

令和4年度 動物実験による主な研究成果（論文）

"Rats learn to prefer the late-consumed flavor over the early-consumed flavor in a multi-flavored meal paired with oral glucose and corn oil. Shinohara K, Izumiya K, Nomura S, Yasoshima Y. Physiol Behav. 254: 113865, 2022. doi: 10.1016/j.physbeh.2022.113865."
T. Yasuda, T. Ishihara, A. Ichimura, N. Ishihara. Mitochondrial dynamics define muscle fiber types by modulating cellular metabolic pathways. Cell Reports (in press)
Otake-Kasamoto Y, Kayama H, Kishikawa T, Shinzaki S, Tashiro T, Amano T, Tani M, Yoshihara T, Li B, Tani H, Liu L, Hayashi A, Okuzaki D, Motooka D, Nakamura S, Okada Y, Iijima H, Takeda K*, Takehara T.: Lysophosphatidylserines derived from microbiota in Crohn's disease elicit pathological Th1 response. J. Exp. Med. 219, e20211291 (2022)
Kimura A, Utsumi S, Shimokawa A, Nishimori R, Hosoi R, Stewart NJ, Imai H, Fujiwara H. Targeted Imaging of Lung Cancer with Hyperpolarized ^{129}Xe MRI Using Surface-Modified Iron Oxide Nanoparticles as Molecular Contrast Agents. Cancers (Basel). 2022;14(24):6070.
Kimura T, Sakai M, Gojo N, Watanabe M, Uzawa N, Sakai T. The HIF-1α pathway plays a critical role in salivary gland development in ex vivo organ cultures. FEBS Open Bio. 12(2):460-469, 2022
Upregulation of Robo4 expression by SMAD signaling suppresses vascular permeability and mortality in endotoxemia and COVID-19 models. Proc Natl Acad Sci U S A. 2023;120(3):e2213317120.
"Ozkan Gokcekaya, Takuya Ishimoto, Yuki Nishikawa, Yong Seong Kim, Aira Matsugaki, Ryosuke Ozasa, Markus Weinmann, Christoph Schnitter, Melanie Stenzel, Hyoung Seop Kim, Yoshitsugu Miyabayashi, Takayoshi Nakano*: Novel single crystalline-like non-equiatomic TiZrHfNbTaMo bio-high entropy alloy (BioHEA) developed by laser powder bed fusion, Materials Research Letters, (2023), 11, 274-280."
Monitoring the courtship flight trajectory of Latham's snipe (<i>Gallinago hardwickii</i>) using microphone arrays, Shiho Matsubayashi, Hideki Osaka, Reiji Suzuki, Kazuhiro Nakadaï, Hiroshi G. Okuno. Ecology and Evolution. https://doi.org/10.1002/ece3.9938 2023 年 3 月.
"Taniguchi S, Matsui T, Kimura K, Funaki S, Miyamoto Y, Uchida Y, Sudo T, Kikuta J, Hara T, Motooka D, Liu Y, Okuzaki D, Morii E, Emoto N, Shintan Y, Ishii M. (2022) In vivo induction of activin A-producing alveolar macrophages supports the progression of lung cell carcinoma. Nat. Commun., 14:143. "

Shibata K, Motozono C, Nagae M, Shimizu T, Ishikawa E, Motooka D, Okuzaki D, Izumi Y, Takahashi M, Fujimori N, Wing JB, Hayano T, Asai Y, Bamba T, Ogawa Y, Furutani-Seiki M, Shirai M, Yamasaki S. "Symbiotic bacteria-dependent expansion of MR1-reactive T cells causes autoimmunity in the absence of Bcl11b." <i>Nat. Commun.</i> 2022 Nov 14;13(1):6948.
"Sun-Wada GH, Wada Y. Exploring the link between vacuolar-type proton ATPase and epithelial cell polarity. <i>Biol Pharm Bull.</i> 2022;45:1419-1425. Sun-Wada GH, Wada Y. The a subunit isoforms of vacuolar-type proton ATPase exhibit differential distribution in mouse perigastrulation embryos. <i>Sci Rep.</i> 2022 12:13590. Matsumoto N, Sekiya M, Sun-Wada GH, Wada Y, Nakanishi-Matsui M. The lysosomal V-ATPase a3 subunit is involved in localization of Mon1-Ccz1, the GEF for Rab7, to secretory lysosomes in osteoclasts. <i>Sci Rep.</i> 2022 12:8455"
Chaya T, Maeda Y, Sugimura R, Okuzaki D, Watanabe S, Varner LR, Motooka D, Gyoten D, Yamamoto H, Kato H, Furukawa T (2022) Multiple knockout mouse and embryonic stem cell models reveal the role of miR-124a in neuronal maturation. <i>J Biol Chem.</i> 2022 Jul 19;102293.doi: 10.1016/j.jbc.2022.102293.
Ochiai Y, Suzuki C, Segawa K, Uchiyama Y, Nagata S. Inefficient development of syncytiotrophoblasts in the Atp11a-deficient mouse placenta. <i>Proc Natl Acad Sci U S A.</i> 2022 May 3;119(18):e2200582119. doi: 10.1073/pnas.2200582119. Epub 2022 Apr 27. PMID: 35476530; PMCID: PMC9170144.