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PUBLICATIONS BY THE STAFF OF THE GRADUATE
SCHOOL OF VETERINARY MEDICINE

Laboratory of Anatomy
Original articles

- 1) Ko, J. H., Asano, A., Kon, Y., Watanabe, T. and Agui, T. 2004. : Characterization of the chicken PKR : polymorphism of the gene and antiviral activity against Vesicular Stomatitis Virus. *Jpn. J. Vet. Res.* , 51 (3 - 4), 123-134.
- 2) Kazusa, K., Namiki, Y., Asano, A., Kon, Y., Endoh, D. and Agui, T. 2004. : Strain difference of spermatogenesis in cryptorchid testis in mice. *Comp. Med.* , 54 (2), 179-184.
- 3) Asanuma, T., Inanami, O., Tabu, K., Waki, K., Kon, Y. and Kuwabara, M. 2004. : Protection against malonate-induced ischemic brain injury in rat by a cell-permeable peptidic c-Jun N-terminal kinase inhibitor, (L)-HIV-TAT 48-57-PP-JBD 20, observed by the apparent diffusion coefficient mapping magnetic resonance imaging method. *Neurosci. Lett.* , 359, 57-60.
- 4) Saito, T., Ishida, J., Takimoto-Ohnishi, E., Takamine, S., Shimizu, K., Sugaya, T., Kato, H., Matsuoka T., Nangaku, M., Kon, Y., Sugiyama, F., Yagami, K. and Fukamizu, A. 2004. : An essential role for angiotensin II type 1 a receptor in pregnancy-associated hypertension with intrauterine growth retardation. *FASEB J.* , 18 (2), 388-90.
- 5) Rung-ruangkijkrai, T., Fujikura, D., Kon, Y. and Iwanaga, T. 2004. : Cellular expression of src-suppressed C kinase substrate (SSeCKS) in the peripheral nervous system and sensory organs. *Biomed. Res.* , 25 (3), 155-164.
- 6) Nio, J., Fujimoto, W., Konno, A., Kon, Y., Owhashi, M. and Iwanaga, T. 2004. : Cellular expression of murine Ym 1 and Ym 2 , chitinase family proteins, as revealed by in situ hybridization and immunohistochemistry. *Histochem. Cell. Biol.* , 121, 473-482.
- 7) Inanami, O., Iizuka, D., Iwahara, A., Yamamori, T., Kon, Y., Asanuma, T., Matsuda, A., Kashiwakura, K. and Kuwabara, M. 2004. : A novel anticancer ribonucleoside, 1 - (3 - C-Ethynyl-b-D-Ribo-Pentofuranosyl) cytosine, enhances radiation-induced cell death in tumor cells. *Rad. Res.* , 162, 635-645.
- 8) Konno, A., Oota, Y., Hashimoto, Y., Kon, Y. and Iwanaga, T. 2004. : Localization of 3 - phosphoglycerate dehydrogenase, an enzyme involved in de novo L-serine biosynthesis, in the peripheral nervous system and non-neuronal tissues of mice. *Biomed. Res.* , 25 (4), 195-200.
- 9) Namiki, Y., Kon, Y., Sasaki, N., Agui, T. and Endoh, D. 2004. : Exon skipping of exonuclease 1 in MRL/MpJ mice is caused by a nucleotide substitution of the branchpoint sequence in intron eight. *Jpn. J. Vet. Res.* , 52 (3), 125-134.
- 10) Hashimoto, Y., Sadamoto, Y., Konno, A., Kon, Y. and Iwanaga, T. 2004. : Distribution of neutral amino acid transporter ASCT 1 in the non-neuronal tissues of mice. *Jpn. J. Vet. Res.* , 52 (3), 113-124.
- 11) Hayashi, M., Miyane, K., Hirooka, T., Endoh, D., Higuchi, H., Nakahata, H., Nakayama, K., Kon, Y. and Okui, T. 2004. : Inhibitory effects of trientine, a copper-chelating agent, on induction of

- DNA strand breaks in hepatic cells of Long-Evans Cinnamon rats. *Biochim. Biophys. Acta*, 1674, 312-318.
- 12) Asano, A., Kon, Y. and Agui, T. 2004.: The mRNA regulation of porcine double-stranded RNA-activated protein kinase gene. *J. Vet. Med. Sci.*, 66 (12), 1523-1528.
- 13) Shiina, T., Konno, A., Oonuma, T., Kitamura, H., Imaoka, K., Takeda, N., Todokoro, K. and Morimatsu, M. 2004. Targeted disruption of MAIL, a nuclear Ikappa B protein, leads to severe atopic dermatitis-like disease. *J. Biol. Chem.*, 279 : 55493-55498
- 14) Takada, K., Takiguchi, M., Konno, A. and Inaba, M. 2004. Spontaneous development of multiple glandular and extraglandular lesions in aged IQI/Jic mice : a model for primary Sjögren's syndrome. *Rheumatology*, 43 : 858-62

