
Poster Session

Dec. 9 12:50-13:30 (Poster odd-number)
13:30-14:10 (Poster even-number)
Dec.10 14:30-15:10 (Poster odd-number)
15:10-15:50 (Poster even-number)
Dec. 11 11:10-11:50 (Poster odd-number)
11:50-12:30 (Poster even-number)

*Poster presenters are generally requested to present on all three days listed above.

The first half will be for odd numbers and the second half for even numbers each day.

Poster Session

Poster Room [12F Conference Hall and 1202]

P-001 Studies on anti-allergic effects of dipeptides containing acidic amino acids

Akari Ozaki¹, Taiki Hirakawa¹, Mitsumasa Izumi¹, Kosuke Nishi^{1,2}, Momoko Ishida^{1,2},
Takuya Sugahara^{1,2}

¹Graduate School of Agriculture, Ehime University, Ehime, Japan,

²Food and Health Function Research Center, Ehime University, Ehime, Japan

P-002 Studies on the Anti-inflammatory Activity of Lactic Acid Bacteria-Fermented Soy Milk

Nanako Ishimaru¹, Momoko Ishida^{1,2}, Kosuke Nishi^{1,2}, Yuki Fukuda³, Yasuhiro Sasuga³,
Takuya Sugahara^{1,2}

¹Graduate School of Agriculture, Ehime University, Japan,

²Food and Health Function Research Center, Ehime University, Japan, ³B&S Corporation, Japan

P-003 Studies on the anti-obesity effect of tetramethoxyluteolin on adipocytes

Manami Sakurai¹, In-Hae Kim¹, Takuya Sugahara^{1,2}, Kosuke Nishi^{1,2}

¹Graduate School of Agriculture, Ehime University,

²Food and Health Function Research Center, Ehime University

P-004 Exploring production enhancer genes (PEGs) for recombinant antibody production in CHO cells

Marina Tsukuda, Hiroe Amou, Masayoshi Onitsuka

Tokushima Univ.

P-005 Establishment and Quality Evaluation of Human iPS Cells Using an Improved Stealth RNA Vector

Anna Ueda¹, Mika Okada², Noriko Sakurada², Minoru Iijima², Mahito Nakanishi²,
Masayoshi Tsukahara¹

¹CiRA Foundation, ²Tokiwa Bio

P-006 Improvement on the Detection of High-Risk Host Cell Proteins of Chinese Hamster-Derived Cells Using Optimized CHO SWATH-MS Spectral Library

Sochi Ogbonna^{1,2}, Tomoko Matsuda^{1,2,3}, Norichika Ogata^{1,2,3}, Noriko Yamano-Adachi^{1,2,4},
Takeshi Omasa^{1,2,4}

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²Graduate School of Engineering, The University of Osaka, Osaka, Japan,

³Nihon BioData Corporation, Kanagawa, Japan,

⁴Institute for Open and Transdisciplinary Research Initiatives, The University of Osaka, Osaka, Japan

P-007 Application of Next-generation Sequencing for Viral Safety Evaluation of Chinese Hamster-Derived Cell Lines

Tomoko Matsuda^{1,2,4}, Sochi Ogbonna^{2,4}, Aoi Hosaka^{1,2,4}, Norichika Ogata^{1,2,4},
Noriko Yamano-Adachi^{2,3,4}, Takeshi Omasa^{2,3,4}

¹Nihon BioData Corporation, ²Graduate School of Engineering, The University of Osaka,

³Institute for Open and Transdisciplinary Research Initiatives, The University of Osaka,

⁴Manufacturing Technology Association of Biologics

P-008 Elucidation Of Cellular Metabolism For CHL-YN Cells By Genome-Scale Metabolic Models

Masahiro Yamazaki^{1,2,3}, Hirotaka Kuroda^{1,2,3}, Noriko Yamano-Adachi^{1,4}, Junko Iida^{2,3},
Takeshi Omasa^{1,4}

¹Grad. Sch. Eng., UOsaka, ²Shimadzu Corp., ³Shimadzu Analytical Innovation Research Lab.,

⁴OTRI, UOsaka

P-009 Cre/loxP-based targeted integration platform for generating high-producing CHO cells

Daichi Kimura¹, Feiyang Zheng^{1,2}, Binbin Ying¹, Yuki Amamoto^{1,2}, Chiharu Tanno³,
Yoshinori Kawabe^{1,4}, Masamichi Kamihira^{1,3,4}

