GEN KANEKO

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EDUCATION

March 2001, B.S. in Aquatic Life Science
Applied Life Science Course, The University of Tokyo.

March 2003, M.S. in Aquatic Bioscience
Graduate School of Agricultural and Life Sciences, The University of Tokyo.
Thesis: Molecular mechanisms regulating lifespan and stress resistance of the rotifer *Brachionus plicatilis*.

March 2006, Ph.D. in Aquatic Bioscience
Graduate School of Agricultural and Life Sciences, The University of Tokyo.
Thesis: Molecular mechanisms underlying population dynamics of the rotifer *Brachionus plicatilis.*
Advisor: Prof. Shugo Watabe.

POSTDOCTORAL TRAINING

April 2006 – March 2007
Postdoctoral Fellow. Department of Animal Science, The University of Tokyo.
Project: Myogenic and adipogenic differentiation of rat satellite cells.
Advisor: Prof. Shin-Ichiro Takahashi.

April 2007 – October 2007
Postdoctoral Fellow [Japan Society for the Promotion of Science Research Fellow (PD)]. Department of Animal Science, The University of Tokyo.
Project: Regulation of myogenic and adipogenic differentiation by insulin-like pathway in fish.
Advisor: Prof. Shin-Ichiro Takahashi.

FACULTY ACADEMIC APPOINTMENTS

October 2007 – May 2016
Assistant Professor of Aquatic Bioscience. Department of Aquatic Bioscience, Graduate School of Agricultural and Life Sciences, The University of Tokyo.
Project 1: Lipid metabolism of fish
Project 2: Response to calorie restriction in rotifer

June 2013 – May 2016
Visiting Assistant Professor of Marine Biochemistry. Department of Radiology & Biomedical Imaging, School of Medicine, Yale University.
Project 1: Whole-brain imaging of schizophrenia model rats
Project 2: Metabolic measurements in aquatic animals by in vivo and ex vivo NMR
Project 3: Altered metabolic microenvironment of brain tumors with NMR

September 2016 – August 2022
Assistant Professor of Biology. School of Arts and Sciences, University of Houston–Victoria.
Project 1: Branched-chain amino acid synthesis by horizontally transferred genes in rotifer
Project 2: Effect of maternal calorie restriction on offspring quality in rotifer
Project 3: Lipid metabolism of fish

September 2022 – Present
Associate Professor of Biology. College of Natural and Applied Science, University of Houston–Victoria.
Project 1: Evolution of energy metabolism (molecular, biochemistry, histology)
Project 2: Aquaculture and enhancement of fish consumption

HONORS

AWARDS

1. Best Poster Award. Kaneko et al. GH-like substance in rotifer. International Symposium on Function of Marine Organisms, Tokyo, Japan. February 22–23, 2003.
2. Best Paper Award of Japanese Society of Fisheries Science. Furukawa et al. Isolation of microsatellite markers by in silico screening implicated for genetic linkage mapping in Japanese pufferfish *Takifugu rubripes*. *Fish Sci* **70**, 620–628, 2004.
3. Best Poster Award. Ohmori et al. Growth-promoting substances secreted from the rotifer *Brachionus plicatilis* at an early culture stage. 5th World Fisheries Congress, Yokohama, Japan. October 20-24, 2008.

4. Incentive Award of Japanese Society of Fisheries Science. Kaneko G. Studies on molecular mechanisms involved in population dynamics of the rotifer *Brachionus plicatilis*. March 2014.
5. Best Poster Award. Yoshinaga et al. Regulation of lipid metabolism in fish by lysine-deficient and -excessive diets. BIO UT 2015, Tokyo, Japan. June 27, 2015.
6. Research and Scholarly Activity Excellence Award. University of Houston-Victoria, 2021.

FELLOWSHIPS

1. Grant-in-Aid for Japan Society for the Promotion of Science Research Fellow (DC1). 2003–2005, #15-11825. Molecular biological studies on rotifer lifespan (Scholarship for Ph. D. student. Total direct cost $25,000).
2. Grant-in-Aid for Japan Society for the Promotion of Science Research Fellow (PD). 2007, #19-6747. New significance of insulin-like signaling in life history strategy of fish larvae (Scholarship for postdoctoral fellow. Total direct cost $8,000).

FUNDING

*As principal investigator (PI)

1. Japan–US Cooperative Science Program. 2008–2009. Japan Society for the Promotion of Science. Novel mechanism of insulin-induced glucose transport system. (Role: Investigator. PI: Fumihiko Hakuno)
2*. Grant-in-Aid for Young Scientists (B). 2008–2009. #20780153, Japan Society for the Promotion of Science. Insulin signaling and lipid metabolism in fish. (Role: PI. Total direct costs $35,000)
3. Research and Development Projects for Application in Promoting New Policy of Agriculture Forestry and Fisheries. 2008–2010. Agriculture, Forestry and Fisheries Research Council. Engineering development of quality improvement systems by environmental control in fishery products. (Role: Investigator. PI: Makoto Yamasaki)
4. Grant-in-Aid for Scientific Research (A). 2009–2011. #21248027. Japan Society for the Promotion of Science. Comprehensive research on fish energy metabolism control factors and development of methods for energy metabolism control. (Role: Investigator. PI: Hideki Ushio)
5*. Grant-in-Aid for Young Scientists (B). 2010–2011. #22780190, Japan Society for the Promotion of Science. Functional analysis on Foxo1 and PPAR gamma possibly involved in tissue-specific lipid accumulation in fish. (Role: PI, total direct costs $35,000)
6. Grant-in-Aid for Exploratory Research. 2011–2012. #23658174. Japan Society for the Promotion of Science. Exploratory research - Are amino acids the central metabolites in fish? (Role: Investigator. PI: Hideki Ushio)
7. Grant-in-Aid for Scientific Research (A). 2012–2014. #21248027. Ministry of Education, Culture, Sports, Science and Technology. $50,000. Effects of central nervous stress on the energy metabolism and immune response in fish. (Role: Investigator. PI: Hideki Ushio)

8. Grant-in-Aid for Scientific Research (C). 2012–2014. #24580297. Ministry of Education, Culture, Sports, Science and Technology. 24580297. Endocrine regulation of triacylglycerol transport proteins involved in species-specific lipid accumulation in fish. (Role: PI, total direct costs $50,000)
9*. The Towa Foundation for Food Research. 2014. Quantification of fish metabolic flux by nuclear magnetic resonance. (Role: PI. Total direct cost $20,000)
10*. Grant-in-Aid for Scientific Research (B). 2015–2017. #15H04548. Ministry of Education, Culture, Sports, Science and Technology. Physiological significance of adipocytes in fish skeletal muscle. (Role: PI, total direct costs $60,000)
11. Tohoku Marine Science. 2011–2016. Innovative study for salmonid fish aquaculture in Tohoku area. (Role: Investigator. PI: Hideki Ushio).
12*. Whitman Fellowship, Marine Biological Laboratory. 2016 (This scholarship provides housing at MBL to conduct a collaborative research with resident scientists).
13*. Johnson Foundation in Victoria. 2016. [Role: PI. Total direct costs $500,000 used for the purchase of a nuclear magnetic resonance (NMR) spectrometer and related education and research].
14*. UHV Junior Faculty Grant. 2017. (Role: PI. Total direct costs $10,000).