Laboratory of Physiology Original articles

- 1) Iwanaga, H. and Habara, Y. 2004. Oscillatory calcium responses mediated by P₂ Y₂ purinergic receptors in terminal schwann cells of longitudinal lanceolate ending isolated from rat vibrissae. *J. Comp. Neurol.*, 475 : 416-425.
- 2) Hayashi, M., Kunii, C., Takahata, T. and Ishikawa, T. 2004. ATP-dependent regulation of SK₄/IK₁-like currents in rat submandibular acinar cells : possible role of cAMP-dependent protein kinase. *Am. J. Physiol. Cell Physiol.*, 286 (3) : C635-46.
- 3) Inagaki, A., Yamaguchi, S., and Ishikawa, T. 2004. Amiloride-sensitive epithelial Na⁺ channel currents in surface cells of rat rectal colon. *Am. J. Physiol. Cell Physiol.*, 286 (2) : C380-90.

Publications other than original articles

- 1) Gautum, S. H., Otsuguro, K., Ito, S., Saito, T. and Habara, Y. 2004. Spatiotemporal dynamics of cytosolic Ca²⁺ in isolated pig olfactory receptor neurons. 138th Congress of Japanese Society of Veterinary Science. September, Sapporo.

Laboratory of Biochemistry Original articles

- 1) Makondo, K., Kimura, K., Kitamura, T., Yamaji, D., Jung, B. D., J., Shibata, H., Saito, M. 2004. Hepatocyte growth factor/scatter factor suppresses TNF- α -induced E-selectin expression in human umbilical vein endothelial cells. *Biochim. Biophys. Acta*, 1644 : 9-15.
- 2) Nakamoto, H., Sakane, N., Kimura, K., Yoshida, T., Mochizuki, S., Ogasawara, Y., Kajiyama, F. 2004. Synergistic effects of C-peptide and insulin on coronary flow in early diabetic rats. *Metabolism*, 53 : 335-339.
- 3) Yamaji, D., Kitamura, H., Kimura, K., Matsushita, Y., Okada, H., Shiina, T., Morimatsu, M., Saito, M. 2004. Cloning of bovine MAIL and its mRNA expression in white blood cells of Holstein cows. *Vet. Immunol. Immunopath.*, 98 : 175-184.
- 4) Soliman, M., Okamoto, S., Kitamura, H., Kushibiki, S., Kimura, K., Saito, M. 2004. Adrenocortical responses to tumor necro-

- sis factor- α and interferon- γ in cattle. *Jpn. J. Vet. Res.*, 52 : 95-99.
- 5) Rung-ruangkijkrai, T., Fujikura, D., Kitamura, H., Saito, M., Iwanaga, T. 2004. The expression of src-suppressed C kinase substrate (SSeCKS) and uptake of exogenous particles in endothelial and reticular cells. *Arch. Histol. Cytol.*, 67 : 135-147.
 - 6) Shaban, Z., El-Shazly, S., Abdelhady, S., Fattouh, I., Muzandu, K., Ishizuka, M., Kimura, K., Kazusaka, A., Fujita, S. 2004. Down regulation of hepatic PPAR α function by AhR ligand. *J. Vet. Med. Sci.*, 66 : 1377-1386.
 - 7) Shaban, Z., El-Shazly, S., Ishizuka, M., Kimura, K., Kazusaka, A., Fujita, S. 2004. PPAR α -dependent modulation of hepatic CYP 1 A by clofibric acid in rats. *Arch. Toxicol.*, 78 : 496-507.
 - 8) Ohashi, A., Matsushita, Y., Shibata, H., Kimura, K., Miyashita, K., Saito, M. 2004. Conjugated linoleic acid deteriorates insulin resistance in obese/diabetic mice in association with decreased production of adiponectin and leptin. *J. Nutr. Sci. Vitaminol.*, 50 : 416-421.

