Research Interests of Academic Staff 2013

NIPPON VETERINARY AND LIFE SCIENCE UNIVERSITY

NIPPON VETERINARY AND LIFE SCIENCE UNIVERSITY

HISTORY OF NIPPON VETERINARY AND LIFE SCIENCE UNIVERSITY

1881 Established as the first private veterinary school in Tokyo

1945 Name changed to Nippon Veterinary and Zootechnical College

1949 According to Japan's new education system, status raised to"university" and the name changed to Nippon Veterinary and Animal Science University

1952 Merged with Nippon Medical School

1962 Graduate School of Veterinary Medicine (Masters and Doctoral course) established

1967 School of Food Science and Technology established

1984 Initiated a six-year program for students in the School of Veterinary Medicine

1992 Established Fuji Animal Research Farm in Yamanashi Prefecture

2003 Built New hospital (Veterinary Medical Teaching Hospital)

2005 Established School of Veterinary Nursing and Technology, and Masters course in Applied Life Science in the Graduate School

2006 Name changed to Nippon Veterinary and Life Science University

2006 Completed New classroom building

2008 Established Doctoral course in Applied Life Science in the Graduate School

2009 Established Masters course in Veterinary Nursing and Technology in the Graduate School

2011 Established Doctoral course in Veterinary Nursing and Technology in the Graduate School

2011 Held a special ceremony for the 130th anniversary of the setting up of the university

2012 The number of admissions in the School of Veterinary Nursing and Technology and the School of Animal Science increased from 80 to 100

2012 Held a special celemony for the 50th anniversary of the setting up of the Graduate School

Partner Institutions

2001 Northeast Agricultural University, China
2003 Kasetsart University, Thailand
2003 Khon Kaen University, Thailand
2003 Chonnam National University, South Korea
2004 Hue University of Agriculture and Forestry, Vietnam
2005 The University of Queensland, Australia
2006 Chiang Mai University, Thailand
2007 Massey University, New Zealand
2008 National Chung Hsing University, Taiwan
2008 Inner Mongolia Agricultural University, China
2010 Faculty of Veterinary Science, Chulalongkorn University, Thailand
2013 Chungnam National University, South Korea

Enrollment (October 1,2013 present)

The number of Undergraduate Students : 1,688
The number of Graduate Students : 69
The number of Faculty Staffs : 133

The number of Alumni: approximately 16,000

＊The laboratories in School of Veterinary Medicine were reorganized as divisions/departments in 2014.

- President of Nippon Veterinary Life Sience University
  - Faculty of Veterinary Science
    - School of Veterinary Medicine＊
      - Laboratory of Veterinary Anatomy
      - Laboratory of Veterinary Physiology
      - Laboratory of Veterinary Biochemistry
      - Laboratory of Veterinary Pharmacology
      - Laboratory of Veterinary Pathology
      - Laboratory of Veterinary Microbiology
      - Laboratory of Veterinary Infectious Diseases
      - Laboratory of Veterinary Parasitology
      - Laboratory of Veterinary Internal Medicine
      - Second Laboratory of Veterinary Internal Medicine
      - Laboratory of Veterinary Surgery
      - Laboratory of Veterinary Radiology
      - Laboratory of Veterinary Reproduction
      - Laboratory of Veterinary Clinical Pathology
      - Laboratory of Veterinary Hygiene
      - Laboratory of Veterinary Public Health
      - Laboratory of Comparative and Behavioral Medicine
      - Laboratory of Aquatic Medicine
      - Laboratory of Wildlife Medicine
      - Laboratory of Comparative Cellular Bilogy
      - Laboratory of Biomolecular Chemistry
      - Laboratory of Comparative Developmental Psychology
    - School of Veterinary Nursing and Technology
      - Department of Basic Science
      - Department of Applied Science
      - Department of Veterinary Nursing
  - Faculty of Applied Life Science
    - School of Animal Science
      - Laboratory of Animal Systems Management
      - Laboratory of Nature Management and Agri-Food Economics
      - Laboratory of Animal Nutrition
      - Laboratory of Animal Physiology
      - Laboratory of Animal Breeding & Genetics
      - Laboratory of Animal Reproduction
      - Laboratory of Applied Animal Biochemistry
      - Laboratory of Experimental Animal Science
      - Laboratory of Host Defense for Animals
      - Laboratory of the English Language
      - Laboratory of Exercise Science
    - School of Food Science and Technology
      - Laboratory of Functional Food Culture
      - Laboratory of Animal Products Science and Technology
      - Laboratory of Food Technology
      - Laboratory of Food Chemistry
      - Laboratory of Food Hygiene
      - Laboratory of Agricultural Foods
      - Laboratory of Food Biotechnology
      - Laboratory of Food Economics
      - Laboratory of Food Safety
      - Laboratory of Physics
      - Laboratory of the English Language
  - Veterinary Medical Teaching Hospital
  - Fuji Animal Research Farm

President of Nippon Veterinary Life Science University

Professor	IKEMOTO Shigenori

Faculty of Veterinary Science

School of Veterinary Medicine

Laboratory of Veterinary Anatomy

Professor	AMASAKI Hajime
Associate Prof.	SOETA Satoshi
Senior Assistant Prof.	OISHI Motoharu
Assistant Prof.	KABAYAMA Miyuki

Laboratory of Veterinary Physiology

Professor	SUZUKI Hiroetsu
Senior Assistant Prof.	KATAYAMA Kentaro
Assistant Prof.	TOCHIGI Yuki

Laboratory of Veterinary Biochemistry

Professor	ARAI Toshiro
Senior Assistant Prof.	SASAKI Noriyasu
Senior Assistant Prof.	YAMAMOTO Ichiro

Laboratory of Veterinary Pharmacology

Project Prof.	SHIMIZU Kazumasa
Associate Prof.	KANEDA Takeharu
Assistant Prof.	TAJIMA Tsuyoshi

Laboratory of Veterinary Pathology

Professor	TAKAHASHI Kimimasa
Associate Prof.	OHKUSU-Tsukada Kozo
Senior Assistant Prof.	MICHISHITA Masaki

Laboratory of Veterinary Microbiology

Associate Prof.	KATAOKA Yasushi
Assistant Prof.	OCHI Hiroki

Laboratory of Veterinary Infectious Diseases

Professor	TAGUCHI Fumihiro
Associate Prof.	NAKAGAKI Kazuhide
Senior Assistant Prof.	UJIKE Makoto

Laboratory of Veterinary Parasitology

Professor	IKE Kazunori
Project Prof.	IMAI Soichi
Senior Assistant Prof.	MORITA Tatsushi

Laboratory of Veterinary Internal Medicine

Professor	KOYAMA Hidekazu
Senior Assistant Prof.	MATSUMOTO Hirotaka
Senior Assistant Prof.	MIZUTANI Hisashi
Assistant Prof.	TESHIMA Takahiro

Second Laboratory of Veterinary Internal Medicine

Professor	TAKEMURA Naoyuki
Assistant Prof.	MIYAGAWA Yuichi

Laboratory of Veterinary Surgery

Professor	HARA Yasushi
Senior Assistant Prof.	HARADA Yasuji
Senior Assistant Prof.	YOGO Takuya

Laboratory of Veterinary Radiology

Professor	FUJITA Michio
Senior Assistant Prof.	HASEGAWA Daisuke
Assistant Prof.	FUJIWARA-IGARASHI Aki

Laboratory of Veterinary Reproduction

Professor	KAWAKAMI Eiichi
Associate Prof.	HORI Tatsuya
Assistant Prof.	KOBAYASHI Masanori

Laboratory of Veterinary Clinical Pathology

Professor	WASHIZU Tsukimi
Associate Prof.	BONKOBARA Makoto
Senior Assistant Prof.	IRIMAJIRI Mami

Laboratory of Veterinary Hygiene

Professor	IKEDA Hidetoshi
Associate Prof.	TANAKA Yoshikazu

Laboratory of Veterinary Public Health

Professor	UEDA Fukiko
Project Prof.	YOSHIMURA Shiro
Associate Prof.	OCHIAI Yoshitsugu
Assistant Prof.	TAKANO Takashi

Laboratory of Comparative and Behavioral Medicine

Professor	SAITO Toru
Associate Prof.	YOKOSUKA Makoto
Assistant Prof.	NAKADA Tomoaki

Laboratory of Aquatic Medicine

Professor	WADA Shinpei
Associate Prof.	KURATA Osamu

Laboratory of Wildlife Medicine

Professor	HAYAMA Shinichi
Assistant Prof.	KATO Takuya

Laboratory of Comparative Cellular Biology

Professor	TSUCHIDA Shuichi
Assistant Prof.	HATAKEYAMA Hitoshi

Laboratory of Biomolecular Chemistry

Professor	TAZAKI Hiroyuki
Associate Prof.	KATAYAMA Kinya
Assistant Prof.	SATO Touko

Laboratory of Comparative Developmental Psychology

Professor	KAKINUMA Miki
Senior Assistant Prof.	NOSE Izuru
Project Prof.	YAMADA Yutaka

School of Veterinary Nursing and Technology

Department of Basic Science

Professor	OSAKA Motohisa
Professor	HAKAMATA Yoji
Professor	OMI Toshinori
Associate Prof.	AOKI Hiroshi
Senior Assistant Prof.	FUJISAWA Masahiko
Senior Assistant Prof.	OCHIAI Kazuhiko

Department of Applied Science

Professor	YUMOTO Norio
Professor	KAJIGAYA Hiroshi
Professor	KAMIYA Shinji
Associate Prof.	KOBAYASHI-Mochizuki Mariko
Senior Assistant Prof.	YAMAMOTO Toshiaki
Senior Assistant Prof.	YAMAMOTO Masami
Senior Assistant Prof.	KOBAYASHI Jun

Department of Veterinary Nursing

Professor	SAKO Toshinori
Associate Prof.	ISHIOKA Katsumi
Associate Prof.	MAKINO Yuki
Associate Prof.	MIZUKOSHI Mina
Senior Assistant Prof.	MATSUBARA Takako

