

第45回日本基礎老化学会大会

プログラム

7月27日(水) / 27 July (Wed)

《ホール1 / Hall I》

9:00 大会長挨拶 細川 昌則 (京都光華女子大学)

9:05~10:30 一般演題 A バイオマーカー

座長：板倉 陽子 (東京都健康長寿医療センター研究所)

三浦 ゆり (東京都健康長寿医療センター研究所)

1. A-01/Y

p16^{INK4a}-associated CC-chemokine gene cluster expression evokes a diversity in cellular senescence

○Yuma SUGIYAMA¹, Akihiko NISHIKIMI¹, Mitsuo MARUYAMA^{1,2}

¹National Center for Geriatrics and Gerontology, ²Nagoya University Graduate School of Medicine

2. A-02/Y

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

○Yurika NIIMURA^{1,2}, Yuta DOSHIDA¹, Fumiya SOBUE^{1,3}, Koji FUKUI², Toshiro AIGAKI³, Sadahiro IWABUCHI⁴, Shinichi HASHIMOTO⁴, Jaewon LEE⁵, Akihito ISHIGAMI^{1,3}

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

3. A-03/Y

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

○Kyojiro KAWAKAMI¹, Naoki EDO², Koji MORITA², Toshio ISHIKAWA², Hiroyuki ONOSE³, Tatsuya FUKUMORI³, Hiroki TSUMOTO¹, Keitaro UMEZAWA¹, Yuri MIURA¹, Yasunori FUJITA¹, Ikuroh OHSAWA¹, Masafumi ITO¹

¹Tokyo Metropolitan Institute of Gerontology, ²Teikyo University School of Medicine, ³Kanaji 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 NARITA¹, Gen FUJII^{1,2}, Mitsuharu MASUDA¹, Yoshihiro SOWA¹, Shingo MIYAMOTO¹, Motoki WATANABE¹, Yosuke WATANABE¹, Michihiro MUTOH^{1,3}

¹Department of Molecular-Targeting Prevention, Kyoto Prefectural University of Medicine, ²Central Radioisotope Division, National Cancer Center Research Institute, ³Division 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-MANYA¹, Hiroshi MANYA¹, Hisatoshi HANAMATSU², Jun-ichi FURUKAWA², Tamao ENDO¹

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

10:30 ~ 10:40 休憩

10:40~12:05 一般演題 B 細胞老化

座長：大山 恭司（東京医科大学）

近藤 祥司（京都大学）

1. B-01/Y

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

○Taiichi OSUMI¹, Taiki NAGANO², Tetsushi IWASAKI^{1,2}, Shinji KAMADA^{1,2}

¹Department of Biology, Graduate School of Science, ²Biosignal Research Center, Kobe University

2. B-02/Y

Induction of DNA damage by exosome derived from senescent cells

○Yukihiro IKEGAKI¹, Taiki NAGANO², Tetsushi IWASAKI^{1,2}, Kenji MIYADO³, Shinji KAMADA^{1,2}

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

3. B-03

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

○Yasuhiro TAKENAKA^{1,2}, Masataka HIRASAKI², Masaaki IKEDA², Ikuo INOUE², Yoshihiko KAKINUMA¹

¹Nippon Medical University, ²Saitama 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 昼食休憩

《ホール 2 / Hall II》

13:00~13:40 ポスター討論 (奇数番号)

《ホール 1 / Hall I》

13:40~14:20 教育講演 1

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

講師：細川 昌則 (第 45 回大会長、京都光華女子大学)

座長：清水 孝彦 (国立長寿医療研究センター)

14:20 ~ 14:30 休憩

14:30~15:30 一般演題 C 筋・心臓

座長：川岸 裕幸（信州大学）

町田 修一（順天堂大学）

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 HUNG¹, Ayami SATO², Yuka TAKINO², Akihito ISHIGAMI², Shuichi MACHIDA¹

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

3. C-03/Y

CREG1 enhances glucose uptake via AMPK in C2C12 myotube

○Ayumi GOTO¹, Yuki ENDO^{1,2}, Michihiro HASHIMOTO³, Misa UNO², Hitoshi YAMASHITA¹

¹Dept. of Biomed. Sci., Coll. of Life and Health Sci., Chubu Univ., ²Grad. of Life and Health Sci., Chubu Univ., ³Div. 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 休憩

