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PUBLICATIONS BY THE STAFF OF THE GRADUATE SCHOOL OF VETERINARY MEDICINE

Laboratory of Anatomy

Original articles

- 1) 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., Yakashima, I. and Kariwa, H. 2011. 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*, **173**: 17-23.
- 2) Kanazawa, T., Ichii, O., Otsuka, S., Namiki, Y., Hashimoto, Y. and Kon, Y. 2011. Hepatocyte nuclear factor 4 alpha is associated with mesenchymal-epithelial transition in developing kidneys of C57BL/6 mice. *J. Vet. Med. Sci.*, **73**: 601-607.
- 3) Kimura, J., Ichii, O., Otsuka, S., Kanazawa, T., Namiki, Y., Hashimoto, Y. and Kon, Y. 2011. Quantitative and Qualitative Urinary Cellular Patterns Correlate with Progression of Murine Glomerulonephritis. *PLoS ONE*. **6**: e16472.
- 4) Torigoe, D., Ichii, O., Dang, R., Ohnaka, T., Okano, S., Sasaki, N., Kon, Y. and Agui, T. 2011. High-Resolution Linkage Mapping of the Rat Hooded Locus. *J. Vet. Med. Sci.*, **73**: 707-710.
- 5) Ichii, O., Yabuki, A., Sasaki, N., Otsuka, S., Ohta, H., Yamasaki, M., Takiguchi, M., Namiki, Y., Hashimoto, Y., Endoh, D. and Kon, Y. 2011. Pathological correlations between podocyte injuries and renal functions in canine and feline chronic kidney diseases. *Histol. Histopathol.*, **26**: 1243-1255.
- 6) Simon, A. Y., Sasaki, N., Ichii, O., Kajino, K., Kon, Y. and Agui, T. 2011. Distinctive and critical roles for cellular immunity and immune inflammatory response in the immunopathology of Sendai virus infection in mice. *Microbes. Infect.*, **13**: 783-797.
- 7) Lee, S. H., Ichii, O., Otsuka, S., Hashimoto, Y., Namiki, Y. and Kon, Y. 2011. Identifying a new locus that regulates the development of rete ovarian cysts in MRL/MpJ mice. *Jpn. J. Vet. Res.*, **59**: 79-88.
- 8) Lee, S. H., Ichii, O., Otsuka, S., Elewa, Y. H., Namiki, Y., Hashimoto, Y. and Kon, Y.. 2011. Ovarian cysts in MRL/MpJ mice are derived from the extraovarian rete: a developmental study. *J. Anat.*, **219** :743-755. (doi: 10.1111/j.1469-7580.2011.01431.x).
- 9) Ichii, O., Otsuka, S., Namiki, Y., Hashimoto, Y., Sasaki, N. and Kon, Y. 2011. Altered expression of miR-146a correlates with tehe development of chronic renal inflammation. *Kidney Int.*, in press. (doi: 10.1038/ki.2011.345)
- 10) Seto, T., Nagata, N., Yoshikawa, K., Ichii, O., Sanada, T., Saasa, N., Ozaki, Y., Kon, Y., Yoshii, K., Takashima, I. and Kariwa, H. 2011. Infection of Hantaan virus strain AA57 leading to pulmonary disease in laboratory mice. *Virus Res.*, in press.
- 11) Ichii, O., Otsuka, S., Namiki, Y., Hashimoto, Y. and Kon, Y. 2011. Molecular pathology of murine ureteritis causing obstructive uropathy with hydronephrosis. *PLoS ONE*. **6**: e27783.

Publications other than original articles

- 1) Kon, Y. 2011. Chapter 1, Cytology. In: *Veterinary Histology*, 5th ed., pp.1-18,

- (Japanese Association of Veterinary Anatomists ed.), Gakusosha, Tokyo. (in Japanese)
- 2) Ichii, O. 2011. Chapter 12, Urinary organ. In: *Veterinary Histology*, 5th ed., pp.179–192, (Japanese Association of Veterinary Anatomists ed.), Gakusosha, Tokyo. (in Japanese)
 - 3) Otsuka S. 2011. Chapter 14, Female genital organ. In: *Veterinary Histology*, 5th ed., pp.207–218, (Japanese Association of Veterinary Anatomists ed.), Gakusosha, Tokyo. (in Japanese)

Laboratory of Physiology

Original articles

- 1) Moustafa, A., Sakamoto, K. Q. and Habara, Y. 2011. A fundamental role for NO-PLC signaling pathway in mediating intracellular Ca^{2+} oscillation in pancreatic acini. *Nitric Oxide*, **24**: 139–150.
- 2) Moustafa, A., Sakamoto, K. Q. and Habara, Y. 2011. Nitric oxide stimulates IP_3 production via a cGMP/PKG-dependent pathway in rat pancreatic acinar cells. *Jpn. J. Vet. Res.*, **59**: 5–14.
- 3) Achiraman, S., Archunan, G., Abirami, B., Kokilavani, P., Suriyakalaa, U., SankarGanesh, D., Kamalakkannan, S., Kannan, S., Habara, Y. and Sankar, R. 2011. Increased squalene concentrations in the clitoral gland during the estrous cycle in rats: an estrus-indicating scent mark? *Theriogenology*, **76**: 1676–83.
- 4) Kazama, K., Niizuma, Y., Sakamoto, K. Q. and Watanuki Y. 2011. Factors affecting individual variation in nest-defense intensity in colonially breeding Black-tailed Gulls (*Larus crassirostris*). *Can. J. Zool.*, **89**: 938–944.
- 5) Kazama, K., Sakamoto, K. Q., Niizuma, Y. and Watanuki Y. 2011. Testosterone and breeding behavior in male Black-tailed Gulls: an implant experiment. *Ornith. Sci.*, **10**: 13–19.

Laboratory of Biochemistry

Original articles

- 1) Okamatsu-Ogura, Y., Nio-Kobayashi, J., Iwanaga, T., Terao, A., Kimura, K. and Saito, M. 2011. Possible involvement of uncoupling protein 1 in appetite control by leptin. *Exp. Biol. Med.*, **236**: 1274–1281. (doi:10.1258/ebm. 2011.011143)
- 2) Shimba, S., Ogawa, T., Hitosugi, S., Ichihashi, Y., Nakadaira, Y., Kobayashi, M., Tezuka, M., Kosuge, Y., Ishige, K., Ito, Y., Komiyama, K., Okamatsu-Ogura, Y., Kimura, K. and Saito, M. 2011. Deficient of a clock gene, brain and muscle Arnt-like protein-1 (BMAL1), induces dyslipidemia and ectopic fat formation. *PLoS ONE*, **6**: e25231. (doi:10.1371/journal.pone.0025231)
- 3) Yoneshiro, T., Aita, S., Matsushita, M., Okamatsu-Ogura, Y., Kameya, T., Kawai, Y., Miyagawa, M., Tsujisaki, M., Saito, M. 2011. Age-related decrease in cold-activated brown adipose tissue and accumulation of body fat in healthy humans. *Obesity*, **19**: 1755–1760. (doi: 10.1038/oby.2011.125)

Publication other than original articles

- 1) Kimura, K. and Kamikawa, A. 2011. Is NO-eNOS a target for C-peptide action and its protective effects on diabetic nephropathy? In: Sima AAF (ed) *Diabetes*

and C-Peptide: Scientific and Clinical Aspects. *Contemporary Diabetes*, Chapter 6:

pp. 55–65, Springer Science+Business Media LLC, PA. (DOI 10.1007/978-1-61779-391-2_6.)

