The 35th Annual Meeting of Japan Society for Biomedical Gerontology
July 26 (Thu), 27 (Fri), 2012
Narashino Campus, Toho University (Funabashi, Chiba, Japan)
President: Ryoya TAKAHASHI (Prof., Fac. Pharmaceut. Sci., Toho Univ.)

Day 1
July 26, Thursday
Building C, 1F
Room C-101
Cafeteria PAL, 2F
09:00
Registration
Poster Set-Up

09:00
Lobby

10:00
Opening Address

Young Scientist Award Session (Oral)
Y-01
Y-02
Y-03
Y-04
Y-05
Y-06
Y-07
Y-08
Y-09
Y-10
Y-11
Y-12
Y-13

11:00
Advisory Committee Meeting

Poster Session (H-01~H-05)

12:00
Poster Highlight Session (Oral)

Plenary Lecture
Nakao Mitsuyoshi
Chair: Ryoya Takahashi

14:00
Poster Sessions
Y-01~Y-13
P-01~P-21

15:00
Break

16:00
Poster Set-Up
(after 4 pm)

17:00
Poster Sessions
Y-01~Y-13
P-01~P-21

18:00
Reception

Day 2
July 27, Friday
Building C, 1F
Room C-101
Lobby, Room C-103, 104

10:00
Registration

Asian Mini-Symposium: Present and Future Aging Research
Ramesh Sharma (India)
Chair: Nozomu Mori
Eun Seong Hwang (Korea)
Chair: Mitsuo Maruyama
Takashi Ikejima (China)
Chair: Keiichi Higuchi

11:00
General Meeting

12:00
Closing Remarks

JSBG Open Symposium
Chewing, Nutrition and Diseases = Food in Later Life =

Minoru Onozuka
Chair: Masanori Hosokawa
Shoji Shinkai
Chair: Hiroshi Kondo
Koji Shirai
Chair: Sataro Goto

Board of Directors Meeting: 18:30-20:00, July 25 (Tsudanuma)
Program

Thursday, 26 July

09:00    Registration Desk Open
(1F Lobby of Building C, Faculty of Pharmaceutical Sciences)

09:50～10:00   Opening Address   Takahashi R (Toho University)

10:00～12:10   Young Scientist Award Session (Oral presentation)
                8 minutes for presentation and 2 minutes for questions

                Chair: Higami Y (Tokyo University of Science)

Y-01  Medaka (*Oryzias latipes*) recover rapidly to the initial telomere length during adolescence
      Hatakeyama H\textsuperscript{1,2}, Yamazaki H\textsuperscript{1}, Nakamura K\textsuperscript{2}, Izumiyama-Shimomura N\textsuperscript{2}, Suzuki H\textsuperscript{1},
      Tsuchida S\textsuperscript{1}, Matsuura M\textsuperscript{2}, Ishikawa N\textsuperscript{2}, Takubo K\textsuperscript{2}
      \textsuperscript{1}Nippon Veterinary and Animal Science University,
      \textsuperscript{2}Tokyo Metropolitan Institute of Gerontology, \textsuperscript{3}The Cancer Institute of JFCR

Y-02  MST1-FOXO pathway regulates oxidative stress resistance for longevity
      Yanagino T, Ito Y, Hibi Y, Maruyama W, Motoyama N
      National Center for Geriatrics and Gerontology

Y-03  The effect of somatosensory stimulation on nerve growth factor release in the cerebral cortex
      Watanabe N, Hara S, Uchida S, Hotta H
      Tokyo Metropolitan Institute of Gerontology

      Chair: Isobe K (Nagoya University)

Y-04  A zebrafish model for studying neurogenesis in aged brain
      Kishimoto N, Takeda Y, Sawamoto K
      Nagoya City University
Y-05  Muscle-type specific atrophy in aging mice
Fukunaga T$^{1,2}$, Mori S$^1$, Kubo S$^1$, Nakayama R$^1$, Murase N$^{1,2}$, Miyazaki T$^1$, Higami Y$^{1,2}$, Shigemoto K$^1$
$^1$Tokyo Metropolitan Institute of Gerontology, $^2$Tokyo University of Science

Y-06  Impact of aging on satellite cell heterogeneity
Ono Y, Kawakatsu M, Goto S, Urata Y, Li T
Nagasaki University

Chair: Tsuboi I (Nihon University)

Y-07  Loss of GADD34 induces early immune aging: Inhibition of neutrophil-lineage cells proliferation
Nishio N, Ito S, Isobe K
Nagoya University

Y-08  The long-term culture of macrophage stem cells by GM-CSF
Ito S, Tanaka Y, Nishio N, Isobe K
Nagoya University

Y-09  A possible function of novel GEF Zizimin family in host defense and its involvement in immunosenescence
Matsuda T, Sakabe I, Hayakawa T, Maruyama M
National Center for Geriatrics and Gerontology

Chair: Hotta H (Tokyo Metropolitan Institute of Gerontology)

Y-10  The mechanism of longevity with hormesis by the low dose X-irradiation in C. elegans
Hayashi S, Yasuda K, Ishii T, Ishii N
Tokai University

