日本語

日本栄養大学大学院
日本栄養大学
日本栄養大学短期大学部

Faculty Members

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Hisanori Katoh

Faculty of Nutrition
Professor

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■ Education

1.	1980/04～1984/03	Department of Applied Biological Chemistry, Faculty of Agriculture, The University of Tokyo, Graduated,
2.	1984/04～1986/03	〔Master degree program〕 Department of Applied Biological Chemistry, Graduate School, Division of Agriculture, The University of Tokyo, Completed, MS
3.	1986/04～1988/11	〔Doctoral course〕 Department of Applied Biological Chemistry, Graduate School, Division of Agricultural Science, The University of Tokyo, Unfinished course
4.	1990/10/08 Degree Acquisition	The University of Tokyo,

■ Career

1.	1988/11～1993/03	The University of Tokyo Faculty of Agriculture Research Assistant
2.	1993/04～1999/03	Utsunomiya University Faculty of Agriculture Associate Professor
3.	1991/04～1993/03	National Institutes of Health Diabetes Branch Guest Reseacher
4.	1999/04～2009/05	The University of Toykyo Graduate School of Agricultural and Life Sciences Associate Professor
5.	2009/06～2017/05	The University of Toykyo Organization for Interdisciplinary Research Projects Project Professor
6.	2017/06～2023/04	The University of Tokyo Graduate School of Agricultural and Life Sciences Project Professor
7.	2023/04～	Kagawa Nutrition University Faculty of Nutrition Professor

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■ Courses Previously Taught

1. Biochemistry（Japan Nutrition University）
2. Food Functionality
3. General Lecture of Nutrition（Graduate School, Kagawa Nutrition University）
4. Biochemistry

■ Research Interests/Keywords

Food sciences, Genome biology, Nutrition science and health science, Molecular biology

■ Publications

1.	Journal Articles	Lactitol reduces renal dysfunction and a senescence marker in aged mice with adenine-induced CKD.（Collaboration）2026

