



Title	INFORMATION: Publications by the staff of the Graduate School of Veterinary Medicine
Citation	Japanese Journal of Veterinary Research, 59(1), 47-67
Issue Date	2011-02
Doc URL	<a href="http://hdl.handle.net/2115/44866">http://hdl.handle.net/2115/44866</a>
Type	bulletin (other)
File Information	JJVR59_1p047-067Publications.pdf



[Instructions for use](#)

## PUBLICATIONS BY THE STAFF OF THE GRADUATE SCHOOL OF VETERINARY MEDICINE

### Laboratory of Anatomy

#### Original articles

- 1) Elewa, Y. H., Bareedy, M. H., Abuel-Atta, A. A., Ichii, O., Otsuka, S., Kanazawa, T., Lee, SH., Hashimoto, Y. and Kon, Y. 2010. Structural characteristics of goat (*Capra hircus*) parotid salivary glands. *Jpn. J. Vet. Res.*, **58**: 121-135.
- 2) Elewa, Y. H., Bareedy, M. H., Abuel-Atta, A. A., Ichii, O., Otsuka, S., Kanazawa, T., Lee, SH., Hashimoto, Y. and Kon, Y. 2010. Cytoarchitectural differences of myoepithelial cells among goat major salivary glands. *Vet. Res. Commun.*, **34**: 557-567. (doi: 10.1007/s11259-010-9427-9)
- 3) Chihara, M., Otsuka, S., Ichii, O., Hashimoto, Y. and Kon Y. 2010. Molecular dynamics of the blood-testis barrier components during murine spermatogenesis. *Mol. Reprod. Dev.* **77**: 630-639. (doi: 10.1002/mrd.21200)
- 4) Kanazawa, T., Konno, A., Hashimoto, Y. and Kon Y. 2010. Hepatocyte nuclear factor 4 alpha is related to survival of the condensed mesenchyme in the developing mouse kidney. *Dev. Dyn.* **239**: 1145-1154. (doi: 10.1002/dvdy.22276)
- 5) Lee, SH., Otsuka, S., Ichii, O., Hashimoto, Y. and Kon, Y. 2010. Quantitative trait-locus analysis of ovarian cysts derived from rete ovarii in MRL/MpJ mice. *Mamm. Genome*, **21**: 162-171. (doi: 10.1007/s00335-010-9254-x)
- 6) Ichii, O., Kamikawa, A., Otsuka, S., Hashimoto, Y., Sasaki, N., Endoh, D. and Kon, Y. 2010. Overexpression of interferon-activated gene 202 (*Ifi202*) correlates with the progression of autoimmune glomerulonephritis associated with the MRL chromosome 1. *Lupus*, **19**: 897-905. (doi: 10.1177/0961203310362534)
- 7) Otsuka, S., Namiki, Y., Ichii, O., Hashimoto, Y., Sasaki, N., Endoh, D. and Kon, Y. 2010. Analysis of factors decreasing testis weight in MRL mice. *Mamm. Genome*, **21**: 153-161. (doi: 10.1007/s00335-010-9251-0)
- 8) Ichii, O., Otsuka, S., Hashimoto, Y., Sasaki, N., Ohta, H., Takiguchi, M., Yabuki, A., Endoh, D. and Kon, Y. 2010. Local overexpression of interleukin 1 family, member 6 relates to the development of tubulointerstitial lesions. *Lab. Invest.*, **90**: 459-475. (doi: 10.1038/labinvest.2009.148)
- 9) Oishi, T., Date, S., Shimamoto, Y., Saito, T., Hirota, K., Sugaya, T., Kon, Y., Fukamizu, A. and Tanimoto, K. 2010. A nuclear receptor, hepatocyte nuclear factor 4, differently contributes to the human and mouse angiotensinogen promoter activities. *J. Receptors Signal Transduction*, **30**: 484-492. (doi: 10.3109/10799893.2010.505240)

### Laboratory of Physiology

#### Original articles

- 1) Ponmanickam, P., Palanivelu, K., Govindaraj, S., Baburajendran, R., Habara, Y. and Archunan G. 2010. Identification of testosterone-dependent volatile compounds and proteins in the preputial gland of rat *Rattus norvegicus*. *Gen. Comp. Endocrinol.*, **167**: 35-43. (doi: 10.1016/j.ygcn.2010.03.001)

- 2) Kikuchi, M., Sakamoto, K. Q. and Sato, K. 2010. Acquisition of gliding skills by Weddell seal (*Leptonychotes weddellii*) pups during lactation. *Polar Biol.*, **33**: 1429-1435. (doi: 10.1007/s00300-010-0835-7)
- 3) Darwish, W. S., Ikenaka, Y., Eldaly, E. A., Ohno, M., Sakamoto, K. Q., Fujita, S. and Ishizuka, M. 2010. Cytochrome P450 1A-dependent activities in deer, cattle, and horses. *J. Vet. Med. Sci.*, **72**: 561-566. (doi: 10.1292/jvms.09-0318)
- 4) Watanuki, Y., Takahashi, A., Trathan, P. N., Wanless, S., Sakamoto, K. Q. and Sato, K. 2010. Regulation of wing or foot strokes in deep-diving seabirds: a comparison between South Georgian Shag, Common Murre and Macaroni Penguin. *Jpn. J. Ornithol.*, **59**: 20-30. (in Japanese) (doi: 10.3838/jjo.59.20)
- 5) Sakamoto, K. Q., Sato, K., Kato, A., Fukui, D., Bando, G., Naito, Y., Habara, Y., Ishizuka, M. and Fujita, S. 2010. Metabolic alkalosis due to feeding chicks in breeding Adélie penguins *Pygoscelis adeliae* under natural conditions. *Physiol. Biochem. Zool.*, **83**: 232-238. (doi: 10.1086/597517)

### Publication other than original articles

- 1) Sakamoto, K. Q. 2010. Ethological analysis of animal behaviour by Ethographer. *Seibutsu no Kagaku Iden*, **64(3)**: 6-12. (in Japanese)

## Laboratory of Biochemistry

### Original articles

- 1) Nordquist, L., Shimada, K., Ishii, T., Furuya, D. T., Kamikawa, A. and Kimura, K. 2010. Proinsulin C-peptide prevents Type-1 diabetes-induced decrease of renal Na<sup>+</sup>-K<sup>+</sup>-ATPase  $\alpha$ 1-subunit in rats. *Diab. Metab. Res. Rev.*, **26**: 193-199. (doi: 10.1002/dmrr.1071)
- 2) Abd Eldaim, M. A., Kamikawa, A., Soliman, M. M., Ahmed, M. M., Okamatsu-Ogura, Y., Terao, A., Miyamoto, T. and Kimura, K. 2010. Retinol binding protein 4 in dairy cows: its presence in colostrum and alteration in plasma during fasting, inflammation, and the peripartum period. *J. Dairy Res.*, **77**: 27-32. (doi: 10.1017/S0022029909990276)
- 3) Abd Eldaim, M. A., Okamatsu-Ogura, Y., Terao, A., and Kimura, K. 2010. Effects of retinoic acid and hydrogen peroxide on sterol regulatory element-binding protein-1a activation during adipogenic differentiation of 3T3-L1 cells. *Jpn. J. Vet. Res.*, **58**: 149-154.
- 4) Sawada, T., Miyoshi, H., Shimada, K., Suzuki, A., Okamatsu, Y., Perfield II, J. W., Kondo, T., Nagai, S., Shimizu, C., Yoshioka, N., Greenberg, A. S., Kimura, K. and Koike, T. 2010. Perilipin overexpression in white adipose tissue induces a brown fat-like phenotype. *PLoS ONE*, **5**: e14006. (doi: 10.1371/journal.pone.0014006)

### Publications other than original articles

- 1) Terao, A. 2010. High-fat diet impairs sleep quality in mice. *Ann. Rep. Study of Food*, **23**: 79-88. (in Japanese with English summary)
- 2) Okamatsu, Y. and Saito, M. 2010. Brown Adipose Tissue. In *Karada to Ondo no Jiten*, pp. 23-26, Kanosue, K., eds., Asakura Shoten, Tokyo. (in Japanese)

## Laboratory of Pharmacology

### Original articles

- 1) Kajihara, Y., Murakami, M., Imagawa, T., Otsuguro, K., Ito, S. and Ohta, T. 2010. Histamine potentiates acid-induced responses mediating transient receptor potential V1 in mouse primary sensory neurons. *Neuroscience*, **166**: 292-304. (doi: 10.1016/j.neuroscience.2009.12.001)
- 2) Takahashi, T., Otsuguro, K., Ohta, T. and Ito, S. 2010. Adenosine and inosine release during hypoxia in the isolated spinal cord of neonatal rats. *Br. J. Pharmacol.*, **161**: 1806-1816. (doi 10.1111/j.1476-5381.2010.01002.x)

### Publications other than original articles

- 1) Kagiya, N. 2010. Legal standing of the 3R-Principle in the Law for the Humane Treatment and Management of Animals, and proper care and management of laboratory animals. *J. Jpn. Vet. Med. Assoc.*, **63**: 395-398. (in Japanese)
- 2) Kagiya, N. 2010. Regulations on animal experiments in the near future-Discussion by the Committee on Animal Welfare and Ethical Animal Experiments, the Japanese Association for Laboratory Animal Science. *LABIO21*, **41**: 6-10. (in Japanese)

