

業 績 目 録 (平成30年)

教室・部門名 病態分子薬理学

(A-a) 英文著書

(A-b) 和文著書

(B-a) 英文総説

(B-b) 和文総説

(C-a) 英文原著

- 1 ○The NOX1 isoform of NADPH oxidase is involved in dysfunction of liver sinusoids in nonalcoholic fatty liver disease. Matsumoto M, Zhang J, Zhang X, Liu J, Jiang JX, Yamaguchi K, Taruno A, Katsuyama M, Iwata K, Ibi M, Cui W, Matsuno K, Marunaka Y, Itoh Y, Torok NJ, Yabe-Nishimura C. *Free Radic Biol Med.* 115:412-420, 2018. (IF=5.657) (細胞生理学、中研 RI 部門と共同)
- 2 Mutations in the β -amyloid precursor protein in familial Alzheimer's disease increase A β oligomer production in cellular models. Ohshima Y, Taguchi K, Mizuta I, Tomiyama T, Kametani F, Yabe-Nishimura C, Mizuno T, Tokuda T. *Heliyon* 4:e00511, 2018. (生体構造科学部門、神経内科学部門と共同)
- 3 ○Ketamine-induced prefrontal serotonin release is mediated by cholinergic neurons in the pedunclopontine tegmental nucleus. Kinoshita H, Nishitani N, Nagai Y, Andoh C, Asaoka N, Kawai H, Shibui N, Nagayasu K, Shirakawa H, Nakagawa T, Kaneko S. *Int J Neuropsychopharmacol.* 21:305-310, 2018. (IF=4.207)
- 4 ○Up-regulation of NOX1/NADPH oxidase following drug-induced myocardial injury promotes cardiac dysfunction and fibrosis. Iwata K, Matsuno K, Murata A, Zhu K, Fukui H, Ikuta K, Katsuyama M, Ibi M, Matsumoto M, Ohigashi M, Wen X, Zhang J, Cui W, Yabe-Nishimura C. *Free Radic Biol Med.* 120:277-288, 2018. (IF=5.657) (中研 RI 部門と共同)

- 5 Nicotine and methyl vinyl ketone, major components of cigarette smoke extracts, increase protective amyloid- β peptides in cells harboring amyloid- β precursor protein. Ohshima Y, Iwata K, Ibi M, Matsumoto M, Katsuyama M, Yabe-Nishimura C. *J Toxicol Sci.* 43:257-266, 2018. (IF=1.732) (中研 RI 部門と共同)
- 6 ○Augmented neutrophil extracellular traps formation promotes atherosclerosis development in socially defeated apoE^{-/-} mice. Yamamoto K, Yamada H, Wakana N, Kikai M, Terada K, Wada N, Motoyama S, Saburi M, Sugimoto T, Kami D, Ogata T, Ibi M, Yabe-Nishimura C, Matoba S. *Biochem Biophys Res Commun.* 500:490-496, 2018. (IF=2.705) (循環器・腎臓内科学部門と共同)
- 7 Clioquinol increase the expression of interleukin-8 by down-regulating GATA-2 and GATA-3. Katsuyama M, Ibi M, Iwata K, Matsumoto M, Yabe-Nishimura C. *Neurotoxicology* 67:296-304, 2018. (IF=3.263) (中研 RI 部門と共同)
- 8 ○Neurotropin inhibits neuronal activity through potentiating of sustained Kv currents in primary cultured DEG neurons. Kawai H, Asaoka N, Miyake T, Nagayasu K, Nakagawa T, Shirakawa H, Kaneko S. *J. Pharmacol Sci.* 137:313-316, 2018. (IF=2.439)

(C-b) 和文原著

(D) 学会発表

I) 特別講演、教育講演等

II) シンポジウム、ワークショップ、パネルディスカッション等

- 1 ○衣斐督和, 矢部千尋. 活性酸素種 ROS を介したうつ様行動発現とその機序 -NOX1/NADPH オキシダーゼの役割-. 第 71 回日本酸化ストレス学会・第 17 回日本 NO 学会合同学術集会. シンポジウム. 2018 年 5 月 17 日 ; 京都.

III) 国際学会における一般発表

- 1 ○Iwata K and Yabe-Nishimura C. Up-regulation of NOX1/NADPH oxidase following myocardial cell injury plays a critical role in the development of cardiac fibrosis. Gordon Research Conference on NOX Family NADPH Oxidases. May 30-31, 2018. Les Diablerets

- Conference Center, Les Diablerets, Switzerland.
- 2 ○Liu J, Zhu K, Iwata K and Yabe-Nishimura C. Role of NOX1 in intestinal epithelial barrier dysfunction. Gordon Research Conference on NOX Family NADPH Oxidases. May 30-31, 2018. Les Diablerets Conference Center, Les Diablerets, Switzerland.
 - 3 ○Matsumoto M, Zhang J, Zhang X and Yabe-Nishimura C. NOX1/NADPH oxidase promotes liver injury through dysfunction of sinusoidal endothelium in nonalcoholic fatty liver disease. The 18th World Congress of Basic & Clinical Pharmacology. July 3, 2018. Kyoto, Japan.
 - 4 ○Ibi M and Yabe-Nishimura C. Role of NOX1/NADPH oxidase in neuropathic pain and its related emotional behaviors. The 18th World Congress of Basic & Clinical Pharmacology. July 4, 2018. Kyoto, Japan.
 - 5 ○Iwata K, Matsuno K and Yabe-Nishimura C. Up-regulation of NOX1/NADPH oxidase following myocardial cell injury plays a critical role in the development of cardiac fibrosis. The 18th World Congress of Basic & Clinical Pharmacology. July 4, 2018. Kyoto, Japan.
 - 6 Katsuyama M and Yabe-Nishimura C. Clioquinol increases the expression of interleukin-8 by suppression of GATA-2 and GATA-3. The 18th World Congress of Basic & Clinical Pharmacology. July 5, 2018. Kyoto, Japan.
 - 7 ○Ibi M and Yabe-Nishimura C. NOX1/NADPH oxidase-derived ROS regulate anxiety-like behaviors in mice. Gordon Research Conference on Thiol-Based Redox Regulation & Signaling. July. 16-17, 2018. Rey Don Jaime Grand Hotel, Barcelona, Spain.

(E) 研究助成（競争的研究助成金）

総額 780 万円

公的助成

代表（総額）・小計 380 万円

1 岩田和実.

文部科学省科学研究費助成金 基盤研究 (C) (課題番号: 18K06898). 平成 30~令和 2 年度.

「新規心線維化シグナリング分子の同定と拡張不全治療への応用」助成金額 140 万円.

2 松本みさき.

文部科学省科学研究費助成金 基盤研究 (C) (課題番号: 17K08601). 平成 29~31 年度.

「獲得免疫成立における活性酸素種産生酵素 NOX1 の新しい役割の解析」助成金額 120 万円.

3 浅岡希美.

文部科学省科学研究費助成金 研究活動スタート支援 (課題番号: 18H06128). 平成 30~31 年度.

「腹側線条体の活性酸素シグナルを介した強迫性障害の病態メカニズムの解明」助成金額 120 万円.

財団等からの助成

代表 (総額)・小計 400 万円

1 矢部千尋.

喫煙科学研究財団 特定研究助成. 平成 26~29 年度.

「たばこ煙ガス相中の活性成分によるタンパク質修飾と臓器ストレス」助成金額 200 万円.

2 衣斐督和.

武田科学振興財団 医学研究助成. 平成 30~31 年度.

「ROS/gasotransmitter を介した行動制御の分子基盤の解明」助成金額 200 万円.