

1. Shinozaki Y., Saito K., Kashiwagi K., Koizumi S. Ocular P2 receptors and glaucoma. *Neuropharmacology* (2023) DOI:10.1016/j.neuropharm.2022.109302
2. Matsuoka K., Takado Y., Tagai K., Kubota M., Sano Y., Takahata K., Ono M., Seki C., Matsumoto H., Endo H., Shinotoh H., Sahara Y., Obata T., Near J., Kawamura K., Zhang M.R., Suhara T., Shimada H., Higuchi M. Two pathways differentially linking tau depositions, oxidative stress, and neuronal loss to apathetic phenotypes in progressive supranuclear palsy. *Journal of the Neurological Sciences* (2023) DOI:10.1016/j.jns.2022.120514
3. Okamoto M., Mizuno R., Kawada K., Itatani Y., Kiyasu Y., Hanada K., Hirata W., Nishikawa Y., Masui H., Sugimoto N., Tamura T., Inamoto S., Sakai Y., Obama K. Neutrophil Extracellular Traps Promote Metastases of Colorectal Cancers through Activation of ERK Signaling by Releasing Neutrophil Elastase. *International Journal of Molecular Sciences* (2023) DOI:10.3390/ijms24021118
4. Murakoshi H., Ueda H.H., Goto R., Hamada K., Nagasawa Y., Fuji T. In vivo three- and four-photon fluorescence microscopy using a 1.8 μm femtosecond fiber laser system. *Biomedical Optics Express* (2023) DOI:10.1364/BOE.477322
5. Nakanishi S., Mantani Y., Ohno N., Morishita R., Yokoyama T., Hoshi N. Histological study on regional specificity of the mucosal nerve network in the rat large intestine. *Journal of Veterinary Medical Science* (2023) DOI:10.1292/jvms.22-0433
6. Furuse M., Nakatsu D., Hempstock W., Sugioka S., Ishizuka N., Furuse K., Sugawara T., Fukazawa Y., Hayashi H. Reconstitution of functional tight junctions with individual claudin subtypes in epithelial cells. *Cell Structure and Function* (2023) DOI:10.1247/csf.22068
7. Higashi T., Saito A.C., Fukazawa Y., Furuse M., Higashi A.Y., Ono M., Chiba H. EpCAM proteolysis and release of complexed claudin-7 repair and maintain the tight junction barrier. *Journal of Cell Biology* (2023) DOI:10.1083/jcb.202204079
8. Muto J., Fukuda S., Watanabe K., Dai X., Tsuda T., Kiyo T., Kameda K., Kawakami R., Mori H., Shiraishi K., Murakami M., Immura T., Higashiyama S., Fujisawa Y., Mizukami Y., Sayama K. Highly concentrated trehalose induces prohealing senescence-like state in fibroblasts via CDKN1A/p21. *Communications Biology* (2023) DOI:10.1038/s42003-022-04408-3
9. Jitsushi T., Yamaguchi A. Characteristic cortico-cortical connection profile of human precuneus revealed by probabilistic tractography. *Scientific Reports* (2023) DOI:10.1038/s41598-023-29251-2
10. Ramon A.F., Wada Y., Ishii H., Watakabe Y., Tsutsumi M., Jang K., Otomo K., Qiao L., Fujii Y., Tsujino H., Tsutsumi Y., Nemoto T., Arisawa M. Absorption, fluorescence, and two-photon excitation ability of 5-phenyl-13-arylisobindolo[2,1-a]quinolines prepared by one-pot reaction of ring-closing metathesis and 1,3-dipolar cycloaddition. *Dyes and Pigments* (2023) DOI:10.1016/j.dyepig.2023.111118
11. Sugimoto H., Abe M.S., Otake-Matsuura M. Word-producing brain: Contribution of the left anterior middle temporal gyrus to word production patterns in spoken language. *Brain and Language* (2023) DOI:10.1016/j.bandl.2023.105233
12. Kashimoto R., Kamei Y., Nonaka S., Kondo Y., Yamamoto S., Furukawa S., Ohashi A., Satoh A. FGF signaling induces the regeneration of collagen fiber structure during skin wound healing in axolotls. *Developmental Biology* (2023) DOI:10.1016/j.ydbio.2023.03.007
13. Ogino Y., Ansai S., Watanabe E., Yasugi M., Katayama Y., Sakamoto H., Okamoto K., Okubo K., Yamamoto Y., Hara I., Yamazaki T., Kato A., Kamei Y., Naruse K., Ohta K., Ogino H., Sakamoto T., Miyagawa S., Sato T., Yamada G., Baker M.E., Iguchi T. Evolutionary differentiation of androgen receptor is responsible for sexual characteristic

- development in a teleost fish. *Nature Communications* (2023) DOI:10.1038/s41467-023-37026-6
- 14. Ohga H., Shibata K., Sakanoue R., Ogawa T., Kitano H., Kai S., Ohta K., Nagano N., Nagasako T., Uchida S., Sakuma T., Yamamoto T., Kim S., Tashiro K., Kuhara S., Gen K., Fujiwara A., Kazeto Y., Kobayashi T., Matsuyama M. Development of a chub mackerel with less-aggressive fry stage by genome editing of arginine vasotocin receptor V1a2. *Scientific Reports* (2023) DOI:10.1038/s41598-023-30259-x
 - 15. Shigetomi K., Ono Y., Matsuzawa K., Ikenouchi J. Cholesterol-rich domain formation mediated by ZO proteins is essential for tight junction formation. *Proceedings of the National Academy of Sciences of the United States of America* (2023) DOI:10.1073/pnas.2217561120
 - 16. Otomo K., Ishii H., Nemoto T. Improving two-photon excitation microscopy for sharper and faster biological imaging. *Biophysics and physicobiology* (2023) DOI:10.2142/biophysico.bppb-v20.0009
 - 17. Shinozaki Y., Kashiwagi K., Koizumi S. Astrocyte Immune Functions and Glaucoma. *International Journal of Molecular Sciences* (2023) DOI:10.3390/ijms24032747
 - 18. Nakamura Y., Kurabe M., Matsumoto M., Sato T., Miyashita S., Hoshina K., Kamiya Y., Tainaka K., Matsuzawa H., Ohno N., Ueno M. Cerebrospinal fluid-contacting neuron tracing reveals structural and functional connectivity for locomotion in the mouse spinal cord. *eLife* (2023) DOI:10.7554/eLife.83108
 - 19. Kimata Y., Yamada M., Murata T., Kuwata K., Sato A., Suzuki T., Kurihara D., Hasebe M., Higashiyama T., Ueda M. Novel inhibitors of microtubule organization and phragmoplast formation in diverse plant species. *Life Science Alliance* (2023) DOI:10.26508/lsa.202201657
 - 20. Fukuda T., Furukawa K., Maruyama T., Yamashita S.I., Noshiro D., Song C., Ogasawara Y., Okuyama K., Alam J.M., Hayatsu M., Saigusa T., Inoue K., Ikeda K., Takai A., Chen L., Lahiri V., Okada Y., Shibata S., Murata K., Klionsky D.J., Noda N.N., Kanki T. The mitochondrial intermembrane space protein mitofissin drives mitochondrial fission required for mitophagy. *Molecular Cell* (2023) DOI:10.1016/j.molcel.2023.04.022
 - 21. Hashimoto A., Kawamura N., Tarusawa E., Takeda I., Aoyama Y., Ohno N., Inoue M., Kagamiuchi M., Kato D., Matsumoto M., Hasegawa Y., Nabekura J., Schaefer A., Moorhouse A.J., Yagi T., Wake H. Microglia enable cross-modal plasticity by removing inhibitory synapses. *Cell Reports* (2023) DOI:10.1016/j.celrep.2023.112383
 - 22. Konishi M., Kishi K., Morita R., Yamada A., Onuma T.A., Nishida H. Formation of the brain by stem cell divisions of large neuroblasts in Oikopleura dioica, a simple chordate. *Development Genes and Evolution* (2023) DOI:10.1007/s00427-023-00704-y
 - 23. Kurusu R., Fujimoto Y., Morishita H., Noshiro D., Takada S., Yamano K., Tanaka H., Arai R., Kageyama S., Funakoshi T., Komatsu-Hirota S., Taka H., Kazuno S., Miura Y., Koike M., Wakai T., Waguri S., Noda N.N., Komatsu M. Integrated proteomics identifies p62-dependent selective autophagy of the supramolecular vault complex. *Developmental Cell* (2023) DOI:10.1016/j.devcel.2023.04.015
 - 24. Miyazaki S., Otani T., Sugihara K., Fujimori T., Furuse M., Miura T. Mechanism of interdigitation formation at apical boundary of MDCK cell. *iScience* (2023) DOI:10.1016/j.isci.2023.106594
 - 25. Saito Y., Kamagata K., Andica C., Taoka T., Tuerxun R., Uchida W., Takabayashi K., Owaki M., Yoshida S., Yamazaki K., Naganawa S., Aoki S. Multisite harmonization of diffusion tensor image analysis along the perivascular space using the COMBined Association Test. *Japanese Journal of Radiology* (2023) DOI:10.1007/s11604-023-01432-z

26. Saito Y., Kamagata K., Andica C., Uchida W., Takabayashi K., Yoshida S., Nakaya M., Tanaka Y., Kamio S., Sato K., Nishizawa M., Akashi T., Shimoji K., Wada A., Aoki S. Glymphatic system impairment in corticobasal syndrome: diffusion tensor image analysis along the perivascular space (DTI-ALPS). *Japanese Journal of Radiology* (2023) DOI:10.1007/s11604-023-01454-7
27. Saito Y., Kamagata K., Andica C., Uchida W., Takabayashi K., Yoshida S., Nakaya M., Tanaka Y., Kamiyo S., Sato K., Nishizawa M., Akashi T., Shimoji K., Wada A., Aoki S. Reproducibility of automated calculation technique for diffusion tensor image analysis along the perivascular space. *Japanese Journal of Radiology* (2023) DOI:10.1007/s11604-023-01415-0
28. Takanami K., Morishita M., Sakamoto T., Sakamoto H. Chronic corticosterone exposure evokes itch hypersensitivity and sexual dysfunction in male rats: Relationship between the two distinct gastrin-releasing peptide systems in the spinal cord. *General and Comparative Endocrinology* (2023) DOI:10.1016/j.ygcen.2023.114289
29. Abe Y., Yagishita S., Sano H., Sugiura Y., Dantsuji M., Suzuki T., Mochizuki A., Yoshimaru D., Hata J., Matsumoto M., Taira S., Takeuchi H., Okano H., Ohno N., Suematsu M., Inoue T., Nambu A., Watanabe M., Tanaka K.F. Shared GABA transmission pathology in dopamine agonist- and antagonist-induced dyskinesia. *Cell Reports Medicine* (2023) DOI:10.1016/j.xcrm.2023.101208
30. Akaike S., Okamoto T., Kurosawa R., Onodera N., Lin Y., Sato W., Yamamura T., Takahashi Y. Exploring the Potential of the Corpus Callosum Area as a Predictive Marker for Impaired Information Processing in Multiple Sclerosis. *Journal of Clinical Medicine* (2023) DOI:10.3390/jcm12216948
31. Asada Y., Taki M., Yamaguchi S. A Synthetic Strategy for Multi-Functionalized Phosphorhodamines via Catalytic P-Arylation. *Bulletin of the Chemical Society of Japan* (2023) DOI:10.1246/bcsj.20230082
32. Burton-Smith R.N., Song C., Ueno H., Murata T., Iino R., Murata K. Six states of Enterococcus hirae V-type ATPase reveals non-uniform rotor rotation during turnover. *Communications Biology* (2023) DOI:10.1038/s42003-023-05110-8
33. Carrasco Apolinario M.E., Umeda R., Teranishi H., Shan M., Sebastian W.A., Lai S., Shimizu N., Shiraishi H., Shikano K., Hikida T., Hanada T., Ohta K., Hanada R. Behavioral and neurological effects of Vrk1 deficiency in zebrafish. *Biochemical and Biophysical Research Communications* (2023) DOI:10.1016/j.bbrc.2023.07.005
34. Goto M., Shibata Y., Ishiyama S., Matsumaru Y., Ishikawa E. Brain Microstructure and Brain Function Changes in Space Headache by Head-Down-Tilted Bed Rest. *Aerospace Medicine and Human Performance* (2023) DOI:10.3357/AMHP.6177.2023
35. Hoshino N., Kanadome T., Takasugi T., Itoh M., Kaneko R., Inoue Y.U., Inoue T., Hirabayashi T., Watanabe M., Matsuda T., Nagai T., Tarusawa E., Yagi T. Visualization of trans homophilic interaction of clustered protocadherin in neurons. *Proceedings of the National Academy of Sciences of the United States of America* (2023) DOI:10.1073/pnas.2301003120
36. Kanai A., Nishida Y., Iwamoto T., Yokota M., Aoyama S., Ueki K., Ito M., Uzawa H., Iida H., Koike M., Watada H. Genome-wide screening for regulators of degradation of insulin secretory granules with a fluorescent reporter. *Biochemical and Biophysical Research Communications* (2023) DOI:10.1016/j.bbrc.2023.07.040
37. Katoh T.A., Omori T., Ishikawa T., Okada Y., Hamada H. Biophysical Analysis of Mechanical Signals in Immotile Cilia of Mouse Embryonic Nodes Using Advanced Microscopic Techniques. *Bio-protocol* (2023) DOI:10.21769/BioProtoc.4715

38. Kira A., Tatsutomi I., Saito K., Murata M., Hattori I., Kajita H., Muraki N., Oda Y., Satoh S., Tsukamoto Y., Kimura S., Onoue K., Yonemura S., Arakawa S., Kato H., Hirashima T., Kawane K. Apoptotic extracellular vesicle formation via local phosphatidylserine exposure drives efficient cell extrusion. *Developmental Cell* (2023) DOI:10.1016/j.devcel.2023.05.008
39. Kondow A., Ohnuma K., Taniguchi A., Sakamoto J., Asashima M., Kato K., Kamei Y., Nonaka S. Automated contour extraction for light-sheet microscopy images of zebrafish embryos based on object edge detection algorithm. *Development Growth and Differentiation* (2023) DOI:10.1111/dgd.12871
40. Matsuda K., Hirayama D., Hino N., Kuno S., Sakaue-Sawano A., Miyawaki A., Matsuda M., Terai K. Knockout of all ErbB-family genes delineates their roles in proliferation, survival and migration. *Journal of Cell Science* (2023) DOI:10.1242/jcs.261199
41. Matsudaira I., Yamaguchi R., Taki Y. Transmit Radiant Individuality to Offspring (TRIO) study: investigating intergenerational transmission effects on brain development. *Frontiers in Psychiatry* (2023) DOI:10.3389/fpsyg.2023.1150973
42. Matsumoto J., Fukunaga M., Miura K., Nemoto K., Okada N., Hashimoto N., Morita K., Koshiyama D., Ohi K., Takahashi T., Koeda M., Yamamori H., Fujimoto M., Yasuda Y., Ito S., Yamazaki R., Hasegawa N., Narita H., Yokoyama S., Mishima R., Miyata J., Kobayashi Y., Sasabayashi D., Harada K., Yamamoto M., Hirano Y., Itahashi T., Nakataki M., Hashimoto R.I., Tha K.K., Koike S., Matsubara T., Okada G., Yoshimura R., Abe O., van Erp T.G.M., Turner J.A., Jahanshad N., Thompson P.M., Onitsuka T., Watanabe Y., Matsuo K., Yamasue H., Okamoto Y., Suzuki M., Ozaki N., Kasai K., Hashimoto R. Cerebral cortical structural alteration patterns across four major psychiatric disorders in 5549 individuals. *Molecular Psychiatry* (2023) DOI:10.1038/s41380-023-02224-7
43. Mazaki Y., Handa H., Fumoto Y., Horinouchi T., Onodera Y. LRRK2 is involved in the chemotaxis of neutrophils and differentiated HL-60 cells, and the inhibition of LRRK2 kinase activity increases fMLP-induced chemotactic activity. *Cell Communication and Signaling* (2023) DOI:10.1186/s12964-023-01305-y
44. Nagasawa Y., Ueda H.H., Kawabata H., Murakoshi H. LOV2-based photoactivatable CaMKII and its application to single synapses: Local Optogenetics. *Biophysics and physicobiology* (2023) DOI:10.2142/biophysico.bppb-v20.0027
45. Nomura M., Ohta K., Nishigami Y., Nakayama T., Nakamura K.I., Tadakuma K., Galipon J. Three-dimensional architecture and assembly mechanism of the egg-shaped shell in testate amoeba Paulinella micropora. *Frontiers in Cell and Developmental Biology* (2023) DOI:10.3389/fcell.2023.1232685
46. Okada N., Fukunaga M., Miura K., Nemoto K., Matsumoto J., Hashimoto N., Kiyota M., Morita K., Koshiyama D., Ohi K., Takahashi T., Koeda M., Yamamori H., Fujimoto M., Yasuda Y., Hasegawa N., Narita H., Yokoyama S., Mishima R., Kawashima T., Kobayashi Y., Sasabayashi D., Harada K., Yamamoto M., Hirano Y., Itahashi T., Nakataki M., Hashimoto R.I., Tha K.K., Koike S., Matsubara T., Okada G., van Erp T.G.M., Jahanshad N., Yoshimura R., Abe O., Onitsuka T., Watanabe Y., Matsuo K., Yamasue H., Okamoto Y., Suzuki M., Turner J.A., Thompson P.M., Ozaki N., Kasai K., Hashimoto R. Subcortical volumetric alterations in four major psychiatric disorders: a mega-analysis study of 5604 subjects and a volumetric data-driven approach for classification. *Molecular Psychiatry* (2023) DOI:10.1038/s41380-023-02141-9
47. Okamoto K., Fujita H., Okada Y., Shinkai S., Onami S., Abe K., Fujimoto K., Sasaki K., Shioi G., Watanabe T.M. Single-molecule tracking of Nanog and Oct4 in living mouse embryonic stem cells uncovers a feedback mechanism of pluripotency maintenance. *EMBO Journal* (2023) DOI:10.15252/embj.2022112305

48. Oti T., Sakamoto H. Neuropeptidergic control circuits in the spinal cord for male sexual behaviour: Oxytocin–gastrin-releasing peptide systems. *Journal of Neuroendocrinology* (2023) DOI:10.1111/jne.13324
49. Sato Y., Shigematsu M., Shibata-Kanno M., Maejima S., Tamura C., Sakamoto H. Aquaporin regulates cell rounding through vacuole formation during endothelial-to-hematopoietic transition. *Development (Cambridge)* (2023) DOI:10.1242/dev.201275
50. Takeda S., Miyamoto R. A randomized controlled trial of changes in resting-state functional connectivity associated with short-term motor learning of chopstick use with the non-dominant hand. *Behavioural Brain Research* (2023) DOI:10.1016/j.bbr.2023.114599
51. Tomiyama H., Murayama K., Nemoto K., Tomita M., Hasuzawa S., Mizobe T., Kato K., Matsuo A., Ohno A., Kan M., Togao O., Hiwatashi A., Ishigami K., Nakao T. Posterior cingulate cortex spontaneous activity associated with motor response inhibition in patients with obsessive-compulsive disorder: A resting-state fMRI study. *Psychiatry Research - Neuroimaging* (2023) DOI:10.1016/j.psychresns.2023.111669
52. Tsuboi A., Fujimoto K., Kondo T. Spatiotemporal remodeling of extracellular matrix orients epithelial sheet folding. *Science Advances* (2023) DOI:10.1126/SCIADV.ADH2154
53. Tsutsumi M., Takahashi T., Kobayashi K., Nemoto T. Fluorescence radial fluctuation enables two-photon super-resolution microscopy. *Frontiers in Cellular Neuroscience* (2023) DOI:10.3389/fncel.2023.1243633
54. Hatsuda A., Kurisu J., Fujishima K., Kawaguchi A., Ohno N., Kengaku M. Calcium signals tune AMPK activity and mitochondrial homeostasis in dendrites of developing neurons. *Development* (2023) DOI:10.1242/dev.201930
55. Saito Y., Hayakawa Y., Kamagata K., Kikuta J., Mita T., Andica C., Taoka T., Uchida W., Takabayashi K., Tuerxun R., Mahemut Z., Yoshida S., Kitagawa T., Arai T., Suzuki A., Sato K., Nishizawa M., Akashi T., Shimoji K., Wada A., Aoki S. Glymphatic system impairment in sleep disruption: diffusion tensor image analysis along the perivascular space (DTI-ALPS). *Japanese Journal of Radiology* (2023) DOI:10.1007/s11604-023-01463-6
56. Hagiwara D., Azuma Y., Kawaguchi Y., Miyata T., Arima H. Response to endoplasmic reticulum stress in arginine vasopressin neurons. *Endocrine Journal* (2023) DOI:10.1507/endocrj.EJ23-0193
57. Masuda K., Kuwada E., Suzuki M., Suzuki T., Niikawa T., Uchida S., Akagi T. Transcriptomic Interpretation on Explainable AI-Guided Intuition Uncovers Premonitory Reactions of Disordering Fate in Persimmon Fruit. *Plant and Cell Physiology* (2023) DOI:10.1093/pcp/pcad050
58. Ishii H., Otomo K., Chang C.P., Yamasaki M., Watanabe M., Yokoyama H., Nemoto T. All-synchronized picosecond pulses and time-gated detection improve the spatial resolution of two-photon STED microscopy in brain tissue imaging. *PloS One* (2023) DOI:10.1371/journal.pone.0290550
59. Ogawa T. Elucidation of the mechanism by which the internal structure of food controls the quality. *Bioscience Biotechnology and Biochemistry* (2023) DOI:10.1093/bbb/zbad088
60. Mochizuki M., Uchiyama Y., Domen K., Koyama T. Applicability of automated tractography during acute care stroke rehabilitation. *Journal of Physical Therapy Science* (2023) DOI:10.1589/jpts.35.156
61. Katoh T.A., Omori T., Mizuno K., Sai X., Minegishi K., Ikawa Y., Nishimura H., Itabashi T., Kajikawa E., Hiver S., Iwane A.H., Ishikawa T., Okada Y., Nishizaka T., Hamada H. Immotile cilia mechanically sense the direction of fluid flow for left-right determination. *Science* (2023) DOI:10.1126/science.abq8148

