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# Liberal Arts

## 0010 Department of Human Science (Humanities)

### Faculty

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Title	Name	Field of Specialization
Professor	HIRAGUCHI Tetsuo	environmental-ethnoarchaeology, peace studies.
Associate Professor	TAKEDA Koichi	Philosophy , History of logic

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### Keywords of Research

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zoo-archaeology, cetacean, dolphin, whale, faunal remains, environmental archaeology, whaling, ancient diet, Palaeolithic period, Jomon period, ethno-archaeology, anthropological education, logic, metaphysics, form, content, predicate, category, deduction, induction, matter, being, substance, definition

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### Outline of Research

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Hiraguchi:Environmental and ethnological archaeology, especially prehistoric whaling, and anthropological education for medical students.

Takeda:It has been asserted that logic and metaphysics are different to each other in Aristotle because his logic is a organon of science. However, his logic is the system where reasonings are dependent on the contents of propositions, while modern formal logic involves abstraction of any content. In Aristotle, Metaphysics studies the order of things which are contents of logic. From this point, I aim to explicate the relation between logic and metaphysics in Aristotle.

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### Publications

#### Originals

0010B001 Koichi Takeda: Analogia in Aristotle, Mem. Lib. Kanazawa Med. Univ., 34:1-15, 2006 (in Japanese) .

#### Others

0010F001 T.Hiraguchi: Pioneers of modern whaling and traditional whale hunts of Kaga and Noto, Reports and Proceedings: the 4th summit of Japanese traditional whaling communities., 133-141, 2006.

## 0030 Department of Human Science (Mathematics)

### Faculty

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Title	Name	Field of Specialization
Associate Professor	MATSUDA Hiroo	Lorentz manifolds, Curves in Euclidean space
Associate Professor	YOSHINO Kenichi	Algebra theory, number theory

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### Keywords of Research

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Bertrand curve, Mannheim curve, isotropy group, harmonic form, class number, ideal class group, cyclotomic field,  
Mannheim curve, Frenet frame, curvature, isotropy group

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### Outline of Research

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Matsuda : We define a generalized Mannheim curve in Euclidean space. And we give characterizations of generalized Mannheim curve and examples of generalized Mannheim curve.

Yoshino : The determination of class number and the ideal class group of the cyclotomic field

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## 0040 Department of Life Science (Natural Science:Physics)

### Faculty

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Title	Name	Field of Specialization
Associate Professor	MATSUDA Kiyotsuna	Study on Physics Education for Medical College
Senior Assistant Professor	NAKAMURA Kiyoshi	Study on Physics Education for Medical College, Study on Room Acoustics

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### Keywords of Research

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physics education, computer simulation, physical experiment, demonstration, elementary particle physics, acoustic environment

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### Outline of Research

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Matsuda: I study physics education for a medical student. 1. A physics curriculum 2. The teaching materials 3. Development of An experimental device 4. A computer support physics learning system  
Nakamura: In order that the student who majors in life science may deepen an understanding of a lecture, and in order to enable independent learning, we are developing the stude support which used a demonstration experiment and intranet.

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### Publications

#### Originals

0040B001 K.Nakamura: The Demonstration Apparatus for Acoustic Impedance Matching, Mem. Lib. Kanazawa Med. Univ., 34:17-20, 2006 (in Japanese) .

## 0050 Department of Life Science (Natural Science:Chemistry)

### Faculty

Title	Name	Field of Specialization
Associate Professor	MIYOSHI Fumihisa	organic synthetic chemistry, solid-state reaction, chemistry education
Research Associate	MAEDA Masayo	Molecular oncology, Metastasis of Cancer Cells

### Keywords of Research

Metastasis, Metastasis Inducing Gene, RhoGDI  $\beta$  (LyGDI/D4GDI/RhoGDI2)

### Outline of Research

Rho guanine nucleotide dissociation inhibitors (RhoGDIs) regulate the activity of Rho family GTPases. Our studies have indicated that RhoGDI  $\beta$  (LyGDI/D4GDI/RhoGDI2) plays a role in cancer metastasis.

Further investigation of the details of RhoGDI  $\beta$ 's role in cancer progression and metastasis is important. It will lead to a better treatment for cancer.

### Publications

#### Originals

- 0050B001 T.Ota, M.Maeda, S.Suto, X.Zhou, M.Murakami, T.Takegami, M.Tatsuka: RhoGDI  $\beta$  lacking the N-terminal regulatory domain suppresses metastasis by promoting anoikis in v-src transformed cells., Clin. Exp. Metastasis., 23:323-334, 2006.

### Presentations at Conference

#### International Conference (Presentations)

- 0050I001 T.Ota, M.Maeda, M.Murakami, T.Takegami, A.Kanda, M.Tatsuka: RhoGDI  $\beta$  lacking the N-terminal regulatory domain suppresses metastasis by promoting anoikis in v-src transformed cells., The 11th International Congress of Metastasis Research Society Jointed with the 15th Annual Meeting of Japanese Association for Metastasis Research, (Hiroshima, '06.09).

## 0060 Department of Life Science (Natural Science: Biology)

### Faculty

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Title	Name	Field of Specialization
Professor	HORI Isao	Development of ascidians
Associate Professor	ASAI Etsuo	Regeneration of planarians

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### Keywords of Research

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planaria, acoel, regeneration, differentiation, ultrastructure, pharynx, sponge, metamorphosis, immunoelectron microscopy, neurosynaps, neurosecretory cell

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### Outline of Research

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It is well known that planarians have a strong power of regeneration. This power depends mainly on a large number of undifferentiated stem cells or neoblasts which distribute through the parenchymal region of intact planarians. I have studied differentiation, proliferation and morphogenesis of these neoblasts by using an electron microscope. Neoblasts are small in size and oval in shape. Their cytoplasm is occupied with free ribosomes and mitochondria. Synthetic organelles are not developed. Most characteristic feature is several chromatoid bodies surrounding the nuclear envelope. Their size and number reduce during cell differentiation. Formation of the chromatoid bodies is inhibited by actinomycin D. These results suggest that chromatoid bodies relate to differentiation of neoblasts. I also studied the process of morphogenesis of muscle layers, gastrodermis and epidermis after decapitation. The data suggest that a kind of neuropeptides and retinoic acid stimulate cell differentiation within the regeneration blastema.

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### Presentations at Conference

#### International Conference (Presentations)

0060I001 I.Hori: Effects of retinoic acid on regeneration of the planarian *Dugesia*, 10th International Symposium on Flatworm Biology, (Innsbruck Austria, '06.07).

## 0070 Department of Human Science (Foreign Languages:English)

### Faculty

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Title	Name	Field of Specialization
Professor	OHTAKI Sachiko	Medical English, Intercultural Communication, Statement analysis
Senior Assistant Professor	KAKIZAKI Kenichi	Contemporary Jewish American Authors' Works
Senior Assistant Professor	CURRY Carla	English education from a viewpoint of music

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### Keywords of Research

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medical research article, schematic analysis, cultural variation, rhetorical variation, low-context communication, high-context communication, contrastive analysis, comparative discourse analysis, cross-cultural differences, conclusion sections, genre analysis, moves analysis, medical encounter, doctor-patient communication, novel, individualism, quest, existentialism, Bildungsroman, humor, irony, narration, suffering, humanity

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### Outline of Research

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Otaki: Achieve the best cross-cultural communication with the medical connection; think that is helped.  
kakizaki: To understand about contemporary American Jewish author and a Nobel laureate, Saul Bellow's idea on the fundamental questions about human existence: "Where are we going? What are we doing here?" To understand his writing technique of novels and his idea on the art.  
C.Curry: My research has focused on using music in the classroom to teach English pronunciation, rhythm, and tone. Students can quickly grasp the main elements of English sound structures when illustrated through chants and songs. I am also interested in how to teach phonics to students who do not use a language represented by a phonetic alphabet. Therefore, I have been studying the various techniques for teaching English phonics to young learners in Japan.

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### Publications

#### Originals

0070B001 K.Kakizaki: The control of distance in the narration in *Seize the Day.*, *Journal of English Language and Literature*, 54:135-151, 2006.



## 0080 Department of Human Science (Foreign Languages:German)

### Faculty

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Title	Name	Field of Specialization
Associate Professor	HARA Akira	Austria literature led by Hofmannsthal
Senior Assistant Professor	KOCHI Munehiro	Interpretationen von Goethes Werken, Begriff von Bildung

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### Keywords of Research

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end of the century, culture, the middle Ages, Modern times, Europe

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### Outline of Research

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Hara : In the German-language area from the end of the 19th century to the beginning of the 20th century, many prominent intellectuals appeared in various fields of culture. Hofmannsthal is also one of such intellectuals in the field of literature. He almost spent the entirety of his life in Vienna, but his influence reaches the whole spiritual world of modern Europe. I analyze his acquaintanceship with intellectuals of that time and extract the essence of the modern culture in the German-language area and furthermore in all Europe.

Kouchi : Das Europa im zweiten Hälfte des 18. Jahrhunderts ist die Wendezeit von der noch einflussreichen mittelalterlichen Denkweise zur neuen modernen, wie sie der Historiker Reinhart Koselleck die „Sattelzeit“ nennt. Wie man sich damals mit dem Wechsel des Paradigmas auseinander setzte, möchte ich im Fall vom deutschen Dichter Goethe untersuchen und in seinen Werken wie Romanen und Dramen zeigen.

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### Publications

#### Originals

0080B001 公地宗弘: Dichtung als Veränderung der Wirklichkeit--Goethes "Torquato Tasso" und der Sturm und Drang--, Goethe-Jahrbuch Japanische Ausgabe, 48:61-81, 2006 (in Japanese) .

#### Others

0080F001 M.Kouchi: Roy Pascal : Die Sturm-und-Drang-Bewegung, Mem. Lib. Kanazawa Med. Univ., 34:43-75, 2006 (in Japanese) .

## 0090 Department of Life Science (Physical Education)

### Faculty

Title	Name	Field of Specialization
Professor	TAMURA Nobuki	OtherGraduate School, Division of Physical Recreation
Associate Professor	YAMASHINA Tadahiko	Muscle Strength, Muscle Strength Training, Thickness of Muscles in the Lower leg
Senior Assistant Professor	UEDA Fumio	Physical strength and a study about the athletic capability, A basketball competition

### Keywords of Research

hygiene of exercise, physical fitness, near-infrared spectroscopy, muscle strength, small group learning, health related training, prescribed exercise, wheel chair basketball, sports medicine, motor ability, working skeletal muscle oxygenation, lower leg, problem learning, effects in iron deficiency, prescription of exercise program

### Outline of Research

Tamura : I do the exercise tolerance test for the people who must attempt the healthy physical fitness. Based on the result, I make the appropriate prescription in the people and guide them in the motion. After two, four, six and twelve month, I investigate the effects of the motion. The prescription is made again again, if the good effect by the motion is not obtained.

Yamashina : To find an effective way to prevent falling ,I have studied the ability to sustain a standing posture and falling mechanism.  
To clarify the association between antigravity muscles and the ability to sustain static and active standing posture.

Ueda : To evaluate the students' physical fitness and healthcondition collectively, I practice the physical fitness and the motor ability test, measure their physique, and understand their condition. Making them as a basis on the guidance of teaching , I try to promote the students physical fitness and health condition.

### Publications

#### Originals

- 0090B001 T.Yamashina: The Association between Antigravity muscles and Balancing Ability, Mem. Lib. Kanazawa Med. Univ., 34:21-33, 2006 (in Japanese) .
- 0090B002 F.Ueda, N.Tamura, T.Yamashina: A Report on the Physical Fitness and Motor Ability of Kanazawa Medical University Students(XXXII), Mem. Lib. Kanazawa Med. Univ., 34:35-42, 2006 (in Japanese) .

# Basic Medicine

## 0100 Department of Molecular and Cell Structural Science (Anatomy I)

### Faculty

Title	Name	Field of Specialization
Professor	HIRAI Keiichi	Medical science of free radical
Senior Assistant Professor	HIGASHI Nobuaki	macroscopic anatomy
Senior Assistant Professor	SHIMADA Hiroki	Medical science of free radical
Senior Assistant Professor	SIMAMURA Eriko	Medical science of free radical
Research Associate	UEDA Tadashi	The injury and regeneration of the cardiovascular and respiratory systems by using cytochemical analysis

### Keywords of Research

anticancer, antioxidant, apoptosis, bcl-2, enzyme cytochemistry, electron microscopy, furanonaphthoquinone, free radical, immunohistochemistry, human macroscopic anatomy, mitochondria, NADH-quinone oxidoreductase, paraquat, reactive oxygen species, superoxide, scavenger, anomaly of muscles and blood vessels, VDAC

### Outline of Research

1. Cytochemical study of the cytotoxicity by reactive oxygen species.
2. Mechanism of mitochondrial damage induced by paraquat and quinones.

### Publications

#### Originals

- 0100B001 (J.Koyama), I.Morita, N.Kobayashi, K.-I.Hirai, E.Simamura, T.Nobukawa, S.Kadota: Antiallergic activity of aqueous extracts and constituents of *Taxus yunnanensis*, *Biol.Pharm.Bull.*, 29:2310-2312, 2006.
- 0100B002 E.Simamura, K.-I.Hirai, H.Shimada, J.Koyama, Y.Niwa, S.Shimizu: Furanonaphthoquinones cause apoptosis of cancer cells by inducing the production of reactive oxygen species by the mitochondrial voltage-dependent anion channel, *Cancer Biol. Ther.*, 5:1523-1529, 2006.
- 0100B003 K.Ikai, E.Simamura, K-I.Hirai: The mechanisms of anti-cancer activity by the natural constituents of *Taxus yunnanensis*, *J. Kanazawa. Med. Univ.*, 31:165-171, 2006 (in Japanese) .
- 0100B004 K.Furuta, H.Shimada, Y-B.Shui: Defense of UV-induced cell death by antioxidant nutrients, *J. Kanazawa. Med. Univ.*, 31:157-164, 2006 (in Japanese) .

#### Others

- 0100F001 (JY.Ueda), S.Awale, Y.Tezuka, E.Simamura, K.-I.Hirai, T.Nobukawa, A.Sato, S.Kadota: Growth inhibitory activity of wood of *Taxus yunnanensis* and its liquid chromatography fourier-transform mass spectrometry analysis, *Planta Med.*, 72:1241-1244, 2006.

## **Presentations at Conference**

### **International Conference (Synposium)**

0100H001 K-I.Hirai, H.Shimada, E.Simamura: Biomedical Mechanisms for Toxication and Detoxication of Paraquat, The 3rd International Forum on Oxidative Stress and Aging, (Nagoya, '06.09).

## 0110 Department of Molecular and Cell Structural Science (Anatomy II)

### Faculty

Title	Name	Field of Specialization
Professor	SHINOHARA Harumichi	gross anatomy,embryology,lymphatic vessels,microscopy.
Associate Professor	SHIMOKAWA Takashi	regeneration of skeletal muscle,development of peripheral nerve.
Senior Assistant Professor	YASUTAKA Satoru	immunocytochemistry,pituitary,cell proliferation,gross anatomy.
Senior Assistant Professor	KOMINAMI Rieko	immunocytochemistry,pituitary,cell proliferation,electron microscopy.

### Keywords of Research

arthrology, osteology, clinical anatomy, development, lymphatic vessels, muscle, innervation, nerve, pituitary, ACTH, LH, GH, ontogenesis, immunocytochemistry, bromodeoxyuridine, proliferation, electron microscopy, rat, PCNA

### Outline of Research

Theme of researches

- 1) Anatomical study of brain white matter by using fiber dissection technique
- 2) Immuno-histochemical study of pituitary gland
- 3) Tissue regeneration in urodele amphibian

### Publications

#### Originals

- 0110B001 K.Fukui, R.Kominami, H.Shinohara, T.Matsumoto: Glucocorticoid induces micro-fat embolism in the rabbit: A scanning electron microscopic study, *J. Orthop. Res.*, 24:675-683, 2006.
- 0110B002 (K.M.Myint), Y.Yamamoto, T.Doi, I.Kato, A.Harashima, H.Yonekura, T. Watanabe, H.Shinohara, M.Takeuchi, K. Tsuneyama, N.Hashimoto, M.Asano, S.Takasawa, H. Okamoto, H.Yamamoto: RAGE control of diabetic nephropathy in a mouse model: effects of RAGE gene disruption and administration of low-molecular weight heparin, *Diabetes*, 55:2510-2522, 2006.

## 0120 Department of Physiology I

### Faculty

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Title	Name	Field of Specialization
Professor	KATO Nobuo	Brain Science
Associate Professor	SUGAI Tokio	Neurophysiology
Senior Assistant Professor	SUGITANI Michio	Neurophysiology

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### Keywords of Research

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central nervous system, neurophysiology, electrophysiology, immunohistochemistry, optical imaging, optical recording, olfactory system, olfactory center, chemical sense, vomeronasal organ, vomeronasal nerve, vomeronasal nerve layer, main olfactory bulb, accessory olfactory bulb, piriform cortex, field potential, propagating signal, horizontal propagation, oscillation, rat, guinea pig, slice preparation, in vitro, voltage-sensitive dye, subdivision, intracellular recording, intracellular staining, GABA, GABA<sub>A</sub> receptor, GABA<sub>B</sub> receptor

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### Outline of Research

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The brain is often regarded as a microcosmos, which contains more than a million neurons. Each neuron, however, is not a mere stardust. A single neuron integrates many inputs thereunto, so as to determine whether the output signal is released or not. Neurons are connected to each other by synapses to build neuron network, which underlies brain function. Our primary research interest is to elucidate, in molecular terms, how one or more neurons are able to regulate neuron excitability and synaptic efficiency. In particular, we are interested in studying in vitro how the versatile intracellular messenger calcium ion mediates a number of signals differentially, thereby achieving adequate regulation of synaptic efficiency and neuron excitability. As another research topic, we are also studying feature detection mechanisms in pheromone-based olfactory sensation by using in vivo preparation.

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### Publications

#### Originals

- 0120B001 H.Yoshimura, M.Honjo, N.Segami, K.Kaneyama, T.Sugai, Y.Mashiyama, N.Onoda: Cyclic AMP-dependent attenuation of oscillatory-activity-induced intercortical strengthening of horizontal pathways between insular and parietal cortices, *Brain Res.*, 1069:86-95, 2006.
- 0120B002 (R.Udagawa), M.Nakano, N.Kato: Blocking L-type calcium channels enhances long-term depression induced by low-frequency stimulation at hippocampal CA1 synapses, *Brain Res.*, 1124:28-36, 2006.
- 0120B003 T.Sugai, H.Yoshimura, N.Kato, N.Onoda: Component-dependent urine responses in the rat accessory olfactory bulb, *Neuroreport.*, 17:1663-1667, 2006.

## 0130 Department of Physiology II

### Faculty

Title	Name	Field of Specialization
Professor	SHIBAMOTO Toshishige	Circulatory Physiology
Associate Professor	KURATA Yasutaka	Cardiac Electrophysiology
Senior Assistant Professor	MIYAMAE Shunichi	Cardiac Electrophysiology
Research Associate	TAKANO Hiromichi	Circulatory Physiology

### Keywords of Research

physiology, hepatic circulation, pulmonary circulation, sympathetic nervous system, isolated perfused liver, circulatory shock, triple vascular occlusion pressure, pulmonary edema, microcirculation, capillary pressure, vascular resistance distribution, pulmonary circulation, triple vascular occlusion pressure, cardiac electrophysiology, ion channels, pacemaker mechanisms, cardiac arrhythmias, biological pacemaker, mathematical modeling, bifurcation analysis, nonlinear dynamics, computer simulation, smooth muscle, vascular electrophysiology, artery, vein

### Outline of Research

Our works widely cover the area of cardiovascular physiology. We are particularly interested in the mechanisms of regulations of hepatic circulation under normal and anaphylactic conditions, and the mechanisms of cardiac automaticity and arrhythmias as well as their regulations. Using liver perfusion system for rats, we recently elucidated the effects of vasoconstrictive lipid mediators such as PAF on the vascular resistance and oxygen consumption, the attenuating effect of NO on anaphylactic hepatic venoconstriction, and the decreased oxygen consumption during hepatic anaphylaxis. We also explored the inhibitory effect of angiotensin II on inward rectifier K<sup>+</sup> currents via AT1 receptors in rat atrial myocytes, and the possible roles of pacemaker currents in robust pacemaking and driving of biological pacemakers.

### Publications

#### Originals

- 0130B001 (K. Sonoyama), H. Ninomiya, O. Igawa, Y. Kaetsu, Y. Furuse, T. Hamada, J. Miake, P. Li, Y. Yamamoto, K. Ogino, A. Yoshida, S. Taniguchi, Y. Kurata, S. Matsuoka, T. Narahashi, G. Shiota, Y. Nozawa, H. Matsubara, M. Horiuchi, Y. Shirayoshi, I. Hisatome: Inhibition of inward rectifier K<sup>+</sup> currents by angiotensin II in rat atrial myocytes: Lack of effects in cells from spontaneous hypertensive rats, *Hypertens. Res.*, 29: 923-934, 2006.
- 0130B002 (E. Mizuta), H. Furuichi, Y. Kazuki, J. Miake, S. Yano, U. Bahrudin, Y. Yamamoto, O. Igawa, C. Shigemasa, K. Hidaka, T. Morisaki, Y. Kurata, H. Ninomiya, M. Kitakaze, Y. Shirayoshi, M. Oshimura, I. Hisatome: Delayed onset of beating and decreased expression of T-type Ca<sup>2+</sup> channel in mouse ES cell-derived cardiocytes carrying human chromosome 21, *Biochem. Biophys. Res. Commun.*, 351:126-132, 2006.
- 0130B003 S. Cui., T. Shibamoto, W. Liu, H. Takano, Y. Kurata: Effects of platelet-activating factor, thromboxane A<sub>2</sub> and leukotriene D<sub>4</sub> on isolated perfused rat liver, *Prostaglandins Other Lipid Mediat.*, 80:35-45, 2006.
- 0130B004 S. Cui., T. Shibamoto, W. Liu, H. Takano, Z. S. Zhao, Y. Kurata: Effects of Hct on L-NAME-induced potentiation of anaphylactic presinusoidal constriction in perfused rat livers, *J. Cardiovasc. Pharmacol.*, 48:827-833, 2006.
- 0130B005 S. Cui., T. Shibamoto, Z. Ruan, H. Takano, W. Liu, Y. Kurata: Oxygen consumption, assessed with the oxygen absorption spectrophotometer, decreases independently of venoconstriction during hepatic anaphylaxis in perfused rat liver, *Shock*, 26:62-68, 2006.

0130B006 T.Shibamoto, T.Ishibashi, T.Shimo, S.Cui, H.Takano, H.Tsuchida, M.Nishio, Y.Kurata: N<sup>G</sup>-nitro-L-arginine methyl ester potentiates anaphylactic venoconstriction in rat perfused livers, Clin. Exp. Pharmacol. Physiol., 33:1073-1077, 2006.

#### Reviews

0130C001 H.Takano, Y.Kurata, T.Shibamoto: Spreading dilatation in small arteries, J. Kanazawa. Med. Univ., 31:127-131, 2006 (in Japanese) .



## 0140 Department of Biochemistry I

### Faculty

Title	Name	Field of Specialization
Professor	DATE Takayasu	Mechanisms of chromosome segregation and DNA repair.
Associate Professor	IWABUCHI Kuniyoshi	Molecular biology, DNA repair, p53-binding proteins
Research Associate	MATSUI Tadashi	Functional analysis of protein kinases
Research Associate	HASHIMOTO Mitsumasa	The function analysis of protein kinase PKU-beta

### Keywords of Research

gene analysis, double-stranded RNA-activated protein kinase (PKR), p53, 53BP1, 53BP2, RNA and DNA binding, PKU- $\beta$  (TLK1), DNA repair, cell cycle, signal transduction

### Outline of Research

PKU-beta/TLK-1 is a nuclear serine/threonine protein kinase, initially found in our laboratory. Recent study shows that it controls multiple aspects of cell cycle, especially in progressions of S phase and mitosis. PKU-beta/TLK deficient cells or its over-expressing cells contain aberrant chromosomes resulting in lethal. Main study in progress is to know how the kinase interacts with other cell cycle-dependent complex and regulates them.

### Publications

#### Originals

- 0140B001 K.Iwabuchi, M.Hashimoto, T.Matsui, T.Kurihara, H.Shimizu, N.Adachi, M.Ishiai, K-I.Yamamoto, H.Tauchi, M.Takata, H.Koyama, T.Date: 53BP1 contributes to survival of cells irradiated with X-ray during G1 without Ku70 or Artemis., *Genes Cells*, 11: 935-948, 2006.
- 0140B002 K.Kawamura, N.Morita, C.Domiki, K.Fujikawa-Yamamoto, M.Hashimoto, K.Iwabuchi, K.Suzuki: Induction of centrosome amplification in p53 siRNA-treated human fibroblast cells by radiation exposure, *Cancer Sci.*, 97:252-258, 2006.

### Presentations at Conference

#### International Conference (Presentations)

- 0140I001 T.Matsui, M.Hashimoto, K.Iwabuchi, T.Date: Short double-stranded RNAs inhibit activation of double-stranded RNA-activated protein kinase (PKR), 20th IUBMB International Congress of Biochemistry and Molecular Biology, (Kyoto, '06.06).
- 0140I002 K.Iwabuchi, T.Matsui, M.Hashimoto, T.Date: A 53BP1-dependent repair pathway contributes to survival of cells irradiated with ionizing radiation during G1, 20th IUBMB International Congress of Biochemistry and Molecular Biology, (Kyoto, '06.06).
- 0140I003 (M.Matsumoto), K.Yaginuma, A.Igarashi, K.Iwabuchi, T.Date, T.Mori, K.Yamashita, M.Inobe, T.Matsunaga: UV-induced phosphorylation of histone H2AX dependent on nucleotide excision repair in quiescent cells., 20th IUBMB International Congress of Biochemistry and Molecular Biology, (Kyoto, '06.06).

0140I004 M.Hashimoto, T.Matsui, T.Hamada, M.Ozaki, K.Iwabuchi, T.Date: Human PKU-  $\beta$  /TLK1 contributes to proper chromosomal segregation and positioning of centrosomes during mitosis, 20th IUBMB International Congress of Biochemistry and Molecular Biology, (Kyoto, '06.06).

## 0150 Department of Biochemistry II

### Faculty

Title	Name	Field of Specialization
Professor	YONEKURA Hideto	Molecular mechanisms of angiogenesis, MicroRNA function, Alternative RNA processing
Associate Professor	YOSHITAKE Yoshino	MicroRNA involved in angiogenesis, Functions of FGF-2 binding protein
Associate Professor(Additional Post)	NAGAO Yosinobu	Spermatogenesis, Effects of endocrine disruptors
Research Associate	TSURUOKA Naoki	Alternative processing of mRNA, Bioactivity of collagen tripeptide

### Keywords of Research

growth factor, fibroblast growth factor, vascular endothelial growth factor, growth factor receptor, VEGF receptor, cytokines, autocrine/paracrine, angiogenesis, neuro-vascular interaction, tumor growth, diabetic vascular complications, endothelial cell, smooth muscle cell, chondrocyte, osteoblast, RNA interference, microRNA, alternative mRNA processing, centrosome, microtubule stabilizing protein, collagen, collagen tripeptide, hydroxyapatite, spermatogenesis, androgen receptor

### Outline of Research

1. Mechanisms of alternative pre-mRNA splicing and 3'-end processing
2. Cellular and molecular mechanisms in angiogenesis
3. Screening and identification of genes and microRNAs involved in neuro-vascular interaction
4. Molecular mechanisms in development of diabetic vascular complications

### Publications

#### Originals

- 0150B001 K.Fujimura, N.Segami, Y.Yoshitake, N.Tsuruoka, K.Kaneyama, J.Sato, S.Kobayashi: Electrophoretic separation of the synovial fluid proteins in patients with temporomandibular joint disorders, *Oral Surg. Oral Med. Oral Pathol. Oral Radiol. Endod.*, 101:463-468, 2006.
- 0150B002 (K.M.Myint), Y.Yamamoto, T.Doi, I.Kato, A.Harashima, H.Yonekura, T. Watanabe, H.Shinohara, M.Takeuchi, K. Tsuneyama, N.Hashimoto, M.Asano, S.Takasawa, H. Okamoto, H.Yamamoto: RAGE control of diabetic nephropathy in a mouse model: effects of RAGE gene disruption and administration of low-molecular weight heparin, *Diabetes*, 55:2510-2522, 2006.

### Presentations at Conference

#### International Conference (Presentations)

- 0150I001 H.Yonekura, H.Li, Y.Yamamoto, K.Ohe, S.Hossain, I.Nozaki, T.Takiya, S.Futo, T.Watanabe, H.Yamamoto: Identification of a new human angiostatic gene by the Antisense Display method - pICln, a regulator of alternative 3'-end processing of VEGF receptor pre-mRNAs., The 20th IUBMB International Congress of Biochemistry and Molecular Biology and 11th FAOBMB Congress, (Kyoto, '06.06), Abstracts, 130, 2006.

## 0160 Department of Pharmacology

### Faculty

Title	Name	Field of Specialization
Professor	NISHIO Matomo	Electrophysiological and pharmacological study of excitable and non-excitable cells, Pharmacology of cardiovascular drugs
Associate Professor	ISHIBASHI Takaharu	Kinetics of NO(nitric oxide)-related compounds in cardiovascular system
Senior Assistant Professor	YOSHIDA Junko	Pharmacology in cardiovascular system, Cancer chemotherapy
Researcher	NISHIZAWA Naoki	Pharmacology of cardiovascular drugs, Kinetics of NO-related compounds in cardiovascular system, Cancer chemotherapy

### Keywords of Research

electropharmacology, electrophysiology, ionic channel, patch clamp, photolysis, excitable membrane, cardiovascular system, ischemic disease, marine toxin, ATP-sensitive K<sup>+</sup> channel, store-operated Ca<sup>2+</sup> channel, intracellular Ca<sup>2+</sup>, coronary circulation, nitric oxide, hemodynamics, nitric oxide-releasing vasodilators, nitrosothiols, signal transduction, anti-tumor drug, proliferation, cell biology

### Outline of Research

- 1 Electrophysiological and pharmacological study on the regulatory mechanisms of excitable and non-excitable cells
- 2 Signaling mechanisms of bioactive substances
- 3 Electropharmacology of the drugs acting on the cardiovascular system
- 4 Pharmacological study of the ischemic cardiomyocytes
- 5 Kinetics of NO(nitric oxide)-related compounds in cardiovascular system

### Publications

#### Originals

- 0160B001 T.Shibamoto, T.Ishibashi, T.Shimo, S.Cui, H.Takano, H.Tsuchida, M.Nishio, Y.Kurata: N<sup>G</sup>-nitro-L-arginine methyl ester potentiates anaphylactic venoconstriction in rat perfused livers, *Clin. Exp. Pharmacol. Physiol.*, 33:1073-1077, 2006.

### Presentations at Conference

#### International Conference (Presentations)

- 0160I001 J.Yoshida, T.Ishibashi, M.Nishio: Antiproliferative effect of amlodipine, a dihydropyridine Ca<sup>2+</sup> channel blocker, on human epidermoid carcinoma A431 cells, 15th World Congress of Pharmacology, (Beijing, China, '06.07), *Acta Pharmacologica Sinica*, (Suppl. 1):65, 2006.
- 0160I002 J.Yoshida, T.Ishibashi, M.Nishio: G1 cell cycle arrest induced by amlodipine, a dihydropyridine Ca<sup>2+</sup> channel blocker, in human epidermoid carcinoma A431 cells, The 18th Japan-Korea Joint Seminar on Pharmacology, (Fukui, '06.09).

## 0170 Department of Oncologic Pathology

### Faculty

Title	Name	Field of Specialization
Professor	TANAKA Takuji	Inhibition of carcinogenesis, Oncologic pathology of digestive organ, Experimental pathology
Professor	SUGIE Shigeyuki	Experimental pathology, Oncologic pathology of digestive organ
Associate Professor	KOHNO Hiroyuki	Experimental pathology, Tumor immunology

### Keywords of Research

cancer chemoprevention, antioxidant, flavonoid, carotenoid, COX-2 inhibitor, organoselenium, intercellular communication, intermediate biomarker, detoxification enzyme, PCNA, BrdU, apoptosis, cytology, hepatocellular carcinoma, Min mice, inflammation

### Outline of Research

Cancer is the result of abnormal genetic control of cell growth that arises from structural alterations in DNA or mutations. Many mutations occur in somatic cells during the lifetime of an individual and some may result in cancer. There is evidence that dietary factors can impede this process. For example, epidemiological studies reveal that the quarter of the population with the lowest dietary intake of fruits and vegetables has roughly twice the cancer risk for most types of cancer compared with the quarter with the highest intake. In recent years the possible chemoprevention of cancer by specific chemical constituents of fruits and vegetables has attracted much attention. Also, several drugs, i.e., COX-2 inhibitors and iNOS inhibitors have been found to effectively inhibit cancer development in animal carcinogenesis models and human clinical studies. Our mission of The Department of Oncologic Pathology is to advance the science and application of cancer prevention through multidisciplinary strategies in research, clinical service, and education using novel animal models and imaging system.

### Publications

#### Originals

- 0170B001 (Y.Mori), K.Tatematsu, A.Koide, S.Sugie, T.Tanaka, H.Mori: Modification by curcumin of mutagenic activation of carcinogenic N-nitrosamines by extrahepatic cytochromes P-450 2B1 and 2E1 in rats, *Cancer Sci.*, 97:896-904, 2006.
- 0170B002 T.Tanaka, H.Kohno, R.Suzuki, K.Hata, S.Sugie, N.Niho, K.Sakano, M.Takahashi, K.Wakabayashi: Dextran sodium sulfate strongly promotes colorectal carcinogenesis in *Apc<sup>Min/+</sup>* mice: Inflammatory stimuli by dextran sodium sulfate results in development of multiple colonic neoplasms, *Int. J. Cancer.*, 118:25-34, 2006.
- 0170B003 (K.Hata), T.Tanaka, H.Kohno, R.Suzuki, S.H.Qiang, T.Kuno, Y.Hirose, A.Hara, H.Mori: Lack of enhancing effects of degraded  $\lambda$ -carrageenan on the development of  $\beta$ -catenin-accumulated crypts in male DBA/2J mice initiated with azoxymethane, *Cancer Lett.*, 238:69-75, 2006.
- 0170B004 (K.Hata), T.Tanaka, H.Kohno, R.Suzuki, S.H.Qiang, Y.Yamada, T.Oyama, T.Kuno, Y.Hirose, A.Hara, H.Mori:  $\beta$ -Catenin-accumulated crypts in the colonic mucosa of juvenile *Apc<sup>Min/+</sup>* mice, *Cancer Lett.*, 239:123-128, 2006.
- 0170B005 R.Suzuki, H.Kohno, S.Sugie, H.Nakagama, T.Tanaka: Strain differences in susceptibility to azoxymethane and dextran sodium sulfate-induced colon carcinogenesis in mice, *Carcinogenesis*, 27:162-169, 2006.
- 0170B006 R.Suzuki, H.Kohno, M.Suzui, N.Yoshimi, H.Tsuda, K.Wakabayashi, T.Tanaka: An animal model for the rapid induction of tongue neoplasms in human c-Ha-ras proto-oncogene transgenic rats by 4-nitroquinoline 1-oxide: its potential use for preclinical chemoprevention studies, *Carcinogenesis*, 27:619-630, 2006.

- 0170B007 H.Kohno, R.Suzuki, M.Curini, F.Epifano, F.Maltese, S.P.Gonzales, T.Tanaka: Dietary administration with prenyloxycoumarins, auraptene and collinin, inhibits colitis-related colon carcinogenesis in mice, *Int. J. Cancer.*, 118:2936-2942, 2006.
- 0170B008 (S.Miyamoto), H.Kohno, R.Suzuki, S.Sugie, A.Murakami, H.Ohigashi, T.Tanaka: Preventive effects of chrysin on the development of azoxymethane-induced colonic aberrant crypt foci in rats, *Oncol. Rep.*, 15:1169-1173, 2006.
- 0170B009 Y.Yasui, M.Hosokawa, H.Kohno, T.Tanaka, K.Miyashita: Growth inhibition and apoptosis induction by all-*trans*-conjugated linolenic acids on human colon cancer cells, *Anticancer Res.*, 26:1855-1860, 2006.
- 0170B010 R.Suzuki, Y.Yasui, H.Kohno, S.Miyamoto, M.Hosokawa, K.Miyashita, T.Tanaka: Catalpa seed oil rich in 9*t*,11*t*,13*c*-conjugated linolenic acid suppresses the development of colonic aberrant crypt foci induced by azoxymethane in rats, *Oncol. Rep.*, 16:989-996, 2006.
- 0170B011 R.Suzuki, H.Kohno, Y.Yasui, K.Hata, S.Sugie, S.Miyamoto, K.Sugawara, T.Sumida, Y.Hirose, T.Tanaka: Diet supplemented with citrus unshiu segment membrane suppresses chemically induced colonic preneoplastic lesions and fatty liver in male *db/db* mice, *Int. J. Cancer.*, 120:252-258, 2006.
- 0170B012 (T.Kawamori), W.Osta, KR.Johnson, BJ.Pettus, J.Bielawski, T.Tanaka, MJ.Wargovich, BS.Reddy, YA.Hannun, LM.Obeid, D.Zhou: Sphingosine kinase 1 is up-regulated in colon carcinogenesis, *FASEB J.*, 386-388, 2006.
- 0170B013 Y.Yasui, M.Hosokawa, H.Kohno, T.Tanaka, K.Miyashita: Troglitazone and 9*cis*,11*trans*,13*trans*-conjugated linolenic acid: Comparison of their antiproliferative and apoptosis-inducing effects on different colon cancer cell lines, *Chemotherapy*, 52:220-225, 2006.
- 0170B014 (M.Ikeda), K.Masumura, K.Matsui, H.Kohno, K.Sakuma, T.Tanaka, T.Nohmi: Chemopreventive Effects of Nobiletin against Genotoxicity Induced by 4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK) in the Lung of gpt delta Transgenic Mice, *Genes and Environment*, 28:84-91, 2006.
- 0170B015 (M.Suzui), T.Tanaka, H.Mori, T.Nakayama, M.Aonahata, N.Yoshimi: Pulmonary hypoplasia and chondrocyte p21<sup>CIP1</sup> expression in patients with lethal short-limbed dwarfism, *Ryuku Med.J.*, 25:41-46, 2006.
- 0170B016 (F.Beppu), M.Hosokawa, L.Tanaka, H.Kohno, T.Tanaka, K.Miyashita: Potent inhibitory effect of *trans*9, *trans*11 isomer of conjugated linoleic acid on the growth of human colon cancer cells, *J. Nutr. Biochem.*, 17:830-836, 2006.

