

The 45<sup>th</sup> Annual Meeting of  
the Japan Society for Biomedical Gerontology  
PROGRAM

27 July (Wed)

《Hall I》

**9:00 Opening Remarks** Masanori Hosokawa (Kyoto Koka Women's Univ.)

**9:05~10:30 Oral Session A Biomarker (In Japanese)**

Chairs : Yoko Itakura (TMIG)

Yuri Miura (TMIG)

1. A-01/Y

**p16<sup>INK4a</sup>-associated CC-chemokine gene cluster expression evokes a diversity in cellular senescence**

○Yuma SUGIYAMA<sup>1</sup>, Akihiko NISHIKIMI<sup>1</sup>, Mitsuo MARUYAMA<sup>1,2</sup>

<sup>1</sup>National Center for Geriatrics and Gerontology, <sup>2</sup>Nagoya University Graduate School of Medicine

2. A-02/Y

**Identification of Akr1c6 gene associated with SMP30 gene expression in mouse liver**

○Yurika NIIMURA<sup>1,2</sup>, Yuta DOSHIDA<sup>1</sup>, Fumiya SOBUE<sup>1,3</sup>, Koji FUKUI<sup>2</sup>, Toshiro AIGAKI<sup>3</sup>, Sadahiro IWABUCHI<sup>4</sup>, Shinichi HASHIMOTO<sup>4</sup>, Jaewon LEE<sup>5</sup>, Akihito ISHIGAMI<sup>1,3</sup>

<sup>1</sup>Tokyo Metropolitan Institute of Gerontology, <sup>2</sup>Shibaura Institute of Technology, <sup>3</sup>Tokyo Metropolitan University, <sup>4</sup>Wakayama Medical University, <sup>5</sup>Pusan National University

3. A-03/Y

**Proteomic analysis of serum extracellular vesicles derived from follicular thyroid cancer patients**

○Kyojiro KAWAKAMI<sup>1</sup>, Naoki EDO<sup>2</sup>, Koji MORITA<sup>2</sup>, Toshio ISHIKAWA<sup>2</sup>, Hiroyuki ONOSE<sup>3</sup>, Tatsuya FUKUMORI<sup>3</sup>, Hiroki TSUMOTO<sup>1</sup>, Keitaro UMEZAWA<sup>1</sup>, Yuri MIURA<sup>1</sup>, Yasunori FUJITA<sup>1</sup>, Ikuroh OHSAWA<sup>1</sup>, Masafumi ITO<sup>1</sup>

<sup>1</sup>Tokyo Metropolitan Institute of Gerontology, <sup>2</sup>Teikyo University School of Medicine, <sup>3</sup>Kanaji Hospital

4. A-04/Y

**Methods for measuring human lipoprotein need to revised**

○Yurie HAYASHI

Akita Prefectural University

5. A-05/Y

**Prevention of intestinal polyps by Brassicaceae plants**

○Takumi NARITA<sup>1</sup>, Gen FUJII<sup>1,2</sup>, Mitsuharu MASUDA<sup>1</sup>, Yoshihiro SOWA<sup>1</sup>, Shingo MIYAMOTO<sup>1</sup>, Motoki WATANABE<sup>1</sup>, Yosuke WATANABE<sup>1</sup>, Michihiro MUTOH<sup>1,3</sup>

<sup>1</sup>Department of Molecular-Targeting Prevention, Kyoto Prefectural University of Medicine, <sup>2</sup>Central Radioisotope Division, National Cancer Center Research Institute, <sup>3</sup>Division of Prevention, Center for Public Health Sciences, National Cancer Center

6. A-06

**Comparative analysis of age-related glycan changes and localization in the mouse heart with lectin microarray**

○Yoko ITAKURA, Norihiko SASAKI, Masashi TOYODA

Tokyo Metropolitan Institute of Gerontology

7. A-07

**Comprehensive and comparative analysis of N-glycan expression in multiple organs during aging in mice**

○Keiko AKASAKA-MANYA<sup>1</sup>, Hiroshi MANYA<sup>1</sup>, Hisatoshi HANAMATSU<sup>2</sup>, Jun-ichi FURUKAWA<sup>2</sup>, Tamao ENDO<sup>1</sup>

<sup>1</sup>Molecular Glycobiology, Research Team for Mechanism of Aging, Tokyo Metropolitan Institute of Gerontology, <sup>2</sup> Faculty of Medicine and Graduate School of Medicine, Hokkaido University

10:30 ~ 10:40 Break

**10:40~12:05 Oral Session B Cellular Senescence (In Japanese)**

Chairs : Kyoji Ohyama (Tokyo Medical Univ.)