## Laboratory of Microbiology

### Original articles

- 1) Cheng, M. C., Soda, K., Lee, M. S., Lee, S. H., Sakoda, Y., Kida, H., and Wang, C. H. 2010. Isolation and characterization of potentially pathogenic H5N2 influenza virus from a chicken in Taiwan in 2008. *Avian Dis.*, **54**: 885-893. (doi: 10.1637/9208-120609-Reg.1)
- 2) Feng, F., Miura, N., Isoda, N., Sakoda, Y., Okamatsu, M., Kida, H., and Nishimura, S. 2010. Novel trivalent anti-influenza reagent. *Bioorg. Med. Chem. Lett.*, **20**: 3772-3776. (doi: 10.1016/j.bmcl.2010.04.060)
- 3) Igarashi, M., Ito, K., Yoshida, R., Tomabechi, D., Kida, H., and Takada, A. 2010. Predicting the antigenic structure of the pandemic (H1N1) 2009 influenza virus hemagglutinin. *PLoS One*, **5**(1): e8553. (doi: 10.1371/journal.pone.0008553)
- 4) Itoh, Y., Ozaki, H., Ishigaki, H., Sakoda, Y., Nagata, T., Soda, K., Isoda, N., Miyake, T., Ishida, H., Okamoto, K., Nakayama, M., Tsuchiya, H., Torii, R., Kida, H., and Ogasawara, K. 2010. Subcutaneous inoculation of a whole virus particle vaccine prepared from a non-pathogenic virus library induces protective immunity against H7N7 highly pathogenic avian influenza virus in cynomolgus macaques. *Vaccine*, **28**: 780-789. (doi: 10.1016/j.vaccine.2009.10.067)
- 5) Iwai, A., Shiozaki, T., Kawai, T., Akira, S., Kawaoka, Y., Takada, A., Kida, H., and Miyazaki, T. 2010. Influenza A virus polymerase inhibits type I interferon induction by binding to interferon beta promoter stimulator 1. *J. Biol. Chem.*, **285**: 32064-32074. (doi: 10.1074/jbc.M110.112458)
- 6) Matsuda, K., Kobayashi, S., Kameyama, K., Sato, M., Koiwa, M., Sakoda, Y., and Taniyama, H. 2010. Non-cytopathic bovine viral diarrhea virus infection inhibits differentiation of bovine neural stem/progenitor cells into astrocytes in vitro. *J. Vet. Med. Sci.*, **72**: 903-907. (doi: 10.1292/jvms.10-0035)
- 7) Miyake, T., Soda, K., Itoh, Y., Sakoda, Y., Ishigaki, H., Nagata, T., Ishida, H., Nakayama, M., Ozaki, H., Tsuchiya, H.,

- Torii, R., Kida, H., and Ogasawara, K. 2010. Amelioration of pneumonia with *Streptococcus pneumoniae* infection by inoculation with a vaccine against highly pathogenic avian influenza virus in a non-human primate mixed infection model. *J. Med. Primatol.*, **39**: 58-70. (doi: 10.1111/j.1600-0684.2009.00395.x)
- 8) Okamoto, M., Tanaka, T., Yamamoto, N., Sakoda, Y., Sasaki, T., Tsuda, Y., Isoda, N., Kokumai, N., Takada, A., Umemura, T., and Kida, H. 2010. Antigenic, genetic, and pathogenic characterization of H5N1 highly pathogenic avian influenza viruses isolated from dead whooper swans (*Cygnus cygnus*) found in northern Japan in 2008. *Virus Genes*, **41**: 351-357. (doi: 10.1007/s11262-010-0530-3)
- 9) Sakoda, Y., Sugar, S., Batchluun, D., Erdene-Ochir, T. O., Okamoto, M., Isoda, N., Soda, K., Takakuwa, H., Tsuda, Y., Yamamoto, N., Kishida, N., Matsuno, K., Nakayama, E., Kajihara, M., Yokoyama, A., Takada, A., Sodnomdarjaa, R., and Kida, H. 2010. Characterization of H5N1 highly pathogenic avian influenza virus strains isolated from migratory waterfowl in Mongolia on the way back from the southern Asia to their northern territory. *Virology*, **406**: 88-94. (doi: 10.1016/j.virol.2010.07.007)
- 10) Sasaki, T., Kokumai, N., Ohgitani, T., Imamura, T., Sawata, A., Lin, Z., Sakoda, Y., and Kida, H. 2010. A comparison of the antibody responses between specific pathogen-free and commercial layers immunized with an influenza vaccine prepared from inactivated non-pathogenic H5N1 virus by single shot. *J. Vet. Med. Sci.*, **72**: 819-821. (doi: 10.1292/jvms.09-0541)
- 11) Tanaka, T., Sunden, Y., Sakoda, Y., Kida, H., Ochiai, K., and Umemura, T. 2010. Lipopolysaccharide treatment and inoculation of influenza A virus results in influenza virus-associated encephalopathy-like changes in neonatal mice. *J. Neurovirol.*, **16**: 125-132. (doi: 10.3109/13550281003682521)

## Publications other than original articles

- 1) Kida, H. 2010. Influenza virus infections: Avian, swine, and pandemic influenza. *Saishin-Igaku*, **65**: 13-20. (in Japanese)
- 2) Kida, H. 2010. Influenza virus infections: Avian, swine, and pandemic influenza. *Virus*, **60**: 17-20. (in Japanese)
- 3) Kida, H. 2010. The view and measure of pandemic influenza. *The Journal of Public Health Practice*, **74**: 687-690. (in Japanese)
- 4) Sakoda, Y. 2010. Foot-and-mouth disease. *Nouka no Tomo*, **62**: 82-84. (in Japanese)
- 5) Sakoda, Y. 2010. Control for animal infectious diseases ~Comparison of avian Influenza and foot-and-mouth disease. *The Journal of Miyagi Veterinary Medical Association*, **63**: 5-8. (in Japanese)

## Laboratory of Infectious Diseases

### Original articles

- 1) Ikebuchi, R., Konnai, S., Sunden, Y., Onuma, M. and Ohashi, K. 2010. Molecular cloning and expression analysis of bovine programmed death-1. *Microbiol. Immunol.*, **54**: 291-298. (doi: 10.1111/j.1348-0421.2010.00208.x)
- 2) Mingala, C. N., Konnai, S., Ikebuchi, R. and Ohashi, K. 2010. Characterization of CTLA-4, PD-1 and PDL-1 of swamp and riverine type water buffaloes. *Comp. Immunol. Microbiol. Infect. Dis.*, In press. (doi: 10.1016/j.cimid.2010.02.002)
- 3) Mori, A., Konnai, S., Yamada, S., Hidano, A., Murase, Y., Ito, T., Takano, A., Kawabata, H., Onuma, M. and Ohashi, K. 2010. Two

- novel Salp15-like immunosuppressant genes from salivary glands of *Ixodes persulcatus* Schulze tick. *Insect Mol. Biol.*, **19**: 359–365. (doi: 10.1111/j.1365-2583.2010.00994.x)
- 4) Parizi, L. F., Utiumi, K. U., Imamura, S., Onuma, M., Ohashi, K., Masuda, A. and da Silva Vaz I. Jr. 2010. Cross immunity with *Haemaphysalis longicornis* glutathione S-transferase reduces an experimental *Rhipicephalus (Boophilus) microplus* infestation. *Exp. Parasitol.*, In press. (doi: 10.1016/j.exppara.2010.07.001)
  - 5) Konnai, S., Nishikado, H., Yamada, S., Imamura, S., Ito, T., Onuma, M., Murata, S. and Ohashi, K. 2010. Molecular identification and expression analysis of lipocalins from blood feeding taiga tick, *Ixodes persulcatus* Schulze. *Exp. Parasitol.*, In press. (doi: 10.1016/j.exppara.2010.10.002)
  - 6) Murase, Y., Konnai, S., Hidano, A., Githaka, W. N., Ito, T., Takano, A., Kawabata, H., Ato, M., Tajima, T., Tajima, M., Onuma, M., Murata, S. and Ohashi, K. 2010. Molecular detection of *Anaplasma phagocytophilum* in cattle and *Ixodes persulcatus* ticks. *Vet. Microbiol.*, In press. (doi: 10.1016/j.vetmic.2010.11.025)

### Publications other than original articles

- 1) Ohashi, K., Murata, S., Okada, T. and Konnai, S. 2010. The detection and characterization of the *meq* variants of Marek's diseases virus. *Animal Viruses*, **16**: 117–132.
- 2) Konnai, S., Tajima, M., Onuma, M. and Ohashi, K. 2010. Current topics and control on Bovine leukemia virus infection. *J. Livestock Med.*, **57**: 201–207. (in Japanese)
- 3) Konnai, S., Tajima, M., Onuma, M., Murata, S. and Ohashi, K. 2010. Current status and control measures of increasing bovine leukemia 'for voices from clinical field'. *Japanese Journal of Large Animal Clinics*, **1**: 110–114. (in Japanese).
- 4) Konnai, S., 2010. Control of tick-borne diseases by anti-tick vaccine. *The Japanese Journal of Animal Hygiene*, **36**: 73–75. (in Japanese).

## Laboratory of Parasitology

### Original articles

- 1) Bawm, S., Tiwananthagorn, S., Lin, K. S., Hirota, J., Irie, T., Htun, L. L., Maw, N. N., Myaing, T. T., Phay, N., Miyazaki, S., Sakurai, T., Oku, Y., Matsuura, H. and Katakura, K. 2010. Evaluation of Myanmar medicinal plant extracts for antitrypanosomal and cytotoxic activities. *J. Vet. Med. Sci.*, **72**: 525–528. (doi: 10.1292/jvms.09-0508)
- 2) Mizukami, C., Spiliotis, M., Gottstein, B., Yagi, K., Katakura, K. and Oku, Y. 2010. Gene silencing in *Echinococcus multilocularis* protoscoleces using RNA interference. *Parasitol. Int.*, **59**: 647–652.
- 3) Okada, Y., Miyazaki, S., Koshikawa, S., Cornette, R., Maekawa, K., Tsuji, K., and Miura, T. 2010. Identification of a reproductive-specific, putative lipid transport protein gene in a queenless ponerine ant *Diacamma* sp. *Naturwissenschaften*, **97**: 971–979. (doi: 10.1007/s00114-010-0713-8)
- 4) Okada, Y., Miyazaki, S., Miyakawa, H., Ishikawa, A., Tsuji, K. and Miura, T. 2010. Ovarian development and insulin-signaling pathways during reproductive differentiation in the queenless ponerine ant *Diacamma* sp. *J. Insect Physiol.*, **56**: 288–295. (doi: 10.1016/j.jinsphys.2009.10.013)
- 5) Miyazaki, S., Murakami, T., Kubo, T., Azuma,



- N., Higashi, S. and Miura T. 2010. Ergatoid queen development in the ant *Myrmecina nipponica*: modular and heterochronic regulation of caste differentiation. *Proc. Biol. Sci.*, **277**: 1953–1961. (doi: 10.1098/rspb.2010.0142)
- 6) Miyakawa, H., Imai, M., Sugimoto, N., Ishikawa, Y., Ishikawa, A., Ishigaki, H., Okada, Y., Miyazaki, S., Koshikawa, S., Cornette, R. and Miura, T. 2010. Gene up-regulation in response to predator kairomones in the water flea, *Daphnia pulex*. *BMC Dev. Biol.*, **10**: 45. (doi: 10.1186/1471-213X-10-45)
- 7) Kawamura, Y., Yoshikawa, I. and Katakura, K. 2010. Imported leishmaniasis in dogs, US military bases, Japan. *Emerg. Infect. Dis.*, **16**: 12 (doi: 10.3201/eid1612.100389)

