Faculty of Applied Biological Sciences
Gifu University

Annual Report of Research Activities 2016

Vol. 13
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I Research Achievement

1) Academic Paper

【Course of Applied Life Science】

“Analyses of genetic variations of glutathione-S-transferase mu1 and theta1 genes in Bangladeshi tannery workers and healthy controls.”

“Water-soluble fractions from defatted sesame seeds protect human neuroblast cells against peroxyl radicals and hydrogen peroxide-induced oxidative stress.”

“White sesame seed water-soluble fraction enhances human neuroblast cell viability via an anti-apoptotic mechanism”

“Resistant starch reduces colonic and urinary p-cresol in rats fed a tyrosine-supplemented diet, whereas konjac mannan does not.”

“Chamigrane Sesquiterpenes from a Basidiomycetous Endophytic Fungus XG8D Associated with Thai Mangrove Xylocarpus granatum.”

“Development of a modified Britton-Robinson buffer with improved linearity in the alkaline pH region”
Biojournal of Science and Technology, Vol.3(1), pp.7-16, 2016/02

“Effective transport and storage condition for preserving the quality of ‘Jiro’ persimmon in export market.”

“The induction of lipid peroxidation during the acute oxidative stress response induced by intratracheal instillation of fine crystalline silica particles in rats.”
Toxicology and Industrial Health, Vol.32(8), pp.1430-1437, 2016

“The total synthesis of starfish ganglioside GP3 bearing a unique sialyl glycan architecture.”

“Synthesis of a fluorescence resonance energy transfer-based probe containing a tricyclic nucleoside analog for single nucleotide polymorphism typing.”

“A study on the color deepening in red rice during storage.”
Food Chemistry, Vol.199, pp.457-462, 2016/05/15

“Equilibrated structures of oolongtheanins.”


“Effect of angiotensin II on body fluid volume of the freshwater oligochaete Tubifex tubifex via the angiotensin II receptor”  
*Biojournal of Science and Technology*, Vol.3, 2016/03

[27] Nakamoto K, Minami K, Akao Y, Ueno Y.  
“Labeling of target mRNAs by a photo-reactive microRNA probe.”  
*Chem. Commun.*, Vol.52(40), pp.6720-6722, 2016/05

[28] Niwa N, Ueda K, Ueno Y.  
“Synthesis of benzene-glycol nucleic acids and their biophysical and biological properties.”  

[29] Ogiwara K, Hirose S, Nagaoka S, Yanase E.  
“Interaction between Tea Polyphenols and Bile Acid Inhibits Micellar Cholesterol Solubility”  

“White sesame seed water-soluble fraction enhances human neuroblast cell viability via an anti-apoptotic mechanism”  

[31] Prasetyo A, Yusiati LM, Rusman, Fitriyanto MA, Nakagawa T, Hayakawa T, Erwanto Y.  
“Isolation and characterization of chitinolytic *Paenibacillus* sp. D10-2 from tropical shrimp pond waste water.”  

“Antioxidative flavonoids in adzuki-meshi (rice boiled with adzuki bean) react with nitrite under simulated stomach conditions”  

[33] Takahashi J, Iwahashi H.  
“Spectrum analysis of X-ray irradiated protoporphyrin IX: radiosensitizer for radiodynamic therapy”  
“2.5-aminolevulinic acid - Protoporphyrin IX mediated radiodynamic therapy (RDT)”

[40] Takahashi J, Misawa M, Iwahashi H.
“Combined treatment with X-ray irradiation and 5-aminolevulinic acid elicits better transcriptomic response of cell cycle-related factors than X-ray irradiation alone”

[41] Takechi S, Teramoto Y, Nishio Y.
“Improvement of dielectric properties of cyanoethyl cellulose via esterification and film stretching.”
*Cellulose*, Vol.23(1), pp.765-777, 2016/02

“CO2 processing and hydration of fruit and vegetable tissue by clathrate hydrate formation”

“A 5-Ureido-modified sialyl donor: A tool for the synthesis of α-sialosides.”

