領域評価用資料 添付資料（さきがけタイプ）

研究領域「情報と細胞機能」

１．応募件数・採択件数

採択年度	応募件数	面接選考件数	採択件数
平成 13 年（1 期生)	175	27	13
平成 14 年（2 期生）	177	28	11(12)*
平成 15 年（3 期生）	378	21	8(9)**
計	730	76	32

＊　採択 1 年後、研究者 1 名が辞退した（理化学研究所独立主幹研究員に就任)。

＊＊　採択 1 年後、研究者 1 名が辞退した（理化学研究所独立主幹研究員に就任)。

２．主要業績

論文数は採択時からの国内外を合わせた数、() 内はその内国外件数、特許数は、採択時からの国内出願数。() 内は、外国出願で、複数国を指定した場合でも 1 件とした。

平成 16 年度終了研究者　　平成 18 年 12 月現在

研究者	論文数	特許出願数
芦高　恵美子	４（４）	１（１）
阿部　高明	２０（２０）	４（０）
大場　雄介	１２（１２）	０（０）
小坂　仁	１６（１６）	１（０）
角谷　寛	７（　３）	２（１）
亀井　康富	８（　８）	２（０）
後藤　聡	２（　２）	０（０）
佐々木　雄彦	２７（２７）	１（０）
武川　睦寛	１２（１２）	０（０）
門叶　冬樹	９（　９）	３（１）
中田　和人	１０（１０）	０（０）
山口　雄輝	１４（１４）	０（０）
吉田　秀郎	１５（１５）	０（０）
合計	１５６（１５２）	１４（３）

平成 17 年度終了研究者　　平成 18 年 12 月現在

研究者	論文数	特許出願数
秋光　和也	１６（１６）	１（０）
石井　浩二郎	２（　２）	２（２）
曽根　雅紀	３（　３）	１（０）
高橋　倫子	１０（１０）	０（０）
茶野　徳宏	１９（１９）	２（１）
豊田　英尚	９（　９）	０（０）
西　毅	３（　１）	０（０）
平井　宏和	６（　６）	４（１）
牧野　雄一	５（　５）	０（０）
宮戸　健二	３（　３）	１（１）
渡辺　英治	４（　４）	０（０）
合計	８０（７８）	１１（５）

平成 18 年度終了研究者　　平成 18 年 12 月現在

研究者	論文数	特許出願数
齋藤　通紀	９（　９）	１（０）
白根　道子	２（　２）	０（１）
豊田　実	１９（１９）	３（０）
東山　繁樹	２３（２３）	０（０）
廣瀬　哲郎	２（　２）	０（０）
三木　裕明	９（　９）	０（０）
村田　茂穂	９（　９）	０（０）
山下　潤	１１（１１）	４（１）
合計	８４（８４）	８（２）

研究領域全体

論文数	特許出願数
３２０（３１４）	３３（１０）

研究者の代表的原著論文

平成 16 年度終了研究者

芦高 恵美子

1. Muratani, T., Minami, T., Enomoto, U., Sakai, M., Okuda-Ashitaka, E., Kiyokane, K., Mori, H. and

Ito, S.: Characterization of nociceptin / orphanin FQ-induced pain responses by the novel receptor antagonist JTC-801. *J. Pharmacol. Exp. Ther.* 303: 424-430, 2002

2. Mabuchi,T., Matsumura, S., Okuda-Ashitaka, E., Kitano, T., Kojima, H., Nagano, T., Minami, T. and Ito, S.: Attenuation of neuropathic pain by nociceptin/orphanin FQ antagonist is mediated by inhibition of nitric oxide production. *Eur. J. Neurosci.* 17: 1384-1392, 2003
3. Otsuji, T., Okuda-Ashitaka, E., Kojima, S., Akiyama, H., Ito, S. and Ohmiya, Y.: Monitoring for dynamic biological processing by intra-molecular bioluminescence resonance energy transfer system using secreted luciferase. *Anal. Biochem.* 329: 230-2378, 2004
4. Okuda-Ashitaka, E., Minami, T., Matsumura, S., Takeshima, H., Reinscheid, R. K., Civelli, O. and Ito, S.: The opioid peptide nociceptin/orphanin FQ mediates prostaglandin E_2-induced allodynia, tactile pain associated with nerve injury. *Eur. J. Neurosci.* 23: 995-1004, 2006

阿部 高明

1. Mikkaichi T, Suzuki T, Tanemoto M, Ito S, Abe T.:The organic anion transporter (OATP) family. *Drug Metab Pharmacokinet.* 19: 171-179, 2004
2. Mikkaichi, T., Suzuki, T., Onogawa, T., Tanemoto, M., Mizutamari, H., Okada, M., Masuda, S., Tokui, T., Eto, N, Abe, M., Cyaki, T., Unno, M., Hishinuma, T., Inui, K, Ito, S., Goto, J. and Abe, T.: Isolation and characterization of novel kidney-specific digoxin transporters. *Proc. Natl. Acad. Sci., USA* 101: 3569-3574, 2004
3. Sasaki, M., Suzuki, H., Ito, K., Abe, T. and Sugitama, Y.: Transcellular transport of organic anions across a double-transfected Madin-Darby canine kidney II cell mnolayer expressing both human organic anion-transporting polypeptide(OATP2/SLC21A6) and multidrug resistance-associated protein 2(MRP2/ABCC2). *J. Biol. Chem.* 277: 6497-6503, 2002
4. Adachi, H., Suzuki, T., Abe, M., Asano, N., Mizutamari, H., Tanemoto, M., Nishio, T., Onogawa, T., Toyohara, T., Kasai, S., Satoh, F., Suzuki, M., Tokui, T., Unno, M., Shimosegawa, T., Matsuno, S., Ito, S. and Abe, T.: Molecular characterization of human and rat organic anion transporter OATP-D. *Am. J. Physiol.* 285: F1188-1197, 2003
5. Suzuki, T., Onogawa, T., Asano, N., Mizutamari, H., Mikkaichi, T., Tanemoto, M., Abe, M., Satoh, F., Unno, M., Nunoki, K., Suzuki, M., Hishinuma, T., Goto, J., Shimosegawa, T., Matsuno, S., Ito, S. and Abe, T.: Identification and characterization of novel rat and human gonad specific organic anion transporters. *Mol. Endocrinol.* 17: 1203-1215, 2003

大場 雄介

1. K. Honda*, Y. Ohba*, H. Yanai*, H. Negishi, T. Mizutani, A. Takaoka, C. Taya, and T. Taniguchi: MyD88-IRF-7 signalling pathway for robust type-I interferon induction is contingent on spatiotemporal regulation. *Nature*, 434(7036): 1035-1040. (2005)

[*these authors contributed equally to this work]