Hiroshi Kondo (Kyoto Univ.)

1. B-01/Y

**Riboflavin suppresses cellular senescence through LSD1-mediated downregulation of Sirtuin-4**

○Taiichi OSUMI<sup>1</sup>, Taiki NAGANO<sup>2</sup>, Tetsushi IWASAKI<sup>1,2</sup>, Shinji KAMADA<sup>1,2</sup>

<sup>1</sup>Department of Biology, Graduate School of Science, <sup>2</sup>Biosignal Research Center, Kobe University

2. B-02/Y

**Induction of DNA damage by exosome derived from senescent cells**

○Yukihiro IKEGAKI<sup>1</sup>, Taiki NAGANO<sup>2</sup>, Tetsushi IWASAKI<sup>1,2</sup>, Kenji MIYADO<sup>3</sup>, Shinji KAMADA<sup>1,2</sup>

<sup>1</sup>Department Biology, Graduate School of Science, <sup>2</sup>Biosignal Research Center, Kobe University, <sup>3</sup>National Research Institute for Child Health and Development

3. B-03

**Analysis of senescence-associated protein aggregates in replicative senescent MRC-5 cells**

○Yasuhiro TAKENAKA<sup>1,2</sup>, Masataka HIRASAKI<sup>2</sup>, Masaaki IKEDA<sup>2</sup>, Ikuo INOUE<sup>2</sup>, Yoshihiko KAKINUMA<sup>1</sup>

<sup>1</sup>Nippon Medical University, <sup>2</sup>Saitama Medical University

4. B-04

**Doxycycline extends replicative lifespan in human fibroblast TIG-1**

○Yasunori FUJITA, Masumi IKETANI, Masafumi ITO, Ikuroh OHSAWA

Tokyo Metropolitan Institute of Gerontology

5. B-05

**The anti-aging effect of natural triterpenoids in cultured dermal fibroblasts**

○Takashi ITO, Mao ODAMA, Eiji MAEGAWA, Shigeru MURAKAMI

Fukui Prefectural University

6. B-06

**Cellular senescence in sweat gland aging**

○Tomohisa HAYAKAWA

Osaka university graduate school of Pharmaceutical Sciences, Laboratory of Advanced Cosmetic Science

7. B-07

**Senolysis enhances alveolar regeneration and ameliorates emphysema-associated pathologies**

○Masataka SUGIMOTO

Tokyo Metropolitan Institute of Gerontology / National Center for Geriatrics and Gerontology

12:05 ~ 13:00 Lunch time

《Hall II》

13:00~13:40 Poster session (Odd number)

《Hall I》

13:40~14:20 Educational Lecture I (In Japanese)

「SAM Mice, an animal model of age-dependent disorders, shows hyperoxidative status and proinflammatory status」

Lecturer: Masanori Hosokawa (Kyoto Koka Women's Univ.)

Chair: Takahiko Shimizu (IMGG)

14:20 ~ 14:30 Break

**14:30~15:30 Oral Session C Muscle and Heart (In Japanese)**

Chairs : Hiroyuki Kawagishi (Shinshu Univ.)

Shuichi Machida (Juntendo Univ.)

1. C-01/Y

**The effect of bioactive compounds on aging skeletal muscle in mice**

○Ryota IYAMA, Eriko KUROGI, Takumi YOKOKAWA, Tatsuya HAYASHI, Tatsuro EGAWA

Graduate School of Human and Environmental Studies, Kyoto University

2. C-02/Y

**Effects of aging and sex differences on IGF-2 and myostatin gene expressions in rat skeletal muscle following resistance training**

○Yung-Li HUNG<sup>1</sup>, Ayami SATO<sup>2</sup>, Yuka TAKINO<sup>2</sup>, Akihito ISHIGAMI<sup>2</sup>, Shuichi MACHIDA<sup>1</sup>

<sup>1</sup>Institute of Health & Sports Science and Medicine, Juntendo University, <sup>2</sup>Molecular Regulation of Aging, Tokyo Metropolitan Institute of Gerontology

3. C-03/Y

**CREG1 enhances glucose uptake via AMPK in C2C12 myotube**

○Ayumi GOTO<sup>1</sup>, Yuki ENDO<sup>1,2</sup>, Michihiro HASHIMOTO<sup>3</sup>, Misa UNO<sup>2</sup>, Hitoshi YAMASHITA<sup>1</sup>

<sup>1</sup>Dept. of Biomed. Sci., Coll. of Life and Health Sci., Chubu Univ., <sup>2</sup>Grad. of Life and Health Sci., Chubu Univ., <sup>3</sup>Div. of Adv. Med. Sci., Asahikawa Med. Univ.

