

Poster Presentations

Sunday, September 15

Animal Models for Human Diseases

POS-01-001

Basic Analysis for Elucidation of the Mechanisms of Acute Effects Induced by Excessive Drinking

Yuki Iwahara¹, Kazuma Higashisaka¹, Akiyoshi Kunieda¹, Kota Tanaka¹, Shin-ichi Tsunoda^{2,3}, Shunji Oshima⁴, Yasushi Kitagawa⁴, Yasuo Yoshioka¹, Yasuo Tsutsumi^{1,2,3}

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POS-01-002

Enrofloxacin Resistance of Uropathogenic Canine *Escherichia coli* Reveals Mechanism Involved in DNA Repair

Cristian Piras¹, Soggio Alessio¹, Viviana Greco², Piera Anna Martino¹, Andrea Urbani^{2,3}, Jarlath Nally⁴, Luigi Bonizzi¹, Paola Roncada^{1,5}

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POS-01-003

★Travel Award

Profiling of Thermostable Proteins in Diabetic Cardiovascular Rat Plasma

Thi Minh Phuong Nguyen, Viet Binh Doan, Kim Dung Nguyen, Thai Thuong Tran, Thi Bich Thao Le, Bich Nhi Nguyen, Dinh Minh Pham, Van Chi Phan

Vietnam Academy of Science & Technology, Vietnam

POS-01-004

PS25-05

Integrated Proteomics for the Study of Metastatic Human Tongue Cancer Development in a Heterogeneous Microenvironment

Masayo Wilson Morifuji, Akiko Niibori Nambu, Daiki Kobayashi, Norie Araki
Dept. Tumor Gen. Biol., Grad. Sch. Med. Sci., Kumamoto Univ., Japan

POS-01-005

Plasma Proteomic Pattern Analysis for Swine Partial Hepatectomy Model

Kohta Iguchi¹, Masaya Ikegawa², Etsuro Hatano¹, Tomohito Sakai², Kenya Yamanaka¹, Motohiko Sato¹, Gen Yamamoto¹, Tatsuya Okamoto¹, Yosuke Kasai¹, Satoru Seo¹, Kojiro Taura¹, Kei Tashiro², Shinji Uemoto¹

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POS-01-006

PS25-02

★Travel Award

Biomarkers of Diabetes in Plasma of NOD Mice

Juliana Almada Colucci¹, Juliana Perez¹, Maisa Mayumi Sakata¹, Regina Lucia Harumi Watanabe³, Fernando Cesar Bizerra², Dulce Elena Casarin¹

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POS-01-007

Aortic Stenosis in a Rabbit Model: Proteomic Analysis of Valve Tissue

Laura Mourino-Alvarez, Fernando de la Cuesta, Montserrat Baldan-Martin,
Maria G. Barderas

Vascular Physiopathology Department, Hospital Nacional de Paraplejicos, Spain

POS-01-008

PS25-03

Proteomic Analysis of Left Ventricular Tissues in Dilated Cardiomyopathy Mouse Models

Mitsuhiro Nishigori¹, Hiroaki Yagi¹, Akikazu Mochizuki¹, Kazuki Sasaki¹, Yuko Iwata²,
Shigeo Wakabayashi², Naoto Minamino¹

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POS-01-009

PS25-04

Plasma Proteomic Pattern Analysis for Murine Experimental Autoimmune Encephalomyelitis (EAE) Model

Tomohito Sakai¹, Takayuki Kondo², Takashi Nirasawa³, Kazunori Yokoi¹, Kei Tashiro⁴,
Masaya Ikegawa^{1,4}

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POS-01-010

Non-Genomic Regulation of Hyperactivation by Progesterone and Estradiol in Hamster Spermatozoa

Masakatsu Fujinoki

Department of Physiology, Dokkyo Medical University, Japan

POS-01-011

A Peptide Profile of Amniotic Fluid in a Fetal Lamb Model of Gastroschisis

Kei Ohyama^{1,2}, Toshiyuki Satou¹, Mitsumi Arito¹, Nobuko Iizuka¹, Kazuki Omoteyama¹,
Manae S. Kurokawa¹, Kazuki Okamoto¹, Naoya Suematu¹, Hiroaki Kitagawa²,
Tomohiro Kato¹

¹Clinical Proteomics and Molecular Medicine, St. Marianna University Graduate School of Medicine, Japan, ²Department of Pediatric Surgery, St. Marianna University School of Medicine, Japan

POS-01-012

A Method for Simultaneous Quantitation of Underivatized Metabolites in the Rat Lens by LC-q-TOF-MS

Vadim V. Yanshole^{1,2}, Lyudmila V. Yanshole^{1,2}, Olga A. Snytnikova^{1,2}, Yuri P. Tsentalovich^{1,2}

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POS-01-013

Phosphoproteome Dynamics of WHV/myc Transgenic Mouse Model During HCC Carcinogenesis

Chen Li, Hong Ni, Qing-run Li, Jing Gao, Zhen Xing, Mu-jun Zhao, Rong Zeng

Shanghai Institute for Biological Sciences, Chinese Academy of Sciences, China

POS-01-014

Protein Networks and Cellular Pathways Altered in Severe Cases of West Nile Virus Infection

Christophe Fraiser¹, Luc Camoin^{2,3}, Stéphanie Lim⁴, Mahfoud Bakli¹, Maya Belghazi⁵, Patrick Fourquet^{2,3}, Samuel Granjeaud^{2,3}, A.D.M.E. Osterhaus⁴, Penelope Koraka⁴, Byron Martina⁴, Lionel Almeras^{1,6}

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POS-01-015

Nutritional Proteomics for the Study of the Suppression of High Fat Diet-Induced Pre-Diabetes by Omega-3 Polyunsaturated Fatty Acids

Yusuke Kawashima^{1,2}, Yoshio Kodera^{2,3}, Hiroyuki Matsumoto¹

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POS-01-017

Analysis of the Secretome of Cultured Cells with Antibody Microarray

Mohamed Saeid Saeed Alhamdani, Shakhawan Mustafa, Aseel Marzoq, Christina Hartl, Rico Uhler, Adem Yildirim, Joerg Hoheisel

Division of Functional Genome Analysis, Deutsches Krebsforschungszentrum (DKFZ), Germany

POS-01-018

Development of a MSIA UPLC-MS/MS Assay for the Analysis of Interleukins

Dayana Argoti², David Sarracino¹, Bryan Krastins¹, Maryann S Vogelsang¹, Gouri Vadali¹, Gregory Byram¹, Amol Prakash¹, Jennifer N Sutton¹, Scott Peterman¹, Patrick Bennett², Mary F Lopez¹

¹BRIMS, Thermo Fisher Scientific, USA, ²Thermo Fisher Scientific, USA

Antibody-Based Proteomics

POS-01-019

Establishment of Peptide Immunoaffinity Enrichment-Coupled Mass Spectrometric Assays for Oral Cancer Biomarker Validation in Body Fluids

Lang-Ming Chi^{1,3}, Kun-Yi Chien², Yung-Chin Hsiao³, Yu-Sun Chang³, Jau-Song Yu²

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POS-01-020

Structural Comparability of the Biosimilar and Innovator Version of a Recombinant Monoclonal Antibody

Andrew Michael Downey

University of Massachusetts-Lowell, USA

POS-01-021

Raising Monoclonal Antibody Against Cell Membrane Proteins Based on Flow Cytometry Screening and Protein Array Identification

Yangyang Liu¹, Xiaobo Yu², Junyi Jiang¹, Jing Liu¹, Joshua LaBaer², Ying Liu¹

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POS-01-022

Classification of Cancer by Multiple Discriminant Analysis for Relationship between Cancer and Expression of Human Cellular Phosphoprotein

Yoko Motofuji¹, Asako Saitoh¹, Tomohito Ayabe¹, Morio Koike¹, Yoshio Kodera², Tadakazu Maeda², Hiroyoshi Komatsu¹

¹School of Health Science & Technology, Bunkyo Gakuin University, Japan, ²Kitasato Univ., Sch. of Sci., Japan

POS-01-023

High-Throughput Production of Antibodies Within the Swedish Human Protein Atlas Project

Hanna Tegel, Holger Berling, Mathias Uhlen, Jenny Ottosson Takanen

Royal Institute of Technology, School of Biotechnology, Division of Proteomics

POS-01-024

Subcellular Localization of the Full Human Proteome Calls for a Selective Choice of Cells

Mikaela Wiking, Frida Danielsson, Mathias Uhlen, Emma Lundberg

Science for Life Laboratory, Royal Institute of Technology (KTH), Sweden

POS-01-025

Mgl-1 Regulated by Antagonistic Functions of STIP1 and DUB Enzyme USP-t

Kwang-Hyun Baek, Key-Hwan Lim, Jang-Joon Park, So-Ra Kim, Jin-Ock Kim, Lau Li

Department of Biomedical Science, CHA University, Bundang CHA Hospital, Korea

POS-01-026

Analysis of Differential Expression in a Four-Stage Human Cell Line Model for Malignant Transformation

Frida Danielsson¹, Marie Skogs¹, Mikael Huss², Elton Rexhepaj¹, Gillian O Hurley³, Daniel Klevebring^{1,4}, Fredrik Ponten³, Annica K. B. Gad⁵, Mathias Uhlen¹, Emma Lundberg¹

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POS-01-027

Detection and Clinical Validation of Circulating Autoantibodies as a Useful Serodiagnostic Markers for Non-Small Cell Lung Cancer

Makoto Kobayashi^{1,2}, Ryo Nagashio¹, Shinichiro Ryuge³, Hiroyasu Nakashima⁴, Kengo Yanagita¹, Benio Tsuchiya¹, Shi-Xu Jiang⁵, Makoto Saegusa⁵, Yukitoshi Satoh⁴, Noriyuki Masuda³, Yuichi Sato¹

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POS-01-028

Detection of Tumor Associated Antigens in Culture Supernatant Using Autoantibodies in Sera from Patients with Bladder Cancer

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POS-01-029

Development of High-Throughput Screening System Using Autoantibody Library for Discovery of Scirrhous Gastric Cancer Biomarker

Satoshi Muraoka¹, Hideaki Kume¹, Hiromi Saitoh¹, Yurie Enomoto², Yuji Ito², Satoshi Nishizuka³, Go Wakabayashi³, Isamu Hoshino⁴, Hisahiro Matsubara⁴, Takeshi Tomonaga¹

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POS-01-030

Diagnostic Significance of MUC5B and TTF-1 Expression in Resected Non-Small Cell Lung Cancer

Ryo Nagashio^{1,2}, Junpei Ueda¹, Sho Minami¹, Makoto Kobayashi¹, Kengo Yanagita¹, Shinichiro Ryuge³, Ken Katono³, Hiroyasu Nakashima⁴, Shi-Xu Jiang⁵, Yukitoshi Satoh⁴, Noriyuki Masuda³, Yoshiki Murakumo⁵, Yuichi Sato^{1,2}

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POS-01-031

Analysis of Autoantibodies Related to Tumor Progression in Sera from Patients with pT1G3 Bladder Cancer

Junpei Ueda^{1,2}, Sho Minami^{1,2}, Kazumasa Matsumoto³, Ryo Nagashio^{1,2}, Yuichi Sato^{1,2}

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POS-01-032

Towards Automated Enrichment and Quantitation of Insulin Using Immuno-MALDI

David Malmstrom¹, Robert Popp¹, Alex Camenzind¹, Daniel T. Holmes², Christoph Borchers^{1,3}

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POS-01-033 PS02-04

Development of an Automated Immuno-MALDI Assay for the Clinical Measurement of Plasma Renin Activity

Robert Popp¹, David Malmstrom¹, Alexander G Camenzind¹, Daniel T Holmes², J Grace van der Gugten², Christoph H Borchers^{1,3}

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POS-01-034

Antibody-Based Proteomics Using an Automated Tissue Microarray Quantification System

Kazufumi Honda, Mari Masuda, Masaya Ono, Tesshi Yamada

Division of Chemotherapy and Clinical Research, National Cancer Center Research Institute

POS-01-035

Study of Usefulness of Established Monoclonal Antibodies as a Sero Diagnostic Marker for Lung Cancer

Kengo Yanagita¹, Ryo Nagashio¹, Benio Tsuchiya¹, Shinichiro Ryuge², Shi-Xu Jiang³, Makoto Saegusa³, Yuichi Sato¹

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POS-01-036

A Modified ELISA Strategy Using Graphene Oxide Sheets and Gold Nanoparticles Functionalised with Different Antibody Types

Hongjun Lin^{1,2}, Aihong Zhang^{1,2}, Fang Tian^{1,2}, Yun Cai^{1,2}, Yangjun Zhang^{1,2}, Xiaohong Qian^{1,2}

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POS-01-037

Towards the Absolute Quantification of Therapeutic Proteins by Immunoaffinity Purification Mass Spectrometry

Wai Siang Law, Andrew Paul Warren, Peter Lloyd, Carsten Krantz

Preclinical Safety, Biologics and Safety Disposition, PK/PD Bioanalytics I, Novartis Institute for Biomedical Research, Novartis Basel, Switzerland

POS-01-038

XIM Cross Species Immunoassays - Analyzing Proteins Across the Barrier

Oliver Poetz, Hannes Planatscher, Bart H.J. van den Berg, Frederik Weiss, Dieter Stoll, Markus F. Templin, Thomas O. Joos

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POS-01-039

DigiWest: High Content Western Blotting

Fridolin Treindl¹, Silke Schultz², Hans Neubauer², Markus F. Templin¹

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POS-01-040

Identification of Altered Cell Signaling Pathways in B-Lymphocytic Chronic Leukemia (B-CLL) by Functional Proteomics Approaches

Manuel Fuentes¹, Raquel Bartolome¹, Martin Perez-Andres¹, Paula Diez¹, Noelia Dasilva¹, Jose Maria Sayagues¹, Laura Gutierrez¹, Maria Gonzalez-Gonzalez¹, Ana Nieto¹, Quentin Lecrevisse¹, Ignacio Criado¹, Marcos Gonzalez¹, Julia Almeida¹, Wei Wu³, Holm Anders³, Daniel LaRosa³, Fridtjof Lund-Johansen³, Alberto Orfao¹

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POS-01-041

Signatures of Human Proteins in Plasma Discriminate Syndromes of Childhood Malaria

Jochen Schwenk^{1,2}, Julie Bachmann^{1,2}, Florence Burte³, Setia Pramana⁴,
Olugbemiro Sodeinde⁵, Yudi Pawitan⁴, Mathias Uhlen^{1,2}, Mats Wahlgren⁴,
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POS-01-042

A Kinase Activity-Estimating Method Using LC-MS/MS

Maiko Nagano, Takahisa Kuga, Jun Adachi, Takeshi Tomonaga

Laboratory of Proteome Research, National Institute of Biomedical Innovation, Japan

POS-01-043

Benefits of Fluorescent Detection for Quantitative Western Blotting

Susanne Grimsby¹, Christoffer Tamm², Karin Soderquist¹, Maria Winkvist¹

¹GE Healthcare Life Sciences, ²Uppsala University, Sweden

POS-01-044

Can We Detect Usually Undetectable Cytokines in Human Body Fluids?

Alamgir Khan

APAF, Macquarie University, Australia

POS-01-045

Intact Mass Analysis of Monoclonal Antibody (MAb) Charge Variants Separated Using Linear pH Gradient

Shanhua Lin, Laurent Rieux, Zhiqi Hao, Wim Decrop, Julia Baek, Andreas Huhmer,
Remco Swart, Srinivasa Rao, Yury Agroskin, Chris Pohl

Thermo Fisher Scientific

Biomarker Discovery I: Cancer

POS-01-046

Secretome-Based Identification of Novel Serum Biomarkers for Ovarian Clear Cell Adenocarcinoma

Noriaki Arakawa¹, Etsuko Miyagi¹, Ayako Nomura¹, Erina Morita¹, Yusuke Masuishi¹,
Yoko Ino¹, Norihisa Ohtake², Shohei Myoba², Yohei Miyagi³, Fumiki Hirahara¹,
Hisashi Hirano¹

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POS-01-047

Search and Identification of Peptide Biomarkers of Colorectal Cancer in Sera

Igor Azarkin¹, Rustam Ziganshin¹, Georgy Arapidi¹, Sergey Kovalchuk^{1,2}, Victoria Shender¹,
Olga Ivanova¹, Vadim Govorun^{1,2}, Vadim Ivanov¹

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POS-01-048

Nuclear N-myc Downstream-Regulated Gene 1 Protein (NDRG1) as a Prognostic Biomarker in Renal Cell Carcinoma

Noriyuki Hosoya^{1,2}, Yuta Kurota^{1,2}, Vladimir Bilim², Yoshihiko Tomita², Tadashi Kondo¹

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POS-01-049

Discovery of a Urinary Biomarker for Renal Cell Carcinoma Based on a Proteomic Analysis of Cyst Fluid

Shiho Kaneko¹, Satoru Minamida¹, Yusuke Kawashima^{2,3}, Kenichi Tabata¹, Kazumasa Matsumoto¹, Tetsuo Fujita¹, Takefumi Satoh¹, Tadakazu Maeda³, Yoshio Kodera^{2,3}, Masatsugu Iwamura¹

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POS-01-050

Revealing Annexin A4 as Potential Biomarker: New Order Towards Liver Cancer Therapy

Rizma Khan^{1,2}, Saadia Zahid¹, Yu Jui Yvonne⁴, Jameson Forster³, A. Bashar Abdul Karim³, Atta M Nawabi³, M. Atta Rahman², Nikhath Ahmed¹

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POS-01-051

Discovery and Subsequent Validation of Biomarkers for Colorectal Cancer by Large-Scale Proteomic Analysis and Tissue Microarray Analysis

Hideaki Kume¹, Satoshi Muraoka¹, Yuuki Hashimoto¹, Shio Watanabe¹, Takeshi Masuda², Yasushi Ishihama³, Junya Fukuoka⁴, Yoshio Kodera⁵, Kazuyuki Matsushita⁶, Hisahiro Matsubara⁷, Takeshi Tomonaga¹

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POS-01-052

A Study of Protein and Glycoprotein Biomarker Discovery in Nipple Discharges from Breast Cancer by Nano-LC-ESI-Mass Spectrometry

Sadamu Kurono^{1,2}, Tomoyuki Nakajima³, Norifumi Kobayashi^{1,2}, Shuji Matsuura¹, Nariaki Matsuura⁴, Haruki Oishi^{1,2}

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POS-01-053

PS07-04

Development of Novel Membrane Protein Marker for Lung Cancer Diagnosis and Therapy

Boram Lee, Jooyoung Chung, Hanyoung Chung, Taiyoun Rhim

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POS-01-054

Proteomics Identification of Novel Prognostic Biomarkers Associated with Relapse of Hepatocellular Carcinoma

Seow Chong Lee¹, Gek San Tan¹, Hwee Tong Tan¹, Teck Kwang Lim², Kiat Hon Lim³, Han Chong Toh⁴, Maxeey Ching Ming Chung^{1,2}

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POS-01-055

Low Expression of Chromatin Remodeling Gene *ARID1A* Induces Gastric Cancer Cell Proliferation and Migration

Hai-Bo Yan¹, Xue-Fei Wang², Qian Zhang¹, Zhao-Qing Tang², Ying-Hua Jiang¹, Yi-hong Sun², Peng-Yuan Yang¹, Feng Liu¹

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POS-01-056

Identification of Plasma Membrane Proteins of Gastric Cancer Cells Reveals SYNJ2BP and C19ORF52 as the Pro-Proliferative Factors

Xiao-En Xu¹, Lei-Lei Xu¹, Sun-Xia Chen¹, Ying-Hua Jiang¹, Jun Yao¹, Peng-Yuan Yang^{1,2}, Feng Liu¹

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POS-01-057

Quantitative Phosphoproteome Analysis of Cultured Stomach Cancer Cell Lines Aimed at Development of Biomarkers for Prediction of Drug Efficacy

Kazunari Hashiguchi, Satoshi Muraoka, Jun Adachi, Misako Sato, Takahisa Kuga, Ryosuke Watanabe, Takashi Shiromizu, Yuuki Hashimoto, Maiko Nagano, Marina Kishida, Takeshi Tomonaga

Lab. Proteome Res., Natl. Inst. Biomed. Innov., Japan

POS-01-058

Optimizing Techniques in Proteomics-Based Biomarker Discovery and Validation in Head and Neck Carcinoma

Ravi Raghavan¹, Anamika Basu³, Rachel Conrad¹, Cliff Herrmann², Mia Perez¹, Laura Denham¹, Steve Lee⁴, Carlos Casiano³, Lawrence Sandberg²

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POS-01-059

Biomarker Proteins in Head and Neck Squamous Cell Carcinoma. A Brief Review

Rachel Conrad¹, Marnelli Bautista¹, Cliff Herrmann², Mia Perez¹, Lawrence Sandberg²,

Ravi Raghavan¹

¹Pathology, ²Biochemistry

POS-01-060

Proteome Analyses of Mammal Tumor Cells in Response to Treatment with Fibroblast Growth Factor 2

Carolina Santacruz-Perez, Julia Pinheiro Chagas da Cunha

Laboratorio Especial de Toxinologia Aplicada, Instituto Butantan, Brazil

POS-01-061

Characterization of the Breast Cancer Marker Candidate LAG3 Protein in Human Plasma by Direct SPRI-MALDI-MS Analysis from Antibody Arrays

F. Remy-Martin^{1,3}, M. El Osta², G. Lucchi², R. Zeggari¹, T. Leblois¹, S. Bellon³, E. Ly-Morin³, C. Fryman³, D. Suckau⁴, P. Ducrocy², W. Boireau¹

¹Institut FEMTO-ST, Universite de Franche Comte, France, ²IFR Sante STIC, Universite de Bourgogne, Centre Hospitalier Universitaire de Dijon, France, ³Horiba Scientific, France, ⁴Bruker Daltonik GmbH, Germany

POS-01-062

Proteomic Approach for Prognostic Biomarker in Myxoid Liposarcoma

Takashi Tajima^{1,4}, Kenta Mukaiharu¹, Naofumi Asano¹, Akihiko Yoshoda³, Takeshi Morii⁴, Akira Kawai², Tadashi Kondo¹

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POS-01-063

Y101-08

★Travel Award

Secretome Analysis of Three-Dimensional *In Vitro* Model Cholangiocarcinoma

Phanthakarn Tit-oon¹, Phannee Sawangareetrakul², Daranee Chokchaichamnankit², Jitsunon Svasti^{1,2}, Chantragan Srisomsap²

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POS-01-064

Investigation into the Mechanisms of Prostate Cancer Androgen Independence Using Label-Free Data-Independent Quantitative LC-IM-DIA-MS and Pathway Analysis

B Morrisey¹, R Tonge², LA Gethings², Motoji Oshikata², S Pennington¹

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POS-01-065

Bladder Cancer Proteome: A Multiplexing Approach Using Online 2D RP-RP Chromatography Coupled with Data Independent Ion Mobility

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POS-01-066

Proteomic Analysis Displays Overexpression of Lactoylglutathione (GLO1) is Associated with Tumor Progression in Murine Fibrosarcoma

Yufeng Wang¹, Yasuhiro Kuramitsu¹, Kazuhiro Tokuda¹, Tomio Ueno², Kazuyuki Nakamura¹, Nobuaki Suzuki², Shigefumi Yoshino², Norio Iizuka², Junko Akada¹, Masaaki Oka²

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POS-01-067

Proteomics Approach to Identify a Glycosylphosphatidylinositol Specific Phospholipase D (GPLD-1) as a Lung Cancer Biomarker and Its Regulation in Lung Cancer

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POS-01-068

Up-Regulation of Type I Collagen During Tumorigenesis of Colorectal Cancer Revealed by Quantitative Proteomic Analysis

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POS-01-069

Treatment Efficacy of a Novel Polybisphosphonate on Soft Tissue Tumor Lesions

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Chaker Adra¹, Marcela Marquez³, Sten Nilsson³, Anders R Holmberg³

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POS-01-070

Analysis of Proteome Expression of Peripheral Blood Mononuclear Cells in Pancreatic Cancer Patients for Novel Biomarker Discovery

Xiaohui Liu

Institutes of Biomedical Sciences Fudan University, China

POS-01-071

Quantitation and Evaluation of Candidate Biomarkers of Pancreatic Cancer in Plasma Using Multiple Reaction of Monitoring (MRM) Method

Weimin Zheng

Institutes of Biomedical Sciences, Fudan University, China

POS-01-072

Differential Glycan Profiling of MY1E12-positive MUC1 to Discover Serological Glyco-Biomarker for Cholangiocarcinoma Diagnosis

Atsushi Matsuda¹, Atsushi Kuno¹, Hideki Matsuzaki¹, Toru Kawamoto², Tatsuro Irimura³,
Yasuni Nakanuma⁴, Masakazu Yamamoto², Nobuhiro Ohkohchi⁵, Yuzuru Ikehara¹,
Junichi Shoda⁶, Jun Hirabayashi¹, Hisashi Narimatsu¹

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POS-01-073

Novel Diagnostic Marker Candidates of Hepatocellular Carcinoma Revealed by Quantitative Proteomics

Dominik A. Megger¹, Thilo Bracht¹, Michael Kohl¹, Maike Ahrens¹, Carolin Puetter²,
Andre Scherag², Joerg F. Schlaak², Frank Weber², Andreas-Claudius Hoffmann²,
Helmut E. Meyer¹, Martin Eisenacher¹, Hideo A. Baba², Barbara Sitek¹

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POS-01-074

Ratio of Glycochenodeoxycholate-3-Sulfate to Its Precursor as a Novel Biomarker of Small Hepatocellular Carcinoma

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POS-01-075

Proteomic and Cytokine Plasma Biomarkers for Predicting Progression from Colorectal Adenoma to Carcinoma in Human Patients

Jung-Won Choi, Minji Choi, Jong Won Yun

Department of Biotechnology, Daegu University, Kyungsan, Korea

POS-01-076

Inhibition of Transketolase by Oxythiamine Altered Dynamics of Protein Signals in Pancreatic Cancer Cells

Gary Guishan Xiao

Genomics and Functional Proteomics Laboratories, Creighton University

POS-01-077

In-Depth Proteomic Characterization of the Secretome of Colorectal Cancer Metastatic Cells Identifies Key Proteins in Liver Metastasis

Ignacio Casal¹, Rodrigo Barderas¹, Marta L. Mendes¹, Sofia Torres¹, Ruben A. Bartolome¹, Roi Villar-Vazquez¹, Alberto Pelaez¹, Maria Lopez Lucendo², Felix Bonilla³

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POS-01-078

N-Linked Glycoprotein Profiling of Prostate Cancer Tissue by ¹⁸O Labeling and High Resolution Mass Spectrometry

Caterina Gabriele¹, Marco Gaspari¹, Francesco Cantiello², Annalisa Nicastrì¹, Giovanni Cuda¹, Rocco Damiano²

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Catanzaro, Italy, ²Surgery Unit, Department of Experimental and Clinical Medicine, Magna Graecia University of Catanzaro, Italy

POS-01-079

Nerve Growth Factor and Its Precursor as Cancer Biomarkers and Targets: Using Proteomics from Discovery to Validation

Severine Roselli¹, Jay Pundavela¹, Genevieve Choquet², Jordane Biarc³, Jerome Lemoine³, Ralph A. Bradshaw⁴, Hubert Hondermarck¹

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POS-01-080

Down-Regulation of the Tumor Suppressor Gene PML is a Novel Prognostic Biomarker in Gastrointestinal Stromal Tumor: Integrated Proteomic and Transcriptomic Approach

Hiroshi Ichikawa^{1,4}, Akihiko Yoshida², Tatsuo Kanda³, Shin-ichi Kosugi¹, Takashi Ishikawa¹, Toshifumi Wakai¹, Tadashi Kondo⁴

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POS-01-081

Screening for Early Intestinal Metaplasia Biomarkers in Gastric Cardia Adenocarcinoma (GCA) by Navigated LCM and Proteomics

Cheng Yan, Jiang Jiong, Zhang Rong, Zhang Jun

Department of Gastroenterology, the Second Affiliated Hospital, Medical School of Xi'an Jiaotong University

POS-01-082

The Proteomic Study to Identify Proteins Specific to Invasion of Myxofibrosarcoma

Kazutaka Kikuta^{1,2,3}, Daisuke Kubota¹, Yoshihisa Suzuki², Hideo Morioka³, Yoshiaki Toyama³, Akihiko Yoshida⁴, Fumihiko Nakatani⁵, Akira Kawai⁵, Hirokazu Chuuman⁵, Tadashi Kondo¹

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POS-01-083

Serum Metabolomics as a Screening Method for Pancreatic Cancer

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POS-01-084

Cancer Proteomics for Biomarker Development Toward Personalized Medicine

Tadashi Kondo, Takashi Mukaihara, Kenta Mukaihara, Naofumu Asano, Yuta Kurota
Division of Pharmacoproteomics, National Cancer Center Research Institute, Japan

POS-01-085

N-Linked Glycoprotein Profiling for Colorectal Cancer Biomarker Discovery Using High Resolution Quadrupole-Orbitrap Mass Spectrometry and ¹⁸O Isotopic Labeling

Annalisa Nicastrì¹, Laura Elia², Roberto Romano², Caterina Gabriele¹, Rosario Sacco², Giovanni Cuda¹, Marco Gaspari¹

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POS-01-086

Analysis of Secretome and Quantitative Tissue Proteome Identified Fibulin-4 and Melanotransferrin as Serological Markers for Colorectal Cancer

Jihye Shin^{1,2}, Hye-Jung Kim^{1,5}, Gamin Kim^{1,4}, Meiyong Song⁴, Seung-Taek Lee², Hoguen Kim⁴, Cheolju Lee^{1,3}

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POS-01-087

Cancer-Specific Genome Changes Observed at Proteome Level in Colorectal Cancer

Sergei Moshkovskii, Alexei Chernobrovkin, Ksenia Kuznetsova, Mikhail Pyatnitsky, Victor Zgoda, Svetlana Novikova, Alexei Lupatov, Igor Vakhrushev, Andrei Lisitsa, Alexander Archakov

Institute of Biomedical Chemistry RAMS, Russia

POS-01-088

Y103-01

★Travel Award

Differentially Glycosylated Circulating Protein Biomarker Discovery for Barretts Esophagus and Esophageal Adenocarcinoma

Alok Kishorkumar Shah¹, David Chen², Kim-Anh Le Cao³, Eunju Choi¹, Derek Nancarrow⁴, David Whiteman⁴, Nicholas A. Saunders¹, Andrew Barbour⁵, Michelle M. Hill¹

¹The University of Queensland Diamantina Institute, The University of Queensland, Australia, ²School of Information and Communication Technology, Griffith University, Australia, ³Queensland Facility of Advanced Bioinformatics, The University of Queensland, Australia, ⁴Queensland Institute of Medical Research, Australia, ⁵School of Medicine, The University of Queensland, Australia

POS-01-089

Proteomic Analysis of Human Malignant Pleural Mesothelioma Cells Compared to Normal Mesothelial Cells

Yasuhiro Kuramitsu, Waka Tominaga, Byron Baron, Takao Kitagawa, Junko Akada, Kazuyuki Nakamura

Department of Biochemistry and Functional Proteomics, Yamaguchi University Graduate School of Medicine, Japan

POS-01-091

Search for Biomarker Proteins Related to Cisplatin-Susceptibility in Malignant Mesothelioma

Kazuya Nagano¹, Takuya Yamashita^{1,2}, Yuka Maeda^{1,2}, Kazuma Higashisaka^{1,2}, Yasuo Yoshioka^{1,2,3}, Masaki Inoue¹, Yasuhiro Abe¹, Yohei Mukai¹, Haruhiko Kamada^{1,3}, Yasuo Tsutsumi^{1,2,3}, Shin-ichi Tsunoda^{1,3}

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²Laboratory of Toxicology and Safety Science, Graduate School of Pharmaceutical Sciences, Osaka University, Japan, ³The Center for Advanced Medical Engineering and Informatics, Osaka University, Japan

POS-01-092

Autoantibody Biomarkers for the Detection of Early Stage Ovarian Cancer

Karina Martin¹, Carmela Ricciardelli², Martin K. Oehler², Peter Hoffmann¹

¹Adelaide Proteomic Centre, School of Molecular and Biomedical Science, The University of Adelaide, Australia, ²Robinson Institute, School of Paediatrics and Reproductive Health, University of Adelaide, Australia

POS-01-093

★Travel Award

Glioblastoma Cell Secretome Analysis and Relevance with Tumor Associated Pathways

Manoj Kumar Gupta¹, Ravindra Varma Polisetty¹, Anjali Shiras², Ravi Sirdeshmukh¹

¹Institute of Bioinformatics, India, ²National Centre for Cell Science, India

POS-01-094

In-Depth Proteomic Characterization of Pancreatic Ductal Adenocarcinoma Subtypes

Laura Postolache^{1,2,3}, Wiebke Nadler^{1,2,3}, Alexander Kerner^{1,2,3}, Christian Eisen^{2,4}, Martin Sprick^{2,4}, Andreas Trumpp^{2,4}, Christoph Roesli^{1,2}

¹Junior Research Group Biomarker Discovery, German Cancer Research Center (DKFZ), Germany,

²Heidelberg Institute for Stem Cell Technology and Experimental Medicine (HI-STEM), Germany,

³Helmholtz International Graduate School for Cancer Research, DKFZ, Germany, ⁴Division of Stem Cells and Cancer, DKFZ, Germany

POS-01-095

Proteomics of High Grade Gliomas: New Molecular Insights

Ravindra Varma Polisetty¹, Poonam Gautam², Manoj Kumar Gupta¹, Rakesh Sharma¹, Megha S Uppin³, Sundaram Challa³, Praveen Ankathi³, Aniruddh K Purohit³, Durairaj Renu⁵, Anjali Shiras⁴, H C Harsha¹, Akhilesh Pandey¹, Ravi Sirdeshmukh¹

¹Institute of Bioinformatics, India, ²National Institute of Pathology (ICMR), India, ³Nizam's Institute of Medical Sciences, India, ⁴National Centre for Cell Science, India, ⁵Strand Life Sciences, India

POS-01-096

Towards the Mechanism of EGFR Inhibitor Resistance in Non-Small Lung Cancer Cells

Ryan Jacobs², Jason Fong², David Moravec², Greg Botting², Ryan Bomgarden³, John Rogers³, Michael Blank¹, Rosa Viner¹, Neelu Puri²

¹Thermo Fisher Scientific (San Jose), USA, ²University of Illinois College of Medicine, USA, ³Thermo Fisher Scientific (Rockford), USA

POS-01-097

Proteomic Analysis of Tumor-Derived Exosomes Derived from Cultured Human Lung Cancer Cell as Tumor Biomarkers

Haruhiko Kamada^{1,2,3}, Takuya Yamashita¹, Masaki Inoue¹, Kazuya Nagano^{1,3}, Sumie Katayama⁴, Yohei Mukai^{1,3}, Yasuo Yoshioka^{2,3}, Kazuma Higashisaka³, Yasuo Tsutsumi^{2,3}, Shin-ichi Tsunoda^{1,2,3,4}

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POS-01-098

The Role of 14-3-3 Protein in Cholangiocarcinoma

Amnart Khongmanee¹, Daranee Chokchaichamnankit², Jisnusun Svasti^{1,2}, Chantragan Srisomsap²

¹Applied Biological Sciences Program, Chulabhorn Graduate Institute, Thailand, ²Laboratory of Biochemistry, Chulabhorn Research Institute, Thailand

POS-01-099

Search for New Urothelial Cancer Biomarkers

Tsutomu Fujimura¹, Hikari Taka¹, Saiko Kazuno¹, Reiko Mineki¹, Kimie Murayama¹, Takashi Ueno¹, Jun-ichi Furukawa², Yasuro Shinohara²

¹Lab. of Proteomics and BioMol. Sci., BioMed. R.C., Juntendo Univ. Grad. Sch. of Medicine, Japan, ²Grad. Sch of Life Sci., Hokkaido Univ., Japan

POS-01-100

Oligosaccharide Structure Analysis of Acute Phase Protein in the Serum of the Prostate Cancer Patient

Tsutomu Fujimura¹, Saiko Kazuno¹, Kimie Murayama¹, Takashi Ueno¹, Jun-ichi Furukawa², Yasuro Shinohara²

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POS-01-101

Glycoproteomic Approaches Enable to Find Glycoproteins with Aberrant Glycans as Novel Biomarkers for Epithelial Ovarian Cancer