2.	Journal Articles	Sunrouge, an anthocyanin-rich green tea cultivar, attenuates fat accumulation and obesity-related metabolic abnormalities in Western diet-fed mice. (Collaboration) 2026
3.	Journal Articles	Identification and evaluation of citrus peel-derived polymethoxyflavonoids as natural SIRT1 activators (Collaboration) 2026
4.	Journal Articles	Dietary eggshell membrane modulates gut microbiota and alleviates AOM/DSS-induced colonic inflammation in mice (Collaboration) 2026
5.	Journal Articles	Offspring metabolic programming via the maternal diet increases susceptibility to metabolic dysregulation. (Collaboration) 2025/08
6.	Journal Articles	Validity of digital photographic images for dietary assessment of participants with low frequency of home-made meal intake. (Collaboration) 2025
7.	Journal Articles	Eggshell membrane, a resistant protein, possesses prebiotic-like properties in improving gut microbiota composition and gut-liver axes in chronologically aged C57BL/6J male mice. (Collaboration) 2024/12
8.	Journal Articles	Genome-wide association meta-analysis identifies two novel loci associated with dental caries (Collaboration) 2024
9.	Journal Articles	Alteration and reprogramming of renal Ptger1 DNA methylation induced by maternal protein restriction in hypertensive rat offspring. (Collaboration) 2023
10.	Journal Articles	A study on the association between antiobesity effects of lactoferrin and genetic variations. (Collaboration) 2023
11.	Journal Articles	Effects of thyme (Thymus vulgaris L.) essential oil on aging-induced brain inflammation and blood tlomere attrition in ahronologically aged C57BL/6J mice. (Collaboration) 2023
12.	Journal Articles	Effects of turmeric extract on age-related skeletal muscle atrophy in senescence-accelerated mice. (Collaboration) 2023
13.	Journal Articles	Exogenous Penicillium camemberti lipase preparation exerts prebiotic-like effects by increasing fecal Bifidobacterium and Lactobacillus abundance in rats. (Collaboration) 2023
14.	Journal Articles	Postnatal nutrition environment reprograms renal DNA methylation patterns in offspring of maternal protein-restricted stroke-prone spontaneously hypertensive rats (Collaboration) 2023
15.	Journal Articles	Ketone-loading as a novel sports nutrition strategy: Chronic ketone supplementation elicits further favorable metabolic changes in keto-adapted mice. (Collaboration) 2023
16.	Journal Articles	Ketogenic diet, ketone bodies, inflammation and mood disorder: Clinical evidence and potential mechanism. (Collaboration) 2023
17.	Journal Articles	Transcriptome and methylome profiling in rat skeletal muscle: Impact of post-weaning protein restriction. (Collaboration) 2022
18.	Journal Articles	Suppressive effects of turmeric extract on muscle atrophy in dexamethasone-treated mice and myotubes. (Collaboration) 2022
19.	Journal Articles	Association between dietary behaviors and BMI stratified by sex and the ALDH2 rs671 polymorphism in Japanese adults. (Collaboration) 2022
20.	Journal Articles	ATF4-dependent hsa-miR-663a transcription mediates mTORC1/p70S6K1 signaling under leucine deprivation (Collaboration) 2022
21.	Journal Articles	Comprehensive miRNA and DNA microarray analysis reveal the response of hepatic miR-203 and its target gene to protein malnutrition in rats (Collaboration) 2022
22.	Journal Articles	Dietary eggshell membrane powder improves survival rate and ameliorates gut dysbiosis in interleukin-10 knockout mice. (Collaboration) 2022
23.	Journal Articles	Effect of heat-moisture treated brown rice crackers on postprandial flow-mediated dilation in adults with mild endothelial dysfunction. (Collaboration) 2022
24.	Journal Articles	Eggshell membrane modulates gut microbiota to prevent murine pre-cachexia through suppression of T helper cell differentiation (Collaboration) 2022
25.	Journal Articles	iTRAQ-based quantitative proteomics reveals the energy metabolism alterations induced by chlorogenic acid in HepG2 cells. (Collaboration) 2022
26.	Journal Articles	Laurel attenuates dexamethasone-induced skeletal muscle atrophy in vitro and in a rat model. (Collaboration) 2022
27.	Journal Articles	Maternal protein restriction and post-weaning high-fat feeding alter plasma amino acid profiles and hepatic gene expression in mice offspring (Collaboration) 2022
28.	Journal Articles	Precision nutrition: A review of current approaches and future endeavors. (Collaboration) 2022