PROFESSIONAL SOCIETIES

The Japanese Society of Fisheries Science
2001–2006, 2008 – Present, Member.

The Japan Endocrine Society
2008–2014, Member.
2015 – Present, Recess.

International Society of Magnetic Resonance in Medicine
2015 – Present, Member.

BIBLIOGRAPHY

PEER-REVIEWED PUBLICATIONS

^equally contributed, *corresponding author.
Numbers with * indicate that these works were widely acknowledged (e.g., awarded, featured in news).

ORIGINAL PAPERS

1. Kinoshita S, **Kaneko G**, Jeen HL, Kikuchi K, Yamada H, Hara T, Itoh Y, Watabe S*. A novel heat stress responsible gene in the marine diatom *Chaetoceros compressom* encoding two types of transcripts, a trypsin-like protease and its related protein, by alternative splicing. *Eur J Biochem* **268**, 4599–4609, 2001.
2. **Kaneko G**, Kinoshita S, Yoshinaga T, Tsukamoto K, Watabe S*. Changes in expression patterns of stress protein genes during population growth of the rotifer *Brachionus plicatilis*. *Fish Sci* **68**, 1317–1323, 2002.
3*. Furukawa S, Takeshima H, Otaka T, Mitsuboshi T, Shirasu K, Ikeda D, **Kaneko G**, Nishida M, Watabe S*. Isolation of microsatellite markers by *in silico* screening implicated for genetic linkage mapping in Japanese pufferfish *Takifugu rubripes*. *Fish Sci* **70**, 620–628, 2004. *Best paper award of the journal in 2004.*
4. Yoshinaga T*, Minegishi Y, Rumengan IFM, **Kaneko G**, Furukawa S, Yanagawa Y, Tsukamoto K, Watabe S. Molecular phylogeny of the rotifers with two Indonesian *Brachionus* lineages. *Coast Mar Sci* **29**, 45–56, 2004.
5. **Kaneko G**, Yoshinaga T, Yanagawa Y, Kinoshita S, Tsukamoto K, Watabe S*. Molecular characterization of Mn-superoxide dismutase and gene expression studies in dietary restricted *Brachionus plicatilis* rotifers. *Hydrobiologia* **546**, 117–123, 2005.
6. Yoshinaga T, **Kaneko G**, Kinoshita S, Furukawa S, Tsukamoto K, Watabe S*. Insulin-like growth factor signaling pathway involved in regulating longevity of rotifers. *Hydrobiologia* **546**, 347–352, 2005.
7. Itoi S, Nakaya M, **Kaneko G**, Kondo H, Sezaki S, Watabe S*. Rapid identification of eels *Anguilla japonica* and *A. anguilla* by polymerase chain reaction with single nucleotide polymorphism-based specific probes. *Fish Sci* **71**, 1356–1364, 2005.
8. Yoon SH, Itoh Y, **Kaneko G**, Nakaniwa M, Ohta M, Watabe S*. Molecular characterization of Japanese sillago vitellogenin and changes in its expression levels on exposure to 17β-estradiol and 4-tert-octylphenol. *Mar Biotechnol* **10**, 19–30, 2008.
9. Kinoshita S^, Isu S^, **Kaneko G**^, Yamada H, Hara T, Itoh Y, Watabe S*. The occurrence of eukaryotic type III glutamine synthetase in the marine diatom *Chaetoceros compressum*. *Mar Genomics* **2**, 103–111, 2009.
10. Oo AKS, **Kaneko G**, Hirayama M, Kinoshita S, Watabe S*. Identification of genes differentially expressed by calorie restriction in the rotifer *Brachionus plicatilis*. *J Comp Physiol B* **180**, 105–116, 2010.
11. Ozaki Y^, **Kaneko G**^, Yanagawa Y, Watabe S*. Calorie restriction in the rotifer *Brachionus plicatilis* enhances hypoxia tolerance in association with the increased mRNA levels of glycolytic enzymes. *Hydrobiologia* **649**, 267–277, 2010.
12*. **Kaneko G**, Yoshinaga T, Yanagawa Y, Ozaki Y, Tsukamoto K, Watabe S*. Calorie restriction-induced maternal longevity is transmitted to their daughters in a rotifer. *Funct Ecol* **25**, 209–216, 2011. *This paper was featured in "The Economist (October 2nd, 2010)" with the title of "Thanks Mum!"*.
13. Kailasam M, **Kaneko G**, Oo AKS, Ozaki Y, Thirunavullarasu AR, Watabe S*. Effects of calorie restriction on the expression of manganese superoxide dismutase and catalase under oxidative stress conditions in the rotifer *Brachionus plicatilis*. *Fish Sci* **77**, 403–409, 2011.