Y-11  Improving effect of green soybean extract on brain senescence
Narita Y$^1$, Konishi T$^2$, Okamura H$^1$, Yamamoto H$^1$, Takabayashi F$^1$, Imai S$^1$, Yasui K$^3$, Katayanagi Y$^3$, Hoshino M$^1$, Unno K$^1$
$^1$University of Shizuoka, $^2$Akita Prefectural University, $^3$Nisshin Pharma Inc.
Y-12  Mechanism of deceleration of age-related disease in Senescence Accelerated Mice Prone 1 (SAMP1) mice with reduced coenzyme Q10 supplementation
Tian G1, Sawashita J1, Kubo H2, Nishio S1, Hashimoto S1, Suzuki N1, Yoshimura G1, Wang Y1, Mori M1, Hosoe K2, Kitano M2, Takeda T1, Usami S1, Higuchi K1
1Shinshu University, 2Kaneka Corporation, 3The Council for SAM Research

Y-13  Chronological approach of caloric restriction-induced alterations of mitochondrial biogenesis
Yuguchi K1, Tuchiya T1, Fukusima M1, Okita N1, Toda T2, Higami Y1
1Tokyo University of Science, 2Tokyo Metropolitan Institute of Gerontology

12:20～13:20  Advisory Committee Meeting

13:30～14:45  Poster Highlight Session (Oral presentation)
10 minutes for presentation and 5 minutes for questions

Chair: Shimokawa I (Nagasaki University)

H-01  Premature aging phenotypes during the differentiation of iPSCs from aged mice
Nagoya University

H-02  Functional analysis of aging-related factor TARSH
Harada T1, Sugimoto M1, Mori H2, Maruyama M1
1National Center for Geriatrics and Gerontology, 2University of Toyama

H-03  Correlation between the increase of variability of gene expression or ATP and the onset timing of aging and lifespan
Suda H
Tokai University
Chair: Yamashita H (Chubu University)

**H-04  Zebrafish age with genomic and epigenomic changes**
Shimoda N¹, Izawa T², Yoshizawa I¹, Yokoi H¹, Kikuchi Y³, Hashimoto A¹
¹National Center for Geriatrics and Gerontology, ²Nagoya University, ³Hiroshima University, ⁴Tohoku University

**H-05  Glycoproteomics of plasma proteins in Japanese semisuper centenarians using lectin microarray**
Miura Y¹, Itakura Y¹, Arai Y², Toyoda M¹, Kinoshita H³, Maruo Y³, Unuma Y³, Toda T⁴, Hirose N², Endo T¹
¹Tokyo Metropolitan Institute of Gerontology, ²Keio University, ³Sharp Corporation, ⁴Yokohama City University

14:45～15:00  Break

15:00～16:00  Plenary Lecture

**Cell regulation and deregulation by epigenetic mechanisms**
Mitsuyoshi Nakao
Department of Medical Cell Biology, Institute of Molecular Embryology and Genetics, Kumamoto University

16:30～18:00  General Session (Poster presentation)
5 minutes for presentation and 3 minutes for questions

Chair: Unno K (University of Shizuoka)

**P-01  Physiological mechanisms of the excitement stage observed during induction of general anesthesia**
Aosaki T, Miura M, Inoue R, Oose Y, Andou N, Nishimura K
Tokyo Metropolitan Institute of Gerontology
P-02  Effect of sustained subcutaneous infusion of nicotine on basal forebrain cholinergic vasodilation in the cerebral cortex in aged rats
Uchida S, Hotta H
Tokyo Metropolitan Institute of Gerontology

P-03  Neuronal aging in vitro: aging phenomena observed in the long-term primary cultured neurons
Onga K, Yamaguchi Y, Ohyama K, Mori N
Nagasaki University

P-04  Onset of learning and memory deficits in 4 month old SAM-P8 mice
Yanai S, Endo S
Tokyo Metropolitan Institute of Gerontology

Chair: Endo S (Tokyo Metropolitan Institute of Gerontology)

P-05  Yes-associated protein homolog, YAP-1, is involved in the thermotolerance and aging in the nematode Caenorhabditis elegans
Iwasa H, Kuroyanagi H, Ikeda M, Nakagawa K, Hata Y
Tokyo Medical and Dental University

P-06  Age-related changes in mice tissue hydroxyl radical and oxidatively modified macromolecule levels
Iijima R1,2, Mogi S1,2, Kaneko T1, Kojima H1,2, Sano A2, Kojima S2, Sasaki T1
1Tokyo Metropolitan Institute of Gerontology, 2Tokyo University of Science

P-07  Relationship between reactive oxygen generation and energy metabolism
Sasaki T1, Yamamura A1,2, Yamanaka M1,2, Kagami N1,2, Mogi S1,3, Kojima S3
1Tokyo Metropolitan Institute of Gerontology, 2Tokyo College of Medico-pharmaco technology, 3Tokyo University of Science