2. Takaoka, H. Yanai, S. Kondo, G. Duncan, H. Negishi, T. Mizutani, S. Kano, K. Honda, Y, Ohba, T. Mak and T. Taniguchi: Integral role of IRF-5 in the gene induction programme activated by Toll-like receptors. *Nature*, 434(7030): 243-249 (2005)
3. K. Honda, H. Yanai, T. Mizutani, . Negishi, N. Shimada, N. Suzuki, Y. Ohba, A. Takaoka, W. C. Yeh and T. Taniguchi: Role of a transductional-transcriptional processor complex involving MyD88 and IRF-7 in Toll-like receptor signaling. *Proc. Natl. Acad. Sci. U.S.A.* 101(43): 15416-15421. (2004)
4. H. Yoshizaki, Y. Ohba, K. Kurokawa, R. E. Itoh, T. Nakamura, N. Mochizuki, K. Nagashima and M. Matsuda: Activity of Rho-family GTPases during cell division as visualized with FRET-based probes. *J. Cell Biol.* 162(2): 223-232. (2003)
5. Y. Ohba, K. Kurokawa and M. Matsuda: Mechanism of the spatio-temporal regulation of Ras and Rap1. *EMBO J.* 22(4): 859-869. (2003)

小坂 仁

1. Osaka, H., Wang, Y. L., Takada, K., Takizawa, S., Setsuie, R., Li, H., Sato, Y., Nishikawa, K., Sun, Y. J., Sakurai, M., et al. (2003). Ubiquitin carboxy-terminal hydrolase L1 binds to and stabilizes monoubiquitin in neuron. *Hum Mol Genet* 12, 1945-1958.
2. Wang YL, Takeda A, Osaka H, Hara Y, Furuta A, Setsuie R, Sun YJ, Kwon J, Sato Y, Sakurai M, Noda M, Yoshikawa Y, Wada K (2004) Accumulation of beta- and gamma-synucleins in the ubiquitin carboxyl-terminal hydrolase L1-deficient gad mouse. *Brain Res.* 1019:1-9.
3. Harada T, Harada C, Wang YL, Osaka H, Amanai K, Tanaka K, Takizawa S, Setsuie R,Sakurai M, Sato Y, Noda M, Wada K. (2004) Role of ubiquitin carboxy terminal hydrolase-l1 in neural cell apoptosis induced by ischemic retinal injury in vivo. *Am J Pathol* 164: 59-64.
4. Nagai J, Yazawa T, Okudela K, Ito T, Kigasawa H, Kitamura H, Osaka H. (2004) Retinoic acid induces cell death on neuroblastoma cell lines by inhibition of proteasome-dependent degradation of retinoic acid receptor α. *Cancer Res* 64: 7910-7917
5. Koizume, S., Takizawa, S., Fujita, K., Aida, N., Yamashita, S., Miyagi, Y., and Osaka, H. (2006). Aberrant trafficking of a proteolipid protein in a mild Pelizaeus-Merzbacher disease. *Neuroscience* 141: 1861-1869.

角谷 寛

1. Hamada H, Taniguchi M, Ohi M., Nakai N, Okura M, Wakamura T, Kadotani H, Chin H: Acceptance and short-term tolerance of nasal continuous positive airway pressure therapy in elderly patients with obstructive sleep apnea. *Sleep and Biological Rhythms* 2, 53- 56, 2004
2. Kadotani H, Taniguchi M, Takahashi, Inoue Y: Genetic approach to sleep-disordered breathing.

Sleep and Biological Rhythms 2, S49, 2004

3. 角谷寛: 高二酸化炭素･低酸素の自動制御によるマウス睡眠障害システム。 三共生命科学研究振興財団研究報告集 20, 66-71, 2004
4. Tsuchiya Y, Minami I, Kadotani H, Nishida E: Resetting of peripheral circadian clock by prostaglandin E2. *EMBO Report* 6, 256-61, 2005
5. 福原俊一, 竹上未紗, 鈴鴨よしみ, 陳和夫, 井上雄一, 角谷寛, 岡靖哲, 野口裕之, 脇田貴文, 並川努, 中村敬哉, 三嶋理晃, Murray W. Johns: 日本語版the Epworth Sleepiness Scale (JESS)～これまで使用されていた多くの「日本語版」との主な差異と改訂～. 日呼吸会誌, 44, 896-898, 2006

亀井 康富

1. Takahashi, N., Kawada, T., Yamamoto, T. Gotoh, T., Taimatsu, A., Yokohama, K., Kamei Y., and Fushiki, T.: Overexpression and ribozyme-mediated targeting of transcriptional coactivators, CBP and p300, revealed their indispensable roles in adipocyte differentiation through the regulation of PPAR-gamma. *J. Biol. Chem.* 277, 16906-16912, 2002
2. Kamei Y., Mizukami, J., Miura, S., Suzuki, M., Takahashi, N., Kawada, T. Taniguchi, T. and Ezaki, O.: A forkhead transcription factor FKHR up-regulates lipoprotein lipase expression in skeletal muscle. *FEBS Lett.* 536, 232-236, 2003
3. Kamei, Y. Miura, S., Suzuki, M., Kai, Y. Mizukami, J. Taniguchi, T. Mochida, K., Hata, T., Matsuda, J. Aburatani, H., Nishino, I. and Ezaki, O.: Skeletal muscle FOXO1 (FKHR)-transgenic mice have less skeletal muscle mass, down-regulated type I (slow twitch / red muscle) fiber genes. *J. Biol. Chem.* 279, 41114-41123, 2004
4. Kamei, Y., Lwin, H., Saito, K., Yokoyama, T., Yoshiike, N., Ezaki, O., and Tanaka, H. The 2.3 genotype of ESRRA23, a 23-bp sequence in the 5'-flanking region of the ERRalpha gene, is associated with a higher body mass index than the 2.2 genotype. *Obesity Research* 13:1843-1844, 2005.
5. Kamei, Y., Suzuki, M., Miyazaki, H., Tsuboyama-Kasaoka, N., Wu, J., Ishimi, Y., and Ezaki, O.: Ovariectomy in mice decreases lipid metabolism-related gene expression in adipose tissue and skeletal muscle with increased body fat. *J. Nutr. Sci. Vitaminol.* 51, 110-117, 2005

後藤 聡

1. Yano, H., Yamamoto-Hino, M., Abe, M., Kuwahara, R., Haraguchi, S., Toyoda, A., and Goto, S.: Distinct functional blocks of the Golgi complex in Drosophila cells. *Proc. Natl. Acad. Sci. USA* 102, 13467-13472 (2005)
2. Goto, S.: Regulation of glycosylation by Golgi units. Trends in Glycoscience and Glycotechnology (in press)