¹Department of Chemical Engineering, Faculty of Engineering, Kyushu University, Japan,

²Present Address; Manufacturing Technology Association of Biologics (MAB),

³Graduate School of Systems Life Sciences, Kyushu University, Japan, ⁴MAB, Japan

P-010 Omics-Based Comparison Reveals Enhanced Energy and Biomass Production and Cell Cycle in Fast-Growing CHL-YN Cells

Yu Tsunoda¹, Rintaro Arishima¹, Tatiana Boronina², Robert Cole², Noriko Yamano-Adachi^{1,3,4},
Michael Betenbaugh⁵, Takeshi Omasa^{1,3,4}

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⁵Department of Chemical and Biomolecular Engineering, Johns Hopkins University, USA

P-011 Temperature Responsive Microcarrier As A New Tool For Expansion Cell Culture

Shoya Hiratoko, Sora Ikeya, Misaki Kato, Toshinobu Toyoshima, Toshifumi Mogami

Tosoh corporation

P-012 Genetic Modification and Characterization of Chicken Primordial Germ Cells for the Production of Transgenic Chickens

Yuya Kaneko¹, Yoshinori Kawabe¹, Ken-ichi Nishijima², Masamichi Kamihira¹

¹Dept. Chem. Eng., Fac. Eng., Kyushu Univ., ²Grad. Schl. Bioagr. Sci., Nagoya Univ.

P-013 Changes in host gene expression in human intestinal organoids when co-cultured with *Akkermansia muciniphila*

Moemi Matsuzaki^{1,2}, Hideo Satsu³, Nobuo Sasaki¹, Eiji Miyauchi¹

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²Department of Biotechnology, Faculty of Engineering, Maebashi Institute of Technology, Japan,

³Graduate School of Food and Population Health Sciences, Gunma University, Japan

- P-014 Improvement of Monoclonal Antibody Production under Hyperosmotic Culture Supplemented with SERICIN**
 Satoshi Terada¹, Yuta Kanasashi¹, Jun Takahashi²
¹University of Fukui, ²SEIREN Co. Ltd.
- P-015 An attempt to co-culture for several CHO-K1 cell lines producing oligoclonal antibodies**
 Jie Ren, Takeshi Omasa, Noriko Yamano-Adachi
 The University of Osaka
- P-016 Application of the Closed Systems for Automated Production of iPSCs from Human Blood**
 Sayaka Yonemizu, Yuko Kitano, Masayoshi Tsukahara
 CiRA Foundation
- P-017 A Novel Approach For Carbon Dioxide Removal In Upstream Biomanufacturing Process With Gas Separation Membrane Technology**
 Yoshie Tanizaki, Yoshiko Suzuki
 Mitsubishi Chemical Corporation
- P-018 Development of Serum-Free Culture Medium for Mammalian Cells Using Machine Learning**
 Takamasa Hashizume, Bei-Wen Ying
 School of Life and Environmental Sciences, University of Tsukuba
- P-019 Improving iPS Cell Adhesion Using Novel Disk-Shaped Microcarriers for Large-Scale Culture**
 Masami Yamashita, Masayoshi Tsukahara
 CiRA Foundation
- P-020 Cytotoxic Extractables From γ -Ray Sterilized PVC Tubing In Automated Closed Systems For iPSC Processing**
 Ichiro Sakai, Eiko Shimizu, Yuko Kitano, Yoshimi Sugahara, Azusa Inagaki, Fumiko Ono, Masayoshi Tsukahara
 CiRA Foundation
- P-021 Development of a Novel Serum-Free Medium for Efficient Vero Cell Suspension Culture**
 Yutaka Ozawa, Fumiko Kyotani, Hisashi Saeki
 FUJIFILM Wako Pure Chemical Corporation
- P-022 Investigation of Novel Serum-free Medium for Suspension Culture of Rat L6 Myoblasts for Cellular Foods**
 Kota Shimizu¹, Koshiro Hashimoto^{1,2}, Noriko Yamano-Adachi^{1,3}, Takeshi Omasa^{1,3}
¹Graduate School of Engineering, The University of Osaka, ²NH foods Ltd. R&D CENTER, ³OTRI, The University of Osaka