4. C-04/Y

**Cellular senescence affects secretory phenotype and myogenic differentiation in mouse myoblasts**

○Tomoko ONO, Airi JO-WATANABE, Takehiko YOKOMIZO

Department of Biochemistry, Juntendo University Graduate School of Medicine

5. C-05

**Interleukin-6/gp130 signaling controls postnatal proliferation of mouse ventricular cardiomyocytes**

○Hiroyuki KAWAGISHI, Tsutomu NAKADA, Takuro NUMAGA-TOMITA, Mitsuhiko YAMADA

Shinshu University

14:50~15:00 Break

**15:30~18:30 Japan-Korea Joint Symposium (In English)**

Chairs: Dr.Yoshikazu HIGAMI (Tokyo University of Science)

Dr.Jaewon LEE (Pusan National University)

**Opening Remark** : Isao Shimokawa (Nagasaki University)

1. S-01

**Glial priming in Alzheimer's disease**

Jinsoo SEO (Daegu Gyeongbuk Institute of Science & Technology)

2. S-02

**PET Imaging of Neuroinflammation**

Jun TOYOHARA (Tokyo Metropolitan Institute of Gerontology)

3. S-03

**The importance of metabolic changes in age-related kidney fibrosis**

Ki Wung CHUNG (Pusan National University)

(Coffee Break: 16:50~17:00)

4. S-04

**Glutamate metabolism upon dietary restriction on aging**

Kazutaka AKAGI (University of Toyama)

5. S-05

**How autophagy shapes a program of senescence and its associated inflammation**

Chanhee KANG (Seoul National University)

6. S-06

**Identification and functional analysis of inflammation-related scarring genes using spatial transcriptome analysis and single-cell analysis**

Ryoichi MORI (Nagasaki University)

**Closing Remark** : Joong-Jean PARK (Korea University College of Medicine)

19:00 ~ 21:00 Reception at Miyako Hotel Kyoto Hachijo

28 July (Thu)

《Hall I》

**9:00~10:40 Oral Session D Oxidative Stress (In Japanese)**

Chairs: Sho Kakizawa (Kyoto Univ.)

Koji Fukui (Shibaura Inst. Technology)

1. D-01/Y

**Optimal concentration of hydrogen gas attenuates sevoflurane-induced brain cell death in juvenile mice**

○Masumi IKETANI<sup>1</sup>, Mai HATOMI<sup>1,2</sup>, Yasunori FUJITA<sup>1</sup>, Nobuhiro WATANABE<sup>3</sup>, Harumi HOTTA<sup>3</sup>, Masafumi ITO<sup>1</sup>, Hideo KAWAGUCHI<sup>2</sup>, Ikuroh OHSAWA<sup>1</sup>

<sup>1</sup>Biological Process of Aging, Tokyo Metropolitan Institute of Gerontology, <sup>2</sup>Department of Life Sciences, Toyo University, <sup>3</sup>Autonomic Neuroscience, Tokyo Metropolitan Institute of Gerontology

2. D-02/Y

**The function of transcription factor MXL-3 involved in oxidative stress and nutrition signal**

○Yunosuke SAKAI<sup>1</sup>, Takamasa ISHII<sup>2</sup>, Masaki MIYAZAWA<sup>1</sup>, Naoaki ISHII<sup>2</sup>, Kayo YASUDA<sup>1</sup>

<sup>1</sup>Department Health Management, School of Health Studies, Tokai Univ., <sup>2</sup>Department of Molecular Life Science, Tokai Univ. School of Medicine

3. D-03/Y

**Mitochondrial ROS in fast muscle reversibly regulates glycogen metabolism and physical activity in mice**

○Shuichi SHIBUYA<sup>1</sup>, Ikko SAKAMOTO<sup>2</sup>, Kenji, WATANABE<sup>1</sup>, Hidetoshi NOJIRI<sup>2</sup>, Takahiko SHIMIZU<sup>1</sup>