Laboratory of Pharmacology

Original articles

- 1) Miyamoto, R., Otsuguro, K. and Ito, S. 2011. Time- and concentration-dependent activation of TRPA1 by hydrogen sulfide in rat DRG neurons. *Neurosci. Lett.*, **499**: 137–142. (doi: 10.1016/j.neulet.2011.05.057)
- 2) Otsuguro, K., Wada, M. and Ito, S. 2011.

Differential contributions of adenosine to hypoxia-evoked depressions of three neuronal pathways in isolated spinal cord of neonatal rats. *Br. J. Pharmacol.*, **164**: 132–144. (doi: 10.1111/j. 1476-5381.2011.01333.x)

Publication other than original articles

- 1) Kagiya, N. 2011. Comments on the amendment of the Law for the Humane

Treatment and Management of Animals. *LABIO21*, **43**: 6–8. (in Japanese)

Laboratory of Microbiology

Original articles

- 1) Isoda, N., Sakoda, Y., Okamatsu, M., Tsuda, Y. and Kida, H. 2011. Improvement of the H5N1 influenza virus vaccine strain to decrease the pathogenicity in chicken embryos. *Arch. Virol.*, **156**: 557–563.
- 2) Kajihara, M., Matsuno, K., Simulundu, E., Muramatsu, M., Noyori, O., Manzoor, R., Nakayama, E., Igarashi, M., Tomabeche, D., Yoshida, R., Okamatsu, M., Sakoda, Y., Ito, K., Kida, H. and Takada, A. 2011. An H5N1 highly pathogenic avian influenza virus that invaded Japan through waterfowl migration. *Jpn. J. Vet. Res.*, **59**: 89–100.
- 3) Kohno, S., Kida, H., Mizuguchi, M., Hirotsu, N., Ishida, T., Kadota, J. and Shimada, J. 2011. Intravenous peramivir for treatment of influenza A and B virus infection in high-risk patients. *Antimicrob. Agents Chemother.*, **55**: 2803–2812.
- 4) Kohno, S., Yen, M. Y., Cheong, H. J., Hirotsu, N., Ishida, T., Kadota, J. I., Mizuguchi, M., Kida, H. and Shimada, J. 2011. Comparison of single-dose intravenous

peramivir with oral oseltamivir in patients with seasonal influenza virus infection: A phase III randomized, double-blind study. *Antimicrob. Agents Chemother.*, **55**: 5267–5276.

- 5) Minami, F., Nagai, M., Ito, M., Matsuda, T., Takai, H., Jinkawa, Y., Shimano, T., Hayashi, M., Seki, Y., Sakoda, Y., Sugiura, K. and Akashi, H. 2011. Reactivity and prevalence of neutralizing antibodies against Japanese strains of bovine viral diarrhea virus subgenotypes. *Comp. Immunol. Microbiol. Infect. Dis.*, **34**: 35–39.
- 6) Miyagawa, E., Kogaki, H., Uchida, Y., Fujii, N., Shirakawa, T., Sakoda, Y. and Kida, H. 2011. Development of a novel rapid immunochromatographic test specific for the H5 influenza virus. *J. Virol. Methods*, **173**: 213–219.
- 7) Motoshima, M., Okamatsu, M., Asakura, S., Kuribayashi, S., Sengee, S., Batchuluun, D., Ito, M., Maeda, Y., Eto, M., Sakoda, Y., Sodnomdarjaa, R. and Kida, H. 2011.

- Antigenic and genetic analysis of H3N8 influenza viruses isolated from horses in Japan and Mongolia, and imported from Canada and Belgium during 2007-2010. *Arch. Virol.*, **156**: 1379-1385.
- 8) Nomura, N., Sakoda, Y., Endo, M., Yoshida, H., Yamamoto, N., Okamatsu, M., Sakurai, K., Hoang, N. V., Nguyen, L. V., Chu, H. D., Tien, T. N. and Kida, H. 2011. Characterization of avian influenza viruses isolated from domestic ducks in Vietnam in 2009 and 2010. *Arch. Virol.*, **157**: 247-257.
 - 9) Nomura, N., Sakoda, Y., Soda, K., Okamatsu, M. and Kida, H. 2011. An H9N2 Influenza Virus Vaccine Prepared from a Non-Pathogenic Isolate from a Migratory Duck Confers Protective Immunity in Mice against Challenge with an H9N2 Virus Isolated from a Girl in Hong Kong. *J. Vet. Med. Sci.*, in press.
 - 10) Sakoda, Y., Ito, H., Uchida, Y., Okamatsu, M., Yamamoto, N., Soda, K., Nomura, N., Kuribayashi, S., Shichinohe, S., Sunden, Y., Umemura, T., Usui, T., Ozaki, H., Yamaguchi, T., Murase, T., Ito, T., Saito, T., Takada, A. and Kida, H. 2011. Reintroduction of H5N1 highly pathogenic avian influenza virus by migratory water birds, causing poultry outbreaks in 2010-2011 winter season in Japan. *J. Gen. Virol.*, in press.
 - 11) Sakurai, A., Nomura, N., Nanba, R., Sinkai, T., Iwaki, T., Obayashi, T., Hashimoto, K., Hasegawa, M., Sakoda, Y., Naito, A., Morizane, Y., Hosaka, M., Tsuboi, K., Kida, H., Kai, A. and Shibasaki, F. 2011. Rapid typing of influenza viruses using super high-speed quantitative real-time PCR. *J. Virol. Methods*, **178**: 75-82.
 - 12) Samad, R. A., Nomura, N., Tsuda, Y., Manzoor, R., Kajihara, M., Tomabeche, D., Sasaki, T., Kokumai, N., Ohgitani, T., Okamatsu, M., Takada, A., Sakoda, Y. and Kida, H. 2011. A vaccine prepared from a non-pathogenic H5N1 influenza virus strain from the influenza virus library conferred protective immunity to chickens against the challenge with antigenically drifted highly pathogenic avian influenza virus. *Jpn. J. Vet. Res.*, **59**: 23-29.
 - 13) Samad, R. A., Sakoda, Y., Tsuda, Y., Simulundu, E., Manzoor, R., Okamatsu, M., Ito, K. and Kida, H. 2011. Virological surveillance and phylogenetic analysis of the PB2 genes of influenza viruses isolated from wild water birds flying from their nesting lakes in Siberia to Hokkaido, Japan in autumn. *Jpn. J. Vet. Res.*, **59**: 15-22.
 - 14) Shiozaki, T., Iwai, A., Kawaoka, Y., Takada, A., Kida, H. and Miyazaki, T. 2011. Requirement for Siva-1 for replication of influenza A virus through apoptosis induction. *J. Gen. Virol.*, **92**: 315-325.
 - 15) Simulundu, E., Ishii, A., Igarashi, M., Mweene, A. S., Suzuki, Y., Hang'ombe, B. M., Namangala, B., Moonga, L., Manzoor, R., Ito, K., Nakamura, I., Sawa, H., Sugimoto, C., Kida, H., Simukonda, C., Chansa, W., Chulu, J. and Takada, A. 2011. Characterization of influenza A viruses isolated from wild waterfowl in Zambia. *J. Gen. Virol.*, **92**: 1416-1427.
 - 16) Soda, K., Asakura, S., Okamatsu, M., Sakoda, Y. and Kida, H. 2011. H9N2 influenza virus acquires intravenous pathogenicity on the introduction of a pair of di-basic amino acid residues at the cleavage site of the hemagglutinin and consecutive passages in chickens. *Virol. J.*, **8**: 64.
 - 17) Soda, K., Cheng, M. C., Yoshida, H., Endo, M., Lee, S. H., Okamatsu, M., Sakoda, Y., Wang, C. H. and Kida, H. 2011. A Low Pathogenic H5N2 Influenza Virus Isolated in Taiwan Acquired High Pathogenicity by Consecutive Passages in Chickens. *J. Vet. Med. Sci.*, **73**: 767-772.
 - 18) Takeyama, N., Minari, K., Kajihara, M., Isoda, N., Sakamoto, R., Sasaki, T., Kokumai, N., Takikawa, N., Shiraishi, R., Mase, M., Hagiwara, J., Kodama, T.,