## Reviews

- 0170C001 T.Tanaka, S.Miyamoto, R.Suzuki, Y.Yasui: Chemoprevention of colon carcinogenesis by dietary non-nutritive compounds, *Curr. Topics Nutraceut. Res.*, 4:127-152, 2006.
- 0170C002 S.Sugie, T.Tanaka: Significance of hyperplastic lesions in chronic toxicity studies in rodents, *J. Kanazawa. Med. Univ.*, 31:124-126, 2006 (in Japanese) .

## Presentations at Conference

### International Conference (Symposium)

- 0170H001 H.Kohno, R.Suzuki, S.Miyamoto, T.Sumida, K.Sugawara, S.Sugie, T.Tanaka: Citrus unshiu segment membrane suppresses azoxymethane-induced colonic aberrant crypt foci and  $\beta$ -catenin accumulated crypts in male *db/db* mice, 4th Regional APOCP Conference, Symposium IV-Pathology and Chemoprevention, (Nagoya, '06.01).

### International Conference (Presentations)

- 0170I001 (S.Miyamoto), R.Suzuki, H.Kohno, S.Sugie, T.Tanaka: Dietary auraptene inhibits azoxymethane-induced colonic aberrant crypt foci in female *db/db* mice, 4th Regional APOCP Conference, (Nagoya, '06.01).
- 0170I002 T.Tanaka: Cancer chemoprevention by lactoferrin and its possible mechanisms, 4th Regional APOCP Conference, Lunchtime Seminar, (Nagoya, '06.01).

- 0170I003 (M.Kim), A.Murakami, T.Tanaka, H.Ohigashi: Effects of green tea polyphenols on dextran sulfate sodium-induced colitis in male ICR mice, 97th Annual Meeting of American Association for Cancer Research, (Washington, DC, '06.04).
- 0170I004 (A.Murakami), T.Nishizawa, M.Yasuda, T.Tanaka, N.H.Colburn, H.Ohigashi: Linoleic acid metabolite suppresses skin tumor promotion in mice and induces programmed cell death protein 4 in mouse epidermal JB6 cells, 97th Annual Meeting of American Association for Cancer Research, (Washington, DC, '06.04).
- 0170I005 H.Kohno, R.Suzuki, S.Miyamoto, S.Sugie, M.Curini, F.Epifano, F.Maltese, S.P.Gonzales, T.Tanaka: Suppression of colitis-related mouse colon carcinogenesis by dietary administration with prenyloxycoumarins, auraptene and collinin, 97th Annual Meeting of American Association for Cancer Research, (Washington, DC, '06.04).
- 0170I006 S.Sugie, R.Suzuki, H.Kohono, T.Tanaka, H.Mori: Modifying effect of thiol compounds on diethylnitrosamine (DEN)-phenobarbital (PB) induced rat hepatocarcinogenesis, 97th Annual Meeting of American Association for Cancer Research, (Washington, DC, '06.04).
- 0170I007 T.Tanaka, R.Suzuki, H.Kohno, K.Hata, S.Sugie, S.Miyamoto, K.Sugawara, T.Sumida, Y.Hirose: Diet supplemented with citrus unshiu segment membrane suppresses azoxymethane-induced colonic aberrant crypt foci and beta-catenin accumulated crypts in male db/db mice, 97th Annual Meeting of American Association for Cancer Research, (Washington, DC, '06.04).
- 0170I008 (F.Epifano), M.Curini, S.Genovese, L.Menghini, T.Tanaka: Synthesis and preliminary colon cancer chemoprevention evaluation of a novel prodrug of 4'-geranyloxy-ferulic acid, active principle of *Acronychia baueri* Schott, GA 2006 - International Congress and 54th Annual Meeting of the Society for Medicinal Plant Research, (Helsinki, Finland, '06.08).
- 0170I009 Y.Yasui, H.Kohno, R.Suzuki, S.Miyamoto, S.Sugie, M.Curini, F.Epifano, F.Maltese, S.P.Gonzales, T.Tanaka: Inhibition of colitis-related mouse colon carcinogenesis by dietary administration with prenyloxycoumarins, auraptene and collinin, The Kadota Fund International Forum 2006, (Inuyama, '06.11).
- 0170I010 (M.Yamamoto), N.Ishibashi, T.Tanaka: Prevention of Rat Hepatocarcinogenesis by NIK-333 and Effect of Connexin Expression in liver, International Conference of Physiological and Pathological Importance of Gap Junctions, (Tokyo, '06.11).

## 0180 Department of Pathophysiological and Experimental Pathology

### Faculty

Title	Name	Field of Specialization
Professor	KATSUDA Shogo	Vascular pathology, Pathophysiology of ECM
Professor	UEDA Yoshimichi	Bone and soft tissue tumor, Pulmonary pathology
Professor(Additional Post)	ISHIKAWA Yoshimaro	Histochemistry
Senior Assistant Professor	SATO Katsuaki	Neuropathology
Researcher	SHIMASAKI Miyako	molecular pathology of the lung cancer

### Keywords of Research

atherosclerosis, extracellular matrix, lung carcinoma, bone and soft tissue tumor, metastasis, invasion, apoptosis, diagnostic histopathology, cardiomyopathy, matrix metalloproteinase, bone tumor, molecular genetics, molecular pathology, neuronal death, nitric oxide synthase, angiogenesis, HMGI-C, Fas/Fas ligand, NF  $\kappa$  B

### Outline of Research

1. Study on the pathogenesis of atherosclerosis, particularly from the aspect of extracellular matrix (ECM). The major subjects are: 1) collagens in human atherosclerosis, 2) cellular interactions and growth regulatory molecules, and 3) ECM degradation and matrix metalloproteinases.
2. Study on the functional gene networks involved in the progression of human lung cancer, especially regarding epithelial-mesenchymal transition of cancer cells, in order to establish novel molecular targets for the treatment. We are analyzing gene expression profiling data bioinformatically by means of ITP, one of the largest data-base for functional gene network/pathway analysis.
3. To elucidate mechanisms of neuronal injury by amyloid  $\beta$  protein, presumed to have essential role on Alzheimer's disease, we identify amyloid  $\beta$  protein-binding proteins in neuron by proteome analysis and explore functional disturbances of these proteins.

### Publications

#### Originals

- 0180B001 J. F. Guo, K.Higashi, Y.Ueda, M.Oguchi, T.Takegami, H.Toga, T.Sakuma, H.Yokota, S.Katsuda, H.Tonami, I.Yamamoto: Microvessel density : correlation with  $^{18}\text{F}$ -FDG uptake and prognostic impact in lung adenocarcinomas, *J. Nucl. Med.*, 47:419-425, 2006.
- 0180B002 T.Ichiseki, Y.Ueda, S.Katsuda, K.Kitamura, A.Kaneuji, T.Matsumoto: Oxidative stress by glutathione depletion induces osteonecrosis in rats, *Rheumatology (Oxford)*, 45:287-290, 2006.
- 0180B003 S.Matsui, M.Fu, M.Hayase, S.Katsuda, N.Yamaguchi, K.Teraoka, T.Kurihara, H.Murano, N.Takekoshi: Transfer of immune components from rabbit autoimmune cardiomyopathy into severe combined immunodeficiency (SCID) mice induces cardiomyopathic changes, *Autoimmunity*, 39:121-128., 2006.
- 0180B004 E.Hatano, T.Fujita, Y.Ueda, T.Okuda, S.Katsuda, Y.Okada, T.Matsumoto: Expression of ADAMTS-4 (aggrecanase-1) and possible involvement in regression of lumbar disc herniation, *Spine*, 31:1426-1432, 2006.
- 0180B005 (H.Yoshikawa), K.Sato, S.Edahiro, Y.Furukawa, T.Maruta, K.Iwasa, H.Watanabe, S.Takaoka, Y.Suzuki, M.Takamori, M.Yamada: Elevation of IL-12 p40 and its antibody in myasthenia gravis with thymoma, *J. Neuroimmunol.*, 175:169-175, 2006.



- 0180B006 S.Matsui, L.Larsson, M.Hayase, S.Katsuda, K.Teraoka, T.Kurihara, H.Murano, K.Nisikawa, M.Fu: Specific removal of  $\beta$  1-adrenoceptor autoantibodies by immunoabsorption in rabbits with autoimmune cardiomyopathy improved cardiac structure and function, *J. Mol. Cell. Cardiol.*, 41:78-85, 2006.
- 0180B007 M.Sagawa, K.Higashi, M.Sugita, Y.Ueda, S.Maeda, H.Toga, T.Sakuma: Fluorodeoxyglucose uptake correlates with the growth pattern of small peripheral pulmonary adenocarcinoma, *Surg Today*, 36:230-234, 2006.

### Case Reports

- 0180D001 K.Sato, R.Waseda, Y.Tatsuzawa, H.Fujinaga, T.Wakabayashi, Y.Ueda, S.Katsuda: Composite large cell neuroendocrine carcinoma and adenocarcinoma of the common bile duct, *J. Clin. Pathol.*, 59:105-107, 2006.
- 0180D002 K.Sato, R.Waseda, Y.Tatsuzawa, R.Soma, Y.Ueda, S.Katsuda: Papillary thyroid carcinoma with anaplastic transformation showing a rhabdoid phenotype solely in the cervical lymph node metastasis, *Pathol. Res. Pract.*, 202:55-59, 2006.
- 0180D003 K.Sato, Y.Ueda, A.Sakurai, Y.Ishikawa, S.Kaji, T.Nojima, S.Katsuda: Adenoid cystic carcinoma of the maxillary sinus with gradual histologic transformation to high-grade adenocarcinoma: a comparative report with dedifferentiated carcinoma, *Virchows Arch.*, 448:204-208, 2006.
- 0180D004 H.Shikata, K.Miyazawa, Y.Ueda, T.Kobata, K.Hida, J.Matsubara: A case of synchronous renal cell carcinoma producing granulocyte colony stimulating factor(G-CSF) and abdominal aortic aneurysm, *Jpn. J. Cardiovasc.Surg.*, 15:521-524, 2006.
- 0180D005 K.Sato, Y.Ueda, M.Yokoi, K.Hayashi, T.Kosaka, S.Katsuda: Reactive lymphoid hyperplasia of the liver in a patient with multiple carcinomas: a case report and brief review, *J. Clin. Pathol.*, 59:990-992, 2006.
- 0180D006 M.Sugita, M.Sagawa, Y.Ueda, K.Higashi, T.Sakuma: Localized bronchioloalveolar carcinoma with small foci of active fibroblastic proliferation, *Respiration*, 73:694-697, 2006.
- 0180D007 K.Sato, Y.Ueda, H.Shikata, S.Katsuda: Bronchioloalveolar carcinoma of mixed mucinous and nonmucinous type: Immunohistochemical studies and mutation analysis of the *p53* gene, *Pathol. Res. Pract.*, 202:751-756, 2006.
- 0180D008 K.Sato, H.Murai, Y.Ueda, S.Katsuda: Intrahepatic sarcomatoid cholangiocarcinoma of round cell variant: a case report and immunohistochemical studies, *Virchows Arch.*, 449:585-590, 2006.
- 0180D009 (R.Komoro), K.Kobayashi, M.Shimazaki, K.Sugimori, Y.Koshino, K.Sato, Y.Oda: Right parietal lobe syndrome as a clinical variant of Creutzfeldt-Jakob disease, *Psychogeriatrics*, 6:74-78, 2006.
- 0180D010 K.Sato, M.Takenaka, M.Nakano, T.Terauchi, Y.Ueda, S.Katsuda: A case of mixed mucinous and nonmucinous type bronchioloalveolar carcinoma, *J. Jpn. Soc. Clin. Cytol.*, 45:103-105, 2006 (in Japanese) .
- 0180D011 K.Sato, Y.Uwami, Y.Nishida, K.Tanimoto, Y.Ueda, S.Katsuda: A case of renal collecting duct (Bellini duct) carcinoma appeared in voided urine, *J. Jpn. Soc. Clin. Cytol.*, 45:194-198, 2006 (in Japanese) .
- 0180D012 (H.Tajima), J.Kinoshita, Y.Hayashida, K.Yoshimoto, H.Itoh, U.Fuchizaki, T.Kamata, H.Miyamori, M.Kannno, K.Takeda, Y.Ueda: A case of erythroderma associated with gastric cancer and cecal carcinoma, *The Hokuriku journal of surgery.*, 25:17-19, 2006 (in Japanese) .

### Others

- 0180F001 K.Sato, H.Tachibana, T.Tsuzuki, Y.Ueda, S.Katsuda: Prostatic ductal adenocarcinoma mimicking villous adenoma of the urethra, *Virchows Arch.*, 449:597-599, 2006.

## Presentations at Conference

### International Conference (Presentations)

- 0180I001 T.Sakuma, J.Xu, Z.Wang, S.Maeda, M.Sugita, M.Sagawa, M.Shimazaki, Y.Ueda: Mechanisms responsible for acute pancreatitis-stimulated alveolar fluid clearance capacity in rat lungs, Experimental Biology, (San Francisco, '06.04).
- 0180I002 M.Iguchi, H.Kida, M.Saito, Y.Machida, K.Kojima, Y.Tachi, R.Hatta, K.Nakagawa, K.Tsuchihara, T.Tobe, T.Seki, M.Takahashi, J.Huang, K.Osanai, H.Toga, M.Sagawa, T.Sakuma, Y.Ueda: Clinical evaluation of micropapillary adenocarcinoma of the lung, 11th Congress of the Asian Pacific Society of Respirology, (kyoto, '06.11), Respirology, 11:A251, 2006.

## 0190 Department of Microbiology

### Faculty

Title	Name	Field of Specialization
Professor	OHARA Yoshiro	Neurovirology, Neuroimmunology
Associate Professor	SAITO Mineki	Neurology, Neurovirology
Research Associate	TANIURA Naoko	Neurovirology

### Keywords of Research

Theiler's murine encephalomyelitis virus, central nervous system, demyelination, persistent infection, multiple sclerosis

### Outline of Research

Studies on pathomechanism of virus induced demyelination

### Publications

#### Originals

- 0190B001 M.Takano-Maruyama, Y.Ohara, K.Asakura, T.Okuwa: Theiler's murine encephalomyelitis virus leader protein amino acid residue 57 regulates subgroup-specific virus growth on BHK-21 cells, *J. Virol.*, 80: 12025-12031, 2006.

#### Reviews

- 0190C001 M.Takano-Maruyama, Y.Ohara, K.Asakura, T.Okuwa: Leader (L) and L\* proteins of Theiler's murine encephalomyelitis virus (TMEV) and their regulation of the virus' biological activities, *J. Neuroinflammation.*, 3:19-26, 2006.

### Presentations at Conference

#### International Conference (Key Note Lecture)

- 0190G001 M. Saito: Virus-host interactions and its implication in the development of HAM/TSP, 7th International Symposium on NeuroVirology, (Philadelphia, '06.06).

#### International Conference (Presentations)

- 0190I001 M. Takano-Maruyama, T. Okuwa, K. Asakura, Y. Ohara: Theiler's murine encephalomyelitis virus subgroup-specific growth on BHK-21 cells is regulated by amino acid 57 within the leader protein, 7th International Symposium on NeuroVirology, (Philadelphia, '06.06), *J. NeuroVirology*, 12:80, 2006.
- 0190I002 K. Asakura, Y. Kontani, Y. Ohara: The association of leader protein of Theiler's murine encephalomyelitis virus with clathrin-associated protein AP50, The 8th International Congress of Neuroimmunology, (Nagoya, '06.10).
- 0190I003 T. Okuwa, M. Takano-Maruyama, K. Asakura, H. Murayama, Y. Ohara: Generation of a mutant of Theiler's murine encephalomyelitis virus (TMEV) causing demyelination in the brain of susceptible mice, The 8th International Congress of Neuroimmunology, (Nagoya, '06.10).

0190I004 M.Saito, K.Usuku, H.Nose, A.H.Sabouri, K.Arimura, S.Izumo, M.Osame, Y.Ohara: Virus-host interactions and its implication in the development of HTLV-1-associated myelopathy/tropical spastic paraparesis(HAM/TSP), The 8th International Congress of Neuroimmunology, (Nagoya, '06.10).

## 0200 Department of Fundamental Research for CAM

### Faculty

Title	Name	Field of Specialization
Professor	YAMAGUCHI Nobuo	Developmental immunology, Defense immunity, Tumor immunity, Complementary medicine
Associate Professor	SHIMIZU Shoji	Immunology, Protective immunology, Tumor immunology
Senior Assistant Professor	MATSUNO Hideo	Allergy, Otolaryngology
Research Associate	MATSUBA Shintaro	Complementary medicine, Immunological pharmacology

### Keywords of Research

pregnancy, maternal immunization, offspring, immune suppression, acquired immunodeficiency, immunomodulator, oral immunity, herbal medicine, cytokine

### Outline of Research

Our research is founded on immunology. To date, we have studied fields such as fetomaternal immunity, tumor immunity and infectious immunity. With the graduate school reorganization in 2003, the name of the chair was changed with "Complementary and alternative medicine". Since then, we started the trial which verified alternative medicine of all the countries of world by the immunological parameters. In order to achieve these ends as effectively as possible, we planned the publication of new international journal, Evidence-based Complementary and Alternative Medicine (eCAM). The journal eCAM was published in 2004 and reached vol. 4th at present. In recent years, it has been proven that the neuroendocrine-system adjusts the function of immune system and that there is a bidirectional regulation mechanism in these systems. We examine the effect of hot spring hydrotherapy and walking exercise on number and function of the immunocompetent cells. Hereafter, we aim at the establishment of an assessment of the alternative medicine throughout immunological parameters.

### Publications

#### Originals

- 0200B001 T.Takahashi, Y.Fei, Z.Shi-jie, J.Moriya, H.Sumino, S.Morimoto, N.Yamaguchi, T.Kanda: Beneficial effect of brewers' yeast extract on daily activity in a murine model of chronic fatigue syndrome, eCAM, 3:109-115, 2006.
- 0200B002 S.Matsui, M.Fu, M.Hayase, S.Katsuda, N.Yamaguchi, K.Teraoka, T.Kurihara, H.Murano, N.Takekoshi: Transfer of immune components from rabbit autoimmune cardiomyopathy into severe combined immunodeficiency (SCID) mice induces cardiomyopathic changes, Autoimmunity, 39:121-128., 2006.
- 0200B003 (T.Murayama), N.Yamaguchi, K.Iwamoto, Y.Eizuru: Inhibition of ganciclovir-resistant human cytomegalovirus replication by Kampo (Japanese herbal medicine), Antivir. Chem. Chemother., 17:11-16, 2006.

#### Reviews

- 0200C001 F Yu, T.Takahashi, J.Moriya, K.Kawaura, J.Yamakawa, K.Kusaka, T.Itoh, S.Morimoto, N.Yamaguchi, T.Kanda: Traditional chinese medicine and kampo: a review from the distant past for the future, J. Int. Med. Res., 34:231-239, 2006.

## **Presentations at Conference**

### **International Conference (Symposium)**

- 0200H001 Nobuo Yamaguchi: Aspect of immunological factors for estimating the efficacy of acupuncture and moxibustion, International Symposium on Evidence Based Acupuncture, (Kyoto, '06.11).

## 0210 Department of Medical Zoology

### Faculty

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Title	Name	Field of Specialization
Associate Professor	IKEDA Teruaki	Immunological and biochemical studies of parasitic diseases
Senior Assistant Professor	OIKAWA Yosaburo	diagnosis of parasitic disease, tick-borne disease
Senior Assistant Professor	ICHIKAWA Hidetaka	Immunological study for parasitic diseases

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### Keywords of Research

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parasite, paragonimiasis, fascioliasis, cysticercosis, tick born disease, immunodiagnosis, antigen purification, circulating antigen, excretory/secretory products, IgE antibody, molecular biological diagnosis, cysteine proteinase, Acanthamoeba, metacercaria, excystment, atopic dermatitis, mite, Myobia musculi, Leptotrombidium

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### Outline of Research

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The main subjects of our department are as follows:

1. Study on the invading mechanism of lung flukes into their final hosts.
  2. Epidemiological research of tick-borne diseases in the Noto Peninsula, Ishikawa Prefect.
  3. Development of immunological and molecular biological diagnosis of parasitic diseases.
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### Publications

#### Originals

- 0210B001 T. Ikeda: Effects of L-type  $Ca^{2+}$  channel antagonists on in vitro excystment of *Paragonimus ohirai* metacercariae induced by sodium cholate, *Parasitol. Res.*, 99:336-340, 2006.

## 0220 Department of Pathology and Laboratory Medicine

### Faculty

Title	Name	Field of Specialization
Professor	NOJIMA Takayuki	surgical pathology, molecular pathology, basic science on bone and soft tissue tumors
Senior Assistant Professor	FUKUNAGA Toshiharu	laboratory medicine, standardization of blood gas analysis, pulmonary function test
Research Associate	KUROSE Nozomu	surgical pathology, molecular pathology
Research Associate	KINOSHITA Eriko	surgical pathology, molecular pathology
Research Associate	KAJI Sachiko	surgical pathology, molecular pathology

### Keywords of Research

pathology, surgical pathology, molecular pathology, ultrastructure, cytology, laboratory medicine, standardization of blood gas analysis, pulmonary function test

### Outline of Research

1. Severe patients with chronic obstructive pulmonary diseases (COPD) frequently show expiratory flow limitation (FL) during spontaneous breathing, which is a marker of severely deteriorated pulmonary function and determines the prognosis of this disease. I have developed a new technique to detect FL with a brief interruption of airflow during spontaneous breathing and have been studying for increasing the accuracy of this method.
2. Accuracy assurance of blood gas analysis: The recent blood gas analyzers are small, portable, and do measurements on bedside (POCY: Point of Care Testing). However, it is difficult to maintain the accuracy of blood gas analysis because of the disposable electrodes in this type of equipments. I have been developing a method of accuracy assurance for these equipments with newly developed standard materials for blood gas analysis.

### Publications

#### Originals

- 0220B001 (U.Tateishi), T.Hasegawa, T.Nojima, T.Takegami, Y.Arai: MRI features of extraskelal myxoid chondrosarcoma, *Skeletal Radiol.*, 35:27-33, 2006.

#### Case Reports

- 0220D001 K.Sato, Y.Ueda, A.Sakurai, Y.Ishikawa, S.Kaji, T.Nojima, S.Katsuda: Adenoid cystic carcinoma of the maxillary sinus with gradual histologic transformation to high-grade adenocarcinoma: a comparative report with dedifferentiated carcinoma, *Virchows Arch.*, 448:204-208, 2006.
- 0220D002 T.Akai, K.Yamamoto, T.Iida, H. Iizuka, T.Nojima: Malignant fibrous histiocytoma in the craniocervical junction presenting with severe occipitalgia, *Brain Tumor Pathol.*, 23:101-105, 2006.
- 0220D003 H.Murai, S.Morimoto, I.Ohashi, K.Okaishi, H.Tsuchiya, K.Iwai, T.Nakahashi, Y.Nishimura, M.Okuro, E.Miyauchi, T.Nojima, M.Matsumoto: A ninety-eight-year-old woman with ruptured pancreatic anaplastic mucinous cystadenocarcinoma, *Jpn. j. geriat.*, 43:246-251, 2006 (in Japanese) .



## Presentations at Conference

### International Conference (Presentations)

- 0220I001 J.Huang, K.Kojima, Y.Tachi, T.Fukunaga, K.Tsuchihara, M.Iguchi, T.Tobe, T.Seki, M.Takahashi, K.Osanai, H.Toga: Expiratory flow limitation in the nasopharynx during wakefulness in patients with obstructive sleep apnea, ATS 2006 International Conference, (San Diego, '06.05), Proceeding of the Am.Thoracic Society, 3:A315, 2006.
- 0220I002 T.Nojima: Chondroblastoma -like osteosarcoma, 33rd Annual Meeting of Internattional Skeletal Society, (Vancouver, '06.09).
- 0220I003 T.Fukunaga: Quality assurace for the POCT (Point of Care Testing) in the blood gas analysis using the certified reference materials, The American association for clinical chemistry critical and point-of-care testing division, (Canada, '06.09).
- 0220I004 M.Iguchi, H.Kida, M.Saito, Y.Machida, K.Kojima, Y.Tachi, R.Hatta, K.Nakagawa, K.Tsuchihara, T.Tobe, T.Seki, M.Takahashi, J.Huang, K.Osanai, H.Toga, M.Sagawa, T.Sakuma, Y.Ueda: Clinical evaluation of micropapillary adenocarcinoma of the lung, 11th Congress of the Asian Pacific Society of Respiriology, (kyoto, '06.11), Respiriology, 11:A251, 2006.
- 0220I005 K.Kojima, J.Huang, H.Yamamura, T.Fukunaga, H.Kida, M.Saito, Y.Machida, Y.Tachi, R.Hatta, K.Nakagawa, T.Oikawa, K.Tsuchihara, M.Iguchi, T.Tobe, T.Seki, M.Takahashi, K.Osanai, H.Toga: Compliance of nasopharyngeal wall estimated by posterior rhinomanometry in patients with obstructive sleep apnea : comparison with dynamic CT imaging, 11th Congress of the Asian Pacific Society of Respiriology, (Kyoto, '06.11), Respiriology, 11:A203, 2006.
- 0220I006 J.Huang, K.Kojima, T.Fukunaga, H.Kida, M.Saito, Y.Machida, Y.Tachi, R.Hatta, K.Nakagawa, T.Oikawa, K.Tsuchihara, M.Iguchi, T.Tobe, T.Seki, M.Takahashi, K.Osanai, H.Toga: Influence of upper airway configuration on Impulse oscillometry measurement, 11th Congress of the Asian Pacific Society of Respiriology, (Kyoto, '06.11), Respiriology, 11:A224, 2006.

## 0230 Department of Social and Environmental Medicine

### Faculty

Title	Name	Field of Specialization
Professor	YAMADA Yuichi	Occupational Health, Epidemiology of circulatory and respiratory diseases
Associate Professor	ISHIZAKI Masao	Occupational Health, Job stress
Senior Assistant Professor	NAKATA Minori	Industrial hygiene, Occupational medicine, Musculoskeletal disorders
Senior Assistant Professor	HONDA Ryumon	Environmental health, Statistical analysis, Analytical chemistry
Senior Assistant Professor	NOBORISAKA Yuka	Occupational Health, Job stress

### Keywords of Research

occupation, work-related disease, mental health, cardiovascular disease, non-specific pulmonary disease, musculoskeletal disease, metabolic syndrome, hypertension, job stress, absenteeism, alcohol consumption, cigarette consumption, shift work, work time

### Outline of Research

To clarify the health effects of social environmental factors—mainly occupational factors, and establish appropriate, policies for health promotion

### Publications

#### Originals

- 0230B001 (Y.Suwazono), E.Kobayashi, M.Uetani, K.Miura, Y.Morikawa, M.Ishizaki, T.Kido, H.Nakagawa, K.Nogawa: G-protein  $\beta$  3 subunit gene variant (C825T) is unlikely to have a significant influence on serum total cholesterol level in Japanese workers, *Clin. Exp. Hypertens.*, 28:47–56, 2006.
- 0230B002 (Y.Suwazono), E.Kobayashi, M.Uetani, K.Miura, Y.Morikawa, M.Ishizaki, T.Kido, H.Nakagawa, K.Nogawa: G-protein  $\beta$  3 subunit polymorphism C1429T and low-density lipoprotein receptor-related protein 5 polymorphism A1330V are risk factors for hypercholesterolemia in Japanese males—a prospective study over 5 years, *Metab. Clin. Exp.*, 55:751–757, 2006.
- 0230B003 (M.Sakurai), K.Miura, T.Takamura, T.Ota, M.Ishizaki, Y.Morikawa, T.Kido, Y.Naruse, H.Nakagawa: Gender differences in the association between anthropometric indices of obesity and blood pressure in Japanese, *Hypertens. Res.*, 29:75–80, 2006.
- 0230B004 (Y.Suwazono), E.Kobayashi, M.Uetani, K.Miura, Y.Morikawa, M.Ishizaki, T.Kido, H.Nakagawa, K.Nogawa: Low-density lipoprotein receptor-related protein 5 variant A1330V is a determinant of blood pressure in Japanese males, *Life Sci.*, 78:2475–2479, 2006.
- 0230B005 (Y.Suwazono), E.Kobayashi, M.Uetani, K.Miura, Y.Morikawa, M.Ishizaki, T.Kido, H.Nakagawa, K.Nogawa: G-protein  $\beta$  3 subunit gene variant is unlikely to have a significant influence on serum uric acid level in Japanese workers, *Tohoku J. Exp. Med.*, 209:149–157, 2006.
- 0230B006 (K.Wada), T.Satoh, M.Tsunoda, Y.Aizawa, and the Japan Work Stress and Health Cohort Study Group, M.Ishizaki: Associations of health behaviors on depressive symptoms among employed men in Japan, *Ind Health*, 44:486–492, 2006.

- 0230B007 (M.Uetani), E.Kobayashi, Y.Suwazono, R.Honda, M.Nishijo, H.Nakagawa, T.Kido, K.Nogawa: Tissue cadmium (Cd) concentrations of people living in a Cd polluted area, Japan, *Biometals*, 19:521–525, 2006.
- 0230B008 (Y.Suwazono), E.Kobayashi, M.Uetani, K.Miura, Y.Morikawa, M.Ishizaki, T.Kido, H.Nakagawa, K.Nogawa: G-protein  $\beta$ 3 subunit variant C825T is a risk factor for hypertension in Japanese females – a prospective cohort study over 5 years, *Ann. Hum. Genet.*, 70:767–777, 2006.
- 0230B009 M.Ishizaki, N.Kawakami, R.Honda, H.Nakagawa, Y.Morikawa, Y.Yamada, The Japan Work Stress and Health Cohort Study Group: Psychosocial work characteristics and sickness absence in Japanese employees, *Int. Arch. Occup. Environ. Health.*, 79:640–646, 2006.
- 0230B010 (Y.Suwazono), E.Kobayashi, M.Uetani, K.Miura, Y.Morikawa, M.Ishizaki, T.Kido, H.Nakagawa, K.Nogawa: Low-density lipoprotein receptor-related protein 5 variant Q89R is associated with hypertension in Japanese females, *Blood Press.*, 15:80–87, 2006.
- 0230B011 (Y.Suwazono), E.Kobayashi, M.Uetani, K.Miura, Y.Morikawa, M.Ishizaki, T.Kido, H.Nakagawa, K.Nogawa: The –1438A/G polymorphism in the 5-hydroxytryptamine receptor 2A gene is related to hyperuricemia, increased  $\gamma$ -glutamyl transpeptidase and decreased high-density lipoprotein cholesterol level in the Japanese population: a prospective cohort study over 5 years, *Int. J. Mol. Med.*, 17:77–82, 2006.
- 0230B012 Y.Yamada, T.Imai, M.Ishizaki, R.Honda: ALDH2 and CYP2E1 genotypes, urinary acetaldehyde excretion and the health consequences in moderate alcohol consumers, *J. Hum. Genet.*, 51:104–111, 2006.

## Presentations at Conference

### International Conference (Presentations)

- 0230I001 H.Sasaki, K.Nagai, M.Kojima, Y.Sakamoto, R.Honda, F.Jonasson, K.Sasaki: Cataract in diabetes ; The Reykjavik Eye Study, The Association for Research in Vision and Ophthalmology, (Florida, '06.05).
- 0230I002 J.Qu, H.Sasaki, Y.Sakamoto, M.Kojima, H.Yaguchi, Y.Yamashiro, R.Honda, K.Sasaki: Change in light scattering intensity of crystalline lens over five years in the Japanese population – The Monzen Eye Study –, The Association for Research in Vision and Ophthalmology, (Florida, '06.05).
- 0230I003 K.Sasaki, H.Sasaki, K.Nagai, H.Yaguchi, M.Kojima, Y.Sakamoto, R.Honda, F.Jonasson: Five-Year's light scattering changes in lens layers in diabetics – The Reykjavik Eye Study –, The Association for Research in Vision and Ophthalmology, (Florida, '06.05).
- 0230I004 Y.Yamashiro, J.Qu, J.Tao, Y.Kawakami, M.Kojima, R.Honda, H.Sasaki, K.Sasaki: Characteristics of cataract in eyes with long axial length in a Chinese population, The Association for Research in Vision and Ophthalmology, (Florida, '06.05).
- 0230I005 J.Qu, H.Sasaki, Y.Sakamoto, M.Kojima, H.Yaguchi, Y.Yamashiro, R.Honda, K.Sasaki: Change in light scattering intensity of crystalline lens over five years in the Japanese population – The Monzen Eye Study –, The 6th Asian Cataract Research Conference, (Beijing, '06.06).
- 0230I006 (J.Tao), J.Qu, R.Honda, M.Kojima, Q.Yan, J.Zhang, H.Sasaki, K.Sasaki: Prevalence of three main and six subtype lens opacities in a rural Chinese population, The 6th Asian Cataract Research Conference, (Beijing, '06.06).
- 0230I007 K.Nagai, H.Sasaki, Y.Sakamoto, M.Kojima, K.Sasaki, F.Jonasson, R.Honda: Characteristics of lens opacity in diabetic patients – Reykjavik Eye Study –, The 6th Asian Cataract Research Conference, (Beijing, '06.06).
- 0230I008 S.Yoneyama, K.Miura, S.Sasaki, S.Yoshita, M.Morikawa, Y.Soyama, M.Ishizaki, T.Kido, Y.Naruse, H.Nakagawa: Relationship of dietary intake of fatty acids to serum C-reactive protein in Japanese, 14th International Symposium on Atherosclerosis, (Rome, '06.06), *Atherosclerosis*, 7:290, 2006.
- 0230I009 M.Nishijo, H.Nakagawa, R.Honda: A trial for a global standard health management for Cd pollution, Health risk management for environment and labour, (Tokyo, '06.06), URMPM special conference, 52, 2006.

- 0230I010 M.Ishizaki, Y.Morikawa, H.Nakagawa, R.Honda, N.Kawakami, T.Haratani, F.Kobayashi, S.Arai: Relationship between change of job demand/control and absence from work, 28th International Congress on Occupational Health, (Milan, '06.06), Book of Abstracts, 292, 2006.
- 0230I011 Y.Noborisaka, M.Nakata, N.Kalezic, A.Crenshaw, E.Lyskov, S.Karlsson, P-O.Eriksson: Physiological reactivity and pain during chewing in Whiplash-Associated Disorder (WAD) patients and healthy controls, 84th General Session and Exhibition of the International Association for Dental Research and American Association for Dental Research, (Brisbane, '06.06), 2006 IADR Program Book, 89, 2006.
- 0230I012 (N.Kawakami), T.Haratani, F.Kobayashi, M.Ishizaki, T.Hayashi, O.Fujita, Y.Aizawa, S.Miyazaki, H.Hiro, T.Masumoto, S.Hashimoto, S.Araiki: Job Insecurity and increased risk of stroke in Japanese men: a prospective finding from the jstress study, 28th International Congress on Occupational Health, (Milan, '06.06), Book of Abstracts, 41, 2006.
- 0230I013 M.Nakata, Y.Noborisaka, Y.Nishijima, T.Kato, M.Boocock, N.Ishii, K.A.Ångquist: Evaluation of muscular workload when handling ambulance stretchers, Healthcare Ergonomics and Patient Safety symposium International Ergonomics Association Congress, (Maastricht, '06.07), Program Book, 57, 2006.
- 0230I014 H.Sasaki, R.Honda, M.Kojima, Y.Kawakami, Y.Sakamoto, J.Qu, K.Sasaki: High prevalence of pterygium in the population of tropical area in China, 2006 KMU Workshop on Ocular Changes Induced by Electromagnetic Waves, (Uchinada, '06.11).

## 0240 Department of Epidemiology and Public Health

### Faculty

Title	Name	Field of Specialization
Professor	NAKAGAWA Hideaki	Epidemiology of cardiovascular diseases, occupational medicine, preventive medicine
Associate Professor	MIURA Katsuyuki	Cardiovascular epidemiology, preventive cardiology, clinical epidemiology
Associate Professor	NISHIJO Muneko	Environmental epidemiology, epidemiology of cadmium pollution
Associate Professor	MORIKAWA Yuko	Cardiovascular epidemiology, occupational medicine
Senior Assistant Professor(Additional Post)	NAKANISHI Yumiko	Preventive medicine

### Keywords of Research

epidemiology, public health, hypertension, diabetes mellitus, shift work, nutrition, calcium, stress, smoking, insulin resistance, work-related disease, environmental pollution, cadmium, renal tubular dysfunction, intractable disease, cardiovascular disease, stroke, hyperlipidemia, dietary habits, salt, magnesium, health promotion, alcohol, lipid peroxide, community registry, silicosis, Itai-itai disease, congenital anomaly, medical decision making, dioxin

### Outline of Research

Epidemiology and Prevention of Lifestyle-related Diseases (mainly of Cardiovascular Diseases)  
Environmental Epidemiology  
Epidemiology of Occupation-related Diseases  
Epidemiology of Congenital Anomalies  
Epidemiology of Intractable Diseases  
Clinical Epidemiology

### Publications

#### Originals

- 0240B001 (Y.Suwazono), E.Kobayashi, M.Uetani, K.Miura, Y.Morikawa, M.Ishizaki, T.Kido, H.Nakagawa, K.Nogawa: G-protein  $\beta$  3 subunit gene variant (C825T) is unlikely to have a significant influence on serum total cholesterol level in Japanese workers, *Clin. Exp. Hypertens.*, 28:47-56, 2006.
- 0240B002 (Y.Suwazono), E.Kobayashi, M.Uetani, K.Miura, Y.Morikawa, M.Ishizaki, T.Kido, H.Nakagawa, K.Nogawa: G-protein  $\beta$  3 subunit polymorphism C1429T and low-density lipoprotein receptor-related protein 5 polymorphism A1330V are risk factors for hypercholesterolemia in Japanese males -a prospective study over 5 years, *Metab. Clin. Exp.*, 55:751-757, 2006.
- 0240B003 (Elliott.P), Stamler.J, Dyer.AR, Appel.L, Dennis.B, Kesteloot.H, H.Ueshima, A.Okayama, Chan.Q, Garside.DB, Zhou.B, for the INTERMAP Cooperative Reserch Group, H.Nakagawa, K.Miura: Association between protein intake and blood pressure: the INTERMAP study, *Arch. Intern. Med.*, 166:79-87, 2006.
- 0240B004 (M.Sakurai), K.Miura, T.Takamura, T.Ota, M.Ishizaki, Y.Morikawa, T.Kido, Y.Naruse, H.Nakagawa: Gender differences in the association between anthropometric indices of obesity and blood pressure in Japanese, *Hypertens. Res.*, 29:75-80, 2006.