62. Toyooka K., Goto Y., Hashimoto K., Wakazaki M., Sato M., Hirai M.Y. Endoplasmic Reticulum Bodies in the Lateral Root Cap are Involved in the Direct Transport of Beta-Glucosidase to Vacuoles. *Plant and Cell Physiology* (2023) DOI:10.1093/pcp/pcac177
63. Murakami M., Kawakami R., Niko Y., Tsuda T., Imamura T. Research letter: A new fluorescent three-dimensional and deep-imaging technique for histological identification of individual tumor cells in extramammary Paget's disease. *Experimental Dermatology* (2023) DOI:10.1111/exd.14759
64. Saitou T., Imamura T. Extended Depth of Focus Two-Photon Light-Sheet Microscopy for In Vivo Fluorescence Imaging of Large Multicellular Organisms at Cellular Resolution. *International Journal of Molecular Sciences* (2023) DOI:10.3390/ijms241210186
65. Nakagami S., Notaguchi M., Kondo T., Okamoto S., Ida T., Sato Y., Higashiyama T., Tsai A.Y.L., Ishida T., Sawa S. Root-knot nematode modulates plant CLE3-CLV1 signaling as a long-distance signal for successful infection. *Science Advances* (2023) DOI:10.1126/sciadv.adf4803
66. Tsujioka S., Sumino A., Nagasawa Y., Sumikama T., Flechsig H., Pupplin L., Tomita T., Baba Y., Kakuta T., Ogoshi T., Umeda K., Kodera N., Murakoshi H., Shibata M. Imaging single CaMKII holoenzymes at work by high-speed atomic force microscopy. *Science Advances* (2023) DOI:10.1126/sciadv.adh1069
67. Tomiyama H., Murayama K., Nemoto K., Tomita M., Kato K., Matsuo A., Ohno A., Kang M., Togao O., Ishigami K., Nakao T. Functional connectivity between pre-supplementary motor area and inferior parietal lobule associated with impaired motor response inhibition in first-degree relatives of patients with obsessive-compulsive disorder. *Cerebral Cortex* (2023) DOI:10.1093/cercor/bhad058
68. Wint H., Li J., Abe T., Yamada H., Higaki T., Nasu Y., Watanabe M., Takei K., Takeda T. Pacsin 2-dependent N-cadherin internalization regulates the migration behaviour of malignant cancer cells. *Journal of Cell Science* (2023) DOI:10.1242/jcs.260827
69. Leo S., Kato Y., Wu Y.M., Yokota M., Koike M., Yui S., Tsuchiya K., Shiraki N., Kume S. The effect of Vitamin D3 and Valproic Acid on the maturation of human induced pluripotent stem cell-derived enterocyte-like cells. *Stem Cells* (2023) DOI:10.1093/stmcls/sxad042
70. Shiraki Y., Mitsuma M., Takada R., Hata S., Kitamura A., Takada S., Kinjo M., Taru H., Müller U.C., Yamamoto T., Sobe Y., Suzuki T. Axonal transport of Frizzled5 by Alcadein α -containing vesicles is associated with kinesin-1. *Molecular Biology of the Cell* (2023) DOI:10.1091/mbc.E22-10-0495
71. Yoshihi K., Iida H., Teramoto M., Ishii Y., Kato K., Kondoh H. Epiblast cells gather onto the anterior mesendoderm and initiate brain development without the direct involvement of the node in avian embryos: Insights from broad-field live imaging. *Frontiers in Cell and Developmental Biology* (2022) DOI:10.3389/fcell.2022.1019845
72. Yokote H., Miyazaki Y., Toru S., Nishida Y., Hattori T., Niino M., Sanjo N., Yokota T. High-efficacy therapy reduces subcortical grey matter volume loss in Japanese patients with relapse-onset multiple sclerosis: A 2-year cohort study. *Multiple Sclerosis and Related Disorders* (2022) DOI:10.1016/j.msard.2022.104077
73. Yamahara K., Yamamoto N., Kuwata F., Nakagawa T. Neuroprotective role of insulin-like growth factor 1 in auditory and other nervous systems. *Histology and Histopathology* (2022) DOI:10.14670/HH-18-437
74. Tamura Y., Shimoji K., Ishikawa J., Murao Y., Yorikawa F., Kodera R., Oba K., Toyoshima K., Chiba Y., Tokumaru A.M., Araki A. Association between white matter alterations on diffusion tensor imaging and incidence of frailty in older adults with cardiometabolic diseases. *Frontiers in Aging Neuroscience* (2022) DOI:10.3389/fnagi.2022.912972

75. Tamura S., Mantani Y., Nakanishi S., Ohno N., Yokoyama T., Hoshi N. Region specificity of fibroblast-like cells in the mucosa of the rat large intestine. *Cell and Tissue Research* (2022) DOI:10.1007/s00441-022-03660-7
76. Takeguchi R., Kuroda M., Tanaka R., Suzuki N., Akaba Y., Tsujimura K., Itoh M., Takahashi S. Structural and functional changes in the brains of patients with Rett syndrome: A multimodal MRI study. *Journal of the Neurological Sciences* (2022) DOI:10.1016/j.jns.2022.120381
77. Tabata H., Sasaki M., Agetsuma M., Sano H., Hirota Y., Miyajima M., Hayashi K., Honda T., Nishikawa M., Inaguma Y., Ito H., Takebayashi H., Ema M., Ikenaka K., Nabekura J., Nagata K.I., Nakajima K. Erratic and blood vessel-guided migration of astrocyte progenitors in the cerebral cortex. *Nature Communications* (2022) DOI:10.1038/s41467-022-34184-x
78. Suzuki M., Masuda K., Asakuma H., Takeshita K., Baba K., Kubo Y., Ushijima K., Uchida S., Akagi T. Deep Learning Predicts Rapid Over-softening and Shelf Life in Persimmon Fruits. *Horticulture Journal* (2022) DOI:10.2503/hortj.UTD-323
79. Saito A.C., Endo C., Fukazawa Y., Higashi T., Chiba H. Effects of TAMP family on the tight junction strand network and barrier function in epithelial cells. *Annals of the New York Academy of Sciences* (2022) DOI:10.1111/nyas.14889
80. Ono K., Gotoh H., Nomura T., Morita T., Baba O., Matsumoto M., Saitoh S., Ohno N. Ultrastructural characteristics of oligodendrocyte precursor cells in the early postnatal mouse optic nerve observed by serial block-face scanning electron microscopy. *PloS One* (2022) DOI:10.1371/journal.pone.0278118
81. Numaga-Tomita T., Shimauchi T., Kato Y., Nishiyama K., Nishimura A., Sakata K., Inada H., Kita S., Iwamoto T., Nabekura J., Birnbaumer L., Mori Y., Nishida M. Inhibition of transient receptor potential cation channel 6 promotes capillary arterialization during post-ischaemic blood flow recovery. *British Journal of Pharmacology* (2022) DOI:10.1111/bph.15942
82. Murai S., Takakura K., Sumiyama K., Moriwaki K., Terai K., Komazawa-Sakon S., Seki T., Yamaguchi Y., Mikami T., Araki K., Ohmuraya M., Matsuda M., Nakano H. Generation of transgenic mice expressing a FRET biosensor, SMART, that responds to necroptosis. *Communications Biology* (2022) DOI:10.1038/s42003-022-04300-0
83. Morizawa Y.M., Matsumoto M., Nakashima Y., Endo N., Aida T., Ishikane H., Beppu K., Moritoh S., Inada H., Osumi N., Shigetomi E., Koizumi S., Yang G., Hirai H., Tanaka K., Tanaka K.F., Ohno N., Fukazawa Y., Matsui K. Synaptic pruning through glial synapse engulfment upon motor learning. *Nature Neuroscience* (2022) DOI:10.1038/s41593-022-01184-5
84. Mori W., Kawakami R., Niko Y., Haruta T., Imamura T., Shiraki K., Zako T. Differences in interaction lead to the formation of different types of insulin amyloid. *Scientific Reports* (2022) DOI:10.1038/s41598-022-12212-6
85. Matsuura H., Kawakami R., Isoe M., Hoshihara M., Minami Y., Yatsuzuka K., Tsuda T., Murakami M., Suzuki Y., Kawamata J., Imamura T., Hadano S., Watanabe S., Niko Y. NIR-II-Excitable Dye-Loaded Nanoemulsions for Two-Photon Microscopy Imaging of Capillary Blood Vessels in the Entire Hippocampal CA1 Region of Living Mice. *ACS Applied Materials and Interfaces* (2022) DOI:10.1021/acsami.2c03299
86. Maeda E., Ando Y., Takeshita K., Matsumoto T. Through the cleared aorta: three-dimensional characterization of mechanical behaviors of rat thoracic aorta under intraluminal pressurization using optical clearing method. *Scientific Reports* (2022) DOI:10.1038/s41598-022-12429-5
87. Kobayashi-Taguchi K., Saitou T., Kamei Y., Murakami A., Nishiyama K., Aoki R., Kusakabe E., Noda H., Yamashita M., Kitazawa R., Imamura T., Takada Y. Computer-Aided Detection

- of Quantitative Signatures for Breast Fibroepithelial Tumors Using Label-Free Multi-Photon Imaging. *Molecules* (2022) DOI:10.3390/molecules27103340
88. Katayama Y., Miura A., Sakamoto T., Takanami K., Sakamoto H. Footedness for scratching itchy eyes in rodents. *Proceedings of the Royal Society B: Biological Sciences* (2022) DOI:10.1098/rspb.2022.1126
89. Kashimoto R., Furukawa S., Yamamoto S., Kamei Y., Sakamoto J., Nonaka S., Watanabe T.M., Sakamoto T., Sakamoto H., Satoh A. Lattice-patterned collagen fibers and their dynamics in axolotl skin regeneration. *iScience* (2022) DOI:10.1016/j.isci.2022.104524
90. Kanehisa K., Koga K., Maejima S., Shiraishi Y., Asai K., Shiratori-Hayashi M., Xiao M.F., Sakamoto H., Worley P.F., Tsuda M. Neuronal pentraxin 2 is required for facilitating excitatory synaptic inputs onto spinal neurons involved in pruriceptive transmission in a model of chronic itch. *Nature Communications* (2022) DOI:10.1038/s41467-022-30089-x
91. Kajiwara K., Osaki H., Greßies S., Kuwata K., Kim J.H., Gensch T., Sato Y., Glorius F., Yamaguchi S., Taki M. A negative-solvatochromic fluorescent probe for visualizing intracellular distributions of fatty acid metabolites. *Nature Communications* (2022) DOI:10.1038/s41467-022-30153-6
92. Jiang C., Okazaki T. Control of mitochondrial dynamics and apoptotic pathways by peroxisomes. *Frontiers in Cell and Developmental Biology* (2022) DOI:10.3389/fcell.2022.938177
93. Ichijo R., Maki K., Kabata M., Murata T., Nagasaka A., Ishihara S., Haga H., Honda T., Adachi T., Yamamoto T., Toyoshima F. Vasculature atrophy causes a stiffened microenvironment that augments epidermal stem cell differentiation in aged skin. *Nature Aging* (2022) DOI:10.1038/s43587-022-00244-6
94. Hoang T.H., Sato-Matsubara M., Yuasa H., Matsubara T., Thuy L.T.T., Ikenaga H., Phuong D.M., Hanh N.V., Hieu V.N., Hoang D.V., Hai H., Okina Y., Enomoto M., Tamori A., Daikoku A., Urushima H., Ikeda K., Dat N.Q., Yasui Y., Shinkawa H., Kubo S., Yamagishi R., Ohtani N., Yoshizato K., Gracia-Sancho J., Kawada N. Cancer cells produce liver metastasis via gap formation in sinusoidal endothelial cells through proinflammatory paracrine mechanisms. *Science Advances* (2022) DOI:10.1126/sciadv.abo5525
95. Hiwatashi Y., Shimada M., Mikami K., Takada N. Establishment of a Live-Imaging Analysis for Polarized Growth of Conchocelis in the Multicellular Red Alga *Neopyropia yezoensis*. *Frontiers in Plant Science* (2022) DOI:10.3389/fpls.2021.716011
96. Hirayama T., Kadooka Y., Tarusawa E., Saitoh S., Nakayama H., Hoshino N., Nakama S., Fukuishi T., Kawanishi Y., Umeshima H., Tomita K., Yoshimura Y., Galjart N., Hashimoto K., Ohno N., Yagi T. CTCF loss induces giant lamellar bodies in Purkinje cell dendrites. *Acta Neuropathologica Communications* (2022) DOI:10.1186/s40478-022-01478-6
97. Hayakawa E., Guzman C., Horiguchi O., Kawano C., Shiraishi A., Mohri K., Lin M.F., Nakamura R., Nakamura R., Kawai E., Komoto S., Jokura K., Shiba K., Shigenobu S., Satake H., Inaba K., Watanabe H. Mass spectrometry of short peptides reveals common features of metazoan peptidergic neurons. *Nature Ecology and Evolution* (2022) DOI:10.1038/s41559-022-01835-7
98. Hashimoto R., Minoshima M., Sakata S., Ono F., Ishii H., Watakabe Y., Nemoto T., Yanaka S., Kato K., Kikuchi K. Efficient visible/NIR light-driven uncaging of hydroxylated thiazole orange-based caged compounds in aqueous media. *Chemical Science* (2022) DOI:10.1039/d2sc02364d
99. Guido I., Vilfan A., Ishibashi K., Sakakibara H., Shiraga M., Bodenschatz E., Golestanian R., Oiwa K. A Synthetic Minimal Beating Axoneme. *Small* (2022) DOI:10.1002/smll.202107854

100. Fujimori C., Umatani C., Chimura M., Ijiri S., Bando H., Hyodo S., Kanda S. In vitro and in vivo gene transfer in the cloudy catshark *Scyliorhinus torazame*. *Development Growth and Differentiation* (2022) DOI:10.1111/dgd.12824
101. Echigoya S., Sato K., Kishida O., Nakagaki T., Nishigami Y. Switching of behavioral modes and their modulation by a geometrical cue in the ciliate *Stentor coeruleus*. *Frontiers in Cell and Developmental Biology* (2022) DOI:10.3389/fcell.2022.1021469
102. Danjo Y., Shinozaki Y., Natsubori A., Kubota Y., Kashiwagi K., Tanaka K.F., Koizumi S. The Mlc1 Promoter Directs Müller Cell-specific Gene Expression in the Retina. *Translational Vision Science and Technology* (2022) DOI:10.1167/tvst.11.1.25
103. Chang C.P., Otomo K., Kozawa Y., Ishii H., Yamasaki M., Watanabe M., Sato S., Enoki R., Nemoto T. Single-scan volumetric imaging throughout thick tissue specimens by one-touch installable light-needle creating device. *Scientific Reports* (2022) DOI:10.1038/s41598-022-14647-3
104. Kaneshiro I., Igarashi M., Higashiyama T., Mizuta Y. Target pollen isolation using automated infrared laser-mediated cell disruption. *Quantitative Plant Biology* (2022) DOI:10.1017/qpb.2022.24
105. Ito T., Morita M., Okuno S., Inaba K., Shiba K., Munehara H., Koya Y., Homma M., Awata S. Fertilization modes and the evolution of sperm characteristics in marine fishes: Paired comparisons of externally and internally fertilizing species. *Ecology and Evolution* (2022) DOI:10.1002/ece3.9562
106. Kamagata K., Andica C., Takabayashi K., Saito Y., Taoka T., Nozaki H., Kikuta J., Fujita S., Hagiwara A., Kamiya K., Wada A., Akashi T., Sano K., Nishizawa M., Hori M., Naganawa S., Aoki S. Association of MRI Indices of Glymphatic System With Amyloid Deposition and Cognition in Mild Cognitive Impairment and Alzheimer Disease. *Neurology* (2022) DOI:10.1212/WNL.00000000000201300
107. Sato K., Sakai M., Ishii A., Maehata K., Takada Y., Yasuda K., Kotani T. Identification of embryonic RNA granules that act as sites of mRNA translation after changing their physical properties. *iScience* (2022) DOI:10.1016/j.isci.2022.104344
108. Sugimoto H., Otake-Matsuura M. Tract-Based Spatial Statistics Analysis of Diffusion Tensor Imaging in Older Adults After the PICMOR Intervention Program: A Pilot Study. *Frontiers in Aging Neuroscience* (2022) DOI:10.3389/fnagi.2022.867417
109. Akaba Y., Shiohama T., Komaki Y., Seki F., Ortug A., Sawada D., Uchida W., Kamagata K., Shimoji K., Aoki S., Takahashi S., Suzuki T., Natsume J., Takahashi E., Tsujimura K. Comprehensive Volumetric Analysis of MeCP2-Null Mouse Model for Rett Syndrome by T2-Weighted 3D Magnetic Resonance Imaging. *Frontiers in Neuroscience* (2022) DOI:10.3389/fnins.2022.885335
110. Mizobe T., Ikari K., Tomiyama H., Murayama K., Kato K., Hasuzawa S., Togao O., Hiwatashi A., Nakao T. Abnormal white matter structure in hoarding disorder. *Journal of Psychiatric Research* (2022) DOI:10.1016/j.jpsychires.2022.01.031
111. Kohno K., Shirasaka R., Yoshihara K., Mikuriya S., Tanaka K., Takanami K., Inoue K., Sakamoto H., Ohkawa Y., Masuda T., Tsuda M. A spinal microglia population involved in remitting and relapsing neuropathic pain. *Science* (2022) DOI:10.1126/science.abf6805
112. Ebisu T., Fukunaga M., Murase T., Matsuura T., Tomura N., Miyazaki Y., Osaki S., Okada T., Higuchi T., Umeda M. Functional Connectivity Pattern Using Resting-state fMRI as an Assessment Tool for Spatial Neglect during the Recovery Stage of Stroke: A Pilot Study. *Magnetic Resonance in Medical Sciences* (2022) DOI:10.2463/mrms.mp.2022-0010
113. Kurematsu C., Sawada M., Ohmuraya M., Tanaka M., Kuboyama K., Ogino T., Matsumoto M., Oishi H., Inada H., Ishido Y., Sakakibara Y., Nguyen H.B., Thai T.Q., Kohsaka S., Ohno N., Yamada M.K., Asai M., Sokabe M., Nabekura J., Asano K., Tanaka M., Sawamoto K.

- Synaptic pruning of murine adult-born neurons by microglia depends on phosphatidylserine. *Journal of Experimental Medicine* (2022) DOI:10.1084/jem.20202304
114. Danjo Y., Shigetomi E., Hirayama Y.J., Kobayashi K., Ishikawa T., Fukazawa Y., Shibata K., Takanashi K., Parajuli B., Shinozaki Y., Kim S.K., Nabekura J., Koizumi S. Transient astrocytic mGluR5 expression drives synaptic plasticity and subsequent chronic pain in mice. *Journal of Experimental Medicine* (2022) DOI:10.1084/jem.20210989
115. Beppu K., Tsutsumi R., Ansai S., Ochiai N., Terakawa M., Mori M., Kuroda M., Horikawa K., Tomoi T., Sakamoto J., Kamei Y., Naruse K., Sakaue H. Development of a screening system for agents that modulate taste receptor expression with the CRISPR-Cas9 system in medaka. *Biochemical and Biophysical Research Communications* (2022) DOI:10.1016/j.bbrc.2022.02.082
116. Fujiwara S., Nguyen T.P., Furuse K., Fukazawa Y., Otani T., Furuse M. Tight junction formation by a claudin mutant lacking the COOH-terminal PDZ domain-binding motif. *Annals of the New York Academy of Sciences* (2022) DOI:10.1111/nyas.14881
117. Ishiyama S., Shibata Y., Ayuzawa S., Matsushita A., Matsumura A., Ishikawa E. The Modifying of Functional Connectivity Induced by Peripheral Nerve Field Stimulation using Electroacupuncture for Migraine: A Prospective Clinical Study. *Pain Medicine* (2022) DOI:10.1093/pmc/pnac048
118. Sugimoto H., Sekiguchi T., Otake-Matsuura M. Association between social comparison orientation and hippocampal properties in older adults: A multimodal MRI study. *Social Neuroscience* (2022) DOI:10.1080/17470919.2023.2166580
119. Ohba A., Sakaguchi M. Contribution of adult-born neurons to memory consolidation during rapid eye movement sleep. *Neural Regeneration Research* (2022) DOI:10.4103/1673-5374.317966
120. Asai M., Miyazawa H., Yanase R., Inaba K., Nakano H. A New Species of Acoela Possessing a Middorsal Appendage With a Possible Sensory Function. *Zoological Science* (2022) DOI:10.2108/zs210058
121. Ichise H., Tsukamoto S., Hirashima T., Konishi Y., Oki C., Tsukiji S., Iwano S., Miyawaki A., Sumiyama K., Terai K., Matsuda M. Functional visualization of NK cell-mediated killing of metastatic single tumor cells. *eLife* (2022) DOI:10.7554/ELIFE.76269
122. Yoshihi K., Kato K., Iida H., Teramoto M., Kawamura A., Watanabe Y., Nunome M., Nakano M., Matsuda Y., Sato Y., Mizuno H., Iwasato T., Ishii Y., Kondoh H. Live imaging of avian epiblast and anterior mesendoderm grafting reveals the complexity of cell dynamics during early brain development. *Development* (2022) DOI:10.1242/dev.199999
123. Yamamori Y., Tomii K. Application of Homology Modeling by Enhanced Profile–Profile Alignment and Flexible-Fitting Simulation to Cryo-EM Based Structure Determination. *International Journal of Molecular Sciences* (2022) DOI:10.3390/ijms23041977
124. Tomiyama H., Murayama K., Nemoto K., Tomita M., Hasuzawa S., Mizobe T., Kato K., Ohno A., Tsuruta S., Togao O., Hiwatashi A., Nakao T. Increased functional connectivity between presupplementary motor area and inferior frontal gyrus associated with the ability of motor response inhibition in obsessive-compulsive disorder. *Human Brain Mapping* (2022) DOI:10.1002/hbm.25699
125. Kinoshita N., Yamamoto T.S., Yasue N., Takagi C., Fujimori T., Ueno N. Force-dependent remodeling of cytoplasmic ZO-1 condensates contributes to cell-cell adhesion through enhancing tight junctions. *iScience* (2022) DOI:10.1016/j.isci.2022.103846
126. Ueba Y., Murakami T., Yamamoto T., Kuroe A., Yamasaki M., Kaneda D., Otani D., Kiyobayashi S., Ikeda K., Yabe D., Ogura M., Inagaki N. Voxel-based specific regional analysis system for Alzheimer's disease utility as a screening tool for unrecognized cognitive