- Imamura, T., Sakaguchi, M., Ohgitani, T., Sawata, A., Okamatsu, M., Muramatsu, M., Tsukamoto, K., Lin, Z., Tuchiya, K., Sakoda, Y. and Kida, H. 2011. Detection of highly pathogenic avian influenza virus infection in vaccinated chicken flocks by monitoring antibodies against non-structural protein 1 (NS1). *Vet. Microbiol.*, **147**: 283–291.
- 19) Uchida, Y., Kanehira, K., Mase, M., Takemae, N., Watanabe, C., Usui, T., Fujimoto, Y., Ito, T., Igarashi, M., Ito, K., Takada, A., Sakoda, Y., Okamatsu, M., Yamamoto, Y., Nakamura, K., Kida, H., Hiromoto, Y., Tsuda, T. and Saito, T. 2011. Genetic characterization and susceptibility on poultry and mammal of H7N6 subtype avian influenza virus isolated in Japan in 2009. *Vet. Microbiol.*, **147**: 1–10.
- 20) Wada, A., Sakoda, Y., Oyamada, T. and Kida, H. 2011. Development of a highly sensitive immunochromatographic detection kit for H5 influenza virus hemagglutinin using silver amplification. *J. Virol. Methods.*, **178**: 82–86.
- 21) Yamamoto, N., Sakoda, Y., Motoshima, M., Yoshino, F., Soda, K., Okamatsu, M. and Kida, H. 2011. Characterization of a non-pathogenic H5N1 influenza virus isolated from a migratory duck flying from Siberia in Hokkaido, Japan, in October 2009. *Virol. J.*, **8**: 65.
- 22) Yoshida, H., Sakoda, Y., Endo, M., Motoshima, M., Yoshino, F., Yamamoto, N., Okamatsu, M., Soejima, T., Senba, S., Kanda, H. and Kida, H. 2011. Evaluation of the Reverse Transcription Loop-Mediated Isothermal Amplification (RT-LAMP) as a Screening Method for the Detection of Influenza Viruses in the Fecal Materials of Water Birds. *J. Vet. Med. Sci.*, **73**: 753–758.
- 23) Sakoda, Y., Endo, M., Sato, Y., Okamatsu, M. and Kida, H. Effects of disinfectant containing glutaraldehyde against avian influenza virus. *J. Jpn. Vet. Med. Assoc.*, in press.

Publications other than original articles

- 1) Kida, H. 2011. Prevention of highly pathogenic avian influenza. *Livestock Tech*, **67**: 2–6. (in Japanese)
- 2) Kida, H. 2011. Highly pathogenic avian influenza and the countermeasure 1. *Niwatori no Kenkyu*, **86**: 14–17. (in Japanese)
- 3) Kida, H. 2011. Highly pathogenic avian influenza and the countermeasure 2. *Niwatori no Kenkyu*, **86**: 14–17. (in Japanese)
- 4) Kida, H. 2011. Highly pathogenic avian influenza and the countermeasure 3. *Niwatori no Kenkyu*, **86**: 22–25. (in Japanese)
- 5) Kida, H. 2011. How to control the epidemic of highly pathogenic avian influenza. *J. Clin. Vet. Med.*, **29**: 10–13. (in Japanese)
- 6) Kida, H. 2011. Prevention strategy for zoonotic disease. *Saishin Igaku*, **66**: 5–7. (in Japanese)
- 7) Sakoda, Y. 2011. Prevention of highly pathogenic avian influenza. *J. Agri. Food Tech.*, **7**: 9–13. (in Japanese)
- 8) Sakoda, Y. 2011. Control of highly pathogenic avian influenza and foot and mouth disease. *Miyagi Veterinarian*, **64**: 5–8. (in Japanese)

Laboratory of Infectious Diseases

Original articles

- 1) Suzuki, S., Konnai, S., Okagawa, T., Githaka, N., Kariuki, E., Gakuya, F., Kanduma, E., Shirai, T., Ikebuchi, R., Ikenaka, Y., Ishizuka, M., Murata, S. and