Maki Sogabe¹, Hirofumi Nozaki¹, Tomomi Kubota¹, Atsushi Kuno¹, Hiroyuki Kaji¹, Akira Togayachi¹, Hayao Nakanishi², Toru Nakanishi³, Nao Suzuki⁴, Kazushige Kiguchi⁴, Mikio Mikami⁵, Yuzuru Ikehara¹, Hisashi Narimatsu¹

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POS-01-102

Substrates and Regulation Mechanisms for the SIRT5

Fang Wang², Leilei Xu², Hongxiu Yu², Pengyuan Yang^{1,2}

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POS-01-103

Comparative and Targeted Proteomic Analyses of Urinary Exosomes/Microparticles from Bladder Cancer and Hernia Patients for Biomarker Discovery and Verification

Yi-Ting Chen¹, Chien-Lun Chen², Yue-Fan Lai³, Petrus Tang⁴, Jau-Song Yu^{1,3}, Cheng-Han Tsai³, Hsiao-Wei Chen¹, Chih-Ching Wu^{1,5}, Yu-Sun Chang^{1,3}

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POS-01-104

Differential Analysis of LG and HG pTa Bladder Tumors in Comparison to Controls for the Detection of Potential Biomarkers

Hanna C. Diehl¹, Kathrin Luedemann-Franke¹, Rena F. Oezdemir², Cordelia Geisler², Nadine T. Gaisa², Axel Heidenreich³, Ruth Knuechel², Helmut E. Meyer¹, Corinna Henkel¹

¹Medizinisches Proteom Center, Ruhr-University Bochum, Germany, ²Institute of Pathology, RWTH Aachen University Hospital, Germany, ³Department of Urology, RWTH Aachen University Hospital, Germany

POS-01-105

Targeted Proteomics for the Verification of Prostate Cancer Biomarkers in Clinically Stratified Expressed Prostatic Secretions and Urines

Yunee Kim¹, Vladimir Ignatchenko¹, Julius Nyalwidhe², Raymond Lance², Anthony Gramolini³, Dean Troyer², O. John Semmes², Richard Drake⁴, Neil Fleshner¹, Robert Bristow¹, Thomas Kislinger¹

¹Ontario Cancer Institute, University Health Network, Canada, ²Eastern Virginia Medical School, Leroy T. Canoles Jr., Cancer Research Center, USA, ³University of Toronto, Department of Physiology, Canada, ⁴Medical University of South Carolina, Department of Cell and Molecular Pharmacology and Experimental Therapeutics, USA

POS-01-106

Serum Protein Biomarkers Discovery for Early Detection/Monitor Treatment Response of Epidermal Growth Factor Receptor Tyrosine Kinase Inhibitor in Non-Small Cell Lung Cancer

Chien-Wei Lee¹, Chih-Liang Wang⁴, Yi-Wen Wang³, Yi-Mei Wang³, Jau-Song Yu^{1,2,3}, Yu-Sun Chang^{1,3}, Chia-Jung Yu^{1,2,3}

¹Graduate Institute of Biomedical Sciences College of Medicine, Chang Gung University, Taiwan, ²Department of Cell and Molecular Biology College of Medicine, Chang Gung University, Taiwan, ³Molecular Medicine Research Center College of Medicine, Chang Gung University, Taiwan, ⁴Division of Pulmonary Oncology and Interventional Bronchoscopy, and Department of Thoracic Medicine, Chang Gung Memorial Hospital, Taiwan

POS-01-107

Positive Regulation of Brain-Specific Serine Protease 4 by Thyroid Hormone Receptors Leads to Enhanced Tumor Motility in Human Hepatoma Cells

Cheng-Yi Chen, Kwang-Huei Lin
Chang-Gung University

POS-01-108

PS08-04

Label-Free Quantitative Personalized Tissue Membrane Proteomics and Targeted Membrane Glycoprotein Profiling for Gastric Cancer Biomarker

Tai-Du Lin^{1,2}, Chia-Li Han¹, Chih-Wei Chien¹, Pei-Mien Chen¹, Chi-Huey Wong^{2,3}, Yu-Ju Chen¹

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POS-01-109

Proteomic Analysis of DLBCL Tumor Tissue Reveals Quantitative Differences in Regulators of Cytoskeletal Architecture between R-CHOP Responding and Non-Responding Patients

Ulla Ruetschi¹, Martin Stenson², Per-Ola Andersson²

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POS-01-110

Proteomic Analysis of Highly Invasive Colorectal Cancer Cells Established by Orthotopic Xenograft Mouse Model

Takashi Shiromizu¹, Jun Adachi¹, Shigeo Yagi², Robert M. Hoffman², Takeshi Tomonaga¹

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POS-01-111

Proteomic Analysis of Saliva from Patients with Oral Cancer

Priya Sivadasan¹, Gajanan Sathe², Manoj Kumar Gupta², Amritha Suresh¹, Harsha H C², Ravi Sirdeshmukh², Moni Abraham Kuriakose¹

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POS-01-112

Discovery of Lung Cancer Biomarkers by Differential Proteomes Analysis from Six Types of Pleural Effusions

Pei-Jun Liu¹, Chi-De Chen¹, Chih-Liang Wang⁵, Yu-Sun Chang^{1,3}, Jau-Song Yu^{1,2,3}, Chih-Ching Wu^{3,4}, Chia-Jung Yu^{1,2,3}

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POS-01-113

YI03-07

An Improved Protocol for the Enrichment of Plasma Membrane Proteins Allows the Identification of Accessible Antibody Targets on Trastuzumab-Resistant Breast Cancer Cells

Yohei Mukai^{1,2,3}, Danilo Ritz⁴, Dario Neri¹, Tim Fugmann⁴

¹Institute of Pharmaceutical Sciences, ETH Zurich, Switzerland, ²Graduate School of Pharmaceutical Sciences, Osaka University, Japan, ³Laboratory of Biopharmaceutical Research, National Institute of Biomedical Innovation (NiBio), Japan, ⁴Philochem AG, Switzerland

POS-01-114

Comprehensive Proteomics of Gastric Cancer for Biomarker and Drug Target Discovery

Yoon Pin Lim^{1,2,3}, Yixuan Yang¹, Poh Kuan Chong¹, Hassan Ashktorab⁴, Khong Hee Lim⁵, Bok Yan So⁶, Boon Ooi Tan⁷, Khay Guan Yeoh⁸

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⁴Department of Medicine and Cancer Center, Howard University, USA, ⁵Department of Surgery, Tan Tock Seng Hospital, Singapore, ⁶Department of Surgery, National University Hospital, Singapore, Singapore, ⁷Duke-NUS Graduate Medical School, Singapore, ⁸Department of Medicine, Yong Loo Lin School of Medicine, National University of Singapore, Singapore

POS-01-115 YI01-06

Basic Fetoprotein Is Homologous with G6PI/AMF/NLK/MF/PGI/PHI/SA-36 by the Identification of 99% AA Sequence for BFP Using MALDI-MS

Mutsumi Hosako, Hiroki Kuyama, Chihiro Nakajima, Shin-ichirou Kawabata, Koichi Tanaka
Koichi Tanaka Laboratory of Advanced Science and Technology, Shimadzu Corporation, Japan

Biomarker Discovery II: Liver, Kidney

POS-01-116

Renal Metabolic Profiling of Early Renal Injury and Renoprotective Effects of Poria Cocos Epidermis Using UPLC Q-TOF/HSMS/MS^E

Yingyong Zhao¹, Xu Bai²

¹The College of life sciences, northwest University, China, ²Waters Technologies Shanghai Limited, China

POS-01-117

Using an Isolated Rat Kidney Model to Identify Kidney Origin Proteins in the Urine

Lulu Jia¹, Xundou Li¹, Chen Shao¹, Lilong Wei¹, Menglin Li¹, Zhengguang Guo¹, Zhihong Liu², Youhe Gao¹

¹Department of Physiology and Pathophysiology, National Key Laboratory of Medical Molecular Biology, Institute of Basic Medical Sciences, Chinese Academy of Medical Sciences, Peking Union Medical College, China, ²Research Institute of Nephrology, Jinling Hospital, Nanjing University School of Medicine

POS-01-118

The Expression and Function of GP73 in Hepatocellular Carcinoma (HCC)

Kai Jiang², Shu Zhang¹, Yin Kun Liu^{1,2}

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POS-01-119

The PI3K Inhibitor, Wortmannin Ameliorates STZ-Induced Diabetic Nephropathy

Sang-Hoon Kim, Young-Woo Jang, Hyun-Jung Kim, Chan-Wha Kim

Korea University, Korea

POS-01-120

Serum Peptides, Represented by Complement 3f Des-Arginine, Are Useful for Prediction of the Response to Pegylated Interferon- α Plus Ribavirin in Patients with Chronic Hepatitis C

Yohei Noguchi¹, Manae S. Kurokawa², Chiaki Okuse¹, Nobuyuki Matsumoto¹, Kouhei Nagai², Toshiyuki Sato², Mitsumi Arito², Naoya Suematsu², Kazuki Okamoto², Michihiro Suzuki^{1,3}, Fumio Itoh¹, Tomohiro Kato²

¹Division of Gastroenterology and Hepatology, Department of Internal Medicine, St. Marianna University School of Medicine, Japan, ²Clinical Proteomics and Molecular Medicine, St. Marianna University Graduate School of Medicine, Japan, ³Kawasaki Municipal Tama Hospital, Japan

POS-01-121

Multi-Omic and Functional Network Analysis of Paediatric Urine from Patients Diagnosed with Idiopathic Nephrotic Syndrome

Motoji Oshikata¹, Lee A Gethings¹, Johannes PC Vissers¹, John Shockcor², Stephen McDonald², Sandra Kraljevic Pavelic³, Mirela Sedic³, Maja Lemac⁴, Danica Batinic⁴, James I Langridge¹, Olga Vasieva⁵

¹Waters Corporation, UK, ²Waters Corporation, USA, ³Department of Biotechnology, University of Rijeka, Croatia, ⁴Division of Nephrology, Department of Pediatrics, Zagreb University Hospital, Croatia, ⁵Institute of Integrative Biology, University of Liverpool, UK

POS-01-122

Proteomic Analysis of Non-Alcoholic Steatohepatitis in Mice

Masaaki Takamura¹, Bo Xu², Shuichiro Shimada², Satoshi Yamagiwa¹, Yasunobu Matsuda³, Yutaka Yoshida², Minoru Nomoto¹, Tadashi Yamamoto², Yutaka Aoyagi¹

¹Department of Gastroenterology and Hepatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata, Japan, ²Department of Structural Pathology, Institute of Nephrology, Niigata University Graduate School of Medical and Dental Sciences, Japan, ³Department of Medical Technology, Niigata University Graduate School of Health Sciences, Japan

POS-01-123

Angiotensin-Converting Enzyme Inhibition Curbs Tyrosine Nitration of Mitochondrial Proteins in the Renal Cortex During the Early Stage of Diabetes Mellitus in Rats

Naohito Ishii^{1,4}, Pamela K. Carmines², Masanori Yokoba^{1,4}, Hideki Ikenaga³, Tsuyoshi Ichikawa⁴, Yuya Yamada⁴, Yoshifumi Kurosaki^{1,4}, Tomoaki Tsukushi⁵, Yoshio Kodera⁶, Masamichi Oh-Ishi⁶, Yoshikazu Aoki⁷, Tadakazu Maeda⁵, Takafumi Ichikawa^{1,4}, Tsuneo Takenaka⁸, Masato Katagiri^{1,4}

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POS-01-124

High Confident Human Glomerulus Proteome Identified Both by Mass Spectrometry- and Antibody-Based Proteomics

Masaaki Nameta, Yutaka Yoshida, Ying Zhang, Bo Xu, Sameh Magdeldin, Hidehiko Fujinaka, Eishin Yaoita, Mathias Uhlen, Tadashi Yamamoto

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POS-01-125

Phospho-Profiling of mTOR Inhibitor-Treated Renal Cell Carcinoma (RCC) Cell Line and Its Application to Drug Response-Efficacy Biomarkers

Ryosuke Watanabe, Yuki Hashimoto, Marina Kishida, Misako Matsubara, Jun Adachi, Takeshi Tomonaga

Proteome Research Project, National Institute of Biomedical Innovation

POS-01-126

Localization of Normal Human Glomerulus Proteins Detected by Mass Spectrometry and Immunohistochemistry in the Kidney

Tomizo Oyama, Masaaki Nameta, Masaki Taga, Fujio Nakamura, Toshikazu Ikoma, Yutaka Yoshida, Eishin Yaoita, Tadashi Yamamoto

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POS-01-127

Proteomes of Normal Human Glomerulus Identified by Mass Spectrometry (MS) and Immunohistochemistry: Origin of Proteins Identified Only by MS

Masaki Taga, Masaaki Nameta, Tomizo Oyama, Fujio Nakamura, Yutaka Yoshida, Eishin Yaoita, Tadashi Yamamoto

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POS-01-128

Is Urine a Better Biomarker Source Than Blood?

Youhe Gao

Institute of Basic Medical Sciences, Chinese Academy of Medical Sciences

POS-01-129

Human Urine Proteome Changes Induced by Space Flight

Ludmila Kh Pastushkova¹, Kirill S. Kireev², Alexey S. Kononikhin^{3,4}, Igor V. Dobrokhotov¹, Igor A. Popov^{3,4}, Natalia L. Starodubtseva³, Vladimir A. Ivanisenko⁵, Pavel S. Demenkov⁵, Evgeny S. Tiis⁵, Nikolay A. Kolchanov⁵, Irina M. Iarina¹, Evgeny N. Nikolaev^{3,4}

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POS-01-130

Autosomal Dominant Polycystic Kidney Disease Patients Urine Proteome

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POS-01-131

Subtractive Proteomic Analysis Determines Lipid Droplet Associated Protein (LDP) and Unravels Differential Liver LDP Profiling in Fatty Liver Disease

Mingwei Liu^{1,2}, Chen Ding^{1,2}, Wanlin Liu^{1,2}, Gaigai Guo^{1,2}, Tianyi Fu^{1,2}, Sung Yun Jung³, Bei Zhen^{1,2}, Yi Wang³, Lawrence C. B. Chan³, Jun Qin^{1,2,3}

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POS-01-132

Urine Peptidomics and Exosome Profiling in Liver Diseases

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POS-01-133

Changes of the O-GlcNAc Modification of Proteins Accompanied with Diabetic Nephropathy

Yoshihiro Akimoto¹, Yuri Miura², Tosifusa Toda³, Toshiyuki Fukutomi⁴, Daisuke Sugahara¹, Margreet A Wolfert⁵, Lance Wells⁵, Geert-Jan Boons⁵, Gerald W Hart⁶, Tamao Endo², Hayato Kawakami¹

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POS-01-134

Application of Glycoproteomics for Development of Serum Biomarker of Liver Disease

Makoto Ocho¹, Akira Togayachi¹, Hiroyuki Kaji¹, Atsushi Kuno¹, Etsuko Iio², Maki Sogabe¹, Yasuhito Tanaka², Yuzuru Ikehara¹, Masashi Mizokami³, Hisashi Narimatsu¹

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Biomarker Discovery III: Brain, Heart, etc.

POS-01-135

Processed B-Type Natriuretic Peptide is a Biomarker of Post-Interventional Restenosis in Ischemic Heart Disease

Kenichi Aizawa¹, Toru Suzuki^{1,3}, Hiroataka Fujimoto², Daigo Sawaki^{1,3}, Junichi Ishida¹, Jiro Ando¹, Hideo Fujita¹, Issei Komuro¹, Ryoza Nagai¹

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POS-01-136

Deciphering the Proteome and Secretome of Human Coronary Atherosclerotic Arteries

Fernando De la Cuesta¹, Irene Zubiri², Maria Posada², Aroa S. Maroto², Luis R. Padial³, Fernando Vivanco², Gloria Alvarez-Llamas², Maria G. Barderas³

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POS-01-137

Proteomics and Metabolomics: New Tools to Study Albuminuria in Patients with Arterial Hypertension

Montserrat Baldan-Martin¹, Laura Mourino-Alvarez¹, Fernando de la Cuesta¹, Luis M. Ruilope², Luis R. Padial³, Maria G. Barderas¹

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POS-01-138

N-Glycan Profiling of Surfactant Protein D (SP-D) by MALDI Mass Spectrometry

Emi Ito¹, Ritsuko Oka¹, Ayako Kurimoto¹, Shinobu Kitazume¹, Shuichi Nakaya², Takeo Ishii³, Kouzui Kida³, Naoyuki Taniguchi¹

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POS-01-139

Systematic Vascular Proteomics in Vascular Remodeling Model

Dong Hoon Kang¹, Soyoung Jang², Min young Lee³, Doo Jae Lee¹, Jiran Kim¹, Daehee Hwang^{3,4}, Chulhee Choi², Snag Won Kang¹

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POS-01-141

Discovery and Verification of Novel Biomarkers Predicting the Response of Antidepressants Using Mass Spectrometry-Based Proteomic Approach

Jisook Park³, Hye In Woo¹, Jeong Soo Yang², Shinn-Won Lim³, Doh Kwan Kim⁴, Soo-Youn Lee^{1,5}

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POS-01-142

Identification of Biomarkers Predictive of Chronic Lung Allograft Dysfunction (CLAD) After Lung Transplantation by Proteomic Technologies

Candice Trocme¹, Sandrine Bourgoin-Voillard^{2,3}, Izabel Berard², Helene Waret², Bertrand Toussaint¹, Karine Botturi⁴, Antoine Magnan⁴, Laurent Nicod⁵, Christophe Pison⁶, Michel Seve^{2,3}

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POS-01-143

Proteome Profiling of Epidermal Differentiation

Hiroyuki Taguchi¹, Daishi Sakaguchi¹, Shigeru Moriwaki¹, Hisashi Hirano²

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POS-01-144

Direct Brain Omics-Study of Alzheimer's Disease Using UPLC-MS Assay for the Early Diagnosis

Haruhito Tsutsui¹, Koichi Inoue¹, Hiroyasu Akatsu^{2,3}, Yoshio Hashizume², Noriyuki Matsukawa³, Takayuki Yamamoto², Toshimasa Toyo¹

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POS-01-145

Proteome Analysis of Aortic Aneurysm Based on Stage Classification Utilizing Protein Profiles

Hiroaki Yagi¹, Hiromitsu Nishigori¹, Tsukasa Osaki¹, Kazuki Sasaki¹, Sayaka Muto¹, Takayuki Morisaki³, Yutaka Iba⁴, Kenji Minatoya⁴, Hatsue Ueda², Naoto Minamino¹

¹National Cerebral and Cardiovascular Center Research Institute, Department of Molecular Pharmacology, ²National Cerebral and Cardiovascular Center Research Institute Hospital, Department of Pathology, ³National Cerebral and Cardiovascular Center Research Institute, Department of Bioscience and Genetics, ⁴National Cerebral and Cardiovascular Center Research Institute Hospital, Department of Cardiovascular Surgery

POS-01-146

★Travel Award

Proteomic Analysis of Posttraumatic Stress Disorder Mouse Model Reveals Nucleus Accumbens Affected Pathways

Chi-Ya Kao, Kathrin Henes, Carsten T Wotjak, Christoph W Turck

Max Planck Institute of Psychiatry, Germany

POS-01-148

Establishing Apolipoprotein J as a Potential Candidate for Alzheimer's Disease Biomarker Panel: Australian Imaging, Biomarker and Lifestyle (AIBL) Flagship Study of Ageing

Veer Bala Gupta¹, Christopher Rowe², Cassandra Szoek³, David Ames³, Lynne Cobiac⁴, Ashley Bush³, Kathryn Ellis³, Lance Macaulay³, Colin Masters³, Ralph Martins³

¹Edith Cowan University, ²Austin Health, Melbourne, ³University of Melbourne, ⁴Flinders University

POS-01-149

Proteomic Analysis of Stratum Corneum of Human Scalp

Daishi Sakaguchi¹, Yoriko Nakagiri¹, Hiroyuki Taguchi¹, Shigeru Moriwaki¹, Hisashi Hirano²

¹Biological Science Laboratories, Kao Corporation, Japan, ²Advanced Medical Research Center, Yokohama City University, Japan

POS-01-150

Identification of Proteins Involved in Thoracic Aortic Aneurysm

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POS-01-151 PS12-05

Mass Spectrometry Methods for Surrogate Biomarker Discovery in Duchenne Muscular Dystrophy

Ramya L Marathi¹, Sree Rayavarapu¹, Kristy J Brown¹, Jenny Mac¹,
Kanneboyina Nagaraju¹, Eric P Hoffman¹, Erik Henricson², Craig M. McDonald²,
Yetrib Hathout¹

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POS-01-152

Relative Quantification of Endogenous Peptides in Cerebrospinal Fluid Using TMT 6-plex to Identify New Biomarkers for Alzheimer's Disease

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Karsten Kuhn³, Henrik Zetterberg¹, Kaj Blennow¹, Johan Gobom¹

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POS-01-153

Proteomics Biomarkers for Human African Trypanosomiasis

Natalia Tiberti¹, Veerle Lejon², Alexandre Hainard¹, Enock Matovu³, John Charles Enyaru⁴,
Dieudonne Mumba Ngoyi⁵, Joseph Ndung'u⁶, Philippe Buscher⁷, Jean-Charles Sanchez¹

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POS-01-154

Comparative Proteomic Analysis of Neutrophils from Patients with Microscopic Polyangiitis and Granulomatosis with Polyangiitis

Teisuke Uchida^{1,3}, Kouhei Nagai², Toshiyuki Sato¹, Nobuko Iizuka¹, Mitsumi Arito¹,
Yukiko Takakuwa³, Hirosama Nakano³, Seido Ooka³, Manae Kurokawa¹, Noya Suematsu¹,
Kazuki Okamoto¹, Shoichi Ozaki³, Tomohiro Kato¹

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POS-01-155

Proteomic and Transcriptomic Analysis of Triglyceride Deposit Cardiomyovasculopathy for Discovery of Novel Biomarkers

Yasuhiro Hara¹, Naoko Kawasaki¹, Kenichi Hirano², Yuki Hashimoto¹, Jun Adachi¹,
Shio Watanabe¹, Takeshi Tomonaga¹

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POS-01-156

Biomarker Discovery from Low Abundance Proteins in Bovine Serum; Proteomics for Developing Beef Production Systems

Haruka Ikegami¹, Kouhei Nagai¹, Atsushi Takemoto², Natsumi Shimizu², Kohtarō Morita², Chika Higuchi², Tamako Matsuhashi³, Naohiko Kobayashi⁴, Kazuya Matsumoto^{1,2}

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POS-01-157

Identification of Proteins Related to Accumulation of Intramuscular Fat in Japanese Black by Proteomic Analysis

Atsushi Takemoto¹, Kouhei Nagai², Haruka Ikegami², Natsumi Shimizu¹, Kohtarō Morita¹, Chika Higuchi¹, Eiji Kobayashi³, Kazuya Matsumoto²

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POS-01-158

The Regulatory Effects of the Tau Protein on Triose Phosphate Isomerase (TPI) in Brain Cells for the Normal and Diseased States are Different

Anastasia Aikins, Seung-Ah Park, Gi-Yeon Han, Chan-Wha Kim
Korea University, Korea

POS-01-159

Proteomic Analysis of Saliva Identifies Potential Biomarkers in Physiological State

Masako Mukai¹, Yuu Yamatani¹, Eri Hatano¹, Ayaka Saiki¹, Aki Harima¹, Yubo Cao², Toshio Kobayashi², Sachie Oda-Tamai¹

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POS-01-160

Implications of Methylglyoxal Modification of Peroxiredoxin 6 for Impaired Healing in Diabetic Wound

Tomoko Oya-Ito¹, Yuji Naito¹, Tomohisa Takagi¹, Keisuke Shima², Yoshito Itoh¹, Toshikazu Yoshikawa¹

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POS-01-161

PS12-04

Proteomic Study of Biomarkers for Amyotrophic Lateral Sclerosis in Human Muscle Biopsies

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POS-01-162

Proteomics and Biomarker Discovery in Bipolar Disorder

Jessica Holmen Larsson, Johan Gobom, Joel Jakobsson, Henrik Zetterberg, Kaj Blennow, Mikael Landen

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POS-01-163

Proteomics of Axons During Presynapse Formation Using the Novel Culture Method "Neuron Ball Culture"

Yukio Sasaki^{1,2}, Akiyo Ishikawa³, Takao Kawakami^{3,4}, Hisashi Hirano³, Yoshio Goshima¹

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POS-01-164

Quantitative Mass Spectrometry for Proteomic Screening of Potential Biomarkers in Alzheimer's Disease

Ganna Shevchenko, Sravani Musunuri, Kim Kultima, Martin Ingelsson, Lars Lannfelt, Jonas Bergquist, Magnus Wetterhall¹

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Chemical Proteomics and Drug Discovery

POS-01-165 YI01-02

ATP Accessibility Screening (AAS), A High-Throughput and High-Resolution Kinase Analysis Platform for Signaling Research

Jun Adachi¹, Daisuke Higo², Shio Watanabe¹, Masayoshi Kuwano¹, Yuki Hashimoto¹, Takeshi Tomonaga¹

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POS-01-166

Replenishment of Recombinant UQCRB Protein, A Terpestacin-Binding Mitochondrial Protein, Enhances Angiogenesis *In Vitro* and *In Vivo*

Junghwa Chang¹, Hye Jin Jung¹, Sang-Kyu Lee², Seung-Woo Cho², Ho Jeong Kwon¹

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POS-01-167

Autophagolysin Induces Autophagy via Endocytosis Inhibition

Yoon Sun Cho¹, Minoru Yoshida², Jin Young Kim³, Jong Shin Yoo³, Ho Jeong Kwon¹

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POS-01-168

Phage Display-Based High Throughput Screening to Identify Cell-Internalizing Monoclonal Antibodies for Antibody-Drug Conjugates

Yohei Mukai^{1,2}, Mai Yoshikawa², Yoshiaki Okada², Yuki Tsumori², Shin-ichi Tsunoda¹, Yasuo Tsutsumi², William C. Aird³, Yasuo Yoshioka², Naoki Okada², Takefumi Doi², Shinsaku Nakagawa²

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POS-01-169

Target Identification of a Novel IL-12p40 Production Inhibitor by Chemical Proteomics

Naoto Nakamura, Masatoshi Yuri, Masashi Hiramoto, Masaomi Terajima, Yoko Kaneko, Kazuyuki Hattori, Hiroyuki Yokota

Drug Discovery Research, Astellas Pharma Inc., Japan

POS-01-170

A Chemical Proteomics Strategy for the Discovery of Targets for Antibody-Based Therapy

Danilo Ritz¹, Tim Fugmann¹, Dario Neri²

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POS-01-171

Application of Proteomics to Drug Discovery Research

Naoto Nakamura, Tomohiro Yamauchi, Masashi Hiramoto, Masatoshi Yuri, Satoru Ujihara, Masanori Naito, Jun Takasaki, Hiroki Shirai, Hiroyuki Yokota

Astellas Pharma Inc., Japan

POS-01-172

Application of Various Types of Linkers for Photoaffinity Biotin-Tagged Chemical Probes to Identify Drug Targets

Masatoshi Yuri¹, Masashi Hiramoto¹, Satoru Ujihara¹, Naoto Nakamura¹,

Tomohiro Yamauchi¹, Masanori Naitou¹, Miyuki Mabuchi², Akito Tanaka², Hiroyuki Yokota¹

¹Astellas Pharma Inc., Japan, ²Hyogo University of Health Sciences, Japan

POS-01-173

Proteomic Analysis of Two Lung Cancer Cell Lines Treated with Umbelliprenin

Narges Khaghanzadeh^{1,2}, Kazuyuki Nakamura³, Takao Kitagawa³, Zahra Mojtahedi¹,
Mohammad Ramezani⁴, Abbas Ghaderi^{1,2}

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POS-01-174

Identification of Prostatic Serine Protease Against Hepatitis C Virus Replication

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POS-01-175

Functional Proteomics Approaches for High-Throughput Determination of Small Molecules Interactions on cKIT

Manuel Fuentes¹, Maria Jara-Acevedo¹, Ricardo Jara-Acevedo⁴,

Maria Gonzalez-Gonzalez¹, Luis Escribano², Joshua LaBaer³, Alberto Orfao¹

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POS-01-176

PS30-3

Target Identification of Novel Anti-Inflammatory Compound Using Chemical Proteomics Approach with Bait Compound

Takashi Yamamoto¹, Ayatoshi Andou¹, Nobuhiko Hayakawa¹, Masatsugu Noguchi¹, Sen Takeshita¹, Ryohei Yokoyama¹, Agung Eviryanti¹, Yuki Seki¹, Hikaru Nishio¹, Manami Shuto¹, Misato Noguchi¹, Yoichiro Shima¹, Kanna Kuribayashi¹, Shunsuke Kageyama¹, Hiroyuki Eda¹, Shun-ichiro Iemura², Tohru Natsume², Tomohisa Hatta², Masataka Shoji¹

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POS-01-177

Andrographolide Analogue AL-1 Reciprocally Exerts Cytotoxic and Protective Effects on Cells by Inducing ROS Generation

Guang-Rong Yan¹, Guangchuang Yu¹, Yuqiang Wang², Qing-Yu He¹

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²Institute of New Drug Research, College of Pharmacy, Jinan University, China

POS-01-178

Cell Permeable Conjugates for Identification of Small Molecule - Protein Interactions

Thomas A Kirkland¹, Rachel Friedman Ohana², Paul Otto², H. Tetsuo Uyeda¹,

Carolyn C. Woodroffe¹, Sergiy Levin¹

¹Promega Biosciences, USA, ²Promega Biosciences, USA

POS-01-179

Synthesis of Mannosylated Lipopeptides as Targets for the Mannose Receptor

Bita Sedaghat, Rachel Stephenson, Istvan Toth

The University of Queensland, Australia

POS-01-180

Synthesis of Lipid LHRH Peptides for Targeted Drug Delivery

Rachel Stephenson, Istvan Toth

The University of Queensland, Australia

Clinical Application of Proteomics

POS-01-181

Relative Quantification of Intact Hemoglobin A2 with an Ion Trap Mass Spectrometer

Adelina E Acosta Martin^{1,2}, Didia Coelho Graca¹, Lorella Clerici², Yury O Tsybin³,

Ralf Hartmer⁴, Markus Meyer⁴, Kaveh Samii⁵, Denis Hochstrasser^{1,2}, Pierre Lescuyer^{1,2},

Alexander Scherl¹

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Hospital, Switzerland

POS-01-182

Analysis of PTH Variants by Immunocapture with High Affinity N and C Terminal Monoclonal Antibodies

Valdemir Melechco Carvalho¹, Gabriela Venturini da Silva²,

Karina Helena Morais Cardozo¹, Jose Gilberto Henriques Vieira^{1,3}

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POS-01-183

Glycol Chitosan-Conjugated ApoA1 Protein Complex Regulation of Silica-Induced IPF

Moonhwan Choi, Jahyun Gu, Taehyun Ban, Taiyoun Rhim

Institute for Bioengineering and Biopharmaceutical Research, Hanyang University

POS-01-184

Proteomic Analysis on the Mechanism of LDL Apheresis Therapy in the Steroid-Resistant Nephrotic Syndrome

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POS-01-185

Discovery of New Therapeutic Targets in Epithelioid Sarcoma Using Proteomic Analysis

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POS-01-186

Comparative Proteomic Analysis of Extremely Low and Moderate Parasitemic Vivax Malaria for Identification of Potential Early Diagnostic and Prognostic Serum Biomarkers

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POS-01-187

Calcyclin Levels Determined by High-Throughput SRM in Serum Samples of Pre-Eclampsia Patients

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POS-01-188

Proteomic Study Discovering Talin 1 Fragment Related to HIV Infection

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POS-01-189

PlasmaQBaby: Quantification of Plasma Proteins in Preterm Infants Using Heavy Protein Standards and Peptide Group-Specific Immunoenrichment

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POS-01-190

Production and Characterization of A Set of Mouse Monoclonal Anti-Peptide Antibodies Against Selected Oral Cancer Marker Candidates for SISCAPA-MRM and -MALDI Assay Development

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POS-01-191

Validation of Pancreatic Disease Markers in Secretin-Stimulated Duodenal Juice Using Selected Reaction Monitoring

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POS-01-192

A Proteomic Portrait of Colon Cancer-Associated Fibroblasts Identifies Novel Prognostic Markers

Sofia Torres¹, Ruben A. Bartolome¹, Marta L. Mendes¹, M. Jesus Fernandez-Acenero², Alberto Pelaez¹, Cristina Pena³, Maria Lopez-Lucendo⁴, Rodrigo Barderas¹, Antonio Garcia de Herreros⁵, Felix Bonilla⁴, J. Ignacio Casal¹

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POS-01-193

Differences in Proteome Between Luminal A and Luminal B HER2 Negative Breast Cancers

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POS-01-194

Quantitative Proteomics Characterization of Pancreatic Tumor Tissues: New Insights and Challenges

Sheng Pan, Ru Chen, Teresa Brentnall

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POS-01-195

Generation and Characterization of New Bispecific Antibodies to EphA10 and CD3 as Candidate Drugs Against Breast Cancer

Shintaro Taki^{1,2}, Haruhiko Kamada^{1,3}, Yuka Maeda^{1,2}, Kazuya Nagano¹, Yohei Mukai¹, Yasuo Tsutsumi^{1,2,3}, Shin-ichi Tsunoda^{1,2,3}

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POS-01-196

Serum Fibrinogen Alpha C-chain 5.9 kDa Fragment (FIC 5.9) as a Biomarker for Early Detection of Hepatic Fibrosis Related to Hepatitis C Virus

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POS-01-197

YI03-06

A SILAC-Based Approach Defines an Angiotensin II- Regulated Proteome in Primary Human Kidney Cells

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POS-01-198

Efficient High Throughput Proteomic Workflow for Clinical Biopsy Samples

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POS-01-199

Potential Plasma Markers of Hypertrophic Cardiomyopathy - Targeted Proteomic Analysis of Soluble Fibronectin

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POS-01-200

Biomarkers for Duchenne Muscle Dystrophy

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POS-01-201

Over-Expressed Calponin3 by Sub-Sonic Vibration Induces Neural Differentiation of hUC-MSCs by Regulating the Ionotropic Glutamate Receptor

Hyun-Jung Kim, Jin-Hee Kim, Chan-Wha Kim

Korea University, Korea

POS-01-202

Genome-Wide Protein Parts List of Human Placenta Tissues for the Chromosome-Centric Human Proteome Project

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POS-01-203

YI01-06

Systematic Characterization of Human Platelets in Arterial Vascular Disorders by Quantitative Proteomics

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POS-01-204

Application of Quantitative Proteomic Analysis Using Tandem Mass Tags for Discovery and Identification of Novel Biomarkers in Periodontal Disease

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POS-01-205

Analysis of Amniotic Fluid Proteome and Peptidome in PPRM Pregnancies with Inflammatory Complications

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POS-01-206

Proteomic Analysis of Cerebrospinal Fluid Gives Insight Into the Pain Relief Through Spinal Cord Stimulation

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POS-01-207

A Proteomics Approach to the Identification of Biomarkers for Psoriasis Utilising Keratome Biopsy

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POS-01-208

Discovery, Development, and Verification of Fatty Acid Binding Protein 5 as a Serological Marker of Crohns Disease

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POS-01-209

Separation of Mycobacterial Cell Wall Extracts Responsible for the Treatment of Bladder Tumor

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POS-01-210

Identification of Biomarkers Related to Capacetibine Response in Solid Tumors by Nucleic Acids Programmable Protein Arrays (NAPPA), IFISH, and SNPs Approaches

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POS-01-211

Human Proteome Project in Cancer

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POS-01-212

Detection of Target Antigens for Anti-Endothelial Cell Antibodies in Patients with Kawasaki Disease

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POS-01-213

A Fast, Robust, and Reproducible Proteomic Solution to Convert Human Tissue Into a Digital Data Set for Targeted Data Analysis

Tiannan Guo¹, Petri Kouvonen¹, Chiek Koh Ching¹, Ludovic Gillet¹, Witold Wolski¹, Hannes Rost¹, George Rosenberger¹, Silke Gillessen², Markus Jorger², Ben Collins¹, Alexander Leitner¹, Ruedi Aebersold¹

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POS-01-214

Towards the Use of Mass Spectrometric Immunoassay (MSIA) in Protein-Based Diagnostics