14. Ohmori F^, **Kaneko G**^, Saito T, Watabe S*. A novel growth-promoting protein in the conditioned media from the rotifer *Brachionus plicatilis* at an early exponential growth phase. *Hydrobiologia* **667**, 101–117, 2011.
15. **Kaneko G**^, Furukawa S^, Kurosu Y, Yamada T, Takeshima H, Nishida M, Mitsuboshi T, Otaka T, Shirasu K, Koda T, Takemasa Y, Aki S, Mochizuki T, Fukushima H, Fukuda Y, Kinoshita S, Asakawa S, Watabe S*. Correlation with larval body size of mRNA levels of growth hormone, growth hormone receptor I and insulin-like growth factor I in larval torafugu *Takifugu rubripes*. *J Fish Biol* **79**, 854–874, 2011.
16. Hirano Y, **Kaneko G**, Koyama H, Ushio H, Watabe S*. cDNA cloning of two types of growth hormone receptor in torafugu *Takifugu rubripes*: tissue distribution is possibly correlated to lipid accumulation patterns. *Fish Sci* **77**, 855–865, 2011.
17. Kondo H*, Suga R, Suda S, Hirono I, Nagasaka R, **Kaneko G**, Ushio H, Watabe S. EST analysis on adipose tissue of rainbow trout *Oncorhynchus mykiss* and tissue distribution of adiponectin. *Gene* **485**, 40–45, 2011.
18. Hakuno F, Yamauchi Y, **Kaneko G**, Yoneyama Y, Nakae J, Chida K, Kadowaki T, Yamanouchi K, Nishihara M, Takahashi SI*. Constitutive expression of insulin receptor substrate (IRS)-1 inhibits myogenic differentiation through nuclear exclusion of Foxo1 in L6 myoblasts. *PLoS ONE* **6**, e25655, 2011.
19. Ikeguchi K, **Kaneko G**, Watabe S*. cDNA cloning and primary structure analysis of transglutaminase from bluefin tuna *Thunnus orientalis*. *Fish Sci* **78**, 667–674, 2012.
20. Kondo H*, Suda S, Kawana Y, Hirono I, Nagasaka R, **Kaneko G**, Ushio H, Watabe S. Effects of feed restriction on the expression profiles on the glucose and fatty acid metabolism-related genes in rainbow trout *Oncorhynchus mykiss*. *Fish Sci* **78**, 1205–1211, 2012.
21. **Kaneko G***, Yamada T, Han Y, Hirano Y, Shirakami H, Nagasaka R, Kondo H, Hirono I, Ushio H, Watabe S. Differences in lipid distribution and expression of peroxisome proliferator-activated receptor gamma and lipoprotein lipase genes in torafugu and red seabream. *Gen Comp Endocrinol* **184**, 51–60, 2013.
22. Ozaki Y, **Kaneko G***, Hakuno F, Takahashi SI, Watabe S. Insulin/insulin-like growth factor-like activity in the aqueous extract of the rotifer *Brachionus plicatilis*. *Fish Sci* **79**, 47–53, 2013.
23. Han Y, **Kaneko G**, Nagasaka R, Kondo H, Hirono I, Takahashi SI, Watabe S, Ushio H*. Distribution of adipocyte-related cells in skeletal muscle of rainbow trout *Oncorhynchus mykiss*. *Fish Sci* **79**, 143–148, 2013.
24. Yamaguchi H, Nakaya M, **Kaneko G**, Yoneda C, Mochizuki T, Fukami K, Ushio H, Watabe S*. Comparison in taste and extractive components of boiled dorsal muscle and broth from half-smooth golden puffer *Lagocephalus spadiceus* caught in Japan with those of the same fish imported. *Fish Sci* **79**, 327–334, 2013.
25. Nurilmala M, Ushio H, **Kaneko G**, Ochiai Y*. Assessment of commercial quality evaluation of yellowfin tuna *Thunnus albacares* meat based on myoglobin properties. *Food Sci Technol Res* **19**, 237–243, 2013.
26. Ahhmed AM*, **Kaneko G**, Ushio H, Inomata T, Yetim H, Karaman S, Muguruma M, Sakata R. Changes in physicochemical properties of proteins in Kayserian Pastirma made from the *M. semimembranosus* muscle of cows during traditional processing. *Food Sci Hum Wellness* **2**, 49–58, 2013.

27. Feroudj H^, Matsumoto T^, Kurosu Y, **Kaneko G**, Ushio H, Suzuki K, Kondo H, Hirono I, Nagashima Y, Akimoto S, Usui K, Kinoshita S, Asakawa S, Kodama M, Watabe S*. DNA microarray analysis on gene candidates possibly related to tetrodotoxin accumulation in pufferfish. *Toxicon* **77**, 68–72, 2014.
28. Ahhmed AM*, **Kaneko G**, Ushio H, Karaman S, Inomata T, Sakata R, Yetim H. Proteins degradation value in cured meat product made from *M. Cutaneous-omo brahialis* muscle of bovine. *Eur Food Res Technol* **238**, 387–396, 2014.
29. Khieokhajonkhet A, **Kaneko G***, Ohara K, Shirakami H, Ushio H. Hormone-sensitive lipase in Japanese flounder *Paralichthys olivaceus*: putative function of the inclinator muscle of fin as a lipid storage site. *Fish Sci* **80**, 341–352, 2014.
30. Marcial HS*, Suga K, Kinoshita S, **Kaneko G**, Hagiwara A, Watabe S. Molecular cloning and localization of $GABA_A$ receptor associated protein in the rotifer *Brachionus plicatilis*. *Int Rev Hydrobiol* **99**, 188–197, 2014.
31. **Kaneko G***, Sawada A, Ushio H, Watabe S. Effects of short-term cold acclimation on FoF_1-ATPase activity in skeletal muscle of red seabream *Pagrus major* (Temminck & Schlegel). *Aquac Res* **45**, 1889–1892, 2014.
32. Matsumoto T^, Feroudj H^, Kikuchi R, Kawana Y, Kondo H, Hirono I, Aki S, Mochizuki T, Nagashima Y, **Kaneko G**, Ushio H, Kodama M, Watabe S*. DNA microarray analysis on the genes differentially expressed in the liver of the pufferfish *Takifugu rubripes* following an intramuscular administration of tetrodotoxin. *Microarrays* **3**, 226–244, 2014.
33. Wang L, **Kaneko G***, Takahashi SI, Watabe S, Ushio H. Identification and gene expression profile analysis of a major type of lipoprotein lipase in adult medaka *Oryzias latipes*. *Fish Sci* **81**, 163–173, 2015.
34. Ahhmed AM, Birisik C, **Kaneko G**, Ushio H, Muguruma M, Yetim H, Sakata R. Differences in gelling properties induced by transglutaminase in chicken muscles are explained by determining myosin heavy chain mRNA ratios using RT-PCR. *Fleischwirtschaft* **95**, 98–104, 2015.
35. **Kaneko G***^, Shirakami H^, Hirano Y^, Oba M, Yoshinaga H, Khieokhajonkhet A, Nagasaka R, Kondo H, Hirono I, Ushio H. Diversity of lipid distribution in fish skeletal muscle. *Zoolog Sci* **33**, 170–178, 2016.
36. **Kaneko G***^, Shirakami H^, Yamada T, Ide S, Haga Y, Satoh S, Ushio H. Short-term fasting increases skeletal muscle lipid content in association with enhanced mRNA levels of lipoprotein lipase 1 in lean juvenile red seabream (*Pagrus major*). *Aquaculture* **452**, 160–168, 2016.
37. **Kaneko G***, Yoshinaga T, Ushio H. Measurement of survival time in *Brachionus* rotifers: synchronization of maternal conditions. *J Vis Exp* **113**, e54126, 2016.
38. Khieokhajonkhet A, **Kaneko G***, Hirano Y, Wang L, Ushio H. Different effects of fasting and growth hormone on indunciton patterns of hormone-sensitive lipase genes in red seabream liver and adipose tissue. *Gen Comp Endocrinol* **236**, 121–130, 2016.
39*. **Kaneko G**, Sanganahalli BG, Groman SM, Wang H, Coman D, Rao J, Herman P, Jiang L, Rich K, de Graaf R, Taylor JR, Hyder F*. Hypofrontality and posterior hyperactivity in early schizophrenia: imaging and behavior in a preclinical model. *Biol Psychiatry* **81**, 503–513, 2017. (Featured by Yale news).