Senior Assistant Prof.	AZAKAMI Daigo
Senior Assistant Prof.	MOMOTA Yutaka
Assistant Prof.	MORI Akihiro

Faculty of Applied Life Science

School of Animal Science

Laboratory of Animal Systems Management

Professor	OZAWA Takeyuki

Laboratory of Nature Management and Agri-Food Economics

Professor	UEKI Miki
Senior Assistant Prof.	KUWABARA Takashi

Laboratory of Animal Nutrition

Associate Prof.	TOKITA Norio
Associate Prof.	NADE Toshihiro

Laboratory of Animal Physiology

Professor	TANAKA Minoru
Senior Assistant Prof.	TSUSHIMA Nobumichi
Senior Assistant Prof.	NAKAO Nobuhiro

Laboratory of Animal Breeding & Genetics

Associate Prof.	YOSHIDA Tatsuyuki
Associate Prof.	FURUTA Hiroki

Laboratory of Animal Reproduction

Professor	USHIJIMA Hitoshi
Associate Prof.	OKADA Konosuke

Laboratory of Applied Animal Biochemistry

Professor	OHTA Yoshiyuki
Assistant Prof.	SHIRAISHI Jun-ichi

Laboratory of Experimental Animal Science

Professor	AMAO Hiromi
Associate Prof.	TOHEI Atsushi

Laboratory of Host Defense for Animals

Associate Prof.	ARIMURA Yutaka

Laboratory of the English Language

Senior Assistant Prof.	TOKIZAKI Toshihiko

Laboratory of Exercise Science

Professor	HAMABE Hirokazu

School of Food Science and Technology

Laboratory of Functional Food Culture

Professor	NISHIMURA Toshihide
Assistant Prof.	EGUSA Ai

Laboratory of Animal Products Science and Technology

Professor	AKUZAWA Ryozo
Senior Assistant Prof.	MIURA Takayuki

Laboratory of Food Technology

Associate Professor	ODAKE Sachiko
Assistant Prof.	KOBAYASHI Fumiyuki

Laboratory of Food Chemistry

Professor	MATSUISHI Masanori
Assistant Prof.	MIGITA Koshiro

Laboratory of Food Hygiene

Professor	FUJISAWA Tomohiko
Associate Prof.	OHASHI Yuji

Laboratory of Agricultural Foods

Professor	NAKAYAMA Tsutomu
Senior Assistant Prof.	KANAYAMA-Narai Asako

Laboratory of Food Biotechnology

Professor	SHIBUI Tatsuro
Senior Assistant Prof.	HARA Hiroyoshi

Laboratory of Food Economics

Professor	SASAKI Teruo

Laboratory of Food Safety

Professor	YOSHIDA Mitsuru

Laboratory of Physics

Senior Assistant Prof.	YAGI Shohei

Laboratory of the English language

Associate Prof.	MATSUFUJI Shigeko

Veterinary Medical Teaching Hospital

Senior Assistant Prof.	KAWASUMI Koh

Fuji Animal Research Farm

Professor	YOSHIMURA Itaru
Senior Assistant Prof.	OSADA Masahiro

Note:Please call to e-mail to “international@nvlu.ac.jp”, if you want to have any questions

President of Nippon Veterinary and Life Science University

IKEMOTO, Shigenori 池本卯典, VMD, D.Med.Sci. PhD

My research primarily focuses on genetic markers in animal and human blood cells and the personal identification of forensic materials.

Since the Meiji era, Japanese veterinary medicine has been established and practiced under one mandate: to propagate foreign veterinary medicine in Japan.

In anticipation of drastic changes in the research environment and to promote advances in veterinary medicine in the 21st century, Nippon Veterinary and Life Science University (NVLU) underwent organizationally restructuring in April 2006. NVLU now consists of two main research departments: the high technology veterinary research center and the advanced veterinary clinical research and teaching hospital.

We would like to continue our efforts to function not only in the field of personnel development but also as the central research institute in the field of advanced veterinary medicine.

Faculty of Veterinary Science
School of Veterinary Medicine

Laboratory of Veterinary Anatomy

Prof. AMASAKI, Hajime 尼﨑 肇, DVM, MS, PhD

My research focuses on the regulatory mechanisms controlling mammalian organogenesis. My primary aim is to examine the differentiation mechanisms of the mammalian digestive organs and the effects of different dietary habits on this system. This research is conducted in collaboration with the Australia Queensland University. In addition, I am developping the techniques of the artificial breeding of the Australian marsupial, monotreme and crocodile. My approach has been performed using mainly morphological techniques, and also the molecular biology technique.

Associate Prof. SOETA, Satoshi 添田 聡, DVM, MVM, PhD

My research focuses on veterinary anatomy, experimental pathology, and comparative pathology. Mechanisms underlying endochondral ossification in various mammalian species and differentiation of the vomeronasal and main olfactory systems in urodele amphibians are the two major topics of my research.

I am particularly interested in the intralacunar ossification found in the epiphyseal growth plate cartilage of mammals after maturation and the function of the olfactory system containing two types of olfactory receptor neurons in the Japanese newt.

Senior Assistant Prof. OISHI, Motoharu 大石 元治, DVM, PhD

My research aims to provide quantitative data on limb muscles in wild animals in order to clarify the different adaptation strategies for locomotion. Previously, three-dimensional computed tomography (CT) of forelimb skeletons has been performed to measure the range of motion of

various joints.

Assistant Prof. KABAYAMA, Miyuki 樺山 実幸, DVM, PhD

My research interests include molecular mechanisms underlying various emotional and social behaviors, and characterizing underlying pathogenic mechanisms related to affective and neurodegenerative disorders. The focus of my research is on the monoaminergic signaling that includes monoamine oxidase (MAO), a major brain protein controlling emotions and the mood. Using molecular biology techniques and behavioral analyses, I have discovered Rines, a RING finger-type E3 ubiquitin ligase, that regulates MAO-A protein levels and emotional and behavioural responses. Rines knockout mice expressed increased MAO-A protein levels, leading to impaired stress responses, enhanced anxiety, and affiliative behavior. This is the first study to demonstrate the regulation of MAO-A protein via the ubiquitin proteasome system related to emotional behavioral aspect. Further research will provide new mechanistic insights into the treatment of anxiety, stress-related disorders, and impaired social functions. I am also interested in the studies related to developmental biology and regenerative medicine. I would like to collaborate with researchers interested in this field.

Laboratory of Veterinary Physiology

Prof. SUZUKI, Hiroetsu 鈴木浩悦, DVM, PhD

My research aims to reveal physiological processes by comparing defective phenotypes with normal ones, and in this process it is also aimed to establish mutant animal models for studying human diseases. In our laboratory, we have established spontaneous mutant rat strains with hypogonadism (HGN), osteochondrodysplasia (OCD), lethal dwarfism with epilepsy (LDE), unilateral urogenital anomalies (UUA), hydronephrosis (HN), and hypoplastic thymus (PET). We have performed pathophysiological examinations to characterize the phenotypes of these models and used the positional candidate approach to identify genes responsible for mutations. Successful examples of the studies conducted in our laboratory include identification of astrin, WWOX, and giantin responsible for HGN, LDE, and OCD, respectively (Reproduction 2006, 132: 79; Genes Brain & Behav.

2009, 8: 650; Bone 2011, 49: 1027). Astrin is a microtubule-associated protein that may be important for the proliferation of testicular Sertoli cells. WWOX is a tumor suppressor gene located on a fragile chromosome site and may be important for brain development. Giantin is a COPI vesicle-tethering protein that may be important for the development of chondrocytes. Currently, we are conducting experiments using cells derived from these mutant rats to reveal the function of genes under in vivo and in vitro conditions. We are also studying the effects of environmental factors (endocrine disruptors) on animal reproduction and development in collaboration with external researchers.

Senior Assistant Prof. KATAYAMA, Kentaro 片山健太郎, PhD

My research aims to identify the genes responsible for developmental anomalies and reveal their in vivo and in vitro functions of these genes. Currently, I am investigating genes associated with genetic defects in spontaneous mutant rat strains established in my laboratory. These rat strains include those with OCD, HGN, LDE, and PET. To date, we have identified the genes responsible for OCD, HGN, and LDE. OCD is caused by a mutation in Golgb1, and is therefore a useful model for studying its in vivo function and OCD pathogenesis. HGN and LDE are associated with mutations in Spag5 and Wwox, respectively. Phenotypes of HGN mutants are different from knockout (KO) mice, whereas those of LDE mutants are similar to KO mice. LDE mutants have an additional phenotypic feature (epilepsy). Currently, I am attempting to understand Golgb1, Spag5, and Wwox functions during normal development.

Assistant Prof. TOCHIGI, Yuki 栃木裕貴, DVM, PhD

The long-term aim of my research is to discover novel molecular mechanisms involved in cell cycle progression and tumorigenesis. In my laboratory, we have established several spontaneous mutant rat strains, and identified mutations in specific genes involved in cell cycle progression and tumorigenesis. However, the biological functions of these mutations still remain largely unknown. To further analyze these mutant strains, I plan to perform molecular and cellular biological analyses. My research is extremely fascinating and enables us to address unknown biological functions of molecules identified by our previous in vivo phenotypical analyses. To connect the knowledge between in vivo and in vitro analysis is my short-term goal.

Laboratory of Veterinary Biochemistry

Prof. ARAI, Toshiro 新井敏郎, DVM, PhD

I graduated from Nippon Veterinary and Animal Science University in 1981, and have always had a strong interest in research and teaching. My research interests lie in the fields of biochemistry, nutrition, metabolism, and endocrinology. My research primarily focuses on the onset mechanisms of metabolic disorders, such as obesity and diabetes mellitus, and tumorigenesis in animals. In my present research I am attempting to develop new diagnostic and preventive techniques for metabolic disorders using genome, proteome, and metabolome analyses. Furthermore, I am the chief investigator of the "Science Frontier Promotion Project" (2005 to 2009) and "Strategic Research Base Development for Private Universities" (2008 to 2012), which is funded through matched funding subsidy from the Ministry of Education, Culture, Sports, Science and Technology of Japan (MEXT).