- P-023 Development of a Non-Invasive Evaluation Method for Cell Culture on Microcarriers Using Image Analysis**
Wakana Matsuda^{1,2}, Hiroaki Takeuchi¹, Kenjiro Tanaka¹, Hiroyuki Matsuda², Uichi Koshimizu², Ryuji Kato^{1,3}
¹Graduate School of Pharmaceutical Sciences, Nagoya University, Japan,
²ZACROS Corporation, Japan,
³Institute of Nano Life Systems, Institutes of Innovation for Future Society, Nagoya University, Japan
- P-024 Integrated Process Control and Automation Using the Bioprocess DX Solution "BioPilot"**
Ayaka Suetsuna, Hiroaki Yamanaka, Soichiro Shimoda
 Yokogawa Electric Corporation
- P-025 Advancing Biotherapeutic Manufacturing Through Precision Gene Editing Platforms**
Ryuichi Uozumi, Neha Mishra, Paraskevi Tserou, Delphine Cougot, Tulshi Patel
 Revvity
- P-026 Comparison of Culture Methods of CHL-YN Cells with High Proliferative Capacity, Focusing on Culture Medium Consumption**
Shohei Sakai, Sayaka Nagae, Hiromu Kunita, Noriko Yamano-Adachi, Takeshi Omasa
 The University of Osaka, Japan
- P-027 Improved Productivity and Consistency in CHO Cell Line Development via Transposon-Based Semi-Targeted Integration**
Shuko Nishida, Saeko Akiyama, Mamoru Takizawa, Saho Takeuchi, Yasuhiro Takagi
 Astellas Pharma Inc.
- P-028 Hepatocyte Culture using Substrates with Different Oxygen Supply Capacities**
Kiriko Maruyama, Kohji Nakazawa
 The University of Kitakyushu
- P-029 Construction of kinetic modeling to estimate secretion bottleneck of CHO cells by quantifying intracellular antibodies**
Atsuki Somatani¹, Yu Tsunoda¹, Noriko Yamano-Adachi^{1,2,3}, Takeshi Omasa^{1,2,3}
¹Graduate School of Engineering, The University of Osaka, Osaka, Japan,
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³Industrial Biotechnology Initiative Division, Institute for Open and Transdisciplinary Research Initiatives, The University of Osaka, Osaka, Japan
- P-030 Investigating The Effect Of 4-Phenylbutyrate (4-PBA) On AAV Production In HEK293 Cells**
Xiner Xu¹, Guirong Kanai-Bai¹, Noriko Yamano-Adachi^{1,2}, Takeshi Omasa^{1,2}
¹Graduate School of Engineering, The University of Osaka, Japan,
²Industrial Biotechnology Initiative Division, Institute for Open and Transdisciplinary Research Initiatives, The University of Osaka, Japan
- P-031 Enabling simplified process scale-up through innovative design: A case study utilizing Thermo Scientific™ DynaDrive™ from 5 L to 5000 L**
Mariko Chinzei, Emily Bell, BoDee Hancock, Jace Parkinson
 Thermofisher Scientific

- P-032 Streamlining CHO Cell Line Engineering via High-Efficiency Gene Editing Platforms**
Yuma Asahina, Saho Takeuchi, Hiroya Ito, Yasuhiro Takagi
Astellas Pharma Inc.
- P-033 Process Optimization for Cell Expansion, Recovery, and Subculture Using Microcarriers**
Junta Shimada
Astellas Pharma Inc.
- P-034 Evaluation of Large-Scale Microcarrier (MC) Culture for Virus Production Using Adherent Host Cells**
Saeko Momma, Yusuke Akashi, Akira Egashira
Astellas Pharma Inc.
- P-035 Substrate Stiffness Modulates Antibiotic Sensitivity via Membrane-Related Pathways in Human Induced Pluripotent Stem Cells**
Xi Yuan¹, Masanobu Horie², Yuichi Tsunoyama^{1,2}
¹Kyoto Univ., ²Agency for Health, Safety & Environment, Kyoto University
- P-036 Enhancing Biopharmaceutical Production Efficiency Through Integration of N-1 Perfusion and Intensified Fed-Batch Culture Strategies**
Keita Chiba, Shunsuke Ohira
Astellas Pharma Inc. CMC Development Chemical and Biological Technology Labs. Upstream Bioprocess Science
- P-037 Application of Mechanistic Modeling in Chromatography Simulation for Supporting Process Characterization Study in CEX Purification of Bispecific Antibodies**
Hiroya Okura, Masako Hagiwara, Tomoki Sugiyama, Mitsutaka Matsuura
Astellas Pharma Inc.
- P-038 Development of a high seeding density culture method of CHO-MK cells for optimal protein drug manufacturing**
Mizuki Morisasa¹, Junshin Iwabuchi¹, Takayuki Horiuchi^{1,2}
¹Chitose Laboratory Corp., ²Manufacturing Technology Association of Biologics
- P-039 Development of a novel protein-free feed system that enhances titer and demonstrates consistency in CHO-K1 cell lines**
Kentaro Kuroki
Thermo Fisher Scientific
- P-040 Expanding the Cell Line Development Platform for Multispecific Antibody Production**
Tatsuya Matsuura¹, Akari Kuroda¹, Kenta Seko¹, Devika Kalsi², Samuel Walker², Leon Pybus², Fay Saunders², Yuta Murakami¹
¹Fujifilm Corporation, ²Fujifilm Biotechnologies
- P-041 Comparison of CHO Cell-Based Transient Expression Systems for High-Yield Membrane Protein Production**
Hinako Tsukada¹, Noriko Yamano-Adachi^{1,2}, Takeshi Omasa^{1,2}
¹Department of Biotechnology, Graduate School of Engineering, The University of Osaka,
²Manufacturing Technology Association of Biologics

