分子神経科学講座

Molecular Neuroscience

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◆ 著　書

1) 吉田知之. 生化学(vol.94, No.6)「mRNAスプライシング制御の最前線と創薬への応用」. 甲斐田大輔, 吉田知之編集. 東京: 日本生化学会; 2022 Dec 26. マイクロエクソンの取捨選択による中枢シナプス形成の調節; p. 845-851.

◆ 原　著

1) Kohji Takagi, Akiko Shimomura, Johji Imura, Hisashi Mori, Akira Noguchi, Shinichi Tanaka, Takashi Minamisaka, Takeshi Nishida, Hideki Hatta, Takahiko Nakajima. Interleukin-32 regulates downstream molecules and promotes the invasion of pancreatic cancer cells. Oncol Lett. 2021 Nov 11; 23(1): 14. doi: 10.3892/ol.2021.13132.（2021年未掲載分）
2) Gabriel Krasovec, Akiko Hozumi, Tomoyuki Yoshida, Takayuki Obita, Mayuko Hamada, Akira Shiraishi, Honoo Satake, Takeo Horie, Hisashi Mori, Yasunori Sasakura. d-Serine controls epidermal vesicle release via NMDA receptor, allowing tissue migration during the metamorphosis of the chordate Ciona. Sci Adv. 2022 Mar 11; 8(10): eabn3264. doi: 10.1126/sciadv.abn3264.
3) Takeshi Uemura, Emi Suzuki-Kouyama, Shiori Kawase, Taiga Kurihara, Misato Yasumura, Tomoyuki Yoshida, Shuya Fukai, Maya Yamazaki, Peng Fei, Manabu Abe, Masahiko Watanabe, Kenji Sakimura, Masayoshi Mishina, Katsuhiko Tabuchi. Neurexins play a crucial role in cerebellar granule cell survival by organizing autocrine machinery for neurotrophins. Cell Rep. 2022 Apr 5; 39(1): 110624. doi: 10.1016/j.celrep.2022.110624.
4) Tetsuya Ishimoto, Takuya Okada, Shiho Fujisaka, Kunimasa Yagi, Kazuyuki Tobe, Naoki Toyooka, Hisashi Mori. A New Method for Albuminuria Measurement Using a Specific Reaction between Albumin and the Luciferin of the Firefly Squid Watasenia scintillans. Int J Mol Sci. 2022 Jul 28; 23(15): 8342. doi: 10.3390/ijms23158342.
5) Mamoru Fukuchi, Satoru Mitazaki, Ryohei Saito-Moriya, Nobuo Kitada, Shojiro A Maki, Hironori Izumi, Hisashi Mori. Bioluminescence imaging using d-luciferin and its analogs for visualizing Bdnf expression in living mice; different patterns of bioluminescence signals using distinct luciferase substrates. J Biochem. 2022 Oct 19; 172(5): 321-327. doi: 10.1093/jb/mvac070.
6) Allah Nawaz, Muhammad Bilal, Shiho Fujisaka, Tomonobu Kado, Muhammad Rahil Aslam, Saeed Ahmed, Keisuke Okabe, Yoshiko Igarashi, Yoshiyuki Watanabe, Takahide Kuwano, Koichi Tsuneyama, Ayumi Nishimura, Yasuhiro Nishida, Seiji Yamamoto, Masakiyo Sasahara, Johji Imura, Hisashi Mori, Martin M Matzuk, Fujimi Kudo, Ichiro Manabe, Akiyoshi Uezumi , Takashi Nakagawa, Yumiko Oishi, Kazuyuki Tobe. Depletion of CD206+ M2-like macrophages induces fibro-adipogenic progenitors activation and muscle regeneration. Nat Commun. 2022 Nov 21; 13(1): 7058. doi: 10.1038/s41467-022-34191-y.

◆ 総　説

1) Xiance Ni, Hisashi Mori. Complex Processes Underlying the Dynamic Changes of D-serine Levels in AD Brains. Curr Alzheimer Res. 2022; 19(7): 485-493. doi. 10.2174/1567205019666220328123048.
2) Tetsuya Ishimoto, Hisashi Mori. Control of actin polymerization via reactive oxygen species generation using light or radiation. Front Cell Dev Biol. 2022 Sep 23; 10: 1014008. doi. 10.3389/fcell.2022.1014008.

◆ 学会報告

1) 吉田知之. Ptprd遺伝子マイクロエクソンの取捨選択調節が作り出す脳神経回路の設計図. 生理学研究所研究会; 2022 Feb 4; 岡崎（オンライン）.（招待講演）

2) 吉田知之. 自閉スペクトラム症関連タンパク質 Neuroligin3による社会性発達調節の分子機構. 生命科学4プラットフォーム 支援説明会・キックオフシンポジウム; 2022 Jun 3; 東京.（招待講演）
3) 赤羽絢夏, 今井彩子, 和泉宏謙, 北嶋悠希, 川瀬修平, 森寿, 吉田知之. PTP δ 遺伝子のマイクロエクソン選択機構の解明. 第40回日本生化学会北陸支部大会; 2022 Jun 4; 富山.
4) Ni Xiance, Ran Inoue, Takashi Saito, Takaomi Saido, Keizo Takao, Hisashi Mori. D-Serine dependent pathophysiological progression of Alzheimer's disease. NEURO2022; 2022 Jun 30-Jul 3; 宜野湾.
5) Ayako Imai, Hironori Izumi, Yumie Koshidaka, Keizo Takao, Hisashi Mori, Tomoyuki Yoshida. Distinct roles of canonical and non-canonical neuroligin 3 pathways in behavioral regulation. NEURO2022; 2022 Jun 30-Jul 3; 宜野湾.
6) Hisashi Mori. Physiological and pathological roles of serine racemase in the brain. IDAR2022; 2022 Jul 25-27; Urbana-Champaign, Illinois. (Invited lecture)
7) Ran Inoue. Blockade of D-serine signaling and adult hippocampal neurogenesis attenuates remote contextual fear memory following multiple memory retrievals. IDAR2022; 2022 Jul 25-27; Urbana-Champaign, Illinois.
8) 吉田知之. ゲノム編集によるSAM系統での遺伝子改変. 第37回老化促進モデルマウス学会学術大会; 2022 Jul 28-29; 京都.（招待講演）
9) Tomoyuki Yoshida. Molecular and structural mechanisms of PTP δ -mediated synapse formation. ISN-APSN 2022 meeting; 2022 Aug 28-Sep 1; Honolulu, Hawaii. (Invited lecture)
10) 森寿, 倪献策, 井上蘭. D-セリンシグナルと海馬神経新生の阻害による遠隔恐怖記憶の抑制. 第96回日本薬理学会年会; 2022 Nov 30-Dec 3; 横浜.
11) 石本哲也, 岡田卓哉, 藤坂志帆, 八木邦公, 戸邉一之, 豊岡尚樹, 森寿. ホタルイカの発光を用いた尿中アルブミン定量法開発. 第45回日本分子生物学会年会; 2022 Nov 30-Dec 2; 千葉.

◆ その他

1) Tomoyuki Yoshida. Imbalance in synaptogenic signaling and neurodevelopmental disorders. 新学術領域「マルチスケール脳」領域会議; 2022 Feb 19-21; online.
2) Tomoyuki Yoshida. Imbalance in PTP δ synaptigenic signaling pathways causes disruption of cortical E/I balance and severe behavioral abnormalities. 新学術領域「マルチスケール脳」領域会議; 2022 Nov 25-27; Wako. (Invited lecture)