Senior Assistant Prof. SASAKI, Noriyasu 佐々木典康, DVM, PhD

My research interests lie in the field of comparative physiology and biochemistry of adipocytes and adipose-derived stem cells (ADSC). My research aims to clarify the molecular mechanisms regulating proliferation and differentiation of adipocytes and ADSC regulated by various signals, including hormones, adipokines, and microRNAs.

My other research interests include the development of new diagnostic techniques for companion animals and evaluation of the safety and efficacy of dietary supplements for dogs and cats.

Senior Assistant Prof. YAMAMOTO, Ichiro 山本一郎, PhD

My research focuses on the biochemistry and endocrinology of domestic animals. My research interests are as follows:

(1) Development of diagnostic techniques for the obese gene SNP in domestic cats and dogs

(2) I nvestigate the roles of the ghrelin receptor superfamily in birds

(3) Improve the understanding of the molecular mechanism of sex determination

and differentiation in birds

Laboratory of Veterinary Pharmacology

Project Prof. SHIMIZU, Kazumasa 清水一政, DVM, PhD

My research focuses mostly on the comparative pharmacology.
I am particularly interested in mechanisms of action of transmitters and other substances on smooth muscle.

Associate Prof. KANEDA, Takeharu 金田剛治, DVM, PhD

My research interest lies in the field of veterinary pharmacology. Recently, I have become interested in the effects of phosphodiesterase inhibitors on smooth muscle contractility and the relationship between smooth muscle contractility and glucose transporter activity.

Assistant Prof. TAJIMA, Tsuyoshi 田島剛, DVM, PhD

My research focuses on the pathophysiological signal transductions related to smooth muscle contraction in domestic animals, especially tracheitis and abomassal displacement. Previously, I have conducted studies involving in vitro models using organ culture and pharmacological tools, and my future studies will investigate the key molecules involved in these diseases and lead to improved treatment and prevention.

Laboratory of Veterinary Pathology

Prof. TAKAHASHI, Kimimasa 高橋公正, DVM, PhD

My research interest lies in the field of veterinary pathology. I have conducted studies involving toxicological pathology for 13 years before

I moved to this university. My current research interest is to study the mechanism of tumorigenesis in mammary tumors in cats and unique skin fibroma in Djungarian hamsters. Almost all mammary tumors in cats, unlike those in dogs, are considered to be potentially malignant. My interest lies in examining the factors related to potential malignancy of mammary tumors in cats. In addition, it has been revealed in my laboratory that the male Djungarian hamster has a strong predisposition to this atypical skin fibroma compared to the female, and that the tumor cells express androgen receptors. I would like to demonstrate experimentally that this tumor develops in an androgen-dependent manner.

Associate Prof. OHKUSU-TSUKADA, Kozo 塚田（大楠）晃三, DVM, PhD

My teaching field covers veterinary pathology and immunology. My research interest is to study the involvement of tumor immunology and inflammatory autoimmune diseases. In particular, I am interested in regulation of immunosuppressor cells such as IL-10-producing Foxp3+ CD4+-induced regulatory T cells (Treg cells) and CD11b+ Gr-1+ myeloid-derived suppressor cells, both of which increase in cancer. Recently, I established an immunotherapy model for cancer by controlling these immunosuppressor cells (Int J Cancer 2011, 128: 119; Eur J Immunol 2010, 40: 1011). In future, I aim to administer cancer immunotherapy to dogs through the induction of tumor antigen-specific T cells combined with controlled immunosuppressor cells.

Senior Assistant Prof. MICHISHITA, Masaki 道下正貴, DVM, PhD

My present research focuses on understanding the molecular and cellular functions of cancer cells using morphology, molecular biology, and gene targeting techniques. One fundamental aim of my research is to identify genes and molecular pathways involved in pathogenesis of malignant tumors, including mammary gland tumors in dogs and cats. I attempt to obtain microarray-based gene expression profiles in spontaneous mammary carcinoma in dogs. I believe that my research will contribute to the development of new strategies for diagnosis, therapy and prevention of cancer.

Laboratory of Veterinary Microbiology

Associate Prof. KATAOKA, Yasushi 片岡 康, DVM, MS, PhD

My research interests include etiological, genetic and immunological characterization of pathogenic bacteria isolated from animals and humans and its applications in epidemiology diagnosis, prevention, and treatment of infectious diseases. My research primarily focuses Streptococcus suis infection in pigs and bacterial infections in companion animals. Furthermore, at the undergraduate level, I teach veterinary bacteriology, bacterial infectious diseases in animals and bacterial zoonoses, and basic computer applications.

Assistant Prof. OCHI, Hiroki 越智広樹, DVM, PhD

My research interest lies in the field of veterinary microbiology. The main aim of my research is to clarify the molecular mechanism of bacterial biofilm formation, the crosstalk between bacterial flora and host organ, and the molecular mechanism of bacterial antibiotic resistance.

Laboratory of Veterinary Infectious Diseases

Prof. TAGUCHI, Fumihiro 田口文広, DVM, PhD

I have been involved with the study of coronaviruses (CoV) for more than 35 years. At my laboratory, we have previously studied virus-receptor interactions, which are followed by virus-cell fusion (J. Virol. 1994, 68: 5403; J. Virol. 1997, 70: 62321. Recently, I have becomeMinterested in the protease-mediated cell entry mechanism of CoVs Mt my laboratory ha have shown that host cell proteases play an important role in the cetry ofd althogenesis of CoVs (PNAS 2005, 102: 12543, J. Virol. 2009, 83: 712, I interestedlso includes i e novel mechanism of CoV entry, hlled receptor-independent infection of murine hepatitis virus (MHV) (J. Virol. 2002, 76: 950,2J. Virol. 2006, 80: 4901,2 Another interest is the investigation of the resistance mechanism of animals to viral infection. We have studied this

resistance using MHV and have shown the importance of the MHV receptor (J. Virol. 1997, 71: 8860,19. Virol. 2010, 84: 6654,20At rently, we are studying another member of the CoV family, torovirus, to elucidate its cell entry mechanisms and pathogenesis. Hopefully, these studies will contribute to the comprehensive understanding of CoV infection and alsds to the development of anti-CoV strategies.

Associate Prof. NAKAGAKI, Kazuhide 中垣和英, DVM, MS, PhD

The primary aim of my research is to understand host-parasite interactions. I have been studying both sides of the host-parasite interface, especially filariae that are tissue-dwelling macro-parasites. Considering the interaction with regard to the host, they regularly come in contact with many parasites without experiencing any severe inflammatory responses. According to Darwinists, this may be the result of “adaptation and selection.” However, it appears that this explanation does not completely answer the question. It is fascinating to search for an answer as to why such a number large of pathogens cannot be eliminated, even though a single allogeneic cell can be removed. As my understanding with regard to this interaction increases, the more I realize that it is impossible to simplify the answer. Thus, we need to investigate the mechanisms at each interface. Currently, my research focuses on the products generated by the parasite and whether the host immune system is affected or not. I hope my work will provide answers to the above questions.

Senior Assistant Prof. UJIKE, Makoto 氏家誠, PhD

My research interest is the cell entry mechanism of influenza virus and CoV. My previous studies have shown the membrane fusion mechanism of influenza B virus (J.Virol. 2004, 78: 11536; J. Gen. Virol. 2006, 87: 1669), the protease-mediated cell entry mechanism of SARS CoV (PNAS 2005, 102: 12543; J. Virol. 2008, 82 :588) and (3) the surveillance of drug resistant influenza A viruses (Emerg. Infect. Dis. 2010, 16: 926; Emerg. Infect. Dis. 2011, 17: 470). Currently, I am attempting to elucidate the cell entry mechanism of bovine torovirus and porcine CoV and develop novel anti-viral drugs on the basis of the findings of my previous studies.

Laboratory of Veterinary Parasitology

Prof. IKE, Kazunori 池 和憲, DVM, PhD

My major research interests lie in the fields of veterinary parasitology and immunology. However, my research focuses on neosporosis of dogs and cattle caused by infection with the intracellular protozoon, Neospora caninum. Puppies and calves affected by the disease are most likely infected congenitally. I aim to elucidate the mechanisms of this disease and develop preventative vaccines. Another of my research interest is the development of vaccine adjuvants using novel compounds such as plant extracts.

Project Prof. IMAI, Soichi 今井壮一, BSc, MSc, PhD

Although I teach veterinary parasitology, I am particularly interested in the taxonomy, morphology, biogeography, and phylogeny of ciliate protozoa, such as the rumen protozoa, inhabiting the gastrointestinal tracts of various large herbivorous mammals . Data obtained from my studies are used to discuss the evolution of ciliates and their hosts. My other interests include the various aspects of the biology of arthropods, such as fleas and ticks, and fish parasites.

Senior Assistant Prof. MORITA, Tatsushi 森田達志, DVM, PhD

My research interest lies in the field of veterinary parasitology. My research mainly focuses on the immunological control of cat flea infestation and specific immunological diagnosis of sarcoptic mange. In addition, I am attempting to identify endo- and exoparasites in clinical isolates.

Laboratory of Veterinary Internal Medicine

Prof. KOYAMA, Hidekazu 小山秀一, DVM, PhD

My research interests include diagnosis and therapy of cardiac diseases and ultrasound diagnosis in animals. My present research focuses on the pathophysiological elucidation and development of therapy for chronic heart failure, arrhythmic analysis, and arrhythmic therapy in dogs and cats. Cardiac function is mainly evaluated by echocardiography, electrocardiography, and Holter electrocardiography. In the study of abdominal ultrasound diagnosis, my research focuses on the criteria for the use of ultrasonic diagnostics in various organs.