P-042 Investigating of the effect of cell cycle regulation on AAV vector production

Kotoha Shimayoshi¹, Guirong Kanai-Bai¹, Noriko Yamano-Adachi^{1,2}, Takeshi Omasa^{1,2}

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P-043 Innovative approaches to reducing time, costs and risk of failure in biologic drug discovery and development

Masahisa Ohishi¹, Weili Wang¹, Ryo Miura²

¹MaxCyte, ²PHCbi

P-044 Implementation of Next-Gen Platform Process for Therapeutic Antibody Production Using CHO Cells

Yuna Sakatani, Rina Nobata, Kouki Kuroda, Hideyuki Kajihara

Takeda Pharmaceutical Company Limited

P-045 High antibody-producing cell isolation process using Yamaha CELL HANDLER and its practical applications

Kazuya Tsujioka¹, Makiko Tsujiuchi¹, Emiko Matsubara², Gakuro Harada², Tomoyuki Abe¹, Takahiko Kumagai², Hiroya Ootani¹

¹FUSO Pharmaceutical Industries, Ltd., ²Yamaha Motor Co., Ltd.

P-046 Non-invasive screening of high-producing CHO clones using intrinsic autofluorescence and wide-field imaging to monitor cellular phenotypes associated with antibody production

Ayumu Yamawaki¹, Takushi Ichino², Noriko Yamano-Adachi^{1,3}, Takeshi Omasa^{1,3}

¹Graduate School of Engineering, The University of Osaka, ²Canon Inc., ³OTRI, The University of Osaka

P-047 500L to 2000L high cell density perfusion culture: Optimizing O2 delivery

Shunichi Yoshida¹, Takashi Kurosawa¹, Shuhei Katayama¹, Kosuke Taniguchi¹, John Raven², Leon Pybus², Shinichi Nakai¹

¹FUJIFILM Corporation, ²FUJIFILM Biotechnologies, U.K.

P-048 Functional characterization of immortalized human adipose-derived mesenchymal stromal/stem cells

Himari Matsusaka¹, Eiko Uno², Kazuma Suda², Lanlan Bai^{1,3}, Eriko Sugano^{1,3}, Hiroshi Tomita^{1,3}, Tohru Kiyono^{4,5}, Sayo Kashiwagi², Takashi Shimizu², Tsuyoshi Ishii², Tomokazu Fukuda^{1,3}

¹Graduate School of Science and Engineering Division of Fundamental and Applied Science Biological Science Area, Iwate University, Iwate, Japan,

²Basic Research and Development Department, Rohto Pharmaceutical Co., Ltd., Kyoto, Japan,

³Department of Life Sciences, Faculty of Agriculture, Iwate University, Iwate, Japan,

⁴Exploratory Oncology Research & Clinical Trial Center, National Cancer Center, Chiba, Japan,

⁵Sasaki Institute, Sasaki Foundation, Department of Cancer Cell Research, Sasaki Institute, Sasaki Foundation, Tokyo, Japan

P-049 High Sensitivity Titer & Simplified 2D Protein A-SEC Analysis for Faster Quantitation of mAb Titers and Aggregates

Hiroko Iwasaki¹, Catherine Mathes², Beatrice Muriithi², Emery Domain², Michael Zagieboylo², Stephan Koza², Stephen Shiner², Matthew A. Lauber²