40. Ahhmed AM*, Birisik C, Karaman S, Ozturk I, Cam M, **Kaneko G**, Sakata R, Yetim H. Utilization of fermented soybeans paste as flavoring lamination for Turkish dry-cured meat. *Meat Sci* **127**, 35–44, 2017.
41. Tian JJ, Lei CX, Ji H*, **Kaneko G**, Zhou JS, Yu HB, Yu EM, Xie J. Comparative analysis of effects of dietary arachidonic acid and eicosapentaenoic acid on growth, tissue fatty acid composition, antioxidant response and lipid metabolism in juvenile grass carp, *Ctenopharyngodon idellus*. *Br J Nutr* **118**, 411–422, 2017.
42. Udo T, Guissou SP, Ushio H, **Kaneko G***. Ethanol extends lifespan of the rotifer *Brachionus plicatilis*. *Hydrobiologia* **844**, 183–190, 2019.
43. Yu EM^, Ma LL^, Ji H, Li ZF, Wang GJ, Xie J*, Yu DG, **Kaneko G***, Tian JJ, Zhang K, Gong WB. Smad4-dependent regulation of type I collagen expression in the muscle of grass carp fed with faba bean. *Gene* **685**, 32–41, 2019.
44. Singkhanan N, Kettratad J, Senarat S*, Pengsakul T, Para C, **Kaneko G**. Morphological characterization of blood cells in five important estuarine fish species in Thailand during juvenile stages. *EnvironmentAsia* **12**, 79–86, 2019.
45. Khieokhajonkhet A*, Klongchai S, Maphum O, **Kaneko G**. Lipid distribution patterns of nine commercial fish in Thailand. *Aquac Res* **50**, 1348–1360, 2019.
46. Khieokhajonkhet A*, Aeksiri N, **Kaneko G**. Molecular characterization and homology modeling of liver X receptor in Asian seabass, *Lates calcarifer*: predicted functions in reproduction and lipid metabolism. *Fish Physiol Biochem* **45**, 523–538, 2019.
47. Thongboon L, Senarat S*, Kettratad J, Jiraungkoorskul W, Wangkulangkul S, Poolprasert P, Para C, **Kaneko G**, Pengsakul T. Gastrointestinal tract and accessory organs in the spotted bent-toed gecko, *Cyrtodactylus peguensis* (Boulenger, 1893): A histological and histochemical study. *J Morphol Sci* **36**, 223-230, 2019.
48. Senarat S, Kettratad J*, Kangwanrangsan N, Jiraungkoorskul W, Plumley FG, Amano M, Shimizu A, Boonyoung P, **Kaneko G**. Immunoreactivity of estrogen receptor alpha in the brain and ovary of the short mackerel *Rastrelliger brachysoma* (Bleeker, 1851). *Asia Pac J Mol Biol Biotechnol*, **27**(3), 50-63, 2019.
49. Senarat S*, Jiraungkoorskul W, Kettratad J*, **Kaneko G**, Poolprasert P, Para C. Histological analysis of the reproductive system of *Dermogenys pusilla* (Kuhl & van Hasselt, 1823) from Thailand: sperm existence in the ovary indicates the viviparous reproductive mode. *Maejo Int J Sci Technol* **13**, 185-195, 2019.
50. Chen L^, Liu J^, **Kaneko G**^, Xie J, Ma L, Wang G, Yu D, Li Z, Qi D, Tian J, Gong W, Zhang K, Yu EM*. Quantitative phosphoproteomic analysis of soft and firm grass carp muscle. *Food Chem* **303**, 125367, 2020.
51. Ma LL^, Kaneko G^, Wang XJ, Xie J, Tian JJ, Zhang K, Wang GJ, Yu DG, Li ZF, Gong WB, Yu EM*, Li HH. Effects of four faba bean extracts on growth parameters, textural quality, oxidative responses, and gut characteristics in grass carp. *Aquaculture* **516**, 734620, 2020.
52. Tegeler Z, Kaneko G*, Ehsan H. Polymerase chain reaction detection of genetically modified organisms in Texas: A preliminary survey that predicts honest labeling under the mandatory labeling law. *Tex Public Health J* **72**, 8-12, 2020.
53. Thongboon L, Senarat S, Kettratad J, Jiraungkoorskul W, Pengsakul T, Wangkulangkul S*, Uribe MR, Plumley FG, Wongkamhaeng K, Kaneko G. Morphology and histology of female

reproductive tract of the dog-faced water snake *Cerberus rynchops* (Schneider, 1799). *Maejo Int J Sci Technol* **14**, 11-26, 2020.

54. Somala N, Senarat S, Para C, Jiraungkoorskul W, **Kaneko G**, Poonpet T, Poolprasert P*. Systemic organization of *Tetraponera rufonigra* Jerdon, 1851 (Hymenoptera: Formicidae): Histological observation. *Serangga* **25**, 53-67, 2020.
55. Yu EM^, Fu B^, Wang G, Li Z, Ye D, Ji H, Wang X, Yu D, Ehsan H, Gong W, Zhang K, Tian J, Yu L, Xie J*, **Kaneko G***. Proteomic and metabolomic basis for improved textural quality in crisp grass carp (*Ctenopharyngodon idellus* C.et V) fed with a natural dietary pro-oxidant. *Food Chem* **325**, 126906, 2020.
56. Ma L^, **Kaneko G**^, Xie J, Wang G, Li Z, Tian J, Zhang K, Xia Y, Gong W, Li H, Yu EM*. Safety evaluation of four faba bean extracts used as dietary supplements in grass carp culture based on hematological indices, hepatopancreatic function and nutritional condition. *PeerJ* **8**, e9615, 2020.
57. Huang CC, Sun J, Ji H*, **Kaneko G**, Xie XD, Chang ZG, Deng W. Systemic effect of dietary lipid levels and α-lipoic acid supplementation on nutritional metabolism in zebrafish (*Danio rerio*): focusing on the transcriptional level. *Fish Physiol Biochem* **46**, 1631-1644, 2020.
58. Senarat S*, Kettratad J, Siriwong W, Bunsomboonsakul S, Kenthao A, **Kaneko G**, Sopon A, Sudtongkong C, Jiraungkoorskul W. Oogenesis and ovarian health problems in important fishes from different habitats potentially affected by pollution in Thailand. *Asian Fish Sci* **33**, 274-286, 2020.
59. Fu B, **Kaneko G**, Xie J, Li Z, Tian J, Gong W, Zhang K, Xia Y, Yu EM, Wang G. Value-added carp products: multi-class evaluation of crisp grass carp by machine learning-based analysis of blood indexes. *Foods* **9**, 1615, 2020.
60. Senarat S*, Kettratad J, **Kaneko G**, Kamnurdnin T, Sudtongkong C. The microanatomy of the central nervous system and brain of the Indo-Pacific seahorse, *Hippocampus barbouri*, during development. *Zoologia* **37**, e53734, 2020.
61. Reyes AC^, Egwu E^, Yu EM^, Sanchez AN, De La O L, Elijah OE, Muschalek TJ, Zhang W, Ji H, Ehsan H, **Kaneko G***. Forkhead transcription factor O1 (FoxO1) in torafugu pufferfish *Takifugu rubripes*: molecular cloning, in vitro DNA binding, and target gene screening in fish metagenome. *Gene* **768**, 145335, 2021.
62. Lampang PN, Palasia A, Senarat S, Jiraungkoorskul W, **Kaneko G**, Kettratad J*. Body size distribution and ovarian histology of the *Pisodonophis boro* (Hamilton, 1822) (Anguillifomes: Ophichthidae) from Pranburi River estuary, Thailand. *CMU J Nat Sci* **20**, e2021001, 2021.
63. Senarat S, Poolprasert P, Kettratad J, Sukparangsi W, Wangkulangkul S, **Kaneko G**, Jiraugkoorskul W. Ultrastructure of ovarian follicles and testis in zebra-snout seahorse *Hippocampus barbouri* (Jordan & Richardson, 1908) under aquaculture conditions. *J Adv Vet Res* **11**, 47-53, 2021.
64. Senarat S, Kettratad J, Boonyoung P, Jiraungkoorskul W, Kato F, Mongkol-Chaichan E, **Kaneko G**, Poolprasert P*. Oocyte differentiation and reproductive health of solitary tunicate *Styela plicata* from Eastern Coast of Thailand. *Sains Malays* **50**, 3353-3359, 2021.
65*. Sudtongkong C*, Senarat S, **Kaneko G**, Para C. Association of oocyte development with ovarian morphology and gonadosomatic index in the sesarmid crab *Episesarma singaporense* (Tweedie, 1936). *Songklanakarin J Sci Technol* **43**, 50-56, 2021. Featured as the journal cover.