Senior Assistant Prof. MATSUMOTO, Hirotaka 松本浩毅, DVM, PhD

My research and teaching interests concern diagnosis and therapy in animals using ultrasound and endoscopy and fatty acid measurement in animals for any disorder, including heart failure and dermatosis.
An imbalance in fatty acid levels reduces each visceral function. A key point of interest in my research is the prevention of such disorders by correcting fatty acid imbalances.

Senior Assistant Prof. MIZUTANI, Hisashi 水谷 尚, DVM, PhD

My research interest includes the study of animal metabolic diseases, especially disorders of lipid metabolism. One of my research interests is the development of therapeutic techniques for ketosis and fatty liver in dairy cattle. I am also interested in the diagnosis and therapy of hyperlipidemia in dogs and cats.

Assistant Prof. TESHIMA, Takahiro 手嶋隆洋, DVM, PhD

My research interest lies in the field of veterinary internal medicine. I am particularly interested in endocrine diseases of dogs and cats, especially

canine Cushing's disease. In future, I would like to work in a broader field and not only focus on endocrine diseases.

Second Laboratory of Veterinary Internal Medicine

Prof. TAKEMURA, Naoyuki 竹村直行, BVSc, MS, DVM, PhD

My research interests are as follows:
(1) Drug therapy and its effect on survival in asymptomatic dogs and cats with chronic heart failure
(2) Diagnosis of early stage chronic renal disease in small animals
(3) Effect of pain during the perioperative period on cardiac and renal function in small animals
(4) Diagnosis, medical therapy, and pathophysiology of diabetes insipidus in small animals.

Assistant Prof. MIYAGAWA, Yuichi 宮川優一, DVM, PhD

My research interest lies in the field of clinical nephrology in dogs and cats. Currently, I am developing a technique for early diagnosis of chronic kidney disease using the plasma clearance method and cystatin C, development of an appraisal method for renal functional reserve, and evaluation of the association of kidney and heart diseases. In addition, evaluation of the utility of N-terminal pro-B-type natriuretic peptide for diagnosis or determination of the severity of chronic heart failure is also in progress at our laboratory.

Laboratory of Veterinary Surgery

Prof. HARA, Yasushi 原 康, DVM, PhD

My research interests are as follows:
(1) Diagnosis & surgical treatment of intracranial tumors in dogs. My main interest includes the pathophysiology, diagnosis, and surgical therapy for

canine Cushing's disease associated with ACTH-producing pituitary tumors.
(2) Diagnosis & surgical treatment of spinal diseases in dogs. My research focuses on the degenerative mechanism of the nucleus pulposus of vertebral discs in chondrodystrophoid dogs.
(3) Diagnosis & surgical treatment of joint diseases in dogs. My present research attempts to solve two problems. One is the clinical efficacy of functionally stabilizing dogs with cranial cruciate ligament rupture, and the other is the study of biomechanics of the stifle joint in dogs.
(4) Growth factors of the bone & bone healing. I am interested in the regenerative potential of basic fibroblast growth factor for the treatment of bone fracture and fracture nonunion.

Senior Assistant Prof. HARADA, Yasuji 原田恭治, DVM, PhD

My research interests lies in the fields of veterinary orthopedics, biomechanics, and tissue regeneration. As a post-graduate student, I studied mechanical effects on stimulation of articular cartilage regeneration. My present research involves regenerative therapy and its clinical use for veterinary patients. As a cell source for regenerative therapy, mesenchymal stem cells have been the focus of attention for their ability to differentiate multipotentially into various cell types. My research involves isolating mesenchymal stem cells from bone marrow or adipose tissues in animals,and examining their croliferation ond differentiation characteristics (osteogenic, chondrogenic, adipogenic). These research data will provide great benefits for regeneration of tissues such as bone, cartilage, and spinal cord in veterinary surgery.

Senior Assistant Prof. YOGO, Takuya 余戸拓也, DVM, PhD

My research interest lies in the field of veterinary ophthalmology, in particular, genetic eye disease in guide dogs, effects of phosphodiesterase inhibitors on eye muscle contractility, and effects of anti-inflammatory eye drops on uveitis.

Laboratory of Veterinary Radiology

Prof. FUJITA, Michio 藤田道郎, PhD

My main research interests are as follows:
(1)Companion animal clinical oncology including veterinary radiology and internal medicine. I am interested in companion animal radiation oncology using drugs with a radiosensitizing effect, such as anti-tumor drugs and cyclooxygenase-2 inhibitors. I am also interested in the molecular biology of tumors because the radiation effect on oral squamous cell carcinoma in cats is different from that in dogs.
2.Imaging diagnostics. I am interested in the use of magnetic resonance imaging (MRI) and computed tomography for imaging diagnosis in companion animals.

Senior Assistant Prof. HASEGAWA, Daisuke 長谷川大輔, DVM, PhD

My research interests lie in the fields of neurology, neurosurgery, neuroscience, and diagnostic imaging using MRI and/or CT. In particular my research focuses on epilepsy in cats and dogs.

Assistant Prof. FUJIWARA-IGARASHI, Aki 藤原 亜紀, DVM, PhD

My research interest includes aberrations related to genetic and epigenetic alterations that occur in canine and feline malignant tumors. I am currently investigating molecular mechanisms responsible for radiosensitivity.

Laboratory of Veterinary Reproduction

Prof. KAWAKAMI, Eiichi 河上栄一, DVM, PhD

My research interest lies in the field of veterinary reproduction especially in male dogs. Currently, my research focuses on sperm capacitation and

treatments for testicular diseases, such as cryptorchidism, spermatogenic dysfunction, asthenoteratozoospermia, and tumors, and prostatic diseases, such as benign hypertrophy, cysts, inflammation, abscess, and adenocarcinoma, in dogs.

Associate Prof. HORI, Tatsuya 堀 達也, DVM, PhD

My research interests lie in the fields of canine and feline reproductive physiology and assisted reproductive technology (artificial insemination, embryo transfer, cryopreservation of sperm and ova, and *in vitro* fertilization). The main aim of my research is the application of these techniques to the endangered species of Canidae and Felidae. My present research focuses on the clarification of the mechanism that maintains luteal function in female dogs, cryopreservation of canine embryos by vitrification method, canine *in vitro* fertilization, and cryopreservation of canine epididymal sperm.

Assistant Prof. KOBAYASHI, Masanori 小林正典, DVM, PhD

My research interests lie in the field of veterinary reproduction, in particular, the molecular mechanisms and genetic abnormalities involved in genital diseases of male dogs, especially cryptorchidism and prostatic tumors.

Laboratory of Veterinary Clinical Pathology

Prof. WASHIZU, Tsukimi 鷲巣月美, DVM, PhD

My major research interests include hepatobiliary diseases in dogs and cats, especially the pathophysiology of congenital portosystemic shunts and juvenile hepatic fibrosis. I am also working on developing a new diagnostic technique for lymphoma and mast cell tumor in dogs and establishing immunotherapy for different tumor types in dogs. I am also interested in human-animal interactions including the use of service dogs for physically handicapped as well as communication in clinical veterinary medicine

including how to acquire the appropriate communication skills to obtain informed consent and second opinion, client support for companion animal loss, and proper communication techniques in veterinary practice.

Associate Prof. BONKOBARA, Makoto 盆子原 誠, DVM, PhD

My research interest includes the development of molecular targeted therapy against malignant tumors with genetic mutations in companion animals such as dogs and cats. Based on screening for genetic mutations that cause alteration in cell growth signaling in several types of malignancies, at my laboratory, we have identified some candidate genetic mutations as possible targets for therapy. We are currently examining the inhibitory effects of a specific kinase inhibitor on growth of malignant cells with genetic mutations in vitro and in vivo.

Senior Assistant Prof. IRIMAJIRI, Mami 入交 眞巳, DVM, PhD, DACVB

My teaching and research interests are outlined below.

1. Teaching veterinarians and veterinary students how to diagnose and treat medical cases related to changes in livestock and companion animals behavior.
2. My main interest in research is to understand various anxiety-related disorders in animals via imaging techniques and compare our findings with human psychiatric disorders.
3. Design suitable Japanese style animal welfare management systems for livestock. Currently, I am using pigs for my study.
4. Conduct animal-assisted education program for children to understand and respect companion animals that live with us.

Laboratory of Veterinary Hygiene

Prof. IKEDA, Hidetoshi 池田秀利 DVM, PhD

My research aims to improve the understanding of virus-cell interactions that determine cell specificity and host range of viruses, and thereby participate in viral pathogenesis in animals and in the spread of viral

diseases. My present research focuses on the viruses involved in complicated diseases in pigs caused by multiple viral and bacterial infections. Epidemiological studies and sequence analysis of viruses isolated from such animals should help to increase the understanding of the genetic diversities of viruses and etiological factors associated with such diseases.

Associate Prof. TANAKA, Yoshikazu 田中良和, MSc, DVM, PhD

The long-term aim of my research is the elucidation of molecular interactions between viral pathogens and host responses necessary for the establishment of infectious diseases. Currently, I am leading two projects in the field of veterinary hygiene. (1) Identification of the host factors required in viral genome replication and propagation and (2) screening of new inhibitors for microbial diseases. My work mainly focuses on infectious diseases in cats (feline immunodeficiency virus and feline infectious peritonitis virus). I have established real-time PCR techniques to measure viral molecules and developed treatment to inhibit viral protein expression with si-RNA and some compounds.

Laboratory of Veterinary Public Health

Prof. UEDA, Fukiko 植田富貴子, DVM, MSc, PhD

My research interests and teaching areas include veterinary public health, zoonoses, food safety, environmental science, epidemiology and microbiology. My research mainly focuses on molecular epidemiology of Listeria monocytogenes in Japan and analysis of environmental contamination by heavy metals.