- 0240B005 (S.Omote), T.Kido, M.Nishijo, H.Nakagawa, Y.Suwazono, E.Kobayashi, N.Nogawa: Urinary type I collagen cross-linked N-telopeptides in inhabitants 18Years after cessation of exposure to cadmium in Japan, *Bull. Environ. Contam. Toxicol.*, 76:187–94, 2006.
- 0240B006 H.Nakagawa, M.Nishijo, Y.Morikawa, K.Miura, K.Tawara, J.Kuriwaki, T.Kido, A.Ikawa, E.Kobayashi, K.Nogawa: Urinary cadmium and mortality among inhabitants of a cadmium-polluted area in Japan, *Environ Res*, 100:323–329, 2006.
- 0240B007 (Y.Suwazono), E.Kobayashi, M.Uetani, K.Miura, Y.Morikawa, M.Ishizaki, T.Kido, H.Nakagawa, K.Nogawa: Low-density lipoprotein receptor-related protein 5 variant A1330V is a determinant of blood pressure in Japanese males, *Life Sci.*, 78:2475–2479, 2006.
- 0240B008 (M.Uetani), E.Kobayashi, Y.Suwazono, M.Nishijo, H.Nakagawa, T.Kido, K.Nogawa: Smoking does not influence cadmium concentrations in blood and urine in relatively high levels of environmental cadmium areas in Japan, *Biol Trace Elem Res*, 110:107–118, 2006.
- 0240B009 (Y.Suwazono), E.Kobayashi, M.Uetani, K.Miura, Y.Morikawa, M.Ishizaki, T.Kido, H.Nakagawa, K.Nogawa: G-protein  $\beta$  3 subunit gene variant is unlikely to have a significant influence on serum uric acid level in Japanese workers, *Tohoku J. Exp. Med.*, 209:149–157, 2006.
- 0240B010 K.Miura, H.Nakagawa, H.Ueshima, A.Okayama, S.Saitoh, JD.Curb, BL.Rodriguez, K.Sakata, N.Okuda, K.Yoshita, J.Stamler, INTERMAP and INTERLIPID Research Groups: Dietary factors related to higher plasma fibrinogen levels of Japanese-americans in hawaii compared with Japanese in Japan, *Arterioscler. Thromb. Vasc. Biol.*, 26:1674–1679, 2006.
- 0240B011 M.Nishijo, Y.Morikawa, H.Nakagawa, K.Tawara, K.Miura, T.Kido, A.Ikawa, E.Kobayashi, K.Nogawa: Causes of death and renal tubular dysfunction in residents exposed to cadmium in the environment, *Occup Environ Med*, 63:545–550, 2006.
- 0240B012 (E.Kobayashi), Y.Suwazono, M.Uetani, T.Inaba, M.Oishi, T.Kido, M.Nishijo, H.Nakagawa, K.Nogawa: Estimation of benchmark dose for renal dysfunction in a cadmium non-polluted area in Japan, *J. Appl. Toxicol.*, 26:351–355, 2006.
- 0240B013 (M.Uetani), E.Kobayashi, Y.Suwazono, R.Honda, M.Nishijo, H.Nakagawa, T.Kido, K.Nogawa: Tissue cadmium (Cd) concentrations of people living in a Cd polluted area, Japan, *Biometals*, 19:521–525, 2006.
- 0240B014 (Y.Fujieda), K.Miura, H.Nakagawa: Walking 10,000 steps per day is effective to improve coronary risk factors among Japanese Middle-Aged Men, *Jpn.J.Phys.Fitness Sports Med.*, 55(Suppl):S37–S42, 2006.
- 0240B015 (Y.Suwazono), E.Kobayashi, M.Uetani, K.Miura, Y.Morikawa, M.Ishizaki, T.Kido, H.Nakagawa, K.Nogawa: G-protein  $\beta$  3 subunit variant C825T is a risk factor for hypertension in Japanese females –a prospective cohort study over 5 years, *Ann. Hum. Genet.*, 70:767–777, 2006.
- 0240B016 M.Ishizaki, N.Kawakami, R.Honda, H.Nakagawa, Y.Morikawa, Y.Yamada, The Japan Work Stress and Health Cohort Study Group: Psychosocial work characteristics and sickness absence in Japanese employees, *Int. Arch. Occup. Environ. Health.*, 79:640–646, 2006.
- 0240B017 (Y.Suwazono), E.Kobayashi, M.Uetani, K.Miura, Y.Morikawa, M.Ishizaki, T.Kido, H.Nakagawa, K.Nogawa: Low-density lipoprotein receptor-related protein 5 variant Q89R is associated with hypertension in Japanese females, *Blood Press.*, 15:80–87, 2006.
- 0240B018 (E.Kobayashi), Y.Suwazono, M.Uetani, T.Kido, M.Nishijo, H.Nakagawa, K.Nogawa: Tolerable level of lifetime cadmium intake estimated as a benchmark dose low, based on excretion of  $\beta_2$ -microglobulin in the cadmium-polluted regions of the Kakehashi River Basin, Japan, *Bull. Environ. Contam. Toxicol.*, 76:8–15, 2006.
- 0240B019 (E.Kobayashi), Y.Suwazono, M.Uetani, T.Inaba, M.Oishi, T.Kido, M.Nishijo, H.Nakagawa, K.Nogawa: Estimation of benchmark dose as the threshold levels of urinary cadmium, based on excretion of total protein,  $\beta_2$ -microglobulin, and N-acetyl- $\beta$ -D-glucosaminidase in cadmium nonpolluted regions in Japan, *Environ Res*, 101:401–406, 2006.
- 0240B020 (Y.Suwazono), E.Kobayashi, M.Uetani, K.Miura, Y.Morikawa, M.Ishizaki, T.Kido, H.Nakagawa, K.Nogawa: The –1438A/G polymorphism in the 5-hydroxytryptamine receptor 2A gene is related to hyperuricemia, increased  $\gamma$ -glutamyl transpeptidase and decreased high-density lipoprotein cholesterol level in the Japanese population: a prospective cohort study over 5 years, *Int. J. Mol. Med.*, 17:77–82, 2006.

- 0240B021 (T.Miyamoto), E.Kobayashi, Y.Suwazono, M.Uetani, M.Nishijo, K.Miura, H.Nakagawa, K.Nogawa: Changes in urinary excretions of cadmium, copper, and zinc in Japanese workers., *Arch. Environ. Occup. Health.*, 61:251–222, 2006.
- 0240B022 M.Nakashima, K.Miura, T.Sakai, M.Bansho, Y.Morikawa, M.Nishijo, Y.Nakanishi, H.Nakagawa: Attitude to smoking and effect of anti-smoking education in elementary school 6th grade students, *Hokuriku Japanese Journal of Public Health.*, 32:73–78, 2006 (in Japanese) .
- 0240B023 K.Miura, H.Myogadani, Y.Kadoya, M.Hayashi, M.Motoya, M.Kuzumaki, M.Yoneda, T.Mitsui, M.Nishijo, Y.Morikawa, Y.Nakanishi, M.Nakashima, H.Nakagawa: Effectiveness of lifestyle modification programs for control of blood pressure: A non-randomized controlled trial in Komatsu, Japan, *Japanese Journal of Public Health.*, 53:533–542, 2006 (in Japanese) .

### Reviews

- 0240C001 (S.Satarug), M.Nishijo, JM.Lasker, RJ.Edwards, MR.Moore: Kidney dysfunction and hypertension:role for cadmium,P450 and heme oxygenases?, *Tohoku J. Exp. Med.*, 208:179–202, 2006.

## Presentations at Conference

### International Conference (Presentations)

- 0240I001 K.Miura, H.Nakagawa, H.Ueshima, A.Okayama, S.Saitoh, JD.Curb, B.Rodriguez, K.Sakata, N.Okuda, K.Yoshita, J.Stamler: Dietary factors related to the plasma fibrinogen difference between Japanese in Japan and Japanese–Americans in Hawaii: the INTERLIPID Study, 46th Annual Conference on Cardiovascular Disease Epidemiology and Prevention, American Heart Association, (Phoenix, '06.03).
- 0240I002 (K.Yoshita), K.Miura, N.Okuda, A.Okayama, S.Saitoh, H.Nakagawa, K.Sakata, S.Archer, P.Elliott, J.Stamler, H.Ueshima, for the INTERMAP Research Group: Effects of dietary supplement use on average total micronutrient intake in middle-aged Japanese: the INTERMAP Study, 46th Annual Conference on Cardiovascular Disease Epidemiology and Prevention, American Heart Association, (Phoenix, '06.03).
- 0240I003 S.Yoneyama, K.Miura, S.Sasaki, S.Yoshita, M.Morikawa, Y.Soyama, M.Ishizaki, T.Kido, Y.Naruse, H.Nakagawa: Relationship of dietary intake of fatty acids to serum C-reactive protein in Japanese, 14th International Symposium on Atherosclerosis, (Rome, '06.06), *Atherosclerosis*, 7:290, 2006.
- 0240I004 M.Nishijo, H.Nakagawa, R.Honda: A trial for a global standard health management for Cd pollution, Health risk management for environment and labour, (Tokyo, '06.06), *URMPM special conference*, 52, 2006.
- 0240I005 M.Ishizaki, Y.Morikawa, H.Nakagawa, R.Honda, N.Kawakami, T.Haratani, F.Kobayashi, S.Arai: Relationship between change of job demand/control and absence from work, 28th International Congress on Occupational Health, (Milan, '06.06), *Book of Abstracts*, 292, 2006.
- 0240I006 M.Nishijo, H.Nakagawa, R.Naganuma, K.Tawara, T.Kido, H.Suzuki: An epidemiological study on health effects by dioxin in vietnam;comparison of contrast acuity between inhabitants of herbicide sprayed and non-sprayed areas, 26th International symposium on halogenated persistent organic pollutants, (Oslo, '06.08), 26th International symposium on halogenated persistent organic pollutants, 2006.
- 0240I007 M.Nishijo, H.Nakagawa, Y.Morikawa, K.Tawara, J.Kuriwaki, E.Hori, H.Nishijo: Effect of 2,3,7,8-thtrachlorodibenzo-p-dioxin exposure during pregnancy on the neurodevelopment of rat off-springs, 26th International symposium on halogenated persistent organic pollutants, (Oslo, '06.08), 26th International symposium on halogenated persistent organic pollutants, 2006.
- 0240I008 M.Nishijo, H.Nakagawa, K.Tawara, T.Kido, R.Naganuma: Areal differences of concentration levels of polychlorinated debenzo-p-dioxins and dibenzofurans in human breast milk from Vietnam and Japan, 26th International symposium on halogenated persistent organic pollutants, (Oslo, '06.08), 26th International symposium on halogenated persistent organic pollutants, 2006.

- 0240I009 K.Miura, H.Nakagawa, T.Kushiro, A.Takahashi, M.Nishinaga, H.Soejima, M.Taguri, R.Matsukawa, A.Harada, Y.Ohashi, H.Ueshima, for the JALS Group.: Comparison of four blood pressure indexes in predicting stroke and myocardial infarction: a meta-analysis of 15 cohort studies in Japan, 21th Scientific Meeting of the International Society of Hypertension, (Fukuoka, '06.10), J Hypertens, 24(suppl 6):S84, 2006.
- 0240I010 (Q.Chan), J.Stamler, K.Miura, B.Zhou, P.Elliott: Relation of type, pattern of alcohol intake to blood pressure: the INTERMAP Study, 21th Scientific Meeting of the International Society of Hypertension, (Fukuoka, '06.10), J Hypertens, 24(suppl 6):S57, 2006.



## 0250 Department of Legal Medicine

### Faculty

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Title	Name	Field of Specialization
Professor	OHYA Isao	

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### Keywords of Research

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personal identification, chemical mediator, elastic recoil, aging, alveolar wall, postmortem changes

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## 0260 Department of Medical Education

### Faculty

Title	Name	Field of Specialization
Professor	YASUDA Yukio	undergraduate clinical teaching, graduate education of physicians, medical education
Associate Professor	AINODA Noriko	medical education, educational assessment, problem-based learning, communication
Associate Professor	HORI Ariyuki	medical education, clinical neurology, clinical sleep medicine, neurophysiology, medical informatics, problem-based learning
Research Associate	KURODA Naohiro	medical informatics, electronic medical record system, medical education

### Keywords of Research

医学教育, 教育評価, 医療コミュニケーション, 臨床医学教育, 初期臨床教育, medical informatics, electronic recording, evidence-based medicine, information technology, computer-aided PBL

### Outline of Research

Improving medical education including a new course of integrated problem-based learning, a medical interview training course before medical practice, management of medical informatics, practical training course using simulators, developing new assessment for students' practice, and providing new educational environment using e-shyllabi.

### Publications

#### Reviews

- 0260C001 (Y.Fujiwara), G.Henningsson, N.Ainoda: A review of Japanese articles on perceptual assessment of speech sounds in individuals with cleft palate, *The Japan journal of logopedics and phoniatrics.*, 47:252-257, 2006.
- 0260C002 A.Hori: Education of subspecialty areas in graduate medical education, *The Autonomic nervous system.*, 43:212-217, 2006 (in Japanese).

### Presentations at Conference

#### International Conference (Presentations)

- 0260I001 H Kakinuma, M Itoh, H Takahashi, A Hori: REPETITIVE AXIAL MYOCLONUS IN A BOY WITH THE MCT8 GENE MUTATION, 10th International Child Neurology Congress, (Montreal, '06.06), *Neuropediatrics*, 26(Suppl.1):S97, 2006.

# Clinical Medicine

## 0300 Department of Cardiovascular Medicine

### Faculty

Title	Name	Field of Specialization
Professor	KAJINAMI Kouji	Atherosclerosis, lipid metabolism
Professor(Additional Post)	MATSUI Shinobu	Heart failure
Associate Professor	TSUGAWA Hiroichi	Arrhythmia, Catheter ablation
Associate Professor	ASAJI Takayoshi	Heart failure
Associate Professor	KITAYAMA Michihiko	Ischemic heart disease, Coronary intervention
Senior Assistant Professor	KAWAI Yasuyuki	Ischemic heart disease, Coronary intervention
Senior Assistant Professor	UENISHI Hiroaki	Ischemic heart disease, Coronary intervention
Research Associate	AKAO Hironobu	Ischemic heart disease, Coronary intervention
Research Associate	TAKEDA Kenji	Molecular Biology
Research Associate	FUJIOKA Nakaba	Arrhythmia, Catheter ablation
Research Associate	SATAKE Osamichi	Cardiomyopathy
Research Associate	SATO Ryoko	Ischemic heart disease, Coronary intervention
Research Doctor	ISHIDA Masaski	Hypertension
Research Doctor	KASENO Kenichi	Arrhythmia, Catheter ablation

### Keywords of Research

heart failure, hypertension, myocardial infarction, myocarditis, autonomic nervous function, atherosclerosis, metabolic syndrome, brain natriuretic peptide, angina pectoris, apoptosis, homocysteine, coronary calcification, valvular disease, autoantibody, myocardial biopsy, cardiac PET, coronary intervention, dilated cardiomyopathy, gene therapy, long QT, myocardial viability, pacemaker, aortitis syndrome, arrhythmia, catheter ablation, renin-angiotensin system, IABP, microvascular angina, gene polymorphism, circadian variation

### Outline of Research

- 1 Exploring risk factors and determinants of responsiveness to treatment or prognosis in cardiovascular diseases
- 2 Development of new therapeutics using the gene expression modification or the stem cell research technique
- 3 Visualization and quantification of the biological signal in cardiovascular system

### Publications

#### Originals

- 0300B001 K.Kawaura: Analysis of thrombocyte counts and atherosclerosis-related markers in pre and post eradication of *Helicobacter pylori* infection with chronic gastritis, J. Kanazawa. Med. Univ., 31:17-22, 2006 (in Japanese) .
- 0300B002 M.Wakasa: 3-Methylglutaconic aciduria (3MGA) in adult patients with left ventricular systolic dysfunction (LVSD), J. Kanazawa. Med. Univ., 31:202-208, 2006 (in Japanese) .
- 0300B003 A.Motoyama: Plasma homocysteine and B vitamin and folate levels in male patients with coronary artery disease, J. Kanazawa. Med. Univ., 31:23-29, 2006 (in Japanese) .

## Presentations at Conference

### International Conference (Presentations)

- 0300I001 H.Akao, M.Kitayama, H.Uenishi, T.Kasuga, M.Asano, R.Sato, A.Motoyama, M.Wakasa, C.Kitaoka, K.Kajinami: Similarity and difference between osteoprotegerin(OPG) and osteopontin(OPN) levels in patients receiving coronary rotational atherectomy(RA), XIV International Symposium on Atherosclerosis, (Rome, '06.06), *ATHEROSCLEROSIS*, 7:283, 2006.
- 0300I002 R.Sato, M.Okabayashi, H.Akao, K.Kajinami: Association between bone mineral density and atherosclerosis in postmenopausal women, XIV International Symposium on Atherosclerosis, (Rome, '06.06), *ATHEROSCLEROSIS*, 7:411, 2006.
- 0300I003 H.Akao: LDL-apheresis may reduce coronary artery disease following percutaneous coronary intervention, 52ND ANNUAL CONFERENCE CHICAGO, (CHICAGO, '06.06).
- 0300I004 S.Matsui: Specific removal of beta 1-adrenoceptor autoantibodies by immunoabsorption in rabbits with autoimmune cardiomyopathy improved cardiac structure and function, World Congress of Cardiology 2006, (Barcelona, '06.09).

## 0310 Department of Respirology (Respiratory Medicine)

### Faculty

Title	Name	Field of Specialization
Professor	TOGA Hirohisa	lung physiology, sleep disordered breathing
Associate Professor	OSANAI Kazuhiro	lung cell and molecular biology , COPD
Senior Assistant Professor	HUANG Jyongsu	lung physiology, sleep disordered breathing
Senior Assistant Professor	TAKAHASHI Masakatsu	clinical respiratory medicine , pulmonary tuberculosis
Research Associate	SEKI Toshimitsu	clinical respiratory medicine
Research Associate	TOBE Takeyasu	clinical respiratory medicine
Research Associate	KASAKURA Hisato	clinical respiratory medicine
Research Associate	IGUCHI Masaharu	clinical respiratory medicine
Research Associate	TSUCHIHARA Katsuma	clinical respiratory medicine
Research Associate	OIKAWA Taku	clinical respiratory medicine , lung cancer
Research Associate	NAKAGAWA Ken	clinical respiratory medicine , lung cancer
Research Doctor	TACHI Yuki	clinical respiratory medicine
Research Doctor	OIKAWA Rieko	clinical respiratory medicine , lung cancer

### Keywords of Research

acute lung injury, cytokine, NO, matrix metalloproteinase, pulmonary alveolar type II cell, sleep apnea syndrome, acoustic reflection technique, upper airway compliance, CPAP, BiPAP, lung cancer, apoptosis, Fas, Fas ligand

### Outline of Research

1. Pathogenesis and therapy of acute lung injury
2. Cell biology of pulmonary alveolar epithelium
3. Pathogenesis and therapy of sleep-disordered breathing
4. Apoptosis of lung cancer cells

### Publications

#### Originals

- 0310B001 T.Sakuma, X.Gu, Z.Wang, S.Maeda, M.Sugita, M.Sagawa, K.Osanai, H.Toga, L.B.Ware, G.Folkesson, M.A.Matthay: Stimulation of alveolar epithelial fluid clearance in human lungs by exogenous epinephrine, *Crit. Care Med.*, 34:676-681, 2006.
- 0310B002 J. F. Guo, K.Higashi, Y.Ueda, M.Oguchi, T.Takegami, H.Toga, T.Sakuma, H.Yokota, S.Katsuda, H.Tonami, I.Yamamoto: Microvessel density : correlation with <sup>18</sup>F-FDG uptake and prognostic impact in lung adenocarcinomas, *J. Nucl. Med.*, 47:419-425, 2006.
- 0310B003 M.Sagawa, K.Higashi, M.Sugita, Y.Ueda, S.Maeda, H.Toga, T.Sakuma: Fluorodeoxyglucose uptake correlates with the growth pattern of small peripheral pulmonary adenocarcinoma, *Surg Today*, 36:230-234, 2006.

- 0310B004 X.Gu, Z.Wang, J.Xu, S.Maeda, M.Sugita, M.Sagawa, H.Toga, T.Sakuma: Denopamine stimulates alveolar fluid clearance via cystic fibrosis transmembrane conductance regulator in rat lungs, *Respirology*, 11:566–571, 2006.
- 0310B005 (H.Kimura), H.Toga, H.Inoue, T.Iwanaga, N.Kohno, S.Hashimoto, Y.Hasegawa, N.Hizawa, M.Yamaya, M.Mishima: A questionnaire report concerning the actual situation of respiratory physicians in Japan, *The journal of the Japanese Respiratory Society.*, 44:312–318, 2006 (in Japanese) .

### Reviews

- 0310C001 K.Osanai, C.Tsuchihara, R.Hatta, T.Oikawa, K.Tsuchihara, M.Iguchi, T.Seki, M.Takahashi, J.Huang, H.Toga: Pulmonary surfactant transport in alveolar type II cells, *Respirology*, 11:S70–S73, 2006.

### Case Reports

- 0310D001 W.Chen, H.Kawahara, M.Takahashi, A.Matsushima, S.Takase: Marked pneumoperitoneum 3 weeks after percutaneous endoscopic gastrostomy, *J. Gastroenterol. Hepatol.*, 21:919–921, 2006.

## Presentations at Conference

### International Conference (Presentations)

- 0310I001 J.Huang, K.Kojima, Y.Tachi, T.Fukunaga, K.Tsuchihara, M.Iguchi, T.Tobe, T.Seki, M.Takahashi, K.Osanai, H.Toga: Expiratory flow limitation in the nasopharynx during wakefulness in patients with obstructive sleep apnea, *ATS 2006 International Conference*, (San Diego, '06.05), *Proceeding of the Am.Thoracic Society*, 3:A315, 2006.
- 0310I002 K.Osanai, R.Hatta, J.Higuchi, T.Miwa, H.Toga: Rab38-deficient rats show the phenotype of Hermansky-Pudlak syndrome, *2006 FASEB Summer Conferences*, (Colorado, '06.08).
- 0310I003 K.Tsuchihara, K.Kojima, R.Hatta, Y.Tachi, T.Oikawa, K.Nakagawa, M.Iguchi, T.Tobe, T.Seki, M.Takahashi, J.Huang, K.Osanai, H.Toga: Effect of sivelestat in patients with acute lung injury, *ERS 2006*, (Germany, '06.09), *ERJ*, 28:347S, 2006.
- 0310I004 R.Hatta, K.Osanai, M.Saito, Y.Machida, H.Kida, K.Kojima, Y.Tachi, K.Nakagawa, T.Oikawa, K.Tsuchihara, M.Iguchi, T.Tobe, T.Seki, M.Takahashi, J.Huang, H.Toga, J.Higuchi: Lung changes caused by genetic disorder of Rab 38 in *lec/crj* rat, *11th Congress of the Asian Pacific Society of Respirology*, (kyoto, '06.11), *Respirology*, 11:A221, 2006.
- 0310I005 K.Osanai, R.Hatta, J.Higuchi, K.Tsuchihara, M.Iguchi, T.Seki, H.Toga, D.R.Volker: Rab 38 mutant mice (chocolate) develop abnormal kinetics of lung surfactant and pulmonary emphysema, *11th Congress of the Asian Pacific Society of Respirology*, (kyoto, '06.11), *Respirology*, 11:A221, 2006.
- 0310I006 M.Iguchi, H.Kida, M.Saito, Y.Machida, K.Kojima, Y.Tachi, R.Hatta, K.Nakagawa, K.Tsuchihara, T.Tobe, T.Seki, M.Takahashi, J.Huang, K.Osanai, H.Toga, M.Sagawa, T.Sakuma, Y.Ueda: Clinical evaluation of micropapillary adenocarcinoma of the lung, *11th Congress of the Asian Pacific Society of Respirology*, (kyoto, '06.11), *Respirology*, 11:A251, 2006.
- 0310I007 H.Toga, K.Tsuchihara, Y.Machida, M.Saito, K.Kojima, R.Hatta, Y.Tachi, T.Oikawa, K.Nakagawa, M.Iguchi, T.Tobe, T.Seki, M.Takahashi, J.Huang, K.Osanai: Role of NO<sub>2</sub> and NO<sub>3</sub> in ventilator-induced lung injury, *11th Congress of the Asian Pacific Society of Respirology*, (Kyoto, '06.11), *Respirology*, 11:A289, 2006.
- 0310I008 K.Kojima, J.Huang, H.Yamamura, T.Fukunaga, H.Kida, M.Saito, Y.Machida, Y.Tachi, R.Hatta, K.Nakagawa, T.Oikawa, K.Tsuchihara, M.Iguchi, T.Tobe, T.Seki, M.Takahashi, K.Osanai, H.Toga: Compliance of nasopharyngeal wall estimated by posterior rhinomanometry in patients with obstructive sleep apnea : comparison with dynamic CT imaging, *11th Congress of the Asian Pacific Society of Respirology*, (Kyoto, '06.11), *Respirology*, 11:A203, 2006.

0310I009 J.Huang, K.Kojima, T.Fukunaga, H.Kida, M.Saito, Y.Machida, Y.Tachi, R.Hatta, K.Nakagawa, T.Oikawa, K.Tsuchihara, M.Iguchi, T.Tobe, T.Seki, M.Takahashi, K.Osanai, H.Toga: Influence of upper airway configuration on Impulse oscillometry measurement, 11th Congress of the Asian Pacific Society of Respiriology, (Kyoto, '06.11), Respiriology, 11:A224, 2006.

## 0320 Department of Gastroenterology

### Faculty

Title	Name	Field of Specialization
Professor	TAKASE Shujiro	Gastroenterology, Hepatology
Associate Professor	KAWAHARA Hiromu	Liver injury and oxidative stress
Research Associate	OKAMURA Hideyuki	Clinical feature and nutritional treatment of liver cirrhosis
Research Associate	OZAKI Kazuaki	Mechanism of portal hypertension in alcoholic liver injury
Research Associate	SHIMADA Masahiko	Clinical feature and pathogenesis of non-alcoholic steatohepatitis
Research Associate	SHIMANAKA Koshi	Clinical feature and treatment of viral hepatitis
Research Associate	SHIROEDA Shoko	Clinical feature and treatment of severe acute pancreatitis
Research Associate	SHIROEDA Hisakazu	Endoscopic therapy of early gastric cancer
Research Associate	TSUCHISHIMA Mutsumi	Anti-viral therapy of viral hepatitis
Research Associate	FUKUMURA Atsushi	Etiology and clinical feature of acute hepatitis
Research Associate	FUKURA Masayuki	Chemotherapy of advanced hepatic cancer
Research Associate	YANO Hirokazu	Clinico-epidemiology of alcoholic liver injury
Research Associate(Additional Post)	MATSUDA Makoto	Endoscopic treatment of esophageal varices
Research Doctor	ISHIZAWA Kiyohiro	Effect of alcohol in pathogenesis of esophageal cancer

### Keywords of Research

alcohol metabolism, alcoholic liver injury, carbohydrate deficient transferrin, cytochrome P4502E1, mitochondrial DNA mutation, hepatic fibrosis, hepatic stellate cell, hepatocyte apoptosis, chemical carcinogenesis, non-alcoholic steatohepatitis, FLS-ob mouse, metabolic syndrome, insuline resistance, leptin, adiponectin, oxidative stress, anti-oxidative enzyme, chronic type C hepatitis, HCV-RNA genotype, interferon therapy, chronic type B hepatitis, anti-viral treatment, treatment of hepatocellular carcinoma, radiofrequency ablation, arterial infusion therapy, early gastric cancer, endoscopic mucosal resection, endoscopic submucosal dissection, inflammatory bowel disease, ischemic colitis

### Outline of Research

- 1 Basic and clinical study of digestive disease
  - ①Genetic polymorphisms of alcoholic oxidizing enzymes in esophageal, pharyngeal and laryngeal cancer
  - ②Treatment for esophageal and gastric varices associated with portal hypertension
  - ③Endoscopic treatment for early cancer of the esophagus, stomach and colon
  - ④Hepatic support system for severe alcoholic hepatitis
  - ⑤Clinical feature and treatment for nonalcoholic steatohepatitis
- 2 Experimental study of alcoholic organ injury
  - ①Pathogenesis and treatment for alcoholic hepatitis
  - ②Pathogenesis of hepatic fibrosis induced by alcohol
  - ③Effect of alcohol on chemical carcinogenesis of the liver
  - ④Pathogenesis for nonalcoholic steatohepatitis



## Publications

### Originals

- 0320B001 (M.Tsutsumi), J.George, K.Ishizawa, A.Fukumura, S.Takase: Effect of chronic dietary ethanol in the promotion of N-nitrosomethylbenzylamine-induced esophageal carcinogenesis in rats, *J. Gastroenterol. Hepatol.*, 21:805-813, 2006.
- 0320B002 M.Yamada, H.Kawahara, S.Takase: Expression of oxidative stress and antioxidant enzymes in experimental mouse model of non-alcoholic steatohepatitis (NASH) developing hepatocellular carcinoma, *J. Kanazawa. Med. Univ.*, 31:223-232, 2006 (in Japanese) .

### Reviews

- 0320C003 M.Shimada, S.Takase: Clinical feature of NASH, *Nipponrinsho.*, 64:1114-1118, 2006 (in Japanese) .
- 0320C004 H.Kawahara, S.Takase: Mutation of mitochondrial DNA in patients with nonalcoholic steatohepatitis, *Nipponrinsho.*, 64:1095-1099, 2006 (in Japanese) .

### Case Reports

- 0320D001 W.Chen, H.Kawahara, M.Takahashi, A.Matsushima, S.Takase: Marked pneumoperitoneum 3 weeks after percutaneous endoscopic gastrostomy, *J. Gastroenterol. Hepatol.*, 21:919-921, 2006.
- 0320D002 (H.Kawabata), T.Sawaki, T.Kawanami, K.Shimoyama, H.Karasawa, T.Fukushima, Y.Masaki, N.Ogawa, Y.Hirose, K.Ozaki, K.Shimanaka, S.Takase, H.Ueno, H.Umehara: Myelodysplastic syndrome complicated with inflammatory intestinal ulcers: significance of trisomy 8, *Intern. Med.*, 45:1309-1314, 2006.

## Presentations at Conference

### International Conference (Presentations)

- 0320I001 M.Shimada, K.Ozaki, M.Fukura, H.Yano, M.Tsuchishima, H.Kawahara, S.Takase: Relationship between oligometric adiponectin and the progression of NASH, 57th American Association for the Study of Liver Disease, (Boston, '06.10), *Hepatology*, 44(Suppl.1):651A-652A, 2006.

## 0330 Department of Nephrology

### Faculty

Title	Name	Field of Specialization
Professor	YOKOYAMA Hitoshi	Clinicopathological study of nephritic and nephrotic syndrome, Clinical study of blood purification, Clinicopathological study of renal transplantation
Professor(Additional Post)	TOMOSUGI Naohisa	Proteomics in clinical nephrology
Associate Professor	ASAKA Mitsuhiro	Cellular immunity in uremia, Clinicopathological study of primary nonfunction and chronic allograft nephropathy in renal transplantation
Senior Assistant Professor	YAMAYA Hideki	Clinical nephrology,
Research Associate	IMAMURA Hidetsugu	Clinical nephrology,
Research Associate	ADACHI Hiroki	Clinical nephrology,
Research Associate	OKUYAMA Hiroshi	Clinical nephrology,
Research Associate	SAITOH Atsushi	Clinical nephrology,
Research Associate	SATO Kazutaka	Clinical nephrology,
Research Associate	CHIKAZAWA Yoshihiro	Clinical nephrology,
Research Associate	NAKAGAWA Masaru	Clinical nephrology,
Research Associate	HAYAMA Satoshi	Clinical nephrology,
Research Associate	MORITA Kyoko	Clinical nephrology,

### Keywords of Research

acquired renal cystic disease, CT scan, renal cell carcinoma, dialysis patient, cytogenetics, chromosome, PCR, karyotype, metalloproteinase, mesangial cell, renal disease, hemodialysis, hematuria, proteinuria, ADPKD, renal transplantation, hyperuricemia, nephrotic syndrome, hyperparathyroidism, bone disease, imaging, RCC, cystic disease, chronic renal failure, survival, IgA, glomerulonephritis, acute renal failure, vitamin D, CAPD

### Outline of Research

We performed the clinicopathological studies of nephritic and nephrotic syndrome, especially in human lupus nephritis. We confirmed the usefulness of ISN/RPS 2003 lupus nephritis classification in the long-term followed cohort analysis. We also analyzed the genetic backgrounds of familial focal segmental glomerulosclerosis (FSGS), and studied the early remission induction therapy of minimal change nephrotic syndrome and FSGS. In the fields of renal transplantation, we analyzed primary non-functioning kidneys and patients with chronic allograft nephropathy. As concern to chronic kidney diseases (CKD), we revealed the CKD population in Ishikawa Prefecture based on the health check program of general population. As the application of proteomics analyses, we studied the uremic toxins and iron metabolism, especially hepcidin, in chronic renal failure of both human and animal models. We applied blood purification and proteomics techniques in some co-ordinal works of various research fields.

## Publications

### Originals

- 0330B001 I.Ishikawa, T.Hayama, S.Yoshida, M.Asaka, N.Tomosugi, M.Watanabe, H.Yamato, M.Sugano: Proteomic analysis of rat plasma by SELDI-TOF-MS under the condition of prevention of progressive adriamycin nephropathy using oral adsorbent AST-120, *Nephron. Physiol.*, 103:125-130, 2006.
- 0330B002 I.Ishikawa, Y.Chikazawa, K.Sato, M.Nakagawa, H.Imamura, S.Hayama, H.Yamaya, M.Asaka, N.Tomosugi, H.Yokoyama, K.Matsumoto: Proteomic analysis of serum, outflow dialysate and adsorbed protein onto dialysis membranes (polysulfone and PMMA) during hemodialysis treatment using SELDI-TOF-MS, *Am. J. Nephrol.*, 26:372-380, 2006.
- 0330B003 N.Tomosugi, H.Kawabata, R.Wakatabe, M.Higuchi, H.Yamaya, H.Umehara, I.Ishikawa: Detection of serum hepcidin in renal failure and inflammation by using ProteinChip System, *Blood*, 108:1381-1387, 2006.
- 0330B004 (J.Yamahana), T.Wada, K.Furuichi, N.Sakai, H.Yokoyama, S.Kaneko: TAK-603, an anti-inflammatory compound, reduces crescentic glomerulonephritis and preserves renal function in WKY rats, *Nephrol. Dial. Transplant.*, 21:2736-2744, 2006.
- 0330B005 (N.Sakai), T.Wada, H.Yokoyama, M.Lipp, S.Ueha, K.Matsushima, S.Kaneko: Secondary lymphoid tissue chemokine (SLC/CCL21)/CCR7 signaling regulates fibrocytes in renal fibrosis, *Proc. Natl. Acad. Sci. U.S.A.*, 103:14098-14103, 2006.
- 0330B006 (T.Wada), H.Azuma, K.Furuichi, N.Sakai, K.Kitagawa, Y.Iwata, K.Matsushima, S.Takahara, H.Yokoyama, S.Kaneko: Reduction in chronic allograft nephropathy by inhibition of p38 mitogen-activated protein kinase, *Am. J. Nephrol.*, 26:319-325, 2006.

### Case Reports

- 0330D001 (Y.Iwata), T.Wada, A.Uchiyama, A.Miwa, I.Nakaya, T.Tohyama, Y.Yamada, T.Kurokawa, T.Yoshida, S.Ohta, H.Yokoyama, H.Iida: Remission of IgA nephropathy after allogeneic peripheral blood stem cell transplantation followed by immunosuppression for acute lymphocytic leukemia, *Intern. Med.*, 45:1291-1295, 2006.
- 0330D002 (K.Ohta), M.Shimizu, A.Nakai, T.Toma, Y.Kasahara, C.Arii, A.Yachie, T.Kawamura, A.Aikawa, A.Hasegawa, K.Sato, H.Yokoyama, I.Ishikawa, S.Koizumi: Rituximab therapy for epstein-barr virus-related chronic hepatitis following living donor kidney transplantation, *Am. J. Kidney Dis.*, 48:986-989, 2006.
- 0330D003 T.Tanaka, M.Moriyama, T.Hayama, K.Suzuki: A case of ABO incompatible kidney transplantation complicated by postoperative massive hemorrhage, *Renaltransplantation•vascular surgery.*, 18:51-55, 2006 (in Japanese) .

## Presentations at Conference

### International Conference (Presentations)

- 0330I001 H.Yokoyama, S.Ohta, T.Wada: Glomerular lesions in preeclampsia can show every histologic variants of focal segmental glomerulosclerosis, *ASN 39th Annual Meeting, (San Diego, '06.11), J.Am.Soc.Nephrol.*, 17:255A, 2006.