“Evaluating the efficacy of modified atmosphere packaging (MAP) to reduce mechanical injury and quality loss of broccoli”

[45] Uchida K, Ogawa K, Yanase E.
“Structure Determination of Novel Oxidation Products from Epicatechin: Thearubigin-Like Molecules.”

“Regulation of intracellular formaldehyde toxicity during methanol metabolism of the methylotrophic yeast Pichia methanolica”

“Antibacterial Activity of Selected Essential oils against Streptococcus sobrinus and Porphyromonas gingivalis.”

“Crystal structures of a subunit of the formylglycinamide ribonucleotide amidotransferase, PurS, from Thermus thermophilus, Sulfolobus tokodaii and Methanocaldococcus jannaschii.”
*Acta Crystallogr F Struct Biol Commun.*, Vol.72(Pt8), pp.627-635, 2016/08

“The effect of titanium dioxide (TiO2) nano-objects, and their aggregates and agglomerates greater than 100 nm (NOAA) on microbes under UV irradiation.”

“Escherichia coli-based production of recombinant ovine angiotensinogen and its characterization as a renin substrate”
[51] Yamauchi K, Mitsunaga T, Muddathir A M.
“Screening for melanogenesis-controlled agents using sudanese medicinal plants and identification of active compounds in the methanol extract of terminalia brownii bark”

[52] Yamauchi K, Mitsunaga T.
“Melanogenesis and melanosome transportation modulators from medicinal plants”

[53] Yasmin T, Akter S, Debnath M, Ebihara A, Nakagawa T, Nabi AH.
“In silico proposition to predict cluster of B- and T-cell epitopes for the usefulness of vaccine design from invasive, virulent and membrane associated proteins of C. jejuni.”
*In Silico Pharmacol.,* Vol.4(1), pp.5, 2016/12

**Course of Agricultural and Environmental Science**

“Small-Farm Reservoir Contribution to Annual Crop Cultivation in Rainfed Paddy Field under Tropical Monsoon Climate”
*Journal of Rainwater Catchment system*, Vol.21(2), pp.1-6, 2016/01

“The optimization principle of storage capacity of small-farm reservoir in rainfed agriculture.”
*Journal of Rainwater Catchment Systems*, Vol.22(1), 2016/07

“Grape apoplasmic β-1,3-glucanase confers fungal disease resistance in Arabidopsis”
*Scientia Horticulturae*, Vol.200, pp.105-110, 2016/03/08

“Environmental stresses and transcriptional responses for safe chloroplast operation.”

“Possible involvement of MYB44-mediated stomatal regulation in induced systemic resistance by Penicillium simplicissimum GP17-2 in Arabidopsis.”

“Specific detection of Type 1 and Type 2 isolates of Pyrenochaeta lycopersici by loop-mediated isothermal amplification reaction.”

“Joint genetic and network analyses identify loci associated with root growth under NaCl stress in Arabidopsis thaliana.”

“Genetic Differentiation, Molecular Phylogenetic Analysis and Ethnobotanical Study of Eutrema japonicum and E. tenue in Japan and E. yunnanense in China”

“Changes in SOD isozyme in mycorrhizal asparagus inoculated with Fusarium oxysporum.”
“Induced systemic resistance to Fusarium root rot and changes in antioxidative ability by arbuscular mycorrhizal fungus and non-pathogenic Fusarium oxysporum in asparagus plants.”

“Medaka in Japanese agricultural water channels - Genetic diversity and conservation -”

“Development of Culture Medium for the Isolation of Flavobacterium and Chryseobacterium from Rhizosphere Soil.”
*Microbes Environ.*, Vol.31(2), pp.104-110, 2016/06/25

“Clonal reproduction with androgenesis and somatic recombination: the case of the ant Cardiocondyla kagutsuchi”
*Naturwissenschaften.*, Vol.103(3-4), pp.22, 2016/04

“EFFECTS OF SALINITY STRESS ON GROWTH, YIELD, FRUIT QUALITY AND WATER USE EFFICIENCY OF TOMATO UNDER HYDROPONICS SYSTEM”

“Specific transcriptomic response in the shoots of Arabidopsis thaliana after exposure to Al rhizotoxicity: - Potential gene expression biomarkers for evaluating Al toxicity in soils.”