## Laboratory of Laboratory Animal Science and Medicine

### Original articles

- 1) Ichii, O., Kon, Y., Otsuka, S., Sasaki, N., Hashimoto, Y., Ohta, H., Takiguchi, M. and Endoh, D. 2010. Local overexpression of interleukin 1 family, member 6 related to the development of tubulointerstitial lesions. *Lab. Invest.*, **90**: 459–475. (doi: 10.1038/labinvest.2009.148)
- 2) Torigoe, D., Asano, A., Yamauchi, H., Dang, R., Sasaki, N. and Agui, T. 2010. Genetic analysis of modifiers for the hooded phenotype in the rat. *Jpn. J. Vet. Res.*, **57**: 175–184.
- 3) Iwata, R., Sasaki, N. and Agui, T. 2010. Contiguous gene deletion of *Ptprk* and *Themis* causes T-helper immunodeficiency (*thid*) in the LEC rat. *Biomed. Res.*, **31**: 83–87. (doi: 10.2220/biomedres.31.83)
- 4) Otsuka, S., Namiki, Y., Ichii, O., Sasaki, N., Hashimoto, Y. and Kon, Y. 2010. Analysis of factors decreasing testis weight in MRL mice. *Mamm. Genome*, **21**: 153–161. (doi: 10.1007/s00335-010-9251-0)
- 5) Ichii, O., Kamikawa, A., Otsuka, S., Hashimoto, Y., Sasaki, N., Endoh, D. and Kon, Y. 2010. Overexpression of interferon-activated gene 202 (*Ifi202*) correlates with the progression of autoimmune glomerulonephritis associated with the MRL chromosome 1. *Lupus*, **19**: 897–905. (doi: 10.1177/0961203310362534)
- 6) Hosoda, Y., Sasaki, N. and Agui, T. 2010. Hypothyroid phenotype of the *Tpst2* mutant mouse is dependent upon genetic background. *Biomed. Res.*, **31**: 207–211. (doi: 10.2220/biomedres.31.207)
- 7) Nishino, T., Sasaki, N., Nagasaki, K., Zulkifli, A. and Agui, T. 2010. Genetic background strongly influences the severity of glomerulosclerosis in mice. *J. Vet. Med. Sci.*, **72**: 1313–1318. (doi: 10.1292/jvms.10-0144)

## Laboratory of Veterinary Internal Medicine

### Original articles

- 1) Nakamura, K., Takagi, S., Sasaki, N., Kumara, W. R. B., Murakami, M., Ohta, H., Yamasaki, M. and Takiguchi, M. 2010. Contrast-enhanced ultrasonography for characterization of canine focal liver lesions. *Vet. Radiol. Ultrasound.*, **51**: 79–85. (doi: 10.1111/j.1740-8261.2009.01627.x)
- 2) Hwang, S-J., Yamasaki, M., Nakamura, K., Murakami, M., Wickramasekara, Rajapakshage, B. K., Ohta, H., Maede, Y.

- and Takiguchi, M. 2010. Development and characterization of a strain of *Babesia gibsoni* resistant to diminazene aceturate *in vitro*. *J. Vet. Med. Sci.*, **72**: 765-761. (doi: 10.1292/jvms.09-0535)
- 3) Ichii, O., Otsuka, S., Sasaki, N., Yabuki, A., Ohta, H., Takiguchi, M., Hashimoto, Y., Endoh, D. and Kon, Y. 2010. Lcal overexpression of interleukin-1 family, member 6 relates to the development of tubulointerstitial lesions. *Lab. Invest.*, **90**: 459-475. (doi: 10.1038/labinvest.2009.148)
- 4) Hwang, S-J., Yamasaki, M., Nakamura, K., Murakami, M., Wickramasekara, Rajapakshage, B. K., Ohta, H., Maede, Y. and Takiguchi, M. 2010. Reduced transcript levels of the heat shock protein 70 gene in diminazene aceturate-resistant *Babesia gibsoni* variants under low concentrations of diminazene aceturate. *Jpn. J. Vet. Res.*, **58**: 155-164.
- 5) Nakamura, K., Sasaki, N., Murakami, M., Bandurla, Kumara, W. R., Ohta, H., Yamasaki, M., Takagi, S., Osaki, T. and Takiguchi, M. 2010. Contrast-enhanced ultrasonography for characterization of focal splenic lesions in dogs. *J. Vet. Intern. Med.*, **24**: 1290-1297. (doi: 10.1111/j.1939-1676.2010.0609.x.)

## Laboratory of Veterinary Surgery

### Original articles

- 1) Nakamura, K., Sasaki, N., Murakami, M., Bandula Kumara, W. R., Ohta, H., Yamasaki, M., Takagi, S., Osaki, T. and Takiguchi, M. 2010. Contrast-enhanced ultrasonography for characterization of focal splenic lesions in dogs. *J. Vet. Intern. Med.*, **24**: 1290-1297. (doi: 10.1111/j.1939-1676.2010.0609.x)
- 2) Lettry, V., Hosoya, K., Takagi, S. and Okumura, M. 2010. Coculture of equine mesenchymal stem cells and mature equine articular chondrocytes results in improved chondrogenic differentiation of the stem cells. *Jpn. J. Vet. Res.*, **58**: 5-15.
- 3) Nakamura, K., Takagi, S., Sasaki, N., Bandula Kumara, W. R., Murakami, M., Ohta, H., Yamasaki, M. and Takiguchi, M. 2010. Contrast-enhanced ultrasonography for characterization of canine focal liver lesions. *Vet. Radiol. Ultrasound.*, **51**: 79-85. (doi: 10.1111/j.1740-8261.2009.01627.x)
- 4) Lettry, V., Kawasaki, H., Sugaya, K., Hosoya, K., Takagi, S. and Okumura, M. 2010. Evaluation of a new enzyme-linked immunosorbent assay to detect keratan sulfate in equine serum. *Jpn. J. Vet. Res.*, **57**: 207-212.
- 5) Lettry, V., Sumie, Y., Mitsuda, K., Tagami, M., Hosoya, K., Takagi, S. and Okumura, M. 2010. Divergent diagnosis from arthroscopic findings and identification of CPII and C2C for detection of cartilage degradation in horses. *Jpn. J. Vet. Res.*, **57**: 197-206.

### Publication other than original articles

- 1) Takagi, S. 2010. Canine histiocytic Diseases (review) *J. Hokkaido Vet. Med. Assoc.*, **54**: 289-294. (in Japanese)
- 2) Takagi, S. 2010. The kidneys and ureters. pp. 205-225, In: *BSAVA Manual of Canine and Feline Abdominal Imaging*, O'Brien, R. and Barr, F. eds., 2009, British Small Animal Veterinary Association, Quedgeley, Gloucester, U.K. (Japanese translation)
- 3) Takagi, S. and Okumura, M. 2010. Basic techniques for veterinary orthopedic surgery. *InfoVets*, **13**(5): 52-55. (in Japanese)
- 4) Okumura, M. 2010. Juvenile pubic symphysiodesis in dogs (review). *J. Hokkaido*



- Vet. Assoc.*, **54**: 187–192. (in Japanese)
- 5) Okumura, M. 2010. Principles and clinical application of arthroscopy in dogs. *SURGEON*, **14**: 6–13. (in Japanese)
  - 6) Okumura, M. 2010. Evidence for application of Juvenile pubic symphysiodesis in dogs. *InfoVets*, **13**(3): 35–41. (in Japanese)
  - 7) Okumura, M. 2010. Unknown pathology of hind limb lameness in dogs. Stifle synovial sarcoma. *InfoVets*, **13**(4): 50–52. (in Japanese)
  - 8) Hosoya, K. and Okumura, M. 2010. Interchondylar ununion in Spaniels. *InfoVets*, **13**(6): 65–68. (in Japanese)
  - 9) Okumura, M. 2010. Experience and treatment of diseases in sacroiliac joints in dogs. *InfoVets*, **13**(7): 38–41. (in Japanese)
  - 10) Okumura, M. 2010. Infectious arthritis in dogs. Diseases in nerve, muscle and joints. *SA Medicine*, **12**(6): 55. (in Japanese)
  - 11) Okumura, M. 2010. Canine hip dysplasia. Diseases in nerve, muscle and joints. *SA Medicine*, **12**(6): 56. (in Japanese)
  - 12) Okumura, M. 2010. What is canine rheumatoid arthritis? Inflammatory joint diseases in dogs. *MPagro J.*, **10**(3): 3–9. (in Japanese)
  - 13) Lin, C., Hosoya, K., Premanandan, C. and Wellman, M. 2010. What is your diagnosis? Fine needle aspiration of an aggressive bone lesion from a dog. *Vet. Clin. Pathol.*, **39**: 397–398. (doi: 10.1111/j.1939-165X.2010.00233.x)

## Laboratory of Comparative Pathology

### Original articles

- 1) Okamoto, M., Yanaka, T., Yamamoto, N., Sakoda, Y., Sasaki, Y., Tsuda, Y., Isoda, N., Kokumai, N., Yakada, A., Umemura, T. and Kida, H. 2010. Antigenic, genetic, and pathogenic characterization from dead whooper swans (*Cygnus Cygnus*) found in northern Japan in 2008. *Virus Genes*, **41**: 351–357. (doi: 10.1007/s11262-010-0530-3)
- 2) Yabe, J., Ishizuka, M. and Umemura, T. 2010 Current levels of heavy metal pollution in Africa. *J. Vet. Med. Sci.*, **72**: 1257–1263. (doi: 10.1292/jvms.10-0058)
- 3) Uchida, H., Kurata, Y., Hiratsuka, H. and Umemura, T. 2010. The effect of a vitamin D deficient diet on chronic cadmium exposure in rats. *Toxicol. Pathol.*, **38**: 730–737. (doi: 10.1177/0192623310374328)
- 4) Ueno, T., Nambo, Y., Tajima, Y. and Umemura, T. 2010. Pathology of lethal periparturum ligament hematoma in 31 thoroughbred mares. *Equine Vet. J.*, **42**: 529–533. (doi: 10.1111/j.2042-3306.2010.00090.x)
- 5) Sunden, Y., Yano, S., Ishida, S., Ochiai, K. and Umemura, T. 2010. Intracerebral vaccination suppresses the spread of rabies virus in the mouse brain. *Microbes Infect.*, **12**: 1163–1169. (doi: 10.1016/j.micinf.2010.08.002)
- 6) Tanaka, T., Sunden, Y., Sakoda, Y., Kida, H., Ochiai, K. and Umemura, T. 2010. Lipopolysaccharide treatment and inoculation of influenza A virus results in influenza virus-associated encephalopathy-like changes in neonatal mice. *J. Neurovirol.*, **16**: 125–132. (doi: 10.3109/13550281003682521)
- 7) Murata, R., Eshita, Y., Maeda, A., Maeda, J., Akita, S., Yanaka, T., Yoshii, K., Kariwa, H., Umemura, T. and Takashima, I. 2010. Glycosylation of the West Nile virus envelope protein increases *in vivo* and *in vitro* viral multiplication in birds. *Am. J. Trop. Med. Hyg.*, **82**: 696–704. (doi: 10.4269/ajtmh.2010.09-0262)
- 8) Suzuki, T., Orba, Y., Okada, Y., Sunden, Y., Kimura, T., Tanaka, S., Nagashima, K., Hall, W. W. and Sawa, H. 2010. The human