29.	Journal Articles	The potential roles of probiotics, resistant starch, and resistant proteins in ameliorating inflammation during aging (inflammaging). (Collaboration) 2022
30.	Journal Articles	A comparison of gene expression profiles of rat tissues after mild and short-term calorie restrictions. (Collaboration) 2021
31.	Journal Articles	Effects of eggshell membrane on keratinocyte differentiation and skin aging in vitro and in vivo. (Collaboration) 2021
32.	Journal Articles	Amaranth supplementation ameliorates high-fat diet-induced dyslipidemia and deterioration of gut microbiota structure in mice. (Collaboration) 2021
33.	Journal Articles	Maternal protein restriction induces renal AT2R promoter hypomethylation in salt-sensitive, hypertensive rats. (Collaboration) 2021
34.	Journal Articles	Zeolite-containing mixture alleviates microbial dysbiosis in dextran sodium sulfate induced colitis in mice. (Collaboration) 2021
35.	Journal Articles	A Genome-wide association study identifies the association between the 12q24 locus and black tea consumption in Japanese populations. (Collaboration) 2020
36.	Journal Articles	Transcriptional activation of Chac1 and other Atf4-target genes induced by extracellular L-serine depletion is negated with glycine consumption in Hepa1-6 hepatocarcinoma cells. (Collaboration) 2020
37.	Journal Articles	Low-arginine and low-protein diets induce hepatic lipid accumulation through different mechanisms in growing rats. (Collaboration) 2020
38.	Journal Articles	Disruption of insulin receptor substrate-2 impairs growth but not insulin function in rats. (Collaboration) 2020
39.	Journal Articles	Strong association between the 12q24 locus and sweet taste preference in the Japanese population revealed by genome-wide meta-analysis. (Collaboration) 2020
40.	Journal Articles	Eggshell membrane powder lowers plasma triglyceride and liver total cholesterol by modulating gut microbiota and accelerating lipid metabolism in high-fat diet-fed mice. (Collaboration) 2020
41.	Journal Articles	A translation repressor, 4E-BP1, regulates the triglyceride level in rat liver during protein deprivation. (Collaboration) 2020
42.	Journal Articles	Integrated omics profiling of dextran sodium sulfate-induced colitic mice supplemented with Wolfberry (Lycium barbarum) (Collaboration) 2020
43.	Journal Articles	GWAS of habitual coffee consumption reveals a sex difference in the genetic effect of the 12q24 locus in the Japanese population. (Collaboration) 2019
44.	Journal Articles	Identification of the 12q24 locus associated with fish intake frequency by genome-wide meta-analysis in Japanese populations. (Collaboration) 2019
45.	Journal Articles	Low-protein diet enhances adiponectin secretion in rats. (Collaboration) 2019
46.	Journal Articles	Maternal protein restriction alters the renal ptger1 DNA methylation state in SHRSP offspring. (Collaboration) 2018
47.	Journal Articles	Enhanced vulnerability to oxidative stress and induction of inflammatory gene expression in 3-phosphoglycerate dehydrogenase-deficient fibroblasts. (Collaboration) 2018
48.	Journal Articles	Branched-chain amino acid supplementation restores reduced insulinotropic activity of a low-protein diet through the vagus nerve in rats (Collaboration) 2017
49.	Journal Articles	Zeolite-containing mixture supplementation ameliorated dextran sodium sulphate-induced colitis in mice by suppressing the inflammatory bowel disease pathway and improving apoptosis in colon mucosa. (Collaboration) 2017
50.	Journal Articles	Eggshell membrane powder ameliorates intestinal inflammation by facilitating the restitution of epithelial injury and alleviating microbial dysbiosis. (Collaboration) 2017
51.	Journal Articles	Acerola (Malpighia emarginata DC.) juice intake suppresses the UVB-induced skin pigmentation in SMP30/GNL knockout hairless mice (Collaboration) 2017
52.	Journal Articles	Comparative integrated omics approach sterically understanding hepatic metabolic dynamics in mouse model. (Collaboration) 2017
53.	Journal Articles	Lactoferrin interacts with bile acids and increases fecal cholesterol excretion in rats. (Collaboration) 2017
54.	Journal Articles	Dietary genistein prevents denervation-induced muscle atrophy in rodents via effects on estrogen receptor-alpha (Collaboration) 2016

