

1. Matsumoto J., Ito S., Sumiyoshi C., Yasuda Y., Saitoh S., Fujimoto M., Yamamori H., Sumiyoshi T., Hashimoto R. Cognitive profiles of patients with enlarged lateral ventricles and cognitive impairment among patients with schizophrenia. *Schizophrenia Research: Cognition* (2026) DOI:10.1016/j.scog.2026.100455
2. Hosokawa M., Kawakami R., Imami K., Kurosawa R., Yoshizawa T., Ishihama Y., Imamura T., Hagiwara M., Takeuchi A. RNA-dependent SFPQ condensates coordinate multidimensional regulation of extra-long neuronal genes. *Cell Chemical Biology* (2026) DOI:10.1016/j.chembiol.2026.06.004
3. Yamakuni R., Seino S., Yamaki A., Shima A., Ishikawa H., Abe M., Takano H., Sawamoto N., Sekino H., Ishii S., Fukushima K., Ukon N., Kasai T., Narumoto J., Hanakawa T., Ito H., Mori Y., Toda W., Goto D., Nakamoto Y., Fushimi Y., Takahashi R., Yamakado H., Taruno Y., Nakanishi E., Sawamura M., Takeda K., Sakato Y., Terada Y., Yoshimura K., Sakamaki-Tsukita H., Wada I., Nishida A., Kambe D., Furukawa K., Matsushima T., Hishikawa K., Togo H., Yoshinaga K., Inoue A., Inoue M., Kato K., Kanno K., Hagane Y., Ueda Y., Hoshino H., Hattori K., Mogi S., Fukuoka H., Sajima K., Aoshima Y., Murai T., Ubukata S., Hashimoto Y., Hattori K., Koike E., Kanezawa T., Takasumi H., Kikori K., Kurihara Y., Oto M., Nemoto A., Sugawara S., Endo Y., Yamada K., Akazawa K., Tazoe J., Kotani T., Tamaki N., Ikeno H., Nii T., Okada T., Kawakatsu S., Hayashi H., Kobayashi N., Yabe H., Nakahara T., Matsuda N., Kanai K., Sugou S., Nakano Y., Kondo M., Niwa F., Matsuoka T., Morii-Kitani F., Mizuno T., Nishikawa N., Mukai Y., Omachi Y., Tsukamoto T., Sakamoto T., Okita K., Sekiguchi A., Wakasugi N., Takahashi Y. Whole-brain histogram analysis and top 20% gray and white matter ratio of amyloid positron emission tomography: A comparison with the centiloid scale. *Annals of Nuclear Medicine* (2026) DOI:10.1007/s12149-026-02218-9
4. Notoh H., Tsukiji N., Takashima H., Sugimori H., Nara R., Kamata A., Hayakawa H., Suzuki N., Suzuki A., Okamoto S., Kanematsu T., Katsumi A., Kojima T., Matsushita T., Suzuki-Inoue K., Tamura S. Spatiotemporal dynamics and ossification of podoplanin-positive cells in the developing femur. *Scientific Reports* (2026) DOI:10.1038/s41598-026-46913-z
5. Lin Y. J., Takahashi-Nakazato A., Tsutsumi K., Takahashi T., Mercier D., Ashitomi H., Chiang M. C., Haberl M., Uytiepo M., Maximov A., Makino Y., Nemoto T., Enoki R., Hirano A., Soga K., Looprasertkul S., Ohno N., Kubota Y., Sakurai T., Tanaka K. Z. Artificial hibernation reveals synaptic engram architecture associated with memory retention. *Science* (2026) DOI:10.1126/science.aee7004
6. Motomatsu H., Toyoshima H., Kawasaki S. *Elliptochloris lunaris* sp. nov. (Trebouxioophyceae, Chlorophyta), a new free-living *Elliptochloris* species isolated under high light conditions. *Phycological Research* (2026) DOI:10.1111/pre.70051
7. Usami F. M., Arata M., Kato K., Shi D., Oka S., Yang Y., Fujimori T. Successful oocyte transport through the oviduct does not depend on the longitudinal alignment of oviduct epithelial folds. *Proceedings of the National Academy of Sciences of the United States of America* (2026) DOI:10.1073/pnas.2605383123
8. Mao G., Ito S., Ishimura R., Sakamaki J. I., Sasaki R., Uemura T., Ishikawa K. I., Komatsu-Hirota S., Akamatsu W., Abe M., Waguri S., Bijarnia-Mahay S., Noda N. N., Inada T., Komatsu M. The UFSP2-ODR4 complex spatially confines and dynamically controls UFM1 deconjugation to safeguard neuronal proteostasis. *Molecular Cell* (2026) DOI:10.1016/j.molcel.2026.06.026
9. Sakamoto J., Ishii H., Otomo K., Kozawa Y., Sato S., Yokoyama H., Nemoto T. Wavelength-tunable depletion expands fluorophore compatibility in two-photon STED nanoscopy. *Biomedical Optics Express* (2026) DOI:10.1364/BOE.603553

10. Jung J., Maejima T., Yamasaki M., Tsuno Y., Wang M., Hiraoka Y., Watanabe M., Mieda M. GIRK Channels Regulate Circadian Rhythms of Excitability in Prokineticin 2 Neurons of the Suprachiasmatic Nucleus and Modulate Behavioral Circadian Rhythms. *The Journal of Neuroscience* (2026) DOI:10.1523/JNEUROSCI.0260-26.2026
11. Dos Santos Kawata K. H., Uruta S., Watanabe A., Ono K., Amari S., Nakatani H., Nozawa K., Sasaka M., Kashiwagi K., Oyama H. Clinical expertise shifts psychological distancing from effortful regulation to reduced engagement on internally oriented processing during multitasking. *Frontiers in Behavioral Neuroscience* (2026) DOI:10.3389/fnbeh.2026.1811561
12. Matsuura K., Shinonaga R., Yamamoto M., Yamamoto Y., Chen H., Maeno A., Okuda K., Inoue H., Imotani S., Glushka J., Miki K., Watanabe Y., Takada M., Kaji H., Inoue J. I., Hattori A., Imamura H., Ito T. Distinct metabolic dependency on BCAA defines cancer stemness and malignancy in human triple-negative breast cancer. *Cell Reports* (2026) DOI:10.1016/j.celrep.2026.117630
13. Takiguchi A., Shek H. T., Sasaki S., Tago T., Uehara T., Goto Y., Toyooka K., Kurokawa K., Tojima T., Nakano A., Maeda M., Satoh T., Satoh A. K. Reversible control of post-Golgi transport by brefeldin A reveals recycling endosome maturation during glycosylphosphatidylinositol-anchored protein transport. *Nature Communications* (2026) DOI:10.1038/s41467-026-75784-1
14. Nishikino T., Takekawa N., Burton-Smith R., Tajimi Y., Murata K., Uchihashi T., Kojima S., Imada K., Homma M. Detection of Ring Structure and Its Flexibility in Periplasmic Region of FliL, Bacterial Flagellar Stator-Associate Protein, in Marine Vibrio. *Molecular Microbiology* (2026) DOI:10.1111/mmi.70101
15. Watanabe M., Shimoji K., Sakamoto J., Maeda C., Iwawaki K., Nayanar G., Chen Q. Y., Takao C., Tominaga R., Kimura Y., Ito A., Tu T. H. T., Miura M., Wada A., Toyofuku A. Peripheral/central neural microstructural alterations in persistent idiopathic dentoalveolar pain: a case-comparative study. *Frontiers in Neurology* (2026) DOI:10.3389/fneur.2026.1905273
16. Shigenobu S., Michellod D., Tan K. X. Lipid metabolism in the aphid-Buchnera symbiosis: an underexplored dimension of insect physiology. *Current Opinion in Insect Science* (2026) DOI:10.1016/j.cois.2026.101581
17. Dong Y., Yoshida T., Maeda M., Adachi H., Eguchi A., Mishiro-Sato E., Okuzaki D., Kataoka Y., Yoshida T., Oneyama C. Stress granules as RNA triage hubs suppress extracellular vesicle secretion under oxidative stress in cancer. *Proceedings of the National Academy of Sciences of the United States of America* (2026) DOI:10.1073/pnas.2533990123
18. Okada N., Morita K., Tonsho S., Kiyota M., Shoji E., Koshiyama D., Koike S., Yamasaki S., Nishida A., Ando S., Yahata N., Kamiya K., Kunitatsu A., Abe O., Yagishita S., Kasai K. The role of the globus pallidus subregions in the schizophrenia spectrum continuum. *Molecular Psychiatry* (2026) DOI:10.1038/s41380-026-03729-7
19. Kakuda K., Abumi M., Kinoshita H., Higashi M., Shiiba H., Shimizu S., Kuramoto S., Nishida F., Kawajiri K., Sakugawa K., Sato M., Toyooka K., Ito-Inaba Y., Inaba T. Multilayered regulation of chloroplast development by single B-BOX CONSTANS-LIKE and GOLDEN2-LIKE proteins in Arabidopsis. *Plant Physiology* (2026) DOI:10.1093/plphys/kiag406
20. Thompson K., Bischof J., Reis Y., Arvanitis C., Balogun O. A., Brown C. M., De Niz M., Díaz M., Engelbrecht L., Fabian-Morales E., Fazeli E., Fletcher G., Guerrero A., Itano M. S., Kable E., Kitten G. T., Komoto S., Ma X., O'Toole P. J., Pinto A., Pollak C. N., Prats C., Pylvänäinen J. W., Riches J. D., Salamero J., Silio V., Terjung S., Winter S., Wright G. D., Yen L., Keppler A. Making the invisible visible: A global examination of careers and recognition in Imaging Scientists in core facilities. *Journal of Microscopy* (2026) DOI:10.1111/jmi.70089

21. Komatsu-Hirota S., Tabata K., Sou Y. S., Kakuta S., Sakamaki J. I., Tsuchiya H., Li J., Kumeta H., Sakai Y., Fujioka Y., Noshiro D., Shimobayashi S. F., Kurimura T., Taniguchi T., Abe M., Koike M., Morishita H., Noda N. N., Komatsu M. Phosphorylation tunes p62 condensates to drive autophagic degradation of ubiquitinated proteins. *EMBO Journal* (2026) DOI:10.1038/s44318-026-00785-1
22. Hamada N., AlAbdi L., Uehara T., Sasikarn L., Nishijo T., Suliman-Lavie R., Hashem M. O., Alfadhel M., Alhefdhi S., Tabarki B., Alghamdi M., Iwamoto I., Takenouchi T., Kosaki K., Shifman S., Mizuno S., Ohno N., Alkuraya F. S., Nagata K. I. Distinct pathophysiological mechanisms of CEP152 variants in microcephaly and brain abnormalities. *EMBO Molecular Medicine* (2026) DOI:10.1038/s44321-026-00427-3
23. Maeda C., Kishi Y., Takeda I., Muratani M., Wake H., Tsuruta F. Age-associated neuronal micronuclei formation and transfer to microglia. *Frontiers in Aging Neuroscience* (2026) DOI:10.3389/fnagi.2026.1787252
24. Takatsuka H., Amari T., Higaki T., Oda Y. Two-step, long-distance nuclear migration guided by distinct actin networks prior to plant root hair formation. *PNAS Nexus* (2026) DOI:10.1093/pnasnexus/pgag141
25. Ageta-Ishihara N., Fuse N., Suzuki A., Fukazawa Y., Kinoshita M. Environmental enrichment is associated with enhanced novel object recognition performance and an increased proportion of smooth endoplasmic reticulum-containing spines in the dentate gyrus of Septin3^{-/-} mice. *Molecular Brain* (2026) DOI:10.1186/s13041-026-01315-0
26. Kang Z., Nakagawa S., Matsumoto H., Ishimoto Y., Nonoyama T., Hanaki Y., Tsugawa S., Ueda M. Temporal changes in surface tension guide microtubule organization and accurate asymmetric division of Arabidopsis zygotes. *Nature Communications* (2026) DOI:10.1038/s41467-026-72280-4
27. Watabe M., Sakamoto J., Yoshimura H., Nemoto T., Kaizu K. Coupled amplitude-phase transport in heterogeneous optical media. *Physical Review A* (2026) DOI:10.1103/zjh7-3bdb
28. Yang G., Inoko M., Ogura K., Ishida-Ishihara S., Tsukada Y., Funahashi A., Sato M., Uehara R. Profiling cell proliferation after whole-genome duplication in human cells. *Biology Open* (2026) DOI:10.1242/bio.062568
29. Toyooka K., Saito Y., Kojima S., Goto Y., Sato M. Biological cross-sectional polishing scanning electron microscopy enables wide-area ultrastructural mapping of intact plant–microbe–soil interfaces. *Communications Earth and Environment* (2026) DOI:10.1038/s43247-026-03598-6
30. Kojima D., Sawada M., Ishimaru T., Ito N., Tateyama S., Adachi K., Kawaguchi H., Satake N., Herranz-Pérez V., García-Verdugo J. M., Hirose Y., Ohno N., Kaneko N., Sawamoto K. Cytoarchitecture of neurogenic niche and neuroblast clusters in the postnatal microminipig brain. *Stem Cell Reports* (2026) DOI:10.1016/j.stemcr.2026.102893
31. Nakamura S., Wakazaki M., Sato M., Toyooka K., Nagano A. J., Ishida H., Hagihara S., Izumi M. Chloroplast stress caused by maltose hyperaccumulation activates chlorophagy via the core autophagy machinery. *Plant Physiology* (2026) DOI:10.1093/plphys/kiag271
32. Kabashima M., Hasuzawa N., Wang L., Rikitake J., Nomura S., Niimoto T., Tokubuchi R., Moriyama S., Gobaru M., Inoguchi Y., Nagayama A., Ashida K., Ohta K., Moriyama Y., Nomura M. Vesicular nucleotide transporter (VNUT)-dependent ATP secretion by hepatic stellate cells promotes liver fibrosis. *Biochimica et Biophysica Acta - Molecular Basis of Disease* (2026) DOI:10.1016/j.bbadis.2026.168180
33. Taemaitree F., Takano Y., Yamaguchi D., Yamaguchi K., Yamashita Y., Tsutsumi M., Wen C., Otomo K., Hirai K., Hutchison J., Van Zundert I., Krzyzowska S., Bravo M., Hirano S., Kimura K. D., Aoki K., Rocha S., Nemoto T., Fortuni B., Uji-i H. Localized heat induces ERK activation and signal propagation in solid tumors. *Scientific Reports* (2026) DOI:10.1038/s41598-026-49009-w