- Ohashi, K. 2011. Molecular cloning and characterization of Th1 and Th2 cytokines of African buffalo (*Syncerus caffer*). *Inter. J. Immunogenet.*, in press.
- 2) Ikebuchi, R., Konnai, S., Shirai, T., Sunden, Y., Murata, S., Onuma, M. and Ohashi, K. 2011. Increase of cells expressing PD-L1 in bovine leukemia virus infection and enhancement of anti-viral immune responses *in vitro* via PD-L1 blockade. *Vet. Res.*, **42**: 103.
 - 3) 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. 2011. Molecular detection of *Anaplasma phagocytophilum* in cattle and *Ixodes persulcatus* ticks. *Vet. Microbiol.*, **49**: 504-507.
 - 4) Konnai, S., Nishikado, H., Yamada, S., Imamura, S., Ito, T., Onuma, M., Murata, S. and Ohashi, K. 2011. Molecular identification and expression analysis of lipocalins from blood feeding taiga tick, *Ixodes persulcatus* Schulze. *Exp. Parasitol.*, **27**: 467-474.
 - 5) Shirai, T., Konnai, S., Ikebuchi, R., Okagawa, T., Suzuki, S., Sunden, Y., Onuma, M., Murata, S. and Ohashi, K. 2011. Molecular cloning of bovine lymphocyte activation gene-3 and its expression characteristics in bovine leukemia virus-infected cattle. *Vet. Immunol. Immunopathol.*, **44**: 462-467.
 - 6) Murata, S., Hayashi, Y., Kato, A., Isezaki, M., Takasaki, S., Onuma, M., Osa, Y., Asakawa, M., Konnai, S. and Ohashi, K. 2011. Surveillance of Marek's disease virus in migratory and sedentary birds in Hokkaido, Japan. *Vet. J.*, in press.
 - 7) Takano, A., Fujita, H., Kadosaka, T., Konnai, S., Tajima, T., Watanabe, H., Ohnishi, M. and Kawabata, H. 2011. Characterization of reptile-associated *Borrelia* sp. in the vector tick, *Amblyomma geoemydae*, and its association with Lyme disease and relapsing fever *Borrelia* spp. *Environ. Microbiol. Rep.*, **3**: 632-637.
 - 8) Takano, A., Nakao, M., Masuzawa, T., Takada, N., Yano, Y., Ishiguro, F., Fujita, H., Ito, T., Ma, X., Oikawa, Y., Kawamori, F., Kumagai, K., Mikami, T., Hanaoka, N., Ando, S., Honda, N., Taylor, K., Tsubota, T., Konnai, S., Watanabe, H., Ohnishi, M. and Kawabata, H. 2011. Multi-locus sequence typing implicates rodents as the main reservoir host of human pathogenic *Borrelia garinii* in Japan. *J. Clin. Microbiol.*, **49**: 2035-2039.
 - 9) Mingala, C.N., Konnai, S., Ikebuchi, R., Onuma, M. and Ohashi, K. 2011. Characterization of CTLA-4, PD-1 and PDL-1 of swamp and riverine type water buffaloes. *Comp. Immunol. Microbiol. Infect. Dis.*, **34**: 55-63.
 - 10) Murata, S., Okada, T., Kano, R., Hayashi, Y., Hashiguchi, T., Onuma, M., Konnai, S. and Ohashi, K. 2011. Analysis of transcriptional activities of the Meq proteins present in highly virulent Marek's disease virus strains, RB1B and Md5. *Virus Genes*, **43**: 66-71.
 - 11) Parizi, L.F., Utiumi, K.U., Imamura, S., Onuma, M., Ohashi, K., Masuda, A. and da Silva Vaz I. Jr. 2011. Cross immunity with *Haemaphysalis longicornis* glutathione S-transferase reduces an experimental *Rhipicephalus (Boophilus) microplus* infestation. *Exp. Parasitol.*, **127**: 113-118.

Publications other than original articles

- 1) Konnai, S., 2011. Future prospective in vaccine development against bovine leukemia virus. *The Japanese Journal of Animal Hygiene*, **37**: 81-84. (in Japanese)
- 2) Konnai, S., 2011. Current topics and problems in control for bovine leukemia. *Journal of Clinical Veterinary Medicine*, **29**: 14-18. (in Japanese)

- 3) Konnai, S., Yasutomi, I., Tajima, M., Murata, S. and Ohashi, K. 2011. Control measures of bovine leukemia (part 1: reasons for increasing bovine leukemia). *Dairy Japan*, **9**: 37-39. (in Japanese)
- 4) Konnai, S., Yasutomi, I., Tajima, M., Murata, S. and Ohashi, K. 2011. Control measures of bovine leukemia (part 2: preventive measures). *Dairy Japan*, **10**: 34-36. (in Japanese)
- 5) Konnai, S., Yasutomi, I., Tajima, M., Murata, S. and Ohashi, K. 2011. Control measures of bovine leukemia (part 3: harmful rumor). *Dairy Japan*, **11**: 57-59. (in Japanese)
- 6) Konnai, S., Yasutomi, I., Tajima, M., Murata, S. and Ohashi, K. 2011. Control measures of bovine leukemia (part 4: practical approach in clinical field). *Dairy Japan*, **12**: 62-64. (in Japanese)
- 7) Konnai, S., Tajima, M., Murata, S. and Ohashi, K. 2011. Current status and control measures of bovine leukemia in Japan. *Japanese Journal of Clinical Bovine Parasitology*, **2**: 2-3. (in Japanese)
- 8) Konnai, S., Yasutomi, I., Tajima, M., Murata, S. and Ohashi, K. 2011. Overview of bovine leukemia, *Holstein magazine*, **505**: 4-7. (in Japanese)
- 9) Konnai, S., Yasutomi, I., Tajima, M., Murata, S. and Ohashi, K. 2011. Control measures of bovine leukemia by BLV, *Dairyman*, **61**: 30-31. (in Japanese)
- 10) Konnai, S., Tajima, M., Murata, S. and Ohashi, K. 2011. Control strategies of bovine leukemia, *Hokkaido shakunagekai kaihou*, **50**: 10-12. (in Japanese)

Laboratory of Parasitology

Original articles

- 1) Nonaka, N., Nakamura, S., Inoue, T., Oku, Y., Katakura, K., Matsumoto, J., Mathis, A., Chembesofu, M. and Phiri, I. G. K. 2011. Coprological survey of alimentary tract parasites in dogs from Zambia and evaluation of a coproantigen assay for canine echinococcosis. *Ann. Trop. Med. Parasitol.*, **105**: 521-530.
- 2) Ichikawa, M., Bawn, S., Maw, N. N., Htun, L. L., Thein, M., Gyi, A., Sunn, K., Katakura, K. and Itagaki, T. 2011. Characterization of *Fasciola* spp. in Myanmar on the basis of spermatogenesis status and nuclear and mitochondrial DNA markers. *Parasitol. Int.*, **60**: 474-479.
- 3) Kobayashi, T., Kanai, Y., Oku, Y., Matoba, Y., Katakura, K. and Asakawa, M. 2011. Morphological and molecular characterization of sylvatic isolates of *Trichinella* T9 obtained from feral raccoons (*Procyon lotor*). *Nematol. Res.*, **41**: 27-29.
- 4) Armua-Fernandez, M. T., Nonaka, N., Sakurai, T., Nakamura, S., Gottstein, B., Deplazes, P., Phiri, I. G. K., Katakura, K. and Oku, Y. 2011. Development of PCR/dot blot assay for specific detection and differentiation of taeniid cestode eggs in canids. *Parasitol. Int.*, **60**: 84-89.
- 5) Loveless, B. C., Mason, J. W., Sakurai, T., Inoue, N., Razavi, M., Pearson, T. W. and Boulanger, M. J. 2011. Structural characterization and epitope mapping of the glutamic acid/alanine-rich protein from *Trypanosoma congolense*: defining assembly on the parasite cell surface. *J. Biol. Chem.*, **286**: 20658-20665.
- 6) Eyford, B. A., Sakurai, T., Smith, D., Loveless, B., Hertz-Fowler, C., Donelson, J. E., Inoue, N. and Pearson, T. W. 2011. Differential protein expression throughout the life cycle of *Trypanosoma congolense*, a major parasite of cattle in Africa. *Mol. Biochem. Parasitol.*, **177**: 116-125.
- 7) Kato, H., Watanabe, J., Nieto, I. M.,

- Korenaga, M. and Hashiguchi, Y., 2011. *Leishmania* species identification using FTA card sampling directly from patients' cutaneous lesions in the state of Lara, Venezuela. *Trans. R. Soc. Trop. Med. Hyg.*, **105**: 561–567.
- 8) Kato, H., Gomez, E. A., Cáceres, A. G., Vargas, F., Mimori, T., Yamamoto, K., Iwata, H., Korenaga, M., Velez, L. and Hashiguchi, Y. 2011. Natural infections of man-biting sand flies by *Leishmania* and *Trypanosoma* species in the northern Peruvian Andes. *Vector Borne Zoonotic Dis.*, **11**: 515–521.