66. Sathorn S, Senarat S*, Kettratad J, **Kaneko G**, Jiraungkoorskul W, Wongkamhaeng K. Effects of salinity level on the activity of chloride cell and mucus secreting cell in the gill of the female Shortfin molly, *Poecilia mexicana* Steindachner, 1863. *Vet Integr Sci* **19**, 173-184, 2021.
67. Puttipong T, Senarat S*, Kettratad J, Chantangsi C, **Kaneko G**, Siriwong W. Evaluation of health status in the striped catfish Pangasianodon hypophthalmus (Sauvage, 1878) from Khlong Saen Saep, Thailand: The use of integrated biomarkers. *Human Ecol Risk Assess* **27**, 938-953, 2021.
68. Senarat S*, Kettratad J, Boonyoung P, Jiraungkoorskul W, **Kaneko G**, Mongkolchaichana E, Pengsakul T. Ovarian histology a toadfish *Batrachus trispinosus* from Pranburi River estuary, Thailand. *Songklanakarin J Sci Technol* **43,** 384-391, 2021.
69. Sukkhee N, Mitparian T, Kanjanarakha T, Senarat S, Jiraungkoorskul W, Kangwanrangsan N, **Kaneko G**, Kettratad J.* Spermatogenic ultrastructure of the grunting toadfish Allenbatrachus grunniens (Batrachoididae). *J Ichthyol* **61**, 467-475, 2021.
70. Khieokhajonkhet A*, Muichanta S, Aeksiri N, Ruttaranamonglol K, Rojtinnakorn J, **Kaneko G**. Evaluation of sacha inchi meal as a novel alternative plant protein ingredient for red hybrid tilapia (*Oreochromis niloticus* × *O. mossambicus*): Growth performance, feed utilization, blood biochemistry, and histological changes. *Anim Feed Sci Technol* **278**, 115004, 2021.
71. Senarat S, Sujittosakul R, Kettratad J, Pairohakul S, **Kaneko G**, Jiraungkoorskul W*. Ultrastructure of hepatocyte and liver ontogeny of the Indo-Pacific seahorse *Hippocampus barbouri* Jordan & Richardson 1908: Liver ontogeny of the Indo-Pacific seahorse. *J Adv Vet Res* **11**, 136-140, 2021.
72. Chen L^, **Kaneko G**^, Li Y, Xie J, Wang G, Li Z, Tian J, Zhang K, Gong W, Xia Y, Yu E.* Reactive oxygen species (ROS)-mediated regulation of muscle texture in crisp grass carp fed with dietary oxidants. *Aquaculture* **544**, 737150, 2021.
73. Zhang J^, **Kaneko G**^, Sun J, Wang G, Xie J, Tian J, Li Z, Gong W, Zhang K, Xia Y, Yu ER*. Key factors affecting the flesh flavor quality and the nutritional value of grass carp in four aquaculture modes. *Foods* **10**, 2075, 2021.
74. Sato M, Kawato S, Oyama H, **Kaneko G**, Post EJ, Suo R, Takai N, Sugita H, Kondo H, Hirono I, Itoi S. Phylogenetic position of the Atlantic Gnomefish, *Scombrops oculatus* (Teleostei: Scombropidae), within the genus *Scombrops*, inferred from the sequences of complete mitochondrial genome and cytochrome c oxidase subunit I genes. *Mitochondrial DNA part B* **6**, 2852-2855, 2021.
75. Yu EM, Yoshinaga T, Jalufka FL, Ehsan H, Mark Welch DB,* **Kaneko G**.* The complex evolution of the metazoan HSP70 gene family. *Sci Rep* **11**, 17794, 2021.
76. Mitparian T, Senarat S, Boonyoung P, Jiraungkoorskul W, **Kaneko G**, Kettratad J. Comprehensive morpho-histological observation of digestive system and gut content of wild-grunting toadfish, *Allenbatrachus grunniens* (Linnaus, 1758). *Maejo Int J Sci Technol* **15**, 222-241, 2021.
77. Sopon A, Kettratad J, Piumsomboon A, **Kaneko G**, Senarat S. The use of hematological and histopathological biomarkers to assess the health of aquatic ecosystems in Koh Sichang, Thailand. *CMU J Nat Sci* **20**, e2021085, 2021.
78. Saito N, **Kaneko G**, Mito K. Bumpy patches: analgesic effects of particle pressure in sports injury treatment. *Adv Biomed Engineer* **10**, 123-158, 2021.
79. Mitparian T, Senarat S, Kettratad J*, Jiraungkoorskul W, **Kaneko G**, Kangwanrangsan N, Ampawong S. Histological and ultrastructural characterization of the gonads of the grunting

toadfish *Allenbatrachus grunniens* (Linnaus, 1758) from the Pranburi River Estuary, Thailand. *Trends Sci* **18**, 489, 2021.