“Local-scale genetic structure in the Japanese wild boar (Sus scrofa leucomystax): insights from autosomal microsatellites”

“Complete mitochondrial genome of the Japanese bumblebee, Bombus hypocrita sapporensis (Insecta: Hymenoptera: Apidae)”

“Effects of 13 developmentally toxic chemicals on the migration of rat cephalic neural crest cells in vitro”
*Congenital Anomalies*, Vol.56(2), pp.52-59, 2016/03

[19] Xu W, Taki Y, Iwasawa A, Yayota M.
“Effects of early experience with low-quality roughage on feed intake, digestibility and metabolism in lambs.”

“Effect of particle size of brown rice on digestibility of energy and crude protein in growing-finishing pigs.”

[21] Yamamoto A, Yoshikawa T, Murakami A.
“Effects of particle size of brown rice-based diet on growth performance and energy digestibility in finishing pigs.”

[22] Yamamoto S, Kusuda S, Horiguchi M, Ishihara Y, Doi O.
“Seasonal changes in supraorbital comb characteristics and fecal testosterone levels in captive male Svalbard rock ptarmigans (Lagopus muta hyperboreus).”
“INFLUENCING FACTORS, EFFECTS AND DEVELOPMENT PROSPECT OF SOIL SOLARIZATION”

“New technologies for monitoring of foraging behavior in ruminants.”
*Journal of Integrated Field Science*, 2016

[25] Zhao Ling, Zhao Chun-Fang, Zhou Li-Hui, Lin Jing, Zhao Qing-Yong, Zhu Zhen, Chen Tao, Yao Shu, Hasegawa Toshihiro, **Matsui Tsutomu**, Wang Cai-Lin.
“QTL mapping of dehiscence length at the basal part of thecae related to heat tolerance of rice (*Oryza sativa* L.)”

[26] Zhao Ling, Zhu Zhen, Tian Xiaohai, Kobayasi Kazuhiro, Hasegawa Toshihiro, Zhang Yadong, Chen Zhide, Wang Cailin, **Matsui Tsutomu**.
“Inheritance analysis of anther dehiscence as a trait for the heat tolerance at flowering in japonica hybrid rice (*Oryza sativa* L.)”

※1 Also recorded on Research Center for Wildlife Management
※2 Also recorded on Joint Department of Veterinary Medicine

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**[Joint Department of Veterinary Medicine]**

[1] Abou Asa S, Anwar Sh, **Yanai T, Sakai H**.
“Immunohistochemical analysis of CD146 expression in canine skin tumours.”

“Effects of inhibitors of vascular endothelial growth factor receptor 2 and downstream pathways of receptor tyrosine kinases involving phosphatidylinositol 3-kinase/ Akt/ mammalian target of rapamycin or mitogen-activated protein kinase in canine hemangiosarcoma cell lines.”

“Theileria annulata seroprevalence among different cattle breeds in Rajshahi Division, Bangladesh.”

“Association of swine leukocyte antigen class II haplotypes and immune-related traits in a swine line selected for resistance to mycoplasmal pneumonia.”

“Generation of Recombinant Rabies Viruses encoding NanoLuc Luciferase for Antiviral Activity Assays.”
*Virus Res.*, Vol.215, pp.121-128, 2016/04/02

[6] Anwar Sh, **Yanai T, Sakai H**.
“Overexpression of peroxiredoxin 6 protects neoplastic cells against apoptosis in canine haemangiosarcoma.”

“Gene expression of ionotropic glutamate receptor subunits in the tectofugal pathway of the pigeon.”
*Neuroscience*, Vol.316, pp.367-377, 2016/03/01
“Proposed homology of the dorsomedial subdivision and V-shaped layer of the avian hippocampus to Ammon’s horn and dentate gyrus, respectively.”

[9] Baba M, Kitoh K, Takashima Y.
“Removal of extracellular Toxoplasma gondii tachyzoites from suspended cell culture.”
Parasitol Int., Vol.65(5), pp.536-538, 2016/10

“Quantitative analysis of the microtubule interaction of rabies virus p3 protein: roles in immune evasion and pathogenesis”

“Genome sequences of rotavirus A strains Ty-1 and Ty-3 isolated from turkeys in Ireland in 1979.”

