



2025年9月11日(木)

第1会場(2階 大ホール)

開会式

9:00 ~ 9:10

Flagship project 企画シンポジウム 1 (リバーストランスレーショナルリサーチ)

9:20 ~ 11:20

SS-1

双方向性 TR・RTR で達成するブレイクスルー

Breakthroughs achieved through interactive TR and RTR

Chair : Akiko Hayashi-Takagi (RIKEN・CBS)、  
Hideyuki Okano (Keio University)Organizer : Akiko Hayashi-Takagi (RIKEN・CBS)、  
Takashi Shichita (Department of Neuroinflammation and Repair, Medical research Laboratory, Institute of Science Tokyo)  
(English)

SS-1-1

脳境界から切り開く新たな脳研究とその可能性

A new frontier in brain research: the brain border and its potential

○Takahiro Masuda  
Div Mol Neuroimmunol, Med Inst Bioreg, Kyushu Univ

SS-1-2

Translational medicine of synapse physiology

○Takuya Takahashi  
Department of Physiology, Yokohama City University Graduate School of Medicine

SS-1-3

認知症病態と脳卒中との関連について

Stroke recovery affected by dementia pathology

○Takashi Shichita  
Department of Neuroinflammation and Repair, Medical research Laboratory, Institute of Science Tokyo

SS-1-4

アルツハイマー病の疾患修飾療法

Disease-modifying therapy of Alzheimer's disease

○Takeshi Iwatsubo  
National Center of Neurology and Psychiatry

特別講演 1

11:30 ~ 12:15

SL-1

Chair : Hiroko Baba (Niigata University of Health and Welfare)

(English)

SL-1

ミクログリア移植による脳機能の制御

Microglia replacement for neurological disease therapy

○Schuichi Koizumi<sup>1,2</sup>  
<sup>1</sup>Dept Neuropharmacol, Interdisc Grad Sch Med, Univ Yamanashi, <sup>2</sup>Yamanashi GLIA Center, Univ Yamanashi

ランチョンセミナー 1

12:30 ~ 13:20

LS-1

Chair : Yoshitaka Nagai (Department of Neurology, Kindai University Faculty of Medicine)

共催 : アッヴィ合同会社 (Japanese)

LS-1

持続的ドパミン受容体刺激時代におけるジスキネジアや精神症状の神経化学的考察

Neurochemical Insights into Dyskinesia and Psychiatric Symptoms under Continuous Dopaminergic Stimulation

○Kensuke Ikenaka  
Department of Neurology, Graduate School of Medicine, The University of Osaka

## 特別講演 2

15:20 ~ 16:05

## SL-2

Chair : Koji Yamanaka (Research Institute of Environmental Medicine, Nagoya University)

(English)

## SL-2

iPS 細胞技術を用いた中枢神経系疾患の再生医療と創薬研究

iPSC-Based Regenerative Medicine and Drug Development for CNS Disorders

○Hideyuki Okano

Keio University Regenerative Medicine Research Center

## 前年度優秀賞受賞者企画シンポジウム 2

16:15 ~ 18:15

## SS-2

行動を司るナノスケール・グリア - 神経回路動態

Nanosopic Glia-Neuron Circuit Dynamics in Behavior

Organizer : Jun Nagai (RIKEN Center for Brain Science, Laboratory for Glia-Neuron Circuit Dynamics)

(English)

## SS-2-1

アストロサイト・ナノドメイン

Astrocyte nanodomains

○Jun Nagai

RIKEN CBS, Lab for Glia-Neuron Circuit Dynamics

## SS-2-2

脳の極端な可塑性が明らかにするアストロサイトの記憶への新規役割

Extreme plasticity of the brain reveals a novel role of the astrocyte in memory

○Kazumasa Tanaka

Okinawa Institute of Science and Technology, Memory Research Unit

## SS-2-3

アストロサイトの微細形態が司る高時空間精度の  $\text{Ca}^{2+}$  シグナルAstrocytic  $\text{Ca}^{2+}$  signals with neuronal precision

○Misa Arizono

The Hakubi Center for Advanced Research, Kyoto University

## SS-2-4

アストロサイトによるオレキシンニューロンへのシナプスの睡眠／覚醒依存的な調節

Sleep/wake-dependent astrocytic regulation of synapses to orexin neurons in the lateral hypothalamus

○Kazue Semba

Department of Medical Neuroscience, Faculty of Medicine, Dalhousie University, Halifax, NS, Canada

## SS-2-5

運動学習によって 5 層錐体細胞のタフト樹状突起に複数のアストロサイト突起が集積

Motor Learning Recruits Multiple Astrocytic Processes to Apical Tuft Dendrites of Layer 5 Pyramidal Neurons

○Yoshiyuki Kubota

Div Multisensory Integ Systems, Natl Inst Physiol Sci

2025年9月11日(木)

第2会場(5階 小ホール1)

## シンポジウム 1

9:20 ~ 11:20

## OS-1 神経発達疾患・神経変性疾患研究の新展開

## New Developments in Research on Neurodevelopmental and Neurodegenerative Diseases

Organizer : Takako Kikkawa (Department of Developmental Neuroscience, Tohoku University Graduate School of Medicine)、  
Mikio Hoshino (National Institute of Neuroscience, NCNP)

(English)

## OS-1-1

## 脳発生過程のモータータンパク質機能不全による小頭症発症機構

Pathogenic mechanisms of microcephaly induced by motor protein dysfunction during brain development

○Takako Kikkawa, Sharmin Naher, Noriko Osumi  
Dept Dev Neurosci, Tohoku Univ Grad Sch Med

## OS-1-2

## mTOR シグナルとてんかん

mTOR signaling and epilepsy

○Mikio Hoshino  
Neuroscience, NCNP

## OS-1-3

## 内在性 DNA リガンドの正常脳発達制御及び自閉スペクトラム症様病態への関与

Involvement of endogenous DNA ligands in the regulation of normal brain development and autism spectrum disorder-like pathology

○Kinichi Nakashima, Kei Aoyagi, Hideyuki Nakashima  
Graduate School of Medical Science, Kyusyu University

## OS-1-4

## リピート伸長病におけるリピート関連 AUG 非依存性 (RAN) 翻訳の制御機構

Regulation of repeat associated non-AUG translation in repeat expansion disorders

○Yoshitaka Nagai<sup>1,2</sup>  
<sup>1</sup>Dept Neurology, Kindai Univ Fac Med, <sup>2</sup>Life Science Res Inst, Kindai Univ

## OS-1-5

A  $\beta$  神経毒性をめぐる ApoE と脂質修飾の役割Unraveling A  $\beta$  -Induced Neurotoxicity: Lipidated ApoE as a Modulator and Therapeutic Target○Yoshiteru Kagawa<sup>1,2</sup>  
<sup>1</sup>the University of Melbourne, the Florey Institute of Neuroscience and Mental Health, Australia,  
<sup>2</sup>Dept of Biochem, Tohoku Univ Grad Sch Med Sci

## OS-1-6

## アルツハイマー病モデルマウスにおいてタウ排出抑制に関わるミクログリアの役割

The role of microglia in glymphatic tau clearance in a mouse model of Alzheimer's Disease

○Kaoru Yamada, Risa Nishiyama, Takeshi Iwatsubo  
Dementia Inclusion and Therapeutics, The University of Tokyo Hospital

## 評議員会

13:30 ~ 14:00

## 授賞式・フォトコンテスト

14:00 ~ 14:30

## 優秀賞授賞者講演

14:30 ~ 15:10

## AL

Chair : Makoto Tsuda (Graduate School of Pharmaceutical Science, Kyushu University)

(English)

## AL-1

## 生体内空間プロテオミクスによるアストロサイト - ニューロン間シナプスの分子景観

Molecular Dissection of Astrocyte-Neuron Contact Sites Using In Vivo Spatial Proteomics

○Tetsuya Takano<sup>1,2</sup>  
<sup>1</sup>Division of Molecular Systems for Brain Function, Kyushu University Institute for Advanced Study, Medical Institute of Bioregulation,  
<sup>2</sup>JST PRESTO

## AL-2

## 液-液相分離によるシヌクレイノパチー発症機構の解明

Mechanism of the pathogenesis of synucleinopathy by liquid-liquid phase separation

○Yasushi Yabuki<sup>1,2</sup>  
<sup>1</sup>Dept Gen Neuro, IMEG, Kumamoto Univ, <sup>2</sup>Grad Sch Pharm, Kumamoto Univ

## シンポジウム 3

16:15 ~ 18:15

**OS-3** 神経損傷と神経変性疾患：そこに隠された関連性に迫る

## New insights into neuronal injury, neurodegenerative disease, and their relevance

Organizer : Hiroyuki Konishi (Division of Neuroanatomy, Department of Neuroscience, Yamaguchi University Graduate School of Medicine) 、  
Sumiko Kiryu-Seo (Nagoya University, Graduate School of Medicine, Department of Functional Anatomy and Neuroscience)  
(English)

**OS-3-1** 硬膜リンパ管の損傷脳への侵入：脳損傷の新たな治療標的となる可能性

Invasion of dural lymphatic vessels into the injured brain:

A potential therapeutical target for brain injury

○Hiroyuki Konishi

Dept Neuroanat, Yamaguchi Univ Grad Sch Med

**OS-3-2** 脳損傷で亢進するノイラミニダーゼの阻害はニューロン移動と脳機能回復を促進する

Inhibition of neuraminidase, which is increased by brain injury, promotes neuronal migration and brain function recovery

○Mami Matsumoto<sup>1,2</sup>, Katsuyoshi Matsushita<sup>3</sup>, Masaya Hane<sup>4</sup>, Chentao Wen<sup>5</sup>, Chihiro Kurematsu<sup>1</sup>, Haruko Ota<sup>1,6</sup>,  
Huy Bang Nguyen<sup>7</sup>, Truc Quynh Thai<sup>7</sup>, Vicente Herranz-Perez<sup>8,9</sup>, Masato Sawada<sup>1,2</sup>, Koichi Fujimoto<sup>3</sup>,  
Jose Manuel Garcia-Verdugo<sup>9</sup>, Koutarou Kimura<sup>5</sup>, Tatsunori Seki<sup>10,11</sup>, Chihiro Sato<sup>4</sup>, Nobuhiko Ohno<sup>12,13</sup>,  
Kazunobu Sawamoto<sup>1,2</sup>

<sup>1</sup>Dept Dev Regen Neurobiol, IBS, Nagoya City Univ Grad Sch Med Sci, <sup>2</sup>Div Neural Dev Regen, NIPS,<sup>3</sup>Dept Mathematical and Life Sciences, Hiroshima Univ, <sup>4</sup>Biosci Biotech, Grad Sch Bioagri Sci, iGCORE, Nagoya Univ,<sup>5</sup>Grad Sch Sci, Nagoya City Univ, <sup>6</sup>Dept Anesthe Intensive Care Med, Nagoya City Univ Grad Sch Med Sci,<sup>7</sup>Sec Electron Microscopy, NIPS, <sup>8</sup>Lab Compara Neurobiol, Cavanilles Institute, Univ Valencia, Spain,<sup>9</sup>Dept Cell Biol, Func Biol Physi Anthropol, Univ Valencia, Spain, <sup>10</sup>Dept Histol Neuroanat, Tokyo Medical Univ,<sup>11</sup>Dept Anato Life Struc, Juntendo Univ Grad Sch Med, <sup>12</sup>Dept Anato, Div Histol Cell Biol, Jichi Medical Univ,<sup>13</sup>Div Ultrastruct Research, NIPS**OS-3-3** 遺伝性パーキンソン病原因因子 DJ-1 は反応性の解糖系副産物の分解酵素である

The hereditary Parkinson's disease-associated factor DJ-1 is an enzyme that degrades reactive glycolysis side-product

○Noriyuki Matsuda

Biomolecular Pathogenesis, MRL, Inst Integ Res, Science Tokyo

**OS-3-4** 回転加速度閉頭型衝撃モデルを用いた反復性軽度外傷性脳損傷はマウス脳内でのタウ病理形成と伝播を促進する

Repetitive mild traumatic brain injury with the Closed-Head Impact Model of Engineered Rotational Acceleration (CHIMERA) promotes tau pathology and propagation in mouse brains

○Taeko Kimura<sup>1</sup>, Masami Suzukake<sup>2</sup>, Fuyuki Kametani<sup>2</sup>, Taisuke Tomita<sup>1</sup>, Hirofumi Aoyagi<sup>3</sup>, Shin-ichi Hisanaga<sup>4</sup>,  
Masato Hasegawa<sup>2</sup>

<sup>1</sup>Lab Neuropathol Neurosci, Grad Sch Pharm Sci, Univ Tokyo, <sup>2</sup>Dept Brain Neurosci, TMIMS,<sup>3</sup>Eisai-Keio Innovation Laboratory for Dementia, <sup>4</sup>Lab Mol Neurosci, Dept Biol Sci, TMU**OS-3-5** 疾患や損傷に対してニューロンが耐性を獲得するメカニズムの解明

Understanding neuronal resilient mechanisms to disease and injury

○Sumiko Kiryu-Seo

Dept Functional Anat &amp; Neurosci, Nagoya Univ, Grad Sch Med

## イブニングセミナー

18:30 ~ 19:30

**ES** Human Brain Development

Chair : Manabu Makinodan (Fujita Health University International Center for Brain Science)

Co-sponsored by the JSPS Core-to-Core Program "Neurogenesis Research &amp; Innovation Center (NeuRIC)" (English)

**ES-1** 細胞内代謝から理解するヒト脳の発生と進化

Metabolic regulation of human neocortex development and evolution

○Takashi Namba<sup>1,2,3</sup><sup>1</sup>Neuroscience Center, HiLIFE, University of Helsinki, Finland,<sup>2</sup>Department of Developmental Biology, Fujita Health University School of Medicine, Toyoake,<sup>3</sup>International Center for Brain Science (ICBS), Fujita Health University, Toyoake**ES-2** Understanding mechanisms of human neurodevelopmental risk factors by single-cell omics

○Konstantin Khodosevich

Biotech Research and Innovation Center, University of Copenhagen, Denmark

2025年9月11日(木)

第3会場(5階 小ホール2)

## シンポジウム 2

9:20 ~ 11:20

## OS-2

神経再生機能制御：幹細胞休眠から記憶形成へ

Functional Control of Neural Regeneration: From Stem Cell Quiescence to Memory Formation

Organizer : Masanori Sakaguchi (WPI-Ills)、

Naoko Kaneko (Laboratory of Neuronal Regeneration, Graduate School of Brain Science, Doshisha University)

(Japanese)

## OS-2-1

わずか3個の新生ニューロンの再活動が恐怖記憶の固定化を支える

Reactivation of as few as three adult-born neurons supports the consolidation of fear memory

○Masanori Sakaguchi

Inst Med, IIS, TIAR, Univ Tsukuba

## OS-2-2

神経幹細胞の休眠におけるプロテオスタシス制御

Proteostatic regulation in neural stem cell quiescence

○Taeko Kobayashi

IMS, U of Tokyo

## OS-2-3

傷害後の脳内における新生ニューロンの移動・分化制御機構

Redirecting Neuroblast Migration and Maturation for Post-Stroke Neuronal Regeneration

○Naoko Kaneko

Lab Neuronal Regen, Grad Sch Brain Sci, Doshisha Univ

## OS-2-4

構造学習における成体脳海馬新生ニューロンの役割について

Roles of adult-born granule cells of the hippocampal dentate gyrus in structure learning

○Itaru Imayoshi<sup>1,2</sup><sup>1</sup>The Graduate School of Biostudies, Kyoto University, <sup>2</sup>Kyoto Univ, LiMe

## ランチョンセミナー 2

12:30 ~ 13:20

## LS-2

Chair : Kunio Mochizuki (Somar Corporation)

共催：ソマール株式会社 (Japanese)

## LS-2

バイオマテリアルによる神経再生

Neural Regeneration by Biomaterials

○Kazunobu Sawamoto

Department of Developmental and Regenerative Neurobiology, Institute of Brain Science, Nagoya City University Graduate School of Medical Sciences

## シンポジウム 4

16:15 ~ 18:15

## OS-4

適応脳機能を担う神経回路構築・変遷メカニズムの理解と操作

Understanding and Manipulation of Adaptive Neural Circuit Formation and Reorganization

Organizer : Nobuhiko Ohno (Department of Anatomy, Division of Histology and Cell Biology, Jichi Medical University)

Co-sponsored by Grant-in-Aid for Transformative Research Areas (A) "Adaptive Circuit Census" (Japanese)

## OS-4-1

遺伝子発現から記憶メカニズムを繋ぐ神経回路ダイナミクス

Neural circuit dynamics connecting gene expression to memory mechanisms

○Takuya Sasaki

Dept Pharmacol, Grad Sch Pharm, Tohoku Univ

## OS-4-2

空間プロテーム技術 ProX-ID による神経回路のシナプス分子多様性の解明

Projection-Exclusive BioID (ProX-ID) Reveals Synaptic Molecular Diversity Across Neural Circuits

○Yuki Ito, Tetsuya Takano

Div Mol Sys Brain Fun, Inst Adv Study, MIB, Kyushu Univ

**OS-4-3**

新規人工シナプスコネクターによる損傷神経回復過程の回路再編と生理機能回復センサス

Newly Synthesized Synapse Connector-Mediated Neural Repair:  
Functional and Circuit Recovery Census

○Kosei Takeuchi<sup>1,2</sup>, Michisuke Yuzaki<sup>3</sup>

<sup>1</sup>Fujita Mind-BRIGe, Fujita Health Univ, <sup>2</sup>Med Cell Biol Med Cleate Cent.,Aichi Medical Univ,

<sup>3</sup>WPI-Bio2Q,Dept Med, Keio Univ

**OS-4-4**

大脳皮質のセルタイプ同定により種特異的な脳機能と結合性を明らかにする

Cell type census in cerebral cortex reveals species-specific brain function and connectivity

○Tomomi Shimogori

RIKEN CBS

2025年9月11日(木)

第4会場(9階 会議室901)

## ランチョンセミナー3

12:30 ~ 13:20

## LS-3 脳神経科学研究の可能性を拓げる3D電子顕微鏡イメージング

Chair: Akira Sato (Research Microscopy Solution, Carl Zeiss Co., Ltd.)

共催: カールツァイス株式会社 (Japanese)

## LS-3-1

神経幹細胞を電顕レベルの解像度で立体的に捉える：  
連続ブロック表面走査型電子顕微鏡 (SBF-SEM) による解析とプレゼンの工夫  
Analysis of Neural Stem Cells by SBF-SEM: Techniques and Creative Visualization

○Shoko Takemura<sup>1,2,3,4</sup>, Kazunobu Sawamoto<sup>1,2</sup><sup>1</sup>Dept Dev Regen Neurobiol, Inst Brain Sci, Nagoya City Univ Grad Sch Med Sci, <sup>2</sup>Div Neural Dev Regen, NIPS,<sup>3</sup>Dept Dev Biol, Fujita Health Univ Sch Med, <sup>4</sup>Div Dev Neurobiol, ICBS, Fujita Health Univ Sch Med

## LS-3-2

Volutome による SBF-SEM の革新: 独自のチャージ抑制技術で、常に高分解能、高コントラストな画像を  
Innovation in SBF-SEM by Volutome:  
Unique Charge Suppression Technology for Consistently High-Resolution, High-Contrast Images

○Takuma Isaka

Research Microscopy Solution, Carl Zeiss Co., Ltd.

## テクニカルワークショップ1

16:15 ~ 17:20

## TW-1 プロテオーム解析とその手法

Chair: Yuki Fujita (Department of Anatomy and Developmental Biology, Graduate School of Medical Research, Shimane University)、  
Kensuke Ikenaka (Department of Neurology, Graduate School of Medicine, University of Osaka)

(Japanese)

## TW-1-1

質量分析イメージングの基礎とプロテオーム解析における現状  
Basics of Mass Spectrometry Imaging and the application in proteome analysis

○Shuichi Shimma

Graduate School of Engineering, The University of Osaka

## TW-1-2

シナプスの空間プロテオーム解析技術を用いた神経回路の分子多様性の解明  
Uncovering the Molecular Landscape of Neural Circuits through Spatial Proteomics Analysis of Synapses

○Tetsuya Takano

Division of Molecular Systems for Brain Function, Kyushu University Institut e for Advanced Study, Medical Institute of Bioregulation

## ミニ講演3

17:30 ~ 18:20

## MT-3

Chair: 石井 宏史 (金沢大学医学系 神経解剖学)、  
金子 奈穂子 (同志社大学 大学院脳科学研究科 神経再生機構部門)

(Japanese・English)

## MT-3-1

ジオスゲニンによる軸索伸長に関連する分泌性分子の探索  
Search for secreted molecules related to axon elongation by diosgenin

○竹内 耕聖, 陳 巧恩, 東田 千尋

富山大・和漢研・神経機能学

## MT-3-2

Acteoside による軸索修復が頸椎症性脊髄症の機能回復に寄与することの検討  
Axonal repairing by Acteoside contributes to functional recovery in degenerative cervical myelopathy

○坂瀬 きの, 羽柴 圭悟, 東田 千尋

富山大学・和漢医薬学総合研究所・神経機能学領域

## MT-3-3

運動神経の軸索を伸長させる筋肉由来分子の探索  
Identification of muscle-derived molecules that promote motor axon elongation

○石井 雄翔, 東田 千尋

富山大・和漢医薬学総合研究所・神経機能学領域

- MT-3-4** 骨格筋萎縮によって誘発される不可逆的認知障害の原因因子と分子メカニズム  
Causal factors and those mechanisms of irreversible cognitive deficit induced by skeletal muscle atrophy  
○鄭 在媛, 東田 千尋  
富山大学・和漢医薬学総合研究所・神経機能学領域
- MT-3-5** iPS 細胞からのサブタイプ特異的 GABA 神経細胞を誘導するアプローチに関する研究  
Research on approaches to induce subtype-specific GABAergic neurons from iPS cells  
○水野 沙美怜  
藤田医科大学 精神・神経病態解明センター 神経再生創薬研究部門
- MT-3-6** 中型有棘突起神経細胞を産生する線条体領域オルガノイド作出法に関する研究  
A study on the generation of striatal region organoids that produce medium spiny neurons  
○福島 悠太  
藤田医科大学 精神・神経病態解明センター 神経再生・創薬研究部門
- MT-3-7** 統合失調症における薬剤反応性解析のための iPS 細胞由来神経細胞モデルの開発  
Development of an iPSC-Derived Neuronal Model to Study Drug Responsiveness in Schizophrenia  
○佐々木 裕也  
藤田医科大学
- MT-3-8** iPS 細胞からの新規転写因子導入による効率的なオリゴデンドロサイト分化誘導方法に関する研究  
Efficient Induction of Oligodendrocyte Differentiation from iPS Cells via Introduction of Novel Transcription Factors  
○泉澤 嘉希  
藤田医科大・医・医
- MT-3-9** IPS 細胞からのミクログリア誘導効率を上げる遺伝子導入に関する研究  
An efficient differentiation protocol for inducing microglia from hiPSCs  
○坂口 さくら  
藤田医科大学 精神・神経病態解明センター 神経再生創薬研究部門
- MT-3-10** 妊娠期高血圧は胎児の発達に影響を及ぼし情動機能を障害する  
Gestational hypertension affects fetal development and impairs emotional function  
○菅田 蘭珠<sup>1</sup>, 倉橋 仁美<sup>1,2</sup>, 國澤 和生<sup>1,2</sup>, 長谷川 真也<sup>1,2</sup>, 坂田 昂駿<sup>1</sup>, 鍋島 俊隆<sup>3</sup>, 毛利 彰宏<sup>1,2</sup>  
<sup>1</sup> 藤田医科大・医療科学・レギュラトリーサイエンス, <sup>2</sup> 藤田医科大・精神神経病態解明センター・神経化学,  
<sup>3</sup> 藤田医科大・健康医科学創造共同研究部門
- MT-3-11** マイクログリアの新規脳内多様性の解明  
Unraveling the novel brain-wide diversity of microglia  
○大柿 安里, 小山 隆太  
国立精神・神経医療研究センター・神経研・疾病研第二部
- MT-3-12** くも膜下出血後早期脳損傷病態の解明と新規治療戦略  
Elucidation of pathophysiology underlying early brain injury after subarachnoid hemorrhage and a strategy for novel therapies  
○石井 宏史<sup>1</sup>, 出村 宗大<sup>2</sup>, 会田 泰裕<sup>3</sup>, 服部 剛志<sup>1</sup>, 宝田 美佳<sup>1</sup>, Ann Marie Shmidt<sup>4</sup>, 中田 光俊<sup>3</sup>, 山本 靖彦<sup>5</sup>, 堀 修<sup>1</sup>  
<sup>1</sup> 金沢大学医学部・神経解剖学, <sup>2</sup> Massachusetts General Hospital, Harvard Medical School, Neuroprotection Research Laboratories  
<sup>3</sup> 金沢大学医学部・脳神経外科学, <sup>4</sup> Department of Medicine, New York University Grossman School of Medicine, NYU Langone Health  
<sup>5</sup> 金沢大学医学部・血管分子生物学
- MT-3-13** こころの理解を目指す笠井ラボの挑戦  
Cracking the Code of Emotions  
○笠井 淳司  
名古屋大・環医研・システム神経薬理
- MT-3-14** 傷害脳における新生ニューロンの挙動の理解とその制御  
How new neurons behave in the injured brain — and how we can guide them  
○金子 奈穂子  
同志社大・院・脳科学研究科・神経再生機構部門

2025年9月11日(木)

第5会場(10階 会議室1001)

ミニ口演 1

11:30 ~ 12:20

MT-1

Chair: 中嶋 智佳子 (名古屋大学 大学院理学研究科)、  
久保山 和哉 (名古屋大学大学院医学研究科 脳神経科学研究所 神経発達・再生医学分野)

(Japanese・English)

MT-1-1

大脳皮質神経回路形成における同期的自発神経活動の役割

Correlated spontaneous activity instructs the circuit maturation in the barrel cortex

○江頭 貴光<sup>1,2</sup>, 水野 秀信<sup>1,2</sup><sup>1</sup> 熊本大・国際先端医学研究機構 (IRCMS), <sup>2</sup> 熊本大院・多次元生体イメージング学

MT-1-2

生物発光イメージングにおいて脳由来の発光を検出するための方法; BDNF を例として

Lighting up the brain: Visualizing BDNF expression with bioluminescence imaging

○福地 守

高崎健康福祉大・薬・分子神経科学

MT-1-3

セプチンの欠損によりグリア細胞質に形成される球状封入体

Globular glial inclusions caused by the lack of a septin subunit

○中嶋 智佳子, 田代 悠太郎, 木下 専

名古屋大・理・生命

MT-1-4

シナプス接着様分子 LRFN2 が関与する GBM-神経細胞間の相互作用による GBM 悪性化解明

Molecular mechanism of tumor progression through bidirectional interactions between GBM-neurons involving LRFN2, synapse adhesion-like molecules

○林 千裕<sup>1</sup>, Kenny Daun<sup>1</sup>, 深見 忠輝<sup>2</sup>, 守村 直子<sup>1</sup>, 等 誠司<sup>1</sup><sup>1</sup> 滋賀医科大学・統合臓器生理学講座, <sup>2</sup> 滋賀医科大学・脳神経外科学講座

MT-1-5

妊娠期ストレスが子どもの生後の神経新生ニッチ形成に与える影響の解明

Impact of prenatal maternal stress on neurogenic niche formation in offspring

○小林 優介<sup>1</sup>, 國屋 敬章<sup>1</sup>, 中本 有美<sup>1</sup>, 方 凌艶<sup>2</sup>, 後藤 由季子<sup>1,2</sup><sup>1</sup> 東京大学大学院薬学系研究科, <sup>2</sup> 東京大学ニューロインテリジェンス国際研究機構

MT-1-6

ステロイドホルモンが発生過程の神経新生ニッチ形成に与える影響

Steroid hormone regulation of neurogenic niche ontogeny

○中本 有美<sup>1</sup>, 國屋 敬章<sup>1</sup>, 方 凌艶<sup>2</sup>, 後藤 由季子<sup>1,2</sup><sup>1</sup> 東京大学大学院薬学系研究科, <sup>2</sup> 東京大学ニューロインテリジェンス国際研究機構

MT-1-7

若年性パーキンソン病の責任因子である Rab39B は Neuro2A 細胞においてリソソームどうしの融合前に一過性に活性化される

Rab39B, associated with early-onset PD, is transiently activated prior to lysosome-lysosome homotypic fusion of lysosomes in Neuro2A cells

○中村 岳史<sup>1</sup>, 古澤 絵菜<sup>1</sup>, 鯉沼 真吾<sup>1</sup>, ユン ヘリム<sup>1</sup>, 福田 光則<sup>2</sup><sup>1</sup> 東京理科大学・生命研, <sup>2</sup> 東北大学・院・生命科学

MT-1-8

生後脳を移動する新生ニューロンにおけるリン酸化プロテオミクス解析

Phosphoproteome analysis in new neurons migrating in the postnatal brain

○原 悠都樹<sup>1</sup>, 澤田 雅人<sup>1,2</sup>, 伊藤 泰行<sup>3</sup>, 五十嵐 道弘<sup>3</sup>, 澤本 和延<sup>1,2</sup><sup>1</sup> 名古屋市大院・医・脳研・神経発達再生医学, <sup>2</sup> 生理研・神経発達再生機構, <sup>3</sup> 新潟大院・医歯学総合・分子細胞機能学

MT-1-9

細胞接着分子から探る未熟ニューロン移動の分子機構と応用

Cell Adhesion Molecules as a Key to Understanding and Applying Immature Neuronal Migration Mechanisms

○久保山 和哉, 古田 美穂, 宮本 拓哉, 鈴木 崇宏, 榎原 悠紀菜, 澤本 和延

名古屋大院・医・脳研・神経発達再生医学

MT-1-10

Repurposing Empagliflozin: Mitochondrial Rescue and ROS Reduction in Stroke Reperfusion Injury

○Mohd Kaisan Mahadi

Faculty of Pharmacy, Universiti Kebangsaan Malaysia, Malaysia.

MT-1-11

The imaging of zebrafish brain to investigate the uptake of charged nanoparticle into the brain

○Hanisah Azhari<sup>1</sup>, Shakila Rizwan<sup>2</sup>, Sarah Hook<sup>2</sup>, Ben J Boyd<sup>3</sup><sup>1</sup> Faculty of Pharmacy, Universiti Kebangsaan Malaysia, <sup>2</sup> School of Pharmacy, University of Otago,<sup>3</sup> Department of Material Science and Engineering, Monash University

## MT-1-12

マウス脳梗塞モデルにおける造影マイクロCTを用いた虚血病変と微小出血の三次元解析

Three-dimensional assessment of ischemic lesions and microbleeds using contrast-enhanced micro-CT in a mouse model of stroke

○RongRong Yang, Mika Takarada-Iemata, Osamu Hori  
Department of Neuroanatomy, Kanazawa University Graduate School of Medical Sciences

## MT-1-13

Impact of ATF6 deletion on the embryonic brain development

○Nguyen Dinh Loc, Osamu Hori  
Department of Neuroanatomy, Kanazawa Univ

## ミニシンポジウム 1

13:30 ~ 15:00

## MS-1

脳発生のメカニズムとその破綻

Mechanisms of Brain Development and Their Disruption

Chair : Takeshi Kawauchi (Graduate School of Medicine, Kyoto University)、  
Yohei Shinmyo (Hamamatsu University School of Medicine)

(Japanese・English)

## MS-1-1

一次繊毛による脳オルガノイド神経幹細胞の背側／腹側運命制御決定機構

Cilia regulates the dorsal/ventral regionalization of human brain organoids

○Issei Shimada, Yoichi Kato  
Dept of Cell Biology, Grad School of Med. Sci., Nagoya City University, Aichi

## MS-1-2

脈絡叢上皮マクロファージの起源

Choroid plexus epiplexus macrophages derive from parenchymal microglia

○Bijay Parajuli<sup>1,2</sup>, Eiji Shigetomi<sup>1,2</sup>, Schuichi Koizumi<sup>1,2</sup>  
<sup>1</sup>Dept Neuropharmacology, Interdisciplinary Grad Sch of Med, Univ of Yamanashi, , <sup>2</sup>Glia Center, Univ of Yamanashi

## MS-1-3

海馬 Cajal-Retzius cells に発現する Robo2 は歯状回の形成に関与している

Robo2 in hippocampal Cajal-Retzius cells is involved in the formation of the hippocampal fissure and dentate gyrus

○Yuko Gonda<sup>1</sup>, Takumi Yamada<sup>1</sup>, Nakumo Beppu<sup>1</sup>, Sara Wilson<sup>2</sup>, Tokiharu Takahashi<sup>1</sup>, Takashi Namba<sup>3,4,5</sup>  
<sup>1</sup>Department of Histology and Neuroanatomy, Tokyo Medical University, Tokyo,  
<sup>2</sup>Department of Integrative Medical Biology, Umea University, Umea, Sweden,  
<sup>3</sup>Neuroscience Center, HiLIFE - Helsinki Institute of Life Science, Univ of Helsinki, Helsinki, Finland,  
<sup>4</sup>Department of Developmental Biology, Fujita Health University School of Medicine, Toyoake,  
<sup>5</sup>Division of Developmental Neurobiology, International Center for Brain Science (ICBS), Fujita Health University, Toyoake

## MS-1-4

神経幹細胞の発達と早産による影響の解析

Development of Neural Stem Cells and the Effect of Preterm Birth

○Shoko Takemura<sup>1,2,3,4</sup>, Koya Kawase<sup>1,5</sup>, Laura Wolbeck<sup>6</sup>, Yasuhisa Nakamura<sup>1,5,7</sup>, Mami Matsumoto<sup>1,2</sup>,  
Hideo Jinnou<sup>1,5,8</sup>, Aika Tahara<sup>1</sup>, Masato Sawada<sup>1,2</sup>, Yoshiaki Kubota<sup>9</sup>, Vicente Herranz-Perez<sup>10,11</sup>,  
Jose Manuel Garcia-Verdugo<sup>10</sup>, Nobuyuki Ishibashi<sup>8</sup>, Vittorio Gallo<sup>8,12</sup>, Nobuhiko Ohno<sup>13,14</sup>,  
Konstantin Khodosevich<sup>6</sup>, Kazunobu Sawamoto<sup>1,2</sup>  
<sup>1</sup>Dept Dev Regen Neurobiol, Inst Brain Sci, Nagoya City Univ Grad Sch Med Sci, <sup>2</sup>Div Neural Dev Regen, NIPS,  
<sup>3</sup>Dept Dev Biol, Fujita Health Univ Sch Med, <sup>4</sup>Div Dev Neurobiol, ICBS, Fujita Health Univ Sch Med,  
<sup>5</sup>Dept Pediatr Neonatol, Nagoya City Univ Grad Sch Med Sci, <sup>6</sup>BRIC, Fac Health Med Sci, Univ Copenhagen, Denmark,  
<sup>7</sup>Dept Pediatr, Nagoya City Univ West Med Ctr, <sup>8</sup>Ctr Neurosci Res, Children's Natl Res Inst, Children's Natl Hosp, USA,  
<sup>9</sup>Dept Anat, Sch Med, Keio Univ, <sup>10</sup>Lab Comp Neurobiol, Inst Cavanilles Biodiv Evol Biol, CIBERNED-ISCIII, Univ Valencia, Spain,  
<sup>11</sup>Dept Cell Funct Biol Phys Anthropol, Univ Valencia, Spain, <sup>12</sup>Seattle Children's Res Inst, Seattle Children's Hosp, USA,  
<sup>13</sup>Div Ultrastruct Res, NIPS, <sup>14</sup>Dept Anat, Div Histol Cell Biol, Sch Med, Jichi Med Univ

## MS-1-5

初期の一時的な神経発生遅延は幼若ゼブラフィッシュの社会的行動に負に作用する

An early transient delayed neurogenesis has a negative impact on social behavior of young zebrafish

○Tomomi Sato<sup>1</sup>, Kaito Saito<sup>3</sup>, Tsubasa Oyu<sup>3</sup>, Sachiko Tsuda<sup>3</sup>, Tomohiro Kurisaki<sup>1</sup>, Takeshi Kajihara<sup>2</sup>,  
Masabumi Nagashima<sup>1</sup>  
<sup>1</sup>Dept Anat, Sch Med, Saitama Med Univ, <sup>2</sup>Dept Ob Gyn, Sch Med, Saitama Med Univ, <sup>3</sup>Dev Life Sci, Grad Sch Sci Eng, Saitama Univ

ミニ口演 2

MT-2

15:20 ~ 16:10

Chair : 山岸 寛 (浜松医科大学 光神経解剖学)、  
澤田 雅人 (名古屋市立大学 大学院医学研究科 脳神経科学研究所 神経発達・再生医学)

(Japanese・English)

## MT-2-1

傷害脳における新生ニューロン移動過程の解析

Analysis of Neuronal Migration Processes in the Injured Brain

○吉村 奏美<sup>1</sup>, 荻野 崇<sup>1</sup>, 水野 秀信<sup>2,3</sup>, 澤本 和延<sup>1,4</sup><sup>1</sup> 名市大院・医・脳研・神経発達再生医学, <sup>2</sup> 熊本大・国際先端医学研究機構, <sup>3</sup> 熊本大院・医・多次元生体イメージング学,<sup>4</sup> 生理研・神経発達再生機構

## MT-2-2

ミクログリアによる成体新生ニューロンのシナプス刈り込み機構～今後の研究の展望を含めて～

Mechanisms for microglial synaptic pruning of adult-born neurons and my future projects

○樽松 千紘<sup>1</sup>, 松本 真実<sup>1</sup>, 澤本 和延<sup>1,2</sup><sup>1</sup> 名市大院・医・脳研・神経発達再生医学, <sup>2</sup> 生理研・神経発達再生機構

## MT-2-3

成体脳におけるニューロン新生の加齢性変化

Age-related changes of neurogenesis in the adult brain

○藤山 瞳<sup>1</sup>, 松本 真実<sup>1,2</sup>, 澤本 和延<sup>1,2</sup><sup>1</sup> 名市大院・医・脳研・神経発達再生医学, <sup>2</sup> 生理研・神経発達再生機構

## MT-2-4

成体脳の神経幹細胞の局在による分類

Classification of neural stem cells based on the localization in the adult brain

○服部 真奈<sup>1</sup>, 松本 真実<sup>1,2</sup>, 澤本 和延<sup>1,2</sup><sup>1</sup> 名市大院・医・脳研・神経発達再生医学, <sup>2</sup> 生理研・神経発達再生機構

## MT-2-5

低体温療法の脳保護メカニズムの解明と新規治療への応用

Mechanisms of therapeutic hypothermia and development of novel neuroprotective therapies

○鳥内 皐暉<sup>1</sup>, 垣田 博樹<sup>1,2</sup>, 青木 啓将<sup>1</sup>, 田村 哲也<sup>3</sup>, 竹下 寛<sup>1,2</sup>, 山田 恭聖<sup>2</sup>, 青山 峰芳<sup>1</sup><sup>1</sup> 名古屋市中院・薬・病態解析学, <sup>2</sup> 愛知医大・周産期母子医療センター, <sup>3</sup> 名古屋市中院・医・麻酔科

## MT-2-6

C9orf72-GGGGCC リピート RNA に着目して、前頭側頭型認知症の病態に迫りたい

Focusing on C9orf72-GGGGCC repeat RNA to explore the pathogenesis of frontotemporal dementia

○三浦 耕人<sup>1</sup>, 森 康治<sup>1</sup>, 宮本 哲慎<sup>1</sup>, 魚住 亮太<sup>1</sup>, 青木 佑紀<sup>1</sup>, 近藤 志都子<sup>1</sup>, 河邊 有哉<sup>2</sup>, 田上 真次<sup>1,2</sup>, 後藤 志帆<sup>1</sup>, 赤嶺 祥真<sup>1</sup>, 池田 学<sup>1</sup><sup>1</sup> 大阪大学大学院医学系研究科 精神医学教室, <sup>2</sup> 医療法人澄鈴会 箕面神経サナトリウム

## MT-2-7

大脳形成過程における鳥類と哺乳類の神経細胞移動の比較解析

Comparative analysis of neuronal migration in the brain development of birds and mammals

○和田 京介<sup>1,2</sup>, 隈元 拓馬<sup>1</sup>, 野村 真<sup>3</sup>, 丸山 千秋<sup>1,2</sup><sup>1</sup> 東京都医学総合研究所・脳神経回路形成PJ, <sup>2</sup> 新潟大学大学院 医歯学総合研究科 分子細胞医学専攻 脳神経発生学分野,<sup>3</sup> 京都工芸繊維大学・応用生物学系

## MT-2-8

3次元電子顕微鏡によるヒト脳の超微細構造解析

Ultrastructural Analysis of the Human Brain by 3D Electron Microscopy

○山岸 寛

浜松医大・光神経解剖

## MT-2-9

新生ニューロンと膠芽腫に共通する細胞移動様式

Shared migratory strategies between newborn neurons and glioblastoma cells

○澤田 雅人<sup>1,2</sup>, 原 悠都樹<sup>1</sup>, 澤本 和延<sup>1,2</sup><sup>1</sup> 名市大院・医・脳研・神経発達・再生医学, <sup>2</sup> 生理研・神経発達・再生機構

## MT-2-10

Analysis of ADP-ribosylation in a mouse model of neuroinflammation

○Alimire Ababaikeri

Kanazawa University

## MT-2-11

A2-Pancortin augments calcium release at mitochondria-ER contact sites (MERCs) and induces perinatal neuronal death in an ischemic mouse model

○Qi Yang<sup>1</sup>, Chen-Chi Wang<sup>2</sup>, Tomohiro Matsuyama<sup>3</sup>, Kazuki Kuroda<sup>2</sup>, Min-Jue Xie<sup>2</sup>, Misato Yasumura<sup>1</sup>, Chao-Yuan Tsai<sup>1</sup>, Yuichiro Oka<sup>1,5</sup>, Hideshi Yagi<sup>2,3</sup>, Makoto Sato<sup>1,2,4,5</sup><sup>1</sup> Dept Anat & Neurosci, Grad Sch Med, Osaka Univ, Osaka, <sup>2</sup> Univ of Fukui, Fukui, <sup>3</sup> Hyogo Medical Univ, Hyogo,<sup>4</sup> Grad Sch of Front Bio, Osaka Univ, Osaka, <sup>5</sup> Div of Dev Neurosci, United Grad Sch of Child Dev (UGSCD), Osaka Univ, Osaka

**MT-2-12** A dopamine D1-like receptor agonist ameliorates stab wound-induced brain injury through its immunosuppressive effect

○Mohammed E. Choudhury, Junya Tanaka, Naoki Abe, Tasuku Nishihara  
Department of Anesthesia and Perioperative Medicine, Ehime University Graduate School of Medicine

**MT-2-13** Impaired myelination in a mouse model of psychiatric syndrome

○Navneet A. Vasistha, Katarina Dragicevic, Irina Korshunova, Konstantin Khodosevich  
Biotech Research and Innovation Center, Ole Maaløes vej 5, Copenhagen Biocenter, Copenhagen N 2200, Denmark

## ミニシンポジウム 2

16:15 ~ 18:21

**MS-2** 神経損傷からの機能回復を支える分子基盤と治療戦略

Molecular Basis and Therapeutic Strategies for Functional Recovery after Neural Injury

Chair : Makoto Kinoshita (Nagoya Univ)、  
Osamu Hori (Kanazawa University, Department of Neuroanatomy)

(Japanese • English)

**MS-2-1** 白質病変に沈着するⅠ型コラーゲンは機能回復および組織再生を阻害する

Type I collagen deposited in white matter lesions inhibits functional recovery and tissue regeneration

○Reiji Yamazaki<sup>1</sup>, Morio Azuma<sup>2</sup>, Yasuyuki Osanai<sup>1</sup>, Takeshi Inagaki<sup>3</sup>, Nobuhiko Ohno<sup>1,4</sup>

<sup>1</sup>Division of Histology and Cell Biology, Department of Anatomy, Jichi Medical University,

<sup>2</sup>Division of Molecular Pharmacology, Department of Pharmacology, Jichi Medical University,

<sup>3</sup>Division of Forensic Medicine, Department of Anatomy, Jichi Medical University,

<sup>4</sup>Division of Ultrastructural Research, National Institute for Physiological Sciences

**MS-2-2** ミクログリアを介した血管リモデリングによる脳梗塞巣の排出効果

Microglia-mediated vascular remodeling facilitates clearance of necrotic tissue after ischemic stroke

○Toshinori Sawano<sup>1</sup>, Haiyang Sun<sup>1</sup>, Tadayuki Ogawa<sup>2</sup>, Momoka Okada<sup>1</sup>, Jin Nakatani<sup>1</sup>, Shinobu Inagaki<sup>3,4</sup>,  
Takayuki Nakagomi<sup>5,6</sup>, Tomohiro Matsuyama<sup>6</sup>, Hidekazu Tanaka<sup>1</sup>

<sup>1</sup>Pharmacol. Lab., Dept. Biomed. Sci., Ritsumeikan Univ., <sup>2</sup>Dokkyo Med. Univ.,

<sup>3</sup>Dept. Child Dev. and Mol. Brain. Sci., United Grad. Sch. Child Dev., Osaka Univ., <sup>4</sup>Dept. PT., Yukioka Col. Health Sci.,

<sup>5</sup>Lab. Neurogenesis and CNS Repair, Inst. Adv. Med. Sci., Hyogo Med. Univ., <sup>6</sup>Dept. Therap. Prog. Brain Dis., Hyogo Med. Univ.