¹Nihon Waters K.K., ²Waters Corporation, MA, USA

- P-050 Exploration of metabolic profiles affecting the proliferation and productivity of CHL-YN cells**
Akari Noma¹, Hirota Kuroda^{1,2,3}, Noriko Yamano-Adachi¹, Takeshi Omasa¹
¹Grad. Sch. Eng., UOsaka, ²Shimadzu Corp., ³Shimadzu Analytical Innovation Research Lab.
- P-051 Endogenous Virus Elements (EVE) Activation in Long-Term Maintained Cell Lines: Evidence on Chinese Hamster-Derived Cell Lines**
Norichika Ogata^{1,2,4}, Tomoko Matsuda^{1,2,4}, Aoi Hosaka^{1,2,4}, Noriko Yamano-Adachi^{2,3,4}, Takeshi Omasa^{2,3,4}
¹Nihon BioData Corporation, ²Graduate School of Engineering, The University of Osaka, ³Institute for Open and Transdisciplinary Research Initiatives, The University of Osaka, ⁴Manufacturing Technology Association of Biologics
- P-052 Near-infrared imaging-based characterization of spheroids for enhanced manufacturing of 3D cell constructs**
Ren Sakai¹, Kenjiro Tanaka¹, Yudai Miyazaki², Yoko Igarashi³, Yasuto Kishii², Shizuka Akieda², Ryuji Kato^{1,4}
¹Graduate School of Pharmaceutical Sciences, Nagoya University, Japan, ²Cyfuse Biomedical K.K., Japan, ³Sumitomo Electric Industries, Ltd., Japan, ⁴Institute of Nano-Life-Systems, Institutes of Innovation for Future Society, Nagoya University, Japan
- P-053 Attempt at the establishment of duck iPSCs from somatic cells using multiple reprogramming factors with PiggyBac transposon system**
Masafumi Katayama¹, Tomokazu Fukuda², Manabu Onuma¹
¹National Institute for Environmental Studies, ²Iwate University, Faculty of Agriculture
- P-054 Scalable Bioreactor-Based Differentiation of Hematopoietic Progenitor Cells from Human iPSCs**
Guirong Kanai-Bai¹, Takaya Hataoka¹, Arisa Ito¹, Noriko Yamano-Adachi^{1,2}, Takeshi Omasa^{1,2}
¹Graduate School of Engineering, The University of Osaka, ²Institute for Open and Transdisciplinary Research Initiatives, The University of Osaka
- P-055 Development of CO2-independent Media for iPSCs Expansion and Cardiomyocyte Differentiation**
Yugo Okazaki¹, Kenji Yoshimochi¹, Yuko Kitano², Tomoaki Kato², Motoshi Shimotsuma¹, Masayoshi Tsukahara²
¹NACALAI TESQUE, INC., ²CiRA Foundation
- P-056 AI-Powered Morphology Scoring for Non-Invasive iPSCs Quality Evaluation**
Shoma Nishiyori¹, Hiroya Ito¹, Timothy K Turkalo², Mikio Ishihara¹
¹Chemical & Biological Technology Labs., Astellas Pharma Inc., Japan, ²Universal Cells, Inc., USA
- P-057 Impact of eGFP Expression on AAV Productivity during AAV Production Cell Culture**
Makoto Matsui, Takashi Sakurai
Astellas Pharma Inc., Japan
- P-058 Optimization of Synthetic Riboswitches That Function in Mammalian Cells**
Yohei Yokobayashi, Bochen Zhu, Yoko Nomura
Okinawa Institute of Science and Technology Graduate University

P-059 AAV full capsid enrichment using Anion Exchange Chromatography

Yusuke Akai

Merck, Process Solutions, MSAT, Japan

P-060 Monitoring of deamidation levels of recombinant adeno-associated virus during the production process

Hanano Kono¹, Yuki Yamaguchi¹, Xiaofang Lyu¹, Toshie Kuwahara², Susumu Uchiyama¹

¹The University of Osaka, ²U-Medico Inc.

P-061 Investigation of Process Parameters for Large-Scale AAV Production Using a Novel Human Amniotic Epithelial-Derived HAT Cell Line

Ryo Asahina, Rena Moromizato, Kazuko Aizawa, Yu-Hsin Chang, Arisa Yamamoto,

Mawo Kinoshita, Kaung Htike, Takayuki Horiuchi, Yugo Hirai

Chitose Laboratory Corp.