## 0340 Department of Endocrinology and Metabolism

### Faculty

Title	Name	Field of Specialization
Professor	KOYA Daisuke	diabetes, hypertension, obesity, aging
Professor	KIGOSHI Toshikazu	intracellular signaling of hormones, aldosterone secretion
Professor	UCHIDA Kenzo	endocrinology, hypertension and adrenal gland, diabetes
Associate Professor	NAKAGAWA Atsushi	pancreatic and gut hormones, pituitary diseases
Senior Assistant Professor	NISHIZAWA Makoto	diabetes, insulin secretion, thyroid diseases
Senior Assistant Professor	ITO Tomohiko	adrenal diseases, diabetes, thyroid diseases
Research Associate	IMAZUMI Noriko	intracellular mechanisms of aldosterone synthesis, diabetes
Research Associate	TSUDA Shinichi	diabetes, hypertension, arteriosclerosis
Research Associate	FURUYA Keisuke	diabetes, thyroid diseases
Research Associate	MAEJIMA Katsuyuki	diabetes, thyroid diseases
Research Associate	KONISHI Kazunori	diabetes, arteriosclerosis
Research Associate	UEHARA Keigo	diabetes
Research Associate(Additional Post)	KITADA Munehiro	diabetes, hypertension
Research Doctor		diabetes, thyroid diseases
Research Doctor	ITO Hiroki	diabetes, thyroid diseases
Research Doctor		diabetes, thyroid diseases

### Keywords of Research

diabetic nephropathy, diabetic retinopathy, diabetic neuropathy, obesity, aldosterone, adrenal zona glomerulosa, transmembrane signaling mechanism, angiotensin, protein kinase C, blood pressure, ambulatory blood pressure monitoring, hypertension, autonomic dysfunction, microalbuminuria, insulin resistance, incretin, entero-insular axis, mitochondrial gene mutation, renin, Type 2 diabetes, artificial pancreas, selective hypoaldosteronism, Basedows disease, thyroid tumor, chronic thyroiditis, glucose metabolism, endothelial function, nitric oxide, hyperlipidemia, antihypertensive therapy

### Outline of Research

We study the relationship between intracellular oxidative stress and an anti-aging substance SIRT1 under diabetic conditions. SIRT1, an enzyme relating to the anti-aging effect of calorie restriction, was shown to inhibit oxidative stress-induced apoptosis of renal mesangial cells in vitro. At present, using diabetic animals, we investigate expressions of SIRT1 under various conditions of oxidative stress and prevention effects of over-expression of SIRT1 against diabetic complications.

Our clinical researches of the relation between the diurnal pattern of blood pressure and cardiovascular events among diabetics are highly evaluated because of the long-term prospective observation. Recently, we have also focused on the metabolic syndrome and blood pressure pattern to find out the participation of adiponectin.

We also study the abdominal vagal afferent signals sensing gut hormones, which are pivotal for postprandial glucose homeostasis.

## Books

- 0340A007 (K. Isshiki), D.Koya, M.Haneda: PPAR- $\gamma$  Ligands and Diabetic Nephropathy, *The Diabetic Kindney*, 289–304, Contemporary Diabetes, USA, 2006.

## Publications

### Originals

- 0340B001 (M.Sakaguchi), M.Isono, K.Isshiki, T.Sugimoto, D.Koya, A.Kashiwagi: Inhibition of mTOR signaling with rapamycin attenuates renal hypertrophy in the early diabetic mice, *Biochem. Biophys. Res. Commun.*, 340:296–301, 2006.
- 0340B002 (M.Omata), H.Taniguchi, D.Koya, K.Kanasaki, R.Sho, Y.Kato, R.Kojima, M.Haneda, N.Inomata: N-acetyl-seryl-aspartyl-lysyl-proline ameliorates the progression of renal dysfunction and fibrosis in WKY rats with established anti-glomerular basement membrane nephritis, *J. Am. Soc. Nephrol.*, 17:674–685, 2006.
- 0340B003 (S.Araki), M.Haneda, T.Sugimoto, M.Isono, K.Isshiki, A.Kashiwagi, D.Koya: Polymorphisms of the protein kinase C- $\beta$  gene (PRKCB1) accelerate kidney disease in type 2 diabetes without overt proteinuria, *Diabetes Care.*, 29:864–868, 2006.
- 0340B004 (M.Tahara), M.Omatsu-Kanbe, M.Sanada, K.Maeda, D.Koya, H.Matsuura, A.Kashiwagi, H.Yasuda: Effect of protein kinase C  $\beta$  inhibitor on Ca<sup>2+</sup> homeostasis in diabetic sensory neurons, *Neuroreport.*, 17:683–688, 2006.
- 0340B005 (K.Kanasaki), M.Haneda, T.Sugimoto, K.Shibuya, M.Isono, K.Isshiki, S.Araki, T.Uzu, A.Kashiwagi, D.Koya: N-acetyl-seryl-aspartyl-lysyl-proline inhibits DNA synthesis in human mesangial cells via up-regulation of cell cycle modulators, *Biochem. Biophys. Res. Commun.*, 342:758–765, 2006.
- 0340B006 (S.Kume), M.Haneda, K.Kanasaki, S.Sugimoto, S-I.Araki, M.Isono, K.Isshiki, T.Uzu, K.Kashiwagi, D.Koya: Silent information regulator 2 (SIRT1) attenuates oxidative stress-induced mesangial cell apoptosis via p53 deacetylation, *Free Radic. Biol. Med.*, 40:2175–2182, 2006.
- 0340B007 (T.Uzu), G.Kimura, A.Yamauchi, M.Kanasaki, K.Isshiki, S.Araki, T.Sugimoto, Y.Nishio, H.Maegawa, D.Koya, M.Haneda, A.Kashiwagi: Enhanced sodium sensitivity and disturbed circadian rhythm of blood pressure in essential hypertension, *J.Hypertens.*, 24:1627–1632, 2006.
- 0340B008 (T.Uzu), T.Harada, M.Sakaguchi, M.Kanasaki, K.Isshiki, S.Araki, T.Sugimoto, D.Koya, M.Haneda, A.Kashiwagi, A.Kashiwagi, A.Yamauchi: Glucocorticoid-induced diabetes mellitus: prevalence and risk factors in primary renal diseases, *Nephron Clin. Pract.*, 105:c54–c57, 2006.
- 0340B009 K.Konishi: Determinant factors of the severity of carotid atherosclerosis in relation to accumulation of visceral fat in type 2 diabetic subjects, *J. Kanazawa. Med. Univ.*, 31:53–61, 2006 (in Japanese) .

## 0350 Department of Hematology and Immunology

### Faculty

Title	Name	Field of Specialization
Professor	UMEHARA Hisanori	Hematology and Immunology
Professor	HIROSE Yuko	Hematology and Immunology, Transfusion Medicine
Associate Professor	FUKUSHIMA Toshihiro	Hematology and Immunology
Senior Assistant Professor	MASAKI Yasufumi	Hematology and Immunology
Senior Assistant Professor	TANAKA Masao	Rheumatology, Immunology
Research Associate	KAWANAMI Takafumi	Hematology and Immunology
Research Associate	JIN Zhexiong	Immunology

### Keywords of Research

autoimmune disorder, Sjögren's syndrome, malignant lymphoma, bone marrow transplantation, monoclonal lymphoproliferation, EB virus and tumorigenesis, stem cell, chemotherapy, leukemia cell line, apoptosis, chemokines, lipid raft, signal transduction, fractalkine, adhesion molecule, rheumatoid arthritis, systemic lupus erythematosus

### Outline of Research

We practice the translational research to develop the new anti-cancer or immunosuppressive drugs through basic research in the fields of Hematology and Immunology.

A) Studies of immunological abnormalities and pathophysiology of autoimmune diseases: 1) Effects of chemokines on vascular injury and Th1 response during chronic inflammation. 2) Function of microdomain (lipid rafts) on lymphocyte activation and its contribution in autoimmune diseases. 3) Analysis of immunological disorder in sphingomyelin knockout mice. 4) Discovery and functional analysis of the new auto-antigens in rheumatoid arthritis. 5) Detection of stem cells in salivary glands and its implication for regenerative medicine.

B) Studies of hematological malignancies and development of anti-cancer drugs. 1) Analysis of EB-virus proteins and their roles in lymphoproliferative disorders. 2) Molecular biological analysis of drug resistance. 3) Roles of sphingomyelin on apoptosis.

### Publications

#### Originals

- 0350B001 N.Tomosugi, H.Kawabata, R.Wakatabe, M.Higuchi, H.Yamaya, H.Umehara, I.Ishikawa: Detection of serum hepcidin in renal failure and inflammation by using ProteinChip System, *Blood*, 108:1381-1387, 2006.
- 0350B002 L.Dong: Identification and characterization of novel human recombinant monoclonal fab fragments specific for EBV viral capsid antigen established by phage display, *J. Kanazawa. Med. Univ.*, 31:172-178, 2006.
- 0350B003 Y.Masaki, K.Itoh, T.Sawaki, H.Karasawa, T.Kawanami, T.Fukushima, H.Kawabata, Y.Wano, Y.Hirose, T.Suzuki, S.Sugai, H.Umehara: Urinary pseudouridine in patients with lymphoma: Comparison with other clinical parameters, *Clin. Chim. Acta*, 371:148-151, 2006.
- 0350B004 (S.Goda), H.Inoue, H.Umehara, M.Miyaji, Y.Nagano, N.Harakawa, H.Imai, P.Lee, JB.MacCarthy, T.Ikeo, N.Domae, Y.Shimizu, J.Ida: Matrix metalloproteinase-1 produced by human CXCL12-stimulated natural killer cells, *Am. J. Pathol.*, 169:445-458, 2006.

- 0350B005 Y.Hirose, Y.Masaki, T.Sawaki, K.Shimoyama, H.Karasawa, H.Kawabata, T.Fukushima, N.Ogawa, Y.Wano, H.Umehara: Association of Epstein–Barr virus with human immunodeficiency virus–negative peripheral T–cell lymphomas in Japan, *Eur. J. Haematol.*, 76:109–118, 2006.
- 0350B006 (H.Yoshifuji), T.Fujii, S.Kobayashi, Y.Imura, Y.Fujita, D.Kawabata, T.Usui, M.Tanaka, S.Nagai, H.Umehara, T.Mimori: Anti–aminoacyl–tRNA synthetase antibodies in clinical course prediction of interstitial lung disease complicated with idiopathic inflammatory myopathies, *Autoimmunity*, 39:233–241, 2006.
- 0350B007 (F.Mizoroki): A phase II study of VEPA/FEPP chemotherapy for aggressive lymphoma in elderly patients:Japan Clinical Oncology Group Study JCOG9203, *Int. J. Hematol.*, 83:55–62, 2006.

#### Reviews

- 0350C001 H.Umehara, M.Tanaka, T.Sawaki, Z.X.Jin, C.R.Huang, L.Dong, T.Kawanami, H.Karasawa, Y.Masaki, T.Fukushima, Y.Hirose, T.Okazaki: Fractalkine in rheumatoid arthritis and allied conditions, *Mod Rheumatol*, 16:124–130, 2006.

#### Case Reports

- 0350D001 K.Shimoyama, N.Ogawa, T.Sawaki, H.Karasawa, Y.Masaki, H.Kawabata, T.Fukushima, Y.Wano, Y.Hirose, H.Umehara: A case of Mikulicz’s disease complicated with interstitial nephritis successfully treated by high–dose corticosteroid, *Mod Rheumatol*, 16:176–182, 2006.
- 0350D002 (H.Kawabata), T.Sawaki, T.Kawanami, K.Shimoyama, H.Karasawa, T.Fukushima, Y.Masaki, N.Ogawa, Y.Hirose, K.Ozaki, K.Shimanaka, S.Takase, H.Ueno, H.Umehara: Myelodysplastic syndrome complicated with inflammatory intestinal ulcers: significance of trisomy 8, *Intern. Med.*, 45:1309–1314, 2006.

### Presentations at Conference

#### International Conference (Presentations)

- 0350I001 K.Kitagawa, K.Hagihara, M.Fukuda, H.Sasaki, K.Shimoyama, K.Fujimoto, N.Ogawa, S.Sugai: Can lissamine green replace rose bengal as the golden standard for Sjogren’s syndrome diagnosis, IX International Symposium on Sjogren’s Syndrome, (Washington DC, ’06.04).
- 0350I002 M.Tanaka, S.Ozaki, X–P.Tong, K.Murakami, D.Kawabata, T.Usui, T.Fujii, H.Umehara, T.Mimori: Cloning and analysis of the receptor molecule for a novel arthritis–modifying factor, follistatin–related protein(FRP)/TSC–36/FSTL1, American College of Rheumatology 70th Annual Scientific Meeting, (Washington, D.C., USA, ’06.11), *Arthritis and Rheumatism*, 2006.

## 0360 Department of Neurology

### Faculty

Title	Name	Field of Specialization
Professor	MATSUI Makoto	Clinical neurology, Neuroimmunology, Clinical Immunology
Associate Professor(Additional Post)	HORI Ariyuki	Medical education, Clinical neurology, Clinical sleep medicine, Neurophysiology, Medical informatics
Senior Assistant Professor	MATSUI Masaru	Neurology, Molecular biology Neuroimmunology, Cognitive Neuroscience
Senior Assistant Professor	NAGAYAMA Shigeni	Clinical neurology, Neuroimmunology
Research Associate	NAGAISHI Akiko	Clinical neurology
Research Associate	NAKANISHI Megumi	Clinical neurology, Neuroimmunology
Research Associate	KAITO Muichi	Clinical neurology
Research Associate	GONDOU Yuichiro	Clinical neurology
Research Associate	ARAYA Shinichi	Neuroimmunology, Clinical Immunology

### Keywords of Research

clinical neurophysiology, epilepsy, apoptosis, cerebrovascular diseases, sleep disorders, neuropathies, molecular genetics, ischemic strokes, autoantibody, neuroimmunology, neuroinfection, experimental autoimmune encephalomyelitis

### Outline of Research

Development of new therapeutic strategies for the neuroimmunological disorders, including multiple sclerosis, by clarifying their etiologies that may be elucidated from meticulous clinical and experimental approaches using experimental animal models, which have been established due to recent advances in basic immunology.

### Publications

#### Originals

0360B001 S.Saiki, K.Sakai, M.Saiki, Y.Kitagawa, T.Umemori, K.Murata, M.Matsui, G.Hirose: Varicose veins associated with CADASIL result from a novel mutation in the *Notch3* gene, *Neurology*, 67:337-339, 2006.

#### Reviews

0360C001 M.Matsui: Clinicopathological aspects of multiple sclerosis, *Advances in neurological sciences.*, 50:571-581, 2006 (in Japanese).

#### Case Reports

0360D001 M.Nakagawa, K.Takeda, M.Yanagihara, H.Ishizaki, T.Mochizuki, T.Iura, S.Kataoka: A case of viper bite that occurred during pregnancy, *Nishinon j. dermatol.*, 68:40-42, 2006 (in Japanese).

0360D002 Y.Gondou, M.Kaito, M.Nakanishi, M.Matsui, M.Matsui, S.Kusunoki: A case of polymyositis associated with acute polyradiculoneuritis, *Peripheral nerve.*, 17:215-218, 2006 (in Japanese).



## Presentations at Conference

### International Conference (Presentations)

- 0360I001 H Kakinuma, M Itoh, H Takahashi, A Hori: REPETITIVE AXIAL MYOCLONUS IN A BOY WITH THE MCT8 GENE MUTATION, 10th International Child Neurology Congress, (Montreal, '06.06), Neuropediatrics, 26(Suppl.1):S97, 2006.
- 0360I002 M.Matsui, S.Araya, H.-Y.Wang, K.Ozawa, E.Nishiguchi, M.Matsui, M.Nakanishi, M.Kaito, Y.Gondo, T.Saida: Percentage of CD4+CD25+cells in cerebrospinal fluid:a reliable immune parameter for disease activity in relapsing-remitting multiple sclerosis, 8th International Society of Neuroimmunology Meeting, (Nagoya, '06.10).
- 0360I003 S.Nagayama, S.Miyake, T.Yamamura: Autoimmune Encephalomyelitis by Transfer of Lymphokine-activated Natural Killer(NK)Cells., 8th International Congress of Neuroimmunology, (Nagoya, '06.10).

## 0370 Department of Geriatric Medicine

### Faculty

Title	Name	Field of Specialization
Professor	MATSUMOTO Masayuki	Geriatrics, Geriatric Cardiology, Geriatric Cerebrovascular Disease Atherosclerosis, Echocardiology
Professor	MORIMOTO Shigeto	Geriatrics, Hypertension, Calcium Metabolism, Dementia, Osteoporosis
Associate Professor	IWAI Kunimitsu	Geriatrics, Circulation, Cell Biology, Cardiology
Senior Assistant Professor	TSUCHIYA Hiroshi	Geriatrics, Circulation, Atherosclerosis
Senior Assistant Professor	NAKASHI Takeshi	Geriatrics, Circulation, Hypertension, Atherosclerosis, Cardiology
Senior Assistant Professor	MIYAUCHI Eiji	Geriatrics, Diabetes Mellitus, Endocrinology
Senior Assistant Professor	MURAI Hiroshi	Geriatrics, Gastroenterology, Dementia, Nutrition
Research Associate	OKURO Masashi	Geriatrics, Circulation, Hypertension, Atherosclerosis
Research Doctor	OHASHI Isao	Geriatrics, Hypertension, Atherosclerosis
Research Doctor	OWARI Masaki	Geriatrics, Hypertension, Atherosclerosis
Research Doctor	KATO Shouzaburo	Geriatrics, Hypertension, Atherosclerosis

### Keywords of Research

elderly, cardiac function, mitral stenosis, dynamic exercise, flow convergence region, dementia, computer, diastolic function, ultrasound, aortic distensibility, adenocarcinoma, stroke volume, carotid arterial stiffness, high frequency ultrasound, hypertension, antihypertensive treatment, color Doppler echocardiography, echocardiography, diabetes mellitus, cardiac disease, carotid artery, atherosclerosis, isolated systolic hypertension, Double cancer, squamous carcinoma, cardiac output, carotid arterial elastic modulus, Hasegawa's dementia scale, eicosapentaenoic acid, nitrendipine

### Outline of Research

The main fields of research of our Department are to elucidate pathogenesis and to develop new treatments for acute diseases in the elderly including pneumonia, stroke, heart failure, and ischemic heart diseases, of hypertension, and of elderly syndromes including dementia, falls/fractures, dysphagia, and bedridden. Besides these, we also research about genetic backgrounds for many elderly diseases using analysis of SNIPs, and about pathogenesis of atherosclerosis using culture of arterial cells.

### Publications

#### Originals

- 0370B001 T.Takahashi, Y.Fei, Z.Shi-jie, J.Moriya, H.Sumino, S.Morimoto, N.Yamaguchi, T.Kanda: Beneficial effect of brewers' yeast extract on daily activity in a murine model of chronic fatigue syndrome, *eCAM*, 3:109-115, 2006.
- 0370B002 T.Takahashi, F.Yu, S.Saegusa, H.Sumino, T.Nakahashi, K.Iwai, S.Morimoto, M.Kurabayashi, T.Kanda: Impaired expression of cardiac adiponectin in leptin-deficient mice with viral myocarditis, *Int. Heart J.*, 47:107-123, 2006.
- 0370B003 F.Yu, T.Takahashi, J.Moriya, K.Kawaura, J.Yamakawa, K.Kusaka, T.Itoh, H.Sumino, S.Morimoto, T.Kanda: Angiotensin- II receptor antagonist alleviates non-alcoholic fatty liver in kky obese mice with type2 diabetes, *J. Int. Med. Res.*, 34:297-302, 2006.

0370B004 M.Okuro, S.Morimoto, T.Takahashi, K.Okaishi, T.Nakahashi, H.Murai, K.Iwai, T.Kanda: Angiotensin I – converting enzyme inhibitor improves reactive hyperemia in elderly hypertensives with arteriosclerosis obliterans, *Hypertens. Res.*, 29:655–663, 2006.

0370B005 S.Morimoto, T.Takahashi, K.Okaishi, T.Nakahashi, K.Nomura, T.Kanda, M.Okuro, H.Murai, T.Nishino, M.Matsumoto: Tilting-induced decrease in systolic blood pressure in bedridden hypertensive elderly inpatients: effects of azelnidipine, *Hypertens. Res.*, 29:943–949, 2006.

#### Reviews

0370C001 F Yu, T.Takahashi, J.Moriya, K.Kawaura, J.Yamakawa, K.Kusaka, T.Itoh, S.Morimoto, N.Yamaguchi, T.Kanda: Traditional chinese medicine and kampo: a review from the distant past for the future, *J. Int. Med. Res.*, 34:231–239, 2006.

#### Case Reports

0370D001 K.Sato, H.Murai, Y.Ueda, S.Katsuda: Intrahepatic sarcomatoid cholangiocarcinoma of round cell variant: a case report and immunohistochemical studies, *Virchows Arch.*, 449:585–590, 2006.

0370D002 H.Murai, S.Morimoto, I.Ohashi, K.Okaishi, H.Tsuchiya, K.Iwai, T.Nakahashi, Y.Nishimura, M.Okuro, E.Miyauchi, T.Nojima, M.Matsumoto: A ninety-eight-year-old woman with ruptured pancreatic anaplastic mucinous cystadenocarcinoma, *Jpn. j. geriat.*, 43:246–251, 2006 (in Japanese) .

#### Others

0370F001 (H.Honda), J.Iwahashi, T.Kashiwagi, Y.Imamura, N.Hamada, T.Anraku, S.Ueda, T.Kanda, T.Takahashi, S.Morimoto: Outbreak of human metapneumovirus infection in elderly inpatients in japan, *J. Am. Geriatr. Soc.*, 54:177–180, 2006.

### Presentations at Conference

#### International Conference (Presentations)

0370I001 S.Morimoto, T.Nakahashi, K.Okaishi, T.Takahashi, K.Nomura, T.Kanda, M.Okuro, H.Murai, T.Nishino, M.Matsumoto: Hypotension induced by tilting of upper body in bedridden hypertensive elderly inpatients. Effects of azelnidipine, The 21st scientific meeting of the international society of hypertension, (Fukuoka, '06.10).

0370I002 S.Morimoto, K.Okaishi, T.Nakahashi, Y.Saitoh, T.Nishino, M.Okuro, H.Murai, K.Nomura, M.Matsumoto: Comparisons of efficacies of olmesartan and telmisartan of elderly hypertensive sub, The 21st scientific meeting of the international society of hypertension, (Fukuoka, '06.10).

0370I003 T.Nakahashi, S.Morimoto, M.Okuro, H.Murai, Y.Nishimura, K.Nomura, H.Tsuchiya, E.Miyauchi, K.Iwai, M.Matsumoto: Relationship between sodium intake and cerebrovascular disease in japan, The 21st scientific meeting of the international society of hypertension, (Fukuoka, '06.10).

0370I004 M.Okuro, S.Morimoto, T.Nakahashi, H.Murai, Y.Nishimura, K.Nomura, H.Tsuchiya, E.Miyauchi, K.Toba, M.Matsumoto: Analysis of clinical factors that affect brain ischemic changes in the elderly, The 21st scientific meeting of the international society of hypertension, (Fukuoka, '06.10).

0370I005 (H.Honda), T.Takahashi, K.Nomura, Y.Imamura, N.Hamada, S.Morimoto: Outbreak of human metapneumovirus infection in elderly inpatients in japan, The 5th east asian conference on infection control and prevention EACIC2006, (Tokyo, '06.11).

0370I006 K.Nomura, H.Honda, T.Nakahashi, S.Morimoto, M.Matsumoto: Seroprevalence of human metapneumovirus in elderly inpatients in a japanese long-term care hospital, The 5th east asian conference on infection control and prevention EACIC2006, (Tokyo, '06.11).

## 0380 Department of Pediatrics

### Faculty

Title	Name	Field of Specialization
Professor	TAKAHASHI Hiroaki	Pediatric endocrinology
Professor	KOH Eikan	Pediatric cardiology
Associate Professor	KAKIMUMA Hiroaki	Pediatric neurology, Pediatric clinical genetics
Senior Assistant Professor	YANASE Takuya	Pediatric hematology, Pediatric nephrology
Research Associate	NAKAMURA Tsuneyuki	Pediatric cardiology
Research Associate	KOBAYASHI Azusa	Neonatology
Research Associate	NAKAMURA Toshimi	Pediatric allergy, Pediatric immunology
Research Associate	ITO Masatsune	Pediatric endocrinology, Pediatric metabolism
Research Associate	YAMAMURA Junichi	Infectious disease in children, Molecular biology
Research Associate	FUJIKI Takuma	Pediatric nephrology
Research Associate	SATO Hitoshi	Infectious disease in children, Molecular biology
Research Doctor	OKADA Naoki	Pediatric hematology, Pediatric oncology

### Keywords of Research

DNA diagnosis, fatty acid oxidation, malignancy in childhood, peripheral blood stem cell, pituitary dwarfism, growth disorders in children, Kawasaki's disease, Adriamycin-induced cardiomyopathy, methylmalonic acidemia, infant botulism, leukemia in children, juvenile diabetes, congenital adrenal hyperplasia, congenital heart disease, arrhythmia in childhood

### Outline of Research

Clinical and basic research are actively going on at pediatric department in the area of Neonatology, Pediatric Infectious Diseases, Pediatric Cardiology, Pediatric Allergy and Immunology, Pediatric Hematology and Oncology, Pediatric Neurology, Psychosomatic Medicine, Pediatric Endocrinology, Inborn Errors of Metabolism.

### Publications

#### Originals

- 0380B001 A Kobayashi, H Kakinuma, H Takahashi: Three novel and six common mutation in 11 patients with methylmalonic acidemia, *Pediatr. Int.*, 48:1-4, 2006.
- 0380B002 (S.Kageyama), DM.Agdamag, ET.Alesna, PS.Leano, AML.Heredia, IP.Abellanosa-Taq-An, LD.Jereza, T.Tanimoto, J.Yamamura, H.Ichimura: A natural inter-genotypic (2b/1b) recombinant of hepatitis C virus in the Philippines, *J. Med. Virol.*, 78:1423-1428, 2006.

#### Reviews

- 0380C001 H.Kakimuma, E.Takase, M.Kita, M.Ozaki, H.Takahashi: Purpose of genetic testing and roles of genetic counseling, *J. Kanazawa. Med. Univ.*, 31:119-123, 2006 (in Japanese) .

## Case Reports

- 0380D001 H.Kakinuma, T.Fujiki, T.Nakamura, H.Takahashi: Valproate hepatotoxicity in a 5-year-old boy with cerebral palsy due to neonatal asphyxia, *Pediatr. Int.*, 48:631-633, 2006.
- 0380D002 T.Akai, K.Yamamoto, H.Iizuka, S.Kawakami, J.Yoshida, H.Kakimuma, H.Yaguchi, T.Ozawa: Syndromic craniosynostosis with elbow joint contracture, *Pediatr Neurosurg*, 42:108-112, 2006.
- 0380D003 E.Koh, A.Kobayashi, M.Matsuda, T.Nakamura, H.Takahashi: Fulminant complications of transient abnormal myelopoiesis in two neonates with down's syndrome, *The journal of the Japan Pediatric Society.*, 110:553-556, 2006 (in Japanese) .
- 0380D004 E.Koh, H.Sato, H.Takahashi: A case of kawasaki disease associated with an aseptic meningitis during intravenous immunoglobulin therapy, *Progress in Medicine*, 26:1537-1540, 2006 (in Japanese) .

## Presentations at Conference

### International Conference (Presentations)

- 0380I001 H Kakinuma, M Itoh, H Takahashi, A Hori: REPETITIVE AXIAL MYOCLONUS IN A BOY WITH THE MCT8 GENE MUTATION, 10th International Child Neurology Congress, (Montreal, '06.06), *Neuropediatrics*, 26(Suppl.1):S97, 2006.
- 0380I002 C.Kitaoka, H.Sato, J.Yamamura, Toshimi Nakamura, Tsuneyuki Nakamura, H.Kakinuma, H.Takahashi: Elevation of brain natriuretic peptide in children with bronchial asthma attack., *The First Asia-Pacific Congress of Pediatric Cardiology and Cardiac Surgery*, (Bangkok, '06.11).
- 0380I003 C.Akita, H.Sato, J.Yamamura, Toshimi Nakamura, Tsuneyuki Nakamura, H.Kakinuma, H.Takahashi: Safety and Efficacy of Dexmedetomidine and low-dose Propofol combination for child cardiac catheterizations., *The First Asia-Pacific Congress of Pediatric Cardiology and Cardiac Surgery*, (Bangkok, '06.11).

## 0390 Department of Neuropsychiatry

### Faculty

Title	Name	Field of Specialization
Professor	JIBIKI Itsuki	Schizophrenia, Epilepsy, Brain imaging, Psychopharmacology, Senile Dementia, Senile Psychosis
Associate Professor	ENOKIDO Fusako	Child Psychiatry, Psychopathology, Psychosomatic Medicine, Liaison Psychiatry
Associate Professor	KUBOTA Takashi	Schizophrenia, Psychopharmacology, Epilepsy
Senior Assistant Professor	IWASAKI Shinzo	Psychophysiology, Neuropsychology, Brain Imaging
Senior Assistant Professor	NAKAGAWA Haruo	Psychophysiology, Psychotherapy, Senile Psychosis
Senior Assistant Professor	WATANABE Kenichiro	Neuropsychology, Neuropharmacology
Senior Assistant Professor	KITAMOTO Fukumi	Psychotherapy, Clinical Psychology
Research Associate	ENATSU Igaku	Senile Psychosis
Research Associate	KAMEHIRO Maya	Psychosomatic Medicine
Research Associate	KAMODA Sachiko	functionalMRI, Epilepsy, Psychosomatic medicine, Chineseherbalmedicine
Research Associate	KOIZUMI Hazuki	Clinical Psychology, Cognitive-behavioral therapy
Research Associate	KOIWA Daisuke	Brain imaging, Schizophrenia
Research Associate	NANNO Hisatoshi	Schizophrenia
Research Associate	HIROYASU Kiwamu	Molecular Psychiatry, Schizophrenia, Epilepsy
Research Associate	ISHIKAWA Akira	Schizophrenia, Psychopharmacology

### Keywords of Research

aged patients, age of onset, agrammatism, amitriptyline, amnesic syndrome, amnesia, amnesias, amoxapline, an interdict, anorexia nervosa, anxiety, aphasic subtypes, apperceptive and associative forms, associated societies, astrocytoma, attention deficit hyperactivity disorder(ADHD), acute reactive psychosis, aging

### Outline of Research

1. Study on regional identification of brain language areas by functional MRI—application for surgical therapy of epilepsy
2. Study on action mechanisms of antipsychotic drugs by regional cerebral blood flow measurement using SPECT
3. Study on action mechanisms of antipsychotic drugs by neurotransmitter measurement using microdialysis in animal experiments
4. Neuropsychological study on dementia or disturbance of high neuronal function such as aphasia
5. Clinical study on psychiatric disturbance in epilepsy
6. Study on cognitive-behavioural therapy for obsessive compulsive disorder
7. Study on music therapy for dementia

### Publications

#### Originals

- 0390B001 A.Ishikawa: Increase of dopamine level in rabbit brain during clozapine-induced potentiation of excitatory synaptic transmission, J. Kanazawa. Med. Univ., 31:30-41, 2006 (in Japanese).

- 0390B002 T.Kawamura: Effects of olanzapine and aripiprazole on excitatory synaptic transmission, and dopamine and serotonin levels in the hippocampal dentate gyrus in the rabbit, J. Kanazawa. Med. Univ., 31:249–262, 2006 (in Japanese) .

#### Case Reports

- 0390D003 F.Enokido, T.Kubota, H.Nakagawa, K.Watanabe, M.Kamehiro, M.Ohara, I.Jibiki, M.Noda: Concepts and diagnoses among neurasthenia, chronic fatigue syndrome (CFS) and depression: study of three cases with similar symptoms, Japanese Society of Psychosomatic Medicine., 46:897–905, 2006 (in Japanese) .

### Presentations at Conference

#### International Conference (Presentations)

- 0390I001 F.Enokido: Symptomatology of AD/HD considered from qualitative aspects of obsessive–compulsive and autistic behaviours., 17th world Congress of the International Association of Child and Adolescent Psychiatry and Allied Professions, (Melbourne Australia, '06.09).
- 0390I002 T.Kawamura, T.Kubota, A.Ishikawa, I.Jibiki: Effects of aripiprazole on dopamine and 5-HT function in rabbit brain, 19th ECNP CONGRESS, (Paris, '06.09).
- 0390I003 K.Hiroyasu, S.Kamoda, I.Jibiki: A case of DLB in which perospirone improved the symptoms of visual hallucinations, The 6th Annual Meeting of International College of Geriatric Psychoneuropharmacology(ICGP), (Hiroshima, '06.10), The 6th Annual Meeting of International College of Geriatric Psychoneuropharmacology(ICGP), 115, 2006.
- 0390I004 K.Hiroyasu, I.Jibiki: Expression of Voltage–Gated Potassium Ion Channel Gene KCNQ3in Mouse Thymus, 6th Asian &Oceanian Epilepsy Congress, (Malaysia, '06.11), 6th Asian &Oceanian Epilepsy Congress, 36, 2006.
- 0390I005 S.Kamoda, S.Iwasaki, I.Jibiki: Functional MRI Study on Memory Lateralisation in Normal Subject and Patients with Partial Epilepsy, 6th AOCE–KUALA LUMPUR 2006, (Malaysia, '06.11), 6th Asian &Oceanian Epilepsy Congress, 44, 2006.

## 0400 Department of Diagnostic and Therapeutic Radiology

### Faculty

Title	Name	Field of Specialization
Professor	TONAMI Hisao	Head and Neck Radiology, MRI Diagnosis
Professor	HIGASHI Kotaro	Oncologic Nuclear Medicine
Associate Professor	MATOBA Munetaka	Interventional Radiology, Diagnostic Imaging
Senior Assistant Professor	OGUCHI Manabu	Radiation Therapy, Nuclear Medicine
Senior Assistant Professor	TANIGUCHI Mitsuru	Cardiac Nuclear Medicine
Senior Assistant Professor	YOKOTA Hajime	Gastrointestinal Radiology, MR Spectroscopy
Senior Assistant Professor(Additional Post)	KUGINUKI Yasuaki	Diagnostic Imaging
Research Associate	ARISAKA Yukiko	Nuclear Medicine
Research Associate	OTA Kiyotaka	Radiation Therapy
Research Associate	NISHIKAWA Takahiro	Nuclear Medicine, Diagnostic Imaging
Research Associate(Additional Post)	YABUNO Yoshinori	Diagnostic Imaging

### Keywords of Research

MRI, MRS, CT, US, IVR, radiotherapy, RI, PET, BAL, lung cancer, perfusion, diffusion, FDG, MTC, radiosurgery, brachitherapy, PEI, Sjögren, radiation, MRA, MRCP, color doppler, bone mineral, biopsy, RN, upper GI, TAE, metallic stent, contrast medium

### Outline of Research

1. Assessment of Tumor Microperfusion and Therapeutic Effect Influencing by Radiotherapy, Chemotherapy and Transarterial Embolization using MD-CT, MRI and MRS.
2. Assessment of Tumor Proliferative Potential and Malignant Grade using MRS, SPECT and PET.
3. Biological Study of Radiation Injury of Tumor and Normal Tissue after Stereotactic Radiosurgery by 3-D Radiotherapy Planning System.
4. Study of Inhibiting Neointimal Proliferation after Angioplasty by  $^{192}\text{Ir}$  Intraarterial Irradiation.

### Publications

#### Originals

- 0400B001 J. F. Guo, K.Higashi, Y.Ueda, M.Oguchi, T.Takegami, H.Toga, T.Sakuma, H.Yokota, S.Katsuda, H.Tonami, I.Yamamoto: Microvessel density : correlation with  $^{18}\text{F}$ -FDG uptake and prognostic impact in lung adenocarcinomas, J. Nucl. Med., 47:419-425, 2006.
- 0400B002 J.Guo: Tumor angiogenesis in lung adenocarcinomas : Correlation with FDG uptake and prognosis, J. Kanazawa. Med. Univ., 31:10-16, 2006.
- 0400B003 M.Sagawa, K.Higashi, M.Sugita, Y.Ueda, S.Maeda, H.Toga, T.Sakuma: Fluorodeoxyglucose uptake correlates with the growth pattern of small peripheral pulmonary adenocarcinoma, Surg Today, 36:230-234, 2006.



- 0400B004 T.Takahashi: FDG uptake within the primary tumor, HRCT findings and serum level of CEA as predictors of recurrence in patients with surgically resected lung adenocarcinoma smaller than 3 cm, J. Kanazawa. Med. Univ., 31:185-193, 2006 (in Japanese) .
- 0400B005 K.Kai: Experimental study of radiation-induced lung injury after unilateral high single-dose irradiation, J. Kanazawa. Med. Univ., 31:424-248, 2006 (in Japanese) .
- 0400B006 M.Matoba, T.Kondou, T.Nishikawa, Y.Kuginuki, H.Yokota, K.Higashi, H.Tonami: Efficacy of high iodine concentration contrast medium with saline pushing in hepatic CT in patients with chronic liver disease; comparison of high doses-standard contrast medium concentration, Jpn. j. clin. Radiol., 51:1851-1856, 2006 (in Japanese) .

#### **Case Reports**

- 0400D001 K.Kusaka, T.Itoh, K.Kawaura, J.Moriya, J.Yamakawa, T.Takahashi, M.Oguchi, H.Tonami, I.Yamamoto, T.Kanda: Advanced oesophageal carcinoma in an 84-year-old treated with chemoradiotherapy, J. Int. Med. Res., 34:437-440, 2006.
- 0400D002 Z.Wang, X.Jin, Y.Machida, H.Aikawa, M.Sagawa, K.Higashi, H.Saito, T.Kosaka, S.Takashima, T.Sakuma: Colorectal cancer identified by FDG-PET during preoperative examination for lung cancer: report of two cases, J. Kanazawa. Med. Univ., 31:144-146, 2006.
- 0400D003 M.Sugita, M.Sagawa, Y.Ueda, K.Higashi, T.Sakuma: Localized bronchioloalveolar carcinoma with small foci of active fibroblastic proliferation, Respiration, 73:694-697, 2006.