15:30~18:30 Japan-Korea Joint Symposium

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 懇親会 / Reception 都ホテル京都八条

7月28日(木) / 28 July (Thu)

《ホール 1 / Hall I》

9:00~10:40 一般演題 D 酸化ストレス

座長：柿澤 昌 (京都大学)

福井 浩二 (芝浦工業大学)

1. D-01/Y

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

○Masumi IKETANI¹, Mai HATOMI^{1,2}, Yasunori FUJITA¹, Nobuhiro WATANABE³, Harumi HOTTA³, Masafumi ITO¹, Hideo KAWAGUCHI², Ikuroh OHSAWA¹

¹Biological Process of Aging, Tokyo Metropolitan Institute of Gerontology, ²Department of Life Sciences, Toyo University, ³Autonomic 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 SAKAI¹, Takamasa ISHII², Masaki MIYAZAWA¹, Naoaki ISHII², Kayo YASUDA¹

¹Department Health Management, School of Health Studies, Tokai Univ., ²Department 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 SHIBUYA¹, Ikko SAKAMOTO², Kenji, WATANABE¹, Hidetoshi NOJIRI², Takahiko SHIMIZU¹

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

4. D-04/Y

Epigenetic regulation by vitamin C in epidermal keratinization

○Ayami SATO¹, Mio MATSUI^{1,2}, Kanae URASAWA^{1,2}, Nanako MAEDA^{1,2}, Yuka Takino¹, Yasunori SATO³, Jaewon LEE⁴, Akihito ISHIGAMI^{1,2}

¹Molecular Regulation of Aging, Tokyo Metropolitan Institute of Gerontology ²Department of Biological Sciences, Tokyo Metropolitan University ³Faculty of Pharmaceutical Sciences, Hokuriku University ⁴College of Pharmacy, Pusan National University

5. D-05/Y

Tocotrienols attenuate diet-induced obesity development

○Yugo KATO¹, Shuichi YANAI², Shogo ENDO², Koji FUKUI¹

¹Shibaura Institute of Technology, ²Tokyo Metropolitan Institute of Gerontology

6. D-06

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

○Kenji WATANABE¹, Shuichi SHIBUYA¹, Keiji KOBAYASHI², Hidetoshi NOJIRI², Takahiko SHIMIZU¹

¹Aging Stress Response Research Project Team National Center for Geriatrics and Gerontology,

²Department 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^{1,2}, Hiroyuki YAMASAKI², Yasuyuki SUZUKI¹, Naoaki ISHII², Takamasa ISHII²

¹Department of Ophthalmology, ²Department 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^{1,3}, Nozomu MORI^{2,3}

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

10:40 ~ 10:50 休憩

10:50~12:30 一般演題 E 代謝・寿命制御(1)

座長：石井 恭正（東海大学）

伊藤 孝（理化学研究所）

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 Mipep-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

○Tatsuhiro 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 NISHIO¹, Ken-ichi ISOBE²

1.Saitama University, 2.Shubun University

6. E-06

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

○Masaki OBA^{1,2}, Mayumi SHINDO¹, Koji FUKUI², Kazunori SANGO¹, Mari SUZUKI¹

¹Tokyo Metropolitan Institute of Medical Science, ²Shibaura 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 昼食休憩

《ホール 2 / Hall II》

13:30~14:10 ポスター討論 (偶数番号)

《ホール 1 / Hall I》

14:10~14:50 教育講演 2

「Senescence research from historical theory to future clinical application」

老化研究の過去、現在、未来；ワイスマンからセノリシスまで」

講師：近藤 祥司（京都大学）

座長：杉本 昌隆（東京都健康長寿医療センター研究所）

14:50 ~ 15:00 休憩

15:00~16:25 一般演題 F 代謝・寿命制御(2) (英語/日本語)

座長：高橋 良哉 (東邦大学)

山下 均 (中部大学)

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

○Masaoki KOHZAKI¹, Keiji SUZUKI², Akira OOTSUYAMA³, Ryuji OKAZAKI¹

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 休憩

16:35~18:00 一般演題 G 脳・神経 (英語/日本語)

座長：内田 さえ (東京都健康長寿医療センター研究所)