佐々木 雄彦

1. J. Sasaki, T. Sasaki, M. Yamazaki, K.. Matsuoka,C. Taya, H. Shitara, S. Takasuga, M. Nishio, K. Mizuno, T. Wada, H. Miyazaki, H. Watanabe, R. Iizuka, S. Kubo, S. Murata, T. Chiba, T. Maehama, K. Hamada, H. Kishimoto, M. Frohman, K. Tanaka, J. Penninger, H. Yonekawa, A. Suzuki & Y. Kanaho, Y: Regulation of anaphylactic responses by phosphatidylinositol phosphate kinase type I α. *J. Exp. Med.,* 201, 859–870 (2005) (1st co–author and corresponding author)
2. K. Hamada, T. Sasaki, P. Koni, M. Natsui, H. Kishimoto, J. Sasaki, N. Yajima, Y. Horie, G. Hasegawa,M. Naito,J. Miyazaki, T. Suda, H. Itoh, K. Nakao, T. Mak, T. Nakano & A. Suzuki: The PTEN/PI3K pathway governs normal vascular development and tumor angiogenesis. *Genes & Dev.* 19, 2054–2065 (2005)
3. M. Zhao, B. Song, J. Pu, T. Wada, B. Reid, G. Tai, F. Wang, A. Guo,P. Walczysko, Y. Gu, T. Sasaki, A. Suzuki, J. Forrester, H. Bourne, P. Devreotes, C. McCaig & J. Penninger: Electrical signals control wound healing through phosphatidylinositol–3–OH kinase–γ and PTEN. *Nature*, 442,457–460 (2006)
4. J. Ferguson, L. Milne, S. Kulkarni, T. Sasaki, S. Walker, S. Andrews, T. Crabbe, P. Finan, G. Jones, S. Jackson, M. Camps, C. Rommel, M. Wymann, E. Hirsch, P. Hawkins & L. Stephens: PI(3)Kγ has an important, context–dependent role in chemokinesis, but not in gradient–biased migration in neutrophils. *Nature Cell Biol.* (in press)
6. M. Nishio, K. Watanabe, J. Sasaki, C. Taya, S. Takasuga, R. Iizuka, T. Balla, M. Yamazaki, H. Watanabe, R. Itoh, S. Kuroda, Y. Horie, I. Förster, T. Mak, H. Yonekawa, J. Penninger, Y. Kanaho, A. Suzuki A. & T. Sasaki: Control of cell polarity and motility by the PI(3,4,5)P_3 phosphatase SHIP1. *Nature Cell Biol.* (in press)

武川 睦寛

1. Takekawa,M., Tatebayashi,K., Itoh,F., Adachi,M., Imai,K. and Saito,H.: Smad–dependent GADD45β expression mediates delayed activation of p38 MAP kinase by TGF–β. *EMBO J.* 21, 6473–6482 (2002).
2. Sakon,S., Xue,X., Takekawa,M., Sasazuki,T., Okazaki,T., Kojima,Y., PiaJ–H., Yagita,H., Okumura,K., Doi,T. and Nakano,H.: NF–κB inhibits TNF–induced accumulation of ROS that mediate prolonged MAPK activation and necrotic cell death. *EMBO J.* 22, 3898–3909 (2003).
3. Tatebayashi,K., Takekawa,M., and Saito,H.: A docking site that determining specificity of Pbs2 MAPKK to Ssk2/Ssk22 MAPKKKs in yeast HOG pathway. *EMBO J.* 22, 3624–3634, (2003).
4. Chi,H., Lu,B., Takekawa,M., Davis,R.J., and Flavell,R.A.: GADD45β/GADD45γ and MEKK4 comprise a genetic pathway mediating STAT–independent IFNγ production in T cells.

EMBO J. 23, 1576–1586 (2004).

5. Takekawa,M., Tatebayashi,K., and Saito,H.: Conserved docking site is essential for activation of mammalian MAP kinase kinases by specific MAP kinase kinase kinases.
Molecular Cell, 18, 295–306 (2005).

門叶 冬樹

1. F. Tokanai, T. Atsumi, T. Endo, Y. Fujita, Y. Ohishi, T. Okada, H. Sakurai, S. Gunji, S. Kishimoto: Developments of optical imaging capillary plate gas detector.
Nucl. Instr. and Meth. A, 567: 376–380, 2006
2. F. Tokanai, T. Atsumi, S. Gunji, T. Okada, H. Sakurai: Soda glass capillary plate gas detector, *IEEE Trans. on Nucl. Sci.*, 2004 （In press）
3. H. Sakurai, S. Gunji, F. Tokanai, T. Maeda, N. Ujiie, N. Saitoh: Characteristics of an X-ray Imaging Detector with Double Capillary Plates.
Nucl. Instr. and Meth. A, 513: 282–286, 2003.
4. H. Sakurai, S. Gunji, F. Tokanai, T. Maeda, N. Ujiie, N. Saitoh: Photoelectron Track Image of Capillary Gas Proportional Counter. *Nucl. Instr. and Meth.* A, 505: 219–222, 2003.
5. H. Sakurai, S. Gunji, F. Tokanai, Y. Inoue, T. Maeda, T. Masuda: Detection of photoabsorpion point with capillary imaging gas proportiocal counter.
IEEE Nucl. Trans. Sci., 49(No.3): 1560–1565, 2002

中田 和人

1. K. Nakada*, A. Sato*, K. Yoshida, T. Morita, H. Tanaka, S.-I. Inoue, H. Yonekawa, and J.-I. Yonekawa: Mitochondria-related male infertility.
Proc. Natl. Acad. Sci. USA, 103: 15148–15153 (2006). (*These authors contributed equally.)
2. A. Sato. T. Kono, K. Nakada, K. Ishikawa, S.-I. Inoue, H. Yonekawa, and J.-I. Hayashi: Gene therapy for progeny of mito-mice carrying pathogenic mtDNA by nuclear transplantation..
Proc. Natl. Acad. Sci. USA, 102(46):16765–16770.
3. A. Sato*, K. Nakada*, M. Akimoto, K. Ishikawa, T. Ono, H. Shitara, H. Yonekawa, and J.-I. Hayashi: Rare creation of recombinant mtDNA haplotypes in mammalian tissues.
Proc. Natl. Acad. Sci. USA, 102: 6057–6062 (2005). (*These authors contributed equally.)
4. K. Nakada*, A. Sato*, H. Sone, A. Kasahara, K. Ikeda, Y. Kagawa, H. Yonekawa, and J.-I. Hayashi: Acumulation of pathogenic △mtDNA induced deafness but not diabetic phenotypes in mito-mice. *Biochem. Biophys. Res. Commun.*, 323: 175–184. (2004). (*These authors contributed equally.)
5. A. Sato, K. Nakada, H. Shitara, H. Yonekawa, and J.-I. Hayashi: *In vivo* interaction between mitochondria carrying mtDNAs from different mouse species.

Genetics, 167: 1855–1861. (2004).

