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### 東北大学加齢医学研究所



### プログラム

# 152<sup>nd</sup> IDAC Biannual Meeting Program



日時:令和元年7月19日(金曜日)13:00~

場所:加齡医学研究所

スマート・エイジング研究棟1階 国際会議室

July 19, 2019,13:00~ Center for Smart Aging Research 1F, IDAC

共催:東北大学加齢医学研究所

Institute of Development, Aging and Cancer, Tohoku University

東北大学加齢医学研究所研究会同窓会

Society of Institute of Development, Aging and Cancer, Tohoku University

#### 13:05-13:50 Sessions $1\sim3$

Chair: Shota Endo

#### 1, Mind Attribution is a Key Concept for Building Smart Aging Society

Toshiki Saito<sup>1, 2</sup>, Rui Nouchi<sup>3, 4</sup>, Kosuke Motoki<sup>5</sup>, Motoaki Sugiura<sup>4, 6</sup>,

Ryuta Kawashima<sup>1, 4</sup>

<sup>1</sup>Department of Functional Brain Imaging, Institute of Development, Aging and Cancer, Tohoku University, Sendai, Japan

<sup>2</sup>Japan Society for Promotion of Science, Tokyo, Japan

<sup>3</sup>Department of Cognitive Health Science, Institute of Development, Aging and Cancer, Tohoku University, Sendai, Japan

<sup>4</sup>Smart Aging Research Center, Institute of Development, Aging and Cancer, Tohoku University, Sendai, Japan

<sup>5</sup>Department of Food Management, Miyagi University, Sendai, Japan

<sup>6</sup>Human and Social Response Research Division, International Research Institute of Disaster Science, Tohoku University, Sendai, Japan

#### 2 From virtual to the real!

#### Virtual training leads to real cognitive and neural benefits.

Dalila Burin<sup>1, 2</sup>, Noriki Yamaya<sup>1</sup>, Rie Ogitsu<sup>1</sup>, Ryuta Kawashima<sup>1, 2</sup>

<sup>1</sup>Smart Aging International Research Center (SAIRC), Tohoku University, 4-1 Seiryocho, Aobaku, Sendai 980-8575, Japan.

<sup>2</sup>Institute of Development, Aging and Cancer (IDAC), Tohoku University, 4-1 Seiryocho, Aobaku, Sendai 980-8575, Japan.

#### 3. Epigenetic effects of prenatal phthalate exposure on testicular germ cells

Yukiko Tando<sup>1</sup>, Hitoshi Hiura<sup>2</sup>, Takahiro Arima<sup>2</sup>, Yasuhisa Matsui<sup>1</sup>

<sup>1</sup>Cell Resource Center for Biomedical Research, Institute of Development, Aging and Cancer (IDAC), Tohoku University.

<sup>2</sup>Department of Informative Genetics, Environment and Genome Research Center, Tohoku University Graduate School of Medicine.

### 13:50-14:00 **Break**

# 4. Role of lymph node stromal cells in immunosuppression during cancer progression

Koyu Ito and Kouetsu Ogasawara

Department of Immunobiology, Institute of Development, Aging and Cancer,

Tohoku University

# 5 . BRCA1 is involved in DNA damage-induced centrosome amplification through the centrosomal localization of Aurora A

Huicheng Qi, Megumi Kikuchi, Kazune Ohashi, Zhenzhou Fang, Yuki Yoshino,

Natsuko Chiba

Department of Cancer Biology, Institute of Development, Aging and Cancer,

Tohoku University.

# 6. The NRXN1 gene SNP (rs858932) is associated with white matter volume and SQ score in healthy adults.

Yuka Shiota<sup>1</sup>, Izumi Matsudaira<sup>1</sup>, Hikaru Takeuchi<sup>3</sup>, Chiaki Ono<sup>2</sup>, Hiroaki Tomita<sup>2</sup>,

Ryuta Kawashima<sup>3,4</sup>, and Yasuyuki Taki<sup>1,3,4,5</sup>

<sup>1</sup>Department of Nuclear Medicine & Radiology, Institute of Development, Aging, and Cancer, Tohoku University, Sendai, Japan.