<sup>1</sup>Aging Stress Response Research PT, National Center for Geriatrics and Gerontology, <sup>2</sup>Department of Orthopaedics, Juntendo University Graduate School of Medicine

4. D-04/Y

**Epigenetic regulation by vitamin C in epidermal keratinization**

○Ayami SATO<sup>1</sup>, Mio MATSUI<sup>1,2</sup>, Kanae URASAWA<sup>1,2</sup>, Nanako MAEDA<sup>1,2</sup>, Yuka Takino<sup>1</sup>, Yasunori SATO<sup>3</sup>, Jaewon LEE<sup>4</sup>, Akihito ISHIGAMI<sup>1,2</sup>

<sup>1</sup>Molecular Regulation of Aging, Tokyo Metropolitan Institute of Gerontology <sup>2</sup>Department of Biological Sciences, Tokyo Metropolitan University <sup>3</sup>Faculty of Pharmaceutical Sciences, Hokuriku University

<sup>4</sup>College of Pharmacy, Pusan National University

5. D-05/Y

**Tocotrienols attenuate diet-induced obesity development**

○Yugo KATO<sup>1</sup>, Shuichi YANAI<sup>2</sup>, Shogo ENDO<sup>2</sup>, Koji FUKUI<sup>1</sup>

<sup>1</sup>Shibaura Institute of Technology, <sup>2</sup>Tokyo Metropolitan Institute of Gerontology

6. D-06

**Mitochondrial dysfunction in osteocytes caused age-related bone loss due to the nuclear lamina abnormalities**

○Kenji WATANABE<sup>1</sup>, Shuichi SHIBUYA<sup>1</sup>, Keiji KOBAYASHI<sup>2</sup>, Hidetoshi NOJIRI<sup>2</sup>, Takahiko SHIMIZU<sup>1</sup>

<sup>1</sup>Aging Stress Response Research Project Team National Center for Geriatrics and Gerontology,

<sup>2</sup>Department of Orthopaedics, Juntendo University Graduate School of Medicine

7. D-07

**Molecular Mechanism of Decreasing Corneal Endothelial Cells Induced by Internal Oxidative Stress**

○Hiromi ONOUCHI<sup>1,2</sup>, Hiroyuki YAMASAKI<sup>2</sup>, Yasuyuki SUZUKI<sup>1</sup>, Naoaki ISHII<sup>2</sup>, Takamasa ISHII<sup>2</sup>

<sup>1</sup>Department of Ophthalmology, <sup>2</sup>Department of Molecular Life Science, Tokai University School of Medicine

8. D-08

**Disparity of age-dependent decline in calcium-release channel responses to nitric oxide and calcium in central neuron**

○Sho KAKIZAWA<sup>1,3</sup>, Nozomu MORI<sup>2,3</sup>

<sup>1</sup>Grad. Sch. Pharmaceu. Sci., Kyoto Univ., <sup>2</sup>Fukuoka Int. Univ. of Health and Welfare, <sup>3</sup>Grad. Sch. Biomed. Sci., Nagasaki Univ.

10:40 ~ 10:50 Break

**10:50~12:30 Oral Session E Metabolism and Longevity (I) (In Japanese)**

Chairs : Takamasa Ishii (Tokai Univ.)  
Takashi Ito (RIKEN)

1. E-01/Y

**Cytosolic mitochondrial DNA enhances the IRF3 response in microglia with mitochondrial dysfunction**

○Yoki NAKAMURA, Manaya NAKANO, Keisuke IKEDA, Momoka IWAMOTO, Kazue HISAOKA-NAKASHIMA, Norimitsu MORIOKA