Project Prof. YOSHIMURA, Shiro 吉村 史朗, DVM, MS

I started my veterinary career in 1977 at the Ministry of Agriculture, Forestry and Fisheries and joined the Nippon Veterinary and Life Science University in 2012. During my 35-year stay at the Ministry, I spent most of the time working on the prevention and control of animal infectious

diseases including FMD, HPAI, and classical swine fever. With my vast experience gained from the Ministry, I developed major interest in how we as veterinarians, contribute to animal and public health.
With this keen interest, my research focuses on how one could carry out effective preventive/control actions in a cooperative manner, and how we could encourage veterinary students to be such a contributor.

Associate Prof. OCHIAI, Yoshitsugu 落合由嗣, DVM, PhD

Currently, I am involved in two researches. One is the epidemiology of viral zoonosis using serology or molecular biology and the other is virulence evaluation of bacteria isolated from food. In the first study, we are investigating the epidemiology of herpes B virus infection in humans and primates. In future, we plan to examine the prevalence of some human and primate herpes viruses including herpes simplex virus (HSV)-1, HSV-2, and herpes B virus in primates. Currently, we have developed a fluorescent ELISA using a recombinant antigen, which can differentiate antibodies against HSV-1, HSV-2, and herpes B virus, and will use this to investigate serum samples from chimpanzees and other primates. In the second study, we plan to investigate the ability of L. monocytogenes strains, which we have isolated from meats purchased from various markets, to invade cell lines including epithelial and non-epithelial cells, and thus, evaluate the virulence of this pathogen in the food environment. This study will help us understand the invasion mechanism of L. monocytogenes into host cells.

Assistant Prof. TAKANO, Takashi 高野貴士, DVM, PhD

My research focuses on infectious viral diseases, especially those caused by viruses belonging to Herpesviridae. Currently, I am studying the epidemiology of HSV-1 and -2 in Japan, and attempt to establish a serodiagnostic technique for Cercopithecine herpesvirus 1 infection.

Laboratory of Comparative and Behavioral Medicine

Prof. SAITO, Toru 齋藤徹, DVM, MSc, PhD

My research interests lie in the fields of comparative and experimental medicine and ethology. My present research aims to study the effect of pheromones and ultra vocalization emitted by rodent pups on sexual and maternal behavior in rodents.

Associate Prof. YOKOSUKA, Makoto 横須賀誠, DVM, PhD

My research interests include the neural circuit and physiological function of the sensory nervous system. In particular, my research focuses on the morphological structures and recognition mechanisms of the olfactory system, and is critical for understanding animal evolution and clinical veterinary medicine.

Assistant Prof. NAKADA, Tomoaki 中田友明, PhD

My research interest includes animal communication via olfactory chemicals, especially “pheromones.”
Communication between organisms by chemical signals is a widespread behavioral or physiological phenomenon. Pheromones are specific cues used by various organisms for intra-specific communication among species, sex, and local groups or strains. Recently I identified a novel peptide sex pheromone that is secreted by female newts to attract males. My present study focuses on chemical communication in lower vertebrates.

Laboratory of Aquatic Medicine

Prof. WADA, Shinpei 和田新平, DVM, PhD

My current research interests lie in the field of histopathological

diagnosis and clinical medicine, including clinical pathology, chemotherapy, and surgery, of aquatic animals (mainly fishes). I have been teaching general fish medicine, specialized fish medicine, and student practice in fish medicine since 1994.

Associate Prof. KURATA, Osamu 倉田 修, PhD

My research interests lie in the field of fish immunology, in particular, innate cellular immune responses and development of these responses in fish. Recently, I have elucidated the mechanism of the encapsulation system employed by fish leukocytes against pathogens. The encapsulation response in fish also serves as an important defense mechanism for providing protection against invading pathogens. I have established an in vitro model for studying encapsulation by leukocytes, and now attempt to isolate immune molecules including cell-surface receptors that recognize pathogens, cytokines, and chemokines involved in the regulation of encapsulation. I have also studied about the development of the encapsulation response in fry to understand the process of functional maturation in immune cells.

Laboratory of Wildlife Medicine

Prof. HAYAMA, Shinichi, 羽山伸一, PhD

I am interested in studying the interactions between Japanese people and wild animals. My research interests include wildlife management for large mammals, especially Japanese monkeys, wildlife policies and laws, the problem of invasive alien species, and the reintroduction of endangered species. My aim is to conserve biodiversity using various techniques, such as field research, education, and public participation.

Assistant Prof. KATO, Takuya 加藤卓也, DVM, PhD

The aim of my research is to reveal the relationships among humans, domestic animals, and the ecosystems for “One health”. Especially, I have analyzed reproductive biology of invasive alien species (IAS) such as feral

raccoon in Japan because this IAS has negative impacts on both native ecosystems and human health.
My current research and teaching interests include: reproductive biology of IAS, the interface between native and alien carnivore species (ex. Japanese raccoon dog vs. raccoon), and the relationships among population dynamics of wildlife, endemic pathogen, and environmental issues.

Laboratory of Comparative Cellular Biology

Prof. TSUCHIDA, Shuichi 土田修一, DVM, PhD

My research interest lies in the field of veterinary genetics. Currently, my research focuses on the investigation of the variants and polymorphisms in genomic DNA related to various disease and traits. The aim of my study is to improve diagnosis and prevention of hereditary disease affecting animals. Furthermore, at our laboratory, we have diagnosed copper-associated hepatopathy in Bedlington terrier dogs on a request. We also receive the requests to identify animal species from forensic samples using DNA analysis.

Assistant Prof. HATAKEYAMA, Hitoshi 畠山 仁, PhD

My broad research interest and teaching areas include biology, pathology, ethology, gerontology, and animal psychology. My present research primarily focuses on the biology of medaka fish, including the measurement of telomere length, screening chemicals for reproductive toxicity, and examining sexual selection.

Laboratory of Biomolecular Chemistry

Prof. TAZAKI, Hiroyuki 田﨑弘之, PhD

My research interests lie in the field of chemical biology, natural product chemistry, and bioorganic chemistry. My current research mainly focuses on the biosynthesis of secondary metabolites by microorganisms, plants, and

animals. In my laboratory, isolation and structure determination techniques for bioactive molecules using spectroscopic and chemical techniques, stable-isotope labeling techniques for precursors of secondary metabolites, and functional analysis of enzymes for biosynthesis are available. In addition, metabolomic studies are also in progress.

Associate Prof. KATAYAMA, Kinya 片山欣哉, PhD

My current research interests include secondary metabolite biosynthesis in microorganisms, gene cloning and expression, enzyme reaction mechanisms, combinatorial biosynthesis, and natural product drug discovery. I am particularly interested in combinatorial biosynthesis of lantibiotics, a novel peptide-derived antimicrobial agent produced by gram-positive bacteria.

Assistant Prof. SATO, Touko 佐藤　稲子, PhD

My research interests are mass spectrometry-based metabolomics. In our laboratory, the comprehensive analysis of blood, urine and cell lines metabolome are performed using derivatization gas chromatography-mass spectrometry (GC-MS) analysis, liquid chromatography-mass spectrometry (LC-MS) analysis. I am currently focusing on detection of disease biomarker which is useful for diagnosis.

Laboratory of Comparative Developmental Psychology

Prof. KAKINUMA, Miki 柿沼美紀, PhD

Comparison the developmental process of social behavior of different species such as chimpanzees and dogs reveals the importance of early experiences and roles played by mothers and peers. Animals, including humans, who suffer a deprived childhood have difficulties in adjusting to a social group after growing up.
As a psychologist working at a veterinary school, I am also interested in the role played by animals in human mental health and vice versa.

Senior Assistant Prof. NOSE, Izuru 野瀬 出, PhD

My research interests lie in the fields of psychophysiology and cognitive neuroscience. I have investigated the neural mechanism of social emotions, such as deception and empathy, using functional MRI. I plan to investigate and evaluate emotional responses in rats, dogs, and humans.

Project Prof. YAMADA, Yutaka 山田 裕, DVM, PhD

For 40 years, I worked at large animal clinics, animal pharmaceutical companies, and dairy farms, before joining the Nippon Veterinary and Life Science University in March 2013.
My research focuses on large animal practice, especially on neonatal calf diseases such as neonatal respiratory distress syndrome, neonatal resuscitation, diarrhea, and bovine respiratory disease complex.

School of Veterinary Nursing and Technology

Department of Basic Science

Prof. OSAKA, Motohisa 大坂元久, MD, PhD

I am a physician specializing in cardiovascular diseases and a scientist using applied mathematics for life science. Although I am not a magician, I wish to apply various ideas and tools of nonlinear dynamics to the study of life science in any manner, in other words, to be “a magician of the kingdom of nonlinear dynamics.” My previous studies include V-shaped trough in autonomic activity is a possible precursor of life-threatening cardiac events (Circulation Journal, 2010), volley-like male GH secretion indicates existence of an intrinsic 1-h oscillator in the hypothalamus (Applied Mathematical and Computational Sciences, 2010), and a modified Chua circuit simulates a v-shaped trough in autonomic activity as a precursor of sudden cardiac death. (International Journal of Bifurcation and Chaos, in press).

Prof. HAKAMATA, Yoji 袴田陽二, DVM, PhD

My research interests lie in the fields of comparative medicine and reproductive biology. My present research includes the development of more efficient research models for veterinary and human medicine using biotechnology (for example models utilizing transgenic and knock-out animals). I am also interested in investigating organ regeneration using organ stem cells to cure intractable disease and cryopreservation of stem cells and tissues for clinical use.