Publications other than original articles

- 1) Omachi, A., Ishioka, K., Shibata, H., Honjoh, T., Kimura, K., Saito, M. 2004. Canine adiponectin : measurement of its serum/plasma concentration by ELISA and effects of obesity. *Vet. Biochem.*, 41 : 31-37. (in Japanese)
- 2) Inokuma, K., Okamatsu-Ogura, Y., Saito, M. 2004. The mechanism of energy expenditure by uncoupling protein 1 (UCP 1) and its physiological role. *Gendaiiryō*, 36 : 33-38. (in Japanese)
- 3) Matsushita, Y., Noda, S., Irie, Y., Kimura, K., Saito, M. 2004. A search for brown adipocyte-specific genes. *Himankenkyū*, 10 : 99-100. (in Japanese)
- 4) Saito, M. 2004. Molecular mechanism of fat energy dissipation and dietary factors. *J. Jpn. Soc. Metab. Clin. Nutr.*, 7 : 229-235. (in Japanese)
- 5) Omachi, A., Saito, M. 2004. Isolation and cell culture of brown adipocytes. *Adiposciences*, 1 : 443-447. (in Japanese)
- 6) Okamatsu-Ogura, Y., Inokuma, K. 2004. The role of uncoupling protein 1 in energy consumption. *Diabetes and metabolic syndrome*, 406-408. (in Japanese)

Labolatory of Pharmacology

Original articles

- 1) Ohta, T., Moroshita, M., Mori, Y. and Ito, S. 2004. Ca²⁺ store-independent augmentation of [Ca²⁺]_i responses to G-protein coupled receptor activation in recombinantly TRPC 5 -expressed rat pheochromocytoma (PC12) cells. *Neurosci. Lett.*, 358 : 161-164.
- 2) Maruyama, K., Ohta, T. and Ito, S. 2004. Involvement of mitochondrial Na⁺ - Ca²⁺ exchange in intracellular Ca²⁺ increase induced by ATP in PC12 cells. *Brain Res.*, 1013 : 40-50.
- 3) Ohta, T., Kai, T. and Ito, S. 2004. Evidence for paracrine modulation of voltage-dependent calcium channels by amperometric analysis in cultured porcine adrenal chromaffin cells. *Brain Res.*, 1030 : 183-192.

Publications other than original articles

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- 2) Ito, K., Ito, S., Ozaki, H., Karaki, H., Komori, S. and Shimoda, M. (Eds.) 2004. *New Textbook of Veterinary Pharmacology (2nd Edition)*. Kindaisyuppan, Tokyo, (in Japanese).
- 3) Nakazato, Y. and Ito, S. 2004. Principles of drug therapeutics. In : *New Textbook of Veterinary Pharmacology (2nd Edition)*. pp44-45, Ito, K., Ito, S., Ozaki, H., Karaki, H., Komori, S. and Shimoda, M. (Eds.)
- 4) Ito, S. 2004. Drugs acting on the peripheral nervous system. *Ibid.*, chapter 1, 2, 3 pp48-60, chapter 5, 6 pp 64-68.
- 5) Nakazato, Y. and Ohta, T. 2004. Drugs acting on the peripheral nervous system. *Ibid.*, chapter 7, 8 pp 69-74.
- 6) Ito, S. 2004. Drugs acting on the immune system. *Ibid.*, pp168-171.
- 7) Ito, K., Ito, S., Ozaki, H., Komori, S., Shimoda, M., Hori, M., Ikeda, M., Ohta, T. and Unno, T. (Eds.) 2004. *Veterinary Clinical Pharmacology Data Base (VCPDB, CD-ROM)*. Kindaisyuppan, Tokyo, (in Japanese).