**MS-2-3** ミクログリアによる脳機能回復を持続させる治療法の開発

Sustaining microglial reparative function enhances stroke recovery

○Jun Tsuyama, Takashi Shichita  
Dept Neuroinflamm Repair, Med Res Inst, Inst Sci Tokyo

**MS-2-4** iPS 細胞由来の培養神経突起を用いた新規人工神経移植による末梢神経再生

Peripheral Nerve Regeneration through Transplantation of iPSC-Derived Neurites as a Novel Biomaterial for Artificial Nerve

○Kentaro Okuyama<sup>1</sup>, Takayuki Nishijima<sup>2</sup>, Junpei Nakayama<sup>1</sup>, Hiroo Kimura<sup>2</sup>, Eri Niiyama<sup>1,3</sup>, Jiro Kawada<sup>1,3</sup>,  
Keiko Uchiyama<sup>1</sup>, Thinh Phan Quang<sup>1</sup>, Shinsuke Shibata<sup>1</sup>

<sup>1</sup>Div Microscopic Anat, Niigata Univ Grad Sch Med Dent Sci, <sup>2</sup>Dept Orthop Surg, Keio Univ Sch Med, <sup>3</sup>Jiksak Bioengineering Inc.

**MS-2-5** アルツハイマー病治療のための脳内での軸索再伸長に関わる責任分子

Responsible molecules involved in axonal regeneration in the brain for treatment of Alzheimer's disease

○Ximeng Yang, Tomoya Nagata, Chihiro Tohda  
Section of Neuromedical Science, Institute of Natural Medicine, University of Toyama

**MS-2-6** リソソーム損傷応答による異常タンパク質凝集伝播に対する細胞防御機構

Lysosomal Damage Response Counteracts  $\alpha$ -Synuclein Aggregation Propagation Initiated by Membrane Rupture

○Keita Kakuda, Kensuke Ikenaka, Junko Doi, Cesar Aguirre, Chi-Jing Choong, Nang Wang, Hideki Mochizuki  
Department of Neurology, Graduate School of Medicine, The University of Osaka

**MS-2-7** 脊髄損傷後の血管バリア機能修復を促進する末梢由来因子の探索

Investigation of peripherally derived factor regulating revascularization after spinal cord injury

○Akiko Uyeda<sup>1</sup>, Hiroshi Yamagishi<sup>1,2</sup>, Lili Quan<sup>1</sup>, Hidemi Misawa<sup>2</sup>, Rieko Muramatsu<sup>1</sup>

<sup>1</sup>Dept. Mol. Pharmacol., Natl. Inst. Neurosci., NCNP, <sup>2</sup>Dept. Pharm. Grad. Sch. Pharm. Sci., Keio Univ.

2025年9月11日(木)

第6会場(11階 会議室1104)

若手道場-1

9:20 ~ 10:50

WD-1 学部・大学院:モノアミン系

Chair: Sayaka Takemoto-Kimura (Research Institute of Environmental Medicine, Nagoya University)、  
Noriyoshi Usui (Dept Neurosci Cell Biol, Grad Sch Med, The Univ Osaka)

(Japanese)

- WD-1-1** 老齢マウスにおけるミクログリア置換は、MPTP 誘発性パーキンソン病モデルに対し予防効果を発揮する  
Replacing microglia in aged mice exhibits a preventive effect against MPTP-induced Parkinson's disease model  
○Ayane Takenaga<sup>1,2</sup>, Haruto Yamamoto<sup>1,2</sup>, Noriyuki Miyae<sup>2</sup>, Mohammed E Choudhury<sup>3</sup>, Naoki Mukai<sup>4</sup>,  
Tasuku Nishihara<sup>3</sup>, Masahiro Nagai<sup>2</sup>  
<sup>1</sup>School of Medicine, Ehime University,  
<sup>2</sup>Department of Clinical Pharmacology and therapeutics, Ehime University Graduate School of Medicine,  
<sup>3</sup>Department of Anesthesia and Perioperative Medicine, Ehime University Graduate School of Medicine,  
<sup>4</sup>Department of Emergency and Critical Care Medicine, Ehime University Graduate School of Medicine
- WD-1-2** シロシビン投与後のマウスにおける全脳 cfos mapping  
c-fos mapping in mice treated with psilocybin  
○Kyosei Tashiro<sup>1</sup>, Daisuke Ibi<sup>2</sup>, Keisuke Yoshida<sup>3</sup>, Yoshifumi Abe<sup>1</sup>, Kenji Tanaka<sup>1</sup>  
<sup>1</sup>Inst Adv Med Res, Keio Univ Sch Med, <sup>2</sup>Dept Chem Pharmacol, Meijo Univ, <sup>3</sup>Dept Med Chem, Meijo Univ
- WD-1-3** チロシン水酸化酵素の 40 番セリン残基の変異により作製したリン酸化欠損あるいはリン酸化模倣型酵素を発現するマウスのドーパミン代謝変化  
Characterization of mice with defected or permanent phosphorylation by the mutation at <sup>40</sup>Ser of tyrosine hydroxylase  
○Jingxuan Qi<sup>1</sup>, Aina Syazwina Binti Sazali<sup>1</sup>, Rie Natsume<sup>2</sup>, Manabu Abe<sup>2</sup>, Kenji Sakimura<sup>2</sup>, Hiroshi Ichinose<sup>1</sup>  
<sup>1</sup>School of Life Science and Technology, Institute of Science Tokyo, Yokohama,  
<sup>2</sup>Department of Animal Model Development, Brain Research Institute, Niigata University, Niigata
- WD-1-4** 嫌悪順応学習と報酬学習に対する線条体尾側ドーパミンの影響  
Dopamine signaling in the tail of the striatum affects adaptation of aversion and reward learning  
○Ryota Tsuruga, Masabumi Minami, Iku Tsutsui-Kimura  
Dept Pharm, Hokkaido Univ, Grad Sch Pharm Sci

若手道場-2

15:20 ~ 16:50

WD-2 大学院・博士:グリア-ニューロン相互作用、血液脳関門

Chair: Ken-ichiro Kubo (The Jikei University School of Med)、  
Mariko Hayashi (Showa Women's University Faculty of food and health science, Department of Food Science and Nutrition)  
(Japanese)

- WD-2-1** 一次性アストロサイト病におけるアストロサイトのミエリン吸引貪食による脱髄  
Demyelination by astrocyte-mediated myelin engulfment in primary astrocyte disease  
○Yuto Kubota<sup>1,2</sup>, Eiji Shigetomi<sup>1,2</sup>, Kozo Saito<sup>1,2</sup>, Youichi Shinozaki<sup>1,2</sup>, Kenji Tanaka<sup>3</sup>, Nobuhiko Ohno<sup>4,5</sup>,  
Schuichi Koizumi<sup>1,2</sup>  
<sup>1</sup>Dept Neuroparmacol, Grad Sch Med, Univ Yamanashi, <sup>2</sup>Yamanashi GLIA center, <sup>3</sup>Div Brain Sci, Keio Univ Sch Med,  
<sup>4</sup>Div Histol and Cell Biol, Dept Anat, Jichi Med. Univ, <sup>5</sup>Div Ultras Res, NIPS
- WD-2-2** 環境汚染ナノ粒子に対する、血管-グリア細胞間の補体依存的相互作用による神経保護メカニズム  
Neuroprotective mechanisms against environmental pollutant nanoparticles through complement-dependent vascular and glial interactions  
○Ari Ogaki<sup>1</sup>, Shinichi Kinoshita<sup>2</sup>, Yuji Ikegaya<sup>2</sup>, Ryuta Koyama<sup>1</sup>  
<sup>1</sup>Dept Translational Neurobiol, Natl Inst Neurosci, Natl Ctr Neurol & Psychiatry,  
<sup>2</sup>Lab Chem Pharmacol, Grad Sch Pharm Sci, Univ Tokyo
- WD-2-3** 脳梗塞後の海馬歯状回におけるミクログリアによる樹状突起スパイン減少と Arcadlin の関係  
Relationship between microglia-mediated dendritic spine reduction and Arcadlin in the hippocampal dentate gyrus after cerebral ischemia  
○Hitomi Takahashi, Shuma Nakazawa, Momoka Okada, Yosuke Inoue, Shota Inoue, Natsumi Yamaguchi, Jin Nakatani,  
Toshinori Sawano, Hidekazu Tanaka  
Pharmacology Laboratory, Department of Biomedical Sciences, College of Life Sciences, Ritsumeikan University

**WD-2-4**

グリア細胞を豊富に含むヒト大脳皮質オルガノイドの開発とマウス脳への異種移植

Development of glia-enriched cortical organoids and transplantation into mouse brains

○Kosuke Kiyama<sup>1</sup>, Hiroko Shimada<sup>1</sup>, Nanako Kobayashi<sup>1</sup>, Mitsuru Ishikawa<sup>2</sup>, Hideyuki Okano<sup>1</sup><sup>1</sup>KRMC, <sup>2</sup>Fujita Health Univ.**若手道場 -3**

16:50 ~ 18:20

**WD-3**

学部・大学院：ニューロンと疾患

Chair : Nariko Arimura (Graduate School of Pharmaceutical Science, Tohoku University)、  
Kohtarō Takei (Department of Neurology, Yokohama City University School of Medicine)

(Japanese)

**WD-3-1**

筋萎縮性側索硬化症 (ALS) 運動ニューロンにおけるコレステロール合成の異常亢進は、ADAR2 の発現低下を介して A-to-I RNA 編集を低下させる

Aberrant Upregulation of Cholesterol Synthesis in Amyotrophic Lateral Sclerosis (ALS) Motor Neurons Suppresses A-to-I RNA Editing via Downregulation of ADAR2 Expression

○Chris Kato<sup>1</sup>, Satoru Morimoto<sup>1</sup>, Shinichi Takahashi<sup>1,2</sup>, Shiho Nakamura<sup>1</sup>, Fumiko Ozawa<sup>1</sup>, Hideyuki Okano<sup>1</sup><sup>1</sup>Regenerative Medicine Research Center, Keio University,<sup>2</sup>Department of Neurology and Stroke, Saitama Medical University International Medical Center**WD-3-2**

老化時に再ミエリン化を促進する自己抗体の同定

Identification of autoantibodies promoting remyelination in aging

○Ayame Nagafuchi<sup>1</sup>, Mana Iizuka<sup>2</sup>, Ako Matsui<sup>1</sup>, Akihiko Yoshimura<sup>2</sup>, Minako Ito<sup>1</sup><sup>1</sup>Division of Allergy and Immunology, Medical Institute of Bioregulation, Kyushu University,<sup>2</sup>Molecular Pathobiology Department, Research Institute for Biomedical Sciences, Tokyo University of Science, Tokyo**WD-3-3**CREB による転写調節を介したアグリカンの神経活動依存的発現がペリニューロナルネットの形成を促進する  
Activity-dependent expression of Aggrecan drives perineuronal nets formation via CREB-mediated transcription

○Kentaro Nakayama

Lab Ani Cell, Dept Agri, Inst Scleroprotein and Leather Research, TUAT

**WD-3-4**

MyD88/TRIF シグナルの欠損は脳梗塞後の神経組織修復を不全にする

Deficiency of MyD88/TRIF signaling impairs neural repair following ischemic stroke

○Ryuki Koyama, Takashi Shichita

Dept of Neuroinflammation and Repair, Medical research laboratory, Institute of Science Tokyo

2025年9月11日(木)

ポスター会場(8階 展示場)

ポスター発表

P1

13:30 ~ 15:10

(Japanese・English)

- P1-001** 免疫細胞化学における界面活性剤処理の有無によって明らかになった、小脳プルキンエ細胞における細胞体ー神経突起間での膜透過性差異及び拡散障壁  
Detergent pretreatment in immunocytochemistry reveals membrane permeability difference and diffusion barrier between the cell body and neurites in cerebellar Purkinje cells  
○Masahiko Tanaka, Tomomi Senda, Naohide Hirashima  
Dept Cell Biophys, Grad Sch Pharmaceut Sci, Nagoya City Univ
- P1-002** 脳発生過程で発現する複数の ArhGAP21 スプライシングバリエーションの分子機能  
Molecular functions of multiple ArhGAP21 splicing variants expressed in embryonic mouse brain  
○Zen Kouchi, Kazuma Sakamoto  
Dept. of Neuronal Information, Institute for Developmental Research, Aichi Developmental Disability Center
- P1-003** 小胞体膜タンパク質 Derlin によるコレステロール合成制御を介した脳の発達と機能維持機構  
Mechanisms of brain development and functional maintenance mediated by the ER protein Derlin through the regulation of cholesterol synthesis  
○Naoya Murao<sup>1</sup>, Takashi Sugiyama<sup>1,2</sup>, Hideki Nishitoh<sup>1</sup>  
<sup>1</sup>Lab. of Biochem and Mol Biol., Dept. of Med Sci., Univ. of Miyazaki, <sup>2</sup>Dept. of Neurology, Univ. of Miyazaki
- P1-004** 血液由来血清アミロイド P 成分が認知機能障害を誘発する機構の解明  
Transport of serum amyloid P component to brain induces age-related neurodegeneration in Senescence-Accelerated Mouse Prone 8  
○Fuka Sato<sup>1,2</sup>, Ai Fujii<sup>1</sup>, Saki Katagiri<sup>1</sup>, Masaki Ishikawa<sup>3</sup>, Daisuke Nakajima<sup>3</sup>, Ryo Konno<sup>3</sup>, Yusuke Kawashima<sup>3</sup>, Keiichi Nakagawa<sup>4</sup>, Toshiaki Ishizuka<sup>4</sup>, Kei Yura<sup>1,2,5</sup>, Mari Gotoh<sup>2,6</sup>, Kei Hashimoto<sup>2</sup>, Yasunori Miyamoto<sup>2</sup>  
<sup>1</sup>Ochanomizu Univ Grad Sch, <sup>2</sup>Inst Human Life Sci, Ochanomizu Univ, <sup>3</sup>Inst Kazusa DNA Res, <sup>4</sup>National Defense Med Col, <sup>5</sup>Waseda Univ, <sup>6</sup>Teikyo Univ
- P1-005** ヒト iPS 細胞由来中型有棘神経細胞の新規分化誘導法の確立  
Establishment of a novel method for differentiating medium spiny neurons from human induced pluripotent stem cells  
○Kosuke Karasawa  
Division of CNS Regeneration and Drug Discovery, International Center for Brain Science, Fujita Health University
- P1-006** 発生期の中脳における DSCAM を介した細胞間隔制御の解析  
The analysis of DSCAM-mediated intercellular spacing in developing midbrain  
○Kento Hizawa<sup>1</sup>, Yukiko Inoue<sup>2</sup>, Satoshi Miyashita<sup>2</sup>, Takayoshi Inoue<sup>2</sup>, Takuya Sasaki<sup>1,3</sup>, Mikio Hoshino<sup>2</sup>, Nariko Arimura<sup>1</sup>  
<sup>1</sup>Dept Pharmacol, Tohoku Univ Grad Sch Pharm Sci, <sup>2</sup>Dept Biochem Cell Biol, Natl Inst Neurosci, NCNP, <sup>3</sup>Dept Neuroparmacol, Tohoku Univ Grad Sch Med
- P1-007** CPTX の長期間投与は興奮性シナプスにおける PSD95 の集積を促進する  
Prolonged administration of CPTX accumulates PSD95 in excitatory synapses  
○Boxiao Zhao<sup>1</sup>, Shigeo Sakuragi<sup>1</sup>, Toshiki Takahashi<sup>1</sup>, Michisuke Yuzaki<sup>2</sup>, Hiroko Bannai<sup>1</sup>  
<sup>1</sup>Graduate School of Advanced Science and Engineering, Waseda University, <sup>2</sup>Keio University
- P1-008** 脱分極阻害におけるミトファジーによる軸索退縮の促進  
Mitophagy promotes axonal retraction during depolarization inhibition  
○Ruri Kawakami<sup>1</sup>, Kita Hiroki<sup>1</sup>, Yuki Kawai<sup>2</sup>, Yoshiyuki Konishi<sup>3</sup>  
<sup>1</sup>Industrial Innovation of Engineering, Graduate School of Engineering, University of Fukui, <sup>2</sup>Department of Materials Science and Biotechnology, School of Engineering, University of Fukui, <sup>3</sup>Department of Materials Science and Biotechnology, Faculty of Engineering, University of Fukui
- P1-009** 演題取り下げ

- P1-010** *in vivo* BioID-based CaMKI  $\gamma$  proximity proteome analysis and discovery of phospho-substrates  
 ○Ryusuke Shiota<sup>1,2</sup>, Pin-Wu Liu<sup>3</sup>, Shuhei Ueda<sup>1,2</sup>, Kouhei Nishino<sup>4</sup>, Honoka Tanaka<sup>1,2</sup>, Shin-ichiro Horigane<sup>1,2</sup>, Daisuke Mori<sup>5</sup>, Hidetaka Kosako<sup>4</sup>, Sayaka Takemoto-Kimura<sup>1,2</sup>  
<sup>1</sup>Dept of Neurosci, Res Inst of Enviro Med, Nagoya Univ, <sup>2</sup>Dept of Mol/Cell Neurosci, Nagoya Univ Grad Sch of Med, <sup>3</sup>Lab of Sys Neuropharma, Grad Sch of Med, Kyoto Univ, <sup>4</sup>Div of Cell Sig, Inst of Adv Med Sci, Tokushima Univ, <sup>5</sup>Brain and Mind Res Cent, Nagoya Univ
- P1-011** Modulating the Role of Senolytics to Help Mitigate the Clearance of Senescent Cells in Differentiated SHSY-5Y Neuronal Cells for Healthy Brain Aging  
 ○Ishika Singh<sup>1</sup>, Abhishek Kumar Singh<sup>2</sup>  
<sup>1</sup>Manipal Centre for Biotherapeutics Research (MCBR), India, <sup>2</sup>Manipal Academy of Higher Education (MAHE)
- P1-012** 慢性ストレスによる進行性神経回路再編と行動変容の持続における役割  
 Progressive Neural Circuit Remodeling Induced by Chronic Stress and Its Role in Sustaining Behavioral Alterations  
 ○Yuki Okuda<sup>1</sup>, Ryota Shinohara<sup>1</sup>, Hirokazu Sonobe<sup>1</sup>, Yuzuki Maruyama<sup>1</sup>, Dongrui Li<sup>1</sup>, Marina Yamamoto<sup>1</sup>, Masahiro Yamaguchi<sup>2</sup>, Kei Ito<sup>2</sup>, Akinori Sato<sup>2</sup>, Fumitaka Osakada<sup>2</sup>, Tomoyuki Furuyashiki<sup>1</sup>  
<sup>1</sup>Dept Pharm, Kobe Univ Grad Sch Med Sci, <sup>2</sup>Lab Cell Pharmacol, Grad Sch Pharm Sci, Nagoya Univ, Nagoya
- P1-013** 胎生期の神経幹細胞における（プロ）レニン受容体の機能解析  
 Analysis of (pro)renin receptor [(P)RR] in embryonic neural stem cell development  
 ○Misuzu Hashimoto<sup>1</sup>, Misaki Hibi<sup>1</sup>, Koya Matsukubo<sup>1</sup>, Hitoshi Kimura<sup>1</sup>, Kuma Hiraoka<sup>1</sup>, Swapna Biswas Paramanya<sup>1</sup>, Chiharu Suzuki-Nakagawa<sup>1</sup>, Yasuhiko Kizuka<sup>2</sup>, Jun-Dal Kim<sup>3</sup>, Akiyoshi Fukamizu<sup>4</sup>, Atsuhiko Ichihara<sup>5</sup>, Tsutomu Nakagawa<sup>1</sup>  
<sup>1</sup>Lab Biol Chem, Appl Biol Sci, Gifu Univ, <sup>2</sup>iGCORE, Gifu Univ, <sup>3</sup>Dept Res Dev, Inst Nat Med, Univ of Toyama, <sup>4</sup>TARA center, Univ of Tsukuba, <sup>5</sup>Dept Endocrine and Hypertens, Tokyo Wom Med Univ
- P1-014** ALS マウスを用いた運動皮質の興奮性亢進の解明  
 The mechanism of hyperexcitability of the motor cortex in ALS transgenic mouse models  
 ○Mieko Morishima<sup>1</sup>, Koki Akashi<sup>1,2</sup>, Okiru Komine<sup>3</sup>, Koji Yamanaka<sup>3</sup>, Naoko Kaneko<sup>1</sup>  
<sup>1</sup>Laboratory of Neuronal Regeneration Graduate School of Brain Science Doshisha University, <sup>2</sup>Faculty of Life and Medical Sciences, Doshisha University, <sup>3</sup>Research Institute of Environmental Medicine, Nagoya University
- P1-015** 神経活動阻害がプレシナプス除去に与える影響  
 The effect of neuronal activity deprivation on presynaptic elimination  
 ○Shion Mochizuki<sup>1</sup>, Yoshiyuki Konishi<sup>2</sup>  
<sup>1</sup>Industrial Innovation of Engineering, Graduate School of Engineering, University of Fukui, <sup>2</sup>Department of Materials Science and Biotechnology, Faculty of Engineering, University of Fukui
- P1-016** 薬物排出膜輸送体 MRP5 の発現抑制は神経興奮毒性を伴う運動障害を示す  
 Knockdown of drug efflux transporter MRP5 showed motor dysfunction accompanied by excitotoxicity  
 ○Maki Watanabe, Takahiro Ishimoto, Shoma Yamada, Yusuke Masuo, Yukio Kato  
 Fac. Pharm., Kanazawa Univ.
- P1-017** 新規ミクログリア特異的マーカー抗体の開発：抗 P2RY12, モルモットポリクローナル抗体  
 Development of a novel homeostatic microglial specific marker antibody:  
 Anti-P2RY12 guinea pig polyclonal antibody  
 ○Shiro Sugino<sup>1</sup>, Daishi Hiratsuka<sup>1</sup>, Satoshi Onodera<sup>1</sup>, Amiyo Yoshihara<sup>2</sup>, Akitoshi Enjo<sup>2</sup>, Seiji Miyata<sup>2</sup>, Ryoichi Yoshimura<sup>2</sup>, Masaaki Kojima<sup>1</sup>  
<sup>1</sup>FUJIFILM Wako Pure Chemical Corporation, <sup>2</sup>Kyoto Institute of Technology
- P1-018** アストロサイト標的型 AAV ベクターによる脳内高効率・高特異性遺伝子導入の実現  
 Development of an Astrocyte-Tropic AAV Vector for Efficient and Specific Gene Delivery in the Brain  
 ○Shinobu Hirai, Hiroko Shimbo, Nobuyuki Aruga, Shoko Tamura  
 Brain Metabolism Group, Frontier Lab, TMIMS
- P1-019** オルガネラストレス下における ER-GA SNARE の発現と  $\beta$  APP プロセシングのグリア細胞種間での比較  
 Comparative analysis of ER-GA SNARE protein expression and  $\beta$  APP processing in glial cells under organelle stress  
 ○Kei Suga<sup>1</sup>, Sachiko Yamamoto-Hijikata<sup>1</sup>, Yasuo Terao<sup>2</sup>, Makoto Ushimaru<sup>1</sup>  
<sup>1</sup>Dept. Chem. Kyorin Univ., Faculty of Med, <sup>2</sup>Dept. Med. Physiol. Kyorin Univ., Faculty of Med

- P1-020** TROY とその未知のリガンドの結合を阻害した TROY-Fc 過剰発現マウスにおける行動異常  
Abnormal behaviors in TROY-Fc transgenic mice through blocking the interaction of TROY with its unidentified ligands  
○Tomoko Hisaoka<sup>1</sup>, Tadasuke Komori<sup>1</sup>, Emi Kuriyama<sup>2</sup>, Yoshihiro Morikawa<sup>1</sup>  
<sup>1</sup>Department of Anatomy and Neurobiology, Wakayama Medical University,  
<sup>2</sup>Department of Neurological Surgery, Wakayama Medical University
- P1-021** アストロサイトにおける TROY とそのリガンドの相互作用の阻害が血液脳関門の形成・維持に及ぼす影響の検討  
Disruption of the blood-brain barrier by blocking interaction of TROY/TNFRSF19 with its ligands in astrocytes  
○Tadasuke Komori<sup>1</sup>, Tomoko Hisaoka<sup>1</sup>, Emi Kuriyama<sup>2</sup>, Yoshihiro Morikawa<sup>1</sup>  
<sup>1</sup>Dept Anat Neurobiol, Wakayama Med Univ, <sup>2</sup>Dept Neurol Surg, Wakayama Med Univ
- P1-022** 脳梁発達時に灰白層へ移動する SOX9 陽性グリア細胞内 Erk 信号伝達におけるプレキシシン A3 の役割に関する解析  
Analysis on the role of PlxnA3 for Erk signaling in SOX9-positive glial cells translocating to the indusium griseum during corpus callosum development  
○Kazunori Yukawa<sup>1</sup>, Md. Mosharaf Hossain<sup>1</sup>, Shoto Sasaki<sup>1</sup>, Takamasa Tsuzuki<sup>1</sup>, Ikuko Takahashi<sup>2</sup>, Takahiko Kawasaki<sup>3</sup>, Takayuki Negishi<sup>1</sup>  
<sup>1</sup>Department of Physiology, Faculty of Pharmacy, Meijo University, <sup>2</sup>Radioisotope Center, Faculty of Pharmacy, Meijo University,  
<sup>3</sup>Brain Functional Laboratory, National Institute of Genetics
- P1-023** 白質ミクログリア活性化がマウスの行動に及ぼす影響の解析  
Analysis of the effects of microglial activation in white matter on mouse behavior  
○Hiroshi Ohnishi<sup>1,2</sup>, Takuro Honzawa<sup>2</sup>, Etsumi Oike<sup>2</sup>, Yuka Moriya<sup>2</sup>, Eriko Urano<sup>2</sup>, Eiko Matsumoto<sup>2</sup>, Takashi Matozaki<sup>3</sup>  
<sup>1</sup>Div Health Sci, Gunma Univ Grad Schl Food Pop Health Sci, <sup>2</sup>Dept Lab Sci, Gunma Univ Grad Sch Health Sci,  
<sup>3</sup>Div Biosig Reg, Dept Biochem Mol Biol, Kobe Univ Grad Sch Med
- P1-024** 脳室周囲器官および延髄中心管に局在するタニサイト様上皮細胞の形態的特徴および増殖特性の検討  
Morphological and Proliferative Analysis of Tanycyte-like Ependymal Cells in the Circumventricular Organs and the Medullary Central Canal  
○Eriko Furube<sup>1</sup>, Ryoto Masuno<sup>2</sup>, Akihiro Okamoto<sup>2</sup>, Ryouichi Yoshimura<sup>2</sup>, Masahiro Ohgidani<sup>1</sup>, Yusuke Tanaka<sup>1</sup>, Shigetaka Yoshida<sup>1</sup>  
<sup>1</sup>Dept Funct Anat Neurosci, Asahikawa Med Univ, <sup>2</sup>Neurosci Lab, Appl Biol, Kyoto Inst Technol
- P1-025** ヒト人工多能性幹細胞由来ミクログリア前駆細胞を含有する大脳皮質オルガノイドを用いた神経層構造形成の解析  
Analysis of neural layer formation using organoids of cerebral cortex containing human induced pluripotent stem cell-derived microglial progenitor cells  
○Mayuko Wada<sup>1</sup>, Koki Harada<sup>1</sup>, Shiho Yamada<sup>1</sup>, Kaneyasu Nishimura<sup>2</sup>, Kazuyuki Takata<sup>1</sup>  
<sup>1</sup>Div. Integ. Pharm. Sci., Kyoto Pharm. Univ., Kyoto, <sup>2</sup>Grad. Sch. Brain Sci., Doshisha Univ., Kyoto
- P1-026** シナプス接着様分子 LRFN2 が関与する GBM- 神経細胞間の相互作用による GBM 悪性化解明  
Molecular mechanism of tumor progression through bidirectional interactions between GBM-neurons involving LRFN2, synapse adhesion-like molecules  
○Chihiro Hayashi<sup>1</sup>, Kenny Daun<sup>1</sup>, Tadateru Fukami<sup>2</sup>, Naoko Morimura<sup>1</sup>, Seiji Hitoshi<sup>1</sup>  
<sup>1</sup>Department of Integrative Physiology, Shiga University of Medical Science,  
<sup>2</sup>Department of Neurosurgery, Shiga University of Medical Science
- P1-027** 神経炎症における成長分化因子 15 (GDF15) の役割：マイクログリアに着目して  
Role of growth differentiation factor 15 in neuroinflammation: targeting microglia  
○Haruto Yamamoto<sup>1</sup>, Noriyuki Miyaue<sup>2</sup>, Choudhury Emamussalehin<sup>3</sup>, Tasuku Nishihara<sup>3</sup>, Masahiro Nagai<sup>2</sup>  
<sup>1</sup>Ehime University, School of Medicine,  
<sup>2</sup>Department of Clinical Pharmacology and therapeutics, Ehime University Graduate School of Medicine,  
<sup>3</sup>Department of Anesthesiology and Perioperative Medicine, Ehime University Graduate School of Medicine
- P1-028** 幼少期ストレス曝露が脳境界に与える影響  
Early life stage stress exposure affects the CNS borders  
○Mikiko Kudo, Ayato Yamasaki, Takahiro Masuda  
Division of Molecular Neuroimmunology, Medical Institute of Bioregulation, Kyushu University
- P1-029** アストロサイトの細胞間及び細胞基質間接着構成成分の局在  
Localization of components of cell-cell and cell-substrate adhesion complex in astrocytes  
○Kodai Inoue<sup>1</sup>, Chieko Ikoma<sup>1</sup>, Kota Kasai<sup>1</sup>, Satoko Tsukuda<sup>1</sup>, Akiko Tamura<sup>1</sup>, Sihoko Nakata<sup>1</sup>, Kazunori Takano<sup>1</sup>, Ayako Nakayama<sup>1</sup>, Hiroyuki Nakagawa<sup>2</sup>, Eiji Shigetomi<sup>3</sup>, Asako Terasaki<sup>1</sup>  
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- P1-030** コネキシン依存性シトルリン - アルギニン代謝異常はてんかん原性に寄与する  
 Connexin dependent dysregulation of citrulline-arginine metabolism promotes epileptogenesis  
 ○Hiroki Hoshino<sup>1,2,3</sup>, Fumikazu Sano<sup>1,2,4</sup>, Eiji Shigetomi<sup>1,2</sup>, Hideyuki Takeuchi<sup>5,6</sup>, Hideaki Kanemura<sup>3</sup>,  
 Schuichi Koizumi<sup>1,2</sup>  
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<sup>5</sup>Dept Neuro, Intl Univ of Health and Welfare, <sup>6</sup>Dept Neuro, Univ Yokohama city
- P1-031** マウス海馬 Olig2+/BLBP+ アストロサイト前駆細胞が示す脳内環境への適応的反応  
 Olig2+/BLBP+ astrocyte progenitors and their adaptative response in mouse hippocampus  
 ○Shoichiro Omura<sup>1,2</sup>, Rina Ogawa<sup>1</sup>, Tomomi Kawachi<sup>1</sup>, Keiko Morimoto<sup>4</sup>, Yuua Yonekura<sup>5</sup>, Aya Ogawa<sup>1</sup>, Yuuki Arai<sup>1</sup>,  
 Natsumi Takayama<sup>1</sup>, Aki Masui<sup>1</sup>, Kumiko Kondo<sup>1</sup>, Toto Wanami<sup>1</sup>, Hiroshi Shinohara<sup>1</sup>, Hideyuki Maeda<sup>3</sup>,  
 Eri Segi-Nishida<sup>5</sup>, Kazunori Nakajima<sup>4</sup>, Tokiharu Takahashi<sup>1</sup>, Kyoji Ohyama<sup>1</sup>  
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<sup>4</sup>Department of Anatomy, Keio University School of Medicine,  
<sup>5</sup>Department of Biological Science and Technology, Faculty of Advanced Engineering, Tokyo University of Science
- P1-032** ミクログリアにおける細胞内亜鉛欠乏は活性酸素種を介した NLRP3 インフラマソームの活性化と炎症を誘発する：ポリフェノールの抑制効果  
 Intracellular Zinc Deficiency in Microglia Induces Reactive Oxygen Species-Mediated NLRP3 Inflammasome Activation and Brain Inflammation: Suppressive Effects of Polyphenols  
 ○Ayumi Matsushita<sup>1</sup>, Maki Kimura<sup>2</sup>, Naoko Tajima<sup>2</sup>, Tsuyoshi Yamanaka<sup>2</sup>, Masato Inazu<sup>1,2</sup>  
<sup>1</sup>Inst .Med .Sci.Tokyo Med .Univ, <sup>2</sup>Dept.Mol.Prev.Med.
- P1-033** オリゴデンドロサイト前駆細胞におけるタンパク質アルギニンメチル化阻害の影響  
 Effects of protein arginine methylation inhibition in oligodendroglial precursor cells  
 ○Hinata Yamamoto<sup>1</sup>, Atsushi Yagi<sup>1</sup>, Nanaho Shibatsuji<sup>1</sup>, Kazuya Murata<sup>2</sup>, Misuzu Hashimoto<sup>3</sup>, Tsutomu Nakagawa<sup>3</sup>  
<sup>1</sup>Graduate School of Natural Science and Technology, Gifu University, <sup>2</sup>COMIT, Institute for Advanced Study, Gifu University,  
<sup>3</sup>Faculty of Applied Biological Sciences, Gifu University
- P1-034** 血管内皮細胞における Gtf2i の発現抑制は血液脳関門の破綻と認知機能障害を引き起こす  
 Endothelial Gtf2i inhibition impairs blood-brain barrier integrity and cognitive function  
 ○Ruijuan Zhang<sup>1,2</sup>  
<sup>1</sup>Dept. Mol. Pharm., Natl. Inst. Neurosci., Natl. Center Neurol. Psychiat.,  
<sup>2</sup>Dept. NCNP Brain Physiol. Pathol., Grad. Sch of Medical and Dental Sci., Inst. Sci. Tokyo
- P1-035** 母体炎症反応のマウス胎仔脳ミクログリアの挙動と血管形成への影響  
 Maternal immune activation disrupts microglial dynamics and vascular formation in the mouse embryonic brain  
 ○Tsukasa Shimamura, Yuki Hattori  
 Dept Anat and Cell Bio, Nagoya Univ Grad Sch Med
- P1-036** マウス海馬における転写活性化因子 MRTFB の神経活動依存的な核移行の制御とその意義に関する研究  
 Regulation of nuclear translocation of SRF coactivator MRTFB and the physiological role in mouse hippocampus  
 ○Aimi Yamamoto, Wataru Yamazaki, Minami Okabe, Daisuke Ihara, Akiko Tabuchi  
 Lab Mol Neurobiol, Grad Sch of Med and Pharm Sci, Univ of Toyama
- P1-037** オリゴデンドロサイト発達における Mbp mRNA 輸送の分子機構解明  
 Elucidating the molecular mechanisms underlying Mbp mRNA transport in developing oligodendrocytes  
 ○Shoko Shimizu, Yugo Ishino, Shingo Miyata  
 Div of Mol Brain Sci, Research Institute of Traditional Asian Medicine, Kindai Univ
- P1-038** ALS 発症機序における TDP-43 と RNA 酸化の分子動態  
 Molecular dynamics of TDP-43 and RNA oxidation in the pathogenesis of ALS  
 ○Akira Ishiguro  
 Micro-Nano Tech, Hosei Univ
- P1-039** 計算機実験によるニューロン移動での細胞接着効果のモデリング  
 Modering of Cell-Cell Adhesion Effects of Neuron Migration Based on Computer Simulation  
 ○Katsuyoshi Matsushita<sup>1</sup>, Mami Matsumoto<sup>2</sup>, Kazunobu Sawamoto<sup>2</sup>, Koichi Fujimoto<sup>1</sup>  
<sup>1</sup>Hiroshima Univ, Grad Sch Integr Sci Life, <sup>2</sup>Nagoya city Univ, Grad Sch of Med Sci