## 0410 Department of Cardiovascular Surgery

### Faculty

Title	Name	Field of Specialization
Professor	MATSUBARA Junichi	Vascular surgery
Professor	SAKAMOTO Shigeru	Cardiovascular surgery
Professor	SHIKATA Hiroo	Vascular surgery, Respiratory surgery
Associate Professor	HIDA Kenji	Vascular surgery
Senior Assistant Professor	TSUCHISHIMA Shuji	
Senior Assistant Professor	NAGAYOSHI Yasuhiro	Cardiovascular surgery
Senior Assistant Professor	NISHIZAWA Hisateru	Cardiovascular surgery
Senior Assistant Professor	TAKEUCHI Katsunori	
Research Associate	KANNO Masaaki	Cardiovascular surgery
Research Associate	KOBATA Takashi	Vascular surgery
Research Associate	NONAKA Toshimichi	Cardiovascular surgery
Research Associate	NOGUCHI Yasuhisa	Cardiovascular surgery
Research Doctor	MIZUNO Fumito	Vascular surgery

### Keywords of Research

Cardiac surgery, vascular surgery, respiratory surgery, pacemaker implantation, Arrhythmia surgery, ventricular assist device, arteriosclerosis obliterans, thromboangitis obliterans, valvular surgery, coronary bypass surgery, surgery for congestive heart failure, artificial vascular graft, endovascular stent grafting, respiratory surgery, lung cancer

### Outline of Research

- 1.Elucidation of different mechanism for ischemia-reperfusion injury of immature and mature heart; Development of cardioplegia specific for neonate cardiac surgery.
- 2.Development of tailor-made cardiac reshaping net for heart failure patients
- 3.Endovascular stent-grafting for aortic aneurysm
- 4.Minimally invasive catheter ablation for varicose vein

### Publications

#### Originals

- 0410B001 K.Hida, M.Hiramatsu, K.Atsumi, Y.Noguchi, T.Kobata, H.Shikata, S.Sakamoto, J.Matsubara: Efficacy of endoscopic thoracic sympathectomy— intraoperative assessment using near-infrared spectroscopy, The journal of Japanese College of Angiology., 46:45-48, 2006 (in Japanese) .
- 0410B002 J.Kiyosawa: Evaluation of sympathetic nerve activity by fluctuation analysis of a finger tip blood flow pulse wave and its clinical application, J. Kanazawa. Med. Univ., 31:194-201, 2006 (in Japanese) .

## Case Reports

- 0410D001 H.Shikata, K.Miyazawa, Y.Ueda, T.Kobata, K.Hida, J.Matsubara: A case of synchronous renal cell carcinoma producing granulocyte colony stimulating factor(G-CSF) and abdominal aortic aneurysm, *Jpn. J. Cardiovasc.Surg.*, 15:521-524, 2006.
- 0410D002 K.Sato, Y.Ueda, H.Shikata, S.Katsuda: Bronchioloalveolar carcinoma of mixed mucinous and nonmucinous type: Immunohistochemical studies and mutation analysis of the *p53* gene, *Pathol. Res. Pract.*, 202:751-756, 2006.
- 0410D003 S.Sakamoto, J.Matsubara, Y.Nagayoshi, H.Nishizawa, K.Takeuchi, J.Kiyosawa: Annular reconstruction for mitral valve replacement in a destroyed or calcified mitral annulus, *Jpn. J. Thorac. Cardiovasc. Surg.*, 54:500-503, 2006.
- 0410D005 H.Shikata, K.Kurose, T.Kobata, K.Hida, M.Moriyama, N.Morita, S.Sakamoto, K.Suzuki, J.Matsubara: Surgical treatment of abdominal aortic aneurysm accompanied by bilateral large multicystic kidneys, *The Japanese Society for Cardiovascular Surgery.*, 35:251-254, 2006 (in Japanese) .

## Presentations at Conference

### International Conference (Presentations)

- 0410I001 K.Hida, T.Kobata, H.Shikata, S.Sakamoto, J.Matsubara: Surgical strategies for patients with abdominal aortic aneurysm who are suffering from ischemic heart disease, 7th International Congress of the Asian Society for Vascular Surgery, (Malaysia, '06.08).
- 0410I002 T.Kobata, K.Hida, H.Shikata, S.Sakamoto, J.Matsubara: One year follow-up after endovenous radiofrequency obliteration of the great saphenous vein-air plethysmographic examinations of the effect, The 4th Meeting of the Japanese German Society for Vascular Surgery, (Nuremberg, '06.08).
- 0410I003 H.Shikata, T.Kobata, K.Hida, S.Sakamoto, J.Matsubara: Endvascular treatment using carbondioxide angiography, The 4th Meeting of the Japanese German Society for Vascular Surgery, (Nuremberg, '06.08).

## 0420 Department of Surgical Oncology

### Faculty

Title	Name	Field of Specialization
Professor	TAKASHIMA Shigeki	Surgical treatment of gastrointestinal cancer – especially gastric cancer and colorectal cancer
Professor	KOSAKA Takeo	Surgical treatment of gastric cancer
Professor	SAITO Hitoshi	Surgical treatment of hepatobiliary and pancreatic disease
Senior Assistant Professor	NAKANO Yasuharu	Surgery of breast cancer
Senior Assistant Professor	YOSHITANI Shinichiro	Surgery of colorectal cancer
Research Associate	USAMI Kazuo	Surgery of digestive disease
Research Associate	SUGAYA Junichi	Surgery of gastric cancer
Research Associate	TANAKA Yumiko	Surgery of colorectal cancer
Research Associate	HASEGAWA Taisuke	Surgery of hepatobiliary diseases
Research Associate	MUKAI Hirokado	Surgery of digestive disease
Research Associate	YOKOI Miki	
Research Associate	KURODA Masatoshi	Surgery of colorectal cancer

### Keywords of Research

gastric cancer, lymph node metastasis, colorectal cancer, hepatic metastasis, hepatic resection, pancreas cyst, cystic tumor, interleukin 6, biliary drainage, cytokine, laparoscopic cholecystectomy, choledocholithiasis, chemotherapy, biochemical modulation, hepatolithiasis, pancreatic injury, bile duct cancer, pancreatic cancer, panperitonitis, gallbladder cancer, tumor marker, duodenal cancer, pancreaticoduodenectomy, abdominal injury, esophageal achasia, neoadjuvant chemotherapy, multiple organ injury, ileus, pancreatitis, breast cancer

### Outline of Research

- ① Study on carcinogenesis of gastrointestinal cancer
- ② Treatment of peritonitis carcinomatosa
- ③ Strategy for hematogenous metastasis
- ④ Study on usefulness of Endotoxin adsorption therapy (PMX-DHP) for acute diffuse peritonitis accompanying large intestinal perforation
- ⑤ Clinical evaluation of reconstructive method after gastrointestinal operation

### Publications

#### Originals

- 0420B001 T.Kosaka, K.Usami, N.Ueshige, T.Hasegawa, S.Yoshitani, J.Sugaya, Y.Nakano, S.Takashima: Paraaortic lymph node dissection for gastric cancer in 244 consecutive cases, *Hepatogastroenterology*, 53:629–633, 2006.
- 0420B002 H.Saito, M.Kuroda, K.Matsuzawa, Y.Tanaka, T.Hasegawa, S.Yoshitani, T.Kosaka, S.Takashima: The usefulness and limitations of PMX-DHP for the treatment of SIRS caused by perforation in the large intestine, *Journal of Japan Society for Surgical Infection.*, 3:93–100, 2006 (in Japanese) .

0420B003 K.Hayashi, S.Takashima: Citrus auraptene suppresses azoxymethane-induced colon carcinogenesis in mice, J. Kanazawa. Med. Univ., 31:216-222, 2006 (in Japanese) .

#### **Case Reports**

0420D001 Z.Wang, X.Jin, Y.Machida, H.Aikawa, M.Sagawa, K.Higashi, H.Saito, T.Kosaka, S.Takashima, T.Sakuma: Colorectal cancer identified by FDG-PET during preoperative axamination for lung cancer: report of two cases, J. Kanazawa. Med. Univ., 31:144-146, 2006.

0420D002 K.Sato, Y.Ueda, M.Yokoi, K.Hayashi, T.Kosaka, S.Katsuda: Reactive lymphoid hyperplasia of the liver in a patient with multiple carcinomas: a case report and brief review, J. Clin. Pathol., 59:990-992, 2006.

0420D004 T.Hasegawa, S.Yoshitani, H.Saito, T.Kosaka, S.Takashima: Nodular cholangiocellular carcinoma arising in S4 with papillary involvement of the extrahepatic biliary tree —A case report —, The Journal of the Japanese Practical Surgeon Society., 67:1380-1385, 2006 (in Japanese) .

## 0430 Department of Orthopedics Surgery

### Faculty

Title	Name	Field of Specialization
Professor	MATSUMOTO Tadami	Hip surgery
Associate Professor	OKADA Masato	Peripheral nerve surgery, Trauma
Senior Assistant Professor	FUJITA Takuya	Spinal surgery
Senior Assistant Professor	KANEUJI Ayumi	Hip and Knee surgery, Sports medicine
Senior Assistant Professor	YOKOYAMA Mitsuteru	Hand surgery, Trauma
Senior Assistant Professor	OKUDA Tetsuhito	Spinal surgery
Senior Assistant Professor	SUGIMORI Tanzo	Hip and Knee surgery, Sports medicine
Senior Assistant Professor	MAEOKA Hayato	Trauma
Research Associate	OGASAWARA Masataka	Hip surgery
Research Associate	NOUTOMI Kenji	Joint surgery
Research Associate	HOSOKAWA Hidetaka	Spinal surgery
Research Associate	ICHISEKI Toru	Hip surgery
Research Associate	KITAMURA Kenji	Hip surgery
Research Associate	HATANO Eiju	Spinal surgery
Research Associate	HIROMURA Kentaro	Trauma
Research Associate	FUKUI Kiyokazu	Hip surgery
Research Associate	YASUDA Yoshihito	Spinal surgery
Research Associate	YAMADA Kengo	Hip surgery

### Keywords of Research

herniated nucleus pulposus, spondylosis, spondylolysis, spondylolisthesis, degenerative spondylolisthesis, giant cell tumor, coxarthrosis, gonarthrosis, carpal tunnel syndrome, acromioclavicular dislocation, gonarthrosis purulenta, nerve graft, patellar tendon rupture, rheumatoid arthritis, benign chondroblastoma, patella subluxation syndrome, posterior lumbar interbody fusion, osteotomy, lumbar disc decompression, hallux valgus, synovectomy, total hip arthroplasty, tendon suture, humeral shaft fracture, osteonecrosis

### Outline of Research

There are three types of proximal femur in Japanese hip osteoarthritis patients and we are developing a new femoral prosthesis that would be more suitable for the Japanese patient using a computer aided design system. Additionally we are researching some factors such as an intravascular obstructive lesion or oxidative stress that would be a cause for steroid induced osteonecrosis of femoral head to prevent the occurrence of the disease. Furthermore, we have been trying to elucidate the mechanism of degeneration of lumbar disc. It has been reported that apoptosis of vertebral disc cells occurs in the degenerative intervertebral disc. However, its molecular mechanism remains to be defined. The gene expression of Bax and Bcl-2 was analyzed in degenerative intervertebral disc. As a result, mechanical stress of the disc induces apoptosis through Bax, reducing the number of cells and the synthesis of extracellular matrix proteins and resulting in the degeneration of the disc.

## Publications

### Originals

- 0430B001 T.Ichiseki, Y.Ueda, S.Katsuda, K.Kitamura, A.Kaneuji, T.Matsumoto: Oxidative stress by glutathione depletion induces osteonecrosis in rats, *Rheumatology (Oxford)*, 45:287–290, 2006.
- 0430B002 K.Fukui, R.Kominami, H.Shinohara, T.Matsumoto: Glucocorticoid induces micro-fat embolism in the rabbit: A scanning electron microscopic study, *J. Orthop. Res.*, 24:675–683, 2006.
- 0430B003 A.Kaneuji, T.Sugimori, T.Ichiseki, K.Fukui, K.Yamada, T.Matsumoto: The relationship between stem subsidence and improvement in the radiolucency in polished tapered stems, *Int Orthop*, 30:387–390, 2006.
- 0430B004 E.Hatano, T.Fujita, Y.Ueda, T.Okuda, S.Katsuda, Y.Okada, T.Matsumoto: Expression of ADAMTS-4 (aggrecanase-1) and possible involvement in regression of lumbar disc herniation, *Spine*, 31:1426–1432, 2006.
- 0430B005 (K.Hirosaki), K.Shintani, A.Kaneuji: Study on high speed cutting of bio-titanium alloy — Tool wear pattern and mechanism of binder-less PcBN tool —, *Journal of the Japan Society for Precision Engineering Supplement Contributed papers.*, 72:219–223, 2006 (in Japanese) .
- 0430B008 T.Fujita, T.Okuda, E.Hatano, Y.Yasuda, T.Matsumoto: Posterior cervical herniotomy using METRx Micro Dissectomy system for cervical disc herniation, *Surgical Technique for Spine and Spinal Nerves.*, 8:75–78, 2006 (in Japanese) .
- 0430B009 K.Yamada, A.Kaneuji, K.Hirosaki, M.Takano, T.Matsumoto: Biomechanical effects of the different surface finish of cement-fixed femoral stems on bone cement, *Nippon rinsho Japanese Journal of Clinical Biomechanics.*, 27:275–280, 2006 (in Japanese) .
- 0430B012 A.Kaneuji, K.Yamada, K.Hirosaki, M.Takano, T.Matsumoto: Compressive force and cement creep at the cement-bone interface in polished tapered stems fixed with vacuum-mixed cement, *Nippon rinsho Japanese Journal of Clinical Biomechanics.*, 27:281–285, 2006 (in Japanese) .
- 0430B013 K.Miaki: Osteonecrosis induction using an oxidative stress inducer in Japanese white rabbits, *J. Kanazawa. Med. Univ.*, 31:179–184, 2006 (in Japanese) .
- 0430B014 (K.Hirosaki), K.Shintani, H.Kato, A.Kaneuji: High speed milling of bio-titanium alloys using a binder-less PcBN tool – Tool damage mechanism of flank face in machining of  $\beta$  type alloy–, *Journal of the Japan Society for Precision Engineering Supplement Contributed papers.*, 72:1397–1401, 2006 (in Japanese) .

### Others

- 0430F001 T.Ichiseki, A.Kaneuji, K.Kitamura, T.Matsumoto: Does oxidative stress play a role in steroid-induced osteonecrosis models?, *Med. Hypotheses.*, 66:1048, 2006.
- 0430F002 T.Ichiseki, T.Matsumoto: Oxidative stress may underlie the sex differences seen in steroid-induced osteonecrosis models, *Med. Hypotheses.*, 66:1256, 2006.

## Presentations at Conference

### International Conference (Presentations)

- 0430I001 A.Kaneuji, T.Sugimori, T.Ichiseki, K.Yamada, K.Fukui, T.Matsumoto: A minimum 10 year result of HGP I cups without bulk bone graft for Crowe group I to III acetabuli, *American Academy of Orthopaedic Surgeons 2006 Annual Meeting (AAOS 2006)*, (Chicago, '06.03).
- 0430I002 A.Kaneuji, T.Sugimori, T.Ichiseki, K.Yamada, K.Fukui, K.Kitamura, T.Matsumoto: A minimum 10 year outcome study of Harris/Galante Porous I cups without bulk bone graft for Crowe group I to III acetabuli, *5th Hip Section Meeting of the Asia Pacific Orthopaedic Association (Hip-APOA 06)*, (Adeilaide, '06.05).

- 0430I003 K.Hiromura, M.Okada, K.Noutomi, A.Kaneuji, T.Nishisaka, T.Matsumoto: The effects of Q-Switched Nd:YAG laser irradiation on fracture healing in rats, The 10th Conference of the International Society for Fracture Repair (ISFR), (Adeilaide, '06.05).
- 0430I004 K.Yamada, A.Kaneuji, K.Hirosaki, M.Takano, T.Matsumoto: Biomechanical effects of the different surface finish of cement-fixed femoral stems on bone cement, 5th Hip Section Meeting of the Asia Pacific Orthopaedic Association (Hip-APOA 06), (Adeilaide, '06.05).
- 0430I005 A.kaneuji: The effects of polished and rough stems on the cement-bone interface, 5th Asia Pacific Orthopaedic Symposium 2006 (APOS), (Singapore, '06.08).
- 0430I006 T.Fujita, Y.Yasuda, H.Hosokawa, E.Hatano, T.Okuda, T.Matsumoto: Involvement of Bax-Mediated apoptosis in degenerative intervertebral disc, North American Spine Society 21st Annual Meeting, (Seattle, '06.09).
- 0430I007 A.Kaneuji, K.Yamada, K.Hirosaki, M.Takano, T.Matsumoto: Biomechanical differences at the cement-bone interface of polished and roughened tapered stems cemented in composite femurs, ISTA 2006—9th Annual Symposium, (New York, '06.10).
- 0430I008 T.Sugimori, KG.Vince, A.Abdeen: Efficacy of using tibial offset stem in revision knee arthroplasty, ISTA 2006—9th Annual Symposium, (New York, '06.10).



## 0440 Department of Neurosurgery

### Faculty

Title	Name	Field of Specialization
Professor	IIZUKA Hideaki	spinal disease, brain tumor, peripheral nerve disease
Associate Professor	AKAI Takuya	brain tumor, pediatric neurosurgical disease
Associate Professor	TACHIBANA Osamu	brain tumor, hypothalamic and pituitary tumor
Senior Assistant Professor	IIDA Takaaki	spinal disease, peripheral nerve disease
Senior Assistant Professor	TAKADA Hisashi	crebrovascular disease, head injury, interventional neurosurgery
Senior Assistant Professor	OKAMOTO Kazuya	brain tumor, stereotactic radiosurgery
Research Associate	SASAGAWA Yasuo	brain tumor
Research Associate	SIRAGA Syunsuke	general neurosurgery
Research Associate	PARK Cheho	spinal disease
Research Associate	MURASAKA Kenshi	general neurosurgery
Research Associate	YAMAMOTO Kenji	general neurosurgery
Research Associate	YAMAMOTO Jiro	general neurosurgery
Research Doctor	TORIGOE Keiichiro	general neurosurgery

### Keywords of Research

brain neoplasm, glioma, meningioma, neurinoma, skull base tumor, subarachnoid hemorrhage, cerebral aneurysm, arteriovenous malformation, stroke, radiosurgery, endovascular therapy, microvascular decompression, skull base surgery, spinal surgery, spinal fusion, atlantoaxial dislocation, cervical spondylosis, ossification of the spinal ligament, syringomyelia, spinal dysraphism, spinal neoplasm, spinal injury, neural injury, experimental spinal injury, spinal cord compression, cerebral ischemia

### Outline of Research

The purpose of research is to regenerate the damaged neurological function by disclosing the pathogenesis of brain, spinal cord and peripheral nerve diseases. The goal of research is to contribute to improve patient prognosis. For the purpose, the researchers have to find out problems based on their clinical view points and solve those questions. The subjects of disease are brain tumors, spinal diseases, cerebrovascular diseases, head injuries and congenital anomalies.

#### 1. Brain tumor

- 1) development of tumor differentiation induction therapy for malignant gliomas
- 2) disclose the poor prognosis factors in malignant gliomas (by genetic sub classification and protein expression study)
- 3) prediction of treatment results in the stereotactic radiosurgery against metastatic brain tumors ( by genetic classification and protein expression study)
- 4) radiological diagnosis of cystic pituitary tumors
- 5) disclose the pathogenesis of secondary hypophysitis

#### 2. Spine and spinal cord disease

- 1) disclose the cord degeneration mechanism by spinal cord compression model
- 2) long term treatment results and affecting factors in spinal surgery

#### 3. Cerebrovascular disease

- 1) disclose the molecular biological mechanism for acquisition of cerebral ischemia

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4. Head injury

- 1) operation methods and recurrence in chronic subdural hematoma

5. Congenital anomaly

- 1) treatment of hydrocephalus in fetus model  
2) disclose the responsible gene and surgical treatment for craniosynostosis
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## Publications

### Originals

- 0440B001 T.Akai, H.Iizuka, S.Kawakami: Treatment of craniosynostosis by distraction osteogenesis, *Pediatr Neurosurg*, 42:288-292, 2006.

### Case Reports

- 0440D001 T.Akai, K.Yamamoto, T.Iida, H. Iizuka, T.Nojima: Malignant fibrous histiocytoma in the craniocervical junction presenting with severe occipitalgia, *Brain Tumor Pathol.*, 23:101-105, 2006.
- 0440D002 T.Akai, K.Yamamoto, H.Iizuka, S.Kawakami, J.Yoshida, H.Kakimuma, H.Yaguchi, T.Ozawa: Syndromic craniosynostosis with elbow joint contracture, *Pediatr Neurosurg*, 42:108-112, 2006.
- 0440D003 Y.Sasagawa, T.Sasaki, T.Fuji, T.Akai, H.Iizuka: Ventriculoperitoneal shunt malfunction due to pregnancy, *Neurological surgery.*, 34:181-187, 2006 (in Japanese) .

## Presentations at Conference

### International Conference (Presentations)

- 0440I001 T.Akai, T.Iida, H.Iizuka, S.Okamoto, M.Kohno, H.Ikawa: Diagnosis and treatment of currarino anomaly, 34th Annual meeting of the international society for pediatric neurosurgery, (Taipei, '06.09).

## 0450 Department of Plastic and Reconstructive Surgery

### Faculty

Title	Name	Field of Specialization
Professor	KAWAKAMI Shigehiko	Plastic and Reconstructive Surgery
Senior Assistant Professor	SHIMADA Kenichi	Plastic and Reconstructive Surgery
Senior Assistant Professor	YOSHIDA Jun	Plastic and Reconstructive Surgery
Senior Assistant Professor	KISHIBE Miyuki	Plastic and Reconstructive Surgery
Senior Assistant Professor	YAMAMOTO Yasunori	Plastic and Reconstructive Surgery
Research Associate	YAMASHITA Masanobu	Plastic and Reconstructive Surgery
Research Associate	KOMURO Akito	Plastic and Reconstructive Surgery
Research Associate	NISHIBU Yasuhiro	Plastic and Reconstructive Surgery
Research Associate	KUROSAWA Tomoko	Plastic and Reconstructive Surgery
Research Associate	HIMI Yuji	Plastic and Reconstructive Surgery
Research Associate	IMOTO Toshhiro	Plastic Surgery
Research Associate	SHINOKAWA Yasuo	Plastic Surgery
Research Associate	YAMASHIRO Kaori	Plastic Surgery
Research Associate	ENOMOTO Jin	Plastic Surgery
Research Associate	HARASHIMA Youto	Plastic Surgery
Research Associate	MORITA Reiji	Plastic and Reconstructive Surgery
Research Associate	MIYASHITA Matsuki	Plastic Surgery
Research Associate	YASUDA Junko	Plastic Surgery
Research Associate	SATSUKI Reiko	plastic surgery
Research Associate	NISHIKAWA Yuuki	plastic surgery

### Keywords of Research

fibroblasts, FGF recptor, pressure ulcer, TGF-beta, TGF-beta receptor, keratinocytes, wound healing, craniofacial surgery, zygoma, cleft lip, clept palate, microtia, tissue expansion, crainofacial cleft, orbital advancement, microsurgery, free flap, medialis pedis flap, adipofascial turu-over flap, burn reconstruction, burn wound management, MRI in cougenital anomaly

### Outline of Research

- 1) Wound healing  
Promoting effects of wound dressings or drugs in wound healing process are studied clinically.
- 2) Tissue engineering  
Regeneration of the skin and subcutaneous tissue using artificial materials are studied clinically and experimentally
- 3) Cranio-maxillo-facial surgery

## Publications

### Originals

- 0450B001 T.Akai, H.Iizuka, S.Kawakami: Treatment of craniosynostosis by distraction osteogenesis, *Pediatr Neurosurg*, 42:288-292, 2006.
- 0450B002 R.Satsuki, S.Kawakami: The treatment of the combination therapy using artificial dermis and bFGF with intractable ulcers, *Skin research.*, 5:46-51, 2006 (in Japanese) .
- 0450B003 Y.Yamamoto, S.Kawakami, M.Kishibe, K.Shimada: The combination effects of hydrogel dressing (Viewgel®) and polyurethane film dressing (Cathereep®) on split-thickness skin donor sites, *Journal of new remedies & clinics.*, 55:967-976, 2006 (in Japanese) .
- 0450B004 Y.Yamamoto, S.Kawakami: A basic strategy for the treatment of burn wounds in infants and children, *The Japanese journal of plastic & reconstructive surgery.*, 49:849-857, 2006 (in Japanese) .
- 0450B005 M.Kishibe, S.Kawakami, M.Nozaki, N.Isono, K.Harii, T.Moriguchi, K.Yamada: Clinical effects of carboxymethylcellulose (AQUACEL®) for the treatment of partial thickness burns, *Japanese journal of burn injuries.*, 32:249-257, 2006 (in Japanese) .
- 0450B006 H.Yasuda: Comparative study of skin tissue reactions after hyaluronic acid or collagen injection, *J. Kanazawa. Med. Univ.*, 31:233-241, 2006 (in Japanese) .

### Case Reports

- 0450D001 T.Akai, K.Yamamoto, H.Iizuka, S.Kawakami, J.Yoshida, H.Kakimuma, H.Yaguchi, T.Ozawa: Syndromic craniosynostosis with elbow joint contracture, *Pediatr Neurosurg*, 42:108-112, 2006.

## Presentations at Conference

### International Conference (Symposium)

- 0450H001 J.Yoshida, S.Kawakami, Jun Jennifer N Keagle,, Henry K Kawamoto: Contour reconstruction of the face using fat injection, *The 16th Japan-China Joint Meeting on Plastic Surgery*, (Harbin, China, '06.08).

### International Conference (Presentations)

- 0450I001 A.Komuro, K.Shimada, M.Kishibe, Y.Yamamoto, M.Yamashita, S.Kawakami: Treatment for Burn Wounds using Basic Fibroblast Growth Factor Spray, *Burn and Wound Care Symposium*, (Maui,Hawaii, '06.02).
- 0450I002 M.Kishibe, A.Komuro, K.Shimada, J.Yoshida, S.Kawakami: Treatment for Burn Wounds using basic fibroblast growth factor spray, *The 16th Japan-China Joint Meeting on Plastic Surgery*, (Harbin, China, '06.08).
- 0450I003 K.Shimada, A.Nishio, R.Morita, Y.Himi, S.Kawakami: Clinical strategy for skin fistula after craniotomy, *The 16th Japan-China Joint Meeting on Plastic Surgery*, (Harbin, China, '06.08).
- 0450I004 Liangliang Quan, R.Morita, K.Shimada, S.Kawakami: Facial protection masks after fracture treatment of the nasal bone to prevent reinjury in contact sports, *The 16th Japan-China Joint Meeting on Plastic Surgery*, (Harbin, China, '06.08).
- 0450I005 J.Yoshida, S.Kawakami, Jennifer N Keagle, Henry K Kawamoto: Contour reconstruction of the face using fat injection, *The 8th Japan-Korea Congress of Plastic and Reconstructive Surgery*, (Jeju,Korea, '06.09).
- 0450I006 Y.Himi, A.Nishio, R.Morita, K.Shimada: Clinical Strategy for the Cranial Skin Fistula after Craniotomy, *The 8th Japan-Korea Congress of Plastic and Reconstructive Surgery*, (Jeju,Korea, '06.09).

## 0460 Department of Pediatric Surgery

### Faculty

Title	Name	Field of Specialization
Professor	IKAWA Hironichi	Pediatric surgery, Defecatory function, Liver transplantation
Associate Professor	KOHNO Miyuki	Pediatric surgery, Pediatric endoscopic surgery, Pediatric urology
Senior Assistant Professor	KONUMA Kunio	Pediatric surgery, Anorectal malformations, Pediatric laryngo tracheo surgery
Senior Assistant Professor	MASUYAMA Hiroaki	Pediatric surgery, Liver transplantation
Research Associate	FUKUMOTO Yasunori	Pediatric surgery
Research Associate	MORIMURA Eri	Pediatric surgery

### Keywords of Research

inguinal hernia, hydrocele of the cord, acute abdomen, quality of life, endoscopy, congestive gastroenteropathy, biliary atresia, epidemiology, spontaneous cure, prevalence, neonatal surgery, vesicoureteral reflux, urostoma, intravenous hyperalimentation, hydrocele testis, cryptorchism, appendicitis, anorectal malformation, endoscopic surgery, gastro-esophageal reflux, liver transplantation, pediatric surgical common disease, natural history, pediatric solid malignant tumor, pediatric urology, phimosis, intestinal stoma

### Outline of Research

Hemodynamic evaluation of PDA flow to decide the optimal timing for radical operation of congenital diaphragmatic hernia.  
The importance of rectal branch to induce high amplitude propagated colonic contraction.  
Clinical study of pediatric endoscopic surgery.  
Histochemical study of extracellular matrices which accelerate the hepatic fibrosis of biliary atresia.

### Publications

#### Originals

- 0460B001 K.Konuma, H.Ikawa, M.Kohno, S.Okamoto, H.Masuyama, H.Hukumoto: Sexual problems in male patients older than 20 years with anorectal malformations, *J. Pediatr. Surg.*, 41:306-309, 2006.
- 0460B002 Y. Inoue, T. Shinka, M. Ohse, H. Ikawa, T. Kuhara: Application of optical isomer analysis by diastereomer derivatization GC/MS to determine the condition of patients with short bowel syndrome, *J. Chromatogr. B Analyt. Technol. Biomed. Life Sci.*, 838:37-42, 2006.
- 0460B003 M.Kohno, Y.Fukumoto, H.Masuyama, S.Okamoto, H.Ikawa: Clinical defecation function of transanal endorectal pull-through for hirschsprung's disease: comparison with the open procedure (Z-Shaped Anastomosis), *Journal of the Japanese Society of Pediatric Surgery.*, 42:181-187, 2006 (in Japanese) .

#### Reviews

- 0460C001 H.Masuyama, H.Ikawa, Y.Fukumoto, S.Okamoto, K.Konuma, M.Kohno: Extended dissection based on the anatomy of the portahepatis for biliary atresia, *Japanese journal of pediatric surgery ; Shonika.*, 38:870-873, 2006 (in Japanese) .

## Presentations at Conference

### International Conference (Presentations)

- 0460I001 M,Kohno, H,Ikawa, H,Hukumoto, S,Okamoto, H,Masuyama, K,Konuma: Clinical Outcome and Colonic Manometry in Children after Transanal Endorectal Pull-Through for Hirschsprung's Disease, British Association of Paediatric Surgeons 53rd Annual International Congress Stockholm, (Sweden, '06.07).
- 0460I002 T.Akai, T.Iida, H.Iizuka, S.Okamoto, M.Kohno, H.Ikawa: Diagnosis and treatment of currarino anomaly, 34th Annual meeting of the international society for pediatric neurosurgery, (Taipei, '06.09).
- 0460I003 H.Masuyama: Is transanal endorectal pull through beneficial for colonic motility on defecation, 20th Congress of Asian Association of Pediatric Surgeons(AAPS), (India, '06.11).

## 0470 Department of Ophthalmology

### Faculty

Title	Name	Field of Specialization
Professor	SASAKI Hiroshi	cataract, epidemiology, uveitis.
Professor	NAKAIZUMI Hiroko	intraocular lens, strabismus amblyopia, blepharospasm, pediatric ophthalmology.
Associate Professor	KITAGAWA Kazuko	ocular infection, Sjogren's syndrome, keratoconjunctivitis sicca, lacrimal fluid, proteomics.
Senior Assistant Professor	KOJIMA Masami	cataract, ophthalmological optics, electromagnetic ocular injury, epidemiology.
Senior Assistant Professor	FUKUDA Masamichi	ocular pharmacology, intraocular, penetration.
Research Associate	NAGAI Kouta	cataract, epidemiology,
Research Associate	KAWAKAMI Yutaka	cataract, thyroid ocular.
Research Associate	FUJITA Nobuyuki	uveitis
Research Associate	SHIMA Ichiro	ocular infection
Research Associate	HAGIWARA Kenta	ocular infection
Research Doctor	NAKANO Tarou	cataract
Research Doctor	YAGUCHI Hiromoto	corneal epithelium, glaucoma.

### Keywords of Research

proteomics, cataract classification, corneal epithelium, crystallin lens, dry eye, glaucoma, image analysis, lens sectioning technique, melanin, ocular toxicology, Scheimpflug photography, tear secretion, UV-B, UV-induced ocular disease, UV-dosimetry, lens organ culture, age related cataract, cataract epidemiology, cytotoxicity, fluoroquinolone, herpetic keratitis, intraocular drug dynamics, lens epithelium, light scattering, retroillumination image, Sjogren's syndrome, three-dimensional image, V-E, intraocular lens(IOL), cell culture

### Outline of Research

There are five major themes for research in our department including: 1) ophthalmic epidemiology, 2) clinical research for crystalline lens and intraocular lens (IOL), 3) basic research of cataract, 4) clinical research for keratoconjunctival diseases and 5) ophthalmic pharmacology. Concerning 1), we have performed epidemiological studies in climatically different places (Ishikawa and Kagoshima, Japan, Singapore, Iceland and China). These studies have included prevalence, incidence and risk factors of cataract, pterygium, high myopia, glaucoma and age-related macular degeneration. For 2), we have worked on image analysis of the crystalline lens, drew up a new classification system for cataract, and done research on visual performance in cataractous eye and IOL. Regarding 3), we have evaluated effects of anti-cataractous drugs using animal models and also investigated the mechanism of posterior capsular opacity (PCO). Development of a preventative drug for PCO is undergoing. Considering 4), a new precise and simple technique for diagnosis of Sjogren's syndrome using proteomics of tears is under development. Clinical research for diagnosis and treatment for ophthalmic infective diseases is also underway. And for 5), ocular dynamics of eye drops, effectiveness and toxicity of eye drops, and a new method for measuring corneal damage in vivo are all being investigated.

## Publications

### Originals

- 0470B001 (T.Takata), T.Shimo-Oka, M.Kojima, K.Miki, N.Fujii: Differential analysis of D-β-Asp- containing proteins found in normal and infrared irradiated rabbit lens, *Biochem. Biophys. Res. Commun.*, 344:263-271, 2006.
- 0470B002 (A.Arnarsson), T.Sverrisson, E.Stefansson, H.Sigurdsson, H.Sasaki, K.Sasaki, F.Jonasson: Risk factors for five-year incident age-related macular degeneration: The Reykjavik Eye Study, *Am. J. Ophthalmol.*, 142:419-428, 2006.
- 0470B003 (GM.Zoega), A.Fujisawa, H.Sasaki, A.Kubota, K.Sasaki, K.Kitagawa, F.Jonasson: Prevalence and risk factors for cornea guttata in the Reykjavik Eye Study, *Ophthalmology*, 113:565-569, 2006.
- 0470B004 (A.Hirata), S.Watanabe, M.Kojima, I.Hata, K.Wake, M.Taki, K.Sasaki, O.Fujisawa, T.Shiozawa: Computational verification of anesthesia effect on temperature variations in rabbit eyes exposed to 2.45 GHz microwave energy, *Bioelectromagnetics*, 27:602-612, 2006.
- 0470B005 (A.Hirata), S.Watanabe, O.Fujiwara, M.Kojima, K.Sasaki, T.Shiozawa: Temperature elevation in the eye of Japanese male and female models for plane wave exposures, *EMC*, 17:29-32, 2006.
- 0470B006 (A.Hirata), S.Watanabe, M.Taki, O.Fujiwara, M.Kojima, K.Sasaki: Temperature elevation in rabbit eye irradiated by 2.45-GHz exposure systems, *IEICE*, 50:29-34, 2006.
- 0470B007 (Y.Fukushima), H.Kato, H.Hayakawa, N.Komae, Y.Karasawa, M.Fukuda: Ocular pharmacokinetics of tosofloxacin tosilate 0.3% ophthalmic solution, a novel fluoroquinolone antibiotic ophthalmic drug in rabbits, *Journal of the eye.*, 23:26-32, 2006 (in Japanese) .
- 0470B009 M.Fukuda, H.Sasaki, Y.Ohashi: Intraocular penetration of moxifloxacin ophthalmic solution in rabbit eyes - calculation of maximum drug concentration in aqueous-, *Journal of the eye.*, 23:1353-1357, 2006 (in Japanese) .
- 0470B010 (S.Sunada), A.Ueda, Y.Inoue, Y.Ohashi, T.Uno, K.Kitagawa, H.Hatano, H.Shiroda, S.Asari: Comparison of minimum inhibitory concentration and postantibiotic effect of eyedrops on isolates in national surveillance of infectious keratitis in japan, *J Jpn Ophthalmol Soc.*, 110:973-983, 2006 (in Japanese) .
- 0470B011 (Study Group of National Surveillance of Infectious Keratitis in Japan), K.Kitagawa: National surveillance of infectious keratitis in japan -current status of isolates, patient background, and treatment-, *J Jpn Ophthalmol Soc.*, 110:961-972, 2006 (in Japanese) .

### Case Reports

- 0470D001 T.Akai, K.Yamamoto, H.Iizuka, S.Kawakami, J.Yoshida, H.Kakimuma, H.Yaguchi, T.Ozawa: Syndromic craniosynostosis with elbow joint contracture, *Pediatr Neurosurg*, 42:108-112, 2006.

## Presentations at Conference

### International Conference (Presentations)

- 0470I001 K.Kitagawa, K.Hagihara, M.Fukuda, H.Sasaki, K.Shimoyama, K.Fujimoto, N.Ogawa, S.Sugai: Can lissamine green replace rose bengal as the golden standard for Sjogren's syndrome diagnosis, IX International Symposium on Sjogren's Syndrome, (Washington DC, '06.04).
- 0470I002 H.Sasaki, K.Nagai, M.Kojima, Y.Sakamoto, R.Honda, F.Jonasson, K.Sasaki: Cataract in diabetes ; The Reykjavik Eye Study, The Association for Research in Vision and Ophthalmology, (Florida, '06.05).
- 0470I003 H.Yaguchi, Y.Sakamoto, J.Qu, K.Nagai, M.Kojima, H.Sasaki, K.Sasaki: Localization of fiber folds in the crystalline lens and influence on visual function, The Association for Research in Vision and Ophthalmology, (Florida, '06.05).