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POS-01-215

Protein C Inhibitor Proteotypic Peptide Quantitation by LC-Free SISCAPA-MALDI Mass Spectrometry Predicts Recurrence of Prostate Cancer After Radiotherapy

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POS-01-216

A Platform for Multiplexed Quantitative Measurements of Low-Abundant Proteins in an Assay Format by Combining Recombinant Single-Chain Antibody Fragments (scFv) with LC-SRM-MS

Fredrika Carlsson, Anna Sall, Niclas Olsson, Christer Wingren, Mats Ohlin, Helena Persson, Sofia Waldemarson

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POS-01-217

Disease Proteomics Reveals Modulation of Cell Microenvironment Due to Loss of Collagen VII

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POS-01-218

Rapid Discrimination between Methicillin-Sensitive and Methicillin-Resistant Staphylococcus Aureus Using MALDI-TOF Mass Spectrometry

Kazuyuki Sogawa^{1,2}, Masaharu Watanabe³, Kenta Noda⁴, Fumie Iida², Syunsuke Segawa^{3,4}, Akiko Miyabe³, Syota Murata³, Tomoko Saito³, Fumio Nomura^{2,3,4}

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POS-01-219

Mechanisms of Virulence in MSSA/MRSA Staphylococcus Aureus Clinical Isolates

Paola Roncada^{1,2}, Alessio Soggiu², Cristian Piras², Monica Monaco³, Annalisa Pantosti³, Marco Tinelli⁴, Andrea Urbani⁵, Luigi Bonizzi²

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POS-01-220

Analysis of HER2 Graded Breast Cancer FFPE Tissue Samples with Reverse Phase Protein Arrays

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POS-01-221

JHP-03

Phosphoproteomics of Human Liver Cancer Analyzed by 2-Dimensional Image-Converted Analysis of Liquid Chromatography and Mass Spectrometry (2DICAL)

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POS-01-222

YI03-05

Synthesis of Galactose-Deficient IgA1 O-glycans by GalNAc-Transferases: Implications for the Pathogenesis of IgA Nephropathy

Kazuo Takahashi^{1,2}, Milan Raska^{1,3}, Tyler J. Stewart¹, Milada Stuchlova Horynova^{1,3}, Audra Hargett¹, Alena Kasperova^{1,3}, Stacy D. Hall¹, Yoshiyuki Hiki², Yukio Yuzawa², Bruce A. Julian¹, Zina Moldoveanu¹, Matthew B. Renfrow¹, Jan Novak¹

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POS-01-223

Population Based Omics ? Identification of Genetic Variants Influencing the Human Plasma Proteome

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POS-01-224 PS13-01

Quantitative Mass Spectrometry (SRM/MRM) to Amyloid Peptides, Tau Protein, and Apolipoprotein E in Human Cerebrospinal Fluid for Alzheimer Disease Diagnosis

Sylvain Lehmann¹, Nicolas Barthelemy², Jérôme Vialaret¹, Susanna Schraen-Maschke³, Laurent Tiers¹, Constance Delaby¹, Christophe Junot², Jacques Touchon¹, Nicolas Sergent³, Audrey Gabelle¹, François Becher², Christophe Hirtz¹

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POS-01-225

Quantitative Target Proteomics-Based Personalized Molecular Target Chemotherapy for Recurrent Brain Tumor

Sumio Ohtsuki¹, Wataru Obuchi², Mitsuyoshi Nakada³, Chiemi Ikeda², Akifumi Yoshikawa², Yutaka Hayashi³, Yasunori Sato^{3,4}, Takuya Watanabe³, Yosuke Kawahara³, Takayuki Hasegawa³, Amura Sabit³, Daisuke Kita³, Yasuhiko Hayashi³, Jun-ichiro Hamada³, Tetsuya Terasaki²

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POS-01-226

Absolute Quantitative Analysis of Human Tear Fluid Proteome Using Wheat Germ Cell-Free Protein Synthesis System and Quantitative Mass Spectrometry

Nobuaki Takemori¹, Atsushi Shiraishi², Ayako Takemori¹, Masahiko Yamaguchi², Tomoyuki Kamao², Xiaodong Zheng², Yasuhito Hayashi², Yuichi Ohashi²

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POS-01-227 PS13-03

Development of an LC-MRM Based Assay of Prostate Specific Antigen (PSA) in Blood Samples

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POS-01-228

Proteome Analysis of Exhaled Breath Condensate for Medical Diagnostics

Alexey Kononikhin^{1,2,5}, Anna Ryabokon¹, Igor Popov^{1,2,5,6}, Viktoria Kurova¹, Konstantin Nagornov², Natalia Starodubtseva^{2,5}, Eldar Anaev³, Irina Larina⁴, Sergey Varfolomeev¹, Eugene Nikolaev^{1,2,6}

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POS-01-229

Plasma Protein Quantification from Dried Blood Spots Using Stable Isotope Labelled Protein Standards

Benedikt Lang¹, Christopher J. Pynn¹, Hannes Planatscher², Bart H.J. van den Berg², Frederik T. Weiss², Cornelia Sommersdorf², Martin Gamer³, Peter Schulz-Knappe³, Thomas O. Joos², Oliver Poetz², Dieter Stoll^{1,2}

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POS-01-230

Urine Profiling of Patients with Preeclampsia

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POS-01-231

An Integrated Proteomics for Extracting Molecular Target of Malignant Gliomas

Norie Araki¹, Takashi Morikawa¹, Souhei Mizuguchi¹, Daiki Kobayashi¹, Akiko Niibori Nambu¹, Uichi Midorikawa¹, Mio Hirayama¹, Masayo Morifuji Wilson¹, Shin Kawano³, Hideo Nakamura², Junichi Kuratsu²

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Databases and Bioinformatics

POS-01-232

Comparative Study of Global Protein Turnover in Tissues and Cell Lines

Alexandre Podtelejnikov, Michael Andersen, Christian Ravnsborg
Thermo Fisher Scientific

POS-01-233

Shotgun Proteomics Data Analysis Using Personalized Protein Sequence Database Built from RNA-Seq Results from the Same Sample

Junwoo Bae¹, Soohan Ahn¹, Daehee Hwang², Sanghyuk Lee³, Sangwon Lee⁴, Heejin Park⁵, Eunok Paek⁵

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POS-01-234

★Travel Award

Proteomic Quantitative Pathway Analysis Aided Potential Target Mining of Alkaloids from Herbal Medicine

Yi Man Eva Fung, Di Hu, Chi-Ming Che

Department of Chemistry, State Key Laboratory of Synthetic Chemistry, and Open Laboratory of Chemical Biology of the Institute of Molecular Technology for Drug Discovery and Synthesis, The University of Hong Kong, China

POS-01-235

Optimal FDR Threshold Surfaces for Combined Search Engine Identification Strategies

Alex A. Henneman, Magnus Palmblad, Paul J. Hensbergen, Yassene Mohammed, Andre M. Deelder

Center for Proteomics and Metabolomics, Leiden University Medical Center, The Netherlands

POS-01-236

A Novel Approach for Processing LC-Ion Mobility-MS Metabolomics Data

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POS-01-237

iPEACH: Integrated Protein/Gene Expression Analysis CHart

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POS-01-238

Finding Representatives in and for Protein Classes

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POS-01-239

CAPER 2.0: An Extensible, Configurable and Interactive Workflow-Based Platform to Mine the Knowledge from the Chromosome-Assembled Human Proteome

Dan Wang, Feifei Guo, Zhongyang Liu, Lihong Diao, Liang Lu, Ping Xu, Dong Li, Fuchu He

The State Key Laboratory of Proteomics, Beijing Proteome Research Center, National Center for Protein Sciences Beijing, National Engineering Research Center for Protein Drugs, Beijing Institute of Radiation Medicine, China

POS-01-240

New Functionality for the Trans-Proteomic Pipeline: Tools for the Analysis of Proteomics Data

Luis Mendoza¹, David Shteynberg¹, Joseph Slagel¹, Michael Hoopmann¹, Terry Farrah¹, Zhi Sun¹, Brian Pratt², Henry Lam³, Jimmy K. Eng⁴, Alexey I. Nesvizhskii⁵, Eric W. Deutsch¹, Robert L. Moritz¹

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POS-01-241

Development of Web-Based Repository System for Mass Spectrometry Data and Equipment with Links to Chromosome-Centric Human Proteome Database

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POS-01-242

PCDq and H-EPD: Human Protein Complex Database and Human Protein Sequence Database Developed to Research Uncharacterized Human Proteins

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POS-01-243

Integrating ENCODE in the Spanish Human Proteome Project: A Bioinformatics Approach
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Alberto Pascual-Montano¹

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POS-01-244

An Automated Workflow for Enterprise-Level High-Throughput Proteomics Analysis
Joe Slagel, Eric Deutsch, Robert L. Mortiz

Institute for Systems Biology, USA

POS-01-245

Development of "Proteome Tools" -A Web Application Suite for Proteomics Experiments
Tsuyoshi Tabata¹, Akiyasu C. Yoshizawa², Yuki Ohta², Maiko Kusano², Noboru Yamamoto¹,
Ken Aoshima¹, Shigeki Kajihara², Yoshiya Oda¹, Koichi Tanaka²

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POS-01-246

Identification and Label-Free Quantitation of Mass Spectrometric Data Via Freely Available Plug-In Software, Mass++

Satoshi Tanaka¹, Yuichiro Fujita¹, Akiyasu C. Yoshizawa¹, Shin-ichi Utsunomiya¹,
Shigeki Kajihara¹, Mitsuru Fukuda², Masayuki Ikawa², Kentaro Takahashi²,
Tsuyoshi Tabata², Ken Aoshima², Yoshiya Oda², Koichi Tanaka²

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POS-01-247

PRIDE-Q: Providing a Condensed and Quality-Scored View of Public MS Proteomics Data in the PRIDE Database

Joseph M. Foster¹, David Ovelleiro¹, Antonio Fabregat¹, Johannes Griss¹, Qing-Wei Xu^{1,2},
Javier Contell¹, Florian Reisinger¹, Henning Hermjakob¹, Juan Antonio Vizcaino¹

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POS-01-248

Unrestricted Modification Search in Formalin-Fixed Paraffin-Embedded Samples Using MS/MS Spectrum Library

Ying Zhang^{1,2}, Markus Muller², Bo Xu¹, Yutaka Yoshida¹, Sameh Magdeldin¹, Eishin Yaoita¹,
Tadashi Yamamoto¹

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POS-01-249

Cross-Organism Comparison of the Uniqueness in Protein Terminal Region Sequences
Akiyasu C. Yoshizawa, Yuko Fukuyama, Shigeki Kajihara, Hiroki Kuyama, Koichi Tanaka
Koichi Tanaka Laboratory of Advanced Science and Technology, Shimadzu Corporation, Japan

POS-01-250

iProX: Integrated Proteome Resources

Jie Ma^{1,2}, Songfeng Wu^{1,2}, Tao Chen^{1,2}, Weimin Zhu^{1,2}, Yunping Zhu^{1,2}

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POS-01-251

"Antibody Ranker" to Find Antibodies Used in Recent Publication

Naohiko Kinoshita, Masaaki Nameta, Yutaka Yoshida, Ying Zhang, Bo Xu, Sameh Magdeldin, Hidehiko Fujinaka, Eishin Yaoita, Tadashi Yamamoto
Institute of Nephrology, Graduate School of Medical and Dental Sciences, Niigata University, Japan

POS-01-252

Identification of Short Terminal Motifs Enriched by Antibodies Using Peptide Mass Fingerprinting

Hannes Planatscher, Frederik Weiss, Bart H.J. Van Den Berg, David Eisen, Thomas Joos, Oliver Poetz
Natural and Medical Sciences Institute at the University of Tuebingen

POS-01-253

Data Processing Within Multi '-OMICS' Projects

Michael Kohl¹, Dominik A. Megger¹, Martin Trippler², Hagen Meckel¹, Maike Ahrens¹, Thilo Bracht¹, Frank Weber³, Andreas-Claudius Hoffmann⁴, Hideo A. Baba⁵, Barbara Sitek¹, Jörg F. Schlaak², Helmut E. Meyer¹, Christian Stephan^{1,6}, Martin Eisenacher¹

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POS-01-254

New 2-Dimensional Image-Converted Analysis of Liquid Chromatography and Mass Spectrometry (2DICAL) Optimized for High-Performance Mass Spectrometry

Tomohiro Sakuma¹, Miho Banno¹, Masahiro Kamita², Tesshi Yamada², Masaya Ono²
¹Mitsui Knowledge Industry Co.,Ltd., Japan, ²National Cancer Center Research Institute

POS-01-255

Development of a Tool for Label-Free Quantitation of Proteins Identified by Mass Spectrometry and Verification of the Results

Toshikazu Ikoma, Xu Bo, Naohiko Kinoshita, Tomizo Oyama, Tomoo Makiguchi, Zhang Ying, Yutaka Yoshida, Eishin Yaoita, Tadashi Yamamoto
Department of Structural Pathology Institute of Nephrology Graduate School of Medical and Dental Sciences Niigata University, Japan

POS-01-256

A Comparison of Two Different Library Construction Processes

Wenyuan Lu^{1,2}, Yang Zhang², Pengyuan Yang^{1,2}
¹Department of Chemistry, Fudan University, China, ²Institutes of Biomedical Sciences of Shanghai Medical School, Fudan University, China

POS-01-257

'exKRT': Automated Extraction Analysis of Contamination in Proteomic

Tomoo Makiguchi, Bo Xu, Naohiko Kinoshita, Ying Zhang, Toshikazu Ikoma, Eishin Yaoita, Yutaka Yoshida, Tadashi Yamamoto
Department of Structural Pathology Institute of Nephrology Graduate School of Medical and Dental Sciences Niigata University, Japan

POS-01-258

PS21-03

Estimation of Protein Species Number for Mammalian, Bacteria, Insecta and Yeast

Elena Ponomarenko, Stanislav Naryzhny, Ekaterina Poverennaya, Mikhail Pyatnitskii, Andrey Lisitsa, Alexander Archakov
Institute of Biomedical Chemistry of RAMS, Russia

POS-01-259

How to Submit MIAPE Compliant Data to ProteomeXchange Consortium

Salvador Martinez-Bartolome, J. Alberto Medina-Aunon, Miguel Angel Lopez-Garcia, Carmen Gonzalez-Tejedo, Severine I. Gharbi, Rosana Navajas, Juan Pablo Albar
Centro Nacional de Biotecnología - CSIC, ProteoRed-ISCIII, Spain

POS-01-260

Update on the Transcriptomic and Proteomic Expression Data for the Placenta Within the GenomewidePDB

Seul-Ki Jeong¹, Hyoung-Joo Lee¹, Keun Na¹, William S. Hancock², Young-Ki Paik¹
¹Yonsei Proteome Research Center, Yonsei University, Korea, ²Northeastern University, USA

POS-01-261

Novel Data Analysis Pipeline Based on Mass Spectrum Sequential Subtraction for High-Throughput Proteogenomics

Satomi Miyake, Mohamed Helmy, Masaki Wakabayashi, Naoyuki Sugiyama, Yasushi Ishihama
Kyoto University, Japan

POS-01-262

Benefits and Challenges of Combining Search Results from Multiple Algorithms

David Shteynberg, Eric Deutsch, Joseph Slagel, Luis Mendoza, Robert Moritz
Institute for Systems Biology, USA

POS-01-263

Solving the Bioinformatics Bottlenecks of Massive Storage & Data Distribution, Huge Computational Needs, and Flexible and Fast Reporting

Gautam Saxena¹, Rafael Dugarte¹, Christine Jellinek³, Vidya Venkat³, Jennifer Van Eyk³, Scott Kuzdzal²
¹Integrated Analysis, USA, ²Shimadzu Scientific, Columbia, MD, ³Johns Hopkins Medical School, MD

POS-01-264

A New Algorithm for Peptide *De Novo* Sequencing with Multiple Complementary Spectra

Mingjie Xie¹, Lian Yang¹, Bin Ma²
¹Bioinformatics Solutions Inc., ²University of Waterloo, Canada

POS-01-265

Peptide *De Novo* Sequencing Result Validation

Lian Yang¹, Baozhan Shan¹, Bin Ma²
¹Bioinformatics Solutions Inc., ²University of Waterloo, Canada

POS-01-266

PAA - A New R Package for Autoimmune Biomarker Discovery with Protein Microarrays

Michael Turewicz¹, Maiké Ahrens¹, Caroline May¹, Dirk Weitalla², Beate Pesch³, Swaantje Casjens³, Helmut E. Meyer¹, Christian Stephan¹, Martin Eisenacher¹
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POS-01-267

Computational Studies of Post-Translational Modifications

Zexian Liu¹, Jian Ren², Yu Xue¹
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POS-01-268

GlycoPepDecipher: Automated Identification of Intact N-Linked Glycopeptides

Chen-Chun Chen^{1,4}, Cheng-Wei Cheng², Ke-Shiuan Lynn², Wan-Chih Su^{1,3},
Chia-Ying Cheng², Wen-Lian Hsu², Chi-Huey Wong^{1,4}, Yu-Ju Chen^{1,3}, Ting-Yi Sung²

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POS-01-269

Bioinformatics Study for Elucidation of Lectin Recognition Patterns

Masae Hosoda, Yukie Akune, Kiyoko F. Aoki-Kinoshita

Graduate School of Engineering, Soka University, Japan

POS-01-270 PS23-04

Firmiana: An Integrated Platform for Mass Spectrometry-Based Proteomics Studies Based on Galaxy Framework

Jun Qin², Bingxin Lu¹, Peng Li¹, Ruichao Xue¹, Lihong Diao², Wei Zhang², Chen Ding²,
Jinwen Feng¹, Ruifang Cao¹, Juan Yang¹, Dong Li², Wanlin Liu², Cheng Chang², Naiqi Qiu¹,
Yu Du², Tieliu Shi¹

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POS-01-271

A Simple and Fast Label-Free Quantitation Algorithm for LC-MS

Ken Aoshima¹, Masayuki Ikawa¹, Takayuki Kimura¹, Mitsuru Fukuda¹,
Kentaro Takahashi¹, Tsuyoshi Tabata¹, Satoshi Tanaka², Yuichiro Fujita²,
Akiyasu C. Yoshizawa², Shin-ichi Utsunomiya², Shigeki Kajihara², Koichi Tanaka²,
Yoshiya Oda¹

¹Biomarkers and Personalized Medicine, Eisai Product Creation Systems, Japan, ²Koichi Tanaka Laboratory of Advanced Science and Technology, Shimadzu Corporation, Japan

POS-01-272 PS21-04

Isobar: Making Sense Out of Protein and Modified Peptide iTRAQ/TMT Quantitative Data

Florian P. Breitwieser, Jacques Colinge

CeMM - Research Center for Molecular Medicine of the Austrian Academy of Sciences, Austria

POS-01-273 PS21-05

"FindPairs" - The Protein Quantification Module of the PeakQuant Software Suite

Martin Eisenacher¹, Michael Kohl¹, Sebastian Wiese², Romano Hebel^{1,3},
Helmut E. Meyer¹, Bettina Warscheid^{2,4}, Christian Stephan^{1,5}

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POS-01-274

Approximative Statistical Approach for Absolute Quantification of the Human Chromosome 18 Proteins

Ekaterina V. Ilgisonis, Arthur T. Kopylov, Elena A. Ponomarenko, Andrey V. Lisitsa
Institute of Biomedical Chemistry

POS-01-275

Condenser: A Statistical Aggregation Tool for Multi-Sample Quantitative Proteomic Data

Anders Knudsen¹, Tue Bennike¹, Henrik Kjeldal¹, Svend Birkelund¹, Daniel Otzen²,
Allan Stensballe¹

¹Aalborg University, Denmark, ²Aarhus University

POS-01-276

Bioinformatic Workflow for Chr16 Characterization Using Proteomic Shotgun and Transcriptomic RNA-Seq Experiments

Elizabeth Guruceaga¹, Daniel Tabas-Madrid², Mariana B Monteiro¹,
Salvador Martinez-Bartolome³, Juan Pablo Albar³, Fernando J Corrales¹,
Alberto Pascual-Montano², Victor Segura¹

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POS-01-277

ProteomeXchange: Globally Coordinating Proteomics Data Dissemination

Henning Hermjakob¹, Juan Antonio Vizcaino¹, Eric W. Deutsch²,
The ProteomeXchange Consortium^{1,2}

¹EMBL-European Bioinformatics Institute, Wellcome Trust Genome Campus, UK, ²Institute for Systems Biology, USA

POS-01-278

Development of a Genome Annotation Pipeline of Protein-Coding Genes of the Liverwort, *Marchantia paleacea* var. *diptera* for *De Novo* RNA-Seq

Kazuo Ishii¹, Toshinori Kozaki¹, Tomomi Nakagawa²

¹Tokyo University of Agriculture and Technology, Japan, ²Meiji University, Japan

POS-01-279

Improving the Efficiency in Obtaining True Protein IDs with Biological Significance in Protein Biomarker Discovery Platforms

Kyoko Kojima, Gregory J. Bowersock, James A. Mobley
University of Alabama at Birmingham, USA

POS-01-280

Automatic Extraction of Correlation of Annotation Terms in Databases to Find Similar Concepts, Synonyms, and Multifunction

Katsuhiko Murakami¹, Tadashi Imanishi²

¹National Institute of Advanced Industrial Science and Technology, Japan, ²Tokai University, Japan

Electrophoresis-Based Proteomics

POS-01-281

Proteome Analysis of Fenitrothion Exposed Adrenal and Pituitary Gland

Narumi Hiroasawa¹, Takeshi Sakamoto², Yasushi Sakamoto¹

¹Biomedical Research Center, Saitama Medical University, Japan, ²Faculty of Pharmaceutical Sciences, Josai University, Japan

POS-01-282

Proteomic Analysis of C14-Sphingosine-Triggered Germination of the Entomopathogenic Fungus, *Nomuraea Rileyi*

Tomofumi Nakajima¹, Takahiro Noda², Tomohiro Araki¹

¹Department of Bioscience, School of Agriculture, Tokai University, Japan, ²Kumamoto Prefectural Agriculture Research Center, Japan

POS-01-283

Global Protomap Profiling for Biomarker Discovery of Human Hepatocellular Carcinoma
Goro Terukina¹, Masato Taoka¹, Yoshio Yamauchi¹, Chiharu Fujita¹, Tadashi Kondo²,
Toshiaki Isobe¹

¹Department of Chemistry, Graduate School of Science and Engineering, Tokyo Metropolitan University, Japan, ²Division of Pharmacoproteomics, National Cancer Center Research Institute, Japan

POS-01-284

Comparative Proteomic Analysis of Virulence Variations in *Xanthomonas campestris* pv. *campestris* Strain 17, 11A and P20H

Tao-Shan Chang, Chien-Chen Lai

Institute of Molecular Biology, National Chung-Hsing University, Taiwan

POS-01-285

Proteins Expression Clustering of Normal and Alzheimeric Rat Hippocampus Treated with *Lavandula Angustifolia*

Hakimeh Zali¹, Mostafa Rezaei Tavirani²

¹Faculty of Paramedical Sciences, Shahid Beheshti University of Medical Sciences, Iran, ²Proteomics Research Center, Faculty of Paramedical Sciences, Shahid Beheshti University of Medical Sciences, Iran

POS-01-286

Proteomic Analysis of the Cellular Signal Regulation Mechanism by Cholesterol Sulfation

Toshihiro Yoshimura¹, Katsuhisa Kurogi¹, Ming-Cheh Liu², Masahito Suiko¹,
Yoichi Sakakibara¹

¹Department of Biochemistry and Applied Biosciences, Faculty of Agriculture, University of Miyazaki, Japan, ²Department of Pharmacology, College of Pharmacy and Pharmaceutical Sciences, The University of Toledo, Spain

POS-01-287

★Travel Award

Immunoproteomics Analysis of Antibody Response to Proteins of *Candida tropicalis*

Pey Yee Lee¹, Lay Harn Gam², Rozita Rosli³, Pei Pei Chong¹

¹Department of Biomedical Sciences, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, Malaysia, ²School of Pharmaceutical Sciences, Science University of Malaysia, Malaysia, ³Department of Obstetrics and Gynaecology, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, Malaysia

POS-01-288

Mechanistic Analysis on Potent Intermolecular Isomerase Activity of Protein Disulfide Isomerase-P5 with Down-Regulation in Sperm Maturation Highlighted by Electrophoresis-Based Proteomics

Miho Miyakawa¹, Shuntaro Shigihara², Gosuke Zukeran¹, Tetsutaro Tomioka¹,
Akihiro Totsuka², Tasuku Yoshino¹, Mamoru Satoh³, Sayaka Kado⁶, Machiko Iwamoto⁴,
Yuri Miura⁴, Kuniko Akama^{1,5}

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POS-01-289

Proteomic Analysis of Cell Populations in Artificial and Clinical Peritoneal Dialysis Effluents

Anton Lichtenauer^{1,2}, Rebecca Herzog², Andreas Vychytil¹, Christoph Aufricht¹,
Klaus Kratochwill^{1,2}

¹Medical University of Vienna, Austria, ²Zytoprotect GmbH, Austria

POS-01-290

Basic Nuclear Proteins Alteration in Neurodegenerative Disorder

Beena Hasan^{1,2}, Nikhat Ahmed Siddiqui¹, Abid Azhar², Saadia Zahid¹

¹Department of Biochemistry, University of Karachi, ²Dr A.Q Khan Research Institute of Biotechnology and Genetic Engineering (KIBGE), University of Karachi, Pakistan

Monday, September 16

Imaging Mass Spectrometry and Mass Microscopy

POS-02-001

Bridging the Gap Between Imaging Mass Spectrometry and LC-MS/MS Identification

Ove Johan Ragnar Gustafsson¹, Stephan Meding¹, Karina Martin¹, James S Edde¹, Sandra Hack¹, Tomas Koudełka¹, Martin K Oehler², Shaun R McColl¹, Peter Hoffmann¹

¹Adelaide Proteomics Centre, School of Molecular and Biomedical Science, The University of Adelaide, Australia, ²Robinson Institute, Research Centre for Reproductive Health, School of Paediatrics and Reproductive Health, The University of Adelaide, Australia

POS-02-002

Detection of Individual Cells in Tissue Using MALDI-TOF Imaging at 10 μm Pixel Size

Eckhard Belau¹, Jane-Marie Kowalski², Janine Rattke¹, Alice Ly³, Soeren-Oliver Deininger¹, Detlev Suckau¹, Axel Walch³, Marius Ueffing³, Toshiji Kudo⁴, Michael Becker¹

¹Bruker Daltonik GmbH, Germany, ²Bruker Daltonics, USA, ³Helmholtz-Zentrum München, Germany, ⁴Bruker Daltonics K.K., Japan

POS-02-003

MALDI-FTICR Tissue Image Analysis of Rat Testis at 10 μm Pixel Size and 200 k Mass Resolution - High Mass Resolution x High Spatial Resolution

Jens Fuchser¹, Eckhard Belau¹, Sören-Oliver Deininger¹, Michael Becker¹, Yoshihiko Morishita², Detlev Suckau¹

¹Bruker Daltonik GmbH, Germany, ²Bruker Daltonics K.K., Japan

POS-02-004

Spatial Correlation Combined with Hierarchal Clustering Analysis for Reducing Complex Multi-Dimensional MALDI Imaging Dataset

K Nagase¹, M Towers², K Neeson², E Claude², T Paxton¹

¹Nihon Waters, Japan, ²Waters Corporation, Manchester, UK

POS-02-005

Computational and Experimental Pipeline for MRI-Compatible Three-Dimensional MALDI Imaging Mass Spectrometry

Janina Oetjen^{1,3}, Michaela Aichler⁴, Dennis Tredde^{1,2}, Michael Becker⁵, Jan Strehlow⁶, Stefan Schiffler^{1,2}, Judith Berger⁷, Stefan Heldmann⁷, Stefan Wirtz⁶, Klaus Steinhorst¹, Michael Gottschalk⁸, Nicole Posorski⁹, Jan Hendrik Kobarg^{1,2}, Andrey Dyatlov², Detlev Suckau⁵, Takashi Nirasawa¹⁰, Ferdinand von Eggeling⁹, Axel Walch⁴, Peter Maass^{1,2}, Theodore Alexandrov^{1,2,3}

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POS-02-006

Investigation of Different Hierarchal Clustering Approaches for Protein Identification Directly from Tissue Section in a MALDI Imaging Experiment

M Towers¹, LM Cole², MR Clench², E Claude¹, James I. Langridge¹

¹Waters Corporation, UK, ²Biomedical Research Centre, Sheffield Hallam University, UK

POS-02-007

ImageID: A New Spatially Resolved Proteomics Approach Providing Access to Disease Biomarker Proteoforms

Martin Schürenberg¹, Rainer Paape¹, Janine Rattke¹, Michael Becker¹, Axel Walch², Detlev Suckau¹

¹Bruker Daltonik GmbH, Germany, ²Helmholtz-Zentrum Muenchen, Germany

POS-02-008

A Study of Drug Distribution in Malignant Melanoma Tissue by MALDI Mass Spectrometry Imaging for Evaluation of Drug Efficacy

Yutaka Sugihara¹, Charlotte Welinder¹, Ákos Végvári², György Marko-Varga^{2,3}

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POS-02-009

PS06-04

Peptide MALDI Imaging - How to Get Most Out of Your Sample?

Hanna C. Diehl¹, Julian Elm¹, Judith Baronner¹, Dennis Trede², Herbert Thiele², Helmut E. Meyer¹, Corinna Henkel¹

¹Medizinisches Proteom-Center, Ruhr-University Bochum, Germany, ²Steinbeis Innovation Center SCILS, Germany

Immunoproteomics and Autoimmune Diseases

POS-02-010

Comparative Analyses of Peptidome and Proteome of CSF Samples from Patients with Guillain-Barre Syndrome and with Non-Neurological Diseases

Igor Azarkin¹, Rustam Ziganshin¹, Sergey Kovalchuk¹, Georgiy Arapidi^{1,2}, Victoria Shender¹, Olga Ivanova¹, Nikolay Anikanov¹, Vadim Govorun^{1,2}, Vadim Ivanov¹

¹Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry RAS, Russia, ²Institute of Physico-chemical Medicine, Russia

POS-02-011

Protein Profiles of Peripheral Blood Mononuclear Cells as a Biomarker for Behcet's Disease

Takuya Yoshioka¹, Manae S. Kurokawa², Toshiyuki Sato², Kouhei Nagai², Nobuko Iizuka², Mitsumi Arito², Yukiko Takakuwa¹, Hiromasa Nakano¹, Seido Ooka¹, Naoya Suematsu², Kazuki Okamoto², Hiroshi Nakamura³, Noboru Suzuki⁴, Shoichi Ozaki¹, Tomohiro Kato²

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POS-02-012

Identification of Naturally Processed MHC Class I-Restricted HIV Epitopes Presented by Human HIV-Infected Cells

Marijana Ručević¹, Georgio Kourjian¹, Majahonkhe Shabangu², Julie Boucau¹, Carl Kadie^{1,3}, Jonathan Carlson³, David Heckerman³, Bruce D. Walker^{1,4}, Sylvie LeGall¹

¹The Ragon Institute of MGH, MIT and Harvard, USA, ²Harvard School of Engineering and Applied Sciences, USA, ³Microsoft Research, USA, ⁴Howard Hughes Medical Institute, USA

POS-02-013

Immuno-Proteomics of *Helicobacter pylori* Antigens for IgG Antibodies in *H. pylori*-Positive Japanese Child Sera

Junko Akada¹, Masumi Okuda², Yoshihiro Fukuda², Takao Kitagawa¹, Yasuhiro Kuramitsu¹, Kazuyuki Nakamura¹

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POS-02-015

Proteomic Analysis of HLA Class I Binding Peptides from Prostate Cancer Cell Lines to Seek for Novel Cancer Vaccine and Cancer Biomarker

Yuko Kamata^{1,2}, Akiko Kuhara¹, Takeo Iwamoto³, Takahiro Kimura², Kazumi Hayashi¹, Shigeo Koido⁴, Shin Egawa², Sadamu Homma¹

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POS-02-016

Immune Complexome Analysis for Identifying the Immune Complex Antigens

Miyako Baba¹, Kaname Ohyama¹, Mami Tamai², Naoya Kishikawa¹, Atsushi Kawakami², Naotaka Kuroda¹

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POS-02-017

Shotgun Proteomic Analysis of Human Multiple Sclerosis Lesions

Ben Crossett¹, Linda Ly², Twishi Gulati², Michael Barnett²

¹School of Molecular Bioscience, University of Sydney, Australia, ²Central Clinical School, University of Sydney, Australia

POS-02-018

Identification of Novel ACPA Targets in Rheumatoid Arthritis Synovial Tissues Using 2D Gel Electrophoresis and Mass Spectrometry

Elena Ossipova¹, Ganna Oliynyk^{1,2}, Catia Cerqueira¹, Susanne Becker³, Jimmy Ytterberg⁴, Gert Auer³, Lars Klareskog¹, Per-Johan Jakobsson¹

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POS-02-019

Identification of Minor Antigens by Quantitative Proteomics and Its Impact on Next Generation Leukemia Immunotherapy

Pierre Thibault^{1,2}, Dev Sriranganadane¹, Diana Granados^{1,3}, Celine Laumont^{1,3}, Tariq Douada^{1,4}, Olivier Caron-Lizotte¹, Antoine Zieger^{1,4}, Sebastien Lemieux^{1,5}, Claude Perreault^{1,3}

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POS-02-020

Extensive Phenotypically Characterization of Exosomes Derived from Activated, Non-Activated APCs and T-Cells Using an Extracellular Vesicle (EV) Array

Anne Louise S. Revenfeld^{1,2}, Allan Stensballe¹, Malene Joergensen²

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POS-02-021

Systems-Level Analysis of Proteolytic Events and Post-Translational N-Acetylation *In Vivo* in Increased Vascular Permeability and Complement Activation in Skin Inflammation Revealed by N-Terminomics Analyses

Christopher M. Overall¹, Ulrich auf dem Keller¹, Anna Prudova¹, Ulrich Eckhardt¹, Barbara Fingleton²

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POS-02-022

Comprehensive Analysis of Aberrantly Glycosylated Proteins in Rheumatoid Arthritis

Toshiyuki Sato¹, Mitsumi Arito¹, Manae S. Kurokawa¹, Yukiko Takakuwa², Seido Ooka², Kouhei Nagai³, Hiroshi Nakamura⁴, Nobuko Iizuka¹, Naoya Suematsu¹, Kazuki Okamoto¹, Tomohiro Kato¹

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POS-02-023

Proteomic Analysis of Effects of Antirheumatic Drugs on Exosomes Derived from Synovial Sarcoma Cells

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POS-02-024

Ultra High-Density Peptide Microarrays Reveal a Receptor Domain as Novel Autoimmunity Target in Multiple Sclerosis

Peter Nilsson, Arash Zandian, Bjorn Forsstrom, Burcu Ayoglu, Anna Haggmark, Jochen M Schwenk, Mathias Uhlen

SciLifeLab Stockholm, KTH - Royal Institute of Technology

POS-02-025

Differential Proteomic Analysis of Human Hippocampal Regions of Interest (CA1, CA2, CA3, fascia dentata) - Relevance for Alzheimer's Disease

Fouzi El Magraoui¹, Helmut Heinsen², Thomas Mastalski¹, Svenja Seger¹, Martin Eisenacher¹, Renata E. Leite³, Lea T. Grinberg⁴, Katja Kuhlmann¹, Helmut E. Meyer¹, Andreas Schroetter¹

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POS-02-026

Global Quantitative Analysis of IL-2 and IL-15 Signaling Pathways

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LC-MS/MS-Based Large-scale Comprehensive Proteomics

POS-02-027

Improving Chr-16 Proteins Coverage with High Confidence and MIAPE Compliant MS Data

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POS-02-028

Dissecting Subcellular Compartments for Deep Proteome Coverage of Chromosome 16 in T Cells

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POS-02-029

First Draft of the Human Proteome

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POS-02-030

Identification and Characterization of Cow's Milk Proteins from the Rat Intestinal Lymph Using a Proteomic Strategy

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POS-02-031

LC Retention Behavior of Tryptic Peptides in Proteomics LC-MS

Chisato Takahashi, Yukiko Yamamoto, Mio Iwasaki, Masaki Wakabayashi, Naoyuki Sugiyama, Yasushi Ishihama
Kyoto University, Japan