Prof. OMI, Toshinori 近江俊徳, PhD

My major research interest includes applied animal and human genetics in transfusion medicine, DNA identification technology, and biological diversity. Currently, my research focuses on animal genetics, in particular, the following:

(1) Genetic variation of mitochondorial DNA hypervariable region 1 haplotype and short tandem repeat (STR) polymorphisms in dogs
(2) Blood typing and candidate gene approach associated with erythrocyte antigens in dogs and cats
(3) Molecular genetic analysis of human histo-blood ABO in dogs
(4) Molecular genetic analysis of UCPs family genes in dogs
(5) Development of Y chromosome STR marker in the Japanese monkey

Associate Prof. AOKI, Hiroshi, 青木博史, BVSc, DVM, PhD

My research interests mainly include infectious animal diseases, especially those caused by RNA viruses. I have previously conducted biological, virological, serological, and diagnostic studies on pestiviruses (classical swine fever virus and bovine viral diarrhea virus) and rabies virus.

Currently, I am analyzing several phenomena caused by pestivirus infection, such as cytopathogenicity, interference phenomenon, viral regulation of innate immunity, and epidemiology. I am also currently studying pathogenic viruses isolated from companion animals. The major objective of my research is the control and prevention of animal infections caused by viruses, an aim which will be achieved through the results of basic research obtained through the use of biology, molecular virology, gene technology, and epidemiology.

Senior Assistant Prof. FUJISAWA, Masahiko 藤澤正彦, DVM, PhD

My research interests lie in the fields of veterinary anatomy and pharmacology. Currently, I am conducting a research on the effect of a 5HT4 receptor agonist on experimental gastrointestinal disorders in a rodent model. I am also interested in the mechanisms of spermatogenesis and gonadogenesis. I would be happy to be contacted by anyone interested in these fields of research.

Senior Assistant Prof. OCHIAI, Kazuhiko, 落合和彦, DVM, PhD

I am working in this laboratory since 2011. My research interests and teaching areas include the fields of biochemistry, molecular biology, and bioimaging. I am particularly interested in studying the mechanism of hereditary breast cancer in dogs. I have cloned the breast cancer susceptibility gene BRCA2 of dogs, and I aim to clarify the mechanism of early onset hereditary mammary tumors in dogs.

Department of Applied Science

Prof. YUMOTO, Norio 湯本典夫, DVM, DMs, PhD

My research interests lie in the fields of comparative pathology and molecular pathology. Previously, I have determined the IgH or TCR nucleotide sequence of lymphoma cell clones and evaluated the properties of their antigen binding sites to understand the origin and role of antigens in clonal selection of lymphoma cells. The results show that the cells of mucosa-associated lymphoid tissue lymphoma are autoantigen related, and that this lymphoma may be derived from a selected autoreactive B-cell clone.

Currently, my research primarily focuses on investigating the relationship between cell differentiation and tumorigenesis in lymphoproliferative disorders using molecular analysis of various genes associated with lymphoma in humans and animals.

Prof. KAJIGAYA, Hiroshi 梶ヶ谷 博, DVM, PhD

I am interested in elucidating the cause of death of wild birds. In general, when an animal dies suddenly without any symptoms, morphological changes cannot be found in the dead body. One possible reason for this could be that the bird died before any morphological change became apparent. A similar situation is seen during an oil spill. Using a physical simulation, I demonstrated that adhesion of spilled oil to feathers reduces the body temperature of a polluted bird. The main reason for this is that the down feather layer, which acts as a warm temperature barrier, is destroyed by oil adhesion or penetration. In the future, I aim to clarify the biophysical role of contour feathers in waterfowls.

Prof. KAMIYA, Shinji 神谷新司, DVM, MVM, PhD

My research interests lie in the fields of veterinary anatomy and comparative pathology. My research mainly focuses on age-related morphological and histochemical changes in the central nervous system of various animal species.

I am particularly interested in inclusion bodies, especially polyglucosan bodies that occur in neuronal and glial cells with increasing age.

Associate Prof.KOBAYASHI-Mochizuki,Mariko 小林(望月)眞理子, PhD

My current research interests,

1) Epidemiological studies of heavy metal contamination in wildlife
2) Effects of toxic metals on cell lines and experimental animals
3) Establishment of indexes for understanding of the condition in cats and horses
4) The study of human and animal bound

Senior Assistant Prof. YAMAMOTO, Toshiaki 山本俊昭, PhD

The primary aim of my research is to elucidate the fundamental and applied aspects of wildlife ecology. In my fundamental research, I have

been working on the behavioral and evolutionary ecology of the Asian black bear, investigating aspects such as the breeding system, the mechanism of dispersal, and paternal and maternal effects on behavior. In my applied research, I am interested in the conservation of population health and management of the relationship between wildlife and humans. Currently, I am working toward the conservation and management of wildlife in collaboration with nonprofit and governmental organizations.

Senior Assistant Prof. YAMAMOTO, Masami, 山本昌美, DVM, PhD

My research interests include the morphological and genetic processes involved in the change of a normal cell to a cancer cell. I have studied carcinogenesis of the digestive organs in experimental animals using pathology and molecular cell biology techniques. I have investigated immunohistochemical and morphological preneoplastic changes and genetic alterations in gastric and large intestinal tumors using an animal model.

Currently, I am studying tumors such as mammary tumors and sarcoma in companion animals. Taking advantage of my experience on experimental animals, I would like to contribute to the prevention, diagnosis, and therapy of tumors in order to improve the health of companion animals.

Senior Assistant Prof. KOBAYASHI, Jun 小林 淳, PhD

My main research interest lies in the field of public health, in particular, estimation of in vivo effect and environmental distribution of trace metals. I have expertise in instrumental analysis and have mainly used atomic absorption spectrometry, capillary electrophoresis, high-performance liquid chromatography, inductively coupled plasma-atomic emission spectrometry/mass spectrometry and spectrophotometry.

Now I aim to measure some toxic components in animal food and biological samples and develop new method for measuring those compounds sensitively and precisely. I have thought that would like to evaluate the influence on human and animals through these results.

Department of Veterinary Nursing

Prof. SAKO, Toshinori 左向敏紀, DVM, PhD

My research focuses on animal metabolic and endocrine diseases. Currently, I am investigating the onset factors and role of insulin resistance in obesity and hyperadrenocorticalism in diabetic animals. I am also interested in studying insulin therapy and food and dietary supplementation as medical treatment for diabetic animals.

In addition, my research focuses on the investigation of biochemical techniques in diabetic animals.

Associate Prof. ISHIOKA, Katsumi 石岡克己, DVM, PhD

My major research interest lies in the molecular biology of obesity in cats and dogs. The study focuses on the adipokines, such as leptin, adiponectin and MCP-1 and genetic polymorphism of the obesity-related genes, such as beta-3 adrenergic receptors. Other research subjects include clinical chemistry tests and educational techniques for veterinary nursing.

Associate Prof. MAKINO, Yuki 牧野ゆき, DVM, LLM

My research interests lie in the field of civil law, veterinary/medical law, and veterinary/medical ethics, in particular, contract, tort, informed/shared decision, veterinary/medical malpractice, veterinarian-client-patient relationship, and rules of professional conduct of veterinarians.

Associate Prof. MIZUKOSHI, Mina 水越美奈, DVM, PhD

My major research interest includes veterinary behavioral therapy in dogs and cats, especially fear problems and puppy social development. I am also involved in pet dog training as a veterinary behaviorist and dog trainer. I am a Japanese Animal Hospital Association and CCPDT certified pet dog trainer. My other areas of research interest are animal welfare and human-animal

relations including guide dogs for the blind and animal-assisted interaction.

Senior Assistant Prof. MATSUBARA, Takako 松原孝子, MSc

My major research interest lies in the field of veterinary nursing. Currently within Japan, the perception of pet owners regarding their pet is changing. At the same time, veterinary clinical medicine for small animals has advanced. As both of these issues continue to develop rapidly, the various roles of veterinary nurses have become increasingly important in veterinary hospitals and clinics. However, the Japanese law does not define the concept of veterinary nursing in detail. Although there are strict laws regarding veterinarians and laws pertaining to the treatment of animals, these laws unfortunately do not cover veterinary nurses. However, in practice, most of the hospital and clinic work, except “diagnosis,” “prescription,” “surgery,” and “post surgical treatment,” is performed by veterinary nurses. On the basis of these facts within our country, I aim to show evidence of the specific skills required in veterinary nursing. My main aim is to establish and develop the professional values of veterinary nursing. In order to do so, I am studying the education and management of nurses and veterinary nursing medicine. I would like to emphasize that as this improves, the organization would become more advanced and better care would be provided to the veterinary nurse. In addition, I am studying techniques that will consider the individuality of the patient animal, its safety, and its comfort.

Senior Assistant Prof. AZAKAMI, Daigo 砦上大吾, DVM, PhD

My research interests are as follows:
(1)Veterinary diagnostic cytology, hematology, and clinical oncology. Currently, I am involved in clinical research in NVLU teaching hospital.
(2)Tumor cell biology, especially histiocytic sarcomas in dogs. My research aims to develop molecular diagnostic techniques and specific molecule-targeted therapies.
(3)Analysis of hereditary diseases in dogs and cats. This research will increase the understanding of disease pathogenesis and the development of gene therapy.
(4)Teaching methodology of laboratory medicine in veterinary nursing.

Senior Assistant Prof. MOMOTA, Yutaka 百田 豊, DVM, PhD

My primary research interest lies in the field of veterinary dermatology, in particular, skin barrier function. Impairment of skin barrier function is responsible for atopic dermatitis (AD) and has been intensively investigated since it was found to contribute to increased AD pathogenesis than previously considered. The aim of my reseacrh is the elucidation of the role of the skin barrier function in canine and feline AD. My current research focuses on the reevaluation of instruments for measuring the barrier function in dogs and cats. I believe that these results will provide valuable information for the development of medical science and skin care in dogs and cats.

Assistant Prof. MORI, Akihiro 森昭博, DVM, PhD

My basic and clinical research interest lies in the field of companion animal endocrinology, in particular, analysis of the insulin effect in canine and feline diabetes mellitus, investigation of insulin resistance in feline obesity, identification of early diagnostic markers for canine and feline diabetes mellitus, and development of novel medical treatments for canine hyperadrenocorticism.