山口 雄輝

1. Yamaguchi, Y., Inukai, N., Narita, T., Wada, T., and Handa, H.: Evidence that negative elongation factor represses transcription elongation through binding to a DRB sensitivity-inducing factor/RNA polymerase II complex and RNA. *Mol. Cell. Biol.* 22, 2918–2927. (2002)
2. Narita, T.*, Yamaguchi, Y.*, Yano, K., Sugimoto, S., Chanarat, S., Wada, T., Kim, D., Hasegawa, J., Omori, M., Inukai, N., Endoh, M., Yamada, T., and Handa, H.: Human transcription elongation factor NELF: Identification of novel subunits and reconstitution of the functionally active complex. *Mol. Cell. Biol.* 23, 1863–1873. (2003) (*筆頭著者).
3. Wu, C.-H., Yamaguchi, Y., Benjamin, L.R., Horvat-Gordon, M., Washinski, J., Enerly, E., Larsson, J., Lambertsson, A., Handa, H., and Gilmour, D.S.: NELF and DSIF cause promoter proximal pausing on the hsp70 promoter in Drosophila. *Genes Dev.* 17, 1402–1414. (2003)
4. Jennings, B.H., Shah, S., Yamaguchi, Y., Seki, M., Phillips, R.G., Handa, H., and Ish-Horowicz, D. Locus-specific requirements for Spt5 in transcriptional activation and repression in *Drosophila*. *Curr. Biol.* 14, 1680–1684. (2004)
5. Yamada, T.*, Yamaguchi, Y.*, Inukai, N., Kamijo, S., Mura, T. and Handa, H. P-TEFb-mediated phosphorylation of the hSpt5 C-terminal repeats is critical to processive transcription elongation. *Mol. Cell* 21, 227–237. (2006) (*筆頭著者).

吉田 秀郎

1. *Yoshida, H., Oku, M., Suzuki, M., and Mori, K. (2006) pXBP1(U) encoded in XBP1 pre-mRNA negatively regulates unfolded protein response activator pXBP1(S) in mammalian ER stress response. *J. Cell Biol. 172*, 565–575. (*Corresponding author)
2. Yoshida, H., Nadanaka, S., and Mori, K. (2006) XBP1 is critical to protection of cells from endoplasmic reticulum stress. *Cell Struct. Funct.*, in press.
3. Nadanaka, S., Yoshida, H. and Mori, K. (2006) A role of disulfide bridges formed in the luminal domain of ATF6 in sensing endoplasmic reticulum stress. *Mol. Cell. Biol.*, in press.
4. Oda, Y., Okada, T., Yoshida, H., Kaufman, R. J., Nagata, K., and Mori, K. (2006) Derlin-2 and Derlin-3 are regulated by the mammalian unfolded protein response and are required for ER-associated degradation. *J. Cell Biol. 172,* 383–393.
5. Yoshida, H., Matsui, T., Hosokawa, N., Kaufman, R. J., Nagata, K., and Mori, K. (2003). A time-dependent phase shift in the mammalian unfolded protein response. *Dev. Cell. 4*, 265–271.

平成 17 年度終了研究者

秋光 和也

1. Isshiki, A., Ohtani, K., Kyo, M., Yamamoto, H. and Akimitsu, K. Green fluorescent detection of fungal colonization and endopolygalacturonase gene expression in the interaction of *Alternaria citri* with citrus. *Phytopathology* 93: 768–773 (2003).
2. Gomi, K., Yamamoto, H. and Akimitsu, K. Epoxide hydrolase: A mRNA induced by a fungal pathogen *Alternaria alternata* on rough lemon (*Citrus jambhiri* Lush). *Plant Molecular Biology* 53: 189–199 (2003).
3. Akimitsu, K., Peever, T.L. and Timmer, L.W. Molecular, ecological and evolutionary approaches to understanding Alternaria diseases of citrus. *Molecular Plant Pathology*: 4, 435–446 (2003).
4. Masunaka, A., Ohtani, K., Peever, T.L., Timmer, L.W., Tsuge, T., Yamamoto, M., Yamamoto, H., and Akimitsu, K. An isolate of *Alternaria alternata* that is pathogenic to both tangerines and rough lemon and produces two host-selective toxins, ACT- and ACR-toxins. *Phytopathology* 95: 241–247 (2005).
5. Tsukuda, S., Gomi, K., Yamamoto, H., and Akimitsu, K.: Characterization of cDNAs encoding two distinct miraculin-like proteins and stress-related modulation of the corresponding mRNAs in *Citrus jambhiri* Lush. *Plant Mol. Biol.* 60: 125–136 (2006).

石井 浩二郎

1. Ishii, K. and Laemmli, U. K.: Structural and dynamic functions establish chromatin domains. *Molecular Cell* 11: 237–248, 2003
2. Saitoh, S., Ishii, K., Kobayashi, Y. and Takahashi, K.: Spindle checkpoint signaling requires the Mis6 kinetochore subcomplex, which interacts with Mad2 and mitotic spindles. *Molecular Biology of the Cell* 16: 3666–3677, 2005

曽根 雅紀

1. M. Yoshizawa, M. Sone, N. Matsuo, T. Nagase, O. Ohara, Y. Nabeshima and M. Hoshino: Dynamic and coordinated expression profile of Dbl-family guanine nucleotide exchange factors in the developing mouse brain. *Gene Expr.* Pat. 3: 375–381, 2003
2. M. Yoshizawa, M. Sone*, T. Kawauchi*, Y. V. Nishimura, M. Terao, K. Chihama, Y. Nabeshima and M. Hoshino: Involvement of a Rac activator, P-Rex1, in neurotrophin-derived signaling and neuronal migration. *J. Neurosci.* 25: 4406–4409, 2005 (* : equal contribution)
3. M. Hoshino, S. Nakamura, K. Mori, T. Kawauchi, M. Terao, Y. V. Nishimura, A. Fukuda, T. Fuse, N. Matsuo, M. Sone, M. Watanabe, H. Bito, T. Terashima, C. V. E. Wright, Y. Kawaguchi, K. Nakao and Y. Nabeshima: *Ptf1a*, a bHLH transcriptional gene, defines GABAergic neuronal fates in cerebellum. *Neuron* 47: 201–213, 2005

高橋 倫子

1. N. Takahashi, H. Hatakeyama, H. Okado, A. Miwa, T. Kishimoto, T. Kojima, T. Abe, H. Kasai: Sequential exocytosis of insulin granules is associated with redistribution of SNAP25. *J. Cell Biol.* 165: 255–262, 2004
2. H. Kasai H., H. Hatakeyama, T. Kishimoto, T.–T. Liu., T. Nemoto, N. Takahashi: A new quantitative (TEPIQ) analysis for diameters of exocytic vesicles and its application to pancreatic islets. *J. Physiol.* 568: 891–903, 2005
3. K. Kasai, M. Ohara–Imaizumi, N. Takahashi, S. Mizutani, S. Zhao, T. Kikuta, H. Kasai, S. Nagamatsu, H. Gomi, T. Izumi: Rab27a mediates the tight docking of insulin granules onto the plasma membrane during glucose stimulation. *J. Clin. Invest.* 115: 388–396, 2005
4. H. Hatakeyama, T. Kishimoto, T. Nemoto, H. Kasai, N. Takahashi: Rapid glucose sensing by protein kinase A for insulin exocytosis in pancreatic islets. *J. Physiol.* 570: 271–82, 2006.
5. Kishimoto T., Kimura R., Liu T.T., Nemoto T., Takahashi N., Kasai H: Vacuolar sequential exocytosis of large dense–core vesicles in adrenal medulla. *EMBO J.* 25: 673–682, 2006.