34. Inoko M., Yang G., Tsukada Y., Uehara R. Sister chromatid separation determines the proliferative properties upon whole-genome duplication via homologous chromosome arrangement. *Proceedings of the National Academy of Sciences of the United States of America* (2026) DOI:10.1073/pnas.2524135123
35. Suito T., Deng X., Sato S., Nagao K., Ganser C., Uchihashi T., Tsutsumi M., Nemoto T., Hara Y., Tominaga M., Sokabe T. Ether phospholipids modulate somatosensory responses by tuning multiple receptor functions in *Drosophila*. *iScience* (2026) DOI:10.1016/j.isci.2026.115209
36. Kato M., Kan S., Ichikawa N., Takamura M., Okada G. Activation of the Anterior Insular and Prefrontal Cortices During Attention Switching and Task Execution: A Study Using a Cued-Switching Task and Functional Magnetic Resonance Imaging. *Perceptual and Motor Skills* (2026) DOI:10.1177/00315125261439049
37. Kawabe Y., Yamada S., Shima Y., Tanemura K., Yoshida S., Hara K. Undifferentiated spermatogonia modulate their behavior via the expression of basement membrane protein laminin γ . *Biology of Reproduction* (2026) DOI:10.1093/biolre/ioag032
38. Song F., Sato M., Toyama Y., Ishikawa T., Tokito F., Katsuda T., Toyooka K., Sakai Y., Nishikawa M. A proof-of-concept study on high pressure freezing for cryopreservation. *PNAS Nexus* (2026) DOI:10.1093/pnasnexus/pgag065
39. Yokote H., Miyazaki Y., Fujimori J., Adachi S., Toru S., Niino M., Nakashima I., Miura Y., Nishida Y., Misawa S. Characterizing spinal cord atrophy in multiple sclerosis patients without disease activity or brain atrophy progression. *Multiple Sclerosis and Related Disorders* (2026) DOI:10.1016/j.msard.2026.106990
40. Kumagai Y., Yamaguchi A. A consistent white-matter lesion is associated with network-level structural and functional disconnection in chronic Broca's aphasia. *Neuroscience* (2026) DOI:10.1016/j.neuroscience.2026.01.041
41. Matura A., Hosono M., Matsuo K., Tamaoki N., Kotani T., Uehara R. Optochemical elucidation of a critical role of the incomplete spindle assembly checkpoint in zebrafish development. *Commun Biol* (2026) DOI:10.1038/s42003-026-09871-w
42. Shimada T. L., Higaki T., Ebine K., Takano Y., Saijo Y., Ueda T. Actin fragmentation induced by *Colletotrichum higginsianum* infection facilitates hyphal invasion in *Arabidopsis thaliana* leaves. *Plant and Cell Physiology* (2026) DOI:10.1093/pcp/pcag038
43. Yoshida S. Y., Matsumoto K., Takagi S., Kinoshita F. L., Yamashita K., Shigeta D., Yoshioka Y., Ushiku T., Morii E., Susaki E. A., Ueda H. R. Whole-organ and whole-body 3D atlases enable cellome-wide profiling. *Cell* (2026) DOI:10.1016/j.cell.2025.12.057
44. Tonsho S., Yamagishi M., Shoji E., Kiyota M., Morita S., Satomura Y., Kamiya K., Abe O., Kasai K., Okada N. Insular volume reduction in patients with major psychiatric disorders experiencing parental versus peer-related childhood adversity. *Psychiatry Research: Neuroimaging* (2026) DOI:10.1016/j.psychresns.2026.112200
45. Miyamoto Y., Kisanuki R., Oshima R., Yoshimura S. H., Yokota M., Maehara K., Aomine Y., Hata C., Tachibana T., Hazawa M., Okada H., Kimura H., Koike M., Ohkawa Y., Katagiri T., Yoneda Y., Oka M., Saitoh H. Importin α Characterizes a micronuclear environment associated with genomic instability in human cancer cells. *Journal of Cell Science* (2026) DOI:10.1242/jcs.264603
46. Goto K., Watanabe R., Yamamoto S., Lim V. S., Shimada R., Kuruma H., Senoo A., Ikeda Y. Expansion of attentional scope modulates postural control, motor strategies, and attentional network connectivity in healthy adults: a proof-of-concept mixed-methods study. *Frontiers in Rehabilitation Sciences* (2026) DOI:10.3389/fresc.2026.1758682

47. Mukai S., Sato T., Kamei Y., Kato K., Mishiro-Sato E., Kondo-Ida L., Yabuta N., Hiroshima K., Sekido Y. Enhanced nuclear export caused by O-GlcNAcylation of nucleoporins is a potential therapeutic target in mesothelioma. *British Journal of Cancer* (2026) DOI:10.1038/s41416-026-03369-2
48. Kumamoto K., Kagami H., Saitoh S., Yamada S., Matsumoto M., Ohno N. Altered ciliary morphology reduces mechanosensation in a cystic kidney model as indicated by a mathematical model. *Scientific Reports* (2026) DOI:10.1038/s41598-026-39179-y
49. Iwata S., Kawakami R., Yamada H., Tanaka T., Teraoka M., Imamura T., Hato N. Three-Dimensional Mapping of Facial Motor Neurons with Tissue Clearing for Facial Nerve Nucleus of Guinea Pig via Long Distance Retrograde Tracing. *Acta Histochemica et Cytochemica* (2026) DOI:10.1267/ahc.25-00055
50. Kawata K. H. D., Ono K., Lem W. G., Amari S., Nozawa K., Sasaka M., Kashiwagi K., Oyama H. The cortical and subcortical brain regions influence multitasking skills using immersive virtual reality simulation in experienced nurses. *Scientific Reports* (2026) DOI:10.1038/s41598-026-39355-0
51. Kumakura N., Motoyama T., Miyazawa K., Nogawa T., Pernier J., Yonehara K., Sato M., Goto Y., Sakai K., Ishihama N., Matsumori K., Gan P., Toyooka K., Lévêque-Fort S., Koshino H., Fukuma T., O'Connell R. J., Shirasu K. Dihydroxyhexanoic acid biosynthesis controls turgor in pathogenic fungi. *Science* (2026) DOI:10.1126/science.aec9443
52. Ageta-Ishihara N., Fukumasu N., Fujii K., Koshidaka Y., Tanigaki K., Hiramoto T., Kang G., Hiroi N., Miyakawa T., Takao K., Kinoshita M. Impairment of novelty-dependent hippocampal behavioural tagging in Septin5-deficient mice. *Molecular Brain* (2026) DOI:10.1186/s13041-026-01276-4
53. Fukuzawa H., Ihara Y., Sawa M., Shirai H., Enoki S., Ikezaki K., Kambara T., Okada Y. Development of electromagnetic tweezers for single-molecule energetics of kinesin. *Biophysics and Physicobiology* (2026) DOI:10.2142/biophysico.bppb-v23.0003
54. Okabe Y., Tsujimoto-Inui Y., Maruyama S., Tsuneizumi K., Takeshita T., Sato M., Toyooka K., Abe T., Matsunaga S. Heavy-ion beam-induced mutants of Medakamo hakoo indicate potential associations between photosynthesis and cell size, cell cycle, and cell wall morphology. *Journal of Plant Research* (2026) DOI:10.1007/s10265-025-01680-2
55. Mii A., Yamamoto S., Yamamoto M., Yamamoto S., Fukuma S., Shimizu A., Imamura H., Yanagita M. Real-Time ATP Imaging Reveals the Metabolic State During Branching Nephrogenesis. *Kidney360* (2026) DOI:10.34067/KID.0000001148
56. Hiraoka D., Xie Y., Powers S., Patterson G., Chin J., Brady N., Yeh T., Kim P. Investigating the role of executive function in brain responses to infant crying among new parents. *Social Cognitive and Affective Neuroscience* (2026) DOI:10.1093/scan/nsag002
57. Hayashi Y., Tsuyama T., Usui T., Ohbayashi T., Kondo T., Kokuryoh K., Awaya T., Katsuno T., Uemura T. Roles of a Drosophila ADAM 10 Transmembrane Metalloprotease, Kuzbanian, in Tissue Architecture and Function of the Adult Adipose Tissue. *Genes to Cells* (2026) DOI:10.1111/gtc.70084
58. Hashimoto N., Nemoto K., Fukunaga M., Matsumoto J., Okada N., Morita K., Yamamori H., Fujimoto M., Yasuda Y., Koeda M., Kawashima T., Aki M., Sasabayashi D., Fujikane D., Harada K., Yamamoto M., Ishikawa S., Hasegawa N., Ito S., Ohi K., Matsubara T., Hirano Y., Watanabe Y., Yamasue H., Tateno A., Miyata J., Takahashi T., Kawasaki Y., Onitsuka T., Okubo Y., Suzuki M., Ozaki N., Kasai K., Hashimoto R. Optimizing multi-site schizophrenia differentiation: MRI harmonization with 20 controls per scanner in a study of 3560 subjects across 15 MRI scanners. *Progress in Neuro-Psychopharmacology and Biological Psychiatry* (2026) DOI:10.1016/j.pnpbp.2026.111607

59. Inagaki S., Wada H., Itabashi T., Itakura Y., Nakagawa R., Chen L., Murata K., Iwane A. H., Hayashi S. Endoplasmic reticulum patterns insect cuticle nanostructure. *Journal of Cell Biology* (2025) DOI:10.1083/jcb.202503127
60. Chen Y., Taberner N., da Silva J., Semwal V., Bhattacharjee B., Eckert J., Kondrychyn I., Hu M., Aswani N., Chen G., Okada Y., Lagendijk A. K., Shibata T., Okuda S., Phng L. K. Circumferential actomyosin bundles anchored by CCM1 drive endothelial cell contraction and vessel constriction. *Nature Communications* (2025) DOI:10.1038/s41467-025-67820-3
61. Utsumi N., Tanaka D. H., Nakai A., Inaba S., Nonaka S., Maeda S., Uesaka N. Convergent Recruitment of Cerebellar Purkinje Cells by Mechanistically Diverse General Anesthetics. *Journal of Neurochemistry* (2025) DOI:10.1111/jnc.70331
62. Matsushima K., Sumikama T., Suzuki T., Ito M., Nagasawa Y., Sumino A., Flechsig H., Ogoshi T., Umeda K., Kodera N., Murakoshi H., Shibata M. Structural dynamics of mixed-subunit CaMKII α/β heterododecamers filmed by high-speed AFM. *Nature Communications* (2025) DOI:10.1038/s41467-025-66527-9
63. Muramoto T., Furuta T., Koike T., Bagdasarian K., Tonomura S., Takenaka A., Kataoka Y., Maeda M., Eguchi A., Kitada M., Kumamoto K., Ahissar E., Ebara S. Club-like receptors respond to light touch but not to whisking. *Nature Communications* (2025) DOI:10.1038/s41467-025-67514-w
64. Morimoto M., Toyoshima H., Shimamura M., Matsuzaki R., Takeshita S., Kawasaki S. *Apricichlorella intertidalis* gen. et sp. nov. and *Chlorella intertidalis* sp. nov. (Chlorellaceae, Chlorellales), isolated from rock surfaces of the intertidal zone in Japan. *Phycological Research* (2025) DOI:10.1111/pre.70022
65. Ban T., Kuroda K., Nishigori M., Yamashita K., Ohta K., Koshiba T. Prohibitin 1 tethers lipid membranes and regulates OPA1-mediated membrane fusion. *Journal of Biological Chemistry* (2025) DOI:10.1016/j.jbc.2024.108076
66. Kuraoka K., Nakamura K. Differential and Temporally Dynamic Involvement of Primate Amygdala Nuclei in Face Reality and Reward Information Processing. *Journal of Neuroscience* (2025) DOI:10.1523/jneurosci.0093-24.2025
67. Hanaki Y., Suzuki H., Nakamura S., Nakagawa S., Tada K., Matsumoto H., Kimata Y., Sato Y., Ueda M. A simple and versatile plasma membrane staining method for visualizing living cell morphology in reproductive tissues across diverse plant species. *Plant Methods* (2025) DOI:10.1186/s13007-025-01465-7
68. Ageta-Ishihara N., Fukumasu N., Sakakibara K., Fujii K., Koshidaka Y., Katsuragawa S., Tanigaki K., Hiramoto T., Kang G. A., Hiroi N., Fukazawa Y., Miyakawa T., Takao K., Kinoshita M. Septin5 deficiency impairs both recent and remote contextual fear memory. *Molecular Brain* (2025) DOI:10.1186/s13041-025-01260-4
69. Wang J. W., Kajiwar K., Kesharwani M., Tama F., Ohsaki Y., Yamaguchi S., Taki M. Single-Cell Fluorescence Analysis of Lipid Droplet Compositional Dynamics during Triacylglycerol Catabolism. *Journal of the American Chemical Society* (2025) DOI:10.1021/jacs.5c11742
70. Ogawa Y., Nishimura K., Nambo M., Tsuchiya Y., Oka S., Fujimori T., Ichihara K., Matsumoto A., Obara K., Kamura T. Inducible tag-free degradation of endogenous proteins with AlissAID and development of a photoactivable inducer. *Communications Biology* (2025) DOI:10.1038/s42003-025-08912-0
71. Tra N. T., Kiryu-Seo S., Kida H., Wakatsuki K., Tashiro Y., Tsutsumi M., Ataka M., Iguchi Y., Nemoto T., Takahashi R., Katsuno M., Kiyama H. Absence of the axon initial segment in sensory neuron enhances resistance to amyotrophic lateral sclerosis. *Brain* (2025) DOI:10.1093/brain/awaf182

