平成 29 年度業績集

【英文原著】

1. Ryo P. Honda, Kazuo Kuwata, The native state of prion protein (PrP) directly inhibits formation of PrP-amyloid fibrils in vitro, *Scientific Reports* 7, Article number: 562 (2017) doi:10.1038/s41598-017-00710-x
2. Amin Tahoun, Hisayoshi Masutani, Hanem El-Sharkawy, Trudi Gillespie, Ryo P. Honda, Kazuo Kuwata, Mizuho Inagaki, Tomio Yabe, Izumi Nomura,and Tohru Suzukicorresponding. Capsular polysaccharide inhibits adhesion of Bifidobacterium longum 105-A to enterocyte-like Caco-2 cells and phagocytosis by macrophages. *Gut pathogens*. 2017 May 1;9:27. doi: 10.1186/s13099-017-0177-x. eCollection 2017.
3. Kei-ichi Yamaguchi, Kazuo Kuwata, Formation and properties of amyloid fibrils of prion protein, *Biophysical reviews* 2017 Dec 4. doi: 10.1007/s12551-017-0377-0. [Epub ahead of print]
4. Duy Phuoc Tran, Kazuhiro Takemura, Kazuo Kuwata, and Akio Kitao, Protein–Ligand Dissociation Simulated by Parallel Cascade Selection Molecular Dynamics, *Journal of chemical theory and computation* 2018 Jan 9;14(1):404-417. doi: 10.1021/acs.jctc.7b00504. Epub 2017 Dec 8.
5. Endo S, Xia S, Suyama M, Morikawa Y, Oguri H, Hu D, Ao Y, Takahara S, Horino Y, Hayakawa Y, Watanabe Y, Gouda H, Hara A, Kuwata K, Toyooka N, Matsunaga T, Ikari A. Correction to Synthesis of Potent and Selective Inhibitors of Aldo-Keto Reductase 1B10 and Their Efficacy against Proliferation, Metastasis, and Cisplatin Resistance of Lung Cancer Cells. J Med Chem. 2018 Jan 11. 8;61(3):1380 doi: 10.1021/acs.jmedchem.7b01911.
6. Honda R, Kuwata K. Evidence for a central role of PrP helix 2 in the nucleation of amyloid fibrils. FASEB J. 2018 Feb 1:fj201701183RR. doi: 10.1096/fj.201701183RR. [Epub ahead of print]
7. Yamaguchi KI, Honda RP, Elhelaly AE, Kuwata K. Acceleration of nucleation of prion protein during continuous ultrasonication. J Biochem. 2018 Feb 2. doi: 10.1093/jb/mvy015. [Epub ahead of print]
8. Ohhashi Y, Yamaguchi Y, Kurahashi H, Kamatari YO, Sugiyama S, Uluca B, Piechatzek T, Komi Y, Shida T, Müller H, Hanashima S, Heise H, Kuwata K, Tanaka M. Molecular basis for diversification of yeast prion strain conformation. Proc

Natl Acad Sci U S A. March 6, 2018. 115 (10) 2389-2394　2018 Feb 21. pii: 201715483. doi: 10.1073/pnas.1715483115.

【国際学会一般講演】

1．Kazuo Kuwata, A quantum clinic to revolutionize the intirnal medicine and surgery based on the thermodynamical principles, The 9th International Meeting on Biomolecules under Pressure(IMBP 2017), August 21-24, 2017, 青蓮会館 Kyoto, Japan

【報告会】

1．本田諒：安定化シャペロンと不安定化シャペロン　プリオン病のサーベイランスと感染予防に関する調査研究班　研究報告会　2018 年 1 月 15 日　アルカディア市ヶ谷
2．桑田一夫：プリオン病のサーベランスと感染予防に関する調査研究班　研究報告会及びサーベランス・JACOP 運営委員会　2018 年 2 月 8 日　アルカディア市ヶ谷
3．桑田一夫：2017 年度難治性疾患実用化研究合同成果報告会　2018 年 2 月 9 日　10:00～18:00　パシフィコ横浜

【報道】

1．（学内取材、新聞掲載）「プリオン病新薬開発桑田シニア教授着々」朝日新聞朝刊　2017 年 5 月 4 日

【特許】

1．Kazuo Kuwata : MALEIC ACID SALT OF ANTI-PRION COMPOUND, METHOD FOR PRODUCING. THE SAME AND PHAMACEUTICAL COMPOSITION OF THE SAME ; Nov. 7, 2017(US 9,809,563 B2)