POS-02-032

Maximizing Spectrum Identification Rate in Shotgun Proteomics on the Q Exactive Mass Spectrometer

Yue Xuan, Andreas Kuehn, Eugen Damoc, Markus Kellmann
Thermo Fisher Scientific (Bremen), Germany

POS-02-033

Proteomic Analysis of the *abi3* Deletion in *Physcomitrella patens*

Izumi Yotsui^{1,2}, Satoshi Serada³, Tetsuji Naka³, Masashi Saruhashi^{2,5}, Kenji Kuramoto², Teruaki Tajiri², Takahisa Hayashi², Ralph Quatrano⁴, Yoichi Sakata²

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POS-02-034

Proteomics Analysis of USP20 for Identifying Its Functions Through the Characterization of Putative Substrates

So-Ra Kim, Jang-Joon Park, Ji-Hyun Yun, Da-Yea Park, Kwang-Hyun Baek
CHA University

POS-02-035

The Effects of 5-Fluorouracil on the Proteome of Colon Cancer Cells

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POS-02-036

Targeting Cancer Metastasis Using Global, Quantitative and Integrative Network Biology

Erwin M. Schoof¹, Thomas R. Cox², Pau Creixell¹, James Longden¹, Adrian Pasculescu³, Cristina Costa Santini¹, Agata Wesolowska-Andersen⁴, Ramneek Gupta⁴, Graeme Murray⁵, Janine T. Erler², Rune Linding¹

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POS-02-037

Profiling and Annotation of Human Kidney Glomerulus Proteome

Zenyui Cui¹, Yutaka Yoshida¹, Bo Xu¹, Ying Zhang¹, Masaaki Nameta¹, Sameh Magdeldin^{1,2}, Tomoo Makiguchi¹, Toshikazu Ikoma¹, Hidehiko Fujinaka^{1,3}, Eishin Yaoita¹, Tadashi Yamamoto¹

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POS-02-038

Unraveling the Role of Progesterone in Cerebral Aneurysm Among Postmenopausal Women: Utilizing HBMECs

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POS-02-039

Protein Profile of HaCaT Cells Under UV Radiation and Lipoic Acid Treatment

Chia-Hsien Feng, Chia-ju Tsai
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POS-02-040

Protein Profile of Human Plasma After Acrylamide Exposure

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POS-02-041

Comprehensive Peptide Searching Workflow to Maximize Protein Identifications

Shadab Ahmad¹, Amol Prakash¹, David Sarracino¹, Bryan Krastins¹, MingMing Ning², Barbara Frewen¹, Scott Peterman¹, Gregory Byram¹, Maryann S. Vogelsang¹, Gouri Vadali¹, Jennifer Sutton¹, Mary F. Lopez¹

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POS-02-042

Comparative Proteogenomic Analysis of *Streptococcus suis* by High Resolution Mass Spectrometry

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POS-02-043

Analysis of the First Draft of the Human Proteome with ProteomicsDB

Mathias Wilhelm^{1,2}, Judith Schlegl², Amin Moghaddas Gholami¹, Hannes Hahne¹, Joos-Hendrik Boese², Marcus Lieberenz², Mikhail Savitski³, Yuval Morad², Lars Butzmann², Emanuel Ziegler², Anton Niadzelka², Eyk Kny², Helmut Cossmann², Siegfried Gessulat², Marcus Bantscheff³, Anja Gerstmair², Franz Faerber², Bernhard Kuster¹

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POS-02-044

Molecular Signatures of Long-Lived Proteins: Autolytic Cleavage Adjacent to Serine Residues and Peptide Laddering

Shih-Ping Su^{1,2}, Brian Lyons³, Michael Friedrich³, Jason McArthur², Xiaomin Song⁴, Dylan Xavier⁴, Roger Truscott^{2,3}, Andrew Aquilina²

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POS-02-045

Proteomics Study of Serum from Patients with Acute Coronary Syndrome

Duc Dan Pham¹, Dinh Minh Pham¹, Thi Huyen Bui¹, Huu Chi Do¹, Thai Thuong Tran¹, Thi Dung Nguyen¹, Thi Bich Thao Le¹, Minh Hai Dang², Doan Loi Do², Bich Nhi Nguyen¹, Van Chi Phan¹

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POS-02-046

Preparation of Meter-Scale Monolithic Silica Capillary Column Modified with Urea Functional Group for Hydrophilic Interaction Chromatography and Its Application to One-Shot Proteomics Approach

Kanta Horie^{1,2}, Tohru Ikegami³, Masaki Wakabayashi², Takashi Kato¹, Nobuo Tanaka^{3,4}, Yasushi Ishihama²

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POS-02-047

Precise Column Temperature Control Enables Improved Protein Identifications in Proteomics Shot-Gun Sequencing Applications

Xiaoyue Jiang, Yi Zhang, Andreas FR Huhmer
Thermo Fisher Scientific (San Jose), USA

POS-02-048

Metaproteomic Analysis of Methanogens in the Thermophilic Reactor Treating Terephthalate at Different Loading

Yun-Chiao Chou, Hung-Jen Huang, Feng-Yau Wu, Jer-Horng Wu
Department of Environmental Engineering, National Cheng Kung University, Taiwan

POS-02-049

Comprehensive Analysis of Downstream Targets of the Novel Protein E4TF-1 Binding Methyltransferase (EBM)

Byron Baron^{1,2}, Yasuhiro Kuramitsu¹, Takao Kitagawa¹, Kazuyuki Nakamura¹, Pierre Schembri-Wismayer²

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POS-02-050

In-Depth Phosphoproteomic Analysis of Colorectal Cancer Stem Cells

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Proteomics Unit, Universitat Pompeu Fabra (UPF) and Centre de Regulacio Genomica (CRG), Spain

POS-02-051

Global Characterization of the Proteome and Phosphoproteome in Human Glioblastoma Initiating Cells by High-Resolution Mass Spectrometry

Hiroko Kozuka-Hata¹, Ryo Koyama-Nasu², Yumi Goto¹, Yukiko Nasu-Nishimura², Hiroko Ao-Kondo¹, Kouhei Tsumoto¹, Tetsu Akiyama², Masaaki Oyama¹

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POS-02-052

Dynamic Phosphoproteomic Profile of Brown Adipose Tissue Stimulated with Cold Temperation

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POS-02-053

Unveiling Phosphoproteome by pY-Enhanced Phosphopeptide Enrichment Coupled with High Resolution Capillary LC-MS

Naoyuki Sugiyama, Shigeharu Yoshida, Mio Iwasaki, Masaki Wakabayashi, Yasushi Ishihama
Graduate School of Pharmaceutical Sciences, Kyoto University, Japan

POS-02-054

SILAC Based Quantitative Phosphoproteome Analysis of INS-1E Pancreatic Beta-Cells to Unravel the Mechanism of Insulin Secretion

Jia-Shu Tang, Qing-Run Li, Jia-Rui Wu, Rong Zeng
Shanghai Institute for Biological Sciences, Chinese Academy of Sciences, China

POS-02-055

Establishment of LC/MS/MRM Assay for Glycopeptide Quantification of Human Serum Prostate Specific Antigen (PSA)

Masaki Kuroguchi¹, Toshio Nakamura¹, Yusuke Inohana², Ichiro Hirano², Junko Amano¹
¹The Noguchi Institute, Lab. of Glycobiology, Japan, ²Shimadzu Corporation, Analytical & Measuring Instruments Division

POS-02-056

Enhanced Protein N-acetylation Analysis by SCX and Dimethyl Labeling and Its Application to Discrimination of Protein Isoforms

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POS-02-057

Elimination of the Last Valid Excuse for Not Testing Every Cellular Proteome Dataset for Viral Proteins

Alexey Chernobrovkin, Roman Zubarev
Department of Medical Biochemistry and Biophysics, Karolinska Institutet, Sweden

POS-02-058 Y102-01

Applying SWATH-MS to Dissect the Variability and Heritability of the Human Plasma Proteome

Yansheng Liu¹, Ben Collins¹, Ludovic CJ Gillet¹, Ruth Huttenhain¹, Emmanouil T Dermitzakis², Ruedi Aebersold^{1,3}
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POS-02-059

Comparative Proteomics of *Thermococcus onnurineus* NA1: Insights Into the Sulfur Metabolism of a H₂-Producing Hyperthermophilic Archaeon

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POS-02-060

Proteomic Analysis of *Mycobacterium tuberculosis* Infection of Human Macrophages

Valerie Poirier, Yossef Av-Gay
University of British Columbia, Canada

POS-02-061

Improvement of Rat Urinary Proteomics by a Differential Precipitation of Proteins

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POS-02-062

Towards Comprehensive Proteomic Characterization of Human Saliva and Investigation of Its Diagnostic Potential

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POS-02-063

Rapid and Deep Coverage in Single-Dimension Shotgun Human Proteomics

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POS-02-064

An Established One Dimensional LC-MS/MS Methods and Using It in Quantification Proteomics

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Medicinal Plant and Agricultural Proteomics for Human Health

POS-02-065 PS33-07

Quantitative MS^E Proteomics as a Tool for the Determination of Clinically Relevant Proteins in Wheat Grain

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POS-02-066

Phosphoproteome Analysis of *Lotus japonicus* Seeds

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POS-02-067

The Wheat Chloroplastic Proteome

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POS-02-068

Unraveling the Proteome of Sugarcane Leaves by Mass Spectrometric Analysis

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Milton Yutaka Nishiyama Junior², Glauca Mendes Souza²,

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POS-02-069

Quantitative Subcellular Proteomics Reveals that Phytohormone Mediated Mechanism Is Involved in the Flooding Tolerance of Soybean

Setsuko Komatsu, Yohei Nanjo

National Institute of Crop Science, National Agriculture and Food Research Organization

POS-02-070

Proteomic Analysis of the Seed Development in *Jatropha curcas*: From Carbon Flux to the Lipid Accumulation

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POS-02-071

Mutation of Nucleotide Pyrophosphatase/Phosphodiesterase 1 Stimulates Accumulation of Starch in Rice Seedlings Under High CO₂ Concentration

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POS-02-072

Identification and Characterization of MARK, MAMP Responsive Phosphoprotein for Appropriated ROS Kinetics, in *Arabidopsis*

Hidegori Matsui, Yuko Nomura, Ken Shirasu, Hirofumi Nakagami

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POS-02-073

Analysis of Mechanism for Light Irradiation-Mediated Enhancement of Soybean Flooding Tolerance by Comparative Proteomics and Transcriptomics

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POS-02-074

Analysis of Flooding Stress Response Mechanism in Soybean Using Gel-Based and Gel-Free Proteomics Techniques

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POS-02-075

Functional Proteomics Reveals Tanshinone IIA Induced Apoptosis of Activated Hepatic Stellate Cells

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POS-02-076

Comparative Proteome Analysis of Roots in Drought-Sensitive and Drought-Tolerant Rapeseed and Their Hybrid F1 Line Under Drought Stress

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POS-02-077

Differential Omics Approach on a Metabolic Network Outlined Flooding-Response Mechanisms in Soybean

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POS-02-78

Investigation of Rice Proteomic Change in Response to Microgravity

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POS-02-079

In-Depth Proteome Analysis of Developing Seeds of *Jatropha curcas*

Mohib U. Shah¹, Camila B. Pinheiro¹, Fabio C.S. Nogueira², Gabriel D.T. Araujo², Emanoella L. Soares¹, Paulo C. Carvalho³, Magno Junqueira², Gilberto B. Domont², Francisco A.P. Campos¹

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POS-02-080

Proteomic Analysis of the Japanese Crested Ibis

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POS-02-081

Proteome Analysis of Roots of Wheat Seedlings Under Aluminum Stress

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POS-02-082

Transcriptome and Quantitative Proteome Analyses Reveal Molecular Mechanism Associated with the Low Silk Production of Silkworm *Bombyx mori*

Shao-hua Wang¹, Zheng-ying You¹, Lu-peng Ye¹, Jiaqian Che¹, Qiuji Qian¹, Jianshe Liang¹, Ake Liu¹, Yohel Nanjo², Setsuko Komatsu^{2,3}, Bo-xiong Zhong^{1,4}

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POS-02-083

Effects of Growth Hormone on the Salmon Pituitary Proteome

Yoichi Kurata^{1,2}, Yayoi Kimura², Yuko Yamanaka², Akiyo Ishikawa², Hiroyuki Okamoto³, Tetsuji Masaoka³, Hiroyuki Nagoya³, Kazuo Araki³, Shunsuke Moriyama⁴, Akinobu Hamada¹, Tsukasa Mori⁵, Hisashi Hirano²

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POS-02-084

Differential Protein Expression and Chemoprotection of Fenugreek Leaf Extract on Normal Rat Liver Cells Treated with Cadmium Chloride

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POS-02-085

S100P Up-Regulated in Hepatocellular Carcinoma Cell Line Treated with Thai Herbal Formula

Wanwisa Suksalak², Penchatr Diskul-Na-Ayudthaya¹, Daranee Chokchaichamnankit¹, Khajeelak Chiablaem¹, N. Monique Paricharttanakul¹, Jisnusun Svasti^{1,2},
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POS-02-086

Proteomic Approach to Antioxidative Effects of Food Factors Using Fluorescence Labeled Difference Gel Electrophoresis

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POS-02-087

Proteomic Analysis of Stress-Related Proteins Associated with Desiccation Tolerance in Developing Rice Seeds

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POS-02-088

Analysis of Labor-Related Functions of the Cephalic and Thoracic Exocrine Glands of the European Honeybee by Using Large-Scale Proteomics

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POS-02-089 P533-06

Characterization of Muscadine Berry Proteome Using Label and Label Free Mass Spectrometry Approaches

Ramesh Katam¹, Devaiah M Kambiranda¹, Katsumi Sakata², Tiratharaj Singh⁴, Steve V Sluyter³, Paul A Haynes³, Mehboob B Sheikh¹, Lekan M Latinwo¹

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POS-02-090

Microbiota Profiling to Improve Quality and Safety of Dairy Products

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POS-02-091

Proteomic Characterization of Ascorbate Peroxidase in Soybean Under Abiotic Stress

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POS-02-092

Overexpression of Sucrose Synthase 1 (sus1) in Transgenic Canola Carrying AtDREB2A Transcription Factor

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POS-02-093

Two-Dimensional Gel Electrophoresis Analysis of Flavonoid Sulfate Effects on *A. thaliana* T87 Cells

Takuyu Hashiguchi^{1,2}, Yoichi Sakakibara^{1,2}, Takehiko Shimohira^{1,2}, Toshihiro Yoshimura^{1,2}, Katsuhisa Kurogi^{1,2}, Yosuke Hara¹, Ming-Cheh Liu³, Masahito Suiko^{1,2}

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POS-02-094

Starch Glycomic and Proteomic Aspects of Grain Chalkness

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POS-02-095

Proteomic Analysis of Soybean Root During Recovery After Flooding

Mudassar Khan^{1,2}, Yohei Nanjo², Katsumi Sakata³, Setsuko Komatsu^{1,2}

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POS-02-096

Label-Free Quantitative Proteomics of Nuclear Proteins in Soybean Under Flooding Stress

MyeongWon Oh^{1,2}, Yohei Nanjo², Setsuko Komatsu^{1,2}

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POS-02-097

Acceleration of Germination of Rice Seeds by Soaking with Red Onion

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POS-02-098

Proteomic Analysis Applied to Meat Science: Characterizing Post Mortem Changes in Japanese Wild Deer Meat

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POS-02-099

Post-Translational Regulation of Nutrient Signaling and Metabolism Mediated by 14-3-3 Proteins in Plants

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POS-02-100

Comprehensive Identification of OsSUMO Binding Proteins in Rice Exposed to High Temperature Stress Condition

Takuya Kushioka¹, Hiroshi Ataka¹, Attia Kotb², Kentaro Kaneko², Toshiaki Mitsui², Kimiko Itoh²

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POS-02-101

Development of an Inflammation-Specific MRM Assay for the Discovery of a Novel Pharmaceutical for the Treatment of Human Vascular Diseases from Derivatives of the Escin Chestnut Extract

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POS-02-102

Isotope Labeling-Based Quantitative Proteomics of Developing Seeds of Castor Bean (*Ricinus communis* L.)

Fabio CS Nogueira¹, Giuseppe Palmisano², Veit Schwammle², Peter Roepstorff², Francisco AP Campos³, Gilberto B Domont¹

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POS-02-103

Proteomic Identification of Diverse and Dynamic Metabolic Network Upon Reduction of Cellular Oxalate Level in Crop Plant

Sudip Ghosh, Kanika Narula, Niranjana Chakraborty, Subhra Chakraborty

National Institute of Plant Genome Research, India

Membrane and Organelle Proteomics

POS-02-104

PS07-05

Proteomic Profiling of Ganglioside-Associated Microdomain in Malignant Melanomas

Noboru Hashimoto¹, Kazunori Hamamura¹, Norihiro Kotani², Yuki Ohkawa¹, Keiko Furukawa³, Koichi Honke², Koichi Furukawa³

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POS-02-105

Physiological and Proteomic Characterization of Outer Membrane Vesicle of *Pseudomonas putida* KT2440

Yeol Gyun Lee, Chi Won Choi, Sung Ho Yun, Young Ju Lee, Gun Hwa Kim, Yeon Hee Hong, Edmond Changkyun Park, Seung Il Kim

Division of Life Science, Korea Basic Science Institute, Korea

POS-02-106

2D-DIGE Analysis of Cell Surface Proteins Reveals Characteristic Proteome Profiles for Effects of Sulfasalazine in Human Synovial Sarcoma Cell Line, SW982

Kazuki Omoteyama, Mitsumi Arito, Toshiyuki Sato, Nobuko Iizuka, Manae S. Kurokawa, Kazuki Okamoto, Naoya Suematsu, Tomohiro Kato
St. Marianna Univ. Grad. Schl. Med., Japan

POS-02-107

Proteomic Analysis of Outer Membrane Vesicles (OMV) from Multidrug-Resistant *Acinetobacter baumannii* DU202

Sung Ho Yun, Yeol Gyun Lee, Chi Won Choi, Yong Ju Lee, Edmind Chang Kyun Park, Yeon Hee Hong, Gun Hwa Kim, Seung Il Kim
Division of Life Science, Korea Basic Science Institute, Korea

POS-02-108

Identification of Protein Complexes in the Golgi from Rat Liver by High Resolution Native Gel and nanoLC-ESI-Q-TOF

Yongqian Zhang^{1,2}, Yulin Deng¹, Tommy Nilsson²
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POS-02-109 PS07-03

A Plasma Membrane Proteomic Analysis of Mouse and Human Cardiovascular Proteins

Parveen Sharma, Nicolas Boussette, Savo Lazic, Cynthia Abbasi, Nicole Dubois, Alex Ignatchenko, Vladimir Ignatchenko, Jie Liu, Allen Teng, Melissa Noronha, Robert Hamilton, Peter P Liu, Peter H Backx, Gordon Keller, Igor Stagljjar, Ian C Scott, Thomas Kislinger, Anthony Gramolini
University of Toronto, Canada

POS-02-110

An Improved Subcellular Protein Atlas

Charlotte Stadler, Hammou Ait Blal, Frida Danielsson, Martin Hjelmare, Diana Mahdessian, Elton Rexhepaj, Rutger Schutten, Marie Skogs, Mikaela Wiking, Annica Abergh, Mathias Uhlen, Emma Lundberg
Royal Institute of Technology, Science for Life Laboratory, Sweden

POS-02-111

Proteome Analysis of Normal Human Circulating Microparticles

Ole Oestergaard¹, Christoffer T. Nielsen¹, Line V. Iversen¹, Soeren Jacobsen², Julia T. Tanassi¹, Niels H. H. Heegaard¹
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POS-02-112

Subcellular Fractionation and Bottom-Up Proteomics for Proteome-Wide Protein Localization

Magnus Palmblad¹, Ekaterina Mostovenko¹, Suzanne van der Plas - Duivesteijn¹, Dana Ohana¹, Yassene Mohammed¹, Robert Passier², Andre M. Deelder¹
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POS-02-113

Proteome Analysis of *Gloeobacter violaceus* PCC7421: Fractionation of Total, Soluble and Insoluble Proteins

Soo Jung Kim^{1,5}, Jung Ha Choi¹, Yeol Gyun Lee¹, Kun Cho², Sang Oh Kweon¹, Joseph Kwon³, Young Hwan Kim², Young Mok Park², Kwang Hwan Jung⁴, Young-Ho Chung¹

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POS-02-114

Proteomic Analysis Identifies CaFer1, A Dehydration-Responsive Ferritin in Chickpea (*Cicer arietinum* L.) Secretome, That Promotes Stress Tolerance

Shaista Parveen, Suchismita Dass, Subhra Chakraborty, Niranjan Chakraborty

National Institute of Plant Genome Research, India

POS-02-115

Profiling and Semi-Quantitative Analysis of Cell Surface Proteome in Human Mesenchymal Stem Cells

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POS-02-116

Segment-Specific Membrane Protein Profiling of Human Colon

Sjoerd van der Post, Gunnar C. Hansson

Department of Medical Biochemistry and Cell Biology, University of Gothenburg, Sweden

POS-02-117

Membrane Proteomics Study of *Clostridium acetobutylicum*: Discovery of the Proteins Regulating the Transition from Acidogenic to Solventogenic Phase

Jingjing Zhao, Quanhui Wang, Xue Bai, Zhen Chen, Yao Sun, Siqi Liu

Beijing Institute of Genomics, Chinese Academy of Sciences, China

POS-02-118

Purification and Proteomic Profiling of Kidney Vascular Endothelial Cell Plasma Membrane Proteins

Zan Liu^{1,2}, Bo Xu¹, Masaaki Nameta¹, Ying Zhang¹, Sameh Magdeldin^{1,3}, Yutaka Yoshida¹, Keiko Yamamoto¹, Hidehiko Fujinaka^{1,4}, Eishin Yaoita¹, Masayuki Tasaki², Yuki Nakagawa², Kazuhide Saito², Kota Takahashi², Tadashi Yamamoto¹

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POS-02-119

A Membrane Proteomics Signature Reveals Surface Factors Associated with Human Embryonic Stem Cell Pluripotency

Chia-Li Han¹, Wei-Ting Hsu², Chun-Neng Wang³, Hsien-Jung Chen¹, Yi-Chuan Tsai¹, Hung-Chih Kuo², Yu-Ju Chen¹

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POS-02-120

Proteomic Profiling of Exosomes Reveal the Intercellular Transfer of Oncogenic Cargo

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POS-02-121

Introducing the Mitochondrial Italian Human Proteome Project Initiative (mt-HPP)

Andrea Urban^{1,2,3}, Luca Bini³, Paola Roncada³, Alessandra Modesti³,
Anna Maria Timperio³, Mauro Fasano³, Massimo Castagnola³

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New Technologies in Proteomics

POS-02-122

Exploring the Capabilities and Specificities of CESI-MS for Bottom-Up Proteomics and Peptide Mapping of Proteins Through A Comparison to nanoLC

Jean-Marc Busnel¹, Anna Lou¹, Chitra Ratnayake¹, Sean Seymour², Christie Hunter²

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POS-02-123

New Developments on a Benchtop Quadrupole-Orbitrap Mass Spectrometer

Jan-Peter Hauschild, Eduard Denisov, Amelia Peterson, Oliver Lange, Alexander Makarov,
Eugen Damoc, Mathias Mueller, Andreas Wiegand, Markus Kellmann

Thermo Fisher Scientific (Bremen), Germany

POS-02-124

Development of Methods for Information-Driven MS/MS (ID-MS/MS) for Increased Identification Rates in Bottom-Up Proteomics of Human Blood Serum

Peter Brechlin¹, Stuart Pengelley¹, Pierre-Olivier Schmitz², Ow Sawyien³, Haruo Hosoda⁴,
Dirk Wunderlich¹

¹Bruker Daltonik GmbH, Germany, ²Bruker Daltonique S.A., France, ³Bruker Daltonics Inc., China, ⁴Bruker Daltonics K.K., Japan

POS-02-125

Development of High-Sensitivity nanoLC-MS/MS Systems Using Narrow-Bore Meter-Long Monolithic Silica Capillaries At Low Flow Rate

Suguru Ichihara, Mio Iwasaki, Masaki Wakabayashi, Naoyuki Sugiyama, Yasushi Ishihama
Kyoto University, Japan

POS-02-126

Disease Model Cell System: A Novel Proteomics Tool to Elucidate Protein Networks with Spatio-Temporal Information

Fumi Kano^{1,2}, Daiki Nakatsu¹, Yoshiyuki Noguchi¹, Yuta Horiuchi¹, Masayuki Murata¹

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POS-02-127

Travelling Wave Ion Mobility Assisted Duty Cycle Enhancements for Targeted and Non-Targeted Proteomics Experiments

CJ Hughes, JPC Vissers, JJ Langridge

Waters Corporation, UK

POS-02-128

Sheathless Capillary Electrophoresis Mass Spectrometry as a Versatile and Powerful Tool for the Characterization of the Primary Sequence and Glycosylations of Monoclonal Antibodies

Anna Lou¹, Jean-Marc Busnel¹, Zhiqi Hao², Elsa Wagner³, Hans Dewald¹, Alain Beck³, Patrick Bennett²

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POS-02-129

Improving Label-Free Quantitation of Plasma and Serum Proteins Using a High-Resolution Hybrid Orbitrap Mass Spectrometer

Maryann S. Vogelsang¹, Amol Prakash¹, David Sarracino¹, Scott Peterman¹, Bryan Krastins¹, Jennifer Sutton¹, Gregory Byram¹, Gouri Vadali¹, Shadab Ahmad¹, Bruno Darbouret², Mary F. Lopez¹

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POS-02-130

Methodological Development of Gel-Filter for the Enrichment of Low-Molecular Weight Proteins from Serum and Comparative Study with Differential Solubilization Method

Lingsheng Chen^{1,2}, Linhui Zhai¹, Ning Li¹, Lingyan Ping¹, Lei Chang¹, Xiangping Li², Deshun Shi², Ping Xu¹

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POS-02-131

Western Blot Quantification of GFAP in Organotypic Brain Slices Using Stain-Free Gel Technology or Housekeeping Proteins as Loading Control

Daniela Volke^{1,2}, Claudia Dietze¹, Agneta Mewes^{1,2}, Ralf Hoffmann^{1,2}, Ning Liu³

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POS-02-132

Stain Free Total Protein Quantitation - A Method for Greater Reliability in Western Blot Loading Controls

Ning Liu, Anton Posch, Matthew Hammond, Kenneth Oh, Jonathan Kohn

Bio-Rad Laboratories

POS-02-133

Higher Data Confidence in Western Blot Analysis - Stain-Free Technology as Novel Normalization Tool

Anton Posch, Soile Tapio

Institute of Radiation Biology, Helmholtz Zentrum Munich, Germany

POS-02-134

Analysis of an Apidaecin 1b Resistant *E. coli* Strain Using Differential Gel Electrophoresis

Daniela Volke, Andor Krizsan, Natalja Kabankov, Daniel Knappe, Ralf Hoffmann

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POS-02-135

Immuno-Sequencing (I-Seq): Digital and Sensitive Antibody Based Proteomics Using DNA Barcoding and Massively Parallel Sequencing

Mahya Dezfouli¹, Sanja Vickovic¹, Peter Nilsson², Afshin Ahmadian¹

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POS-02-136 PS10-03

SOMAmer Capture Coupled to Mass Spectrometry for Plasma Protein Quantification

Thomas O. Joos¹, Frederik Weiss¹, Sheri Wilcox³, Jeff Carter³, Stephan Kraemer³, Nick Saccomano³, Larry Gold³, Bart H.J. van den Berg¹, Martin Gamer², Peter Schulz-Knappe², Oliver Poetz

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POS-02-137

Affinity Probe Capillary Electrophoresis (APCE) of Insulin Using a Fluorescence Labeled Recombinant Fab as an Affinity Probe

Kiyohito Shimura, Ken-ichi Kasai

Fukushima Medical University, Japan

POS-02-138

Quantitative Screening of Aptamers via Particle Display

Jinpeng Wang, Qiang Gong, Nupur Maheshwari, Michael Eisenstein, H. Tom Soh

University of California Santa Barbara, USA

POS-02-139

Global Proteome Survey (GPS) Finds New Roads for Translational Biomarker Signatures in Breast Cancer

Sara Stahl¹, Niclas Olsson¹, Petter Carlsson¹, Peter James¹, Karin Hansson¹, Per Malmström², Mårten Fernö², Lisa Ryden², Sofia Waldemarson¹, Christer Wingren¹, Carl Borrebaeck¹

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POS-02-140

Identification of Metastasis Related Membrane Glycoprotein in Triple Negative Breast Cancer Using a Lectin Microarray

Shu-Min Zhou^{1,2,3}, Li Cheng^{1,2,3}, Shu-Juan Guo^{1,2,3}, Sheng-ce Tao^{1,2,3}

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POS-02-141

Preliminary Study on the Development of Novel Proteomic Analysis by Using Surface Enhanced Raman Scattering (SERS)

Hiroaki Ito¹, Haruhiro Inoue¹, Katsuyuki Hasegawa², Yuuki Hasegawa², Noriko Odaka¹, Norimasa Sando¹, Tohru Ohmori³, Satoshi Kimura⁴, Shin-ei Kudo¹

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POS-02-142

A Quick Profiling System for Cancer Marker Proteins with Diverse Post-Translational Modifications by a Fully Automated 2DE Device, Auto-2D

Munenori Nishimura^{1,2}, Uichi Midorikawa³, Megumi Nagayama¹, Daiki Kobayashi¹, Mio Hirayama¹, Yoji Murakami⁴, Yoshihiro Wada⁴, Takahisa Imamura⁵, Yutaka Unuma³, Norie Araki¹

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POS-02-143

High-Resolution Separation for Western Blotting by Automated 2-DE and Blotting System

Hiroshi Sakaya¹, Yoshiyuki Ishida², Kimihiko Yabe², Shinichi Goto², Hideki Kinoshita², Yutaka Unuma², Makoto Nakamura²

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POS-02-144 Y102-02

Plasma Proteome Analysis Using LC-MS/MS with Travelling Wave Ion Mobility and an Alternative Computational Solution to Protein Quantitation

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POS-02-145

A Fast Workflow for Identification and Quantification of Proteomes

Chen Ding^{1,2}, Jing Jiang^{1,2}, Junying Wei^{1,2}, Wanlin Liu^{1,2}, Wei Zhang^{1,2}, Mingwei Liu^{1,2}, Tianyi Fu^{1,2}, Tianyuan Lu^{1,2}, Lei Song^{1,2}, Wantao Ying^{1,2}, Jie Ma^{1,2}, Yangjun Zhang^{1,2}, Lai Wei^{1,2}, Anna Malovannaya³, Lijun Jia⁴, Bei Zhen^{1,2,4}, Yi Wang³, Fuchu He^{1,2}, Xiaohong Qian^{1,2}, Jun Qin^{1,2,3}

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POS-02-146

DMSO Drastically Enhances Electrospray Response Boosting Sensitivity of Proteomic Experiments

Hannes Hahne¹, Fiona Pachl¹, Benjamin Ruprecht¹, Matthias Wilm², Stefan Maier¹, Susan Klaeger¹, Dominic Helm¹, Guillaume Medard¹, Simone Lemeer¹, Bernhard Kuster¹

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POS-02-147

Increasing the Quality of Bottom-Up Proteomics Data by Computer-Assisted Liquid Chromatography Gradient Optimisation

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POS-02-148

Metal-Chelate Methacrylate Monolithic Support for Targeted Affinity Selection of Histidine-Peptides in High-Throughput Proteomics

Rajasekar R. Prasanna, Sidhik Sinash, Agamudi S Kamalanathan, Mookambeswaran A Vijayalakshmi

Centre for Bioseparation Technology, VIT University, India

POS-02-149

Improving MSⁿ Performance with a Multitasking Mass Spectrometer

Michael Senko, Philip Remes, Qingyu Song, Jesse Canterbury, Justin Blethrow,
Vlad Zabrouskov, Oliver Lange, Alexander Makarov
Thermo Fisher Scientific

POS-02-150

Increased Throughput 2D Nanoscale LC Analysis of Human Placental Samples

M Stapels¹, K Fadgen¹, JW Thompson², MA Moseley², JI Langridge¹, Kenji Hirose¹
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POS-02-151

Data Independent Acquisition (DIA) Analysis on the Q Exactive Mass Spectrometer

Yue Xuan¹, Reiko Kiyonami³, Jarrett Egertson², Michael MacCoss², Andreas Kuehn¹,
Andreas Huehmer³, Markus Kellmann¹

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POS-02-152

Missing Proteins in Chromosome 16-Spanish HPP

Manuel Fuentes¹, Noelia Dasilva¹, Felipe Clemente², Maria Luisa Hernaez², Paula Diez¹,
Maria Gonzalez-Gonzalez¹, Alberto Orfao¹, Felix Elorzta⁵, Fernando Corrales⁴,
Juan Pablo Albar³, Concha Gil²

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POS-02-153

A Novel Chemical Tool for Proteomic Analysis of Translational Control

Kenichi Horisawa, Takaaki Miyazawa, Koji Ohkawa, Kotaro Oka, Nobuhide Doi
Graduate School of Science and Technology, Keio University, Japan

POS-02-154

Mass Spectrometry Based N- Terminal Sequence Determination with *De Novo* Sequencing Using CID and ETD

Jo Lene Lai, Chien-Chen Lai
Institute of Molecular Biology, National Chung Hsing University, Taiwan

POS-02-155

Application of a Peptide-Based Assay System to Study the Human Proteome

Igor Kozloy, Norihito Muranaka, Corey Dambacher, Petr Capek, Wayne Delpont,
Muskan Kukreja, Mark Chee
Prognosys Biosciences Inc.

POS-02-156

Toward Early Stage Detection of AD: Dynamic Binding and Unbinding of Kinesins during Collective Transport

Woochul Nam, Bogdan Epureanu
University of Michigan - Ann Arbor, USA

POS-02-157

Comprehensive Mass Spectrometry-Based Characterization of Box H/ACA Small Nucleolar Ribonucleoprotein Complexes in *Schizosaccharomyces Pombe*

Masato Taoka¹, Yuko Nobe¹, Aiko Takeuchi¹, Masayuki Hori¹, Shunpei Masaki¹, Hiroshi Nakayama^{2,4}, Yoshio Yamauchi³, Nobuhiro Takahashi^{3,4}, Toshiaki Isobe^{1,4}

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POS-02-158

Improving Throughput for Highly Multiplexed Targeted Quantification Methods Using Novel API-remote Instrument control and State-Model Data Acquisition Schemes

Amol Prakash¹, Scott Peterman¹, Barbara Frewen¹, Andreas Kuehn², Tara Schroeder³, Lisa Vasicek⁶, Brian Hood⁶, Ryan Bomgarden⁴, Bryan Krastins¹, David Sarracino¹, Gregory Bryam¹, Maryann Vogelsang¹, Shadab Ahmad¹, Jonathan Worboys⁵, Claus Jorgensen⁵, Thomas Conrads⁶, Mary Lopez¹

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POS-02-159

***In Vitro* Phosphorylation-Assisted in Depth Human Serum Proteome Analysis**

Shunsuke Takagi, Haruna Imamura, Masaki Wakabayashi, Naoyuki Sugiyama, Yasushi Ishihama

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POS-02-160

Comprehensive Quantitative Phosphoproteomic Approach by MS/MS^{ALL} with SWATHTM Acquisition

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POS-02-161

Large Scale Targeted Protein Quantification Using HR/AM Selected Ion Monitoring with MS/MS Confirmation on a Novel Hybrid, Q-OT-qIT Mass Spectrometer

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POS-02-162

Quality Control Tool and Long-Term Performance of SRM Instruments

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POS-02-163

Facile Synthesis of Novel Magnetic Silica Nanoparticles Functionalized with Layer-by-Layer Detonation Nanodiamonds for Secretome Study of An Inducible Hepatitis B Virus Cell Line

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POS-02-164

Urimum, A Simple Economical Urinary Protein Membrane, Will Facilitate Biomarker Research

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POS-02-165

A Comprehensive Analysis of the Interactions between *Streptococcus pyogenes* and Human Plasma Proteins

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POS-02-166 PS03-04

Monitoring Protein Synthesis in Living Cells with Fluorescent Labeled tRNA FRET Pairs

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POS-02-167

A Novel Method to Quantify Protein Conformational Changes in Complex Cellular Matrices

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POS-02-168

Intact Protein LC-MS, How to Overcome the Challenges?