“AN EPIZOOTIC OF EMERGING NOVEL AVIAN POX IN CARRION CROWS (CORVUS CORONE) AND LARGE-BILLED CROWS (CORVUS MACRORHYNCHOS) IN JAPAN.”

“Therapeutic potential of endothelin inhibitors in canine hemangiosarcoma.”
Life Sci., Vol.159, pp.55-60, 2016/08/15

“Isolation of avian bornaviruses from psittacine birds using QT6quail cells in Japan.”

“Nationwide distribution of bovine influenza D virus infection in Japan”

[16] Hussan MT, Saito S, Atoji Y.
“Glutamate-Like Neurons in the Turtle Brain.”

[17] Inoshima Y, Takasu M, Ishiguro N.
“Establishment of an on-site diagnostic procedure for detection of orf virus from oral lesions of Japanese serows (Capricornis crispus) by loop-mediated isothermal amplification.”

[18] Ito N, Moseley GW, Sugiyama M.
“The importance of immune evasion in the pathogenesis of rabies virus.”
[21] Ito T, Atoji Y.
“Tectothalamic inhibitory projection neurons in the avian torus semicircularis.”

[22] Itoh T, Kawabe M, Nagase T, Endo K, Miyoshi M, Miyahara K.
“Body surface area measurement in laboratory miniature pigs using a computed tomography scanner”

“Computed Tomographic Evaluation of Presumptively Normal Canine Sternal Lymph Nodes.”

“Production of a locus and allele-specific monoclonal antibody for the characterisation of SLA-1*0401 mRNA and protein expression levels in MHC-defined Microminipigs”

“B-cell lymphoma with Mott cell differentiation in a cat.”

“Molecular identification of the Cryptosporidium deer genotype in the Hokkaido sika deer (Cervus nippon yesoensis) in Hokkaido, Japan”

“Toxigenic Corynebacterium ulcerans isolated from a hunting dog and its diphtheria toxin antibody titer.”
*Microbiol Immunol.*, Vol.60(3), pp.177-186, 2016/03

[28] Karim MR, Atoji Y.
“Distribution of Vesicular Glutamate Transporter 2 and Ionotropic Glutamate Receptors in the Auditory Ganglion and Cochlear Nuclei of Pigeons (Columba livia)”

“Scalable Production of a Multifunctional Protein (TSG-6) That Aggregates with Itself and the CHO Cells That Synthesize It.”
*PLos One.*, Vol.11(1), pp.e0147553, 2016/01/21

“Chromatographically isolated CD63^+CD81^+ extracellular vesicles from mesenchymal stromal cells rescue cognitive impairments after TBI.”
*Proc Natl Acad Sci U S A.*, Vol.113(1), pp.170-175, 2016/01/05

“Regulation of Heart Contractility by M2 and M3 Muscarinic Receptors: Functional Studies Using Muscarinic Receptor Knockout Mouse.”

“Chicken Amyloid Arthropathy Caused by Mycoplasma Synoviae Infection in Japan.”

“Canine tumor development and crude incidence of tumors by breed based on domestic dogs in Gifu Prefecture.”
[34] Maeda M, Murakami T, Muhammad N, Inoshima Y, Ishiguro N.
“Experimental transmission of systemic AA amyloidosis in autoimmune disease and type 2 diabetes mellitus model mice.”

“Magnetic Resonance Imaging of Ovarian Activity in Microminipigs Showing Normal Estrous Cycles.”

“Contribution of the interaction between rabies virus P protein and IKKe to the inhibition of type I interferon induction signaling”

“Prevalence of anti-Toxoplasma gondii antibody in domestic horses in Japan”

“Identification and characterization of two CD4 alleles in Microminipigs.”

“Gastro Jejunal Inner Lumen Bypass Device Inhibits the Growth of Pigs”

[40] Matsuo K, Uetsu H, Takashima Y, Abe N.
“High occurrence of Sarcocystis infection in Sika deer Cervus nippon centralis and Japanese wild boar Sus scrofa leucomystax and molecular characterization of Sarcocystis and Hepatozoon isolates from their muscles.”