P-08  ApoA-I deficiency in mice is associated with redistribution of apoA-II and aggravated AApoAII amyloidosis
Higuchi K, Wang Y, Qian J, Tian G, Chen L, Mori M, Sawashita J
Shinshu University
P-09 The molecular mechanisms for inhibitory effect of molecular hydrogen on oxidative stress
Ohsawa I, Murakami Y
Tokyo Metropolitan Institute of Gerontology

P-10 Restoration of the lifespan and behavioral rate in *clk-1* mutant nematodes and the biological rhythms in *clk-1*-deficient mice by the exogenous administration of coenzyme Q10
Takahashi M1, Ogawara M1, Shimizu T2, Shirasawa T3
1Tokyo Metropolitan Institute of Gerontology, 2Chiba University, 3Juntendo University

P-11 Evodiamine improves age-associated obesity and insulin resistance in mice
Yamashita H1, Kusudo T1, Takeuchi T1, Li Y1, Qiao S1, Yamashita Y1, Kontani Y2, Wang T3, Mori N4
1Chubu University, 2Minami Kyusyu University, 3Iwate Medical University, 4Nagasaki University

P-12 Analysis of organ specific autophagy associated with obesity
Tokunaga Y, Mikami K, Okita N, Higami Y
Tokyo University of Science

P-13 Prolonged suppression of erythropoiesis in aged mice during inflammation due to age-related functional impairment of stromal cell
Tsuboi I1, Harada T1, Hirabayashi Y2, Kanno J2, Inoue T1, Aizawa S1
1Nihon University, 2National Institute of Health Sciences

P-14 HuR maintains replicative lifespan by repressing ARF tumor suppressor
Sugimoto M, Kawagishi H, Tsugawa T, Nakamura H
National Center for Geriatrics and Gerontology
P-15  MiR-221 is robustly induced by NGF and enhances neuronal differentiation in PC12 cells
Hamada N1,4, Fujita Y2, Kojima T3, Akao Y4, Nozawa Y4, Ito M1
1Institute for Developmental Research, Aichi Human Service Center,
2Tokyo Metropolitan Institute of Gerontology, 3Hamamatsu University School of Medicine,
4Gifu University, 5Tokai Gakuin University

P-16  The dihydropyridine calcium channel blocker prevents endothelial senescence
Yamaguchi T, Iida M, Hayashi T
Nagoya University

P-17  Dbf4 is direct downstream target of ATM and ATR protein to regulate intra-S-phase checkpoint
Chiba T1,2,3, Wu X3, Shimokawa I1
1Waseda University, 2Nagasaki University, 3The Scripps Research Institute

P-18  Effect of dietary restriction by weekday every-other-day feeding from old on the degenerative loss of skeletal muscle mass with age
Takahashi R, Tobe S, Odera K
Toho University

P-19  Accumulation of abnormally modified proteins in the renal proximal tubular cells of old rats
Odera K, Takahashi R
Toho University

P-20  Genetic mutation and expression of agmatinase in the liver of senescence accelerated mouse SAMP8 strain with age
Wang G, Odera K Takahashi R
Toho University

P-21  Effect on casein-based diet on lipid metabolism in different mouse strains: SAMR1, SAMP8, C57BL, DBA/2
Tanaka (Fukui) Y, Takahashi R
Toho University

18:00～20:00  Reception
  Young Scientist Award Ceremony / Domestic/International Event Announcement
Friday, 27 July

09:00 Registration Desk Open
(1F Lobby of Building C, Faculty of Pharmaceutical Sciences)

09:30～11:45 Asian Mini-Symposium: Present and Future Aging Research

Chair: Mori N (Nagasaki University)

1. Aging research in Indian context: Dietary restriction benefits cholinergic deficits in aged mice
   Ramesh Sharma
   Department of Biochemistry, North-Eastern Hill University, India

   Chair: Maruyama M (National Center for Geriatrics and Gerontology)

2. Studies on aging in Korea with major focus on senescence of human cells
   - Introducing a study on the mechanisms underlying the expression of the senescence phenotypes
   Eun Seong Hwang
   BK21 Cellular Stress Response Research Team
   Department of Life Science, University of Seoul, Republic of Korea

   Chair: Higuchi K (Shinshu University)

3. Relationship among apoptosis, autophagy and (possibly necroptosis) in aging studies in China
   Takashi Ikejima
   China-Japan Research Institute of Medical and Pharmaceutical Sciences,
   Shenyang Pharmaceutical University, China

12:00～13:00 General Meeting

13:00 Closing Remarks
14:00～17:00  JSBG Open Symposium

Chewing, Nutrition and Diseases  = Food in Later Life =

Chair: Hosokawa M (Institute for Developmental Research, Aichi Human Service Center)

1. Chewing and brain functions
   Minoru Onozuka (Institute for Mastication and Brain Science)

   Chair: Kondo H (University of Human Arts and Sciences)

2. Do not believe that ‘Soshoku’ is good for health if you are beyond 50 years of age!
   Shoji Shinkai (Tokyo Metropolitan Institute of Gerontology)

   Chair: Goto S (Juntendo University)

3. Age-related diseases caused by foods
   Koji Shirai (Toho University)