- P1-040** 母体炎症モデルマウスにおけるアストロサイト発生異常  
 Impairment of astrocyte development in a mouse model of maternal inflammation  
 ○Hidenori Tabata<sup>1</sup>, Keiko Morimoto<sup>2</sup>, Michio Miyajima<sup>2</sup>, Ken-ichiro Kubo<sup>2,3</sup>, Masatsugu Ema<sup>4</sup>, Koh-ichi Nagata<sup>1</sup>, Kazunori Nakajima<sup>2</sup>  
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<sup>4</sup>Dept. Stem Cells & Human Disease Models, Res. Cent. for Animal Life Sci., Shiga Univ. of Medical Sci., Shiga
- P1-041** 傷害後の皮質における移動ニューロンと足場細胞の相互作用の分子基盤  
 Molecular basis of neuron-scaffold interactions during post-injury migration in the cortex  
 ○Kazuya Kuboyama<sup>1</sup>, Rasmus Rydbirk<sup>2</sup>, Chikako Nakajima<sup>1,3</sup>, Miho Furuta<sup>1</sup>, Mami Matsumoto<sup>1</sup>, Masato Sawada<sup>1,4</sup>, Koya Kawase<sup>1,5</sup>, Nobuhiko Ohno<sup>6,7</sup>, Konstantin Khodosevich<sup>2</sup>, Kazunobu Sawamoto<sup>1,4</sup>  
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<sup>7</sup>Div Ultrastructural Res, NIPS
- P1-042** 大脳皮質神経回路形成における同期的自発神経活動の役割  
 Spontaneous correlated activity and the formation of cortical microcircuits  
 ○Hidenobu Mizuno, Takamitsu Egashira  
 IRCMS, Kumamoto Univ
- P1-043** 軸索成長円錐における脂質ラフト形成と神経成長における役割  
 Lipid Raft Formation in the Axonal Growth Cone and Its Role in Neuronal Development  
 ○Atsuko Honda<sup>1,2</sup>, Michihiro Igarashi<sup>2</sup>  
<sup>1</sup>Center for Res Promotion, Sch of Med, Niigata Univ, <sup>2</sup>Grad Sch of Med and Dent Sci, Niigata University
- P1-044** 妊娠期ストレスが子どもの生後の神経新生ニッチ形成に与える影響の解明  
 Impact of prenatal maternal stress on neurogenic niche formation in offspring  
 ○Yusuke Kobayashi<sup>1</sup>, Takaaki Kuniya<sup>1</sup>, Ami Nakamoto<sup>1</sup>, Lingyan Fang<sup>2</sup>, Yukiko Gotoh<sup>1,2</sup>  
<sup>1</sup>Grad Sch Pharm Sci, The Univ of Tokyo, <sup>2</sup>International Research Center for Neurointelligence, The Univ of Tokyo
- P1-045** ヤツメウナギオートタキシンの機能と構造解析  
 Functional and structural analysis of Japanese lamprey autotaxin  
 ○Himeka Saida, Kodai Nakamoto, Shigeru Shimamoto, Nobuyuki Fukushima  
 Kindai Univ Sch Sci and Eng
- P1-046** 生後脳を移動する新生ニューロンにおけるリン酸化プロテオミクス解析  
 Phosphoproteome analysis in new neurons migrating in the postnatal brain  
 ○Yuzuki Hara<sup>1</sup>, Masato Sawada<sup>1,2</sup>, Yasuyuki Ito<sup>3</sup>, Michihiro Igarashi<sup>3</sup>, Kazunobu Sawamoto<sup>1,2</sup>  
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<sup>3</sup>Dept Neurochem Mol Cell biol, Grad Sch Med Dent Sci, Niigata Univ
- P1-047** ステロイドホルモンが発生過程の神経新生ニッチ形成に与える影響  
 Steroid hormone regulation of neurogenic niche ontogeny  
 ○Ami Nakamoto<sup>1</sup>, Takaaki Kuniya<sup>1</sup>, Lingyan Fang<sup>2</sup>, Yukiko Gotoh<sup>1,2</sup>  
<sup>1</sup>Graduate School of Pharmaceutical Sciences, The University of Tokyo,  
<sup>2</sup>International Research Center for Neurointelligence (WPI-IRCIN), The University of Tokyo
- P1-048** 老化特異的なサブプレートニューロンの変性メカニズム解明  
 Understanding of the mechanism of degeneration of subplate neurons specific to aging  
 ○Yusuke Sugita<sup>1,3</sup>, Keiko Moriya-Ito<sup>2</sup>, Carina Hanashima<sup>1</sup>, Chiaki Ohtaka-Maruyama<sup>2</sup>  
<sup>1</sup>Grad Sch of Ad Sci and Eng, Waseda Univ, <sup>2</sup>Neuro Dev PJ, Tokyo Metropol. Inst. of Med. Sci, <sup>3</sup>JSPS
- P1-049** 末梢神経再生過程における軸索 - シュワン細胞の相互作用  
 Dynamic Schwann cell-axon interactions guide peripheral nerve regeneration  
 ○Kota Yamashina<sup>1</sup>, Mieko Morishima<sup>1</sup>, Takuya Miyamoto<sup>2</sup>, Shinsuke Shibata<sup>3</sup>, Tomoyuki Akazawa<sup>4</sup>, Hideyuki Okano<sup>5</sup>, Kazunobu Sawamoto<sup>6</sup>, Naoko Kaneko<sup>1</sup>  
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<sup>3</sup>Niigata University Graduate School of Medical and Dental Sciences, <sup>4</sup>Juntendo University Graduate School of Medicine,  
<sup>5</sup>Keio University, <sup>6</sup>Department of Developmental and Regenerative Neurobiology, National Institute for Physiological Sciences
- P1-050** 神経幹細胞の増殖に影響を与える因子の同定  
 Identification of factors affecting neural stem cell proliferation  
 ○Takuya Nitta<sup>1,2</sup>, Takuya Tomita<sup>1</sup>, Yasushi Saeki<sup>1</sup>, Taeko Kobayashi<sup>1</sup>  
<sup>1</sup>Div Protein Metab, Dept Basic Med Sci, Inst Med Sci, Univ Tokyo, <sup>2</sup>Dept Pharm Sci, Grad Sch Pharm Sci, Univ Tokyo

- P1-051** マウスの母子分離ストレスが海馬での成体神経新生と行動発達に与える影響  
The effects of maternal separation stress on adult hippocampal neurogenesis and behavioral development in mice  
○Motoki Akiyama, Yuki Ito, Jun Motoyama  
Lab dev neurobiol, Doshisha Univ Grad Sch Brain Science
- P1-052** Impact of ATF6 deletion on the embryonic brain development  
○Nguyen Dinh Loc<sup>1</sup>, Nguyen Huong Ly<sup>1</sup>, Dao Xuan Dat<sup>1</sup>, Mika Takarada-Iemata<sup>1</sup>, Hiroshi Ishii<sup>1</sup>, Takashi Tamatani<sup>1</sup>, Tsuyoshi Hattori<sup>2</sup>, Masato Miyake<sup>3</sup>, Seiichi Oyadomari<sup>3</sup>, Kazutoshi Mori<sup>4</sup>, Osamu Hori<sup>1</sup>  
<sup>1</sup>Kanazawa University, <sup>2</sup>Nara Medical University, <sup>3</sup>Tokushima University, <sup>4</sup>Kyoto University
- P1-053** NEUROD1 と多能性因子による末梢血細胞の効率的なグルタミン酸作動性ニューロンへの変換  
Efficient conversion of peripheral blood cells into glutamatergic neurons by NEUROD1 and pluripotency Factors  
○Yoichi Saito<sup>1</sup>, Mitsuru Ishikawa<sup>1,2,3</sup>, Mahito Ohkuma<sup>4</sup>, Jonathan Moody<sup>5</sup>, Yo Mabuchi<sup>6</sup>, Tsukasa Sanosaka<sup>2</sup>, Yoshinari Ando<sup>5</sup>, Takayuki Yamashita<sup>4,7</sup>, Chung-Chau Hon<sup>5</sup>, Jay W. Shin<sup>5</sup>, Wado Akamatsu<sup>2,8</sup>, Hideyuki Okano<sup>1,2,3</sup>  
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- P1-054** The role of Kif2C in radial glial cell maintenance and neuronal migration in the developing mouse cortex  
○Sharmin Naher, Takako Kikkawa, Noriko Osumi  
Department of Developmental Neuroscience, Tohoku University Graduate School of Medicine
- P1-055** 新生ニューロンとの相互作用による脳室下帯由来 OPC 移動の促進  
V-SVZ-derived OPC migration is facilitated by interaction with newborn neurons  
○Yuriko Sobu<sup>1</sup>, Edward William Uy<sup>1</sup>, Takuya Miyamoto<sup>2</sup>, Hirohide Takebayashi<sup>3,4</sup>, Shinsuke Shibata<sup>6</sup>, Chihiro Akazawa<sup>7</sup>, Hideyuki Okano<sup>8</sup>, Kazunobu Sawamoto<sup>2,5</sup>, Naoko Kaneko<sup>1</sup>  
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- P1-056** 脳における免疫グロブリンの網羅的 RNA 発現解析  
Comprehensive analysis of immunoglobulin RNA expression in the brain  
○Keiko Morimoto, Hitomi Sano, Michiko Takahashi, Rikuo Takahashi, Kazunori Nakajima  
Dept Anat, Keio Univ Sch Med, Tokyo
- P1-057** アルツハイマー病モデルマウスの海馬における BDNF スプライスバリエーションの発現プロファイルの性差  
Sex differences in expression profiles of BDNF splice variants in the hippocampus of early-stage Alzheimer's disease model mice  
○Mamoru Fukuchi  
Lab Mol Neurosci, Fac Pharm, Takasaki Univ Health & Welfare
- P1-058** 子宮内発育遅延ラットモデルにおける神経細胞の病理学的変化の解析とトロンボポエチンの治療効果の検討  
Analysis of Pathological Alterations Changes in Neuronal Cells in a Rat Model of Intrauterine Growth Restriction (IUGR) and Therapeutic Effects of Thrombopoietin  
○Yuka Suzuki<sup>1</sup>, Satoru Takeshita<sup>1,2</sup>, Hiroki Kakita<sup>1,2</sup>, Nami Nakamura<sup>2,3</sup>, Kohki Toriuchi<sup>1</sup>, Hiromasa Aoki<sup>1</sup>, Yasumichi Inoue<sup>4</sup>, Hidetoshi Hayashi<sup>4</sup>, Yasumasa Yamada<sup>2</sup>, Mineyoshi Aoyama<sup>1</sup>  
<sup>1</sup>Dept Pathobio, Nagoya City Univ Grad Sch Phar Sci, <sup>2</sup>Dept Perinatal and Neonatal Med, Aichi Med Univ, <sup>3</sup>Dept Pediatrics, Aichi Med Univ, <sup>4</sup>Dept Cell Signaling, Nagoya City Univ Grad Sch Phar Sci
- P1-059** 脳由来神経栄養因子 (BDNF) は、神経細胞の発達と機能に重要な役割を果たす分泌タンパク質である  
Brain-derived neurotrophic factor (BDNF) is a secreted protein that plays a critical role in the development and function of neurons  
○Yoshiki Kura, Masami Kojima  
Dept Biosci, Grad Sch Eng, Kanazawa Inst Technol

- P1-060** 神経栄養因子 BDNF とその前駆体からの副産物 BDNF pro-peptide の作用差の研究：  
樹状突起と軸索に対する相反作用  
Distinct role of BDNF and its pro-peptide in the axon and dendrite growth  
○Airi Nakamura<sup>1</sup>, Misaki Miyata<sup>1,2</sup>, Masami Kojima<sup>1</sup>  
<sup>1</sup>Dept Biosci, Grad Sch Eng, Kanazawa Inst Technol,  
<sup>2</sup>Division of Animal Resources and Development, Life Science Research Center, Administration Center for Promotion of Research,  
Organization for Promotion of Research, University of Toyama
- P1-061** リソソームを標的とするフェロトシス阻害剤 N,N- ジメチルアニリン誘導体の開発  
Development of Lysosome-Targeting Ferroptosis Inhibitors Based on N,N-Dimethylaniline  
Derivatives  
○Yoko Hirata<sup>1</sup>, Tomohiro Hashimoto<sup>2</sup>, Kaori Ando<sup>3</sup>, Yuji Kamatari<sup>1,4</sup>, Hiroshi Takemori<sup>3</sup>, Kyoji Furuta<sup>3</sup>  
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<sup>3</sup>Faculty of Engineering, Gifu University, <sup>4</sup>Institute for Glyco-core Research (iGCORE), Gifu University
- P1-062** 3-nitrotyrosine induces mitochondrial dysfunction and axonal degeneration in mature cerebellar  
granule neurons  
○Aadhan Aruloli, Yoshiyuki Konishi  
Department of Industrial Innovation Engineering, Graduate School of Engineering, University of Fukui, Fukui
- P1-063** ニューロン由来分泌タンパク質・クロモグラニン B はオリゴデンドロサイトの生存を低下させる  
A neuron-derived secreted protein chromogranin B attenuates the survival of oligodendrocytes  
○Nanako Yamada, Momona Yamada, Reina Ono, Binri Sasaki, Nobuharu Suzuki  
Department of Clinical Bioanalysis and Molecular Biology, Graduate School of Medical and Dental Sciences, Institute of Science  
Tokyo
- P1-064** 頭部損傷後のグリオシスおよび血管増生における Glial cells missing 1 の機能解析  
Glial cells missing 1 triggers gliosis and vasculogenesis after neonatal brain injury  
○Seiji Hitoshi, Yoshitaka Hayashi, Asmaa Abdullah, Naoko Morimura, Nur Azrah Fazera Mohd Ariffin  
Department of Integrative Physiology, Shiga University of Medical Science
- P1-065** 脳梗塞後の運動機能障害からの機能回復を評価するための統合的な行動および組織学的解析  
Integrated behavioral and histological analysis for evaluating functional recovery from post-stroke  
motor dysfunction  
○Gyeonghwan Park<sup>1,2</sup>, Mieko Morishima<sup>1</sup>, Yasuhiro Tanaka<sup>3</sup>, Naoko Kaneko<sup>1</sup>  
<sup>1</sup>Laboratory of Neuronal Regeneration, Graduate School of Brain Science, Doshisha University,  
<sup>2</sup>Faculty of Life and Medical Sciences, Doshisha University,  
<sup>3</sup>Brain Science Institute Systems Neuroscience Research Center, Tamagawa University
- P1-066** 脳梗塞後痙攣発症マウスにおける相反抑制機能と脊髄抑制性神経回路の可塑的変化の確認  
Disfunction of reciprocal inhibition and plastic changes of inhibitory mechanisms including pre-  
and post- inhibitory synaptic connection in mice with post-stroke spasticity  
○Kanon Hyodo, Sachiko Lee  
Dept Integrated Health Sci, Nagoya Univ Grad Sch Med
- P1-067** マウス体性感覚野における疼痛表現の多様性  
Multiple pain representations by distinct neuronal ensembles in the somatosensory cortex of  
mice  
○Hiroyuki Okuno<sup>1</sup>, Liwei Guo<sup>1</sup>, Syuichi Hirabayashi<sup>1</sup>, Yoshihiko Irie<sup>1,2</sup>, Yukihiisa Daitoku<sup>1,2</sup>  
<sup>1</sup>Dept Biochem Mol Biol, Grad Sch Med Dent Sci, Kagoshima Univ, <sup>2</sup>Dept Anesthesiol, Grad Sch Med Dent Sci, Kagoshima Univ
- P1-068** 酸感受性イオンチャネル 3 の痒み行動への関与  
Involvement of acid-sensing ion channel 3 in itch behavior  
○Yasuhiro Shibata, Yuuki Hosokawa, Natsuko Kumamoto, Takashi Ueda, Shinya Ugawa  
Dept of Anatomy and Neuroscience, Nagoya City Univ Grad Sch of Med Sci
- P1-069** 侵害受容性疼痛の中樞性感作に対する末梢神経パルス高周波法の有用性  
Effectiveness of pulsed radiofrequency on peripheral nerve for central sensitization in nociceptive  
pain  
○Momoyu Yamanaka<sup>1,2</sup>, Yoshihisa Koyama<sup>2,3</sup>, Ayako Takahashi<sup>1</sup>, Yoichi Matsuda<sup>1</sup>, Takeshi Yoshida<sup>1</sup>,  
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<sup>2</sup>Department of Neuroscience and Cell Biology, Osaka University Graduate School of Medicine,  
<sup>3</sup>Addiction Research Unit, Osaka Psychiatric Research Center, Osaka Psychiatric Medical Center

- P1-070** 慢性疼痛モデルマウスにおけるシリコン製剤の鎮痛効果と作用機序の解析  
Analgesic Effects and Mechanistic Analysis of a Silicon-Based Agent in a Mouse Model of Chronic Pain  
○Yukiko Arai<sup>1,2</sup>, Yoshihisa Koyama<sup>2,3</sup>, Yuki Kobayashi<sup>4</sup>, Hikaru Kobayashi<sup>4</sup>, Takeshi Yoshida<sup>1</sup>, Shoichi Shimada<sup>2,3</sup>  
<sup>1</sup>Department of Anesthesiology and Intensive Care Medicine, Graduate School of Medicine, Osaka University,  
<sup>2</sup>Department of Neurocell Biology, Graduate School of Medicine, Osaka University,  
<sup>3</sup>Osaka Psychiatric Medical Center, Kokoro Research Center, Addiction Unit, <sup>4</sup>Sanken, Osaka University
- P1-071** ヒゲ運動時の大脳皮質一次運動野第5層細胞の発火変調  
Cell Type-Dependent Dynamics of Whisking-Related Layer 5 Neurons in the Motor Cortex  
○Koshi Iriya<sup>1</sup>, Jaerin Sohn<sup>2</sup>, Takuma Tanaka<sup>3</sup>, Takahiro Furuta<sup>2</sup>  
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<sup>2</sup>Department of Systematic Anatomy and Neurobiology, Graduate School of Dentistry, Osaka University,  
<sup>3</sup>Graduate School of Data Science, Shiga University
- P1-072** アルツハイマー病モデル動物 5 × FAD における脳内ドレブリン代謝物の増加  
Elevated levels of drebrin metabolite in the brains of Alzheimer's disease model 5 × FAD mice  
○Ayaka Higa<sup>1</sup>, Noriko Koganezawa<sup>1,2</sup>, Tomoaki Shirao<sup>1</sup>, Nobuyuki Takei<sup>1</sup>, Yuko Sekino<sup>1,3,4</sup>  
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<sup>4</sup>Grad Sch Agri & Life Sci, Univ of Tokyo, Tokyo
- P1-073** 変異 $\alpha$ シヌクレイン凝集体の構造的多様性のラマン分光法による解析  
Analysis of detailed conformational variety of  $\alpha$ -synuclein aggregates caused by mutations using Raman spectroscopy  
○Masafumi Ohtsubo, Yu Nagashima  
Biomed Photonics Lab, Inst Photonics Med, Hamamatsu Univ Sch Med
- P1-074** シヌクレイノパチーマウスモデルにおける免疫細胞の変化  
A study on the changes of immune cells observed in synucleinopathy mouse models  
○Yuto Hayashi<sup>1</sup>, Kousuke Baba<sup>1</sup>, Hideki Hayakawa<sup>1</sup>, Tatsuhiko Ozono<sup>1</sup>, Kotaro Ogawa<sup>1</sup>, Keita Kakuda<sup>1</sup>, Yasuyoshi Kimura<sup>1</sup>, Kensuke Ikenaka<sup>1</sup>, Seiichi Nagano<sup>1</sup>, Naganari Ohkura<sup>2,3</sup>, Shimon Sakaguchi<sup>2,4</sup>, Hideki Mochizuki<sup>1</sup>  
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<sup>3</sup>Department of Basic Research in Tumor Immunology, Graduate School of Medicine, Osaka University, Suita, Osaka,  
<sup>4</sup>Department of Experimental Immunology, Institute for Life and Medical Sciences, Kyoto University, Kyoto
- P1-075** 有機ヒ素化合物による培養ラット小脳アストロサイトの異常活性化における構造毒性相関解析  
Structure-toxicity relationship analysis of diphenylarsinic acid and related organic arsenicals in arsenicals-induced aberrant cellular activation in cultured rat cerebellar astrocytes  
○Takayuki Negishi<sup>1</sup>, Daiki Yoshioka<sup>1</sup>, Shoto Sasaki<sup>2</sup>, Takamasa Tsuzuki<sup>1</sup>, Kazunori Yukawa<sup>1</sup>  
<sup>1</sup>Department of Physiology, Faculty of Pharmacy, Meijo University,  
<sup>2</sup>Faculty of Pharmacy, International University of Health and Welfare
- P1-076** コンドロイチン硫酸の合成低下マウスにおける糖尿病性神経障害発症の抵抗性  
CSGalNACT1-KO mice prevent the onset and the development of diabetic neuropathy  
○Michihiro Igarashi<sup>1</sup>, Hajime Ishiguro<sup>2</sup>  
<sup>1</sup>Dept of Neurochem & Mol Cell Biol, Niigata Univ Sch Med,  
<sup>2</sup>Dept. of Hematology, Metabolism, and Endocrinology, Niigata University School of Medicine
- P1-077** マウス神経障害性疼痛モデルにおける脊髄後角ニューロン TRPC3 の重要性  
Importance of spinal dorsal horn neuronal TRPC3 in a mouse neuropathic pain model  
○Hisashi Shirakawa<sup>1</sup>, Shota Tobori<sup>1</sup>, Kosei Tamada<sup>1</sup>, Kyoko Sawada<sup>1</sup>, Nagi Uemura<sup>1</sup>, Kazuki Nagayasu<sup>1,2</sup>  
<sup>1</sup>Dept Mol Pharmacol, Grad Sch Pharm Sci, Kyoto Univ, <sup>2</sup>Lab Mol Neuropharmacol, Grad Sch Pharm Sci, Osaka Univ
- P1-078** KCNQ2 遺伝子の R213 残基における 2 つの異なるミスセンス変異による病態メカニズムの違い  
Difference of pathophysiological mechanisms caused by two distinct missense variants at the same R213 residue of KCNQ2  
○Takuma Nishijo<sup>1,2</sup>, Nanako Hamada<sup>2</sup>, Ikuko Iwamoto<sup>2</sup>, Koh-ichi Nagata<sup>2</sup>  
<sup>1</sup>Lab Phys Chem, Fac Pharm Sci, Teikyo Univ, <sup>2</sup>Dept Mol Neurobiol, Inst Dev Res, Aichi Dev Dis Cent
- P1-079** ATXN3 の機能低下は TDP-43 の核内機能低下を増強する  
Impaired ATXN3 function exacerbates TDP-43 nuclear dysfunction  
○Ryutaro Hanyu, Yuka Mitsunashi-Koike, Osamu Onodera  
Department of Neurology, Brain Research Institute (BRI), Niigata University

- P1-080** 微量ハイスループットスクリーニングシステムを利用したアミロイドβ凝集を抑制するキノコエキスの探索  
Screening of amyloid β aggregation inhibitors from mushroom extracts using a microliter scale high throughput screening system with quantum dot Imaging  
○Gegentuya Huanood<sup>1,2,3</sup>  
<sup>1</sup>Faculty of Pharmacy, Takasaki University of Health and Welfare, <sup>2</sup>Graduate School of Engineering, Muroran Institute of Technology, <sup>3</sup>Faculty of Advanced Life Science, Hokkaido University
- P1-081** 若年性パーキンソン病の責任因子である Rab39B は Neuro2A 細胞においてリソソームどうしの融合前に一過性に活性化される  
Rab39B, associated with early-onset Parkinson's disease, is transiently activated prior to lysosome-lysosome fusion in Neuro2A cells  
○Takeshi Nakamura<sup>1</sup>, Ena Furusawa<sup>1</sup>, Shingo Koinuma<sup>1</sup>, Hae-rim Yoon<sup>1</sup>, Mitsunori Fukuda<sup>2</sup>  
<sup>1</sup>Research Institute for Biomedical Sciences, Tokyo Univ Sci, <sup>2</sup>Grad Sch Life Sci Dep Develop Biol and Neurosci Tohoku Univ
- P1-082** Teaghrlein as a Neuroprotective Agent Crosses the Blood-Brain Barrier Without Disrupting Endothelial Integrity in a bEND.3 Cell Model  
○Wen-Ying Chen<sup>1</sup>, Chen-Yu Chiang<sup>1</sup>, Keng-Ying Liao<sup>1</sup>, Wei-Chi Huang<sup>1</sup>, Chun-Yen Chiu<sup>2</sup>  
<sup>1</sup>Department of Veterinary Medicine, National Chung Hsing University, Taichung, Taiwan, <sup>2</sup>Graduate Institute of Biotechnology, National Chung Hsing University, Taichung 402, Taiwan
- P1-083** ヒト幹細胞モデルを用いた APOE Christchurch バリエーション機能の解析  
Functional analysis of APOE Christchurch variant in human stem cell models  
○Hirofumi Watanabe<sup>1,2</sup>, Rei Murakami<sup>1</sup>, Mayu Hakozaiki<sup>3</sup>, Tadafumi Hashimoto<sup>3</sup>, Takeshi Iwatsubo<sup>3</sup>, Hideyuki Okano<sup>1,2</sup>  
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- P1-084** 疾患特異的 iPS 細胞を用いた球脊髄性筋萎縮症 (SBMA) の変異 AR 凝集体形成機構の解明  
Elucidation of the mechanism of mutant AR aggregate formation in spinal and bulbar muscular atrophy (SBMA) using disease-specific iPSCs  
○Kimihiko Sasaki<sup>1</sup>, Kazunari Onodera<sup>1,2</sup>, Himari Ogiwara<sup>1</sup>, Reika Sobue<sup>1</sup>, Fumito Yoshii<sup>1</sup>, Soma Koten<sup>1</sup>, Yu-Shen Cheng<sup>1</sup>, Yukiko Kitashiba<sup>1</sup>, Masahisa Katsuno<sup>2</sup>, Gen Sobue<sup>3</sup>, Hideyuki Okano<sup>4</sup>, Yohei Okada<sup>1</sup>  
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- P1-085** ゼレドロン酸による Ets2/MSR1 経路の活性化は虚血後炎症を弱める  
Ets2/MSR1 Pathway Activated by Zoledronic Acid Attenuates Post-Ischemic Inflammation  
○Eri Tanaka<sup>1,2</sup>, Kento Otani<sup>1,2</sup>, Koji Hase<sup>2</sup>, Takashi Shichita<sup>1</sup>  
<sup>1</sup>Department of Neuroinflammation and Repair, Medical Research Laboratory, Institute of Science Tokyo, <sup>2</sup>Division of Biochemistry, Faculty of Pharmacy and Graduate School of Pharmaceutical Science, Keio University
- P1-086** アルツハイマー病の脳において軸索再伸長を促進するアストロサイト分泌因子の同定  
Identification of astrocyte-secreted molecules promoting axonal regeneration in Alzheimer's disease brains  
○Kensuke Hayami, Ximeng Yang, Chihiro Tohda  
Section of Neuromedical Science, Institute of Natural Medicine, University of Toyama
- P1-087** FTY720 は脳内 CD8 陽性 T 細胞の増加を介してタウオパチーモデルマウスのタウのリン酸化と神経変性を増悪させる  
FTY720 treatment exacerbates tau phosphorylation and neurodegeneration via increasing brain CD8+ T cells in a mouse model of tauopathy  
○Ryohei Uenishi, Masanori Hijioka, Rinna Kawata, Takashi Saito  
Department of Neurocognitive Science, Institute of Brain Science, Nagoya City University Graduate School of Medical Sciences
- P1-088** マウス脳内出血病態に対する S-allyl-L-cysteine の効果  
Effects of S-allyl-L-cysteine on the pathogenesis of intracerebral hemorrhage in mice  
○Yuma Hirata, Yuki Kurauchi, Natsuko Hitora-Imamura, Hiroshi Katsuki  
Dept Cemico-Pharmacol Sci, Grad Sch Pharm Sci, Kumamoto Univ
- P1-089** Aromatic-turmerone 類縁体は脊髄小脳失調症モデルプルキンエ細胞の表現型を改善する  
Aromatic-turmerone analogs improve the phenotype of spinocerebellar ataxia model Purkinje cells  
○Kensuke Motomura<sup>1</sup>, Boateng Alex<sup>2</sup>, Masaharu Sugiura<sup>2</sup>, Ayumu Konno<sup>3</sup>, Hirokazu Hirai<sup>3</sup>, Natsuko Hitora-Imamura<sup>1</sup>, Yuki Kurauchi<sup>1</sup>, Hiroshi Katsuki<sup>1</sup>, Takahiro Seki<sup>1,4</sup>  
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- P1-090** P301S タウオパチーマウスモデルにおける CRMP2 リン酸化阻害によるミクログリア形態と神経炎症への影響  
Impact of Microglial Morphology and Neuronal Inflammation through CRMP2 Phosphorylation Inhibition in a P301S Tauopathy Mouse Model  
○Wanying Li<sup>1</sup>, Takaomi C. Saido<sup>2</sup>, Yoshio Goshima<sup>3</sup>, Toshio Ohshima<sup>1</sup>  
<sup>1</sup>Waseda University, <sup>2</sup>RIKEN Center for Brain Science, <sup>3</sup>Yokohama City University
- P1-091** 空間トランスクリプトミクスに基づくてんかん発症機序の解明  
Elucidation of the Epileptogenic Mechanism Based on Spatial Transcriptomics  
○Nao Tabe<sup>1,2</sup>, Satoshi Miyashita<sup>1</sup>, Keiya Iijima<sup>3</sup>, Masaki Takao<sup>4</sup>, Shinichiro Taya<sup>5</sup>, Masaki Iwasaki<sup>3</sup>, Mikio Hoshino<sup>1</sup>  
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<sup>2</sup>Department of NCNP Brain Physiology and Pathology, Cognitive and Behavioral Medicine, Institute of Science Tokyo,  
<sup>3</sup>Department of Neurosurgery, National Center Hospital, National Center of Neurology and Psychiatry.,  
<sup>4</sup>Department of Clinical Laboratory and Internal Medicine., National Center Hospital, National Center of Neurology and Psychiatry.,  
<sup>5</sup>Division of Behavioral Neuropharmacology, International Center for Brain Science (ICBS), Fujita Health University.
- P1-092** HTRA1 セリンプロテアーゼドメインヘテロ接合体における rs2672592 多型の発症および臨床的特徴に与える影響  
The Impact of rs2672592 Polymorphism on Disease Onset and Clinical Features in Heterozygous HTRA1 Serine Protease Domain Mutation Carriers  
○Shin Koide<sup>1,2</sup>, Taisuke Kato<sup>1</sup>, Osamu Onodera<sup>2</sup>  
<sup>1</sup>Dept Molec Neurosci, BRI Niigata Univ, <sup>2</sup>Dept Neurology, BRI Niigata Univ
- P1-093** ポリアミンは生理学的条件下における  $\alpha$ -シヌクレインのフィブリル形成に影響を及ぼす  
Polyamines affect alpha-synuclein fibril formation in physiological-relevant conditions  
○Nan Wang, Aguirre Cesar, Kensuke Ikenaka  
Dept Neurology, Osaka Univ Grad Sch Med
- P1-094** Reorganization of Excitatory-Inhibitory Circuits in Early Alzheimer's Disease  
○Keng-Ying Liao<sup>1</sup>, Yue-Loong Hsin<sup>2</sup>, Wen-Ying Chen<sup>1</sup>  
<sup>1</sup>Department of Veterinary Medicine, National Chung Hsing University, Taichung, Taiwan,  
<sup>2</sup>Department of Neurology, Chung Shan Medical University and Chung Shan Medical University Hospital, Taichung, Taiwan
- P1-095** Three-dimensional assessment of ischemic lesions and microbleeds using contrast-enhanced micro-CT in a mouse model of stroke  
○Yang Rongrong, Mika Iemata-Takarada, Osamu Hori  
Dept Neuroanatomy, Kanazawa Univ Grad Sch Med Sci
- P1-096** 細胞体におけるタウ線維はヒト iPS 細胞由来神経細胞の活動性を低下させる  
Tau inclusions in the soma suppress neuronal activity in hiPSC-derived neurons  
○Naoki Kato<sup>1</sup>, Tomoya Uchida<sup>1</sup>, Maika Itsuno<sup>2</sup>, Keita Matsumoto<sup>2</sup>, Masami Masuda-Suzukake<sup>3</sup>, Masato Hasegawa<sup>3</sup>, Hideyuki Okano<sup>4</sup>  
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<sup>2</sup>Department of Physiology, School of Medicine, Keio University,  
<sup>3</sup>Dementia Research Project, Tokyo Metropolitan Institute of Medical Science,  
<sup>4</sup>Keio Regenerative Medicine Research Center
- P1-097** 自閉症関連 Sparcl1/Hevin 変異体は持続的血管新生を誘導する  
Autism-associated Sparcl1/Hevin mutant has impacts on persistent angiogenesis  
○Takumi Taketomi<sup>1</sup>, Hirone Kikukawa<sup>2</sup>, Kentaro Ueda<sup>1</sup>, Naoki Yamashita<sup>2</sup>, Fuminori Tsuruta<sup>1,3</sup>  
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- P1-098** プレセニリンの機能不全は ALS 様 TDP-43 の細胞質蓄積を引き起こす  
Presenilin Dysfunction Drives ALS-like Cytoplasmic Accumulation of TDP-43  
○Sadequl Islam<sup>1</sup>, Yang Sun<sup>1</sup>, Taisuke Tomita<sup>2</sup>, Daisuke Kawauchi<sup>1</sup>, Makoto Michikawa<sup>3</sup>, Kun Zou<sup>1</sup>  
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<sup>2</sup>Lab Neuropathol and Neurosci, Faculty of Pharm Sci, Univ Tokyo,  
<sup>3</sup>Dept Geriatric Med, Sch Life Dent at Niigata, The Nippon Dental Univ
- P1-099** 急性・慢性神経炎症モデルマウスにおける TBK1 完全欠損の役割  
The role of complete TBK1 deletion in the mouse models of acute and chronic neuroinflammation  
○Mai Horiuchi, Seiji Watanabe, Okiru Komine, Koji Yamanaka  
Department of Neuroscience and Pathobiology, Research Institute of Environmental Medicine, Nagoya University
- P1-100** TBK1 は IFN  $\beta$  によって誘導される免疫プロテアソーム経路を介して異常な TDP-43 を減少させる  
TBK1 reduces abnormal TDP-43 via the IFN  $\beta$  -induced immunoproteasome pathway  
○Shohei Sakai, Kotaro Oiwa, Seiji Watanabe, Okiru Komine, Mai Horiuchi, Koji Yamanaka  
Dept Neuroscience and Pathobiology, RIEM, Nagoya Univ

- P1-101** Effects of Estradiol Treatment on In Vitro Neural Models Derived from the iPSCs of Alzheimer's Disease Patients  
 ○Sopak Supakul<sup>1</sup>, Sumihiro Maeda<sup>2</sup>, Hideyuki Okano<sup>1,3</sup>  
<sup>1</sup>Division of CNS Regeneration and Drug Discovery, International Center for Brain Science, Fujita Health University,  
<sup>2</sup>Department of Physiology, Keio University School of Medicine, <sup>3</sup>Keio University Regenerative Medicine Research Center
- P1-102** マウス海馬体の新しい脳地図に基づくリン酸化タウの局在解析  
 Phospho-Tau distribution based on the new brain map of the mouse hippocampal formation  
 ○Yoshihisa Ishihara<sup>1,3,4</sup>, Rin Yanai<sup>2</sup>, Eriko Kuramoto<sup>5</sup>, Toshihiro Konno<sup>1</sup>, Takaichi Fukuda<sup>4</sup>, Etsuo Susaki<sup>6</sup>,  
 Naruhiko Sahara<sup>2</sup>, Chitoshi Takayama<sup>1</sup>  
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<sup>6</sup>Juntendo Univ
- P1-103** シナプスにおけるリン酸化 TDP-43 の解析  
 Analysis of synaptic phosphorylated TDP-43  
 ○Satoshi Yokoi<sup>1,2</sup>, Yuichi Riku<sup>3</sup>, Ryo Chikuchi<sup>2</sup>, Yohei Iguchi<sup>2</sup>, Masahisa Katsuno<sup>2</sup>  
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<sup>3</sup>Institute for Med Sci Aging, Aichi Med Univ
- P1-104** α7nAChR activation protects against neuroinflammation in cerebral ischaemic reperfusion injury  
 ○Mohd Kaisan Bin Mahadi  
 Faculty of Pharmacy, Universiti Kebangsaan Malaysia, Malaysia.
- P1-105** 更年期うつに対して加味逍遙散は前頭前野スパイン構造に作用する  
 The Kampo medicine Kamishoyosan normalizes dendritic spine morphology in the medial prefrontal cortex in postmenopausal chronic stress-exposed mice  
 ○Shingo Miyata<sup>1</sup>, Shoko Shimizu<sup>1</sup>, Yugo Ishino<sup>1</sup>, Yoshihisa Koyama<sup>2,3,4</sup>, Shoichi Shimada<sup>2,3,4,5</sup>, Masaya Tohyama<sup>6</sup>  
<sup>1</sup>Div Mol Brain Sci, Res Inst Tra Asian Med, Kindai Univ, <sup>2</sup>Dep Neurosci Cell Biol, Osaka Univ Grad Sch Med,  
<sup>3</sup>Addict Res Unit, Osaka Psych Re Center, Osaka Psych Med Cent, <sup>4</sup>Glob Cent Med Eng Info, Osaka Univ,  
<sup>5</sup>Unit Gra Sch Child Dev, Osaka Univ, <sup>6</sup>Osaka Pre Hosp Org
- P1-106** TRPV1 拮抗薬 AMG-517 は胎生期 VPA 投与による自閉スペクトラム症モデルマウスの痛覚過敏と社会性行動障害を改善する  
 A TRPV1 antagonist AMG-517 alleviates hyperalgesia and social deficits in prenatal VPA-induced mouse model of autism spectrum disorder  
 ○Rei Yokoyama<sup>1</sup>, Takeru Tahara<sup>2</sup>, Eiji Imado<sup>1</sup>, Daisuke Uta<sup>3</sup>, Haruki Kawase<sup>4</sup>, Momoko Higuchi<sup>4</sup>, Satoshi Asano<sup>1</sup>,  
 Hidekuni Yamakawa<sup>5</sup>, Koichi Ogawa<sup>5</sup>, Yaichiro Kotake<sup>2</sup>, Toshiaki Kume<sup>3</sup>, Kazuhiro Takuma<sup>6</sup>, Hitoshi Hashimoto<sup>4</sup>,  
 Yukio Ago<sup>1</sup>  
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<sup>2</sup>Dept. Neurochem. Environ. Health Sci., Grad. Sch. Biomed. Health Sci., Hiroshima Univ.,  
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<sup>6</sup>Dept. Pharmacol., Grad. Sch. Dent., Osaka Univ.
- P1-107** 演題取り下げ
- P1-108** Fate Mapping による自閉症モデルマウス脳における神経細胞分布異常と性差の解析  
 Analysis of neuronal distribution abnormalities and sex differences in the brain of an autism model mouse using fate mapping  
 ○Yuka Nakai<sup>1,2</sup>, Hiroki Ueno<sup>1,2</sup>, Takanobu Nakazawa<sup>3</sup>, Hitoshi Hashimoto<sup>1,4,5,6</sup>, Atsushi Kasai<sup>2</sup>  
<sup>1</sup>Lab Mol Neuropharmacol, Grad Sch Pharmaceut Sci, Univ Osaka, <sup>2</sup>Dep Systems Neuropharmacol, RIEM, Nagoya Univ,  
<sup>3</sup>Dep Biosci, Grad Sch Life Sci, Tokyo Univ Agricul, <sup>4</sup>Mol Res Cent Child Ment Dev, United Grad Sch Child Dev, Univ Osaka,  
<sup>5</sup>Div Biosci, Inst Datability Sci, Osaka Univ, <sup>6</sup>Transdimens Life Imaging Div, Inst Open Transdiscip Res Initiatives, Univ Osaka
- P1-109** Disruption of FOXG1 in iSPNs impairs AMPAR synaptic transmission leading to ASD-like behaviors  
 ○Baoshen Zhang, Daxiang Xu, Shuangshuang Dong, Pei Zhu, Chunjie Zhao  
 Key Laboratory of Developmental Genes and Human Diseases, Ministry of Education, School of Medicine, Southeast University, Nanjing 210009, China
- P1-110** うつ病モデル動物のグリア細胞における KLK8 の発現とその機能的役割  
 Expression and functions of KLK8 in glial cells of animal models of depression  
 ○Yusuke Tanaka, Masahiro Ohgidani, Eriko Furube, Shigetaka Yoshida  
 Dept Functional Anatomy and Neuroscience, Asahikawa Med Univ
- P1-111** NOTCH2NLC GGC リピートのフレーム特異的翻訳と、神経核内封入体病患者組織におけるリピート翻訳産物の検出  
 Frame-specific translation of NOTCH2NLC GGC repeats and detection of proteins from repeat translation in tissues of Neuronal intranuclear inclusion disease patients  
 ○Tesshin Miyamoto, Kohji Mori, Shiho Gotoh, Ryota Uozumi, Koujin Miura, Yuki Aoki, Shizuko Kondo,  
 Shoshin Akamine, Manabu Ikeda  
 Department of Psychiatry, Graduate School of Medicine, The University of Osaka, Osaka