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Pharmacoproteomics and Toxicoproteomics

POS-02-169

Data Independent LC-IM-MS Strategies for the Multi-Omic Scale Identification and Quantitation on Cytochrome P450 Transfected Hepatocytes

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POS-02-170

Proteomic Analysis of Antidepressant-Like Effect of a Kampo (Japanese Herbal) Medicine "Kososan (Xiang-Su-San)" on Brain from Stress-Induced Depression-Like Model Mouse

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POS-02-171

Proteomic Analysis of Cardiomyocytes after Inhibition of MMP-2 Gene Expression

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POS-02-172

Proteomic Analysis of Liver Microsomes in *X. tropicalis*

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POS-02-173

Monitoring Drug Metabolizing Enzymes and Transporters Using TXP Antibodies and Immunoaffinity MS

Frederik Weiss, Bart H.J. van den Berg, Hannes Planatscher, Helen S. Hammer, Thomas O. Joos, Oliver Poetz

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POS-02-174

Evaluation of Nanomaterial-Induced Biological Responses by Toxico-Proteomics Analysis

Kazuma Higashisaka¹, Akiyoshi Kunieda¹, Yuki Iwahara¹, Kota Tanaka¹, Shin-ichi Tsunoda^{2,3}, Yasuo Yoshioka¹, Yasuo Tsutsumi^{1,2,3}

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POS-02-175

Discovering Novel Neurotoxins from Snake Venom by Using Mass-Spectrometry-Guided Purification Approach and Pharmacological Assays

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POS-02-176

Calcium Oxalate Crystals Induced Changes in Secretion of Proteins from Basolateral Compartment of Renal Tubular Cells That, in Turn, Enhanced Crystal Invasion

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POS-02-177

Temporal and Quantitative Proteomics Study Reveals Mitochondrial Dysfunction, Perturbed Secretory Pathway and ER Stress-Mediated Apoptosis as Anticancer Mechanisms of a Chalcone on A375 Melanoma Cells

Siew Li Lai¹, Pooi Fong Wong¹, Teck Kwang Lim², QingSong Lin²,
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POS-02-178

New Insights Into the Cellular Response Triggered by Silver Nanoparticles Using Quantitative Proteomics

Thiago Verano-Braga¹, Rona Miethling-Graff², Katarzyna Wojdyla¹,
Adelina Rogowska-Wrzesinska¹, Jonathan R. Brewer¹, Helmut Erdmann², Frank Kjeldsen¹

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Protein Array and Chip Technology

POS-02-179

Protein-Protein Interaction Analysis Using Oligo-Cysteine Tagged Protein Chip. Detection of Tubulin from Mouse Brain Extract by Oligo-Cysteine Tagged Stathmin Chip

Hiroko Furumoto, Maoko Shimizu, Hisayuki Tanaka, Takao Kitagawa, Junko K. Akada,
Kazuyuki Nakamura
Yamaguchi University, Japan

POS-02-180

Miniaturization of Multiplexed Planar Recombinant Antibody Nanoarrays for Serum Protein Profiling

Linn Petersson¹, Linda Dexlin-Mellby¹, Michael Coen², Navil Amro², Lennart Truedsson³,
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POS-02-181

Personalised Proteomics by Means of Individualised Protein Microarrays

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Functional Genome Analysis, Deutsches Krebsforschungszentrum (DKFZ), Germany

POS-02-182

PS04-04

High Throughput Cell-Based Studies and Protein Microarrays for Biomarker and Target Discovery

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POS-02-183

Identification of B-Cell Lymphoma Subsets by Protein Profiling Using Recombinant Antibody Microarrays

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POS-02-184

Protein Chip Methodology to Detect HSP70 Autoimmune Antibodies in the Sera of Hepatitis C Virus-Positive Hepatocellular Carcinoma Patients

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POS-02-185

Phenotyping of Various Membrane Markers on Plasma Exosomes from 80 Healthy Donors Using an Extracellular Vesicle (EV) Array

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POS-02-186 P519-04

Extracellular Vesicle (EV) Array: Microarray Capturing of Exosomes and Other Extracellular Vesicles for Multiplexed Phenotyping

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POS-02-187

Multiplexed Analysis of Target Protein and Its Lys Acetylation Using Antibody Microarray

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POS-02-188

Multiplexed Analysis of Target Protein and Lys Acetylation Using Antibody Microarray

Feina Yao^{1,2}, Ying Li^{1,2}, Pengyuan Yang^{1,2}, Yinkun Liu³, Huizhi Fan¹

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POS-02-189

DNA Methylation Presents Distinct Binding Sites for Human Transcription Factors

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Protein Interaction and Protein Complexes

POS-02-190

Structural Proteomics of the Human Nucleoporin 107 Complex

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POS-02-191 PS17-04

In Vivo Crosslinking Combined with Label-Free Quantitative Proteomics to Determine the Subcellular Distribution and Stoichiometry of Proteasome Complexes

Bertrand Fabre, Thomas Lambour, Manuelle Ducoux-Petit, Luc Garrigues, Francois Amalric, Bernard Monsarrat, Marie-Pierre Bousquet-Dubouch, Odile Burlet-Schiltz

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POS-02-192

Elucidating the Unfolded Protein Response in GPCR Expressing Yeast Host

Hussain Dahodwala, Anne S Robinson

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POS-02-193

Molecular Mechanism Underlying IgSF11-Induced Cell Migration

Erika Hayashi¹, Hiroaki Akutsu², Hiroshi Funakoshi², Kenji Nakayama³, Yokichi Hayashi⁴

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POS-02-194

Proteomics Approaches to Understand Molecular Basis of Mammalian Circadian Clock

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POS-02-195

Mapping the Dynamic Interactome Through the Human Cell Cycle

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POS-02-196

A Novel Mechanism of Keratin Cytoskeleton Organization Through Casein Kinase I Alpha and FAM83H in Colorectal Cancer: Interactome Analysis of FAM83H

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POS-02-197

Protease Resistant Soy Proteins Interact with the Cell Surface Proteins of an Intestinal Cell Line, Caco-2, and Change the Cell Signaling

Jinkyu Lim, Ju-Young Lee, You-Jin Youm

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POS-02-198

Interactions between SAP155 and FUSE-binding Protein-Interacting Repressor Bridges c-Myc and P27Kip1 Expression Revealed by GeLC-MS Approach

Kazuyuki Matsushita¹, Mamoru Satoh¹, Takeshi Tomonaga², Hisahiro Matsubara³, Hideaki Shimada⁴, Fumio Nomura¹

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POS-02-199

Dynamic Long-Range Chromatin Control of *Klf4* Transcription by IRF8 in Monocyte Differentiation

Akira Nishiyama, Daisuke Kurotaki, Tomohiko Tamura

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POS-02-200

Analysis of Intact Macromolecular Assemblies on a Bench Top Orbitrap MS System

Olaf Scheibner, Eugen Damoc, Eduard Denisov, Alexander Makarov, Maciej Bromirski
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POS-02-201

The Monitoring of Protein Complex Dynamics in Response on Apoptosis Using PCP-SILAC

Nicholas E Scott, Anders R Kristensen, Leonard J Foster

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POS-02-202

Structural Analyses for the Effects of Ets1 Phosphorylation on Ets1-Containing TF-DNA Assemblies

Masaaki Shiina¹, Keisuke Hamada¹, Taiko Inoue-Bungo¹, Mariko Shimamura¹, Akiko Uchiyama¹, Shiho Baba¹, Ko Sato¹, Masaki Yamamoto², Tahir Tahirov³, Kazuhiro Ogata¹

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POS-02-203

Isolating, Characterizing, and Monitoring in Real Time Intracellular Epigenetic Protein Complexes

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POS-02-204

Molecular Dynamics Approach to Dynamical Protein Interaction

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POS-02-205

Identification of a Novel Binding Partner of the Cell Polarity-Regulating Kinase, PAR-1

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POS-02-206

System-Wide Characterization of Temporal Dynamics of Macromolecular Protein Complexes during Oncogene-Induced Cell Transformation

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POS-02-208

Charting Non-Sequence Specific Nucleic Acid-Protein Interactions in Human Cells

Gerhard Dürnberger, Tilmann Bürckstümmer, Kilian Huber, Roberto Giambruno,

Andr Müller, Keiryn L. Bennett, Giulio Superti-Furga, Jacques Colinge

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POS-02-209

Obtaining Interactome Map by Sifting the Collection of MS-Data

Ekaterina V. Poverennaya, Alexey L. Chernobrovkin, Elena A. Ponomarenko,

Andrey V. Lisitsa

Institute of Biomedical Chemistry

POS-02-210

A High-Resolution Quantitative BN-MS Approach for Comprehensive Analysis of Protein Complexes and Stoichiometries

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POS-02-211

Structural Study of Proteins C3 and C3b by Time Resolved Hydroxyl Radical Footprinting

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POS-02-212

Human Cell Growth Regulator LYAR is Highly Expressed in Many Tumors and Accelerates Ribosome Biogenesis

Keiichi Izumikawa^{1,2}, Naoki Miyazawa¹, Harunori Yoshikawa^{1,2}, Hideaki Ishikawa^{2,3}, Goro Terukina^{2,3}, Yutaka Miura¹, Toshiya Hayano⁴, Toshiaki Isobe^{2,3}, Akira Watanabe⁵, Hiroyuki Aburatani⁵, Nobuhiro Takahashi^{1,2}

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POS-02-213

Y102-07

Defining the Structure of Mitotic Chromosomes Using Multi-Classifer Combinatorial Proteomics Together with DT40 Genetics

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POS-02-214

Trypanosome Proteome

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POS-02-215

The Role of Nucleolar Protein Nop52 in the pre-rRNA Processing During Human Ribosome Biogenesis by Proteomic Approach

Harunori Yoshikawa^{1,2,3}, Hideaki Ishikawa^{1,2}, Keiichi Izumikawa^{1,2}, Toshiya Hayano^{1,4}, Yutaka Miura^{1,2}, Yoshio Yamauchi³, Toshiaki Isobe^{2,3}, Nobuhiro Takahashi^{1,2}

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POS-02-216

A New Approach to Identify RNA-Protein Interactions Using a Conditional CRISPR Nuclease

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POS-02-217

Mapping of Cross-Links in Complex Protein Samples Introduced by Bis (Succinimidyl)-3-Azidomethyl Glutarate

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POS-02-218

PS05-04

Top-Down Proteomic Analysis of Enzymes and Complexes in *Trichoderma* Fungal Secretomes

Luis Henrique F. Do Vale^{1,2}, Adam Catherman², Ryan Tal Fellers², Paul Thomas², Edivaldo Ximenes F. Filho³, Carlos Andre O. Ricart¹, Neil L. Kelleher², Marcelo Valle de Sousa¹

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POS-02-219

Structural Analysis of Histone Multimers and NCPs by Ion Mobility Mass Spectrometry

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POS-02-220

Genome-Wide Mass Spectrometry-Based RNA Analysis Reveals a Novel snRNA Metabolic Pathway in Human Cell

Hideaki Ishikawa^{1,2,3}, Keiichi Izumikawa^{1,2}, Harunori Yoshikawa^{1,2,3}, Yuko Nobe³, Yoshio Yamauchi³, Hiroshi Nakayama^{2,4}, Toshiaki Isobe^{2,3}, Nobuhiro Takahashi^{1,2}

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POS-02-221

Proteomic Identification of Profilin1 as a Co-Repressor of Estrogen Receptor Alpha in MCF7 Breast Cancer Cells

Jitendra Kumar Kanaujiya, Savita Lochab, Isha Kapoor, Pooja Pal, Dipak Datta, Sabyasachi Sanyal, Arun Kumar Trivedi
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POS-02-222

Analysis of PIK1-Bora Interaction Using the ProteoChip System

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POS-02-223

Current Status of the Human DREAM/Calsenilin/KChIP3 Interactome: Focus on ProtoArrays for the Screening of Novel Protein Interactions

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POS-02-224

P532-04

Mapping the Human Methyltransferasome Reveals the Existence of a Posttranslational Modification Code That Targets Molecular Chaperones to Regulate Functional Organization of the Human Proteome

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POS-02-225

Function Through Interaction: Identification and Characterisation of SOCS4 and 5 SH2 Domain Targets

Edmond M Linossi^{1,2}, Andrew I Webb^{1,2}, Lukasz Kedzierski^{1,2}, Thomas Nebl^{1,2}, Tatiana Kolesnik^{1,2}, Tracy A Wilson^{1,2}, Alex N Bullock³, Jeffrey J Babon^{1,2}, Nicos A Nicola^{1,2}, Sandra E Nicholson^{1,2}

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POS-02-226

Fill-in-the-Blanks on the List of Players in the Histone Code: Limitations of Conventional Pull-Down Proteomics and Efforts to Overcome the Difficulties

Kazuki Yamamoto, Gosuke Hayashi, Ryosuke Sakamoto, Takeshi Kawamura, Akimitsu Okamoto, Tatsuhiko Kodama
University of Tokyo, Japan

POS-02-227

Proteomic Profiling of the IL-3 Receptor Complex and Signal Transduction in Leukemia

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POS-02-228

Cell-Type Specific Stoichiometries of the Human Nuclear Pore Complex

Alessandro Ori¹, Niccolo Banterle¹, Murat Iskar¹, Amparo Andres-Pons¹, Claudia Escher², Huy Khan Bui¹, Lenore Sparks¹, Victor Solis-Mezarino¹, Oliver Rinner², Peer Bork¹, Edward A Lemke¹, Martin Beck¹

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POS-02-229 YI01-01

Role of CYLD Deubiquitinase in EGF Signaling Pathway

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POS-02-230

Interactome-Wide Analysis Identifies End-Binding Protein 1 as a Crucial Component for the Speck-Like Particle Formation of Activated AIM2 Inflammasomes

Chih-Ching Wu^{1,2}, Li-Jie Wang¹, Hao-Ping Liu¹, Yu-Sun Chang¹

¹Molecular Medicine Research Center, Chang Gung University, Taiwan, ²Department of Medical Biotechnology and Laboratory Science, College of Medicine, Chang Gung University

POS-02-231 YI02-04

Investigation of Time Dependent Competitive Protein Adsorption to Surfaces Using Mass Spectrometry

Torgny Undin, Andreas Dahlin, Jonas Bergquist, Magnus Wetterhall

Uppsala University, Sweden

POS-02-232

An Efficient Affinity Purification Method for Interaction Proteomics in Mammalian Cells

Akio Yamashita¹, Hitomi Kurosawa¹, Hisashi Hirano², Shigeo Ohno¹

¹Department of Molecular biology, Yokohama City University School of Medicine, Japan, ²Advanced Medical Research Center, Yokohama City University, Japan

POS-02-233 YI02-03

Quantifying the Dynamics of a 14-3-3 Protein Interaction Network by Affinity Purification and SWATH Mass Spectrometry

Ben C. Collins¹, Ludovic C. Gillet¹, George Rosenberger^{1,2}, Hannes L. Rost^{1,2},

Matthias Gstaiger¹, Ruedi Aebersold^{1,2,3,4}

¹Department of Biology, Institute of Molecular Systems Biology, ETH Zurich, Switzerland, ²Ph.D. Program in Systems Biology, University of Zurich and ETH Zurich, Switzerland, ³Competence Center for Systems Physiology and Metabolic Diseases, Switzerland, ⁴Faculty of Science, University of Zurich, Switzerland

Proteomics on Aging and Geriatric Diseases

POS-02-234

Proteomic Analysis of Alpha Synuclein-Containing Inclusions in Neurodegenerative Disorders

Amelia McCormack¹, Fariba Chegini², Nusha Chegeni¹, Damien Keating², Weiping Gai²,

Tim Kennion Chataway¹

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POS-02-235

Serum Peptide Profiles as a Candidate Biomarker for Dementia with Lewy Bodies

Itsuku Suzuki¹, Manae S. Kurokawa², Miwa Noguchi¹, Toshiyuki Sato², Itaru Utagawa¹, Mitsumi Arito², Nobuko Iizuka², Kazuki Omoteyama², Naoya Suematsu², Kazuki Okamoto², Noboru Yamaguchi¹, Tomihiro Kato²

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POS-02-236

★Travel Award

Proteomic Changes of Rat Lens During Cataractogenesis: Therapeutic Effect of Antioxidant SkQ1

Lyudmila V. Yanshole^{1,2}, Olga A. Snytnikova^{1,2}, Vadim V. Yanshole^{1,2}, Natalia G. Kolosova³, Yury P. Tsentlovich^{1,2}

¹International Tomography Center, Russia, ²Novosibirsk State University, Russia, ³Institute of Cytology and Genetics, Russia

POS-02-237

Proteomic and Functional Knockdown Study of the APP Binding Protein FE65 Shows a Down-Regulation of Proteins Involved in DNA Replication (Potential Relevance to Alzheimer's Disease)

Andreas Schroetter¹, Thomas Mastalski¹, Fabian M. Nensa¹, Martin Neumann¹, Christina Loosse¹, Kathy Pfeiffer¹, Fouzi El Magraoui^{1,2}, Harald W. Platta², Ralf Erdmann², Carsten Theiss³, Julian Uszkoreit¹, Martin Eisenacher¹, Helmut E. Meyer¹, Katrin Marcus¹, Thorsten Mueller¹

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POS-02-238

Glycoproteomics Study of Plasma Glycoproteins in Japanese Semisuper Centenarians

Yuri Miura¹, Yoko Itakura², Yasumichi Arai³, Machiko Iwamoto¹, Masashi Toyoda², Hideki Kinoshita⁴, Yutaka Unuma⁴, Tosifusa Toda⁵, Nobuyoshi Hirose³, Tamao Endo¹

¹Research Team for Mechanism of Aging, Tokyo Metropolitan Institute of Gerontology, Japan, ²Research Team for Geriatric Medicine, Tokyo Metropolitan Institute of Gerontology, Japan, ³Department of Geriatric Medicine, Keio University School of Medicine, Japan, ⁴Healthcare Systems Laboratories, Sharp Co., Japan, ⁵Advanced Medical Research Center, Yokohama City University, Japan

POS-02-239

Proteomic Analysis of Glycation and Glycosylation in a Diabetic Model Otsuka Long-Evans Tokushima Fatty (OLETF) Rat Using a Novel Boronate Affinity 2-DE

Yuichi Aikyo, Kenichi Nakazato, Masamichi Oh-Ishi

Department of Physics, Kitasato University School of Science, Japan

POS-02-240

Label Free Quantitative Proteomic Analysis of Phosphoprotein and Glycoprotein of Aged Mouse Muscle Tissue

Na-Young Han¹, Jong-Moon Park¹, Sung-Chun Cho³, Je-Hyun Baek⁴, Sang-Chul Park³, Hookeun Lee^{1,2}

¹Lee Gil Ya Cancer and Diabetes Institute, Gachon University, Korea, ²Gachon College of Pharmacy, Gachon University, Korea, ³Institute on Aging, Seoul National University, Korea, ⁴Dept of Molecular Medicine and Biopharmaceutical Sciences Seoul National University, College of Medicine, Korea

POS-02-241

Absolute Quantitation of Beta-Amyloid Peptide and Alpha-Synuclein Protein in Animal Models of Neurodegenerative Diseases Using Selected Reaction Monitoring

Adrien W. Schmid, Marc Moniatte

Proteomics Core Facility, Swiss Federal Institute of Technology, EPFL, Switzerland

PTM I: Phosphorylation, Acetylation, Methylation

POS-02-242

Acetylated Proteins Involved in Resistance to EGFR Tyrosine Kinase Inhibitors in Non-Small Cells Lung Cancer

Sylvia G. Lehmann^{1,2,3}, Laetitia Vanwonterghem^{1,2}, Amandine Hurbin^{1,2}, Michel Seve^{1,2,3},
Sandrine Bourgoïn-Voillard^{1,2,3}

¹Universite Joseph Fourier, France, ²INSERM U823, France, ³Plateforme Proteomique PROMETHEE, IBP/CHU-Grenoble, France

POS-02-243

Quantitative Analysis of the Phosphorylation State of a Hybrid Histidine Kinase in Bacterial Two-Component System by Using Phosphate-Affinity SDS-PAGE

Keisuke Edahiro, Akio Shiba, Emiko Kinoshita-Kikuta, Yuki Inoue, Eiji Kinoshita,
Tohru Koike

Department of Functional Molecular Science, Graduate School of Biomedical & Health Sciences, Hiroshima University, Japan

POS-02-244

Functional Proteomics Defines the Molecular Switch Underlying FGF Receptor Trafficking and Cellular Outputs

Chiara Francavilla¹, Kristoffer T.G. Rigbolt², Kristina B. Emdal¹, Gianni Carraro³,
Erik Vernet¹, Dorte B. Bekker-Jensen¹, Werner Streicher¹, Mats Wikstrom¹,
Michael Sundstrom¹, Saverio Bellusci³, Ugo Cavallaro⁴, Blagoy Blagoev², Jesper V. Olsen¹

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POS-02-245

Phos-Tag Biotin as an On-Demand Tool for Study on Protein Phosphorylome

Eiji Kinoshita, Emiko Kinoshita-Kikuta, Tohru Koike

Department of Functional Molecular Science, Institute of Biomedical & Health Sciences, Hiroshima University, Japan

POS-02-246

Phosphorylation Profiling of MAPK Signaling Cascade Proteins by Using Neutral Phos-tag SDS-PAGE

Emiko Kinoshita-Kikuta, Eiji Kinoshita, Tohru Koike

Department of Functional Molecular Science, Institute of Biomedical & Health Sciences, Hiroshima University, Japan

POS-02-247

A New Signaling Cascade in Breast Cancers with p53 Inducible Protein Phosphatase PPM1D Overexpression

Yuuki Kozakai, Yoshiro Chuman, Yuhei Kiyota, Toshiaki Imagawa, Kazuyasu Sakaguchi

Laboratory of Biological Chemistry, Department of Chemistry, Faculty of Science, Hokkaido University, Japan

POS-02-248

Old Tools in a New Jacket: Phosphopeptide Enrichment by TiO₂ and IMAC Columns

Simone Lemeer, Benjamin Ruprecht, Heiner Koch, Max Mundt, Bernhard Kuster

Chair of Proteomics and Bioanalytics, Technische Universitaet Muenchen, Germany

POS-02-249

Global Survey of Mouse Liver Protein Expression Using Off-Gel Isoelectric Focusing of Tryptic Peptides and LTQ-Orbitrap

Ying Li¹, Hong Liu¹, Siting Liu¹, Pengyuan Yang^{1,2}, Huizhi Fan¹

¹Department of Chemistry, Fudan University, China, ²Institute of Biomedical Sciences, Fudan University, China

POS-02-250

PS09-03

Enhanced Phosphopeptide Identification in *Escherichia coli* by Stepwise Hydroxy Acid-Modified Metal Oxide Chromatography with Elevated Sample Loading Capacity

Miao-Hsia Lin, Shunsuke Takagi, Masaki Wakabayashi, Naoyuki Sugiyama, Yasushi Ishihama

Graduate School of Pharmaceutical Sciences, Kyoto University, Japan

POS-02-251

Mapping Global Histone Acetylation Patterns Using MALDI-TOF Mass Spectrometry

Gabriela Lochmanova¹, Iva Mitosinkova², Zbynek Zdrahal^{1,2}

¹Research Group - Proteomics, Central European Institute of Technology, Masaryk University, Czech Republic, ²Faculty of Science, Masaryk University, Czech Republic

POS-02-252

A Large Synthetic Phosphopeptide Library for Mass Spectrometry Based Proteomics

Harald Marx¹, Simone Lemeer¹, Jan Erik Schliep¹, Lucrece Matheron², Shabaz Mohammed², Juergen Cox³, Matthias Mann³, Albert Heck², Bernhard Kuster¹

¹Chair for Proteomics and Bioanalytics, Technische Universitaet Muenchen, Germany, ²Biomolecular Mass Spectrometry and Proteomics, Bijvoet Center for Biomolecular Research and Utrecht Institute of Pharmaceutical Sciences, Utrecht University, Utrecht, The Netherlands; and The Netherlands Proteomics Centre, The Netherlands, ³Proteomics and Signal Transduction, Max-Planck Institute of Biochemistry, Germany

POS-02-253

***In Vivo* Screening of Kinase-Specific Substrates by Phosphatase Inhibitor and Kinase Inhibitor Substrate Screening (PIKISS)**

Tomoki Nishioka, Shinichi Nakamuta, Tomonari Hamaguchi, Mutsuki Amano, Kozo Kaibuchi

Department of Cell Pharmacology, Nagoya University Graduate School of Medicine, Japan

POS-02-254

Phosphoproteomic Analysis of Gamma-Irradiated Human Leukemic Cells

Barbora Salovska^{1,2}, Ales Tichy^{1,2}, Martina Rezacova¹, Jirina Vavrova²

¹Department of Medical Biochemistry, Faculty of Medicine in Hradec Kralove, Charles University in Prague, Czech Republic, ²Department of Radiobiology, Faculty of Military Health Sciences, University of Defence, Czech Republic

POS-02-255

Quantitative Analysis of Effects of pH on the Stability of His- and Asp-Phosphoproteins in Bacterial Two-Component System by Using Phosphate-Affinity SDS-PAGE

Akio Shiba, Keisuke Eda, Emiko Kinoshita-Kikuta, Eiji Kinoshita, Tohru Koike

Department of Functional Molecular Science, Graduate School of Biomedical & Health Sciences, Hiroshima University, Japan

POS-02-256 ★Travel Award

Sequential Phosphoproteomic Enrichment by Complementary Metal-Directed Immobilized Metal Ion Affinity Chromatography: Case Study on Kinase Substrate Mapping in Human Lung Cancer Tissue

Chia-Feng Tsai^{1,2}, Chuan-Chih Hsu², Jo-Nan Hung¹, Yi-Ting Wang^{2,3,4}, Pei-Yi Lin², Yu-Ju Chen^{1,2,3,4}

¹Department of Chemistry, National Taiwan University, Taiwan, ²Institute of Chemistry, Academia Sinica, Taiwan, ³Chemical Biology and Molecular Biophysics Program, Taiwan International Graduate Program, Academia Sinica, Taiwan, ⁴Institute of Biochemical Sciences, National Taiwan University, Taiwan

POS-02-257

Rapid and Selective Separation of Phosphorylated Biomolecules by Using a Phos-Tag-Based Magnetic-Bead Method

Masaya Tsunehiro, Yuma Meki, Emiko Kinoshita-Kikuta, Eiji Kinoshita, Tohru Koike
Department of Functional Molecular Science, Graduate School of Biomedical & Health Sciences, Hiroshima University, Japan

POS-02-258

Proteomic Identification of the Posttranslational Modifications in TrkA-mediated Tyrosine Phosphorylation Signaling Network

Eun Joo Jung, Choong Won Kim

Department of Biochemistry, Gyeongsang National University School of Medicine

POS-02-259 PS20-04

Identification of Dysregulated Kinase-Mediated Pathways in Hepatocellular Carcinoma by a Quantitative Phosphoproteome Approach

Yu-Tsun Lin¹, Kun-Yi Chien¹, Chau-Ting Yeh^{1,2}, Jau-Song Yu¹

¹Graduate Institute of Biomedical Sciences, Chang Gung University, Taiwan, ²Liver Research Center, Chang Gung Memorial Hospital, Taiwan

POS-02-260

A Phospho-Peptide Spectrum Library for Improved Targeted Assays

Barbara Frewen¹, Scott Peterman¹, John Sinclair², Claus Jorgensen², Amol Prakash¹, Mary Lopez¹

¹Thermo Fisher Scientific, BRIMS (Biomarker Research in Mass Spectrometry) (Cambridge), USA, ²Institute of Cancer Research, UK

POS-02-261

Phosphoproteomics Approach Coupled with *In Vitro* Kinase Reaction to Construct Kinase-Substrate Network

Haruna Imamura, Naoyuki Sugiyama, Masaki Wakayashi, Yasushi Ishihama
Graduate School of Pharmaceutical Sciences, Kyoto University, Japan

POS-02-262

Targeted Phosphoproteomics Analysis of Immunoaffinity Enriched Tyrosine Phosphorylation in Mouse Tissues

Ravi K Krovidi¹, Jeffrey C Silva², Leo E Bonilla³, Charles Farnsworth²

¹Agilent Technologies India Pvt. Ltd, India, ²Cell Signaling Technology, Inc., USA, ³Agilent Technologies, USA

POS-02-263 Y103-02

A Novel Titanium Dioxide Plate (TiO₂ plate) for Phosphopeptide Enrichment and On-Target MALDI-TOF Analysis

Chao-jung Chen

China Medical University

POS-02-264

Novel Strategy for Lysine Acetylation Discovery Without Using Immunoprecipitation

Takayuki Hashimoto, Masaki Wakabayashi, Naoyuki Sugiyama, Yasushi Ishihama
Graduate School of Pharmaceutical Sciences, Kyoto University, Japan

POS-02-265

LC-MALDI-TOF-TOF Mass Spectrometry Distinguishing between Symmetric/Asymmetric Dimethylated Arginine³ of Histone H4 Peptide

Yoko Chikaoka¹, Matthew Openshaw², Yuzo Yamazaki³, Omar Belgacem²,
Takeshi Kawamura¹, Tatsuhiro Kodama¹
¹University of Tokyo, Japan, ²Kratos Analytical, UK, ³Shimadzu Corporation, Japan

POS-02-266

Deep Profiling of Molecular-Targeted Drugs by One-Shot Quantitative Phosphoproteomics

Yu Hayashi, Suguru Ichihara, Masaki Wakabayashi, Naoyuki Sugiyama, Yasushi Ishihama
Graduate School of Pharmaceutical Sciences, Kyoto University, Japan

POS-02-267

mTOR Complex 2 Phosphorylates Filamin A to Regulate Cell Migration

Tatsuhiro Sato, Yoshio Shibagaki, Seisuke Hattori
Kitasato University, School of Pharmacy, Division of Biochemistry, Japan

POS-02-268

Functional Analysis of Targeted Phosphorylation on Signaling Proteins

Ming-Quan Guo
Key Laboratory of Plant Germplasm Enhancement and Specialty Agriculture, Wuhan Botanical Garden,
China

POS-02-269

Impact of High Glucose Concentration on ASA-Induced Acetylation of Human Serum Albumin: An in Vitro Study

Francesco Finamore¹, Feliciano Priego-Capote², Florent Gluck¹, Anne Zufferey¹,
Pierre Fontana³, Jean-Charles Sanchez¹
¹Translational Biomarker Group (TBG), Department of Human Protein Sciences, University Medical
Centre, University of Geneva, Switzerland, ²Department of Analytical Chemistry, Campus of Rabanales,
University of Cordoba, Spain, ³Division of Angiology and Haemostasis, Geneva Platelet Group (GPG),
Geneva University Hospital, Switzerland

POS-02-270

Discovery of Novel Inhibitors for Human Sirtuins

Theresa Nowak¹, Claudia Roessler², Michael Scharfe¹, Clemens Steegborn³,
Wolfgang Sippl¹, Mike Schutkowski²
¹Department of Medical Chemistry, Institute of Pharmacy, Martin-Luther-University Halle-Wittenberg,
Germany, ²Department of Enzymology, Institute of Biochemistry and Biotechnology, Martin-
Luther-University Halle-Wittenberg, Germany, ³Department of Biochemistry, University of Bayreuth,
Universitaetsstrasse 30, Germany

POS-02-271

Quantitative Proteomic Analysis of Post Translational Modifications in Alzheimer's Disease Brain

Nikhat Ahmed
Neurochemistry Research Laboratory, Department of Biochemistry, University of Karachi, Pakistan

POS-02-272

★Travel Award

Quantitative Phosphoproteome Analysis for Identification of Novel GSK-3 Substrates in HEK293 Cells

Jeng-Ting Chen
Graduate Institute of Biomedical Sciences, Chang Gung University, Taiwan

POS-02-273

Global In-Depth Quantitative Proteomic Analysis of HIV Infected Cells Using a Novel Q-OT-qIT Mass Spectrometer

Shannon Eliuk¹, Jeffrey Johnson², Vlad Zabrouskov¹, Nevan Krogan²

¹Thermo Fisher Scientific, ²University of California San Francisco, USA

POS-02-274

Phosphoproteomic Analysis of the Model *Cyanobacterium Synechococcus* sp. Strain PCC 7002

Feng Ge

Institute of Hydrobiology, Chinese Academy of Sciences

POS-02-275

Quantitative Phosphoproteomic Analysis of Calmodulin-Dependent Calcium Signaling

Atsushi Hatano¹, Masaki Matsumoto², Keiichi I. Nakayama¹

¹Department of Molecular and Cellular Biology, Medical Institute of Bioregulation, Kyushu University, Japan, ²Department of Proteomics, Medical Institute of Bioregulation, Kyushu University, Japan

POS-02-276

Quantitative Variation of Protein Components and Their Phosphorylations in the SWI/SNF Chromatin Remodeling Complex Associated with High Malignancy of Ovarian Clear Cell Adenocarcinoma

Ayuko Kimura¹, Ayako Nomura¹, Takao Kawakami^{1,2}, Noriaki Arakawa¹, Hisashi Hirano¹

¹Advanced Medical Research Center, Yokohama City University, Japan, ²Medical ProteoScope Co., Ltd.

