

Curriculum vitae

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Professional Experience

1986-1993 Assistant professor, School of Veterinary Medicine, NVLU

1989-1990 Postdoctoral research fellow, Medical School, University of Michigan, Ann Arbor, MI

1994-2005 Associate professor, School of Veterinary Medicine, NVLU

2006-present Professor, Graduate School of Veterinary Medicine and Life Science, NVLU

2009-present Chief, School of Veterinary Medicine, NVLU

Research

Clinical Biochemistry

Molecular and Biochemical Analysis of Onset Mechanism of Obesity and Diabetes

Comparative Endocrinology, Nutrition and Metabolism in Animals

Prophylactic Veterinary Medicine and Disease Control in Animals

Service

Peer reviewer: Research in Veterinary Science, Veterinary Research Communications, Diabetes Obesity
and Metabolism, Journal of Veterinary Medical Science, Comparative Medicine

Professional Societies

Councilor, Japanese Society of Veterinary Science

Councilor, Japanese Association for Laboratory Animal Science

Chairman, Japanese Society of Prophylactic Veterinary Medicine

Member, American Diabetes Association

Member, Japan Diabetes Society

Recent Papers (2008-2010)

- Sato T, Katayama K, Arai T, Sako T, Tazaki H. 2008. Simultaneous determination of serum mannose and glucose concentrations in dog serum using high performance liquid chromatography. *Research in Veterinary Science* 84: 26-29.
- Yamato O, Jo E-O, Chang, H-S., Satoh H, Shoda T, Sato R, Uechi M, Kawasaki N, Naito Y, Yamasaki M, Maede Y, Arai T. 2008. Molecular screening of canine GM1 gangliosidosis using blood smear specimens after prolonged storage: detection of carriers among Shiba dogs in northern Japan. *Journal of Veterinary Diagnostic Investigation* 20: 68-71.
- Mori A, Kenyon PR, Mori N, Yamamoto I, Tanaka Y, Suzuki N, Tazaki H, Ozawa T, Hayashi T, Hickson RE, Morris ST, Blair H, Arai T. 2008. Changes in metabolite, energy metabolism related enzyme activities and peripheral blood mononuclear cell (PBMC) populations in beef heifers with two differing liveweight change profiles in New Zealand. *Veterinary Research Communications* 32: 159-166.
- Mori A, Sagara F, Shimizu S, Mizutani H, Sako T, Hirose H, Yoshimura I, Uematsu Y, Yamaguchi T, Arai T. 2008. Changes in peripheral lymphocyte subsets in the type 1 diabetic dogs treated with insulin injections. *Journal of Veterinary Medical Science* 70(2): 185-187.
- Tanaka Y, Mori A, Tazaki H, Imai S, Shiina J, Kusaba A, Ozawa T, Yoshida T, Kimura N, Hayashi T, Kenyon PR, Blair H, Arai T. 2008. Plasma metabolite concentrations and hepatic enzyme activities in pregnant Romney ewes with restricted feeding. *Research in Veterinary Science* 85(1): 17-21.
- Arai T, Hashimoto H, Kawai K, Mori A, Ohnishi Y, Hioki K, Ito M, Saito M, Ueyama Y, Ohsugi M, Suzuki R, Kubota N, Yamauchi T, Tobe K, Kadowaki T, Kosaka K. 2008. Fulminant type 1 diabetes mellitus observed in insulin receptor substrate 2 deficient mice. *Clinical and Experimental Medicine* 8(2): 93-99.
- Hashimoto H, Eto T, Kamisako T, Hoya N, Hatakeyama T, Arai T, Yokosuka M, Ohnishi Y, Ito M, Hioki K, Suzuki R, Ohsugi M, Saito M, Ueyama Y, Yamauchi T, Kubota N, Tobe K, Kadowaki T, Tamaoki N, Nomura T, Kosaka K. 2008. An efficient reproductive method for Irs2^{-/-} mice with C57BL/6Jcl genetic background. *Experimental Animals* 57(4): 407-411.
- Yamato O, Hayashi D, Satoh H, Shoda T, Uchida K, Nakayama H, Sasaki H, Masegi T, Murai A, Iida T, Hisada H, Hisada A, Yamasaki M, Maede Y, Arai T. 2008. Retrospective diagnosis of feline GM2 gangliosidosis variant 0 (Sandhoff-Like Disease) in Japan: Possible spread of mutant allele in the Japanese domestic cat population. *Journal of Veterinary Medical Science* 70(8): 813-818.
- Uematsu Y, Yamaguchi T, Koike A, Yagihara H, Hasegawa D, Matsuki N, Ono K, Washizu T, Arai T, Bonkobara M. 2008. Generation of monoclonal antibody against canine neural-cell adhesion molecule. *Journal of Veterinary Medical Science* 70(8): 845-847.
- Mori A, Sako T, Lee P, Motoike T, Iwase K, Kanaya Y, Fukuta H, Mizutani H, Arai T. 2008. Comparison of time-action profiles of insulin Glargine and NPH insulin in normal and diabetic dogs. *Veterinary Research Communications* 32(7): 563-573.