Hiroshima University

2. E-02/Y

**Comprehensive analysis of gene expression in adipose-specific Mip2p-deficient mice**

○Mitsuki KUMAGAI, Yuka NOZAKI, Masaki KOBAYASHI, Yoshikazu HIGAMI

Tokyo University of Science Faculty of Pharmaceutical Sciences

3. E-03/Y

**Adipose tissue-specific mitochondrial stress contributes to whole-body metabolism**

○Yuka NOZAKI, Masaki KOBAYASHI, Yoshikazu HIGAMI

Faculty of Pharmaceutical Sciences, Tokyo University of Science

4. E-04/Y

**Regulation of adipocyte differentiation by a transcription factor PARIS/ZNF746**

○Tatsuhiko ESASHI, Yuka NOZAKI, Masaki KOBAYASHI, Yoshikazu HIGAMI

Tokyo University of Science, Faculty of Pharmaceutical Sciences

5. E-05

**Adult mice fed only heneggs are alive healthy until aged, but pups nursed by egg-only mice died early**

○Naomi NISHIO<sup>1</sup>, Ken-ichi ISOBE<sup>2</sup>

1.Saitama University, 2.Shubun University

6. E-06

**Age-related changes in Rubicon post-translational modifications in *Drosophila***

○Masaki OBA<sup>1,2</sup>, Mayumi SHINDO<sup>1</sup>, Koji FUKUI<sup>2</sup>, Kazunori SANGO<sup>1</sup>, Mari SUZUKI<sup>1</sup>

<sup>1</sup>Tokyo Metropolitan Institute of Medical Science, <sup>2</sup>Shibaura Institute of Technology

7. E-07

**Evaluation of the effects of food extract components on aging-related functional decline using fly**

○Hiroyuki IDA, Mai YANAI, Leo TSUDA

Kankyo Eisei Yakuhin co., ltd.

8. E-08

**Nicotinamide supplementation within the safe upper limit increases blood NAD+ levels in healthy subjects**

○Takashi ITO

RIKEN CSRS

12:30 ~ 13:30 Lunch Time

《Hall II》

13:30~14:10 Poster Presentation (Even number)

《Hall I》

14:10~14:50 Educational Lecture II (In Japanese)

**Senescence research from historical theory to future clinical application**

Lecturer: Hiroshi Kondo (Kyoto Univ.)

Chair : Masataka Sugimoto (NCGG)

14:50 ~ 15:00 Break



**15:00~16:25 Oral Session F Metabolism and Longevity (II) (In English/Japanese)**

Chairs: Ryoya Takahashi (Toho Univ.)

Hitoshi Yamashita (Chubu Univ.)

1. F-01

**Age-related change of proteasome activity in liver: comparison between rat and mouse**

○Ryoya TAKAHASHI, Keiko ODERA

Department of Biochemistry, Faculty of Pharmaceutical Sciences, Toho University

2.F-02

**Accumulation of abnormally modified proteins in rat kidney: Effect of age and dietary restriction**

○Keiko ODERA, Ryoya TAKAHASHI

Department of Biochemistry, Faculty of Pharmaceutical Sciences, Toho University

3. F-03

**The role of commensal microbes on the longevity effect of dietary restriction**

○Ji-Hyeon LEE, Kyung-Jin MIN

Department of Biological Science and Bioengineering, Inha University

4. F-04

**CD4+/CD8+ Ratio and Growth Differentiation Factor 8 Levels in Peripheral Blood of Large Canine Males for Age Prediction**

○Han-Jun LEE, Seok-Jin HONG, Seung-Soo KIM, Young-Yon KWON, Cheol-Koo LEE

Korea University

5. F-05

**Spontaneous p53 activation in aged C57BL/6 mice mitigates the lifespan-extending adaptive response induced by low-dose ionizing radiation**

○Masaaki KOHZAKI<sup>1</sup>, Keiji SUZUKI<sup>2</sup>, Akira OOTSUYAMA<sup>3</sup>, Ryuji OKAZAKI<sup>1</sup>

1.Department of Radiobiology and Hygiene Management, Institute of Industrial Ecological Sciences, University of Occupational and Environmental Health, 2.Department of Radiation Medical Sciences, Atomic Bomb Disease Institute, Nagasaki University, 3. Department of Radiation Biology and Health, School of Medicine, University of Occupational and Environmental Health

6. F-06

**Co-inhibition of ATM and ROCK synergistically induces cell proliferation in replicative senescence by activating FOXM1 and E2F1**

○Eun Jae YANG, Young-Sam LEE

Department of New Biology, DGIST

7. F-07

**Interaction between cold-inducible diapause and longevity mechanism in *C. elegans***

○Makoto HORIKAWA

Hiroshima Research Center for Healthy Aging, Graduate School of Integrated Sciences for Life, Hiroshima University

16:25~16:35 Break

**16:35~18:00 Oral Session G Brain and Nervous systems (In English/Japanese)**

Chairs: Sae Uchida (TMIG)