72. Parajuli B., Doi H., Shigetomi E., Suzuki H., Saito K., Sawada K., Koizumi S. Development of a label-free Ca²⁺ image sensor to visualize extracellular Ca²⁺ dynamics in the biological samples. *Biosensors and Bioelectronics* (2025) DOI:10.1016/j.bios.2025.117729
73. Ogino T., Saito A., Sawada M., Takemura S., Hara Y., Yoshimura K., Nagase J., Kawase H., Sato T., Inada H., Herranz-Pérez V., Mukouyama Y. S., Ema M., García-Verdugo J. M., Nabekura J., Sawamoto K. Neuronal migration depends on blood flow in the adult mammalian brain. *eLife* (2025) DOI:10.7554/eLife.99502
74. Ichikawa T., Kono Y., Kudo M., Shimi T., Miyashita N., Maesaka T., Ishibashi K., Sivashanmugan K., Yoshida T., Miyazawa K., Hanayama R., Hirata E., Miyata K., Kimura H., Fukuma T. Probing Nanomechanics by Direct Indentation Using Nanoendoscopy-AFM Reveals the Nuclear Elasticity Transition in Cancer Cells. *ACS Applied Nano Materials* (2025) DOI:10.1021/acsanm.5c03044
75. Sasaki T., Ishizaki K., Motose H., Oda Y. The conserved machinery of bipolar prospindle formation controls acentrosomal spindle orientation in land plants. *Current Biology* (2025) DOI:10.1016/j.cub.2025.08.038
76. Tago T., Satoh T., Satoh A. K. Studying Cargo Transport Using RudLOV. *Bio-Protocol* (2025) DOI:10.21769/BioProtoc.5468
77. Miyata T., Hagiwara D., Ashida R., Naito S., Kawaguchi Y., Handa T., Kobayashi T., Sugiyama M., Onoue T., Iwama S., Suga H., Banno R., Matsumoto M., Urakubo H., Ohno N., Arima H. Phagophores originate from endoplasmic reticulum membranes in vasopressin neurons in a mouse model of familial neurohypophysial diabetes insipidus. *Cell and Tissue Research* (2025) DOI:10.1007/s00441-025-04013-w
78. Nanatani K., Guan L., Kanno R., Kawabata T., Watanabe S., Katsube S., Hariharan P., Hidaka M., Yamanaka T., Toda K., Fujiki T., Kunii K., Miyamoto A., Chiba F., Ogasawara S., Murata T., Inaba K., Mitsuoka K., Abe K., Yamamoto M., Koshiba S. Elucidation of the structure and molecular mechanisms of the aspartate antiporter. *Communications Biology* (2025) DOI:10.1038/s42003-025-08676-7
79. Ohnishi Y., Setoyama D., Miwa H., Koitabashi N., Ogasawara R., Kitada S., Matoba N., Ayano T., Hiramoto K., Yasui R., Sugiura Y., Anada T., Ino K., Matsuda H., Noma T., Nonaka S., Izumi T., Kurabayashi M., Suematsu M., Kunisaki Y., Yanagita M., Imamura H., Yamamoto M. AVID mouse: A versatile platform for real-time, multiscale ATP imaging and spatial systems metabolism analysis in living mice. *Cell Reports* (2025) DOI:10.1016/j.celrep.2025.116246
80. Ma S., Asada Y., Yamaguchi S., Taki M. Unsymmetric thieno-phospha-rhodamines: a new class of near-infrared fluorescent probes for stimuli-responsive organelle imaging. *Chemical Communications* (2025) DOI:10.1039/d5cc03133h
81. Hasegawa M., Mizoguchi H., Ishikawa M., Tanaka K., Korenaga Y., Hatsuki S., Takahashi H., Yamada G., Akashi H., Toyota K., Miyagawa S. Androgen-regulated gene expression of developing external genitalia in mice. *Gene* (2025) DOI:10.1016/j.gene.2025.149669
82. Tian Y., Zhang Q., Li J. T., Tsutsumi M., Inose T., Taemaitree F., Hirai K., Kanekura K., Uji-i H. Raman Spectroscopy and FRAP Analysis on Density Heterogeneity and Diffusion Behavior of Complex Coacervation by Arginine-Rich Dipeptides and Poly-A RNA. *Acs Omega* (2025) DOI:10.1021/acsomega.5c04844
83. Umezaki Y., Motomura H., Nagamachi S., Toyofuku A., Tu T. T. H., Naito T. Alleviation of symptoms and paradoxical brain perfusion shift in oral ceneesthopathy: A retrospective neuroimaging study. *Frontiers in Psychiatry* (2025) DOI:10.3389/fpsy.2025.1653444
84. Motomatsu H., Kawaguchi R., Toyoshima H., Kawasaki S. Two microalgal strains, *Chloroidium dehydrum* sp. nov. and *Chloroidium satellitum* sp. nov. (Trebouxiophyceae, Chlorophyta), isolated under high light exposure conditions and exhibiting stress-induced morphological changes. *Phycological Research* (2025) DOI:10.1111/pre.70008

85. Watanabe A., Hirayama S., Kominato I., Marchese S., Esposito P., Metodieva V., Kimura T., Kameda H., Sano T., Takao M., Takatori S., Koike M., Varela J. A., Tomita T., Murata S. HAPLN2 forms aggregates and promotes microglial inflammation during brain aging in mice. *PLOS Biology* (2025) DOI:10.1371/journal.pbio.3003006
86. Takemura S., Kawase K., Wolbeck L., Nakamura Y., Matsumoto M., Jinnou H., Tahara A., Sawada M., Kubota Y., Herranz-Pérez V., García-Verdugo J. M., Ishibashi N., Gallo V., Ohno N., Khodosevich K., Sawamoto K. Transformation of radial glia into postnatal neural stem cells depends on birth. *Cell Reports* (2025) DOI:10.1016/j.celrep.2025.116029
87. Kamiya T., Ito Y., Iwasaki T., Suzuki D., Hayashi T., Kim J., Matsumoto T., Maeda E. Structural characterization of newt tendon regeneration after complete transection: In vivo two-photon imaging and transmission electron microscopy. *Journal of Anatomy* (2025) DOI:10.1111/joa.70036
88. Nakaoku Y., Ogata S., Nemoto K., Kakuta C., Kiyoshige E., Teramoto K., Nakatsuka K., Ganbaatar G., Ihara M., Nishimura K. Combinations of multimodal neuroimaging biomarkers and cognitive test scores to identify patients with cognitive impairment. *Frontiers in Aging Neuroscience* (2025) DOI:10.3389/fnagi.2025.1650629
89. Omileke F., Ikegame T., Tonsho S., Mori S., Shoji E., Kiyota M., Minami T., Kumagai E., Asai T., Kirihaara K., Koike S., Jinde S., Kamiya K., Abe O., Kasai K., Okada N. The association between plasma betaine level and brain structural changes in schizophrenia. *Schizophrenia* (2025) DOI:10.1038/s41537-025-00657-3
90. Shindo M., Tsuji T., Hartantyo R. Y., Saito Y., Ito A., Sugio S., Takeda I., Sukanami T., Wake H. Potential effects of microglia-vascular interactions during chronic systemic inflammation in the central nervous system of mice with systemic lupus erythematosus. *Nagoya Journal of Medical Science* (2025) DOI:10.18999/nagjms.87.3.509
91. Saitou T., Takanezawa S., Kawakami R., Kobayashi-Taguchi K., Kamito M., Takemoto K., Niko Y., Tsukamoto Y., Ozaki R., Tsurumune A., Kamei Y., Umeda Y., Imamura T. Upright Light-Sheet Microscopy with Two-Photon Excitation for Imaging Large Samples. *Bioimages* (2025) DOI:10.11169/bioimages.33.1
92. Yamamoto T., Takeuchi K., Nagata Y., Mizuno A., Harada H., Ishikawa T., Maeda S., Ohka F., Yanase R., Shiba K., Ueno H., Inaba K., Saito R. Dpcd Induces Hydrocephalus Because of Partial Defects in the Inner Dynein Arms, With Abnormal Ciliary Motility. *Cytoskeleton* (2025) DOI:10.1002/cm.70012
93. Kawata N. Y. S., Fujisawa T. X., Makita K., Yao A., Okazawa H., Tomoda A. White matter microstructure abnormalities in children experiencing neglect without other forms of maltreatment. *Scientific Reports* (2025) DOI:10.1038/s41598-025-13363-y
94. Lee M. L., Chang C. P., Toda C., Nemoto T., Enoki R. Body temperature regulates glucose metabolism and torpid behavior. *Nature Communications* (2025) DOI:10.1038/s41467-025-61499-2
95. Takahashi T., Makino Y., Okamura Y., Nemoto T. Construction of Large Cranial Windows With Nanosheet and Light-Curable Resin for Long-term Two-Photon Imaging in Mice. *Bio-protocol* (2025) DOI:10.21769/BioProtoc.5373
96. Okazaki T., Nozaki K., Morimoto N., Otake Y., Saito R., Abe S., Okajima M., Yoshitane H., Hatta T., Iemura S. I., Natsume T., Kosako H., Yamasaki M., Inoue S., Kondo T., Koseki H., Gotoh Y. Membrane topology inversion of GGXX mediates cytoplasmic carboxylation for antiviral defense. *Science* (2025) DOI:10.1126/science.adk9967
97. Takahashi N., Ogita N., Koike T., Nishimura K., Inagaki S., Zhang Y., Higaki T., Umeda M. The transcriptional repressors IAA5 and IAA29 participate in DNA damage-induced stem cell death in Arabidopsis roots. *Plant Physiology* (2025) DOI:10.1093/plphys/kiaf303

98. Sano F. K., Shimizume K., Kobayashi K., Awazu T., Kawakami K., Akasaka H., Kobayashi T. A., Tanaka T., Okamoto H. H., Hirano H., Kusakizako T., Shihoya W., Kise Y., Itoh Y., Ishitani R., Okada Y., Sako Y., Yanagawa M., Inoue A., Nureki O. Insights into G-protein coupling preference from cryo-EM structures of Gq-bound PTH1R. *Nature Chemical Biology* (2025) DOI:10.1038/s41589-025-01957-6
99. Mizuta Y., Igarashi M., Shinagawa T., Kaneshiro I., Anan H., Kurihara D. In Vitro Live Cell Imaging Reveals Nuclear Dynamics and Role of the Cytoskeleton During Asymmetric Division of Pollen Mitosis I in *Nicotiana Benthamiana*. *Cytoskeleton* (2025) DOI:10.1002/cm.70003
100. Zhang J., Watanabe T., Miyazaki T., Yamasaki M., Konno K., Okuno Y., Matsuyama K., Noro T., Watanabe M., Uesaka N., Kano M. The transcription factor ZFP64 promotes activity-dependent synapse elimination during postnatal cerebellar development. *iScience* (2025) DOI:10.1016/j.isci.2025.112746
101. Matsudaira I., Yamaguchi R., Taki Y. Parent–offspring brain similarity: Specificities and commonalities among sex combinations—the TRIO study. *iScience* (2025) DOI:10.1016/j.isci.2025.112936
102. Jitsuishi T., Yamaguchi A. Structural connector hub properties of the thalamus in large-scale brain networks: white matter structure as an anatomical basis. *NeuroImage* (2025) DOI:10.1016/j.neuroimage.2025.121333
103. Nakayama T., Harada R., Yabuki A., Nomura M., Shiba K., Inaba K., Inagaki Y. Marked Genome Reduction Driven by a Parasitic Lifestyle: Two Complete Genomes of Endosymbiotic Bacteria Possibly Hosted by a Dinoflagellate. *Microbes and Environments* (2025) DOI:10.1264/jsme2.ME25005
104. Yamaguchi K., Kusumoto T., Araki T., Gomibuchi Y., Yasunaga T., Osada S., Taira J. Effect of Introducing Leucine Residues into 2-Aminoisobutyric Acid-Based Amphiphilic Helical Peptides on Intermolecular Interactions and Peptide Self-Assembly. *ACS Omega* (2025) DOI:10.1021/acsomega.5c02490
105. Uemura T., Kawakami R., Seki H., Yoshida S., Murakami M., Imamura T., Shingo H., Watanabe S., Niko Y. Bright and water-dispersible membrane probes enable visualization of cellular morphologies and dynamics in light-scattering tissues of living mice. *Chemical Science* (2025) DOI:10.1039/d5sc03047a
106. Horiuchi R., Kamimura A., Hanaki Y., Matsumoto H., Ueda M., Higaki T. Deep learning-based cytoskeleton segmentation for accurate high-throughput measurement of cytoskeleton density. *Protoplasma* (2025) DOI:10.1007/s00709-024-02019-9
107. Nakata K., Sakamoto J., Otomo K., Sato M., Ishii H., Tsutsumi M., Enoki R., Nemoto T. Amyloid- β -induced alteration of fast and localized calcium elevations in cultured astrocytes. *Scientific Reports* (2025) DOI:10.1038/s41598-025-03931-7
108. Takada S., Shinomiya N., Mao G., Tsuchiya H., Koga T., Komatsu-Hirota S., Sou Y. S., Abe M., Ryzhii E., Suzuki M., Nakao M., Waguri S., Morishita H., Komatsu M. KEAP1 retention in phase-separated p62 bodies drives liver damage under autophagy-deficient conditions. *EMBO Reports* (2025) DOI:10.1038/s44319-025-00483-9
109. Koike T., Oe S., Hirahara Y., Hayashi S., Seki-Omura R., Nakano Y., Sato Y., Iwashita H., Maeda M., Kataoka Y., Tanaka S., Mori T., Yamada H., Kitada M. Morphological Characterization of Glial Cells Surrounding Cajal's Initial Glomerulus of the Dorsal Root Ganglion Neurons Revealed Myelinating Schwann Cell Production. *Glia* (2025) DOI:10.1002/glia.70046
110. Takami N., Kato K., Yoshihi K., Kawamura A., Iida H., Kondoh H. The potent neuroepithelium-promoting activity of Otx2 during gastrulation, as demonstrated by its exogenous epiblast-wide expression in chicken embryos. *Frontiers in Cell and Developmental Biology* (2025) DOI:10.3389/fcell.2025.1599287

