

機能生化学講座

氏名	所属	職名	取得学位	専門分野	主な論文・著作・業績
二井 将光	機能生化学講座	教授	薬学博士	機能生物化学、細胞生物学、分子生物学	<p>①平成23年度 研究シーズ探索プログラム (JST) 課題名「創薬を目指すATPaseの回転触媒と細胞機能」</p> <p>②Y. Sambongi, Y. Iko, M. Tanabe, H. Omote, A. Iwamoto-Kihara, I. Ueda, T. Yanagida, Y. Wada and M. Futai, Mechanical rotation of c subunit oligomer in ATP synthase (FoF1): direct observation. <i>Science</i>, 286, 1722 – 1724 (1999).</p> <p>③G.-H. Sun-Wada, T. Toyomura, T. Murata, A. Yamamoto, M. Futai, The $\alpha 3$ isoform of V-ATPase regulates insulin secretion from pancreatic beta-cells. <i>J Cell Sci.</i> Nov. 119 (21) 4531-40 (2006).</p> <p>④M. Sekiya, RK Nakamoto, M. Nakanishi-Matsui, M. Futai, Binding of phytopolyphenol piceatannol disrupts β/γ subunit interactions and rate-limiting step of steady-state rotational catalysis in <i>Escherichia coli</i> F1-ATPase. <i>J Biol Chem.</i> 287(27), 22771-80. (2012)</p> <p>⑤M. Futai, M. Nakanishi-Matsui, H. Okamoto, M. Sekiya, and R.K. Nakamoto Rotational Catalysis in Proton Pumping ATPases: from <i>E. coli</i> F-ATPase to Mammalian V-ATPase, <i>Biophys. Biochim. Acta</i>, 1817 (10), 1711-1721. (2012) March 20, Special Issue Entitled: 17th European Bioenergetics Conference</p>
中西 真弓	機能生化学講座	准教授	博士 (生命薬学)	生化学、分子生物学、細胞生物学	<p>① <u>M. Nakanishi-Matsui</u>, Y.W. Zheng, D.J. Sulciner, E.J. Weiss, M.J. Ludeman, and S.R. Coughlin, PAR3 is a cofactor for PAR4 activation by thrombin. <i>Nature</i> 404 (2000) 609-613.</p> <p>② <u>M. Nakanishi-Matsui</u>, S. Kashiwagi, T. Ubukata, A. Iwamoto-Kihara, Y. Wada, and M. Futai, Rotational catalysis of <i>Escherichia coli</i> ATP synthase F1 sector: stochastic fluctuation and a key domain of the β subunit. <i>J. Biol. Chem.</i> 282 (2007) 20698-20704.</p> <p>③ <u>M. Nakanishi-Matsui</u>, M. Sekiya, R. K. Nakamoto, and M. Futai, The mechanism of rotating proton-pumping ATPases. <i>Biochim, Biophys. Acta</i> (2010) 1797, 1343-1352.</p> <p>④ <u>M. Nakanishi-Matsui</u> (責任著者), S. Yano, N. Matsumoto, and M. Futai, Lipopolysaccharide induces multinuclear cell from RAW264.7 line with increased phagocytosis activity. <i>Biochem. Biophys. Res. Commun</i> 425 (2012) 144-149.</p> <p>⑤文部科学省科学研究費補助金 基盤C「課題名：細胞内イオン環境と小胞輸送におけるV-ATPaseの機能」2012年</p>

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氏名	所属	職名	取得学位	専門分野	主な論文・著作・業績
岡本 晴子	機能生化学講座	特任講師	博士（理学）	遺伝学、分子生物学、植物生理学	<p>① “Jasmonate and phytochrome A signalling in Arabidopsis wound and shade responses are integrated through JAZ1 stability.” Robson F, Okamoto H, Patrick E, Harris SR, Wasternack C, Brealey C, Turner JG (査読有) Plant Cell 22: 1143-1160 (2010)</p> <p>② “The alpha subunit of the heterotrimeric G-protein affects jasmonate responses in Arabidopsis thaliana.” Okamoto H, Göbel C, Capper RG, Saunders N, Feussner I, Knight MR (査読有; corresponding author) J. Exp. Bot. 60:1991-2003 (2009)</p> <p>③12 Okamoto H, Matsui M, Deng X-W. “Overexpression of the heterotrimeric G-protein α-subunit enhances phytochrome mediated inhibition of hypocotyl elongation in Arabidopsis.” Plant Cell 13: 1639-1651 (2001)</p> <p>④招待講演: “G-protein and all that JAZ” Department of Plant Sciences, University of Oxford. 22 May 2008</p> <p>⑤文部科学省科学研究費補助金「課題名: 一分子観察による植物のプロトンポンプV-ATPaseの細胞内pH恒常性維持機構」2010年</p>
後藤（松元） 奈緒美	機能生化学講座	助教	理学（博士）	分子細胞生物学	<p>① Nakanishi-Matsui M, Yano S, Matsumoto N, Futai M Lipopolysaccharide induces multinuclear cell from RAW264.7 line with increased phagocytosis activity / Biochem. Biophys. Res. Commun. 425:144-149 (2012)</p> <p>② Y. Fujiki, N. Miyata, N. Matsumoto, S. Tamura Dynamic and functional assembly of the AAA peroxins, Pex1p and Pex6p, and their membrane receptor Pex26p involved in shuttling of the PTS1 receptor Pex5p in peroxisome biogenesis. / Biochem. Soc. Trans. 36:109-113 (2008)</p> <p>③ S. Tamura, S. Yasutake, N. Matsumoto, Y. Fujiki Dynamic and functional assembly of the AAA peroxins, Pex1p and Pex6p, and their membrane receptor Pex26p / J. Biol. Chem. 281:27693-27704 (2006)</p>

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關谷 瑞樹	機能生化学講座	助教	薬学	機能生物化学、天然物化学	<p>①Sekiya, M., Hosokawa, H., Nakanishi-Matsui, M., Al-Shawi, M.K., Nakamoto, R.K., Futai, M. :Single molecule behavior of inhibited and active states of Escherichia coli ATP synthase F1 rotation / J. Biol. Chem. 285:42058-42067 (2010)</p> <p>②Sekiya, M., Nakamoto, R.K., Al-Shawi, M.K., Nakanishi-Matsui, M., Futai, M. :Temperature dependence of single molecule rotation of the Escherichia coli ATP synthase F1 sector reveals the importance of gamma-beta subunit interactions in the catalytic dwell / J. Biol. Chem. 284:22401-22410 (2009)</p> <p>③Sekiya, M., Ueda, K., Okazaki, K., Terashima, J., Katou, Y., Kikuchi, H., Kurata, S., Oshima, Y. :A phytoceramide analog stimulates the production of chemokines through CREB activation in human endothelial cells / Int. Immunopharmacol. in press (2011)</p> <p>④Sekiya, M., Ueda, K., Okazaki, K., Kikuchi, H., Kurata, S., Oshima, Y. : A cyclopentanediol analogue selectively suppresses the conserved innate immunity pathways, Drosophila IMD and TNF-alpha pathways / Biochem. Pharmacol. 75:2165-2174 (2008)</p> <p>⑤文部科学省科学研究費補助金・若手研究スタートアップ「課題名：骨粗鬆症を標的とする組織特異的プロトンポンプATPase 阻害薬の探索」2009年</p>