- polyoma JC virus agnoprotein acts as a viroporin. *PLoS Pathog.* **12**: e1000801. (doi: 10.1371/journal.ppat.1000801)
- 9) Suzuki, T., Yamanouchi, S., Sunden, Y., Orba, Y., Kimura, T. and Sawa, H. 2010. Natalizumab has no direct biological effect on JC virus infectivity in permissive human neural cell lines. *J. Med. Virol.*, **82**: 1229–1235. (doi: 10.1002/jmv.21805)
- 10) Ikebuchi, R., Konnai, S., Sunden, Y., Onuma, M. and Ohashi, K. 2010. Molecular cloning and expression analysis of bovine programmed death-1. *Microbiol. Immunol.*, **54**: 291–298. (doi: 10.1111/j.1348-0421.2010.00208.x)

### Publication other than original articles

- 1) Ochiai, K. 2010. Chapter 2, Blood and hematopoietic system, myeloid leukemias. In: *Systemic Animal Pathology*, 2nd ed., pp. 46–49, (Japanese Society of Veterinary Pathology ed.), Buneido, Tokyo. (In Japanese)
- 2) Ochiai, K. 2010. Chapter 5, Digestive organs, liver, developmental anomalies, circulatory disturbances and inflammation. In: *Systemic Animal Pathology*, 2nd ed., pp. 205–207, pp. 216–227, Japanese Society of Veterinary Pathology ed., Buneido, Tokyo. (In Japanese)
- 3) Ochiai, K. 2010. Chapter 12, Skin, Tumors of Skin. In: *Systemic Animal Pathology*, 2nd ed., pp. 456–463, Japanese Society of Veterinary Pathology ed., Buneido, Tokyo. (In Japanese)
- 4) Ochiai, K. 2010. Metaplasia and Dysplasia. *JSVP/JCVP Newsletter July 2010*, pp. 11–16, Japanese Society of Veterinary Pathology/Japanese College of Veterinary Pathologists. (In Japanese)

## Laboratory of Theriogenology

### Original articles

- 1) Higaki, S., Eto, Y., Kawakami, Y., Yamaha, E., Kagawa, N., Kuwayama, M., Nagano, M., Katagiri, S. and Takahashi, Y. 2010. Production of fertile zebrafish (*Danio rerio*) possessing germ cells (gametes) originated from primordial germ cells recovered from vitrified embryos. *Reproduction*, **139**: 733–740. (doi: 10.1530/REP-09-0549)
- 2) Higaki, S., Fujii, H., Nagano, M., Katagiri, S. and Takahashi, Y. 2010. Measurement of pO<sub>2</sub> in cultured mouse oocytes using electron paramagnetic resonance oximetry. *Biomed. Res.*, **31**: 165–168. (doi: 10.2220/biomedres.31.165)
- 3) Higaki, S., Mochizuki, K., Akashi, Y., Yamaha, E., Katagiri, S. and Takahashi, Y. 2010. Cryopreservation of primordial germ cells by rapid freezing of whole zebrafish (*Danio rerio*) embryos. *J. Reprod. Dev.*, **56**: 212–218. (doi: 10.1262/jrd.09-136E)
- 4) Yoshizawa, M., Ulloa, C. M. U., Hufana-Duran, D., Atabay, E., Duran, P. G., Cruz, L. C., Kanai, Y. and Takahashi, Y. 2010. Incidence of chromosomal abnormalities in early-stage river buffalo embryos derived from *in vitro* fertilization. *J. Mamm. Ova Res.*, **27**: 157–160.
- 5) Shah, S., Nagano, M., Yamashita, Y. and Hishinuma, M. 2010. Microencapsulation of canine sperm and its preservation at 4°C. *Theriogenology*, **73**: 560–567. (doi: 10.1016/j.theriogenology.2009.09.034)
- 6) Uchikura, K., Nagano, M. and Hishinuma, M. 2010. Evaluation of follicular development and oocyte quality in prepubertal cats. *Reprod. Domest. Anim.*, **45**: e405-e411.

(doi: 10.1111/j.1439-0531.2010.01590.x)

### Publications other than original articles

- 1) Nagano, M. and Katagiri, S. 2010. Structure, physiology and pathology of cells. In: *Textbook of Embryo Transfer and In Vitro fertilization in Cattle*, pp. 34-39, Takahashi, Y. ed., LIAJ and AIAJ, Tokyo. (in Japanese)
- 2) Katagiri, S. and Nagano, M. 2010. Growth of follicles and oocytes. In: *Textbook of Embryo Transfer and In Vitro fertilization in Cattle*, pp. 40-52, Takahashi, Y. ed., LIAJ and AIAJ, Tokyo. (in Japanese)
- 3) Takahashi, Y. and Nagai, T. 2010. Fertilization. In: *Textbook of Embryo Transfer and In Vitro fertilization in Cattle*, pp. 53-58. Takahashi, Y. ed., LIAJ and AIAJ, Tokyo. (in Japanese)
- 4) Takahashi, Y. 2010. Handling and preservation of embryos. In: *Textbook of Embryo Transfer and In Vitro fertilization in Cattle*, pp.76-88. Takahashi, Y. ed., LIAJ and AIAJ, Tokyo. (in Japanese)
- 5) Takahashi, Y. and Tominaga, K. 2010. Cryopreservation of embryos. In: *Textbook of Embryo Transfer and In Vitro fertilization in Cattle*, pp. 88-100. Takahashi, Y. ed., LIAJ and AIAJ, Tokyo. (in Japanese)

## Laboratory of Molecular Medicine

### Original articles

- 1) Arashiki, N., Otsuka, Y., Ito, D., Yang, M., Komatsu, T., Sato, K. and Inaba, M. 2010. Covalent modification of spectrin in red cell membranes by the lipid peroxidation product 4-hydroxy-2-nonenal. *Biochem. Biophys. Res. Commun.*, **391**: 1543-1547. (doi: 10.1016/j.bbrc.2009.12.121)
- 2) Komatsu, T., Sato, K., Otsuka, Y., Arashiki, N., Tanaka, K., Tamahara, S., Ono, K. and Inaba, M. 2010. Parallel reductions in stomatin and Na,K-ATPase through the exosomal pathway during reticulocyte maturation in dogs: stomatin as a genotypic and phenotypic marker of high K<sup>+</sup> and low K<sup>+</sup> red cells. *J. Vet. Med. Sci.*, **72**: 893-901. (doi: 10.1292/jvms.10-0030)
- 3) Komatsu, T., Arashiki, N., Otsuka, Y., Sato, K. and Inaba, M. 2010. Extrusion of the Na,K-ATPase and the transferrin receptor in different population of exosomes with lipid raft-associated proteins during reticulocyte maturation in dogs. *Jpn. J. Vet. Res.*, **58**: 17-27.
- 4) Adachi, H., Kurooka, T., Otsu, W. and Inaba, M. 2010. The forced aggresome formation of a bovine anion exchanger 1 (AE1) mutant through association with  $\Delta$ F508-cystic fibrosis transmembrane conductance-regulator upon proteasome inhibition in HEK293 cells. *Jpn. J. Vet. Res.*, **58**: 101-110.

### Publication other than original articles

- 1) Inaba, M. and Messick, J. B. 2010. Chapter 29: Erythrocyte membrane defects. In: *Schalm's Veterinary Hematology*, 6th ed., pp. 187-195, Weiss, D. and Wardrop, K. J. eds., Wiley-Blackwell, Hoboken, NJ.
- 2) Inaba, M. 2010. Molecular pathology of anion exchanger 1 (AE1). *Membrane*, **35**: 262-267.

## Laboratory of Public Health

### Original articles

- 1) Yoshii, K., Mottate, K., Omori-Urabe, Y., Chiba, Y., Seto, T., Sanada, T., Maeda, J., Obara, M., Ando, S., Ito, N., Sugiyama, M., Sato, H., Fukushima, H., Kariwa, H. and Takashima, I. 2010. Epizootiological study of Tick-borne encephalitis virus infection in Japan. *J. Vet. Med. Sci.*, In press. (doi: 10.1292/jvms.10-0350)
- 2) Lee, H. K., Lee, B. H., Seok, S. H., Baek, M. W., Lee, H. Y., Kim, D. J., Na, Y. R., Noh, K. J., Park, S. H., Kumar, D. N., Kariwa, H., Nakauchi, M., Heo, S. J., and Park, J. H. 2010. Production of specific antibodies against SARS-coronavirus nucleocapsid protein without cross reactivity with human coronaviruses 229E and OC43. *J. Vet. Sci.*, **11**: 165-167. (doi: 10.4142/jvs.2010.11.2.165)
- 3) Murata, R., Eshita, Y., Maeda, A., Maeda, J., Akita, S., Tanaka, T., Yoshii, K., Kariwa, H., Umemura, T. and Takashima, I. 2010. Glycosylation of the West Nile Virus envelope protein increases *in vivo* and *in vitro* viral multiplication in birds. *Am. J. Trop. Med. Hyg.*, **82**: 696-704. (doi: 10.4269/ajtmh.2010.09-0262)
- 4) Tegshduuren, E., Yoshimatsu, K., Taruishi, M., Endo, R., Shimizu, K., Koma, T., Yasuda, S. P., Kariwa, H., Arikawa, J., and Ishihara, C. 2010. Different cross-reactivity of human and rodent sera to Tula virus and Puumala virus. *Comp. Immunol. Microbiol. Infect. Dis.*, **33**: e67-e73. (doi: 10.1016/j.cimid.2010.01.001)
- 5) Hayasaka, D., Nagata, N., Hasegawa, H., Sata, T., Takashima, I. and Koike, S. 2010. Early mortality following intracerebral infection with Tick-borne encephalitis virus Oshima strain in a mouse model. *J. Vet. Med. Sci.*, **72**: 391-396. (doi: 10.1292/jvms.09-0258)
- 6) Seto, T., Tkachenko, E. A., Morozov, V.G., Tanikawa, Y., Kolominov, S. I., Belov, S. N., Nakamura, I., Hashimoto, N., Kon, Y., Balakiev, A. E., Dzagurnova, T. K., Medvedkina, O. A., Nakauchi, M., Ishizuka, M., Yoshii, K., Yoshimatsu, K., Ivanov, L. V., Arikawa, J., Takashima, I. and Kariwa, H. 2010. An efficient *in vivo* method for the isolation of Puumala virus in Syrian hamsters and the characterization of the isolates from Russia. *J. Virol. Methods*, In press. (doi: 10.1016/j.jviromet.2010.12.019)
- 7) Ikawa-Yoshida, A., Yoshii, K., Kuwahara, K., Obara, M., Kariwa, H. and Takashima, I. 2010. Development of ELISA system for tick-borne encephalitis virus infection in rodents. *Microbiol. Immunol.*, In press. (doi: 10.1111/j.1348-0421.2010.00296.x.)

