Alagesan (Max Planck Institute of Colloids and Interfaces; Freie Universität, Berlin, Germany)

12:50-13:05

TOTAL PLASMA *N*-GLYCOME CHANGES IN DIABETES MELLITUS TYPE 2 **(340)**

Viktoria Dotz (VU University Amsterdam, the Netherlands)

11:05-12:05 Glycans in Signaling and Cellular Communication II

Grand Dalmacija hall II, Chair: Celso Reis

11:05-11:35

Keynote lecture: SIALIC ACIDS AND CANCER: METABOLIC ENGINEERING AS A POTENTIAL STRATEGY FOR THERAPY **(124)**

Rüdiger Horstkorte (Institute for Physiological Chemistry, Martin-Luther University Halle-Wittenberg, Germany)

11:35-11:50

PLANT LECTIN DOMAINS IN THE NUCLEOCYTOPLASMIC COMPARTMENT: ROLE IN SIGNALING AND DEFENSE **(129)**

Els JM Van Damme (Ghent University, Belgium)

11:50-12:05

MYTILEC, AN R-TYPE LECTIN FROM MEDITERRANEAN MUSSEL REGULATES CANCER CELL GROWTH THROUGH GLYCAN-DEPENDENT SIGNALING **(128)**

Imtiaz Hasan (Yokohama City University, Japan)

12:05-13:05 Glycans and Cancer III

Grand Dalmacija hall II, Chair: Jan Tkac

12:05-12:35

Keynote lecture: O-GlcNAcylation of RACK1 promotes hepatocellular carcinogenesis **(86)**

Yuanyuan Ruan (School of Basic Medical Sciences, Fudan University, China)

12:35-12:45

LOSS OF FUT8 INHIBITS CHEMICALLY INDUCED HEPATOCELLULAR CARCINOMA AND TUMORIGENESIS BY DOWN-REGULATING MULTIPLE CELLULAR SIGNALING **(90)**

Jianguo Gu (Tohoku Pharmaceutical University, Japan)

12:45-12:55

SILENCING OF GNT-V DECREASES β -1,6-GlcNAc STRUCTURE ON ANTI-TUMOR DRUG TRANSPORTER hENT1 AND POTENTIATES THE CHEMOSENSITIVITY OF GEMCITABINE IN BLADDER CANCER **(97)**

Jianing Zhang (School of Life Science and Medicine, Dalian University of Technology, China)

12:55-13:05

SERUM IgG GALACTOSYLATION AS A MARKER FOR OVARIAN CANCER **(94)**

Shifang Ren (Shanghai Medical College, Fudan University, China)