55.	Journal Articles	Supplemental arginine above the requirement during suckling causes obesity and insulin resistance in rats. (Collaboration) 2016
56.	Journal Articles	Adaptive response to L-serine deficiency is mediated by p38 MAPK activation via deoxysphinganine in normal fibroblasts. (Collaboration) 2016
57.	Journal Articles	Enteric lactoferrin attenuates the development of high-fat and high-cholesterol diet-induced hypercholesterolemia and atherosclerosis in Microminipigs (Collaboration) 2017
58.	Journal Articles	Down regulation of asparagine synthetase and 3-phosphoglycerate dehydrogenase, and the up-regulation of serine dehydratase in rat liver from intake of excess amount of leucine are not related to leucine-caused amino acid imbalance. (Collaboration) 2015
59.	Journal Articles	Identification of the flavonoid luteolin as a repressor of the transcription factor hepatocyte nuclear factor 4alpha. (Collaboration) 2015
60.	Journal Articles	Rapid increase of fibroblast growth factor 21 under protein malnutrition and its impact on growth and lipid metabolism. (Collaboration) 2015
61.	Journal Articles	Lactoferrin attenuates fatty acid-induced lipotoxicity via Akt signaling in hepatocarcinoma cells. (Collaboration) 2015
62.	Book/Book Chapter	Chapter 3: The comprehensive understanding of anti-diabetic and anti-obesity effects of coffee intake via nutrigenomics (Collaboration) 2015
63.	Journal Articles	Eggshell membrane ameliorates hepatic fibrogenesis in human C3A cells and rats through changes in PPARγ-Endothelin 1 signaling (Collaboration) 2014
64.	Journal Articles	Multi-faceted integrated omics analysis revealed Parsley (Petroselinum crispum) as a novel dietary intervention in dextran sodium sulphate induced colitic mice. (Collaboration) 2014
65.	Journal Articles	Beneficial effects of soluble dietary Jerusalem artichoke (Helianthus tuberosus) in the prevention of the onset of Type 2 diabetes and NAFLD in high fructose-fed rats (Collaboration) 2014
66.	Journal Articles	Luteolin and quercetin affect the cholesterol absorption mediated by epithelial cholesterol transporter Niemann-Pick C1-like 1 in Caco-2 cells and rats. (Collaboration) 2014
67.	Journal Articles	Coffee intake mitigated inflammation and obesity-induced insulin resistance in skeletal muscle of high-fat diet-induced obese mice. (Collaboration) 2014
68.	Journal Articles	Tissue-specific effects of protein malnutrition on insulin signaling pathway and lipid accumulation in growing rats. (Collaboration) 2014
69.	Journal Articles	An integrated multi-omics study revealed metabolic alterations underlying the effects of coffee consumption. (Collaboration) 2014
70.	Journal Articles	Protective effects of acetaminophen on ibuprofen-induced gastric mucosal damage in rats with associated suppression of matrix metalloproteinase. (Collaboration) 2014
71.	Journal Articles	Coffee intake down-regulates the hepatic gene expression of peroxisome proliferator-activated receptor gamma in C57BL/6J mice fed a high-fat diet (Collaboration) 2014
72.	Book/Book Chapter	Identification of branched amino acids; Underlying molecular pathways using transcriptomics analysis: Application to cirrhosis. (Collaboration) 2014
73.	Book/Book Chapter	Melatonin: its microbicidal propertiesand clinical applications. (Collaboration) 2014
74.	Journal Articles	Transcriptional profiling in rats and an ex vivo analysis implicate novel beneficial function of egg shell membrane in liver fibrosis. (Collaboration) 2013
75.	Journal Articles	Potent lipolytic activity of lactoferrin in mature adipocytes. (Collaboration) 2013
76.	Journal Articles	Adverse effects of excessive leucine intake depend on dietary protein intake: A transcriptomic analysis to identify useful biomarkers. (Collaboration) 2013
77.	Journal Articles	DNA microarray analysis identified molecular pathways mediating the effect of the supplementation of branched amino acids on CCl_4-induced cirrhosis in rats. (Collaboration) 2013
78.	Journal Articles	Bovine lactoferrin reduces visceral fat and liver triglycerides in ICR mice. (Collaboration) 2012
79.	Journal Articles	Enhanced effect of daytime restricted feeding on the circadian rhythm of streptozotocin-induced type 2 diabetic rats. (Collaboration) 2012
80.	Journal Articles	Role of the renin-angiotensin-aldosterone system in the enhancement of salt sensitivity caused by prenatal protein restriction in stroke-prone spontaneously hypertensive rats. (Collaboration) 2012
81.	Journal Articles	Regulatory mechanism for the stimulatory action of genistein on glucose uptake in vitro and in vivo. (Collaboration) 2012