### Publication other than original articles

- 1) Yoshii, K., Kariwa, H., and Takashima, I. 2010. Tick-borne flavivirus. *Animal viruses*, **16**: 75-88.
- 2) Takashima, I., Kariwa, H., and Shirato, K. 2010. West Nile fever. *Animal viruses*, **16**: 67-74.
- 3) Kariwa, H., Daud, N. H., Masahiro, A., Iwasa, M. A., Tanikawa, Y., Sawabe, J., Hagiya, T., Seto, T., Yoshii, K., Yoshimatsu, K., Arikawa, J., Hashimoto, N., and Takashima, I. 2010. Epidemiology of hantavirus infection: Hokkaido virus and its mode of infection among the gray red-backed vole, *Myodes rufocanus*. *Animal viruses*, **16**: 23-46.
- 4) Murata, T., Yoshii, K., Kariwa, H., Takashima, I. 2010. Studies on the multiplication of West Nile virus and the antibody survey in Far-Eastern Russia. *J. Vet. Med.*, **63**: 208-209. (in Japanese)
- 5) Yoshii, K., Kariwa, H., and Takashima, I. 2010. Tick-borne encephalitis. *J. Hokkaido Vet. Med. Assoc.*, **54**: 2-7. (in Japanese)

- 6) Kunze, U. and ISW TBE. 2010. Tick-borne encephalitis: from childhood to golden age does increased mobility mean increased risk? Conference report of the 11th meeting of the

International Scientific Working Group on Tick-Borne Encephalitis (ISW-TBE). *Vaccine*, **28**: 875–876.

## Laboratory of Radiation Biology

### Original articles

- 1) Yamamori, T., DeRicco, J., Naqvi, A., Hoffman, T. A., Mattagajasingh, I., Kasuno, K., Jung, S. B., Kim, C. S. and Irani, K. 2010. SIRT1 deacetylates APE1 and regulates cellular base excision repair. *Nucleic Acids Res.*, **38**: 832–845. (doi: 10.1093/nar/gkp1039)
- 2) Asanuma, T., Ono, M., Kubota, K., Hirose, A., Hayashi, Y., Saibara, T., Inanami, O., Ogawa, Y., Enzan, H., Onishi, S., Kuwabara, M. and Oben, J. A. 2010. Super paramagnetic iron oxide MRI shows defective Kupffer cell uptake function in non-alcoholic fatty liver disease. *Gut*, **59**: 258–266. (doi: 10.1136/gut.2009.176651)
- 3) Yasui, H., Ito, N., Yamamori, T., Nakamura, H., Okano, J., Asanuma, T., Nakajima, T., Kuwabara, M. and Inanami, O. 2010. Induction of neurite outgrowth by alpha-phenyl-N-tert-butyl-nitron through nitric oxide release and Ras-ERK pathway in PC12 cells. *Free Radic. Res.*, **44**: 645–654. (doi: 10.3109/10715761003692537)
- 4) Watanabe, Y., Hiraoka, W., Igarashi, M., Ito, K., Shimoyama, Y., Horiuchi, M., Yamamori, T., Yasui, H., Kuwabara, M., Inagaki, F. and Inanami, O. 2010. A novel copper(II) coordination at His186 in full-length murine prion protein. *Biochem. Biophys. Res. Commun.*, **394**: 522–528. (doi: 10.1016/j.bbrc.2010.03.003)
- 5) Jung, S. B., Kim, C. S., Naqvi, A., Yamamori, T., Mattagajasingh, I., Hoffman, T. A., Cole, M. P., Kumar, A., DeRicco, J. S., Jeon, B. H. and Irani, K. 2010. Histone deacetylase 3 antagonizes aspirin-stimulated endothelial nitric oxide production by reversing aspirin-induced lysine acetylation of endothelial nitric oxide synthase. *Circ. Res.*, **107**: 877–887. (doi: 10.1161/CIRCRESAHA.110.222968)
- 6) Naqvi, A., Hoffman, T. A., DeRicco, J., Kumar, A., Kim, C. S., Jung, S. B., Yamamori, T., Kim, Y. R., Mehdi, F., Kumar, S., Rankinen, T., Ravussin, E. and Irani, K. 2010. A single-nucleotide variation in a p53-binding site affects nutrient-sensitive human SIRT1 expression. *Hum. Mol. Genet.*, **19**: 4123–4133. (doi: 10.1093/hmg/ddq331)
- 7) Yasui, H., Matsumoto, S., Devasahayam, N., Munasinghe, J. P., Choudhuri, R., Saito, K., Subramanian, S., Mitchell, J. B., and Krishna, M. C. 2010. Low-field magnetic resonance imaging to visualize chronic and cycling hypoxia in tumor-bearing mice. *Cancer Res.*, **70**: 6427–6436. (doi: 10.1158/0008-5472.CAN-10-1350)
- 8) Matsumoto, S., Yasui, H., Mitchell, J. B. and Krishna, M. C. 2010. Imaging cycling tumor hypoxia. *Cancer Res.*, **70**: 10019–10023. (doi: 10.1158/0008-5472.CAN-10-2821)

### Publication other than articles

- 1) Yasui, H., Yamamori, T., Meike, S., Eitaki, M., Iizuka, D., Kuwabara, M. and Inanami, O. 2010. New insight into hypoxia-targeting cancer therapy. *Radiation Biology Research Communications*, **45**: 45–57. (in Japanese)
- 2) Yasui, H. 2010. Report of overseas research experience, *Spin Science*, **14**: 51–53. (in Japanese)



## Laboratory of Toxicology

### Original article

- 1) Watanabe, K. P., Saengtienchai, A., Tanaka, K. D., Ikenaka, Y. and Ishizuka, M. 2010. Comparison of warfarin sensitivity between rat and bird species. *Comp. Biochem. Physiol. C Toxicol. Pharmacol.*, **152**: 114–119. (doi: 10.1016/j.cbpc.2010.03.006)
- 2) Darwish, W. S., Morshdy, A. E., Ikenaka, Y., Ibrahim, Z. S., Fujita, S. and Ishizuka, M. 2010. Expression and Sequence of CYP1A in Camel. *J. Vet. Med. Sci.*, **72**: 221–224. (doi: 10.1292/jvms.09-0319)
- 3) Kim, H. S., Sakai, N., Saito, K., Fujita, S. and Ishizuka, M. 2010. Diazepam metabolism in kidney of male and female rats of varying strain. *J. Vet. Med. Sci.*, **72**: 7–11. (doi: 10.1292/jvms.09-0127)
- 4) Sakamoto, Q. K., Sato, K., Kato, A., Fukui, D., Bando, G., Naito, Y., Habara, Y., Ishizuka, M. and Fujita, S. 2010. Metabolic alkalosis due to feeding chicks in breeding Adelie penguins *Pygoscelis adeliae* under natural conditions. *Physiol. Biochem. Zool.*, **83**: 232–238. (doi: 10.1086/597517)
- 5) Darwish, W. S., Ikenaka, Y., Eldaly, E. A., Ohno, M., Sakamoto, K. Q., Fujita, S. and Ishizuka, M. 2010. Cytochrome P450 1A-dependent activities in deer, cattle and horses. *J. Vet. Med. Sci.*, **72**: 561–566. (doi: 10.1292/jvms.09-0318)
- 6) Takiguchi, M., Darwish, W. S., Ikenaka, Y., Ohno, M. and Ishizuka, M. 2010. Metabolic Activation of Heterocyclic Amines and Expression of CYP1A1 in the Tongue. *Toxicol. Sci.*, **116**: 79–91. (doi: 10.1093/toxsci/kfq087)
- 7) Kawai, Y. K., Ikenaka, Y., Fujita, S. and Ishizuka, M. 2010. The CYP1D subfamily of genes in mammals and other vertebrates. *Mamm. Genome*, **21**: 320–329. (doi: 10.1007/s00335-010-9263-9)
- 8) Darwish, W., Ikenaka, Y., Eldaly, E. and Ishizuka, M. 2010. Mutagenic activation and detoxification of benzo[a]pyrene in vitro by hepatic cytochrome P450 1A1 and phase II enzymes in three meat-producing animals. *Food Chem. Toxicol.*, **48**: 2526–2531. (doi: 10.1016/j.fct.2010.06.026)
- 9) Chang, H. S., Ko, M., Ishizuka, M., Fujita, S., Yabuki, A., Hossain, M.A. and Yamato, O. 2010. Sodium 2-propenyl thiosulfate derived from garlic induces phase II detoxification enzymes in rat hepatoma H4IIE cells. *Nutr. Res.*, **30**: 435–440. (doi: 10.1016/j.nutres.2010.06.007)
- 10) Nakayama, S. M., Ikenaka, Y., Muzandu, K., Choongo, K., Oroszlany, B., Teraoka, H., Mizuno, N. and Ishizuka, M. 2010. Heavy Metal Accumulation in Lake Sediments, Fish (*Oreochromis niloticus* and *Serranochromis thumbergi*), and Crayfish (*Cherax quadricarinatus*) in Lake Itzhitzezi and Lake Kariba, Zambia. *Arch. Environ. Contam. Toxicol.*, **59**: 291–300. (doi: 10.1007/s00244-010-9483-8)
- 11) Darwish W. S., Ikenaka Y., El-Ghareeb W. R. and Ishizuka M. 2010. High expression of the mRNA of cytochrome P450 and phase II enzymes in the lung and kidney tissues of cattle. *Animal*, **4**: 2023–2029. (doi: 10.1017/S1751731110001394)
- 12) Darwish, W. S., Ikenaka, Y., Ohno, M., Eldaly, E. A. and Ishizuka, M. 2010. Carotenoids as regulators for inter-species difference in cytochrome P450 1A expression and activity in ungulates and rats. *Food Chem. Toxicol.*, **48**: 3201–3208. (doi: 10.1016/j.fct.2010.08.022)
- 13) Sata, F., Kurahashi, N., Ban, S., Moriya, K., Tanaka, K. D., Ishizuka, M., Nakao, H., Yahata, Y., Imai, H., Kakizaki, H., Nonomura, K. and Kishi, R. 2010. Genetic polymorphisms of 17 $\beta$ -hydroxysteroid dehydrogenase 3 and the risk of hypospadias. *J. Sex. Med.*, **7**: 2729–2738. (doi: 10.1111/