茶野 徳宏

1. Chano T, Saji M, Inoue H, et al. Neuromuscular abundance of RB1CC1 contributes the non–proliferating enlarged cell phenotype through both RB1 maintenance and TSC1 degradation. *Int J Mol Med.* 18(3): 425–32, 2006.
2. Watanabe R, Tambe Y, Inoue H, Isono T, Haneda M, Isobe K, Kobayashi T, Hino O, Okabe H, Chano–T. GADD34 inhibits mTOR signaling via TSC and controls cell survival under bioenergetic stress. *Int J Mol Med.* 19: in press.(2007)
3. Kawakami T, Chano T, Minami K, Okabe H, Okada Y, Okamoto K. Imprinted DLK1 is a putative tumor suppressor gene and inactivated by epimutation at the region upstream of GTL2 in human renal cell carcinoma. *Hum Mol Genet.* 15(6): 821–30, 2006
4. Watanabe R, Chano T, Inoue H, Isono T, Koiwai O, Okabe H. Rb1cc1 is critical for myoblast differentiation through Rb1 regulation. *Virchows Arch.* 447(3): 643–8, 2005.
5. Tambe Y, Yoshioka–Yamashita A, Mukaisho KI, Haraguchi S, Chano T, Isono T, Kawai T, Suzuki Y, Kushima R, Hattori T, Goto M, Yamada S, Kiso M, Saga Y, Inoue H. Tumor prone phenotype of mice deficient in a novel apoptosis–inducing gene, *drs. Carcinogenesis* 2006; Nov 4 [Epub ahead of print]

豊田 英尚

1. H. Morio, Y. Honda, H. Toyoda, M. Nakajima, H. Kurosawa and T. Shirasawa: EXT gene family member *rib–2* is essential for embryonic development and heparan sulfate biosynthesis in

Caenorhabditis elegans. *Biochem. Biophys. Res. Commun*. 301: 317–23, 2003

2. H. Barth, C. Schafer, M.I. Adah, F. Zhang, R.J. Linhardt, H. Toyoda, A. Kinoshita–Toyoda, T. Toida, T.H. Van Kuppevelt, E. Depla, F. Von Weizsacker, H.E. Blum and T.F. Baumert: Cellular binding of hepatitis C virus envelope glycoprotein E2 requires cell surface heparan sulfate. *J. Biol. Chem*. 278: 41003–41012, 2003
3. S. Nishihara, R. Ueda, S. Goto, H. Toyoda, H. Ishida and M. Nakamura: Approach for functional analysis of glycan using RNA interference. *Glycoconj. J*. 21: 63–68, 2004
4. P. Vongchan, M. Warda, H. Toyoda, T. Toida, R.M. Marks and R.J. Linhardt: Structural characterization of human liver heparan sulfate. *Biochim. Biophys. Acta* 1721: 1–8, 2005
5. E. Goda, S. Kamiyama, T. Uno, H. Yoshida, M. Ueyama, A. Kinoshita–Toyoda, H. Toyoda, R. Ueda and S. Nishihara: Identification and characterization of a novel *Drosophila* 3'–phosphoadenosine 5'–phosphosulfate transporter. *J. Biol. Chem*. 281: 28508–28517, 2006

西 毅

1. Y. Kubo, S. Sekiya, M. Ohigashi, C. Takenaka, K. Tamura, S. Nada, T. Nishi, A. Yamamoto and A. Yamaguchi: ABCA5 resides in lysosomes and ABCA5 knockout mice develop lysosomal disease–like symptoms. *Mol. Cell. Biol*. 25: 4138–4149, 2005
2. 西　毅：サブユニットアイソフォームによる V–ATPase の局在と活性の制御。
   生化学 77: 354–358, 2005
3. 横山　謙、西　毅：精巧で巧妙な仕組みを持つプロトンポンプ、V 型 ATPase。
   蛋白質　核酸　酵素 49: 2035–2043, 2004

平井 宏和

1. Torashima T, Okoyama S, Nishizaki T, Hirai H. Exposure of lentiviral vectors to subneutral pH shifts the tropism from Purkinje cell to Bergmann glia. *European Journal of Neuroscience* 24:371–380, 2006
2. Torashima T, Okoyama S, Nishizaki T, Hirai H. In vivo transduction of murine cerebellar Purkinje cells by HIV–derived lentiviral vectors. *Brain Research* 1082(1):11–22, 2006
3. Qin Q, Inatome R, Hotta A, Kojima M, Yamamura H, Hirai H, Yoshizawa T, Tanaka H, Fukami K, and Yanagi S. A novel GTPase, CRAG, mediates PML–associated nuclear body formation and degradation of expanded polyglutamine protein. *Journal of Cell Biology* 172:497–504, 2006
4. Hirai H, Zeng P, Bao D, Miyazaki T, Li L, Miura E, Parris J, Rong Y, Watanabe M, Yuzaki Y, Morgan JI.: Cbln1 is essential for synaptic integrity and information processing in the cerebellum. *Nature Neuroscience* 8:1534–1541, 2005
5. Hirai H, Launey T, Mikawa S, Torashima T, Yanagihara D, Kasaura T, Miyamoto A, Yuzaki M.: New role of delta2–glutamate receptors in AMPA receptor trafficking and cerebellar function.

Nature Neuroscience 6: 869-876, 2003

牧野 雄一

1. Makiko Matsumoto, Yuichi Makino, Tetsuhiro Tanaka, Hirotoshi Tanaka, Nobuhiro Ishizaka, Eisei Noiri, Toshiro Fujita, and Masaomi Nangaku. Induction of Renoprotective gene expression by cobalt ameliorates ischemic injury of the kidney in rats. *J. Am. Soc. Nephrol*, 14: 1825-1832 (2003)
2. Tsunenori Kodama, Noriaki Shimizu, Noritada Yoshikawa, Yuichi Makino, Rika Ouchida, Kensaku Okamoto, Testuya Hisada, Hiroshi Nakamura, Chikao Morimoto, and Hirotoshi Tanaka. Role of the glucocorticoid receptor for regulation of hypoxia-dependent geen expression. *J. Biol. Chem.*, 278: 33384-33391 (2003)
3. Yuichi Makino, Hiroshi Nakamura, Eiji Ikeda, Kei Ohnuma, Kenji Yamauchi, Yuataka Yabe, Lorenz Poellinger, Yasunori Okada, Chikao Morimoto, and Hirotoshi Tanaka Hypoxia-inducble factor regulates survival of antigen receptor-driven T cells
   J. Immunol., 171: 6534-6540 (2003)
4. Helene Ameln, Thomas Gustafsson, Carl Johan Sundberg, Lorenz Poellinger, Eva Jansson, and Yuichi Makino, Physiological activation of hypoxia-inducible factor-1 in human skeletal muscle *FASEB J.*, 19: 1009-1011 (2005)
5. Hiroshi Nakamura, Yuichi Makino, Kensaku Okamoto, Lorenz Poellinger, Kei Ohnuma, Chikao Morimoto, and Hirotoshi Tanaka TCR-engagement increases HIF-1a protein synthesis via rapamycin-sensitive pathway under hypoxic conditions in human peripheral T cells *J. Immunol.,* 174: 7592-7599 (2005)