POS-02-277

PS13-04

Improved PhosphoTau SRM Assay Sensitivity Enables Multi-Site Tau Phosphorylation Quantitation in a Preclinical Model of AD Treated with Novel Small Molecule Inhibitors of Casein Kinase 1 Delta

Emma Louise Lahert, Claire Louise Russell, Ian Pike, Malcolm Ward

Proteome Sciences plc, UK

POS-02-279

Potent Lipolytic Action of Lactoferrin: Elucidation of the Lipolytic Action Mechanism in Mature Adipocytes, Using Proteomic Approach

Satoru Morishita¹, Keiko Ikoma¹, Ayako Nomura², Kanae Taki¹, Tomoji Ono^{1,2}, Michiaki Murakoshi^{1,3}, Keikichi Sugiyama^{1,4}, Hisashi Hirano², Hoyoku Nishino^{3,4}

¹Research and Development Headquarters, Lion Corporation, Japan, ²Advanced Medical Research Center/Graduate School of Nanobioscience, Yokohama City University, Japan, ³Kyoto Prefectural University of Medicine, Japan, ⁴Ritsumeikan University, Japan

POS-02-280

SILAC-Based Quantitative Phosphoproteome Analysis of Glioblastoma Stem Cell Differentiation by High-Resolution nanoLC-MS/MS

Yuta Narushima¹, Hiroko Kozuka-Hata¹, Yumi Goto¹, Tomoko Hiroki¹, Ryo Koyama-Nasu², Kouhei Tsumoto¹, Tetsu Akiyama², Masaaki Oyama¹

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POS-02-281

Phosphoproteomics of the Cellular Response to MAPK Blockade in V600EBRAF Mutant Cells

Robert Parker¹, Mark Molloy¹, Roderick Clifton-Bligh²

¹Department of Chemistry and Biomolecular Sciences, Macquarie University, Australia, ²Kolling Institute of Medical Research, University of Sydney, Australia

POS-02-282

Acetyl-Phosphate Links Metabolism to Global Acetylation Dynamics in *E. coli*

Brian Tate Weinert¹, Vytautas Iesmantavicius¹, Sebastian A. Wagner¹, Bertil Gummesson², Thomas Nystrom², Chunaram Choudhary¹

¹The NNF Center for Protein Research, Faculty of Health Sciences, University of Copenhagen, Denmark,

²Department of Cell and Molecular Biology, University of Gothenburg, Sweden

POS-02-283

MRM-Based Absolute Quantitation of Metabolic Enzymes Acetylation

Leilei Xu¹, Fang Wang¹, Hongxiu Yu², Pengyuan Yang^{1,2}

¹Department of Chemistry, Fudan University, China, ²Institutes of Biomedical Sciences, Fudan University, China

POS-02-284

Quantitative Phosphoproteome Analysis in Differentiation of Human Promyelocytic Leukemia HI-60 Cells

Mitsuaki Yanagida, Masako Miura, Kenji Takamori

Institute for Environmental and Gender Specific Medicine, Juntendo University Graduate School of Medicine, Japan

POS-02-285

Optimization of Enrichment Conditions on TiO₂-affinity Chromatography for Phosphoproteomic Analysis

Isao Fukuda, Yoshino Hirabayashi-Ishioka, Ikue Sakikawa, Takeshi Ota, Mari Yokoyama, Takaaki Uchiumi, Atsushi Morita

Shionogi Pharmaceutical Research Center, Shionogi & Co. Ltd., Japan

POS-02-286

Identification of Novel p38 MAP Kinase Substrates Using *In Vitro* Phosphorylation

Naoyuki Iida¹, Masayuki Fujita¹, Kohtaro Miyazawa¹, Michimoto Kobayashi², Seisuke Hattori¹

¹Division of Biochemistry, School of Pharmaceutical Sciences, Kitasato University, Japan, ²Toray Industries, Inc., Japan

POS-02-287

Multidimensional Phosphoproteomic Characterization of Human Embryonic Stem Cells SILAC Labelled Using a Chemically Defined Medium

Albert R. Liberski¹, Muna N. Al-Noubi¹, Najeeb M. Halabi¹, Jeremie A. R. Tabrizi², Kasper Engholm-Keller^{3,4,5}, Roopesh Krishnankutty¹, Hisham Ben Hamidane¹, Pankaj Kumar¹, Marcella N. Melo-Braga³, Melanie Schulz³, Martin R. Larsen³, Rasha Mismar¹, Johannes Graumann¹

¹Weill Cornell Medical College - Qatar, Qatar, ²Department of Genetic Medicine Weill Cornell Medical College, USA; Stem cell and microenvironment laboratory Weill Cornell Medical College in Qatar, Qatar,

³Department of Biochemistry and Molecular Biology, University of Southern Denmark, Denmark, ⁴Center for Clinical Proteomics, Odense University Hospital, Denmark, ⁵Cell Signaling Unit, Childrens Medical Research Institute, Australia

POS-02-288

PS09-04

Unravelling Cell Signaling Events with Sub-Minute Temporal Resolution

Evgeny Kanshin^{1,4}, Louis-Philippe Sandoval-Bergeron¹, Pierre Thibault^{1,2,4}, Stephen Michnick^{1,3}

¹Departement of Biochemistry, University of Montreal, Canada, ²Departement of Chemistry, University of Montreal, Canada, ³Centre Robert-Cedergren, Bio-Informatique et Genomique, University of Montreal, Canada, ⁴Institute for Research in Immunology and Cancer, University of Montreal, Canada

Tuesday, September 17

PTM II: Glycosylation, Glycation, Oxidation

POS-03-001

Abrogated Expression and Identification of O-GlcNAcylated Proteins in Colorectal Cancer Cells

Parunya Chaiyawat¹, Vorarat Champattanachai^{1,2}, Kriengsak Lirdprapamongkol², Chantragan Srisomsap², Jisnusun Svasti^{1,2}

¹Chulabhorn Graduate Institute, ²Chulabhorn Research Institute

POS-03-002

Alcoholic Liver Disease Alters the Glycosylation of Membrane Proteins

Maja N. Christiansen¹, Wil M.H. d'Avigdor², Aimee Lee², Nicholas Shackel², Nicolle H. Packer¹

¹Department of Chemistry and Biomolecular Sciences, Macquarie University, Australia, ²Centenary Institute, Royal Prince Alfred Hospital, Australia

POS-03-003

Large-Scale Identification of Mouse and Human N-Glycoproteins and Data Sharing Through an Experimental-Based Glycoprotein Database, GlycoProtDB

Mika Fujita, Hiroyuki Kaji, Atsushi Kuno, Toshihide Shikanai, Yoshinori Suzuki, Hiromichi Sawaki, Hisashi Narimatsu

Research Center for Medical Glycoscience, AIST, Japan

POS-03-004

Milk Protein Modifications Associated with Processing Treatments

Jessica Gathercole, Stefan Clerens, Rex Humphrey, Paul Harris, Mariza Gomes Reis, Jolon Dyer, Brendan Haigh

AgResearch Ltd., New Zealand

POS-03-005

Multi-Acquisition Ion Mobility Strategies Utilizing LC/MS and MALDI for the Characterization of Enriched Glycopeptides

Lee A Gethings¹, Mark W Towers¹, Chen Chun Chen², Pei Yi Lin², Yu Ju Chen²

¹Waters Corporation, UK, ²Academia Sinica, Institute of Chemistry, Taiwan

POS-03-006

Advanced nano-LC-MALDI Spotting System for the Detection of Low-Abundance Glycopeptides from Complex Samples

Yusaku Hioki, Ritsuko Tanimura, Koichi Tanaka

Koichi Tanaka Laboratory of Advanced Science and Technology, Shimadzu Corporation, Japan

POS-03-007

In-Depth Characterization of Glycopeptides by Combination of CID and ETD Fragmentation After Charge State Enhancement

Andreas Brekenfeld¹, Kristina Marx¹, Andrea Kiehne¹, Noriyuki Iwasaki², Markus Meyer¹

¹Bruker Daltonik GmbH, Germany, ²Bruker Daltonics K.K., Japan

POS-03-009

Identification of Ectonucleotide Pyrophosphatase/Phosphodiesterase 3 (ENPP3) as a New Modifier of Glycan Biosynthesis

Hiroaki Korekane^{1,2}, Jong Yi Park², Akio Matsumoto², Kazuki Nakajima², Shinji Takamatsu², Kazuaki Ohtsubo^{1,2}, Yasuhide Miyamaoto³, Naoyuki Taniguchi^{1,2}

¹Systems Glycobiology Research Group, RIKEN-MAX Planck Joint Research Center, RIKEN Global Research Cluster, ²Department of Disease Glycomics, Alliance Laboratory, ISIR, Osaka University, Japan, ³Department of Immunology, Osaka Medical Center for Cancer and Cardiovascular Diseases, Japan

POS-03-010

Application of the Lectin Microarray System to Glycome Mapping of Mouse FFPE Tissue Sections

Atsushi Kuno¹, Atsushi Matsuda¹, Binbin Tan², Yan Zhang², Takashi Sato¹, Hiroyuki Kaji¹, Hisashi Narimatsu¹

¹Research Center for Medical Glycoscience (RCMG), National Institute of Advanced Industrial Science and Technology (AIST), Japan, ²Ministry of Education, Key Laboratory of Systems Biomedicine, Shanghai Center for Systems Biomedicine, Shanghai Jiao Tong University, China

POS-03-011

Off-Line Hydrophilic Interaction Liquid Chromatography Enrichment of Glycopeptides Coupled with LC/MS Analysis

Ju Yeon Lee^{1,2}, Hyun Kyoung Lee^{1,3}, Gun Wook Park^{1,3}, Heeyoung Hwang¹, Myeong Hee Moon², Jin Young Kim¹, Jong Shin Yoo^{1,3}

¹Korea Basic Science Institute, O-chang Campus, Korea, ²Department of Chemistry, Yonsei University, Korea, ³Graduate School of Analytical Science and Technology, Korea

POS-03-012

Comprehensive Characterization of the Phosphorylation and Glycosylation of OPN Using Integrated Mass Spectrometry-Based Approaches

Hong Li², Guoquan Yan¹, Mingqi Liu¹, Lei Zhang¹, Pengyuan Yang^{1,2}

¹Institutes of Biomedical Sciences, Fudan University, China, ²Department of Chemistry, Fudan University, China

POS-03-013

LC-MS Ion Trap Workflows for Glycan and Glycopeptide Analysis Using CID and ETD Fragmentation

Kristina Marx¹, Andrea Kiehne¹, Yumiko Matsuyama², Ullrike Schweiger-Hufnagel¹

¹Bruker Daltonik GmbH, Germany, ²Bruker Daltonics K.K., Japan

POS-03-014

★Travel Award

Proteomic Analysis of O-GlcNacetylated Proteins Associated to Cancer Metastasis in Breast Cancer Cells

Pukkavadee Netsirisawan¹, Voraratt Champattanachai^{1,2}, Kriengsak Lirdprapamongkol², Chantragan Srisomsap², Jisnusun Svasti^{1,2}

¹Chulabhorn Graduate Institute, ²Chulabhorn Research Institute

POS-03-015

Comprehensive Glycome/Glycoproteome Analysis in α 1,3-Fucosyltransferase-9 Knockout Mice

Erika Noro^{1,2}, Akira Togayachi¹, Takashi Sato¹, Nami Suzuki¹, Atsushi Matsuda¹, Atsushi Kuno¹, Hiroyuki Kaji¹, Hisashi Narimatsu^{1,2}

¹Research Center for Medical Glycoscience (RCMG), National Institute of Advanced Industrial Science and Technology (AIST), Japan, ²Department of Biomolecular Function, Doctoral Program in Life System Medical Sciences, Graduate School of Comprehensive Human Sciences, University of Tsukuba, Japan

POS-03-016

YI03-03

Site-Specific N-Linked Glycosylation Analysis by nano-LC Tandem Mass Spectrometry Coupled with a Spectral Library Searching Approach

Pei-Jing Pai, Yingwei Hu, Henry Lam

Department of Chemical and Biomolecular Engineering, The Hong Kong University of Science and Technology, HK

POS-03-017

Large-Scale Identification of Glycoproteins Having LDN Glycans for Mechanism Elucidation in Protein-Specific Glycosylation

Takashi Sato, Hiroyuki Kaji, Hisashi Narimatsu

Research Center for Medical Glycoscience (RCMG), National Institute of Advanced Industrial Science and Technology (AIST), Japan

POS-03-018

Comprehensive Study of O-Linked Glycans of Erythropoietin

Ulrike Schweiger-Hufnagel¹, Kristina Marx¹, Stephanie Kaspar¹, Pierre-Olivier Schmit², Anja Resemann¹

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POS-03-019

Qualitative and Quantitative Investigation of Glyco-Proteoforms from Prostate-Specific Antigen (PSA) in Healthy and Cancer Samples

Ulrike Schweiger-Hufnagel, Kristina Marx, Wolfgang Jabs, Anja Resemann, Detlev Suckau

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POS-03-020

Enhancement of the Search Function in JCGGDB

Toshihide Shikanai, Noriaki Fujita, Yoshinori Suzuki, Masako Maeda, Hongling Wen, Madoka Ishizaki, Elena Solovieva, Daisuke Shinmachi, Hideyo Yasuda, Hiromichi Sawaki, Hiroyuki Kaji, Hisashi Narimatsu

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POS-03-021

An LC/MS-based Glycoproteomic Approach for Systematic Identification of *In Vivo* Target Proteins Specific for a Glycosyltransferase Isozyme

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POS-03-022

Inhibition of N-Glycan Biosynthesis Reveals Site-Specific Glycan Types by a Glycoproteome Approach

Huanhuan Han, Jing Jiang, Bo Peng, Wantao Ying, Xiaohong Qian

State Key Lab of Proteomics, Beijing Proteome Research Center, National Engineering Research Center for Protein Drugs, National Center for Protein Sciences Beijing, Beijing Institute of Radiation Medicine, China

POS-03-023

Glycan Changes of GP73 in Hepatocellular Carcinoma Cell Lines

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POS-03-024

A Complete Workflow Solution for Monoclonal Antibody Glycoform Characterization Combining a Novel Glycan Column Technology and Bench-Top Orbitrap LC-MS/MS

Zhiqi Hao¹, Udayanath Aich², Julian Saba², Rosa Viner¹, Xiaodong Liu², Srinivasa Rao², Chris Pohl², Andreas Huhmer¹, Patrick Bennett¹

¹Thermo Fisher Scientific San Jose, USA, ²Thermo Fisher Scientific Sunnyvale, USA

POS-03-025

Aberrant Expression of O-GlcNAcylated Proteins Associated with Primary Breast Cancer
Voraratt Champattanachai^{1,2}, Pukkavadee Netsirisawan², Parunya Chaiyawat²,
Phaibul Punyarit³, Chantragan Srisomsap¹, Jisnusun Svasti^{1,2}

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POS-03-026

Biomarker Discovery of N-glycopeptide of Immunoprecipitated Vitronectin from Human Cancer Plasma by High Resolution Mass Spectrometry

Heeyoun Hwang¹, Hyun Kyoung Lee^{1,2}, Ju Yeon Lee^{1,3}, Gun Wook Park^{1,2},
Jong Shin Yoo^{1,2}, Jin Young Kim¹

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POS-03-027

GlycoProtein Analysis (GPA): High-Throughput MS Platform for Automated N-linked Glycoproteome Analysis and Its Application to Human Plasma for Biomarker Discovery

Jin Young Kim¹, Gun Wook Park^{1,2}, Ju Yeon Lee^{1,3}, Hyun Kyoung Lee^{1,2}, Heeyoun Hwang¹,
Yeong Hee Ahn¹, Hyun Joo An², Jae-Han Kim⁴, Jong Shin Yoo^{1,2}

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POS-03-028

PS24-04

Breast Cancer Tumour Transformation from Primary Tumour to Secondary Site

Emila Kurbasic¹, Sofia Waldemarson¹, Peter James¹, Emma Nimeus Malmstrom²

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POS-03-029

Site-Specific Analyses of N-Glycans on Haptoglobin in Sera of Patients with Various Kinds of Cancers: A Possible Implication of Differential Diagnosis for Cancer

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POS-03-030

★Travel Award

Comparison of Single, Serial and Multiple Lectin Affinity Chromatography Using Secreted Proteins from Colorectal Cancer Cell Lines

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POS-03-031

Acquired Drug Resistance by Alteration of Glycan Structure on Leukemia Cell-Membrane Glycoproteins

Ryohei Shirai¹, Nicolle Packer², Maria Kavallaris³, Miyako Nakano¹

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POS-03-032

Improvement of Lectin Microarray-Based Tissue Glycan Profiling with Lectin-Assisted Fractionation for Glyco-Biomarker Discovery

Binbin Tan^{1,2}, Atsushi Matsuda¹, Atsushi Kuno¹, Yan Zhang², Hisashi Narimatsu^{1,2}

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POS-03-033

Extensive Characterization of Glycoconjugates in Nanobioparticles in Blood - Analysis of HDL and Other Lipoproteins

Carlito Lebrilla

University of California, USA

POS-03-034

Significance of Glycosylation-Focused Proteome Strategy for Discovery of the Biomarker of Heart Failure

Chiaki Nagai, Naoto Minamino

Department of Molecular Pharmacology, National Cerebral and Cardiovascular Center Research Institute

POS-03-035

Direct Proteomics Analysis of Protein Oxidation in Blood Plasma of Alzheimer's Disease Patients

Harleen Kaur Dhot¹, Hongqian Yang¹, Hilkka Soininen², Roman A. Zubarev^{1,3}

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POS-03-036

Glycomic Approach for Identification of Diagnostic Markers of the Acquisition of Drug Resistance Against Microtubule-Targeting Drugs

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POS-03-037

Resolving Double Disulfide Bond Patterns in SNAP25B Using Liquid Chromatography-Ion Trap Mass Spectrometry

Nozomi Ogawa¹, Ryan Taylor², Dixon Woodbury¹, John Prince²

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POS-03-038

UniCarbKB: Connecting Proteomics with Glycomics

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POS-03-039

DJ-1 Isoforms are Altered in Mouse Hypothalamus Upon High-Fat Diet

Gereon Poschmann¹, Katrin Seyfarth², Helmut E. Meyer³, Martin Klingenspor², Stuehler Kai¹

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POS-03-040

Recent Advances in Glycoprotein Analysis by Mass Spectrometry

Marshall Bern¹, Christopher Becker¹, Wilfred Tang¹, Yong J. Kil¹, Xiaoke Yin²,
Manuel Mayr², K.-H. Khoo³, Rosa Viner⁴

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POS-03-041

Cell Surface Proteome Profiling to Discover Therapeutic Targets for Adult T-Cell Leukemia

Koji Ueda¹, Makoto Ishihara¹, Natsumi Araya², Tomoo Sato², Ayako Tatsuguchi¹,
Naomi Saichi¹, Atae Utsunomiya³, Yoshihisa Yamano², Hidewaki Nakagawa¹

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POS-03-043

Glycan Structural Elucidation on a Novel Quadrupole Dual Cell Linear Ion Trap Orbitrap Hybrid Mass Spectrometer

Julian Saba¹, Katie Southwick¹, Shannon Eliuk¹, Sergei Snovidia², Vlad Zabrouskov¹,
Daisuke Higo³

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POS-03-044

Y103-08

Mass Isotopomer Analysis of Metabolically Labeled Nucleotide Sugars and N- and O-Glycans for Tracing Nucleotide Sugar Metabolisms

Kazuki Nakajima

Systems Glycobiology Research Group, RIKEN

POS-03-046

Modulation of the Intracellular Phosphorylation-Dependent Signaling Upon Sialoglycoconjugates Remodeling in Cancer

Giuseppe Palmisano, Martin Rossel Larsen

University of Southern Denmark, Denmark

POS-03-047

Age- and Sex-Associated Differences in the Glycopatterns of Human Salivary Glycoproteins and Their Roles Against Influenza A Virus

Yannan Qin¹, Yaogang Zhong¹, Minzhi Zhu¹, Liuyi Dang¹, Hanjie Yu¹, Zhuo Chen¹,
Wentian Chen¹, Xiorong Wang², Hua Zhang³, Zheng Li¹

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POS-03-048

Global Substrate Profiling of the UDP-GalNAc: Polypeptide N-Acetylgalactosaminyltransferase Using A Human Proteome Microarray

Xing Li, Wenxian Xie, Zhijue Xu, Jing Wang, Shu-min Zhou, Li Cheng, Sheng-ce Tao,
Yan Zhang

Ministry of Education Key Laboratory of Systems Biomedicine, Shanghai Center for Systems Biomedicine, Shanghai Jiao Tong University, China

POS-03-049

Glycosylation of Human Plasma Clusterin Yields Novel Biomarkers of Alzheimer's Disease

Malcolm Ward¹, Hui-Chung Liang¹, Claire Russell¹, Ray Chung², Abdul Hye²,
Chantal Bazenet², Simon Lovestone², Ian Pike¹, Emma Lahert

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POS-03-050

N-Linked Global Glycan Profiling from Human Gastric Cancer Tissue Using High Performance Liquid Chromatography on a Microfluidic Chip and Time-of-Flight Mass Spectrometry

Jong-Moon Park¹, Na-Young Han¹, Su-Jin Kim³, Seung Ho Choi⁴, Hark Kyun Kim⁴,
Sang-Won Lee³, Hookeun Lee^{1,2}

¹Lee Gil Ya Cancer and Diabetes Institute, Gachon University, Korea, ²College of Pharmacy, Gachon University, Korea, ³Department of Chemistry, Korea University, Korea, ⁴National Cancer Center, Research Institute, Korea

POS-03-051

Novel Glycan Column Technology for the LC-MS Analysis of Labeled and Native N-Linked Glycans

Julian Saba¹, Udayanath Aich², Xiaodong Liu², Srinivasa Rao², Yury Agroskin², Chris Pohl²

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POS-03-052

Quantitative Mapping of Glycoprotein Micro- and Macro- Heterogeneity: An Evaluation of Mass Spectrometry Signal Strengths Using Synthetic Peptides and Glycopeptides

Kathrin Stavenhagen^{1,2}, Hannes Hinneburg¹, Morten Thaysen-Andersen³, Laura Hartmann¹,
Daniel Varón Silva¹, Jens Fuchser⁴, Stephanie Kasper⁴, Detlev Suckau⁴, Erdmann Rapp²,
Peter H. Seeberger^{1,5}, Daniel Kolarich¹

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POS-03-053

From Qualitative to Quantitative: The Evolution of Glycoproteomics

Michael Blank¹, David Horn¹, Marshall Bern², Michael Athanas¹, Amol Prakash¹,
Scott Peterman¹, Julian Saba¹, Rosa Viner¹

¹Thermo Fisher Scientific, USA, ²Protein Metrics, USA

POS-03-054

In-Depth Structural Characterization of Glycopeptides Using Complete Derivatization for Carboxyl Groups Followed by Tandem Mass Spectrometry

Takashi Nishikaze, Shin-ichirou Kawabata, Koichi Tanaka

Koichi Tanaka Laboratory of Advanced Science and Technology, Shimadzu Corporation, Japan

POS-03-055

Glycomic Analysis Using Glycoprotein Immobilization for Glycan Extraction

Shuang Yang, Yan Li, Punit Shah, Hui Zhang

Department of Pathology, Johns Hopkins University, USA

PTM III: All other PTMs

POS-03-056

Impaired Tryptic Proteolytic Activity at Citrullinated Amino Acids

Tue Bennike¹, Kasper B. Lauritsen¹, Vibeke Andersen², Svend Birkelund¹, Allan Stensballe¹
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POS-03-057

Crystal Structure of Tyrosylprotein Sulfotransferase: The Reaction Mechanism of Post-Translational Tyrosine Sulfation

Takamasa Teramoto^{1,2}, Katsuhisa Kurogi³, Yoichi Sakakibara³, Ming-Cheh Liu⁴, Masahito Suiko³, Makoto Kimura^{1,2}, Yoshimitsu Kakuta^{1,2}

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POS-03-058

Mass Spectrometric Identification of Glycosylphosphatidylinositol-Anchored Peptides

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POS-03-059

Functional Studies of Post-Translational Modification by Tyrosine Sulfation: Knockdown Analysis of Three Kinds of Zebrafish Tyrosylprotein Sulfotransferases

Emi Mishiro-Sato^{1,2}, Tomomi Kondo¹, Naoya Kenmochi³, Tamayo Uechi³, Katsuhisa Kurogi¹, Ming-Cheh Liu⁴, Masahito Suiko¹, Yoichi Sakakibara¹

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POS-03-060

A Proteomics Strategy for Identification of FAT10 Modified Proteins and Specific Sites by Mass Spectrometry

Ling Leng¹, Changming Xu², Jiyang Zhang², Boya Liu¹, Jie Ma¹, Ning Li¹, Weijie Qin¹, Wanjun Zhang¹, Chengpu Zhang¹, Xiaohua Xing¹, Linhui Zhai¹, Fan Yang¹, Mansheng Li¹, Chaozhi Jin¹, Yanzhi Yuan¹, Ping Xu¹, Jun Qin¹, Hongwei Xie², Fuchu He¹, Jian Wang¹

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POS-03-061

Nitroproteomics Analyses of Pituitary Adenomas

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POS-03-062

USP-t Elongates Telomerase Activity by Stabilizing Human Telomerase Reverse Transcriptase (hTERT)

Key-Hwan Lim, Jang-Joon Park, Jin-Ock Kim, Bon-Hee Gu, Kwang-Hyun Baek
Department of Biomedical Science, CHA University, Bundang CHA General Hospital, Korea

POS-03-063

The Roles of HAUSP/USP7 Deubiquitinating Enzyme in Human Cancer and Apoptosis

Jang-Joon Park, Key-Hwan Lim, Bon-Hee Gu, So-Ra Kim, Kwang-Hyun Baek
Department of Biomedical Science, CHA University

POS-03-064

Identification of Novel Human N-myristoylated Proteins Using cDNA Resource and Cell-Free Protein Synthesis System

Toshihiko Utsumi¹, Emi Takamitsu¹, Takashi Suzuki², Koko Moriya¹

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POS-03-065

Quantitative Analysis of Deamidation and Isomerization in β 2-Microglobulin by ¹⁸O Labeling

Masafumi Fukuda, Toshifumi Takao

Institute for Protein Research, Osaka University, Japan

POS-03-066

USPJ is Critical for Regulating 14-3-3 in Cell Proliferation

Jin-Ock Kim, Key-Hwan Lim, Lan Li, Jun-Hyun Kim, Eun-Hea Kim, Kwang-Hyun Baek

Department of Biomedical Science, CHA University

POS-03-067

N-Terminal Modification of Proteasome Subunit Rpt1 in Yeast

Yayoi Kimura, Yoichi Kurata, Akiyo Ishikawa, Akiko Okayama, Masahiro Kamita, Hisashi Hirano

Yokohama City University, Japan

POS-03-068

Second Generation Electron Transfer Dissociation (ETD) on a Novel Hybrid Instrument with Improved Functionality, Increased Speed, and Robustness of Data

Christopher Mullen¹, Lee Earley¹, Jean-Jacques Dunyach¹, John E.P. Syka¹, Philip Daniel Compton³, Jeffrey Shabanowitz², Donald F. Hunt²

¹Thermo Fisher Scientific (San Jose), USA, ²Department of Chemistry, University of Virginia, USA, ³Kelleher Lab, Northwestern University, USA

POS-03-069

Systems-Wide Analysis of Protein Ubiquitylation in Response to DNA Damage

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POS-03-070

YI03-04

Proteome-Wide Identification of Poly (ADP-ribosyl)ation Targets in Different Genotoxic Stress Responses

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POS-03-071

Analysis of Post-Translational Modifications in Human Transthyretin Associated with Familial Amyloidotic Polyneuropathy by Targeted LC/MS and Intact Protein MS

Marta Vilà¹, Nùria Colomé¹, Antoni Planas¹, Stephanie Kaspar³, Pierre-Olivier Schmit⁴, Carsten Baessmann³, Francesc Canals²

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POS-03-072

Site-Specific Quantitative Analysis of Protein Ubiquitylation in Cellular Signaling

Sebastian Alexander Wagner¹, Petra Beli¹, Brian Tate Weinert¹, Matthias Mann^{1,2}, Chuna Ram Choudhary¹

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POS-03-073

Identification of Differentially S-Nitrosylated Proteins in Alzheimer's Disease Brain

Saadia Zahid^{1,2,3}, Rizma Khan¹, Michael Oellerich², Nikhat Ahmed¹, Abdul R Asif²

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Quantitative and Differential Proteomics

POS-03-074

Comparative Secretomics Reveals Wound Environment Acidification-Associated Secretome and Novel Microbial Virulence Factors for Group A *Streptococcus pyogenes* Infection

Yao-Tseng Wen¹, Jie-Siou Wang¹, Sue-Han Tsai¹, Jiunn-Jong Wu², Pao-Chi Liao¹

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POS-03-075

Multiplexed Quantitative Analysis of 51 Proteins in Human Tears Using High Resolution Multiple Reaction Monitoring (HR-MRM) Mass Spectrometry

Roger W Beuerman^{1,2,3}, Louis Tong^{1,4}, Siew Kwan Koh¹, Lei Zhou^{1,2,3}

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POS-03-076

YI01-04

Targeted Proteomics to Validate and Quantify One-Hit Wonders Proteins in Human Liver

Chen Chen

Department of Chemistry, Fudan University, China

POS-03-077

The Human Embryonic Secretome

Thomas F. Dyrlyund¹, Ebbe T. Poulsen¹, Kirstine K. Kirkegaard², Jakob Ingerslev², Jan J. Enghild¹

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POS-03-078

Hepatocyte Pathway Alterations in Response to in Vitro Crimean Congo Hemorrhagic Fever Virus Infection

Christophe Fraiser^{1,2}, Raquel Rodrigues³, Vinh Vu Hai^{1,2}, Luc Camoin^{4,5}, Maya Belghazi⁶, Stephanie Bourdon¹, Patrick Fourquet^{4,5}, Glauca Paranhos-Baccala³, Lionel Almeras^{1,2}, Christophe Nicolas Peyrefitte^{3,7}

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POS-03-079 Y102-08

Targeted Analysis of *Salmonella* Effector Proteins Using Multiple Reaction Monitoring

Joost W. Gouw, Nat F. Brown, Leonard J. Foster

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POS-03-080

Fibroblast Activation Protein (FAP) Degradomics

Elizabeth Hamson¹, Stefan Tholen², Maria Koczorowska², Charles Bailey¹, Fiona Keane¹, Oliver Schilling², Mark Gorrell¹

¹Centenary Institute, Sydney Medical School, University of Sydney, Australia, ²Institute of Molecular Medicine and Cell Research, Albert-Ludwigs University of Freiburg, Germany

POS-03-081

Honeybee Worker (*Apis mellifera ligustica*) Larvae Have a More Diverse Hemolymph Proteome Than Pupae

Bin Han, Dereje Woltejdji, Jianke Li, Yu Fang, Mao Feng

Institute of Apicultural Research/Key Laboratory of Pollinating Insect Biology, Ministry of Agriculture, Chinese Academy of Agricultural Science, China

POS-03-082

Absolute Quantitation of Yeast Kinases by Means of LC-MS/MS Using QconCat and SRM Technologies

Y Haramaki¹, PJ Brownridge², V Harman², S Cubbon³, JPC Vissers³, C Lawless⁴, SJ Hubbard⁴, RJ Beynon²

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POS-03-083

The Profiling of the Effects of Adenomatous Polyposis Coli (APC) Mutation on the Cellular Proteome in Colorectal Cancer Cells

Yasuhiro Irino¹, Akiyo Koshiyama², Tomoko Ichibangase², Kazuhiro Imai², Masaru Yoshida^{1,3}

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POS-03-084

Proteomic Analysis of Oil Metabolic Pathway in *Arthrobacter Nicotinovorans* MWB-30

Jonghyun Kim¹, Soo Jung Kim¹, Hyung-Yeel Kahng², Seung Il Kim¹, Young-Ho Chung¹

¹Division of Life Science, Korea Basic Science Institute, Korea, ²Department of Environmental Education, Suncheon National University, Korea

POS-03-085

Comparative Proteomics for Yeast Interspecies Differences in Metabolic Pathway and Regulation of Protein Expression

Mihoko Ohnishi, Haruka Ito, Takehiro Nohara, Keiji Kito
Department of Life Science, School of Agriculture, Meiji University, Japan

POS-03-086

Improved Throughput and Reproducibility for Targeted Protein Quantification Using a New High Performance Triple Quadrupole Mass Spectrometer

Reiko Kiyonami, Mary Blackburn, Andreas FR Humer
Thermo Fisher Scientific (San Jose), USA

POS-03-087

Integrated Proteomics Identified Novel Activation of Dynein IC2-GR-COX-1 Signaling by Suppression of NF1 Tumor Suppressor Gene Product, Neurofibromin, in Neuronal Cells

Daiki Kobayashi¹, Mio Hirayama¹, Souhei Mizuguchi¹, Takashi Morikawa¹, Megumi Nagayama¹, Uichi Midorikawa¹, Masayo Wilson-Morifuji¹, Akiko Nambu-Niibori¹, Akiyasu Yoshizawa C.², Shin Kawano³, Norie Araki¹
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POS-03-088

Altered Protein Expression of Rat Prefrontal Cortex Following Perinatal Asphyxia: Implications of Schizophrenia and Autism

Sylvia Lam¹, Tomoyasu Wakuda², Qi Li¹, Ran Wei¹, Xiaofan Zhang¹, Jana Leung¹, Siew Eng Chua^{1,3}, Pak Sham^{1,3}, Nori Takei⁴, Grainne McAlonan^{3,5}
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POS-03-089

Novel Aspects in the Understanding of Honeybee (*Apis mellifera*) Venom from Electrical Stimulation and Manual Extraction from the Venom Gland: A Proteomic Study

Jianke Li, Rongli Li, Yu Fang, Bin Han, Mao Feng
Institute of Apicultural Research/Key Laboratory of Pollinating Insect Biology, Ministry of Agriculture, Chinese Academy of Agricultural Science

POS-03-090

Quantitative Proteomics Applied to Biobank Samples from Patients with Acute Myocardial Infarction Enrolled in SWEDEHEART, The Swedish Cardiac Registry

Melinda Rezeli¹, Akos Vegvari¹, Karin Sjodin¹, Olof Gidlöf², Gustav Smith², Pontus Andell², David Erlinge², Gyorgy Marko-Varga¹
¹Clinical Protein Science & Imaging, Biomedical Center, Department of Measurement Technology and Industrial Electrical Engineering, Lund University, Sweden, ²Department of Cardiology, Lund University, Skae University Hospital, Sweden

POS-03-091

A Qualitative and Quantitative Ion Mobility Enabled Data Independent SILAC Workflow

T Paxton¹, AJK Williamson², S Ciavarini³, SJ Geromanos³, A Tudo⁴, B Dyson³, LA Gethings⁴, K McMahon⁴, R Tonge⁴, JI Langridge⁴, AD Whetton², JPC Vissers⁴
¹Nihon Waters, Japan, ²School of Cancer and Imaging Sciences, University of Manchester, UK, ³Waters Corporation, USA, ⁴Waters Corporation, UK

POS-03-092

Proteomics Profiling of Fuchs Corneal Endothelial Dystrophy (FECD)

Ebbe T Poulsen¹, Thomas F Dyrlund¹, Kasper Runager¹, Jesper Hjortdal², Henrik Vorum^{2,3}, Gordon K Klintworth⁴, Jan J Enghild¹

¹Department of Molecular Biology and Genetics, Aarhus University, Denmark, ²Department of Ophthalmology, Aarhus University Hospital, Denmark, ³Department of Ophthalmology, Aalborg Hospital, Denmark, ⁴Departments of Pathology and Ophthalmology, Duke University Medical Center, USA

POS-03-093

Analysis of Proteins in the Brain Cortex Tissues of as Alzheimer's Disease Transgenic Mouse (TG)

Bernardo Ramos Raymundo, Gi-Yeon Han, Chan-Wha Kim
Korea University, Korea

POS-03-094

Changes in Protein Expression Profiles of Brain Tissue during Cervical Cancer Development

Maria Elena Mitzy Rios de Anda, Alberto Checa Rojas, Luis Fernando Delgadillo Silva, Sergio Manuel Encarnacion Guevara
National Autonomous University of Mexico, Mexico

POS-03-095

Serine Protease HtrA1 Accumulates in Corneal Transforming Growth Factor Beta Induced Protein (TGFB1p) Amyloid Deposits

Kasper Runager¹, Henrik Karring², Ebbe Toftgaard Poulsen¹, Ida B. Thøgersen¹, Gordon K. Klintworth³, Peter Hoejrup⁴, Jan J. Enghild¹

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POS-03-096

Y102-05

Establishment and Application of a High-Quality Comparative Analysis Strategy of Low-Abundance Biomarker Peptide in Serum Based on Optimized Novel Peptide Extraction Method

Tatsuya Saito¹, Kawashima Yusuke^{1,2}, Minamida Satoru³, Kazumasa Matsumoto³, Takashi Matsui⁴, Mamoru Satoh⁵, Fumio Nomura^{5,6}, Masatsugu Iwamura³, Tadakazu Maeda^{1,2}, Shiro Baba³, Yoshio Kodera^{1,2,5}

¹Laboratory of Biomolecular Dynamics, Department of Physics, Kitasato University School of Science, Japan, ²Center for Disease Proteomics, Kitasato University School of Science, Japan, ³Department of Urology, Kitasato University School of Medicine, Japan, ⁴Division of Natural Products Chemistry, Department of Medicinal Resources, Institute of Natural Medicine, University of Toyama, Japan, ⁵Clinical Proteomics Research Center, Chiba University Hospital, Japan, ⁶Department of Molecular Diagnosis (F8) Graduate School of Medicine, Chiba University, Chiba, Japan

POS-03-097

Quantitative Proteome Analysis with Isotope Dimethyl Labeling to Identify TGF-beta-mediated Tumor Proteins Using the Metastatic Mouse Breast Cancer Model

Misako Sato, Jun Adachi, Takeshi Tomonaga
Center National Institute of Biomedical Innovation

POS-03-098

iTRAQ-Based Quantitation and Validation by Multiple Reaction Monitoring to Identify Diabetes-Related Biomarkers in Sera from KK-A^y Diabetes Mice

Eri Takahashi^{1,2}, Hiroyuki Unoki-Kubota¹, Akinori Okumura¹, Hisashi Hirano², Yasushi Kaburagi¹

¹Department of Diabetic Complications, Diabetes Research Center, Research Institute, National Center for Global Health and Medicine, Japan, ²Graduate School of Nanobioscience, Yokohama City University, Japan

POS-03-099

Elucidating the Functional Role of Frataxin (FXN) Over-Expression in HCT116 by a Quantitative Proteomics Approach

Xing Fei Tan, Teck Kwang Lim, Qingsong Lin

Department of Biological Sciences, National University of Singapore, Singapore

POS-03-100

Identification and Quantification of a Novel Prostate Specific Antigen Proteoform (SNP Leu132Ile) in Clinical Samples by Multiple Reaction Monitoring

Akos Vegvari¹, Karin Sjodin¹, Melinda Rezel¹, Johan Malm², Hans Lilja², Thomas Laurell¹, Gyorgy Marko-Varga^{1,3}

¹Clinical Protein Science & Imaging, Biomedical Center, Dept. of Measurement Technology and Industrial Electrical Engineering, Lund University, Sweden, ²Dept. of Laboratory Medicine, Division of Clinical Chemistry, Lund University, Skane University Hospital in Malmo, Sweden, ³First Department of Surgery, Tokyo Medical University, Japan