“Isolation of a sp. nov. Ljungan virus from wild birds in Japan.”
J Gen Virol., Vol.97, pp.1818-1822, 2016/08

“Longitudinal study of experimental induction of AA amyloidosis in mice seeded with homologous and heterologous AA fibrils.”
Inflamm Res., Vol.65(9), pp.689-699, 2016/09

“Pyoderma gangrenosum after trauma in a dog”

“Stimulation of dopamine D2-like receptors in the lumbosacral defecation centre causes propulsive colorectal contractions in rats.”
J. Physiol, Vol.594(15), pp.4339-4350, 2016/08/01

“Methylprednisolone sodium succinate reduces spinal cord swelling but does not affect recovery of dogs with surgically treated thoracolumbar intervertebral disk herniation”
[46] Nishii N, Nomizo T, Takashima S, Matsubara T, Tokuda M, Kitagawa H.
“Effects of D-allulose on glucose metabolism after the administration of sugar or food in healthy dogs.”

[47] Nishii N, Nomizo T, Takashima S, Matsubara T, Tokuda M, Kitagawa H.
“Single oral dose safety of D-allulose in dogs.”

“Analysis of microRNA-203 function in CREB/MITF/RAB27a pathway: comparison between canine and human melanoma cells.”

“The Rabies Virus L Protein Catalyzes mRNA Capping with GDP Polyribonucleotidyltransferase Activity”

“Roles of the Rabies Virus Phosphoprotein Isoforms in Pathogenesis.”

“Changes in respiratory function in Pembroke Welsh Corgi dogs with degenerative myelopathy”

“Does the capsaicin-sensitive local neural circuit constitutively regulate vagally evoked esophageal striated muscle contraction in rats?”

“Programmed cell death ligand 1 expression in canine cancer.”

“Two isoforms of aquaporin 2 responsive to hypertonic stress in the bottlenose dolphin”

“Molecular Cloning of Feline Resistin and the Expression of Resistin, Leptin, and Adiponectin in the Adipose Tissue of Normal and Obese Cats”
[60] **Takashima S, Shibata S, Yamada K, Ogawa M, Nishii N, Kitagawa H.**
“Intravenous infusion of amino acids in dogs attenuates hypothermia during anaesthesia and stimulates insulin secretion.”

[61] **Takasu M, Morita N, Tajima S, Almunia J, Maeda M, Kamiguchi T.**
“Cryopreservation of lar gibbon semen collected by manual stimulation.”

“Inhibitory effects of SKF96365 on the activities of K+ channels in mouse small intestinal smooth muscle cells”

“Inhibitory effect for proliferation of oral bacteria in dogs by tooth brushing and application of toothpaste.”

[64] Yaegashi G, Fukunari K, Oyama T, Murakami R, **Inoshima Y.**
“Detection and quantification of parapoxvirus DNA by use of a quantitative real-time polymerase chain reaction assay in calves without clinical signs of parapoxvirus infection”

[65] **Yamamoto A, Ono K, Machino E, Takasu M, Imaeda N.**
“Effect of particle size of brown rice on digestibility of energy and crude protein in growing-finishing pigs.”

※2 Also recorded on Course of Agricultural and Environmental Science
※3 Also recorded on Animal Medical Center

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**[Animal Medical Center]**

“Computed Tomographic Evaluation of Presumptively Normal Canine Sternal Lymph Nodes.”

※3 Also recorded on Joint Department of Veterinary Medicine

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**[Research Center for Wildlife Management]**

“Intraspecific Phylogeny of the House Shrews, *Suncus murinus-S. montanus* Species Complex, Based on the Mitochondrial Cytochrome b Gene”

“Local-scale genetic structure in the Japanese wild boar (Sus scrofa leucomystax): insights from autosomal microsatellites”

※1 Also recorded on Course of Agricultural and Environmental Science

2) Book

【Course of Applied Life Science】

【Course of Agricultural and Environmental Science】
II Lectures, Conference Presentation, etc.