Laboratory of Microbiology
Original articles

- 1) Ishiguro, N., Takada, A., Yoshioka, M., Ma, X., Kikuta, H., Kida, H., and Kobayashi, K. 2004. Induction of interferon-inducible protein - 10 and monokine induced by interferon- γ from human endothelial cells infected with *Influenza A virus*. *Arch. Virol.* 149, 17-34.
- 2) Matsuda, K., Park, C. H., Sunden, T., Kimura, T., Ochiai, K., Kida, H., and Umemura, T. 2004. The vagus nerve is one route of transneuronal invasion for intranasally inoculated influenza A virus in mice. *Vet. Pathol.* 41 : 101-107.
- 3) Yazawa, S., Okada, M., Ono, M., Fujii, S., Okuda, Y., Shibata, I., and Kida, H. 2004. Experimental dual infection of pigs with an H1N1 swine influenza virus (A/Sw/Hok/2/81) and *Mycoplasma hyopneumoniae*. *Vet. Microbiol.* 98, 221-228.
- 4) Ohishi, K., Kishida, N., Ninomiya, A., Kida, H., Takada, Y., Miyazaki, N., Boltunov, A. N., and Maruyama, T. 2004. Antibodies to Human-Related H3 Influenza A Virus in Baikal Seals (*Phoca sibirica*) and Ringed Seals (*Phoca hispida*) in Russia. *Microbiol. Immunol.* 48, 905-909.
- 5) Kishida, K., Sakoda, Y., Eto, M., and Kida, H. 2004. Co-infection of *Staphylococcus aureus* or *Haemophilus paragallinarum* exacerbates H9N2 influenza A virus infection in chickens. *Arch. Virol.* 149, 2095-2104.
- 6) Liu, J. H., Okazaki, K., Mweene, A., Bai, G. R., Shi, W. M., Mweene, A., Kida, H. 2004. Interregional transmission of the internal protein genes of H2 influenza virus in migratory ducks from North America to Eurasia. *Virus Genes*, 29, 81-86.
- 7) Liu, J. H., Okazaki, K., Mweene, A., Shi, W. M., Wu, Q. M., Su, J. L., Zhang, G. Z., Bai, G. R., Kida, H. 2004. Genetic conservation of hemagglutinin gene of H9 influ-

enza virus in chicken population in Mainland China. *Virus Genes* 29, 329-334.

- 8) Okazaki, K., Kida, H. 2004. A synthetic peptide from a heptad repeat region of herpesvirus glycoprotein B inhibits virus replication. *J. Gen. Virol.* 85, 2131-2137.
- 9) Aoki, H., Sakoda, Y., Nakamura, S., Suzuki, S., Fukusho, A. 2004. Cytopathogenicity of classical swine fever viruses that do not show the exaltation of Newcastle disease virus is associated with accumulation of NS 3 in serum-free cultured cell lines. *J. Vet. Med. Sci.* 66 : 161-167.
- 10) Nagai, M., Hayashi, M., Sugita, S., Sakoda, Y., Mori, M., Murakami, T., Ozawa, T., Yamada, N., Akashi, H. 2004. Phylogenetic analysis of bovine viral diarrhea viruses using five different genetic regions. *Virus Res.* 99 : 103-113.

Publications other than original articles

- 1) Kida, H. 2004. Surveillance of animal influenza. *Saisin Igaku* 59, 257 - 262. (in Japanese)
- 2) Kida, H. 2004. Influenza In : *Zoonosis*, pp 54-59, Kimura, T., and Hida, H. ed., Iyaku Journal Pub. Co. Ltd., Tokyo (in Japanese)
- 3) Kida, H. 2004. Origin of highly pathogenic avian influenza viruses. *Kagaku Ryohou no Ryouiki* 20, 19-24. (in Japanese)
- 4) Sakoda, Y. 2004. Preparation of a panel of influenza viruses of different subtypes for vaccine strain. *Kagaku Ryohou no Ryouiki* 20, 39-42. (in Japanese)
- 5) Kameyama, K. and Sakoda, Y. 2004. : Bovine viral diarrhea virus. *Rinsho Juui* 22, 10-12. (in Japanese)
- 6) Kishida, N., Eto, M., Sunaga, Y., Kida H. 2004. Enhancement of pathogenicity of H 9 N 2 influenza A virus isolated from chicken in China by co-infection with *Staphylococcus aureus* and *Haemophilus paragallinarum*. In : *International Congress Series 1263-Options for the Control of Influenza V*, 481-485.
- 7) Sakoda, Y., Ito, T., Okazaki, K., Takada, A., Ito, Y., Tamai, K., Okamoto, M., Shortridge, K. F., Webster, R. G., Kida H. 2004. Preparation of a panel of avian influenza viruses of different subtypes for vaccine strains against future pandemics. In : *International Congress Series 1263-Options for the Control of Influenza V*, 674-677.
- 8) Takada, A., Matsushita, S., Ninomiya, A., Kawaoka, Y., Kida H. 2004. Intranasal immunization with formalin-inactivated virus vaccine induces a broad spectrum of heterosubtypic immunity against influenza virus infection in mice. In : *International Congress Series 1263-Options for the Control of Influenza V*, 618-621.