POS-03-101

Stathmin-1 (STMN1) Silencing Restricts Metastatic Processes, Induces Chemosensitisation, and Potentially Inhibits EMT in CRC

Wei Wu¹, Hwee Tong Tan¹, Maxey Ching Ming Chung^{1,2}

¹Department of Biochemistry, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, ²Department of Biological Sciences, Faculty of Science, National University of Singapore, Singapore

POS-03-102

Dynamic Proteomic Survey on the Colon Tissue Interstitial Fluids (TIFs) During Tumorigenesis Process of APC^{Min} Mouse Model

Yingying Xie¹, Qiang Shan¹, Lechuang Chen², Xiaomin Lou¹, Ju Zhang¹, Yinghui Zhu¹, Yang Wang¹, Ningzhi Xu², Siqi Liu¹

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POS-03-103

Confirming Different Roles of Embryo and Endosperm During Rice Seed Germination Though Proteomic Strategy

Chao Han^{1,2}, Pingfang Yang¹

¹Key Laboratory of Plant Germplasm Enhancement and Speciality Agriculture, Wuhan Botanical Garden, Chinese Academy of Sciences, China, ²University of Chinese Academy of Sciences, China

POS-03-104

Targeted Protein Quantitation for Plasma Samples by Scheduled MRM-HR Using a TripleTOF Mass Spectrometer

Thiri Zaw, Xiaomin Song, Mark P Molloy

Australian Proteome Analysis Facility, Macquarie University, Australia

POS-03-105 PS13-02

High Resolution MRM Quantification of 300 Tear Proteins Using MS/MS^{ALL} with SWATHTM Acquisition and Its Application to Biomarker Discovery

Lei Zhou^{1,2,3}, Louis Tong^{1,4}, Tina Wong^{1,4}, Jocelyn Chua⁴, Siew Kwan Koh¹, Justin Lim⁵, Jason Neo⁵, Roger W Beuerman^{1,2,3}

¹Singapore Eye Research Institute, Singapore, ²Department of Ophthalmology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, ³SRP Neuroscience and Behavioral Disorder, DUKE-NUS Graduate Medical School, Singapore, ⁴Singapore National Eye Centre, Singapore, ⁵AB SCIEX, Singapore

POS-03-106

SILVER: An Efficient Tool for Stable Isotope Labeling LC-MS Data Quantitative Analysis with Quality Control Methods

Cheng Chang¹, Jiyang Zhang², Mingfei Han¹, Jie Ma¹, Songfeng Wu¹, Wei Zhang², Hongwei Xie², Fuchu He^{1,3}, Yunping Zhu¹

¹State Key Laboratory of Proteomics, Beijing Proteome Research Center, National Engineering Research Center for Protein Drugs, National Center for Protein Sciences Beijing, Institute of Radiation Medicine, China, ²Department of Automatic Control, College of Mechatronics and Automation, National University of Defense Technology, China, ³Institutes of Biomedical Sciences and Department of Chemistry, Fudan University, China

POS-03-107

The Comparative Proteomic Study on Ana-1 and Ana-1-Derived Tumor Associated Macrophages

Yinghui Zhu¹, Ju Zhang¹, Yingying Xie¹, Ningzhi Xu², Xiaomin Lou¹, Siqi Liu¹

¹Beijing Institute of Genomics, Chinese Academy of Sciences, China, ²Institute of Basic Medical Sciences, Chinese Academy of Medical Sciences and Peking Union Medical College Chinese Academy of Medical Sciences, China

POS-03-108

Fast Stable Isotope Labeling of the Murine Intestinal Tract

Liisa Arike, Sjoerd van der Post, Ana Maria Rodriguez Pinero, Anna Ermund, Andre Schutte, George Birchenough, Malin E.V. Johansson, Gunnar C. Hansson
Dept. Medical Biochemistry, University of Gothenburg, Sweden

POS-03-109

Quantitative Proteomic Analysis of the Hippocampus in the 5XFAD Mouse Model at Early Stages of Alzheimer's Disease Pathology

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POS-03-110

Application of Nano-LC Tandem Mass Spectrometry for Screening the Differential Vitreous Protein Expressions in the Lens-Induced Myopic Chicks

Chuen Lam, Fengjuan Yu, King Kit Li, Chi ho To

School of Optometry, The Hong Kong Polytechnic University, Hong Kong SAR, China

POS-03-111

Proteomics Analysis of Endogenous Nuclear Receptor Proteins in Diet Induced Obesity Mouse Liver

Qiongmeng Liu^{1,2}, Chen Ding^{1,2}, Wanlin Liu^{1,2}, Mingwei Liu^{1,2}, Lei Song^{1,2}, Lei Lei^{1,2}, Bei Zhen^{1,2}, Yi Wang³, Jun Qin^{1,2,3}

¹State Key Laboratory of Proteomics, Beijing Proteome Research Center, Beijing Institute of Radiation Medicine, ²National Engineering Research Center for Protein Drugs, China, ³Center for Molecular Discovery, Verna and Marrs McLean Department of Biochemistry and Molecular Biology, Department of Molecular and Cellular Biology, Baylor College of Medicine, USA

POS-03-112

Comparison of Cuprizone and Experimental Autoimmune Encephalomyelitis Multiple Sclerosis Models Using TMT and Label-Free Quantitative Proteomics and Translation to Patients

Eystein Oveland^{1,2}, Stig Wergeland², Harald Barsnes¹, Kjell-Morten Myhr², Lars B², Frode Berven^{1,2}

¹Proteomics Unit at University of Bergen, Norway, ²Department of Clinical Medicine, University of Bergen, Norway

POS-03-113

Quantitative Proteomic Techniques: Exploring Protein Pathways and Potential Biomarkers in Dorsal Region of Rat Spinal Cord Associated with Neuropathic Pain

Ping Sui¹, Hiroyuki Watanabe², Jonas Bergquist¹, Georgy Bakalkin², Konstantin Artemenko¹

¹Analytical Chemistry, Department of Chemistry-BMC, Uppsala University, Sweden, ²Molecular Neuropsychopharmacology, Department of Pharmaceutical Biosciences, Uppsala University, Sweden

POS-03-114

Combination of a Discovery LC-MS/MS Analysis and a Label-Free Quantification for the Epithelial-Mesenchymal Transition Signature Characterization

Jordane Biarc^{1,3}, Ivan Mikaelian^{2,3}, Philippe Gonzalo^{2,3}, Laurent Fattet^{2,3}, Pierre-Germain Gillet^{2,3}, Ruth Rimokh^{2,3}, Jerome Lemoine^{1,3}

¹UMR 5280, Institut des sciences analytiques, France, ²CNRS UMR5286, INSERM U1052, Centre de Recherche en Cancérologie de Lyon, Centre Leon Berard, France, ³Universite de Lyon 1, France

POS-03-115

Quantitative Proteomic Analysis of Serum Proteins in Patients with Gastric Carcinoma Using an Isobaric Tag for Relative and Absolute Quantification Labeling, 2DLC-MS/MS

Hong Jin^{1,2}, Fengying Yang², Qingping Liu¹, Xinwen Zhou², Pengyuan Yang^{1,2}

¹Department of Chemistry, Fudan University, China, ²Institute of Biomedical Sciences, Fudan University, China

POS-03-116

Biomarker Verification: Assessment of the Performances of LFABP as New CRC Marker on 4 Independent Cohorts of 798 Patients, Using ELISA, MRM and MRM3. Detection of CRC Early Stages and Adenomas

Jerome Lemoine¹, Tanguy Fortin¹, Jean-Philippe Charrier², Gaspard Gervasi², Frederique Steinbrugger², Elodie Charmette², Corinne Beaulieu², Arnaud Salvador¹, Come Lepage³, Jean Faivre³, Genevieve Choquet-Kastylevsky²

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POS-03-117

★Travel Award

Identification of Novel Biomarkers for Prostate Cancer Radioresistance Using the Label-Free LC-MS/MS Approach

Lei Chang^{1,2}, Valerie Wasinger³, Peter Graham^{1,2}, Jingli Hao^{1,2}, Jie Ni^{1,2}, Julia Beretov^{1,2}, Joseph Bucci^{1,2}, Paul Cozzi^{2,4}, John Kearsley^{1,2}, Yong Li^{1,2}

¹Cancer Care Centre, St George Hospital, Australia, ²St George Clinical School, Faculty of Medicine, UNSW, Australia, ³Bioanalytical Mass Spectrometry facility, Mark Wainwright Analytical Centre, UNSW, Australia, ⁴Department of Surgery, St George Hospital, Australia

POS-03-118

Quantitative Analysis of Colorectal Cancer Secretomes Using MS/MSALL with SWATH Acquisition

Qifeng Lin¹, Hannah Soo Rei Lim², Hui Ling Lin², Hwee Tong Tan¹, Teck Kwang Lim², Justin Wee Eng Lim³, Jason Chun Hong Neo³, Maxey Ching Ming Chung^{1,2}

¹Department of Biochemistry, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, ²Department of Biological Sciences, Faculty of Science, National University of Singapore, Singapore, ³AB SCIEX, Singapore

POS-03-119

Proteomic Analysis for Discovering Therapeutic Targets and Prognostic Markers for Early-Stage Lung Adenocarcinoma

Akiko Okayama¹, Yohei Miyagi², Fumihiro Oshita², Mayuko Nishi¹, Yayoi Kimura¹, Yoji Nagashima¹, Akihito Ryo¹, Hisashi Hirano¹

¹Yokohama City University, Japan, ²Kanagawa Cancer Center, Japan

POS-03-120

Gel-Based and Gel-Free Quantitative Proteomic Analysis in Oral Malignant Transformation

Sijia Zhao, Xiaobing Chen, Kai Su, Peixi Liao, Da Ma, Zhi Wang

Guanghua School Stomatology, Hospital of Stomatology, Sun Yat-sen University; Guangdong Provincial Key Laboratory of Stomatology, China

POS-03-121

Protein Dynamics of Human Cancer/Tumour Inducible Model Cell Lines Analysed by Next Generation Proteomics

Kayo Yamada¹, Motoharu Ono¹, Neil D. Perkins², Sonia Rocha¹, Angus I. Lamond¹

¹Centre for Gene Regulation and Expression, College of Life Sciences, University of Dundee, UK, ²Institute for Cell and Molecular Biosciences, Medical School, Newcastle University, UK

POS-03-122

Laser Capture Microdissection-based Quantitative Proteomics Analysis of Stromal Differentially Expressed Proteins in the Colon Carcinomas

Xianquan Zhan, Yibing Mu, Guiying Zhang, Zhuchu Chen

Xiangya Hospital, Central South University, China

POS-03-123

Quantitative Proteomic Analysis of RIP3 Mediated Cisplatin Sensitivity in ESCC Cells

Shouzhi Ma¹, Linhui Zhai², Heng Zhang², YuLin Sun¹, Yang Xu¹, Ning Li², Chengpu Zhang², Tao Zhang², Ping Xu², Xiaohang Zhao^{1,3}

¹State Key Laboratory of Molecular Oncology, Cancer Institute & Hospital, Chinese Academy of Medical Sciences & Peking Union Medical College, China, ²State Key Laboratory of Proteomics, Beijing Proteome Research Center, National Engineering Research Center for Protein Drugs, National Center for Protein Sciences Beijing, Beijing Institute of Radiation Medicine, China, ³Center for Basic Medical Science, Navy General Hospital, China

POS-03-124

Serum Proteome Analysis During Metastatic Processes of Hepatocellular Carcinoma and Function of Transaldolase and Secretory Clusterin

Yinkun Liu^{1,2}, Cun Wang^{1,2}, Kai Jiang²

¹Liver Cancer Institute, Zhongshan Hospital, Fudan University, China, ²Institutes of Biomedical Sciences, Fudan University, China

POS-03-125

Comprehensive and Comparative Proteomics Reveals Alterations of Metabolomics between Monolayer and Three-Dimensional Cell Cultures

Shushi Nagamori¹, Hideki Aizaki², Yoshihiro Matsumoto², Noriyoshi Isozumi¹, Pattama Wiriyasermkul¹, Tomokazu Matsuura³, Yoshikatsu Kanai¹

¹Bio-system Pharmacology, Osaka University Graduate School of Medicine, ²Department of Virology II, National Institute of Infectious Diseases, ³Department of Laboratory Medicine, Jikei University School of Medicine, Japan

POS-03-126

★Travel Award

A Proteomic Investigation into the Molecular Mechanism of HIV Tat Induced Neuronal Apoptosis

Tariq Ganief^{1,2}, Shaun Garnett¹, Putuma Gqamana¹, Salomie Smit², Jonathan Blackburn¹

¹Institute of infectious disease and molecular medicine (IIDMM), University of Cape Town, South Africa, ²Central Analytical Facilities, Stellenbosch University, South Africa

POS-03-127

Screening for Protein Biomarkers in Alzheimer's Disease Using Multiplex Quantitative Mass Spectrometry

Sravani Musunuri, Magnus Wetterhall, Martin Ingelsson, Lars Lannfelt, Jonas Bergquist, Ganna Shevchenko

Uppsala University, Sweden

POS-03-128

Proteome Analysis of a Hepatocyte-Specific BIRC5-Knockout Mouse Model during Liver Regeneration

Thilo Bracht¹, Marius Loscha¹, Sascha Hagemann², Dominik A. Megger¹, Juliet Padden¹, Stephanie Tautges¹, Martin Eisenacher¹, Katja Kuhlmann¹, Helmut E. Meyer¹, Hideo A. Baba², Barbara Sitek¹

¹Medizinisches Proteom-Center, Ruhr-Universitaet Bochum, Germany, ²Institut fuer Pathologie, Universitaetsklinikum Essen, Germany

POS-03-129

A Proteomic Analysis of Radio-Resistance in Breast Cancer Cell Lines

Paolo Cifani, Peter James

Protein Technology, Department of Immunotechnology, CREATE Health, Lund University, Sweden

POS-03-130

Quantitative Proteome Analysis of Cervical Cancer Tissues Using a iTRAQ Approach

Alberto Carlos Ramirez-Torres¹, Jeovanis Gil-Valdes¹, Sandra Contreras-Martinez¹, Alejandro Garcia-Carranca², Sergio Encarnacion-Guevara¹

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POS-03-131

Label Free Quantitative Proteome Analysis on Cerebrospinal Fluid to Discover Severity Grade Markers for Human T-cell Leukemia Virus Type 1 Associated Myelopathy/Tropic Spastic Paraparesis (HAM/TSP)

Makoto Ishihara¹, Natsumi Araya², Sato Tomoo², Hidewaki Nakagawa¹, Yoshihisa Yamano², Koji Ueda¹

¹Laboratory for Biomarker Development, Center of Genomic Medicine, RIKEN, Japan, ²Department of Molecular Medical Science, Institute of Medical Science, St. Marianna University School of Medicine, Japan

POS-03-132

Performance of the Label-Free Differential LC-MS/MS Incorporating Peptide Identification Items to Associate Peptide Detection Signals Among Measurements

Takao Kawakami^{1,2}, Makiko Otsuji¹, Keiko Nagasaka¹

¹Research and Development Division, Medical Proteoscope Company, ²Advanced Medical Research Center, Yokohama City University, Japan

POS-03-133

Quantitative Mass Spectrometric Immunoassay of Clusterin

Makoto Nogami^{1,2}, Jason W. Jarvis¹, Paul E. Oran¹, Nisha D. Sherma¹, Chad R. Borges¹, Randall W. Nelson¹

¹Molecular Biomarkers, The Biodesign Institute at Arizona State University, USA, ²Research and Development Division, Hitachi High-Technologies Corporation, Japan

POS-03-134

Absolute Quantitation of Plasma Biomarker Peptides APL1 β for Alzheimer Disease at fmol/ml Level Using SRM

Seizo Sano¹, Shinji Tagami², Kumiko Yoshizawa-Kumagaye³, Masahiko Tsunemi³, Masayasu Okochi², Takeshi Tomonaga¹

¹Laboratory of Proteome Research, National Institute of Biomedical Innovation, Japan, ²Psychiatry, Department of Integrated Medicine, Division of Internal Medicine, Osaka University Graduate School of Medicine, Japan, ³Peptide Institute, Inc.

POS-03-135

Metabolomics Data Normalization Improves Correlation with NMR and Physiology Data

Yuliya Karpievitch¹, Lindsay Edwards³, Sonja Nikolic², James Sharman²

¹School of Mathematics and Physics, University of Tasmania, Australia, ²Menzies Research Institute Tasmania, Australia, ³School of Biological Sciences, University of Essex, UK

POS-03-136

Deconvolution of Overlapping Peptide Isotopic Clusters with EM Algorithm for Label-free Quantification

Lei Xin¹, Ziaur Rahman¹, Weiwu Chen¹, Zefeng Zhang¹, Mingjie Xie¹, Bin Ma²

¹Bioinformatics Solutions Inc., Canada, ²University of Waterloo, Canada

POS-03-137

Comparative Proteomic Analysis of Early Salt Stress-Responsive Proteins in Roots and Leaves of Rice

Chien-Chen Lai, Chih-Wei Liu, Yu-Kai Hsu

Institute of Molecular Biology, National Chung-Hsing University, Taiwan

POS-03-138

Novel Aspects of Understanding Molecular Working Mechanisms of Salivary Glands of Worker Honeybees (*Apis mellifera*) Investigated by Proteomics and Phosphoproteomics

Mao Feng, Yu Fang, Bin Han, Lan Zhang, Xiaoshan Lu, Jianke Li

Institute of Apicultural Research/Key Laboratory of Pollinating Insect Biology, Ministry of Agriculture, Chinese Academy of Agricultural Science, China

POS-03-139

High Resolution LC-MS/MS versus SOMAScan Proteomics Platform: An In-Depth Comparison of Two Quantitative Proteomic Technologies

Anja M. Billing, Shaima S. Dib, Hisham Ben Hamidane, Muna N. Al-Noubi, Albert R. Liberski, Johannes Graumann

Proteomics Core, Weill Cornell Medical College in Qatar, Qatar

POS-03-140

Urinary Proteome Variability Assessment of Normal Monozygotic Twins

Young Ah Goo¹, Claire Yang², David Goodlett¹

¹University of Maryland, USA, ²University of Washington, USA

POS-03-141

Proteome Analysis of Ginseng Extract, Ginsenoside F2 and Ginsenoside Rg2 Treated Neuronal Cell

Jeong-ju Ha

Department of Physiology, Kyung Hee University School of Medicine, Korea

POS-03-142

Quantitative Proteomics to Study Neuromuscular Disorders

Laxmikanth Kollipara¹, Stephan Buchkremer², Andreas Roos², René Zahedi¹

¹Leibniz-Institut fuer Analytische Wissenschaften - ISAS - e.V., Germany, ²Institute of Neuropathology, University Hospital RWTH, Germany

POS-03-143 YI01-03

Hidden Proteome: Multiplex Quantitation of Low- and Ultralow-Copy Number Proteins in HepG2 Cells and Human Plasma

Arthur T. Kopylov, Zgoda G. Victor, Lisitsa V. Andrei, Elena Ponomarenko,
Ekaterina Poverennaya, Ekaterina Ilgisonis, Alexander A. Moisa, Alexey D. Filimonov,
Alexander I. Archakov

Orekhovich Institute of Biomedical Chemistry of the Russian Academy of Medical Sciences, Russia

POS-03-145

Label Free Mass Spectrometry Proteome Quantification of Human Embryonic Kidney Cells Following 24 Hours of Sialic Acid Overproduction

Ville Ilmari Parviainen, Sakari Joenvaara, Niina Johanna Tohmola, Risto Olavi Renkonen

Haartman Institute, University of Helsinki & HUSLAB, Helsinki University Central Hospital, Finland

POS-03-146

Integrating Approach of Proteomics and Metabolomics in EAM Rat Model

Jong Bok Seo, Soo Young Kim, Joo Hee Chung

Korea Basic Science Institute, Korea

POS-03-147

Proteomic Analysis of Human Obesity Reveals Differential Expression of the Epigenetic Factor HDAC4 and Role of Physical Exercise in Correcting Its Expression

Ali Tiss¹, Mohamed Abu-Farha¹, Jehad Abubaker¹, Fahad Al-Ghimlas², Irina Al-Khairi¹,
Preethi Cherian¹, Naser Elkum³, Jeena John¹, Sina Kavalakatt¹, Abdelkrim Khadir¹,
Samia Warsame¹, Kazem Behbehani^{1,2,3}, Said Dermime¹, Mohammed Dehbi¹

¹Biomedical Research Department, Dasman Diabetes Institute, Kuwait, ²Fitness and Rehabilitation Centre, Dasman Diabetes Institute, Kuwait, ³Biostatistics and Epidemiology Department, Dasman Diabetes Institute, Kuwait

POS-03-148

Membrane Proteomic Analysis of the Effect of Lysophosphatidic Acid on Platelet-Monocyte Interaction in the Context of Atherosclerosis

Jiqing Huang, Juergen Kast

The Biomedical Research Centre, University of British Columbia, Canada

POS-03-149

Towards the Identification of Yeast Endoplasmic Reticulum Phospholipid Flippase Using Quantitative Proteomics Approach

Roopesh Krishnankutty¹, Madhavan Chalath², Anja Billing¹, Hisham Ben Hamidane¹, Albert Liberski¹, Shaima Salah Dib¹, Muna N. Al-Noubi¹, Anant K. Menon², Johannes Graumann¹

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²Department of Biochemistry, Weill Cornell Medical College, USA

POS-03-150

Improving Throughput of Relative Protein Quantitation Using 10 Plex Isobaric Tags

Rosa Viner¹, Ryan Bomgardner², Michael Blank¹, John Rogers², Masayuki Kubota³

¹Thermo Fisher Scientific (San Jose), USA, ²Thermo Fisher Scientific (Rockford), USA, ³Thermo Fisher Scientific, Japan

POS-03-151

A Six-Plex Proteome Quantification Strategy Reveals the Dynamics of Protein Turnover

Kai Cheng, Fangjun Wang, Xiaoluan Wei, Hanfa Zou

Key Lab of Separation Science for Analytical Chemistry, National Chromatography R&A Center, Dalian Institute of Chemical Physics, the Chinese Academy of Science, China

POS-03-152

Quantification of Peptides in Clinical Samples Based on High-Resolution Mass Measurements

Bruno Doman, Sebastien Gallien, Antoine Lesur, Marie-Aline Pierrard, Yeoun-Jin Kim, Guy Berchem

Luxembourg Clinical Proteomics Center, CRP-Sante, Luxembourg

POS-03-153

Liver Mitochondria Proteomics Employing High Resolution MS Technology

Jenny T.C Ho¹, Loic Dayon², John Corthesy², Umberto de Marchi², Antonio Nunez², Andreas Wiederkehr², Rosa Viner³, Michael Blank³, Steve Danielson³, Madalina Oppermann¹, Martin Hornshaw¹, Martin Kussmann^{2,4,5}

¹ThermoFisher Scientific, UK, ²Nestle Institute of Health Sciences, Switzerland, ³Thermo Fisher Scientific (San Jose), USA, ⁴Faculty of Life Sciences, Ecole Polytechnique Federale Lausanne (EPFL), Switzerland,

⁵Faculty of Sciences, Aarhus University, Denmark

POS-03-154 PS01-04

Quantitative CID Cleavable Crosslink Strategy on a Benchtop Instrument Using All-Ion-Fragmentation and SILAC

Richard Alexander Scheltema, Herbert Schiller, Matthias Mann

Max Planck Institute for Biochemistry, Germany

POS-03-155

Compared Performances of Different Targeted Proteomics Approaches on a Benchtop UHR-Q-TOF

Stephanie Kaspar¹, Wolfgang Jabs¹, Andrew Percy², Carsten Baessmann¹, Pierre-Olivier Schmit⁴, Jouji Seta³, Christoph Borchers²

¹Bruker Daltonik GmbH, Germany, ²University of Victoria, Genome BC Proteomics Centre, Canada,

³Bruker Daltonics K.K., Japan, ⁴Bruker Daltonique S.A., France

POS-03-156 ★Travel Award

Global *In Vivo* Terminal Amino Acid Labeling for Exploring Dialyzed Serum Cultivation Induced Proteins Differential Expression in SILAC Studies

Li-Qi Xie^{1,2}, Ai-Ying Nie¹, Chao Zhao², Lei Zhang¹, Peng-Yuan Yang^{1,2}, Hao-Jie Lu^{1,2}

¹Shanghai Cancer Center and Department of Chemistry, Fudan University, China, ²Key Laboratory of Medical Molecular Virology and Institutes of Biomedical Sciences, Shanghai Medical College, Fudan University, China

POS-03-157

Quantitative Proteomics Analysis Reveals the Significant Changes on the Cell Shape and Energy Shift After IPTG Inducing Via SILAC Approach on *Escherichia coli*

Heng Zhang¹, Lingyan Ping¹, Duc M. Duong^{1,3}, Eric B. Dammer^{1,3}, Linhui Zhai¹, Lei Chang¹, Junzhu Wu², Ping Xu¹

¹State Key Laboratory of Proteomics, Beijing Proteome Research Center, National Engineering Research Center for Protein Drugs, National Center for Protein Sciences Beijing, Beijing Institute of Radiation Medicine, China, ²Wuhan University, China, ³Emory University, USA

POS-03-158

A Hybrid Multiple Reaction Monitoring Method Using mTRAQ/iTRAQ Labeling for Multiplex Absolute Quantification and Validation of Human Colorectal Cancer Biomarker

Hong-Rui Yin^{1,2}, Lei Zhang¹, Li-Qi Xie¹, Li-Yong Huang¹, Ye Xu¹, San-Jun Cai¹, Peng-Yuan Yang^{1,2}, Hao-Jie Lu^{1,2}

¹Shanghai Cancer Center and Institutes of Biomedical Sciences, Fudan University, China, ²Department of Chemistry, Fudan University, China

POS-03-159

Increasing the Breadth and Depth of Multi-Notch MS3-based TMT Quantitation Using a Hybrid Q-OT-qIT Mass Spectrometer

Graeme Mcalister¹, Edward Huttlin¹, Mark Jedrychowski¹, Martin Wuehr¹, Ramin Rad¹, David Nusinow¹, Philip Remes², Jesse Canterbury², Vlad Zabrouskov², Justin Blethrow², Shannon Eliuk², Mike Senko², Julian Saba², Wilhelm Haas¹, Steven Gygi¹

¹Harvard Medical School, USA, ²Thermo Fisher Scientific (San Jose), USA

POS-03-160

Development of SRM Methods for the Detection and Quantification of Chromosome 16 Proteins

Maria I Mora¹, Nuria Colome², Francesc Canals², Felipe Clemente³, Concha Gil³, Patricia Fernandez⁴, Cristina Ruiz⁴, Irene Orera⁵, Silvia Barcel⁶, Miguel Marcilla⁷, Juan Pablo Albar^{1,7}, Fernando J. Corrales¹

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POS-03-161

Proteomic Analysis of Whole Glomeruli in Patients with IgA Nephropathy Using Micro-Sieving

Shigeki Kojima^{1,2}, Kenichiro Koitabashi², Nobuko Iizuka¹, Kazuki Okamoto¹, Mitsumi Arito¹, Toshiyuki Sato¹, Manae (S) Kurokawa¹, Naoya Suematsu¹, Takashi Yasuda², Kenjiro Kimura², Tomohiro Kato¹

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POS-03-162

Whole Cell Proteome Quantification and Cell Shaving Analyses of the *Staphylococcus aureus* Response to Oxacillin

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POS-03-163

Proteome-Wide Dysregulation by G6PD Reveals a Novel Protective Role for G6PD in Aflatoxin B1-Mediated Cytotoxicity

Hao-Ping Liu¹, Hsin-Ru Lin^{2,3}, Daniel Tsun-Yee Chiu^{2,3}, Chih-Ching Wu^{1,2,3}

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POS-03-164

YI02-06

Quantitative Proteomic Approach to Identify Proteins

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POS-03-165

Advanced SILAC Proteomic Analysis of Human Protein Replacement Stable Cell Lines Established Using snoMEN-PR Vector

Motoharu Ono¹, Kayo Yamada¹, Akinori Endo¹, Fabio Avolio², Angus I. Lamond¹

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POS-03-166

Quantification and Mathematical Modeling of the CD95 Death Inducing Signaling Complex

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POS-03-167

Further Exploration of Plasma Biomarkers for Alzheimers Disease Using Isotopic Tandem Mass Tags and a Combined Targeted /Non-Targeted LC/MS/MS Method

Christopher Lossner¹, Stephan Jung¹, Emma Lahert², Ian Pike², Hans-Dieter Zucht¹, Malcolm Ward²

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POS-03-168

Phosphoproteomic Analysis of ABA Signaling Pathways in Physcomitrella Patens

Yoshimasa Honda¹, Naoyuki Sugiyama², Mayuri Kuwamura³, Ryosuke Terao¹, Kozue Ishizuka¹, Yoichi Sakata³, Daisuke Takezawa⁴, Kazuo Shinozaki⁵, Yasushi Ishihara², Taishi Umezawa¹

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POS-03-169

Detection of Cellular Response to an in Vitro Challenge with Bacterial Gram-Negative Lipopolysaccharides (LPS) in Peripheral Blood Mononuclear Cells (PBMCs)

David A Sarracino, Jennifer Sutton, Maryann S Vogelsang, Bryan Krastins, Gregory Byram, Amol Prakash, Dayana Argoti, Scott Peterman, Mary Lopez

BRIMS, Thermo Fisher Scientific, USA

POS-03-170

Integrating Genetics and Phosphoproteomics Reveals a Protein Phosphorylation Network in the Abscisic Acid Signaling Pathway in *Arabidopsis*

Taishi Umezawa¹, Naoyuki Sugiyama^{2,3}, Fuminori Takahashi⁴, Jeffrey C. Anderson⁵, Ryosuke Terao¹, Koze Ishizuka¹, Yasushi Ishihama^{2,3}, Scott Peck⁵, Kazuo Shinozaki⁴

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POS-03-171

Comprehensive Study of Redox Proteomics in THP-1 Cells Using a Modified Biotin-Switch Assay

Ru Li, Juergen Kast

University of British Columbia, Canada

POS-03-172 P532-05

A Proteomic Investigation of Proteasome Malfunctioning

Karen A Sap, Karel Bezstarosti, Dick HW Dekkers, Olaf Voets, Erikjan Rijkers, C Peter Verrijzer, Jeroen AA Demmers

Erasmus University Medical Center, The Netherlands

POS-03-173

Variability of Signature Peptide Production in Bottom-Up Proteomics

Siri Valen Egeland, Leon Reubsaet, Trine Gronhaug Halvorsen

Department of Pharmaceutical Chemistry, School of Pharmacy, University of Oslo, Norway

POS-03-174

Discovery of Subnanomolar Serum/Plasma Biomarkers Inclusive of Albumin-Bound Molecules by Novel Sample Pretreatment and High Quality Comparative Analysis

Yoshio Kodera^{1,2,3}, Yuya Hidoh², Tatsuya Saito², Yusuke Kawashima^{1,2}, Kazuyuki Sogawa^{3,4}, Satoru Minamida⁵, Kazumasa Matsumoto⁵, Masatsugu Iwamura⁵, Shiro Baba⁵, Tadakazu Maeda¹, Takeshi Tomonaga^{3,6}, Fumio Nomura^{3,7}

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POS-03-175 ★Travel Award

Revealing the Membrane Proteome, Phosphoproteome and Sialome of Human Embryonic and Neural Stem Cells

Marcella N Melo-Braga¹, Melanie Schulz¹, Qiuyue Liu², Andrzej Swistowski², Giuseppe Palmisano¹, Kasper Engholm-Keller¹, Lene Jakobsen¹, Xianmin Zeng², Martin R Larsen¹

¹Biochemistry and Molecular Biology, University of Southern Denmark, Denmark, ²Buck Institute for Age Research, USA

POS-03-176

Quantitative Phosphoproteomics Studies Reveal Different Signaling Events for Cultured Distal Convoluted Tubular Cells Upon Vasopressin or Angiotensin II Stimulation

Lei Cheng, Trairak Pisitkun, Robert Fenton

Department of Biomedicine, Aarhus University, Denmark

POS-03-177

A Proteomics-Based Study to Reveal Profilin1-Induced Molecular Changes in Breast Cancer Cells

Joelle Victorine Coumans¹, David Gau², Anne Poljak³, Valerie Wasinger³, Partha Roy², Pierre Moens¹

¹University of New England, Australia, ²University of Pittsburgh, USA, ³University of New South Wales, Australia

POS-03-178

Using 2D-PAGE and iTRAQ Proteomics Approaches to Investigate the Effect of Cigarette Smoke Fraction Exposure on Primary Normal Human Bronchial Epithelial (NHBE) Cells

Ashraf Elamin, Thomas Schneider, Sophie Dijon, Fabio Talamo, Sandra Wagner, Ulrike Kogel, Caole Mathis, Julia Hoeng, Patrick Vanscheeuwijck, Manuel Peitsch

Philip Morris Products S.A.