Laboratory of Laboratory Animal Science and Medicine

Original articles

- 1) Moritoh, K., Maeda, A., Nishino, T., Sasaki, N. and Agui, T. 2011. Development and application of West Nile virus subgenomic replicon RNA expressing secreted alkaline phosphatase. *J. Vet. Med. Sci.*, **73**: 683–686.
- 2) Torigoe, D., Ichii, O., Dang, R., Ohnaka, T., Okano, S., Sasaki, N., Kon, Y. and Agui, T. 2011. High-resolution linkage mapping of the rat hooded locus. *J. Vet. Med. Sci.*, **73**: 707–710.
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- 5) Asano, A., Torigoe, D., Sasaki, N. and Agui, T. 2011. Identification of antigenic peptides derived from B-cell epitopes of nucleocapsid protein of mouse hepatitis virus for serological diagnosis. *J. Virol. Meth.*, **177**: 107–111.
- 6) Dang, R., Torigoe, D., Suzuki, S., Kikkawa, Y., Moritoh, K., Sasaki, N. and Agui, T. 2011. Genetic background strongly modifies the severity of symptoms of Hirschsprung disease, but not hearing loss in rats carrying *Ednrb^{sl}* mutations. *PLoS One* **6**: e24086.
- 7) Dang, R., Torigoe, D., Sasaki, N. and Agui, T. 2011. QTL analysis identifies a modifier locus of aganglionosis in the rat model of Hirschsprung disease carrying *Ednrb^{sl}* mutations. *PLoS One* **6**: e27902.
- 8) Ichii, O., Yabuki, A., Sasaki, N., Otsuka, S., Ohta, H., Yamasaki, M., Takiguchi, M., Namiki, Y., Hashimoto, Y., Endoh, D. and Kon, Y. 2011. Pathological correlations between podocyte injuries and renal functions in canine and feline chronic kidney diseases. *Histol. Histopathol.*, **26**: 1243–1255.

Laboratory of Veterinary Internal Medicine

Original articles

- 1) Yamasaki, M., Kobayashi, Y., Nakamura, K., Sasaki, N., Murakami, M., Rajapakshage, B. K., Ohta, H., Yamato, O., Maede, Y. and Takiguchi, M. 2011. *Babesia gibsoni*: Detection in blood smears and formalin-fixed, paraffin-embedded tissues using deoxyribonucleic acid *in situ* hybridization analysis. *Exp. Parasitol.*, **127**: 119–126.

- 2) Ohta, H., Yamaguchi, T., Wickramasekara Rajapakshage, B. K., Murakami, M., Sasaki, N., Nakamura, K., Hwang, S.-J., Yamasaki, M. and Takiguchi, M. 2011. Expression and subcellular localization of apical junction complex proteins in canine duodenal and colonic mucosa. *Am. J. Vet. Res.*, **72**: 1046–1051.
- 3) Yamasaki, M., Ishida, M., Nakamura, K., Sasaki, N., Murakami, M., Bandula Kumara, W. R., Tamura, Y., Lim, S. Y., Ohta, H. and Takiguchi, M. 2011. Detection of anti-*Babesia gibsoni*: heat shock protein 70 antibody and anti-canine heat shock protein 70 antibody in sera from *Babesia gibsoni*-infected dogs. *Vet. Parasitol.*, **180**: 215–225.
- 4) Ichii, O., Yabuki, A., Sasaki, N., Otsuka, S., Ohta, H., Yamasaki, M., Takiguchi, M., Nami, Y., Hashimoto, Y., Endoh, D. and Kon, Y. 2011. Pathological correlations between podocyte injuries and renal functions in canine and feline chronic kidney diseases. *Histol. Histopathol.*, **26**: 1243–1255.
- 5) Yamasaki, M., Tamura, N., Nakamura, K., Sasaki, N., Murakami, M., Bandula Kumara, W. R., Tamura, Y., Lim, S. Y., Ohta, H. and Takiguchi, M. 2011. Effects and mechanisms of action of polyene macrolide antibiotic nystatin on *Babesia gibsoni* in vitro. *J. Parasitol.*, **97**: 1190–1192.
- 6) Nakamura, K., Yamasaki, M., Ohta, H., Sasaki, N., Murakami, M., Bandura Kumara, W. R. and Takiguchi, M. 2011. Effects of sildenafil citrate on five dogs with Eisenmenger's syndrome. *J. Small Anim. Pract.*, **52**: 595–598.

Laboratory of Veterinary Surgery

Original articles

- 1) Sunaga, T., Oh, N., Hosoya, K., Takagi, S. and Okumura, M. 2011. Inhibitory effects of pentosan polysulfate sodium on MAP-Kinase pathway and NF- κ B nuclear translocation in canine chondrocytes in vitro. *J. Vet. Med. Sci.* [Epub ahead of print]
- 2) Hosoya, K., Takagi, S. and Okumura, M. 2011. Iatrogenic tumor seeding after ureteral stenting in a dog with urothelial carcinoma. *J. Am. Anim. Hosp. Assoc.*, in press.
- 3) Vilar-Saavedra, P. and Hosoya, K. 2011. Thromboelastographic profile for a dog with hypocoagulable and hyperfibrinolytic phase of disseminated intravascular coagulopathy. *J. Small Anim. Pract.*, **52**: 656–659.