- dysfunction of elderly patients in diabetes outpatient clinics: Multicenter retrospective exploratory study. *Journal of Diabetes Investigation* (2022) DOI:10.1111/jdi.13622
127. Takazaki H., Kusumoto T., Ishibashi W., Yasunaga T., Sakamoto J. Extended supercomplex contains type-II NADH dehydrogenase, cytochrome bcc complex, and aa₃ oxidase in the respiratory chain of *Corynebacterium glutamicum*. *Journal of Bioscience and Bioengineering* (2022) DOI:10.1016/j.jbiosc.2021.10.004
128. Onitsuka T., Hirano Y., Nemoto K., Hashimoto N., Kushima I., Koshiyama D., Koeda M., Takahashi T., Noda Y., Matsumoto J., Miura K., Nakazawa T., Hikida T., Kasai K., Ozaki N., Hashimoto R. Trends in big data analyses by multicenter collaborative translational research in psychiatry. *Psychiatry and clinical neurosciences* (2022) DOI:10.1111/pcn.13311
129. Nishida H., Matsuo M., Konishi S., Ohno N., Manni L., Onuma T.A. Germline development during embryogenesis of the larvacean, *Oikopleura dioica*. *Developmental Biology* (2022) DOI:10.1016/j.ydbio.2021.10.009
130. Ueda H.H., Nagasawa Y., Sato A., Onda M., Murakoshi H. Chronic neuronal excitation leads to dual metaplasticity in the signaling for structural long-term potentiation. *Cell Reports* (2022) DOI:10.1016/j.celrep.2021.110153
131. Matsumoto K., Nishigami Y., Nakagaki T. Binocular stereo-microscopy for deforming intact amoeba. *Optics Express* (2022) DOI:10.1364/OE.439825
132. Kamada T., Otomo K., Murata T., Nakata K., Hiruma S., Uehara R., Hasebe M., Nemoto T. Low-invasive 5D visualization of mitotic progression by two-photon excitation spinning-disk confocal microscopy. *Scientific Reports* (2022) DOI:10.1038/s41598-021-04543-7
133. Asamizuya T., Saito H., Higuchi R., Naruse G., Ota S., Kato J. Effective Connectivity and Criminal Sentencing Decisions: Dynamic Causal Models in Laypersons and Legal Experts. *Cerebral Cortex* (2022) DOI:10.1093/cercor/bhab484
134. Haraguchi T., Koujin T., Shindo T., Bilir S., Osakada H., Nishimura K., Hirano Y., Asakawa H., Mori C., Kobayashi S., Okada Y., Chikashige Y., Fukagawa T., Shibata S., Hiraoka Y. Transfected plasmid DNA is incorporated into the nucleus via nuclear envelope reformation at telophase. *Communications Biology* (2022) DOI:10.1038/s42003-022-03021-8
135. Sugiura K., Shiba K., Inaba K., Matsumoto M. Morphological differences in tardigrade spermatozoa induce variation in gamete motility. *BMC Zoology* (2022) DOI:10.1186/s40850-022-00109-w
136. Tomiyama H., Murayama K., Nemoto K., Hasuzawa S., Mizobe T., Kato K., Matsuo A., Ohno A., Kang M., Togao O., Hiwatashi A., Ishigami K., Nakao T. Alterations of default mode and cingulo-opercular salience network and frontostriatal circuit: A candidate endophenotype of obsessive-compulsive disorder. *Progress in Neuro-Psychopharmacology and Biological Psychiatry* (2022) DOI:10.1016/j.pnpbp.2022.110516
137. Tanaka S., Kirino E. Right-Lateralized Enhancement of the Auditory Cortical Network During Imagined Music Performance. *Frontiers in Neuroscience* (2022) DOI:10.3389/fnins.2022.739858
138. Hasegawa Y., Reyes T.H., Uemura T., Baral A., Fujimaki A., Luo Y.M., Morita Y., Saeki Y., Maekawa S., Yasuda S., Mukuta K., Fukao Y., Tanaka K., Nakano A., Takagi J., Bhalerao R.P., Yamaguchi J., Sato T. The TGN/EE SNARE protein SYP61 and the ubiquitin ligase ATL31 cooperatively regulate plant responses to carbon/nitrogen conditions in *Arabidopsis*. *The Plant Cell* (2022) DOI:10.1093/plcell/koac014
139. Hori M., Maekawa T., Kamiya K., Hagiwara A., Goto M., Takemura M.Y., Fujita S., Andica C., Kamagata K., Cohen-Adad J., Aoki S. Advanced Diffusion MR Imaging for Multiple Sclerosis in the Brain and Spinal Cord. *Magnetic Resonance in Medical Sciences* (2022) DOI:10.2463/mrms.rev.2021-0091

140. Kobayashi A., Hamada M., Yoshida M.A., Kobayashi Y., Tsutsui N., Sekiguchi T., Matsukawa Y., Maejima S., Gingell J.J., Sekiguchi S., Hamamoto A., Hay D.L., Morris J.F., Sakamoto T., Sakamoto H. Vasopressin-oxytocin-type signaling is ancient and has a conserved water homeostasis role in euryhaline marine planarians. *Science Advances* (2022) DOI:10.1126/sciadv.abk0331
141. Akagi T., Masuda K., Kuwada E., Takeshita K., Kawakatsu T., Ariizumi T., Kubo Y., Ushijima K., Uchida S. Genome-wide cis-decoding for expression design in tomato using cistrome data and explainable deep learning. *The Plant Cell* (2022) DOI:10.1093/plcell/koac079
142. Inoue K., Kawakami R., Murakami M., Nakayama T., Yamamoto S., Inoue K., Tsuda T., Sayama K., Imamura T., Kaneno D., Hadano S., Watanabe S., Niko Y. Synthesis and photophysical properties of a new push-pull pyrene dye with green-to-far-red emission and its application to human cellular and skin tissue imaging. *Journal of Materials Chemistry B* (2022) DOI:10.1039/d1tb02728j
143. Jitsushi T., Yamaguchi A. Searching for optimal machine learning model to classify mild cognitive impairment (MCI) subtypes using multimodal MRI data. *Scientific Reports* (2022) DOI:10.1038/s41598-022-08231-y
144. Kawano K., Kato K., Sugioka T., Kimura Y., Tanimoto M., Higashijima S.I. Long descending commissural V0v neurons ensure coordinated swimming movements along the body axis in larval zebrafish. *Scientific Reports* (2022) DOI:10.1038/s41598-022-08283-0
145. Kato S., Hagiwara A., Yokoyama K., Andica C., Tomizawa Y., Hoshino Y., Uchida W., Nishimura Y., Fujita S., Kamagata K., Hori M., Hattori N., Abe O., Aoki S. Microstructural white matter abnormalities in multiple sclerosis and neuromyelitis optica spectrum disorders: Evaluation by advanced diffusion imaging. *Journal of the Neurological Sciences* (2022) DOI:10.1016/j.jns.2022.120205
146. Kanazawa Y., Omotehara T., Nakata H., Hirashima T., Itoh M. Three-dimensional analysis and in vivo imaging for sperm release and transport in the murine seminiferous tubule. *Reproduction* (2022) DOI:10.1530/REP-21-0400
147. Nishizawa Y., Watanabe T., Noguchi T., Takizawa M., Song C.H., Murata K., Minato H., Suzuki D. Durable gelfoams stabilized by compressible nanocomposite microgels. *Chemical Communications* (2022) DOI:10.1039/d2cc04993g
148. Shinozaki Y., Leung A., Namekata K., Saitoh S., Nguyen H.B., Takeda A., Danjo Y., Morizawa Y.M., Shigetomi E., Sano F., Yoshioka N., Takebayashi H., Ohno N., Segawa T., Miyake K., Kashiwagi K., Harada T., Ohnuma S., Koizumi S. Astrocytic dysfunction induced by ABCA1 deficiency causes optic neuropathy. *Science Advances* (2022) DOI:10.1126/sciadv.abq1081
149. Suzuki M., Kawai S., Shee C.F., Yamada R., Uchida S., Yasukawa T. Development of a simultaneous electrorotation device with microwells for monitoring the rotation rates of multiple single cells upon chemical stimulation. *Lab on a Chip* (2022) DOI:10.1039/d2lc00627h
150. Shibata A.C.E., Ueda H.H., Eto K., Onda M., Sato A., Ohba T., Nabekura J., Murakoshi H. Photoactivatable CaMKII induces synaptic plasticity in single synapses. *Nature Communications* (2021) DOI:10.1038/s41467-021-21025-6
151. Roszak P., Heo J.O., Blob B., Toyokura K., Sugiyama Y., de Luis Balaguer M.A., Lau W.W.Y., Hamey F., Cirrone J., Madej E., Bouatta A.M., Wang X., Guichard M., Ursache R., Tavares H., Verstaen K., Wendrich J., Melnyk C.W., Oda Y., Shasha D., Ahnert S.E., Saeys Y., De Rybel B., Heidstra R., Scheres B., Grossmann G., Mähönen A.P., Denninger P., Göttgens B., Sozzani R., Birnbaum K.D., Helariutta Y. Cell-by-cell dissection of phloem

- development links a maturation gradient to cell specialization. *Science* (2021) DOI:10.1126/science.aba5531
152. Oti T., Satoh K., Uta D., Nagafuchi J., Tateishi S., Ueda R., Takanami K., Young L.J., Galione A., Morris J.F., Sakamoto T., Sakamoto H. Oxytocin Influences Male Sexual Activity via Non-synaptic Axonal Release in the Spinal Cord. *Current Biology* (2021) DOI:10.1016/j.cub.2020.09.089
153. Oti T., Sakamoto T., Sakamoto H. Systemic effects of oxytocin on male sexual activity via the spinal ejaculation generator in rats. *Communicative and Integrative Biology* (2021) DOI:10.1080/19420889.2021.1902056
154. Ogawa T., Matsumura Y. Revealing 3D structure of gluten in wheat dough by optical clearing imaging. *Nature Communications* (2021) DOI:10.1038/s41467-021-22019-0
155. Nishida H., Ohno N., Caicci F., Manni L. 3D reconstruction of structures of hatched larva and young juvenile of the larvacean Oikopleura dioica using SBF-SEM. *Scientific Reports* (2021) DOI:10.1038/s41598-021-83706-y
156. Nagahara S., Takeuchi H., Higashiyama T. Polyspermy Block in the Central Cell During Double Fertilization of *Arabidopsis thaliana*. *Frontiers in Plant Science* (2021) DOI:10.3389/fpls.2020.588700
157. Matsuoka T., Yamasaki M., Abe M., Matsuda Y., Morino H., Kawakami H., Sakimura K., Watanabe M., Hashimoto K. Kv11 (ether-à-go-go-related gene) voltage-dependent K⁺ channels promote resonance and oscillation of subthreshold membrane potentials. *Journal of Physiology* (2021) DOI:10.1113/JP280342
158. Matsumoto J., Miura K., Fukunaga M., Nemoto K., Koshiyama D., Okada N., Morita K., Yamamori H., Yasuda Y., Fujimoto M., Ito S., Hasegawa N., Watanabe Y., Kasai K., Hashimoto R. Association Study Between White Matter Microstructure and Intelligence Decline in Schizophrenia. *Clinical EEG and Neuroscience* (2021) DOI:10.1177/15500594211063314
159. Kutomi O., Yamamoto R., Hirose K., Mizuno K., Nakagiri Y., Imai H., Noga A., Obbineni J.M., Zimmermann N., Nakajima M., Shibata D., Shibata M., Shiba K., Kita M., Kigoshi H., Tanaka Y., Yamasaki Y., Asahina Y., Song C., Nomura M., Nomura M., Nakajima A., Nakachi M., Yamada L., Nakazawa S., Sawada H., Murata K., Mitsuoka K., Ishikawa T., Wakabayashi K.I., Kon T., Inaba K. A dynein-associated photoreceptor protein prevents ciliary acclimation to blue light. *Science Advances* (2021) DOI:10.1126/sciadv.abf3621
160. Kurihara D., Mizuta Y., Nagahara S., Sato Y., Higashiyama T. Optical Clearing of Plant Tissues for Fluorescence Imaging. *Journal of Visualized Experiments* (2021) DOI:10.3791/63428
161. Koyanagi I., Sonomura K., Naoi T., Ohnishi T., Kaneko N., Sawamoto K., Sato T.A., Sakaguchi M. Metabolic fingerprints of fear memory consolidation during sleep. *Molecular Brain* (2021) DOI:10.1186/s13041-021-00733-6
162. Ichijo R., Kabata M., Kidoya H., Muramatsu F., Ishibashi R., Abe K., Tsutsui K., Kubo H., Iizuka Y., Kitano S., Miyachi H., Kubota Y., Fujiwara H., Sada A., Yamamoto T., Toyoshima F. Vasculature-driven stem cell population coordinates tissue scaling in dynamic organs. *Science Advances* (2021) DOI:10.1126/sciadv.abd2575
163. Hirata T., Tohsato Y., Itoga H., Shioi G., Kiyonari H., Oka S., Fujimori T., Onami S. NeuroGT: A brain atlas of neurogenic tagging CreER drivers for birthdate-based classification and manipulation of mouse neurons. *Cell Reports Methods* (2021) DOI:10.1016/j.crmeth.2021.100012
164. Takei N., Sato K., Takada Y., Iyyappan R., Susor A., Yamamoto T., Kotani T. Tdrd3 regulates the progression of meiosis II through translational control of Emi2 mRNA in mouse oocytes. *Current Research in Cell Biology* (2021) DOI:10.1016/j.crcbio.2021.100009

165. Tamura Y., Shimoji K., Ishikawa J., Tachibana A., Kodera R., Oba K., Toyoshima K., Chiba Y., Tokumaru A.M., Araki A. Associations between sarcopenia and white matter alterations in older adults with diabetes mellitus: A diffusion tensor imaging study. *Journal of Diabetes Investigation* (2021) DOI:10.1111/jdi.13379
166. Ogino Y., Kawamichi H., Takizawa D., Sugawara S.K., Hamano Y.H., Fukunaga M., Toyoda K., Watanabe Y., Abe O., Sadato N., Saito S., Furui S. Enhanced structural connectivity within the motor loop in professional boxers prior to a match. *Scientific Reports* (2021) DOI:10.1038/s41598-021-88368-4
167. Saito A.C., Higashi T., Fukazawa Y., Otani T., Tauchi M., Higashi A.Y., Furuse M., Chiba H. Occludin and tricellulin facilitate formation of anastomosing tight-junction strand network to improve barrier function. *Molecular Biology of the Cell* (2021) DOI:10.1091/mbc.E20-07-0464
168. Hirata E., Shirai K., Kawaoka T., Sato K., Kodama F., Suzuki K. Atg15 in *Saccharomyces cerevisiae* consists of two functionally distinct domains. *Molecular Biology of the Cell* (2021) DOI:10.1091/mbc.E20-07-0500
169. Ishii C., Shibano N., Yamazaki M., Arima T., Kato Y., Ishii Y., Shinoda Y., Fukazawa Y., Sadakata T., Sano Y., Furuichi T. CAPS1 is involved in hippocampal synaptic plasticity and hippocampus-associated learning. *Scientific Reports* (2021) DOI:10.1038/s41598-021-88009-w
170. Motomura K., Takeuchi H., Notaguchi M., Tsuchi H., Takeda A., Kinoshita T., Higashiyama T., Maruyama D. Persistent directional growth capability in *Arabidopsis thaliana* pollen tubes after nuclear elimination from the apex. *Nature Communications* (2021) DOI:10.1038/s41467-021-22661-8
171. Nishimoto R., Derouiche S., Eto K., Deveci A., Kashio M., Kimori Y., Matsuoka Y., Morimatsu H., Nabekura J., Tominaga M. Thermosensitive TRPV4 channels mediate temperature-dependent microglia movement. *Proceedings of the National Academy of Sciences of the United States of America* (2021) DOI:10.1073/pnas.2012894118
172. Shimizu T., Murakoshi H., Matsumoto H., Ichino K., Hattori A., Ueno S., Ishida A., Tajiri N., Hida H. Tension Sensor Based on Fluorescence Resonance Energy Transfer Reveals Fiber Diameter-Dependent Mechanical Factors During Myelination. *Frontiers in Cellular Neuroscience* (2021) DOI:10.3389/fncel.2021.685044
173. Satrialdi, Takano Y., Hirata E., Ushijima N., Harashima H., Yamada Y. An effective in vivo mitochondria-targeting nanocarrier combined with a π -extended porphyrin-type photosensitizer. *Nanoscale Advances* (2021) DOI:10.1039/d1na00427a
174. Matsumoto H., Kimata Y., Higaki T., Higashiyama T., Ueda M. Dynamic Rearrangement and Directional Migration of Tubular Vacuoles are Required for the Asymmetric Division of the *Arabidopsis* Zygote. *Plant and Cell Physiology* (2021) DOI:10.1093/pcp/pcab075
175. Hasebe A., Saeki A., Shibata K.I. Lipoprotein Extraction from Microbial Membrane and Lipoprotein/Lipopeptide Transfection into Mammalian Cells. *Methods in Molecular Biology* (2021) DOI:10.1007/978-1-0716-0939-2_19
176. Hamada T., Higashiyama Y., Saito A., Morihara K., Landin-Romero R., Okamoto M., Kimura K., Miyaji Y., Joki H., Kishida H., Doi H., Ueda N., Takeuchi H., Tanaka F. Qualitative Deficits in Verbal Fluency in Parkinson's Disease with Mild Cognitive Impairment: A Clinical and Neuroimaging Study. *Journal of Parkinson's Disease* (2021) DOI:10.3233/jpd-202473
177. Mori Y., Takenaka K.I., Fukazawa Y., Takamori S. The endosomal Q-SNARE, Syntaxin 7, defines a rapidly replenishing synaptic vesicle recycling pool in hippocampal neurons. *Communications Biology* (2021) DOI:10.1038/s42003-021-02512-4

178. Yoshii T., Oki C., Watahiki R., Nakamura A., Tahara K., Kuwata K., Furuta T., Tsukiji S. Chemo-optogenetic Protein Translocation System Using a Photoactivatable Self-Localizing Ligand. *ACS Chemical Biology* (2021) DOI:10.1021/acschembio.1c00416
179. Otubo A., Maejima S., Oti T., Satoh K., Ueda Y., Morris J.F., Sakamoto T., Sakamoto H. Immunoelectron microscopic characterization of vasopressin-producing neurons in the hypothalamo-pituitary axis of non-human primates by use of formaldehyde-fixed tissues stored at -25°C for several years. *International Journal of Molecular Sciences* (2021) DOI:10.3390/ijms22179180
180. Matsuo K., Tamaoki N. Rational design and development of a light-active photoswitchable inhibitor targeting CENP-E. *Organic and Biomolecular Chemistry* (2021) DOI:10.1039/d1ob01332g
181. Suzuki T., Hayashi M., Komatsu T., Tanioka A., Nagasawa M., Tanimura-Inagaki K., Rahman M.S., Masuda S., Yusa K., Sakai J., Shibata H., Inagaki T. Measurement of the nuclear concentration of α -ketoglutarate during adipocyte differentiation by using a fluorescence resonance energy transfer-based biosensor with nuclear localization signals. *Endocrine Journal* (2021) DOI:10.1507/ENDOCRJ.EJ21-0255
182. Shiotani H., Miyata M., Kameyama T., Mandai K., Yamasaki M., Watanabe M., Mizutani K., Takai Y. Nectin-2 α is localized at cholinergic neuron dendrites and regulates synapse formation in the medial habenula. *Journal of Comparative Neurology* (2021) DOI:10.1002/cne.24958
183. Ishibashi K., Iwamoto H., Sakakibara H., Oiwa K. X-Ray Fiber Diffraction and Numerical Simulation Studies on the Change in the Helical Symmetry of Chlamydomonas Flagellar Axonemes Coupled with the Change in Ca^{2+} Concentrations. *Biophysical Journal* (2021) DOI:10.1016/j.bpj.2020.11.1178
184. Usami F.M., Arata M., Shi D., Oka S., Higuchi Y., Tissir F., Takeichi M., Fujimori T. Intercellular and intracellular cilia orientation is coordinated by CELSR1 and CAMSAP3 in oviduct multi-ciliated cells. *Journal of Cell Science* (2021) DOI:10.1242/jcs.257006
185. Imanishi A., Ichise H., Fan C., Nakagawa Y., Kuwahara K., Sumiyama K., Matsuda M., Terai K. Visualization of Spatially-Controlled Vasospasm by Sympathetic Nerve-Mediated ROCK Activation. *American Journal of Pathology* (2021) DOI:10.1016/j.ajpath.2020.09.012
186. Itoh M., Terada M., Sugimoto H. The zonula occludens protein family regulates the hepatic barrier system in the murine liver. *Biochimica et Biophysica Acta - Molecular Basis of Disease* (2021) DOI:10.1016/j.bbadi.2020.165994
187. Aoyama-Ishiwatari S., Okazaki T., Iemura S.I., Natsume T., Okada Y., Gotoh Y. NUDT21 links mitochondrial IPS-1 to RLR-containing stress granules and activates host antiviral defense. *Journal of Immunology* (2021) DOI:10.4049/jimmunol.2000306
188. Taki M., Kajiwara K., Yamaguchi E., Sato Y., Yamaguchi S. Fused Thiophene-S, S-dioxide-Based Super-Photostable Fluorescent Marker for Lipid Droplets. *ACS Materials Letters* (2021) DOI:10.1021/acsmaterialslett.0c00451
189. Sołtysik K., Ohsaki Y., Tatematsu T., Cheng J., Maeda A., Morita S.Y., Fujimoto T. Nuclear lipid droplets form in the inner nuclear membrane in a seipin-independent manner. *Journal of Cell Biology* (2021) DOI:10.1083/JCB.202005026
190. Aoki K., Harada S., Kawaji K., Matsuzawa K., Uchida S., Ikenouchi J. STIM-Orai1 signaling regulates fluidity of cytoplasm during membrane blebbing. *Nature Communications* (2021) DOI:10.1038/s41467-020-20826-5
191. Yuizumi N., Harada Y., Kuniya T., Sunabori T., Koike M., Wakabayashi M., Ishihama Y., Suzuki Y., Kawaguchi D., Gotoh Y. Maintenance of neural stem-progenitor cells by the lysosomal biosynthesis regulators TFEB and TFE3 in the embryonic mouse telencephalon. *Stem Cells* (2021) DOI:10.1002/stem.3359

192. Kohzuma K., Tamaki M., Hikosaka K. Corrected photochemical reflectance index (PRI) is an effective tool for detecting environmental stresses in agricultural crops under light conditions. *Journal of Plant Research* (2021) DOI:10.1007/s10265-021-01316-1
193. Inoue M., Enomoto M., Yoshimura M., Mizowaki T. Pharmacological inhibition of sodium-calcium exchange activates NADPH oxidase and induces infection-independent NETotic cell death. *Redox Biology* (2021) DOI:10.1016/j.redox.2021.101983
194. Higashiyama Y., Hamada T., Saito A., Morihara K., Okamoto M., Kimura K., Joki H., Kishida H., Doi H., Ueda N., Takeuchi H., Tanaka F. Neural mechanisms of foreign accent syndrome: Lesion and network analysis. *NeuroImage: Clinical* (2021) DOI:10.1016/j.nicl.2021.102760
195. Jalbrzikowski M., Hayes R.A., Wood S.J., Nordholm D., Zhou J.H., Fusar-Poli P., Uhlhaas P.J., Takahashi T., Sugranyes G., Kwak Y.B., Mathalon D.H., Katagiri N., Hooker C.I., Smigielski L., Colibazzi T., Via E., Tang J., Koike S., Rasser P.E., Michel C., Lebedeva I., Hegelstad W.T.V., De La Fuente-Sandoval C., Waltz J.A., Mizrahi R., Corcoran C.M., Resch F., Tamnes C.K., Haas S.S., Lemmers-Jansen I.L.J., Agartz I., Allen P., Amminger G.P., Andreassen O.A., Atkinson K., Bachman P., Baeza I., Baldwin H., Bartholomeusz C.F., Borgwardt S., Catalano S., Chee M.W.L., Chen X., Cho K.I.K., Cooper R.E., Cropley V.L., Dolz M., Ebdrup B.H., Fortea A., Glenthøj L.B., Glenthøj B.Y., De Haan L., Hamilton H.K., Harris M.A., Haut K.M., He Y., Heekeren K., Heinz A., Hubl D., Hwang W.J., Kaess M., Kasai K., Kim M., Kindler J., Klaunig M.J., Koppel A., Kristensen T.D., Kwon J.S., Lawrie S.M., Lee J., León-Ortiz P., Lin A., Loewy R.L., Ma X., McGorry P., McGuire P., Mizuno M., Møller P., Moncada-Habib T., Muñoz-Samons D., Nelson B., Nemoto T., Nordentoft M., Omelchenko M.A., Oppedal K., Ouyang L., Pantelis C., Pariente J.C., Raghava J.M., Reyes-Madrigal F., Roach B.J., Røssberg J.I., Rössler W., Salisbury D.F., Sasabayashi D., Schall U., Schiffman J., Schlagenhauf F., Schmidt A., Sørensen M.E., Suzuki M., Theodoridou A., Tomyshev A.S., Tor J., Værnes T.G., Velakoulis D., Venegoni G.D., Vinogradov S., Wenneberg C., Westlye L.T., Yamasue H., Yuan L., Yung A.R., Van Amelsvoort T.A.M.J., Turner J.A., Van Erp T.G.M., Thompson P.M., Hernaus D. Association of Structural Magnetic Resonance Imaging Measures with Psychosis Onset in Individuals at Clinical High Risk for Developing Psychosis: An ENIGMA Working Group Mega-analysis. *JAMA Psychiatry* (2021) DOI:10.1001/jamapsychiatry.2021.0638
196. Sasabayashi D., Takayanagi Y., Takahashi T., Nishiyama S., Mizukami Y., Katagiri N., Tsujino N., Nemoto T., Sakuma A., Katsura M., Ohmuro N., Okada N., Tada M., Suga M., Maikusa N., Koike S., Furuichi A., Kido M., Noguchi K., Yamasue H., Matsumoto K., Mizuno M., Kasai K., Suzuki M. Reduced cortical thickness of the paracentral lobule in at-risk mental state individuals with poor 1-year functional outcomes. *Translational Psychiatry* (2021) DOI:10.1038/s41398-021-01516-2
197. Harada N., Hirose Y., Chihong S., Kurita H., Sato M., Onodera J., Murata K., Itoh F. A novel characteristic of a phytoplankton as a potential source of straight-chain alkanes. *Scientific Reports* (2021) DOI:10.1038/s41598-021-93204-w
198. Yamashita A., Sakai Y., Yamada T., Yahata N., Kunimatsu A., Okada N., Itahashi T., Hashimoto R., Mizuta H., Ichikawa N., Takamura M., Okada G., Yamagata H., Harada K., Matsuo K., Tanaka S.C., Kawato M., Kasai K., Kato N., Takahashi H., Okamoto Y., Yamashita O., Imamizu H. Common Brain Networks Between Major Depressive-Disorder Diagnosis and Symptoms of Depression That Are Validated for Independent Cohorts. *Frontiers in Psychiatry* (2021) DOI:10.3389/fpsyg.2021.667881
199. Koike S., Fujioka M., Takano Y., Iwashiro N., Satomura Y., Nagai T., Koshiyama D., Tada M., Natsubori T., Okada N., Abe O., Kirihara K., Yamasue H., Suga M., Kasai K. Neurocognitive Deficits Mediate the Relationship Between Structural Abnormalities and Clinical Outcomes in Individuals With Ultrahigh Risk for Psychosis: A Multimodal