1) Conference Presentation

【Course of Applied Life Science】

[1] Agus Fitriyanto Nanung, Amalia Ditasari, Erwanto Yuny, Pertiwiningrum Ambar, Triatmojo Suharjono, Bachruddin Zaenal, Wihandoyo, **Tomoyuki Nakagawa, Takashi Hayakawa.**

"ISOLATION OF INDIGENOUS DENITRIFYING BACTERIA FROM THE ODOROUS REGION OF AN LAYER FARM AND ITS POTENTIAL AS NITRATE REDUCING AGENT"

The 17th Animal Science Congress of Asian-Australasian Association of Animal Production Societies (AAAP)(Fukuoka, Japan), 2016/08/22-25

[2] **Ando H.**

“Synthetic chemistry challenging to diversity of gangliosides.”

The 3rd International Symposium on Glyco-Neuroscience(Awaji city, Hyogo), 2016/07/14-16

[3] **Ando H.**

“Molecular interactions in the cell membrane revealed by novel glycolipid probes.”

CARBO XXXI International Conference on "New Frontiers in Carbohydrate Chemistry and Biology"( Delhi University, India), 20016/11/14-16


“Synthetic study on unique sialylic acid containing glycan architectures of neuritogenic gangliosides found in echinoderms.”

2016 International Carbohydrate Symposium (ICS2016) ( New Orleans, Louisiana, USA), 2016/07/17-21


“Novel Synthetic Method for Seleno-glycosides Based on Transacetalization Reaction.”

13th International Conference on the Chemistry of Selenium and Tellurium(Gifu), 2016/05/23-27


“Metabolic dynamics and transcriptional regulation in temperature adaptation of Arabidopsis”

Cold Spring Harbor Asia Conference, "Latest advances in plant development & environmental response"( Awaji, Japan), 2016/11/29-12/02


“A C5-Ureido-Modified Sialyl Donor for the Synthesis of α-Sialosides.”

Sialoglyco 2016 (California, USA), 2016/11/14-17

[8] **Katsuno N, Fujimura M, Nishizu T.**


The 20th International Drying Symposium(Gifu), 2016/08/07-10


“Ganglioside lipid raft interaction unveiled by novel ganglioside probes.”

Sialoglyco 2016 (California, USA), 2016/11/14-17


“Development of fluorescent ganglioside analogs for imaging of raft-based interactions.”

2016 International Carbohydrate Symposium (ICS2016) (New Orleans, Louisiana, USA), 2016/07/17-21


“Synthesis of fluorescent disialyl ganglioside probes useful for single molecule imaging.”

Sialoglyco 2016 (California, USA), 2016/11/14-17

[12] Mahomud MS, **Katsuno N, Nishizu T.**

“Formation of soluble protein complexes in heated skim milk induced by whey protein fortification and their effects on yoghurt texture”

IUFoST2016(Ireland), 2016/08/21-25


[15] Nagaoka S. “Exhaustive analysis of a novel bile Acid binding peptide derived from soybean protein and efficient modification of soystatin by peptide array” 107th AOCS Annual Meeting & Expo (2016) (Salt Lake City, United States), 2016/04/30-05/04

[16] Nakagawa T, Wakayama K, Hayakawa T. “Regulation of methanol metabolism in the methylotrophic yeast Pichia methanolica” 14th International Congress on Yeasts; ICY14 (Awaji, Japan), 2016/09/11-15


[Course of Agricultural and Environmental Science]


Montira Yossapol, **Yamamoto A**, Sugiyama M, Asai T.
“Occurrence of Cephalosporin-Resistant Gram Negative Bacteria in Mice and Rat”
The 159th meeting of the Japanese Society of Veterinary Science (Fujisawa), 2016/09/06-08

Mori J, Ando T, **Himaki T**.
“Effect of tris(2-carboxyethyl)phosphine hydrochloride on in vitro development of bovine in vitro fertilized embryos”
The 17th Animal Science Congress of Asian-Australasian Association of Animal Production Societies (AAAP)(Fukuoka, Japan), 2016/08/22-25