80. Khen B, Aeksiri N, Wuthijaree K, Rattasut K, **Kaneko G**, Khieokhajonkhet A. The impacts of partial replacement of sacha inchi seed on growth performance, fatty acids composition, blood parameters, histological changes, and immune-related gene expression in Nile tilapia (*Oreochromis niloticus*). *Adv Anim Vet Sci* **10**, 94-106, 2022.
81. Ma LL^, Zhang JM^, **Kaneko G**^, Xie J, Sun JH, Wang GJ, Tian JJ, Zhang K, Li ZF, Gong WB, Xi Y, Yu EM. Growth performance, intestinal microbiota and immune response of grass carp fed isonitrogenous and isoenergetic diets containing faba bean extracts. *Aquac Rep* **22**, 100924, 2022.
82. Sukkhee N, Mitparian T, Kanjanarakha T, Senarat S, Kangwanrangsan N, **Kaneko G**, Kettratad J. Spermatozoon of the wild scalloped perchlet, *Ambassis nalua* (Hamilton, 1822): ultrastructure and morphometric analysis. *Vet Integr Sci* **20**, 199-208, 2022.
83. Fu B^, Xie J^, **Kaneko G**^, Wang G, Yang H, Tian J, Xia Y, Li Z, Gong W, Zhang K, Yu EM. MicroRNA-dependent regulation of targeted mRNAs for improved muscle texture in crisp grass carp fed with broad bean. *Food Res Int* **155**, 111071, 2022.
84. Khieokhajonkhet A*, Sangphrom S, Aeksiri N, Tatsapong P, Wuthijaree K, **Kaneko G**. Effects of long-term exposure to high temperature on growth performance, chemical composition, hematological and histological changes, and physiological responses in hybrid catfish ♂*Clarias gariepinus* (Burchell, 1822) ×♀*C. macrocephalus* (Günther, 1864). *J Therm Biol* **105**, 103226, 2022.
85. Aiyala R, Senarat S*, Kettratad J, Angsujinda K, Jiraungkoorskul J, Kong-oh S, **Kaneko G**, Mongkolchaichana E, To-orn M. Morphological characterization of the digestive system and health status of the invasive shortfin molly *Poecilia mexicana* Steindachner, 1863, in Thailand. *Songklanakarin J Sci Technol* **44**, 281-288, 2022.
86. **Kaneko G***. Phylogenetic annotation of *Drosophila melanogaster* heat shock protein 70 genes. *MicroPubl Biol* **10.17912**, 000558, 2022.
87. Senarat S, Kettratad J, Pairohakul S, Ampawong S, Huggins BP, Coleman MM, **Kaneko G***. An update on the evolutionary origin of aglomerular kidney with structural and ultrastructural descriptions of the kidney in three fish species. *J Fish Biol* **100**, 1283-1298, 2022.
88. Khieokhajonkhet A*, Aeksiri N, Ratanasut K, Kannika K, Suwannalers P, Tatsapong P, Inyawilert W, **Kaneko G**. Effects of dietary *Hericium erinaceus* powder on growth, hematology, disease resistance, and expression of genes related immune response against thermal challenge of Nile tilapia (*Oreochromis niloticus*). *Anim Feed Sci Technol* **290***,* 115342, 2022.
89. Khieokhajonkhet A*, Aeksiri N, Ratanasut K, Kannika K, Suwannalers P, Tatsapong P, Inyawilert W, **Kaneko G**. Sacha inchi meal as a fish-meal replacer in red hybrid tilapia (*Oreochromis niloticus* × *O. mossambicus*) feeds: effects on dietary digestibility, growth metrics, hematology, and liver and intestinal histology. *Aquac Int* **30**, 677-698, 2022.
90. Yangthong M*, Ruensirikul J, **Kaneko G***. The hot-water extract of *Sargassum* sp. as a feed ingredient for spotted scat (*Scatophagus argus* Linnaeus, 1766) reared in Songkhla Lake: Effects on growth, feed efficiency, hematological data and body composition. *Fishes* **7**, 170, 2022.
91. Khieokhajonkhet A*, Uanlam P, Ruttarattanamongkol K, Aeksiri N, Tastsapong P, **Kaneko G**. Replacement of fish meal by black soldier fly larvae meal in diet for goldfish *Carassius auratus*:

Growth performance, hematology, histology, total carotenoids, and coloration. *Aquaculture* **561**, 738618, 2022.

92. Senarat S*, Kettratad J, Sukparangsi W, **Kaneko G**, Charoenphon N, Siriwong W. Ovarian development and alteration in demersal and pelagic fishes of Pranburi River estuary, Thailand. *Maejo Int J Sci Technol* **16**, 151-160, 2022.
93. Senarat S*, To-orn N, Sudtongkong C, **Kaneko G**, Charoenphon N, Jitpraphai SM, Kettratad J. Structure and health status of the sand crab, *Emerita taiwanesis* Hsueh, 2015 from Sangchan Beach, Thailand: The histopathological approach. *Int J Aquat Biol* **10**, 209-217, 2022.
94. Hasnain P, **Kaneko G***. Phylogenetic annotation of *Caenorhabditis elegans* heat shock protein 70 genes. *MicroPubl Biol* **10.17912**, 000633, 2022.

Books, Book Chapters, and/or Reviews

1. Yoshinaga T, **Kaneko G**, Kinoshita S, Tsukamoto K, Watabe S*. The molecular mechanisms of life history alterations in a rotifer: a novel approach in population dynamics. *Comp. Biochem. Physiol. B* **136**, 715–722, 2003.
2. Watabe S, **Kaneko G**. Quality control of fish and shellfish. In: Kurokura H and Ramaiah N, Ed. Introduction for Fisheries and Aquatic Biology. Terrapub, Tokyo, 2011. pp. 212–217.
3. **Kaneko G**, Yoshinaga T. Aging and lifespan in the rotifer. In: Hagiwara A & Yoshinaga T, Ed. Rotifers: Aquaculture, Ecology, Gerontology, and Ecotoxicology. Springer. pp. 111–128, 2017.
4. **Kaneko G***, Ushio H, Ji H. Application of magnetic resonance technology in aquatic biology and seafood science. *Fish Sci* **85**, 1–17, 2019.
5. **Kaneko G**, Salinas C, Ehsan H*. Uphill Battle of CRISPR/Cas9: a budding technology in need of refinement. *Biores Commun* **6**, 859-871, 2020.
6. Miyazawa D*, **Kaneko G**. Clinical trials of inhaled beclomethasone and mometasone for COVID-19 should be conducted. *J Med Virol* **93**, 637-638, 2021.
7. Baptiste M, Moinuddeen SS, Soliz CL, Ehsan H, **Kaneko G***. Making sense of genetic information: the promising evolution of clinical stratification and precision oncology using machine learning. *Genes* **12**, 722, 2021.
8. **Kaneko G***. Impact of pre-mortem factors on meat quality of fish. *Foods* **10**, 2749, 2021.
9. Merchant A, Tania VH, Baptiste M, Ehsan H, **Kaneko G**. Severe acute respiratory syndrome coronavirus-2: An era of struggle and discovery leading to the emergency use authorization of treatment and prevention measures based on computational analysis. In: Parihar, Khan, Kumar, Kaushik, Gohel Eds. Computational Approaches for Novel Therapeutic and Diagnostic Designing to Mitigate SARS-CoV-2 Infection. Elsevier, 2022. Chapter 25. Pages 559-582. ISDN: 978-0-323-91172-6.