111. Ageta-Ishihara N., Mizukami M., Kinoshita I., Asami Y., Nishioka T., Bito H., Kaibuchi K., Kinoshita M. Phosphorylated septin 3 delocalizes from the spine base and facilitates endoplasmic reticulum extension into spines via myosin-Va. *Molecular Brain* (2025) DOI:10.1186/s13041-025-01215-9
112. Kikuchi S., Kotaka T., Hanaki Y., Ueda M., Higaki T. Distinct actin microfilament localization during early cell plate formation through deep learning-based image restoration. *Plant Cell Reports* (2025) DOI:10.1007/s00299-025-03498-7
113. Inoko A., Soga N., Suzuki M., Kiyono T., Ikenouchi J., Kojima T., Sato Y., Saito D., Miyamoto T., Goshima N., Ito H., Kasai K. Long-term expansion of basal cells and the novel differentiation methods identify mechanisms for switching Claudin expression in normal epithelia. *Scientific Reports* (2025) DOI:10.1038/s41598-025-95463-3
114. Hashimoto N., Okada N., Fukunaga M., Nemoto K., Miura K., Matsumoto J., Ishikawa S., Narita H., Morita K., Yasuda Y., Kamishikiryō T., Harada K., Yamamoto M., Ohi K., Matsubara T., Hirano Y., Okada G., Tha K. K., Abe O., Onitsuka T., Kawasaki Y., Ozaki N., Kasai K., Hashimoto R. Lithium and valproate affect subcortical brain volumes in individuals with bipolar disorder: Mega-analysis of 235 individuals. *Journal of Affective Disorders* (2025) DOI:10.1016/j.jad.2025.04.019
115. Agetsuma M., Hatakeyama A., Yamada D., Kuniishi H., Ito C., Takeuchi E., Tsuji S., Tsutsumi M., Ichiki T., Otomo K., Yoshioka T., Kobayashi T., Noritake A., Aoki Y., Nemoto T., Yukawa H., Saitoh A., Nabekura J., Sekiguchi M. Minimally invasive, wide-field two-photon imaging of the brainstem at cellular resolution. *Cell Reports Methods* (2025) DOI:10.1016/j.crmeth.2025.101010
116. Soma S., Hayatsu N., Nomura K., Sherwood M. W., Murakami T., Sugiyama Y., Suematsu N., Aoki T., Yamada Y., Asayama M., Kaneko M., Ohbayashi K., Arizono M., Ohtsuka M., Hamada S., Matsumoto I., Iwasaki Y., Ohno N., Okazaki Y., Taruno A. Channel synapse mediates neurotransmission of airway protective chemoreflexes. *Cell* (2025) DOI:10.1016/j.cell.2025.03.007
117. Gachie S. W., Muhire A., Li D., Kawamoto A., Takeda-Kamiya N., Goto Y., Sato M., Toyooka K., Yoshimura R., Takami T., Zhang L., Kurisu G., Terachi T., Sakamoto W. The thylakoid membrane remodeling protein VIPP1 forms bundled oligomers in tobacco chloroplasts. *Plant Physiology* (2025) DOI:10.1093/plphys/kiaf137
118. Yoshida S., Kawakami R., Niko Y., Yatsuzuka K., Tsuda T., Mori H., Muto J., Shiraishi K., Imamura T., Fujisawa Y., Murakami M. Horizontal Imaging of Skin Tumors Using Advanced Fluorescence Techniques for Detecting Individual Malignant Cells. *Acta Histochemica et Cytochemica* (2025) DOI:10.1267/ahc.24-00059
119. Nakamura Y., Doi H., Kimura Y., Horio T., Choi Y. J., Takahashi K., Noda T., Sawada K. CMOS-Based Implantable Multi-Ion Image Sensor for Mg²⁺ Measurement in the Brain. *Sensors* (2025) DOI:10.3390/s25082595
120. Kimori Y. RMPJ: An ImageJ plugin for morphological information processing in biomedical images. *PLoS Computational Biology* (2025) DOI:10.1371/journal.pcbi.1012992
121. Nozaki Y., Kobayashi M., Fukuoh T., Ishimatsu M., Narita T., Taki K., Hirao Y., Ayabe S., Yokoyama M., Otani Y., Mizunoe Y., Matsumoto M., Ohno N., Kaifu T., Okazaki S., Goitsuka R., Nakagawa Y., Shimano H., Iwakura Y., Higami Y. Mipep deficiency in adipocytes impairs mitochondrial protein maturation and leads to systemic inflammation and metabolic dysfunctions. *Scientific Reports* (2025) DOI:10.1038/s41598-025-97307-6
122. Kurotani K. I., Shinozaki D., Okada K., Tabata R., Kawakatsu Y., Sugita R., Utsugi Y., Okayasu K., Mori M., Tanoi K., Goto Y., Sato M., Toyooka K., Yoshimoto K., Notaguchi M. Autophagy is induced during plant grafting to promote wound healing. *Nature Communications* (2025) DOI:10.1038/s41467-025-58519-6

123. Vergara P., Wang Y., Srinivasan S., Dong Z., Feng Y., Koyanagi I., Kumar D., Chérasse Y., Naoi T., Sugaya Y., Sakurai T., Kano M., Shuman T., Cai D., Yanagisawa M., Sakaguchi M. A comprehensive suite for extracting neuron signals across multiple sessions in one-photon calcium imaging. *Nature Communications* (2025) DOI:10.1038/s41467-025-58817-z
124. Narita H., Natsume J., Suzuki T., Shiohama T., Kawaguchi M., Okazaki M., Hashizume A., Naganawa S., Ito Y., Yamamoto H., Nakata T., Kidokoro H., Takahashi Y., Takahashi S., Tsujimura K. Diffuse but Non-homogeneous Brain Atrophy: Identification of Specific Brain Regions and Their Correlation with Clinical Severity in Rett Syndrome. *Brain and Development* (2025) DOI:10.1016/j.braindev.2025.104348
125. Sawada M., Nakajima C., Umeda E., Takagi Y., Nakashima N., Vepřek N. A., Küllmer F., Nasufović V., Arndt H. D., Trauner D., Igarashi M., Sawamoto K. Time-Lapse Super-Resolution Imaging and Optical Manipulation of Growth Cones in Elongating Axons and Migrating Neurons. *Bio-protocol* (2025) DOI:10.21769/BioProtoc.5251
126. Kubo S., Okada Y. The ATPase asymmetry: Novel computational insight into coupling diverse F(O) motors with tripartite F(1). *Biophysical Journal* (2025) DOI:10.1016/j.bpj.2024.03.013
127. Yu X., Kawakami R., Yambe S., Yoshimoto Y., Sasaki T., Higuchi S., Watanabe H., Akiyama H., Miura S., Hu K., Kondoh G., Sagasaki R., Inui M., Adachi T., Docheva D., Imamura T., Shukunami C. Dynamic interactions between cartilaginous and tendinous/ligamentous primordia during musculoskeletal integration. *Development* (2025) DOI:10.1242/dev.204512
128. Ageta-Ishihara N., Fukazawa Y., Arima-Yoshida F., Okuno H., Ishii Y., Takao K., Konno K., Fujishima K., Ageta H., Hioki H., Tsuchida K., Sato Y., Kengaku M., Watanabe M., Watabe A. M., Manabe T., Miyakawa T., Inokuchi K., Bito H., Kinoshita M. Septin 3 regulates memory and L-LTP-dependent extension of endoplasmic reticulum into spines. *Cell Reports* (2025) DOI:10.1016/j.celrep.2025.115352
129. Kishi K., Nigorikawa K., Hasegawa Y., Ohta Y., Matsugi E., Matsumoto D., Nomura W. Cell cycle-dependent regulation of CRISPR-Cas9 repetitive activation by anti-CRISPR and Cdt1 fusion in the CRISPRa system. *FEBS Letters* (2025) DOI:10.1002/1873-3468.15090
130. Kuno S., Nakamura R., Otani T., Togashi H. Multivalent afadin interaction promotes IDR-mediated condensate formation and junctional separation of epithelial cells. *Cell Reports* (2025) DOI:10.1016/j.celrep.2025.115335
131. Ochi Y., Kato W., Tsutsui Y., Gomibuchi Y., Tominaga D., Sakai K., Araki T., Yoshitake S., Yasunaga T., Morimoto Y. V., Maeda K., Taira J., Sato Y. Wireframe DNA Origami Capable of Vertex-protruding Transformation. *ChemBioChem* (2025) DOI:10.1002/cbic.202401071
132. Yasuda Y., Ito S., Matsumoto J., Okada N., Onitsuka T., Ikeda M., Kushima I., Sumiyoshi C., Fukunaga M., Nemoto K., Miura K., Hashimoto N., Ohi K., Takahashi T., Sasabayashi D., Koeda M., Yamamori H., Fujimoto M., Takano H., Hasegawa N., Narita H., Yamamoto M., Thakur K. K., Kikuchi M., Kamishikiryo T., Itai E., Okubo Y., Tateno A., Nakamura M., Kubota M., Igarashi H., Hirano Y., Okada G., Miyata J., Numata S., Abe O., Yoshimura R., Nakagawa S., Yamasue H., Ozaki N., Kasai K., Hashimoto R. Proposal for a Novel Classification of Patients With Enlarged Ventricles and Cognitive Impairment Based on Data-Driven Analysis of Neuroimaging Results in Patients With Psychiatric Disorders. *Neuropsychopharmacology Reports* (2025) DOI:10.1002/npr2.70010
133. Yuasa H., Matsubara T., Urushima H., Daikoku A., Ikenaga H., Kadono C., Kinoshita M., Kimura K., Ishizawa T., Ohta K., Kawada N., Ikeda K. Cdc42 is crucial for the early regulation of hepatic stellate cell activation. *American Journal of Physiology-Cell Physiology* (2025) DOI:10.1152/ajpcell.00987.2024
134. Kawahara T., Suzuki S., Nakagawa T., Kamo Y., Kanouchi M., Fujita M., Hattori M., Suzuki A., Tanemura K., Yoshida S., Hara K. Age-Dependent Clonal Expansion of Non-Sperm-Forming Spermatogonial Stem Cells in Mouse Testes. *Aging Cell* (2025) DOI:10.1111/acer.70019

135. Omori-Miyake M., Kawakami R., Kuwahara M., Okabe M., Muto J., Imamura T., Yamashita M. Loss of Bach2 in T cells causes prolonged allergic inflammation through accumulation of effector T cells and disruption of epidermal barrier. *J Allergy Clin Immunol* (2025) DOI:10.1016/j.jaci.2025.01.036
136. Higashi T., Hashimoto K., Mai Y., Naganuma F., Yoshikawa T. Cystine transporter SLC7A11 regulates sensitivity to unsaturated carbonyl compounds in mouse macrophage cell lines. *J Pharmacol Sci* (2025) DOI:10.1016/j.jphs.2024.12.008
137. Kijima S. T., Sasaki T., Kikushima Y., Inoue D., Sakamoto S., Kondo Y., Inagaki S., Yamaguchi M., Mitsuda N., Oda Y. Control of plasma membrane-associated actin polymerization specifies the pattern of the cell wall in xylem vessels. *Nature Communications* (2025) DOI:10.1038/s41467-025-56866-y
138. Suzuki M., Yamada R., Imou Y., Isozaki Y., Yasukawa T. Simple and Convenient Three-Electrode Layout for Real-Time Electrorotation Measurement Upon Chemical Stimulation. *Electrophoresis* (2025) DOI:10.1002/elps.8121
139. Tago T., Ogawa T., Goto Y., Toyooka K., Tojima T., Nakano A., Satoh T., Satoh A. K. RudLOV is an optically synchronized cargo transport method revealing unexpected effects of dynasore. *EMBO Reports* (2025) DOI:10.1038/s44319-024-00342-z
140. Yamada M., Matsuyama H. J., Takeda-Kamiya N., Sato M., Toyooka K. Class II kinesin-12 facilitates cell plate formation by transporting cell plate materials in the phragmoplast. *Nat Plants* (2025) DOI:10.1038/s41477-025-01909-x
141. Mochizuki M., Uchiyama Y., Domen K., Koyama T. Associations Between Stroke Outcome Assessments and Automated Tractography Fractional Anisotropy Incorporating Age. *Annals of Rehabilitation Medicine* (2025) DOI:10.5535/arm.240073
142. Dos Santos Kawata K. H., Lem W. G., Ono K., Oyama H. The visuomotor synchronization immersive virtual reality of a depression avatar in a stigma context experience mobilizes the fronto-parietal cortex and anterior insula. *Frontiers in Behavioral Neuroscience* (2025) DOI:10.3389/fnbeh.2025.1526684
143. Shiroyama T., Maeda M., Tanii H., Motomura E., Okada M. Distinguished Frontal White Matter Abnormalities Between Psychotic and Nonpsychotic Bipolar Disorders in a Pilot Study. *Brain Sciences* (2025) DOI:10.3390/brainsci15020108
144. Yoshida K., Suzuki T., Osakada Y., Fujitsuka M., Miyatake Y., Biju V., Takano Y. Exploring photo-excited states of aromatic sulfones for efficient near-infrared-activated photothermal cancer therapy. *Bulletin of the Chemical Society of Japan* (2025) DOI:10.1093/bulcsj/uoe137
145. Tanaka Y., Taki M., Yamaguchi S. Near-infrared fluorescent HaloTag ligands for efficient organelle labelling in live cells. *Chemical Communications* (2025) DOI:10.1039/d4cc05144k
146. Ohta S., Ohzeki J. I., Sato N., Tanizawa H., Chung C. Y., Noma K. I., Masumoto H. Novel role of zinc-finger protein 518 in heterochromatin formation on alpha-satellite DNA. *Nucleic Acids Research* (2025) DOI:10.1093/nar/gkae1162
147. Hatori K., Morikura T., Funahashi A., Takemura K. A Cross-Modal Tactile Reproduction Utilizing Tactile and Visual Information Generated by Conditional Generative Adversarial Networks. *Ieee Access* (2025) DOI:10.1109/Access.2025.3527946
148. Kong W., Hara M., Tokunaga Y., Okumura K., Hirano Y., Miao J., Takenoshita Y., Hashimoto M., Sasaki H., Fujimori T., Wakabayashi Y., Fukagawa T. CENP-C-Mis12 complex establishes a regulatory loop through Aurora B for chromosome segregation. *Life Sci Alliance* (2025) DOI:10.26508/lsa.202402927