Neuroimaging and Longitudinal Neurocognitive Study. *Schizophrenia Bulletin Open* (2021) DOI:10.1093/schizbulopen/sgab027

200. Suzuki A.Z., Sakano T., Sasaki H., Watahiki R., Sone M., Horikawa K., Furuta T. Design and synthesis of gene-directed caged cyclic nucleotides exhibiting cell type selectivity. *Chem Commun (Camb)* (2021) DOI:10.1039/d1cc01405f
201. Yu J., Naoi T., Sakaguchi M. Fear generalization immediately after contextual fear memory consolidation in mice. *Biochemical and Biophysical Research Communications* (2021) DOI:10.1016/j.bbrc.2021.04.072
202. Takahashi T., Zhang H., Otomo K., Okamura Y., Nemoto T. Protocol for constructing an extensive cranial window utilizing a PEO-CYTOP nanosheet for in vivo wide-field imaging of the mouse brain. *STAR Protocols* (2021) DOI:10.1016/j.xpro.2021.100542
203. Hirooka A., Hamada M., Fujiyama D., Takanami K., Kobayashi Y., Oti T., Katayama Y., Sakamoto T., Sakamoto H. The gastrin-releasing peptide/bombesin system revisited by a reverse-evolutionary study considering Xenopus. *Scientific reports* (2021) DOI:10.1038/s41598-021-92528-x
204. Andica C., Kamagata K., Saito Y., Uchida W., Fujita S., Hagiwara A., Akashi T., Wada A., Ogawa T., Hatano T., Hattori N., Aoki S. Fiber-specific white matter alterations in early-stage tremor-dominant Parkinson's disease. *npj Parkinson's Disease* (2021) DOI:10.1038/s41531-021-00197-4
205. Andica C., Kamagata K., Kirino E., Uchida W., Irie R., Murata S., Aoki S. Neurite orientation dispersion and density imaging reveals white matter microstructural alterations in adults with autism. *Molecular Autism* (2021) DOI:10.1186/s13229-021-00456-4
206. Takechi K., Nagase H., Furuya T., Hattori K., Sato Y., Miyajima K., Higuchi T., Matsuda R., Takio S., Tsukaya H., Takano H. Two atypical ANGUSTIFOLIA without a plant-specific C-terminus regulate gametophore and sporophyte shapes in the moss Physcomitrium (Physcomitrella) patens. *The Plant Journal* (2021) DOI:10.1111/tpj.15121
207. Sugihara Y., Inai N., Taki M., Baumgartner T., Kawakami R., Saitou T., Imamura T., Yanai T., Yamaguchi S. Donor–acceptor–acceptor-type near-infrared fluorophores that contain dithienophosphole oxide and boryl groups: effect of the boryl group on the nonradiative decay. *Chemical Science* (2021) DOI:10.1039/D1SC00827G
208. Shinozaki Y., Koizumi S. Potential roles of astrocytes and Müller cells in the pathogenesis of glaucoma. *Journal of Pharmacological Sciences* (2021) DOI:10.1016/j.jphs.2020.12.009
209. Vergara P., Kumar D., Srinivasan S., Koyanagi I., Naoi T., Singh S., Sakaguchi M. Remapping of adult-born neuron activity during fear memory consolidation in mice. *International Journal of Molecular Sciences* (2021) DOI:10.3390/ijms22062874
210. Carrier-Ruiz A., Sugaya Y., Kumar D., Vergara P., Koyanagi I., Srinivasan S., Naoi T., Kano M., Sakaguchi M. Calcium imaging of adult-born neurons in freely moving mice. *STAR Protocols* (2021) DOI:10.1016/j.xpro.2020.100238
211. Uta D., Oti T., Sakamoto T., Sakamoto H. In vivo electrophysiology of peptidergic neurons in deep layers of the lumbar spinal cord after optogenetic stimulation of hypothalamic paraventricular oxytocin neurons in rats. *International Journal of Molecular Sciences* (2021) DOI:10.3390/ijms22073400
212. Takezaki M., Kawakami R., Onishi S., Suzuki Y., Kawamata J., Imamura T., Hadano S., Watanabe S., Niko Y. Integrated Fluorescent Nanoprobe Design for High-Speed In Vivo Two-Photon Microscopic Imaging of Deep-Brain Vasculature in Mice. *Advanced Functional Materials* (2021) DOI:10.1002/adfm.202010698
213. Song C.H., Satoh T., Sekiguchi T., Kato K., Murata K. Structural Fluctuations of the Human Proteasome alpha 7 Homo-Tetradecamer Double Ring Imply the Proteasomal alpha-Ring

Assembly Mechanism. *International Journal of Molecular Sciences* (2021)
DOI:10.3390/ijms22094519

214. Murayama K., Tomiyama H., Tsuruta S., Ohono A., Kang M., Hasuzawa S., Mizobe T., Kato K., Togao O., Hiwatashi A., Nakao T. Aberrant Resting-State Cerebellar-Cerebral Functional Connectivity in Unmedicated Patients With Obsessive-Compulsive Disorder. *Frontiers in Psychiatry* (2021) DOI:10.3389/fpsyg.2021.659616
215. Murakami M., Kawakami R., Niko Y., Tsuda T., Yatsuzuka K., Mori H., Imamura T., Sayama K. New fluorescent three-dimensional and deep-imaging technique confirms a direct relationship between the acrosyringium and vesicles/pustules of palmoplantar pustulosis. *Journal of Dermatological Science* (2021) DOI:10.1016/j.jdermsci.2021.03.004
216. Kawakami N., Otubo A., Maejima S., Talukder A.H., Satoh K., Oti T., Takanami K., Ueda Y., Itoi K., Morris J.F., Sakamoto T., Sakamoto H. Variation of pro-vasopressin processing in parvocellular and magnocellular neurons in the paraventricular nucleus of the hypothalamus: Evidence from the vasopressin-related glycopeptide copeptin. *Journal of Comparative Neurology* (2021) DOI:10.1002/cne.25026
217. Uno K., Sugimoto N., Sato Y. N-aryl pyrido cyanine derivatives are nuclear and organelle DNA markers for two-photon and super-resolution imaging. *Nature Communications* (2021) DOI:10.1038/s41467-021-23019-w
218. Hoshikawa E., Sato T., Haga K., Suzuki A., Kobayashi R., Tabeta K., Izumi K. Cells/colony motion of oral keratinocytes determined by non-invasive and quantitative measurement using optical flow predicts epithelial regenerative capacity. *Scientific Reports* (2021) DOI:10.1038/s41598-021-89073-y
219. Takanezawa S., Saitou T., Imamura T. Wide field light-sheet microscopy with lens-axicon controlled two-photon Bessel beam illumination. *Nature Communications* (2021) DOI:10.1038/s41467-021-23249-y
220. Tezuka T., Kumar D., Singh S., Koyanagi I., Naoi T., Sakaguchi M. Real-time, automatic, open-source sleep stage classification system using single EEG for mice. *Scientific Reports* (2021) DOI:10.1038/s41598-021-90332-1
221. Yamamoto S., Kashimoto R., Furukawa S., Sakamoto H., Satoh A. Nerve-mediated FGF-signaling in the early phase of various organ regeneration. *Journal of Experimental Zoology Part B: Molecular and Developmental Evolution* (2021) DOI:10.1002/jez.b.23093
222. Taniguchi M., Tezuka T., Vergara P., Srinivasan S., Hosokawa T., Cherasse Y., Naoi T., Sakurai T., Sakaguchi M. Open-Source Software for Real-time Calcium Imaging and Synchronized Neuron Firing Detection. *Annu Int Conf IEEE Eng Med Biol Soc* (2021) DOI:10.1109/EMBC46164.2021.9629611
223. Tanaka S., Kirino E. The Precuneus Contributes to Embodied Scene Construction for Singing in an Opera. *Frontiers in Human Neuroscience* (2021) DOI:10.3389/fnhum.2021.737742
224. Simankova A., Bizen N., Saitoh S., Shibata S., Ohno N., Abe M., Sakimura K., Takebayashi H. Ddx20, DEAD box helicase 20, is essential for the differentiation of oligodendrocyte and maintenance of myelin gene expression. *Glia* (2021) DOI:10.1002/glia.24058
225. Oda Y., Takahashi C., Harada S., Nakamura S., Sun D.X., Kiso K., Urata Y., Miyachi H., Fujiyoshi Y., Honigmann A., Uchida S., Ishihama Y., Toyoshima F. Discovery of anti-inflammatory physiological peptides that promote tissue repair by reinforcing epithelial barrier formation. *Science Advances* (2021) DOI:10.1126/sciadv.abj6895
226. Maikusa N., Zhu Y., Uematsu A., Yamashita A., Saotome K., Okada N., Kasai K., Okano Y., Yamashita O., Tanaka S.C., Koike S. Comparison of traveling-subject and ComBat harmonization methods for assessing structural brain characteristics. *Human Brain Mapping* (2021) DOI:10.1002/hbm.25615

227. Hori M., Hagiwara A., Goto M., Wada A., Aoki S. Low-Field Magnetic Resonance Imaging Its History and Renaissance. *Investigative Radiology* (2021) DOI:10.1097/rli.0000000000000810
228. Hamada K., Shinozaki Y., Namekata K., Matsumoto M., Ohno N., Segawa T., Kashiwagi K., Harada T., Koizumi S. Loss of P2Y1 receptors triggers glaucoma-like pathology in mice. *British Journal of Pharmacology* (2021) DOI:10.1111/bph.15637
229. Soares L.C., Al-Dalahmah O., Hillis J., Young C.C., Asbed I., Sakaguchi M., O'Neill E., Szele F.G. Novel Galectin-3 Roles in Neurogenesis, Inflammation and Neurological Diseases. *Cells* (2021) DOI:10.3390/cells10113047
230. Okada N., Yamamoto Y., Yahata N., Morita S., Koshiyama D., Morita K., Sawada K., Kanata S., Fujikawa S., Sugimoto N., Toriyama R., Masaoka M., Koike S., Araki T., Kano Y., Endo K., Yamasaki S., Ando S., Nishida A., Hiraiwa-Hasegawa M., Yokoyama C., Kasai K. Birth order and prosociality in the early adolescent brain. *Scientific Reports* (2021) DOI:10.1038/s41598-021-01146-0
231. Kato T., Manabe R.I., Igarashi H., Kametani F., Hirokawa S., Sekine Y., Fujita N., Saito S., Kawashima Y., Hatano Y., Ando S., Nozaki H., Sugai A., Uemura M., Fukunaga M., Sato T., Koyama A., Saito R., Sugie A., Toyoshima Y., Kawata H., Murayama S., Matsumoto M., Kakita A., Hasegawa M., Ihara M., Kanazawa M., Nishizawa M., Tsuji S., Onodera O. Candesartan prevents arteriopathy progression in cerebral autosomal recessive arteriopathy with subcortical infarcts and leukoencephalopathy model. *Journal of Clinical Investigation* (2021) DOI:10.1172/JCI140555
232. Matsuo K., Thayyil S., Kawaguchi M., Nakagawa H., Tamaoki N. A visible light-controllable Rho kinase inhibitor based on a photochromic phenylazothiazole. *Chemical Communications* (2021) DOI:10.1039/d1cc04905d
233. Ishii H., Otomo K., Takahashi T., Yamaguchi K., Nemoto T. Focusing new light on brain functions: multiphoton microscopy for deep and super-resolution imaging. *Neuroscience Research* (2021) DOI:10.1016/j.neures.2021.11.011
234. Yokote H., Okano K., Toru S. Theory of mind and its neuroanatomical correlates in people with multiple sclerosis. *Multiple Sclerosis and Related Disorders* (2021) DOI:10.1016/j.msard.2021.103156
235. Tanaka T., Ohno N., Osanai Y., Saitoh S., Thai T.Q., Nishimura K., Shinjo T., Takemura S., Tatsumi K., Wanaka A. Large-scale electron microscopic volume imaging of interfascicular oligodendrocytes in the mouse corpus callosum. *Glia* (2021) DOI:10.1002/glia.24055
236. Choong C.J., Okuno T., Ikenaka K., Baba K., Hayakawa H., Koike M., Yokota M., Doi J., Kakuda K., Takeuchi T., Kuma A., Nakamura S., Nagai Y., Nagano S., Yoshimori T., Mochizuki H. Alternative mitochondrial quality control mediated by extracellular release. *Autophagy* (2021) DOI:10.1080/15548627.2020.1848130
237. Saito H., Matsukawa-Usami F., Fujimori T., Kimura T., Ide T., Yamamoto T., Shibata T., Onoue K., Okayama S., Yonemura S., Misaki K., Soba Y., Kakui Y., Sato M., Toya M., Takeichi M. Tracheal motile cilia in mice require CAMSAP3 for the formation of central microtubule pair and coordinated beating. *Molecular Biology of the Cell* (2021) DOI:10.1091/mbc.E21-06-0303
238. Kimura T., Haga K., Nomura Y., Higaki T., Nakagami H., Sakai T. Phosphorylation of NONPHOTOTROPIC HYPOCOTYL3 affects photosensory adaptation during the phototropic response. *Plant Physiology* (2021) DOI:10.1093/plphys/kiab281
239. Ueda H.H., Nagasawa Y., Murakoshi H. Imaging intracellular protein interactions/activity in neurons using 2-photon fluorescence lifetime imaging microscopy. *Neuroscience Research* (2021) DOI:10.1016/j.neures.2021.10.004

240. Kowada R., Kodani A., Ida H., Yamaguchi M., Lee I.S., Okada Y., Yoshida H. The function of Scox in glial cells is essential for locomotive ability in Drosophila. *Scientific Reports* (2021) DOI:10.1038/s41598-021-00663-2
241. He J., Yamamoto M., Sumiyama K., Konagaya Y., Terai K., Matsuda M., Sato S. Two-photon AMPK and ATP imaging reveals the bias between rods and cones in glycolysis utility. *FASEB Journal* (2021) DOI:10.1096/fj.202101121R
242. Ageta-Ishihara N., Kinoshita M. Developmental and postdevelopmental roles of septins in the brain. *Neuroscience Research* (2021) DOI:10.1016/j.neures.2020.08.006
243. Oti T., Ueda R., Kumagai R., Nagafuchi J., Ito T., Sakamoto T., Kondo Y., Sakamoto H. Sexual experience induces the expression of gastrin-releasing peptide and oxytocin receptors in the spinal ejaculation generator in rats. *International Journal of Molecular Sciences* (2021) DOI:10.3390/ijms221910362
244. Yoshimi Y., Hara K., Yoshimura M., Tanaka N., Higaki T., Tsumuraya Y., Kotake T. Expression of a fungal exo- β -1,3-galactanase in Arabidopsis reveals a role of type II arabinogalactans in the regulation of cell shape. *Journal of Experimental Botany* (2020) DOI:10.1093/jxb/eraa236
245. Yoshida T., Matsuda M., Hirashima T. Incoherent Feedforward Regulation via Sox9 and ERK Underpins Mouse Tracheal Cartilage Development. *Frontiers in Cell and Developmental Biology* (2020) DOI:10.3389/fcell.2020.585640
246. Yamamoto S., Yamamoto M., Nakamura J., Mii A., Yamamoto S., Takahashi M., Kaneko K., Uchino E., Sato Y., Fukuma S., Imamura H., Matsuda M., Yanagita M. Spatiotemporal ATP Dynamics during AKI Predict Renal Prognosis. *Journal of the American Society of Nephrology* (2020) DOI:10.1681/ASN.2020050580
247. Yagi-Utsumi M., Sikdar A., Song C., Park J., Inoue R., Watanabe H., Burton-Smith R.N., Kozai T., Suzuki T., Kodama A., Ishii K., Yagi H., Satoh T., Uchiyama S., Uchihashi T., Joo K., Lee J., Sugiyama M., Murata K., Kato K. Supramolecular tholos-like architecture constituted by archaeal proteins without functional annotation. *Scientific Reports* (2020) DOI:10.1038/s41598-020-58371-2
248. Yagi H., Yagi-Utsumi M., Honda R., Ohta Y., Saito T., Nishio M., Ninagawa S., Suzuki K., Anzai T., Kamiya Y., Aoki K., Nakanishi M., Satoh T., Kato K. Improved secretion of glycoproteins using an N-glycan-restricted passport sequence tag recognized by cargo receptor. *Nature Communications* (2020) DOI:10.1038/s41467-020-15192-1
249. Watabe T., Terai K., Sumiyama K., Matsuda M. Booster, a Red-Shifted Genetically Encoded Förster Resonance Energy Transfer (FRET) Biosensor Compatible with Cyan Fluorescent Protein/Yellow Fluorescent Protein-Based FRET Biosensors and Blue Light-Responsive Optogenetic Tools. *ACS Sensors* (2020) DOI:10.1021/acssensors.9b01941
250. Tokumoto S., Yabe D., Tatsuoka H., Usui R., Fauzi M., Botagarova A., Goto H., Herrera P.L., Ogura M., Inagaki N. Generation and characterization of a novel mouse model that allows spatiotemporal quantification of pancreatic β -cell proliferation. *Diabetes* (2020) DOI:10.2337/db20-0290
251. Takei N., Takada Y., Kawamura S., Sato K., Saitoh A., Bormann J., Yuen W.S., Carroll J., Kotani T. Changes in subcellular structures and states of pumilio 1 regulate the translation of target Mad2 and cyclin B1 mRNAs. *Journal of Cell Science* (2020) DOI:10.1242/jcs.249128
252. Takahashi T., Zhang H., Kawakami R., Yarinome K., Agetsuma M., Nabekura J., Otomo K., Okamura Y., Nemoto T. PEO-CYTOP Fluoropolymer Nanosheets as a Novel Open-Skull Window for Imaging of the Living Mouse Brain. *iScience* (2020) DOI:10.1016/j.isci.2020.101579
253. Tachibana Y., Hagiwara A., Hori M., Kershaw J., Nakazawa M., Omatsu T., Kishimoto R., Yokoyama K., Hattori N., Aoki S., Higashi T., Obata T. The utility of a convolutional neural

- network for generating a myelin volume index map from rapid simultaneous relaxometry imaging. *Magnetic Resonance in Medical Sciences* (2020) DOI:10.2463/mrms.mp.2019-0075
254. Suzuki K., Elegheert J., Song I., Sasakura H., Senkov O., Matsuda K., Kakegawa W., Clayton A.J., Chang V.T., Ferrer-Ferrer M., Miura E., Kaushik R., Ikeno M., Morioka Y., Takeuchi Y., Shimada T., Otsuka S., Stoyanov S., Watanabe M., Takeuchi K., Dityatev A., Radu Aricescu A., Yuzaki M. A synthetic synaptic organizer protein restores glutamatergic neuronal circuits. *Science* (2020) DOI:10.1126/science.abb4853
255. Sato S., Yamashita T., Matsuda M. Rhodopsin-mediated light-off-induced protein kinase A activation in mouse rod photoreceptor cells. *Proceedings of the National Academy of Sciences of the United States of America* (2020) DOI:10.1073/pnas.2009164117
256. Sakamoto Y., Sato M., Sato Y., Harada A., Suzuki T., Goto C., Tamura K., Toyooka K., Kimura H., Ohkawa Y., Hara-Nishimura I., Takagi S., Matsunaga S. Subnuclear gene positioning through lamina association affects copper tolerance. *Nature Communications* (2020) DOI:10.1038/s41467-020-19621-z
257. Saito J., Nemoto T., Katagiri N., Hori M., Tagata H., Funatogawa T., Yamaguchi T., Tsujino N., Mizuno M. Can reduced leftward asymmetry of white matter integrity be a marker of transition to psychosis in at-risk mental state? *Asian Journal of Psychiatry* (2020) DOI:10.1016/j.ajp.2020.102450
258. Saeki A., Tsuchiya K., Suda T., Into T., Hasebe A., Suzuki T., Shibata K.I. Gasdermin D-independent release of interleukin-1 β by living macrophages in response to mycoplasmal lipoproteins and lipopeptides. *Immunology* (2020) DOI:10.1111/imm.13230
259. Okada N., Yahata N., Koshiyama D., Morita K., Sawada K., Kanata S., Fujikawa S., Sugimoto N., Toriyama R., Masaoka M., Koike S., Araki T., Kano Y., Endo K., Yamasaki S., Ando S., Nishida A., Hiraiwa-Hasegawa M., Kasai K. Smaller anterior subgenual cingulate volume mediates the effect of girls' early sexual maturation on negative psychobehavioral outcome. *NeuroImage* (2020) DOI:10.1016/j.neuroimage.2019.116478
260. Okada N., Yahata N., Koshiyama D., Morita K., Sawada K., Kanata S., Fujikawa S., Sugimoto N., Toriyama R., Masaoka M., Koike S., Araki T., Kano Y., Endo K., Yamasaki S., Ando S., Nishida A., Hiraiwa-Hasegawa M., Edden R.A.E., Sawa A., Kasai K. Neurometabolic underpinning of the intergenerational transmission of prosociality. *NeuroImage* (2020) DOI:10.1016/j.neuroimage.2020.116965
261. Nagai M., Saitoh S., Takaki T., Ohbayashi T., Hotta O., Ohno N., Joh K. Glomerular Cellular Interactions Following Disruption of the Glomerular Basement Membrane in IgA Nephropathy: Ultrastructural Analyses by 3-Dimensional Serial Block-Face Scanning Electron Microscopy. *Kidney Medicine* (2020) DOI:10.1016/j.xkme.2019.11.003
262. Morita R., Onuma T.A., Manni L., Ohno N., Nishida H. Mouth opening is mediated by separation of dorsal and ventral daughter cells of the lip precursor cells in the larvacean, Oikopleura dioica. *Development Genes and Evolution* (2020) DOI:10.1007/s00427-020-00667-4
263. Miyata T., Hagiwara D., Hodai Y., Miwata T., Kawaguchi Y., Kurimoto J., Ozaki H., Mitsumoto K., Takagi H., Suga H., Kobayashi T., Sugiyama M., Onoue T., Ito Y., Iwama S., Banno R., Matsumoto M., Kawakami N., Ohno N., Sakamoto H., Arima H. Degradation of Mutant Protein Aggregates within the Endoplasmic Reticulum of Vasopressin Neurons. *iScience* (2020) DOI:10.1016/j.isci.2020.101648
264. Makita K., Takiguchi S., Naruse H., Shimada K., Morioka S., Fujisawa T.X., Shimoji K., Tomoda A. White matter changes in children and adolescents with reactive attachment disorder: A diffusion tensor imaging study. *Psychiatry Research - Neuroimaging* (2020) DOI:10.1016/j.pscychresns.2020.111129