Symposium Proceedings

1. Yoshinaga T, Kinoshita S, **Kaneko G**, Tsukamoto K, Watabe S. Gene expression pattern during population growth of the rotifer *Brachionus plicatilis*. *Fish Sci* **68** (suppl. 1), 793–796, 2002.

(Proceeding of International Commemorative Symposium 70th Anniversary of Japanese Society of Fisheries Science, 2001)

2. **Kaneko G**, Kinoshita S, Yoshinaga T, Tsukamoto K, Watabe S. Expression patterns of heat shock genes during population dynamics of the rotifer *Brachionus plicatilis*. *Fish Sci* **68** (suppl. 1), 1311–1312, 2002. (Proceeding of International Commemorative Symposium 70th Anniversary of Japanese Society of Fisheries Science, 2001)
3. **Kaneko G**, Yamada T, Han Y, Hirayama M, Nagasaka R, Ushio H, Watabe S. Molecular mechanisms involved in lipid accumulation of pufferfish. Proceeding of 5th World Fisheries Congress, 3f_0637_442, 2009.
4. Ozaki Y, **Kaneko G**, Yanagawa Y, Watabe S. The effects of calorie restriction on the mRNA levels of glycolytic enzymes and hypoxia tolerance in the rotifer *Brachionus plicatilis*. Proceeding of 5th World Fisheries Congress, 3f_0626_441, 2009.
5. Oo AKS, **Kaneko G**, Ozaki Y, Hirayama M, Kinoshita S, Watabe S. Screening of genes up-regulated by calorie restriction in the rotifer *Brachionus plicatilis*. Proceeding of 5th World Fisheries Congress, 3f_0628_437, 2009.
6. Ohmori F, **Kaneko G**, Saito T, Watabe S. Growth-promoting substances secreted from the rotifer *Brachionus plicatilis* at an early culture stage. Proceeding of 5th World Fisheries Congress, 2e_0432_448, 2009.
7. Ahhmed MA, Tomisaka Y, **Kaneko G**, Watabe S, Muguruma M, Yetim H, Sakata R. Differences in myosin heavy chain mRNA expression levels among chicken muscles reflect differences in protein polymerization by transglutaminase. Proceeding of the 57th International Congress of Meat Science and Technology, 2011.
8. Honein K, **Kaneko G**, Katsuyama I, Matsumoto M, Kawashima Y, Yamada M, Watabe S. Studies on the cellulose-degrading system in a shipworm and its potential applications. *Energy Procedia* **18**, 1271–1274, 2012. (Proceedings of TerraGreen12 International Conference, 2012)
9. Ahhmed AM, Watabe S, Ushio H, **Kaneko G**, Inomata T, Sakata S, Yetim H. Changes in physicochemical properties of proteins in Kayserian pastirma made from M. semimembranosus muscle of bovine during traditional processing: Part I. Proceeding of the 58th International Congress of Meat Science and Technology, 2012.
10. Ahhmed AM, **Kaneko G**, Ushio H, Kawahara S, Muguruma M, Sakata R, Watabe S. Physicochemical changes in muscle proteins of cured beef products made from M. cutaneous-omo brachialis muscle: Part II. Proceeding of the 58th International Congress of Meat Science and Technology, 2012.
11. Ahhmed AM, Karaman S, Toker O, **Kaneko G**, Ushio H, Sakata R, Cam M, Saki S, Yetim H. Diversity in textual and meat quality parameters of dromedary camel. Proceeding of the 59th International Congress of Meat Science and Technology, 2013.
12. Ahhmed AM, Birisik C, Karaman S, Ozturk I, Bilgen M, **Kaneko G**, Ushio H, Sakata R, Yetim H. Improvements in functional properties of dry cured meat using fermented soy paste. Proceedings of the 60th International Congress of Meat Science and Technology, 2014.
13. **Kaneko G**, Coman D, Sanganahalli BG, Wang H, Herman P, Jiang L, Rao J, Groman SM, Taylor JR, de Graaf RA, Hyder F. Enhanced neurometabolic activity and neuroanatomical changes in visual area of rats prenatally exposed to MAM parallel schizophrenic symptoms. *Proc. Intl. Soc.*

Mag. Reson. Med. **23**, 3549, 2015. (Proceedings of the 23rd Annual Meeting of International Society of Magnetic Resonance in Medicine, 2015)

MAJOR PRESENTATIONS (INTERNATIONAL, SELECTED)

Plenary or keynote lectures are shown with asterisks.
Presentations as a co-author are not listed. Please contact me if you need the information.

INVITED PRESENTATIONS/SEMINARS/LECTURES

1. **Kaneko G**. Applied Molecular Techniques in Aquaculture, Graduate Course of Agriculture Faculty, Atatürk University, Turkey, June 9–14, 2008.
2. **Kaneko G**. Graduate Summer School of Applied Molecular Biology Techniques, Atatürk University, Turkey, July 4–9, 2011.
3. **Kaneko G**. Studies on the species-specific lipid accumulation in torafugu and red seabream. The International Symposium on Muscle Biochemistry, Tokyo, Japan. October 27–29, 2011.

4*. **Kaneko G** and Ushio H. Biotechnology in food science. The First Turkish-International Circle's Workshop on Global Food Science and Technology, Erciyes University, Kayseri, Turkey, May 9–11, 2013.

5. **Kaneko G**. Hypofrontality and posterior hyperactivity in early schizophrenia: Imaging and behavior in a preclinical model. *Bioimaging Sciences Seminar, Yale University, New Haven, USA. Sep 30, 2016.*
6. **Kaneko G**. Intramuscular adipose tissue of fish. *The 3rd Workshop on the Study of Lipid Nutrition and Metabolism in Aquatic Animals. Northwest A&F University, Yangling, China. Sep 18–20, 2017.*
7. **Kaneko G**. Explore novel metabolic pathways – application of stable isotope labeling in aquatic biochemistry. *Pearl River Fisheries Research Institute (PRFRI) Research Report, Guangzhou, China. Sep 21, 2017.*
8. **Kaneko G**. Application of stable isotope labeling in aquatic biochemistry. *Fisheries Science for Future Generations. The Japanese Society of Fisheries Science 85 Years Anniversary Symposium. Tokyo, Japan. Sep 22–24, 2017.*

ORAL PRESENTATIONS

1. **Kaneko G**, Yoshinaga T, Yanagawa Y, Kinoshita S, Tsukamoto K, Watabe S. Superoxide dismutases possibly related to the ageing in rotifer. Rotifera X International Symposium, Illmitz, Austria. June 7–13, 2003.
2. **Kaneko G**, Yamada T, Han Y, Hirayama M, Nagasaka R, Ushio H, Watabe S. Molecular mechanisms involved in lipid accumulation of pufferfish. 5th World Fisheries Congress, Yokohama, Japan. October 20–24, 2008.