149. Fumoto Y., Takada S., Onodera Y., Hatakeyama S., Oikawa T. Development of a Myogenin minimal promoter-based system for visualizing the degree of myogenic differentiation. **Biochemical and Biophysical Research Communications** (2024) DOI:10.1016/j.bbrc.2024.151091
150. Yagi H., Yamada R., Saito T., Honda R., Nakano R., Inutsuka K., Tateo S., Kusano H., Nishimura K., Yanaka S., Tojima T., Nakano A., Furukawa J. I., Yagi-Utsumi M., Adachi S., Kato K. Molecular tag for promoting N-glycan maturation in the cargo receptor-mediated secretion pathway. **iScience** (2024) DOI:10.1016/j.isci.2024.111457
151. Yamamoto R., Tanaka Y., Orii S., Shiba K., Inaba K., Kon T. Chlamydomonas IC97, an intermediate chain of the flagellar dynein f/I1, is required for normal flagellar and cellular motility. **mSphere** (2024) DOI:10.1128/msphere.00558-24
152. Hirai H., Konno K., Yamasaki M., Watanabe M., Sakaba T., Hashimoto Y. Distinct release properties of glutamate/GABA co-transmission serve as a frequency-dependent filtering of supramammillary inputs. **eLife** (2024) DOI:10.7554/eLife.99711
153. Ikenouchi J., Shigetomi K. Role of lipids in the organization of tight junction. **Microscopy (Oxf)** (2024) DOI:10.1093/jmicro/dfae039
154. Hasegawa T., Lee C. Y. C., Hotchen A. J., Fleming A., Singh R., Suzuki K., Yuzaki M., Watanabe M., Birch M. A., McCaskie A. W., Lenart N., Toth K., Denes A., Liu Z., Ginhoux F., Richoz N., Clatworthy M. R. Macrophages and nociceptor neurons form a sentinel unit around fenestrated capillaries to defend the synovium from circulating immune challenge. **Nature Immunology** (2024) DOI:10.1038/s41590-024-02011-8
155. Ohno M., Higuchi Y., Yamai K., Fuchigami S., Sasaki T., Oda Y., Hayashi I. Structural analysis of microtubule binding by minus-end targeting protein Spiral2. **Biochimica et Biophysica Acta Molecular Cell Research** (2024) DOI:10.1016/j.bbamcr.2024.119858
156. Yamaguchi A., Jitsuishi T. Structural connectivity of the precuneus and its relation to resting-state networks. **Neuroscience Research** (2024) DOI:10.1016/j.neures.2023.12.004
157. Takahashi M., Yamamoto S., Yamamoto S., Okubo A., Nakagawa Y., Kuwahara K., Matsusaka T., Fukuma S., Yamamoto M., Matsuda M., Yanagita M. ATP dynamics as a predictor of future podocyte structure and function after acute ischemic kidney injury in female mice. **Nature Communications** (2024) DOI:10.1038/s41467-024-54222-0
158. Zhong C., Arai S., Okada Y. Development of fluorescence lifetime biosensors for ATP, cAMP, citrate, and glucose using the mTurquoise2-based platform. **Cell Reports Methods** (2024) DOI:10.1016/j.crmeth.2024.100902
159. Aoki R., Inui Y., Okabe Y., Sato M., Takeda-Kamiya N., Toyooka K., Sawada K., Morita H., Genot B., Maruyama S., Tomo T., Sonoike K., Matsunaga S. Incorporation of photosynthetically active algal chloroplasts in cultured mammalian cells towards photosynthesis in animals. **Proceedings of the Japan Academy Series B Physical and Biological Sciences** (2024) DOI:10.2183/pjab.100.035
160. Izumi M., Nakamura S., Otomo K., Ishida H., Hidema J., Nemoto T., Hagihara S. Autophagosome development and chloroplast segmentation occur synchronously for piecemeal degradation of chloroplasts. **eLife** (2024) DOI:10.7554/eLife.93232
161. Tago T., Fujii S., Sasaki S., Shirae-Kurabayashi M., Sakamoto N., Yamamoto T., Maeda M., Ueki T., Satoh T., Satoh A. K. Cell-wide arrangement of Golgi/RE units depends on the microtubule organization. **Cell Structure and Function** (2024) DOI:10.1247/csf.24055
162. Inoue M., Takayama K., Hashimoto R., Enomoto M., Date N., Ohsumi A., Mizowaki T. Hyponatremia unleashes neutrophil extracellular traps elevating life-threatening pulmonary embolism risk. **Proceedings of the National Academy of Sciences of the United States of America** (2024) DOI:10.1073/pnas.2404947121

163. Yokote H., Miyazaki Y., Fujimori J., Nishida Y., Toru S., Niino M., Nakashima I., Miura Y., Yokota T. Slowly expanding lesions are associated with disease activity and gray matter loss in relapse-onset multiple sclerosis. *Journal of Neuroimaging* (2024) DOI:10.1111/jon.13243
164. Koike S., Tachikawa M., Tsutsumi M., Okada T., Nemoto T., Keino-Masu K., Masu M. Actin dynamics switches two distinct modes of endosomal fusion in yolk sac visceral endoderm cells. *eLife* (2024) DOI:10.7554/eLife.95999
165. Tanaka S., Matsushita Y., Hanaki Y., Higaki T., Kamamoto N., Matsushita K., Higashiyama T., Fujimoto K., Ueda M. HD-ZIP IV genes are essential for embryo initial cell polarization and the radial axis formation in Arabidopsis. *Current Biology* (2024) DOI:10.1016/j.cub.2024.08.038
166. Kubo S., Okada Y., Takada S. Theoretical insights into rotary mechanism of MotAB in the bacterial flagellar motor. *Biophysical Journal* (2024) DOI:10.1016/j.bpj.2024.09.010
167. Dai X., Mizukami Y., Watanabe K., Tsuda T., Shidahara M., Yoshida S., Yatsuzuka K., Shiraishi K., Mori H., Murakami M., Kawakami R., Imamura T., Fujisawa Y., Muto J. Trehalose Prevents IL-4/IL-13-Induced Skin Barrier Impairment by Suppressing IL-33 Expression and Increasing NRF2 Activation in Human Keratinocytes In Vitro. *Journal of Investigative Dermatology* (2024) DOI:10.1016/j.jid.2024.08.038
168. Hara S., Hori M., Kamagata K., Andica C., Inaji M., Tanaka Y., Aoki S., Nariai T., Maehara T. Increased Parenchymal Free Water May Be Decreased by Revascularization Surgery in Patients with Moyamoya Disease. *Magnetic Resonance in Medical Sciences* (2024) DOI:10.2463/mrms.mp.2022-0146
169. Yanai R., Mitani T. T., Susaki E. A., Minamihisamatsu T., Shimojo M., Saito Y., Mizuma H., Nitta N., Kaneda D., Hashizume Y., Matsumoto G., Tanemura K., Zhang M. R., Higuchi M., Ueda H. R., Sahara N. A novel tauopathy model mimicking molecular and spatial aspects of human tau pathology. *Brain Communications* (2024) DOI:10.1093/braincomms/fcae326
170. Hara S., Kikuta J., Takabayashi K., Kamagata K., Hayashi S., Inaji M., Tanaka Y., Hori M., Ishii K., Nariai T., Taoka T., Naganawa S., Aoki S., Maehara T. Decreased diffusivity along the perivascular space and cerebral hemodynamic disturbance in adult moyamoya disease. *Journal of Cerebral Blood Flow and Metabolism* (2024) DOI:10.1177/0271678X241245492
171. Tomiyama H., Murayama K., Nemoto K., Kato K., Matsuo A., Kang M., Sashikata K., Togao O., Nakao T. No significant alteration in white matter microstructure in first-degree relatives of patients with obsessive-compulsive disorder. *Psychiatry Research: Neuroimaging* (2024) DOI:10.1016/j.psychresns.2024.111884
172. Ichijo R. Cutting-edge skin ageing research on tissue stem cell. *J Biochem* (2024) DOI:10.1093/jb/mvae022
173. Susaki E. A. Unlocking the potential of large-scale 3D imaging with tissue clearing techniques. *Microscopy (Oxf)* (2024) DOI:10.1093/jmicro/dfae046
174. Yokote H., Miyazaki Y., Fujimori J., Nishida Y., Toru S., Niino M., Nakashima I., Miura Y., Yokota T. Characterization of Japanese multiple sclerosis patients with progression independent of relapse activity: A 2-year multicenter cohort study. *Journal of Neuroimmunology* (2024) DOI:10.1016/j.jneuroim.2024.578407
175. Oikawa T., Hasegawa J., Handa H., Ohnishi N., Onodera Y., Hashimoto A., Sasaki J., Sasaki T., Ueda K., Sabe H. p53 ensures the normal behavior and modification of G1/S-specific histone H3.1 in the nucleus. *Life Sci Alliance* (2024) DOI:10.26508/lsa.202402835
176. Yamamoto S., Yamamoto S., Takahashi M., Mii A., Okubo A., Toriu N., Nakagawa S., Abe T., Fukuma S., Imamura H., Yamamoto M., Yanagita M. Visualization of intracellular ATP dynamics in different nephron segments under pathophysiological conditions using the kidney slice culture system. *Kidney International* (2024) DOI:10.1016/j.kint.2024.05.028

177. Tago T., Yamada Y., Goto Y., Toyooka K., Ochi Y., Satoh T., Satoh A. K. Golgi clustering by the deficiency of COPI-SNARE in *Drosophila* photoreceptors. **Frontiers in Cell and Developmental Biology** (2024) DOI:10.3389/fcell.2024.1442198
178. Yagi H., Tateo S., Saito T., Ohta Y., Nishi E., Obitsu S., Suzuki T., Seetaha S., Hellec C., Nakano A., Tojima T., Kato K. Deciphering the sub-Golgi localization of glycosyltransferases via 3D super-resolution imaging. **Cell Structure and Function** (2024) DOI:10.1247/csf.24008
179. Ohno Y., Takahashi A., Tsutsumi M., Kubota A., Iguchi A., Iijima M., Mizusawa N., Nakamura T., Suzuki A., Suzuki M., Yasumoto J., Watabe S., Sakai K., Nemoto T., Yasumoto K. Live imaging of center of calcification formation during septum development in primary polyps of. **Frontiers in Marine Science** (2024) DOI:10.3389/fmars.2024.1406446
180. Oishi R., Takeda I., Ode Y., Okada Y., Kato D., Nakashima H., Imagama S., Wake H. Neuromodulation with transcranial direct current stimulation contributes to motor function recovery via microglia in spinal cord injury. **Scientific Reports** (2024) DOI:10.1038/s41598-024-69127-7
181. Takeuchi H., Nagahara S., Higashiyama T., Berger F. The Chaperone NASP Contributes to de Novo Deposition of the Centromeric Histone Variant CENH3 in Arabidopsis Early Embryogenesis. **Plant and Cell Physiology** (2024) DOI:10.1093/pcp/pcae030
182. Tian Y., Zhang Q., Hirai K., Wen H., Feng G. L., Li J. T., Taemaitree F., Inose T., Kanekura K., Uji-i H. Spatially heterogeneous dynamics of droplets formed by arginine-rich dipeptides and poly-A RNA during liquid-liquid phase separation. **Molecular Crystals and Liquid Crystals** (2024) DOI:10.1080/15421406.2024.2353937
183. Katoh T. A., Lange T., Nakajima Y., Yashiro K., Okada Y., Hamada H. BMP4 regulates asymmetric Pkd2 distribution in mouse nodal immotile cilia and ciliary mechanosensing required for left-right determination. **Developmental Dynamics** (2024) DOI:10.1002/dvdy.727
184. Sanada T., Kotani T. High-sensitivity whole-mount in situ Hybridization of Mouse Oocytes and Embryos Visualizes the Super-resolution Structures and Distributions of mRNA Molecules. **Biological Procedures Online** (2024) DOI:10.1186/s12575-024-00250-5
185. Wang J., Taki M., Ohba Y., Arita M., Yamaguchi S. Fluorescence Lifetime Imaging of Lipid Heterogeneity in the Inner Mitochondrial Membrane with a Super-photostable Environment-Sensitive Probe. **Angewandte Chemie International Edition in English** (2024) DOI:10.1002/anie.202404328
186. Kawakami S., Okada N., Satomura Y., Shoji E., Mori S., Kiyota M., Omileke F., Hamamoto Y., Morita S., Koshiyama D., Yamagishi M., Sakakibara E., Koike S., Kasai K. Frontal pole-precuneus connectivity is associated with a discrepancy between self-rated and observer-rated depression severity in mood disorders: a resting-state functional magnetic resonance imaging study. **Cerebral Cortex** (2024) DOI:10.1093/cercor/bhae284
187. Mitani T. T., Susaki E. A., Matsumoto K., Ueda H. R. Realization of cellomics to dive into the whole-body or whole-organ cell cloud. **Nature Methods** (2024) DOI:10.1038/s41592-024-02307-5
188. Akter R., Kirkwood N., Zaman S., Lu B., Wang T., Takakusagi S., Mulvaney P., Biju V., Takano Y. Bio-catalytic nanoparticle shaping for preparing mesoscopic assemblies of semiconductor quantum dots and organic molecules. **Nanoscale Horiz** (2024) DOI:10.1039/d4nh00134f
189. Takeguchi R., Akaba Y., Kuroda M., Tanaka R., Tanaka T., Itoh M., Takahashi S. Neurophysiological and brain structural insights into cyclin-dependent kinase-like 5 deficiency disorder: Visual and auditory evoked potentials and MRI analysis. **Journal of the Neurological Sciences** (2024) DOI:10.1016/j.jns.2024.123063