- j.1743-6109.2009.01641.x)
- 14) Darwish, W. S., Kawai, Y., Ikenaka, Y., Yamamoto, H., Muroya, T. and Ishizuka, M. 2010. Identification and phylogenetic analysis of novel cytochrome P450 1A genes from ungulate species. *J. Vet. Med. Sci.*, **72**: 1237-1241. (doi: 10.1292/jvms.10-0019)
  - 15) Ikenaka, Y., Nakayama, S. M. M., Muzandu, K., Choongo, K., Teraoka, H., Mizuno, N. and Ishizuka, M. 2010. Heavy metal contamination of soil and sediment in Zambia. *African Journal of Environmental Science and Technology*, **4**: 729-739.
  - 16) Yabe, J., Ishizuka, M. and Umemura, T. 2010. Current levels of heavy metal pollution in Africa. *J. Vet. Med. Sci.*, **72**: 1257-1263. (doi: 10.1292/jvms.10-0058)

## Laboratory of Wildlife Biology and Medicine

### Original articles

- 1) Hayakawa, D., Sasaki, M., Suzuki, M., Tsubota, T., Igota, H. and Kitamura, N. 2010. Immunohistochemical localization of steroidogenic enzymes in the testis of the sika deer (*Cervus nippon*) during developmental and seasonal changes. *J. Reprod. Dev.*, **56**: 117-123. (doi: 10.1262/jrd.09-102T)
- 2) Iibuchi, R., Kamine, A., Shimozuru, M., Nio-Kobayashi, J., Watanabe, G., Taya, K. and Tsubota, T. 2010. Changes in plasma gonadotropins, inhibin and testosterone concentrations and testicular gonadotropin receptor mRNA expression during testicular active, regressive and recrudescence phase in the captive Japanese black bear (*Ursus thibetanus japonicus*). *Jpn. J. Vet. Res.*, **57**: 185-196.
- 3) Nakagawa, E., Kobayashi, M., Suzuki, M. and Tsubota, T. 2010. Genetic variation in the harbor seal *Phoca vitulina* and the spotted seal *Phoca largha* in Hokkaido, based on mitochondrial DNA cytochrome *b* sequences. *Zool. Sci.*, **27**: 263-268. (doi: 10.2108/zsj.27.263)
- 4) Iibuchi, R., Shimozuru, M., Kamine, A., Nio-Kobayashi, J., Iwanaga, T. and Tsubota, T. 2010. Localization of five steroidogenic enzyme mRNAs in Japanese black bear (*Ursus thibetanus japonicus*) testes during the mating season by *in situ* hybridization. *J. Reprod. Dev.*, **56**: 236-242. (doi: 10.1262/jrd.09-188N)
- 5) Kubo, M., Chiba, E., Iibuchi, R., Tsubota, T., Sasaki, M., Sakai, H. and Yana, T. 2010. Hepatozoon sp. Infection in Hokkaido Brown Bears *Ursus arctos yesoensis*. *Jpn. J. Zoo and Wildl. Med.*, **15**: 111-113.
- 6) Adachi, I., Kusuda, S., Nagao, E., Taira, Y., Asano, M., Tsubota, T. and Doi O. 2010. Fecal steroid metabolites and reproductive monitoring in female Tsushima leopard cat (*Prionailurus bengalensis euptilurus*). *Theriogenology*, **74**: 1499-1503. (doi: 10.1016/j.theriogenology.2010.04.031)
- 7) Yamanaka, A., Asano, M., Suzuki, M., Mizoguchi, T., Oi, T., Shimozuru, M. and Tsubota, T. 2010. Evaluation of stored body fat of nuisance-killed Japanese black bears (*Ursus thibetanus japonicus*). *Zool. Sci.*, In press.
- 8) Ogawa, K., Yamaguchi, K., Suzuki, M., Tsubota, T., Ohya, K. and Fukushi, H. 2010. Genetic characteristics and antimicrobial resistance of *Escherichia coli* from Japanese macaques (*Macaca fuscata*) in rural Japan. *J. Wildl. Dis.*, In press.

## Laboratory of Veterinary Hygiene

### Original articles

- 1) Nakamitsu, S., Kurokawa, A., Yamasaki, T., Uryu, M., Hasebe, R. and Horiuchi, M. 2010. Cell-density dependent increase of the amount of protease-resistant PrP in prion-infected Neuro2a mouse neuroblastoma cells. *J. Gen. Virol.*, **91**: 563-569. (doi: 10.1099/vir.0.016287-0)
- 2) Sakata, H., Horiuchi, M., Takahashi, I. and Kinjo, M. 2010. Conformational Analysis of Soluble Oligomers of GFP Tagged Prion Protein by Fluorescence Fluctuation Spectroscopy. *Curr. Pharm. Biotechnol.*, **11**: 87-95. (doi: 10.2174/138920110790725357)
- 3) Sato, Y., Shimonohara, N., Hanaki, K.I., Goto, M., Yamakawa, Y., Horiuchi, M., Takahashi, H., Sata, T. and Nakajima, N. 2010. ImmunoAT method: an initial assessment for the detection of abnormal isoforms of prion protein in formalin-fixed and paraffin-embedded tissues. *J. Virol. Methods.*, **165**: 261-267. (doi: 10.1016/j.jviromet.2010.02.006)
- 4) Watanabe, Y., Hiraoka, W., Igarashi, M., Ito, K., Shimoyama, Y., Horiuchi, M., Yamamori, T., Yasui, H., Kuwabara, M., Inagaki, F. and Inanami, O. 2010. A novel copper(II) coordination at His186 in full-length murine prion protein. *Biochem. Biophys. Res. Commun.*, **394**: 522-528. (doi: 10.1016/j.bbrc.2010.03.003)
- 5) Hasebe, R., Suzuki, T., Makino, Y., Igarashi, M., Yamanouchi, S., Maeda, A., Horiuchi, M., Sawa, H. and Kimura, T. 2010. Transcellular transport of West Nile virus-like particles across human endothelial cells depends on residues 156 and 159 of envelope protein. *BMC Microbiol.*, **10**: 165. (doi: 10.1186/1471-2180-10-165)
- 6) Sassa, Y., Yamasaki, T., Horiuchi, M., Inoshima, Y. and Ishiguro, N. 2010. The effects of lysosomal and proteasomal inhibitors on abnormal forms of prion protein degradation in murine macrophages. *Microbiol. Immunol.*, **54**: 763-768. (doi: 10.1111/j.1348-0421.2010.00272.x.)

## Veterinary Teaching Hospital

### Original Articles

- 1) Kato, H., Ichijo, Y., Emura, Y., Sato, R., Takaku, H., Onishi, M. and Tajima, M. 2010. Neutralizing antibody titer persistence after immunization with bovine viral diarrhea virus vaccine. *J. Jpn. Vet. Med. Assoc.*, **63**: 33-37. (in Japanese with English summary)
- 2) Kadohira, M. and Tajima, M. 2010. A case control study of bovine viral diarrhea virus (BVDV) persistent infection (PI) in Betsukai, Hokkaido, Japan. *J. Vet. Med. Sci.*, **72**: 635-638. (doi: 10.1292/jvms.09-0305)
- 3) Kato, H., Emura, Y., Sato, R., Nakao, S., Onishi, M. and Tajima, M. 2010. Study on immunization effect of vaccines against respiratory diseases containing bovine viral diarrhea virus inactivated antigen. *J. Livestock Med.*, **57**: 221-226. (in Japanese with English summary)

### Publications other than original articles

- 1) Konnai, S., Tajima, M., Onuma, M. and Ohashi, K. 2010. Prevalence of bovine leukemia; the reply against the problem from bedside. *J. Livestock Med.*, **57**: 201-207. (in Japanese)
- 2) Tajima, M. 2010 Endocrinopathy. In. *Clinical*

*veterinary advisor dogs and cats*, E. Cote ed. pp.44, 310-311, 496-497, 638-639, 776-780, 848-850, 1042-1049. Interzoo, Tokyo. (translated in Japanese).

3) Kato, H. and Tajima, M. 2010 Bovine viral diarrhoea virus and reproductive problem. *J. Livestock Med.*, **57**, 689-691. (in Japanese)

## Office for Faculty Development and Teaching Enriched Veterinary Medicine

### Original articles

- 1) Elewa, Y. H., Bareedy, M. H., Abuel-Atta, A. A., Ichii, O., Otsuka, S., Kanazawa, T., Lee, SH., Hashimoto, Y. and Kon, Y. 2010. Structural characteristics of goat (*Capra hircus*) parotid salivary glands. *Jpn. J. Vet. Res.*, **58**: 121-135.
- 2) Elewa, Y. H., Bareedy, M. H., Abuel-Atta, A. A., Ichii, O., Otsuka, S., Kanazawa, T., Lee, SH., Hashimoto, Y. and Kon, Y. 2010. Cytoarchitectural differences of myoepithelial cells among goat major salivary glands. *Vet. Res. Commun.*, **34**: 557-567. (doi: 10.1007/s11259-010-9427-9)
- 3) Chihara, M., Otsuka, S., Ichii, O., Hashimoto, Y. and Kon Y. 2010. Molecular dynamics of the blood-testis barrier components during murine spermatogenesis. *Mol. Reprod. Dev.* **77**: 630-639. (doi: 10.1002/mrd.21200)
- 4) Kanazawa, T., Konno, A., Hashimoto, Y. and Kon Y. 2010. Hepatocyte nuclear factor 4 alpha is related to survival of the condensed mesenchyme in the developing mouse kidney. *Dev. Dyn.* **239**: 1145-1154. (doi: 10.1002/dvdy.22276)
- 5) Lee, SH., Otsuka, S., Ichii, O., Hashimoto, Y. and Kon, Y. 2010. Quantitative trait-locus analysis of ovarian cysts derived from rete ovarii in MRL/MpJ mice. *Mamm. Genome*, **21**: 162-171. (doi: 10.1007/s00335-010-9254-x)
- 6) Ichii, O., Kamikawa, A., Otsuka, S., Hashimoto, Y., Sasaki, N., Endoh, D. and Kon, Y. 2010. Overexpression of interferon-activated gene 202 (Ifi202) correlates with the progression of autoimmune glomerulonephritis associated with the MRL chromosome 1. *Lupus*, **19**: 897-905. (doi: 10.1177/0961203310362534)
- 7) Otsuka, S., Namiki, Y., Ichii, O., Hashimoto, Y., Sasaki, N., Endoh, D. and Kon, Y. 2010. Analysis of factors decreasing testis weight in MRL mice. *Mamm. Genome*, **21**: 153-161. (doi: 10.1007/s00335-010-9251-0)
- 8) Ichii, O., Otsuka, S., Hashimoto, Y., Sasaki, N., Ohta, H., Takiguchi, M., Yabuki, A., Endoh, D. and Kon, Y. 2010. Local overexpression of interleukin 1 family, member 6 relates to the development of tubulointerstitial lesions. *Lab. Invest.*, **90**: 459-475. (doi: 10.1038/labinvest.2009.148)