宮戸 健二

1. Takeda Y, Tachibana I, Miyado K, Kobayashi M, Miyazaki T, Funakoshi T, Kimura H, Yamane H, Saito Y, Goto H, Yoneda T, Yoshida M, Kumagai T, Osaki T, Hayashi S, Kawase I, Mekada E. Tetraspanins CD9 and CD81 function to prevent the fusion of blood monocytes/alveolar macrophages. *J Cell Biol,* 100: 3221-6 (2003).
2. Ishibashi T, Ding L, Ikenaka K, Inoue Y, Miyado K, Mekada E, Baba H Tetraspanin protein CD9 is a novel paranodal component regulating paranodal junctional formation. *J Neurosci*, 24: 96-102 (2004).
3. Nakanishi T, Kubota H, Ishibashi N, Kumagai S, Watanabe H, Yamashita M, Kashiwabara S, Miyado K, Baba T. Functional role of mouse poly(A) polymerase mGLD-2 during oocyte maturation. *Dev Biol*, 289: 115-26 (2006).

渡辺 英治

1. Watanabe, U., Shimura, T., Sako, N., Kitagawa, J., Shingai, T. Watanabe, E., Noda, M. and Yamamoto, T., A comparison of voluntary salt-intake behavior in Nax-gene deficient and wild-type mice with reference to peripheral taste inputs.
   Brain Research 967, 247-256 (2003)
2. Hiyama, T.Y., Watanabe, E., Okado, H. and Noda, M., The subfornical organ is the primary locus of sodium-level sensing by Nax sodium channels for the control of salt-intake behavior. *Journal of Neuroscience* 24, 9276-9281 (2004)
3. Niisato, K., Fujikawa, A., Komai, S., Shintani, T., Watanabe, E., Sakaguchi, G., Katsuura, G., Manabe, T. and Noda, M., Age-dependent enhancement of hippocampal LTP and impairment of spatial learning through the ROCK pathway in protein tyrosine phosphatase receptor type Z-deficient mice. *Journal of Neuroscience* 25, 1081-1088 (2005)
4. Watanabe, E., Hiyama, T.Y., Shimizu, H., Kodama, R., Hayashi, N., Miyata, S., Yanagawa, Y., Obata, K., and Noda, M., Sodium-level-sensitive sodium channel Nax is expressed in glial laminate processes in the sensory circumventricular organs. *American Journal of Physiology* 290, R568-R576 (2006)

平成 18 年度終了研究者

齋藤 通紀

1. Yabuta, Y., Kurimoto, K., Ohinata, Y., Seki, Y., and Saitou, M. (2006). Gene expression dynamics during germline specification in mice identified by quantitative single-cell gene expression profiling. *Biol. Reprod.*, 75, 705-716
2. Kurimoto, K., Yabuta, Y., Ohinata, Y., Ono, Y., Uno, D. K., Yamada, R. G., Ueda, H. R., and Saitou, M. (2006). An improved single-cell cDNA amplification method for efficient high-density oligonucleotide microarray analysis. *Nuc. Acids Res.*, 34, e42.
3. *Saitou, M., Payer, B., O'Carroll, D., Ohinata, Y., and *Surani, M. A. (2005). Blimp1 and the emergence of the germ line during development in the mouse. *Cell Cycle*, 4, 1736-1740.
   * Co-correspondence
4. Ohinata, Y., Payer, B., O'Carroll, D., Ancelin, K., Ono, Y., Sano, M., Barton, S. C., Obukhanych, T., Nussenzweig, M., Tarakhovsky, A., *Saitou, M., and *Surani, M. A. (2005). Blimp1 is a critical determinant of the germ cell lineage in mice. *Nature*, 436, 207-213.
   * Co-correspondence
5. Seki, Y., Hayashi, K., Itoh, K., Mizugaki, M., Saitou, M., and Matsui, Y. (2005). Extensive and orderly reprogramming of genome-wide chromatin modifications associated with specification and early development of germ cells in mice. *Dev. Biol.* 278, 440-458.

白根 道子

1. Wang, H. Q., Nakaya, Y., Du, Z., Yamane, T., Shirane, M., Kudo, T., Takeda, M., Takebayashi, K., Noda, Y., Nakayama, K. I., Nishimura, M.: Interaction of presenilins with FKBP38 promotes apoptosis by reducing mitochondrial Bcl-2. *Hum. Mol. Genet*. 14: 1889-1902, 2005
2. Shirane, M., and Nakayama, K.-i.: Protrudin induces neurite formation by directional membrane trafficking. *Science*. 314: 818-821, 2006

豊田 実

1. Suzuki H, Watkins DN, Jair KW, Schuebel KE, Markowitz SD, Chen WD, Pretlow TP, Yang B, Akiyama Y, Van Engeland M, Toyota M, Tokino T, Hinoda Y, Imai K, Herman JG, Baylin SB.: Epigenetic inactivation of SFRP's complements genetic alterations to allow constitutive Wnt pathway signaling in human colorectal cancer. *Nat Genet* 36, 417-422 (2004)
2. Ogi K, Toyota M, Mita H, Satoh A, Kashima L, Sasaki Y, Suzuki H, Akino K, Noguchi M, Shinomura Y, Imai K, Hiratsuka H and Tokino T: Small interfering RNA-induced CHFR silencing sensitizes oral squamous cell cancer cells to microtubule inhibitors. *Cancer Biol. Ther.* 4, 773-780 (2005)
3. Akino K, Toyota M, Suzuki H, Mita H, Sasaki Y, Ohe-Toyota M, Issa JP, Hinoda Y, Imai K, Tokino T: The RAS effector RASSF2 is a novel tumor suppressor in colorectal cancer. *Gastroenterol* 129, 156-169 (2005)
4. Kusano M, Toyota M, Suzuki H, Akino K, Aoki F, Fujita M, Hosokawa M, Shinomura Y, Imai K, Tokino T: Genetic, epigenetic and clinicopathological features of gastric cancers with CpG island methylator phenotype and an association with Epstein-Barr virus. *Cancer* 106, 1467-1479 (2006)
5. Maruyama R, Aoki F, Toyota M, Sasaki Y, Akashi H, Mita H, Suzuki H, Akino K, Ohe-Toyota M, Maruyama Y, Tatsumi H, Imai K, Shinomura Y, Tokino T: Comparative genome analysis identified the vitamin D receptor gene as a direct target of p53-mediated transcriptional activation. *Cancer Res*. 66, 4574-4583 (2006)