190. Otomo K., Omura T., Nozawa Y., Edwards S. J., Sato Y., Saito Y., Yagishita S., Uchida H., Watakabe Y., Naitou K., Yanai R., Sahara N., Takagi S., Katayama R., Iwata Y., Shiokawa T., Hayakawa Y., Otsuka K., Watanabe-Takano H., Haneda Y., Fukuhara S., Fujiwara M., Nii T., Meno C., Takeshita N., Yashiro K., Rosales Rocabado J. M., Kaku M., Yamada T., Oishi Y., Koike H., Cheng Y., Sekine K., Koga J. I., Sugiyama K., Kimura K., Karube F., Kim H., Manabe I., Nemoto T., Tainaka K., Hamada A., Brismar H., Susaki E. A. descSPIM: an affordable and easy-to-build light-sheet microscope optimized for tissue clearing techniques. *Nature Communications* (2024) DOI:10.1038/s41467-024-49131-1
191. Nakayama T., Nomura M., Yabuki A., Shiba K., Inaba K., Inagaki Y. Convergent reductive evolution of cyanobacteria in symbiosis with Dinophysiales dinoflagellates. *Scientific Reports* (2024) DOI:10.1038/s41598-024-63502-0
192. Ikenaga T., Kobayashi A., Takeuchi A., Uesugi K., Maezawa T., Shibata N., Sakamoto T., Sakamoto H. Volume X-Ray Micro-Computed Tomography Analysis of the Early Cephalized Central Nervous System in a Marine Flatworm, *Stylochoplana pusilla*. *Zoological Science* (2024) DOI:10.2108/zs230082
193. Matsumoto M., Matsushita K., Hane M., Wen C., Kurematsu C., Ota H., Bang Nguyen H., Quynh Thai T., Herranz-Perez V., Sawada M., Fujimoto K., Garcia-Verdugo J. M., Kimura K. D., Seki T., Sato C., Ohno N., Sawamoto K. Neuraminidase inhibition promotes the collective migration of neurons and recovery of brain function. *EMBO Molecular Medicine* (2024) DOI:10.1038/s44321-024-00073-7
194. Mizuta Y., Sakakibara D., Nagahara S., Kaneshiro I., Nagae T. T., Kurihara D., Higashiyama T. Deep imaging reveals dynamics and signaling in one-to-one pollen tube guidance. *EMBO Reports* (2024) DOI:10.1038/s44319-024-00151-4
195. Yoshinari A., Isoda R., Yagi N., Sato Y., Lindeboom J. J., Ehrhardt D. W., Frommer W. B., Nakamura M. Near-infrared imaging of phytochrome-derived autofluorescence in plant nuclei. *Plant J* (2024) DOI:10.1111/tj.16699
196. Nguyen T. P., Otani T., Tsutsumi M., Kinoshita N., Fujiwara S., Nemoto T., Fujimori T., Furuse M. Tight junction membrane proteins regulate the mechanical resistance of the apical junctional complex. *Journal of Cell Biology* (2024) DOI:10.1083/jcb.202307104
197. Shintaki R., Tanaka D., Suzuki S., Yoshimoto T., Sadato N., Chikazoe J., Jimura K. Continuous decision to wait for a future reward is guided by fronto-hippocampal anticipatory dynamics. *Cerebral Cortex* (2024) DOI:10.1093/cercor/bhae217
198. Kikuchi K., Arata M. The interplay between Wnt signaling pathways and microtubule dynamics. *In Vitro Cellular & Developmental Biology Animal* (2024) DOI:10.1007/s11626-024-00860-z
199. Murase S., Mantani Y., Ohno N., Shimada A., Nakanishi S., Morishita R., Yokoyama T., Hoshi N. Regional differences in the ultrastructure of mucosal macrophages in the rat large intestine. *Cell & Tissue Research* (2024) DOI:10.1007/s00441-024-03883-w
200. Takeshita N., Sakaki S., Saba R., Inoue S., Nishikawa K., Ueyama A., Nakajima Y., Matsuo K., Shigeta M., Kobayashi D., Yamazaki H., Yamada K., Iehara T., Yashiro K. Acto3D: an open-source user-friendly volume rendering software for high-resolution 3D fluorescence imaging in biology. *Development* (2024) DOI:10.1242/dev.202550
201. Wu Q., Taki M., Tanaka Y., Keshewani M., Phung Q. M., Enoki S., Okada Y., Tama F., Yamaguchi S. Stereochemistry-Dependent Labeling of Organelles with a Near-Infrared-Emissive Phosphorus-Bridged Rhodamine Dye in Live-Cell Imaging. *Angewandte Chemie International Edition in English* (2024) DOI:10.1002/anie.202400711
202. Tokumaru T., Apolinario M. E. C., Shimizu N., Umeda R., Honda K., Shikano K., Teranishi H., Hikida T., Hanada T., Ohta K., Li Y., Murakami K., Hanada R. Hepatic extracellular ATP/adenosine dynamics in zebrafish models of alcoholic and metabolic steatotic liver disease. *Scientific Reports* (2024) DOI:10.1038/s41598-024-58043-5

203. Nishida N., Nagata N., Shimoji K., Jingami N., Uemura K., Ozaki A., Takahashi M., Urade Y., Matsumoto S., Iwasaki K., Okumura R., Ishikawa M., Toda H. Lipocalin-type prostaglandin D synthase: a glymphopathy marker in idiopathic hydrocephalus. *Frontiers in Aging Neuroscience* (2024) DOI:10.3389/fnagi.2024.1364325
204. 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. Longitudinal trajectories of anterior cingulate glutamate and subclinical psychotic experiences in early adolescence: the impact of bullying victimization. *Molecular Psychiatry* (2024) DOI:10.1038/s41380-023-02382-8
205. Iwamoto H., Oiwa K., Shiba K., Inaba K. X-ray diffraction recording from a small amount of fibrous protein materials oriented by a micro shear-flow cell. *Biophys Physicobiol* (2024) DOI:10.2142/biophysico.bppb-v21.0014
206. Nakajima C., Sawada M., Umeda E., Takagi Y., Nakashima N., Kuboyama K., Kaneko N., Yamamoto S., Nakamura H., Shimada N., Nakamura K., Matsuno K., Uesugi S., Veprek N. A., Kullmer F., Nasufovic V., Uchiyama H., Nakada M., Otsuka Y., Ito Y., Herranz-Perez V., Garcia-Verdugo J. M., Ohno N., Arndt H. D., Trauner D., Tabata Y., Igarashi M., Sawamoto K. Identification of the growth cone as a probe and driver of neuronal migration in the injured brain. *Nature Communications* (2024) DOI:10.1038/s41467-024-45825-8
207. Kurata S., Nishitani S., Kawata N. Y. S., Yao A., Fujisawa T. X., Okazawa H., Tomoda A. Diffusion tensor imaging of white-matter structural features of maltreating mothers and their associations with intergenerational chain of childhood abuse. *Scientific Reports* (2024) DOI:10.1038/s41598-024-53666-0
208. Takahashi T., Zhang H., Agetsuma M., Nabekura J., Otomo K., Okamura Y., Nemoto T. Large-scale cranial window for in vivo mouse brain imaging utilizing fluoropolymer nanosheet and light-curable resin. *Commun Biol* (2024) DOI:10.1038/s42003-024-05865-8
209. Lem W. G., Kawata K., Oyama H. Exploring the impact of immersive virtual reality on depression knowledge and stigma reduction: a cross-over RCT fMRI study. *Scientific Reports* (2024) DOI:10.1038/s41598-024-55797-w
210. Nishihara H., Watanabe M., Kawakami R., Murakami M., Seki H., Osaki K., Tsuda T., Imamura T., Hadano S., Watanabe S., Niko Y. Pyrene-fused dioxaborine-based merocyanines with high brightness, photostability, and fluorogenic function for deep-skin tissue imaging of a living mouse. *Bulletin of the Chemical Society of Japan* (2024) DOI:10.1093/bulcsj/uoad027
211. Yamazaki R., Matsumoto J., Ito S., Nemoto K., Fukunaga M., Hashimoto N., Kodaka F., Takano H., Hasegawa N., Yasuda Y., Fujimoto M., Yamamori H., Watanabe Y., Miura K., Hashimoto R. Longitudinal reduction in brain volume in patients with schizophrenia and its association with cognitive function. *Neuropsychopharmacol Rep* (2024) DOI:10.1002/npr2.12423
212. Kume D., Kozawa Y., Kawakami R., Ishii H., Watakabe Y., Uesugi Y., Imamura T., Nemoto T., Sato S. Graded arc beam in light needle microscopy for axially resolved, rapid volumetric imaging without nonlinear processes. *Optics Express* (2024) DOI:10.1364/OE.516437
213. Hashimoto R., Minoshima M., Kikuchi K. Rational Design of Hydroxylated Thiazole Orange Photocages for Green Light-Triggered DNA Recombination. *ChemBioChem* (2024) DOI:10.1002/cbic.202300799
214. Ataka M., Otomo K., Enoki R., Ishii H., Tsutsumi M., Kozawa Y., Sato S., Nemoto T. Multibeam continuous axial scanning two-photon microscopy for in vivo volumetric imaging in mouse brain. *Biomedical Optics Express* (2024) DOI:10.1364/BOE.514826
215. Ryu T., Okamoto K., Ansai S., Nakao M., Kumar A., Iguchi T., Ogino Y. Gene Duplication of Androgen Receptor As An Evolutionary Driving Force Underlying the Diversity of Sexual Characteristics in Teleost Fishes. *Zoological Science* (2024) DOI:10.2108/zs230098