### Publications other than original articles

- 1) Hashimoto, Y. 2010. Introduction and general anatomy, Hind limb or Pelvic limb, Vol. I, pp. 23-74, pp. 241-299, Topographical-clinical anatomy, Introduction and general anatomy of the fowl, Vol. II, pp. 737-804, pp. 805-879. In: *Veterinary Anatomy of Domestic Mammals, -Textbook and Colour Atlas-*, Midori-Shobo, Tokyo. (translated in Japanese)

## Department of Global Epidemiology

### Original articles

- 1) Matsuno, K., Kishida, N., Usami, K., Igarashi, M., Yoshida, R., Nakayama, E., Shimojima, M., Feldmann, H., Irimura, T., Kawaoka, Y. and Takada, A. 2010. Different potential of C-type lectin-mediated entry between Marburg virus strains. *J. Virol.*, **84**: 5140–5147. (doi: 10.1128/JVI.02021-09)
- 2) Nakayama, E., Yokoyama, A., Miyamoto, H., Igarashi, M., Kishida, N., Matsuno, K., Marzi, A., Feldmann, H., Ito, K., Saijo, M. and Takada, A. 2010. Enzyme-linked immunosorbent assay for detection of filovirus species-specific antibodies. *Clin. Vaccine Immunol.*, **17**: 1723–1728. (doi: 10.1128/CVI.00170-10)
- 3) Sakoda, Y., Sugar, S., Batchluun, D., Erdene-Ochir, T. O., Okamatsu, M., Isoda, N., Soda, K., Takakuwa, H., Tsuda, Y., Yamamoto, N., Kishida, N., Matsuno, K., Nakayama, E., Kajihara, M., Yokoyama, A., Takada, A., Sodnomdarjaa, R. and Kida, H. 2010. Characterization of H5N1 highly pathogenic avian influenza virus strains isolated from migratory waterfowl in Mongolia on the way back from the southern Asia to their northern territory. *Virology*, **406**: 88–94. (doi: 10.1016/j.virol.2010.07.007)
- 4) Okamatsu, M., Tanaka, T., Yamamoto, N., Sakoda, Y., Sasaki, T., Tsuda, Y., Isoda, N., Kokumai, N., Takada, A., Umemura, T. and Kida, H. 2010. Antigenic, genetic, and pathogenic characterization of H5N1 highly pathogenic avian influenza viruses isolated from dead whooper swans (*Cygnus cygnus*) found in northern Japan in 2008. *Virus Genes*, **41**: 351–357. (doi: 10.1007/s11262-010-0530-3)
- 5) Yang, J., Yoshida, R., Kariya, Y., Zhang, X., Hashiguchi, S., Nakashima, T., Suda, Y., Takada, A., Ito, Y. and Sugimura, K. 2010. Characterization of human single-chain antibodies against highly pathogenic avian influenza H5N1 viruses: mimotope and neutralizing activity. *J. Biochem.*, **148**: 507–515. (doi: 10.1093/jb/mvq084)
- 6) Matsuno, K., Nakayama, E., Noyori, O., Marzi, A., Ebihara, H., Irimura, T., Feldmann, H. and Takada, A. 2010. C-type lectins do not act as functional receptors for filovirus entry into cells. *Biochem. Biophys. Res. Commun.*, **403**: 144–148. (doi: 10.1016/j.bbrc.2010.10.136)
- 7) Iwai, A., Shiozaki, T., Kawai, T., Akira, S., Kawaoka, Y., Takada, A., Kida, H. and Miyazaki, T. 2010. Influenza A virus polymerase inhibits type I interferon induction by binding to interferon beta promoter stimulator 1. *J. Biol. Chem.*, **285**: 32064–32074. (doi: 10.1074/jbc.M110.112458)
- 8) Nakajima, C., Rahim, Z., Fukushima, Y., Sugawara, S., van der Zanden, A. G. M., Tamaru, A. and Suzuki, Y. 2010. Identification of Mycobacterium tuberculosis clinical isolates in Bangladesh by a species distinguishable multiplex PCR. *BMC Infect. Dis.*, **10**: 118. (doi: 10.1186/1471-2334-10-118)
- 9) Fukasawa, T., Oda, N., Wada, Y., Tamaru, A., Fukushima, Y., Nakajima, C. and Suzuki, Y. 2010. A novel method for the purification of DNA by capturing nucleic acid and magnesium complexes on non-woven fabric filters under alkaline conditions for the gene diagnosis of tuberculosis by loop-mediated isothermal amplification (LAMP). *Jpn. J. Infect. Dis.*, **63**: 246–250.
- 10) Ishihara, K., Shimokubo, N., Sakagami, A., Ueno, H., Muramatsu, Y., Kadosawa, T., Yanagisawa, C., Hanaki, H., Nakajima, C., Suzuki, Y. and Tamura, Y. 2010. Occurrence and molecular characteristics of methicillin-resistant *Staphylococcus aureus* and methicillin-resistant *Staphylococcus pseudintermedius* in an academic veterinary hospital. *Appl. Env. Microbiol.*, **76**: 5165–5174. (doi: 10.1128/

- AEM.02780-09.)
- 11) Matsuoka, M., Suzuki, Y., Garcia, I. E., Fafutis-Morris, M., Vargas-Gonzalez, A., Carreno-Martinez, C., Fukushima, Y. and Nakajima, C. 2010. Possible mode of emergence for drug-resistant leprosy is revealed by an analysis of samples from Mexico. *Jpn. J. Infect. Dis.*, **63**: 412-416.
  - 12) Okada, K., Chantaroj, S., Taniguchi, T., Suzuki, Y., Roobthaisong, A., Puiprom, O., Honda, T. and Sawanpanyalert, P. 2010. A rapid, simple, and sensitive loop-mediated isothermal amplification method to detect toxigenic *Vibrio cholerae* in rectal swab samples. *Diagn. Micr. Infec. Dis.*, **66**: 135-139. (doi: 10.1016/j.diagmicrobio.2009.09.004)
  - 13) Uchiyama, S., Suzuki, Y., Otake, K., Yokoyama, M., Ohta, M., Aikawa, S., Komatsu, M., Sawada, T., Kagami, Y., Morishima, Y. and Fukui, K. 2010. Development of novel humanized anti-CD20 antibodies based on affinity constant and epitope. *Cancer Sci.*, **101**: 201-209. (doi: 10.1111/j.1349-7006.2009.01392.x)
  - 14) Watanabe, Y., Hiraoka, W., Igarashi, M., Ito, K., Shimoyama, Y., Horiuchi, M., Yamamori, T., Yasui, H., Kuwabara, M., Inagaki, F. and Inanami, O. 2010. A novel copper(II) coordination at His186 in full-length murine prion protein. *Biochem. Biophys. Res. Commun.*, **394**: 522-528. (doi: 10.1016/j.bbrc.2010.03.003)
  - 15) Ito, K., Zeugmann, T. and Zhu, Y. 2010. Clustering the normalized compression distance for influenza virus data. *Lect. Notes Comput. Sci.*, **6060**: 130-146. (doi: 10.1007/978-3-642-12476-1\_9)
  - 16) Igarashi, M., Ito, K., Yoshida, R., Tomabechi, D., Kida, H. and Takada, A. 2010. Predicting the antigenic structure of the pandemic (H1N1) 2009 influenza virus hemagglutinin. *PLoS ONE*, **5(1)**: e8553. (doi: 10.1371/journal.pone.0008553)

### Publications other than original articles

- 1) Takada, A. 2010. Immunity against influenza virus infection. *Nippon Rinsho (Japanese Journal of Clinical Medicine)*, **68**: 1625-1630 (in Japanese).
- 2) Matsuba, T., Nakajima, C. and Suzuki, Y. 2010. Envelope structure and components of *Mycobacterium tuberculosis*. *Nippon Saikingaku Zasshi*, **65**: 355-368 (in Japanese).
- 3) Matsuoka, M., Suzuki, Y. and Makino M. 2010. Novel method for simple detection of mutations conferring drug resistance in *Mycobacterium leprae*, based on a DNA microarray, and its applicability in developing countries. *Nihon Hansenbyo Gakkai Zasshi*, **79**: 257-261 (in Japanese).
- 4) Suzuki, Y., Iizuka, M., Oguri, H. and Sugimoto, C. 2010. Science and technology research partnership for sustainable development. Establishment of rapid diagnostic tools for tuberculosis and trypanosomiasis and screening of candidate compounds for trypanosomiasis. *Kankyokagakukaishi*, **23**: 522-529 (in Japanese).