Nobuyuki Kimura (Okayam Univ. Science)

1. G-01

**Effect of age on nicotinic cholinergic regulation of olfactory bulb blood flow response**

○Sae UCHIDA, Jura MORIYA, Mayura SHIMURA, Fusako KAGITANI

Department of Autonomic Neuroscience, Tokyo Metropolitan Institute of Gerontology

2. G-02

**A descending inhibitory mechanism of nociception evolutionarily conserved in *Drosophila***

○Ken HONJO<sup>1</sup>, Izumi OIKAWA<sup>2</sup>, Shu KONDO<sup>3</sup>, Kao HASHIMOTO<sup>2</sup>, Akiho KASHIWABARA<sup>2</sup>, Hiromu TANIMOTO<sup>4</sup>, Katsuo FURUKUBO-TOKUNAGA<sup>2</sup>

<sup>1</sup>National Center for Geriatrics and Gerontology, <sup>2</sup>University of Tsukuba, <sup>3</sup>Tokyo University of Science,

<sup>4</sup>Tohoku University

3. G-03

**Mitochondrial aconitase 1 regulates age-related memory impairment via autophagy/mitophagy-mediated neural plasticity**

○Joong-Jean PARK

Department of Physiology, Korea University College of Medicine

4. G-04

**Exogenous coenzyme Q<sub>10</sub> improves age-related decline of neurophysiological activities in the mouse motor cortex**

○Ritsuko INOUE, Masami MIURA, Hiroshi NISHIMUNE

Tokyo Metropolitan Institute of Gerontology, Neurobiology of Aging

5. G-05

**A novel crosstalk between peritoeal cells and the hippocampus improves aged recognition memory**

○Yoshinori TAKEI

Department of Pharmacology, Faculty of Medicine, Toho University

6. G-06

**Effect of traditional Japanese medicine, ninjin' yoeito on cerebral blood flow regulation in anesthetized mice**

○Nobuhiro WATANABE, Kaori IIMURA, Harumi HOTTA

Department of Autonomic Neuroscience, Tokyo Metropolitan Institute of Gerontology

7. G-07

**Pharmacological intervention to Parkinson's disease through regulating neuroinflammation**

Seulah LEE, Dong Geun HONG, Seonguk YANG, Jaehoon KIM, Seoyeong KIM, ○Jaewon LEE

Department of Pharmacy, College of Pharmacy, Pusan National University

**18:00 ~ Closing Ceremony**

27(Wed) ~ 28(Thu) July

Poster Sessions

《Hall II》

1. A-01/Y

**p16<sup>INK4a</sup>-associated CC-chemokine gene cluster expression evokes a diversity in cellular senescence**

○Yuma SUGIYAMA<sup>1</sup>, Akihiko NISHIKIMI<sup>1</sup>, Mitsuo MARUYAMA<sup>1,2</sup>

<sup>1</sup>National Center for Geriatrics and Gerontology, <sup>2</sup>Nagoya University Graduate School of Medicine

2. A-02/Y

**Identification of Akr1c6 gene associated with SMP30 gene expression in mouse liver**

○Yurika NIIMURA<sup>1,2</sup>, Yuta DOSHIDA<sup>1</sup>, Fumiya SOBUE<sup>1,3</sup>, Koji FUKUI<sup>2</sup>, Toshiro AIGAKI<sup>3</sup>, Sadahiro IWABUCHI<sup>4</sup>, Shinichi HASHIMOTO<sup>4</sup>, Jaewon LEE<sup>5</sup>, Akihito ISHIGAMI<sup>1,3</sup>

<sup>1</sup>Tokyo Metropolitan Institute of Gerontology, <sup>2</sup>Shibaura Institute of Technology, <sup>3</sup>Tokyo Metropolitan University, <sup>4</sup>Wakayama Medical University, <sup>5</sup>Pusan National University

3. A-03/Y

**Proteomic analysis of serum extracellular vesicles derived from follicular thyroid cancer patients**

○Kyojiro KAWAKAMI<sup>1</sup>, Naoki EDO<sup>2</sup>, Koji MORITA<sup>2</sup>, Toshio ISHIKAWA<sup>2</sup>, Hiroyuki ONOSE<sup>3</sup>, Tatsuya FUKUMORI<sup>3</sup>, Hiroki TSUMOTO<sup>1</sup>, Keitaro UMEZAWA<sup>1</sup>, Yuri MIURA<sup>1</sup>, Yasunori FUJITA<sup>1</sup>, Ikuroh OHSAWA<sup>1</sup>, Masafumi ITO<sup>1</sup>