3. **Kaneko G**, Kondo H, Hirono I, Nagasaka R, Satoh S, Ushio H, Watabe S. Expressed sequence tag analysis of liver and fast muscle from red seabream *Pagrus major* in relation to lipid metabolism. 9th International Marine Biotechnology Symposium, Qingdao, China. October 8–12, 2010.
4. **Kaneko G**, Hecox-Lea B, Gribble KE, Mark Welch DB. Valine synthesis in the bdelloid rotifer: application of a novel metabolic flux measurement technology to study unique metabolic pathways. International Rotifer XV Symposium. El Paso, TX, USA. Jun 3–9, 2018.
5. **Kaneko G**. Phylogenetic annotation of rotifer heat shock protein 70 genes. International Rotifer XVI Symposium. Zagreb, Croatia. Sep 5–9, 2022. (Online oral presentation)

POSTER PRESENTATIONS

1. **Kaneko G**, Kinoshita S, Watabe S, Yoshinaga T, Tsukamoto K. Expression patterns of heat shock genes during population dynamics of the rotifer *Brachionus plicatilis*. International Commemorative Symposium 70th Anniversary of Japanese Society of Fisheries Science, Yokohama, Japan. October 1–5, 2001.
2. **Kaneko G**, Yoshinaga T, Kinoshita S, Tsukamoto K, Hagiwara A, Watabe S. GH-like substance in rotifer. International Symposium on Function of Marine Organisms, Tokyo, Japan. February 22–23, 2003. (Best Poster Award)
3. **Kaneko G**, Yoshinaga T, Tsukamoto K, Watabe S. Difference in stress resistance and stress protein expression between immature and adult rotifers implicated for population dynamics. DOBIS International Symposium -Dynamics of the Ocean Biosystem- , Tokyo, Japan. November 15–18, 2005.
4. **Kaneko G**, Yoshinaga T, Tsukamoto K, Watabe S. Insulin/IGF pathway possibly regulates population dynamics of rotifer. The 3rd International Congress of the GRS and the IGF Society, Kobe, Japan. November 11–15, 2006.
5. **Kaneko G**, Hasegawa T, Hakuno F, Takahashi SI. Changes of IGF signals during myogenic differentiation which are quite different from those during adipogenic differentiation. The Endocrine Society's 89th Annual Meeting, Toronto, Canada. June 2–5, 2007.
6. **Kaneko G**, Yanagawa Y, Yoshinaga T, Tsukamoto K, Watabe S. The effects of caloric restriction on lifespan, oxidative stress resistance and catalase mRNA levels in successive generations of the rotifer *Brachionus plicatilis*. Plant and Animal Genome XVI Conference, San Diego, CA, USA. January 12–16, 2008.
7. **Kaneko G**, Yamada T, Nagasaka R, Ushio H, Watabe S. Molecular characterization of lipase family in pufferfish *Takifugu rubripes*. Annual Main Meeting of the Society for Experimental Biology, Glasgow, UK. June 28 – July 1, 2009.
8. **Kaneko G**, Coman D, Sanganahalli BG, Wang H, Herman P, Jiang L, Rao J, Groman SM, Taylor JR, de Graaf RA, Hyder F. Enhanced neurometabolic activity and neuroanatomical changes in visual area of rats prenatally exposed to MAM parallel schizophrenic symptoms. 23rd Annual Meeting of International Society of Magnetic Resonance in Medicine, Toronto, Canada. May 30 – June 05, 2015.

PROFESSIONAL ACTIVITIES

EDITORIAL ACTIVITIES

Fish Sci	Editorial board member	2019–2022
Nippon Suisan Gakkaishi	Editorial board member	2019–2022
Foods	Guest Editor of Special Issues	2019–2022
Animals	Guest Editor of a Special Issue	2020–2021

COMMITTEE SERVICE

1. Supporting Member of the Organizing Committee, 5th World Fisheries Congress, Kanagawa, Japan, 2007.
2. International Relations Committee Member, the Japanese Society of Fisheries Science, 2008 – 2013.
3. Organizing Committee Member, the International Symposium on Muscle Biochemistry, Tokyo, Japan, 2011.
4. Program Committee Member, Fisheries Science for Next Generations: 85th Anniversary International Symposium of Japanese Society of Fisheries Science, 2017.
5. Search Committee Member, UHV Environmental Health & Safety Specialist, 2019.
6. Faculty Awards Committee Chair, UHV, 2021-2022.
7. Search Committee Member, UHV Computer Science Assistant Professor, 2021.

COURSES TAUGHT AT UNIVERSITY OF HOUSTON-VICTORIA

*Instructor of record with a graduate teaching assistant.

Undergraduate courses

Biology I Lab	BIOL1106	2018*
Biology I	BIOL1308	2021
Biology II	BIOL1309	2017–2020
Biology II Lab	BIOL1107	2020 (Academic Partnership, online)
Biology II Lab	BIOL1107	2021
Genetics	BIOL4313	2016–2022
Genetics Lab	BIOL4113-1	2016–2022
Biochemistry	BIOL4130	2017–2021
Biochemistry Lab	BIOL4110	2017–2021
Cell & Mol Biol	BIOL4330	2017

Graduate courses

Biochemistry	BIMS6300	2016–2018 (Face to face, interactive television)

Comp Genomics	BIMS6325	2017, 2018
Bioinformatics	BIMS6320	2017–2022 (Face to face, interactive television)
Biostatistics	BIMS6316	2020–2022 (Online)

COURSES TAUGHT AT THE UNIVERSITY OF TOKYO

Undergraduate courses

Marine Biochemistry Lab	2007–2012
Aquatic Food Science	2008, 2010 (Field work instruction)

Graduate courses

Experimental Methods in Aquatic Biology	2008–2013 (Omnibus lecture)
Aquatic Biochemistry	2008–2012 (Omnibus lecture)
Aquatic Biology Exercises	2009–2012 (Omnibus lecture)

OTHER EDUCATIONAL ACTIVITIES

1. Teaching Assistant, Aquatic molecular biology experiments. 2003–2006. Faculty of Agriculture, The University of Tokyo.
2. Instructor. 2007, 2008, 2010, 2012. The "Real Lab project" to introduce university activities. National Museum of Emerging Science and Innovation, Japan.
3. External examiner of Ph. D. University of Madras (India).
4. Thesis Committee Chair, Master of Science degree in Biomedical Sciences, University of Houston–Victoria: 2018 (1 student), 2019 (3 students), 2020 (2 students), 2021 (1 student).
5. Thesis Committee Member, Master of Science degree in Biomedical Sciences, University of Houston–Victoria: 2018 (1 student), 2020 (1 student), 2021 (1 student).