82.	Journal Articles	Evaluation of the antioxidant potential of Chinese parsley (Coriandrum sativum) as compared with a synthetic antioxidant in diet. (Collaboration) 2012
83.	Journal Articles	Antioxidant potential of Western parsley (Petroselinum crispum) extract and its effects on oxidative stabilities of food during storage. (Collaboration) 2012
84.	Journal Articles	An optimized method for the determination of free L-cysteine in rat plasma by high-performance liquid chromatography using the derivatization reagent 4-aminosulfonyl-7-fluoro-2,1,3-benzoxadiazole. (Collaboration) 2011
85.	Journal Articles	Significant dissociation of expression patterns of the basic helix-loop-helix transcription factors Dec1 and Dec2 in rat kidney. (Collaboration) 2011
86.	Journal Articles	Differential roles of breakfast and supper in rats of a daily three-meal schedule upon circadian regulation and physiology. (Collaboration) 2011
87.	Journal Articles	Mild caloric restriction up-regulates the expression of prohibitin: A proteome study. (Collaboration) 2011
88.	Journal Articles	Effects of pepsin and trypsin on the anti-adipogenic action of lactoferrin against pre-adipocytes derived from rat mesenteric fat. (Collaboration) 2011
89.	Journal Articles	Omics and integrated omics for the promotion of food and nutrition science. (Single) 2011
90.	Journal Articles	Dietary protein deprivation up-regulates insulin signaling and inhibits gluconeogenesis in rat liver. (Collaboration) 2010
91.	Journal Articles	Feeding-induced rapid resetting of the hepatic circadian clock is associated with acute induction of Per2 and Dec1 transcription in rats (Collaboration) 2010
92.	Journal Articles	Dietary iron deficiency induces a variety of metabolic changes and even apoptosis in rat liver: a DNA microarray study. (Collaboration) 2010
93.	Journal Articles	Effect of mild restriction of food intake on gene expression profile in the liver of young rats: reference data for in vivo nutrigenomics study. (Collaboration) 2010
94.	Journal Articles	Regulation of circadian gene expression in the kidney by light and food cues in rats. (Collaboration) 2010
95.	Journal Articles	Effect of fasting on the peripheral circadian gene expression in rats. (Collaboration) 2010
96.	Journal Articles	Melatonin in septic shock: Some recent concepts. (Collaboration) 2010
97.	Book/Book Chapter	Genomics applied to nutrients and functional foods in Japan: State of the art (Collaboration) 2010
98.	Journal Articles	Sardine peptide with angiotensin I converting enzyme inhibitory activity improves glucose tolelance in stroke-prone spontaneously hypertensive rats. (Collaboration) 2009
99.	Journal Articles	Differential resetting process of circadian gene expression in rat pineal glands after the reversal of the light/dark cycle via a 24-h light or dark period transition. (Collaboration) 2009
100.	Journal Articles	Qualitative PCR methods for detecting major food allergens (peanut, soybean, and wheat) by using internal transcribed spacer region. (Collaboration) 2009
101.	Journal Articles	Light and food signals cooperate to entrain the rat pineal circadian system. (Collaboration) 2008
102.	Journal Articles	Opposite effects of PU.1 on mast cell stimulation. (Collaboration) 2008
103.	Journal Articles	Effects of light cues on re-entrainment of the food-dominated peripheral clocks in mammals. (Collaboration) 2008
104.	Journal Articles	Up-regulation of genes related to the ubiquitin-proteasome system in the brown adipose tissue of 24 h-fasted rats. (Collaboration) 2008
105.	Journal Articles	Qualitative and quantitative PCR methods for detecting food allergens by using internal transcribed spacer region. (Collaboration) 2008
106.	Journal Articles	Nutrigenomics: the cutting edge and Asian perspectives. (Single) 2008
107.	Journal Articles	A novel PCR method for quantification of buckwheat using a unique internal standard material. (Collaboration) 2006
108.	Journal Articles	Gene expression analysis of the anti-obesity effect by apple polyphenols in rats fed a high fat diet or a normal diet. (Collaboration) 2006