265. Liu C., Konagaya Y., Chung M., Daigh L.H., Fan Y., Yang H.W., Terai K., Matsuda M., Meyer T. Altered G1 signaling order and commitment point in cells proliferating without CDK4/6 activity. *Nature Communications* (2020) DOI:10.1038/s41467-020-18966-9
266. Leong S.Y., Edzuka T., Goshima G., Yamada M. Kinesin-13 and Kinesin-8 function during cell growth and division in the moss *physcomitrella patens*[OPEN]. *The Plant Cell* (2020) DOI:10.1105/tpc.19.00521
267. Kushioka J., Kaito T., Okada R., Ishiguro H., Bal Z., Kodama J., Chijimatsu R., Pye M., Narimatsu M., Wrana J.L., Inoue Y., Ninomiya H., Yamamoto S., Saitou T., Yoshikawa H., Imamura T. A novel negative regulatory mechanism of Smurf2 in BMP/Smad signaling in bone. *Bone Research* (2020) DOI:10.1038/s41413-020-00115-z
268. Kumar D., Koyanagi I., Carrier-Ruiz A., Vergara P., Srinivasan S., Sugaya Y., Kasuya M., Yu T.S., Vogt K.E., Muratani M., Ohnishi T., Singh S., Teixeira C.M., Chérasse Y., Naoi T., Wang S.H., Nondhalee P., Osman B.A.H., Kaneko N., Sawamoto K., Kernie S.G., Sakurai T., McHugh T.J., Kano M., Yanagisawa M., Sakaguchi M. Sparse Activity of Hippocampal Adult-Born Neurons during REM Sleep Is Necessary for Memory Consolidation. *Neuron* (2020) DOI:10.1016/j.neuron.2020.05.008
269. Koshiyama D., Okada N., Ando S., Koike S., Yahata N., Morita K., Sawada K., Morita S., Kawakami S., Kanata S., Fujikawa S., Sugimoto N., Toriyama R., Masaoka M., Araki T., Kano Y., Endo K., Yamasaki S., Nishida A., Hiraiwa-Hasegawa M., Kasai K. Association between duration of breastfeeding based on maternal reports and dorsal and ventral striatum and medial orbital gyrus volumes in early adolescence. *NeuroImage* (2020) DOI:10.1016/j.neuroimage.2020.117083
270. Koshiyama D., Fukunaga M., Okada N., Morita K., Nemoto K., Yamashita F., Yamamori H., Yasuda Y., Matsumoto J., Fujimoto M., Kudo N., Azechi H., Watanabe Y., Kasai K., Hashimoto R. Association between the superior longitudinal fasciculus and perceptual organization and working memory: A diffusion tensor imaging study. *Neuroscience Letters* (2020) DOI:10.1016/j.neulet.2020.135349
271. Kondow A., Ohnuma K., Kamei Y., Taniguchi A., Bise R., Sato Y., Yamaguchi H., Nonaka S., Hashimoto K. Light-sheet microscopy-based 3D single-cell tracking reveals a correlation between cell cycle and the start of endoderm cell internalization in early zebrafish development. *Development Growth and Differentiation* (2020) DOI:10.1111/dgd.12695
272. Kobachi K., Kuno S., Sato S., Sumiyama K., Matsuda M., Terai K. Biliverdin reductase-a deficiency brighten and sensitize biliverdin-binding chromoproteins. *Cell Structure and Function* (2020) DOI:10.1247/csf.20010
273. Kinjo T., Watabe T., Kobachi K., Terai K., Matsuda M. Single-Cell Activation of the cAMP-Signaling Pathway in 3D Tissues with FRET-Assisted Two-Photon Activation of bPAC. *ACS Chemical Biology* (2020) DOI:10.1021/acschembio.0c00333
274. Kimata Y., Higaki T., Kurihara D., Ando N., Matsumoto H., Higashiyama T., Ueda M. Mitochondrial dynamics and segregation during the asymmetric division of Arabidopsis zygotes. *Quantitative Plant Biology* (2020) DOI:10.1017/qpb.2020.4
275. Kadota Y., Hirai T., Azuma M., Hattori Y., Khant Z.A., Hori M., Saito K., Yokogami K., Takeshima H. Differentiation between glioblastoma and solitary brain metastasis using neurite orientation dispersion and density imaging. *Journal of Neuroradiology* (2020) DOI:10.1016/j.neurad.2018.10.005
276. Itahashi T., Okada N., Ando S., Yamasaki S., Koshiyama D., Morita K., Yahata N., Koike S., Nishida A., Kasai K., Hashimoto R.I. Functional connectomes linking child-parent relationships with psychological problems in adolescence. *NeuroImage* (2020) DOI:10.1016/j.neuroimage.2020.117013

277. Ishibashi K., Sakakibara H., Oiwa K. Force-generating mechanism of axonemal dynein in solo and ensemble. *International Journal of Molecular Sciences* (2020) DOI:10.3390/ijms21082843
278. Imachi H., Nobu M.K., Nakahara N., Morono Y., Ogawara M., Takaki Y., Takano Y., Uematsu K., Ikuta T., Ito M., Matsui Y., Miyazaki M., Murata K., Saito Y., Sakai S., Song C., Tasumi E., Yamanaka Y., Yamaguchi T., Kamagata Y., Tamaki H., Takai K. Isolation of an archaeon at the prokaryote–eukaryote interface. *Nature* (2020) DOI:10.1038/s41586-019-1916-6
279. Horibata Y., Mitsuhashi S., Shimizu H., Maejima S., Sakamoto H., Aoyama C., Ando H., Sugimoto H. The phosphatidylcholine transfer protein StarD7 is important for myogenic differentiation in mouse myoblast C2C12 cells and human primary skeletal myoblasts. *Scientific Reports* (2020) DOI:10.1038/s41598-020-59444-y
280. Higaki T., Mizuno H. Four-dimensional imaging with virtual reality to quantitatively explore jigsaw puzzle-like morphogenesis of arabiopsis cotyledon pavement cells. *Plant Biotechnology* (2020) DOI:10.5511/plantbiotechnology.20.0605a
281. Higaki T., Akita K., Katoh K. Coefficient of variation as an image-intensity metric for cytoskeleton bundling. *Scientific Reports* (2020) DOI:10.1038/s41598-020-79136-x
282. Hara S., Hori M., Hagiwara A., Tsurushima Y., Tanaka Y., Maehara T., Aoki S., Nariai T. Myelin and axonal damage in normal-appearing white matter in patients with moyamoya disease. *American Journal of Neuroradiology* (2020) DOI:10.3174/ajnr.A6708
283. Hagiwara A., Fujita S., Ohno Y., Aoki S. Variability and Standardization of Quantitative Imaging: Monoparametric to Multiparametric Quantification, Radiomics, and Artificial Intelligence. *Investigative Radiology* (2020) DOI:10.1097/RLI.0000000000000666
284. Gao L., Kita T., Katsuno T., Yamamoto N., Omori K., Nakagawa T. Insulin-Like Growth Factor 1 on the Maintenance of Ribbon Synapses in Mouse Cochlear Explant Cultures. *Frontiers in Cellular Neuroscience* (2020) DOI:10.3389/fncel.2020.571155
285. Fumoto S., Kinoshita E., Ohta K., Nakamura K.I., Hirayama T., Nagasawa H., Hu D., Okami K., Kato R., Shimokawa S., Ohira N., Nishimura K., Miyamoto H., Tanaka T., Kawakami S., Nishida K. A pH-adjustable tissue clearing solution that preserves lipid ultrastructures: Suitable tissue clearing method for DDS evaluation. *Pharmaceutics* (2020) DOI:10.3390/pharmaceutics12111070
286. Fujita S., Hagiwara A., Otsuka Y., Hori M., Takei N., Hwang K.P., Irie R., Andica C., Kamagata K., Akashi T., Kumamaru K.K., Suzuki M., Wada A., Abe O., Aoki S. Deep Learning Approach for Generating MRA Images From 3D Quantitative Synthetic MRI Without Additional Scans. *Investigative Radiology* (2020) DOI:10.1097/rli.0000000000000628
287. Aoki K., Satoi S., Harada S., Uchida S., Iwasa Y., Ikenouchi J. Coordinated changes in cell membrane and cytoplasm during maturation of apoptotic bleb. *Molecular Biology of the Cell* (2020) DOI:10.1091/mbc.E19-12-0691
288. Otubo A., Kawakami N., Maejima S., Ueda Y., Morris J.F., Sakamoto T., Sakamoto H. Vasopressin gene products are colocalised with corticotrophin-releasing factor within neurosecretory vesicles in the external zone of the median eminence of the Japanese macaque monkey (*Macaca fuscata*). *Journal of Neuroendocrinology* (2020) DOI:10.1111/jne.12875
289. Otomo K., Goto A., Yamanaka Y., Hori T., Nakayama H., Nemoto T. High-peak-power 918-nm laser light source based two-photon spinning-disk microscopy for green fluorophores. *Biochemical and Biophysical Research Communications* (2020) DOI:10.1016/j.bbrc.2020.05.213
290. Notaguchi M., Kurotani K.I., Sato Y., Tabata R., Kawakatsu Y., Okayasu K., Sawai Y., Okada R., Asahina M., Ichihashi Y., Shirasu K., Suzuki T., Niwa M., Higashiyama T. Cell-

cell adhesion in plant grafting is facilitated by beta-1,4-glucanases. *Science* (2020) DOI:10.1126/science.abc3710

291. Yamashita A., Sakai Y., Yamada T., Yahata N., Kunimatsu A., Okada N., Itahashi T., Hashimoto R., Mizuta H., Ichikawa N., Takamura M., Okada G., Yamagata H., Harada K., Matsuo K., Tanaka S.C., Kawato M., Kasai K., Kato N., Takahashi H., Okamoto Y., Yamashita O., Imamizu H. Generalizable brain network markers of major depressive disorder across multiple imaging sites. *Plos Biology* (2020) DOI:10.1371/journal.pbio.3000966
292. Ozaki K., Kato D., Ikegami A., Hashimoto A., Sugio S., Guo Z.T., Shibushita M., Tatematsu T., Haruwaka K., Moorhouse A.J., Yamada H., Wake H. Maternal immune activation induces sustained changes in fetal microglia motility. *Scientific Reports* (2020) DOI:10.1038/s41598-020-78294-2
293. Nakamura S., Hagihara S., Otomo K., Ishida H., Hidema J., Nemoto T., Izumi M. Autophagy contributes to quality control of leaf mitochondria. *Plant and Cell Physiology* (2020) DOI:10.1093/pcp/pcaa162
294. Murakami M., Kawakami R., Niko Y., Tsuda T., Mori H., Yatsuzuka K., Imamura T., Sayama K. High-quality Fluorescence Imaging of the Human Acrosyringium Using a Transparency: Enhancing Technique and an Improved, Fluorescent Solvatochromic Pyrene Probe. *Acta Histochemica et Cytochemica* (2020) DOI:10.1267/ahc.20-00020
295. Saccenti L., Hagiwara A., Andica C., Yokoyama K., Fujita S., Kato S., Maekawa T., Kamagata K., Le Berre A., Hori M., Wada A., Tateishi U., Hattori N., Aoki S. Myelin Measurement Using Quantitative Magnetic Resonance Imaging: A Correlation Study Comparing Various Imaging Techniques in Patients with Multiple Sclerosis. *Cells* (2020) DOI:10.3390/cells9020393
296. Kawasoe R., Shinoda T., Hattori Y., Nakagawa M., Pham T.Q., Tanaka Y., Sagou K., Saito K., Katsuki S., Kotani T., Sano A., Fujimori T., Miyata T. Two-photon microscopic observation of cell-production dynamics in the developing mammalian neocortex in utero. *Development Growth and Differentiation* (2020) DOI:10.1111/dgd.12648
297. Gunji S., Oda Y., Takigawa-Imamura H., Tsukaya H., Ferjani A. Excess Pyrophosphate Restrains Pavement Cell Morphogenesis and Alters Organ Flatness in *Arabidopsis thaliana*. *Frontiers in Plant Science* (2020) DOI:10.3389/fpls.2020.00031
298. Fujioka Y., Alam J.M., Noshiro D., Mouri K., Ando T., Okada Y., May A.I., Knorr R.L., Suzuki K., Ohsumi Y., Noda N.N. Phase separation organizes the site of autophagosome formation. *Nature* (2020) DOI:10.1038/s41586-020-1977-6
299. Satrialdi, Munechika R., Biju V., Takano Y., Harashima H., Yamada Y. The optimization of cancer photodynamic therapy by utilization of a pi-extended porphyrin-type photosensitizer in combination with MITO-Porter. *Chemical Communications* (2020) DOI:10.1039/c9cc08563g
300. Sato Y., Kamijo K., Tsutsumi M., Murakami Y., Takahashi M. Nonmuscle myosin IIA and IIB differently suppress microtubule growth to stabilize cell morphology. *The Journal of Biochemistry* (2020) DOI:10.1093/jb/mvz082
301. Morohoshi A., Miyata H., Shimada K., Nozawa K., Matsumura T., Yanase R., Shiba K., Inaba K., Ikawa M. Nexin-Dynein regulatory complex component DRC7 but not FBXL13 is required for sperm flagellum formation and male fertility in mice. *Plos Genetics* (2020) DOI:10.1371/journal.pgen.1008585
302. Irie R., Otsuka Y., Hagiwara A., Kamagata K., Kamiya K., Suzuki M., Wada A., Maekawa T., Fujita S., Kato S., Nakajima M., Miyajima M., Motoi Y., Abe O., Aoki S. A Novel Deep Learning Approach with a 3D Convolutional Ladder Network for Differential Diagnosis of Idiopathic Normal Pressure Hydrocephalus and Alzheimer's Disease. *Magnetic Resonance in Medical Sciences* (2020) DOI:10.2463/mrms.mp.2019-0106

303. Kataoka K., Bilkei-Gorzo A., Nozaki C., Togo A., Nakamura K., Ohta K., Zimmer A., Asahi T. Age-dependent Alteration in Mitochondrial Dynamics and Autophagy in Hippocampal Neuron of Cannabinoid CB1 Receptor-deficient Mice. *Brain Research Bulletin* (2020) DOI:10.1016/j.brainresbull.2020.03.014
304. Iwaki A., Moriwaki K., Sobajima T., Taniguchi M., Yoshimura S.I., Kunii M., Kanda S., Kamada Y., Miyoshi E., Harada A. Loss of Rab6a in the small intestine causes lipid accumulation and epithelial cell death from lactation. *FASEB Journal* (2020) DOI:10.1096/fj.202000028R
305. Ohno M., Nishi K., Hiraoka Y., Niizuma S., Matsuda S., Iwasaki H., Kimura T., Nishi E. Nardilysin controls cardiac sympathetic innervation patterning through regulation of p75 neurotrophin receptor. *FASEB Journal* (2020) DOI:10.1096/fj.202000604R
306. Sakano D., Inoue A., Enomoto T., Imasaka M., Okada S., Yokota M., Koike M., Araki K., Kume S. Insulin2(Q104del) (Kuma) mutant mice develop diabetes with dominant inheritance. *Scientific Reports* (2020) DOI:10.1038/s41598-020-68987-z
307. Nagao Y., Sakamoto M., Chinen T., Okada Y., Takao D. Robust classification of cell cycle phase and biological feature extraction by image-based deep learning. *Molecular Biology of the Cell* (2020) DOI:10.1091/mbc.E20-03-0187
308. Kobayakawa T., Takano H., Ishii T., Tsuji K., Ohashi N., Nomura W., Furuta T., Tamamura H. Synthesis of hydrophilic caged DAG-lactones for chemical biology applications. *Organic & Biomolecular Chemistry* (2020) DOI:10.1039/d0ob00807a
309. Kakeda S., Watanabe K., Nguyen H., Katsuki A., Sugimoto K., Igata N., Abe O., Yoshimura R., Korogi Y. An independent component analysis reveals brain structural networks related to TNF-alpha in drug-naive, first-episode major depressive disorder: a source-based morphometric study. *Translational Psychiatry* (2020) DOI:10.1038/s41398-020-00873-8
310. Watanabe T., Nishizawa Y., Minato H., Song C., Murata K., Suzuki D. Hydrophobic Monomers Recognize Microenvironments in Hydrogel Microspheres during Free-Radical-Seeded Emulsion Polymerization. *Angew Chem Int Ed Engl* (2020) DOI:10.1002/anie.202003493
311. Shimizu K., Hara S., Hori M., Tanaka Y., Maehara T., Aoki S., Tazawa T., Narai T. Transient Global Amnesia: A Diffusion and Perfusion MRI study. *Journal of Neuroimaging* (2020) DOI:10.1111/jon.12745
312. Yamasaki A., Alam J.M., Noshiro D., Hirata E., Fujioka Y., Suzuki K., Ohsumi Y., Noda N.N. Liquidity Is a Critical Determinant for Selective Autophagy of Protein Condensates. *Molecular Cell* (2020) DOI:10.1016/j.molcel.2019.12.026
313. Takeuchi T., Mori K., Sunayama H., Takano E., Kitayama Y., Shimizu T., Hirose Y., Inubushi S., Sasaki R., Tanino H. Antibody-Conjugated Signaling Nanocavities Fabricated by Dynamic Molding for Detecting Cancers Using Small Extracellular Vesicle Markers from Tears. *Journal of the American Chemical Society* (2020) DOI:10.1021/jacs.9b13874
314. Otani Y., Ohno N., Cui J.J., Yamaguchi Y., Baba H. Upregulation of large myelin protein zero leads to Charcot-Marie-Tooth disease-like neuropathy in mice. *Communications Biology* (2020) DOI:10.1038/s42003-020-0854-z
315. Maeda K., Sasabe M., Hanamata S., Machida Y., Hasezawa S., Higaki T. Actin Filament Disruption Alters Phragmoplast Microtubule Dynamics during the Initial Phase of Plant Cytokinesis. *Plant and Cell Physiology* (2020) DOI:10.1093/pcp/pcaa003
316. Kakizuka T., Takai A., Yoshizawa K., Okada Y., Watanabe T.M. An improved fluorescent protein-based expression reporter system that utilizes bioluminescence resonance energy transfer and peptide-assisted complementation. *Chemical Communications* (2020) DOI:10.1039/c9cc08664a

317. Sasabayashi D., Takayanagi Y., Takahashi T., Katagiri N., Sakuma A., Obara C., Katsura M., Okada N., Koike S., Yamasue H., Nakamura M., Furuichi A., Kido M., Nishikawa Y., Noguchi K., Matsumoto K., Mizuno M., Kasai K., Suzuki M. Subcortical Brain Volume Abnormalities in Individuals With an At-risk Mental State. *Schizophrenia Bulletin* (2020) DOI:10.1093/schbul/sbaa011
318. Andica C., Kamagata K., Hatano T., Saito Y., Uchida W., Ogawa T., Takeshige-Amano H., Hagiwara A., Murata S., Oyama G., Shimo Y., Umemura A., Akashi T., Wada A., Kumamaru K.K., Hori M., Hattori N., Aoki S. Neurocognitive and psychiatric disorders-related axonal degeneration in Parkinson's disease. *Journal of Neuroscience Research* (2020) DOI:10.1002/jnr.24584
319. Bae S., Lee S., Harada K., Makino K., Chiba I., Katayama O., Shinkai Y., Park H., Shimada H. Engagement in Lifestyle Activities is Associated with Increased Alzheimer's Disease-Associated Cortical Thickness and Cognitive Performance in Older Adults. *Journal of Clinical Medicine Research* (2020) DOI:10.3390/jcm9051424
320. Konagaya Y., Takakura K., Sogabe M., Bisaria A., Liu C., Meyer T., Sehara-Fujisawa A., Matsuda M., Terai K. Intravital imaging reveals cell cycle-dependent myogenic cell migration during muscle regeneration. *Cell Cycle* (2020) DOI:10.1080/15384101.2020.1838779
321. Murata K., Kinoshita T., Ishikawa T., Kuroda K., Hoshi M., Fukazawa Y. Region- and neuronal-subtype-specific expression of Na,K-ATPase alpha and beta subunit isoforms in the mouse brain. *Journal of Comparative Neurology* (2020) DOI:10.1002/cne.24924
322. Nishikawa S., Yamaguchi Y., Suzuki C., Yabe A., Sato Y., Kurihara D., Sato Y., Susaki D., Higashiyama T., Maruyama D. Arabidopsis GEX1 Is a Nuclear Membrane Protein of Gametes Required for Nuclear Fusion During Reproduction. *Frontiers in Plant Science* (2020) DOI:10.3389/fpls.2020.548032
323. Yoshida M.W., Yamada M., Goshima G. Moss kinesin-14 KCBP accelerates chromatid motility in anaphase. *Cell Structure and Function* (2019) DOI:10.1247/csf.19015
324. Tomiyama H., Nakao T., Murayama K., Nemoto K., Ikari K., Yamada S., Kuwano M., Hasuzawa S., Togao O., Hiwatashi A., Kanba S. Dysfunction between dorsal caudate and salience network associated with impaired cognitive flexibility in obsessive-compulsive disorder: A resting-state fMRI study. *NeuroImage: Clinical* (2019) DOI:10.1016/j.nicl.2019.102004
325. Terai K., Imanishi A., Li C.J., Matsuda M. Two Decades of Genetically Encoded Biosensors Based on Forster Resonance Energy Transfer. *Cell Structure and Function* (2019) DOI:10.1247/csf.18035
326. Shitara A., Malec L., Ebrahim S., Chen D., Bleck C., Hoffman M.P., Weigert R. Cdc42 negatively regulates endocytosis during apical membrane maintenance in live animals. *Molecular Biology of the Cell* (2019) DOI:10.1091/mbc.E18-10-0615
327. Serizawa T., Isotani A., Matsumura T., Nakanishi K., Nonaka S., Shibata S., Ikawa M., Okano H. Developmental analyses of mouse embryos and adults using a non-overlapping tracing system for all three germ layers. *Development (Cambridge)* (2019) DOI:10.1242/dev.174938
328. Saccenti L., Andica C., Hagiwara A., Yokoyama K., Takemura M.Y., Fujita S., Maekawa T., Kamagata K., Le Berre A., Hori M., Hattori N., Aoki S. Brain tissue and myelin volumetric analysis in multiple sclerosis at 3T MRI with various in-plane resolutions using synthetic MRI. *Neuroradiology* (2019) DOI:10.1007/s00234-019-02241-w
329. Nguyen L.H., Kakeda S., Katsuki A., Sugimoto K., Otsuka Y., Ueda I., Igata R., Watanabe K., Kishi T., Iwata N., Korogi Y., Yoshimura R. Relationship between VEGF-related gene polymorphisms and brain morphology in treatment-naïve patients with first-episode major

depressive disorder. *European Archives of Psychiatry and Clinical Neuroscience* (2019) DOI:10.1007/s00406-018-0953-8