Laboratory of Infectious Diseases Original articles

- 1) Odbileg, R., Lee, S. I., Yoshida, R., Chang, K. S., Ohashi, K., Sugimoto, C., and Onuma, M. 2004. Cloning and sequence analysis of llama cytokines related to cell-mediated immunity. *Vet Immunol. Immunopathol.*, 102 : 93-102.
- 2) Pham, H. M., Chang, K. S., Mase, M., Ohashi, K., and Onuma, M. 2004. Molecular characterization of the nucleocapsid protein gene of Newcastle disease virus strains in Japan and development of a restriction enzyme-based rapid identifying

- method. *Arch. Virol.*, 149 : 1559-1569.
- 3) Meas, S., Nakayama, M., Usui, T., Nakazato, Y., Yasuda, J., Ohashi, K., and Onuma, M. 2004. Evidence for bovine immunodeficiency virus infection in cattle in Zambia. *Jpn. J. Vet. Res.*, 52 : 3-8.
 - 4) Witola, W. H., Inoue, N., Ohashi, K., and Onuma, M. 2004. RNA-interference silencing of the adenosine transporter - 1 gene in *Trypanosoma evansi* confers resistance to diminazene aceturate. *Exp. Parasitol.*, 107 : 47-57.
 - 5) Silva Vaz, Jr. I., Imamura, S., Ohashi, K., and Onuma, M. 2004. Cloning, expression and partial characterization of a *Haemaphysalis longicornis* and a *Rhipicephalus appendiculatus* glutathione S-transferase. *Insect Mol. Biol.*, 13 : 329-335.
 - 6) Tomioka, Y., Ochiai, K., Ohashi, K., Ono, E., Toyoda, T., Kimura, T., and Umemura, T. 2004. Genome sequence analysis of the avian retrovirus causing so-called fowl glioma and the promoter activity of the long terminal repeat. *J. Gen. Virol.*, 85 : 647-652.
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 - 8) Takahashi, M., Tajima, S., Takeshima, S. N., Konnai, S., Yin, S. A., Okada, K., Davis, W. C., and Aida, Y. 2004. *Ex vivo* survival of peripheral blood mononuclear cells in sheep induced by bovine leukemia virus (BLV) mainly occurs in CD5-B cells that express BLV. *Microbes Infect.*, 6 : 584-595.
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 - 10) Kozasa, T., Tajima, M., Sano, K., Yasutomi, I., Ohashi, K. and Onuma, M. 2004. Detecting the neutralizing antibody in bulk-milk whey to investigate prevalence of infection with the bovine viral-diarrhea virus. *J. Jpn. Vet. Med. Assoc.*, 57 : 705-709 (in Japanese).

Publications other than original articles.

- 1) Onuma, M. 2004. Control of infectious diseases by vaccination. *Small Animal Clinic*, 137 : 11-19 (in Japanese).
- 2) Onuma, M., Imamura, S. and Nakajima, C. 2004. Development of anti-tick vaccine. *J. Vet. Med.*, 57 : 753-757 (in Japanese).
- 3) Ohashi, K., Chang, K. S., Lee, S. L., Murata, S., Takagi, M., and Onuma, M. 2004. The roles of the *L-meq* gene and its gene product the latent infection and transformation by Marek's disease virus. *ibid.* 57 : 597-595 (in Japanese).
- 4) Onuma, M. 2004. BLV infection and pathogenesis of BLV. *J. Clinic. Vet. Med.*, 22 : 10-14 (in Japanese).
- 5) Onuma, M. 2004. Transmission and clearance of BLV infection in herds. *ibid.* 22 : 15-19 (in Japanese).
- 6) Konnai, S. 2004. Genetic resistance in BLV infection. *ibid.* 22 : 20-23 (in Japanese).
- 7) Onuma, M. 2004. Immunology and vaccine programs of kitten and puppy. *InfoVets*, 7 : 11-17 (in Japanese).
- 8) Onuma, M. 2004. Fight against vector ticks : Development of anti-tick vaccine. *Littera Populi*, 20 : 12 (in Japanese).