- P1-112** オリゴデンドロサイト系譜細胞の分化と生存における性差  
Sex Differences in Viability and Differentiation of Oligodendrocyte Lineage Cells  
○Hitomi Misawa<sup>1</sup>, Sakurako Abe<sup>2</sup>, Yuichi Hiraoka<sup>3</sup>, Nobuharu Suzuki<sup>1,2</sup>  
<sup>1</sup>Department of Clinical Bioanalysis and Molecular Biology, Graduate School of Medical and Dental Science, Institute of Science Tokyo,  
<sup>2</sup>Medical Technology Major, School of Health Care Sciences, Faculty of Medicine, Institute of Science Tokyo,  
<sup>3</sup>Center for Disease Biology and Integrative Medicine, Graduate School of Medicine, The University of Tokyo
- P1-113** 敗血症における細胞外小胞を介した情報伝達による循環維持機構  
Physiological role of immune brain communication by extracellular vesicles in septic circulation failure  
○Tomoka Ao<sup>1,2</sup>, Ryuki Kunimaru<sup>1</sup>, Hitoshi Hashimoto<sup>1,2,3,4,5</sup>, Masaru Ishii<sup>6</sup>  
<sup>1</sup>Laboratory of Molecular Neuropharmacology, Graduate School of Pharmaceutical Sciences, Osaka University,  
<sup>2</sup>United Graduate School of Child Development, Osaka University, <sup>3</sup>Institute for Dataability Science, Osaka University,  
<sup>4</sup>Institute for Open and Transdisciplinary Research Initiatives, Osaka University,  
<sup>5</sup>Department of Molecular Pharmaceutical Science, Graduate School of Medicine, Osaka University,  
<sup>6</sup>Department of Immunology and Cell Biology, Graduate School of Medicine, Osaka University
- P1-114** 慢性社会的敗北ストレスによる社会性行動低下における脳腎連関の役割の検討  
Exploring the Role of Brain-Kidney Interaction in Social Behavior Changes Induced by Chronic Social Defeat Stress  
○Yuka Ihara<sup>1</sup>, Nene Kawazoe<sup>1,2</sup>, Saki Shibukawa<sup>1,3</sup>, Nozomi Endo<sup>1</sup>, Shinya Kimura<sup>1</sup>, Shiho Kitaoka<sup>1</sup>  
<sup>1</sup>Dept Pharmacol, Hyogo Med Univ Sch Med, <sup>2</sup>Dept Biomed Chem, Kwansei Gakuin Univ Grad Sch Sci Tech,  
<sup>3</sup>Dept Biomed Chem, Kwansei Gakuin Univ Sch Sci Tech
- P1-115** マウス脳における一次繊毛の概日振動  
Circadian oscillation of primary cilia in murine brain  
○Ryota Nakazato, Ryotarou Kiso, Yuki Matsuda, Faryal Ijaz, Koji Ikegami  
Department of Anatomy and Developmental Biology, Graduate School of Biomedical and Health Sciences, Hiroshima University
- P1-116** バルプロ酸胎内投与マウスへの経口カルノシン投与による社会性改善効果の解析  
Oral Supplementation of L-carnosine Attenuates Social Behavior Impairment of Valproic Acid-Induced ASD model mice  
○Chiharu Tsuji<sup>1</sup>, Pinyue Fu<sup>1</sup>, Erchu Guo<sup>1</sup>, Taiken Sakano<sup>3</sup>, Takahiro Tsuji<sup>1,2</sup>  
<sup>1</sup>Research Center for Child Mental Development, Kanazawa University,  
<sup>2</sup>Department of Ophthalmology, Faculty of Medical Sciences, University of Fukui, <sup>3</sup>Tokaibussan
- P1-117** マウスの動揺病様行動に対する低周波音刺激法がマウスの行動に与える影響の検証  
Effects of Low-Frequency Sound Stimulation on Mouse Behavior in a Motion Sickness Model  
○Maho Maruo<sup>1</sup>, Zihan Xu<sup>1</sup>, Masahiro Mori<sup>2</sup>, Asaki Iwata<sup>2</sup>, Hiromu Monai<sup>1</sup>  
<sup>1</sup>Dept Life Sci, Grad Sch Hum Sci, Ochanomizu Univ, <sup>2</sup>DENSO CORPORATION
- P1-118** Magnesium lithospermate B as a potential neuroprotective agent against cognitive and metabolic impairments induced by chronic circadian rhythm disruption  
○Wei-Chi Huang<sup>1</sup>, Keng-Ying Liao<sup>1</sup>, Chun-Jung Chen<sup>2</sup>, Wen-Ying Chen<sup>1</sup>  
<sup>1</sup>Department of Veterinary Medicine, National Chung Hsing University, Taichung, Taiwan,  
<sup>2</sup>Department of Medical Research, Taichung Veterans General Hospital, Taichung, Taiwan
- P1-119** バルプロ酸胎内暴露マウス（ASD モデルマウス）におけるマカの社会性行動障害改善効果の検証  
Oral intake of Maca Improves Social Recognition Deficits in the Valproic Acid Animal Model of Autism Spectrum Disorder  
○Erchu Guo<sup>1</sup>, Pinyue Fu<sup>1</sup>, Jing Zhong<sup>2</sup>, Chiharu Tsuji<sup>1</sup>  
<sup>1</sup>Research Center for Child Mental Development, Kanazawa University,  
<sup>2</sup>Physiological Department, Guangxi University of Chinese Medicine, China
- P1-120** 妊娠・授乳期マウスのビスフェノール A ジグリシジルエーテル曝露による産仔の行動異常と海馬の未成熟ニューロンへの影響  
Effects of Bisphenol A diglycidyl ether (BADGE) exposure during gestation and lactation on behavior and hippocampal immature neurons of the offspring  
○Kaori Masai<sup>1</sup>, Kana Tomimoto<sup>1</sup>, Geng Yan<sup>1</sup>, Kazuma Zensho<sup>1,2</sup>, Kenji Goto<sup>3</sup>, Kotaro Hatakeyama<sup>3</sup>, Haruko Miyazaki<sup>4</sup>, Toshitaka Ohashi<sup>4</sup>, Ikuko Miyazaki<sup>1</sup>, Masato Asanuma<sup>1</sup>  
<sup>1</sup>Dept Med Neurobiol, Okayama Univ Grad Sch Med Dent Pharmacol Sci, <sup>2</sup>Dept Pediatrics, Okayama Univ Hosp,  
<sup>3</sup>Okayama Univ Med Sch, <sup>4</sup>Dept Mol Biol Biochem, Okayama Univ Grad Sch Med Dent Pharmacol Sci
- P1-121** AiCE-Tg マウスにおける EGFP 陽性細胞：エングラムの新たなマーカー候補  
EGFP-Labeled Neurons in AiCE-Tg: A Potential Marker of Engram Cells  
○Maki Yamada<sup>1,3</sup>, Aya Yokota-Nakatsuma<sup>2,3</sup>, Yuki Taoka<sup>1</sup>, Natsuki Horie<sup>1</sup>, Akane Nishimura<sup>1</sup>, Kiyora Fujihara<sup>1</sup>, Kazuya Kuboyama<sup>4</sup>, Taro Kitazawa<sup>5</sup>  
<sup>1</sup>Dep Neuropharm., <sup>2</sup>Dep Immunol, KagawaSchPharmSci, TokushimaBunri Univ., <sup>3</sup>Neuropharm, TokushimaBunri Inst Neurosci,  
<sup>4</sup>Dept Dev Regen Neurobiol, Inst Brain Sci, Nagoya City Univ Grad Sch Med Sci, <sup>5</sup>DANDRITE, Aarhus Univ, Denmark

- P1-122** 学習・記憶障害の治療戦略としての Rac1 シグナル研究  
Rac1 signal as a potential target for treating learning and memory deficits  
○Yukie Yamahashi, Huanhuan Wang, Marcel Riedl, Mutsuki Amano, Kozo Kaibuchi  
Division of Cell Biology, International Center for Brain Science, Fujita Health University
- P1-123** Crtac1B/LOTUS は老齢期における海馬シナプス形成および認知機能回復を誘起する  
Crtac1B/LOTUS induces hippocampal synapse formation and restores cognitive function in aging  
○Junpei Matsubayashi<sup>1,2</sup>, Ryohei Nishida<sup>2</sup>, Yuki Kawaguchi<sup>2</sup>, Yutaka Kawakami<sup>2</sup>, Kiwa Kobayashi<sup>2</sup>, Tetsuya Takano<sup>1,3</sup>, Kohtaro Takei<sup>2</sup>  
<sup>1</sup>Div Mol Sys Brain Func, Kyushu Univ Inst Adv Stu, Med Inst Bioreg, Fukuoka,  
<sup>2</sup>Neural Regen Med Lab, Dept Neurol Stroke Med, Yokohama City Univ Grad Sch Med, Yokohama,  
<sup>3</sup>PRESTO, Japan Science and Technology Agency, Saitama
- P1-124** The crucial role of the hippocampal intermediate CA3 pyramidal neuron on aversive memory extinction  
○Asami Tanimura<sup>1,2,3</sup>, Chihiro Nakamoto<sup>1,2</sup>, Kassandra Georges<sup>1,2</sup>, Wen-Hsien Hou<sup>1,2,3</sup>, Freja Wind Asmussen<sup>1</sup>, Hande Login<sup>1,2</sup>, Naoki Yamawaki<sup>1,2,3</sup>, Jelena Radulovic<sup>1,2,3,4,5</sup>  
<sup>1</sup>Dept Biomedicine, Aarhus Univ, Denmark, <sup>2</sup>PROMEMO, Aarhus Univ, Denmark, <sup>3</sup>DANDRITE, Aarhus Univ, Denmark,  
<sup>4</sup>Dept Neuroscience, Albert Einstein College of Medicine, USA,  
<sup>5</sup>Dept Psychiatry and Behavioral Science, Albert Einstein College of Medicine, USA
- P1-125** 脳と運動器を循環して subjective well-being を制御する血中分子の探索  
Investigation of blood molecules regulating subjective well-being via the brain-locomotor system interaction  
○Yuna Inada, Ayaka Higashiyama, Chihiro Tohda  
Sec Neuromedical Sci., Inst Natural Medicine, Univ of Toyama
- P1-126** AOP475 に基づく神経シナプス障害のドレブリン定量的評価法について  
Quantitative Drebrin Assay for Evaluating Synaptic Neurotoxicity Based on AOP475  
○Yuko Sekino<sup>1,2,3</sup>, Izuo Tsutsui<sup>2,3</sup>, Tomoaki Shirao<sup>1,3</sup>, Noriko Koganezawa<sup>3</sup>, Satoshi Yokota<sup>4</sup>, Shihori Tanebe<sup>4</sup>  
<sup>1</sup>Inst. Drug Disc. Innov, <sup>2</sup>Univ.Tokyo, Agri. and Life Sci, <sup>3</sup>AlzMed, Inc, <sup>4</sup>NIHS
- P1-127** サイトカイン指標を用いた機械学習ベースの病態予測モデル  
Machine Learning-Based Disease Prediction Model Using Cytokine Signatures  
○Katsuyuki Kunida<sup>1,2</sup>, Sihuan Jing<sup>3</sup>, Takanori Suzuki<sup>4,5</sup>, Yoji Nomura<sup>6</sup>, Yuichi Sakumura<sup>3</sup>, Tetsushi Yoshikawa<sup>4</sup>, Kazushi Yasuda<sup>6</sup>, Junichiro Yoshimoto<sup>2,7</sup>  
<sup>1</sup>Department of Computational Biology, Fujita Health University, Aichi,  
<sup>2</sup>Division of Computational Science, International Center for Brain Science, Fujita Health University, Aichi,  
<sup>3</sup>Graduate School of Science and Technology, Nara Institute of Science and Technology, Nara,  
<sup>4</sup>Department of Pediatrics, Fujita Health University, Aichi,  
<sup>5</sup>The Labbatt Family Heart Centre, The Hospital for Sick Children, Toronto, Ontario, Canada,  
<sup>6</sup>Department of Pediatric Cardiology, Aichi Children's Health and Medical Center, Aichi,  
<sup>7</sup>Department of Biomedical Data Science, Fujita Health University, Aichi
- P1-128** 多チャンネル全脳イメージングデータにおけるデータ駆動的仮説探索法の開発  
A method for exploring association rules in multi-channel whole brain imaging data in mice  
○Yusuke Suzuki<sup>1,2,3</sup>, Ryosuke Nishino<sup>1</sup>, Yuichiro Gyoten<sup>1</sup>, Natsumi Hlga<sup>4</sup>, Hiroyuki Okuno<sup>3,4</sup>, Itaru Imayoshi<sup>1,2,3</sup>  
<sup>1</sup>Grad Sch Biostudies, Kyoto Univ, <sup>2</sup>Grad Sch Biostudies CeliSIS, Kyoto Univ, <sup>3</sup>LiMe, Kyoto Univ,  
<sup>4</sup>Grad Sch Medical and Dental Sciences, Kagoshima Univ
- P1-129** Zebrafish Brain Imaging as a Tool to Visualise and Evaluate Charged Nanoparticle Delivery to the Central Nervous System  
○Hanisah Azhari<sup>1</sup>, Shakila Rizwan<sup>2</sup>, Sarah Hook<sup>2</sup>, Ben J. Boyd<sup>3</sup>  
<sup>1</sup>Centre for Drug Delivery Technology and Vaccine (CENTRIC), Faculty of Pharmacy, Universiti Kebangsaan Malaysia, Malaysia,  
<sup>2</sup>School of Pharmacy, University of Otago, New Zealand,  
<sup>3</sup>Department of Pharmacy, Faculty of Health and Medical Sciences, University of Copenhagen, Denmark
- P1-130** Possible Effect of Porous Silicon Nanoparticles Prepared by Borax for Glioblastoma with Large Scale preparation  
○Monisha Nandi Bristi<sup>1</sup>, Dokyoung Kim<sup>1,2,3</sup>, Junyang Jung<sup>1,2,3</sup>  
<sup>1</sup>Department of Biomedical Science, Graduate School of Medicine, Kyung Hee University, Seoul 02447, Republic of Korea,  
<sup>2</sup>Department of Anatomy and Neurobiology, College of Medicine, Kyung Hee University, Seoul 02447, Republic of Korea,  
<sup>3</sup>Department of Precision Medicine, College of Medicine, Kyung Hee University, Seoul 02447, Republic of Korea.
- P1-131** 肺機能測定による脳内の髄鞘状態の予測  
Prediction of brain myelin status from pulmonary function measurements  
○Kou Nishikubo<sup>1</sup>, Kaho Hitomi<sup>2</sup>, Kyoka Higuchi<sup>1</sup>, Reiichi Sugihara<sup>2</sup>, Yuki Kato<sup>2</sup>, Rieko Muramatsu<sup>1</sup>  
<sup>1</sup>Department of Molecular Pharmacology, National Institute of Neuroscience, National Center of Neurology and Psychiatry,  
<sup>2</sup>Department of RNA Biology and Neuroscience, Graduate School of Medicine, Osaka University

**LBA-1-1** **$\alpha$  2,3- シアル酸転移酵素 ST3GalIV が制御する GABA 作動性神経回路形成機構****Involvement of  $\alpha$  2,3-Sialyltransferase ST3GalIV in Regulating GABAergic Neural Circuit Formation**○Ayuha Morii, Tomoki Yashima, Akiko Fujita, Keiko Kato  
Division of Life Sciences, Kyoto Sangyo University**LBA-1-2****前部帯状回皮質のペリニューラルネットは社会隔離による社会性変化の臨界期に関与する****Perineuronal nets in the anterior cingulate cortex contribute to the critical period of sensitivity to isolation-induced social changes**○Riku Adachi<sup>1</sup>, Hiroshi Kuniishi<sup>2,3</sup>, Hideo Matsuzaki<sup>2,3</sup>  
<sup>1</sup>Sch Med, Univ of Fukui, <sup>2</sup>Research Center for Child Mental Development, Univ of Fukui,  
<sup>3</sup>United Grad Sch Child Development, Osaka Univ**LBA-1-3****神経輸送顆粒の形成は脆弱 X 精神遅滞タンパク質の液 - 液相分離変異によって障害される****Formation of neuronal transport granule is impaired by LLPS mutations of Fragile X Mental Retardation Protein**○Kanae Yoshizawa, Momo Kubo, Maho Ishiyama, Yukio Sasaki  
Yokohama City Univ Grad Sch Med Life Sci

**2025年9月11日(木)**

**12階 会議室 1205～1210**

若手研究者育成セミナー グループセミナー

18:40～20:50

若手研究者育成セミナー 全体討論会（名古屋市立大学ミッドタウン名駅サテライトにて）

21:10～24:00

2025年9月12日(金)

第1会場(2階 大ホール)

## レジェンドレクチャー 1

8:30 ~ 9:10

## LL-1

Chair : Mitsuharu Hattori (Nagoya City University)

(Japanese)

## LL-1

小胞体 IP<sub>3</sub> 受容体の新たな働き:細胞代謝の制御 (ウイルス感染、癌のワールブルグ効果、小胞体ストレス応答)  
—抗体細胞内導入による新規戦略—

ER-IP<sub>3</sub> receptor: a novel role in cell metabolism of Warburg effect in cancer, virus infection and ER-Stress Response

○Katsuhiko Mikoshiba  
ShanghaiTech University, China

## ISN-JSN 合同シンポジウム 3

9:20 ~ 11:20

## SS-3

## 精神展開剤の治療メカニズム

Therapeutic Mechanisms of Classical and Non-Classical Psychedelics for Stress-Related Disorders

Organizer : Kenji Tanaka (Keio University School of Medicine)

Co-sponsored by International Society for Neurochemistry (ISN) (English)

## SS-3-1

MDMA assisted therapy for PTSD and co-morbid AUD: Insights from preclinical models

Kade L Huckstep, Billi Newton, Grace Bailey, Annai Charlton, Erin Campbell, Andrew Lawrence, ○Leigh C Walker  
University of Melbourne, Australia

## SS-3-2

異なる抗うつ薬は共通して淡蒼球の構造と機能に作用する

Distinct classes of antidepressants commonly act to shape pallidal structure and function

○Yoshifumi Abe  
Keio University School of Medicine

## SS-3-3

○Christine Ann Denny  
Columbia University, USA

## SS-3-4

TRKB neurotrophin receptor as a target for antidepressant and psychedelic compounds

○Eero Castrén  
Neuroscience Center, University of Helsinki, Helsinki, Finland

## 特別講演 3

11:30 ~ 12:15

## SL-3

Chair : Seiji Hitoshi (Department of Integrative Physiology, Shiga University of Medical Science)

(English)

## SL-3

哺乳類大脳皮質発生メカニズムの理解と神経発達症への洞察

Decoding Brain Development: Insights into Microcephaly and Neurodevelopmental Disorders

○Noriko Osumi  
Dept Dev Neurosci, Tohoku Univ Grad Sch Med

## ランチョンセミナー 4

12:30 ~ 13:20

## LS-4

Chair : Yuichiro Imai (Evident Corporation)

共催: 株式会社エビデント (Japanese)

## LS-4

コンピュータショナル4D イメージングによる脳の情報処理機構の解明

Understanding of brain information processing mechanism by computational 4D imaging

○Takuma Sugi  
Program of Biomedical Science, Graduate School of Integrated Sciences for Life, Hiroshima University

## 大会長企画シンポジウム 4

13:35 ~ 15:35

**SS-4** 生後ニューロン新生の観察と操作 — ライブイメージングと光操作が示す脳の可塑性

## Postnatal Neurogenesis – Live Imaging and Optical Manipulation of Brain Plasticity

Organizer : Kazunobu Sawamoto (Department of Developmental and Regenerative Neurobiology, Institute of Brain Science, Nagoya City University Graduate School of Medical Sciences)

Co-sponsored by the JSPS Core-to-Core Program “Neurogenesis Research &amp; Innovation Center (NeuRIC)” (English)

**SS-4-1** Long non-coding RNA Casc15 regulates the rostral migratory stream○Francis Szele  
Oxford Univ, UK**SS-4-2** 成体脳の新生ニューロン移動における血流の役割

## Blood flow regulates neuronal migration in the adult brain

○Takashi Ogino<sup>1</sup>, Akari Saito<sup>1</sup>, Masato Sawada<sup>1,2</sup>, Shoko Takemura<sup>1</sup>, Yuzuki Hara<sup>1</sup>, Kanami Yoshimura<sup>1</sup>, Jiro Nagase<sup>1</sup>, Honomi Kawase<sup>1</sup>, Hiroyuki Inada<sup>3</sup>, Vicente Herranz-Perez<sup>4,5</sup>, Yoh-suke Mukouyama<sup>6</sup>, Masatsugu Ema<sup>7</sup>, Jose Manuel Garcia-Verdugo<sup>4</sup>, Junichi Nabekura<sup>3</sup>, Kazunobu Sawamoto<sup>1,2</sup><sup>1</sup>Dept Dev Regen Neurobiol, Inst Brain Sci, Nagoya City Univ Grad Sch Med Sci, <sup>2</sup>Div Neur Dev Regen, Natio Inst Phys Sci,<sup>3</sup>Div Homeo Dev, Dept Dev Phys, Natio Inst Physiol Sci, <sup>4</sup>Lab Comp Neurobiol, Univ Valencia Spain.,<sup>5</sup>Dept Cell Biol, Funct Biol Physic Anthropol, Univ Valencia, Spain.,<sup>6</sup>Lab Stem Cell Neuro-Vascul Biol, Cell Dev Bio Cent, Natio Heart, Lung, Blood Instit, NIH, USA.,<sup>7</sup>Dept Stem Cell Hum Dis Mod, Res Cent Ani Lif Sci, Shiga Univ Med Sci.**SS-4-3** Mechanostress induces DNA damage in migrating neurons during brain development○Zhejing Zhang<sup>1,2</sup>, Peilin Zou<sup>1,2</sup>, Yusuke Kishi<sup>3</sup>, Takahiro Furuta<sup>4</sup>, Noriko Takeda<sup>1,2</sup>, Takumi Kawaue<sup>1</sup>, Naotaka Nakazawa<sup>1</sup>, Hiroyuki Sasanuma<sup>5</sup>, Andres Canela<sup>6</sup>, Mineko Kengaku<sup>1,2</sup><sup>1</sup>Institute for Integrated Cell-Material Sciences (iCeMS), Kyoto Univ, <sup>2</sup>Grad Sch of Biostudies, Kyoto Univ,<sup>3</sup>Institute for Quantitative Biosciences, Tokyo Univ, <sup>4</sup>Grad Sch of Dentistry, Osaka Univ,<sup>5</sup>Tokyo Metropolitan Institute of Medical Science, <sup>6</sup>The Hakubi Center for Advanced Research, Kyoto Univ**SS-4-4** 光遺伝学的手法を用いた神経幹細胞の新規転写制御メカニズムの同定

## Uncovering Novel Transcriptional Regulatory Mechanisms of Neural Stem Cells Using Optogenetic Approaches

○Mayumi Yamada<sup>1</sup>, Itaru Imayoshi<sup>2</sup><sup>1</sup>Cell Biol, Inst Life Med Sci, Kyoto Univ, <sup>2</sup>Brain Dev Reg, Grad Sch Biostudies, Kyoto Univ**SS-4-5** Live imaging of adult neural stem cells to decipher their quiescence and activation dynamics○Armen Saghatelian  
University of Ottawa, Canada

## Plenary lecture

15:45 ~ 16:45

**PL**

Chair : Kazunobu Sawamoto (Department of Developmental and Regenerative Neurobiology, Institute of Brain Science, Nagoya City University Graduate School of Medical Sciences)

Co-sponsored by the JSPS Core-to-Core Program “Neurogenesis Research &amp; Innovation Center (NeuRIC)” (English)

**PL-1** Relay Neuronal Stem Cells and Adult Neurogenesis○Arturo Alvarez-Buylla  
Department of Neurological Surgery and The Eli and Edythe Broad Center of Regeneration Medicine and Stem Cell Research  
University of California, San Francisco, School of Medicine, USA

2025年9月12日(金)

第2会場(5階 小ホール1)

## シンポジウム5

9:20 ~ 11:20

**OS-5** 先端技術が解き明かす発達期の脳内マクロファージの多様な特性と機能  
Cutting-Edge Technologies Unveiling Diverse Characteristics of Brain Macrophages During Development

Organizer : Yuki Hattori (Graduate School of Medicine, Nagoya University)、  
Takahiro Masuda (Medical Institute of Bioregulation, Kyushu University)

(English)

**OS-5-1** 発生期におけるミクログリア多様性を形づくる細胞動態と制御メカニズム  
Cellular Dynamics and Mechanisms Shaping Microglial Diversity During Development

○Yuki Hattori  
Dept Anat Cell Biol, Grad Sch Med, Nagoya Univ

**OS-5-2** ミクログリア微小核伝播の生理的意義の解明  
Physiological role of micronuclear propagation to microglia

○Fuminori Tsuruta  
Inst Life and Env Sci, Univ of Tsukuba

**OS-5-3** 発達期から加齢期にかけたグリア細胞リポドームカタログの創出  
Establishment of glial lipidome atlas during the postnatal stage to aged

○Shota Yamamoto, Takahiro Masuda  
Division of Molecular Neuroimmunology, Medical Institute of Bioregulation, Kyushu University

**OS-5-4** 発達期のマクログリアによる赤血球貪食  
A novel erythrophagocytosing role of microglia during brain development

○Ryuta Koyama  
Dept Transl Neurobiol, Natl Inst Neurosci, NCNP

## ランチョンセミナー5

12:30 ~ 13:20

**LS-5** 神経系疾患と遺伝子治療  
Gene Therapy for Neurological Disorders

Chair : Kazunobu Sawamoto (Institute of Brain Science, Graduate School of Medical Sciences, Nagoya City University)

共催：ベクタービルダー・ジャパン株式会社 (Japanese)

**LS-5-1** 脳室下帯細胞へのウイルス感染の試みとその課題  
Attempts at viral transduction to subventricular zone cells and the challenges encountered

○Kenichiro Hayashi  
Institute of Brain Science, Graduate School of Medical Sciences, Nagoya City University;  
Reproductive, Developmental and Aging Sciences, Graduate School of Medicine, The University of Tokyo

**LS-5-2** 神経性疾患と遺伝子治療：VectorBuilder の成果と今後の取り組み  
Gene Therapy for Neurological Disorders: VectorBuilder's Achievements and Leadership

○Miho Matakatsu  
VectorBuilder Inc., VectorBuilder Japan Inc.

## シンポジウム7

13:35 ~ 15:35

**OS-7** グリアの多様性が拓く中枢神経疾患治療の未来：亜集団特異的アプローチの追究  
Glial Cell Diversity in CNS Disorders: Exploring Subpopulation-Specific Mechanisms and Treatments

Organizer : Eiji Shigetomi (Yamanashi GLIA Center, Interdisciplinary Graduate School of Medicine, University of Yamanashi)

(English)

**OS-7-1** アストロサイト多様性の分子メカニズムとアルツハイマー病治療への新たな手がかり  
Decoding astrocyte diversity: Molecular basis and therapeutic insights for Alzheimer's disease

○Fumito Endo<sup>1,2</sup>, Joselyn Soto<sup>2</sup>, Viviana Gradinaru<sup>5</sup>, James Wohlschlegel<sup>4</sup>, Riki Kawaguchi<sup>6</sup>, Baljit Khakh<sup>2,3</sup>

<sup>1</sup>Department of Neuroscience and Pathobiology, Research Institute of Environmental Medicine, Nagoya University,

<sup>2</sup>Department of Physiology, School of Medicine, University of California, Los Angeles, USA,

<sup>3</sup>Department of Neurobiology, School of Medicine, University of California, Los Angeles, USA,

<sup>4</sup>Department of Biological Chemistry, School of Medicine, University of California, Los Angeles, USA,

<sup>5</sup>Division of Biology and Biological Engineering, California Institute of Technology, USA,

<sup>6</sup>Center for Neurobehavioral Genetics, School of Medicine, University of California, Los Angeles, USA

- OS-7-2** ケミカルバイオロジーで開く神経免疫学の扉：治療標的としての神経炎症グリア  
Decoding the glial interactions with Chemical biology  
~ Glia targeting therapy for neuroinflammation-related diseases  
○Akiko Nakano-Kobayashi  
Graduate School of Medicine, Kyoto University
- OS-7-3** 感覚情報伝達における脊髄 Hes5<sup>+</sup> アストロサイトの機能解明  
Functional characterization of Hes5<sup>+</sup> spinal astrocytes in sensory information processing  
○Yuta Kohro, Makoto Tsuda  
Dept. Mol. Syst. Pharmacol., Grad. Sch. Pharm. Sci., Kyushu Univ.
- OS-7-4** 中枢神経疾患における反応性アストロサイトの Gq-GPCR シグナル増強  
Disease-relevant upregulation of Gq-GPCR in reactive astrocytes in neurological disorders  
○Eiji Shigetomi<sup>1,2</sup>, Schuichi Koizumi<sup>1,2</sup>  
<sup>1</sup>Yamanashi GLIA center, Interdiscipl Grad Sch Med, Univ Yamanashi,  
<sup>2</sup>Dept Neuropharmacol, Interdiscipl Grad Sch Med, Univ Yamanashi

懇親会

19:00 ~ 20:50  
(Japanese)

2025年9月12日(金)

第3会場(5階 小ホール2)

## 神経化学入門コース 1

8:30 ~ 9:10

## EL-1

Chair : Hiroshi Kiyama (Shijonawate Gakuen University)

(Japanese)

## EL-1

中枢神経回路の修復を促進するメカニズムと治療薬の開発

Development of therapeutic strategies to repair neuronal network for the central nervous system diseases

○Toshihide Yamashita

Dept Mol Neurosci, Grad Sch Med, Univ Osaka

## シンポジウム 6

9:20 ~ 11:20

## OS-6

神経機能における細胞構造形態ダイナミクスの新展開

Dynamics of Cell Structural Morphology in Neural Function

Organizer : Yusuke Kishi (Institute for Quantitative Biosciences, The University of Tokyo)、  
Masato Sawada (Dept Dev Regen Neurobiol, IBS, Nagoya City Univ Grad Sch Med Sci)

(Japanese)

## OS-6-1

側脳室上衣細胞の繊毛の形態変化

Morphological changes of ependymal cilia in the lateral ventricles

○Maki Takagishi

Dept Biomed Sci, Nagoya City Univ Grad Sch Pharm Sci

## OS-6-2

生後脳のニューロン移動における構造ダイナミクスの制御と意義

Regulation and significance of structural dynamics in postnatal neuronal migration

○Masato Sawada<sup>1,2</sup>, Kazunobu Sawamoto<sup>1,2</sup><sup>1</sup>Dept Dev Regen Neurobiol, IBS, Nagoya City Univ Grad Sch Med Sci, <sup>2</sup>Div Neural Dev Regen, NIPS

## OS-6-3

ニューロンにおける核の形態的・物理的ダイナミクス

Morphological and physical dynamics of the nucleus in neurons

○Yusuke Kishi<sup>1</sup>, Yu Nagata<sup>1,2</sup>, Viveca Hoglund<sup>1</sup>, Rinka Obata<sup>1,2</sup>, Haruto Kinoshita<sup>1</sup><sup>1</sup>IQB, Univ of Tokyo, <sup>2</sup>Grad Sch of Pharma, Univ of Tokyo

## OS-6-4

老化神経細胞の核構造異常と微小核形成の影響

Effects of Nuclear Structural Abnormalities and Micronuclei Formation in Aging Neurons

○Chihiro Maeda<sup>1</sup>, Fuminori Tsuruta<sup>2</sup><sup>1</sup>Grad. Sch. of Life and Env. Sci., Univ. of Tsukuba, <sup>2</sup>Fac of Life and Env. Sci., Univ. of Tsukuba

## OS-6-5

核小体内外における DNA 二重らせん構造変化の力学的理解

Biomechanical understanding of DNA conformational changes inside and outside the nucleolus

○Koichiro Maki

Institute for Life and Medical Sciences, Kyoto University

## ランチョンセミナー 6

12:30 ~ 13:20

## LS-6

Chair : Kenjiro Ono (Department of Neurology, Kanazawa University Institute of Medical, Pharmaceutical and Health Sciences)

共催：小野薬品工業株式会社 (Japanese)

## LS-6

進行期 PD におけるレボドパ治療の課題

Pharmacological Management of advanced Parkinson's Disease

○Masashi Hamada

Department of Neurology, Graduate School of Medicine, The University of Tokyo

## シンポジウム 8

13:35 ~ 15:35

**OS-8** 分子メカニズムから解き明かす精神疾患病態研究の最前線

## Frontiers of research on the pathogenesis of mental disorders revealed by molecular mechanisms

Organizer : Taku Nagai (Division of Behavioral Neuropharmacology, International Center for Brain Science (ICBS), Fujita Health University)、  
Sayaka Takemoto-Kimura (Research Institute of Environmental Medicine, Nagoya University)

(Japanese)

**OS-8-1** リン酸化シグナルを基盤とした薬物依存症治療の探索

Explore the treatment of drug addiction based on phosphorylation signaling

○Taku Nagai

Div Behav Neuropharmacol, ICBS, Fujita Health Univ

**OS-8-2** 心理社会的ストレスによる行動変容の多様性を創発する分子神経回路メカニズム

Molecular and neural mechanisms underlying individual differences in psychosocial stress-induced behavioral changes

○Shusaku Uchida

Department of Integrative Stress Science Medical Research Laboratory, Institute of Integrated Research Institute of Science Tokyo

**OS-8-3** レット症候群の解明に向けて：皮質ネットワーク異常と分子基盤

Understanding the pathology of Rett syndrome from molecular mechanisms to network connectivity

○Aya Ito-Ishida

RIKEN Center for Brain Science

**OS-8-4** 神経カルシウムシグナリングの多彩な機能と神経発達症

Diverse functions of neuronal calcium signaling and its implications for neurodevelopmental disorders

○Sayaka Takemoto-Kimura

RIEM, Nagoya Univ.

**OS-8-5** ブレインバンク死後脳組織の解析による統合失調症の病態理解

Analyses of postmortem brain tissues provided by the Brain Bank to understand the pathophysiology of schizophrenia

○Ken-ichiro Kubo<sup>1,2</sup>, Satoshi Yoshinaga<sup>1,2</sup>, Julio Leon<sup>1,3,4</sup>, Mizuki Hino<sup>5,6</sup>, Yoshinari Ando<sup>3</sup>, Jonathan Moody<sup>3</sup>,  
Atsuko Nagaoka<sup>5,7</sup>, Ayako Kitazawa<sup>1,2</sup>, Kanehiro Hayashi<sup>2</sup>, Kazunori Nakajima<sup>2</sup>, Chung Chau Hon<sup>3</sup>, Jun Kohyama<sup>8</sup>,  
Yasuto Kunii<sup>5,6</sup>, Jay W. Shin<sup>3,9</sup><sup>1</sup>Dept. of Anat., The Jikei Univ. Sch. Med., Tokyo, <sup>2</sup>Dept. of Anat., Keio Univ. Sch. Med., Tokyo, <sup>3</sup>IMS RIKEN, Yokohama,<sup>4</sup>Inst. for Neurodegenerative Diseases, UCSF, San Francisco, USA, <sup>5</sup>Dept. of Neuropsychiatry, Fukushima Med. Univ., Fukushima,<sup>6</sup>Dept. of Disaster Psychiatry, IRIDeS, Tohoku Univ., Sendai, <sup>7</sup>Dept. of Psychiatry, Tohoku Univ. Hosp., Sendai,<sup>8</sup>Faculty of Human Sci., Waseda Univ. Tokorozawa, <sup>9</sup>Lab. of Regulatory Genomics, Genome Inst. of Singapore, Singapore

## 懇親会

19:00 ~ 20:50

(Japanese)

2025年9月12日(金)

第4会場(9階 会議室901)

## ミニシンポジウム 3

9:15 ~ 11:21

**MS-3** 分子・細胞メカニズムから探る神経損傷応答と機能回復戦略**Neural Injury Responses and Functional Recovery Strategies Explored from Molecular and Cellular Mechanisms**Chair : Kozo Kaibuchi (Fujita Health University International Center for Brain Science)、  
Maki K. Yamada (Tokushima Bunri University)

(Japanese・English)

**MS-3-1**

損傷後の神経組織で瘢痕組織をつくる線維芽細胞の発生源について

**Developmental origins of scar-forming fibroblasts in the damaged neural tissue**○Nozomu Yoshioka<sup>1,2,3</sup>, Kenta Kobayashi<sup>4</sup>, Yuki Yoshimoto<sup>5</sup>, Sachiko Iseki<sup>5</sup>, Yuka Nakamura<sup>6</sup>, Masaki Ueno<sup>6</sup>,  
Shinsuke Shibata<sup>7</sup>, Taku Toriumi<sup>1</sup>, Hayato Ohshima<sup>2</sup>, Hirohide Takebayashi<sup>3,8</sup>, Hitoshi Kawano<sup>9</sup><sup>1</sup>The Nippon Dent Univ, Depart of Anat, Sch Life Dent Niigata,<sup>2</sup>Div Anat Cell Biol Hard Tiss, Dep Tiss Regen Reconst, Grad Sch of Med Dent Sci, Niigata Univ,<sup>3</sup>Div Neurobiol Anat, Grad Sch Med Dent Sci, Niigata Univ, <sup>4</sup>Sect Viral Vector Dev, Nat Inst Physiol Sci,<sup>5</sup>Dep Mol Craniofaci Embryol Oral Histol, Grad Sch Med Dent Sci, Inst Sci Tokyo,<sup>6</sup>Dep Sys Pathol Neurol Dis, Brain Res Inst, Niigata Univ, <sup>7</sup>Div Microscop Anat, Grad Sch Med Dent Sci, Niigata Univ,<sup>8</sup>Cent Anat Stud, Grad Sch Med, Kyoto Univ, <sup>9</sup>Tokyo Met Inst of Med Sci**MS-3-2**

視神経傷害における網膜神経節細胞のサイズ依存性の傷害応答

**Size-dependent injury responses of retinal ganglion cells following optic nerve injury**○Mika Takarada-Iemata<sup>1</sup>, Serika Hosoi<sup>1</sup>, Nahoko Okitani<sup>1</sup>, Sumiko Kiryu-Seo<sup>2</sup>, Osamu Hori<sup>1</sup><sup>1</sup>Dept Neuroanat, Kanazawa Univ Grad Sch Med Sci, <sup>2</sup>Dept Funct Anat & Neurosci, Nagoya Univ Grad Sch Med**MS-3-3**

インスリン/インスリン様成長因子 1 は GSK3 を介して神経細胞における MARK4 の活性とそのタウのリン酸化を制御している

**Insulin/Insulin-like growth factor 1 regulates microtubule affinity-regulating kinase 4 and its phosphorylation of tau via glycogen synthase kinase 3 in neurons**

○Taro Saito, Sophia Limlingan, Kanae Ando

Dept Biol Sci, Tokyo Met Univ

**MS-3-4**転写活性化因子 MRTFB の Ca<sup>2+</sup> シグナリングおよび Rho 経路依存的なシナプスから核への局在変化を介した遺伝子発現誘導機構に関する解析**Ca<sup>2+</sup> signaling and Rho pathway-dependent gene expression mediated by nuclear translocation of SRF coactivator MRTFB from postsynapses**○Daisuke Ihara<sup>1</sup>, Haruka Ohkawara<sup>1</sup>, Shunsuke Yoneda<sup>1</sup>, Hiroki Tanabe<sup>1</sup>, Shiori Imanishi<sup>1</sup>, Sho Hatanaka<sup>1</sup>,  
Shigeru Sasaki<sup>1</sup>, Aya Kosaka<sup>1</sup>, Yukari Sano<sup>1</sup>, Hiroyuki Sakagami<sup>2</sup>, Akiko Tabuchi<sup>1</sup><sup>1</sup>Lab Mol Neurobiol, Grad Sch of Med and Pharm Sci, Univ of Toyama, <sup>2</sup>Dept Anatomy, Kitasato Univ, Sch of Med**MS-3-5**

DNA を介した多波長 1 分子イメージングによる細胞膜分子の拡散動態解析

**DNA-based Single-Molecule Particle Tracking for the Multicolor Analysis of Membrane Molecule Diffusion Dynamics**○Shigeo Sakuragi<sup>1</sup>, Taro Katagiri<sup>1</sup>, Tomoya Uchida<sup>1</sup>, Miyu Enomoto<sup>1</sup>, Naoki Kato<sup>1</sup>, Rie Kato<sup>1</sup>, Hideaki Yoshimura<sup>2</sup>,  
Hiroko Bannai<sup>1</sup><sup>1</sup>Dept Elec Eng Biosci, Grad Sch Adv Sci Eng, Waseda Univ, <sup>2</sup>Dept Chem, Sch Sci, Univ of Tokyo**MS-3-6**

脳梗塞後の感覚運動野におけるトップダウン回路の再構築と修復性の遺伝子発現

**Top-down circuit remodeling and reparative gene expression in the sensorimotor cortex after ischemic stroke**

○Seiichiro Sakai, Takashi Shichita

Neuroinfl Repair, Med Res Lab, Science Tokyo

**MS-3-7**

人工シナプスコネクタ CPTX は緑内障モデルマウスにおける視機能低下を抑制する

**The Artificial Synaptic Connector CPTX Prevents Visual Dysfunction in a Mouse Model of Experimental Glaucoma**○Youichi Shinozaki<sup>1</sup>, Keiko Matsuda<sup>2</sup>, Kazuhiko Namekata<sup>1</sup>, Xiaoli Guo<sup>1</sup>, Michisuke Yuzaki<sup>2</sup>, Takayuki Harada<sup>1</sup><sup>1</sup>Vis Res PJ, Dept Clin Med Sci, TMI/MS, <sup>2</sup>Bio2Q, Keio Univ

## テクニカルワークショップ 2

13:35 ~ 15:35

## TW-2 生物の網羅解析手法

Chair : Hiroaki Wake (Nagoya University Graduate School of Medicine)、  
Hiroko Bannai (Waseda Faculty of Science and Engineering)

(Japanese)

## TW-2-1

セルオミクス・3次元空間オミクスの開発と医学生物学応用

Cell-omics: diving into three-dimensional multicellular cloud

○Etsuo A. Susaki<sup>1,2,3</sup><sup>1</sup>DBSB, Juntendo Univ Grad Sch Med., <sup>2</sup>Nakatani-BSH, Juntendo Univ Grad Sch Med., <sup>3</sup>QST Inst Quant Life Sci.