Publications other than original articles

- 1) Okumura, M. 2011. Intervertebral disc hernia in a dog; Question on the sensitivity of computed tomography in its diagnostic value. *Infovets*, **14**: 23–27. (in Japanese)
- 2) Okumura, M. 2011. Management of luxation of hock joints in dogs. *Infovets*, **14**: 36–39. (in Japanese)
- 3) Okumura, M. 2011. A new idea in pelvic fracture in dogs; how do you handle fractures of pubis and ischium. *Infovets*, **14**: 41–44. (in Japanese)
- 4) Okumura, M. 2011. *Patella alta* in dogs. *Infovets*, **14**: 28–31. (in Japanese)
- 5) Okumura, M. 2011. Repair of Achilles tendon in a dog. *Infovets*, **14**: 60–63. (in Japanese)
- 6) Okumura, M. 2011. Therapeutic planning and informed consent in the treatment of canine osteoarthritis. *Vet. Information*, **2**: 8–13. (in Japanese)
- 7) Okumura, M. 2011. Book review of Fundamentals of Small Animal Surgery. *J. Vet. Med.*, **64**: 607. (in Japanese)
- 8) Okumura, M. 2011. Pain management in Feline osteoarthritis. *J. Vet.*, **24**: 37. (in Japanese)

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- 9) Okumura, M. 2011. DJD-associated pain in cats: what can we do promote patient comfort? *J. Vet.*, **24**: 38-50. (Japanese translation)
 - 10) Okumura, M. 2011. Management of canine and feline osteoarthritis. *MVM* **130**: 5-13. (in Japanese)
 - 11) Okumura, M. 2011. Chapter 11-4. Management of canine osteoarthritis, In: *Updates on Veterinary Therapies. Vol. 2* Ishida, T. ed., pp352-368. Midori Shobo, Tokyo. (in Japanese)
 - 12) Takagi, S. 2011. Perioperative management of gastric surgery. *Surgeon*, **15**: 68-77. (in Japanese)
 - 13) Takagi, S. 2011. Osteochondrodysplasia in Scottish Fold Cats. *Infovets*, **14**: 41-45. (in Japanese)
 - 14) Hosoya, K. 2011. Doxorubicin chemotherapy in dogs. *Japan J. Vet. Clinic. Oncol.*, **7**: 44-50. (in Japanese)
 - 15) Hosoya, K. 2011. Ureteral stenting technique in dogs with malignant upper urinary tract obstruction (Review). *J. Hokkaido Vet. Med. Assoc.*, **55**: 1-4. (in Japanese)

Laboratory of Comparative Pathology

Original articles

- 1) Lee, H., Sunden, Y., Ochiai, K. and Umemura, T. 2011. Experimental intracerebral vaccination protects mouse from a neurotropic virus by attracting antibody secreting cells to the CNS. *Immunol. Lett.*, **139**: 102-109.
- 2) Aoshima, K., Sunden, Y., Ishida, S., Ochiai, K. and Umemura, T. 2011. Possible origin of CSF antibodies induced by intrathecal immunization and prophylactic effects against intracerebral rabies virus infection. *J. Vet. Med. Sci.*, **73**: 1303-1308.
- 3) Nakamura, S., Ochiai, K., Hatai, H., Ochi, A., Sunden, Y. and Umemura, T. 2011. Pathogenicity of avian leukosis viruses related to fowl glioma-inducing virus. *Avian Pathol.*, **40**: 499-505.
- 4) Ikebuchi, R., Konnai, S., Shirai, T., Sunden, Y., Murata, S., Onuma, M. and Ohashi, K. 2011. Increase of cells expressing PD-L1 in bovine leukemia virus infection and enhancement of anti-viral immune responses in vitro via PD-L1 blockade. *Vet. Res.*, **42**: 103.
- 5) Shirai, T., Konnai, S., Ikebuchi, R., Okagawa, T., Suzuki, S., Sunden, Y., Onuma, M., Murata, S. and Ohashi, K. 2011. Molecular cloning of bovine lymphocyte activation gene-3 and its expression characteristics in bovine leukemia virus-infected cattle. *Vet. Immunol. Immunopathol.*, [Epub ahead of print]
- 6) Sakoda, Y., Ito, H., Uchida, Y., Okamatsu, M., Yamamoto, N., Soda, K., Nomura, N., Kuribayashi, S., Shichinohe, S., Sunden, Y., Umemura, T., Usui, T., Ozaki, H., Yamaguchi, T., Murase, T., Ito, T., Saito, T., Takada, A. and Kida, H. 2011. Reintroduction of H5N1 highly pathogenic avian influenza virus by migratory water birds, causing poultry outbreaks in 2010-2011 winter season in Japan. *J. Gen. Virol.*, [Epub ahead of print]
- 7) Yabe, J., Nakayama, S.M.M., Ikenaka, Y., Nuzandu, K., Ishizuka, M. and Umemura, T. 2011. Uptake of lead, cadmium and other metals in the liver and kidneys of cattle near a lead-zinc mine in Kabwe, Zambia. *Environ. Toxicol. Chem.*, **30**: 1892-1897.
- 8) Sassa, Y., Yamamoto, H., Mochizuki, M., Umemura, T., Horiuchi, M., Ishiguro, N. and Miyazawa, T. 2011. Successive deaths of a captive snow leopard (*Uncia uncia*) and a serval (*Leptailurus serval*) by infection with feline panleukopenia virus at Sapporo

- Maruyama zoo. *J. Vet. Med. Sci.*, **73**: 491-494.
- 9) Chiba, E., Yamasaki, M., Ohta, H., Nakamura, K., Sasaki, N., Murakami, M., Tamura, Y., Yee, L-S., Bandula Kumara, W. R., Honda, H., Nasuno, T., Ochiai, K. and Takiguchi, M. 2011. Two dogs having infiltration of eosinophils into the subcorneal layer and dermis according to dermatohistopathology. *Jpn. J. Vet. Dermatol.*, **17**: 177-182. (in Japanese with English summary)

Laboratory of Theriogenology

Original articles

- 1) Uchikura, K., Nagano, M. and Hishinuma, M. 2011. The effect of ovarian status and follicular diameter on maturational ability of domestic cat oocytes. *J. Vet. Med. Sci.*, **73**: 561-566.
- 2) Sahashi, Y., Otsuki, T., Higaki, S., Nagano, M., Yamashita, Y. and Hishinuma, M. 2011. Effect of butylated hydroxytoluene on dog sperm longevity in chilling storage and cryopreservation. *J. Vet. Med. Sci.*, **73**: 895-899.
- 3) Elsheikh, A. S., Takahashi, Y. and Kanagawa, H. 2011. DNA topoisomerase II enzyme activity appears in mouse sperm heads after fertilization. *Afr. J. Biotechnol.*, **10**: 9522-9527.

Publication other than original articles

- 1) Takahashi, Y. 2011. Embryo transfer in cattle. In: *The History of Livestock Technology*, pp. 62-69, Japan Livestock Technology Association, Tokyo. (in Japanese)

Laboratory of Molecular Medicine

Original articles

- 1) Asano, T., Deguchi, Y., Kawamura, S. and Inaba, M. 2011. A simple method for enrichment of polychromatic erythroblasts from rat bone marrow and their proliferation and maturation in vitro. *J. Toxicol. Sci.*, **36**: 435-444.
- 2) Wang, C.-C., Sato, K., Otsuka, Y. and Inaba, M. 2011. Cell surface expression and internalization of the murine erythroid AE1 anion exchanger tagged with an extracellular FLAG epitope. *Jpn. J. Vet. Res.*, **59**: 157-164.