<sup>1</sup>Tokyo Metropolitan Institute of Gerontology, <sup>2</sup>Teikyo University School of Medicine, <sup>3</sup>Kanaji Hospital

4. A-04/Y

**Methods for measuring human lipoprotein need to revised**

○Yurie HAYASHI

Akita Prefectural University

5. A-05/Y

**Prevention of intestinal polyps by Brassicaceae plants**

○Takumi NARITA<sup>1</sup>, Gen FUJII<sup>1,2</sup>, Mitsuharu MASUDA<sup>1</sup>, Yoshihiro SOWA<sup>1</sup>, Shingo MIYAMOTO<sup>1</sup>, Motoki WATANABE<sup>1</sup>, Yosuke WATANABE<sup>1</sup>, Michihiro MUTOH<sup>1,3</sup>

<sup>1</sup>Department of Molecular-Targeting Prevention, Kyoto Prefectural University of Medicine, <sup>2</sup>Central Radioisotope Division, National Cancer Center Research Institute, <sup>3</sup>Division of Prevention, Center for Public Health Sciences, National Cancer Center

6. F-03

**The role of commensal microbes on the longevity effect of dietary restriction**

○Ji-Hyeon LEE, Kyung-Jin MIN

Department of Biological Science and Bioengineering, Inha University

7. F-04

**CD4+/CD8+ Ratio and Growth Differentiation Factor 8 Levels in Peripheral Blood of Large Canine Males for Age Prediction**

○Han-Jun LEE, Seok-Jin HONG, Seung-Soo KIM, Young-Yon KWON, Cheol-Koo LEE

Korea University

8. B-01/Y

**Riboflavin suppresses cellular senescence through LSD1-mediated downregulation of Sirtuin-4**

○Taiichi OSUMI<sup>1</sup>, Taiki NAGANO<sup>2</sup>, Tetsushi IWASAKI<sup>1,2</sup>, Shinji KAMADA<sup>1,2</sup>

<sup>1</sup>Department of Biology, Graduate School of Science, <sup>2</sup>Biosignal Research Center, Kobe University

9. B-02/Y

**Induction of DNA damage by exosome derived from senescent cells**

○Yukihiro IKEGAKI<sup>1</sup>, Taiki NAGANO<sup>2</sup>, Tetsushi IWASAKI<sup>1,2</sup>, Kenji MIYADO<sup>3</sup>, Shinji KAMADA<sup>1,2</sup>

<sup>1</sup>Department Biology, Graduate School of Science, <sup>2</sup>Biosignal Research Center, Kobe University, <sup>3</sup>National Research Institute for Child Health and Development

10. F-06

**Co-inhibition of ATM and ROCK synergistically induces cell proliferation in replicative senescence by activating FOXM1 and E2F1**

○Eun Jae YANG, Young-Sam LEE

Department of New Biology, DGIST

11. C-01/Y

**The effect of bioactive compounds on aging skeletal muscle in mice**

○Ryota IYAMA, Eriko KUROGI, Takumi YOKOKAWA, Tatsuya HAYASHI, Tatsuro EGAWA

Graduate School of Human and Environmental Studies, Kyoto University

12. C-02/Y

**Effects of aging and sex differences on IGF-2 and myostatin gene expressions in rat skeletal muscle following resistance training**

○Yung-Li HUNG<sup>1</sup>, Ayami SATO<sup>2</sup>, Yuka TAKINO<sup>2</sup>, Akihito ISHIGAMI<sup>2</sup>, Shuichi MACHIDA<sup>1</sup>

<sup>1</sup>Institute of Health & Sports Science and Medicine, Juntendo University, <sup>2</sup>Molecular Regulation of Aging, Tokyo Metropolitan Institute of Gerontology

13. C-03/Y

**CREG1 enhances glucose uptake via AMPK in C2C12 myotube**

○Ayumi GOTO<sup>1</sup>, Yuki ENDO<sup>1,2</sup>, Michihiro HASHIMOTO<sup>3</sup>, Misa UNO<sup>2</sup>, Hitoshi YAMASHITA<sup>1</sup>

<sup>1</sup>Dept. of Biomed. Sci., Coll. of Life and Health Sci., Chubu Univ., <sup>2</sup>Grad. of Life and Health Sci., Chubu Univ., <sup>3</sup>Div. of Adv. Med. Sci., Asahikawa Med. Univ.