## TW-2-2

100万細胞を一望する：トランススケールスコープ AMATERAS が切り拓く希少事象解析の新地平

A Million Cells at a Glance: Super-wide-field of view microscope, AMATERAS Opens a New Frontier in Rare Event Analysis

○Takeharu Nagai

SANKEN, Univ Osaka

## TW-2-3

全脳全ニューロンアトラス解析による新規神経変性ニッチ "ミクログリアセキュリティホール" の同定

Whole-Brain Single-Neuron Atlas Analysis Reveals Microglial Security Hole Accelerating Neuronal Vulnerability

○Mitani Tomoki<sup>1,2,3</sup>, Kosei Yamaura<sup>3</sup>, Rikuhiro Yamada<sup>3,4</sup>, Etsuo Susaki<sup>5</sup>, Naruhiko Sahara<sup>1,6</sup>, Rin Yanai<sup>6</sup>, Kensuke Ikenaka<sup>2</sup>, Shiyong Jiang<sup>2</sup>, Hideki Hayakawa<sup>2</sup>, Hideki Mochizuki<sup>2</sup>, Kousuke Baba<sup>2</sup>, Hiroki Ueda<sup>3,4</sup><sup>1</sup>Ctr Integr Human Brain Sci, Brain Res Inst, Niigata Univ, <sup>2</sup>Dept Neurol, Grad Sch Med, Osaka Univ,<sup>3</sup>Dept Syst Pharmacol, Grad Sch Med, Tokyo Univ, <sup>4</sup>Dept Organismal Syst Biol, Inst Life Sci, Kurume Univ,<sup>5</sup>Dept Biochem Syst Biomed, Grad Sch Med, Juntendo Univ,<sup>6</sup>Adv Neuroimaging Ctr, Inst Quantum Med Sci, Natl Insts Quantum Sci Technol

## TW-2-4

神経活動・細胞内シグナル可視化のための蛍光プローブ開発と生体への応用

Design and application of fluorescent probes for monitoring neural activity and intracellular signaling *in vivo*

○Masayuki Sakamoto

Department of Brain Development and Regeneration, Graduate School of Biostudies, Kyoto University

## TW-2-5

全光学的解析、多重計測、定量的 Ca<sup>2+</sup> 計測に向けた多用途 Ca<sup>2+</sup> インディケーター・XCaMP-C の合理的設計Rational engineering of XCaMP-C, a versatile genetically-encoded Ca<sup>2+</sup> indicator for all-optical interrogation, multiplex imaging, and quantitative Ca<sup>2+</sup> imaging○Hajime Fujii<sup>1</sup>, Keisuke Ota<sup>1</sup>, Yayoi Kondo<sup>1</sup>, George Cai<sup>1,2</sup>, Richard Song<sup>1,3</sup>, Haobo Song<sup>1</sup>, Michiko Okamura<sup>1</sup>, Hayato Kondo<sup>1</sup>, Masatoshi Inoue<sup>1,4</sup>, Haruhiko Bito<sup>1</sup><sup>1</sup>Dept Neurochem, Grad Sch of Med, The Univ of Tokyo, <sup>2</sup>Neuroscience Program, Harvard Univ, USA,<sup>3</sup>Dept of Neuroscience, Vanderbilt Univ, USA, <sup>4</sup>Biophotonics Res Cntr, Mallinckrodt Inst of Radiology, Univ Wash St. Louis

## ミニシンポジウム 6

17:00 ~ 18:48

## MS-6

発生から再生へ：神経系細胞の分化とその制御基盤

From Development to Regeneration: Mechanisms Underlying Differentiation of Neural Cells

Chair : Makoto Sato (Graduate School of Child Development (UGSCD) / Graduate School of Medicine, The University of Osaka)、  
Koh-ichi Nagata (Institute for Developmental Research, Aichi Developmental Disability Center)

(Japanese・English)

## MS-6-1

細胞内粘性による神経幹細胞の静止状態の確立

Intracellular viscosity as a regulator of quiescence in neural stem cells

○Ayana Nakada<sup>1</sup>, Takaaki Kuniya<sup>1</sup>, Sora Hirokane<sup>2</sup>, Yasushi Okada<sup>2,3,4,5,6</sup>, Lingyan Fang<sup>6</sup>, Yukiko Gotoh<sup>1,6</sup><sup>1</sup>Graduate School of Pharmaceutical Sciences, The University of Tokyo,<sup>2</sup>Department of Physics, Graduate School of Science, The University of Tokyo,<sup>3</sup>Department of Cell Biology, Graduate School of Medicine, The University of Tokyo,<sup>4</sup>Laboratory for Cell Polarity Regulation, Center for Biosystems Dynamics Research (BDR), RIKEN, Osaka,<sup>5</sup>Universal Biology Institute (UBI), The University of Tokyo,<sup>6</sup>International Research Center for Neurointelligence (WPI-IRCN), The University of Tokyo

## MS-6-2

大脳皮質アストロサイトの分布を制御するメカニズム

Mechanisms of controlling astrocyte distribution in cerebral cortex

○Shun Takano<sup>1</sup>, Michio Miyajima<sup>1,2</sup>, Keiko Morimoto<sup>1</sup>, Noriko Hiroi<sup>1,3</sup>, Hitomi Sano<sup>1</sup>, Hidenori Tabata<sup>1,4</sup>, Kazunori Nakajima<sup>1</sup><sup>1</sup>Dept. Anat. Keio Univ. Sch. Med. Tokyo, <sup>2</sup>PRESTO, JST, <sup>3</sup>Fac. Engineering, Kanagawa Inst. Tech., Kanagawa,<sup>4</sup>Dept. Molecular Neurobiology, Institute for Developmental Research, Aichi Developmental Disability Center, Aichi

## MS-6-3

## 脳室下帯の神経幹細胞・上皮下細胞の形態形成における ERM 蛋白質 Ezrin の役割

## Role of the ERM Protein Ezrin in Morphogenesis of Neural Stem Cells and Ependymal Cells in the Postnatal Ventricular-Subventricular Zone

○Murasaki Nishijima<sup>1</sup>, Norihiko Nakashima<sup>2</sup>, Tomotaka Ishizaki<sup>3</sup>, Atsushi Tamura<sup>4</sup>, Kei Higuchi<sup>5</sup>, Sachiko Tsukita<sup>6</sup>, Vicente Herranz-Perez<sup>7</sup>, Jose Manuel Garcia-Verdugo<sup>7</sup>, Kazunobu Sawamoto<sup>2,8</sup>, Naoko Kaneko<sup>1</sup>

<sup>1</sup>Lab Neuronal Regen, Grad Sch Brain Sci, Doshisha Univ,

<sup>2</sup>Dept Dev Regen Neurobiol, Inst Brain Sci, Grad Sch Med Sci, Nagoya City Univ, <sup>3</sup>Dept Neurosurgery, Grad Sch Med, Nagoya Univ,

<sup>4</sup>Dept Pharmacol, Sch Med, Teikyo Univ, <sup>5</sup>Dept Biopharmaceutics, Sch Pharm, Tokyo Univ Pharm Life Sci,

<sup>6</sup>Adv Comprehensive Res Org, Teikyo Univ, <sup>7</sup>Valencia Univ, Spain, <sup>8</sup>Div Neural Dev Regen, Natl Inst Physiol Sci

## MS-6-4

## 外側放射状グリアは新生児脳傷害後の白質再生を促進する

## Outer radial glia promotes white matter regeneration after neonatal brain injury

○Hideo Jinnou<sup>1,2</sup>, Lauren Rosko<sup>2</sup>, Satoshi Yamashita<sup>1</sup>, Artur Agaronyan<sup>3</sup>, Tu Tsang-Wei<sup>3</sup>, Yuka Imamura<sup>4</sup>, Kazuya Kuboyama<sup>5</sup>, Kazunobu Sawamoto<sup>5</sup>, Kazue Hashimoto-Torii<sup>2</sup>, Nobuyuki Ishibashi<sup>2</sup>, Vittorio Gallo<sup>2,6</sup>

<sup>1</sup>Dept Pediatrics and Neonatology, Nagoya City Univ Grad Sch Med Sci,

<sup>2</sup>Children's National Research Institute, Children's National Hospital, USA, <sup>3</sup>Department of Radiology, Howard University, USA,

<sup>4</sup>Dept Pharm, Biochem, Molecular Biol, Pennsylvania State Univ, USA,

<sup>5</sup>Dept Pediatrics and Neonatology, Nagoya City Univ Grad Sch Med Sci,

<sup>6</sup>Seattle Children's Research Institute, Seattle Children's Hospital, USA

## MS-6-5

## 傷害脳内における新生ニューロンの分化と運命決定機構

## Morphological and functional maturation of new neurons in the post-stroke brain

○Nodoka Ito<sup>1</sup>, Mieko Morishima<sup>1</sup>, Atsuya Yaguchi<sup>2</sup>, Takahiro Muraoka<sup>2</sup>, Kazunobu Sawamoto<sup>3,4</sup>, Naoko Kaneko<sup>1</sup>

<sup>1</sup>Lab Neuronal Regen, Grad Sch Brain Sci, Doshisha Univ, <sup>2</sup>Dept App Chem, Grad Sch Eng, Tokyo Univ Agri Tech,

<sup>3</sup>Dept Dev Regen Neurobiol, Inst Brain Sci, Nagoya City Univ Grad Sch Med Sci,

<sup>4</sup>Div Neural Dev Regen, Nat Inst Phy Sci

## MS-6-6

## iPS 細胞由来ドーパミン神経と細胞内再構成系によるドーパミンシナプス小胞の組織化と選別機構の解析

Distinct synaptic vesicle populations in iPSC-derived dopaminergic neurons: Insights into their organization and sorting mechanisms by *in cellulo* reconstitution assay

○Kenshiro Fujise<sup>1,2</sup>, Atsushi Saito<sup>1</sup>, Nisha Mohd Rafiq<sup>3</sup>, Pietro De Camilli<sup>2</sup>

<sup>1</sup>Dept Frontier Sci and Interdisciplinary Research, Faculty of Medicine, Kanazawa Univ, Kanazawa,

<sup>2</sup>Dept Neuroscience, YSM, Yale Univ, New Haven, CT, USA, <sup>3</sup>IFIB, Univ Tübingen, Tübingen, Germany

2025年9月12日(金)

第5会場(10階 会議室1001)

## ミニシンポジウム 4

9:15 ~ 11:21

MS-4

全身性ネットワークが紡ぐ脳機能と老化の分子メカニズム

Molecular Mechanisms Linking Brain Function and Aging through Systemic Networks

Chair: Hideki Hida (Nagoya City Univ Grad Sch Med Sci, Dept Neurophysiol & Brain Sci)、  
Makoto Tsuda (Graduate School of Pharmaceutical Sciences, Kyushu University)

(Japanese・English)

MS-4-1

耳介迷走神経刺激による社会性異常の調整効果とその神経回路メカニズムの探索

Modulatory effects of auricular vagus nerve stimulation on social deficits and exploration of the underlying neural circuit mechanisms in mice

○Hiroshi Kuniishi, Min-Jue Xie, Hideo Matsuzaki

Div. Development of Mental Functions, Research Center for Child Mental Development, Univ. of Fukui

MS-4-2

ADHD ラットモデルにおいて、うま味摂取は迷走神経の活性化と iNTS-CeA 神経回路の調節を通じて攻撃行動を抑制する

Umami Ingestion Suppresses Aggression by Activating Vagus Nerve &amp; Modulating iNTS-CeA Neural Circuitry in an ADHD Rat Model

○Dewi Mustika<sup>1</sup>, Yu Nishimura<sup>1</sup>, Sinya Ueno<sup>1</sup>, Mariko Shindo<sup>1</sup>, Cha-Gyun Jung<sup>2</sup>, Hideki Hida<sup>1</sup><sup>1</sup>Dept of Neurophysiology & Brain Sciences, Nagoya City Univ Grad Sch of Med Sci,<sup>2</sup>Center for Nursing International Promotion, Nagoya City Univ Grad Sch of Nursing

MS-4-3

腸内腔における異なる種類の栄養素は迷走神経下神経節の異なる神経細胞群を活性化する

Different types of nutrients in the gut activate distinct sets of neurons in the nodose petrosal ganglion

○Hikari Takeshima<sup>1</sup>, Keisuke Ito<sup>2</sup>, Hideki Enomoto<sup>2</sup>, Takeshi Imai<sup>1</sup><sup>1</sup>Graduate School of Medical Sciences, Kyushu University, Fukuoka,<sup>2</sup>Division for Neural Differentiation and Regeneration, Department of Physiology and Cell Biology, Kobe University Graduate School of Medicine, Kobe, Hyogo

MS-4-4

プロバイオティクスによる成体神経新生の調節機構の解析

Three-Strain Probiotic Combination Restores Dysregulated Adult Hippocampal Neurogenesis in Germ-Free Mice

○Masakazu Namihira<sup>1</sup>, Nana Inoue<sup>2</sup>, Yohei Watanabe<sup>2</sup>, Takuto Hayashi<sup>2</sup>, Kazutoshi Murotomi<sup>1</sup>, Kazuhiro Hirayama<sup>3</sup>, Naoki Sato<sup>2</sup><sup>1</sup>Mol. Biosystem Res. Inst. AIST., <sup>2</sup>TOA Biopharma Co. Ltd., <sup>3</sup>Lab. Vet. Pub. Health, Grad. Sch. Agric. Life Sci., Univ of Tokyo.

MS-4-5

炎症性老化における神経系疾患の発症機構：多臓器連関の視点から

Pathogenic Mechanisms of Neurological Disorders in Inflammaging: From the Viewpoint of Multi-Organ Interactions

○Yoshitaka Kase<sup>1,2,3</sup><sup>1</sup>Division of CNS Regeneration and Drug Discovery, International Center for Brain Science (ICBS), Fujita Health University,<sup>2</sup>Department of Geriatric Medicine, Graduate School of Medicine, The University of Tokyo,<sup>3</sup>Regenerative Medicine Research Center, Keio University

MS-4-6

加齢に伴うフレイルに対する新規抗酸化剤の有効性

Efficacy of a novel antioxidant in age-related frailty

○Yoshihisa Koyama<sup>1,2</sup>, Yuki Kobayashi<sup>3</sup>, Hikaru Kobayashi<sup>3</sup>, Shoichi Shimada<sup>1,2</sup><sup>1</sup>Dept. Neurosci and Cell biol, Osaka Univ Grad Sch Med,<sup>2</sup>Addiction Research Unit, Osaka Psychiatric Research Ctr, Osaka Psychiatric Medical Ctr, <sup>3</sup>SANKEN, Osaka Univ

MS-4-7

肝臓および小腸の apoa1 特異的欠失マウスにおける CSF apoa1 の消失

CSF apoa1 ablated in liver and intestine apoa1 specific deletion mice

○Maki Tsujita<sup>1</sup>, Alan T Remaley<sup>2</sup><sup>1</sup>Mol Oncology, Nagoya City Univ Grad Sch Med Sci, <sup>2</sup>NHLBI, NIH, USA

## ミニ口演 4

11:30 ~ 12:20

## MT-4

Chair: 宝田 美佳 (金沢大学 医薬保健研究域医学系 神経解剖学)、  
久保 健一郎 (東京慈恵会医科大学 解剖学講座)

(Japanese・English)

- MT-4-1** グリーンじゃできない・・・シアンで解決！—多機能型 Ca<sup>2+</sup> インディケーター XCaMP-C の開発—  
Green just won't work... development of XCaMP-C, a versatile cyan Ca<sup>2+</sup> indicator  
○Hajime Fujii<sup>1</sup>, Keisuke Ota<sup>1</sup>, Yayoi Kondo<sup>1</sup>, George Cai<sup>1,2</sup>, Richard Song<sup>1,3</sup>, Haobo Song<sup>1</sup>, Michiko Okamura<sup>1</sup>, Hayato Kondo<sup>1</sup>, Masatoshi Inoue<sup>1,4</sup>, Haruhiko Bito<sup>1</sup>  
<sup>1</sup>Dept of Neurochemistry, Univ of Tokyo Grad Sch of Med., Tokyo, <sup>2</sup>Neuroscience Program, Harvard University, <sup>3</sup>Dept of Neuroscience, Vanderbilt University, <sup>4</sup>Biophotonics Res Cntr, Mallinckrodt Inst of Radiology, Univ Wash St. Louis
- MT-4-2** タウはミトコンドリアの過分極と呼吸鎖複合体 I 活性低下により神経細胞死を引き起こす  
Tau disrupts OXPHOS complexes and hyperpolarizes mitochondria  
○田村 有沙, 浅田 明子, 齊藤 太郎, 安藤 香奈絵  
東京都立大学・理学研究科・生命科学専攻・神経分子機能研究室
- MT-4-3** 思いやりのこころを育む脳機能および神経回路基盤の多階層横断的解析  
Multi-level and cross-sectional analysis of brain functions underlying the development of empathy  
○藤田 慶大  
金沢大学・子どものこころの発達研究センター
- MT-4-4** 血管内皮細胞の UPR は脳損傷後の機能回復に寄与する  
Vascular endothelial cell-mediated unfolded protein response promotes functional recovery following brain injury  
○Qiyang Fan<sup>1</sup>, 宝田 美佳<sup>1</sup>, 堀 修<sup>1</sup>, 田中 貴士<sup>2</sup>  
<sup>1</sup>金沢大学大学院・医・神経解剖, <sup>2</sup>神戸大学・保健・リハビリテーション科学
- MT-4-5** 網膜神経節細胞のサイズ依存性の傷害応答  
Size-dependent injury responses of retinal ganglion cells  
○宝田 美佳<sup>1</sup>, 細井 芹香<sup>1</sup>, 沖谷 なほ子<sup>1</sup>, 石井 宏史<sup>1</sup>, 服部 剛志<sup>1</sup>, 桐生 寿美子<sup>2</sup>, 堀 修<sup>1</sup>  
<sup>1</sup>金沢大学・医・神経解剖, <sup>2</sup>名古屋大学・医・機能組織
- MT-4-6** 神経病態下における細胞内ストレス応答の役割  
Role of intracellular stress response in the neuropathological situations  
○堀 修<sup>1</sup>, 宝田 美佳<sup>1,2</sup>, 石井 宏史<sup>1</sup>, 服部 剛志<sup>2</sup>, Loc Dinh Nguyen<sup>1</sup>, Qiyang Fan<sup>1</sup>, RongRong Yang<sup>1</sup>  
<sup>1</sup>金沢大・医・神経解剖学, <sup>2</sup>奈良医大・第二解剖学
- MT-4-7** 記憶の素子を可視化する  
Toward Visualizing Memory Engram (Cells and Synapses)  
○山田 麻紀<sup>1</sup>, 久保山 和哉<sup>1,2</sup>, 鳥山 道則<sup>1</sup>  
<sup>1</sup>徳島文理大・香川薬・薬理, <sup>2</sup>名古屋市大院・医・脳研・神経発達再生
- MT-4-8** 放射線認知症モデルマウスにおけるエングラマー候補の発現変化  
Alterations of Potential Engram Markers in Radiation-Induced Dementia Mice  
○西村 明音<sup>1</sup>, 佐藤 千花<sup>1</sup>, 川田 一稀<sup>1</sup>, 久保山 和哉<sup>1,2</sup>, 鳥山 道則<sup>1</sup>, 山田 麻紀<sup>1</sup>  
<sup>1</sup>徳島文理・香川薬・薬理, <sup>2</sup>名古屋市大院・医・脳研・神経発達再生
- MT-4-9** ミクログリアの新しい生理機能の発掘を目指して  
Challenging to discover the new physiological functions of microglia  
○最上(重本) 由香里, 北村(中山) 貴美子, 千川 和枝, 佐藤 薫  
国立衛研 薬理
- MT-4-10** ミトコンドリアから見つめなおす神経化学  
Rethinking Neurochemistry Through Mitochondria  
○新谷 紀人  
和歌山県立医科大学・薬・薬品作用
- MT-4-11** 神経化学を社会に生かす：ドレブリン研究から広がる新しい挑戦  
Translational Research in Neurochemistry: Drebrin as a Gateway to Innovation  
○関野 祐子<sup>1,2</sup>, 小金澤 紀子<sup>2</sup>, 比嘉 彩香<sup>2</sup>  
<sup>1</sup>NPO法人イノベーション創薬研究所, <sup>2</sup>アルメッド株式会社

## MT-4-12

## ブレインバンク死後脳組織の解析による統合失調症の病態理解

## Analyses of postmortem brain tissues provided by the Brain Bank to understand the pathophysiology of schizophrenia

○久保 健一郎<sup>1,2</sup>, 吉永 怜史<sup>1,2</sup>, レオン フリオ<sup>1,3,4</sup>, 日野 瑞城<sup>5,6</sup>, 安藤 吉成<sup>3</sup>, ムーディ ジョナサン<sup>3</sup>, 長岡 敦子<sup>5,7</sup>, 北澤 彩子<sup>1,2</sup>, 林 周宏<sup>2</sup>, 仲嶋 一範<sup>2</sup>, ホン ジョン チョウ<sup>3</sup>, 神山 淳<sup>8</sup>, 國井 泰人<sup>5,6</sup>, シン ジェイ W<sup>3,9</sup>  
<sup>1</sup> 東京慈恵会医科大学・解剖学, <sup>2</sup> 慶應義塾大学医学部・解剖学, <sup>3</sup> 理研IMS, <sup>4</sup> IND, UCSF, <sup>5</sup> 福島県立医科大学, <sup>6</sup> 東北大学災害科学国際研究所, <sup>7</sup> 東北大学病院精神科, <sup>8</sup> 早稲田大学人間科学学術院, <sup>9</sup> GIS, シンガポール

## MT-4-13

## 新生ニューロンを傷害部へ誘引する新規因子の同定

## Identification of Novel Factors Attracting New Neurons to Injured Site

○川瀬 薫<sup>1</sup>, 神澤 孝洋<sup>1</sup>, 久保山 和哉<sup>1</sup>, 澤本 和延<sup>1,2</sup>  
<sup>1</sup> 名市大院・医・脳研・神経発達再生, <sup>2</sup> 生理研・神経再生

## ミニシンポジウム 5

13:30 ~ 15:36

## MS-5

## 記憶・情動の表出を司る分子神経基盤

## Molecular and Neural Basis Controlling the Expression of Memory and Emotion

Chair : Masabumi Minami (Dept. Pharmacol. Fac. Pharm. Sci. Hokkaido Univ.),  
 Kazuto Kobayashi (Fukushima Medical University)

(Japanese・English)

## MS-5-1

## 記憶表出のゆらぎをもたすヒスタミン神経活動動態

## Spontaneous histaminergic neuronal activity primes memory accessibility

○Yoshikazu Morishita<sup>1</sup>, Yuki Takamura<sup>1</sup>, Kyoka Nishimura<sup>2</sup>, Yuto Yokoi<sup>1</sup>, Rentaro Idutsu<sup>1</sup>, Misato Ono<sup>1</sup>, Reika Matsumoto<sup>3</sup>, Natsuko Hitora-Imamura<sup>4</sup>, Masabumi Minami<sup>2</sup>, Hiroshi Nomura<sup>1</sup>  
<sup>1</sup> Endowed Dept. of Cognitive Function & Pathology, Inst. of Brain Science, Grad. Sch. of Medical Sciences, Nagoya City University,  
<sup>2</sup> Department of Pharmacology, Graduate School of Pharmaceutical Sciences, Hokkaido University,  
<sup>3</sup> Dept. of Cognitive Function & Pathology, Inst. of Brain Science, Grad. Sch. of Medical Sciences, Nagoya City University,  
<sup>4</sup> Dept. of Chemico-Pharmacological Sciences, Grad. Sch. of Pharmaceutical Sciences, Kumamoto University

## MS-5-2

## 前頭前野における恐怖と消去を制御するニューロン集団

## Neuronal population regulating fear and extinction in mPFC

○Rie Ishikawa, Satoshi Kida  
 Univ. of Tokyo

## MS-5-3

## 恐怖学習中に観察されるドーパミン情報表現の多様性

## Brain region-specific dopamine dynamics during fear conditioning in mice

○Takaaki Ozawa<sup>1</sup>, Kazuhiro Umemoto<sup>1</sup>, Ryotaro Iwamoto<sup>1</sup>, Moe Nakamura<sup>1</sup>, Yuma Matsumoto<sup>1</sup>, Yoshinobu Oyama<sup>1</sup>, Tom Macpherson<sup>2</sup>, Takatoshi Hikida<sup>1</sup>  
<sup>1</sup> Lab Adv Brain Funct, IPR, Univ Osaka, <sup>2</sup> ILAS, Pharmacology, Kyoto Univ

## MS-5-4

## 局所アストロサイトによる全脳ネットワークおよび行動の制御

## Astrocyte local circuit modulation directs brain-wide circuitry and behavior

○Bolati Wulaer  
 RIKEN Center for Brain Science

## MS-5-5

## 痛みの生成および過敏化を担う新たな脳—脊髄神経路の同定

## Identification of the brain-spinal neural pathway that generates and sensitizes pain

○Kazuki Fujimori<sup>1</sup>, Hidetoshi Saitoh<sup>2</sup>, Kota Tsunoda<sup>1</sup>, Yohei Kurino<sup>1</sup>, Daichi Sueto<sup>1</sup>, Kaoru Seiriki<sup>3</sup>, Hitoshi Hashimoto<sup>3,4,5,6,7</sup>, Makoto Tsuda<sup>1</sup>  
<sup>1</sup> Dept Mol Syst Pharmacol, Grad Sch Pharm Sci, Kyushu Univ, <sup>2</sup> Dept Pharm Sci, Intl Univ Health and Welfare,  
<sup>3</sup> Lab Mol Neuropharmacol, Grad Sch Pharm Sci, Osaka University, <sup>4</sup> United Grad Sch Child Devel, Osaka Univ,  
<sup>5</sup> Division of Biosci, Inst Datability Sci, Osaka Univ,  
<sup>6</sup> Transdimensional Life Imaging Division, Inst Open and Transdisciplinary Res Initiatives, Osaka University,  
<sup>7</sup> Dept Mol Pharm Sci, Grad Sch Med, Osaka University

## MS-5-6

## 社会性・共感性を制御する小脳の生理学的・病態学的機能解明

## Physiological and pathological role of cerebellum on social behavior and empathy

○Kyota Fujita<sup>1</sup>, Hong Zhu<sup>1</sup>, Chiharu Tsuji<sup>1</sup>, Atsuki Kawamura<sup>2</sup>, Masaaki Nishiyama<sup>2</sup>, Haruhiro Higashida<sup>1</sup>, Hitoshi Okazawa<sup>3</sup>, Shigeru Yokoyama<sup>1</sup>  
<sup>1</sup> Department of Basic Research on Social Recognition and Memory, Research Centre for Child Mental Development, Kanazawa University,  
<sup>2</sup> Institute for Frontier Science Initiative, Social Brain Development Research Unit, Next Generation Medical Development Research Core,  
<sup>3</sup> Institute of Science Tokyo, Institute of Integrated Research, Advanced Pathophysiological Science, Department of Neuropathology

## MS-5-7

## Augmentation of Notch1 Signaling in Adult Neurogenesis Adversely Affects Memory function

○Nur Azrah Fazera Mohd Ariffin, Naoko Morimura, Kenny Daun, Seiji Hitoshi  
 Department of Integrative Physiology, Shiga University of Medical Science

## ミニシンポジウム 7

17:00 ~ 18:48

**MS-7** グリア細胞による脳恒常性の維持とその破綻

## Maintenance and Disruption of Brain Homeostasis by Glial Cells

Chair : Shigenobu Kanba (Kyushu University)、

Kouko Tatsumi (Department of Anatomy and Neuroscience, Faculty of Medicine, Nara Medical University)

(Japanese • English)

**MS-7-1** 脳恒常性におけるグリア細胞特異的代謝機構の役割

The role of glial metabolism in the maintenance of brain homeostasis

○Miho Terunuma

Niigata University, Grad Sch. Med and Dent Sci., Div. Oral Biochemistry

**MS-7-2** カルシウムシグナルの恒常性破綻による認知・精神機能障害

Cognitive and mental disorders regulated by calcium signaling dysfunction

○Shigeki Moriguchi

RCPD, Grad. Sch. Pharmaceut. Sci., Tohoku Univ

**MS-7-3** 恒常性破綻の病態解明のための患者血液単球由来 iMG 細胞を用いたリバーストランスレーショナル研究

Reverse translational research using human blood induced microglia-like (iMG) cells for clarifying the dynamic mechanisms of homeostasis disruption

○Takahiro Kato

Department of Psychiatry, Hokkaido University Graduate School of Medicine

**MS-7-4** ミクログリアによる細胞外アデノシン調節機構：CD39 依存性・非依存性メカニズム

Microglia-mediated two distinct mechanisms of extracellular adenosine elevation; CD39-dependent and independent pathways

○Kent Sakai<sup>1</sup>, Eiji Shigetomi<sup>1,2</sup>, Hajime Yasuda<sup>1</sup>, Schuichi Koizumi<sup>1,2</sup><sup>1</sup>Department of Neuropharmacology, Interdisciplinary Graduate School of Medicine, University of Yamanashi,<sup>2</sup>Yamanashi GLIA center, University of Yamanashi**MS-7-5** ヒト iPS 細胞由来ミクログリアと脳オルガノイドの三次元共培養による神経変性疾患病態モデルの構築

Establishment of a neurodegenerative disorder model by co-culturing human iPSC-derived microglia and brain organoids

○Tatsuya Kozaki, Satoru Morimoto, Hideyuki Okano

Keio University, Regenerative Medicine Research Center

**MS-7-6** 上衣腫原因融合タンパク質 ZFTA-RELA の核移行機構

Nuclear transportation of ZFTA-RELA fusion protein that drives ependymoma

○Shinya Ohata<sup>1</sup>, Sachiko Toma<sup>2</sup><sup>1</sup>Res. Instit. Pharm. Sci., Facul. Pharm., Musashino Univ., <sup>2</sup>NAIST

2025年9月12日(金)

第6会場(11階 会議室1104)

若手道場 -4

9:20 ~ 10:50

**WD-4** 学部・大学院：神経系の発生・成長・再生Chair : Shinsuke Shibata (Niigata University, Graduate School of Medical and Dental Sciences)、  
Sumiko Kiryu-Seo (Nagoya University Graduate School of Medical and Dental Sciences)

(Japanese)

**WD-4-1** 大脳形成過程における鳥類と哺乳類の神経細胞移動の比較解析

Comparative analysis of neuronal migration in the brain development of birds and mammals

○ Kyouosuke Wada<sup>1,2</sup>, Takuma Kumamoto<sup>1</sup>, Tadashi Nomura<sup>1,3</sup>, Chiaki Ohtaka-Maruyama<sup>1,2</sup><sup>1</sup>Developmental Neuroscience Project, Department of Brain & Neurosciences, Tokyo Metropolitan Institute of Medical Science, Tokyo,<sup>2</sup>Developmental Neurology, Molecular and Cellular Medicine Course, Niigata University Graduate School of Medical and Dental Sciences, Niigata,<sup>3</sup>Applied Biology, Kyoto Institute of Technology**WD-4-2** 発達時期の視床が有する特殊な脂質分布と、その視床発達に与える生理的意義の解明

The characteristic distribution and physiological significance of a specific phospholipid molecule in the developing thalamus

○ Yuto Takekoshi<sup>1</sup>, Momoka Takeda<sup>1</sup>, Haruki Uchino<sup>2</sup>, Takao Kohno<sup>1</sup>, Makoto Arita<sup>2,3</sup>, Mitsuharu Hattori<sup>1</sup><sup>1</sup>Dept Biomed Sci, Nagoya City Univ Grad Sch of Pharmaceut Sci, <sup>2</sup>RIKEN, IMS, Lab for Metabol,<sup>3</sup>Div of Physiological Chem and Metabol, Keio Univ Faculty of Pharm**WD-4-3** 傷害後における血管上のアストロサイト突起の形態と新生ニューロン移動効率

Thick astrocytic endfeet on blood vessels limit migration of new neurons in the post-stroke brain

○ Taisei Ishimaru<sup>1,2</sup>, Hidetoshi Iwata<sup>3</sup>, Nodoka Ito<sup>1</sup>, Mami Matsumoto<sup>3</sup>, Kyoka Otake<sup>3</sup>, Vicente Herrants-Perez<sup>4</sup>, Jose Manuel Garcia Verdugo<sup>4</sup>, Kazunobu Sawamoto<sup>3,5</sup>, Naoko Kaneko<sup>1</sup><sup>1</sup>Lab Neuronal Regen, Grad Sch Brain Sci, Doshisha Univ, <sup>2</sup>Dept Life Med Systems, Fac Med Life Sci, Doshisha Univ,<sup>3</sup>Dept Dev Regen Neurobiol, Inst Brain Sci, Nagoya City Univ Grad Sch Med Sci,<sup>4</sup>Lab Comp Neurobiol, Cavanilles Inst, Univ Valencia, Spain, <sup>5</sup>Div Neural Dev Regen, Natl Inst Physiol Sci**WD-4-4** 出生によって引き起こされる放射状グリアの mTORC1 シグナルの低下が生後の神経幹細胞としての静止化獲得をもたらす

Birth-induced downregulation of mTORC1 signaling in radial glia is required for the acquisition of quiescence in postnatal neural stem cells

○ Takehiro Ando<sup>1</sup>, Koya Kawase<sup>1</sup>, Yasuhisa Nakamura<sup>1</sup>, Shoko Takemura<sup>1,2</sup>, Kazunobu Sawamoto<sup>1,3</sup><sup>1</sup>Dept Dev Regen Neurobiol, IBS, Nagoya City Univ Grad Sch Med Sci, <sup>2</sup>Dept Dev Biology, Fujita Health University SchMed,<sup>3</sup>Div Neural Dev Regen, NIPS

若手道場 -5

10:50 ~ 12:20

**WD-5** 学部・大学院：グリア細胞Chair : Akio Wanaka (Jikei University of Health Care Sciences)、  
Shiho Kitaoka (School of Medicine, Hyogo Medical University)

(Japanese)

**WD-5-1** 細胞外マトリックスタンパク質ラミニン-411 および由来ペプチドによるオリゴデンドロサイトの髄鞘形成促進  
Promotion of myelin formation in oligodendrocytes by an extracellular matrix protein laminin-411 and its derived peptide○ Binri Sasaki<sup>1</sup>, Momo Oishi<sup>1</sup>, Tomoka Aoki<sup>1</sup>, Mai Hyodo<sup>1</sup>, Nanako Yamada<sup>1</sup>, Hitomi Misawa<sup>1</sup>, Kiyotoshi Sekiguchi<sup>2</sup>, Keisuke Hamada<sup>3</sup>, Yuji Yamada<sup>3</sup>, Yamato Kikkawa<sup>3</sup>, Motoyoshi Nomizu<sup>3</sup>, Nobuharu Suzuki<sup>1</sup><sup>1</sup>Department of Clinical Bioanalysis and Molecular Biology, Graduate School of Medical and Dental Sciences, Institute of Science Tokyo,<sup>2</sup>Division for Matrixome Research and Application, Institute for Protein Research, Osaka University,<sup>3</sup>Department of Clinical Biochemistry, School of Pharmacy, Tokyo University of Pharmacy and Life Science**WD-5-2** HGPRに制御される出生後ミクログリアの形態変化メカニズム

HGPR regulates microglial morphology during early postnatal stages

○ Rin-ichiro Teruya<sup>1</sup>, Fuminori Tsuruta<sup>2</sup><sup>1</sup>PhD Prog Biol, Grad Sch Sci and Tech, Univ of Tsukuba, <sup>2</sup>Inst Life and Env Sci, Univ of Tsukuba**WD-5-3** 脳室マクロファージは大脳実質への侵入能力を獲得しミクログリアへ分化する

Intraventricular macrophages acquire pallial infiltration competence to differentiate into microglia

○ Hisa Asai, Yuki Hattori, Takaki Miyata

Dept. of Anat. Cell. Biol., Grad. Sch. of Med., Nagoya Univ.

- WD-5-4** 灰白質と白質のアストロサイトの分化を制御する候補遺伝子の探索  
 Exploration of candidate genes regulating the differentiation of gray and white matter astrocytes  
 ○Yuta Inai<sup>1</sup>, Shun Takano<sup>1</sup>, Keiko Morimoto<sup>1</sup>, Michio Miyajima<sup>1,2</sup>, Kazunori Nakajima<sup>1</sup>  
<sup>1</sup>Dept Anat, Keio Univ Sch Med, Tokyo, <sup>2</sup>PRESTO, JST

## 若手道場 -6

13:35 ~ 15:05

- WD-6** 大学院・博士：学習・認知障害及びその関連疾患  
 Chair : Tomoyuki Furuyashiki (Department of Pharmacology, Graduate School of Medical and Dental Sciences, Institute of Science Tokyo)、  
 Rieko Muramatsu (National Institute of Neuroscience, National Center of Neurology and Psychiatry)  
 (Japanese)

- WD-6-1** 脾臓由来小脳 BBB 破綻は慢性的な社会的敗北ストレスによって誘導されるうつ様行動に関与する  
 Spleen-derived cerebellar BBB disruption is involved in the depression-like behaviors induced by chronic social defeat stress  
 ○Aika Kosuge<sup>1,2</sup>, Kazuo Kunisawa<sup>1,7,8</sup>, Hiroyuki Tezuka<sup>3</sup>, Masato Hoshi<sup>4</sup>, Nanaka Morita<sup>5</sup>, Tomoki Kawai<sup>1</sup>,  
 Kuniaki Saito<sup>5,6</sup>, Toshitaka Nabeshima<sup>1,6,7,8</sup>, Jun Yukitake<sup>2</sup>, Hidehiko Akiyama<sup>2</sup>, Akihiro Mouri<sup>1,7,8</sup>  
<sup>1</sup>Dept Regul Sci Eval Dev Pharm Devices, Fujita Health Univ Grad Sch Health Sci,  
<sup>2</sup>Major Med Lab Sci, Dept Med Sci, Fac Health Med Sci, Aichi Shukutoku Univ,  
<sup>3</sup>Dept Cell Funct Anal, Res Prom Headquarters, Fujita Health Univ,  
<sup>4</sup>Dept Dis Sys Anal Med, Fujita Health Univ Grad Sch Health Sci,  
<sup>5</sup>Adv Diagn Syst Res Lab, Fujita Health Univ Grad Sch Health Sci,  
<sup>6</sup>Lab Health Med Sci Innov, Fujita Health Univ Grad Sch Med Sci,  
<sup>7</sup>Japanese Drug Org of Appropriate Use & Research (J-DO), <sup>8</sup>Int Cent Brain Sci (ICBS), Fujita Health Univ
- WD-6-2** 骨格筋萎縮によって誘発される不可逆的認知障害の原因因子と分子メカニズム  
 Causal factors and those mechanisms of irreversible cognitive deficit induced by skeletal muscle atrophy  
 ○Jaewon Jung, Chihiro Tohda  
 Section of Neuromedical Science, Institute of Natural Medicine, University of Toyama
- WD-6-3** 社会的隔離による学習障害の神経基盤の解明  
 Elucidating the neural mechanisms underlying fear learning deficits induced by social isolation  
 ○Rie Shimizu<sup>1</sup>, Shota Morikawa<sup>2</sup>, Kazuki Katori<sup>2</sup>, Yuji Ikegaya<sup>1,3</sup>, Haruki Takeuchi<sup>2</sup>  
<sup>1</sup>Grad. Sch. Pharmaceut. Sci., Univ. Tokyo, Tokyo, <sup>2</sup>Grad. Sch. Sci., Univ. Tokyo, Tokyo,  
<sup>3</sup>Inst. for AI and Beyond, Univ. Tokyo, Tokyo
- WD-6-4** MARK4 と CYFIP1 は相乗的にタウの蓄積を促進する  
 CYFIP1 enhances the accumulation of phosphorylated tau and exacerbates neurodegeneration  
 ○Kotone Watanabe, Toshiya Oba, Akiko Asada, Taro Saito, Kanae Ando  
 Department of Biological Science, Graduate school of Science, Tokyo Metropolitan University

2025 年 9 月 12 日 (金)

ポスター会場 (8 階 展示場)

ポスター発表  
P2

17:00 ~ 18:40

(Japanese • English)