330. Murata S., Tachibana Y., Murata K., Kamagata K., Hori M., Andica C., Suzuki M., Wada A., Kumamaru K., Hagiwara A., Irie R., Sato S., Hamasaki N., Fukunaga I., Hoshito H., Aoki S. Comparison of magnetization transfer contrast of conventional and simultaneous multislice turbo spin echo acquisitions focusing on excitation time interval. *Japanese Journal of Radiology* (2019) DOI:10.1007/s11604-019-00848-w
331. Morita K., Miura K., Kasai K., Hashimoto R. Eye movement characteristics in schizophrenia: A recent update with clinical implications. *Neuropsychopharmacology Reports* (2019) DOI:10.1002/npr2.12087
332. Matsumoto M., Sawada M., García-González D., Herranz-Pérez V., Ogino T., Nguyen H.B., Thai T.Q., Narita K., Kumamoto N., Ugawa S., Saito Y., Takeda S., Kaneko N., Khodosevich K., Monyer H., García-Verdugo J.M., Ohno N., Sawamoto K. Dynamic changes in ultrastructure of the primary cilium in migrating neuroblasts in the postnatal brain. *Journal of Neuroscience* (2019) DOI:10.1523/JNEUROSCI.1503-19.2019
333. Maruyama D., Higashiyama T., Endo T., Nishikawa S.-i. Fertilization-Coupled Sperm Nuclear Fusion is Required for Normal Endosperm Nuclear Proliferation. *Plant and Cell Physiology* (2019) DOI:10.1093/pcp/pcz158
334. Koshiyama D., Fukunaga M., Okada N., Morita K., Nemoto K., Usui K., Yamamori H., Yasuda Y., Fujimoto M., Kudo N., Azechi H., Watanabe Y., Hashimoto N., Narita H., Kusumi I., Ohi K., Shimada T., Kataoka Y., Yamamoto M., Ozaki N., Okada G., Okamoto Y., Harada K., Matsuo K., Yamasue H., Abe O., Hashimoto R., Takahashi T., Hori T., Nakataki M., Onitsuka T., Holleran L., Jahanshad N., van Erp T.G.M., Turner J., Donohoe G., Thompson P.M., Kasai K., Hashimoto R. White matter microstructural alterations across four major psychiatric disorders: mega-analysis study in 2937 individuals. *Molecular Psychiatry* (2019) DOI:10.1038/s41380-019-0553-7
335. Kinjo T., Terai K., Horita S., Nomura N., Sumiyama K., Togashi K., Iwata S., Matsuda M. FRET-assisted photoactivation of flavoproteins for in vivo two-photon optogenetics. *Nature Methods* (2019) DOI:10.1038/s41592-019-0541-5
336. Kakeda S., Watanabe K., Katsuki A., Sugimoto K., Ueda I., Igata N., Kishi T., Iwata N., Abe O., Yoshimura R., Korogi Y. Genetic effects on white matter integrity in drug-naive patients with major depressive disorder: a diffusion tensor imaging study of 17 genetic loci associated with depressive symptoms. *Neuropsychiatric Disease and Treatment* (2019) DOI:10.2147/ndt.s190268
337. Hwang D., Wada S., Takahashi A., Urawa H., Kamei Y., Nishikawa S.-i. Development of a Heat-Inducible Gene Expression System Using Female Gametophytes of *Arabidopsis thaliana*. *Plant and Cell Physiology* (2019) DOI:10.1093/pcp/pcz148
338. Hayashi T., Hashitani H., Takeya M., Uemura K.I., Nakamura K.I., Igawa T. Properties of SK3 channel-expressing PDGFR α (+) cells in the rodent urinary bladder. *European Journal of Pharmacology* (2019) DOI:10.1016/j.ejphar.2019.172552
339. Haruwaka K., Ikegami A., Tachibana Y., Ohno N., Konishi H., Hashimoto A., Matsumoto M., Kato D., Ono R., Kiyama H., Moorhouse A.J., Nabekura J., Wake H. Dual microglia effects on blood brain barrier permeability induced by systemic inflammation. *Nature Communications* (2019) DOI:10.1038/s41467-019-13812-z
340. Griesbeck S., Michail E., Rauch F., Ogasawara H., Wang C., Sato Y., Edkins R.M., Zhang Z., Taki M., Lambert C., Yamaguchi S., Marder T.B. The Effect of Branching on the One- and Two-Photon Absorption, Cell Viability, and Localization of Cationic Triarylborane Chromophores with Dipolar versus Octupolar Charge Distributions for Cellular Imaging. *Chemistry - A European Journal* (2019) DOI:10.1002/chem.201902461

341. Fujita S., Hagiwara A., Hori M., Warntjes M., Kamagata K., Fukunaga I., Andica C., Maekawa T., Irie R., Takemura M.Y., Kumamaru K.K., Wada A., Suzuki M., Ozaki Y., Abe O., Aoki S. Three-dimensional high-resolution simultaneous quantitative mapping of the whole brain with 3D-QALAS: An accuracy and repeatability study. *Magnetic Resonance Imaging* (2019) DOI:10.1016/j.mri.2019.08.031
342. Ito H., Tsunoda T., Riku M., Inaguma S., Inoko A., Murakami H., Ikeda H., Matsuda M., Kasai K. Indispensable role of STIL in the regulation of cancer cell motility through the lamellipodial accumulation of ARHGEF7–PAK1 complex. *Oncogene* (2019) DOI:10.1038/s41388-019-1115-9
343. Osawa T., Kotani T., Kawaoka T., Hirata E., Suzuki K., Nakatogawa H., Ohsumi Y., Noda N.N. Atg2 mediates direct lipid transfer between membranes for autophagosome formation. *Nature Structural & Molecular Biology* (2019) DOI:10.1038/s41594-019-0203-4
344. Nozoye T., von Wieren N., Sato Y., Higashiyama T., Nakanishi H., Nishizawa N.K. Characterization of the Nicotianamine Exporter ENA1 in Rice. *Frontiers in Plant Science* (2019) DOI:10.3389/fpls.2019.00502
345. Muta Y., Matsuda M., Imajo M. Divergent Dynamics and Functions of ERK MAP Kinase Signaling in Development, Homeostasis and Cancer: Lessons from Fluorescent Bioimaging. *Cancers* (2019) DOI:10.3390/cancers11040513
346. Murata K., Hirata A., Ohta K., Enaida H., Nakamura K. Morphometric analysis in mouse scleral fibroblasts using focused ion beam/scanning electron microscopy. *Scientific Reports* (2019) DOI:10.1038/s41598-019-42758-x
347. Hara S., Hori M., Ueda R., Hayashi S., Inaji M., Tanaka Y., Maehara T., Ishii K., Aoki S., Narai T. Unraveling Specific Brain Microstructural Damage in Moyamoya Disease Using Diffusion Magnetic Resonance Imaging and Positron Emission Tomography. *Journal of Stroke and Cerebrovascular Diseases* (2019) DOI:10.1016/j.jstrokecerebrovasdis.2018.12.038
348. Goto A., Otomo K., Nemoto T. Real-Time Polarization-Resolved Imaging of Living Tissues Based on Two-Photon Excitation Spinning-Disk Confocal Microscopy. *Frontiers in Physics* (2019) DOI:10.3389/fphy.2019.00056
349. Chougar L., Hagiwara A., Takano N., Andica C., Cohen-Adad J., Warntjes M., Maekawa T., Hori M., Koshino S., Nakazawa M., Abe O., Aoki S. Signal Intensity within Cerebral Venous Sinuses on Synthetic MRI. *Magnetic Resonance in Medical Sciences* (2019) DOI:10.2463/mrms.mp.2018-0144
350. Wang C.G., Taki M., Sato Y., Tamura Y., Yaginuma H., Okada Y., Yamaguchi S. A photostable fluorescent marker for the superresolution live imaging of the dynamic structure of the mitochondrial cristae. *Proceedings of the National Academy of Sciences of the United States of America* (2019) DOI:10.1073/pnas.1905924116
351. Nakayama T., Nomura M., Takano Y., Tanifuji G., Shiba K., Inaba K., Inagaki Y., Kawata M. Single-cell genomics unveiled a cryptic cyanobacterial lineage with a worldwide distribution hidden by a dinoflagellate host. *Proceedings of the National Academy of Sciences of the United States of America* (2019) DOI:10.1073/pnas.1902538116
352. Murakoshi H., Horiuchi H., Kosugi T., Onda M., Sato A., Koga N., Nabekura J. ShadowR: a novel chromoprotein with reduced non-specific binding and improved expression in living cells. *Scientific Reports* (2019) DOI:10.1038/s41598-019-48604-4
353. Andica C., Kamagata K., Hatano T., Saito A., Uchida W., Ogawa T., Takeshige-Amano H., Zalesky A., Wada A., Suzuki M., Hagiwara A., Irie R., Hori M., Kumamaru K.K., Oyama G., Shimo Y., Umemura A., Pantelis C., Hattori N., Aoki S. Free-Water Imaging in White and Gray Matter in Parkinson's Disease. *Cells* (2019) DOI:10.3390/cells8080839

354. Sasaki T., Tsutsumi M., Otomo K., Murata T., Yagi N., Nakamura M., Nemoto T., Hasebe M., Oda Y. A Novel Katanin-Tethering Machinery Accelerates Cytokinesis. *Current Biology* (2019) DOI:10.1016/j.cub.2019.09.049
355. Nishikawa T., Narita H., Ogi S., Sato Y., Yamaguchi S. Hydrophobicity and CH/pi-interaction-driven self-assembly of amphiphilic aromatic hydrocarbons into nanosheets. *Chemical Communications* (2019) DOI:10.1039/c9cc08070h
356. Hattori A., Kamagata K., Kirino E., Andica C., Tanaka S., Hagiwara A., Fujita S., Maekawa T., Irie R., Kumamaru K.K., Suzuki M., Wada A., Hori M., Aoki S. White matter alterations in adult with autism spectrum disorder evaluated using diffusion kurtosis imaging. *Neuroradiology* (2019) DOI:10.1007/s00234-019-02238-5
357. Fujita S., Hagiwara A., Hori M., Warntjes M., Kamagata K., Fukunaga I., Goto M., Takuya H., Takasu K., Andica C., Maekawa T., Takemura M.Y., Irie R., Wada A., Suzuki M., Aoki S. 3D quantitative synthetic MRI-derived cortical thickness and subcortical brain volumes: Scan-rescan repeatability and comparison with conventional T-1-weighted images. *Journal of Magnetic Resonance Imaging* (2019) DOI:10.1002/jmri.26744
358. Yasuda Y., Okada N., Nemoto K., Fukunaga M., Yamamori H., Ohi K., Koshiyama D., Kudo N., Shiino T., Morita S., Morita K., Azechi H., Fujimoto M., Miura K., Watanabe Y., Kasai K., Hashimoto R. Brain morphological and functional features in cognitive subgroups of schizophrenia. *Psychiatry and Clinical Neurosciences* (2019) DOI:10.1111/pcn.12963
359. Andica C., Kamagata K., Hatano T., Saito Y., Ogaki K., Hattori N., Aoki S. MR biomarkers of degenerative brain disorders derived from diffusion imaging. *Journal of Magnetic Resonance Imaging* (2019) DOI:10.1002/jmri.27019
360. Sone E., Noshiro D., Ikebuchi Y., Nakagawa M., Khan M., Tamura Y., Ikeda M., Oki M., Murali R., Fujimori T., Yoda T., Honma M., Suzuki H., Ando T., Aoki K. The induction of RANKL molecule clustering could stimulate early osteoblast differentiation. *Biochemical and Biophysical Research Communications* (2019) DOI:10.1016/j.bbrc.2018.12.093
361. Shimahara Y., Sugawara K., Kojo K.H., Kawai H., Yoshida Y., Hasezawa S., Kutsuna N. IMACEL: A cloud-based bioimage analysis platform for morphological analysis and image classification. *PloS One* (2019) DOI:10.1371/journal.pone.0212619
362. Maekawa T., Hagiwara A., Hori M., Andica C., Haruyama T., Kuramochi M., Nakazawa M., Koshino S., Irie R., Kamagata K., Wada A., Abe O., Aoki S. Effect of Gadolinium on the Estimation of Myelin and Brain Tissue Volumes Based on Quantitative Synthetic MRI. *American Journal of Neuroradiology* (2019) DOI:10.3174/ajnr.A5921
363. Kiyonari H., Kaneko M., Abe T., Shioi G., Aizawa S., Furuta Y., Fujimori T. Dynamic organelle localization and cytoskeletal reorganization during preimplantation mouse embryo development revealed by live imaging of genetically encoded fluorescent fusion proteins. *Genesis* (2019) DOI:10.1002/dvg.23277
364. Kimata Y., Kato T., Higaki T., Kurihara D., Yamada T., Segami S., Morita M.T., Maeshima M., Hasezawa S., Higashiyama T., Tasaka M., Ueda M. Polar vacuolar distribution is essential for accurate asymmetric division of *Arabidopsis* zygotes. *Proceedings of the National Academy of Sciences of the United States of America* (2019) DOI:10.1073/pnas.1814160116
365. Hagiwara A., Otsuka Y., Hori M., Tachibana Y., Yokoyama K., Fujita S., Andica C., Kamagata K., Irie R., Koshino S., Maekawa T., Chougar L., Wada A., Takemura M.Y., Hattori N., Aoki S. Improving the Quality of Synthetic FLAIR Images with Deep Learning Using a Conditional Generative Adversarial Network for Pixel-by-Pixel Image Translation. *American Journal of Neuroradiology* (2019) DOI:10.3174/ajnr.A5927
366. Fujita S., Nakazawa M., Hagiwara A., Ueda R., Horita M., Maekawa T., Irie R., Andica C., Kunishima Kumamaru K., Hori M., Aoki S. Estimation of Gadolinium-based Contrast Agent

Concentration Using Quantitative Synthetic MRI and Its Application to Brain Metastases: A Feasibility Study. *Magnetic Resonance in Medical Sciences* (2019)
DOI:10.2463/mrms.mp.2018-0119

367. Suzuki A.Z., Sekine R., Takeda S., Aikawa R., Shiraishi Y., Hamaguchi T., Okuno H., Tamamura H., Furuta T. A clickable caging group as a new platform for modular caged compounds with improved photochemical properties. *Chemical Communications* (2019) DOI:10.1039/c8cc07981a
368. Soltysik K., Ohsaki Y., Tatematsu T., Cheng J.L., Fujimoto T. Nuclear lipid droplets derive from a lipoprotein precursor and regulate phosphatidylcholine synthesis. *Nature Communications* (2019) DOI:10.1038/s41467-019-08411-x
369. Okada N., Yahata N., Koshiyama D., Morita K., Sawada K., Kanata S., Fujikawa S., Sugimoto N., Toriyama R., Masaoka M., Koike S., Araki T., Kano Y., Endo K., Yamasaki S., Ando S., Nishida A., Hiraiwa-Hasegawa M., Edden R.A.E., Barker P.B., Sawa A., Kasai K. Neurometabolic and functional connectivity basis of prosocial behavior in early adolescence. *Scientific Reports* (2019) DOI:10.1038/s41598-018-38355-z
370. Hagiwara A., Hori M., Cohen-Adad J., Nakazawa M., Suzuki Y., Kasahara A., Horita M., Haruyama T., Andica C., Maekawa T., Kamagata K., Kumamaru K.K., Abe O., Aoki S. Linearity, Bias, Intrascanner Repeatability, and Interscanner Reproducibility of Quantitative Multidynamic Multiecho Sequence for Rapid Simultaneous Relaxometry at 3 T A Validation Study With a Standardized Phantom and Healthy Controls. *Investigative Radiology* (2019) DOI:10.1097/rli.0000000000000510
371. Yoon Y., Park J., Taniguchi A., Kohsaka H., Nakae K., Nonaka S., Ishii S., Nose A. System level analysis of motor-related neural activities in larval Drosophila. *Journal of Neurogenetics* (2019) DOI:10.1080/01677063.2019.1605365
372. Andica C., Hagiwara A., Hori M., Kamagata K., Koshino S., Maekawa T., Suzuki M., Fujiwara H., Ikeno M., Shimizu T., Suzuki H., Sugano H., Arai H., Aoki S. Review of synthetic MRI in pediatric brains: Basic principle of MR quantification, its features, clinical applications, and limitations. *Journal of Neuroradiology* (2019) DOI:10.1016/j.neurad.2019.02.005
373. Tanaka H., Okazaki T., Aoyama S., Yokota M., Koike M., Okada Y., Fujiki Y., Gotoh Y. Peroxisomes control mitochondrial dynamics and the mitochondrion-dependent apoptosis pathway. *Journal of Cell Science* (2019) DOI:10.1242/jcs.224766
374. Takaki T., Ohno N., Saitoh S., Nagai M., Joh K. Podocyte penetration of the glomerular basement membrane to contact on the mesangial cell at the lesion of mesangial interposition in lupus nephritis: a three-dimensional analysis by serial block-face scanning electron microscopy. *Clinical and Experimental Nephrology* (2019) DOI:10.1007/s10157-019-01701-0
375. Nishimura A., Shimoda K., Tanaka T., Toyama T., Nishiyama K., Shinkai Y., Numaga-Tomita T., Yamazaki D., Kanda Y., Akaike T., Kumagai Y., Nishida M. Depolysulfidation of Drp1 induced by low-dose methylmercury exposure increases cardiac vulnerability to hemodynamic overload. *Science Signaling* (2019) DOI:10.1126/scisignal.aaw1920
376. Nakamura M., Takahashi T., Takayanagi Y., Sasabayashi D., Katagiri N., Sakuma A., Obara C., Koike S., Yamasue H., Furuchi A., Kido M., Nishikawa Y., Noguchi K., Matsumoto K., Mizuno M., Kasai K., Suzuki M. Surface morphology of the orbitofrontal cortex in individuals at risk of psychosis: a multicenter study. *European Archives of Psychiatry and Clinical Neuroscience* (2019) DOI:10.1007/s00406-018-0890-6
377. Li J.L., Suda K., Ueoka I., Tanaka R., Yoshida H., Okada Y., Okamoto Y., Hiramatsu Y., Takashima H., Yamaguchi M. Neuron-specific knockdown of Drosophila HADHB induces a shortened lifespan, deficient locomotive ability, abnormal motor neuron terminal morphology

and learning disability. *Experimental Cell Research* (2019)
DOI:10.1016/j.yexcr.2019.03.040

378. Katsuno T., Belyantseva I.A., Cartagena-Rivera A.X., Ohta K., Crump S.M., Petralia R.S., Ono K., Tona R., Imtiaz A., Rehman A., Kiyonari H., Kaneko M., Wang Y.X., Abe T., Ikeya M., Fenollar-Ferrer C., Riordan G.P., Wilson E.A., Fitzgerald T.S., Segawa K., Omori K., Ito J., Frolenkov G.I., Friedman T.B., Kitajiri S. TRIOBP-5 sculpts stereocilia rootlets and stiffens supporting cells enabling hearing. *JCI Insight* (2019)
DOI:10.1172/jci.insight.128561
379. Griesbeck S., Ferger M., Czernetzi C., Wang C.G., Bertermann R., Friedrich A., Haehnel M., Sieh D., Taki M., Yamaguchi S., Marder T.B. Optimization of Aqueous Stability versus pi-Conjugation in Tetracationic Bis(triarylborane) Chromophores: Applications in Live-Cell Fluorescence Imaging. *Chemistry – A European Journal* (2019)
DOI:10.1002/chem.201900723
380. Goto N., Fukuda A., Yamaga Y., Yoshikawa T., Maruno T., Maekawa H., Inamoto S., Kawada K., Sakai Y., Miyoshi H., Taketo M.M., Chiba T., Seno H. Lineage tracing and targeting of IL17RB(+) tuft cell-like human colorectal cancer stem cells. *Proceedings of the National Academy of Sciences of the United States of America* (2019)
DOI:10.1073/pnas.1900251116
381. Fujiwara D., Iwahara N., Seburi R., Hosoda R., Shimohama S., Kuno A., Horio Y. SIRT1 deficiency interferes with membrane resealing after cell membrane injury. *PloS One* (2019)
DOI:10.1371/journal.pone.0218329
382. Fujioka T., Kaneko N., Sawamoto K. Blood vessels as a scaffold for neuronal migration. *Neurochemistry International* (2019) DOI:10.1016/j.neuint.2019.03.001
383. Yamamoto K., Otomo K., Nemoto T., Ishihara S., Haga H., Nagasaki A., Murakami Y., Takahashi M. Differential contributions of nonmuscle myosin IIA and IIB to cytokinesis in human immortalized fibroblasts. *Experimental Cell Research* (2019)
DOI:10.1016/j.yexcr.2019.01.020
384. Shimahara Y., Kutsuna N., Hasezawa S., Kojo K.H. Quantitative Evaluation of Stromule Frequency at Hourly Intervals in *Arabidopsis* Stomatal Guard Cell Chloroplasts. *Cytologia* (2019) DOI:10.1508/cytologia.84.31
385. Kubota-Kawai H., Burton-Smith R.N., Tokutsu R., Song C.H., Akimoto S., Yokono M., Ueno Y., Kim E., Watanabe A., Murata K., Minagawa J. Ten antenna proteins are associated with the core in the supramolecular organization of the photosystem I supercomplex in *Chlamydomonas reinhardtii*. *Journal of Biological Chemistry* (2019)
DOI:10.1074/jbc.RA118.006536
386. Katagiri N., Pantelis C., Nemoto T., Tsujino N., Saito J., Hori M., Yamaguchi T., Funatogawa T., Mizuno M. Longitudinal changes in striatum and sub-threshold positive symptoms in individuals with an 'at risk mental state' (ARMS). *Psychiatry Research: Neuroimaging* (2019) DOI:10.1016/j.psychresns.2019.01.008
387. Okada N., Ando S., Sanada M., Hirata-Mogi S., Iijima Y., Sugiyama H., Shirakawa T., Yamagishi M., Kanehara A., Morita M., Yagi T., Hayashi N., Koshiyama D., Morita K., Sawada K., Ikegami T., Sugimoto N., Toriyama R., Masaoka M., Fujikawa S., Kanata S., Tada M., Kirihara K., Yahata N., Araki T., Jinde S., Kano Y., Koike S., Endo K., Yamasaki S., Nishida A., Hiraiwa-Hasegawa M., Bundo M., Iwamoto K., Tanaka S.C., Kasai K. Population-neuroscience study of the Tokyo TEEN Cohort (pn-TTC): Cohort longitudinal study to explore the neurobiological substrates of adolescent psychological and behavioral development. *Psychiatry and Clinical Neurosciences* (2019) DOI:10.1111/pcn.12814