東山 繁樹

1. Sahin, U., Weskamp, G., Zhou, H., Higashiyama, S., Peschon, J., Hartmann, D., Safting, P. and Blobel, C.P.: Distinct roles for ADAM10 and 17 in ectodomain shedding of six EGFR-ligands. *J. Cell Biol.* 164:769-779, 2004.
2. Tanaka, M., Nanba, D., Mori, S., Shiba F., Ishiguro, H., Yoshino, K., Matsuura, N. and Higashiyama, S.: ADAM-binding protein Eve-1 is required for ectodomain shedding of EGF receptor ligands. *J. Biol. Chem.* 279; 41950-*41959,* 2004.
3. Toki, F., Nanba, D., Matsuura, N. and Higashiyama, S.: Ectodomain shedding of

membrane-anchored heparin-binding EGF like growth factor and subcellular localization of the C-terminal fragment in a cell cycle. *J.Cell. Physiol.* 202: 839-848, 2005.

4. Shirakata, Y., Kimura, R., Nanba, D., Morimoto, C., Yokota, K., Nakamura, M., Mekada, E., Higashiyama, S., and Hashimoto, K.: Heparin-binding EGF-like growth factor is essential for keratinocyte migration in skin wound healing. *J. Cell Science.* 118: 2363-2370, 2005.
5. Shiraishi, K., Yamasaki, K., Nanba, D., Inoue, H., Hanakawa, Y., Shirakata, Y., Hashimoto, K., and Higashiyama, S.: Pbx1is a major target of PLZF-mediated melanoma cell growth suppression. *Oncogene.* in press, 2006.

廣瀬 哲郎

1. Hirose, T., Ideue, T., Nagai, M., Hagiwara, M., Shu, M-D., Steitz, J.A. A spliceosomal intron binding protein, IBP160, links position-dependent assembly of intron-encoded box C/D snoRNP to pre-mRNA splicing. *Mol. Cell.* 23, 673-684. (2006)
2. Hirose, T., Shu, M-D., Steitz, J. A. Splicing of U12-type introns deposits an exon junction complex competent to induce nonsense-mediated mRNA decay. *Proc. Natl. Acad. Sci. USA.* 101, 17976-17981 (2004)

三木 裕明

1. Funato, Y., Michiue, T., Asashima, M., and Miki, H. Nucleoredoxin, a thioredoxin-related redox-regulating protein, inhibits Wnt/beta-catenin signaling through Dishevelled. *Nat. Cell Biol.* 8, 501-508 (2006)
2. Oda, A., Miki, H., Wada, I., Yamaguchi, H., Yamazaki, D., Suetsugu, S., Nakajima, M., Nakayama, A., Okawa, K., Miyazaki, H., Matsuno, K., Ochs, H. D., Machesky, L. .M, Fujita, H., and Takenawa, T. WAVE/Scars in Platelets. *Blood* 105, 3141-3148 (2005)
3. Yamaguchi, H., Lorenz, M., Kempiak, S., Sarmiento, C., Coniglio, S., Symons, M., Segall, J., Eddy, R., Miki, H., Takenawa, T., and Condeelis, J. Molecular mechanisms of invadopodium formation: the role of the N-WASP-Arp2/3 complex pathway and cofilin. *J. Cell Biol.* 168, 441-452 (2005)
4. Kawamura, K., Takano, K., Suetsugu, S., Kurisu, S., Yamazaki, D., Miki, H., Takenawa, T., and Endo, T. N-WASP and WAVE2 acting downstream of phosphatidylinositol 3-kinase are required for myogenic cell migration induced by hepatocyte growth factor. *J. Biol. Chem.* 279, 54862-54871 (2004)
5. Funato, Y., Terabayashi, T., Suenaga, N., Seiki, M., Takenawa, T., and Miki, H. IRSp53/Eps8 complex is important for positive regulation of Rac and cancer cell motility/invasiveness. *Cancer Res.* 64, 5237-5244 (2004)

村田 茂穂

1. Hirano, Y., Hendil, K., Yashiroda, H., Iemura, S., Nagane, R., Hioki, Y., Natsume, T., Tanaka, K. and Murata, S. A heterodimeric complex that promotes the assembly of mammalian 20S proteasomes. *Nature* 2005, 437: 1381–1385.
2. Komatsu, M., Waguri, S., Chiba, T., Murata, S., Iwata, J., Tanida, I., Ueno, T., Koike, M., Uchiyama, Y., Kominami, E., and Tanaka, K. Loss of autophagy in the central nervous system causes neurodegeneration in mice. *Nature* 2006, 441: 880–884.
3. Kirisako, T., Kamei, K., Murata, S., Kato, M., Fukumoto, H., Kanie, M., Sano, S., Tokunaga, F., Tanaka, K., and Iwai, K. A ubiquitin ligase complex assembles linear polyubiquitin chains. *EMBO J* 2006, 25: 4877–4887
4. Hamazaki, J., Iemura, S., Natsume, T., Yashiroda, H., Tanaka, K., and Murata, S. A novel proteasome interacting protein recruits UCH37 to 26S proteasomes. *EMBO J* 2006, 25: 4524–4536.
5. Hirano, Y., Hayashi, H., Iemura, S., Hendil, KB., Niwa, S., Kishimoto, T., Kasahara, M., Natsume, T., Tanaka, K., and Murata, S. Cooperation of multiple chaperones required for the assembly of mammalian 20S proteasomes. *Mol Cell* 2006, *in press*.

山下 潤

1. Hiraoka-Kanie M, Miyagishi M, Yamashita JK. Differentiation stage-specific analysis of gene function with inducible short hair-pin RNA in differentiating embryonic stem cells. *Biochem Biophys Res Commun*, 351: 669-674, 2006.
2. Yurugi-Kobayashi T, Itoh H, Schroeder T, Nakano A, Narazaki G, Kita F, Yanagi K, Hiraoka-Kanie M, Inoue E, Ara T, Nagasawa T, Just U, Nakao K, Nishikawa SI, Yamashita JK. Adrenomedullin/cyclic AMP pathway induces Notch activation and differentiation of arterial endothelial cells from vascular progenitors. *Arterioscler Thromb Vasc Biol*, 26: 1977-1984, 2006.
3. Kono T, Kubo H, Shimazu C, Ueda Y, Takahashi M, Yanagi K, Fujita N, Tsuruo T, Wada H, Yamashita JK. Differentiation of lymphatic endothelial cells from embryonic stem cells on OP9 stromal cells. *Arterioscler Thromb Vasc Biol*, 26: 2070-2076, 2006.
4. Yamashita JK, Takano M, Hiraoka-Kanie M, Shimazu C, Yan P, Yanagi K, Nakano A, Inoue E, Kita F, Nishikawa SI. Prospective identification of cardiac progenitor potentials by a novel single cell-based cardiomyocyte induction. *FASEB J*, 19: 1534-1536, 2005.