Nakayama F, **Ninomiya S**.
“Does locomotor behaviour of tethered cattle released to the paddock indicate their motivation during tethering?”
The 50th Congress of the International Society for Applied Ethology(The University of Edinburgh), 2016/07/12-16

**Ninomiya S**.
“How to assess animal welfare and comfort on the basis of animal behaviour”
the 31st International Congress of Psychology(Yokohama), 2016/07/24-29

“Comprehensive analysis of target genes of SOG1, a master regulator of DNA damage response”
Plant Genome Stability and Change 2016(Hayama, Japan), 2016/07/07-10

Terashima M, **Ninomiya S**.
“Different behavioural responses of stabled horses to delayed feeding and polymorphisms of the dopamine D4 receptor gene”
The 50th Congress of the International Society for Applied Ethology(The University of Edinburgh), 2016/07/12-16

**Yamamoto A**, Ono K, Takasu M, Machino E.
“Effect of brown rice particle size on energy and crude protein digestibility in growing-fattening pigs”
The 17th Animal Science Congress of Asian-Australasian Association of Animal Production Societies (AAAP)(Fukuoka, Japan), 2016/08/22-25

**Joint Department of Veterinary Medicine**

Cornelia Appiah-Kwarteng, Toda N, **Kito K, Takashima Y**.
“Rapid disappearance of anti-Toxoplasma antibodies in experimentally infected chickens”
The 159th meeting of the Japanese Society of Veterinary Science (Fujisawa), 2016/09/06-08

**Inoshima Y**, Tashiro M, **Ishiguro N**.
“N-terminal region of serum amyloid A3 is responsible for up-regulation of MUC2 mRNA expression in mouse epithelial cells”
The XVth International Symposium on Amyloidosis(Uppsala, Sweden), 2016/07/03-07

Md. Nuruddin Mahmud, **Yasuo Inoshima, Naotaka Ishiguro, Yuji Kamatari**.
“Identification of the third epitope recognized by multispecific antibody G2”
The 54th Annual Meeting of the Biophysical Society of Japan (Epochal Tsukuba), 2016/11/25-27

Reza Rajabi Toustani, Quzi Sharmin Akter, Hoshino Y, Mukoujima K, Sakaguchi S, **Murase T**.
“Modifications of methodology for the staining of frozen-thawed Japanese Black bull sperm acrosomes with fluorescein isothiocyanate peanut agglutinin (FITC-PNA)”
The 159th meeting of the Japanese Society of Veterinary Science (Fujisawa), 2016/09/06-08

Sonjoy Sarkar, **Shouichiro Saito, Yasuro Atoji**.
“Expression of vesicular glutamate transporter 2 mRNA in the telencephalon and diencephalon of chick embryos”
The 39th Annual Meeting of the Japan Neuroscience Society (Yokohama), 2016/07/20-22
2) Academic lecture

【Course of Applied Life Science】

[1] Ando H.
“Development of novel ganglioside probes to explore glycan-protein architecture formed in the cell membrane.”
Glycoscience Japan – The Netherlands Joint Seminar 2016, Glycobioiy in Health and Disease(Leiden University Medical Center, Leiden, The Netherlands), 2016/04/19-22 (Invitation lecture)

[2] Ishida H.
“Design and Synthesis of Novel Sialosides as Potent Inhibitors for Siglec-2.”
Glycoscience Japan – The Netherlands Joint Seminar 2016, Glycobioiy in Health and Disease(Leiden University Medical Center, Leiden, The Netherlands), 2016/04/19-22 (Invitation lecture)

【Course of Agricultural and Environmental Science】

“PCR-SSCP analysis and regulation of growth and antioxidants through AMF symbiosis in asparagus decline.”
5th World Congress of Food and Nutrition(Taiwan), 2016/11/19 (Invitation lecture)

“Environmental stress management through mycorrhizal symbiosis in horticultural plants.”
International Conference on Dry Zone Agriculture(SriLanka), 2016/12/15-16 (Invitation lecture)

“Preference and Impression of Roses among Women in China and Japan.”
The Second Asian Horticultural Congress(China), 2016/09 (Invitation lecture)
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Mukai Y, Naka S
Ida A (the person in charge)