Laboratory of Parasitology

Original articles

- 1) Luyo-Acero, G. E., Uezato, H., Oshiro, M., Takei, K., Kariya, K., Katakura, K., Gomez-Landirez, E., Hashiguchi, Y. and Nonaka, S., 2004. Sequence variation of the Cytochrome b gene of various human infecting members of the genus *Leishmania* and their phylogeny. *Parasitology*, 128 : 483-491.
- 2) Terabe, M., Wakana, S., Katakura, K., Onodera, T., Matsumoto, Y. and Ito, M., 2004. Influence of H 2 complex and non-H 2 genes on progression of cutaneous lesions in mice infected with *Leishmania amazonensis*. *Parasitol. Int.*, 53 : 217-221.
- 3) Subeki, Matuura, H., Yamasaki, M., Yamato, O., Maede, Y., Katakura, K., Suzuki, M., Triurningsih, Charirul and Yoshihara, T., 2004. Effects of Central Kalimantan Plant Extracts on Intraerythrocytic *Babesia gibsoni* in Culture. *J. Vet. Med. Sci.*, 66 : 871-874.
- 4) Katakura, K., Fujise, H., Takeda, K., Kaneko, O., Torii, M., Suzuki, M., Chang, K. P. and Hashiguchi, Y., 2004. Overexpression of LaMDR 2, a novel multidrug resistance ATP-binding cassette transporter, causes 5 - fluorouracil resistance in *Leishmania amazonensis*. *Fed. Eur. Biochem. Soc. Let.*, 561 : 207-212.
- 5) Oku, Y., Malgor, R., Benavidez, U., Carmona, C. and Kamiya, M., 2004. Control program against hydatidosis and the decreased prevalence in Uruguay. In : *International Collaboration in Community Health*, Mita, R. and Satoh, K., eds., Elsevier, Amsterdam, pp. 98-104
- 6) Oku, Y., Nonaka, N., Yagi, K. and Kamiya, M., 2004. Canine Echinococcosis. *Jpn. J. Vet. Parasitol.*, 3 : 17-19. (in Japanese)
- 7) Kamiya, M., Nonaka, N., Sumiya, G. and Oku, Y., 2004. Effective countermeasures against alveolar echinococcosis in red fox population of Hokkaido, Japan. In : *Echinococcosis in central Asia : Problems and solutions*, Torgerson, P. and Shaikenov, B., eds., Publishing house "Dauir", Zurich/Almaty, pp. 273-282.

Publications other than original articles

- 1) Nonaka, N., 2004. Toxocariasis. In : *Shuyo-shojo wo kisonishita neko-no-rinsho*, Maede, Y., ed., Dairyman, Sapporo, pp. 218-220. (in Japanese)
- 2) Nonaka, N., 2004. Coccidiosis. *ibid.*, pp. 238-241. (in Japanese)
- 3) Nonaka, N., 2004. Giardiasis. *ibid.*, pp. 242-244. (in Japanese)
- 4) Nonaka, N., 2004. Cestode infection. *ibid.*, pp. 247-251. (in Japanese)
- 5) Nonaka, N., 2004. Toxoplasmosis. *ibid.*, pp. 268-271. (in Japanese)
- 6) Nonaka, N., 2004. Ancylostomosis. *ibid.*, pp. 272-274. (in Japanese)
- 7) Nonaka, N., 2004. List of major gastrointestinal parasite infections. *ibid.*, pp. 363-364. (in Japanese)
- 8) Nonaka, N., 2004. Ear mite infection. *ibid.*, pp. 742-744. (in Japanese)
- 9) Nonaka, N., 2004. Ancylostomosis. In : *Kyotu-kansensho handbook*, Japan Veterinary Medical Association, Tokyo, pp. 134-135. (in Japanese)
- 10) Oku, Y., 2004. *Taenia solium*, *T. saginata* and *T. s. asiatica* infections. *ibid.*, pp. 218-219. (in Japanese)

- 11) Oku, Y. and Kamiya, M. , 2004. Parasitic zoonosis. In : *Jyui-koshueisei-gaku*, Takashima, I. and Kumagai, S. eds., Buneido, Tokyo, pp. 141-159. (in Japanese)
- 12) Katakura, K. , 2004. VI Protozoal zoonosis 7. Leishmaniasis. In : *Jinju-kyotu-kansensho*, Kimura, T. and Kida, H., eds., Iyaku-Journal-sha, Osaka, pp. 341 - 346. (in Japanese)
- 13) Nonaka, N. , 2004. VI Protozoal zoonosis 8. Giardiasis. *ibid.*, pp. 347-349. (in Japanese)
- 14) Oku, Y. , 2004. VII Parasitic zoonosis 5. Trichinellosis. *ibid.*, pp. 366 - 373. (in Japanese)
- 15) Nonaka, N. , 2004. VII Parasitic zoonosis 6. Ascarid larva migrans. *ibid.*, pp. 374-378. (in Japanese)
- 16) Oku, Y. , 2004. VII Parasitic Zoonosis 8. Clonorchiasis. *ibid.*, pp. 382 - 386. (in Japanese)
- 17) Oku, Y. , 2004. VII Parasitic zoonosis 11. Metagonimiasis. *ibid.*, pp. 396 - 400. (in Japanese)
- 18) Katakura, K. , 2004. Current status of leishmaniasis in the world and Japan. *J. Vet. Med.* , 57 : 671-672. (in Japanese)
- 19) Shimada, M., Akao, N., Ishiwata, K., Oku, Y., Okusawa, E., Takeuchi, T., Nawa, Y., Nishiyama, T., Hara, S., Hamada, A. and Horio, M. , 2004. Parasite information system useful for routine diagnosis. *J. Therapy* , 86 : 29-34. (in Japanese)
- 20) Nonaka, N. , 2004. Establishment of a diagnostic method for the definitive hosts of *Echinococcus multilocularis* endemic in Hokkaido and its application to the control of the definitive hosts. *Annual report of Uehara Moemorial Bioscience Foundation* , 18 : 78-80. (in Japanese)