Laboratory of Public Health

Original articles

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2. Seto, T., Nagata, N., Yoshikawa, K., Ichii, O., Sanada, T., Saasa, N., Ozaki, Y., Kon, Y.,

- Yoshii, K., Takashima, I., and Kariwa, H. 2011. Infection of Hantaan virus strain AA57 leading to pulmonary disease in laboratory mice. *Virus Res.*, [Epub ahead of print]
3. Omori-Urabe, Y., Yoshii, K., Ikawa-Yoshida, A., Kariwa, H., and Takashima, I. 2011. Needle-free jet injection of DNA and protein vaccine of the Far-Eastern subtype of Tick-borne encephalitis virus induced protective immunity in mice. *Microbiol. Immunol.*, **55**: 893-897.
4. Totani, M., Yoshii, K., Kariwa, H., and Takashima, I. 2011. Glycosylation of the Envelope Protein of West Nile Virus Affects Its Replication in Chicks. *Avian Diseases*, **55**: 561-568.
5. Takano, A., Yoshii, K., Omori-Urabe, Y., Yokozawa, K., Kariwa, H., and Takashima, I. 2011. Construction of a replicon and an infectious cDNA clone of the Sofjin strain of the Far-Eastern subtype of tick-borne encephalitis virus. *Arch. Virol.*, **156**: 1931-1941.
6. Sanada, T., Kariwa, H., Nagata, N., Tanikawa, Y., Seto, T., Yoshimatsu, K., Arikawa, J., Yoshii, K., and Takashima, I. 2011. Puumala virus infection in Syrian hamsters (*Mesocricetus auratus*) resembling hantavirus infection in natural rodent hosts. *Virus Res.*, **160**: 108-119.
7. Murata, R., Hashiguchi, K., Yoshii, K., Kariwa, H., Nakajima, K., Ivanov, L. I., Leonova, G. N. and Takashima, I. 2011. Seroprevalence of West Nile Virus in Wild Birds in Far Eastern Russia Using a Focus Reduction Neutralization Test. *Am. J. Trop. Med. Hyg.*, **84**: 461-465.
8. 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. 2011. 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*, **173**: 17-23.
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10. Obara, M., Yamauchi, T., Watanabe, M., Hasegawa, S., Ueda, Y., Matsuno, K., Iwai, M., Horimoto, E., Kurata, T., Takizawa, T., Kariwa, H. and Takashima, I. 2011. Continuity and change of Japanese encephalitis virus in Toyama Prefecture, Japan. *Am. J. Trop. Med. Hyg.*, **84**: 695-708.
11. Yoshii, K., Igarashi, M., Ito, K., Kariwa, H., Holbrook, M. R. and Takashima, I. 2011. Construction of an infectious cDNA clone for Omsk hemorrhagic fever virus, and characterization of mutations in NS2A and NS5. *Virus Res.*, **155**: 61-68.
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Publications other than original articles

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2. Kariwa, H., Yoshii, K., and Takashima, I. 2011. Tick-borne encephalitis. *J. Public Health Practice*, **75**: 36-38. (in Japanese)
3. Kunze, U.; ISW. TBE. 2011. Tick-borne encephalitis: The impact of epidemiology, changing lifestyle, and environmental factors. Conference report of the 12th Annual

Meeting of the International Scientific Working Group on Tick-Borne Encephalitis

(ISW-TBE). *Vaccine*, **29**: 1355–1356.

Laboratory of Radiation Biology

Original articles

- 1) Yamamori, T., Mizobata, A., Saito, Y., Urano, Y., Inanami, O., Irani, K. and Noguchi, N. 2011. Phosphorylation of p66shc mediates 6-hydroxydopamine cytotoxicity. *Free Radic. Res.*, **45**: 342–350. (doi:10.3109/10715762.2010.532496)
- 2) Meike, S., Yamamori, T., Yasui, H., Eitaki, M., Matsuda, A. and Inanami, O. 2011. 8-amino-adenosine Enhances Radiation-induced Cell Death in Human Lung Carcinoma A549 Cells. *J. Radiat. Res.*, **52**: 456–463. (doi 10.1269/jrr.10188)
- 3) Meike, S., Yamamori, T., Yasui, H., Eitaki, M., Matsuda, A., Morimatsu, M., Fukushima, M., Yamasaki, Y. and Inanami, O. 2011. A nucleoside anticancer drug, 1-(3-C-ethynyl- β -D-ribo-pentofuranosyl)cytosine (TAS106), sensitizes cells to radiation by suppressing BRCA2 expression. *Mol. Cancer*, **10**: 92. (doi: 10.1186/1476-4598-10-92)
- 4) Kobayashi, S., Abe, Y., Inanami, O., Oda, S., Yamauchi, K., Hankanga, C., Yasuda, J. and Sato, R. 2011. Oral administration of bovine lactoferrin upregulates neutrophil functions in a dog with familial β 2-integrin-related neutrophil dysfunction. *Vet. Immunol. Immunopathol.*, **143**: 155–161. (doi:10.1016/j.vetimm.2011.05.027)
- 5) Matsumoto, S., Batra, S., Saito, K., Yasui, H., Choudhuri, R., Gadiseti, C., Subramanian, S., Devasahayam, N., Munasinghe, J. P., Mitchell, JB. and Krishna, MC. 2011. Antiangiogenic agent sunitinib transiently increases tumor oxygenation and suppresses cycling hypoxia. *Cancer Res.*, **71**: 6350–6359. (doi:10.1158/0008-5472.CAN-11-2025)
- 6) Yamanaka, K., Saito, Y., Yamamori, T., Urano, Y. and Noguchi, N. 24(S)-hydroxycholesterol induces neuronal cell death through necroptosis, a form of programmed necrosis. *J. Biol. Chem.*, **286**: 24666–24673. (doi:10.1074/jbc.M111.236273)

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- 1) Yamamori, T. and Irani, K. 2011. Deacetylation of AP endonuclease 1 by Sirt1 regulates DNA base excision repair activity. *Biomedical Gerontology*, **35**: 29–32. (in Japanese)
- 2) Yamamori, T. and Irani, K. 2011. Regulation of DNA repair enzyme AP endonuclease 1 by lifespan regulation-related protein Sirt1. *The Journal of the Hokkaido Veterinary Medical Association*, **55**: 45–49. (in Japanese)

Laboratory of Toxicology

Original articles

- 1) Nakayama, S.M.M., Ikenaka, Y., Hamada, K., Muzandu, K., Choongo, K., Teraoka, H., Mizuno, N. and Ishizuka, M. 2011. Metal and metalloid contamination in roadside soil and wild rats around a Pb-Zn mine in Kabwe, Zambia. *Environ. Poll.*, **159**: 175–181. (doi:10.1016/j.envpol.2010.09.007)
- 2) Ohno, M., Darwish, W.S., Ikenaka, Y., Miki, W. and Ishizuka, M. 2011. Astaxanthin can alter CYP1A-dependent activities via two