14. C-04/Y

**Cellular senescence affects secretory phenotype and myogenic differentiation in mouse myoblasts**

○Tomoko ONO, Airi JO-WATANABE, Takehiko YOKOMIZO

Department of Biochemistry, Juntendo University Graduate School of Medicine

15. G-03

**Mitochondrial aconitase 1 regulates age-related memory impairment via autophagy/mitophagy-mediated neural plasticity**

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16. D-01/Y

**Optimal concentration of hydrogen gas attenuates sevoflurane-induced brain cell death in juvenile mice**

○Masumi IKETANI<sup>1</sup>, Mai HATOMI<sup>1,2</sup>, Yasunori FUJITA<sup>1</sup>, Nobuhiro WATANABE<sup>3</sup>, Harumi HOTTA<sup>3</sup>, Masafumi ITO<sup>1</sup>, Hideo KAWAGUCHI<sup>2</sup>, Ikuroh OHSAWA<sup>1</sup>

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17. D-02/Y

**The function of transcription factor MXL-3 involved in oxidative stress and nutrition signal**

○Yunosuke SAKAI<sup>1</sup>, Takamasa ISHII<sup>2</sup>, Masaki MIYAZAWA<sup>1</sup>, Naoaki ISHII<sup>2</sup>, Kayo YASUDA<sup>1</sup>

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18. D-03/Y

**Mitochondrial ROS in fast muscle reversibly regulates glycogen metabolism and physical activity in mice**

○Shuichi SHIBUYA<sup>1</sup>, Ikko SAKAMOTO<sup>2</sup>, Kenji, WATANABE<sup>1</sup>, Hidetoshi NOJIRI<sup>2</sup>, Takahiko SHIMIZU<sup>1</sup>

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19. D-04/Y

**Epigenetic regulation by vitamin C in epidermal keratinization**

○Ayami SATO<sup>1</sup>, Mio MATSUI<sup>1,2</sup>, Kanae URASAWA<sup>1,2</sup>, Nanako MAEDA<sup>1,2</sup>, Yuka Takino<sup>1</sup>, Yasunori SATO<sup>3</sup>, Jaewon LEE<sup>4</sup>, Akihito ISHIGAMI<sup>1,2</sup>

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20. D-05/Y

**Tocotrienols attenuate diet-induced obesity development**

○Yugo KATO<sup>1</sup>, Shuichi YANAI<sup>2</sup>, Shogo ENDO<sup>2</sup>, Koji FUKUI<sup>1</sup>

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21. G-07

**Pharmacological intervention to Parkinson's disease through regulating neuroinflammation**

Seulah LEE, Dong Geun HONG, Seonguk YANG, Jaehoon KIM, Seoyeong KIM, ◯Jaewon LEE  
Department of Pharmacy, College of Pharmacy, Pusan National University,

22. E-01/Y

**Cytosolic mitochondrial DNA enhances the IRF3 response in microglia with mitochondrial dysfunction**

◯Yuki NAKAMURA, Manaya NAKANO, Keisuke IKEDA, Momoka IWAMOTO, Kazue HISAOKA-  
NAKASHIMA, Norimitsu MORIOKA

Hiroshima University

23. E-02/Y

**Comprehensive analysis of gene expression in adipose-specific Mipep-deficient mice**

◯Mitsuki KUMAGAI, Yuka NOZAKI, Masaki KOBAYASHI, Yoshikazu HIGAMI

Tokyo University of Science Faculty of Pharmaceutical Sciences

24. E-03/Y

**Adipose tissue-specific mitochondrial stress contributes to whole-body metabolism**

◯Yuka NOZAKI, Masaki KOBAYASHI, Yoshikazu HIGAMI

Faculty of Pharmaceutical Sciences, Tokyo University of Science

25. E-04/Y

**Regulation of adipocyte differentiation by a transcription factor PARIS/ZNF746**

◯Tatsuhiko ESASHI, Yuka NOZAKI, Masaki KOBAYASHI, Yoshikazu HIGAMI

Tokyo University of Science, Faculty of Pharmaceutical Sciences