Laboratory of Experimental Animal Science Original articles

- 1) Ko, J-H., Asano, A., Kon, Y. and Agui, T. 2004. Characterization of the chicken PKR : Polymorphism of the gene and antiviral activity against vesicular stomatitis virus. *Jpn. J. Vet. Res.* , 51 : 123-133.
- 2) Asano, A., Kon, Y. and Agui, T. 2004. The mRNA regulation of porcine double-stranded RNA-activated protein kinase gene. *J. Vet. Med. Sci.* , 66 : 1523-1528.
- 3) Ko, J-H., Takada, T., Mitsuhashi, T., Agui, T. and Watanabe, T. 2004. Native antiviral specificity of chicken Mx protein depends on amino acid variation at position 631. *Anim. Genet.* , 35 : 119-122.
- 4) Okumura, M., Yoshimatsu, K., Araki, K., Lee, B-H., Asano, A., Agui, T. and Arikawa, J. 2004. Epitope analysis of monoclonal antibody E5/G6, which binds to a linear epitope in the nucleocapsid protein of hantaviruses. *Arch. Virol.* , 149 : 2427-2434.
- 5) Kazusa, K., Namiki, Y., Asano, A., Kon, Y., Endo, D. and Agui, T. 2004. Differences in spermatogenesis in cryptorchid testes among various strains of mice. *Comp. Med.* , 54 : 179-184
- 6) Namiki, Y., Kon, Y., Sasaki, N., Agui, T. and Endoh, D. 2004. Exon skipping of exonuclease 1 in MRL/MpJ mice is caused by a nucleotide substitution of the branchpoint sequence in intron eight. *Jpn. J. Vet. Res.* , 52, : 125-134.

Laboratory of Veterinary Internal Medicine
Original articles

- 1) Chang, H. S., Yamato, O., Sakai, Y., Yamasaki, M. and Maede, Y. 2004. Acceleration of superoxide generation in polymorphonuclear leukocytes and inhibition of platelet aggregation by alk(en)yl thiosulfates derived from onion and garlic in dogs and humans. *Prostaglandins Leukot. Essent. Fatty Acids* 70 : 77-83.
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- 3) Yamasaki, M. 2004. In : *Clinical aspects of feline diseases*, Maede Y. ed., new ed., pp. 223-224, 342-344, 418-419, 423-425, 430-432, 433-434, 658-659, 663-664. , Dairyman, Sapporo. (in Japanese)

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 - 6) Kido, N., Takagi, S., Shimada, K., Okumura, M., Kadosawa, T. and Fujinaga, T. 2004. The efficacy of nutraceutical (Agaricus blazei, Pleurotus cornucopiae, Hericium erinaceum, arabinoxylan and shark substances) on the tumor growth in LM 8 Dunn osteosarcoma-bearing mice. *J. Hokkaido. Vet. Med. Assoc.* 48 : 386 - 390. (in Japanese)
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 - 9) Okumura, M. 2004. Nonunion of the humeral fracture. *Tech. Mag. Vet. Surg.* 8 (5) : 34-42. (in Japanese)
 - 10) Okumura, M. 2004. Diagnosis and treatment of joint diseases in the dog. *J-Vet. supplement* Nov. : 26-32. (in Japanese)
 - 11) Okumura, M. 2004. Decision making of corrective surgery for patellar luxation in dogs. *InfoVets* . 11 & 12 : 19-25. (in Japanese)
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 - 13) Okumura, M. 2004. Subcutaneous abscess., pp 450-452, Subcutaneous emphysema., pp 453-454, Fracture., pp 466-470, Luxation., pp 471-474, Osteoarthritis., pp 475-477, Patellar luxation., pp 488-489, Feline hip dysplasia., pp 490-491, Polyarthritits., pp 492-494, Paronychia., pp 566-567, Pinnal hematoma., pp 745-746, *In : Clinical aspects of feline diseases*. Maede, Y. ed., Dairyman, Sapporo. (in Japanese)