P-062 Integrated Process Development and Analytical Reference Materials for High-Quality AAV Vector Manufacturing

Toshie Kuwahara¹, Mitsuko Fukuhara^{1,2}, Yasuo Tsunaka², Yuki Yamaguchi², Yugo Hirai³,

Ryo Asahina³, Takaaki Kurinomaru¹, Takahiro Maruno¹, Kenjiroo Matsumoto¹,

Kimitoshi Takeda¹, Aoba Matsushita¹, Mark Allen Vergara Rocafort¹, Masanori Noda¹,

Akira Kawai¹, Ayano Fukuhara¹, Susumu Uchiyama²

¹U-Medico Inc., ²Graduate School of Engineering, The University of Osaka, Japan,

³Chitose Laboratory Corp., Japan

P-063 HAT: A Versatile Cell Line For Improved AAV Vector Production And Transcriptomic Exploration Of Host Determinants

Yu-Hsin Chang^{1,2}, Kaung Htike^{1,2}, Ryo Asahina^{1,2}, Arisa Yamamoto^{1,2}, Mawo Kinoshita^{1,2},

Kazuko Aizawa^{1,2}, Takayuki Horiuchi^{1,2}, Kazuaki Nakamura³, Yugo Hirai^{1,2}

¹Chitose Laboratory Corp., ²Manufacturing Technology Association of Biologics,

³Cell Engineering Division, BioResource Research Center, RIKEN

P-064 Accurate quantification of particle number and size distribution of lentiviral vector

Mana Yamasaki¹, Yuki Yamaguchi¹, Kentaro Osawa², Tetsuo Torisu¹, Susumu Uchiyama¹

¹Graduate School of Engineering, The University of Osaka, Osaka, Japan,

²Hitachi High-Tech Co., Ltd, Japan

P-065 Cryopreservation and analysis of in vitro cultured chicken primordial germ cells from inbred strains maintained by ABRC

Yuya Okuzaki, Ken-ichi Nishijima

ABRC, Grad. Schl. Bioagricultural Sciences, Nagoya Univ.

P-066 Transgenic chickens producing scFv-Fc into eggs

Yuya Okuzaki¹, Ryutaro Tsujii¹, Yusuke Shimomura¹, Ayaka Nishino¹, Masamichi Kamihira²,

Ken-ichi Nishijima¹

¹Nagoya University, ²Kyushu University

P-067 Novel LCMS-Compatible icIEF Fractionation for Characterization of Innovator and Biosimilar mAbs

Etsuko Yada¹, Srinivasa Rao², Samantha Ippoliti³, Ying Qing Yu³, Nick Pittman³, Chris Heger²,

Kenji Hirose¹

¹Nihon Waters K.K., ²Bio-Techne, ³Waters Corporation

P-068 A strategy for using modeling tools to analyze the viral contamination risk in integrated continuous biomanufacturing

Takao Ito

Merck Ltd.

P-069 Inhibitory effect of tetramethoxyluteolin on osteoclastogenesis

Haruka Ono¹, Mai Fujioka², In-Hae Kim², Hisashi Nishiwaki^{1,3}, Ryota Kaino², Akihiro Nakata⁴, Yuuki Imai^{3,4,5}, Takuya Sugahara^{1,3}, Kosuke Nishi^{1,3}

¹Graduate School of Agriculture, Ehime University, ²Faculty of Agriculture, Ehime University,

³Food and Health Function Research Center, Ehime University,

⁴Graduates School of Medicine, Ehime University, ⁵Proteo-Science Center, Ehime University

P-070 Inhibitory effects of fatty acid derivatives on urate transporter 1, a renal urate re-absorber: an *in vitro* study

Yu Toyoda^{1,2}, Hiroki Saito³, Hiroshi Hirata³, Ami Ota-Kontani³, Youichi Tsuchiya³, Tappei Takada¹

¹Department of Pharmacy, The University of Tokyo Hospital, Japan,

²Department of Integrative Physiology and Bio-Nano Medicine, National Defense Medical College, Japan,

³Frontier Laboratories for Value Creation, SAPPORO HOLDINGS LTD., Japan

P-071 Quercetin Promotes Slow Myofiber Development in 2D/3D Human Skeletal Muscle Models

Akitoshi Nagai^{1,2}, Yoshihisa Kaneda¹, Takayuki Izumo¹, Yoshihiro Nakao¹, Hiroyuki Honda², Kazunori Shimizu²

¹Suntory Wellness Ltd., ²Nagoya Univ.