- different mechanisms : Induction of protein expression and inhibition of NADPH P450 reductase dependent electron transfer. *Food Chem. Toxicol.*, **49**: 1285–1291. (doi:10.1016/j.fct.2011.03.009)
- 3) Sasaki, N., Matsumoto, T., Ikenaka, Y., Kazusaka, A., Ishizuka, M. and Fujita, S. 2011. Furazolidone induces the activity of microsomal enzymes that metabolize furazolidone in chickens. *Pestic. Biochem. Physiol.*, **100**: 135–139. (doi:10.1016/j.pestbp.2011.02.013)
 - 4) Ueda, H., Ikenaka, Y., Nakayama, S.M., Tanaka-Ueno, T. and Ishizuka, M. 2011. Phase-II conjugation ability for PAH metabolism in amphibians: Characteristics and inter-species differences. *Aquat. Toxicol.*, **105**: 337–343. (doi:10.1016/j.aquatox.2011.07.004)
 - 5) Ohno, M., Darwish, W.S., Ikenaka, Y., Miki, W., Fujita, S. and Ishizuka, M. 2011. Astaxanthin rich crude extract of *Haematococcus pluvialis* induces cytochrome P450 1A1 mRNA by activating aryl hydrocarbon receptor in rat hepatoma H4IIE cells. *Food Chem.*, **130**: 356–361. (doi:10.1016/j.foodchem.2011.07.050)
 - 6) Yabe, J., Nakayama, S.M., Ikenaka, Y., Muzandu, K., Ishizuka, M. and Umemura, T. 2011. Uptake of lead, cadmium, and other metals in the liver and kidneys of cattle near a lead-zinc mine in Kabwe, Zambia. *Environ. Toxicol. Chem.*, **30**: 1892–1897. (doi: 10.1002/etc.580)
 - 7) Saengtienchai, A., Ikenaka, Y., Watanabe, K., Ishida, T. and Ishizuka, M. 2011. Comparative metabolism of warfarin in rats and chickens. *Poult Sci.*, **90**: 2775–2781.

Laboratory of Wildlife Biology and Medicine

Original articles

- 1) Yamanaka, A., Asano, M., Suzuki, M., Mizoguchi, T., Oi, T., Shimozuru, M. and Tsubota, T. 2011. Evaluation of stored body fat of nuisance-killed Japanese black bears (*Ursus thibetanus japonicus*). *Zool. Sci.*, **28**: 105–111.
- 2) Ogawa, K., Yamaguchi, K., Suzuki, M., Tsubota, T., Ohya, K. and Fukushima, H. 2011. Genetic characteristics and antimicrobial resistance of *Escherichia coli* from Japanese macaques (*Macaca fuscata*) in rural Japan. *J. Wildl. Dis.*, **47**: 261–270.
- 3) Yamanaka, A., Yamauchi, K., Tsujimoto, T., Mizoguchi, T., Oi, T., Sawada, S., Shimozuru, M. and Tsubota, T. 2011. Estimating the success rate of ovulation and early litter loss rate in the Japanese black bear (*Ursus thibetanus japonicus*) by examining the ovaries and uteri. *Jpn. J. Vet. Res.*, **59**: 31–39.
- 4) Takano, A., Nakao, M., Masuzawa, T., Takada, N., Yano, Y., Ishiguro, F., Fujita, H., Ito, T., Ma, X., Oikawa, Y., Kawamori, F., Kumagai, K., Mikami, T., Hanaoka, N., Ando, S., Honda, N., Taylor, K., Tsubota, T., Konnai, S., Watanabe, H., Ohnishi, M. and Kawabata, H. 2011. Multi-locus sequence typing of *Borrelia garinii* isolated from human, ticks, and rodents; Rodents were implicated as the main reservoir host of human pathogenic *B. garinii* in Japan. *J. Clin. Microbiol.*, **49**: 2035–2039.
- 5) Nakashita, R., Suzuki, Y., Akamatsu, F., Sato-Hashimoto, M. and Tsubota, T.: Ecological application of compound-specific stable nitrogen isotope analysis of amino acids—A case study for captive and wild bears. *Researches in Organic Geochemistry*, in press.
- 6) Kamine, A., Shimozuru, M., Shibata, H. and Tsubota, T.: Effects of tiletamine-zolazepam with and without premedications on blood

- chemistry and glucose tolerance tests in Japanese black bears (*Ursus thibetanus japonicus*). *Am. J. Vet. Res.*, in press.
- 7) Weng, Q., Tsubota, T., Dai, M., Tian, Y., Zhang, H., Xu, M., Watanabe, G. and Taya, K.: Immunolocalization of steroidogenic enzymes and its expression during the breeding season in the testes of the wild raccoon dogs (*Nyctereutes procyonoides*). *Anim. Sci. J.*, in press
 - 8) Kamine, A., Shimozuru, M., Shibata, H. and Tsubota, T.: Changes in blood glucose and insulin responses to intravenous glucose tolerance tests and blood biochemical values in adult female Japanese black bears (*Ursus thibetanus japonicus*). *Jpn. J. Vet. Res.*, in press.
 - 9) Okuyama W. M., Shimozuru, M., Takahashi, N., Fukui, D., Nakamura, R. and Tsubota, T.: Seasonal changes in spermatogenesis and peripheral testosterone concentration in raccoon (*Procyon lotor*) in Hokkaido. *J. Vet. Med. Sci.*, in press.

Laboratory of Veterinary Hygiene

Original articles

- 1) Sassa, Y., Yamamoto, H., Mochizuki, M., Umemura, T., Horiuchi, M., Ishiguro, N., and Miyazawa, T. 2011. Successive deaths of a captive snow leopard (*Uncia uncia*) and a serval (*Leptailurus serval*) by infection with feline panleukopenia virus at Sapporo Maruyama Zoo. *J. Vet. Med. Sci.*, **73**: 491–494.
- 2) Furuoka, H., Horiuchi, M., Yamakawa, Y. and Sata, T. 2011. Predominant involvement of the cerebellum in guinea pigs infected with bovine spongiform encephalopathy (BSE). *J. Comp. Pathol.*, **144**: 269–276.
- 3) Song C.-H., Honmou, O., Furuoka, H. and Horiuchi, M. 2011. Identification of chemoattractive factors involved in the migration of bone marrow-derived mesenchymal stem cells to brain lesions caused by prions. *J. Virol.*, **85**: 11069–11078.
- 4) Sasaki, M., Kim, E., Igarashi, M., Ito, K., Hasebe, R., Fukushi, H., Sawa, H. and Kimura, T. 2011. Single amino acid residue in the A2 domain of major histocompatibility complex class I is involved in the efficiency of equine herpesvirus-1 entry. *J. Biol. Chem.*, **286**: 39370–39378.
- 5) Sasaki, M., Hasebe, R., Makino, Y., Suzuki, T., Fukushi, H., Okamoto, M., Matsuda, K., Taniyama, H., Sawa, H. and Kimura T. 2011. Equine major histocompatibility complex class I molecules act as entry receptors that bind to equine herpesvirus-1 glycoprotein D. *Genes Cells*, **16**: 343–357.

Publication other than original articles

- 1) Horiuchi, M. 2011. Prion Diseases. The Medical Frontline, **66**: 2713–2720. (in Japanese)

Office for Faculty Development and Teaching Enriched Veterinary Medicine

Original articles

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Veterinary Teaching Hospital

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Division of Global Epidemiology

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Division of Molecular Pathobiology

Original Article

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Division of Bioresources

Original articles

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Division of Collaboration and Education

Original articles

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