Faculty of Applied Life Science
School of Animal Science

Laboratory of Animal Systems Management

Prof. OZAWA, Takeyuki 小澤壯行, BAgri, MAgri, PhD

I gained my PhD degree in dairy farm system management from Tokyo University of Agriculture and Technology in 2000. My PhD thesis topic was about understanding the fluctuation of dairy farm management in Japan. In 2000, I was appointed a Research Fellow at Massey University (New Zealand) for further research in pasture-based livestock farming systems. Since then, I have been working with colleagues at Massey University, consistently publishing refereed conference papers and refereed journal papers with them.

I have been awarded both Japanese Society of Animal Science Awards and

NVLU Research Awards (Umeno Shinkichi Award) in 2011 for my research on goat production and marketing system in Japan.

My current research focuses not only on livestock farming systems but also on the adoption of farming systems for other small ruminant animals (goat, alpaca, sheep, etc), their management, and their products in Japan.

Laboratory of Nature Management and Agri-Food Economics

Prof. UEKI, Miki 植木　美希, PhD

My major research interests are as follows:

(1) Organic agriculture
(2) Agrifood supply chain development in Japan and the EU
(3) Food safety and security systems in agrifood chains
(4) Consumers' concern for food safety
(5) Farm animal welfare

Senior Assistant Prof.KUWABARA, Takashi　桑原　考史, PhD

I have majored in Agricultural Economics and my research interests are (1) agricultural damage caused by wildlife, (2) sustainable agriculture (environmentally friendly farming) practice related to biodiversity, and (3) current scenario and the history of rural tourism. I carry out fieldwork at some rural areas in Japan, including Sado Island, Toyooka city, Iijima town, to find solutions to these interests. I aim to reveal the socio-economic structure of rural areas and provide implication for agricultural administration.

Laboratory of Animal Nutrition

Associate Prof. TOKITA, Norio 時田昇臣, BSc, MSc, PhD

I currently hold the position of Associate Professor of Animal Nutrition, Department of Animal Science. I received my MS degree from Gifu University and my PhD degree from Kyushu University. My major research interest is the

evaluation of the chemical fractions of grazed and stored forages as related to animal intake, digestibility, and performance.

Associate Prof. NADE, Toshihiro, 撫 年浩, PhD

I have been working at this laboratory since April 2006. My main research interest includes the development of an efficient fattening technique for beef production. My research focuses on the effect of several fattening techniques on the growth performance of beef cattle, and assessment of growth performance using ultrasonic techniques.

Laboratory of Animal Physiology

Prof. TANAKA, Minoru 田中 実, PhD

My research interest is to study the neurological functions of prolactin. In addition to the well-known lactogenic effect on the mammary gland, prolactin is involved in the regulation of brain functions such as maternal behavior, stress tolerance, food intake, and sexual behavior. Currently, I am studying the molecular mechanisms responsible for the induction of maternal behavior and stress tolerance by prolactin and application of prolactin to the treatment of behavioral disorders in animals including humans.

Senior Assistant Prof. TSUSHIMA, Nobumichi 對馬宣道, BSc, PhD

My research interest and teaching areas lie in the fields of physiology, hematology, enzymology, environmental physiology, and behavior of various animals. Currently, I am studying the biosynthesis and degradation of protoporphyrin and heme in various tissues, particularly in chickens and mammals. At the undergraduate level, one of my fields of teaching is environmental physiology including regulatory mechanisms controlling the body temperature of homeothermic animals. I also teach the behavior of domestic animals and birds with special reference to brain function at the undergraduate level.

Senior Assistant Prof. NAKAO, Nobuhiro 中尾暢宏, PhD

My research interest includes the application of molecular biology techniques to study photoperiodism in vertebrates. I am particularly interested in studying the pars tuberalis because of its role as a molecular switch for photoperiodic responses. The aim of my research is to clarify the physiological function of the pars tuberalis.

Laboratory of Animal Breeding & Genetics

Associate Prof. YOSHIDA, Tatsuyuki 吉田達行, PhD

My research interest includes the breeding dairy cattle for mastitis resistance. My research focuses on the association between genes affecting the mammary immune system and mastitis. In particular, I am interested in the association of somatic cell count in milk and mastitis pathogens with toll-like receptor genes, chemokine receptor genes, or BoLA-DRB3 genes.

Associate Prof. FURUTA, Hiroki 古田洋樹, PhD

I graduated from Kyushu University with a Master of Agricultural Science degree in 1998 and with a PhD degree in 2001. My experimental topic was designed to produce germline chimeric chickens by transferring primordial germ cells (PGCs) of chicken embryos. Exogenous genes were introduced into embryonic PGCs using lipofection or electroporation in order to investigate whether transgenic offspring could be produced via germline chimeric gene transfer.

Laboratory of Animal Reproduction

Prof. USHIJIMA, Hitoshi 牛島 仁, PhD

In my laboratory, we mainly focus on the clarification of developmental biology and development of reproductive engineering techniques. Reproductive engineering techniques, such as in vitro embryo production systems,

intracytoplasmic sperm injection, cryopreservation, and cloning, are still not developed to a level where they can be applied in animal industries including their practical utility in the field. My present research focuses on technical improvements in these techniques using experimental and domestic animals as models for transgenic, companion, or endangered animals and assisted reproductive technology.

Associate Prof. OKADA, Konosuke 岡田幸之助, PhD

Pigs are excellent models for certain biomedical approaches, such as stem cell technologies and xenotransplantation, in humans. Of these, embryonic stem cell technologies will be an important step in achieving the above purpose and such research requires numerous high-quality embryos. Thus, my research focuses on the establishment of reliable protocols for in vitro production of pig embryos with in vitro systems using several assisted reproductive technologies such as in vitro fertilization, intracytoplasmic sperm injection, and embryo development.

In addition, I also maintain a population of the field vole (Microtus agrestis), an unique small animal. The field vole is expected to serve as a useful model for metabolic diseases in herbivorous animals, since this species is also herbivorous and possesses a complex stomach similar to that in ruminant animals such as cows. Nonetheless, there is little information on the reproductive biology of this species, especially concerning assisted reproductive technology. Therefore, I am working toward establishing techniques for preservation and regeneration in this species as an animal genetic resource.

Laboratory of Applied Animal Biochemistry

Prof. OHTA, Yoshiyuki 太田能之, PhD

My majors are animal nutritional physiology and biochemistry, especially avians.

Assistant Prof. SHIRAISHI, Jun-ichi 白石純一, PhD

My research field is the branch of poultry science that studies and applies animal nutrition, biochemistry, physiology and behavior. Especially, I focus on the relationship between central nervous system and peripheral tissues in chick energy metabolism. Poultry eggs and meats are important sources of edible animal protein and are consumed in almost all countries of the world. Therefore, continuous studies of poultry science are needed to produce high-quality chicken eggs and meat at very efficient production. I hope that my research develop new technology of poultry science.

Laboratory of Experimental Animal Science

Prof. AMAO, Hiromi 天尾弘実, PhD

My research interests and teaching areas lie in the field of laboratory animal science. I have a special interest in infectious diseases of small laboratory animals, and my research primarily focuses on murine corynebacteriosis in mice, rats and Syrian hamsters. In addition, I am also involved in a study on the relationship between superoxide dismutase (SOD) expression and intestinal flora using transgenic mice overexpressing the human Cu/Zn SOD (hSOD-1 Tg mice) and germ free mice.

Associate Prof. TOHEI, Atsushi 藤平篤志, DVM, PhD

My research interests include endocrinology, neuroendocrinology, physiology, pharmacology in rats and mice. The main topics of research are endocrinological studies on stress responses, on obesity and on diabetes mellitus. Recently, the relationship between gut microflora and the releases of hormones that control food intake is one of main topics in our laboratory. My teaching responsibilities include all aspects of laboratory animal science.

Laboratory of Host Defense for Animals

Associate Prof. ARIMURA, Yutaka 有村裕, DVM, PhD

My ongoing research projects focus on elucidating molecular mechanisms of immune responses, for example, how follicular helper T cells, a newly defined T cell subpopulation, promote a particular type of antibody production by B cells, and how mental stress could cause immune dysregulation by perturbing immune cell network. In another long term project, I aim to discover novel roles of protein tyrosine phosphatases in signal transduction pathways via antigen receptors of immune cells.

Laboratory of the English Language

Senior Assistant Prof. TOKIZAKI, Toshihiko 鴇﨑敏彦, MA

My special interest is in the syntax of Old English and Middle English. I have been investigating the use and the form of three kinds of verbals, namely the infinitive, the gerund and the participle in Middle English texts. In Middle English, these verbals are different from those in Modern English in some respects and I have been observing how they acquired the same characteristics as in Modern English.

Laboratory of Exercise Science

Prof. HAMABE, Hirokazu 濵部浩一, PhD

My laboratory conducts studies on exercise science and health science in animals. In 2005, I began my study of movement analysis in animals. I photograph an animal's movement in two or three dimensions and then analyzed it. Using this method, I examined the movement mechanism and characteristics of exercise ability and also studied the maintenance and improvement in exercise ability. Education in this department includes sports science (diving, skiing, golf, fitness, tennis, and basketball), health science, human

animal-related ideas, and production of a graduation thesis.

School of Food Science and Technology

Laboratory of Food Function

Prof. NISHIMURA, Toshihide 西村敏英, PhD

In my laboratory, we conduct research on the physiological functions of peptides derived from food proteins and food palatability. Studies in the former field include a survey of peptides derived from muscle proteins possessing physiological functions such as enhanced calcium absorption, antioxidant activity, and hypotensive activity. Other work concerning the clarification of physiological functions of anserine and carnosine in muscle is also ongoing in this field. Studies in the latter field include the clarification of factors giving "koku," which are involved in palatability of food, and the development of objective evaluation systems for palatability by measuring responses in model taste cells in response to taste stimuli.