- 0470I004 J.Qu, H.Sasaki, Y.Sakamoto, M.Kojima, H.Yaguchi, Y.Yamashiro, R.Honda, K.Sasaki: Change in light scattering intensity of crystalline lens over five years in the Japanese population – The Monzen Eye Study –, The Association for Research in Vision and Ophthalmology, (Florida, '06.05).
- 0470I005 K.Sasaki, H.Sasaki, K.Nagai, H.Yaguchi, M.Kojima, Y.Sakamoto, R.Honda, F.Jonasson: Five-Year's light scattering changes in lens layers in diabetics – The Reykjavik Eye Study –, The Association for Research in Vision and Ophthalmology, (Florida, '06.05).
- 0470I006 M.Kojima, Y.Yamashiro, H.Sasaki, J.Qu, M.Hanazawa, K.Wake, S.Watanabe, M.Taki, Y.Kamimura, K.Sasaki: Investigation of safety exposure range by 60 GHz millimeter-wave for rabbit eyes, The Association for Research in Vision and Ophthalmology, (Florida, '06.05).
- 0470I007 Y.Yamashiro, J.Qu, J.Tao, Y.Kawakami, M.Kojima, R.Honda, H.Sasaki, K.Sasaki: Characteristics of cataract in eyes with long axial length in a Chinese population, The Association for Research in Vision and Ophthalmology, (Florida, '06.05).
- 0470I008 H.Sasaki: Epidemiology Classification and diagnostic technique of cataract, The 6th Asian Cataract Research Conference – Clinical Workshop –, (Beijing, '06.06).
- 0470I009 Y.Sakamoto: New technique for examine visual function in cataract and pseudophakic eyes (Wavefront and PSF sensor), The 6th Asian Cataract Research Conference – Clinical Workshop –, (Beijing, '06.06).
- 0470I010 J.Qu, H.Sasaki, Y.Sakamoto, M.Kojima, H.Yaguchi, Y.Yamashiro, R.Honda, K.Sasaki: Change in light scattering intensity of crystalline lens over five years in the Japanese population – The Monzen Eye Study –, The 6th Asian Cataract Research Conference, (Beijing, '06.06).
- 0470I011 (J.Tao), J.Qu, R.Honda, M.Kojima, Q.Yan, J.Zhang, H.Sasaki, K.Sasaki: Prevalence of three main and six subtype lens opacities in a rural Chinese population, The 6th Asian Cataract Research Conference, (Beijing, '06.06).
- 0470I012 K.Nagai, H.Sasaki, Y.Sakamoto, M.Kojima, K.Sasaki, F.Jonasson, R.Honda: Characteristics of lens opacity in diabetic patients – Reykjavik Eye Study –, The 6th Asian Cataract Research Conference, (Beijing, '06.06).
- 0470I013 M.Kojima, Y.Suzuki, Y.Yamashiro, Y.Sakamoto, M.Hanazawa, S.Watanabe, M.Taki, H.Sasaki, K.Sasaki: Visualization of convective heat transportation of aqueous humor, The 6th Asian Cataract Research Conference, (Beijing, '06.06).
- 0470I014 (X.An), H.Sasaki, Y.Sakamoto, M.Kojima, Y.Kawakami, J.Tao, J.Qu, Z.Liu, J.Zhang, K.Sasaki: True exfoliation in chinese population in a tropical area – The Senya Eye Study –, The 6th Asian Cataract Research Conference, (Beijing, '06.06).
- 0470I015 Y.Sakamoto, H.Nakaizumi, H.Sasaki, K.Sasaki: Higher order wavefront aberrations with silicone aspheric and acrylic spherical intraocular lenses, The 6th Asian Cataract Research Conference, (Beijing, '06.06).
- 0470I016 M.Kojima, Y.Suzuki, Y.Yamashiro, M.Hanazawa, A.Hirata, S.Watanabe, M.Taki, H.Sasaki, K.Sasaki: Assessment of the thermal insult on aqueous humor convection utilizing micro – encapsulated thermo – chromic liquid crystal, The Bioelectromagnetics Society the 28th Annual Meeting, (Cancun, '06.06).
- 0470I017 H.Nakaizumi: Glaucoma following pediatric cataract surgery with without intraocular lens implantation, XXIV European Society of Cataract and Refractive Surgeons, (London, '06.09).
- 0470I018 M.Fukuda, K.Kitagawa, K.Yamamoto, H.Sasaki: Cytotoxic effect of rose bengal and iissamine green on cultured rabbit corneal cell line, 10th International Society of Ocular Toxicology, (Bonn, '06.09).
- 0470I019 M.Kojima, Y.Suzuki, Y.Yamashiro, Y.Sakamoto, M.Hanazawa, S.Watanabe, M.Taki, H.Sasaki, K.Sasaki: Relationship between crystalline lens injury by millimeter wave exposure and aqueous humor convection, 10th International Society of Ocular Toxicology, (Bonn, '06.09).
- 0470I020 M.Kojima, Y.Suzuki, Y.Yamashiro, Y.Sakamoto, M.Hanazawa, S.Watanabe, M.Taki, H.Sasaki, K.Sasaki: Investigation of convective heat transportation of aqueous humor during 60 GHz millimeter wave exposure, 4th International Workshop Biological Effects of Emfs, (Crete, '06.10).
- 0470I021 M.Kojima, Y.Suzuki, Y.Yamashiro, M.Hanazawa, S.Watanabe, M.Taki, Y.Sakamoto, H.Sasaki, K.Sasaki: Relationship between the thermal insult by electromagnetic wave exposure and convective heat transportation of aqueous humor, 2006 KFU Workshop on Ocular Changes Induced by Electromagnetic Waves, (Uchinada, '06.11).

- 0470I022 Y.Sakamoto, H.Sasaki, M.Kojima, M.Ono, K.Sasaki: Sun altitude and effective protection items against UV exposure to the ocular surface – UV dosimetry by mannequin head, 2006 KMU Workshop on Ocular Changes Induced by Electromagnetic Waves, (Uchinada, '06.11).
- 0470I023 (Y.Suzuki), M.Kojima, Y.Yamashiro, K.Wake, M.Taki, M.Hanazawa, S.Watanabe: In-situ 3D temperature imaging with micro – encapsulated thermo – chromic liquid crystal for electromagnetic field dosimetry, 2006 KMU Workshop on Ocular Changes Induced by Electromagnetic Waves, (Uchinada, '06.11).
- 0470I024 Y.Yamashiro, M.Kojima, Y.Sakamoto, H.Kawada, H.Sasaki, K.Sasaki: Suitable methodology to detection ocular injury for millimeter wave exposure, 2006 KMU Workshop on Ocular Changes Induced by Electromagnetic Waves, (Uchinada, '06.11).
- 0470I025 H.Sasaki, R.Honda, M.Kojima, Y.Kawakami, Y.Sakamoto, J.Qu, K.Sasaki: High prevalence of pterygium in the population of tropical area in China, 2006 KMU Workshop on Ocular Changes Induced by Electromagnetic Waves, (Uchinada, '06.11).
- 0470I026 (H.Wakatsuchi), M.Hanazawa, T.Sakai, S.Watanabe, M.Kojima, Y.Yamashiro, K.Sasaki, O.Hashimoto: Complex permittivities measurements of eye tissues in quasi – millimeter wave band, 2006 KMU Workshop on Ocular Changes Induced by Electromagnetic Waves, (Uchinada, '06.11).

## 0480 Department of Otolaryngology

### Faculty

Title	Name	Field of Specialization
Professor	TOMODA Koichi	Otology, Computer aided surgery, Head and Neck surgery, Neuroimmunology
Associate Professor	SUZUKA Yuko	Otology, Audiology, Equilibrium, Neuro-otology, phonation, Medical education
Associate Professor	TSUJI Hiroyuki	Head and neck oncology, Head and neck surgery
Senior Assistant Professor	MURATA Hideyuki	Rhinology, Head and neck surgery, Endoscopic surgery, Computer aided surgery
Senior Assistant Professor	TAKASHIMA Masayuki	Head and neck surgery, Stomatopharyngology, Sleep study, Laser medicine
Senior Assistant Professor	HORIGUTI Akiko	Equilibrium, Vestibular research, Laryngology, Voice restration
Research Associate	ISHIMASA Hiroshi	Head and neck surgery, rhinology, General otolaryngology
Research Associate	IWASAKI Noriko	Head and neck oncology, Immune-allergic disease, general otolaryngology
Research Associate	SHIMODE Yuzo	Head and neck oncology, surgery, Thyroid gland tumor research
Research Associate	NAKAIZUMI Toshihiko	Otology, Clinical and basic otology research
Research Associate	MIYAZAWA Toru	Basic otology research, Head and neck surgery
Research Associate	KITAMURA Miwa	Otolaryngology
Research Associate	SAKAI Aya	Sleep apnea, Otolaryngology
Research Associate	YAMADA Kanako	Audiology, Otolaryngology

### Keywords of Research

neurotology, otoneuro surgery, tympanoplasty, vestibular neurectomy, cochlear implant, middle ear implant, virtual endoscopy, computer-aided surgery, endoscopic nasal surgery, laser surgery, sleep apnea & snorer surgery, skull base surgery, head and neck tumor surgery, molecular biology, neuroimmunology, oncology, laryngology, speech rehabilitation, acoustic neuroma surgery, navigation surgery, tele-medicine, thyroid tumor surgery, virtual education for surgery

### Outline of Research

Research for 3D mobile navigation system  
Central mechanism of audiological function by MEG  
Restriction for phonation with Provox 2 prosthesis  
Clinical research for snorer and sleep apnea  
Research for Thyroid and parathyroid gland  
Inner ear molecular biology  
Clinical survey for Head and Neck tumor and Oncology

### Publications

#### Originals

- 0480B001 Z.Lan, A.Itoi, M.Takashima, M.Oda, K.Tomoda: Difference of pharyngeal morphology and mechanical property between OSAHS patients and normal subjects, *Auris Nasus Larynx*, 33:433-439, 2006.

- 0480B003 A.Itoi, M.Oda, M.Takashima: Clinical study of pathophysiology and severity in pediatric sleep related breathing disorder, J. Kanazawa. Med. Univ., 31:1-9, 2006 (in Japanese) .
- 0480B004 M.Takashima, M.Oda, A.Itoi, K.Tomoda: Evaluation of surgical skill of uvulopalato pharyngo plasty (UPPP), Stomato-pharyngology / Japan Society of Stomato-pharyngology., 18:393-400, 2006 (in Japanese) .
- 0480B005 H.Tsuji, M.Yagi, M.Minamino, M.Nagata, H.Yukawa, T.Minami, Y.Shimode, T.Yamashita: Clinical study of parapharyngeal space tumors, Pract. otol., 99:481-490, 2006 (in Japanese) .
- 0480B006 H.Ishimasa, H.Murata: Investigation of objective evaluation system of anatomical knowledge and operative techniques in education for rhinologic surgery, J. Kanazawa. Med. Univ., 31:62-72, 2006 (in Japanese) .
- 0480B007 H.Tsuji, M.Nagata, T.Inoue, T.Minami, H.Iwai, S.Ohnishi, H.Yukawa, M.Ogura, T.Yamashita, K.Nagata: Clinical phase I trial of concurrent chemo-radiotherapy with S-1 for T2NO glottic carcinoma, Cancer & chemotherapy ; Japanese journal of cancer and chemotherapy., 33(Suppl.1):163-166, 2006 (in Japanese) .
- 0480B008 (M.Hasuo), M.Minamino, M.Yagi, H.Iwai, H.Tsuji, M.Konishi, T.Shimano, N.Sakaida, T.Yamashita: HER-2 expression in salivary duct carcinoma and trastuzumab therapy, Head and neck cancer., 32:68-71, 2006 (in Japanese) .
- 0480B009 (M.Nagata), H.Tsuji, M.Minamino, T.Inoue, N.Yukawa, T.Fujisawa, M.Yagi, MOgura, M.Miyamoto, S.Chikano, H.Iwai, T.Yamashita: A new incision for maxillary cancer-extended lateral rhinotomy+hemicoronal flap-, Head and neck cancer., 32:423-428, 2006 (in Japanese) .
- 0480B010 (T.Inoue), H.Tsuji, T.Minami, M.Nagata, H.Yukawa, M.Minamino, M.Ogura, M.Yagai, T.Fujisawa, M.Miyamaoto, S.Chikano, T.Yamashita: Long-term results of postoperative function after reconstruction of lateral and superior oropharyngeal defects, Head and neck cancer., 32:474-480, 2006 (in Japanese) .

#### Case Reports

- 0480D001 K.Yamada, H.Murata, Y.Shimode, Y.Suzuka, K.Tomoda: The cases of gas gangrene of neck with dysphagia, Journal of Japan Society for Infectious Diseases in Otolaryngology., 24:165-169, 2006 (in Japanese) .

#### Others

- 0480F005 H.Ishimasa, H.Murata, K.Tomoda, J.Yamashita: Investigation of objective evaluation system of anatomical knowledge and operative techniques in education for rhinologic surgery, Oto-rhino-laryngology Tokyo., 49:283-289, 2006 (in Japanese) .
- 0480F006 H.Murata, K.Tomoda: The measurement of error range between location of endoscopic field and CT images, Oto-rhino-laryngology Tokyo., 49:275-277, 2006 (in Japanese) .

### Presentations at Conference

#### International Conference (Symposium)

- 0480H001 Y.Suzuka, K.Yamada, M. Higuchi, N. Hatsusaka, K.Tomoda: Variations of N100m responses in auditory evoked magnetic field, KIT International Symposium on Brain and Language, (Tokyo, '06.03), KIT international symposium on brain and language, 17-18, 2006.
- 0480H002 K.Tomoda, H.Murata, H.Ishimasa, K.Yamada, Y.Suzuka: Image-guided navigation surgery in otorhinolaryngology, The 23rd Congress of Pan-Pacific Surgical Association Japan Chapter, (Bangkok, '06.10).
- 0480H003 Y.Suzuka, T.Nakaizumi, K.Yamada, K.Tomoda: Experience of autologous fat injection to the vocal fold for glottic insufficiency, The 23rd Congress of Pan-Pacific Surgical Association Japan Chapter, (Bangkok, '06.10).
- 0480H004 K.Tomoda, H.Murata, H.Ishimasa, Y.Ning: Current state of image-guided navigation surgery in otorhinolaryngology, 2006 Joint Meeting of Eight Departments of Otolaryngology, (Taipei, '06.11).

### International Conference (Presentations)

- 0480I001 (M. Izumikawa), S. Batts, D.L. Swiderski, M.Crumling, T. Miyazawa, D. Dolan, Y.Raphael: The Severity of Ototoxic Insult Affects Outcome of Atoh1 Treatment, Association for Research inOtolaryngology The 29th Annual Midwinter Meeting, (Baltimore, '06.02).
- 0480I002 T. Miyazawa, M. Izumikawa, D.L. Swiderski, L.A. Beyer, M. Crumling, Y. Raphael: Viral Vector Inoculation into the Apical Cochlear Endolymph Transduces cells throughout the Auditory Membranous Labyrinth, Association for Research inOtolaryngology The 29th Annual Midwinter Meeting, (Baltimore, '06.02).
- 0480I003 K.Tomoda, H.Murata, H.Ishimasa, J.Yamashita: The evaluation of navigation surgery in nose and paranasal sinuses, Computer assisted radiology and surgery 20th international congress and exhibition, (Osaka, '06.06), International Journal of computer assisted radiology and surgery, 1:311-323, 2006.
- 0480I004 Y.Suzuka, Y.Shimode, A.Horiguchi, K.Tomoda: Audiological Findings of Recent Acute Otitis Media, International Otopathology Meeting, (Boston, '06.06), International Otopathology Meeting, 21-22, 2006.
- 0480I005 Y.Suzuka, K.Yamada, M. Higuchi, N. Hatsusaka, K.Tomoda: The Study on Auditory Area Function of Right and Left Hemisphere in Human, 15th International Conference on Biomagnetism, (Vancouver, '06.08), 15th International Conference on Biomagnetism, 15:117, 2006.
- 0480I006 K.Yamada, H.Murata, Y.Shimode, Y.Suzuka, K.Tomoda: The cases of neck gas gangrene with dysphagia, The 23rd Congress of Pan-Pacific Surgical Association Japan Chapter, (Bangkok, '06.10).

## 0490 Department of Dermatology

### Faculty

Title	Name	Field of Specialization
Professor	MOCHIZUKI Takashi	Medical mycology , Dermatmycosis
Associate Professor	TANABE Hiroshi	Medical mycology, Decubitns
Senior Assistant Professor	WATANABE Seiji	Medical mycology
Senior Assistant Professor	KAWASAKI Masako	Medical mycology
Senior Assistant Professor	ABE Shinya	Skin tumor and growth factores
Senior Assistant Professor	FUJII Toshiki	Dermatopathology
Senior Assistant Professor	ISHIZAKI Yasuko	Dermatopathology, cutaneous malignant tumor
Research Associate	TAKEDA Kiminobu	Medical mycology
Research Associate	TACHIKAWA Nobuyuki	Medical mycology
Research Associate	WAKAMATSU Nobuhiko	Dermatopathology
Research Associate	FUJITA Jun	Medical mycology
Research Associate	HASEI Maki	Skin tumor and growth factores, Medical mycology

### Keywords of Research

fungi, dermatophytes, *Candida* species, *Sporothrix* species, dematiaceous fungi, mitochondrial DNA, restriction fragment length polymorphism, ribosomal DNA, ITS region, sequencing, phylogeny, taxonomy, molecular epidemiology, molecular typing, electron microscopy, dermatopathology, skin tumor

### Outline of Research

Research activities in the Department of Dermatology are mainly in the fields of cutaneous mycosis and medical mycology. We introduced a nail drilling method for onychomycosis, to improve the methods of sampling, diagnosis and treatment by antimycotics. For tinea capitis and tinea corporis spreading over wrestling, judo and sumo wrestlers, we support dermatologists for identifying the causative fungi, *Trichophyton tonsurans*, and collect the nationwide epidemiological data. We try to find an effective infection control system combining with a hairbrush sampling method and antimycotics to the epidemics.

In the field of basic mycology, a new technique based on the analysis of intergenic regions of certain genomes are found to be useful to detect intra-species variations of *T. mentagrophytes*. Besides, the other aim of our research is to disclose the phylogenetic relationships of *Trichophyton* species based on multi-locus gene analysis and mating tests, and to understand those species as they are.

In the most recent years, we began to study the pathophysiology of deep tissue injury, which is an uncommon clinical type of decubitus after surgical operations.

## Publications

### Originals

- 0490B001 (T. Uenotsuchi), S. Takeuchi, T. Matsuda, K. Urabe, T. Koga, H. Uchi, T. Nakahara, S. Fukagawa, M. Kawasaki, H. Kajiwara, S. Yoshida, Y. Moroi, M. Furue: Differential induction of T<sub>H</sub>1-prone immunity by human dendritic cells activated with *Sporothrix schenckii* of cutaneous and visceral origins to determine their different virulence, *Int. Immunol.*, 18:1637–1646, 2006.
- 0490B002 (C.J. Jackson), T. Mochizuki, R.C. Barton: PCR fingerprinting of *Trichophyton mentagrophytes* var. *interdigitale* using polymorphic subrepeat loci in the rDNA nontranscribed spacer, *J. Med. Microbiol.*, 55:1349–1355, 2006.
- 0490B003 (N. Umemoto), M. Kakurai, H. Yokokura, S. Toda, M. Osawa, H. Abe, Y. Hiratsuka, E. Okada, R. Azuma, Y. Wada, M. Hayashi, T. Mochizuki, T. Demitsu: Analysis of dermatophyte flora for 5 years at Jichi Medical University Omiya Medical Center in Saitama and identification of atypical dermatophytes using molecular biological Technique (PCR-RFLP analysis), *Jichi Medical School journal.*, 29:155–161, 2006 (in Japanese) .

### Reviews

- 0490C003 T. Mochizuki, H. Tanabe, A. Wakasa, M. Kawasaki, K. Anzawa, H. Ishizaki: Survey of *Trichophyton tonsurans* infection in Japan—Molecular epidemiology and factors affecting adequate hairbrush sampling—, *The Japanese Society for Medical Mycology.*, 47:57–61, 2006 (in Japanese) .

### Case Reports

- 0490D001 (K. Haruna), Y. Shiraki, M. Hiruma, S. Ikeda, M. Kawasaki: A case of lymphangitic sporotrichosis occurring on both forearms with a published work review of cases of bilateral sporotrichosis in Japan, *J. Dermatol.*, 33:364–367, 2006.
- 0490D002 S. Watanabe, H. Tanabe, T. Mochizuki, M. Yanagihara, H. Ishizaki: Two Cases of Toe Web Infection by *Pseudomonas Aeruginosa*, *Skin research.*, 5:53–56, 2006 (in Japanese) .
- 0490D003 M. Nakagawa, K. Takeda, M. Yanagihara, H. Ishizaki, T. Mochizuki, T. Iura, S. Kataoka: A case of viper bite that occurred during pregnancy, *Nishinohon j. dermatol.*, 68:40–42, 2006 (in Japanese) .
- 0490D004 M. Nakagawa, H. Tanabe, M. Yanagihara, H. Ishizaki, T. Mochizuki: A case of meningomyelocoele diagnosed with malum perforans pedis, *Skin research.*, 5:22–26, 2006 (in Japanese) .
- 0490D010 (M. Maeda), T. Mochizuki: A case of onychomycosis caused by *Fusarium oxysporum* infection, *Nishinohon j. dermatol.*, 68:652–655, 2006 (in Japanese) .
- 0490D011 H. Ogawa, S. Watanabe, S. Abe, H. Tanabe, T. Mochizuki: A case of external region basal cell carcinoma the study of basal cell carcinoma for past 15 years in our department, *Skin research.*, 5:411–414, 2006 (in Japanese) .
- 0490D015 H. Tanabe, M. Terada, M. Hasei, H. Ogawa, K. Anzawa, M. Kawasaki, T. Mochizuki, N. Ishikura: Problems of hairbrush test for monitoring of *Trichophyton tonsurans* infection, *Skin research.*, 5:430–434, 2006 (in Japanese) .

### Short Communications

- 0490E001 (P. Campos-Macias), R. Arenas, M. Vega-Memije, M. Kawasaki: *Sporothrix schenckii* Type 3D (mtDNA-RFLP) : Report of an osteoarticular case, *J. Dermatol.*, 33:295–299, 2006.

## Presentations at Conference

### International Conference (Presentations)

- 0490I001 M. Kawasaki: Genetic and phenotypic variations among F1 progenies of *Arthroderma benhamiae*, 16th Congress of the International Society for Human and Animal Mycology, (Paris, '06.06).

- 0490I002 M.Kawasaki, A.Wakasa, K.Anzawa, H.Tanabe, T.Mochizuki, H.Ishizaki, S.Kagawa, B.Hemashettar: Multi-locus analysis of infra- and inter-species variations among *Trichophyton* species, 16th Congress of the International Society for Human and Animal Mycology, (Paris, '06.06).
- 0490I003 S.Watanabe, K.Anzawa, M.Kawasaki, T.Mochizuki, H.Ishizaki: Strain typing of *Fonsecaea pedrosoi* strains by PCR-RFLP analysis, 16th Congress of the International Society for Human and Animal Mycology, (Paris, '06.06).
- 0490I004 T.Mochizuki, M.Kawasaki, H.Tanabe, K.Anzawa, H.Ishizaki, J. Choi: Molecular epidemiology of *Trichophyton tonsurans* isolation in Japan, 16th Congress of the International Society for Human and Animal Mycology, (Paris, '06.06).
- 0490I005 H.Ishizaki, M.Kawasaki, T.Mochizuki, A.Chakrabarti, R.Ungpakorn, J.Yamashita, C.Zaitz, H.Guerrero, C.Toriello, R.Arenas: Mitochondrial DNA analysis of *Sporothrix schenckii* isolated from India, Thailand, Brazil, Guatemala, Colombia and Mexico., 16th Congress of the International Society for Human and Animal Mycology, (Paris, '06.06).
- 0490I006 K.Anzawa, M.Kawasaki, T.Mochizuki, H.Ishizaki: Identification of species from scale from dermatophytosis lesions by PCR-RFLP analysis, 16th Congress of the International Society for Human and Animal Mycology, (Paris, '06.06).
- 0490I007 K.Anzawa, M.Kawasaki, T.Mochizuki, H.Ishizaki: Identification of dermatophytes in the nail by PCR-RFLP analysis, 16th Congress of the International Society for Human and Animal Mycology, (Paris, '06.06).
- 0490I008 K.Anzawa, M.Kawasaki, H.Tanabe, T.Mochizuki, H.Ishizaki: Genotype analysis of *Candida albicans* isolated from the human oral cavity, 16th Congress of the International Society for Human and Animal Mycology, (Paris, '06.06).
- 0490I009 (C. Jackson), T.Mochizuki, R.Barton: Recent developments in the molecular subtyping of anthropophilic dermatophyte fungi, 16th Congress of the International Society for Human and Animal Mycology, (Paris, '06).



## 0500 Department of Urogenital Surgery

### Faculty

Title	Name	Field of Specialization
Professor	SUZUKI Koji	kidney stone disease, kidney transplantation, hyperparathyroidism
Associate Professor	TANAKA Tatsuro	kidney transplantation, endourology
Associate Professor	MIYAZAWA Katsuhito	kidney stone disease, endourology, prostate cancer
Senior Assistant Professor	KAWAMURA Kenji	kidney stone disease, urogenital cancer
Senior Assistant Professor	MORIYAMA Manabu	kidney stone disease, kidney transplantation
Research Associate	SUGA Koudai	general urology
Research Associate	CHIKAZAWA Ippei	general urology
Research Associate	TOKUNAGA Kousuke	general urology
Research Associate	TACHIBANA Hiromichi	general urology
Research Associate	ISHII Takeo	general urology
Research Associate	MORITA Nobuyo	general urology

### Keywords of Research

chronic renal failure, renal transplantation, acquired cystic disease of the kidney, secondary hyperparathyroidism, acute rejection, immunosuppression, renal stone, ESWL, TUL, endourology, calcium oxalate, glycosaminoglycans, heparan sulfate, crystal matrix protein, prothrombin, scanning microscopy, renal cell carcinoma, flow cytometry, BPH, prostatic cancer, bladder cancer, p53, urinary incontinence

### Outline of Research

clinical research on renal transplantation,  
mechanism of urolithiasis

### Publications

#### Originals

- 0500B001 (K.Fujimoto), Y.Hirao, N.Masumori, Y.Arai, H.Yamanaka, T.Kato, K.Miyazawa: Prostate-specific antigen changes as a result of chlormadinone acetate administration to patients with benign prostatic hyperplasia: A retrospective multi-institutional study, *Int. J. Urol.*, 13:543-549, 2006.
- 0500B002 (PK.Grover), K.Miyazawa, M.Coleman, J.Stahl, RL.Ryall: Renal prothrombin mRNA is significantly decreased in a hyperoxaluric rat model of nephrolithiasis, *J. Pathol.*, 210:273-281, 2006.
- 0500B003 K.Kawamura, N.Morita, C.Domiki, K.Fujikawa-Yamamoto, M.Hashimoto, K.Iwabuchi, K.Suzuki: Induction of centrosome amplification in p53 siRNA-treated human fibroblast cells by radiation exposure, *Cancer Sci.*, 97:252-258, 2006.
- 0500B004 K.Aihara, N.Morita, I.Chikazawa, M.Moriyama, K.Kawamura, K.Miyazawa, T.Tanaka, C.Tanaka, Y.Nakamoto, K.Suzuki: An investigation of blood culture positive cases in the department of urology, *J. Kanazawa. Med. Univ.*, 31:132-137, 2006 (in Japanese).

- 0500B005 K.Aihara, K.Kawamura, S.Matsuda, Y.Inoue, T.Yamano, J.Tabuchi, Y.Shimizu, N.Morita, I.Chikazawa, M.Moriyama, K.Miyazawa, T.Tanaka, K.Suzuki: Induction of clinical pathways in portless endoscopic urological surgery for prostate cancer, *Journal for Japanese Society for Clinical Pathway*, 8:125-132, 2006 (in Japanese) .

#### **Case Reports**

- 0500D001 H.Shikata, K.Miyazawa, Y.Ueda, T.Kobata, K.Hida, J.Matsubara: A case of synchronous renal cell carcinoma producing granulocyte colony stimulating factor(G-CSF) and abdominal aortic aneurysm, *Jpn. J. Cardiovasc.Surg.*, 15:521-524, 2006.
- 0500D002 H.Shikata, K.Kurose, T.Kobata, K.Hida, M.Moriyama, N.Morita, S.Sakamoto, K.Suzuki, J.Matsubara: Surgical treatment of abdominal aortic aneurysm accompanied by bilateral large multicystic kidneys, *The Japanese Society for Cardiovascular Surgery.*, 35:251-254, 2006 (in Japanese) .
- 0500D003 T.Tanaka, M.Moriyama, T.Hayama, K.Suzuki: A case of ABO incompatible kidney transplantation complicated by postoperative massive hemorrhage, *Renaltransplantation•vascular surgery.*, 18:51-55, 2006 (in Japanese) .

#### **Others**

- 0500F001 K.Sato, H.Tachibana, T.Tsuzuki, Y.Ueda, S.Katsuda: Prostatic ductal adenocarcinoma mimicking villous adenoma of the urethra, *Virchows Arch.*, 449:597-599, 2006.

## 0510 Department of Obstetrics and Gynecology

### Faculty

Title	Name	Field of Specialization
Professor	MAKINODA Satoru	reproductive physiology, perinatal medicine, gynecologic oncology, ovulation and cytokines
Associate Professor	IURA Toshihiko	perinatal medicine, perinatal diagnosis
Senior Assistant Professor	FUJII Ryota	perinatal medicine, reproductive endocrinology
Senior Assistant Professor	TOMIZAWA Hideki	perinatal medicine, reproductive medicine
Research Associate	FUJITA Satoko	perinatal medicine, reproductive medicine
Research Associate	WASADA Tomoo	reproductive medicine, perinatal medicine, gynecologic oncology
Research Associate	WATANABE Yukio	perinatal medicine, reproductive endocrinology, perinatal diagnosis
Research Associate	INOUE Hirokazu	perinatal medicine, perinatal diagnosis
Research Doctor	KUWAHARA Takashi	perinatal medicine
Research Doctor	NEYATANI Natsuko	perinatal medicine, climacteric medicine

### Keywords of Research

hypothalamus-pituitary system, prenatal diagnosis, malignant tumor of female genital organs, fertilization and nidation, postmenopausal osteoporosis, endothelin, corpus luteum insufficiency, hormone-replacement therapy, nutrition and metabolism in pregnant women, abnormal sexual differentiation, toxikosis of pregnancy, myoma uteri, climacteric symptoms, mechanism of abortion, endometriosis, HGF, cytokine, G-CSF, IL-6, ovulation, hemodynamics, vaginal agenesis

### Outline of Research

<Reproductive Endocrinology>

(Ovarian function and Cytokines)

Mechanism of luteolysis regulated by IL-6

Mechanism of ovulation regulated by G-CSF and its clinical application

(Water transport in the female genital tract)

Mechanism of aquaporin water channels in the ovary and oviduct

(Ovulatory process and Ovarian blood flow)

Prediction of ovulation using ovarian blood flow measurement

<Perinatology>

(Mechanism of Labor pains)

Relation between labor pains and G-CSF, and its clinical application for the prediction of premature labor

(Prenatal diagnosis for Fetus)

New method for fetal diagnosis using ultrasonography

Retrospective analysis for fetal MRI findings, compared with pathological and neonatal diagnosis

(Prognostic factor for early pregnant loss)

Analysis for hCG, Progesterone and G-CSF as prognostic factor for early pregnant loss

## Publications

### Originals

- 0510B001 T.Iura, S.Makinoda, C.Sasakura, N.Hirosaki, H.Inoue, T.Waseda, Y.Watanabe: Hemodynamic analysis of cephalothoracopagus by the color doppler method, *Fetal. Diagn. Ther.*, 21:61–64, 2006.
- 0510B002 (P.Dahm–Kahler), C.Lofman, R.Fujii, M.Axelsson, P.O.Janson, M.Brannstrom: An intravital microscopy method permitting continuous long-term observations of ovulation *in vivo* in the rabbit, *Hum. Reprod.*, 21:624–631, 2006.
- 0510B003 C.Sasakura: The usefulness of MRI in the diagnosis of fetal lung maturity, *J. Kanazawa. Med. Univ.*, 31:269–273, 2006 (in Japanese) .
- 0510B004 N.Hirosaki: Study on the feasibility of G-CSF as a supportive drug in ovulation induction for luteinized unruptured follicle, *J. Kanazawa. Med. Univ.*, 31:274–280, 2006 (in Japanese) .

### Case Reports

- 0510D001 M.Nakagawa, K.Takeda, M.Yanagihara, H.Ishizaki, T.Mochizuki, T.Iura, S.Kataoka: A case of viper bite that occurred during pregnancy, *Nishinohon j. dermatol.*, 68:40–42, 2006 (in Japanese) .

## Presentations at Conference

### International Conference (Presentations)

- 0510I001 S.Makinoda, N.Hirosaki, K.Yanagi, R.Fujii, K.Yoshida: The involvement of granulocyte colony-stimulating factor(G-CSF) in the human ovulatory process, 12th World Congress of Gynecological Endocrinology, (Florence, '06.03).
- 0510I002 N.Hirosaki, R.Fujii, L.Gang, K.Yanagi, K.Yoshida, S.Makinoda: Possible involvement of interleukin-6 in human luteolysis, 12th World Congress of Gynecological Endocrinology, (Florence, '06.03).
- 0510I003 T.Iura, S.Makinoda, H.Inoue, S.Fujita, T.Waseda, C.Sasakura, Y.Watanabe: Prenatal diagnosis of fetal renal disease using color doppler ultrasound, International Symposium Japanese–German Society of Obstetrics and Gynecology, (Niigata, '06.04).
- 0510I004 R.Fujii, G.Lu, K.Yanagi, N.Hirosaki, K.Yoshida, S.Makinoda: Periodic changes of interleukin-6 (IL-6) and its receptors mRNAs in the human ovary– Possible involvement of IL-6 in human luteolysis-, The International Ovarian Conference 2006, (Yokohama, '06.05).
- 0510I005 R.Fujii, N.Hirosaki, K.Yanagi, T.Iura, S.Makinoda: The involvement of granulocyte colony-stimulating factor(G-CSF) in the release of a mature oocyte., 6th Sapporo International Symposium on Ovarian Function, (Otaru, '06.08).
- 0510I006 T.Iura, S.Makinoda, H.Inoue, S.Fujita, T.Waseda, C.Sasakura, Y.Watanabe: Prenatal diagnosis of fetal renal disease using color doppler ultrasound, 16th World Congress on Ultrasound in Obstetrics and Gynecology, (London, '06.09).
- 0510I007 H.Inoue, N.Neyatani, T.Waseda, S.Matsuzawa, T.Iura, S.Makinoda: Analysis of renal artery hemodynamics in normal fetuses using the color doppler method, 16th World Congress on Ultrasound in Obstetrics and Gynecology, (London, '06.09).
- 0510I008 T.Waseda, H.Inoue, T.Iura, S.Makinoda: An attempt to evaluate the placental function by using myometrial blood flow analysis, 16th World Congress on Ultrasound in Obstetrics and Gynecology, (London, '06.09).
- 0510I009 H.Tomizawa, H.Inoue, K.Ohshima, T.Iura, S.Makinoda: Markers to predict the prognosis of pregnancy at 5 week of gestation, 12th International Federation of Placenta Associations Meeting, (Kobe, '06.09).
- 0510I010 T.Waseda, C.Sasakura, H.Tomizawa, R.Fujii, K.Yoshida, T.Iura, S.Makinoda: At attempt to evaluate the placental function by using myometrial blood flow analyse, XVIIIth FIGO, (Kuala Lumpur, '06.11).

0510I011 C.Sasakura, S.Fujita, S.Matsuzawa, T.Waseda, Y.Watanabe, H.Tomizawa, M.Sakaihara, T.Iura, S.Makinoda: The usefulness of MRI in the diagnosis of fetal pulmonary maturity, XVIIIth FIGO, (Kuala Lumpur, '06.11).

## 0520 Department of Anesthesiology and Perioperative Medicine

### Faculty

Title	Name	Field of Specialization
Professor	TSUCHIDA Hideaki	Cardiovascular Effects of Anesthetics, Intravenous Anesthetics
Associate Professor	SEKI Sumihiko	Vascular Reactivity and Cellular calcium dynamics
Senior Assistant Professor	SHIRAIISHI Miharuru	Cardiac Anesthesia, Cardiovascular Agents
Senior Assistant Professor	HIDAKA Koji	Cerebral ischemia
Research Associate	SHIMO Tomohiro	Anaphylaxis
Research Associate	FUKUOKA Tadashi	Intensive care
Research Associate	HORIUCHI Katsura	General anesthesia, Local anesthesia

### Keywords of Research

anesthetic volatile, anesthetic intravenous, cardiovascular system, vascular smooth muscle, endothelium, palliative care, postoperative pain relief, paraquat, sepsis, delayed neuronal death, apoptosis, inducible nitric oxide synthase, brain ischemia, epidural blockade, cytochrome P-450, liver mitochondria, nitric oxide, hypothermia

### Outline of Research

In a clinical setting, we have been studying the effects of various anesthetics or vasoactive drugs on hemodynamics in perioperative patients. Especially, we are now studying the effects of beta1-selective antagonists on hemodynamics and prognosis in patients undergoing noncardiac surgery. In the laboratory, we have examined 1) the effects of septic shock on vasoreactivity in the rat thoracic aorta or the mesenteric arteriole, and 2) the effects of transient forebrain ischemia on apoptotic death of the hippocampal pyramidal neuron in Mongolian gerbil.

### Publications

#### Originals

- 0520B001 T.Shibamoto, T.Ishibashi, T.Shimo, S.Cui, H.Takano, H.Tsuchida, M.Nishio, Y.Kurata: N<sup>G</sup>-nitro-L-arginine methyl ester potentiates anaphylactic venoconstriction in rat perfused livers, *Clin. Exp. Pharmacol. Physiol.*, 33:1073-1077, 2006.