３．受賞等

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受賞者氏名	受賞日	授賞機関	賞の内容
阿部　高明	2002	胆汁酸研究会	ウルソ賞。 ヒト胆汁酸輸送機構にはヒト独自の有機アニオントランスポータ遺伝子が介在する。
阿部　高明	2002	持田医学薬学振興財団	研究奨励賞。 消化器固形癌に特異的に発現している有機アニオントランスポーターLST-2を用いた新規抗癌剤送達系の開発。
武川　睦寛	2003/9/27	日本癌学会	奨励賞 プロテインキナーゼ及びホスファターゼによるストレス応答シグナル制御機構の研究
吉田　秀郎	2003/10/16	日本生化学会	奨励賞。 高等動物の小胞体ストレス応答の分子機構
阿部　高明	2003	日本薬物動態学会	奨励賞。 有機アニオントランスポーター oatp/LST の同定と薬物輸送機構の解明。
阿部　高明	2003	東北医学会	東北医学会賞金賞。 有機アニオントランスポーター遺伝子群の発見とその臨床応用。
秋光　和也 他 3 名	2004/3/18	日本植物病理学会	論文賞 Characterization of a lipoxygenase gene in rough lemon induced by *Alternalia alternate*.
高橋　倫子	2004/4/16	科学技術映像祭	第 45 回科学技術映像祭　基礎研究部門文部科学大臣賞。 インスリン開口放出の謎を追う。
中田　和人	2004/5/15	文部科学省	文部科学大臣表彰「若手科学者賞」。 科学分野におけるミトコンドリア間相互作用の研究。

高橋　倫子	2004/6/3	日本生理学会	日本生理学会奨励賞。 インスリン開口放出機構の解析。
阿部　高明	2004	三共生命科学財団	研究奨励賞。 薬物トランスポーター遺伝子の機能解析と尿毒症物質除去システムの開発：腎薬物排泄機構を用いた新たな腎不全の診断と治療法の確立。
阿部　高明	2004	病態代謝研究会	研究奨励賞。 腎臓特異的薬物トランスポーター遺伝子の機能解析と尿毒症物質除去システムの開発。
阿部　高明	2004	宮城腎臓協会	研究奨励賞。 トランスポーターを用いた新たな腎不全の診断と治療法の確立。
門叶　冬樹	2005/6/23	4th International Conference on New Developments in Photodetection/France	Best poster prize。 Developments of optical imaging Capillary plate gas detector.
阿部　高明	2005	日本内分泌学会	奨励賞。 有機アニオントランスポーター遺伝子群の単離とその構造機能解析。
亀井　康富	2006/4/19	文部科学省	文部科学大臣表彰「若手科学者賞」。 基礎生物医学分野における遺伝子発現調節機構の研究。
亀井　康富	2006/5/28	日本栄養・食糧学会	奨励賞。 転写調節共役因子による生体機能制御。
村田　茂穂	2007/12/7	日本分子生物学会	三菱化学奨励賞。 哺乳類プロテアソームの多様性と分子基盤の解析。
廣瀬　哲郎	2006/12/15	病態代謝研究会	最優秀理事長賞。 核小体低分子 RNA による遺伝子発現のファインチューニング機構の解明。

４．シンポジウム等

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シンポジウム名	日時	場所	入場者数	特記事項
第1回研究成果報告会	2005/1/27	有楽町 国際フォーラム	97 名	高校生 3 名
第2回研究成果報告会	2006/2/2	東京大学 弥生講堂	61 名	高校生 3 名
第3回研究成果報告会	2007/2/2	東京大学 弥生講堂		

５．その他の重要事項（新聞・雑誌・テレビ等）

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研究者名	取材題材・表題	メディア名	掲載日
角谷　寛	ウインター・ブルー「冬季気分障害」 （NHK「今日の健康」11 月号）	NHK	2003/10/16
平井　宏和	難病「脊髄小脳変性症」治療用遺伝子を特定	北陸中日新聞	2004/1/26
角谷　寛	睡眠時無呼吸症候群マウスモデル実験系について	文教ニュース	2004/7/1
角谷　寛	ナルコレプシー	NHK 京都放送	2005/4/6
角谷　寛	睡眠時無呼吸症候群	NHK 京都放送	2005/4/13
吉田　秀郎	センサー型転写因子とセンサー型 RNase による生体防御ネットワークの解明	科学新聞	2005/9/9
平井　宏和	神経細胞間の結合を制御、生理活性物質を発見（Nature Neuroscience）	日刊工業新聞	2005/10/18
角谷　寛	睡眠時無呼吸症候群 成人男性の 13%	京都新聞	2005/11/1
平井　宏和	神経細胞結合促すタンパク質を特定、金大平井助教授など日米グループ（Nature Neuroscience）	北陸中日新聞	2005/10/19
平井　宏和	神経細胞結合促すタンパク質、金大など解明（Nature Neuroscience）	北國新聞	2005/10/19
平井　宏和	ニュース石川610「脳の情報伝達　金大“重要なタンパク質”発見」（Nature Neuroscience）	NHK 金沢放送局 （テレビ放映）	2005/10/19

角谷　寛	男性 13%は無呼吸症候群、京大助教授調査の推定値	日本経済新聞	2006/2/7
角谷　寛	寝ている間に呼吸が止まる！？ 成人男性は1／3？　睡眠呼吸障害(SDB)とは？	R25（リクルート）	2006/3/10
平井　宏和	脳の遺伝子治療に前進　無害化 HIV で神経細胞操作	北國新聞	2006/6/1
平井　宏和	無害化 HIV 使い小脳細胞狙い撃ち　金沢大	日本経済新聞	2006/6/12
角谷　寛	－京都　睡眠と健康のコホート研究－多数の専門領域が融合して睡眠障害の解明に当たる	Medical Tribune	2006/9/7
中田　和人	男性不妊　ミトコンドリア変異が一因（Proc. Natl. Acad. Sci. USA）	読売新聞	2006/10/3
中田　和人	男性不妊の原因 （Proc. Natl. Acad. Sci. USA）	毎日新聞	2006/10/3
中田　和人	遺伝子変異、男性不妊症の原因 （Proc. Natl. Acad. Sci. USA）	日本経済新聞	2006/10/3
中田　和人	ミトコンドリアゲノム変異が男性不妊の原因に（Proc. Natl. Acad. Sci. USA）	NHK	2006/10/3
中田　和人	男性不妊の一因解明 （Proc. Natl. Acad. Sci. USA）	朝日新聞	2006/10/13
秋光　和也	ミトコンドリア病発生制御分子の認識機構の解明	科学新聞	2006/12/1

６．事後評価結果（添付）

平成 16 年度「領域活動・評価報告書」

平成 17 年度「領域活動・評価報告書」

平成 18 年度「領域活動・評価報告書」