388. Kamemizu C., Fujimori T. Distinct dormancy progression depending on embryonic regions during mouse embryonic diapause. *Biology of Reproduction* (2019) DOI:10.1093/biolre/iox017
389. Inagaki S., Agetsuma M., Ohara S., Iijima T., Yokota H., Wazawa T., Arai Y., Nagai T. Imaging local brain activity of multiple freely moving mice sharing the same environment. *Scientific Reports* (2019) DOI:10.1038/s41598-019-43897-x
390. Hara S., Hori M., Ueda R., Hagiwara A., Hayashi S., Inaji M., Tanaka Y., Maehara T., Ishii K., Aoki S., Nariai T. Intravoxel incoherent motion perfusion in patients with Moyamoya disease: comparison with (15)O-gas positron emission tomography. *Acta Radiologica Open* (2019) DOI:10.1177/2058460119846587
391. Griesbeck S., Michail E., Wang C.G., Ogasawara H., Lorenzen S., Gerstner L., Zang T., Nitsch J., Sato Y., Bertermann R., Taki M., Lambert C., Yamaguchi S., Marder T.B. Tuning the pi-bridge of quadrupolar triarylboration chromophores for one- and two-photon excited fluorescence imaging of lysosomes in live cells. *Chemical Science* (2019) DOI:10.1039/c9sc00793h
392. Andica C., Hagiwara A., Kamagata K., Yokoyama K., Shimoji K., Saito A., Takenaka Y., Nakazawa M., Hori M., Cohen-Adad J., Takemura M.Y., Hattori N., Aoki S. Gray Matter Alterations in Early and Late Relapsing-Remitting Multiple Sclerosis Evaluated with Synthetic Quantitative Magnetic Resonance Imaging. *Scientific Reports* (2019) DOI:10.1038/s41598-019-44615-3
393. Sekiguchi T., Satoh T., Kurimoto E., Song C., Kozai T., Watanabe H., Ishii K., Yagi H., Yanaka S., Uchiyama S., Uchihashi T., Murata K., Kato K. Mutational and Combinatorial Control of Self-Assembling and Disassembling of Human Proteasome alpha Subunits. *International Journal of Molecular Sciences* (2019) DOI:10.3390/ijms20092308
394. Ieda T., Tazawa H., Okabayashi H., Yano S., Shigeyasu K., Kuroda S., Ohara T., Noma K., Kishimoto H., Nishizaki M., Kagawa S., Shirakawa Y., Saitou T., Imamura T., Fujiwara T. Visualization of epithelial-mesenchymal transition in an inflammatory microenvironment-colorectal cancer network. *Scientific Reports* (2019) DOI:10.1038/s41598-019-52816-z
395. Hara S., Tanaka Y., Hayashi S., Inaji M., Maehara T., Hori M., Aoki S., Ishii K., Nariai T. Bayesian Estimation of CBF Measured by DSC-MRI in Patients with Moyamoya Disease: Comparison with O-15-Gas PET and Singular Value Decomposition. *American Journal of Neuroradiology* (2019) DOI:10.3174/ajnr.A6248
396. Hashida Y., Takechi K., Abiru T., Yabe N., Nagase H., Hattori K., Takio S., Sato Y., Hasebe M., Tsukaya H., Takano H. Two ANGUSTIFOLIA genes regulate gametophore and sporophyte development in *Physcomitrella patens*. *The Plant Journal* (2019) DOI:10.1111/tpj.14592
397. Hoshikawa E., Sato T., Kimori Y., Suzuki A., Haga K., Kato H., Tabeta K., Nanba D., Izumi K. Noninvasive measurement of cell/colony motion using image analysis methods to evaluate the proliferative capacity of oral keratinocytes as a tool for quality control in regenerative medicine. *Journal of Tissue Engineering* (2019) DOI:10.1177/2041731419881528
398. Hagiwara A., Kamagata K., Shimoji K., Yokoyama K., Andica C., Hori M., Fujita S., Maekawa T., Irie R., Akashi T., Wada A., Suzuki M., Abe O., Hattori N., Aoki S. White Matter Abnormalities in Multiple Sclerosis Evaluated by Quantitative Synthetic MRI, Diffusion Tensor Imaging, and Neurite Orientation Dispersion and Density Imaging. *American Journal of Neuroradiology* (2019) DOI:10.3174/ajnr.A6209
399. Andica C., Hagiwara A., Hori M., Haruyama T., Fujita S., Maekawa T., Kamagata K., Yoshida M.T., Suzuki M., Sugano H., Arai H., Aoki S. Aberrant myelination in patients with Sturge-Weber syndrome analyzed using synthetic quantitative magnetic resonance imaging. *Neuroradiology* (2019) DOI:10.1007/s00234-019-02250-9

400. Ueda I., Kakeda S., Watanabe K., Sugimoto K., Igata N., Moriya J., Takemoto K., Katsuki A., Yoshimura R., Abe O., Korogi Y. Brain structural connectivity and neuroticism in healthy adults. *Scientific Reports* (2018) DOI:10.1038/s41598-018-34846-1
401. Ogawa C., Kidokoro H., Fukasawa T., Yamamoto H., Ishihara N., Ito Y., Sakaguchi Y., Okai Y., Ohno A., Nakata T., Azuma Y., Hattori A., Kubota T., Tsuji T., Hirakawa A., Kawai H., Natsume J. Cytotoxic edema at onset in West syndrome of unknown etiology: A longitudinal diffusion tensor imaging study. *Epilepsia* (2018) DOI:10.1111/epi.13988
402. Muta Y., Matsuda M., Imajo M. Dynamic ERK signaling regulation in intestinal tumorigenesis. *Molecular and Cellular Oncology* (2018) DOI:10.1080/23723556.2018.1506684
403. Konishi Y., Terai K., Furuta Y., Kiyonari H., Abe T., Ueda Y., Kinashi T., Hamazaki Y., Takaori-Kondo A., Matsuda M. Live-Cell FRET Imaging Reveals a Role of Extracellular Signal-Regulated Kinase Activity Dynamics in Thymocyte Motility. *iScience* (2018) DOI:10.1016/j.isci.2018.11.025
404. Katano T., Takao K., Abe M., Yamazaki M., Watanabe M., Miyakawa T., Sakimura K., Ito S. Distribution of Caskin1 protein and phenotypic characterization of its knockout mice using a comprehensive behavioral test battery. *Molecular Brain* (2018) DOI:10.1186/s13041-018-0407-2
405. Irie R., Kamagata K., Kerever A., Ueda R., Yokosawa S., Otake Y., Ochi H., Yoshizawa H., Hayashi A., Tagawa K., Okazawa H., Takahashi K., Sato K., Hori M., Arikawa-Hirasawa E., Aoki S. The Relationship between Neurite Density Measured with Confocal Microscopy in a Cleared Mouse Brain and Metrics Obtained from Diffusion Tensor and Diffusion Kurtosis Imaging. *Magnetic Resonance in Medical Sciences* (2018) DOI:10.2463/mrms.mp.2017-0031
406. Imanishi A., Murata T., Sato M., Hotta K., Knayoshi I., Matsuda M., Terai K. A Novel Morphological Marker for the Analysis of Molecular Activities at the Single-cell Level. *Cell Structure and Function* (2018) DOI:10.1247/csf.18013
407. Hirata A., Hayashi K., Murata K., Nakamura K.I. Removal of choroidal neovascular membrane in a case of macular hole after anti-VEGF therapy for age-related macular degeneration. *American Journal of Ophthalmology Case Reports* (2018) DOI:10.1016/j.ajoc.2017.12.003
408. Hashimoto N., Ito Y.M., Okada N., Yamamori H., Yasuda Y., Fujimoto M., Kudo N., Takemura A., Son S., Narita H., Yamamoto M., Tha K.K., Katsuki A., Ohi K., Yamashita F., Koike S., Takahashi T., Nemoto K., Fukunaga M., Onitsuka T., Watanabe Y., Yamasue H., Suzuki M., Kasai K., Kusumi I., Hashimoto R., Cocoro. The effect of duration of illness and antipsychotics on subcortical volumes in schizophrenia: Analysis of 778 subjects. *NeuroImage: Clinical* (2018) DOI:10.1016/j.nicl.2017.11.004
409. Goto M., Abe O., Aoki S., Kamagata K., Hori M., Miyati T., Gomi T., Takeda T. Combining Segmented Grey and White Matter Images Improves Voxel-based Morphometry for the Case of Dilated Lateral Ventricle. *Magnetic Resonance in Medical Sciences* (2018) DOI:10.2463/mrms.mp.2017-0127
410. Akiyoshi R., Wake H., Kato D., Horiuchi H., Ono R., Ikegami A., Haruwaka K., Omori T., Tachibana Y., Moorhouse A.J., Nabekura J. Microglia enhance synapse activity to promote local network synchronization. *eNeuro* (2018) DOI:10.1523/ENEURO.0088-18.2018
411. Watanabe T., Imamura T., Hiasa Y. Roles of protein kinase R in cancer: Potential as a therapeutic target. *Cancer Science* (2018) DOI:10.1111/cas.13551
412. Oti T., Takanami K., Ito S., Ueda T., Matsuda K.I., Kawata M., Soh J., Ukimura O., Sakamoto T., Sakamoto H. Effects of Sex Steroids on the Spinal Gastrin-Releasing Peptide

System Controlling Male Sexual Function in Rats. *Endocrinology* (2018)
DOI:10.1210/en.2018-00043

413. Kuragano M., Uyeda T.Q.P., Kamijo K., Murakami Y., Takahashi M. Different contributions of nonmuscle myosin IIA and IIB to the organization of stress fiber subtypes in fibroblasts. *Molecular Biology of the Cell* (2018) DOI:10.1091/mbc.E17-04-0215
414. Imamura T., Saitou T., Kawakami R. In vivo optical imaging of cancer cell function and tumor microenvironment. *Cancer Science* (2018) DOI:10.1111/cas.13544
415. Tsukamoto M., Chiba K., Sobe Y., Shiraki Y., Okumura Y., Hata S., Kitamura A., Nakaya T., Uchida S., Kinjo M., Taru H., Suzuki T. The cytoplasmic region of the amyloid beta-protein precursor (APP) is necessary and sufficient for the enhanced fast velocity of APP transport by kinesin-1. *FEBS Letters* (2018) DOI:10.1002/1873-3468.13204
416. Todokoro A., Tanaka S.C., Kawakubo Y., Yahata N., Ishii-Takahashi A., Nishimura Y., Kano Y., Ohtake F., Kasai K. Deficient neural activity subserving decision-making during reward waiting time in intertemporal choice in adult attention-deficit hyperactivity disorder. *Psychiatry and Clinical Neurosciences* (2018) DOI:10.1111/pcn.12668
417. Sugimoto K., Kakeda S., Watanabe K., Katsuki A., Ueda I., Igata N., Igata R., Abe O., Yoshimura R., Korogi Y. Relationship between white matter integrity and serum inflammatory cytokine levels in drug-naive patients with major depressive disorder: diffusion tensor imaging study using tract-based spatial statistics. *Translational Psychiatry* (2018) DOI:10.1038/s41398-018-0174-y
418. Saeki A., Sugiyama M., Hasebe A., Suzuki T., Shibata K. Activation of NLRP3 inflammasome in macrophages by mycoplasmal lipoproteins and lipopeptides. *Molecular Oral Microbiology* (2018) DOI:10.1111/omi.12225
419. Ishikawa T., Eto K., Kim S.K., Wake H., Takeda I., Horiuchi H., Moorhouse A.J., Ishibashi H., Nabekura J. Cortical astrocytes prime the induction of spine plasticity and mirror image pain. *Pain* (2018) DOI:10.1097/j.pain.0000000000001248
420. Grzybowski M., Taki M., Senda K., Sato Y., Ariyoshi T., Okada Y., Kawakami R., Imamura T., Yamaguchi S. A Highly Photostable Near-Infrared Labeling Agent Based on a Phosphorhodamine for Long-Term and Deep Imaging. *Angewandte Chemie-International Edition* (2018) DOI:10.1002/anie.201804731
421. Chougar L., Hagiwara A., Maekawa T., Hori M., Andica C., Iimura Y., Sugano H., Aoki S. Limitation of neurite orientation dispersion and density imaging for the detection of focal cortical dysplasia with a "transmantle sign". *Physica Medica-European Journal of Medical Physics* (2018) DOI:10.1016/j.ejmp.2018.06.011
422. Takahashi T., Mori T., Ueda K., Yamada P., Nagahara S., Higashiyama T., Sawada H., Igawa T. The male gamete membrane protein DMP9/DAU2 is required for double fertilization in flowering plants. *Development* (2018) DOI:10.1242/dev.170076
423. Saitou T., Takanezawa S., Ninomiya H., Watanabe T., Yamamoto S., Hiasa Y., Imamura T. Tissue Intrinsic Fluorescence Spectra-Based Digital Pathology of Liver Fibrosis by Marker-Controlled Segmentation. *Frontiers in Medicine* (2018) DOI:10.3389/fmed.2018.00350
424. Koshiyama D., Fukunaga M., Okada N., Morita K., Nemoto K., Yamashita F., Yamamori H., Yasuda Y., Fujimoto M., Kelly S., Jahanshad N., Kudo N., Azechi H., Watanabe Y., Donohoe G., Thompson P.M., Kasai K., Hashimoto R. Role of frontal white matter and corpus callosum on social function in schizophrenia. *Schizophrenia Research* (2018) DOI:10.1016/j.schres.2018.07.009
425. Kaneko N., Herranz-Perez V., Otsuka T., Sano H., Ohno N., Omata T., Nguyen H.B., Thai T.Q., Nambu A., Kawaguchi Y., Garcia-Verdugo J.M., Sawamoto K. New neurons use Slit-Robo signaling to migrate through the glial meshwork and approach a lesion for functional regeneration. *Science Advances* (2018) DOI:10.1126/sciadv.aav0618

426. Ishiyama S., Shibata Y., Ayuzawa S., Matsushita A., Matsumura A. Clinical Effect of C2 Peripheral Nerve Field Stimulation Using Electroacupuncture for Primary Headache. *Neuromodulation* (2018) DOI:10.1111/ner.12772
427. Hayashi Y., Jinnou H., Sawamoto K., Hitoshi S. Adult neurogenesis and its role in brain injury and psychiatric diseases. *Journal of Neurochemistry* (2018) DOI:10.1111/jnc.14557
428. Hara S., Hori M., Inaji M., Maehara T., Aoki S., Nariai T. Regression of White Matter Hyperintensity after Indirect Bypass Surgery in a Patient with Moyamoya Disease. *Magnetic Resonance in Medical Sciences* (2018) DOI:10.2463/mrms.ci.2018-0088
429. Tanoue R., Ohta K., Miyazono Y., Iwanaga J., Koba A., Natori T., Iwamoto O., Nakamura K.I., Kusukawa J. Three-dimensional ultrastructural analysis of the interface between an implanted demineralised dentin matrix and the surrounding newly formed bone. *Scientific Reports* (2018) DOI:10.1038/s41598-018-21291-3
430. Sawada M., Ohno N., Kawaguchi M., Huang S.H., Hikita T., Sakurai Y., Nguyen H.B., Thai T.Q., Ishido Y., Yoshida Y., Nakagawa H., Uemura A., Sawamoto K. PlexinD1 signaling controls morphological changes and migration termination in newborn neurons. *Embo Journal* (2018) DOI:10.15252/embj.201797404
431. Saitou T., Kiyomatsu H., Imamura T. Quantitative Morphometry for Osteochondral Tissues Using Second Harmonic Generation Microscopy and Image Texture Information. *Scientific Reports* (2018) DOI:10.1038/s41598-018-21005-9
432. Nakamura A., Tasaki T., Okuni Y., Song C.H., Murata K., Kozai T., Hara M., Sugimoto H., Suzuki K., Watanabe T., Uchihashi T., Noji H., Iino R. Rate constants, processivity, and productive binding ratio of chitinase A revealed by single-molecule analysis. *Physical Chemistry Chemical Physics* (2018) DOI:10.1039/c7cp04606e
433. Ishii Y., Maruyama S., Fujimura-Kamada K., Kutsuna N., Takahashi S., Kawata M., Minagawa J. Isolation of uracil auxotroph mutants of coral symbiont alga for symbiosis studies. *Scientific Reports* (2018) DOI:10.1038/s41598-018-21499-3
434. Ohta Y., Furuta T., Nagai T., Horikawa K. Red fluorescent cAMP indicator with increased affinity and expanded dynamic range. *Scientific Reports* (2018) DOI:10.1038/s41598-018-20251-1
435. Ogasawara H., Grzybowski M., Hosokawa R., Sato Y., Taki M., Yamaguchi S. A far-red fluorescent probe based on a phospha-fluorescein scaffold for cytosolic calcium imaging. *Chemical Communications* (2018) DOI:10.1039/c7cc07344e
436. Koshiyama D., Fukunaga M., Okada N., Yamashita F., Yamamori H., Yasuda Y., Fujimoto M., Ohi K., Fujino H., Watanabe Y., Kasai K., Hashimoto R. Role of subcortical structures on cognitive and social function in schizophrenia. *Scientific Reports* (2018) DOI:10.1038/s41598-017-18950-2
437. Koshiyama D., Fukunaga M., Okada N., Yamashita F., Yamamori H., Yasuda Y., Fujimoto M., Ohi K., Fujino H., Watanabe Y., Kasai K., Hashimoto R. Subcortical association with memory performance in schizophrenia: a structural magnetic resonance imaging study. *Translational Psychiatry* (2018) DOI:10.1038/s41398-017-0069-3
438. Kimura Y., Tasaka M., Torii K.U., Uchida N. ERECTA-family genes coordinate stem cell functions between the epidermal and internal layers of the shoot apical meristem. *Development* (2018) DOI:10.1242/dev.156380
439. Hirata A., Murata K., Hayashi K., Nakamura K. Three-Dimensional Analysis of Peeled Internal Limiting Membrane Using Focused Ion Beam/Scanning Electron Microscopy. *Translational Vision Science & Technology* (2018) DOI:10.1167/tvst.7.1.15
440. Fujimoto T., Kuwahara T., Eguchi T., Sakurai M., Komori T., Iwatubo T. Parkinson's disease-associated mutant LRRK2 phosphorylates Rab7L1 and modifies trans-Golgi

morphology. *Biochemical and Biophysical Research Communications* (2018)
DOI:10.1016/j.bbrc.2017.12.024

441. Goto M., Yamashita F., Kawaguchi A., Abe O., Aoki S., Miyati T., Gomi T., Takeda T., Japanese Alzheimer's Dis N. The Effect of Single-Scan and Scan-Pair Intensity Inhomogeneity Correction Methods on Repeatability of Voxel-Based Morphometry With Multiple Magnetic Resonance Scanners. *Journal of Computer Assisted Tomography* (2018) DOI:10.1097/rct.0000000000000657
442. Watanabe T., Song C.H., Murata K., Kureha T., Suzuki D. Seeded Emulsion Polymerization of Styrene in the Presence of Water-Swollen Hydrogel Microspheres. *Langmuir* (2018) DOI:10.1021/acs.langmuir.8b01047
443. Kikuchi K., Nakamura A., Arata M., Shi D.B., Nakagawa M., Tanaka T., Uemura T., Fujimori T., Kikuchi A., Uezu A., Sakamoto Y., Nakanishi H. Map7/7D1 and Dvl form a feedback loop that facilitates microtubule remodeling and Wnt5a signaling. *Embo Reports* (2018) DOI:10.15252/embr.201745471
444. Kamiya K., Okada N., Sawada K., Watanabe Y., Irie R., Hanaoka S., Suzuki Y., Koike S., Mori H., Kunimatsu A., Hori M., Aoki S., Kasai K., Abe O. Diffusional kurtosis imaging and white matter microstructure modeling in a clinical study of major depressive disorder. *NMR in Biomedicine* (2018) DOI:10.1002/nbm.3938
445. Kakeda S., Watanabe K., Katsuki A., Sugimoto K., Igata N., Ueda I., Igata R., Abe O., Yoshimura R., Korogi Y. Relationship between interleukin (IL)-6 and brain morphology in drug-naïve, first-episode major depressive disorder using surface-based morphometry. *Scientific Reports* (2018) DOI:10.1038/s41598-018-28300-5
446. Hirota K., Yasoda A., Kanai Y., Ueda Y., Yamauchi I., Yamashita T., Sakane Y., Fujii T., Inagaki N. Live imaging analysis of the growth plate in a murine long bone explanted culture system. *Scientific Reports* (2018) DOI:10.1038/s41598-018-28742-x
447. Hagiwara A., Hori M., Kamagata K., Warntjes M., Matsuyoshi D., Nakazawa M., Ueda R., Andica C., Koshino S., Maekawa T., Irie R., Takamura T., Kumamaru K.K., Abe O., Aoki S. Myelin Measurement: Comparison Between Simultaneous Tissue Relaxometry, Magnetization Transfer Saturation Index, and T(1)w/T(2)w Ratio Methods. *Scientific Reports* (2018) DOI:10.1038/s41598-018-28852-6
448. Otomo K., Hibi T., Fang Y.C., Hung J.H., Tsutsumi M., Kawakami R., Yokoyama H., Nemoto T. Advanced easy STED microscopy based on two-photon excitation by electrical modulations of light pulse wavefronts. *Biomedical Optics Express* (2018) DOI:10.1364/boe.9.002671
449. Muta Y., Fujita Y., Sumiyama K., Sakurai A., Taketo M.M., Chiba T., Seno H., Aoki K., Matsuda M., Imajo M. Composite regulation of ERK activity dynamics underlying tumour-specific traits in the intestine. *Nature Communications* (2018) DOI:10.1038/s41467-018-04527-8
450. Komatsu N., Terai K., Imanishi A., Kamioka Y., Sumiyama K., Jin T., Okada Y., Nagai T., Matsuda M. A platform of BRET-FRET hybrid biosensors for optogenetics, chemical screening, and in vivo imaging. *Scientific Reports* (2018) DOI:10.1038/s41598-018-27174-x
451. Inaba K., Shiba K. Microscopic analysis of sperm movement: links to mechanisms and protein components. *Microscopy* (2018) DOI:10.1093/jmicro/dfy021
452. Lin H.A., Sato Y., Segawa Y., Nishihara T., Sugimoto N., Scott L.T., Higashiyama T., Itami K. A Water-Soluble Warped Nanographene: Synthesis and Applications for Photoinduced Cell Death. *Angewandte Chemie-International Edition* (2018) DOI:10.1002/anie.201713387
453. Kuragano M., Murakami Y., Takahashi M. Nonmuscle myosin IIA and IIB differentially contribute to intrinsic and directed migration of human embryonic lung fibroblasts.