- Sako T, Mori A, Lee P, Takahashi T, Izawa T, Karasawa S, Furuuchi M, Azakami D, Mizukoshi M, Mizutani H, Kiyosawa Y, Arai T. 2008. Diagnostic significance of serum glycated albumin in diabetic dogs. *Journal of Veterinary Diagnostic Investigation* 20(5): 634-638.
- Terasawa F, Arai T, Tokura T, Ohshita I. 2008. Fibrinogen concentrations in captive bottlenose dolphins during pregnancy. *Journal of Veterinary Medical Science* 70(11): 1277-1279.
- Sato T, Soeda S, Ohta Y, Katayama K, Arai T, Tazaki H. 2008. Plasma glucose, mannose, and non-esterified fatty acid concentrations in layer-type chickens. *British Poultry Science* 49(6): 731-735.
- Mori A, Lee P, Mizutani H, Takahashi T, Azakami D, Mizukoshi M, Fukuta H, Sakusabe N, Sakusabe A, Kiyosawa Y, Arai T, Sako T. 2009. Serum glycated albumin as a glycemic control marker in diabetic cats. *Journal of Veterinary Diagnostic Investigation* 21(1): 112-116.
- Mori A, Lee P, Takemitsu H, Sako T, Arai T. 2009. Comparison of insulin signaling gene expression in insulin sensitive tissues between cats and dogs. *Veterinary Research Communications* 33: 211-226.
- Yano H, Ohtsuka H, Miyazawa M, Abiko S, Ando T, Watanabe D, Matsuda K, Kawamura S, Arai T, Morris S. 2009. Relationship between immune function and serum vitamin A in Japanese black beef cattle. *Journal of Veterinary Medical Science* 71: 199-202.
- Mori A, Lee P, Takemitsu H, Iwasaki E, Kimura N, Yagishita M, Hayasaka M, Arai T. 2009. Decreased gene expression of insulin signaling genes in insulin sensitive tissues of obese cats. *Veterinary Research Communications* 33: 315-329.
- Yamamoto I, Kimura N, Arai T, Tanaka M. 2009. cDNA cloning and mRNA expression of bovine GPR39. *Journal of Veterinary Medical Science* 71: 641-644.
- Mori A, Sako T, Lee P, Furuuchi M, Tazaki H, Katayama K, Mizutani H, Sako T, Arai T. 2009. Clinical significance of plasma mannose concentrations in healthy and diabetic dogs. *Veterinary Research Communications* 33: 439-451.
- Sako T, Mori A, Lee P, Sato T, Mizutani H, Takahashi T, Kiyosawa Y, Tazaki H, Arai T. 2009. Serum glycated albumin: Potential use as an index of glycemic control in diabetic dogs. *Veterinary Research Communications* 33: 473-479.
- Mori A, Lee P, Sako T, Mizutani H, Arai T. 2009. Successful intensive insulin treatment of type 1 diabetic dogs leads to restoration of peripheral leukocyte insulin signaling gene expression and enzyme activities. *Journal of Veterinary Medical Science* 71: 1017-1026.
- Mori A, Sako T, Lee P, Nishimaki Y, Fukuta H, Mizutani H, Honjo T, Arai T. 2009. Comparison of three commercially available prescription diet regimens on short-term post-prandial serum glucose and insulin concentrations in healthy cats. *Veterinary Research Communications* 33: 669-680.
- Mori A, Lee P, Izawa T, Oda H, Mizutani H, Kenyon H, Arai T, Sako T. 2009. Assessing the immune state of dogs suffering from pituitary gland dependent hyperadrenocortism by determining changes in peripheral lymphocyte subsets. *Veterinary Research Communications* 33: 757-769.
- Mori A, Lee P, Yamashita T, Nishimaki Y, Oda H, Saeki K, Miki Y, Mizutani H, Ishioka K, Honjo T, Arai

- T., Sako T. 2009. Effect of glimepiride and nateglinide on serum insulin and glucose concentration in healthy cats. *Veterinary Research Communications* 33: 957-970.
- Hashimoto H, Arai T., Mori A, Kawai K, Hikishima K, Ohnishi Y, Eto T, Ito M, Suzuki R, Ohsugi M, Saito M, Ueyama Y, Okano H, Yamauchi T, Kubota N, Ueki K, Tobe K, Tamaoki N, Kadowaki T, Kosaka K. 2009. Reconstitution of insulin signals induced by improved laboratory animal diets, Japanese and American diets, in IRS-2 deficient mice. *Experimental and Clinical Endocrinology & Diabetes* 117: 577-586.
- Sako T, Mori A, Lee P, Goto H, Fukuta H, Oda H, Saeki K, Miki Y, Makino Y, Ishioka K, Mizutani H, Kojima Y, Koikeda S, Arai T. 2010. Supplementing transglucosidase with a high-fiber diet for prevention of postprandial hyperglycemia in streptozotocin-induced diabetic dogs. *Veterinary Research Communications* 34: 161-172.
- Hatano Y, Mori N, Asada M, Mori A, Yamamoto I, Muranaka S, Kojima M, Kigure M, Yagishita M, Sako T, Arai T. 2010. Hypertriglyceridemia with increased plasma insulin concentrations in cats. *Research in Veterinary Science* doi:10.1016/j.rvsc.2009.12.012
- Mori N, Lee P, Muranaka S, Sagara F, Takemitsu K, Nishiyama Y, Yamamoto I, Yagishita M, Arai T. 2010. Predisposition for primary hyperlipidemia in Miniature Schnauzers and Shetland sheepdogs as compared to other canine breeds. *Research in Veterinary Science* doi:10.1016/j.rvsc.2009.12.003