109.	Journal Articles	Safety evaluation of hypoallergenic wheat flour using a DNA microarray. (Collaboration) 2006
110.	Journal Articles	A nutrigenomics database - Integrated repository for publications and associated microarray data in nutrigenomics research. (Collaboration) 2005
111.	Journal Articles	Disruption of the availability of amino acids induces a rapid reduction of serine phosphorylation of insulin receptor substrate-1 in vivo and in vitro. (Collaboration) 2005
112.	Journal Articles	Intake of soy protein isolate alters hepatic gene expression in rats. (Collaboration) 2005
113.	Journal Articles	PCR method for detecting trace amounts of buckwheat (Fagopyrum spp.) in food. (Collaboration) 2005
114.	Journal Articles	A perspective on DNA microarray technology in food and nutritional science. (Collaboration) 2005
115.	Journal Articles	Transcriptomics and metabolomics of dietary leucine excess. (Collaboration) 2005
116.	Journal Articles	Dietary protein deprivation decreases the serine phosphorylation of insulin receptor substrate-1 in rat skeletal muscle. (Collaboration) 2004
117.	Journal Articles	DNA microarray analyses of the effects of dietary proteins (Collaboration) 2004
118.	Journal Articles	Nutritional and hormonal factors control the gene expression of FoxOs, the mammalian homologues of DAF-16. (Collaboration) 2003
119.	Journal Articles	Dietary protein is a potent regulator of the hyaluronan synthase gene in rat skin. (Collaboration) 2003
120.	Journal Articles	Evaluation of the effects of the dietary intake of proteins and amino acids by DNA microarray technology. (Collaboration) 2003
121.	Journal Articles	Response of the IGF system to vitamin A depletion and repletion in rats. (Collaboration) 2002
122.	Journal Articles	Dietary protein quantity and quality affect rat hepatic gene expression. (Collaboration) 2002
123.	Journal Articles	Molecular basis of the alteration in skin-collagen metabolism in response to in vivo dexamethasone treatment: Effects on syntheses of collagen type I and III, collagenase, and TIMPs. (Collaboration) 2002
124.	Journal Articles	Intracerebroventricular injection of glucagon-like peptide-1 decreases monoamine concentrations in the hypothalamus of chicks. (Collaboration) 2002
125.	Journal Articles	Effects of protein deprivation on alpha1(I) and alpha1(III) collagen and its degrading system in rat skin (Collaboration) 2002
126.	Journal Articles	Molecular cloning and circadian regulation of cryptochrome genes in the Japanese quail (Coturnix coturnix japonica). (Collaboration) 2002
127.	Journal Articles	Regulation of hydroxyindole-O-methyltransferase gene expression in Japanese quail (Coturnix coturnix japonica). (Collaboration) 2001
128.	Journal Articles	Up-regulation of upstream stimulatory factors by protein malnutrition and its possible role in regulation of the IGF-binding protein-1 gene. (Collaboration) 2001
129.	Journal Articles	Differential regulation of IGFBP-2 and IGFBP-5 gene expression by vitamin A status in Japanese quail. (Collaboration) 2001
130.	Journal Articles	Retinoid nutritional status differently affects the expression of quail RARbeta isoform transcripts in a tissue-specific manner. (Collaboration) 2001
131.	Journal Articles	Vitamin A deficiency reduces IGF-I gene expression and increases IGF-I receptor and insulin receptor gene expression in tissues of Japanese quail (Coturnix coturnix japonica). (Collaboration) 2001
132.	Journal Articles	Developmental changes in the mRNA levels of IGF-I and its related genes in the reproductive organs of Japanese quail (Coturnix coturnix japonica) (Collaboration) 2001
133.	Journal Articles	Cloning of cDNAs encoding quail (Coturnix coturnix japonica) retinoic acid receptor beta isoforms and changes in their gene expression during gonadotropic growth. (Collaboration) 2001
134.	Journal Articles	Extracellular norepinephrine in the medial hypothalamus increases during feeding in chicks: A microdialysis study. (Collaboration) 2000
135.	Journal Articles	Gene expression of the three members of hepatocyte nuclear factor-3 is differentially regulated by nutritional and hormonal factors. (Collaboration) 2000