454. Hori M., Hagiwara A., Fukunaga I., Ueda R., Kamiya K., Suzuki Y., Liu W., Murata K., Takamura T., Hamasaki N., Irie R., Kamagata K., Kumamaru K.K., Suzuki M., Aoki S. Application of Quantitative Microstructural MR Imaging with Atlas-based Analysis for the Spinal Cord in Cervical Spondylotic Myelopathy. *Scientific Reports* (2018) DOI:10.1038/s41598-018-23527-8
455. Goto M., Kamagata K., Hatano T., Hattori N., Abe O., Aoki S., Hori M., Gomi T. Depressive symptoms in Parkinson's disease are related to decreased left hippocampal volume: correlation with the 15-item shortened version of the Geriatric Depression Scale. *Acta Radiologica* (2018) DOI:10.1177/0284185117719100
456. Tanaka K., Takeda S., Mitsuoka K., Oda T., Kimura-Sakiyama C., Maeda Y., Narita A. Structural basis for cofilin binding and actin filament disassembly. *Nature Communications* (2018) DOI:10.1038/s41467-018-04290-w
457. Matsuyama S., Kage Y., Fujimoto N., Ushijima T., Tsuruda T., Kitamura K., Shiose A., Asada Y., Sumimoto H., Takeya R. Interaction between cardiac myosin-binding protein C and formin Fhod3. *Proceedings of the National Academy of Sciences of the United States of America* (2018) DOI:10.1073/pnas.1716498115
458. Kuno M., Hirano Y., Nakagawa A., Asano K., Oshima F., Nagaoka S., Matsumoto K., Masuda Y., Iyo M., Shimizu E. White Matter Features Associated With Autistic Traits in Obsessive-Compulsive Disorder. *Frontiers in Psychiatry* (2018) DOI:10.3389/fpsyg.2018.00216
459. Fujikake K., Sawada M., Hikita T., Seto Y., Kaneko N., Herranz-Perez V., Dohi N., Homma N., Osaga S., Yanagawa Y., Akaike T., Garcia-Verdugo J.M., Hattori M., Sobue K., Sawamoto K. Detachment of Chain-Forming Neuroblasts by Fyn-Mediated Control of cell-cell Adhesion in the Postnatal Brain. *Journal of Neuroscience* (2018) DOI:10.1523/jneurosci.1960-17.2018
460. Andica C., Hagiwara A., Hori M., Nakazawa M., Goto M., Koshino S., Kamagata K., Kumamaru K.K., Aoki S. Automated brain tissue and myelin volumetry based on quantitative MR imaging with various in-plane resolutions. *Journal of Neuroradiology* (2018) DOI:10.1016/j.neurad.2017.10.002
461. Takeda A., Shinozaki Y., Kashiwagi K., Ohno N., Eto K., Wake H., Nabekura J., Koizumi S. Microglia mediate non-cell-autonomous cell death of retinal ganglion cells. *Glia* (2018) DOI:10.1002/glia.23475
462. Sano T., Kobayashi T., Ogawa O., Matsuda M. Gliding Basal Cell Migration of the Urothelium during Wound Healing. *American Journal of Pathology* (2018) DOI:10.1016/j.ajpath.2018.07.010
463. Okada N., Yahata N., Koshiyama D., Morita K., Sawada K., Kanata S., Fujikawa S., Sugimoto N., Toriyama R., Masaoka M., Koike S., Araki T., Kano Y., Endo K., Yamasaki S., Ando S., Nishida A., Hiraiwa-Hasegawa M., Kasai K. Abnormal asymmetries in subcortical brain volume in early adolescents with subclinical psychotic experiences. *Translational Psychiatry* (2018) DOI:10.1038/s41398-018-0312-6
464. Ida-Yonemochi H., Morita W., Sugiura N., Kawakami R., Morioka Y., Takeuchi Y., Sato T., Shibata S., Watanabe H., Imamura T., Igarashi M., Ohshima H., Takeuchi K. Craniofacial abnormality with skeletal dysplasia in mice lacking chondroitin sulfate N-acetylgalactosaminyltransferase-1. *Scientific Reports* (2018) DOI:10.1038/s41598-018-35412-5
465. Hirano T., Konno H., Takeda S., Dolan L., Kato M., Aoyama T., Higaki T., Takigawa-Imamura H., Sato M.H. PtdIns(3,5)P-2 mediates root hair shank hardening in Arabidopsis. *Nature Plants* (2018) DOI:10.1038/s41477-018-0277-8

466. Abe T., Kutsuna N., Kiyonari H., Furuta Y., Fujimori T. ROSA26 reporter mouse lines and image analyses reveal distinct region-specific cell behaviors in the visceral endoderm. *Development* (2018) DOI:10.1242/dev.165852
467. Tsunoda J., Song C.H., Imai F.L., Takagi J., Ueno H., Murata T., Iino R., Murata K. Off-axis rotor in Enterococcus hirae V-ATPase visualized by Zernike phase plate single-particle cryo-electron microscopy. *Scientific Reports* (2018) DOI:10.1038/s41598-018-33977-9
468. Hara S., Hori M., Murata S., Ueda R., Tanaka Y., Inaji M., Maehara T., Aoki S., Nariai T. Microstructural Damage in Normal-Appearing Brain Parenchyma and Neurocognitive Dysfunction in Adult Moyamoya Disease. *Stroke* (2018) DOI:10.1161/strokeaha.118.022367
469. Ageta-Ishihara N., Konno K., Yamazaki M., Abe M., Sakimura K., Watanabe M., Kinoshita M. CDC42EP4, a perisynaptic scaffold protein in Bergmann glia, is required for glutamatergic tripartite synapse configuration. *Neurochemistry International* (2018) DOI:10.1016/j.neuint.2018.01.003
470. Miyatake Y., Kuribayashi-Shigetomi K., Ohta Y., Ikeshita S., Subagyo A., Sueoka K., Kakugo A., Amano M., Takahashi T., Okajima T., Kasahara M. Visualising the dynamics of live pancreatic microtumours self-organised through cell-in-cell invasion. *Scientific Reports* (2018) DOI:10.1038/s41598-018-32122-w
471. Kakegawa W., Katoh A., Narumi S., Miura E., Motohashi J., Takahashi A., Kohda K., Fukazawa Y., Yuzaki M., Matsuda S. Optogenetic Control of Synaptic AMPA Receptor Endocytosis Reveals Roles of LTD in Motor Learning. *Neuron* (2018) DOI:10.1016/j.neuron.2018.07.034
472. Eguchi T., Kuwahara T., Sakurai M., Komori T., Fujimoto T., Ito G., Yoshimura S., Harada A., Fukuda M., Koike M., Iwatsubo T. LRRK2 and its substrate Rab GTPases are sequentially targeted onto stressed lysosomes and maintain their homeostasis. *Proceedings of the National Academy of Sciences of the United States of America* (2018) DOI:10.1073/pnas.1812196115
473. Ageta H., Ageta-Ishihara N., Hitachi K., Karayel O., Onouchi T., Yamaguchi H., Kahyo T., Hatanaka K., Ikegami K., Yoshioka Y., Nakamura K., Kosaka N., Nakatani M., Uezumi A., Ide T., Tsutsumi Y., Sugimura H., Kinoshita M., Ochiya T., Mann M., Setou M., Tsuchida K. UBL3 modification influences protein sorting to small extracellular vesicles. *Nature Communications* (2018) DOI:10.1038/s41467-018-06197-y
474. Yamaguchi S., Fukazawa A., Taki M. Phosphole P-oxide-containing ϕ -electron materials: Synthesis and applications in fluorescence imaging. *Yuki Gosei Kagaku Kyokaishi/Journal of Synthetic Organic Chemistry* (2017) DOI:10.5059/yukigoseikyokaishi.75.1179
475. Watanabe R., Kakeda S., Watanabe K., Liu X., Katsuki A., Umeno-Nakano W., Hori H., Abe O., Yoshimura R., Korogi Y. Relationship between the hippocampal shape abnormality and serum cortisol levels in first-episode and drug-naïve major depressive disorder patients. *Depression and Anxiety* (2017) DOI:10.1002/da.22604
476. Tsuchiyagaito A., Hirano Y., Asano K., Oshima F., Nagaoka S., Takebayashi Y., Matsumoto K., Masuda Y., Iyo M., Shimizu E., Nakagawa A. Cognitive-behavioral therapy for obsessive-compulsive disorder with and without autism spectrum disorder: Gray matter differences associated with poor outcome. *Frontiers in Psychiatry* (2017) DOI:10.3389/fpsyg.2017.00143
477. Takemura M.Y., Hori M., Yokoyama K., Hamasaki N., Suzuki M., Kamagata K., Kamiya K., Suzuki Y., Kyogoku S., Masutani Y., Hattori N., Aoki S. Alterations of the optic pathway between unilateral and bilateral optic nerve damage in multiple sclerosis as revealed by the combined use of advanced diffusion kurtosis imaging and visual evoked potentials. *Magnetic Resonance Imaging* (2017) DOI:10.1016/j.mri.2016.04.011

478. Takeda K., Matsumoto M., Ogata Y., Maida K., Murakami H., Murayama K., Shimoji K., Hanakawa T., Matsumoto K., Nakagome K. Impaired prefrontal activity to regulate the intrinsic motivation-action link in schizophrenia. *NeuroImage: Clinical* (2017) DOI:10.1016/j.nicl.2017.07.003
479. Saito J., Hori M., Nemoto T., Katagiri N., Shimoji K., Ito S., Tsujino N., Yamaguchi T., Shiraga N., Aoki S., Mizuno M. Longitudinal study examining abnormal white matter integrity using a tract-specific analysis in individuals with a high risk for psychosis. *Psychiatry and Clinical Neurosciences* (2017) DOI:10.1111/pcn.12515
480. Kawaoka T., Ohnuki S., Ohya Y., Suzuki K. Morphometric analysis of autophagy-related structures in *Saccharomyces cerevisiae*. *Autophagy* (2017) DOI:10.1080/15548627.2017.1384888
481. Jin M., Pomp O., Shinoda T., Toba S., Torisawa T., Furuta K., Oiwa K., Yasunaga T., Kitagawa D., Matsumura S., Miyata T., Tan T.T., Reversade B., Hirotsune S. Katanin p80, NuMA and cytoplasmic dynein cooperate to control microtubule dynamics. *Scientific Reports* (2017) DOI:10.1038/srep39902
482. Igata N., Kakeda S., Watanabe K., Nozaki A., Rettmann D., Narimatsu H., Ide S., Abe O., Korogi Y. Utility of real-time prospective motion correction (PROMO) for segmentation of cerebral cortex on 3D T1-weighted imaging: Voxel-based morphometry analysis for uncooperative patients. *European Radiology* (2017) DOI:10.1007/s00330-016-4730-7
483. Igata N., Kakeda S., Watanabe K., Ide S., Kishi T., Abe O., Igata R., Katsuki A., Iwata N., Yoshimura R., Korogi Y. Voxel-based morphometric brain comparison between healthy subjects and major depressive disorder patients in Japanese with the s/s genotype of 5-HTLPR. *Scientific Reports* (2017) DOI:10.1038/s41598-017-04347-8
484. Hori M., Kamiya K., Irie R. Advanced diffusion-weighted magnetic resonance imaging in the evaluation of white matter axons in patients with idiopathic normal pressure hydrocephalus. *Neural Regeneration Research* (2017) DOI:10.4103/1673-5374.221149
485. Hagiwara A., Hori M., Yokoyama K., Takemura M.Y., Andica C., Kumamaru K.K., Nakazawa M., Takano N., Kawasaki H., Sato S., Hamasaki N., Kunimatsu A., Aoki S. Utility of a multiparametric quantitative MRI model that assesses myelin and edema for evaluating plaques, periplaque white matter, and normal-appearing white matter in patients with multiple sclerosis: A feasibility study. *American Journal of Neuroradiology* (2017) DOI:10.3174/ajnr.A4977
486. Goto M., Abe O., Miyati T., Aoki S., Gomi T., Takeda T. Mis-segmentation in voxel-based morphometry due to a signal intensity change in the putamen. *Radiological Physics and Technology* (2017) DOI:10.1007/s12194-017-0424-3
487. Goto M., Abe O., Hata J., Fukunaga I., Shimoji K., Kunimatsu A., Gomi T. Adverse effects of metallic artifacts on voxel-wise analysis and tract-based spatial statistics in diffusion tensor imaging. *Acta Radiologica* (2017) DOI:10.1177/0284185116641348
488. Abe H., Shimoji K., Nagamine Y., Fujiwara S., Izumi S.I. Predictors of Recovery from Traumatic Brain Injury-Induced Prolonged Consciousness Disorder. *Neural Plasticity* (2017) DOI:10.1155/2017/9358092
489. Abe H., Keigo S., Takeo K., Takanori K., Yoshihide N., Satoru F., Yutaka O., Shin-Ichi I. Longitudinal White Matter Alteration in Prolonged Disorders of Consciousness due to Traffic Accidents. *International Journal of Neurology and Neurotherapy* (2017) DOI:10.23937/2378-3001/1410064
490. Sato K., Kerever A., Kamagata K., Tsuruta K., Irie R., Tagawa K., Okazawa H., Arikawa-Hirasawa E., Nitta N., Aoki I., Aoki S. Understanding microstructure of the brain by comparison of neurite orientation dispersion and density imaging (NODDI) with transparent mouse brain. *Acta Radiologica Open* (2017) DOI:10.1177/2058460117703816

491. Kimura K., Mamane A., Sasaki T., Sato K., Takagi J., Niwayama R., Hufnagel L., Shimamoto Y., Joanny J.F., Uchida S., Kimura A. Endoplasmic-reticulum-mediated microtubule alignment governs cytoplasmic streaming. *Nature Cell Biology* (2017) DOI:10.1038/ncb3490
492. Andica C., Hagiwara A., Nakazawa M., Kumamaru K.K., Hori M., Ikeno M., Shimizu T., Aoki S. Synthetic MR Imaging in the Diagnosis of Bacterial Meningitis. *Magnetic Resonance in Medical Sciences* (2017) DOI:10.2463/mrms.ci.2016-0082
493. Wang C.G., Taki M., Sato Y., Fukazawa A., Higashiyama T., Yamaguchi S. Super-Photostable Phosphole-Based Dye for Multiple-Acquisition Stimulated Emission Depletion Imaging. *Journal of the American Chemical Society* (2017) DOI:10.1021/jacs.7b04418
494. Takano N., Suzuki M., Irie R., Yamamoto M., Teranishi K., Yatomi K., Hamasaki N., Kumamaru K.K., Hori M., Oishi H., Aoki S. Non-Contrast-Enhanced Silent Scan MR Angiography of Intracranial Anterior Circulation Aneurysms Treated with a Low-Profile Visualized Intraluminal Support Device. *American Journal of Neuroradiology* (2017) DOI:10.3174/ajnr.A5223
495. Sobe Y., Furukori K., Chiba K., Nairn A.C., Kinjo M., Hata S., Suzuki T. Phosphorylation of multiple sites within an acidic region of Alcadein alpha is required for kinesin-1 association and Golgi exit of Alcadein alpha cargo. *Molecular Biology of the Cell* (2017) DOI:10.1091/mbc.E17-05-0301
496. Nakao A., Miyazaki N., Ohira K., Hagiwara H., Takagi T., Usuda N., Ishii S., Murata K., Miyakawa T. Immature morphological properties in subcellular-scale structures in the dentate gyrus of Schizurri-2 knockout mice: a model for schizophrenia and intellectual disability. *Molecular Brain* (2017) DOI:10.1186/s13041-017-0339-2
497. Koike S., Satomura Y., Kawasaki S., Nishimura Y., Kinoshita A., Sakurada H., Yamagishi M., Ichikawa E., Matsuoka J., Okada N., Takizawa R., Kasai K. Application of functional near infrared spectroscopy as supplementary examination for diagnosis of clinical stages of psychosis spectrum. *Psychiatry and Clinical Neurosciences* (2017) DOI:10.1111/pcn.12551
498. Hori M., Irie R., Suzuki M., Aoki S. Teaching Neuroimages: Obscured Cerebral Infarction on MRI. *Clinical Neuroradiology* (2017) DOI:10.1007/s00062-017-0576-x
499. Chiba K., Chien K.Y., Sobe Y., Hata S., Kato S., Nakaya T., Okada Y., Nairn A.C., Kinjo M., Taru H., Wang R., Suzuki T. Phosphorylation of KLC1 modifies interaction with JIP1 and abolishes the enhanced fast velocity of APP transport by kinesin-1. *Molecular Biology of the Cell* (2017) DOI:10.1091/mbc.E17-05-0303
500. Uno K., Sasaki T., Sugimoto N., Ito H., Nishihara T., Hagiwara S., Higashiyama T., Sasaki N., Sato Y., Itami K. Key Structural Elements of Unsymmetrical Cyanine Dyes for Highly Sensitive Fluorescence Turn-On DNA Probes. *Chemistry-an Asian Journal* (2017) DOI:10.1002/asia.201601430
501. Mizuno Y., Jung M., Fujisawa T.X., Takiguchi S., Shimada K., Saito D.N., Kosaka H., Tomoda A. Catechol-O-methyltransferase polymorphism is associated with the cortico-cerebellar functional connectivity of executive function in children with attention-deficit/hyperactivity disorder. *Scientific Reports* (2017) DOI:10.1038/s41598-017-04579-8
502. Katoh M., Wu B., Nguyen H.B., Thai T.Q., Yamasaki R., Lu H.Y., Rietsch A.M., Zorlu M.M., Shinozaki Y., Saitoh Y., Saitoh S., Sakoh T., Ikenaka K., Koizumi S., Ransohoff R.M., Ohno N. Polymorphic regulation of mitochondrial fission and fusion modifies phenotypes of microglia in neuroinflammation. *Scientific Reports* (2017) DOI:10.1038/s41598-017-05232-0
503. Morizawa Y.M., Hirayama Y., Ohno N., Shibata S., Shigetomi E., Sui Y., Nabekura J., Sato K., Okajima F., Takebayashi H., Okano H., Koizumi S. Reactive astrocytes function as

phagocytes after brain ischemia via ABCA1-mediated pathway. *Nature Communications* (2017) DOI:10.1038/s41467-017-00037-1

504. Kotani R., Sotome H., Okajima H., Yokoyama S., Nakaike Y., Kashiwagi A., Mori C., Nakada Y., Yamaguchi S., Osuka A., Sakamoto A., Miyasaka H., Saito S. Flapping viscosity probe that shows polarity-independent ratiometric fluorescence. *Journal of Materials Chemistry C* (2017) DOI:10.1039/c7tc01533j
505. Kaneko N., Sawada M., Sawamoto K. Mechanisms of neuronal migration in the adult brain. *Journal of Neurochemistry* (2017) DOI:10.1111/jnc.14002
506. Arai R., Sugawara T., Sato Y., Minakuchi Y., Toyoda A., Nabeshima K., Kimura H., Kimura A. Reduction in chromosome mobility accompanies nuclear organization during early embryogenesis in *Caenorhabditis elegans*. *Scientific Reports* (2017) DOI:10.1038/s41598-017-03483-5
507. Takano N., Suzuki M., Irie R., Yamamoto M., Hamasaki N., Kamagata K., Kumamaru K.K., Hori M., Oishi H., Aoki S. Usefulness of Non-Contrast-Enhanced MR Angiography Using a Silent Scan for Follow-Up after Y-Configuration Stent-Assisted Coil Embolization for Basilar Tip Aneurysms. *American Journal of Neuroradiology* (2017) DOI:10.3174/ajnr.A5033
508. Ikematsu S., Tasaka M., Torii K.U., Uchida N. ERECTA-family receptor kinase genes redundantly prevent premature progression of secondary growth in the *Arabidopsis* hypocotyl. *New Phytologist* (2017) DOI:10.1111/nph.14335
509. Tsuji H., Inoue I., Takeuchi M., Furuya A., Yamakage Y., Watanabe S., Koike M., Hattori M., Yamanaka K. TDP-43 accelerates age-dependent degeneration of interneurons. *Scientific Reports* (2017) DOI:10.1038/s41598-017-14966-w
510. Sasabayashi D., Takayanagi Y., Takahashi T., Koike S., Yamasue H., Katagiri N., Sakuma A., Obara C., Nakamura M., Furuichi A., Kido M., Nishikawa Y., Noguchi K., Matsumoto K., Mizuno M., Kasai K., Suzuki M. Increased Occipital Gyrification and Development of Psychotic Disorders in Individuals With an At-Risk Mental State: A Multicenter Study. *Biological Psychiatry* (2017) DOI:10.1016/j.biopsych.2017.05.018
511. Konagaya Y., Terai K., Hirao Y., Takakura K., Imajo M., Kamioka Y., Sasaoka N., Kakizuka A., Sumiyama K., Asano T., Matsuda M. A Highly Sensitive FRET Biosensor for AMPK Exhibits Heterogeneous AMPK Responses among Cells and Organs. *Cell Reports* (2017) DOI:10.1016/j.celrep.2017.10.113
512. Shinozaki Y., Kashiwagi K., Namekata K., Takeda A., Ohno N., Robaye B., Harada T., Iwata T., Koizumi S. Purinergic dysregulation causes hypertensive glaucoma-like optic neuropathy. *JCI Insight* (2017) DOI:10.1172/jci.insight.93456
513. Hagiwara A., Warntjes M., Hori M., Andica C., Nakazawa M., Kumamaru K.K., Abe O., Aoki S. SyMRI of the Brain Rapid Quantification of Relaxation Rates and Proton Density, With Synthetic MRI, Automatic Brain Segmentation, and Myelin Measurement. *Investigative Radiology* (2017) DOI:10.1097/rlr.0000000000000365
514. Hagiwara A., Hori M., Yokoyama K., Nakazawa M., Ueda R., Horita M., Andica C., Abe O., Aoki S. Analysis of White Matter Damage in Patients with Multiple Sclerosis via a Novel In Vivo MR Method for Measuring Myelin, Axons, and G-Ratio. *American Journal of Neuroradiology* (2017) DOI:10.3174/ajnr.A5312
515. Satoh T., Song C., Zhu T., Toshimori T., Murata K., Hayashi Y., Kamikubo H., Uchihashi T., Kato K. Visualisation of a flexible modular structure of the ER folding-sensor enzyme UGGT. *Scientific Reports* (2017) DOI:10.1038/s41598-017-12283-w
516. Matsumoto-Makidono Y., Nakayama H., Yamasaki M., Miyazaki T., Kobayashi K., Watanabe M., Kano M., Sakimura K., Hashimoto K. Ionic Basis for Membrane Potential Resonance in Neurons of the Inferior Olive. *Cell Reports* (2016) DOI:10.1016/j.celrep.2016.06.053

517. Goto M., Abe O., Miyati T., Yamasue H., Gomi T., Takeda T. Head Motion and Correction Methods in Resting-state Functional MRI. *Magnetic Resonance in Medical Sciences* (2016) DOI:10.2463/mrms.rev.2015-0060
518. Aramaki S., Mayanagi K., Jin M., Aoyama K., Yasunaga T. Filopodia formation by crosslinking of F-actin with fascin in two different binding manners. *Cytoskeleton* (2016) DOI:10.1002/cm.21309
519. Tsuboyama K., Koyama-Honda I., Sakamaki Y., Koike M., Morishita H., Mizushima N. The ATG conjugation systems are important for degradation of the inner autophagosomal membrane. *Science* (2016) DOI:10.1126/science.aaf6136
520. Sakakibara E., Homae F., Kawasaki S., Nishimura Y., Takizawa R., Koike S., Kinoshita A., Sakurada H., Yamagishi M., Nishimura F., Yoshikawa A., Inai A., Nishioka M., Eriguchi Y., Matsuoka J., Satomura Y., Okada N., Kakiuchi C., Araki T., Kan C., Umeda M., Shimazu A., Uga M., Dan I., Hashimoto H., Kawakami N., Kasai K. Detection of resting state functional connectivity using partial correlation analysis: A study using multi-distance and whole-head probe near-infrared spectroscopy. *NeuroImage* (2016) DOI:10.1016/j.neuroimage.2016.08.011