P-072 Unified Screening Of Food-Derived Anti-Cancer Combinations: Low-Molecular-Weight Fucoidan Extract Enhances The Cancer-suppressive Effects Of Polyphenols, Ascorbate, And All-Trans Retinoic Acid

Kehan Sun¹, Yiheng Wang¹, Hiroshi Eto², Kiichiro Teruya¹

¹Kyushu Univ., ²Daiichi Sangyo Co. Ltd.

P-073 Molecular Basis of Muscle–Brain Interaction Activated by β -Alanine

Siyu Zhang, Yukiko Ida, Yoshinori Katakura

Kyushu Univ.

P-074 Maslinic Acid, A Pentacyclic Triterpenoid, Promotes Hair Growth Through Wnt/ β -catenin Pathway, With A Potential Involvement Of Cilia Activity

Aprill Kee Oliva Mizushima^{1,2,3}, Meryem Bouhoute³, Meriem Bejaoui^{3,4}, Farhana Ferdousi^{1,3,6}, Mitsutoshi Nakajima^{3,4,5,6}, Hiroko Isoda^{1,2,3,4,5,6}

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³Alliance for Research on the Mediterranean and North Africa (ARENA), University of Tsukuba, Tsukuba, Japan,

⁴Open Innovation Laboratory for Food and Medicinal Resource Engineering (FoodMed-OIL), National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Japan,

⁵MED R&D Co. Ltd., Tsukuba, Japan,

⁶Institute of Life and Environmental Sciences, University of Tsukuba, Tsukuba, Japan

P-075 The Effects of 7-fluoro-2-(4-methoxyphenyl)-4H-chromen-4-one on 3T3-L1 Adipocytes

Kyoko Yamasaki¹, Munkhzul Ganbold², Tomoya Sugai³, Hiroko Isoda^{1,2,4,5}

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³*International Institute for Integrative Sleep Medicine (WPI-IIIS), University of Tsukuba, Japan,*

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P-076 Brain Function Regulation via Exosomes Induced by GABA

Reika Miyauchi, Yoshinori Katakura, Yurina Akama

KYUSHU Univ

P-077 Anti-inflammatory Effects of Shichifuku-imo Extracts and Their Fractions from Unused Parts

Yukiyo Noguchi, Hakuto Ikeda, Ayuka Tagashira

National Institute of Technology (KOSEN), Niihama College

P-078 Anti-inflammatory Activity of Honeybush Extract and Extract-loaded Phytosomes

Miyu Saito¹, Kanta Kusumoto¹, Dalene de Beer², Mariska Lilly³, Tadashi Yoshida¹,
Chie Umatani¹, Yutaka Miura¹

¹*Department of Applied Biological Science, Tokyo University of Agriculture and Technology,*

²*Agricultural Research Council, Stellenbosch University,*

³*Medical Research Council, Cape Peninsula University of Technology*

P-079 Anti-inflammatory effects of Lysozyme-derived peptides in Murine Macrophage-like RAW264.7 cells

Ayaka Okada, Ayuka Tagashira

National Institute of Technology (KOSEN), Niihama College

P-080 Effects of Decaffeination on the Anti-allergic and Antioxidant Activities of Shizuchi Kurocha

Kaito Akiyama¹, Chihiro Minamoto², Ayuka Tagashira¹, Yumi Namekata³

¹*National Institute of Technology, Niihama College,* ²*National Institute of Technology, Tokyo College,*

³*Ehime University*

P-081 Effects of Six Flavonoid Derivatives on Lipid Accumulation in HepG2 Cells

Yuri Karasawa¹, Munkhzul Ganbold², Tomoya Sugai³, Hiroko Isoda^{2,4,5}

¹*School of Life and Environmental Sciences, University of Tsukuba, Japan,*

²*Alliance for Research on the Mediterranean and North Africa (ARENA), University of Tsukuba, Japan,*

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P-082 Biological activity of *Alpinia zerumbet* extract and bioavailability profiles of 5,6-dehydrokawain and dihydro-5,6-dehydrokawain

Akio Watanabe¹, Miyu Eto¹, Yoshiaki Nagasawa¹, Wataru Kobayashi², Sayaka Okada¹, Hanoya Tamura¹, Sakura Koyama¹, Aki Yamano³, Takayuki Yonezawa³, Je-Tae Woo³

¹JUMONJI Univ., ²KOMAZAWA WOMEN'S Univ., ³CHUBU Univ.

P-083 Chemical Composition and Anti-Inflammatory Activity of Beer Hop Residue Extracts

Miyu Eto¹, Yasunaga Nakajima², Akira Nakazato², Akio Watanabe¹

¹Jumonji UNIV., ²System Advance Co., Ltd.