POS-03-179

Protein Expression Analysis of Soft-Tissue Sarcomas

Ufuk Kirik¹, Fredrik Levander¹, Peter James¹, Ana Carneiro^{2,3}

¹Lund University, Department of Immunotechnology, Sweden, ²Lund University, Department of Oncology, Sweden, ³Skane University Hospital, Institute of Clinical Sciences

POS-03-180

Mechanism Survey on Cell Senescence Induced by the Knockdown of Cathepsin D Through Quantitative Proteomic Approach

Siyuan Su¹, Ju Zhang¹, Huiying Sun¹, Xu Zhu¹, Ningzhi Xu², Siqi Liu¹, Xiaomin Lou¹

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Sample Preparation and Preprocessing

POS-03-181

Why Less is More When Generating Tryptic Peptides for Bottom-Up Proteomics

Siri Hildonen, Trine Gronhaug Halvorsen, Leon Reubsæet

Department of Pharmaceutical Chemistry, School of Pharmacy, University of Oslo, Norway

POS-03-182

Rapid and Simple Method of Tamm-Horsfall Protein Removal for Urinary Exosomal Protein Identification

Aki Nakayama¹, Yuki Arai², Akira Katayama³, Hidenori Suzuki⁴, Kiyoko Shiba², Shiro Iijima^{1,2}

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POS-03-183

Depletion of Abundant Plasma Proteins by Irreversible Trapping in Poly-N-Isopropylacrylamide-Acrylic Acid Hydrogel Particles

Gerard Such-Sanmartin, Estela Ventura-Espejo, Ole Norregaard Jensen

Protein Research Group, Department of Biochemistry and Molecular Biology, University of Southern Denmark, Denmark

POS-03-184

Selective Preparation of Faecal Material for Parasite Proteome and Biomarker Identification

Francesca M. Jones¹, Richard Lipscombe², R.C. Andrew Thompson¹

¹Murdoch University, Australia, ²Proteomics International, Australia

POS-03-185

Quantitative Analysis of Whole Proteome Using Denator in Two Human Cancer Cell Lines Treated with Doxorubicin

Albert-Baskar Arul¹, Na-Young Han¹, Young-Su Jang², Hwan-Mook Kim², Hookeun Lee^{1,2}

¹Lee Gil Ya Cancer and Diabetes Institute, College of Pharmacy, Gachon University, Korea, ²College of Pharmacy, Gachon University, Korea

POS-03-186

Electrostatic Repulsion-Hydrophilic Interaction Chromatography for Profiling of Human Urine Shotgun Proteome

Michiko Takakura, Hiroyuki Unoki-Kubota, Yasushi Kaburagi

Department of Diabetic Complications, Diabetes Research Center, Research Institute, National Center for Global Health and Medicine, Japan

POS-03-187

Middle-Down Proteomic Analysis of Embryonic Proteins Secreted Prior to Implantation

Unige A. Laskay¹, Kristina Srzentic¹, Tanja Panic-Jankovic², Michel Monod³,

Goran Mitulovic², Yury O. Tsybin

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POS-03-188

PS20-03

Development of Universal Protocols for Clinical Tissue Phosphoproteomics Optimized for Formalin-Fixed Paraffin-Embedded Specimens

Mayu Ogura, Masaki Wakabayashi, Naoyuki Sugiyama, Yasushi Ishihama

Kyoto University, Japan

POS-03-189

Differential Solubilization Method to Extract Low-Molecular-Weight Proteins/Peptides for Successful Serum SRM Analyses

Mamoru Satoh^{1,2,4}, Yusuke Kawashima³, Tatsuya Saito³, Masumi Ishibashi¹,

Kazuyuki Sogawa^{1,2}, Sayaka Kado⁴, Yoshio Kodera^{1,3}, Fumio Nomura^{1,2}

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POS-03-190

Selective Analysis of Cell Surface-Associated Proteins: Characterization of Intracellular Proteins that are Released from Damaged Cells and Interact with the Surface of Human Monocytic Cell Line U937

Tomonori Izumi, Katsumi Yokoyama, Isao Sakaida

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POS-03-191

Evaluation of OFF Gel- Based Prefractionation Approach in Combination with In-Solution or Ultra Filtration Protein Digestion

Sameh Magdeldin, Keiko Yamamoto, Yutaka Yoshida, Bo Xu, Ying Zhang, Shymaa Enany, Eishin Yaoita, Tadashi Yamamoto

Department of Structural Pathology, Institute of Nephrology, Niigata University, Japan

POS-03-192

Method Development for Metaproteomic Analyses of Biofilms from Methanogenic Consortia Degrading Terephthalate

Hung-Jen Huang, Jer-Horng Wu

Department of Environmental Engineering, National Cheng Kung University, Taiwan

POS-03-193

Application of Group Specific Anti-Peptide Antibodies for Immunoaffinity Enrichment of Signature Peptides of Allergens from Food Samples

Kerstin Pohl¹, Christopher J. Pynn¹, Silvia Panther¹, Sven Hellwig¹, Hannes Planatscher², Bart H.J. van den Berg², Frederik T. Weiss², Cornelia Sommersdorf², Thomas O. Joos², Oliver Poetz², Joerg Bergemann¹, Dieter Stoll^{1,2}

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POS-03-195

Boronate Affinity Materials for the Selective Enrichment of Glycoproteins for Proteomic Analysis

Zhen Liu

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POS-03-196

A Graphene Based Soft Material Platform for Facile One-Step Glycan Enrichment and Derivatization for MALDI-TOF-MS Analysis

Haihong Bai, Wanjun Zhang, Weijie Qin, Xiaohong Qian

State Key Lab of Proteomics, Beijing Proteome Research Center, National Engineering Research Center for Protein Drugs, National Center for Protein Sciences Beijing, Beijing Institute of Radiation Medicine, China

POS-03-197

Accurate Quantification of Peptides for Mass Spectrometric Analysis: A Modified Micro-Scale Bicinchoninic Acid Assay

Yutaka Yoshida¹, Miki Hasegawa^{1,2}, Lim Lay Cheng³, Takashi Shiromizu⁴, Yasuhiro Hara⁴, Akiko Kanagawa⁴, Yu Koyama², Eishin Yaoita¹, Toshifumi Wakai², Takeshi Tomonaga⁴, Tadashi Yamamoto¹

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Stem Cell Biology: ES, iPS, Cancer Stem Cells

POS-03-198

iTRAQ Proteome Analysis of Inner Cell Mass Derived Versus Epiblast Derived Murine Embryonic Stem Cells

Thomas Frohlich¹, Miwako Kusters¹, Alexander Graf¹, Eckhard Wolf¹, Julianna Kobolak², Vincent Brochard⁴, Andras Dinnyes^{2,3}, Alice Jouneau⁴, Georg J. Arnold¹

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POS-03-199

Proteome Dynamics During Reprogramming of Fibroblasts to the Pluripotent State

Jenny Hansson¹, Mahmoud Reza Rafiee¹, Sonja Reiland¹, Jose M. Polo²,
Konrad Hochedlinger², Jeroen Krijgsveld¹

¹European Molecular Biology Laboratory, Germany, ²Harvard Stem Cell Institute, USA

POS-03-200

Sox2, Oct4 and Nanog, Key Stem Cell Transcriptional Factors, Contribute to Different Aspects of Cancer Stem-Like Properties of HCC

Yan Li¹, Chun Sun², Lu Sun², Yin Kun Liu^{1,2}

¹Liver Cancer Institute, Zhongshan Hospital, Fudan University, China, ²Institutes of Biomedical Sciences, Fudan University, China

POS-03-201

Transgelin Regulates Metastatic Ability of Cancer Stem Cells

Won-Yong Jeong, Eun-Kyung Lee, Gi-Yeon Han, Yeo-Ju Song, Chan-Wha Kim

Korea University, Korea

POS-03-202

★Travel Award

Generating a Proteomic Profile on Neurogenesis, Through the Comparison of Differentiating Human Foetal Neural Stem Cells

Shaun Garnett¹, Jignesh Tailor², Austin Smith², Kathryn Lilley², Susan Kidson¹,
Jonathan Blackburn¹

¹University of Cape Town, South Africa, ²University of Cambridge, UK

POS-03-203

Comparative Nuclear Proteomic Analysis of Spermatogonial Stem Cells and Differentiating Spermatogonia Induced by Retinoic Acid

Kazue Kakiuchi, Kiyohiko Takagishi, Hiroshi Kubota

Lab. of Cell and Mol. Biol. Sch. of Vet. Med., Kitasato Univ., Japan

POS-03-204

Integrated Proteomics Identified the Differentiation Niche Induced by Glioma Stem Cells

Akiko Niibori Nambu¹, Uichi Midorikawa¹, Souhei Mizuguchi¹, Takuichiro Hide²,
Minako Nagai¹, Yoshihiro Komohara³, Megumi Nagayama¹, Mio Hirayama¹,
Daiki Kobayashi¹, Hideo Nakamura², Motohiro Takeya³, Jyunichi Kuratsu², Norie Araki¹

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POS-03-205

High-Resolution Accurate Mass (HRAM) and Intelligent Acquisition-Enabled Global Discovery and Quantification of Histones, Histone PTMs and Histone Modification Enzymes in Mesenchymal Stem Cells

Amol Prakash¹, Maryann S Vogelsang¹, David Sarracino¹, Scott Peterman¹,
Victoria V Lunyak², Benny Blackwell², James R Tollervey², Shadab Ahmad¹,
Gregory Byram¹, Bryan Krastins¹, Mary F Lopez¹

¹BRIMS, Thermo Fisher Scientific, USA, ²Buck Institute for Age Research, USA

POS-03-206

Marked Expression of MSY Genes During Differentiation of Human Embryonic Stem Cells Into Dopaminergic Precursor Cells

Mehdi Sharifi Tabar¹, Ali Fathi², Haghghat Vakilian¹, Mehdi Alikhani², Hossein Baharvand²,
Ghasem Hosseini Salekdeh¹

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Systems Biology

POS-03-207

Investigating the Group A *Streptococcus* Surface Proteome Dynamic Using a Combination of Mass Spectrometry Techniques

Ola Kilsgard, Christofer Karlsson, Johan Malmstrom
Department of Immunotechnology, Sweden

POS-03-208

Comparative Analyses of Cellular Responses to Different Aggregation-Prone Proteins

Andre Melnik¹, Martin Soste¹, Dan Tardiff², Kent Matlack², Alexander Schmidt³,
Susan Lindquist², Paola Picotti¹
¹ETH Zurich, Switzerland, ²Whitehead Institute of Biomedical Research, USA, ³Biocentre, University of Basel, Switzerland

POS-03-209

An Integrative Systems Analysis of Glioma and Medulloblastoma for the Identification of Diagnostic and Therapeutic Targets

Rekha Jain, Sanjeeva Srivastava
Department of Biosciences and Bioengineering, Indian Institute of Technology Bombay, India

POS-03-210

Expanding the Known Substrate Degradome of Snake Venom Metalloproteinases by Mass Spectrometric Analysis Using PICS and TAILS

Andre Zelanis¹, Pitter F. Huesgen², Anna Prudova², Lindsay Rogers², Philipp Lange²,
Ana Karina Oliveira¹, Alexandre K. Tashima^{1,3}, Christopher M. Overall²,
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POS-03-211

Integrative Transcriptomic and Proteomic Data Analysis to Identify OSCC-Relevant Protein Targets

Li-Chieh Julie Chu¹, Chia-Wei Hsu², Shu-Jen Chen^{1,2}, Chih-Ching Wu^{1,3}, Jau-Song Yu^{1,2}
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POS-03-212

Multi-parameter Systematic Strategy Opinion that Predicts, Prevents and Personalized Treats a Cancer

Xianquan Zhan, Xiaowei Wang, Rong Hu
Xiangya Hospital, Central South University, China

POS-03-213 PS21-04

An Integrated View on the Exploitation of Affinity Purification-Mass Spectrometry Data

Jacques Colinge¹, Alexey Stukalov¹, Roberto Sacco¹, Andreas Pichlmair²,
Keiryn L. Bennett¹, Giulio Superti-Furga¹
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POS-03-214

Prediction of Phosphorylated Residues Based on Machine Learning Technique and Large Scale Phosphoproteomics Experiment

Satoshi Tamaki¹, Haruna Imamura², Masaru Tomita¹, Naoyuki Sugiyama², Yasushi Ishihama²

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POS-03-215

Integration of 'omics and Phenotypic Data to Elucidate Mechanisms of Social Immunity

M. Marta Guarna¹, Matthew Bundala¹, Kyung-Mee Moon¹, Rick White¹, Robert Parker^{1,4}, Elizabeth Huxter², Andony P Melathopoulos³, Stephen F Pernal³, Leonard J Foster¹

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POS-03-216

Proteogenomics Framework to Elucidate TGF β Induced Epithelial to Mesenchymal Transition (EMT)

Shivashankar H Nagaraj¹, Magdalene Michael², Nicola Waddell¹, Alun Jones², Katia Nones¹, David Miller¹, John V Pearson¹, Alpha S. Yap², Sean M Grimmond¹

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POS-03-217

Hemorrhagic Activity of HF3, A Snake Venom Metalloproteinase: Insights from the Peptidomic Analysis of Muscle Cells

Milene Cristina Menezes, Andre Zelanis, Ana Karina Oliveira, Eduardo Shiguelo Kitano, Amanda Francine Asega, Solange Maria de Toledo Serrano

Laboratorio Especial de Toxinologia Aplicada, Instituto Butantan, Brazil

POS-03-218

Comparative Analysis of Platelets Stimulated with Thrombin, TRAP and PA-BJ: A Proteomics Approach

Ana K. Oliveira¹, Andre Zelanis¹, Aline S. Lopes², Eduardo S. Kitano¹, Marcelo L. Santoro³, Solange M. T. Serrano¹

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POS-03-219

Assessment of the Activation Profile of Multiple Small GTPase Isoforms Using Targeted Proteomics

Chengcheng Zhang, Juergen Kast

The Biomedical Research Centre, University of British Columbia, Canada

POS-03-220

Sentinel Protein Assays Take System-Wide Snapshots of Alpha-Synuclein Induced Cytotoxicity

Martin Soste¹, Stefanie Wanka², Andre Melnik¹, Timon Wernas¹, Alexander Schmidt³, Christian Von Mering², Paola Picotti¹

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POS-03-221

The Methylproteome Network of *Saccharomyces cerevisiae*

Marc R. Wilkins

University of New South Wales, Australia

POS-03-222

Protein Quantitative Trait Locus (pQTL) Analysis in Mouse by Targeted Proteomics

Yibo Wu¹, Evan G. Williams², Johan Auwerx², Ruedi Aebersold¹

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POS-03-223

Platelet Secretory Granules Proteome Characterization: Association with Platelet Reactivity in Stable Cardiovascular Patients Treated with Aspirin

Anne Zufferey^{1,2}, Mark Ibberson³, Domitille Schvartz², Severine Nolli^{1,2}, Jean-Luc Reny⁴, Ioannis Xenarios³, Jean-Charles Sanchez², Pierre Fontana^{1,2}

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Top-Down Proteomics

POS-03-224

Top-Down Analysis of Intact Antibodies Using Orbitrap Mass Spectrometry

Eugen Damoc, Eduard Denisov, Alexander Makarov

Thermo Fisher Scientific (Bremen), Germany

POS-03-225 PS05-03

Top-Down and Flexible Analysis of Protein Using MALDI In-Source Decay

Mitsuo Takayama

Yokohama City University, Japan

Other Topics in Proteomics

POS-03-226

Global Proteomic Analysis of Intracellular and Extracellular Amastigote Forms of *Trypanosoma cruzi* Reveals Key Differences in Morphologically Similar Parasites

Igor C. Almeida¹, Alexandre F. Marques¹, Tiago J.P. Sobreira², Clemente Aguilar-Bonavides¹, Alexey I. Nesvizhskii³, Hyungwon Choi⁴, Ariel M. Silber⁵, Ernesto S. Nakayasu¹

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POS-03-227

Investigation of Effects of Angiotensin II (ATII) on Human Articular Chondrocytes by Proteomic Approach

Wataru Endo¹, Mitsumi Arito¹, Toshiyuki Sato¹, Manae S. Kurokawa¹, Kazuki Okamoto¹, Naoya Suematsu¹, Kazuki Omoteyama¹, Moroe Beppu², Tomohiro Kato¹

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POS-03-228

Investigation of Effects of Edaravone on Human Brain Microvascular Endothelial Cells

Hidetaka Onodera^{1,2}, Mitsumi Arito¹, Toshiyuki Sato¹, Manae S. Kurokawa¹, Kazuki Okamoto¹, Naoya Suematsu¹, Yuichiro Tanaka², Takuo Hashimoto², Tomohiro Kato¹

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POS-03-229

Production and Characterization of Monoclonal Antibodies to Hepatitis B Virus X (HBx) Protein

Shun-ichi Asano, Satoko Matsunaga, Akihide Ryo

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POS-03-230

Lipidomic Profiling Using a Prototype Microfluidic MS Platform

G Astarita¹, A Doneanu¹, W Thompson², SA Cohen¹, G Isaac¹, J Johnson¹, MA Moseley², J Murphy¹, JI Langridge³, Yukari Haramaki¹

¹Waters Corporation, USA, ²Duke Proteomics Core Facility, USA, ³Waters Corporation, UK

POS-03-231

The Anticancer Curcumin Induces the Unfolded Protein Response in Prostate Cancer Cells

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POS-03-232

Use Specific Proteins of Taiwan Tea as Biomarkers for the Certification of Origin

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POS-03-233

Moss Proteomics and Peptidomics. Peptides in the Stress Adaptation Process

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POS-03-234

Analysis of p53 Transcriptional Activity Toward the Promoters of Target Genes in Living Cells

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POS-03-235

Phosphoproteomic Analysis of *Rhodospseudomonas palustris* Reveals the Role of Pyruvate Phosphate Dikinase Phosphorylation in Lipid Production

Chia-Wei Hu¹, Miao-Hsia Lin², Hsuan-Cheng Huang³, Wei-Chi Ku⁴, Tsun-Hsuan Yi¹, Chia-Feng Tsai⁵, Yu-Ju Chen⁵, Naoyuki Sugiyama⁴, Yasushi Ishihama⁴, Hsueh-Fen Juan^{1,7}, Shih-Hsiung Wu²

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POS-03-236

Y Chromosome-Located Gene, Lysine-Specific Demethylase 5D, Associated with Prostate Cancer Progression

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POS-03-237

Generation and Utilization of Full-Length Recombinant Proteins of Human T-cell Leukemia Virus Type 1

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POS-03-238

Wheat Germ Cell-Free Protein Production of Human Immunodeficiency Virus Accessory Protein Vif

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POS-03-239

Influence of Arginine, Lysine, Phenylalanine Residues and Phosphorylation on the Positive- and Negative-Ion Yields of Peptides in ESI-MS

Issey Osaka, Mitsuo Takayama

Yokohama City University, Japan

POS-03-240

Bioinformatics Analysis of Protein Dynamics in Urine of Healthy Volunteers Exposed 105-Day Isolation

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POS-03-241

Process Optimization for Shake Flask Bio-Treatment of Disperse Yellow 9 Textile Dye with White-Rot Fungi and Their Enzymes

Muhammad Ramzan¹, Muhammad Asgher¹, Raymond Legge²

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POS-03-242

Identification of *HAMP* Transcript Variant Coding for an Abnormal Polypeptide in Human Hepatoma-Derived Cell Line HLF

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POS-03-243

Venom Proteomics of the Brazilian Spider *Acanthoscurria gomesiana*

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POS-03-244

Proteomic Analysis of Two Transcriptional Start Sites of the *argC* Gene and Its Implication on the *Sinorhizobium meliloti* Physiology

Maria del Carmen Vargas-Lagunas, Angel Gabriel Martinez, Rafael Diaz,
Emmanuel Salazar, Yolanda Mora, Sergio Encarnacion, Jaime Mora

Programa Genomica Funcional de Procariorotes. Centro de Ciencias Genomicas. Universidad Nacional Autonoma de Mexico, Mexico

POS-03-245

Proteomic Analysis of Hepatocarcinoma Cell Line SMMC7721 in Response to Over Expression of the RING Finger Protein, HSPC238

Suihai Wang, Xiaobo Wang, Ming Li

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POS-03-246

Biomarkers of Social Immunity in Honey Bees: Real-World Application of Biomarkers in a Marker-Assisted Selective Breeding Program

M Marta Guarna¹, Kyung-Mee Moon¹, Rick White¹, Derek Smith², Elizabeth Huxter³,
Heather Higo¹, Shelley Hoover⁴, Abdullah Ibrahim⁴, Robert Currie⁵, Christoph Borchers²,
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POS-03-247

Depth and Width of Human Proteome

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POS-03-248

The Utility of ETD in Peptidomics for Endogenous Secretory Peptides

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POS-03-249

Pyrococcus Furiosus: The Perfect Standard for Proteomics?

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POS-03-250

Alcohol Induced ER Stress Markers in Human Microglia Cells

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Janaina Alves¹, Luis Cubano¹, Shilpa Buch², Nawal Boukli¹

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POS-03-251

Identification of Cell Polarity Target Phospho-Protein by Using Inducible Gene Knock-Out Strategy

Masa-aki Nakaya

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POS-03-252

Analysis of Structural Changes in Erythropoietin by LC/MS Induced by Different pH Conditions

In-Rok Oh, Dong-Ho Ha, Hyun-Jung Kim, Chan-Wha Kim

Korea University, Korea

POS-03-LB-001

On-Line Chip-Based Strategy for 2D Fractionation - Comparing Peptides Found between 1D and 2D Proteomic Analysis

Tina Settineri¹, Christie Hunter², Jenny Albanes², Xiang Zhu¹, Remco van Soest¹

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POS-03-LB-002

Shedding Light on Placental Infection and Inflammation in Preterm Birth by Terminomics - A Comprehensive Protein Termini Orientated Genome Wide Analysis of Human Placental Tissue

Ulrich Eckhard, Pitter F Huesgen, Philipp F Lange, Karen Nguyen, Reinhild Kappellhoff, Christopher M Overall¹

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POS-03-LB-003

Glycosylation Profiling of Cancer Biomarkers by a Nanoprobe-Based Strategy Combined with Lectin-Based Enrichment

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POS-03-LB-004

The Role of Collapsin Response Mediator Protein 2 in Amyloid- β 25-35 Induces Impairment of Cognitive Function and Long-Term Potentiation

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POS-03-LB-005

Insights into UV-A & Dark Incubation Induced Paclitaxel in *Taxus chinensis* by Genomic and Proteomic Analysis

Wen Zheng, Lianli Sun, Lin Zhang, Jingkui Tian

College of Biomedical Engineering & Instrument Science, Zhejiang University, China

POS-03-LB-006

Enzymatic Approach to Reduce the Complexity of Proteome Samples by Depleting Glutamine-Containing Peptides

Yanbo Pan, Mingliang Ye, Hanfa Zou

CAS Key Lab of Separation Sciences for Analytical Chemistry, National Chromatographic Research and Analysis Center, Dalian Institute of Chemical Physics, Chinese Academy of Sciences, China

POS-03-LB-007

Systematic Evaluation of Ultrahigh Resolution MS Instrument Parameter to Optimize Topdown Analysis

Martin Zeller¹, Mathias Mueller¹, Eugen Damoc¹, Eduard Denisov¹, Alexander Makarov¹, Dirk Nolting¹, Shannon Eliuk², Justin Blethrow², August Specht², Thomas Moehring¹, Vlad Zabrouskov²

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POS-03-LB-008

Characterization of Monoclonal Antibodies with LC-MS by Integration of *De Novo* Sequencing and Database Search

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POS-03-LB-009

Proteomic Investigation of Breast Cancer Biomarkers Using Human Plasma and Serum Samples

Julia Beretov^{1,2,3}, Valerie Wasinger⁴, Peter Schwartz⁵, Peter Graham^{1,2}, John Kearsley^{1,2}, Yong Lj^{1,2}

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POS-03-LB-010

Ero1alpha and PDIs Constitute a Hierarchical Electron Transfer Network of Endoplasmic Reticulum Oxidoreductases

Kazutaka Araki^{1,2}, Shun-ichiro Iemura³, Yukiko Kamiya^{4,5}, David Ron⁶, Koichi Kato^{4,5,7}, Tohru Natsume¹, Kazuhiro Nagata²

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POS-03-LB-011

Zebrafish Scube1 [Signal Peptide-CUB (Complement Protein C1r/C1s, Uegf, and Bmp1)-EGF Domain-Containing Protein 1] Is Involved in Primitive Hematopoiesis

Ku-Chi Tsao¹, Cheng-Fen Tu¹, Shyh-Jye Lee², Ruey-Bing Yang¹

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POS-03-LB-012

Serum *N*-Glycans Profiling for the Discovery of Potential Oral Cancer Tumor Markers

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Department of Medical Laboratory Science and Biotechnology, College of Medicine, National Cheng Kung University

POS-03-LB-013 ★Travel Award

Proteomic Alterations of *Plasmodium falciparum* by Dihydroartemisinin, Mefloquine and Chloroquine

Patcharee Isarankura-Na-Ayudhya^{1,2,3}, Suthidarak Chaijan¹, Jarunee Vanichthanankul¹, Chairat Uthaipibull¹, Phantip Vattanaviboon², Yongyuth Yuthavong¹, Sumalee Kamchonwongpaisan¹

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POS-03-LB-014

Proteomic Analysis of Urine from HIV Co-Infected Tuberculosis Patients

Pichapat Piamrojaphat¹, Rodjana Suyayai¹, Pacharee Kantipong², Supalert Nedsuwan², Norio Yamada³, Sittiruk Roytrakul⁴

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POS-03-LB-015

Targeted Quantification of TMPRSS2-ERG Fusion Protein Products in Prostate Cancer Cell Lines and Tumors Using an Antibody-Independent PRISM-SRM Approach

Jintang He¹, Xuefei Sun¹, Tujin Shi¹, Athena A Schepmoes¹, Thomas L. Fillmore², Vladislav A. Petyuk¹, Fang Xie¹, Naoki Kitabayashi³, Sung-Suk Chae, Mark A. Rubin³, Javed Siddiqui^{4,5}, John T. Wei⁴, Arul M. Chinnaiyan⁵, Wei-Jun Qian¹, Richard D. Smith¹, Jacob Kagan⁶, Sudhir Srivastava⁶, Karin D. Rodland¹, Tao Liu¹, David G. Camp II¹

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POS-03-LB-016

An Experimental Platform for the Analysis of Mammalian Protein Interaction Networks and Ligand Receptor Interactions

Thomas Uhlmann, Björn Wienke, Daniel Auerbach
Dualsystems Biotech AG

POS-03-LB-017

Bottom-Up Mass Spectrometry Reveals Biomarker Candidate Proteins in Cerebrospinal Fluid of Patients Treated with Electric Spinal Cord Stimulation for Severe Chronic Pain

Anne-Li Lind^{1,2}, Marcus Sjodin², Lenka Katila¹, Magnus Wetterhall², Torsten Gordh¹

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POS-03-LB-018

Analysis of the Liver Non-Parenchymal Cells Proteome in Response to Ethanol: Novel Molecular Targets of Disease

Xiaofang Jia, Lijun Zhang

Shanghai Public Health Clinical Center Affiliated to Fudan University, China

POS-03-LB-019

Dissection of the Human GalNAc O-Glycoproteome: Mapping Specific Functions of Individual Polypeptide GalNAc-Transferase Isoforms by Zinc-Finger Gene Engineering of Human Cells

Katrine ter-Borch Gram Schjoldager, Sergey Vakhrushev, Yun Kong, Hiren Joshi, Eric Bennett, Ulla Mandel, Hans Wandall, Henrik Clausen
Center for Glycomics, Department of Cellular and Molecular Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Denmark

POS-03-LB-020

Approaching Nanoflow Level Sensitivity Using Microflow Rates for Peptide Quantitation

Christie L Hunter
AB SCIEX, USA

POS-03-LB-021

Using Variable Widths in Q1 Selection Windows to Improve Data Quality in Data Independent Acquisition

Christie L Hunter
AB SCIEX, USA

POS-03-LB-022

Phosphoproteomic Analysis of Pancreatic Cancer Signaling Identifies Drug Targets for Individualized Patient Treatment

David James Britton¹, Yoh Zen², Stefan Selzer¹, Alberto Quaglia², Christopher Loessner¹, Stephan Jung¹, Vikram Mitra¹, Julia Gee⁴, Robert Nicholson⁴, Malcolm Ward¹, Leandro Castellano³, Justin Stebbing³, Hans Dieter Zucht¹, Nigel Heaton², Ian Pike¹
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POS-03-LB-023

EDEM2 and OS-9 are Required for the ER-Associated Degradation of Nonglycosylated Sonic Hedgehog Proteins

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POS-03-LB-024

Derlin2 Facilitates HRD1-Mediated Retro-Translocation of Sonic Hedgehog at the Endoplasmic Reticulum

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POS-03-LB-025

AGSY: Automatic Glycopeptide Sequencing by Y1 Ion

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POS-03-LB-026

Quantitative Proteomic Analysis of Human Lung Tumor Xenografts Treated with the Ectopic ATP Synthase Inhibitor Citreoviridin

Yi-Hsuan Wu, Chia-Wei Hu, Chih-Wei Chien, Yu-Ju Chen, Hsuan-Cheng Huang, Hsueh-Fen Juan

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POS-03-LB-027

Application of Survival Analysis Methodology to the Quantitative Analysis of LC-MS Proteomics Data

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POS-03-LB-028

Y Chromosome Genes Expression Profiling During Differentiation of NT2 Cells to Dopaminergic Neurons Under Androgen Treatments

Haghighat Vakilian¹, Mehdi Sharifi Tabar¹, Lida Habibi Rezei¹, Babak Arefnejad¹, Mehdi Alikhani¹, Zohreh Jangravi, Shahab Mirshahvaladi¹, Hossein Baharvand², Ghasem Hosseini Salekdeh¹

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POS-03-LB-029

Towards the Proteome Profiling and Signature of Glioblastoma

Stanislav Naryzhny, Natalia Ronzhina, Tatiana Shtam, Vladimir Burdakov, Michail Filatov
Petersburg Nuclear Physics Institute, Russia

POS-03-LB-030

Two Dimensional Electrophoresis (2DE) Based Approach for Detecting of Numbers of Protein Species in Cell

Stanislav Naryzhny^{1,2}, Andrey Lisitsa¹, Victor Zgoda¹, Elena Ponomarenko¹, Alexander Archakov¹

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POS-03-LB-031

Prognostic Biomarkers for Predicting Metastatic Relapse versus Non-Relapse Hepatocellular Carcinoma

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POS-03-LB-032

A Novel Oncogenic Gene, L-FABP, Promotes Cancer Cell Migration and Invasion by Inducing the Expression of VEGF-A and MMP-2

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POS-03-LB-033

iPhos: A Tool Kit to Streamline the Label-Free LC-MS-Based Tyrosine Phosphoproteome Investigation

Juo-Ling Sun¹, Tzu-Hsien Yang², Hsin-Yi Wu³, Wei-Sheng Wu², Pao-Chi Liao¹

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POS-03-LB-034

Impact of Human Blood Specimen Collection, Manipulation, and Storage on Protein Integrity and Implications for Use in Clinical Research

Geun-Cheol Gil, Bich Nguyen, Yiyong Zhou, Yuliya Karpievitch, Xiaolei Xie, Daniel Lopez-Ferrer, Michael Schirm, Paul Drogaris, Rene Allard, Julie Lamontagne, Howard Schulman, Daniel Chelsky, Sushmita Mimi Roy

Caprion Proteomics US LLC, USA

POS-03-LB-035

Utilized Mass Spectrometry-Based Protein Profiling System to Identify Potential Biomarkers of Hepatocellular Carcinoma

Ming-Hui Yang, Hung Su, Yu-Chang Tyan

Kaohsiung Medical University, Taiwan

POS-03-LB-036

Is NAP an Additional Neuroprotection in Alzheimer's Disease?

Ming-Hui Yang, Yu-Chang Tyan

Kaohsiung Medical University, Taiwan

POS-03-LB-037

Identification of Specific Epitopes for West Nile Virus Diagnostics

Stefan Chabierski¹, Luisa Barzon², Petra Fiebig³, Uwe G. Liebert³, Anna Papa⁴, Michael S. Diamond⁵, Giorgio Palu², Sebastian Ulbert¹

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POS-03-LB-038

Elucidation of Structure-Activity Relationship of Recombinant Human Kinases by Quantitative Phosphoproteomics

Ayaka Sato, Masaki Wakabayashi, Naoyuki Sugiyama, Yasushi Ishihama

Graduate School of Pharmaceutical Sciences, Kyoto University, Japan

POS-03-LB-039

Antibodypedia - How to Find the Right Antibody for the Right Application

Tove Lovisa Alm, Kalle von Feilitzen

Royal Institute of Technology, Sweden

POS-03-LB-040

Membrane Phosphoproteomics Profiling for the Elucidation of Molecular Dynamics during Sperm Capacitation

Pei-Hsuan Hsieh¹, Ting-Wei Lin^{1,2}, Ben-Hang Lai^{1,2}, Yet-Ran Chen^{1,2}

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POS-03-LB-041

One-Shot Human Proteome Analysis by nanoLC-MS/MS with Meter-Scale Monolithic Silica Capillary Columns

Takeo Kamakura, Suguru Ichihara, Mio Iwasaki, Masaki Wakabayashi, Naoyuki Sugiyama, Yasushi Ishihama
Kyoto University, Japan

POS-03-LB-042

On-Line Chip-Based Strategy for 2D Fractionation - Comparing Peptides Found between 1D and 2D Proteomic Analysis

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¹K.K. AB Sciex, ²AB Sciex, USA, ³Eksigent

POS-03-LB-043

Proteomic Analysis of Proteins Involved in Apoptosis during Leukaemic Cells Treatment with HDACI BML-210

Veronika Viktorija Borutinskaite, Ruta Navakauskiene
Dept. of Molecular Cell Biology, Institute of Biochemistry, Vilnius University, Lithuania

POS-03-LB-044

In-Depth 2-DE Reference Map of a Medically Important Fungus, *Aspergillus fumigatus*, and Proteomic Profiling on Exposure to Itraconazole

Poonam Gautam^{1,2,3}, Dolly Mushahary¹, Wazid Hassan^{2,9}, Santosh Kumar Upadhyay^{2,7}, Taruna Madan^{2,4}, Ravi Sirdeshmukh^{1,8}, Curam Sreenivasacharlu Sundaram¹, Wasudev Namdev Gade⁵, Puranam Usha Sarma^{2,6}

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POS-03-LB-045

Glycopeptide and Glycan Analysis of Monoclonal Antibodies Using Capillary Electrophoresis Electrospray Ionization Mass Spectrometry

Suresh Babu CV¹, Ravindra Gudihal¹, Ravi Krovvidi¹, Ning Tang², Martin Greiner³
¹Agilent Technologies India Pvt. Ltd, India, ²Agilent Technologies, USA, ³Agilent Technologies R&D and Mktg. GmbH & Co.KG, Germany

POS-03-LB-046

Novel Proteomic Biomarkers in the Evaluation of Childhood Asthma

Honghua Lu, Liping Peng, Dan Li, Li Liu, Shucheng Hua
Department of Respiratory Medicine, the First Hospital of Jilin University, China

POS-03-LB-047

Enrichment of Protein N-Terminal Peptides for Shotgun Proteogenomics

Michiko Kimura, Takayuki Hashimoto, Masaki Wakabayashi, Naoyuki Sugiyama, Yasushi Ishihama
Graduate School of Pharmaceutical Sciences, Kyoto University, Japan

POS-03-LB-048

Dynamics of Protein Expression Measured by SRM Reveals Direct Targets and Secondary Messengers of Estrogen Receptor in MCF-7 Breast Cancer Cells

Andrei P. Drabovich¹, Maria Pavlou³, Apostolos Dimitromanolakis², Eleftherios P. Diamandis^{1,2,3}

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POS-03-LB-049

Proteome Profiling and Identification of *In Vivo* Substrates of Cysteine Cathepsins in a Murine Model of Pancreatic Cancer

Anna Prudova¹, Vasilena Gocheva², Ulrich auf dem Keller¹, Oakley Olson²,
Johanna Joyce², Christopher Overall¹

¹University of British Columbia, Canada, ²Memorial Sloan Kettering Cancer Center, USA

POS-03-LB-050

PrESTs as Reagents for Proteomics

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POS-03-LB-051

Deep Proteome Characterization as a Tool for Identification of Novel Intraamniotic Infection and Inflammation Biomarkers in Preterm Birth Patients

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POS-03-LB-052

Characterization of the Host and Microbiota Proteomes in Pediatric IBD

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POS-03-LB-053

Targeted Phosphoproteomics to Analyze Kinase-Mediated Signaling Pathway

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POS-03-LB-054

iTRAQ-Based Plasma Protein Profiling of Mild Cognitive Impairment Across Two Independent Cohorts

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POS-03-LB-055

Mapping the Chromosome 10 Proteome: Objectives and Progress

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POS-03-LB-056

Improved Enrichment of S-Nitrosylated Peptides Using Iodoacetyl Tandem Mass Tag Reagents, Immobilized anti-TMT Antibody Resin and TMT Elution Buffer

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POS-03-LB-057

Customized Real-Time Control of Benchtop Orbitrap MS

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POS-03-LB-058

Preliminary Verification of Lung Cancer Plasma-based Stratification Markers for Chemotherapy

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Patrick Pirrotte⁴, Michael Syring⁴, Jeffrey R. Whiteaker¹, Chenwei Lin¹, Ping Yan¹,
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POS-03-LB-059

Proteomic Analysis of Salivary Proteins in Patients with Oral Precancerous Lesions

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POS-03-LB-060

Deep Subcellular Proteome Profiling of Human Induced Pluripotent Stem Cell by One-shot nanoLC-MS/MS Analyses with Meter-scale Monolithic Silica Columns

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POS-03-LB-061

Changes in the Protein Profiles of *Beta vulgaris* Leaf Apoplastic Fluid with Iron Deficiency and Iron Resupply

Elain Gutierrez-Carbonell, Giuseppe Lattanzio, Anunciación Abadía, Javier Abadía,
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POS-03-LB-062

Integrated -omic Analysis Uncovers a Fundamental Hypoxia-driven Mechanism of Breast Cancer Progression

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Ching-Yun Chang⁴, Danni Yu⁴, Carey Sheu², Lucas Pelkmans⁵, Tak W. Mak³,
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POS-03-LB-063

Quantitative Proteomic Analysis of Oyster Larvae to Study the Effect of Multiple Climate Change Stressors by 8-plex iTRAQ Labeling

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POS-03-LB-064

Targeted Proteomic Absolute Quantification on Transporters of Human Pancreatic Cancer Cells with Gemcitabine-resistance

Yasuharu Ueno¹, Sayuri Hoshino¹, Nana Tsuchida¹, Susumu Nakata², Yasuo Uchida³, Keisuke Sekine¹, Yun-Wen Zheng¹, Masanao Kurata⁴, Soichiro Morinaga⁵, Yohei Miyagi⁶, Tomoyuki Yokose⁶, Itaru Endo⁷, Tetsuya Terasaki³, Hisashi Hirano⁸, Hideki Taniguchi¹

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POS-03-LB-065

Deciphering Human-Microbe Proteome Interactions using an E. coli Proteome Chip

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POS-03-LB-066

Comparative Proteomics of Wild Type, Mutant and Overexpressing Strains of Diazotrophic Anabaena PCC7120 Unveils the Role of ahpC in Abiotic Stress Management

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POS-03-LB-067

Diagnosis of Male Reproductive System Disorders with Proteomic Biomarkers Measured in Seminal Plasma

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POS-03-LB-068

Scalable Multiplexed and Sensitive Immunoassays by the Proximity Extension Assay

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