Laboratory of Comparative Pathology

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 - 7) Ueno, H., Kadosawa, T., Ochiai, K., Tomioka, Y., Okumura, M. and Fujinaga, T. 2004. Canine Pyogranulomatous Dermatitis Caused by *Nocardia*-subspecies Infection. *J. Jpn. Vet. Med. Assoc.*, 57 : 113-115.
 - 8) Watanabe, K., Kadosawa, T., Ishiguro, T., Takagi, S., Ochiai, K., Kimura, T., Okumura, M. and Fujinaga, T. 2004. Odontogenic cysts in three dogs : one odontogenic keratocyst and Two dentigerous cysts. *J. Vet. Med. Sci.*, 66 : 1167-1170.
 - 9) Shirato, K., Kimura, T., Mizutani, T., Kariwa, H. and Takashima, I. 2004. Different chemokine expression in lethal and non-lethal murine West Nile virus infection. *J. Med. Virol.*, 74 : 507-513.

Laboratory of Theriogenology Original articles

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- 2) Takahashi, Y. 2004. Veterinary Teaching Hospital in Hokkaido University. *J. Vet. Med.* 57 : 921-922 (in Japanese).
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Original articles

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- 9) Yoshii, K., Konno, A., Goto, A., Nio, J., Obara, M., Ueki, T., Hayasaka, D., Mizutani, T., Kariwa, H., Takashima, I. 2004. Single point mutation in tick-borne encephalitis virus prM protein induces a reduction of virus particle secretion. *J. Gen. Virol.* 85 : 3049-3058.
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- 2) Jalal Hosseinimehr, S., Inanami, O., Hamasu, T., Takahashi, M., Kashiwakura, I., Asanuma, T. and Kuwabara, M. 2004. Activation of C-kit by stem cell factor induces radioresistance to apoptosis through ERK-dependent expression of survivin in HL 60 cells. *J. Radiat. Res.*, 45 : 557-561.
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- 4) Cui, Z. G., Kondo, T., Feril, Jr. L. B., Waki, K., Inanami, O. and Kuwabara, M. 2004. Effects of antioxidants on X-ray-or hyperthermia-induced apoptosis in human lymphoma U937 cells. *Apoptosis*, 9 : 757-763.
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- 3) Kuwabara, M. 2003. Molecular mechanisms of biodefense against free radicals and reactive oxygens. *Akiyama Found. Ann. Rep.*, 17 : 23-49. (in Japanese)
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Laboratory of Toxicology Original articles

- 1) Shaban, Z., El-Shazly, S., Abdelhady, S., Fattouh, I., Muzandu, K., Ishizuka, M., Kimura, K., Kazusaka, A., Fujita, S. 2004. Down regulation of hepatic PPARalpha function by AhR ligand. *J. Vet. Med. Sci.* 66 : 1377-1386.
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- 3) Kim, H.S., Ishizuka, M., Kazusaka, A., Fujita, S. 2004. Alterations of activities of cytosolic phospholipase A2 and arachidonic acid-metabolizing enzymes in di-(2-ethylhexyl) phthalate-induced testicular atrophy. *J. Vet. Med. Sci.* 66 : 1119-1124.
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Laboratory of Wildlife Biology
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- 2) Hayakawa, D., Sasaki, M., Akabane, C., Kitamura, N., Tsubota, T., Suzuki, M. and Yamada, J. 2004. Immunohistochemical localization of steroidogenic enzymes in the testis of Hokkaido sika deer (*Cervus nippon yesoensis*). *J. Vet. Med. Sci.*, 66 (11) : 1463-1466.
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- 11) Matsuura, Y., Suzuki, M., Hayakawa, D., Asano, M., Sasaki, M., Kitamura, N., Yamada, J., Tsubota, T. and Ohtaishi, N. 2004. Immunohistochemical localization of steroidogenic enzymes in corpus luteum of wild sika deer during early mating season. *Jpn. J. Vet. Res.*, 51 (3/4) : 167-172.

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- 2) Kozasa, T., Tajima, M., Ohashi, K. and Onuma, M. 2004. Surveillance of bovine viral diarrhoea virus infection in diseased cattle. *J. Jpn. Vet. Med. Assoc.*, 57 : 511-514. (in Japanese with English summary)
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