- P2-001** hTERT-RPE1 細胞における G 蛋白質共役型受容体の 1 次繊毛への局在  
Localization of G protein-coupled receptors to primary cilia in hTERT-RPE1 cells  
○Ko Miyoshi<sup>1,2</sup>, Yuanyuan Qin<sup>1</sup>, Tomomi Nagano<sup>1</sup>, Yuuki Fujiwara<sup>1</sup>, Taiichi Katayama<sup>1</sup>  
<sup>1</sup>Dept of Child Develop and Molecular Bra Sci, United Grad Sch of Child Develop, Univ of Osaka,  
<sup>2</sup>Molecular Res Center for Children's Mental Develop, United Grad Sch of Child Develop, Univ of Osaka
- P2-002** 神経回路構築におけるゲノム高次構造変化の役割  
Spatial genome organization during neural circuit formation  
○Yuki Fujita  
Dept Anat and Dev Biol, Grad Sch of Med Res, Shimane Univ
- P2-003** チューブリンのチロシン化 / 脱チロシン化が軸索樹状突起の形態制御に果たす役割の解析  
Analysis of the role of tyrosination/de-tyrosination of tubulins in controlling axonal arbor morphology  
○Keigo Yamada<sup>1</sup>, Daiso Mizuno<sup>2</sup>, Yoshiyuki Konishi<sup>1,2</sup>  
<sup>1</sup>Industrial Innovation of Engineering, Graduate School of Engineering, University of Fukui,  
<sup>2</sup>Materials Science and Biotechnology, School of Engineering, University of Fukui
- P2-004** 発達過程の神経細胞においてリソソームでのタンパク質分解能の障害はユビキチン化タンパク質の凝集を伴う形態形成異常をもたらす  
Loss of lysosomal degradative capacity promotes aggregation of ubiquitinated proteins along with impaired morphogenesis in developing neurons  
○Yinping Zhou<sup>1</sup>, Yuuki Fujiwara<sup>1</sup>, Mai Shirazaki<sup>2,3</sup>, Gen Igarashi<sup>4</sup>, Xiaoye Tian<sup>1</sup>, Ko Miyoshi<sup>1</sup>, Taiichi Katayama<sup>1</sup>  
<sup>1</sup>Dept Child Dev Mol Brain Sci, United Grad Sch Child Dev, Osaka Univ, <sup>2</sup>Nikon Imaging Ctr, Osaka Univ,  
<sup>3</sup>Dept Immunol Cell Biol, Osaka Univ, <sup>4</sup>Fac Med, Osaka Univ
- P2-005** 成体マウスにおける全身的な遺伝子ノックダウンシステムの確立  
Establishment of global gene knockdown system in adult mice  
○Yuka Saito<sup>1</sup>, Yoshifumi Abe<sup>1</sup>, Satoru Moritoh<sup>1</sup>, Yuichi Hiraoka<sup>2</sup>, Kenji Tanaka<sup>1</sup>  
<sup>1</sup>Div Brain Sci, Inst Adv Med Res, Keio Univ Sch Med, <sup>2</sup>Lab. Anim. Res., Ctr Dis Biol Integr Med, Grad Sch Med, Univ Tokyo
- P2-006** ラット大脳皮質初代神経細胞を使ったタウ凝集段階制御可能なモデルの作成  
Development of a controllable Tau Aggregation model using rat primary cortical neurons  
○Naho Kanemoto<sup>1</sup>, Tomoya Uchida<sup>1</sup>, Shigeo Sakuragi<sup>1</sup>, Toshiki Takahashi<sup>1</sup>, Yoshiyuki Soeda<sup>3</sup>, Hideaki Yoshimura<sup>4</sup>, Akihiko Takashima<sup>2</sup>, Hiroko Bannai<sup>1</sup>  
<sup>1</sup>Dept Elec Eng Biosci, Grad Sch Adv Sci Eng, <sup>2</sup>Fac Sci, Gakushuin Univ, <sup>3</sup>Sch Pha, Nihon Univ, <sup>4</sup>Dept Chem, Sch Sci, Univ of Tokyo
- P2-007** CRMP-2 はセロトニントランスポーターの軸索輸送を制御する  
CRMP-2 mediates the axonal transport of the serotonin transporter (SERT)  
○Toshihiro Yamanoi<sup>1</sup>, Takeshi Yoshimura<sup>1,2</sup>, Xiaoye Tian<sup>1</sup>, Keiko Iwata<sup>3,4</sup>, Hideo Matsuzaki<sup>3</sup>, Taiichi Katayama<sup>1</sup>  
<sup>1</sup>Department of Child Development and Molecular Brain Science, United Graduate School of Child Development, Osaka University,  
<sup>2</sup>Department of Biological Regulation, School of Health Science, Faculty of Medicine, Tottori University,  
<sup>3</sup>Research Center for Child Mental Development, University of Fukui,  
<sup>4</sup>Laboratory of Pharmacology, School of Pharmaceutical Sciences, Wakayama Medical University
- P2-008** OptoTau Knock-in Neuro2a 細胞を用いた安定的なタウ凝集体の誘導と OptoTau 発現神経細胞モデルへの応用  
Induction of Stable Tau Aggregates Using OptoTau Knock-in Neuro2a Cells and Deployment in OptoTau Neuronal Model  
○Tomoya Uchida<sup>1</sup>, Shigeo Sakuragi<sup>1</sup>, Naoki Kato<sup>1</sup>, Toshiki Takahashi<sup>1</sup>, Naho Kanemoto<sup>1</sup>, Yoshiyuki Soeda<sup>2</sup>, Hideaki Yoshimura<sup>3</sup>, Akihiko Takashima<sup>4</sup>, Hiroko Bannai<sup>1</sup>  
<sup>1</sup>Dept Elec Eng Biosci, Grad Sch Adv Sci Eng, Waseda Univ, <sup>2</sup>Sch Pha, Nihon Univ, <sup>3</sup>Dept Chem, Sch Sci, Univ of Tokyo,  
<sup>4</sup>Fac Sci, Gakushuin Univ
- P2-009** 血管内皮細胞の UPR は脳損傷後の機能回復に寄与する  
Vascular endothelial cell-mediated unfolded protein response promotes functional recovery following brain injury  
○Qiyan Fan<sup>1</sup>, Mika Takarada-Iemata<sup>1</sup>, Takashi Tanaka<sup>2</sup>, Osamu Hori<sup>1</sup>  
<sup>1</sup>Department of Neuroanatomy, Graduate School of Medical Sciences, Kanazawa University,  
<sup>2</sup>Department of Rehabilitation, Kumamoto Health Science University

- P2-010** 脳室上衣繊維毛における活性型 PKA の Subapical actin への局在と GPCR シグナルによるその量的制御  
Localization of Active PKA to Subapical Actin in Ependymal Motile Cilia and Regulation of Its Amount by GPCR Signaling  
○Kanami Yoshimura<sup>1</sup>, Takuro Hosoya<sup>1</sup>, Keito Tanaka<sup>1</sup>, Masaki Ishii<sup>2</sup>, Shinya Ohata<sup>2</sup>  
<sup>1</sup>Fac Pharm, Musashino Univ, <sup>2</sup>Res Inst Pharm Sci, Musashino Univ
- P2-011** ペリニューロナルネットは進化を通じて興奮性神経細胞の細胞体サイズを調節している  
Perineuronal net regulates excitatory neuronal soma size throughout evolution  
○Ayumu Mubuchi<sup>1</sup>, Yoshifumi Ueta<sup>2</sup>, Yohei Shinmyo<sup>3</sup>, Hiroshi Many<sup>4</sup>, Yuko Saito<sup>4</sup>, Hiroshi Kawasaki<sup>5</sup>, Mariko Miyata<sup>2</sup>, Shinji Miyata<sup>1</sup>  
<sup>1</sup>Tokyo University of Agriculture and Technology, The United Graduate School of Agricultural Sciences,  
<sup>2</sup>Tokyo Womens Medical University, <sup>3</sup>Hamamatsu University School of Medicine,  
<sup>4</sup>Tokyo Metropolitan Institute for Geriatrics and Gerontology, <sup>5</sup>Kanazawa University
- P2-012** A2-Pancortin stabilizes mitochondria-ER contact sites (MERCs) and exacerbates calcium flux to induces perinatal neuronal death in an ischemic mouse model  
○Qi Yang<sup>1</sup>, Chen-Chi Wang<sup>2</sup>, Tomohiro Matsuyama<sup>3</sup>, Kazuki Kuroda<sup>2</sup>, Min-Jue Xie<sup>2</sup>, Misato Yasumura<sup>1</sup>, Chao-Yuan Tsai<sup>1</sup>, Yuichiro Oka<sup>1,5</sup>, Hideshi Yagi<sup>2,3</sup>, Makoto Sato<sup>1,2,4,5</sup>  
<sup>1</sup>Dept Anat & Neurosci, Grad Sch Med, Osaka Univ, Osaka, <sup>2</sup>Univ of Fukui, Fukui, <sup>3</sup>Hyogo Medical Univ, Hyogo,  
<sup>4</sup>Grad Sch of Front Bio, Osaka Univ, Osaka, <sup>5</sup>Div of Dev Neurosci, United Grad Sch of Child Dev (UGSCD), Osaka Univ, Osaka
- P2-013** Establishment of a more effective ALS disease model using feeder-free disease-specific iPSCs  
○Zohora Khatun<sup>1</sup>, Kazunari Onodera<sup>1</sup>, Fuyuki Miya<sup>2</sup>, Shinichi Yamaguchi<sup>1</sup>, Rina Okada<sup>1</sup>, Muhammad Irfanur Rashid<sup>1</sup>, Haruhisa Inoue<sup>3</sup>, Masashi Aoki<sup>4</sup>, Hideyuki Okano<sup>5</sup>, Manabu Doyu<sup>6</sup>, Yohei Okada<sup>1</sup>  
<sup>1</sup>Department of Neural iPSC Research, Institute for Medical Science of Aging, Aichi Medical University,  
<sup>2</sup>Center for Medical Genetics, Keio University School of Medicine,  
<sup>3</sup>Center for iPS Cell Research and Application (CiRA), Kyoto University,  
<sup>4</sup>Department of Neurology, Tohoku University Graduate School of Medicine,  
<sup>5</sup>Department of Physiology, Keio University School of Medicine,  
<sup>6</sup>Department of Neurology, Aichi Medical University School of Medicine
- P2-014** チューブリンはシナプス後肥厚部の必須構築分子である  
Tubulin is an essential building block of postsynaptic density  
○Tatsuo Suzuki<sup>1</sup>, Toshihiro Fujii<sup>2</sup>, Kiyokazu Kametani<sup>3</sup>, Weidong Li Li<sup>4</sup>, Katsuhiko Tabuchi<sup>5</sup>  
<sup>1</sup>Dept Mol & Cell Phys, Shinshu Univ. Sch Med, <sup>2</sup>Shinshu Univ Textile Sci & Tech, <sup>3</sup>Dept Veterinary Anat, Rakuno Gakuen Univ,  
<sup>4</sup>Center Brain Health & Brain Tech, Shanghai Jiao Tong Univ, China,  
<sup>5</sup>Dept Mol & Cell Phys, Shinshu Univ. Academic Assembly, Inst Med
- P2-015** NMDA 受容体依存的なリン酸化シグナルが忌避学習に必要なシナプス可塑性を制御する  
Signal flow in the NMDA receptor-dependent phosphoproteome regulates postsynaptic plasticity for aversive learning  
○Yasuhiro Funahashi<sup>1</sup>, Rijwan Uddin Ahammad<sup>1,2,10</sup>, Xinjian Zhang<sup>3</sup>, Hossen Emran<sup>1,2</sup>, Masahiro Kawatani<sup>4</sup>, Akira Yoshimi<sup>6,7</sup>, Li Xu<sup>1,2</sup>, Daisuke Tsuboi<sup>1,2</sup>, Tomoki Nishioka<sup>1,2</sup>, Keisuke Kuroda<sup>5</sup>, Mutsuki Amano<sup>5</sup>, Yukihiko Noda<sup>6,7</sup>, Kiyofumi Yamada<sup>3,6</sup>, Kenji Sakimura<sup>8</sup>, Taku Nagai<sup>3</sup>, Takayuki Yamashita<sup>4,11</sup>, Shigeo Uchino<sup>9</sup>, Kozo Kaibuchi<sup>1,2</sup>  
<sup>1</sup>CMS, Fujita Health Univ, <sup>2</sup>Div Cell Biol, ICBS, Fujita Health Univ, <sup>3</sup>Div Behav Neuropharmacol, ICBS, Fujita Health Univ,  
<sup>4</sup>Dept Physiol, Sch Med, Fujita Health Univ, <sup>5</sup>Dept Cell Pharmacol, Grad Sch Med, Nagoya Univ,  
<sup>6</sup>Dept Neuropsychopharmacol Hospital Pharm, Grad Sch Med, Nagoya Univ,  
<sup>7</sup>Div Clin Sci Neuropsychopharmacol, Fac Grad Sch Pharm, Meijo Univ, <sup>8</sup>Brain Res Inst, Niigata Univ,  
<sup>9</sup>Dept Biosci, Sch Sci Eng, Teikyo Univ, <sup>10</sup>ATRI, Keck Sch of Med of USC, USA, <sup>11</sup>Div Neurophysiol, ICBS, Fujita Health Univ
- P2-016** アルツハイマー病におけるタウタンパク質異常と樹状突起スパインの関係  
Relationship between Tau Protein Abnormalities and Dendritic Spines in Alzheimer's Disease  
○Misaki Ueda, Boxiao Zhao, Shigeo Sakuragi, Hiroko Bannai  
Dept Elec Eng Biosci, Grad Sch Adv Sci Eng, Waseda Univ
- P2-017** Resonance 特性の発現に必要な Kcnq (Kv7) チャネルの機能的特性  
The gating property of Kcnq (Kv7) crucial for inducing resonance  
○Yuta Eguchi<sup>1,2</sup>, Yuki Kuwano<sup>3</sup>, Satoshi Okada<sup>2</sup>, Hiroyuki Morino<sup>3</sup>, Kouichi Hashimoto<sup>1</sup>  
<sup>1</sup>Dept Neurophysiol, Grad Sch Biomed Health Sci, Hiroshima Univ,  
<sup>2</sup>Dept Pediatr, Grad Sch Biomed Health Sci, Hiroshima Univ, <sup>3</sup>Dept Med Genet, Grad Sch Biomed Sci, Tokushima Univ
- P2-018** アストロサイト活性化を介した結節性硬化症モデルマウスの行動異常誘発メカニズム  
Mechanism of behavioral impairments induced by astrocyte activation in tuberous sclerosis model mouse  
○Tadayuki Shimada<sup>1</sup>, Hiroko Sugiura<sup>1</sup>, Kanato Yamagata<sup>1,2</sup>, Hiroshi Sakuma<sup>1</sup>  
<sup>1</sup>Tokyo Metropolitan Institute of Medical Science, Tokyo, <sup>2</sup>Takada Nishishiro Hospital, Niigata

- P2-019** 炎症関連グリア細胞を標識する新規 in vivo ツールの確立  
Establishment of novel genetic tools to label the inflammation-associated glial cells  
○Kenichi Nagata<sup>1</sup>, Kazuto Yoshimi<sup>2</sup>, Daisuke Motooka<sup>3</sup>, Sumiko Kiryu-Seo<sup>1</sup>  
<sup>1</sup>Nagoya University, Graduate School of Medicine, <sup>2</sup>Institute of Medical Science, The University of Tokyo, <sup>3</sup>Research Institute for Microbial Diseases, The University of Osaka
- P2-020** 生後ラット大脳皮質領域の BBB 形成過程におけるミクログリアの役割  
The role of microglia on the functional maturation of the blood brain barrier (BBB) in the rat postnatal cerebral cortex (CC)  
○Yukari Shigemoto-Mogami, Kimiko Nakayama-Kitamura, Kazue Hoshikawa, Kaoru Sato  
Dept Pharmacol. NIHS
- P2-021** GPNMB は性差特異的なメカニズムでアルツハイマー病の病態進行に寄与する  
GPNMB contributes to the pathogenesis of Alzheimer's disease through sex-specific mechanisms  
○Kohichi Kawahara, Reo Ogata, Riku Sato  
Dept Bio-analytical Chemistry, Niigata Univ Pharm Med Life Sci
- P2-022** 脳発達期の膜小胞輸送異常が惹起する神経発達症の分子細胞病態  
Cellular and Molecular Pathology of Neurodevelopmental Disorders Caused by Abnormal Membrane Trafficking in the Developing Brain  
○Yasushi Enokido, Yumi Tsuneura, Taeko Kawai, Naoko Inamura, Tohru Matsuki, Atsuo Nakayama  
Dept Cell Pathol, Inst Dev Res, Aichi Dev Disabl Center
- P2-023** 末梢ミエリン形成における L-MPZ の機能の一部はプロテインキナーゼ C により制御されている  
The role of L-MPZ in peripheral myelin formation is partly regulated by protein kinase C  
○Yoshihide Yamaguchi, Souichirou Mizuma, Nanami Moriya, Shunsuke Seki, Riho Nishioka, Hirokazu Ohtaki  
Dept Funct Neurobio, Tokyo Univ of Pharm and Life Sci
- P2-024** アクチン・チューブリン・中間径フィラメントによるアストロサイト分岐構造制御  
The role of actin / tubulin / intermediate filaments on astrocyte branch dynamics  
○Mariko Hayashi, Miku Yoshida, Yuri Okada  
Showa Women's University
- P2-025** A dopamine D1-like receptor agonist ameliorates stab wound-induced brain injury through its immunosuppressive effect  
○Mohammed E. Choudhury, Junya Tanaka, Naoki Abe, Tasuku Nishihara  
Department of Anesthesia and Perioperative Medicine, Ehime University Graduate School of Medicine
- P2-026** ミューラー細胞の P2Y1 受容体欠損は酸化ストレス依存的な視機能障害を誘導する  
Loss of P2Y1 receptors in Muller cells induces oxidative stress-mediated visual dysfunction  
○Hinako Mori<sup>1</sup>, Youichi Shinozaki<sup>1,2,3</sup>, Kenji Kashiwagi<sup>4</sup>, Schuichi Koizumi<sup>1,3</sup>  
<sup>1</sup>Dept. Neuropharmacol., Interdiscip. Grad. Sch. Med. Univ. Yamanashi, Yamanashi, <sup>2</sup>Vis. Res. Project, Tokyo Metro. Inst. Med. Sci., Tokyo, <sup>3</sup>GLIA Center, Univ. Yamanashi, Yamanashi, <sup>4</sup>Dept. Ophthalmol, Interdiscip. Grad. Sch. Med. Univ. Yamanashi, Yamanashi
- P2-027** 胎生期のミクログリアの分布と分化におけるメカニズム  
Mechanisms Underlying the Colonization and Differentiation of Microglia in the Embryonic Brain  
○Mizuki Ono, Yuki Hattori  
Dept Anatomy and Cell Biology, Nagoya Univ Grad Sch Med
- P2-028** 脳腸相関におけるミクログリアの役割  
The roles of microglia in gut-brain axis  
○Wataru Shibata  
Division of Gastroenterology and Hepatology, Department of Internal Medicine, Keio University School of Medicine
- P2-029** 新生仔低酸素虚血白質障害ラットにおけるミクログリア依存的シナプス刈り込みの異常  
Synaptic Pruning Deficits Mediated by Microglia in Neonatal White Matter Injury  
○Shiori Tominaga<sup>1</sup>, Cha-Gyun Jung<sup>2</sup>, Naoki Tajiri<sup>1</sup>, Shinya Ueno<sup>1</sup>, Hideki Hida<sup>1</sup>  
<sup>1</sup>Dept Neurophysiol, Brain Sci, Nagoya City Univ Grad Sch Med Sci, <sup>2</sup>Cent Nur Inter Prom, Nagoya City Univ Grad Sch Nur
- P2-030** ラミニン 411 由来の合成ペプチドはオリゴデンドロサイトの髄鞘膜形成を促進する  
A synthetic peptide derived from laminin 411 promotes the formation of myelin membrane in oligodendrocyte  
○Tomoka Aoki<sup>1</sup>, Binri Sasaki<sup>1</sup>, Nanako Yamada<sup>1</sup>, Hitomi Misawa<sup>1</sup>, Keisuke Hamada<sup>2</sup>, Yuji Yamada<sup>2</sup>, Yamato Kikkawa<sup>2</sup>, Motoyoshi Nomizu<sup>2</sup>, Nobuharu Suzuki<sup>1</sup>  
<sup>1</sup>Department of Clinical Bioanalysis and Molecular Biology, Graduate School of Medical and Dental Sciences, Institute of Science Tokyo, <sup>2</sup>Laboratory of Clinical Biochemistry, School of Pharmacy, Tokyo University of Pharmacy and Life Sciences

- P2-031** Lasp-2 の発現抑制がアストロサイトに及ぼす影響  
The effect of silencing lasp-2 on astrocyte morphology  
○Risa Ohashi<sup>1</sup>, Chieko Ikoma<sup>1</sup>, Koudai Inoue<sup>1</sup>, Suzuno Ichige<sup>1</sup>, Haruka Nakajima<sup>1</sup>, Akiko Tamura<sup>1</sup>, Kazunori Takano<sup>1</sup>, Hiroyuki Nakagawa<sup>2</sup>, Eiji Shigetomi<sup>3</sup>, Asako G Terasaki<sup>1</sup>  
<sup>1</sup>Grad Schi, Chiba Univ, <sup>2</sup>Fac Sci, Fukuoka Univ, <sup>3</sup>Dept Neuropharmacol, Interdiscipl Sch Med, Yamanashi Univ
- P2-032** 脳梗塞モデルにおけるアストロサイト由来 IGFBP2 の発現とその放出  
Expression and release of astrocyte-derived IGFBP2 in stroke models  
○Yuki Nagai<sup>1,2,3</sup>, Eiji Shigetomi<sup>1,2</sup>, Toru Tateoka<sup>2,3</sup>, Yuka Fujimoto<sup>1,2</sup>, Miho Miyakawa<sup>1,2</sup>, Hideyuki Yoshioka<sup>2,3</sup>, Hiroyuki Kinouchi<sup>2,3</sup>, Schuichi Koizumi<sup>1,2</sup>  
<sup>1</sup>Dept Neuropharmacol, Interdiscipl Grad Sch Med, Univ Yamanashi, <sup>2</sup>Yamanashi GLIA center, Univ Yamanashi, <sup>3</sup>Dept Neurosurgery, Interdiscipl Grad Sch Med, Univ Yamanashi
- P2-033** マイクログリア置換は敗血症モデルマウスにおける急性期体温低下を緩和する  
Microglial Replacement Attenuates Acute-Phase Hypothermia in a Mouse Model of Sepsis  
○Naoki Mukai<sup>1</sup>, Mohammed E. Choudhury<sup>2</sup>, Junya Tanaka<sup>2</sup>, Naoki Abe<sup>2</sup>, Satoshi Kikuchi<sup>1</sup>, Noriyuki Miyaue<sup>3</sup>, Jun Takeba<sup>4</sup>, Norio Sato<sup>1</sup>  
<sup>1</sup>Department of Emergency Medicine, Ehime University Graduate School of Medicine, Toon, Ehime, <sup>2</sup>Department of Anesthesia and Perioperative Medicine, Ehime University Graduate School of Medicine, Toon, Ehime, <sup>3</sup>Department of Clinical Pharmacology and Therapeutics, Ehime University Graduate School of Medicine, Toon, Ehime, <sup>4</sup>Department of Aeromedical Services for Emergency and Trauma Care, Ehime University Graduate School of Medicine, Toon, Ehime
- P2-034** Monosulfide/trisulfide はマウスの全身性炎症に伴う微小脳出血の発生および関連する病理変化を抑制する  
Monosulfide and trisulfide prevent systemic inflammation-induced cerebral microbleeds and associated pathogenic events in mice  
○Ryouma Fujioka, Yusei Itihara, Yuki Kurauti, Natuko Hitora-Imamura, Hiroshi Katuki  
Dept Chemico-Pharmacol Sci, Grad Sch Pharm Sci, Kumamoto Univ
- P2-035** 脳移行性 AAV ベクター探索ツールとしてのヒト不死化細胞血液脳関門モデル  
Human immortalized cell-based blood-brain barrier models as a tool for exploring brain-permeable AAV vectors  
○Ryuto Isogai<sup>1</sup>, Mei Fukuda<sup>2</sup>, Hanae Morio<sup>1</sup>, Yoshinori Tanaka<sup>3</sup>, Sachiko Okamoto<sup>3</sup>, Tomomi Furihata<sup>1</sup>  
<sup>1</sup>Lab Adv. Drug Dev. Sci, Sch Pharm, Tokyo Univ Pharm & Life Sci., <sup>2</sup>Lab Clin Pharm & Exp Therapeut, Sch Pharm, Tokyo Univ Pharm & Life Sci., <sup>3</sup>Takara Bio Inc.
- P2-036** Analysis of ADP-ribosylation in a mouse model of neuroinflammation  
○Alimire Ababaikeri<sup>1</sup>, Tsuyoshi Hattori<sup>2</sup>, Osamu Hori<sup>1</sup>  
<sup>1</sup>Lab Neuroanatomy, Kanazawa Univ Grad Sch Med Sci, <sup>2</sup>Lab Anatomy and Neuroscience, Nara Med Univ
- P2-037** ミクログリアは脳梗塞後の海馬歯状回顆粒細胞の樹状突起スパイン密度減少に寄与する  
Microglia play a role in the loss of dendritic spines on dentate gyrus granule cells following cerebral ischemia  
○Momoka Okada, Hitomi Takahashi, Shuma Nakazawa, Koki Hayashi, Natsumi Yamaguchi, Jin Nakatani, Toshinori Sawano, Hidekazu Tanaka  
Pharmacol Lab, Grad Sch Life Sci, Ritsumeikan Univ
- P2-038** ニコチンは、大脳皮質におけるカイニン酸誘導性 *Arc*, *junB* 遺伝子発現を抑制する  
Nicotine administration inhibits kainite-induced *Arc*, *junB* mRNA expression in cerebral cortex  
○Shiho Kasahara, Yuna Kato, Daisuke Ihara, Akiko Tabuchi  
Lab Mol Neurobiol, Grad Sch of Med and Pharm Sci, Univ of Toyama
- P2-039** Quaking5 は、細胞タイプ特異的のトランスクリプトミクスに寄与する  
Quaking5 as a regulator in neural cell type specific transcriptome  
○Masato Yano, Yoshika Hayakawa-Yano  
Core Res Facilities, Basic Sci Res Center Med Sci, The Jikei Univ. Sch Med
- P2-040** マウス胎仔脳においてミエリン関連遺伝子の発現を誘導する新規ポリペプチドの機能解析  
Function analysis of a novel polypeptide inducing myelin-related gene expressions in fetal mice brains  
○Izumi Ikezawa<sup>1,3</sup>, Norihisa Bizen<sup>1</sup>, Hirohide Takebayashi<sup>1,2,3</sup>  
<sup>1</sup>Div Neurobiol and Anat, Grad Sch Med and Dent Sci, Niigata Univ, <sup>2</sup>CCRF, Niigata Univ, <sup>3</sup>Cent Anat Stud, Grad Sch Med, Kyoto Univ
- P2-041** グリオーマ治療の新規分子標的としての ZFHX4 の同定  
Identification of ZFHX4 as a novel molecular target for glioma therapy  
○Shigeki Ohta<sup>1</sup>, Yuki Hirota<sup>2</sup>, Takao Honda<sup>2</sup>, Kazunori Nakajima<sup>2</sup>, Masahiro Toda<sup>3</sup>, Hideyuki Okano<sup>4</sup>, Yutaka Kawakami<sup>1</sup>  
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- P2-042** 発達期脊髄における細胞外マトリックス関連分子の発現  
Expression of extracellular matrix-related molecules in the developing spinal cord  
○Yusuke Minato<sup>1</sup>, Souei Asuka<sup>2</sup>, Tetsuto Yamaura<sup>2</sup>, Chiaki Morita<sup>3</sup>, Rika Sakuma<sup>1</sup>, Seishi Maeda<sup>1</sup>, Hideshi Yagi<sup>1</sup>  
<sup>1</sup>Dept Anat Cell Biol, Hyogo Med Univ Sch Med, <sup>2</sup>Dept Orthop Surg, Hyogo Med Univ Grad Sch Med, <sup>3</sup>Hyogo Med Univ Sch Med
- P2-043** Cux1/2 ノックアウトマウスを用いた発生期マウス大脳新皮質興奮性神経細胞の移動における Cux 遺伝子の影響の検討  
Examination of the effects of Cux1/2 on mouse neocortical excitatory neuronal migration during development using double-knockout mice  
○Ayako M. Kitazawa<sup>1,2</sup>, Satoshi Yoshinaga<sup>1,2</sup>, Mingyung Shin<sup>2</sup>, Kanehiro Hayashi<sup>2</sup>, Hitomi Sano<sup>2</sup>, Koji Oishi<sup>2</sup>, Ken-ichiro Kubo<sup>1,2</sup>, Kazunori Nakajima<sup>1,2</sup>  
<sup>1</sup>Dept. of Anat., The Jikei Univ. Sch. Med., Tokyo, <sup>2</sup>Dept. of Anat., Keio Univ. Sch. Med., Tokyo
- P2-044** 神経・グリア発生におけるタンパク質アルギニンメチル化修飾の役割  
Towards Understanding the Roles of Protein Arginine Methylation in Neural and Glial Development  
○Yugo Ishino, Shoko Shimizu, Shingo Miyata  
Research Institute of Traditional Asian Medicine, Kindai University
- P2-045** ミトコンドリア増加薬がオリゴデンドロサイトの分化におよぼす影響  
Effects of mitochondria-enhancing drugs on oligodendrocyte differentiation  
○Norihito Shintani<sup>1,2</sup>, Suzuha Hishida<sup>1</sup>, Masafumi Noguchi<sup>1</sup>, Keiko Iwata<sup>1</sup>  
<sup>1</sup>Sch Pharmaceut Sci, Wakayama Med Sch, <sup>2</sup>Grad Sch Pharmaceut Sci, Osaka Univ
- P2-046** 鎖状移動している未熟ニューロンが発現する接着分子による移動機構  
Migratory Mechanisms Mediated by Adhesion Molecules Expressed in Chain-forming Immature Neurons  
○Yukina Sakakibara<sup>1</sup>, Kazuya Kuboyama<sup>1</sup>, Mayumi Yamada<sup>2,3</sup>, Takuya Miyamoto<sup>1</sup>, Mizuki Honda<sup>4,5</sup>, Miho Furuta<sup>1</sup>, Masato Sawada<sup>1,6</sup>, Yasuyuki Ohkawa<sup>7</sup>, Shinya Oki<sup>4,8</sup>, Mikio Hoshino<sup>3</sup>, Kazunobu Sawamoto<sup>1,6</sup>  
<sup>1</sup>Dept Dev Regen Neurobiol, Inst Brain Sci, Nagoya City Univ Grad Sch Med Sci, <sup>2</sup>Dept Biosystem Sci, Inst Life Med Sci, Kyoto Univ, <sup>3</sup>Dept Biochem Cell Biol, NCNP, <sup>4</sup>Dept Drug Discov Med, Kyoto Univ Grad Sch Med, <sup>5</sup>Lab Mol Cell Physiol, Grad Sch Integrated Sci Life, Hiroshima Univ, <sup>6</sup>Div Neural Dev Regen, NIPS, <sup>7</sup>Div Transcriptomics, Med Inst Bioreg, Kyushu Univ, <sup>8</sup>Inst Resource Dev Analysis, Kumamoto Univ
- P2-047** アルツハイマー病モデルマウスにおける海馬新生ニューロンのシナプス成熟  
Synaptic maturation of hippocampal new neurons in a mouse model of Alzheimer's disease  
○Kotaro Hanaki<sup>1</sup>, Masanori Hijioka<sup>2</sup>, Kanon Tsuji<sup>2</sup>, Masato Sawada<sup>1,3</sup>, Takashi Saito<sup>2</sup>, Kazunobu Sawamoto<sup>1,3</sup>  
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- P2-048** 新生ニューロンの移動と脳機能回復を促進する新規バイオマテリアルの開発  
A Novel Biomaterial that Promotes Neuronal Migration and Enhances Brain Function Recovery  
○Takahiro Suzuki<sup>1,2</sup>, Kazuya Kuboyama<sup>1</sup>, Takuya Miyamoto<sup>1</sup>, Naoya Kawamura<sup>1</sup>, Kumiko Matsunaga<sup>3</sup>, Kunio Mochizuki<sup>3</sup>, Naoki Shimada<sup>4</sup>, Shigeru Koyamoto<sup>5</sup>, Tomotaka Ishizaki<sup>2</sup>, Ryuta Saito<sup>2</sup>, Kazunobu Sawamoto<sup>1,6</sup>  
<sup>1</sup>Dept Dev Regen Neurobiol, IBS, Nagoya City Univ Grad Sch Med Sci, <sup>2</sup>Dept Neurosurg, Nagoya Univ Grad Sch Med, <sup>3</sup>SOMAR CORP, <sup>4</sup>THE JAPAN WOOL TEXTILE CO LTD, <sup>5</sup>KYOTO MEDICAL PLANNING CO LTD, <sup>6</sup>Div Neural Dev Regen, NIPS
- P2-049** 成体嗅球のニューロン新生におけるミクログリアによる死細胞貪食の役割  
Role of microglial phagocytosis of dead neurons in neuronal regeneration in the adult olfactory bulb  
○Kiichi Toyoda<sup>1,2</sup>, Masato Sawada<sup>1,3</sup>, Takashi Ogino<sup>1</sup>, Ryuta Koyama<sup>4</sup>, Kenichi Asano<sup>5</sup>, Masato Tanaka<sup>5</sup>, Shinichi Iwasaki<sup>2</sup>, Kazunobu Sawamoto<sup>1,3</sup>  
<sup>1</sup>Dept Dev Regen Neurobiol, IBS, Nagoya City Univ Grad Sch Med Sci, <sup>2</sup>Dept Otolaryngol Head Neck Surg, Nagoya City Univ Grad Sch Med Sci, <sup>3</sup>Div Neural Dev Regen, NIPS, <sup>4</sup>Dept Transl Neurobiol, NIN, NCNP, <sup>5</sup>Lab Immun Reg, Sch Life Sci, Tokyo Univ Phar Life Sci
- P2-050** cGAS によって制御される中枢神経系関連マクロファージは髄膜構造の維持を担う  
The CNS-associated macrophages regulated by cGAS maintain meningeal architecture  
○Chihiro Hiraki<sup>1</sup>, Fuminori Tsuruta<sup>2</sup>  
<sup>1</sup>Doctoral Program in Biology, Grad. Sch. of Life and Env. Sci., University of Tsukuba, <sup>2</sup>Institute of Life and Environmental Sciences, University of Tsukuba
- P2-051** Cav1 による神経幹細胞運命の制御  
Cav1-Mediated Regulation of Neural Stem Cell Fate  
○He Zhang<sup>1,2</sup>, Takuya Tomita<sup>1</sup>, Yasushi Saeki<sup>1</sup>, Taeko Kobayashi<sup>1</sup>  
<sup>1</sup>Div Protein Metab, Inst Med Sci, Univ Tokyo, <sup>2</sup>Div Integr Life Sci, Grad Sch Biostudies, Kyoto Univ

- P2-052** 成体脳におけるニューロン新生の加齢性変化  
Age-related changes in neurogenesis in the adult brain  
○Hitomi Fujiyama<sup>1</sup>, Mami Matsumoto<sup>1,2</sup>, Kazunobu Sawamoto<sup>1,2</sup>  
<sup>1</sup>Dept Dev Regen Neurobiol, Inst Brain Sci, Nagoya City Univ Grad Sch Med Sci, <sup>2</sup>Div Neural Dev Regen, NIPS
- P2-053** MECP2 欠損マーモセット海馬の Single Nucleus RNA シーケンシング解析による歯状回の未熟発達の解明  
Single Nucleus RNA-sequencing of MECP2 Deficient Marmoset Hippocampus Reveals Immature Development at Dentate Gyrus  
○Ching Chi Jimmy He<sup>1</sup>, Noriyuki Kishi<sup>2,3</sup>, Tsukasa Sanosaka<sup>1</sup>, Hideyuki Okano<sup>2,3</sup>, Jun Kohyama<sup>4</sup>  
<sup>1</sup>Dept Physiol, Sch Med, Keio Univ Grad Sch Med, <sup>2</sup>Lab Marmoset Brain Dis, RIKEN CBS, <sup>3</sup>Regen Med Res Ctr, Keio Univ, <sup>4</sup>Stem Cell Biol Lab, Fac Human Sci, Waseda Univ
- P2-054** Photo-isolation chemistry 法を用いた傷害周囲皮質を移動する新生ニューロンの高空間分解能遺伝子発現プロファイリングとその特徴の記述  
High spatial resolution gene expression profiling and characterization of neuroblasts migrating in the peri-injured cortex using photo-isolation chemistry  
○Takuya Miyamoto<sup>1,2</sup>, Kazuya Kuboyama<sup>1</sup>, Mizuki Honda<sup>3,4</sup>, Yasuyuki Ohkawa<sup>5</sup>, Shinya Oki<sup>3,6</sup>, Kazunobu Sawamoto<sup>1,7</sup>  
<sup>1</sup>Dept Dev Regen Neurobiol, Nagoya City Univ Grad Sch Med Sci, <sup>2</sup>Dept Otolaryngol Head Neck Surg, Nagoya City Univ Grad Sch Med Sci, <sup>3</sup>Dept Drug Dis Med, Kyoto Univ Grad Sch Med, <sup>4</sup>Lab Mol and Cellular Phys, Grad Sch Integrated Sci Life, Hiroshima Univ, <sup>5</sup>Div Transc Med Inst Bioreg, Kyushu Univ, <sup>6</sup>Inst Res Dev and Analysis, Kumamoto Univ, <sup>7</sup>Div Neural Dev and Regen, National Inst Phys Sci
- P2-055** 繊毛遺伝子欠失による先天性水頭症および新生児損傷脊髄の修復不全  
Loss of ciliary protein caused congenital hydrocephalus and insufficient recovery after neonatal spinal cord injury  
○Iyo Yorifuji, Toshihide Yamashita  
Mol Neu, Osaka Univ Grad Sch med
- P2-056** Exploring a novel molecular pathway that links neurodevelopmental and neurodegenerative disorders  
○Mohamed Darwish, Yoko Iijima, Takatoshi Iijima  
Department of Molecular Life Science, School of Medicine, Tokai University
- P2-057** 触覚学習・記憶における BDNF/MEK/ERK1/2 シグナル伝達構成要素の異なる関与  
Distinct contributions to whisker-dependent tactile learning and memory by components of the BDNF/MEK/ERK1/2 signaling pathway  
○Hitomi Soumiya, Shingo Mori, Khota Kageyama, Hidefumi Fukumitsu  
Lab Mol Biol, Gifu Pharmaceutical University
- P2-058** 炎症因子やストレス誘導因子のオリゴデンドロサイト系譜細胞に与える影響  
The Effect of Inflammatory and Stress-induced Factors on Oligodendrocyte Lineage Cells  
○Sakurako Abe<sup>1</sup>, Hitomi Misawa<sup>2</sup>, Nobuharu Suzuki<sup>1,2</sup>  
<sup>1</sup>Medical Technology Major, School of Health Care Sciences, Faculty of Medicine, Institute of Science Tokyo, <sup>2</sup>Department of Clinical Bioanalysis and Molecular Biology, Graduate School of Medical and Dental University, Institute of Science Tokyo, Tokyo
- P2-059** 神経伝達抑制因子として発見された BDNF pro-peptide の分泌機構  
- そのメカニズムと脳疾患治療と診断のための基礎研究 -  
Secretion Mechanism of BDNF pro-peptide Identified as a Synaptic Transmission Suppressor: Toward Basic Research for Diagnosis and Treatment of Neuropsychiatric Disorders  
○Mana Sueyoshi, Masami Kojima  
Dept Biosci, Grad Sch Eng, Kanazawa Inst Technol
- P2-060** BDNF 副産物 BDNF pro-peptide は BDNF の作用の抑制因子である  
BDNF pro-peptide, a BDNF processing byproduct, is an inhibitor of BDNF activity  
○Manaka Yoneda<sup>1</sup>, Masami Kojima<sup>1</sup>, Shingo Suzuki<sup>2</sup>, Tatsuki Saitou<sup>1</sup>, Yuki Matsui<sup>1</sup>, Misaki Miyata<sup>1,3</sup>  
<sup>1</sup>Dept Biosci, Grad Sch Eng, Kanazawa Inst Technol, <sup>2</sup>Faculty of Medicine, Kagawa University Kita-gun, <sup>3</sup>Division of Animal Resources and Development, Life Science Research Center, Administration Center for Promotion of Research, Organization for Promotion of Research, University of Toyama
- P2-061** Progranulin の過剰な発現は神経毒性を引き起こす  
Overexpression of Progranulin Induces Neurotoxicity Instead of Neuroprotection  
○Shinya Kusakari<sup>1</sup>, Hiroaki Suzuki<sup>1</sup>, Mikiro Nawa<sup>1</sup>, Katsuko Sudo<sup>2</sup>, Rio Yamazaki<sup>1</sup>, Tamami Miyagi<sup>1</sup>, Tomoko Ohara<sup>1</sup>, Masaaki Matsuoka<sup>1</sup>, Kohsuke Kanekura<sup>1</sup>  
<sup>1</sup>Dept Pharmacol, Tokyo Med Univ, <sup>2</sup>Pre-Clin Res Ctr, Tokyo Med Univ