P-084 Effects of Residue after Rosemary Essential Oil Extraction and Its Constituent Triterpenoids on Bone Metabolism

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P-085 Elucidation of the Anti-neuroinflammatory Effect of Methyl-tetraferuloyl Quinate (M4FQA) in Human Microglial Cells (HMC3)

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P-086 Search For And Functionality Of Skin-Improving Foods Via The Intestinal Tract

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P-087 Behavioral, Transcriptomic, and Biochemical Evidence of Antidepressant and Neuroprotective Actions of Pine Needle Extracts

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P-088 The Effect of M4CQA and M4FQA on Insulin Resistance in C2C12 Skeletal Muscle Cells

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P-089 Elucidation Of The Molecular Mechanism Of The Neuroprotective Effect By Cinnamoyl Quinic Acid (CQA) Derivatives Using In Vitro And In Vivo Models

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P-090 Edible Bird's Nest Exerts Antidepressant Effects through Gut–Brain Axis-Mediated Exosomal Modulation of Hippocampal Inflammation and Aging

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P-091 A methoxyflavanone from Red-Shiso (*Perilla frutescens*) suppresses autoimmune arthritis and diabetes through blockade of TCR signaling

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P-092 Identification and Mechanistic Analysis of DIF Derivatives that Induce Autophagy and Ferroptosis

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P-093 Intracellular Sensing Mechanisms of a phytochemical in Lysosomes

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P-094 The Microalgae That Activate Autophagy Independently of mTORC1

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- P-095 Phytochemical-Mediated Cellular Senescence Control by Lysosomal Hormesis**
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- P-096 Identification of Polyamines with Autophagy-Activating Effects and Analysis of Their Mechanisms**
Yuka Sugaya, Yuki Marugame, Satoshi Yano, Taichi Hara
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- P-097 Electrolyzed Hydrogen Water Improves Chemotherapy Efficacy in Cancer Cells via Autophagy Suppression**
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- P-098 Identification of a Lactic Acid Bacterium that Enhances Intestinal Barrier Function via mTORC1-Independent Autophagy**
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- P-099 Blue Light and 5-ALA Induce Mitochondrial Dysfunction, Oxidative Stress, and DNA Damage in B16F1 Melanoma and HaCaT Keratinocyte Cells**
Kazuomi Sato¹, Riku Hirotani¹, Taiki Sato¹, Munetsugu Bam²
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- P-100 Phgdh-mediated L-Serine Synthesis Maintains Metabolic and Organellar Integrity to Prevent Ferroptosis**
Natsuko Higo¹, Miyu Umenoki¹, Wazifa Afrin¹, Haruka Fujii¹, Satoshi Suzaki¹, Yuki Matsuo¹, Tomoko Sayano², Rion Ishikubo³, Momoko Hamano³, Shigeki Furuya^{4,5}
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- P-101 Evaluation of Magnesium Ferrite (MgFe₂O₄) Cytotoxicity in Macrophage-like Cells**
Hazuki Saka, Hideyuki Hirazawa, Ayuka Tagashira
National Institute of Technology (KOSEN), Niihama College.
- P-102 Development Of Highly Precise And Efficient Gene Knock-in Technology Using Modified FirmCut Platinum TALEN And Single-strand Donor DNA**
Marina Akase¹, Sota Nishikawa^{1,2}, Tetsushi Sakuma¹
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- P-103 A CFD-based digital framework for scaling optimization of orbital rocking bioreactors**
Soo Hyun Ryu, Young Jin Kim, Jae Hong Jeon, Ji Soo Kim, Jong Kwang Hong
Yonsei University

P-104 Analytical Method Validation of CE-C4D for Determining Metal Ions in Cell Culture Media

Da Eun Kang, Yeong Bin An, Min Hyeong Kim, Ha Eun Roh, Jong Kwang Hong
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P-105 Quantitative Analysis of Human Work Movements in Cell Culture Using Video-Based Approaches

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P-106 Optimized Bioinformatics Pipeline for NGS-based Detection of Intermediate-Size Deletions in CHO Cell Line Development

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P-107 Evaluation of Oxygen Consumption Rate Associated with Boar Sperm Count and Glucose Concentration Changes Using Scanning Electrochemical Microscopy

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P-108 Development of a device for isolating progressively motile boar sperm and electrochemical evaluation of respiratory activity

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P-109 Debottlenecking vaccine design and manufacturing

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