136.	Journal Articles	Retinoic acid accelerates the development of reproductive organs and egg production in Japanese quail (Coturnix coturnix japonica). (Collaboration) 2000
137.	Journal Articles	The tyrosine kinase activity of the chicken insulin receptor is similar to that of the human insulin receptor. (Collaboration) 2000
138.	Journal Articles	Feeding a lysine-free diet decreases food intake without changes in hypothalamic monoamine concentrations in growing chickens. (Collaboration) 1999
139.	Journal Articles	Regulation of the expression of serotonine N-acetyltransferase gene in Japanese quail (Coturnix japonica): (II) Effect of vitamin A deficiency. (Collaboration) 1999
140.	Journal Articles	Regulation of the expression of serotonine N-acetyltransferase gene in Japanese quail (Coturnix japonica): (I) Rhythmic pattern and effect of light. (Collaboration) 1999
141.	Journal Articles	Decrease of the obese gene expression in bovine subcutaneous adipose tissue by fasting. (Collaboration) 1998
142.	Journal Articles	Circadian rhythm of pineal melatonin contents in silky chicks. (Collaboration) 1998
143.	Journal Articles	Vitamin A deficiency reduces the responsiveness of pineal gland to light in Japanese quail (Coturnix japonica). (Collaboration) 1998
144.	Journal Articles	Diurnal changes in the enzyme activity and the messenger RNA level of pineal serotonin N-acetyltransferase in normal and hereditary microphthalmic rats. (Collaboration) 1997
145.	Journal Articles	Analyses of serotonin N-acetyltransferase mRNA content in rat pineal grand and testis by an improved assay system - Micro lysate assay. (Collaboration) 1997
146.	Journal Articles	Retinoic acid accelerates the testicular maturation in Japanese quail. (Collaboration) 1997
147.	Journal Articles	Differential phosphorylation of pp120 by insulin and insulin-like growth factor-1 receptors: Role for the C-terminal domain of the beta-subunit. (Collaboration) 1997
148.	Journal Articles	Nutritional regulation of insulin-like growth factor-I receptor mRNA levels in growing chickens. (Collaboration) 1996
149.	Book/Book Chapter	Nutritional regulation of gene expression of IGFs and their related proteins. (Collaboration) 1996
150.	Journal Articles	Single tyrosine substitution in the insulin-like growth factor I receptor inhibits ligand-induced receptor autophosphorylation and internalization, but not mitogenesis. (Collaboration) 1995
151.	Journal Articles	Dissociation of mitogenesis and transforming activity by C-terminal truncation of the insulin-like growth factor-I receptor. (Collaboration) 1995
152.	Journal Articles	Mutation of a conserved amino acid residue (tryptophan 1173) in the tyrosine kinase domain of the IGF-I receptor abolishes autophosphorylation but does not eliminate biologic function. (Collaboration) 1995
153.	Journal Articles	Insulin and insulin-like growth factor-I receptors similarly stimulate deoxyribonucleic acid synthesis despite differences in cellular protein tyrosine phosphorylation. (Collaboration) 1994
154.	Journal Articles	Role of the carboxyl-terminal domains of the insulin and insulin-like growth factor I receptor function. (Collaboration) 1994
155.	Journal Articles	Essential role of tyrosine residues 1131, 1135 and 1136 of the insulin-like growth factor-I (IGF-I) receptor in IGF-I action. (Collaboration) 1994
156.	Book/Book Chapter	Pathological alterations in various components of the insulin-like growth factor signalling system. (Collaboration) 1994
157.	Journal Articles	Effect of protein nutrition on the messenger RNA content of insulin-like growth factor binding protein-1 in liver and kidney of rats. (Collaboration) 1993
158.	Journal Articles	Paradoxical biological effects of overexpressed insulin-like growth factor-I receptors in Chinese hamster ovary cells. (Collaboration) 1993
159.	Journal Articles	Role of tyrosine kinase activity in signal transduction by the insulin-like growth factor-I (IGF-I) receptor. Characterization of kinase-deficient IGF-I receptors and the action of IGF-I mimetic antibody (alphaIR-3). (Collaboration) 1993
160.	Book/Book Chapter	Insulin-like growth factor receptors - Implications for nervous system function. (Collaboration) 1993
161.	Book/Book Chapter	Divergence of insulin and insulin-like growth factor-I signalling pathways. (Collaboration) 1993