216. Boen R., Kaufmann T., van der Meer D., Frei O., Agartz I., Ames D., Andersson M., Armstrong N. J., Artiges E., Atkins J. R., Bauer J., Benedetti F., Boomsma D. I., Brodaty H., Brosch K., Buckner R. L., Cairns M. J., Calhoun V., Caspers S., Cichon S., Corvin A. P., Crespo-Facorro B., Dannlowski U., David F. S., de Geus E. J. C., de Zubicaray G. I., Desrivieres S., Doherty J. L., Donohoe G., Ehrlich S., Eising E., Espeseth T., Fisher S. E., Forstner A. J., Fortaner-Uya L., Frouin V., Fukunaga M., Ge T., Glahn D. C., Goltermann J., Grabe H. J., Green M. J., Groenewold N. A., Grotegerd D., Grontvedt G. R., Hahn T., Hashimoto R., Hehir-Kwa J. Y., Henskens F. A., Holmes A. J., Haberg A. K., Haavik J., Jacquemont S., Jansen A., Jockwitz C., Jonsson E. G., Kikuchi M., Kircher T., Kumar K., Le Hellard S., Leu C., Linden D. E., Liu J., Loughnan R., Mather K. A., McMahon K. L., McRae A. F., Medland S. E., Meinert S., Moreau C. A., Morris D. W., Mowry B. J., Muhleisen T. W., Nenadic I., Nothen M. M., Nyberg L., Ophoff R. A., Owen M. J., Pantelis C., Paolini M., Paus T., Pausova Z., Persson K., Quide Y., Marques T. R., Sachdev P. S., Sando S. B., Schall U., Scott R. J., Selbaek G., Shumskaya E., Silva A. I., Sisodiya S. M., Stein F., Stein D. J., Straube B., Streit F., Strike L. T., Teumer A., Teutenberg L., Thalamuthu A., Tooney P. A., Tordesillas-Gutierrez D., Trollor J. N., van 't Ent D., van den Bree M. B. M., van Haren N. E. M., Vazquez-Bourgon J., Volzke H., Wen W., Wittfeld K., Ching C. R. K., Westlye L. T., Thompson P. M., Bearden C. E., Selmer K. K., Alnaes D., Andreassen O. A., Sonderby I. E., Group E.-C. W. Beyond the Global Brain Differences: Intraindividual Variability Differences in 1q21.1 Distal and 15q11.2 BP1-BP2 Deletion Carriers. *Biological Psychiatry* (2024) DOI:10.1016/j.biopsych.2023.08.018
217. Yatsuzuka K., Kawakami R., Niko Y., Tsuda T., Kameda K., Kohri N., Yoshida S., Shiraishi K., Muto J., Mori H., Fujisawa Y., Imamura T., Murakami M. A fluorescence imaging technique suggests that sweat leakage in the epidermis contributes to the pathomechanism of palmoplantar pustulosis. *Scientific Reports* (2024) DOI:10.1038/s41598-023-50875-x
218. Yamada H., Makino S. I., Okunaga I., Miyake T., Yamamoto-Nonaka K., Oliva Trejo J. A., Tominaga T., Empitu M. A., Kadariswantiningsih I. N., Kerever A., Komiya A., Ichikawa T., Arikawa-Hirasawa E., Yanagita M., Asanuma K. Beyond 2D: A scalable and highly sensitive method for a comprehensive 3D analysis of kidney biopsy tissue. *PNAS Nexus* (2024) DOI:10.1093/pnasnexus/pgad433
219. Koyama T., Mochizuki M., Uchiyama Y., Domen K. Outcome Prediction by Combining Corticospinal Tract Lesion Load with Diffusion-tensor Fractional Anisotropy in Patients after Hemorrhagic Stroke. *Progress in Rehabilitation Medicine* (2024) DOI:10.2490/prm.20240001
220. Hiromoto Y., Minamino N., Kikuchi S., Kimata Y., Matsumoto H., Nakagawa S., Ueda M., Higaki T. Comprehensive and quantitative analysis of intracellular structure polarization at the apical-basal axis in elongating Arabidopsis zygotes. *Scientific Reports* (2023) DOI:10.1038/s41598-023-50020-8
221. Onai T., Adachi N., Urakubo H., Sugahara F., Aramaki T., Matsumoto M., Ohno N. Ultrastructure of the lamprey head mesoderm reveals evolution of the vertebrate head. *iScience* (2023) DOI:10.1016/j.isci.2023.108338
222. Katano T., Konno K., Takao K., Abe M., Yoshikawa A., Miyakawa T., Sakimura K., Watanabe M., Ito S., Kobayashi T. Brain-enriched guanylate kinase-associated protein, a component of the post-synaptic density protein complexes, contributes to learning and memory. *Scientific Reports* (2023) DOI:10.1038/s41598-023-49537-9
223. Watabe T., Yamahira S., Matsuda M., Terai K. Visual quantification of prostaglandin E(2) discharge from a single cell. *Cell Structure and Function* (2023) DOI:10.1247/csf.23047
224. Kang Z., Matsumoto H., Nonoyama T., Nakagawa S., Ishimoto Y., Tsugawa S., Ueda M. Coordinate Normalization of Live-Cell Imaging Data Reveals Growth Dynamics of the Arabidopsis Zygote. *Plant and Cell Physiology* (2023) DOI:10.1093/pcp/pcad020

225. 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 Disorder Fate in Persimmon Fruit. *Plant and Cell Physiology* (2023) DOI:10.1093/pcp/pcad050
226. Tamura M., Ishikawa R., Nakanishi Y., Pascual-Anaya J., Fukui M., Saitou T., Sugahara F., Rijli F. M., Kuratani S., Suzuki D. G., Murakami Y. Comparative analysis of Hmx expression and the distribution of neuronal somata in the trigeminal ganglion in lamprey and shark: insights into the homology of the trigeminal nerve branches and the evolutionary origin of the vertebrate jaw. *Zoological Lett* (2023) DOI:10.1186/s40851-023-00222-9
227. Koyama T., Mochizuki M., Uchiyama Y., Domen K. Applicability of fractional anisotropy from standardized automated tractography for outcome prediction of patients after stroke. *Journal of Physical Therapy Science* (2023) DOI:10.1589/jpts.35.838
228. 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
229. Saito Y., Hayakawa Y., Kamagata K., Kikuta J., Mita T., Andica C., Taoka T., Uchida W., Takabayashi K., Tuexun R., Mahemuti 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
230. Tachibana Y., Otsuka Y., Nozaki H., Kamagata K., Mori S., Saito Y., Aoki S. Noise reduction by multiple path neural network using Attention mechanisms with an emphasis on robustness against Errors: A pilot study on brain Diffusion-Weighted images. *Physica Medica* (2023) DOI:10.1016/j.ejmp.2023.103176
231. Hirano T., Ebine K., Ueda T., Higaki T., Watanabe-Nakayama T., Konno H., Takigawa-Imamura H., Sato M. H. The SYP123-VAMP727 SNARE complex delivers secondary cell wall components for root hair shank hardening in Arabidopsis. *The Plant Cell* (2023) DOI:10.1093/plcell/koad240
232. Saito Y., Kamagata K., Andica C., Maikusa N., Uchida W., Takabayashi K., Yoshida S., Hagiwara A., Fujita S., Akashi T., Wada A., Irie R., Shimoji K., Hori M., Kamiya K., Koike S., Hayashi T., Aoki S. Traveling Subject-Informed Harmonization Increases Reliability of Brain Diffusion Tensor and Neurite Mapping. *Aging and Disease* (2023) DOI:10.14336/AD.2023.1020
233. 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
234. 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
235. Mochizuki M., Uchiyama Y., Domen K., Koyama T. Automated Tractography for the Assessment of Aphasia in Acute Care Stroke Rehabilitation: A Case Series. *Progress in Rehabilitation Medicine* (2023) DOI:10.2490/prm.20230041

236. 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
237. 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
238. 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 Commun Signal* (2023) DOI:10.1186/s12964-023-01305-y
239. Mantani Y., Ohno N., Haruta T., Nakanishi S., Morishita R., Murase S., Yokoyama T., Hoshi N. Histological study on the regional difference in the localization of mucosal enteric glial cells and their sheath structure in the rat intestine. *Journal of Veterinary Medical Science* (2023) DOI:10.1292/jvms.23-0266
240. 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 Methods* (2023) DOI:10.1016/j.xcrm.2023.101208
241. 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
242. Carrasco Apolinario M. E., Umeda R., Teranishi H., Shan M., Phurpa, 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
243. Shiraki Y., Mitsuma M., Takada R., Hata S., Kitamura A., Takada S., Kinjo M., Taru H., Muller U. C., Yamamoto T., Sobu Y., Suzuki T. Axonal transport of Frizzled5 by Alcadein alpha-containing vesicles is associated with kinesin-1. *Molecular Biology of the Cell* (2023) DOI:10.1091/mbc.E22-10-0495
244. 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
245. 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
246. Matsudaira I., Yamaguchi R., Taki Y. Transmit Radiant Individuality to Offspring (TRIO) study: investigating intergenerational transmission effects on brain development. *Front Psychiatry* (2023) DOI:10.3389/fpsy.2023.1150973

247. 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
248. 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
249. 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. *Aerosp Med Hum Perform* (2023) DOI:10.3357/AMHP.6177.2023
250. 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
251. 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
252. 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.psychres.2023.111669
253. Tsuboi A., Fujimoto K., Kondo T. Spatiotemporal remodeling of extracellular matrix orients epithelial sheet folding. *Science Advances* (2023) DOI:10.1126/sciadv.adh2154
254. 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
255. 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
256. 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
257. Leo S., Kato Y., Wu Y., 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
258. 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
259. 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
260. Saito Y. Diffusion magnetic resonance imaging-based surrogate marker in amyotrophic lateral sclerosis. *Exploration of Neuroprotective Therapy* (2023) DOI:10.37349/ent.2023.00047

261. 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
262. 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 & Differentiation* (2023) DOI:10.1111/dgd.12871
263. 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. *Commun Biol* (2023) DOI:10.1038/s42003-023-05110-8
264. 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
265. Katoh T. A., Omori T., Ishikawa T., Okada Y., Hamada H. Biophysical Analysis of Mechanical Signals in Immobile Cilia of Mouse Embryonic Nodes Using Advanced Microscopic Techniques. *Bio-Protocol* (2023) DOI:10.21769/BioProtoc.4715
266. 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
267. Tsujioka S., Sumino A., Nagasawa Y., Sumikama T., Flechsig H., Puppulin L., Tomita T., Baba Y., Kakuta T., Ogoshi T., Umeda K., Kadera 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
268. 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
269. 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
270. 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
271. 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
272. Nakagami S., Notaguchi M., Kondo T., Okamoto S., Ida T., Sato Y., Higashiyama T., Tsai A. Y., 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
273. 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* (2023) DOI:10.1242/dev.201275

274. 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
275. 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
276. 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
277. Nagasawa Y., Ueda H. H., Kawabata H., Murakoshi H. LOV2-based photoactivatable CaMKII and its application to single synapses: Local Optogenetics. *Biophys Physicobiol* (2023) DOI:10.2142/biophysico.bppb-v20.0027
278. 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
279. 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
280. 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
281. 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
282. 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 Sci Alliance* (2023) DOI:10.26508/lsa.202201657
283. 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-arylisoindolo[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
284. 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
285. 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
286. 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
287. Otomo K., Ishii H., Nemoto T. Improving two-photon excitation microscopy for sharper and faster biological imaging. *Biophys Physicobiol* (2023) DOI:10.2142/biophysico.bppb-v20.0009

288. 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
289. 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
290. Jitsuishi 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
291. 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
292. Shinozaki Y., Kashiwagi K., Koizumi S. Astrocyte Immune Functions and Glaucoma. *International Journal of Molecular Sciences* (2023) DOI:10.3390/ijms24032747
293. Nakamura K., Watanabe Y., Boitet C., Satake S., Iida H., Yoshihi K., Ishii Y., Kato K., Kondoh H. Wnt signal-dependent antero-posterior specification of early-stage CNS primordia modeled in EpiSC-derived neural stem cells. *Frontiers in Cell and Developmental Biology* (2023) DOI:10.3389/fcell.2023.1260528
294. 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
295. 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
296. 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. Immobile cilia mechanically sense the direction of fluid flow for left-right determination. *Science* (2023) DOI:10.1126/science.abq8148
297. Muto J., Fukuda S., Watanabe K., Dai X., Tsuda T., Kiyoi T., Kameda K., Kawakami R., Mori H., Shiraishi K., Murakami M., Imamura T., Higashiyama S., Fujisawa Y., Mizukami Y., Sayama K. Highly concentrated trehalose induces prohealing senescence-like state in fibroblasts via CDKN1A/p21. *Commun Biol* (2023) DOI:10.1038/s42003-022-04408-3
298. 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
299. 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
300. 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 microm femtosecond fiber laser system. *Biomedical Optics Express* (2023) DOI:10.1364/BOE.477322
301. Shinozaki Y., Saito K., Kashiwagi K., Koizumi S. Ocular P2 receptors and glaucoma. *Neuropharmacology* (2023) DOI:10.1016/j.neuropharm.2022.109302

302. 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.0000000000201300
303. 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
304. 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
305. 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
306. 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
307. 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
308. 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
309. 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
310. 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
311. 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
312. 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
313. 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
314. 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

315. 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
316. 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
317. 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
318. 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
319. 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
320. 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
321. 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
322. 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
323. 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
324. 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
325. 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
326. 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/pm/pnac048
327. 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

328. 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/sml.202107854
329. 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
330. 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
331. 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
332. 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
333. 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
334. 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
335. 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
336. 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
337. 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
338. Kasai K., Yagishita S., Tanaka S. C., Koike S., Murai T., Nishida A., Yamasaki S., Ando S., Kawakami N., Kanehara A., Morita K., Kumakura Y., Takahashi Y., Sawai Y., Uno A., Sakakibara E., Okada N., Okamoto Y., Nochi M., Kumagaya S. I., Fukuda M. Personalized values in life as point of interaction with the world: Developmental/neurobehavioral basis and implications for psychiatry. *Psychiatry and Clinical Neurosciences Reports* (2022) DOI:10.1002/pcn5.12
339. 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
340. 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

341. 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
342. 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
343. 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
344. 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
345. Kajiwaru K., Osaki H., Greßes 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
346. 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
347. 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
348. 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
349. 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
350. 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
351. 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
352. 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

353. 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
354. 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
355. Jitsuishi 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
356. 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
357. 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
358. 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
359. 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
360. 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
361. 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
362. 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
363. 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
364. 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
365. 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

366. 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
367. 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
368. 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
369. 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
370. 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
371. Haraguchi T., Koujin T., Shindo T., Bilir Ş., 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
372. 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
373. 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
374. Matsumoto K., Nishigami Y., Nakagaki T. Binocular stereo-microscopy for deforming intact amoeba. *Optics Express* (2022) DOI:10.1364/OE.439825
375. 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
376. 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
377. 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
378. 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
379. 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
380. 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

381. 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
382. 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
383. 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
384. Nakamura S., Hagihara S., Otomo K., Ishida H., Hidema J., Nemoto T., Izumi M. Autophagy Contributes to the Quality Control of Leaf Mitochondria. *Plant and Cell Physiology* (2021) DOI:10.1093/pcp/pcaa162
385. 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
386. 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
387. 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
388. 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
389. 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
390. 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
391. 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
392. Maikusa N., Zhu Y., Uematsu A., Yamashita A., Saotome K., Okada N., Kasai K., Okanoya K., 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