## Department of Molecular Pathobiology

### Original articles

- 1) Ichinohe, T., Ainai, A., Nakamura, T., Akiyama, Y., Maeyama, J., Odagiri, T., Tashiro, M., Takahashi, H., Sawa, H., Tamura, S., Chiba, J., Kurata, T., Sata, T. and Hasegawa, H. 2010. Induction of cross-protective immunity against influenza A virus H5N1 by intranasal vaccine with mycelia extracts of mushroom. *J. Med. Virol.*,



- 82**: 128–137. (doi: 10.1002/jmv.21670)
- 2) Orba, Y., Suzuki, T., Makino, Y., Kubota, K., Tanaka, S., Kimura, T. and Sawa H. 2010. Large T antigen promotes JC virus replication in G2-arrested cells by inducing ATM- and ATR-mediated G2 checkpoint signaling. *J. Biol. Chem.*, **285**: 1544–1554. (doi: 10.1074/jbc.M109.064311)
  - 3) Ohtake, N., Niikura, K., Suzuki, T., Nagakawa, K., Mikuni, S., Matsuo, Y., Kinjo, M., Sawa, H. and Ijio, K. 2010. Low pH-triggered model drug molecule release from virus-like particles. *Chembiochem* **11**: 959–962. (doi: 10.1002/cbic.201000094)
  - 4) Suzuki, T., Orba, Y., Okada, Y., Sunden, Y., Kimura, T., Tanaka, S., Nagashima, K., Hall, W. W. and Sawa, H. 2010. The Human polyoma JC virus agnoprotein acts as a viroporin. *PLoS Pathogens*, **6(3)**: e1000801. (doi: 10.1371/journal.ppat.1000801)
  - 5) Suzuki, T., Yamanouchi, S., Sunden, Y., Orba, Y., Kimura, T. and Sawa, H. 2010. Natalizumab has no direct biological effect on JC virus infectivity in permissive human neural cell lines. *J. Med. Virol.*, **82**: 1229–1235. (doi: 10.1002/jmv.21805)
  - 6) Watters, K. M., Dean, J., Hasegawa, H. and Sawa, H. 2010. Hall W, Sheehy N: Cytokine and growth factor expression by HTLV-1 Lck-tax transgenic cells in SCID mice. *AIDS Res. Hum. Retroviruses*, **26**: 593–603. (doi: 10.1089/aid.2009.0212.)
  - 7) Shirai, S., Takahashi, K., Kohsaka, S., Tsukamoto, T., Isogai, H., Kudo, S., Sawa, H., Nagashima, K. and Tanaka, S. 2010. High expression of MeCP2 in JC virus-infected cells of progressive multifocal leukoencephalopathy brains. *Neuropathology*, May 19. (doi: 10.1111/j.1440-1789)
  - 8) Hasebe, R., Suzuki, T., Makino, Y., Igarashi, M., Yamanouchi, S., Maeda, A., Horiuchi, M., Sawa, H. and Kimura, T. 2010. Transcellular transport of West Nile virus-like particles across human endothelial cells depends on residues 156 and 159 of envelope protein. *BMC Microbiol.*, **10**: 165. (doi: 10.1186/1471-2180-10-165)
  - 9) Kawaguchi, A., Suzuki, T., Kimura, T., Sakai, N., Ayabe, T., Sawa, H. and Hasegawa, H. 2010. Functional analysis of an  $\alpha$ -helical antimicrobial peptide derived from a novel mouse defensin-like gene. *Biochem. Biophys. Res. Commun.*, **398**: 778–784. (doi: 10.1016/j.bbrc.2010.07.028)
  - 10) Kimura, T., Sasaki, M., Okumura, M., Kim, E. and Sawa, H. 2010. Flavivirus encephalitis: pathological aspects of mouse and other animal models. *Vet. Pathol.*, **47**: 806–818. (doi: 10.1177/0300985810372507)

## Department of Bioresources

### Original articles

- 1) Matsuda, M., Suizu, F., Hirata, N., Miyazaki, T., Obuse, C. and Noguchi, M. 2010. Characterization of the interaction of Influenza virus NS1 with Akt. *Biochem. Biophys. Res. Commun.*, **395**: 312–317. (doi: 10.1016/j.bbrc.2010.03.166)
- 2) Tosa, N., Iwai, A., Tanaka, T., Kumagai, T., Nitta, T., Chiba, S., Maeda, M., Takahama, Y., Uede, T. and Miyazaki, T. 2010. Critical function of death associated protein 3 in T cell receptor-mediated apoptosis induction. *Biochem. Biophys. Res. Commun.*, **395**: 356–360. (doi: 10.1016/j.bbrc.2010.04.018)
- 3) Nakayama, Y., Kon, S., Kurotaki, D., Morimoto, J., Matsui, Y. and Uede, T. 2010. Blockade of interaction of  $\alpha$ 9 integrin with its ligands hinders the formation of granulation in cutaneous wound healing. *Lab. Invest.*, **90**: 881–894. (doi: 10.1038/labinvest.2010.69)



- 4) Harada, T., Iwai, A. and Miyazaki, T. 2010. Identification of DELE, a novel DAP3-binding protein which is crucial for death receptor-mediated apoptosis induction. *Apoptosis*, **15**: 1247-1255. (doi: 10.1007/s10495-010-0519-3)
- 5) Iwai, A., Shiozaki, T., Kawai, T., Akira, S., Kawaoka, Y., Takada, A., Kida, H. and Miyazaki, T. 2010. Influenza A virus polymerase inhibits type I interferon induction by binding to interferon  $\beta$  promoter stimulator 1. *J. Biol. Chem.*, **285**: 32064-32074. (doi: 10.1074/jbc.M110.112458)
- 6) Hayakawa, S., Shiratori, S., Yamato, H., Kameyama, T., Kitatsuji, C., Kashigi, F., Goto, S., Kameoka, S., Fujikura, D., Yamada, T., Mizutani, T., Kazumata, M., Sato, M., Tanaka, J., Asaka, M., Ohba, Y., Miyazaki, T., Imamura, M. and Takaoka A. Epub 2010. ZAPS is a potent stimulator of RIG-I-mediated signaling for antiviral response. *Nat. Immunol.*, **12**: 37-44. (doi: 10.1038/ni.1963)
- 7) Shiozaki, T., Iwai, A., Kawaoka, Y., Takada, A., Kida, H. and Miyazaki, T. 2010. Requirement of Siva-1 for replication of influenza A virus through the apoptosis induction. *J. Gen. Virol.*, In press. (doi: 10.1099/vir.0.028316-0)
- 8) Fujioka, Y., Tsuda, M., Hattori, T., Sasaki, J., Sasaki, T., Miyazaki, T. and Ohba, Y. 2010. The Ras-PI3K signaling pathway is involved in clathrin-independent endocytosis and the internalization of influenza viruses. *PLoS ONE*, In press. (doi: 10.1371/journal.pone.0016324)
- 9) Kurotaki, D., Kon, S., Bae, K., Ito, K., Matsui, Y., Nakayama, Y., Kanayama, M., Kimura, C., Narita, Y., Nishimura, T., Iwabuchi, K., Mack, M., Van Rooijen, N., Sakaguchi, S., Uede, T. and Morimoto, J. 2010. CSF-1-dependent red pulp macrophages regulate CD4 T cell responses, *J. Immunol.*, In press. (doi: 10.4049/jimmunol.1001345)

## Department of Collaboration and Education

### Original articles

- 1) Hayashida, K., Hattori, M., Nakao, R., Tanaka, Y., Kim, J. Y., Inoue, N., Nene, V. and Sugimoto, C. 2010. A schizont-derived protein, TpSCOP, is involved in the activation of NF-kappaB in *Theileria parva*-infected lymphocytes. *Mol. Biochem. Parasitol.*, **174**: 8-17. (doi: 10.1016/j.molbiopara.2010.06.005)
- 2) Yamagishi, J., Wakaguri, H., Ueno, A., Goo, Y. K., Tolba, M., Igarashi, M., Nishikawa, Y., Sugimoto, C., Sugano, S., Suzuki, Y., Watanabe, J. and Xuan, X. 2010. High-resolution characterization of *Toxoplasma gondii* transcriptome with a massive parallel sequencing method. *DNA Res.*, **17**: 233-243. (doi: 10.1093/dnares/dsq013)
- 3) Thekisoe, O. M., Rodriguez, C. V., Rivas, F., Coronel-Servian, A. M., Fukumoto, S., Sugimoto, C., Kawazu, S. and Inoue, N. 2010. Detection of *Trypanosoma cruzi* and *T. rangeli* infections from *Rhodnius pallescens* bugs by loop-mediated isothermal amplification (LAMP). *Am. J. Trop. Med. Hyg.*, **82**: 855-860. (doi: 10.4269/ajtmh.2010.09-0533)
- 4) Salim, B., Bakheit, M. A., Kamau, J., Nakamura, I. and Sugimoto, C. 2010. Nucleotide sequence heterogeneity in the small subunit ribosomal RNA gene within *Theileria equi* from horses in Sudan. *Parasitol. Res.*, **106**: 493-498. (doi: 10.1007/s00436-009-1691-7)
- 5) Jia, H., Nishikawa, Y., Luo, Y., Yamagishi, J., Sugimoto, C. and Xuan, X. 2010. Characterization of a leucine aminopeptidase from *Toxoplasma gondii*. *Mol. Biochem. Parasitol.*, **170**: 1-6.

- (doi: 10.1016/j.molbiopara.2009.11.005)
- 6) Thekisoe, O. M., Rambritch, N. E., Nakao, R., Bazie, R. S., Mbatia, P., Namangala, B., Malele, I., Skilton, R. A., Jongejan, F., Sugimoto, C., Kawazu, S. and Inoue, N. 2010. Loop-mediated isothermal amplification (LAMP) assays for detection of *Theileria parva* infections targeting the PIM and p150 genes. *Int. J. Parasitol.*, **40**: 55-61. (doi: 10.1016/j.ijpara.2009.07.004)
- 7) Nakao, R., Stromdahl, E. Y., Magona, J. W., Faburay, B., Namangala, B., Malele, I., Inoue, N., Geysen, D., Kajino, K., Jongejan, F. and Sugimoto, C. 2010. Development of loop-mediated isothermal amplification (LAMP) assays for rapid detection of *Ehrlichia ruminantium*. *BMC Microbiol.*, **10**: 296. (doi: 10.1186/1471-2180-10-296)
- 8) Yokoyama, N., Ueno, A., Mizuno, D., Kuboki, N., Khukhuu, A., Igarashi, I., Miyahara, T., Shiraishi, T., Kudo, R., Oshiro, M., Zakimi, S., Sugimoto, C., Matsumoto, K. and Inokuma, H. 2010. Genotypic diversity of *Theileria orientalis* detected from cattle grazing in Kumamoto and Okinawa Prefectures of Japan. *J. Vet. Med. Sci.*, In press. (doi: 10.1292/jvms.10-0263)
- 9) Kamau, J., Salim, B., Yokoyama, N. and Sugimoto, C. 2010. Rapid discrimination and quantification of *Theileria orientalis* types using ribosomal DNA internal transcribed spacers. *Infect. Genet. Evol.*, In press. (doi: 10.1016/j.meegid.2010.11.016)
- 10) Tuda, J., Mongan, A. E., Tolba, M. E., Imada, M., Yamagishi, J., Xuan, X., Wakaguri, H., Sugano, S., Sugimoto, C. and Suzuki, Y. 2010. Full-parasites: database of full-length cDNAs of apicomplexa parasites, 2010 update. *Nucleic Acids Res.*, **39** (suppl. 1): D625-D631. (doi: 10.1093/nar/gkq1111)