<sup>2</sup>Department of Disaster Psychiatry, International Research Institute of Disaster Science, Tohoku University, Sendai, Japan.

<sup>3</sup>Division of Developmental Cognitive Neuroscience, Institute of Development, Aging, and Cancer, Tohoku University, Sendai, Japan.

<sup>4</sup>Smart-Aging Research Center, IDAC, Tohoku University, Sendai, Japan.

<sup>5</sup>Tohoku Medical Megabank Organization, Tohoku University, Sendai, Japan.

### 14:45-15:00 *Coffee break*

### $15 \cdot 00 - 15 \cdot 45$ Sessions $7 \! \sim \! 9$ Chair: Ryutaro Shirakawa

# 7. A Neural Network Centered on Posteromedial Cortex and Ventromedial Cortex Computes The Value of An Occupation.

Shunsui Matsuura<sup>1</sup>, Shinsuke Suzuki<sup>2,3</sup>, Kosuke Motoki<sup>4</sup>, Shohei Yamazaki<sup>1</sup>, Ryuta Kawashima<sup>1</sup>, and Motoaki Sugiura<sup>1,5</sup>

<sup>1</sup>Institute of Development, Aging and Cancer, Tohoku University, Japan

<sup>2</sup>Brain, Mind and Markets Laboratory, Department of Finance, The University of Melbourne, Parkville, Australia

- <sup>3</sup>Frontier Research Institute for Interdisciplinary Sciences, Tohoku University, Japan
- <sup>4</sup>Department of Food Management, Miyagi University, Japan
- <sup>5</sup>International Research Institute of Disaster Science, Tohoku University, Japan

# 8. Development of the implantable power generation system utilizing muscle contractions by the electrical stimulation

Genta Sahara<sup>1</sup>, Wataru Hijikata<sup>2</sup>, Tadahiko shinshi<sup>2</sup>, Akihiko Yamada<sup>3</sup>, Yusuke Inoue<sup>3</sup>, Yasuyuki Shiraishi<sup>3</sup>, Masato Karube<sup>1</sup>, Tatsuya Genda<sup>1</sup>, Naoki Iwamoto<sup>1</sup>, Yuma Tachizaki<sup>1</sup>, Ryosuke Morita<sup>1</sup> and Tomoyuki Yambe<sup>3</sup>

- <sup>1</sup>Graduate school of Biomedical Engineering, Tohoku University, Sendai, Japan
- <sup>2</sup>School of Engineering, Tokyo Institute of Technology, Tokyo, Japan
- <sup>3</sup>Institute of Development, Aging and Cancer, Tohoku University, Sendai, Japan

## 9 . Ultra-high resolution photoacoustic microscope that enables cell visualization

Ryo Shintate<sup>1</sup>, Kazuto Kobayashi<sup>2</sup> and Yoshifumi Saijo<sup>1</sup>

<sup>1</sup>School of Biomed Eng., Tohoku Univ. 6-6-05 Aramaki, Aoba-ku, Sendai-shi, Miyagi, 980-8579 Japan <sup>2</sup>R&D Division, Honda electronics Co., Ltd. 20 Oyamazuka, Oiwa-cho, Toyohashi-shi, Aichi, 441-3193 Japan

#### 一般口演について

発表時間12分, 討論3分とします。時間厳守にてお願いします。 座長は研究員会委員の集談会コンテスト係が行ないます。

### 15:45-15:50 Closing remarks Dr. Hozumi Motohashi

集談会終了後

#### 加齢医学研究所研究会同窓会総会

17:30~ 園遊会

場所:東北大学加齢医学研究所

スマート・エイジング研究棟 1階ホール