#### Short Communications

- 0520E001 T.Shimo, S.Nishiike, M.Shiraishi, S.Seki, H.Tsuchida: Intraoperative anaphylactic shock induced by methylergometrine and oxytocin, *The Japanese journal of anesthesiology.*, 55:447-450, 2006 (in Japanese) .
- 0520E002 H.Wada, K.Nakamura, S.Nishiike, S.Seki, H.Tsuchida: The combined use of laryngoscope and trachlight®: Another option for endotracheal intubation in patients with large epiglottic cysts, *The Japanese journal of anesthesiology.*, 55:468-470, 2006 (in Japanese) .

## Presentations at Conference

### International Conference (Presentations)

- 0520I001 S.Sugiura, K.Hidaka, S.Seki, H.Tsuchida: Hemodynamic effects of landiolol , an ultra-short acting  $\beta$  1 –selective blocker, on endotracheal intubation in hypertensive patients, IARS 80th Clinical & Scientific Congress, (San Francisco, '06.03).
- 0520I002 S.Nishiike, K.Hidaka, S.Seki, H.Tsuchida: Factor influencing an induction time with 2.5 MAC sevoflurane inhalation, IARS 80th Clinical & Scientific Congress, (San Francisco, '06.03).

## 0530 Department of Oral and Maxillofacial Surgery

### Faculty

Title	Name	Field of Specialization
Professor	SEGAMI Natsuki	oral and maxillofacial surgery, temporomandibular joint disorders, oral cancer, orthognathic surgery
Associate Professor	YOSHMURA Hiroshi	temporomandibular joint disorders, stomatology, neuroscience
Senior Assistant Professor	KANEYAMA Keiseki	oral cancer, stomatology, oral and maxillofacial surgery, orthognathic surgery
Senior Assistant Professor	DEMURA Noboru	orthodontics, stomatology
Research Associate	TAKAHASHI Motohiro	temporomandibular joint disorders, stomatology
Research Associate	NAGAO Toshikazu	temporomandibular joint disorders, stomatology
Research Associate	NISHIURA Rie	temporomandibular joint disorders, stomatology

### Keywords of Research

stomatology, oral and maxillofacial surgery, orthodontics, temporomandibular joint, arthroscopy, magnetic resonance imaging, oral cancer, metastasis, orthognathic surgery

### Outline of Research

1. Basic and clinical research for disorders of temporomandibular joints.
2. Molecular biological research for growth and metastasis of tumors in oral region.
3. Pathophysiological research for abnormal development of oral and maxillofacial region.
4. Research for surgical orthognathics for jaw deformity.
5. Integration mechanisms of oral sensory information in the central nervous systems.

### Publications

#### Originals

- 0530B001 H.Yoshimura, M.Honjo, N.Segami, K.Kaneyama, T.Sugai, Y.Mashiyama, N.Onoda: Cyclic AMP-dependent attenuation of oscillatory-activity-induced intercortical strengthening of horizontal pathways between insular and parietal cortices, *Brain Res.*, 1069:86-95, 2006.
- 0530B002 K.Fujimura, N.Segami, S.Kobayashi: Anatomical study of the complications of intraoral vertico-sagittal ramus osteotomy, *J. Oral Maxillofac. Surg.*, 64:384-389, 2006.
- 0530B003 K.Fujimura, N.Segami, Y.Yoshitake, N.Tsuruoka, K.Kaneyama, J.Sato, S.Kobayashi: Electrophoretic separation of the synovial fluid proteins in patients with temporomandibular joint disorders, *Oral Surg. Oral Med. Oral Pathol. Oral Radiol. Endod.*, 101:463-468, 2006.
- 0530B004 M.Nishimura, N.Segami, K.Kaneyama, J.Sato: Systemic lymphangiomatosis of bone involving the mandible with cystic hygroma of the neck, *J. Oral Maxillofac. Surg.*, 64:1157-1160, 2006.
- 0530B005 T.Sugai, H.Yoshimura, N.Kato, N.Onoda: Component-dependent urine responses in the rat accessory olfactory bulb, *Neuroreport.*, 17:1663-1667, 2006.



- 0530B006 M.Honjo: Influences of multiple tooth losses during developmental periods on the maturation of oral sensory cortices of rats, J. Kanazawa. Med. Univ., 31:73-81, 2006 (in Japanese) .
- 0530B007 S.Kobayashi: Histological evaluation of temporomandibular arthritis induced by mild mechanical loading in rabbits, J. Kanazawa. Med. Univ., 31:42-52, 2006 (in Japanese) .

## **Presentations at Conference**

### **International Conference (Presentations)**

- 0530I001 N.Segami: Eminectomy for habitual dislocation under local anesthesia ; An experience with 11cases, 18th Congress of the European Association for Cranio-Maxillofacial Surgery, (Barcelona, '06.07).

## 0550 Department of Emergency Medicine

### Faculty

Title	Name	Field of Specialization
Professor	WATOH Yukihiro	Emergency, Emergency medical system, Disaster Medicine,
Senior Assistant Professor	MASHIBA Satoru	Emergency, Anaphylaxis
Research Associate	HAYASHI Nobuyuki	Emergency,
Research Associate	MORITA Hideki	Emergency,
Research Associate	GOTO Tetsuro	Emergency,
Research Associate	MIZUNUMA Mariko	Emergency,
Research Associate	NAKATA Mari	Emergency,

### Keywords of Research

acute poisoning, resuscitation, disaster medicine, emergency room, intensive care

### Outline of Research

Evaluative research of Emergency Medicine, EMS system, and Disaster management.

## 0560 Department of Medical Oncology

### Faculty

Title	Name	Field of Specialization
Professor	MOTOO Yoshiharu	Medical oncology, Gastroenterology, Pancreatology
Associate Professor	KIBA Takayoshi	Medical oncology, Gastroenterology
Senior Assistant Professor	NAKAJIMA Hideo	Medical oncology, Immunology
Research Associate	SHIMASAKI Takeo	Medical oncology, Gastroenterology, BioInformatics

### Keywords of Research

medical oncology, clinical oncology, gastroenterology, chemotherapy, tumor biology

### Outline of Research

We are studying on pancreatic cancer, which is one of the most untreatable cancers. One of our projects is the research on the cancerous expression of pancreatitis-associated proteins in human pancreatic cancer. We are cooperating with INSERM in Marseille, France. The second project is the identification and characterization of new heat-shock proteins. The third one is the elucidation of the molecular mechanisms of gemcitabine resistance of pancreatic cancer cells. We are cooperating with Cancer Research Institute of Kanazawa University, especially on glycogen synthase kinase. Other projects include the metabolome approach on the prediction of adverse reaction of anti-cancer drugs, and the proteome analysis on the discovery of new molecular markers for pancreatic cancer.

### Publications

#### Originals

- 0560B001 (J.Peï-Hong), Y.Motoo, N.Sawabu, T.Minamoto: Effect of gemcitabine on the expression of apoptosis-related genes in human pancreatic cancer cells, *World J. Gastroenterol.*, 12:1597-1602, 2006.
- 0560B002 (J.Peï-Hong), Y.Motoo, S.Garcia, JL.Iovanna, MJ.Pebusque, N.Sawabu: Down-expression of tumor protein p53-induced nuclear protein 1 in human gastric cancer, *World J. Gastroenterol.*, 12: 691-696, 2006.
- 0560B003 (Y.Ito), Y.Motoo, H.Yoshida, JL.Iovanna, Y.Nakamura, K.Kuma, A.Miyauchi: High level of tumour protein p53-induced nuclear protein 1 (TP53INP1) expression in anaplastic carcinoma of the thyroid, *Pathology.*, 38:545-547, 2006.

#### Reviews

- 0560C009 Y.Motoo, K.Tsutani: Is it possible to develop global clinical practice guidelines for traditional medicine?, *Japanese journal of oriental medicine.*, 57: 465-475, 2006 (in Japanese) .

#### Case Reports

- 0560D001 J.Yamakawa, J.Moriya, K.Kusaka, T.Itoh, Y.Motoo, T.Kanda: Effectiveness of goshajinkigan on the cold sensation and dyesthesia in a case of nodular multiple angitis, *Japanese journal of oriental medicine.*, 57:651-654, 2006 (in Japanese) .

## **Presentations at Conference**

### **International Conference (Symposium)**

- 0560H001 Y.Motoo: How to develop an international clinical practice guideline for lung cancer, WHO Workshop on Guideline Development for Cancer, (Budapest, Hungary, '06.10).

### **International Conference (Presentations)**

- 0560I001 Y.Motoo: Down-expression of TP53INP1 in human gastric cancer., American Society of Clinical Oncology-Symposium on Gastrointestinal Cancers (ASCO-GI), (San Francisco, CA, USA, '06.01).
- 0560I002 Y.Motoo, T.Shimasaki: Molecular mechanisms of anti-tumor effect of gemciatbine hydrochloride on human pancreatic cancer cells., The 28th World Congress of Internal Medicine, (Taipei, '06.11).

## 0610 Health Management Center

### Faculty

Title	Name	Field of Specialization
Professor	MATSUDA Yoshiro	
Professor(Additional Post)	NAKAGAWA Hideaki	Epidemiology of cardiovascular diseases, occupational medicine, preventive medicine
Professor(Additional Post)	YASUDA Yukio	evidence-based health care
Professor(Additional Post)	YAMADA Yuichi	Occupational health, Epidemiology for cardiovascular and pulmonary diseases
Associate Professor(Additional Post)	ISHIZAKI Masao	Occupational health, Epidemiology for cardiovascular disease
Associate Professor(Additional Post)	MIURA Katsuyuki	Cardiovascular epidemiology, preventive cardiology, clinical epidemiology
Associate Professor(Additional Post)	NISHIJO Muneko	Environmental epidemiology, epidemiology of cadmium pollution
Associate Professor(Additional Post)	MORIKAWA Yuko	Cardiovascular epidemiology, occupational medicine
Senior Assistant Professor	NAKANISHI Yumiko	Preventive medicine
Senior Assistant Professor	HAYASE Mitsuru	
Senior Assistant Professor	KUGINUKI Yasuaki	hemodynamics
Research Associate	KUSAKA Kazuya	英文の研究領域を入力してください。
Research Associate	YABUNO Yoshinori	Diagnostic Imaging

### Keywords of Research

stress, eating habit, health examination, screening, exercise, nutrient intake, life style, obesity

### Publications

#### Originals

- 0610B001 (Y.Suwazono), E.Kobayashi, M.Uetani, K.Miura, Y.Morikawa, M.Ishizaki, T.Kido, H.Nakagawa, K.Nogawa: G-protein  $\beta$  3 subunit gene variant (C825T) is unlikely to have a significant influence on serum total cholesterol level in Japanese workers, *Clin. Exp. Hypertens.*, 28:47-56, 2006.
- 0610B002 (Y.Suwazono), E.Kobayashi, M.Uetani, K.Miura, Y.Morikawa, M.Ishizaki, T.Kido, H.Nakagawa, K.Nogawa: G-protein  $\beta$  3 subunit polymorphism C1429T and low-density lipoprotein receptor-related protein 5 polymorphism A1330V are risk factors for hypercholesterolemia in Japanese males –a prospective study over 5 years, *Metab. Clin. Exp.*, 55:751-757, 2006.
- 0610B003 (Elliott.P), Stamler.J, Dyer.AR, Appel.L, Dennis.B, Kesteloot.H, H.Ueshima, A.Okayama, Chan.Q, Garside.DB, Zhou.B, for the INTERMAP Cooperative Reserch Group, H.Nakagawa, K.Miura: Association between protein intake and blood pressure: the INTERMAP study, *Arch. Intern. Med.*, 166:79-87, 2006.
- 0610B004 (M.Sakurai), K.Miura, T.Takamura, T.Ota, M.Ishizaki, Y.Morikawa, T.Kido, Y.Naruse, H.Nakagawa: Gender differences in the association between anthropometric indices of obesity and blood pressure in Japanese, *Hypertens. Res.*, 29:75-80, 2006.

- 0610B005 (S.Omote), T.Kido, M.Nishijo, H.Nakagawa, Y.Suwazono, E.Kobayashi, N.Nogawa: Urinary type I collagen cross-linked N-telopeptides in inhabitants 18Years after cessation of exposure to cadmium in Japan, *Bull. Environ. Contam. Toxicol.*, 76:187–94, 2006.
- 0610B006 H.Nakagawa, M.Nishijo, Y.Morikawa, K.Miura, K.Tawara, J.Kuriwaki, T.Kido, A.Ikawa, E.Kobayashi, K.Nogawa: Urinary cadmium and mortality among inhabitants of a cadmium-polluted area in Japan, *Environ Res*, 100:323–329, 2006.
- 0610B007 S.Matsui, M.Fu, M.Hayase, S.Katsuda, N.Yamaguchi, K.Teraoka, T.Kurihara, H.Murano, N.Takekoshi: Transfer of immune components from rabbit autoimmune cardiomyopathy into severe combined immunodeficiency (SCID) mice induces cardiomyopathic changes, *Autoimmunity*, 39:121–128., 2006.
- 0610B008 (Y.Suwazono), E.Kobayashi, M.Uetani, K.Miura, Y.Morikawa, M.Ishizaki, T.Kido, H.Nakagawa, K.Nogawa: Low-density lipoprotein receptor-related protein 5 variant A1330V is a determinant of blood pressure in Japanese males, *Life Sci.*, 78:2475–2479, 2006.
- 0610B009 F.Yu, T.Takahashi, J.Moriya, K.Kawaura, J.Yamakawa, K.Kusaka, T.Itoh, H.Sumino, S.Morimoto, T.Kanda: Angiotensin- II receptor antagonist alleviates non-alcoholic fatty liver in kka y obese mice with type2 diabetes, *J. Int. Med. Res.*, 34:297–302, 2006.
- 0610B010 (M.Uetani), E.Kobayashi, Y.Suwazono, M.Nishijo, H.Nakagawa, T.Kido, K.Nogawa: Smoking does not influence cadmium concentrations in blood and urine in relatively high levels of environmental cadmium areas in Japan, *Biol Trace Elem Res*, 110:107–118, 2006.
- 0610B011 (Y.Suwazono), E.Kobayashi, M.Uetani, K.Miura, Y.Morikawa, M.Ishizaki, T.Kido, H.Nakagawa, K.Nogawa: G-protein  $\beta$  3 subunit gene variant is unlikely to have a significant influence on serum uric acid level in Japanese workers, *Tohoku J. Exp. Med.*, 209:149–157, 2006.
- 0610B012 K.Miura, H.Nakagawa, H.Ueshima, A.Okayama, S.Saitoh, J.D.Curb, B.L.Rodriguez, K.Sakata, N.Okuda, K.Yoshita, J.Stamler, INTERMAP and INTERLIPID Research Groups: Dietary factors related to higher plasma fibrinogen levels of Japanese-american in hawaii compared with Japanese in Japan, *Arterioscler. Thromb. Vasc. Biol.*, 26:1674–1679, 2006.
- 0610B013 (K.Wada), T.Satoh, M.Tsunoda, Y.Aizawa, and the Japan Work Stress and Health Cohort Study Group, M.Ishizaki: Associations of health behaviors on depressive symptoms among employed men in Japan, *Ind Health*, 44:486–492, 2006.
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- 0610B015 M.Nishijo, Y.Morikawa, H.Nakagawa, K.Tawara, K.Miura, T.Kido, A.Ikawa, E.Kobayashi, K.Nogawa: Causes of death and renal tubular dysfunction in residents exposed to cadmium in the environment, *Occup Environ Med*, 63:545–550, 2006.
- 0610B016 (E.Kobayashi), Y.Suwazono, M.Uetani, T.Inaba, M.Oishi, T.Kido, M.Nishijo, H.Nakagawa, K.Nogawa: Estimation of benchmark dose for renal dysfunction in a cadmium non-polluted area in Japan, *J. Appl. Toxicol.*, 26:351–355, 2006.
- 0610B017 (M.Uetani), E.Kobayashi, Y.Suwazono, R.Honda, M.Nishijo, H.Nakagawa, T.Kido, K.Nogawa: Tissue cadmium (Cd) concentrations of people living in a Cd polluted area, Japan, *Biometals*, 19:521–525, 2006.
- 0610B018 (Y.Suwazono), E.Kobayashi, M.Uetani, K.Miura, Y.Morikawa, M.Ishizaki, T.Kido, H.Nakagawa, K.Nogawa: G-protein  $\beta$  3 subunit variant C825T is a risk factor for hypertension in Japanese females –a prospective cohort study over 5 years, *Ann. Hum. Genet.*, 70:767–777, 2006.
- 0610B019 M.Ishizaki, N.Kawakami, R.Honda, H.Nakagawa, Y.Morikawa, Y.Yamada, The Japan Work Stress and Health Cohort Study Group: Psychosocial work characteristics and sickness absence in Japanese employees, *Int. Arch. Occup. Environ. Health.*, 79:640–646, 2006.
- 0610B020 (Y.Suwazono), E.Kobayashi, M.Uetani, K.Miura, Y.Morikawa, M.Ishizaki, T.Kido, H.Nakagawa, K.Nogawa: Low-density lipoprotein receptor-related protein 5 variant Q89R is associated with hypertension in Japanese females, *Blood Press.*, 15:80–87, 2006.

- 0610B021 (E.Kobayashi), Y.Suwazono, M.Uetani, T.Kido, M.Nishijo, H.Nakagawa, K.Nogawa: Tolerable level of lifetime cadmium intake estimated as a benchmark dose low, based on excretion of  $\beta_2$ -microglobulin in the cadmium-polluted regions of the Kakehashi River Basin, Japan, *Bull. Environ. Contam. Toxicol.*, 76:8-15, 2006.
- 0610B022 (E.Kobayashi), Y.Suwazono, M.Uetani, T.Inaba, M.Oishi, T.Kido, M.Nishijo, H.Nakagawa, K.Nogawa: Estimation of benchmark dose as the threshold levels of urinary cadmium, based on excretion of total protein,  $\beta_2$ -microglobulin, and *N*-acetyl- $\beta$ -D-glucosaminidase in cadmium nonpolluted regions in Japan, *Environ Res*, 101:401-406, 2006.
- 0610B023 (Y.Suwazono), E.Kobayashi, M.Uetani, K.Miura, Y.Morikawa, M.Ishizaki, T.Kido, H.Nakagawa, K.Nogawa: The -1438A/G polymorphism in the 5-hydroxytryptamine receptor 2A gene is related to hyperuricemia, increased  $\gamma$ -glutamyl transpeptidase and decreased high-density lipoprotein cholesterol level in the Japanese population: a prospective cohort study over 5 years, *Int. J. Mol. Med.*, 17:77-82, 2006.
- 0610B024 Y.Yamada, T.Imai, M.Ishizaki, R.Honda: ALDH2 and CYP2E1 genotypes, urinary acetaldehyde excretion and the health consequences in moderate alcohol consumers, *J. Hum. Genet.*, 51:104-111, 2006.
- 0610B025 (T.Miyamoto), E.Kobayashi, Y.Suwazono, M.Uetani, M.Nishijo, K.Miura, H.Nakagawa, K.Nogawa: Changes in urinary excretions of cadmium, copper, and zinc in Japanese workers., *Arch. Environ. Occup. Health.*, 61:251-222, 2006.
- 0610B026 M.Nakashima, K.Miura, T.Sakai, M.Bansho, Y.Morikawa, M.Nishijo, Y.Nakanishi, H.Nakagawa: Attitude to smoking and effect of anti-smoking education in elementary school 6th grade students, *Hokuriku Japanese Journal of Public Health.*, 32:73-78, 2006 (in Japanese) .
- 0610B027 K.Miura, H.Myogadani, Y.Kadoya, M.Hayashi, M.Motoya, M.Kuzumaki, M.Yoneda, T.Mitsui, M.Nishijo, Y.Morikawa, Y.Nakanishi, M.Nakashima, H.Nakagawa: Effectiveness of lifestyle modification programs for control of blood pressure: A non-randomized controlled trial in Komatsu, Japan, *Japanese Journal of Public Health.*, 53:533-542, 2006 (in Japanese) .

#### Reviews

- 0610C001 F Yu, T.Takahashi, J.Moriya, K.Kawaura, J.Yamakawa, K.Kusaka, T.Itoh, S.Morimoto, N.Yamaguchi, T.Kanda: Traditional chinese medicine and kampo: a review from the distant past for the future, *J. Int. Med. Res.*, 34:231-239, 2006.
- 0610C002 (S.Satarug), M.Nishijo, JM.Lasker, RJ.Edwards, MR.Moore: Kidney dysfunction and hypertension:role for cadmium,P450 and heme oxygenases?, *Tohoku J. Exp. Med.*, 208:179-202, 2006.

#### Case Reports

- 0610D001 K.Kusaka, T.Itoh, K.Kawaura, J.Moriya, J.Yamakawa, T.Takahashi, M.Oguchi, H.Tonami, I.Yamamoto, T.Kanda: Advanced oesophageal carcinoma in an 84-year-old treated with chemoradiotherapy, *J. Int. Med. Res.*, 34:437-440, 2006.
- 0610D002 J.Yamakawa, J.Moriya, K.Kusaka, T.Itoh, Y.Motoo, T.Kanda: Effectiveness of goshajinkigan on the cold sensation and dyesthesia in a case of nodular multiple angiitis, *Japanese journal of oriental medicine.*, 57:651-654, 2006 (in Japanese) .

### Presentations at Conference

#### International Conference (Presentations)

- 0610I001 K.Miura, H.Nakagawa, H.Ueshima, A.Okayama, S.Saitoh, JD.Curb, B.Rodriguez, K.Sakata, N.Okuda, K.Yoshita, J.Stamler: Dietary factors related to the plasma fibrinogen difference between Japanese in Japan and Japanese-Americans in Hawaii: the INTERLIPID Study, 46th Annual Conference on Cardiovascular Disease Epidemiology and Prevention, American Heart Association, (Phoenix, '06.03).

- 0610I002 (K.Yoshita), K.Miura, N.Okuda, A.Okayama, S.Saitoh, H.Nakagawa, K.Sakata, S.Archer, P.Elliott, J.Stamler, H.Ueshima, for the INTERMAP Research Group: Effects of dietary supplement use on average total micronutrient intake in middle-aged Japanese: the INTERMAP Study, 46th Annual Conference on Cardiovascular Disease Epidemiology and Prevention, American Heart Association, (Phoenix, '06.03).
- 0610I003 S.Yoneyama, K.Miura, S.Sasaki, S.Yoshita, M.Morikawa, Y.Soyama, M.Ishizaki, T.Kido, Y.Naruse, H.Nakagawa: Relationship of dietary intake of fatty acids to serum C-reactive protein in Japanese, 14th International Symposium on Atherosclerosis, (Rome, '06.06), *Atherosclerosis*, 7:290, 2006.
- 0610I004 M.Nishijo, H.Nakagawa, R.Honda: A trial for a global standard health management for Cd pollution, Health risk management for environment and labour, (Tokyo, '06.06), URMPM special conference, 52, 2006.
- 0610I005 M.Ishizaki, Y.Morikawa, H.Nakagawa, R.Honda, N.Kawakami, T.Haratani, F.Kobayashi, S.Arai: Relationship between change of job demand/control and absence from work, 28th International Congress on Occupational Health, (Milan, '06.06), *Book of Abstracts*, 292, 2006.
- 0610I006 (N.Kawakami), T.Haratani, F.Kobayashi, M.Ishizaki, T.Hayashi, O.Fujita, Y.Aizawa, S.Miyazaki, H.Hiro, T.Masumoto, S.Hashimoto, S.Araki: Job Insecurity and increased risk of stroke in Japanese men: a prospective finding from the jstress study, 28th International Congress on Occupational Health, (Milan, '06.06), *Book of Abstracts*, 41, 2006.
- 0610I007 M.Nishijo, H.Nakagawa, R.Naganuma, K.Tawara, T.Kido, H.Suzuki: An epidemiological study on health effects by dioxin in vietnam; comparison of contrast acuity between inhabitants of herbicide sprayed and non-sprayed areas, 26th International symposium on halogenated persistent organic pollutants, (Oslo, '06.08), 26th International symposium on halogenated persistent organic pollutants, 2006.
- 0610I008 M.Nishijo, H.Nakagawa, Y.Morikawa, K.Tawara, J.Kuriwaki, E.Hori, H.Nishijo: Effect of 2,3,7,8-thtrachlorodibenzo-p-dioxin exposure during pregnancy on the neurodevelopment of rat off-springs, 26th International symposium on halogenated persistent organic pollutants, (Oslo, '06.08), 26th International symposium on halogenated persistent organic pollutants, 2006.
- 0610I009 M.Nishijo, H.Nakagawa, K.Tawara, T.Kido, R.Naganuma: Areal differences of concentration levels of polychlorinated debenzo-p-dioxins and dibenzofurans in human breast milk from Vietnam and Japan, 26th International symposium on halogenated persistent organic pollutants, (Oslo, '06.08), 26th International symposium on halogenated persistent organic pollutants, 2006.
- 0610I010 K.Miura, H.Nakagawa, T.Kushiro, A.Takahashi, M.Nishinaga, H.Soejima, M.Taguri, R.Matsukawa, A.Harada, Y.Ohashi, H.Ueshima, for the JALS Group.: Comparison of four blood pressure indexes in predicting stroke and myocardial infarction: a meta-analysis of 15 cohort studies in Japan, 21th Scientific Meeting of the International Society of Hypertension, (Fukuoka, '06.10), *J Hypertens*, 24(suppl 6):S84, 2006.
- 0610I011 (Q.Chan), J.Stamler, K.Miura, B.Zhou, P.Elliott: Relation of type, pattern of alcohol intake to blood pressure: the INTERMAP Study, 21th Scientific Meeting of the International Society of Hypertension, (Fukuoka, '06.10), *J Hypertens*, 24(suppl 6):S57, 2006.



## 0620 Department of Pathology

### Faculty

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Title	Name	Field of Specialization
Research Associate(Additional Post)	KUROSE Nozomu	surgical pathology, molecular pathology
Research Associate(Additional Post)	KINOSHITA Eriko	surgical pathology, molecular pathology

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### Keywords of Research

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surgical pathology, cytopathology, molecular pathology, ultrastructural pathology, general pathology, clinical pathology, diagnosis, histochemistry, immunostaining, PCR, in situ hybridization

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### Publications

#### Case Reports

0620D001 K.Sato, M.Takenaka, M.Nakano, T.Terauchi, Y.Ueda, S.Katsuda: A case of mixed mucinous and nonmucinous type bronchioloalveolar carcinoma, J. Jpn. Soc. Clin. Cytol., 45:103-105, 2006 (in Japanese) .

## 0630 Department of General Internal Medicine

### Faculty

Title	Name	Field of Specialization
Professor	KANDA Tsugiyasu	Cardiovascular distase,Diabetes Mellitus,Mental distase
Associate Professor	ITOU Tohru	Diaqnosis for esophagus,gastro-intestine,colon,liver & bileduct disease.Endoscopical treatment of its disease,especially,superfficial type esophageal cancer, earygastric cancer, eary colon cancer
Associate Professor	TAKAHASHI Takashi	Infections disease,Respiratory medicine,Clinical microbiology
Research Associate(Additional Post)	KUSAKA Kazuya	Diaqnosis for esophagus,gastro-intestine,colon,liver & bileduct disease.Endoscopical treatment of its disease,especially,superfficial type esophageal cancer, earygastric cancer, eary colon cancer
Research Associate	YAMAKAWA Junichi	Nenurology,Kampo medicine

### Keywords of Research

cardiology, gastroenterology, neurology, clinical epidemiology, alternative, clinical ethics, hospital management, diagnostic & treatment endoscopy, general practise, obesity, cytokine, gastric cancer, infection

### Outline of Research

Three major investigations are proceeded. One is to investigate the therapeutic implication of cytokine against viral myocarditis, chronic fatigue syndrome, infection due to obese through immunomodulation. The second is to investigate the new methods of endoscopic therapy against gastric cancer and colon tumors. The third is to apply the kampo medicine to the metabolic syndrome and chronic fatigue syndrome.

### Publications

#### Originals

- 0630B001 T.Takahashi, Y.Fei, Z.Shi-je, J.Moriya, H.Sumino, S.Morimoto, N.Yamaguchi, T.Kanda: Beneficial effect of brewers' yeast extract on daily activity in a murine model o f chronic fatigue syndrome, eCAM, 3:109-115, 2006.
- 0630B002 T.Takahashi, F.Yu, S.Saegusa, H.Sumino, T.Nakahashi, K.Iwai, S.Morimoto, M.Kurabayashi, T.Kanda: Impaired expression of cardiac adiponectin in leptin-deficient mice with viral myocarditis, Int. Heart J., 47:107-123, 2006.
- 0630B003 (H.Sumino), S.Ichikawa, T.Takahashi, H.Sakamoto, K.Goto-Onozato, S.Koya, T.Kanda, M.Nara, K.Seki, M.Murakami, M.Kurabayashi: Conjugated estrogen plus medroxyprogesterone does not impair blood rheological properties in hypertensive postmenopausal women, Maturitas, 53:306-314, 2006.
- 0630B004 (H.Sumino), S.Ichikawa, S.Kasama, T.Takahashi, H.Kumakura, Y.Takayama, T.Kanda, T.Sakamaki, M.Kurabayashi: Elevated arterial stiffness in postmenopausal women with osteoporosis, Maturitas, 55:212-218, 2006.
- 0630B005 (H.Sumino), S.Ichikawa, S.Kasama, T.Takahashi, H.Kumakura, Y.Takayama, T.Kanda, M.Kurabayashi: Different effects of oral conjugated estrogen and transdermal estradiol on arterial stiffness and vascular inflammatory markers in postmenopausal women, Atherosclerosis, 189:436-442, 2006.
- 0630B006 F.Yu, T.Takahashi, J.Moriya, K.Kawaura, J.Yamakawa, K.Kusaka, T.Itoh, H.Sumino, S.Morimoto, T.Kanda: Angiotensin- II receptor antagonist alleviates non-alcoholic fatty liver in kkey obese mice with type2 diabetes, J. Int. Med. Res., 34:297-302, 2006.

- 0630B007 (T.Yuuki), T.Kanda, S.Kishi: Expression of ephrin in retinal neovascularization and iris rubeosis, *J. Int. Med. Res.*, 34:485-494, 2006.
- 0630B008 M.Okuro, S.Morimoto, T.Takahashi, K.Okaishi, T.Nakahashi, H.Murai, K.Iwai, T.Kanda: Angiotensin I – converting enzyme inhibitor improves reactive hyperemia in elderly hypertensives with arteriosclerosis obliterans, *Hypertens. Res.*, 29:655-663, 2006.
- 0630B009 S.Morimoto, T.Takahashi, K.Okaishi, T.Nakahashi, K.Nomura, T.Kanda, M.Okuro, H.Murai, T.Nishino, M.Matsumoto: Tilting-induced decrease in systolic blood pressure in bedridden hypertensive elderly inpatients: effects of azelnidipine, *Hypertens. Res.*, 29:943-949, 2006.
- 0630B010 J.Moriya: Establishment of murine model for chronic fatigue syndrome and efficacy of Kampo Medicine on daily activity, *J. Kanazawa. Med. Univ.*, 31:263-268, 2006 (in Japanese) .
- 0630B011 S.Saegusa: Myocardial protective action of the angiotensin II type 1 receptor blocker (ARB) in the acute viral myocarditis of mice with metabolic syndrome –Meaning of adiponectin expression by cardiac muscle–, *J. Kanazawa. Med. Univ.*, 31:209-215, 2006 (in Japanese) .

### Reviews

- 0630C001 F Yu, T.Takahashi, J.Moriya, K.Kawaura, J.Yamakawa, K.Kusaka, T.Itoh, S.Morimoto, N.Yamaguchi, T.Kanda: Traditional chinese medicine and kampo: a review from the distant past for the future, *J. Int. Med. Res.*, 34:231-239, 2006.

### Case Reports

- 0630D001 K.Kusaka, T.Itoh, K.Kawaura, J.Moriya, J.Yamakawa, T.Takahashi, M.Oguchi, H.Tonami, I.Yamamoto, T.Kanda: Advanced oesophageal carcinoma in an 84- year-old treated with chemoradiotherapy, *J. Int. Med. Res.*, 34:437-440, 2006.
- 0630D002 J.Yamakawa, J.Moriya, K.Kusaka, T.Itoh, Y.Motoo, T.Kanda: Effectiveness of goshajinkigan on the cold sensation and dyesthesia in a case of nodular multiple angitis, *Japanese journal of oriental medicine.*, 57:651-654, 2006 (in Japanese) .

### Others

- 0630F001 (H.Honda), J.Iwahashi, T.Kashiwagi, Y.Imamura, N.Hamada, T.Anraku, S.Ueda, T.Kanda, T.Takahashi, S.Morimoto: Outbreak of human metapneumovirus infection in elderly inpatients in japan, *J. Am. Geriatr. Soc.*, 54:177-180, 2006.

## Presentations at Conference

### International Conference (Presentations)

- 0630I001 T.Kanda: Mao-to, j apanese herbal medicine, prolonged the survuival of viral myocarditis in mice by reduction of cardiac tnf-  $\alpha$  expression, 3rd Annual Symposium of the American Heart Association Council on Basic Cardiovascular Sciences, (United States of America, '06.07), American Heart Association, :53, 2006.
- 0630I002 S.Morimoto, T.Nakahashi, K.Okaishi, T.Takahashi, K.Nomura, T.Kanda, M.Okuro, H.Murai, T.Nishino, M.Matsumoto: Hypotension induced by tilting of upper body in bedridden hypertensive elderly inpatients. Effects of azelnidipine, The 21st scientific meeting of the international society of hypertension, (Fukuoka, '06.10).
- 0630I003 (H.Honda), T.Takahashi, K.Nomura, Y.Imamura, N.Hamada, S.Morimoto: Outbreak of human metapneumovirus infection in elderly inpatients in japan, The 5th east asian conference on infection control and prevention EACIC2006, (Tokyo, '06.11).

## 0640 Endoscopy Center

### Faculty

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Title	Name	Field of Specialization
Director(Additional Post)	TAKASE Shujiro	Gastroenterology, Hepatology
Research Associate	MATSUDA Makoto	Endoscopic treatment of esophageal varices

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### Keywords of Research

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early esophageal cancer, gastric esophageal reflux disorder, esophageal ulcer, esophageal varix, thrombosis of esophageal varix, peptic ulcer, acute gastric mucosal lesion, proton pump inhibitor, lansoplazole metabolism, helicobacter pylori, eradication therapy of helicobacter pylori, early gastric cancer, endoscopic mucosal resection, endoscopic submucosal dissection, endoscopic ultrasound, marking rivet, early colon cancer, apoptosis, vascular endothelial growth factor, ulcerative colitis, Crohn disease

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### Outline of Research

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- 1.Endoscopic treatment for early cancer of digestive organ
  - 2.Endoscopic treatment for esophageal and gastric varices associated with portal hypertension
  - 3.Endoscopic treatment for choledochal stone
  - 4.Endoscopic diagnosis for pulmonary cancer
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## 0650 Department of Rehabilitation Medicine

### Faculty

Title	Name	Field of Specialization
Professor	YAMAGUCHI Masao	Gait analysis using EMG power spectrum. Sway paths of the center of gravity; post hip surgery of the patient with osteoarthritis of the hip. Clinical pathway of the patient with femoral neck fracture.
Senior Assistant Professor		Establishment of evaluation for dysphagia.
Senior Assistant Professor(Additional Post)	NAKATA Minori	Treatment and rehabilitation of musculoskeletal disorders, caused by work-related, whiplash-injury-associated, and other origins

### Keywords of Research

gait analysis, force plate, kinematic measurements, electromyogram, power spectrum, bone and joint problem, femoral neck fracture, low back pain, hemiplegia, paraplegia, osteoporosis, dysphagia, instruction of ADL

### Outline of Research

- 1) Using spectral analysis in the EMG frequency, we will clarify the control in motor units of lower extremity muscles during walking cycle.
- 2) For the purpose of developing the therapeutic exercise, we are studying the sway paths of center of gravity for the patient with osteoarthritis of the hip who underwent hip surgery.
- 3) We have made the clinical pathway of the patient with femoral neck fracture. Hereafter we are going to study about the outcome, then to improve this clinical pathway, for the patient to return home with satisfaction.
- 4) We will establish the evaluation for dysphagia, analyzing results of videofluoroscopic and videoendoscopic examination of swallowing. Secondly, we are going to establish the standard of indication for swallowing training.

## 0660 Department of Respiriology (Thoracic Surgery)

### Faculty

Title	Name	Field of Specialization
Professor	SAKUMA Tsutomu	
Professor	SAGAWA Motoyasu	
Research Associate	AIKAWA Hirokazu	

### Keywords of Research

thoracic surgery, lung cancer, mediastinal tumor, lung transplantation, video assisted thoroscopic surgery, chemotherapy, lung injury, alveolar epithelial cell, bronchoscopy, thoracoscopy, laser therapy, pneumothorax

### Publications

#### Originals

- 0660B001 T.Sakuma, X.Gu, Z.Wang, S.Maeda, M.Sugita, M.Sagawa, K.Osanai, H.Toga, L.B.Ware, G.Folkesson, M.A.Matthay: Stimulation of alveolar epithelial fluid clearance in human lungs by exogenous epinephrine, *Crit. Care Med.*, 34:676-681, 2006.
- 0660B002 J. F. Guo, K.Higashi, Y.Ueda, M.Oguchi, T.Takegami, H.Toga, T.Sakuma, H.Yokota, S.Katsuda, H.Tonami, I.Yamamoto: Microvessel density : correlation with <sup>18</sup>F-FDG uptake and prognostic impact in lung adenocarcinomas, *J. Nucl. Med.*, 47:419-425, 2006.
- 0660B003 M.Sagawa, K.Higashi, M.Sugita, Y.Ueda, S.Maeda, H.Toga, T.Sakuma: Fluorodeoxyglucose uptake correlates with the growth pattern of small peripheral pulmonary adenocarcinoma, *Surg Today*, 36:230-234, 2006.
- 0660B004 X.Gu, Z.Wang, J.Xu, S.Maeda, M.Sugita, M.Sagawa, H.Toga, T.Sakuma: Denopamine stimulates alveolar fluid clearance via cystic fibrosis transmembrane conductance regulator in rat lungs, *Respirology*, 11:566-571, 2006.