- P2-062** てんかんモデルを用いた興奮毒性後の神経細胞死の解析  
Analysis of neuronal cell death in excitotoxicity of epilepsy model  
○Tsuyoshi Hattori<sup>1</sup>, Ly Huong Nguyen<sup>2</sup>, Mika Takarada<sup>2</sup>, Hiroshi Ishii<sup>2</sup>, Kouko Tatsumi<sup>1</sup>, Haruhiro Higashida<sup>3</sup>, Hiroshi Okamoto<sup>4</sup>, Osamu Hori<sup>2</sup>  
<sup>1</sup>Dept Anat and Neurosci, Nara Med Univ, <sup>2</sup>Dept Neuroanat, Grad Sch Med Sci, Kanazawa Univ, <sup>3</sup>Res Cent Child Ment Dev, Kanazawa Univ, <sup>4</sup>Tohoku Univ
- P2-063** タウはミトコンドリアの過分極と呼吸鎖複合体 I 活性低下により神経細胞死を引き起こす  
Tau causes neurodegeneration via disruption of OXPHOS complex I and mitochondrial hyperpolarization in a Drosophila model  
○Arisa Tamura, Akiko Asada, Taro Saito, Kanae Ando  
Laboratory of Molecular Neuroscience, Department of Biological Sciences, Graduate School of Science, Tokyo Metropolitan University
- P2-064** 脊髄損傷後の血管新生制御機構  
Regulatory mechanism of angiogenesis after spinal cord injury  
○Yuki Wakayama<sup>1</sup>, Hoai Dinh Thi Phuong<sup>1</sup>, Kohji Sato<sup>1</sup>, Satoru Yamagishi<sup>2</sup>  
<sup>1</sup>Department of Organ and Tissue Anatomy, Hamamatsu University School of Medicine, <sup>2</sup>Optical Neuroanatomy, Preeminent Medical Photonics Education & Research Center, Hamamatsu University School of Medicine
- P2-065** シナプス形成に依存するシナプス前因子のダイナミクス解析システムの構築  
Construction of an analytical system for the dynamics of presynaptic factors dependent on synaptic formation  
○Mikito Toyoda<sup>1</sup>, Haruto Suzuki<sup>3</sup>, Rui Sakata<sup>3</sup>, Kaho Nakajima<sup>3</sup>, Tokuchi Iguchi<sup>2</sup>, Yoshiyuki Konishi<sup>4</sup>  
<sup>1</sup>Industrial Innovation of Engineering, Graduate School of Engineering, University of Fukui, <sup>2</sup>Fukui Medical University, Faculty of Health and Medical Sciences, Laboratory of Morphological Functional Science, <sup>3</sup>Department of Materials Science and Biotechnology, School of Engineering, University of Fukui, <sup>4</sup>Department of Materials Science and Biotechnology, Faculty of Engineering, University of Fukui
- P2-066** Diosgenin による軸索伸長に関連する分泌分子  
Secreted molecules related to axonal elongation induced by Diosgenin  
○Kosei Takeuchi, Chiao-eng Chen, Chihiro Tohda  
Sec Neuromed Sci, Inst Natural Med, Univ of Toyama
- P2-067** 脳梗塞マウスの視床垂核における細胞活動亢進とミクログリアの集積について  
Hyperactivity of the thalamic nucleus and microglial accumulation in mice with cerebral infarction  
○Ryota Nakamoto<sup>1</sup>, Takuto Hanasaki<sup>1</sup>, Hirohito Kan<sup>2</sup>, Sachiko Lee<sup>3</sup>  
<sup>1</sup>Nagoya Univ Grad Sch Med, <sup>2</sup>Dep Heal Sci, Nagoya Univ Grad Sch Med, <sup>3</sup>Dep Prev Reha, Nagoya Univ Grad Sch Med
- P2-068** *Sept7* のハプロ不全は部分的胎生 / 生後致死と温熱覚障害を伴う感覚神経線維網の低形成として現れる  
*Sept7* haploinsufficiency manifests as partial pre/postnatal lethality and sensory nerve fiber hypotrophy with thermal hypesthesia  
○Naoki Goto<sup>1</sup>, Hirotaka Shoji<sup>2</sup>, Masashi Nishikawa<sup>1</sup>, Chikako Nakajima<sup>1</sup>, Minoru Kamei<sup>1</sup>, Tatsuyuki Kurashina<sup>1</sup>, Yoshihiro Takamiya<sup>2</sup>, Natsumi Ageta-Ishihara<sup>1</sup>, Mica Ohara-Imaizumi<sup>3</sup>, Kosei Takeuchi<sup>4</sup>, Tsuyoshi Miyakawa<sup>2</sup>, Makoto Kinoshita<sup>1</sup>  
<sup>1</sup>Neurosci Inst, Nagoya Univ Grad Sch Sci, <sup>2</sup>Cent for Comprehensive Med Sci, Fujita Health Univ, <sup>3</sup>Kyorin Univ Sch of Med, <sup>4</sup>Aichi Med Univ
- P2-069** 線維筋痛症モデルにおけるストレス誘導性の固有感覚経路および脊髄ミクログリアの活性化  
Stress-induced activation of proprioceptive pathways and spinal microglia in an animal model of fibromyalgia  
○Koji Wakatsuki<sup>1</sup>, Hiroshi Kiyama<sup>1,2</sup>, Sumiko Kiryu-Seo<sup>1</sup>  
<sup>1</sup>Dept Funct Anat Neurosci, Nagoya Univ Grad Sch Med, Nagoya, <sup>2</sup>Shijonawate Gakuen University
- P2-070** 機械性痛覚過敏に対する SEMA3E 阻害抗体の治療効果  
Therapeutic Effects of Semaphorin 3E Blocking Antibody on Mechanical Pain Hypersensitivity  
○Sato Yoshidomi, Takayuki Fujii, Kaoru Kashu, Yuka Inoue, Noriko Isobe  
Dept Neurol, Kyusyu Univ Grad Sch Med Sci
- P2-071** 嫌悪刺激による感覚情報の統合における扁桃体中心核の役割  
The role of the central amygdala in integrating sensory information evoked by various aversive stimuli  
○Xinliang Zhou<sup>1</sup>, Yuta Sakuragi<sup>1</sup>, Chiaki Katagiri<sup>1</sup>, Hiroshi Nomura<sup>2</sup>, Masabumi Minami<sup>1</sup>  
<sup>1</sup>Grad Sch Phar, Univ of Hokkaido, Sapporo, <sup>2</sup>Nagoya City Univ Grad Sch Med Sci

- P2-072** 中枢性疲労を主徴とする神経発達障害群のトランス診断アプローチとその神経化学的背景  
Trans-diagnostic approach to neurodevelopmental disorders characterized by central fatigue and their neurochemical background  
○Takanobu Yamamoto<sup>1</sup>, Hirotsugu Azechi<sup>2</sup>  
<sup>1</sup>Department of Psychology, Neurophysiology section, Tezukayama University,  
<sup>2</sup>Laboratory of Cognitive and Behavioral Neuroscience, Graduate School of Brain Science, Doshisha University, Kyotanabe
- P2-073** プログラニュリンによる新たなリソソーム恒常性維持機構  
A novel role of progranulin to maintain lysosomal homeostasis  
○Mai Makino<sup>1,2</sup>, Takayuki Shima<sup>1,2</sup>, Takao Kiriya<sup>3</sup>, Kazuha Nagae<sup>1</sup>, Tatsuya Kaminishi<sup>4</sup>, Tamotsu Yoshimori<sup>4</sup>, Kazuma Sugie<sup>2,3</sup>, Shuhei Nakamura<sup>1,2</sup>  
<sup>1</sup>Dept Biochem, Nara Med Univ, <sup>2</sup>Center for Autophagy and Anti-Aging Research, Nara Med Univ, <sup>3</sup>Dept Neuro, Nara Med Univ, <sup>4</sup>Grad Sch Med, Osaka Univ
- P2-074** 認知症予防のために高齢者の食習慣を効果的に改善する尿バイオマーカーの応用  
Application of urinary biomarkers is effective to improve the dietary pattern in the Japanese elderly to prevent dementia  
○Masayo Shamoto-Nagai, Wakako Maruyama  
Dept of Health and Nutritional Sci, Fac Health Sci, Aichi Gakuin Univ
- P2-075** 神経発達障害関連 ARF1 変異による大脳皮質形成障害の分子機構  
Pathophysiological significance of variants in ARF1 responsible for a neurodevelopmental disorder  
○Hidenori Ito<sup>1</sup>, Tomoki Ishiguro<sup>1</sup>, Mariko Noda<sup>1</sup>, Masashi Nishikawa<sup>1,2</sup>, Koh-ichi Nagata<sup>1,3</sup>  
<sup>1</sup>Dept Mol Neurobiol, Inst Dev Res, Aichi Dev Disabil Ctr, <sup>2</sup>Div Biol Sci, Nagoya Univ Grad Sch Sci, <sup>3</sup>Dept Neurochem, Nagoya Univ Grad Sch Med
- P2-076** イヌとネコにおける Tau の種差に関する検索  
The species difference of Tau: TSG101 knockdown induces intracellular accumulation of cat Tau but not dog Tau  
○Nobuyuki Kimura<sup>1</sup>, Yuzuki Tsukimoto<sup>1</sup>, Akira Matsuda<sup>2</sup>, Fumio Hoshi<sup>2</sup>, Yumi Une<sup>3</sup>  
<sup>1</sup>Department of Veterinary Associated Science, Faculty of Veterinary Medicine, Okayama University of Science, <sup>2</sup>Department of Internal Medicine, Faculty of Veterinary Medicine, Okayama University of Science, <sup>3</sup>Department of Pathology, Faculty of Veterinary Medicine, Okayama University of Science
- P2-077** 高速原子力間顕微鏡を用いた神経系タンパク質の動態解析  
Dynamic Analysis of Neural Proteins Using High-Speed Atomic Force Microscopy  
○Hironori Kawahara<sup>1,2</sup>, Tang Zixin<sup>1</sup>, Naoki Shukuya<sup>1</sup>, Noriyuki Kadera<sup>2</sup>, Rikinari Hanayama<sup>1,2</sup>  
<sup>1</sup>Dept Immunology, Grad Sch Med Sci, Kanazawa Univ, <sup>2</sup>WPI Nano Life Science Institute, Kanazawa University
- P2-078** パーキンソン病で増加するαシヌクレインの DOPA 化は中脳黒質の神経変性を促進する  
Dopaminization of α-synuclein in Parkinson's disease leads to a neurodegeneration of dopaminergic neurons in the substantia nigra  
○Sakiko Matsumoto<sup>1,2</sup>, Mingyue Jin<sup>2</sup>, Takashi Ayaki<sup>3</sup>, Keisuke Togawa<sup>4</sup>, Akitoshi Takeda<sup>4</sup>, Toshifumi Takao<sup>5</sup>, Shinji Hirotsune<sup>2</sup>  
<sup>1</sup>Dept Functional Anat Neurosci, Nagoya Univ Grad Sch Med, <sup>2</sup>Dept Genetic Dis Res, Osaka Metropolitan Univ Grad Sch Med, <sup>3</sup>Dept Neurol, Kyoto Univ Grad Sch Med, <sup>4</sup>Dept Neurol, Osaka Metropolitan Univ Grad Sch Med, <sup>5</sup>Lab Prot Profiling Proteomics, Inst Prot Res, Osaka Univ
- P2-079** アルツハイマー病モデルマウスのミクログリアにおけるサブクラス選択的な内在性 IgG 集積とその機能  
Subclass-selective accumulation of endogenous IgG in a mouse model of Alzheimer's disease and its effects on microglial functions  
○Shogo Ito<sup>1,2</sup>, Kenta Yamauchi<sup>1,2</sup>, Masato Koike<sup>2</sup>, Hiroyuki Hioki<sup>1,2,3</sup>  
<sup>1</sup>Department of Neuroanatomy, Juntendo University Graduate School of Medicine, <sup>2</sup>Department of Cell Biology and Neuroscience, Juntendo University Graduate School of Medicine, <sup>3</sup>Department of Multi-Scale Brain Structure Imaging, Juntendo University Graduate School of Medicine
- P2-080** C9orf72-GGGGCC リピート RNA による、I 型インターフェロン経路の活性化  
C9orf72-derived GGGGCC repeat RNA activates type I interferon pathway in a cell model  
○Koujin Miura<sup>1</sup>, Kohji Mori<sup>1</sup>, Tesshin Miyamoto<sup>1</sup>, Ryota Uozumi<sup>1</sup>, Yuki Aoki<sup>1</sup>, Shizuko Kondo<sup>1</sup>, Yuya Kawabe<sup>2</sup>, Shinji Tagami<sup>1,2</sup>, Shiho Gotoh<sup>1</sup>, Shoshin Akamine<sup>1</sup>, Manabu Ikeda<sup>1</sup>  
<sup>1</sup>Department of Psychiatry, Osaka University Graduate School of Medicine, <sup>2</sup>Minoh Neuropsychiatric Sanatorium

- P2-081** プラズマローゲン誘導体 KIT-13 はミトコンドリア DNA 漏出を抑制することでレット症候群フェノタイプを改善する  
Plasmalogen derivative KIT-13 ameliorates Rett syndrome symptoms by inhibiting neuroinflammation through the reduction of mitochondrial DNA leakage  
○Hideyuki Nakashima<sup>1</sup>, Akane Matsuda<sup>1</sup>, Takehiko Fujino<sup>2,3</sup>, Tatsuo Okauchi<sup>4</sup>, Masanori Honsho<sup>5</sup>, Kinichi Nakashima<sup>1</sup>  
<sup>1</sup>Dept Stem Cell Biol Med, Grad Schl Med Sci, Kyushu Univ, <sup>2</sup>Div Lipid Cell Biol, Inst Rheological Functions Food, <sup>3</sup>Neurocores, Inc, <sup>4</sup>Dep Appl Chem, Kyushu Inst of Tech, <sup>5</sup>Dep, Neuroinfla Brain Fatigue Sci, Grad Sch Med Sci, Kyushu Univ
- P2-082** ミトコンドリア病患者由来 iPS 細胞における変異 mtDNA が神経分化に与える影響  
Impact of mutant mtDNA on neural differentiation in iPSCs derived from patients with mitochondrial diseases  
○Naoki Yahata<sup>1,2,3</sup>, Ryuji Hata<sup>3</sup>, Takashi Namba<sup>1,2,4</sup>  
<sup>1</sup>Dept Dev Biol, Fujita Health Univ Sch Med, <sup>2</sup>Div Dev Neurobiol, ICBS, Fujita Health Univ, <sup>3</sup>Dept Anat I, Fujita Health Univ Sch Med, <sup>4</sup>Neurosci Center, HiLIFE, Univ Helsinki, Finland
- P2-083** TDP-43 液滴はどのように分解されるのか？ HSPA1A と HSPB1 の役割  
How Are TDP-43 Droplets Disassembled? The Roles of HSPA1A and HSPB1  
○Toru Yamashita, Ricardo Satoshi Ota-Elliott, Hongming Sun, Yusuke Fukui, Ryuta Morihara, Hiroyuki Ishiura  
Dept Neurology, Okayama Univ
- P2-084** Conformational switch in the alpha-synuclein C-terminus domain directs its fibril polymorphs  
○Cesar Aguirre<sup>1</sup>, Yohei Miyanoiri<sup>2</sup>, Yoh Matsuki<sup>3,4</sup>, Nan Wang<sup>1</sup>, Kensuke Ikenaka<sup>1</sup>, Hideki Mochizuki<sup>1</sup>  
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- P2-085** 神経・精神疾患とスプライシングにおける Teneurin-4 バリエントの細胞接着活性  
Cell adhesion activity of Teneurin-4 variants in neurological/mental diseases and splicing  
○Chisaki Akutsu<sup>1</sup>, Reina Ono<sup>2</sup>, Mizuki Fukuhara<sup>2</sup>, Yuki Munakata<sup>2</sup>, Nobuharu Suzuki<sup>1,2</sup>  
<sup>1</sup>Medical Technology Major, School of Health Care Sciences, Faculty of Medicine, Institute of Science Tokyo, <sup>2</sup>Department of Clinical bioanalysis and molecular biology, Graduate School of Medical and Dental Sciences, Institute of Science Tokyo
- P2-086** 一細胞解析による脳梗塞後の脳の修復機能の解明  
Single cell analysis reveals reparative function in brain cells after ischemic stroke  
○Ayaka Nakamura<sup>1</sup>, Seiichiro Sakai<sup>1</sup>, Koji Hase<sup>2</sup>, Takashi Shichita<sup>1</sup>  
<sup>1</sup>Department of Neuroinflammation and Repair, Medical Research Laboratory, Institute of Science Tokyo, <sup>2</sup>Division of Biochemistry, Faculty of Pharmacy and Graduate School of Pharmaceutical Science, Keio University
- P2-087** 尿由来細胞から直接誘導した神経細胞を用いたニーマン・ピック病 C 型のモデリング  
Modeling Niemann-Pick Disease Type C by Directly Converted Neurons From Urine-Derived Cells  
○Keita Matsumoto<sup>1</sup>, Maika Itsuno<sup>1</sup>, Naoki Kato<sup>2</sup>, Hideyuki Okano<sup>3</sup>, Sumihiro Maeda<sup>1</sup>  
<sup>1</sup>Dept Physiol, Keio Univ Sch Med, <sup>2</sup>Dept Elec Eng Biosci, Sch Adv Sci Eng, Waseda Univ, <sup>3</sup>Keio Univ
- P2-088** Acteoside による軸索修復が頸椎症性脊髄症の機能回復に寄与することの検討  
Axonal repairing by Acteoside contributes to functional recovery in degenerative cervical myelopathy  
○Kino Sakase, Keigo Hashiba, Chihiro Tohda  
Section of Neuromedical Science, Institute of Natural Medicine, University of Toyama
- P2-089** アルツハイマー病モデル *App* knock-in マウスに対する PLX3397 の影響  
Effect of PLX3397 in the brain of Alzheimer's disease model *App* knock-in mouse  
○Takuto Iida, Tatsuya Manabe, Takashi Saito  
Dept Neurocogn Sci, Inst Brain Sci, Nagoya City Univ Grad Sch Med Sci, Nagoya
- P2-090**  $\alpha$  シヌクレイン過剰発現が海馬神経細胞の樹状突起スパイン密度に及ぼす影響  
Effects of  $\alpha$  -Synuclein Overexpression on Dendritic Spine Density in Hippocampal Neurons  
○Mio Kawatsu, Boxiao Zhao, Shigeo Sakuragi, Hiroko Bannai  
Dept Elec Eng Biosci, Grad Sch Adv Sci Eng, Waseda Univ
- P2-091** ALS 疾患特異的 iPS 細胞由来運動ニューロンの多因子解析システムの確立  
Establishment of a multifactorial analysis system for motor neurons derived from ALS disease-specific iPSCs  
○Shinichi Yamaguchi<sup>1</sup>, Kazunari Onodera<sup>1</sup>, Zohora Khatun<sup>1</sup>, Rina Okada<sup>1</sup>, Naoki Atsuta<sup>2</sup>, Gen Sobue<sup>3</sup>, Yohei Okada<sup>1</sup>  
<sup>1</sup>Department of Neural iPSC Research Institute for Medical Science of Aging, Aichi Medical University, <sup>2</sup>Department of Neurology, Aichi Medical University School of Medicine, <sup>3</sup>Aichi Medical University

- P2-092** マウスの社会敗北ストレス感受性に及ぼすオキサリプラチン及びドキシソルビシンの影響の比較  
Oxaliplatin, but not doxorubicin, enhances susceptibility to social defeat stress in mice  
○Keisuke Mogi<sup>1</sup>, Ayaka Akinaga<sup>1</sup>, Ryoko Tsukube<sup>1</sup>, Takeshi Yasukawa<sup>2</sup>, Hiroto Morimoto<sup>2</sup>, Katsuya Morito<sup>1</sup>, Kentaro Takayama<sup>1</sup>, Yoshinobu Uozumi<sup>2</sup>, Kazuki Nagasawa<sup>1</sup>  
<sup>1</sup>Lab of Environ Biochem Kyoto Pharm Univ, <sup>2</sup>Ako Kasei Co., Ltd.
- P2-093** リン脂質フリッパーゼ ATP8A1/ATP8A2 欠損による小脳神経変性機構の解明  
The mechanism of cerebellar neurodegeneration in phospholipid flippases ATP8A1/ATP8A2 double knock-out mice  
○Shu Tokunaga<sup>1</sup>, Yuta Umemura<sup>1</sup>, Muneyuki Kawase<sup>1</sup>, Hossam Shawki<sup>2</sup>, Tsuzumi Nakajima<sup>1</sup>, Mana Kato<sup>1</sup>, Chiharu Miyajima<sup>1</sup>, Hisashi Oishi<sup>2</sup>, Jumpei Omi<sup>3</sup>, Junken Aoki<sup>3</sup>, Owen Chapman<sup>2</sup>, Daisuke Kawauchi<sup>2</sup>, Mitsuharu Hattori<sup>1</sup>  
<sup>1</sup>Grad. Sch. Pharm. Sci., Nagoya City Univ., <sup>2</sup>Grad. Sch. Med. Sci., Nagoya City Univ., <sup>3</sup>Grad. Sch. Pharm. Sci., Univ. Tokyo
- P2-094** 球脊髄性筋萎縮症 (SBMA) に関連する新規バイオマーカーの探索  
SOMAscan proteomics identifies novel plasma biomarkers for spinal and bulbar muscular atrophy  
○Ayano Kondo<sup>1</sup>, Madoka Iida<sup>1</sup>, Shinichiro Yamada<sup>1</sup>, Kazuki Obara<sup>1</sup>, Yu Mori<sup>1</sup>, Munetaka Yamamoto<sup>1</sup>, Takahiro Kawase<sup>1</sup>, Shota Komori<sup>1</sup>, Yoshiyuki Kishimoto<sup>1</sup>, Daisuke Ito<sup>1</sup>, Atsushi Hashizume<sup>2</sup>, Masahisa Katsuno<sup>1</sup>  
<sup>1</sup>Dept of Neurology, Nagoya Univ Grad Sch of Med, <sup>2</sup>Department of Clinical Research Education, Nagoya University Graduate School of Medicine
- P2-095** エルゴチオネインの経口投与は認知機能の低下を示すアルツハイマー病モデルマウスの空間記憶を改善し A  $\beta$  の蓄積を減らす  
Oral administration of ergothioneine ameliorates spatial memory and reduces A  $\beta$  deposition in an Alzheimer's disease model mice with cognitive impairments  
○Akira Moritomo<sup>1</sup>, Takahiro Ishimoto<sup>1</sup>, Reiya Yamashita<sup>1</sup>, Hiroki Sasaguri<sup>2</sup>, Takashi Saito<sup>3</sup>, Takaomi Saido<sup>2</sup>, Yukio Kato<sup>1</sup>  
<sup>1</sup>Fac. Pharm, Kanazawa Univ, <sup>2</sup>Lab for Proteolytic Neurosci, RIKEN Brain Sci Inst, <sup>3</sup>Dept Neurocog Sci, Inst Brain Sci, Nagoya City Univ Grad Sch Med Sci
- P2-096** Hippocampal microglia contribute to postoperative cognitive dysfunction by enhancing the excitatory synaptic strength and neuronal excitability of PV interneurons  
○Xiaoxiang Tan<sup>1</sup>, Hongyu Dai<sup>1</sup>, Jing Yuan<sup>1</sup>, Lili Qiu<sup>1</sup>, Xuelong Zhou<sup>2</sup>, Jie Sun<sup>1</sup>  
<sup>1</sup>Department of Anesthesiology, surgery and pain management & Key Laboratory of Clinical Science and Research, Zhongda Hospital Southeast University II Southeast University School of Medicine, Nanjing, China, <sup>2</sup>Department of Anesthesiology, Women's Hospital, School of Medicine, Zhejiang University, Hangzhou, Hangzhou, China
- P2-097** 正常眼圧緑内障マウスモデルの軸索の保護と再伸長に有効な薬用植物未利用部位抽出物  
Protection and regeneration of axons by extracts of unused parts of medicinal plants in normal tension glaucoma mouse model  
○Peiyu Lan, Chihiro Tohda  
Section of Neuromedical Science, Institute of Natural Medicine, University of Toyama
- P2-098** 運動神経の軸索を伸長させる筋肉由来分子の探索  
Identification of muscle-derived molecules that promote motor axon elongation  
○Yusho Ishii, Chihiro Tohda  
Sec. of Neuromedical Science, Inst. of Natural Medicine, Univ. of Toyama
- P2-099** 脂肪酸結合タンパク質 2 型が腸管神経における  $\alpha$ -Synuclein の蓄積に関与する  
Fatty acid-binding protein 2 is involved in  $\alpha$ -Synuclein accumulation in the enteric neurons  
○Tomoki Sekimori<sup>1</sup>, Kohji Fukunaga<sup>2</sup>, Takuya Sasaki<sup>1,3</sup>, Ichiro Kawahata<sup>4</sup>  
<sup>1</sup>Dept Pharmacol, Tohoku Univ Grad Sch Pharm Sci, <sup>2</sup>BRI Pharma Inc, <sup>3</sup>Dept Neuropharmacol, Tohoku Univ Grad Sch Med, <sup>4</sup>Dept Mol Genet, Inst Biomed Sci, Fukushima Med Univ Sch Med
- P2-100** アルツハイマー病モデルマウスにおけるレンボレキサント長期経口投与の効果  
Effects of long-term oral administration of lemborexant in a mouse model of Alzheimer's disease  
○Kazuhiro Hada<sup>1</sup>, Yuki Murata<sup>1</sup>, Yoshiaki Ohi<sup>1</sup>, Hiroyuki Mizoguchi<sup>2</sup>, Kayoko Ozeki<sup>1</sup>, Nobuhiko Nakamura<sup>1</sup>  
<sup>1</sup>Sch Pharm, Aichi Gakuin University, Nagoya, Aichi, <sup>2</sup>Dept Neuropharm, Nagoya Univ Grad Sch Med Sci
- P2-101** 疾患特異的 iPS 細胞を用いた球脊髄性筋萎縮症 (SBMA) の早期病態解明  
Elucidating early pathophysiology of spinal and bulbar muscular atrophy using disease-specific iPSCs  
○Kazunari Onodera<sup>1,2</sup>, Yuichi Riku<sup>3</sup>, Daisuke Shimojo<sup>1,4</sup>, Yasuharu Ishihara<sup>4</sup>, Akinobu Ota<sup>5,6</sup>, Fuyuki Miya<sup>7</sup>, Muhammad Irfanur Rashid<sup>1</sup>, Rina Okada<sup>1</sup>, Yoshitaka Hosokawa<sup>5</sup>, Mari Yoshida<sup>3</sup>, Yasushi Iwasaki<sup>3</sup>, Manabu Doyu<sup>8</sup>, Gen Sobue<sup>9</sup>, Masahisa Katsuno<sup>2</sup>, Hideyuki Okano<sup>4,10</sup>, Yohei Okada<sup>1</sup>  
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- P2-102** ミクログリアにおける CRMP4 の欠損は 6-OHDA 誘発性薬剤性パーキンソン病モデルマウスのドーパミン神経細胞死を抑制する  
Microglial CRMP4 Deficiency Attenuates Dopaminergic Neuronal Loss in a 6-OHDA-Induced Mouse Model of Parkinson's Disease  
○Ryo Asahina  
Department of Life science and Medical Bioscience, Waseda University
- P2-103** Crtac1B/LOTUS は AD モデルマウスにおける認知機能障害を改善する  
Crtac1B/LOTUS ameliorates cognitive dysfunction in AD model mice  
○Yuki Kawaguchi<sup>1</sup>, Junpei Matsubayashi<sup>2</sup>, Kohtaro Takei<sup>1</sup>  
<sup>1</sup>Department of Neurology and Stroke Medicine, Yokohama City University School of Medicine,  
<sup>2</sup>Institute for Advanced Study / MIB, Kyushu University Division of Molecular Systems for Brain Function
- P2-104** 新規 FLVCR1 遺伝子変異による細胞内局在の変化  
A novel FLVCR1 variant alters subcellular localization  
○Yusuke Fukui, Ayaka Matsuo, Yumiko Nakano, Ryuta Morihara, Toru Yamashita, Hiroyuki Ishiura  
Department of Neurology, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences
- P2-105** 神経内分泌腫瘍に対するソマトスタチン受容体の機能と治療標的の可能性  
Functional Role and Targetability of Somatostatin Receptors in Neuroendocrine Tumors  
○Masayasu Okada<sup>1,2</sup>, Manabu Natsumeda<sup>1,2</sup>, Satoshi Shibuma<sup>2</sup>, Manabu Abe<sup>3</sup>, Hirofumi Hanaoka<sup>4</sup>, Keiichi Izumikawa<sup>5</sup>, Makoto Oishi<sup>2</sup>  
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<sup>3</sup>Department of Animal Model Development, Brain Research Institute, Niigata University,  
<sup>4</sup>Near InfraRed Photo-ImmunoTherapy Research Institute, Kansai Medical University,  
<sup>5</sup>Laboratory of Molecular and Cellular Biochemistry, Meiji Pharmaceutical University
- P2-106** リン酸化マッピング解析が解き明かす抗精神病薬がつなぐ脳の新たなネットワーク  
Phosphorylation Mapping Reveals New Brain Connections Linked by Antipsychotic Drugs  
○Daisuke Tsuboi<sup>1</sup>, Sarker Protup<sup>1</sup>, Guinto Mark<sup>2</sup>, Yukie Yamahashi<sup>1</sup>, Yasuhiro Funahashi<sup>1</sup>, Junichiro Yoshimoto<sup>2</sup>  
<sup>1</sup>Dept Cellbio, ICBS, Fujita Univ, <sup>2</sup>Dept Med DataSci, Fujita Univ
- P2-107** 慢性的ストレスホルモン上昇が扁桃体関連亜核に及ぼす分子的影響の探索  
Exploring the molecular impact of chronic stress hormone elevation on amygdala-related subnuclei  
○Shuhe Ueda<sup>1,2</sup>, Masahito Hosokawa<sup>3,4,5</sup>, Manami Kakita<sup>1</sup>, Koji Arikawa<sup>4</sup>, Hiroko Matsunaga<sup>4</sup>, Haruko Takeyama<sup>3,4,5</sup>, Sayaka Takemoto-Kimura<sup>1,2</sup>  
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<sup>4</sup>Res Org for Nano and Life Innov, Waseda Univ, Tokyo, <sup>5</sup>Inst for Adv Res of Biosyst Dyn, Waseda Res Inst for Sci and Eng, Tokyo
- P2-108** 抗うつ治療によるマウス海馬神経新生の促進における転写因子 CREB 寄与解明  
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○Eri Segi-Nishida, Yusuke Sumitomo, Sayoko Yui, Naoto Sakai, Yutaka Kanda, Kanzo Suzuki  
Dept Biol Sci and Tech, Tokyo Univ of Sci
- P2-109** マウスの慢性ストレスによる脳領域選択的な代謝変化と情動変容への関与  
Chronic Stress-induced Metabolic alterations in selective brain regions and their involvement in behavioral disturbance in mice  
○Kohei Ota<sup>1</sup>, Hirotaka Nagai<sup>1</sup>, Wenran Qiu<sup>1</sup>, Io Horikawa<sup>1</sup>, Midori Nagai<sup>1</sup>, Chisato Numa<sup>1</sup>, Shuichi Shimma<sup>2,3</sup>, Tomomi Yamashita<sup>4</sup>, Taro Kato<sup>4</sup>, Tomoyuki Furuyashiki<sup>1</sup>  
<sup>1</sup>Div Pharmacol, Grad Sch Med, Kobe Univ, <sup>2</sup>Dept Biotechnol, Grad Sch Engineering, Osaka Univ,  
<sup>3</sup>Omics Innovation Res Lab, Osaka Univ Shimadzu, <sup>4</sup>Pharmacol Res Unit, Sumitomo Pharma
- P2-110** アルツハイマー病モデルマウスにおける食物由来アミノ酸エルゴチオネインの予防的投与による神経新生とミクログリア貪食活性促進  
Neurogenesis and microglial phagocytic activity in Alzheimer's disease model mice preventively administered with a food-derived amino acid ergothioneine  
○Reiya Yamashita<sup>1</sup>, Takahiro Ishimoto<sup>1</sup>, Yusuke Masuo<sup>1</sup>, Hiroki Sasaguri<sup>2,3</sup>, Takashi Saito<sup>4</sup>, Takaomi Saido<sup>2</sup>, Yukio Kato<sup>1</sup>  
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<sup>3</sup>Dementia Pathophysiol Collaborat Unit, RIKEN Cent Brain Sci,  
<sup>4</sup>Dept Neurocog Sci, Inst Brain Sci, Nagoya City Univ Grad Sch Med Sci
- P2-111** 歯周病原細菌性菌血症による精神疾患発症機構の検討  
A Mechanistic Link of Periodontal Bacteremia and Psychiatric Disorders  
○Yusuke Nasu<sup>1</sup>, Koichi Tabeta<sup>2</sup>, Miho Terunuma<sup>1</sup>  
<sup>1</sup>Div of Oral Biochemistry, Niigata Univ Grad Sch of Med & Dent Sci,  
<sup>2</sup>Div of Periodontology, Niigata Univ Grad Sch of Med & Dent Sci

- P2-112** ヒト iPS 細胞由来神経・筋共培養モデルを用いた運動ニューロン疾患の病態解明  
Establishment of a neuromuscular co-culture model derived from human iPSCs to analyze neuromuscular diseases  
○Yu-Shen Cheng<sup>1</sup>, Rina Okada<sup>1</sup>, Kazunari Onodera<sup>1,2</sup>, Daisuke Shimojo<sup>1,3</sup>, Masahisa Katsuno<sup>2</sup>, Gen Sobue<sup>4</sup>, Hideyuki Okano<sup>5</sup>, Yohei Okada<sup>1</sup>  
<sup>1</sup>Dept Neural iPSC Res, Inst Med Sci Aging, Aichi Med Univ, <sup>2</sup>Dept Neurology, Nagoya Univ Grad Sch Med, <sup>3</sup>Dept Physiology, Keio Univ Sch Med, <sup>4</sup>Aichi Med Univ, <sup>5</sup>Keio Univ, Regen Med Res Ctr
- P2-113** Myelination deficits in a mouse model of neuropsychiatric syndrome  
○Navneet A. Vasistha, Katarina Dragicevic, Irina Korshunova, Konstantin Khodosevich  
Biotech Research and Innovation Center, University of Copenhagen, Ole Maaløes vej 5, Copenhagen N 2200, Denmark
- P2-114** 社会的敗北ストレスによる好中球機能の変化  
Alteration in neutrophil function induced by social defeat stress  
○Rinka Ota, Yuta Yamaguchi, Hiroko Iwamura, Tomoyuki Furuyashiki  
Division of Pharmacology, Kobe University Graduate School of Medicine
- P2-115** 急性拘束ストレスは絶食に伴う求食行動を抑制する  
Suppression of fasting-evoked food-seeking by acute restraint stress  
○Hideki Tamura<sup>1,2</sup>, Ryusei Tojo<sup>1</sup>, Mayuka Tashiro<sup>1</sup>  
<sup>1</sup>Lab Biofunc Sci, Hoshi Univ, <sup>2</sup>Inst Adv Life Sci, Hoshi Univ
- P2-116** 幼少期社会的孤立による攻撃性および恐怖記憶障害は大豆ペプチド摂取により軽減する  
Chronic soy peptide supplementation alleviates aggressive behavior and abnormal fear memory induced by juvenile social isolation  
○Haruka Takahashi<sup>1</sup>, Akiko Miyazaki<sup>2</sup>, Takashi Kawamura<sup>2</sup>, Hikaru Gotoh<sup>2</sup>, Minoru Narita<sup>2,3,4</sup>, Hideki Tamura<sup>1,3</sup>  
<sup>1</sup>Lab Biofunc Sci, Hoshi Univ, <sup>2</sup>Dept Pharmacol, Hoshi Univ, <sup>3</sup>Inst Adv Life Sci, Hoshi Univ, <sup>4</sup>Lab Cancer Pathophysiol, NCCH
- P2-117** ソマトスタチンは青斑核を介してストレス性不安行動を制御する  
Somatostatinergic modulation of stress-induced anxiety via locus coeruleus circuits  
○Mayuka Tashiro<sup>1</sup>, Moeko Ogura<sup>1</sup>, Haruka Takahashi<sup>1</sup>, Hideki Tamura<sup>1,2</sup>  
<sup>1</sup>Lab Biofunc Sci, Hoshi Univ, <sup>2</sup>Inst Adv Life Sci, Hoshi Univ
- P2-118** 視床下部脳室周囲核の興奮性および抑制性ソマトスタチンニューロンはそれぞれ異なるストレス応答経路を制御する  
Distinct stress response pathways orchestrated by excitatory and inhibitory somatostatin neurons in the hypothalamic periventricular nucleus  
○Moeko Ogura<sup>1</sup>, Mayuka Tashiro<sup>1</sup>, Haruka Takahashi<sup>1</sup>, Hideki Tamura<sup>1,2</sup>  
<sup>1</sup>Lab Biofunc Sci, Hoshi Univ, <sup>2</sup>Inst Adv Life Sci, Hoshi Univ
- P2-119** 過硫酸化コンドロイチン硫酸は遺伝子発現変動および神経突起伸長を誘導する  
Oversulfated chondroitin sulfate rewires gene networks to promote neurite outgrowth  
○Misaki Kinome<sup>1</sup>, Mayuka Tashiro<sup>1</sup>, Moeko Ogura<sup>1</sup>, Shino Makiyama<sup>2</sup>, Humi Watanabe<sup>2</sup>, Hiroshi Akiyama<sup>2</sup>, Hideki Tamura<sup>1,3</sup>  
<sup>1</sup>Lab Biofunc Sci, Hoshi Univ, <sup>2</sup>Dept Anal Chem, Hoshi Univ, <sup>3</sup>Inst Adv Life Sci, Hoshi Univ
- P2-120** 妊娠期乾癬と産仔の行動  
Maternal psoriasis and offspring behavior  
○Daisuke Tanioka<sup>1</sup>, Minaka Sakuma<sup>1</sup>, Yoshinori Otani<sup>1</sup>, Yoichiro Iwakura<sup>2</sup>, Masashi Fujitani<sup>1</sup>  
<sup>1</sup>Department of Anatomy and Neuroscience Faculty of Medicine, Shimane University, <sup>2</sup>Research Institute for Biomedical Sciences, Tokyo University of Science
- P2-121** エンリッチ環境はミクログリア表現型を変化させ、慢性予測不能軽度ストレスによるうつ様行動と新生神経のシナプス形成低下を緩解する  
Enriched environment attenuates chronic unpredictable mild stress-induced depression-like behaviors and suppression of synaptic formation in newborn neurons through changing microglial phenotypes  
○Masaya Hasegawa<sup>1,2</sup>, Akihiro Mouri<sup>1,2,5</sup>, Kazuo Kunisawa<sup>1,2</sup>, Hitomi Kurahashi<sup>1,2</sup>, Takatoshi Sakata<sup>1</sup>, Tomoya Sugai<sup>3</sup>, Noriki Kutsumura<sup>3</sup>, Toshitaka Nabeshima<sup>4,5</sup>  
<sup>1</sup>Dept. Regulatory Sci., Grad. Sch. Med. Sci., Fujita Health Univ, <sup>2</sup>ICBS., Fujita Health Univ, <sup>3</sup>WPI-IHIS., Tsukuba Univ, <sup>4</sup>Lab. Health & Med. Sci. Innov., Grad. Sch. Med. Sci., Fujita Health Univ, <sup>5</sup>NPO.J-DO.
- P2-122** ヒト血漿中ドレブリン：興奮性シナプス機能不全を捉えるトランスレーショナルバイオマーカー  
Drebrin in Human Plasma: A Translational Biomarker for Excitatory Synaptic Dysfunction  
○Noriko Koganezawa<sup>1,2</sup>, Yuko Sekino<sup>1,3,4</sup>, Ayaka Higa<sup>1</sup>, Mikio Shoji<sup>5,6</sup>, Tomoaki Shirao<sup>1,6</sup>  
<sup>1</sup>AlzMed, Inc., Tokyo, <sup>2</sup>Grad Sch Front Sci, Univ of Tokyo, <sup>3</sup>Grad Sch Agri and life Sci, Univ of Tokyo, <sup>4</sup>Inst for Drug Dis Innov, Tokyo, <sup>5</sup>Geriatrics Research Institute and Hospital, Maebashi, <sup>6</sup>Gunma Univ Grad Sch Med, Maebashi