Assistant Prof. EGUSA, Ai 江草 愛, PhD

My research focuses on the functional properties of peptides derived from food proteins. The daily intake of peptides is expected to protect us from lifestyle-related diseases, such as hypertension, diabetes, and hyperglycemia, which one tenth of Japanese currently suffer from. I am conducting research on the ability of peptides to exert positive effects on venous cells using cell biology techniques. The ultimate aim of my research is to clarify the mechanisms responsible for this improved activity and develop functional peptide materials for functional foods that can contribute to the prevention of these diseases.

Laboratory of Animal Products Science and Technology

Prof. AKUZAWA, Ryozo 阿久澤良造, PhD

Currently, I am interested and studying the enzymes in milk and cheese ripening with regard to two main topics:
(1) Isolation and characterization of enzymes (proteinases, peptidases, phosphatases, transglutaminases, and aminotransferases) from bovine milk and cheese-related bacteria (Lactococcus and Lactobacillus)
(2) Improvement in the texture and flavor of low-fat hard cheese

Senior Assistant Prof. MIURA, Takayuki 三浦孝之, PhD

My research interest includes studying livestock food products, in particular, dairy foods. For example, the mechanisms of ripening cheese, a traditional dairy food process, which is examined using enzymology and biochemical techniques.

Laboratory of Food Technology

Associate Prof. ODAKE, Sachiko 小竹佐知子, PhD

My current research interest includes flavor release from food (meat & dairy products) during mastication, called “retronasal aroma,” and the development of a chemometric technique for the evaluation of food palatability and acceptability.

Assistant Prof. Kobayashi, Fumiyuki 小林史幸, PhD

My research interests include the development of food pasteurization and preservation techniques. I have studied the techniques of non-thermal sterilization and enzyme inactivation with pressurized CO2 and microbicidal mechanisms. Recently, I have become interested in the application of

microbubbles for food pasteurization.

Laboratory of Food Chemistry

Prof. MATSUISHI, Masanori 松石昌典, PhD

My main research interests lie in the fields of food chemistry and food biochemistry. I am interested in the cause of palatability of various foods, especially meat. One of my research topics includes the generation mechanism of Wagyu beef aroma (the preferred sweet and fatty aroma). This aroma is specific to highly-marbled Wagyu beef and is a main reason why Japanese people prefer Wagyu beef to imported beef. Some lactones and aldehydes have been assumed to contribute to Wagyu beef aroma, and hence, research on the generation mechanism of these compounds is ongoing. Another study focuses on how 5′-inosinic acid (IMP)-induced dissociation of actomyosin is related to rigor mortis resolution and gel formation of meat proteins by salting and heating. IMP dissociates actomyosin in vitro into actin and myosin in the presence of 0.2 M NaCl.

Assistant Prof. MIGITA, Koshiro 右田光史郎, PhD

My research focuses on the effect of Cl-activated aminopeptidase that contributes to improvement in meat taste during postmortem aging. I have purified and investigated certain properties of Cl-activated aminopeptidase. Furthermore, I also succeeded in the molecular cloning and expression of this enzyme. My current research interests include the mechanism of generation of Wagyu beef aroma, which is the odor peculiar to this variety of beef, and the main reason why Japanese consumers prefer Wagyu beef.

Laboratory of Food Hygiene

Prof. FUJISAWA, Tomohiko, 藤澤倫彦, PhD

My research interests lie in the fields of food microbiology and intestinal microbiology. In the field of food microbiology, I am interested in studying the taxonomy of food bacteria and evaluation of selective media for isolation of harmful bacteria, such as Escherichia coli O157:H7, Salmonella and Clostridium perfringens, from various foods such as raw vegetables, spices, herbs, and commercially available curry roux. In the field of intestinal microbiology, I am interested in studying the effects of probiotics and prebiotics on the composition and metabolic activity of human fecal flora, the effect of bile salts on the activity of cancer-associated bacterial enzymes, such as β-glucuronidase and β-glucosidase, and the taxonomy of intestinal anaerobic bacteria.

Associate Prof. OHASHI, Yuji 大橋雄二, PhD

My research interests include the ecology of intestinal microflora and host-microbial interactions in the gastrointestinal tract. To analyze intestinal microflora, I used molecular biological and culture-based techniques. Using a combination of these two techniques, I have investigated the colonic fermentation system of intestinal bacteria and the effect of microbial composition on the development of the mucosal immune system and physiological function in the digestive tract.

Laboratory of Agricultural Foods

Prof. NAKAYAMA, Tsutomu 中山　勉, PhD

The research conducted in my laboratory focuses on food biochemistry of cereals, vegetables, fruits, plant polyphenols, and other agricultural food materials. The research is based on biochemistry, with main focus on enzymology, organic chemistry, and analytical chemistry.
I have studied the molecular interactions that occur between tea polyphenols

and biological materials such as lipids and proteins. The study involved characterizing phospholipid bilayers by NMR to clarify the mechanisms of their biological functions, including tastes such as bitterness and astringency. I have recently found that certain tea catechins interact with the surface of lipid membranes via the choline moiety and that the various biological activities of these catechins are related to the interactions that occur in phospholipids and certain proteins including enzymes.

Senior Assistant Prof.KANAYAMA-Narai,Asako 金山（奈良井）朝子,PhD

The research conducted in my laboratory primarily focuses on food biotechnology and food enzymology of cereals, vegetables, fruits, and other agricultural food materials. Currently, I am working on examining the application of plant proteases, such as papain, to preparation of a functional peptide and characterizing the underlying mechanism of protease-catalyzed peptide synthetic reactions. I am also interested in the development of functional foods from yacon tuberous root, one of Andean edible tubers, which is rich in fructooligosaccharides that may be beneficial to health. I have found that decrease in fructooligosaccharide during postharvest storage of yacon roots is related to the activity of endogenous fructan exohydrolase and that reduced atmospheric pressure acts as an effective storage condition, under which the enzymatic degradation of fructooligosaccharide is suppressed.

Laboratory of Food Biotechnology

Prof. SHIBUI, Tatsuro 渋井達郎, PhD

Research fields in my laboratory are followings.

I.Analyses on freshness of food ingredients and their origins using PCR methods to improve quality of food.

II.Isolation and characterization of anti-bacteria substances derived from lactic bacteria in fermented food and their application for food preservation.

III.In vitro revolution of enzymes by protein display technologies to obtain better enzymes for food processing.

Senior Assistant Prof. HARA, Hiroyoshi 原宏佳, PhD

The research conducted in my laboratory mainly focuses on the improvement of the digestive ability of livestock by gene transfer techniques and search for bacteriocins produced by lactic acid bacteria with the aim of developing new applications.

Laboratory of Food Economics

Prof. SASAKI, Teruo 佐々木輝雄, MEc

I am interested in food distribution and trade, promotional strategies for "local production and consumption" and their effects, promotional strategies for "sustainable agriculture" and outcomes, establishment of policies to increase food safety, and roles of dietary habits in maintaining well-being of humans.

Laboratory of Food Safety

Prof. YOSHIDA, Mitsuru 吉田充, PhD

My research field is in the area of bio-organic chemistry and instrumental analysis of food components. I have been engaged in inspecting acrylamide levels in food and in the development of techniques for the reduction of acrylamide formation. Acrylamide is a carcinogen, which is formed in the reactions of asparagines with reducing sugars at high temperature. This laboratory was launched in 2013 in order to enhance studies of food safety in this university. I work in the capacity of a Professor at this laboratory.

Laboratory of Physics

Senior Assistant Prof. YAGI, Shohei 八木昌平, MA

My research interest includes the development of food processing techniques used for vegetables, soy bean seeds, and garlic. My research mainly focuses on achieving wider applications of techniques in vegetables, and understanding the mechanism of pectin change in blade vegetables, root crops, and others during low temperature steam heating.

Laboratory of the English Language

Associate Prof. MATSUFUJI, Shigeko 松藤薫子, PhD

My main research interests are first language acquisition and English education. I have investigated (1) how children acquire quantificational and possessive expressions and (2) what type of self-learning support programs are effective for the students of NVLU.

Veterinary Medical Teaching Hospital

Senior Assistant Prof. KAWASUMI, Koh 川角 浩, DVM, PhD

My research interests lie in the field of prophylactic veterinary medicine, in particular, the study of canine and feline metabolic syndrome (MS). Currently, the criteria defining MS in dogs and cats are the same as those used inhuman. I aim to identify new criteria to define MS in dogs and cats.

Fuji Animal Research Farm

Prof. YOSHIMURA, Itaru　吉村　格, PhD

My research interest is on artificial insemination. I am conducting experiments on cows, horses and sheep at the university research farm. While artificial insemination is a practical way of assuring the food resources, we should not leave out the ethical issues of depending on them. As the companion animal is becoming part of the society, we need to pay more attention to how we treat animal lives, as livestock or as a family member.

Senior Assistant Prof. OSADA, Masahiro　長田雅宏, PhD

My study is about progressive process and development condition of land use for dairy farming. I have researched about grazing for small paddock, self-sufficiency ratio of grass and corn silage. In case of paddy farmers for cultivation of whole crop rice silage, paddy and daily farmings can't manage circulation without contractors. Big scale dairy farmings with employees need to solve environmental problems and strengthen the collaboration of livestock farm and cultivating farm. We need to improve the self-sufficient ratio of feed to establish the recycling agriculture.

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Members:

Prof. SHIBUI, Tatsuro : Chairperson

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Associate Prof. AOKI, Hiroshi

Associate Prof. YOSHIDA, Tatsuyuki

Associate Prof. ODAKE, Sachiko

Associate Prof. MATSUFUJI, Shigeko

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Nippon Veterinary and Life Science University
1-7-1 Kyonan-cho, Musashino-shi, Tokyo 180-8602, JAPAN
Te l : +81-422-31-4151
Fax : +81-422-33-2094
E-mail : international@nvlu.ac.jp