木村 展之 (岡山理科大学)

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 HONJO¹, Izumi OIKAWA², Shu KONDO³, Kao HASHIMOTO², Akiho KASHIWABARA², Hiromu TANIMOTO⁴, Katsuo FURUKUBO-TOKUNAGA²

¹National Center for Geriatrics and Gerontology, ²University of Tsukuba, ³Tokyo University of Science,

⁴Tohoku University

3. G-03

Mitochondrial aconitase 1 regulates age-related memory impairment via autophagy/mitophagy-mediated neural plasticity in middle-aged flies

○Joong-Jean PARK

Department of Physiology, Korea University College of Medicine

4. G-04

Exogenous coenzyme Q₁₀ 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 ~ 閉会式・若手奨励賞表彰式

7月27日(水)～28日(木) / 27(Wed)～28(Thu) July

《ホール 2 / Hall II》ポスター発表会場

1. A-01/Y

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○Yuma SUGIYAMA¹, Akihiko NISHIKIMI¹, Mitsuo MARUYAMA^{1,2}

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

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

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Methods for measuring human lipoprotein need to revised

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Prevention of intestinal polyps by Brassicaceae plants

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¹Department of Molecular-Targeting Prevention, Kyoto Prefectural University of Medicine, ²Central Radioisotope Division, National Cancer Center Research Institute, ³Division 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

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

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Korea University

8. B-01/Y

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¹Department of Biology, Graduate School of Science, ²Biosignal Research Center, Kobe University

9. B-02/Y

Induction of DNA damage by exosome derived from senescent cells

○Yukihiro IKEGAKI¹, Taiki NAGANO², Tetsushi IWASAKI^{1,2}, Kenji MIYADO³, Shinji KAMADA^{1,2}

¹Department Biology, Graduate School of Science, ²Biosignal Research Center, Kobe University, ³National 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

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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 HUNG¹, Ayami SATO², Yuka TAKINO², Akihito ISHIGAMI², Shuichi MACHIDA¹

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

13. C-03/Y

CREG1 enhances glucose uptake via AMPK in C2C12 myotube

○Ayumi GOTO¹, Yuki ENDO^{1,2}, Michihiro HASHIMOTO³, Misa UNO², Hitoshi YAMASHITA¹

¹Dept. of Biomed. Sci., Coll. of Life and Health Sci., Chubu Univ., ²Grad. of Life and Health Sci., Chubu Univ., ³Div. 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 in middle-aged flies

○Joong-Jean PARK

Department of Physiology, Korea University College of Medicine

16. D-01/Y

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

○Masumi IKETANI¹, Mai HATOMI^{1,2}, Yasunori FUJITA¹, Nobuhiro WATANABE³, Harumi HOTTA³, Masafumi ITO¹, Hideo KAWAGUCHI², Ikuroh OHSAWA¹

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

17. D-02/Y

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

○Yunosuke SAKAI¹, Takamasa ISHII², Masaki MIYAZAWA¹, Naoaki ISHII², Kayo YASUDA¹

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

18. D-03/Y

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

○Shuichi SHIBUYA¹, Ikko SAKAMOTO², Kenji, WATANABE¹, Hidetoshi NOJIRI², Takahiko SHIMIZU¹

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

19. D-04/Y

Epigenetic regulation by vitamin C in epidermal keratinization

○Ayami SATO¹, Mio MATSUI^{1,2}, Kanae URASAWA^{1,2}, Nanako MAEDA^{1,2}, Yuka Takino¹, Yasunori SATO³, Jaewon LEE⁴, Akihito ISHIGAMI^{1,2}

¹Molecular Regulation of Aging, Tokyo Metropolitan Institute of Gerontology ²Department of Biological Sciences, Tokyo Metropolitan University ³Faculty of Pharmaceutical Sciences, Hokuriku University ⁴College of Pharmacy, Pusan National University

20. D-05/Y

Tocotrienols attenuate diet-induced obesity development

○Yugo KATO¹, Shuichi YANAI², Shogo ENDO², Koji FUKUI¹

¹Shibaura Institute of Technology, ²Tokyo Metropolitan Institute of Gerontology

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

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25. E-04/Y

Regulation of adipocyte differentiation by a transcription factor PARIS/ZNF746

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