162.	Journal Articles	Effects of dexamethasone on the production of insulin-like growth factor-I and insulin-like growth factor binding proteins in primary cultures of rat hepatocytes. (Collaboration) 1992
163.	Journal Articles	Effect of dietary proteins on insulin-like growth factor-I (IGF-I) messenger ribonucleic acid content in rat liver. (Collaboration) 1992
164.	Journal Articles	Insulin-like growth factors. (Collaboration) 1992
165.	Journal Articles	Distribution of messenger RNAs of insulin-like growth factor (IGF)-binding proteins-1 and -3 between parenchymal and nonparencymal cells in rat liver. (Collaboration) 1991
166.	Journal Articles	Effect of protein deprivation on insulin-like growth factor-binding proteins in rats. (Collaboration) 1991
167.	Journal Articles	The effect of quantity and nutritional quality of dietary proteins on plasma concentration of insulin-like growth factor binding proteins (IGFBP) and the saturability of IGFBP with endogenous IGF-I. (Collaboration) 1991
168.	Journal Articles	Effect of dietary proteins on the plasma immunoreactive insulin and insulin-like growth factor-I/somatomedin C concentration in the rat. (Collaboration) 1990
169.	Journal Articles	Correlation between the urinary excretion of acid soluble peptides, fractional synthesis rate of whole body proteins, and plasma insulin-like growth factor-I/somatomedin C concentration in the rat. (Collaboration) 1990
170.	Journal Articles	Evidence of introduction by molecular cloning of artificial inverted sequence at the 5' terminus of the sense strand of rat insulin-like growth factor-I cDNA. (Collaboration) 1990
171.	Journal Articles	A new cDNA clone relating to larger molecular species of rat insulin-like growth factor-I mRNA. (Collaboration) 1990
172.	Journal Articles	The effects of bestatin, a microbial aminopeptidase inhibitor, on epidermal growth factor- induced DNA synthesis and cell division in primary cultured hepatocytes of rats. (Collaboration) 1989
173.	Journal Articles	Microinjection of endogenous proteins into primary cultures of rat hepatocytes and the degradation of the injected proteins. (Collaboration) 1989
174.	Journal Articles	Degradation of endogenous proteins and internalized asialofetuin in primary cultured hepatocytes of rats. (Collaboration) 1989
175.	Book/Book Chapter	Dietary and hormonal factors affecting the mRNA level of IGF-I in rat liver in vivo and in primary cultures of rat hepatocytes. (Collaboration) 1989
176.	Book/Book Chapter	Microinjection of endogenous and exogenous proteins into primary cultured hepatocytes and degradation of the injected proteins. (Collaboration) 1989
177.	Book/Book Chapter	Mechanism and rate of degradation of short- and long-lived proteins in primary cultured rat hepatocytes. (Collaboration) 1989
178.	Journal Articles	Intermediate peptides of insulin degradation in liver and cultured hepatocytes of rats. (Collaboration) 1988
179.	Journal Articles	Further studies on the nutritional factors affecting the urinary excretion of acid-soluble peptides in rats. (Collaboration) 1988
180.	Journal Articles	Mode of action of bestatin and leupeptin to induce the accumulation of acid soluble peptides in rat liver in vivo and the properties of the accumulated peptides. The important role of bestatin- and leupeptin- sensitive proteases in the protein degradation pathway in vivo. (Collaboration) 1987
181.	Journal Articles	Bestatin, a microbial aminopeptidase inhibitor inhibits DNA synthesis induced by insulin or epidermal growth factor in primary cultured rat hepatocytes. (Collaboration) 1985

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■ Memberships

1.	1990/04～	Japan Society of Nutrition and Food Science
2.	2002/05～2004/05	∟ Trustee
3.	2008/05～2014/05	∟ Trustee
4.	2016/05～2018/05	∟ Trustee
5.	2018/05～2020/05	∟ Vice President
6.	2020/05～2022/05	∟ President
7.	2007～	Japanese Society for Amino Acid Sciences
8.	2013/10～2023/08	Organizing Committee of the 22nd IUNS-International Congress of Nutrition

9. 2013/10～2023/08 ∟ Chair

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■ Prizes,Honors,and Awards

1. 2024/09 The Japanese Soceity for Amino Acid Sciences Award for Distinguished Investigator

2. 2023/09 Fellow Award of Federation of Asian Nutrition Societies

3. 2020/12 Merit Award of Asia Pacific Nutrigenomics & Nutrigenetics Organisation

4. 2015/05 Japan Society of Nutrition and Food Science Award for Excellence in Research

5. 1997/03 The Japan Bioscience, Biotechnology and Agrochemistry Society Award for the Encouragement of Young