- P2-123** GIRK Channel Dysfunction Impairs Memory Encoding in Postoperative Cognitive Dysfunction via Suppressed Excitability of Dorsal CA1 Pyramidal Neurons  
 ○Hongyu Dai, Xiaoxiang Tan, Yuzhou Chen, Jie Sun  
 Department of Anesthesiology, surgery and pain management & Key Laboratory of Clinical Science and Research, Zhongda Hospital Southeast University II Southeast University School of Medicine, Nanjing, China
- P2-124** レム睡眠中の記憶固定化における新生ニューロンのシナプス長期抑制  
 Long-Term Depression in Adult-Born Dentate Gyrus Neurons for Memory Consolidation During REM Sleep  
 ○Iyo Koyanagi<sup>1</sup>, Yuki Hashimoto<sup>2</sup>, Yuteng Wang<sup>1</sup>, Akinobu Ohba<sup>1</sup>, Pablo Vergara<sup>1</sup>, Parimal Chavan<sup>1</sup>, Toshie Naoi<sup>1</sup>, Ryoko Shiina<sup>1</sup>, Shinji Matsuda<sup>3</sup>, Michisuke Yuzaki<sup>4</sup>, Masashi Yanagisawa<sup>1</sup>, Kaspar Vogt<sup>1</sup>, Masanori Sakaguchi<sup>1</sup>  
<sup>1</sup>Univ of Tsukuba, IIS, <sup>2</sup>Dept Physiol, Keio Univ Sch Med, <sup>3</sup>Dept Eng Sci, Grad Sch Informatics Eng, Univ Electro-Comm, <sup>4</sup>WPI-Bio2Q, Keio Univ
- P2-125** Interplay between retrosplenial layer 1 and diagonal band cholinergic neurons representing distinct internal states for immobility and locomotion  
 ○Naoki Yamawaki<sup>1,2,3</sup>, Asami Tanimura<sup>1,2,3</sup>, Hande Login<sup>1,2,3</sup>, Solbjørg Østergaard Feld-Jakobsen<sup>1,2,3</sup>, Wen-Hsien Hou<sup>1,2,3</sup>, Hilligje Trijnie Gunnink<sup>1,2,3</sup>, Chihiro Nakamoto-Griffiths<sup>1,2,3</sup>, Tobias Overmark<sup>1</sup>, Jelena Radulovic<sup>1,2,3,4,5</sup>  
<sup>1</sup>Dept Biomedicine, Aarhus Univ, Denmark, <sup>2</sup>PROMEMO, Aarhus Univ, Denmark, <sup>3</sup>DANDRITE, Aarhus Univ, Denmark, <sup>4</sup>Dept Neuroscience, Albert Einstein College of Medicine, USA, <sup>5</sup>Dept Psychiatry and Behavioral Science, Albert Einstein College of Medicine, USA
- P2-126** 新規 LC-MS 分析法を用いた神経細胞の活動調節におけるイノシトールリン酸代謝変化の解析  
 Exploring inositol phosphate metabolism in neuromodulatory responses by originally-designed liquid chromatography-tandem mass spectrometry  
 ○Masatoshi Ito<sup>1,2</sup>, Takatoshi Iijima<sup>3</sup>, Natsuko Fujii<sup>1</sup>, Ayako Ro<sup>2</sup>, Norimasa Kageyama<sup>2</sup>, Shinichi Koguchi<sup>4</sup>, Eiichiro Nagata<sup>1</sup>  
<sup>1</sup>Department of Neurology, Tokai University School of Medicine, <sup>2</sup>Department of Legal Medicine, St. Marianna University School of Medicine, <sup>3</sup>Department of Anatomy, Tokai University School of Medicine, <sup>4</sup>Department of Chemistry, Tokai University School of Science
- P2-127** cRNA プローブを使用した高感度 non-RI in situ hybridization 法  
 High-sensitivity non-Radioisotope in situ hybridization method for using cRNA probes  
 ○Kimiko Kobayashi  
 Dept physical therapist, Fac Reha Sci, Nagoya Gakuin Univ
- P2-128** Updated KANPHOS : データ拡充と基盤システム再構築による利便性の向上  
 Updated KANPHOS: Expanded Neural Phosphorylation Data and Redesigned Platform for Enhanced Usability  
 ○Takayuki Kannon<sup>1,2</sup>, Satoshi Murashige<sup>1</sup>, Tomoki Nishioka<sup>3</sup>, Yasuhiro Funahashi<sup>2,3</sup>, Daisuke Tsuboi<sup>2,3</sup>, Yuki Yamahashi<sup>2,3</sup>, Taku Nagai<sup>4</sup>, Kozo Kaibuchi<sup>3</sup>, Junichiro Yoshimoto<sup>1,2</sup>  
<sup>1</sup>Department of Biomedical Data Science, Fujita Health University School of Medicine, Toyoake, <sup>2</sup>Division of Computational Science, International Center for Brain Science, Fujita Health University, <sup>3</sup>Division of Cell Biology, International Center for Brain Science, Fujita Health University, Toyoake, <sup>4</sup>Division of Behavioral Neuropharmacology, International Center for Brain Science, Fujita Health University, Toyoake
- P2-129** Flow Cytometry を用いたマウス脳の解析法  
 Critical factors for flow cytometry analysis of the brain  
 ○Tetsushi Sadakata<sup>1</sup>, Mizuki Sadakata<sup>1</sup>, Ayumu Konno<sup>2</sup>, Takatoshi Iijima<sup>3</sup>, Hirokazu Hirai<sup>2</sup>  
<sup>1</sup>Education and Research Support Center, Gunma Univ Grad Sch Med, <sup>2</sup>Department of Neurophysiology and Neural Repair, Gunma University Graduate School of Medicine, <sup>3</sup>Department of Molecular Life Science, Division of Basic Medical Science and Molecular Medicine, School of Medicine, Tokai University
- P2-130** マウス歩行異常の自動検出を目的とした測定装置とおび解析アルゴリズムの開発  
 Development of a Measurement and Analysis System for the Automated Detection of Mouse Foot Faults  
 ○Ryudai Yokokawa<sup>1</sup>, Chikako Hara-Miyauchi<sup>2</sup>, Itsuki Ajioka<sup>2,3</sup>, Shingo Maeda<sup>1,3</sup>  
<sup>1</sup>Department of Mechanical Engineering, School of Engineering, Institute of Science Tokyo, <sup>2</sup>Center for Brain Integration Research (CBIR), Institute of Research, Institute of Science Tokyo, <sup>3</sup>Research Center for Autonomous Systems Materialogy (ASMat), Institute of Research, Institute of Science Tokyo
- P2-131** 急性エタノール過剰摂取に伴う二日酔い身体症状におけるシリコン製剤の有効性  
 Efficacy of Si-based agent for treating physical symptoms of hangover following acute ethanol ingestion  
 ○Xin Ye<sup>1</sup>, Yoshihisa Koyama<sup>1,2</sup>, Yuki Kobayashi<sup>3</sup>, Ikuei Hirota<sup>1</sup>, Hikaru Kobayashi<sup>3</sup>, Shoichi Shimada<sup>1,2</sup>  
<sup>1</sup>Dept Neurosci Cell Biol, Osaka Univ Grad Sch Med, <sup>2</sup>Addiction Unit, Osaka Psychiatric Ctr, Osaka Psychiatric Medical Ctr, <sup>3</sup>SANKEN, Osaka Univ

**LBA-2-1**

シアル酸転移酵素 ST3GAL4 欠損マウスにおける視床 TNAP 発現および膜分布の変化

Thalamic TNAP Expression and Membrane Distribution in Sialyltransferase ST3GAL4-Deficient Mice

○Yudai Yamamoto<sup>1</sup>, Kenji Murata<sup>1</sup>, Siriporn Tangsudjai<sup>1,2</sup>, Toshiya Tamura<sup>1</sup>, Akiko Fujita<sup>1</sup>, Keiko Kato<sup>1</sup><sup>1</sup>Div Life Sci, Kyoto Sangyo Univ, <sup>2</sup>Vet Sci, Mahidol Univ, Thailand.**LBA-2-2**

cGAS-STING 経路活性化はミクログリアにおいて LRRK2 を中心体近傍オルガネラに集積させる

Activation of the cGAS-STING pathway in microglia causes LRRK2 recruitment to organelles in the centrosomal area

○Shoichi Suenaga<sup>1</sup>, Maria Sakurai<sup>1</sup>, Takeshi Iwatsubo<sup>2</sup>, Tomoki Kuwahara<sup>1</sup><sup>1</sup>Dept Neuropathol, Univ Tokyo Grad Sch Med, <sup>2</sup>National Center of Neurology and Psychiatry**LBA-2-3**SRSF5 は *C9orf72* FTLD/ALS 細胞モデルにおいて RAN 翻訳を促進するSerine/arginine-rich splicing factor 5 promotes RAN translation in the *C9orf72* FTLD/ALS cellular model○Shiho Gotoh, Kohji Mori, Tesshin Miyamoto, Ryota Uozumi, Koujin Miura, Yuki Aoki, Shizuko Kondo, Manabu Ikeda  
Psychiatry, Osaka Univ Grad Sch Med

2025年9月13日(土)

第1会場(2階 大ホール)

## レジェンドレクチャー 2

8:30 ~ 9:10

## LL-2

Chair : Kazunori Nakajima (Department of Anatomy, Keio University School of Medicine)

(Japanese)

## LL-2

神経細胞間の接着と認識の仕組みを探る

Exploring the mechanisms of neural cell adhesion and recognition

○Masatoshi Takeichi

RIKEN Center for Biosystems Dynamics Research

## シンポジウム 9

9:20 ~ 11:20

## OS-9

恐怖記憶とその関連疾患の細胞・分子・回路機構

Molecular, Cellular, and Circuit Mechanisms of fear memory regulation and the related-disease

Organizer : Satoshi Kida (Graduate School of Agriculture and Life Sciences, The University of Tokyo)

(English)

## OS-9-1

Molecular, Cellular, and Circuit Mechanisms of fear memory regulation and the related-disease

○Andrew Holmes

NIAAA, USA

## OS-9-2

情動研究のための多細胞回路動態の計測と操作

Multi-cellular dynamics and their manipulation

○Hiroaki Wake<sup>1,2</sup><sup>1</sup>Nagoya Univ Grad Sch Med, <sup>2</sup>Division of Multicellular Circuit Dynamics, NIPS

## OS-9-3

Neuron-specific inflammatory pathways in memory formation

Vladimir Jovasevic<sup>1</sup>, Ana Cicvaric<sup>1</sup>, Elizabeth Wood<sup>1</sup>, Naoki Yamawaki<sup>1</sup>, ○Jelena Radulovic<sup>1,2</sup><sup>1</sup>Department of Neuroscience, Albert Einstein College of Medicine, USA, <sup>2</sup>Department of Biomedicine, Aarhus University, Denmark

## OS-9-4

PTSD の分子細胞メカニズム

Molecular and Cellular Mechanisms of PTSD

○Satoshi Kida

Grad Sch Agricul and Life Sci, U Tokyo

## OS-9-5

神経新生依存的な海馬神経回路再構築によりトラウマ記憶の忘却を促す

Neurogenesis-dependent remodeling of hippocampal circuits reduces PTSD-like behaviors in adult mice

○Risako Fujikawa<sup>1,2</sup>, Adam I Ramsaran<sup>2,3</sup>, Axel Guskjolen<sup>2,4</sup>, Juan de la Parra<sup>2</sup>, Yi Zou<sup>2</sup>, Andrew Mocle<sup>2,4</sup>, Sheena A. Josselyn<sup>2,3,4,5,6</sup>, Paul W. Frankland<sup>2,3,4,5,7</sup><sup>1</sup>Department of Neuropharmacology, Faculty of Pharmaceutical Sciences, Fukuoka University,<sup>2</sup>Program in Neurosciences & Mental Health, Hospital for Sick Children, <sup>3</sup>Department of Psychology, University of Toronto,<sup>4</sup>Department of Physiology, University of Toronto, <sup>5</sup>Institute of Medical Sciences, University of Toronto,<sup>6</sup>Brain, Mind & Consciousness Program, Canadian Institute for Advanced Research,<sup>7</sup>Child & Brain Development Program, Canadian Institute for Advanced Research

## OS-9-6

Systems consolidation reorganizes hippocampal engram circuitry

○Paul Frankland

Hospital for Sick Children, Toronto, Canada

## 特別講演 4

11:30 ~ 12:15

## SL-4

Chair : Hideki Mochizuki (Osaka Toneyama Medical Center)

(English)

## SL-4

患者を起点とする神経化学：臨床の気づきから病態理解と治療応用へ

Patient-Centered Neurochemistry: Clinical Insight Guiding the Discovery of Molecular Pathogenesis

○Osamu Onodera

Dept Neurol, Brain Res Inst, Niigata Univ

## ランチョンセミナー7

12:30 ~ 13:20

**LS-7** 神経再生促進因子 LOTUS の臨床応用への道：治療薬と診断薬の開発

## Pathways to Clinical Application of LOTUS, a Neuroregeneration Promoting Factor: Development of Therapeutic and Diagnostic Medicines

Chair : Kazunobu Sawamoto (Department of Development and Regenerative Neurobiology, Institute of Brain Science, Nagoya City University Graduate School of Medical Science)

共催：シスメックス株式会社 (Japanese)

**LS-7-1** 脊髄損傷に対する治療薬開発

## Development of therapeutic agents for spinal cord injury

○Kohtaro Takei

Department of Neurology and Stroke Medicine, Yokohama City University School of Medicine

**LS-7-2** 神経疾患に対する診断薬開発

## Clinical Application as a Biomarker for Neurological Diseases

○Keita Takahashi

Department of Neurology and Stroke Medicine, Yokohama City University School of Medicine

## 日本再生医療学会 - 日本神経化学会ジョイントシンポジウム 5

13:30 ~ 15:30

**SS-5** 脳と再生医療が出会う場所—神経化学、次のステージへ

## Where Brain Meets Regeneration: Neurochemistry's Next Frontier

Organizer : Hideyuki Okano (Keio University Regenerative Medicine Research Center)、

Kazunobu Sawamoto (Department of Developmental and Regenerative Neurobiology, Institute of Brain Science, Nagoya City University Graduate School of Medical Sciences)

Co-sponsored by the Japanese Society for Regenerative Medicine (JSRM) (Japanese)

**SS-5-1** ミクログリアから神経細胞へのダイレクトリプログラミングによる脳梗塞後神経機能障害の回復

## Recovery of Post-Stroke Neurological Function via Direct Reprogramming of Microglia into Neurons

○Taito Matsuda

Lab Neural Regen Brain Repair, Grad Sch Sci Technol, NAIST

**SS-5-2** ゲノム編集 iPS 細胞を用いた脳腫瘍に対する遺伝子治療法開発

## Gene therapy for brain tumors using neural stem cells derived from genome-edited iPS cells

○Masahiro Toda

Department of Neurosurgery, Keio University School of Medicine

**SS-5-3** 脳神経回路修復のメカニズム探索

## Exploring the mechanisms of neural circuit repair in the central nervous system

○Rieko Muramatsu

Dept Mol Pharmacol, Nat Inst Neurosci, NCNP

**SS-5-4** iPS 細胞を用いた神経再生

## iPS cell-based therapy for neurological diseases

○Jun Takahashi

Center for iPS Cell Research and Application, Kyoto University

## 優秀発表賞表彰式・閉会式

15:40 ~ 16:10

2025年9月13日(土)

第2会場(5階 小ホール1)

## シンポジウム 10

9:20 ~ 11:20

## OS-10 分子アセンブリーから解き明かす生命現象・疾患病態そして治療薬開発

## Molecular Assembly: Implications for Pathophysiology and Drug Development

Organizer : Itsuki Ajioka (Center for Brain Integration Research (CBIR), Institute of Integrated Research, Institute of Science Tokyo)、  
Kensuke Ikenaka (University of Osaka, Graduate School of Medicine)

(English)

## OS-10-1

アルファシヌグレインのモノマー構造が規定するフィブリル構造多型

Monomer conformation determines the polymorphs of the amyloid fibrils

○Kensuke Ikenaka, Cesar Aguirre, Keita Kakuda, Nan Wang, Chi-Jin Choong  
Department of Neurology, University of Osaka

## OS-10-2

線維状 ECM を模倣した超分子ペプチドゲル JigSAP の創製と医療応用

JigSAP: A Supramolecular Hydrogel Mimicking Fibrous Extracellular Matrix for Therapeutic Protein Delivery

○Chikako Hara-Miyauchi<sup>1</sup>, Itsuki Ajioka<sup>1,2,3</sup><sup>1</sup>CBIR, Inst Integrated Research, Inst Science Tokyo, <sup>2</sup>ASMat, Inst Integrated Research, Inst Science Tokyo,<sup>3</sup>Dept Material-Based Neurosci, Grad Sch Med and Dent Sci, Inst Science Tokyo

## OS-10-3

Wiring the actin web: How do Arp2/3 complex and nucleation-promoting factors orchestrate actin network architecture?

○Saikat Chowdhury<sup>1,2</sup><sup>1</sup>CSIR-Centre for Cellular and Molecular Biology, India<sup>2</sup>Academy of Scientific and Innovative Research (AcSIR), Ghaziabad, Uttar Pradesh, India

## OS-10-4

ALS 関連因子が相分離シャペロンの機能を阻害するメカニズム

Mechanistic insights into ALS-related factors disrupting a phase modifier

○Tomohide Saio

IAMS, Tokushima Univ.

## ランチョンセミナー 8

12:30 ~ 13:20

## LS-8

Chair : Noriyuki Matsukawa (Department of Neurology, Nagoya City University Graduate School of Medical Sciences)

共催 : 中外製薬株式会社 (Japanese)

## LS-8

血液脳関門から考える NMOSD の病態と治療戦略

Pathophysiology and Therapeutic Strategies for NMOSD: A Blood-Brain Barrier Perspective

○Yukio Takeshita

Department of Neurotherapeutics Yamaguchi University School of Medicine, BBB research center Yamaguchi University School of Medicine

## シンポジウム 12

13:30 ~ 15:30

## OS-12 髄鞘による神経機能制御メカニズムの解明

## Revealing the mechanisms underlying the regulation of neuronal functions by myelin sheaths

Organizer : Yugo Ishino (Research Institute of Traditional Asian Medicine, Kindai University)、

Yasuyuki Osanai (Department of Anatomy, Division of Histology and Cell Biology, School of Medicine, Jichi Medical University)

(English)

## OS-12-1

神経活動に依存したオリゴデンドロサイトによる活動電位の伝導調節と運動課題への関与

Neuronal activity-dependent regulation of action potential conduction by oligodendrocytes and its involvement in lever pull motor task

○Shouta Sugio

Dept Anat and Mol Cel Biol, Nagoya Univ Grad Sch Med

**OS-12-2**

中枢無髄神経に着目した神経機能制御メカニズムの解析

Seeking functional implications of unmyelinated fibers on neural circuits

○Haruko Miyazaki<sup>1</sup>, Hirotaka Shoji<sup>2</sup>, Akinori Miyashita<sup>3</sup>, Norikazu Hara<sup>3</sup>, Takeshi Ikeuchi<sup>3</sup>, Tsuyoshi Miyakawa<sup>2</sup>, Toshitaka Oohashi<sup>1</sup>

<sup>1</sup>Department of Molecular Biology and Biochemistry, Okayama University Faculty of Medicine, Dentistry and Pharmaceutical Sciences, <sup>2</sup>Division of Systems Medical Science, Center for Medical Science, Fujita Health University,

<sup>3</sup>Department of Molecular Genetics, Brain Research Institute, Niigata University

**OS-12-3**

Myelin wrapping evaluation device construction and therapeutic exploration in remyelination

○Lili Quan, Rieko Muramatsu

Dept. Mol. Pharmacol., Natl. Inst. Neurosci., Natl. Center Neurol. Psychiat

**OS-12-4**

オリゴデンドロサイトにおける多階層性 RNA 制御機構

Oligodendrocyte-specific RBPs govern multilayered RNA biogenesis

○Yoshika Hayakawa-Yano<sup>1,2</sup>, Masato Yano<sup>1,2</sup>

<sup>1</sup>Core Research Facilities for Basic Science, Research Center for Medical Sciences, The Jikei University School of Medicine ,

<sup>2</sup>Keio University Regenerative Medicine Research Center

**OS-12-5**

視覚伝導路の髄鞘形成は GABA シグナルにより調整される

GABA mediates experience-dependent regulation of myelination in the mouse visual pathway

○Yasuyuki Osanai<sup>1,2</sup>, Nobuhiko Ohno<sup>1,3</sup>

<sup>1</sup>Dept Anatomy, Div Histology and Cell Biology, Sch Med, Jichi Medical Univ, <sup>2</sup>ARMI, Monash University, Clayton, Australia,

<sup>3</sup>Div of Ultrastructural Research, NIPS, Okazaki

2025年9月13日(土)

第3会場(5階 小ホール2)

## シンポジウム 11

9:20 ~ 11:20

**OS-11** 免疫が司る脳神経系の制御機構**Immune-mediated control mechanisms in the central nervous system**

Organizer : Minako Ito (Division of Allergy and Immunology, Medical Institute of Bioregulation, Kyushu University)、  
Shogo Tanabe (Department of Molecular Pharmacology, National Institute of Neuroscience, National Center of Neurology and Psychiatry)  
(Japanese)

**OS-11-1**

マクロファージ-ニューロンのシグナル伝達を介した感覚制御機構

Mechanism of sensory regulation via macrophage-neuron signaling

○Tatsuhide Tanaka  
National Center for Geriatrics and Gerontology

**OS-11-2**

免疫応答を介した ASD 発症メカニズムの解明

Mechanistic insights into ASD pathogenesis mediated by immune responses

○Minako Ito, Natsumi Awata, Tatsuya Yokota  
Div Allergy and Immunology, MIB, Kyushu Univ

**OS-11-3**

髄膜免疫系の破綻による脳発達障害の分子病態機構

Molecular mechanisms of neurodevelopmental disorders by meningeal immune dysfunction

○Shogo Tanabe, Rieko Muramatsu  
Dept Mol Pharmacol, Natl Inst Neurosci, Natl Cent Neurology and Psychiatry

**OS-11-4**

統合失調症のシナプス自己抗体病態

Synaptic Autoantibody Pathology in Schizophrenia

○Hiroki Shiwaku  
Department of Psychiatry, Institute of Science Tokyo

**OS-11-5**

精神疾患の脳病態を探索する末梢免疫細胞ヒストン修飾プロファイリング

Peripheral Immune Histone Profiling to Explore Brain Pathophysiology in Mental Disorders

○Yuko Arioka<sup>1,2</sup>  
<sup>1</sup>Nagoya University Hospital, CAMCR, <sup>2</sup>Pathophysiology of Mental disorders, Nagoya University

## ランチョンセミナー 9

12:30 ~ 13:20

**LS-9**

FcRn ブロッカー エフガルチギモドによる新たな可能性

New possibilities with FcRn blocker "Efgartigimod"

Chair : Keita Matsuura (Dementia Center, Mie University Hospital)、  
Eiichi Katada (Department of Neurology, Nagoya City University West Medical Center)

共催：アルジェニクスジャパン株式会社 (Japanese)

**LS-9-1**

全身型重症筋無力症診療の変化とエフガルチギモドへの期待

Changes in clinical practice of generalized Myasthenia Gravis and expectations for Efgartigimod

○Masayuki Mizuno  
Department of Neurology, Nagoya City University Hospital

**LS-9-2**

CIDP マネージメントの多様性 . エフガルチギモドへの期待

Diversity of CIDP management. Expectations for Efgartigimod

○Naoki Morishita  
Department of Neurology, Yaizu City Hospital

## シンポジウム 13

13:30 ~ 15:30

**OS-13** 多様性で挑むアルツハイマー病研究**Diversity in Alzheimer's Research**

Organizer : Kenjiro Ono (Department of Neurology, Kanazawa University Graduate School of Medical Sciences)、  
Chihiro Tohda (Institute of Natural Medicine, University of Toyama)

(Japanese)

**OS-13-1** 細胞レベルで迫るアルツハイマー病の病態研究：タウとミトコンドリア異常の悪循環の分子メカニズム

Understanding Alzheimer's disease pathogenesis at cellular levels:  
molecular mechanisms for a vicious cycle between tau and mitochondrial abnormality

○Kanae Ando  
Dept of Biol Sci, Grad Sch Sci, Tokyo Metropolitan University

**OS-13-2** 和漢薬研究の視点から迫るアルツハイマー病の治療薬開発

Development of therapeutic agents for Alzheimer's disease approached from perspective of  
natural medicine study

○Chihiro Tohda, Ximen Yang, Yuna Inada  
Section of Neuromedical Science, Institute of Natural Medicine, University of Toyama

**OS-13-3** トランスレーショナル研究から迫るアルツハイマー病研究

Translational research into Alzheimer's disease

○Kenjiro Ono  
Dept Neurol, Kanazawa Univ Grad Sch Med Sci

**OS-13-4** 脳画像研究から迫るアルツハイマー病研究：最新知見と臨床応用

Neuroimaging-Driven Perspectives on Alzheimer's Disease:  
From Cutting-Edge Evidence to Clinical Practice

○Atsushi Kimura  
Integrated Brain Sci, Brain Res Inst, Niigata Univ

**OS-13-5** 地域コホート調査から迫る認知症研究：中島町研究

Dementia cohort study: Nakajima study

○Moeko Shinohara  
Department of Neurology, Kanazawa University Graduate School of Medical Sciences

2025年9月13日(土)

第4会場(9階 会議室901)

神経化学入門コース 2

8:30 ~ 9:10

EL-2

Chair : Hideki Hida (Nagoya City Univ Grad Sch Med Sci, Dept Neurophysiol &amp; Brain Sci)

(Japanese)

EL-2

神経回路再編

Remodeling of Neuronal Circuits

○Junichi Nabekura

National Institute for Physiological Sciences

ミニシンポジウム 8

9:20 ~ 11:26

MS-8

多彩なアプローチで解明する大脳皮質形成と病態のメカニズム

Mechanisms of cerebral cortex formation and pathology elucidated through various approaches

Chair : Yuki Hirota (Dept. Anat. Keio Univ. Sch. Med.)、

Takao Honda (Department of Anatomy, School of Medicine, University of Occupational and Environmental Health)

(Japanese・English)

MS-8-1

カドヘリン 6 は大脳皮質発生においてインテグリン経路を介して神経細胞移動を制御する

Cadherin-6 controls neuronal migration in the developing neocortex via an integrin-mediated pathway

○Yuki Hirota<sup>1</sup>, Rikaho Saito<sup>1</sup>, Takao Honda<sup>1,2,3</sup>, Hitomi Sano<sup>4</sup>, Kazunori Nakajima<sup>1</sup><sup>1</sup>Dep Anat, Keio Univ Sch Med, Tokyo, <sup>2</sup>Dep Anat, Sch Med, Univ Occup Env Health, Kitakyushu, <sup>3</sup>Mol Bio, Gifu Pharm Univ, Gifu,<sup>4</sup>Tokyo Online Univ.

MS-8-2

大脳新皮質第1層はDAB1によって維持される必要のある動的構造である

Neocortical layer 1 is a dynamic structure that requires maintenance by DAB1

○Takao Honda<sup>1,2,3</sup>, Yuki Hirota<sup>3</sup>, Kazunori Nakajima<sup>3</sup><sup>1</sup>Dep Anat, Sch Med, Univ Occup Env Health, Kitakyushu, <sup>2</sup>Mol Bio, Gifu Pharm Univ, Gifu, <sup>3</sup>Dep Anat, Keio Univ Sch Med, Tokyo

MS-8-3

中心体タンパク質 CEP152 の機能破綻が引き起こす小頭症と脳奇形の異なる病態生理メカニズム

Distinct pathophysiological mechanisms in microcephaly and brain malformation by CEP152 variants

○Nanako Hamada<sup>1</sup>, Takuma Nishijo<sup>1</sup>, Sagiv Shifman<sup>2</sup>, Fowzan Alkuraya<sup>3</sup>, Seiji Mizuno<sup>4</sup>, Tomoko Uehara<sup>5</sup>, Toshiki Takenouchi<sup>5</sup>, Kenjiro Kosaki<sup>5</sup>, Koh-ichi Nagata<sup>1</sup><sup>1</sup>Dept Mol Neurobiol, Inst Dev Res, Aichi Dev Disability Center, <sup>2</sup>Alexander Silberman Inst Life Sci, Hebrew Univ, Israel,<sup>3</sup>King Faisal Hosp and Res Center, Saudi Arabia, <sup>4</sup>Central Hosp, Aichi Dev Disability Cntr,<sup>5</sup>Center Med Genet, Keio Univ Grad Sch Med

MS-8-4

発生期における自発的カルシウム活動制御は海馬形成に重要である

Developmental regulation of spontaneous calcium activity is critical in the formation of the hippocampus

○Yuki Bando<sup>1</sup>, Masaru Ishibashi<sup>2</sup>, Mao Kawauchi<sup>3</sup>, Satoru Yamagishi<sup>4</sup>, Yohei Shinmyo<sup>2</sup>, Atsuo Fukuda<sup>5</sup>, Kohji Sato<sup>1</sup><sup>1</sup>Dept. Organ and Tissue Anatomy, Hamamatsu Univ. Sch. Med., <sup>2</sup>Dept. Neurophysiology, Hamamatsu Univ. Sch. Med.,<sup>3</sup>Faculty of Medicine, Hamamatsu Univ. Sch. Med., <sup>4</sup>Dept. Opt. Neuroanatomy, Hamamatsu Univ. Sch. Med.,<sup>5</sup>Dept. Neurophysiology/Biochemistry, Hamamatsu Univ. Sch. Med.

MS-8-5

カルシウムシグナリングは大脳皮質放射状細胞移動における核変形サイクルを制御する

Ca<sup>2+</sup> signalling drives nuclear deformation cycles in radially migrating cortical neurons○Shin-ichiro Horigane<sup>1</sup>, Sayaka Takemoto-Kimura<sup>1</sup>, Satoshi Kamijo<sup>2</sup>, Hajime Fujii<sup>2</sup>, Haruhiko Bito<sup>2</sup><sup>1</sup>Dept Neurosci, Inst Env Med, Nagoya Univ, <sup>2</sup>Dept Neuro chem, Univ Tokyo Grad Sch Med

MS-8-6

ミオシン Va は生後大脳新皮質における表層神経細胞のターミナルトランスロケーションを制御する

Myosin Va regulates the terminal translocation of superficial layer neurons in the postnatal neocortex

○Takao Kohno, Rimi Okino, Mitsuharu Hattori

Biomed Sci, Grad Sch of Pharm Sci, Nagoya City Univ

**MS-8-7**

神経発達異常および知的障害に関連する RAC1 de novo 変異の病態解析

Pathophysiological analysis of RAC1 de novo variants associated with neurodevelopmental abnormalities and intellectual disability

○Masashi Nishikawa<sup>1</sup>, Hidenori Ito<sup>2</sup>, Kaito Yamada<sup>1</sup>, Koh-ichi Nagata<sup>2,3</sup>, Makoto Kinoshita<sup>1</sup><sup>1</sup>Dept Biol Sci, Nagoya Univ Grad Sch Sci, <sup>2</sup>Dept Mol Neurobiol, Inst Dev Res, Aichi Dev Disabil Ctr,<sup>3</sup>Dept Neurochem, Nagoya Univ Grad Sch Med**テクニカルワークショップ 3****13:30 ~ 15:00****TW-3****画像解析と AI**

Chair : Yuki Hattori (Graduate School of Medicine, Nagoya University)、

Ryuta Koyama (Department of Translational Neurobiology, National Institute of Neuroscience, National Center of Neurology and Psychiatry)

(Japanese)

**TW-3-1**

科学研究における生成 AI 活用の最前線

The Frontier of Generative AI Applications in Scientific Research

○Daichi Konno

Laboratory of Chemical Pharmacology, Graduate School of Pharmaceutical Sciences, The University of Tokyo

**TW-3-2**

ボリウム電子顕微鏡による 3 次元超微形態解析 ～基本から画像解析を含めた最近の話題まで～

3D Ultrastructural Analysis by Volume Electron Microscopy:

From Basics to Recent Topics Including Data Analysis

○Nobuhiko Ohno<sup>1,2</sup><sup>1</sup>Dept Anat, Jichi Med Univ, <sup>2</sup>Div Ultrastruct Res, NIPS**TW-3-3**

AI を用いた神経損傷ピッグの定量的な運動機能解析

AI-based quantitative assessment for motor function of pig with peripheral nerve damage

○Shinsuke Shibata<sup>1</sup>, Junpei Nakayama<sup>1</sup>, Kentaro Okuyama<sup>1</sup>, Manabu Hayatsu<sup>1</sup>, Ryota Miura<sup>1</sup>, Jiro Kawada<sup>1,2</sup><sup>1</sup>Niigata Univ Grad Sch Med Dent, Niigata, <sup>2</sup>Jiksak Bioengineering, Inc

2025年9月13日(土)

第5会場(10階 会議室1001)

## ミニシンポジウム 9

9:20 ~ 11:26

**MS-9** 分子・神経回路・行動の多階層解析による精神疾患の解明

## Understanding Psychiatric Disorders through Multilevel Analyses of Molecules, Neural Circuits, and Behavior

Chair : Toshitaka Nabeshima (Japanese Organization of Appropriate Use and Research; Fujita Health University),  
 Makoto Kondo (Department of Anatomy and Neuroscience, Graduate School of Medicine, Osaka Metropolitan University)  
 (Japanese・English)

**MS-9-1** 自閉スペクトラム症の病態形成メカニズムにおける代謝異常の機能解析

## Functional analyses of metabolic abnormalities in the pathogenesis of autism spectrum disorder

○Noriyoshi Usui<sup>1</sup>, Miyuki Doi<sup>1</sup>, Yuuki Fujiwara<sup>2</sup>, Taiichi Katayama<sup>2</sup>, Hideo Matsuzaki<sup>3</sup>, Manabu Makinodan<sup>4</sup>,  
 Shoichi Shimada<sup>1</sup>

<sup>1</sup>Dept Neurosci Cell Biol, Grad Sch Med, The Univ Osaka, <sup>2</sup>United Grad Sch Child Dev, The Univ Osaka,

<sup>3</sup>Div Dev Func Brain Activ, Res Center for Child Ment Dev, Univ Fukui,

<sup>4</sup>Div Trans Psychiatry Syn Res, Int Cent Brain Sci, Fujita Health Univ

**MS-9-2** 幼若期ストレスによる腸内環境変容に伴う代謝変化と行動変容

## Gut-brain axis disruption by adolescent stress: Links to metabolic and behavioral changes

○Kazuo Kunisawa<sup>1</sup>, Moeka Tanabe<sup>1</sup>, Toshitaka Nabeshima<sup>2</sup>, Akihiro Mouri<sup>1</sup>

<sup>1</sup>Dept. Regulatory Sci., Grad. Sch. Med Sci., Fujita Health Univ, <sup>2</sup>Lab. HMSI, Grad. Sch. Med Sci., Fujita Health Univ.

**MS-9-3** 前帯状皮質ソマトスタチン神経の活動異常は、ASD モデル POGZ 変異マウスの社会性障害を引き起こす

## Impaired somatostatin interneuron activity in the ACC underlies social deficits in a POGZ-mutant mouse model of ASD

○Kohei Kitagawa<sup>1</sup>, Tomoya Takemoto<sup>1</sup>, Kaoru Seiriki<sup>1</sup>, Atsushi Kasai<sup>1,2</sup>, Hitoshi Hashimoto<sup>1,3,4,5,6</sup>,  
 Takanobu Nakazawa<sup>7</sup>

<sup>1</sup>Mol. Neuropharmacol., Grad. Sch. Pharmaceut. Sci., Osaka Univ., <sup>2</sup>Systems Neuropharmacol., Inst. Env. Med., Nagoya Univ.,

<sup>3</sup>Unit. Grad. Sch. Child Dev., Osaka Univ., <sup>4</sup>Inst. Datability Sci., Osaka Univ., <sup>5</sup>Open Tarns. Res., Osaka Univ.,

<sup>6</sup>Mol. Pharmaceut. Sci., Grad. Sch. Med., Osaka Univ., <sup>7</sup>Dept. Biosci., Fac. Life Sci., Tokyo Univ. Agr.

**MS-9-4** 解剖学的・機能的に異なる青斑核ノルアドレナリン系サブシステムによる社会回避学習の制御

## Anatomically and functionally distinct locus coeruleus noradrenaline subsystems underlying social avoidance learning

○Kaoru Seiriki<sup>1</sup>, Shunsuke Maeda<sup>1</sup>, Leo Kojima<sup>1</sup>, Yuzuka Fujimoto<sup>1</sup>, Taiyou Baba<sup>1</sup>, Hiroki Rokujo<sup>1</sup>, Tomoki Nitta<sup>1</sup>,  
 Takanobu Nakazawa<sup>2</sup>, Atsushi Kasai<sup>3</sup>, Takatoshi Hikida<sup>4</sup>, Hitoshi Hashimoto<sup>1</sup>

<sup>1</sup>Grad. Sch. Pharmaceutical Sci., Univ. of Osaka, <sup>2</sup>Dept Biosci, Tokyo Univ of Agriculture,

<sup>3</sup>Res. Inst. of Environmental Medicine, Nagoya Univ., <sup>4</sup>Inst. Protein Res., Univ. of Osaka

**MS-9-5** プロテアーゼの欠損による髄鞘過形成とネグレクト行動の誘発

## Induction of hypermyelination and neglect behavior by protease deficiency

○Masahiro Ohgidani, Yusuke Tanaka, Eriko Furube, Shigetaka Yoshida

Department of Functional Anatomy and Neuroscience, Asahikawa Medical University

**MS-9-6** 脳室周囲核 Cartpt ニューロンが雌マウスの社会的優位性の決定において果たす役割の検討

## Consideration of the role of ventral periventricular Cartpt neurons in determination of social hierarchy in female mice

○Takashi Nozu, Kazune Kitamura, Masabumi Minami, Taiju Amano

Department of pharmacology, Graduate school of Pharmaceutical Science, Hokkaido University

**MS-9-7** 空間トランスクリプトームで解明する統合失調症における分子・細胞・組織レベルの変化

## Unraveling the molecular, cellular, and histological alterations in schizophrenia with spatial transcriptomics

○Satoshi Yoshinaga<sup>1,2</sup>, Julio Leon<sup>3,4</sup>, Mizuki Hino<sup>5,6</sup>, Yoshinari Ando<sup>3</sup>, Jonathan Moody<sup>3</sup>, Atsuko Nagaoka<sup>5,7</sup>,  
 Ayako Kitazawa<sup>1,2</sup>, Kanehiro Hayashi<sup>2</sup>, Kazunori Nakajima<sup>2</sup>, Chung Chau Hon<sup>3</sup>, Yasuto Kunii<sup>5,6</sup>, W. Jay Shin<sup>3,8</sup>,  
 Ken-ichiro Kubo<sup>1,2</sup>

<sup>1</sup>Dept. of Anat., The Jikei Univ. Sch. Med, <sup>2</sup>Dept. of Anat., Keio Univ. Sch. Med, <sup>3</sup>IMS RIKEN,

<sup>4</sup>Inst. for Neurodegenerative Diseases, UCSF, USA, <sup>5</sup>Dept. of Neuropsychiatry, Fukushima Medical Univ,

<sup>6</sup>Dept. of Disaster Psychiatry, IRIDeS, Tohoku Univ, <sup>7</sup>Dept. of Psychiatry, Tohoku Univ. Hospital,

<sup>8</sup>Lab. of Regulatory Genomics, Genome Inst. of Singapore, A\*STAR, Singapore

## ミニシンポジウム 10

13:25 ~ 15:31

**MS-10** 蛋白質凝集体研究が拓く神経変性疾患の新治療戦略**Novel Therapeutic Strategies for Neurodegenerative Diseases Pioneered by Protein Aggregate Research**

Chair : Naruhiko Sahara (Niigata University)、

Wakako Maruyama (Department of Health and Nutritional Sciences, Faculty of Health Sciences, Aichi Gakuin University)

(Japanese・English)

**MS-10-1** 筋萎縮性側索硬化症におけるメタアグリゲートの探索研究

## Exploring studies on MetaAggregates in amyotrophic lateral sclerosis

○Kazuma Murakami<sup>1</sup>, Thi Hong Van Nguyen<sup>1</sup>, Nobuko Fujita<sup>2</sup>, Chioko Nagao<sup>2</sup>, Kenji Mizuguchi<sup>2</sup>, Takumi Nishiuchi<sup>3</sup>, Yasuhiro Sakashita<sup>4</sup>, Moeko Noguchi-Shinohara<sup>4</sup>, Kenjiro Ono<sup>4</sup><sup>1</sup>Division of Food Science and Biotechnology, Graduate School of Agriculture, Kyoto University,<sup>2</sup>Institute for Protein Research, Osaka University, <sup>3</sup>Center for Experimental Modeling of Human Disease, Kanazawa University,<sup>4</sup>Department of Neurology, Kanazawa University Graduate School of Medical Sciences**MS-10-2** RNA 相転移による Tau 凝集と軸索機能障害機構の解析

## Elucidation of Tau aggregation and axonal dysfunction induced by RNA phase transition

○Yasushi Yabuki, Ginji Komiya, Norifumi Shioda

Dept Genom Neuro, IMEG, Kumamoto Univ

**MS-10-3** 次世代型モデルマウスを用いたタウ研究の新展開

## New Horizon in Tau Research Using Next-Generation Model Mouse

○Naruhiko Sahara<sup>1</sup>, Rin Yanai<sup>2</sup><sup>1</sup>Dept Functional Neurology and Neurosurgery, Brain Research Institute, Niigata Univ,<sup>2</sup>National Institutes for Quantum Science and Technology, Institute for Quantum Medical Science**MS-10-4** 4 リピータウオパチーに対する長期作用型アンチセンス核酸による治療法開発

## Correcting tau isoform ratios with a long-acting antisense oligonucleotide alleviates 4R-tauopathy phenotypes

○Shinsuke Ishigaki<sup>1</sup>, Kuniyuki Iwata<sup>1,2</sup>, Kentaro Sahashi<sup>2</sup>, Kaori Kawai<sup>2</sup>, Yusuke Fujioka<sup>1</sup>, Gen Sobue<sup>3</sup><sup>1</sup>Molecular Neuroscience Research Center, Shiga University of Medical Science, <sup>2</sup>Nagoya University Graduate School of Medicine,<sup>3</sup>Aichi Medical University**MS-10-5** 成熟型アストロサイト - エンリッチ大脳皮質オルガノイドの開発

## Development of the mature astrocyte-enriched cortical organoids

○Hiroko Shimada, Hideyuki Okano

Keio Univ. Regenerative Medicine Research Center

**MS-10-6** 脂肪酸結合タンパク質を標的としたレビー小体病の新規病態解明 - 治療開発と早期診断への新展開FABP3 as a Novel Therapeutic and Diagnostic Target for  $\alpha$ -Synucleinopathies: From Pathogenic Insight to Drug Innovation○Ichiro Kawahata<sup>1</sup>, Atsushi Takeda<sup>2</sup>, Kazuko Hasegawa<sup>3</sup>, Kazuto Kobayashi<sup>1</sup>, Kohji Fukunaga<sup>4</sup><sup>1</sup>Dept Mol Gen, Inst Bio Sci, Fukushima Med Univ, <sup>2</sup>NHO Sendai-Nishitaga Hosp, <sup>3</sup>NHO Sagamihara Hosp, <sup>4</sup>BRI Pharma Inc**MS-10-7** 多系統萎縮症マウスのオリゴデンドロサイトにおける $\alpha$ シヌクレインの病態Pathological impact of  $\alpha$ -synuclein in oligodendrocytes in multiple system atrophy mouse model○Kohji Fukunaga<sup>1</sup>, An Cheng<sup>1,2</sup>, David Finkelstein<sup>3</sup>, Tomonori Sekimori<sup>1</sup>, Ichiro Kawahata<sup>4</sup><sup>1</sup>Tohoku Univ Grad Sch Pharm Sci, <sup>2</sup>Sun Yat-sen Univ Sch of Med, China, <sup>3</sup>Univ Melbourne, Florey Institute of Neuroscience,<sup>4</sup>Dept Mol Genetics, Fukushima Med Univ

2025年9月13日(土)

ポスター・企業展示会場(8階 展示場)

神経化学カフェ

11:30 ~ 12:30

NC

研究者が岐路に立つとき ～先人の経験に学ぶ～

Stories and Advice from Senior Researchers

Chair : Eiji Shigetomi (Yamanashi GLIA center, Interdiscipl Grad Sch Med, Univ Yamanashi)

共催：将来計画委員会 (Japanese)

NC-1

研究の岐路で考えたこと ～私の経験から～

○ Makoto Tsuda

Graduate School of Pharmaceutical Sciences, Kyushu University

NC-2

研究者としての転機 — PI としての独立 — の経験を通して学んだこと、感じたこと

○ Kazunori Nakajima

Department of Anatomy, Keio University School of Medicine