393. 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
394. Oda Y., Takahashi C., Harada S., Nakamura S., Sun D. X., Kiso K., Urata Y., Miyachi H., Fujiyoshi Y., Honigsmann 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
395. 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
396. 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
397. 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
398. 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
399. 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
400. 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
401. 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
402. 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
403. 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
404. 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
405. 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
406. 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
407. 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

408. Matsuo K., Tamaoki N. Rational design and development of a lit-active photoswitchable inhibitor targeting CENP-E. *Organic and Biomolecular Chemistry* (2021) DOI:10.1039/d1ob01332g
409. 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
410. 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/acscchembio.1c00416
411. 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
412. 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
413. 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
414. 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
415. 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
416. 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
417. 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

418. 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., Rössberg J. I., Rössler W., Salisbury D. F., Sasabayashi D., Schall U., Schiffman J., Schlagenhaut 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., Hearn 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
419. 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
420. 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
421. 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
422. 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
423. 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
424. 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
425. 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
426. 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

427. 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
428. 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. *Chemical Communications (Camb)* (2021) DOI:10.1039/d1cc01405f
429. Koike S., Fujioka M., Takano Y., Iwashiro N., Satomura Y., Nagai T., Koshiyama D., Tada M., Natsubori T., Okada N., Abe O., Kiriara 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/schizbullopen/sgab027
430. 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/fpsyt.2021.667881
431. 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
432. 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
433. 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
434. 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
435. 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
436. 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
437. 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/fpsyt.2021.659616
438. 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

439. 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
440. 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
441. 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
442. 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
443. 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
444. 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
445. 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
446. 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
447. 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
448. 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
449. 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
450. 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
451. 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
452. 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

453. Nakanishi T., Nakagawa K., Kobayashi H., Kudo K., Nakazawa K. Specific Brain Reorganization Underlying Superior Upper Limb Motor Function After Spinal Cord Injury: A Multimodal MRI Study. *Neurorehabilitation and Neural Repair* (2021) DOI:10.1177/1545968321989347
454. 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
455. 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
456. 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
457. 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
458. 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
459. 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
460. 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
461. 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
462. 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
463. 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
464. 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
465. 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

466. 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
467. Soltysik 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
468. Taki M., Kajiwaru 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
469. 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
470. 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.bbadis.2020.165994
471. 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
472. 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
473. Higaki T., Mizuno H. Four-dimensional imaging with virtual reality to quantitatively explore jigsaw puzzle-like morphogenesis of arabidopsis cotyledon pavement cells. *Plant Biotechnology* (2020) DOI:10.5511/plantbiotechnology.20.0605a
474. Murakami M., Kawakami R., Niko Y., Tsuda T., Mori H., Yatsuzuka K., Imamura T., Sayama K. High-quality Fluorescence Imaging of the Human Acrosyngium Using a Transparency: Enhancing Technique and an Improved, Fluorescent Solvatochromic Pyrene Probe. *Acta Histochemica et Cytochemica* (2020) DOI:10.1267/ahc.20-00020
475. 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
476. 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
477. 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
478. 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
479. 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

480. 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
481. 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
482. 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
483. 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/acscchembio.0c00333
484. 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
485. 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
486. 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
487. 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
488. 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
489. 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
490. 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
491. 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

492. 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
493. 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
494. 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
495. 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
496. 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
497. 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
498. 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
499. 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
500. 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
501. 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
502. 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
503. 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.psychresns.2020.111129
504. 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

505. 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
506. 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
507. 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
508. 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
509. 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
510. 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
511. 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
512. 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
513. 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
514. 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
515. 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
516. 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

517. 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
518. Shimizu K., Hara S., Hori M., Tanaka Y., Maehara T., Aoki S., Tazawa T., Nariyai T. Transient Global Amnesia: A Diffusion and Perfusion MRI study. *Journal of Neuroimaging* (2020) DOI:10.1111/jon.12745
519. 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. *Angewandte Chemie International Edition in English* (2020) DOI:10.1002/anie.202003493
520. 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-naïve, first-episode major depressive disorder: a source-based morphometric study. *Translational Psychiatry* (2020) DOI:10.1038/s41398-020-00873-8
521. 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
522. 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
523. 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
524. 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
525. 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
526. 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
527. 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
528. Aoki K., Sato 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
529. 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

530. 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
531. 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
532. 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
533. 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
534. 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
535. 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
536. 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
537. 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
538. 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
539. 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
540. 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
541. 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
542. 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

543. 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
544. 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
545. 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
546. 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
547. 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
548. 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
549. 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
550. 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
551. 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
552. 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
553. 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
554. 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

555. 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
556. 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
557. Nishikawa T., Narita H., Ogi S., Sato Y., Yamaguchi S. Hydrophobicity and CH/ π -interaction-driven self-assembly of amphiphilic aromatic hydrocarbons into nanosheets. *Chemical Communications* (2019) DOI:10.1039/c9cc08070h
558. 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
559. 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
560. 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
561. 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
562. 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
563. 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
564. 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
565. 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
566. 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
567. 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

568. 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* (2019) DOI:10.2463/mrms.ci.2018-0088
569. 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
570. 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
571. 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
572. 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
573. 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
574. 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
575. 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
576. 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
577. 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
578. 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
579. 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

580. 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
581. 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
582. 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
583. 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
584. 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
585. 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
586. Fujiwara D., Iwahara N., Sebori 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
587. 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
588. 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
589. 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
590. 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
591. Nakamura M., Takahashi T., Takayanagi Y., Sasabayashi D., Katagiri N., Sakuma A., Obara C., Koike S., Yamasue H., Furuichi 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

592. 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
593. 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
594. 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
595. 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
596. 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
597. 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 triarylborane chromophores for one- and two-photon excited fluorescence imaging of lysosomes in live cells. *Chemical Science* (2019) DOI:10.1039/c9sc00793h
598. 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
599. 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
600. Kamemizu C., Fujimori T. Distinct dormancy progression depending on embryonic regions during mouse embryonic diapause. *Biology of Reproduction* (2019) DOI:10.1093/biolre/ioz017
601. 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., Ikegame T., Sugimoto N., Toriyama R., Masaoka M., Fujikawa S., Kanata S., Tada M., Kirihaara 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
602. 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
603. Goto A., Otomo K., Nemotou 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

604. Hara S., Hori M., Ueda R., Hayashi S., Inaji M., Tanaka Y., Maehara T., Ishii K., Aoki S., Nariai 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
605. 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
606. 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
607. 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
608. Nozoye T., von Wiren 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
609. 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
610. 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
611. 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
612. 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
613. 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
614. 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
615. 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

616. 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
617. 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
618. 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
619. 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
620. 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
621. 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
622. 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
623. 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-naïve 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
624. 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
625. 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
626. 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
627. 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

628. 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
629. 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
630. 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
631. 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
632. 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
633. 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
634. 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. *Front Med (Lausanne)* (2018) DOI:10.3389/fmed.2018.00350
635. 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. *Transl Psychiatry* (2018) DOI:10.1038/s41398-018-0312-6
636. Takahashi T., Mori T., Ueda K., Yamada L., 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
637. 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
638. 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
639. 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
640. 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
641. 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

642. 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
643. Tsunoda J., Song C., 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
644. 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 Ventricles. *Magnetic Resonance in Medical Sciences* (2018) DOI:10.2463/mrms.mp.2017-0127
645. 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
646. 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
647. 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
648. Eguchi T., Kuwahara T., Sakurai M., Komori T., Fujimoto T., Ito G., Yoshimura S. I., 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
649. 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
650. 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
651. 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
652. Muta Y., Matsuda M., Imajo M. Dynamic ERK signaling regulation in intestinal tumorigenesis. *Molecular and Cellular Oncology* (2018) DOI:10.1080/23723556.2018.1506684
653. Imanishi A., Murata T., Sato M., Hotta K., Imayoshi 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
654. 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 in English* (2018) DOI:10.1002/anie.201804731

655. 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. *Transl Psychiatry* (2018) DOI:10.1038/s41398-018-0174-y
656. 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
657. Sacki 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
658. 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
659. Tsukamoto M., Chiba K., Sobu 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
660. Watanabe T., Song C., 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
661. 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
662. 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
663. 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-naive, first-episode major depressive disorder using surface-based morphometry. *Scientific Reports* (2018) DOI:10.1038/s41598-018-28300-5
664. 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
665. Kikuchi K., Nakamura A., Arata M., Shi D., 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
666. 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
667. 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

668. Inaba K., Shiba K. Microscopic analysis of sperm movement: links to mechanisms and protein components. *Microscopy (Oxf)* (2018) DOI:10.1093/jmicro/dfy021
669. Otomo K., Hibi T., Fang Y. C., Hung J. H., Tsutsumi M., Kawakami R., Yokoyama H., Nemoto T. Advanced easySTED microscopy based on two-photon excitation by electrical modulations of light pulse wavefronts. *Biomedical Optics Express* (2018) DOI:10.1364/BOE.9.002671
670. 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
671. 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. *The Journal of Neuroscience* (2018) DOI:10.1523/JNEUROSCI.1960-17.2018
672. 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
673. 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. Journal de Neuroradiologie* (2018) DOI:10.1016/j.neurad.2017.10.002
674. 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. *Front Psychiatry* (2018) DOI:10.3389/fpsyt.2018.00216
675. 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
676. 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
677. 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
678. Imamura T., Saitou T., Kawakami R. In vivo optical imaging of cancer cell function and tumor microenvironment. *Cancer Sci* (2018) DOI:10.1111/cas.13544
679. Watanabe T., Imamura T., Hiasa Y. Roles of protein kinase R in cancer: Potential as a therapeutic target. *Cancer Sci* (2018) DOI:10.1111/cas.13551
680. 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
681. Kuragano M., Murakami Y., Takahashi M. Nonmuscle myosin IIA and IIB differentially contribute to intrinsic and directed migration of human embryonic lung fibroblasts. *Biochemical and Biophysical Research Communications* (2018) DOI:10.1016/j.bbrc.2018.02.171

682. 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 Clin* (2018) DOI:10.1016/j.nicl.2017.11.004
683. 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 in English* (2018) DOI:10.1002/anie.201713387
684. 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
685. 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. *Am J Ophthalmol Case Rep* (2018) DOI:10.1016/j.ajoc.2017.12.003
686. 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
687. Sawada M., Ohno N., Kawaguchi M., Huang S. H., Hikita T., Sakurai Y., Bang Nguyen H., Quynh Thai T., 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
688. 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
689. 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
690. Hirata A., Murata K., Hayashi K., Nakamura K. I. Three-Dimensional Analysis of Peeled Internal Limiting Membrane Using Focused Ion Beam/Scanning Electron Microscopy. *Transl Vis Sci Technol* (2018) DOI:10.1167/tvst.7.1.15
691. 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
692. Goto M., Yamashita F., Kawaguchi A., Abe O., Aoki S., Miyati T., Gomi T., Takeda T., Japanese Alzheimer's Disease Neuroimaging I. 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
693. Nakamura A., Tasaki T., Okuni Y., Song C., 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

694. 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
695. 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
696. 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. *Transl Psychiatry* (2018) DOI:10.1038/s41398-017-0069-3
697. Fujimoto T., Kuwahara T., Eguchi T., Sakurai M., Komori T., Iwatsubo 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
698. 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
699. Ogasawara H., Grzybowski M., Hosokawa R., Sato Y., Taki M., Yamaguchi S. A far-red fluorescent probe based on a phospho-fluorescein scaffold for cytosolic calcium imaging. *Chemical Communications (Camb)* (2018) DOI:10.1039/c7cc07344e
700. Chiba K., Chien K. Y., Sobu 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
701. Sobu Y., Furukori K., Chiba K., Nairn A. C., Kinjo M., Hata S., Suzuki T. Phosphorylation of multiple sites within an acidic region of Alcadin alpha is required for kinesin-1 association and Golgi exit of Alcadin alpha cargo. *Molecular Biology of the Cell* (2017) DOI:10.1091/mbc.E17-05-0301
702. Nakao A., Miyazaki N., Ohira K., Hagihara H., Takagi T., Usuda N., Ishii S., Murata K., Miyakawa T. Immature morphological properties in subcellular-scale structures in the dentate gyrus of Schnurri-2 knockout mice: a model for schizophrenia and intellectual disability. *Molecular Brain* (2017) DOI:10.1186/s13041-017-0339-2
703. 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
704. 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
705. 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
706. 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

707. 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
708. 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
709. Tsuiji 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
710. Yamaguchi S., Fukazawa A., Taki M. Phosphole P-Oxide-Containing π -Electron Materials: Synthesis and Applications in Fluorescence Imaging. *Journal of Synthetic Organic Chemistry, Japan* (2017) DOI:10.5059/yukigoseikyokaishi.75.1179
711. 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
712. 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
713. 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/RLI.0000000000000365
714. 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
715. Wang C., 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
716. 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. *Front Psychiatry* (2017) DOI:10.3389/fpsyt.2017.00143
717. 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
718. 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
719. 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

720. Katoh M., Wu B., Nguyen H. B., Thai T. Q., Yamasaki R., Lu H., 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
721. 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
722. 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
723. 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
724. 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-HTTLPR. *Scientific Reports* (2017) DOI:10.1038/s41598-017-04347-8
725. 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
726. 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
727. Kaneko N., Sawada M., Sawamoto K. Mechanisms of neuronal migration in the adult brain. *Journal of Neurochemistry* (2017) DOI:10.1111/jnc.14002
728. 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
729. 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
730. 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
731. 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
732. 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

733. 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
734. 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
735. 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
736. 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
737. Abe H. 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
738. Uno K., Sasaki T., Sugimoto N., Ito H., Nishihara T., Hagihara 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
739. 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
740. 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
741. 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
742. 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
743. 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 (Hoboken)* (2016) DOI:10.1002/cm.21309
744. 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