#### Reviews

- 0660C001 M.Sagawa, M.Sugita, S.Marda, K.Usuda, T.Sakuma: Is board certification system of thoracic CT screening necessary?, *The journal of thoracic CT screening.*, 13:113-115, 2006 (in Japanese) .
- 0660C004 M.Sagawa, I.Tsuji, H.Aikawa, S.Maeda, K.Usuda, T.Sakuma: Quality control of cancer screening, *Proceedings of the Society for Clinical and Biostatistical Research.*, 26:22-27, 2006 (in Japanese) .

#### Case Reports

- 0660D001 M.Sagawa, T.Donjo, T.Isobe, S.Notake, M.Nakai, M.Sugita, S.Maeda, T.Sakuma: Bilateral vocal cord paralysis after lung cancer surgery with a double-lumen endotracheal tube: a life-threatening complication, *J. Cardiothorac. Vasc. Anesth.*, 20:225-226, 2006.
- 0660D002 Z.Wang, X.Jin, Y.Machida, H.Aikawa, M.Sagawa, K.Higashi, H.Saito, T.Kosaka, S.Takashima, T.Sakuma: Colorectal cancer identified by FDG-PET during preoperative examination for lung cancer: report of two cases, *J. Kanazawa. Med. Univ.*, 31:144-146, 2006.
- 0660D003 M.Sugita, M.Sagawa, Y.Ueda, K.Higashi, T.Sakuma: Localized bronchioloalveolar carcinoma with small foci of active fibroblastic proliferation, *Respiration*, 73:694-697, 2006.
- 0660D004 M.Sagawa, M.Sugita, S.Maeda, T.Sakuma: Two-staged treatment of bronchial carcinoid without pulmonary parenchymal resection, *J. Thorac. Cardiovasc. Surg.*, 131:753-754, 2006.

0660D005 S.Maeda, M.Sagawa, M.Sugita, T.Sakuma: Surgical approach for lung cancer with multiple pulmonary nodules, The Japanese journal of thoracic surgery., 59:31-35, 2006 (in Japanese) .

## **Presentations at Conference**

### **International Conference (Symposium)**

0660H001 T.Sakuma: Protective effects of endogenous catecholamine on alveolar fluid balance in acute pancreatitis and hypoxia in rats, 3rd International Symposium on Respiratory Diseases, (Shanghai, '06.11), J. Organ Dysfunction, ISRD 2006Abstract:1-5, 2006.

### **International Conference (Presentations)**

0660I001 T.Sakuma, J.Xu, Z.Wang, S.Maeda, M.Sugita, M.Sagawa, M.Shimazaki, Y.Ueda: Mechanisms responsible for acute pancreatitis-stimulated alveolar fluid clearance capacity in rat lungs, Experimental Biology, (San Francisco, '06.04).

0660I002 M.Iguchi, H.Kida, M.Saito, Y.Machida, K.Kojima, Y.Tachi, R.Hatta, K.Nakagawa, K.Tsuchihara, T.Tobe, T.Seki, M.Takahashi, J.Huang, K.Osanai, H.Toga, M.Sagawa, T.Sakuma, Y.Ueda: Clinical evaluation of micropapillary adenocarcinoma of the lung, 11th Congress of the Asian Pacific Society of Respiriology, (kyoto, '06.11), Respiriology, 11:A251, 2006.

## 0670 Lifestyle-related Diseases Center

### Faculty

Title	Name	Field of Specialization
Director(Additional Post)	MATSUI Shinobu	cardiac function, echocardiography, myocardial metabolism
Professor(Additional Post)	KIGOSHI Toshikazu	intracellular signaling of hormones, aldosterone secretin
Professor(Additional Post)	TAMURA Nobuki	Physical physiology(The exercise testing and prescription from the physiological and biochemical research), Effects of the anemia on the physical activity, Exercise therapy for the lifestyle-related disease, Training for health Medical Education.
Professor(Additional Post)	UCHIDA Kenzo	endocrinology, hypertension and adrenal gland, diabetes.
Senior Assistant Professor(Additional Post)	NAKANISHI Yumiko	
Research Associate	KUDOH AKAZAWA Sumiyo	gender specific medicine, hypertension, molecular biology.
Research Associate	KITADA Munehiro	diabetes, hypertension.

### Keywords of Research

life-style related disease, metabolic syndrome, impaired glucose tolerance, hypertension, hyperlipidemia, smoking, stroke, myocardial infarction, diet, exercise, smoking

### Outline of Research

Prevention of life-style-related diseases by exercise, diet and stop-smoking.

### Publications

#### Originals

- 0670B001 M.Nakashima, K.Miura, T.Sakai, M.Bansho, Y.Morikawa, M.Nishijo, Y.Nakanishi, H.Nakagawa: Attitude to smoking and effect of anti-smoking education in elementary school 6th grade students, Hokuriku Japanese Journal of Public Health., 32:73-78, 2006 (in Japanese) .
- 0670B002 K.Miura, H.Myogadani, Y.Kadoya, M.Hayashi, M.Motoya, M.Kuzumaki, M.Yoneda, T.Mitsui, M.Nishijo, Y.Morikawa, Y.Nakanishi, M.Nakashima, H.Nakagawa: Effectiveness of lifestyle modification programs for control of blood pressure: A non-randomized controlled trial in Komatsu, Japan, Japanese Journal of Public Health., 53:533-542, 2006 (in Japanese) .
- 0670B003 F.Ueda, N.Tamura, T.Yamashina: A Report on the Physical Fitness and Motor Ability of Kanazawa Medical University Students(XXXII), Mem. Lib. Kanazawa Med. Univ., 34:35-42, 2006 (in Japanese) .

### Presentations at Conference

#### International Conference (Symposium)

- 0670H001 (H.Akazawa), Y.Qin, T.Yasuda, Y.Zou, S.Kudoh akazawa, I.Komuro: Molecular basis of inverse agonist activity of AT1 receptor blockers, Gordon conference, (Italy, '06.09).



## 0680 Medical Genetic Center

### Faculty

Title	Name	Field of Specialization
Director(Additional Post)	KAKIMUMA Hiroaki	child neurology, inborn errors of metabolism, congenital malformation, medical genetics
Research Associate(Additional Post)	ITO Masatsune	child endocrinology
Research Associate(Additional Post)	SATO Hitoshi	clinical virology, child infectious disease

### Publications

#### Case Reports

- 0680D001 E.Koh, H.Sato, H.Takahashi: A case of kawasaki disease associated with an aseptic meningitis during intravenous immunoglobulin therapy, Progress in Medicine, 26:1537-1540, 2006 (in Japanese) .

### Presentations at Conference

#### International Conference (Presentations)

- 0680I001 H Kakinuma, M Itoh, H Takahashi, A Hori: REPETITIVE AXIAL MYOCLONUS IN A BOY WITH THE MCT8 GENE MUTATION, 10th International Child Neurology Congress, (Montreal, '06.06), Neuropediatrics, 26(Suppl.1):S97, 2006.
- 0680I002 C.Kitaoka, H.Sato, J.Yamamura, Toshimi Nakamura, Tsuneyuki Nakamura, H.Kakinuma, H.Takahashi: Elevation of brain natriuretic peptide in children with bronchial asthma attack., The First Asia-Pacific Congress of Pediatric Cardiology and Cardiac Surgery, (Bangkok, '06.11).
- 0680I003 C.Akita, H.Sato, J.Yamamura, Toshimi Nakamura, Tsuneyuki Nakamura, H.Kakinuma, H.Takahashi: Safety and Efficacy of Dexmedetomidine and low-dose Propofol combination for child cardiac catheterizations., The First Asia-Pacific Congress of Pediatric Cardiology and Cardiac Surgery, (Bangkok, '06.11).

# Medical Research Institute

## 0740 Division of Human Genetics (Biochemistry)

### Faculty

Title	Name	Field of Specialization
Professor	KUHARA Tomiko	Human metabolome analysis for diagnosis of metabolic disorders and personalized medicine
Associate Professor	SHINKA Toshihiro	Chemical diagnosis of metabolic disorders by mass spectrometry (Tyrosinosis, Metabolic disorders of fatty acid beta oxidation, Acylcarnitine analysis, Sulfated bile acids analysis)
Senior Assistant Professor	INOUE Yoshito	Chemical diagnosis and follow up study for metabolic disorders (urea cycle disorders, prenatal diagnosis of organic acidemias, Canavan disease, optical isomer analysis)
Researcher	OHSE Morimasa	Development of data handling method from a mass analysis measurement value to evaluation value in diagnosis software

### Keywords of Research

metabolomics, metabolome, human genetics, mass spectrometry, inborn errors of metabolism, genetic disease, inherited metabolic disorders, molecular diagnosis, organic acidemia, gas chromatography-mass spectrometry, chemical diagnosis, pilot study of neonatal screening, diagnosis of inborn errors of metabolism, prenatal diagnosis, tailor-made medicine, personalized medicine, stable isotope dilution, soft ionization mass spectrometry, tandem mass spectrometry, electrospray ionization mass spectrometry, 5-fluorouracil toxicity, metabolic profiling, aminoacidemia/aminoaciduria, disorders of purine and pyrimidine degradation, valproic acid, fatty acid  $\beta$ -oxidation, carnitine, acylcarnitine, diabetes mellitus, urease-pretreatment

### Books

- 0740A001 T. Kuhara: Simultaneous diagnosis of inborn errors of purine & pyrimidine metabolism-Mass spectrometric metabolome analysis, Genetic Errors Associated with Purine and Pyrimidine Metabolism in Humans: Diagnosis and Treatment, (Y. Moriwaki ed), 173-196, Research Signpost, India, 2006.

### Publications

#### Originals

- 0740B001 Y. Inoue, T. Shinka, M. Ohse, H. Ikawa, T. Kuhara: Application of optical isomer analysis by diastereomer derivatization GC/MS to determine the condition of patients with short bowel syndrome, J. Chromatogr. B Analyt. Technol. Biomed. Life Sci., 838:37-42, 2006.

#### Others

- 0740F001 (S. Liammongkolkul), P. Wasant, T. Shinka, T. Kuhara, I. Matsumoto: Tyrosinemia type I in Thailand - A report of 4 cases, Japanese Journal for inherited metabolic diseases., 22:56-58, 2006.

## Presentations at Conference

### International Conference (Symposium)

- 0740H001 (M. Fujiwara), T. Nemoto, T.Kuhara: Metabolic profiling using NMR-based multivariate analysis and its clinical application combined with Mass spectroscopy, 20th IUBMB International Congress of Biochemistry and Molecular Biology and 11th FAOBMB Congress, (Kyoto, '06.06), "20th IUBMB International Congress of Biochemistry and Molecular Biology and 11th FAOBMB Congress, ABSTRACTS", 850, 2006.
- 0740H002 T.Kuhara: Metabolome-based chemical diagnosis of IEM, The 10th International Congress of Inborn Errors of Metabolism, (Chiba, '06.09), J. Inherit. Metab. Dis., 29 (Suppl 1):18, 2006.

### International Conference (Presentations)

- 0740I001 T.Kuhara, Y.Inoue, M.Ohse, T.Shinka, T. Inokuchi, K. Aoki, K. Tashiro, M. Inaba, A. Fumimori, M. Tetsuo: A pilot study of newborn screening and chemical diagnosis by GC/MS analysis of urine, The 6th Meeting of the International Society for Neonatal Screening, (Awaji, '06.09), "The 6th Meeting of the International Society for Neonatal Screening, Program and Abstracts", 171, 2006.
- 0740I002 (P. Wasant), S. Liammongkolkul, A. Sathienkijkarnchai, T.Shinka: Glutaric aciduria type I in a Thai infant, The 10th International Congress of Inborn Errors of Metabolism, (Chiba, '06.09), J. Inherit. Metab. Dis., 29 (Suppl 1):104, 2006.
- 0740I003 (P. Wasant), S. Liammongkolkul, T. Shinka, I. Matsumoto: Multiple carboxylase deficiency in a Thai infant: first reported case, The 10th International Congress of Inborn Errors of Metabolism, (Chiba, '06.09), J. Inherit. Metab. Dis., 29 (Suppl 1):104, 2006.
- 0740I004 (P. Wasant), S. Liammongkolkul, EW. Naylor, T. Shinka: Isovaleric acidemia in Thai infants: a report of 5 cases, The 10th International Congress of Inborn Errors of Metabolism, (Chiba, '06.09), J. Inherit. Metab. Dis., 29 (Suppl 1):105, 2006.
- 0740I005 (P. Wasant), S. Liammongkolkul, T. Shinka: Mitochondrial acetoacetyl-CoA thiolase (MAT) deficiency in a Thai boy: first reported case, The 10th International Congress of Inborn Errors of Metabolism, (Chiba, '06.09), J. Inherit. Metab. Dis., 29 (Suppl 1):120, 2006.
- 0740I006 (S. Liammongkolkul), P. Wasant, T. Shinka: D-Glyceric aciduria in Thai infant with vesical stone: first reported case, The 10th International Congress of Inborn Errors of Metabolism, (Chiba, '06.09), J. Inherit. Metab. Dis, 29 (Suppl 1):123, 2006.
- 0740I007 (P. Wasant), S. Liammongkolkul, T. Shinka, I. Matsumoto: Fructose-1,6-bisphosphatase deficiency (FBP1) in Thai infant: first reported case, The 10th International Congress of Inborn Errors of Metabolism, (Chiba, '06.09), J. Inherit. Metab. Dis., 29 (Suppl 1):124, 2006.

## 0750 Division of Human Genetics (Clinical Medicine)

### Faculty

Title	Name	Field of Specialization
Professor(Additional Post)	KAKIMUMA Hiroaki	Child neurology, inborn errors of metabolism, clinical genetics
Associate Professor	TAKABAYASHI Haruo	fetal medicine, DNA medicine
Research Associate	OZAKI Mamoru	cytogenetics, Molecular cytogenetics

### Keywords of Research

genetic counseling, genetic service, prenatal diagnosis, congenital abnormality

### Outline of Research

英文なし。

### Publications

#### Originals

- 0750B001 A Kobayashi, H Kakinuma, H Takahashi: Three novel and six common mutation in 11 patients with methylmalonic acidemia, *Pediatr. Int.*, 48:1-4, 2006.
- 0750B002 (Y.Purwosunu), A.Sekizawa, A.Farina, T.Okai, H.Takabayashi, P.Wen, H.Yura, M.Kitagawa: Enrichment of NRBC in maternal blood: a more feasible method for noninvasive prenatal diagnosis, *Prenat. Diagn.*, 26:545-547, 2006.
- 0750B003 (T.Tsuji), M.Takemura, T.Kimura, K.Shimoya, T.Tsutsui, K.Ogita, M.Ozaki, Y.Murata: Rapid detection of trisomy 21 by gene dosage analysis using quantitative real-time polymerase chain reaction, *J. Obstet. Gynaecol. Res.*, 32:368-372, 2006.

#### Reviews

- 0750C001 W.Peng, H.Takabayashi, K.Ikawa: Whole genome amplification from single cells in preimplantation genetic diagnosis and prenatal diagnosis, *Eur. J. Obstet. Gynecol. Reprod. Biol.*, 131:13-20, 2006.
- 0750C003 H.Kakimuma, E.Takase, M.Kita, M.Ozaki, H.Takahashi: Purpose of genetic testing and roles of genetic counseling, *J. Kanazawa. Med. Univ.*, 31:119-123, 2006 (in Japanese) .

#### Case Reports

- 0750D001 H.Kakinuma, T.Fujiki, T.Nakamura, H.Takahashi: Valproate hepatotoxicity in a 5-year-old boy with cerebral palsy due to neonatal asphyxia, *Pediatr. Int.*, 48:631-633, 2006.
- 0750D002 (M.Nakagawa), K.Hashimoto, H.Ohira, T.Hamanaka, M.Ozaki, N.Suehara: Prenatal diagnosis of trisomy 9, *Fetal. Diagn. Ther.*, 21:68-71, 2006.
- 0750D003 T.Akai, K.Yamamoto, H.Iizuka, S.Kawakami, J.Yoshida, H.Kakimuma, H.Yaguchi, T.Ozawa: Syndromic craniosynostosis with elbow joint contracture, *Pediatr Neurosurg*, 42:108-112, 2006.

## Presentations at Conference

### International Conference (Presentations)

- 0750I001 H Kakinuma, M Itoh, H Takahashi, A Hori: REPETITIVE AXIAL MYOCLONUS IN A BOY WITH THE MCT8 GENE MUTATION, 10th International Child Neurology Congress, (Montreal, '06.06), *Neuropediatrics*, 26(Suppl.1):S97, 2006.
- 0750I002 M.Hashimoto, T.Matsui, T.Hamada, M.Ozaki, K.Iwabuchi, T.Date: Human PKU-  $\beta$  /TLK1 contributes to proper chromosomal segregation and positioning of centrosomes during mitosis, 20th IUBMB International Congress of Biochemistry and Molecular Biology, (Kyoto, '06.06).
- 0750I003 C.Kitaoka, H.Sato, J.Yamamura, Toshimi Nakamura, Tsuneyuki Nakamura, H.Kakinuma, H.Takahashi: Elevation of brain natriuretic peptide in children with bronchial asthma attack., The First Asia-Pacific Congress of Pediatric Cardiology and Cardiac Surgery, (Bangkok, '06.11).
- 0750I004 C.Akita, H.Sato, J.Yamamura, Toshimi Nakamura, Tsuneyuki Nakamura, H.Kakinuma, H.Takahashi: Safety and Efficacy of Dexmedetomidine and low-dose Propofol combination for child cardiac catheterizations., The First Asia-Pacific Congress of Pediatric Cardiology and Cardiac Surgery, (Bangkok, '06.11).

## 0770 Division of Core Facility (Radioisotope Center)

### Faculty

Title	Name	Field of Specialization
Associate Professor(Additional Post)	YOSHITAKE Yoshino	microRNA involved in angiogenesis, Functions of FGF2 binding protein
Senior Assistant Professor	ISHIGAKI Yasuhito	Molecular and Cellular Biology

### Keywords of Research

RNA surveillance, nonsense mediated mRNA decay, mutation, DNA microarray, transcriptome, proteome, apoptosis, Energy-filtering electron microscopy, Element mapping, Ultra micro structure, mouse germ cells, DNA repair, fibroblast growth factor, centrosome, tumor growth angiogenesis, micro RNA

### Outline of Research

Quality control of genetic information

### Publications

#### Originals

- 0770B001 K.Fujimura, N.Segami, Y.Yoshitake, N.Tsuruoka, K.Kaneyama, J.Sato, S.Kobayashi: Electrophoretic separation of the synovial fluid proteins in patients with temporomandibular joint disorders, Oral Surg. Oral Med. Oral Pathol. Oral Radiol. Endod., 101:463-468, 2006.

### Presentations at Conference

#### International Conference (Presentations)

- 0770I001 Y.Ishigaki, Z.Xia: DNA microarray analysis with NMD suppression in humana cells carrying nonsense mutation, 20th IUBMB, (Kyoto, '06.06).

## 0780 Division of Core Facility (Experimental Animal Center)

### Faculty

Title	Name	Field of Specialization
Professor(Additional Post)	MATSUI Shinobu	
Senior Assistant Professor	SO Shihei (ZONG zhi-ping)	

### Publications

#### Originals

- 0780B001 S.Matsui, M.Fu, M.Hayase, S.Katsuda, N.Yamaguchi, K.Teraoka, T.Kurihara, H.Murano, N.Takekoshi: Transfer of immune components from rabbit autoimmune cardiomyopathy into severe combined immunodeficiency (SCID) mice induces cardiomyopathic changes, *Autoimmunity*, 39:121-128., 2006.
- 0780B002 S.Matsui, L.Larsson, M.Hayase, S.Katsuda, K.Teraoka, T.Kurihara, H.Murano, K.Nisikawa, M.Fu: Specific removal of  $\beta$  1-adrenoceptor autoantibodies by immunoabsorption in rabbits with autoimmune cardiomyopathy improved cardiac structure and function, *J. Mol. Cell. Cardiol.*, 41:78-85, 2006.
- 0780B003 S.Matsui, M.Fu: Pathological importance of anti-G-protein coupled receptor autoantibodies, *Int. J. Cardiol.*, 112:27-19, 2006.

## 0790 Division of Core Facility (Morphological Equipment Center)

### Faculty

Title	Name	Field of Specialization
Professor	ISHIKAWA Yoshimaro	
Senior Assistant Professor	KURIHARA Takayuki	Mechanism of Chromosomal Instability

### Publications

#### Originals

- 0790B001 S.Matsui, M.Fu, M.Hayase, S.Katsuda, N.Yamaguchi, K.Teraoka, T.Kurihara, H.Murano, N.Takekoshi: Transfer of immune components from rabbit autoimmune cardiomyopathy into severe combined immunodeficiency (SCID) mice induces cardiomyopathic changes, *Autoimmunity*, 39:121–128., 2006.
- 0790B002 S.Matsui, L.Larsson, M.Hayase, S.Katsuda, K.Teraoka, T.Kurihara, H.Murano, K.Nisikawa, M.Fu: Specific removal of  $\beta$  1-adrenoceptor autoantibodies by immunoabsorption in rabbits with autoimmune cardiomyopathy improved cardiac structure and function, *J. Mol. Cell. Cardiol.*, 41:78–85, 2006.
- 0790B003 K.Iwabuchi, M.Hashimoto, T.Matsui, T.Kurihara, H.Shimizu, N.Adachi, M.Ishiai, K-I.Yamamoto, H.Tauchi, M.Takata, H.Koyama, T.Date: 53BP1 contributes to survival of cells irradiated with X-ray during G1 without Ku70 or Artemis., *Genes Cells*, 11: 935–948, 2006.

#### Case Reports

- 0790D001 K.Sato, Y.Ueda, A.Sakurai, Y.Ishikawa, S.Kaji, T.Nojima, S.Katsuda: Adenoid cystic carcinoma of the maxillary sinus with gradual histologic transformation to high-grade adenocarcinoma: a comparative report with dedifferentiated carcinoma, *Virchows Arch.*, 448:204–208, 2006.



## 0800 Division of Core Facility (High-Tech Research Center)

### Faculty

Title	Name	Field of Specialization
Associate Professor(Additional Post)	KOHNO Hiroyuki	
Associate Professor(Additional Post)	NISHIJO Muneko	
Researcher	OKUWA Takako	
Researcher	WU Jialu	
Researcher	YASUI Yumiko	

### Publications

#### Originals

- 0800B001 (S.Omote), T.Kido, M.Nishijo, H.Nakagawa, Y.Suwazono, E.Kobayashi, N.Nogawa: Urinary type I collagen cross-linked N-telopeptides in inhabitants 18Years after cessation of exposure to cadmium in Japan, *Bull. Environ. Contam. Toxicol.*, 76:187-94, 2006.
- 0800B002 H.Nakagawa, M.Nishijo, Y.Morikawa, K.Miura, K.Tawara, J.Kuriwaki, T.Kido, A.Ikawa, E.Kobayashi, K.Nogawa: Urinary cadmium and mortality among inhabitants of a cadmium-polluted area in Japan, *Environ Res*, 100:323-329, 2006.
- 0800B003 (M.Uetani), E.Kobayashi, Y.Suwazono, M.Nishijo, H.Nakagawa, T.Kido, K.Nogawa: Smoking does not influence cadmium concentrations in blood and urine in relatively high levels of environmental cadmium areas in Japan, *Biol Trace Elem Res*, 110:107-118, 2006.
- 0800B004 M.Nishijo, Y.Morikawa, H.Nakagawa, K.Tawara, K.Miura, T.Kido, A.Ikawa, E.Kobayashi, K.Nogawa: Causes of death and renal tubular dysfunction in residents exposed to cadmium in the environment, *Occup Environ Med*, 63:545-550, 2006.
- 0800B005 (E.Kobayashi), Y.Suwazono, M.Uetani, T.Inaba, M.Oishi, T.Kido, M.Nishijo, H.Nakagawa, K.Nogawa: Estimation of benchmark dose for renal dysfunction in a cadmium non-polluted area in Japan, *J. Appl. Toxicol.*, 26:351-355, 2006.
- 0800B006 (M.Uetani), E.Kobayashi, Y.Suwazono, R.Honda, M.Nishijo, H.Nakagawa, T.Kido, K.Nogawa: Tissue cadmium (Cd) concentrations of people living in a Cd polluted area, Japan, *Biometals*, 19:521-525, 2006.
- 0800B007 M.Takano-Maruyama, Y.Ohara, K.Asakura, T.Okuwa: Theiler's murine encephalomyelitis virus leader protein amino acid residue 57 regulates subgroup-specific virus growth on BHK-21 cells, *J. Virol.*, 80: 12025-12031, 2006.
- 0800B008 T.Tanaka, H.Kohno, R.Suzuki, K.Hata, S.Sugie, N.Niho, K.Sakano, M.Takahashi, K.Wakabayashi: Dextran sodium sulfate strongly promotes colorectal carcinogenesis in *Apc<sup>Min/+</sup>* mice: Inflammatory stimuli by dextran sodium sulfate results in development of multiple colonic neoplasms, *Int. J. Cancer.*, 118:25-34, 2006.
- 0800B009 (K.Hata), T.Tanaka, H.Kohno, R.Suzuki, S.H.Qiang, T.Kuno, Y.Hirose, A.Hara, H.Mori: Lack of enhancing effects of degraded  $\lambda$ -carrageenan on the development of  $\beta$ -catenin-accumulated crypts in male DBA/2J mice initiated with azoxymethane, *Cancer Lett.*, 238:69-75, 2006.
- 0800B010 (K.Hata), T.Tanaka, H.Kohno, R.Suzuki, S.H.Qiang, Y.Yamada, T.Oyama, T.Kuno, Y.Hirose, A.Hara, H.Mori:  $\beta$ -Catenin-accumulated crypts in the colonic mucosa of juvenile *Apc<sup>Min/+</sup>* mice, *Cancer Lett.*, 239:123-128, 2006.
- 0800B011 R.Suzuki, H.Kohno, S.Sugie, H.Nakagawa, T.Tanaka: Strain differences in susceptibility to azoxymethane and dextran sodium sulfate-induced colon carcinogenesis in mice, *Carcinogenesis*, 27:162-169, 2006.

- 0800B012 R.Suzuki, H.Kohno, M.Suzui, N.Yoshimi, H.Tsuda, K.Wakabayashi, T.Tanaka: An animal model for the rapid induction of tongue neoplasms in human c-Ha-ras proto-oncogene transgenic rats by 4-nitroquinoline 1-oxide: its potential use for preclinical chemoprevention studies, *Carcinogenesis*, 27:619-630, 2006.
- 0800B013 H.Kohno, R.Suzuki, M.Curini, F.Epifano, F.Maltese, S.P.Gonzales, T.Tanaka: Dietary administration with prenyloxycompounds, auraptene and collinin, inhibits colitis-related colon carcinogenesis in mice, *Int. J. Cancer.*, 118:2936-2942, 2006.
- 0800B014 (S.Miyamoto), H.Kohno, R.Suzuki, S.Sugie, A.Murakami, H.Ohigashi, T.Tanaka: Preventive effects of chrysin on the development of azoxymethane-induced colonic aberrant crypt foci in rats, *Oncol. Rep.*, 15:1169-1173, 2006.
- 0800B015 Y.Yasui, M.Hosokawa, H.Kohno, T.Tanaka, K.Miyashita: Growth inhibition and apoptosis induction by all-*trans*-conjugated linolenic acids on human colon cancer cells, *Anticancer Res.*, 26:1855-1860, 2006.
- 0800B016 R.Suzuki, Y.Yasui, H.Kohno, S.Miyamoto, M.Hosokawa, K.Miyashita, T.Tanaka: Catalpa seed oil rich in 9*t*,11*t*,13*c*-conjugated linolenic acid suppresses the development of colonic aberrant crypt foci induced by azoxymethane in rats, *Oncol. Rep.*, 16:989-996, 2006.
- 0800B017 R.Suzuki, H.Kohno, Y.Yasui, K.Hata, S.Sugie, S.Miyamoto, K.Sugawara, T.Sumida, Y.Hirose, T.Tanaka: Diet supplemented with citrus unshiu segment membrane suppresses chemically induced colonic preneoplastic lesions and fatty liver in male *db/db* mice, *Int. J. Cancer.*, 120:252-258, 2006.
- 0800B018 Y.Yasui, M.Hosokawa, H.Kohno, T.Tanaka, K.Miyashita: Troglitazone and 9*cis*,11*trans*,13*trans*-conjugated linolenic acid: Comparison of their antiproliferative and apoptosis-inducing effects on different colon cancer cell lines, *Chemotherapy*, 52:220-225, 2006.
- 0800B019 (M.Ikeda), K.Masumura, K.Matsui, H.Kohno, K.Sakuma, T.Tanaka, T.Nohmi: Chemopreventive Effects of Nobiletin against Genotoxicity Induced by 4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK) in the Lung of gpt delta Transgenic Mice, *Genes and Environment*, 28:84-91, 2006.
- 0800B020 (E.Kobayashi), Y.Suwazono, M.Uetani, T.Kido, M.Nishijo, H.Nakagawa, K.Nogawa: Tolerable level of lifetime cadmium intake estimated as a benchmark dose low, based on excretion of  $\beta_2$ -microglobulin in the cadmium-polluted regions of the Kakehashi River Basin, Japan, *Bull. Environ. Contam. Toxicol.*, 76:8-15, 2006.
- 0800B021 (E.Kobayashi), Y.Suwazono, M.Uetani, T.Inaba, M.Oishi, T.Kido, M.Nishijo, H.Nakagawa, K.Nogawa: Estimation of benchmark dose as the threshold levels of urinary cadmium, based on excretion of total protein,  $\beta_2$ -microglobulin, and *N*-acetyl- $\beta$ -D-glucosaminidase in cadmium nonpolluted regions in Japan, *Environ Res*, 101:401-406, 2006.
- 0800B022 (F.Beppu), M.Hosokawa, L.Tanaka, H.Kohno, T.Tanaka, K.Miyashita: Potent inhibitory effect of *trans*9, *trans*11 isomer of conjugated linoleic acid on the growth of human colon cancer cells, *J. Nutr. Biochem.*, 17:830-836, 2006.
- 0800B023 (T.Miyamoto), E.Kobayashi, Y.Suwazono, M.Uetani, M.Nishijo, K.Miura, H.Nakagawa, K.Nogawa: Changes in urinary excretions of cadmium, copper, and zinc in Japanese workers., *Arch. Environ. Occup. Health.*, 61:251-222, 2006.
- 0800B024 M.Nakashima, K.Miura, T.Sakai, M.Bansho, Y.Morikawa, M.Nishijo, Y.Nakanishi, H.Nakagawa: Attitude to smoking and effect of anti-smoking education in elementary school 6th grade students, *Hokuriku Japanese Journal of Public Health.*, 32:73-78, 2006 (in Japanese) .
- 0800B025 K.Miura, H.Myogadani, Y.Kadoya, M.Hayashi, M.Motoya, M.Kuzumaki, M.Yoneda, T.Mitsui, M.Nishijo, Y.Morikawa, Y.Nakanishi, M.Nakashima, H.Nakagawa: Effectiveness of lifestyle modification programs for control of blood pressure: A non-randomized controlled trial in Komatsu, Japan, *Japanese Journal of Public Health.*, 53:533-542, 2006 (in Japanese) .

## Reviews

- 0800C001 M.Takano-Maruyama, Y.Ohara, K.Asakura, T.Okuwa: Leader (L) and L\* proteins of Theiler's murine encephalomyelitis virus (TMEV) and their regulation of the virus' biological activities, *J. Neuroinflammation.*, 3:19-26, 2006.
- 0800C002 T.Tanaka, S.Miyamoto, R.Suzuki, Y.Yasui: Chemoprevention of colon carcinogenesis by dietary non-nutritive compounds, *Curr. Topics Nutraceut. Res.*, 4:127-152, 2006.

- 0800C003 (S.Satarug), M.Nishijo, JM.Lasker, RJ.Edwards, MR.Moore: Kidney dysfunction and hypertension:role for cadmium,P450 and heme oxygenases?, *Tohoku J. Exp. Med.*, 208:179–202, 2006.

## Presentations at Conference

### International Conference (Symposium)

- 0800H001 H.Kohno, R.Suzuki, S.Miyamoto, T.Sumida, K.Sugawara, S.Sugie, T.Tanaka: Citrus unshiu segment membrane suppresses azoxymethane-induced colonic aberrant crypt foci and  $\beta$ -catenin accumulated crypts in male db/db mice, 4th Regional APOCP Conference, Synposium IV–Pathology and Chemoprevention, (Nagoya, '06.01).

### International Conference (Presentations)

- 0800I001 (S.Miyamoto), R.Suzuki, H.Kohno, S.Sugie, T.Tanaka: Dietary auraptene inhibits azoxymethane-induced colonic aberrant crypt foci in female db/db mice, 4th Regional APOCP Conference, (Nagoya, '06.01).
- 0800I002 H.Kohno, R.Suzuki, S.Miyamoto, S.Sugie, M.Curini, F.Epifano, F.Maltese, S.P.Gonzales, T.Tanaka: Suppression of colitis-related mouse colon carcinogenesis by dietary administration with prenyloxy coumarins, auraptene and collinin, 97th Annual Meeting of American Association for Cancer Research, (Washington, DC, '06.04).
- 0800I003 S.Sugie, R.Suzuki, H.Kohono, T.Tanaka, H.Mori: Modifying effect of thiol compounds on diethylnitrosamine (DEN)-phenobarbital (PB) induced rat hepatocarcinogenesis, 97th Annual Meeting of American Association for Cancer Research, (Washington, DC, '06.04).
- 0800I004 T.Tanaka, R.Suzuki, H.Kohno, K.Hata, S.Sugie, S.Miyamoto, K.Sugawara, T.Sumida, Y.Hirose: Diet supplemented with citrus unshiu segment membrane suppresses azoxymethane-induced colonic aberrant crypt foci and beta-catenin accumulated crypts in male db/db mice, 97th Annual Meeting of American Association for Cancer Research, (Washington, DC, '06.04).
- 0800I005 M.Nishijo, H.Nakagawa, R.Honda: A trial for a global standard health management for Cd pollution, Health risk management for environment and labour, (Tokyo, '06.06), URMPM special conference, 52, 2006.
- 0800I006 M. Takano-Maruyama, T. Okuwa, K. Asakura, Y. Ohara: Theiler's murine encephalomyelitis virus subgroup-specific growth on BHK-21 cells is regulated by amino acid 57 within the leader protein, 7th International Symposium on NeuroVirology, (Philadelphia, '06.06), *J. NeuroVirology*, 12:80, 2006.
- 0800I007 M.Nishijo, H.Nakagawa, R.Naganuma, K.Tawara, T.Kido, H.Suzuki: An epidemiological study on health effects by dioxin in vietnam;comparison of contrast acuity between inhabitants of herbicide sprayed and non-sprayed areas, 26th International symposium on halogenated persistent organic pollutants, (Oslo, '06.08), 26th International symposium on halogenated persistent organic pollutants, 2006.
- 0800I008 M.Nishijo, H.Nakagawa, Y.Morikawa, K.Tawara, J.Kuriwaki, E.Hori, H.Nishijo: Effect of 2,3,7,8-thetrachlorodibenzo-p-dioxin exposure during pregnancy on the neurodevelopment of rat off-springs, 26th International symposium on halogenated persistent organic pollutants, (Oslo, '06.08), 26th International symposium on halogenated persistent organic pollutants, 2006.
- 0800I009 M.Nishijo, H.Nakagawa, K.Tawara, T.Kido, R.Naganuma: Areal differences of concentration levels of polychlorinated de benzo-p-dioxins and dibenzofurans in human breast milk from Vietnam and Japan, 26th International symposium on halogenated persistent organic pollutants, (Oslo, '06.08), 26th International symposium on halogenated persistent organic pollutants, 2006.
- 0800I010 T. Okuwa, M. Takano-Maruyama, K. Asakura, H. Murayama, Y. Ohara: Generation of a mutant of Theiler's murine encephalomyelitis virus (TMEV) causing demyelination in the brain of susceptible mice, The 8th International Congress of Neuroimmunology, (Nagoya, '06.10).
- 0800I011 Y.Yasui, H.Kohno, R.Suzuki, S.Miyamoto, S.Sugie, M.Curini, F.Epifano, F.Maltese, S.P.Gonzales, T.Tanaka: Inhibition of colitis-related mouse colon carcinogenesis by dietary administration with prenyloxy coumarins, auraptene and collinin, The Kadota Fund International Forum 2006, (Inuyama, '06.11).

## 0900 Division of Cell Medicine

### Faculty

Title	Name	Field of Specialization
Professor	FUJIKAWA Kohzaburo	polyploid cells, cell cycle, transformation
Research Associate	MIYAGOSHI Minoru	Cell biology

### Keywords of Research

polyploid cells, polyploidization, Meth-A cells, V79 cells, triploid cells, tetraploid cells, octaploid cells, H-1(ES)cells

### Outline of Research

Study of polyploid cells

### Publications

#### Originals

- 0900B001 K.Fujikawa-Yamamoto: An hypothesis about genome structures in mammalian polyploid cells based on a new concept that genome is fractal of six hierarchies, *Med. Hypotheses.*, 66:337-344, 2006.
- 0900B002 K.Fujikawa-Yamamoto, M.Miyagoshi, H.Yamagishi: Reversible alteration in morphology and proliferation of mouse H-1 (ES) cells in DME versus L15F10 medium, *J. Kanazawa. Med. Univ.*, 31:138-143, 2006.
- 0900B003 K.Fujikawa-Yamamoto, M.Miyagoshi, H.Yamagishi: Polyploidization of mouse H-1 (ES) cells by demecolcine and K-252a, *Cytologia*, 71:399-406, 2006.
- 0900B004 K.Kawamura, N.Morita, C.Domiki, K.Fujikawa-Yamamoto, M.Hashimoto, K.Iwabuchi, K.Suzuki: Induction of centrosome amplification in p53 siRNA-treated human fibroblast cells by radiation exposure, *Cancer Sci.*, 97:252-258, 2006.
- 0900B005 M.Miyagoshi, K.Fujikawa-Yamamoto: The reversion to diploid cells from established triploid V79 cells, *Cell Prolif.*, 39:421-428, 2006.

#### Reviews

- 0900C001 K.Fujikawa-Yamamoto, M.Miyagoshi: Cell cycle analysis using flow cytometry I -relationship between fraction and duration-, *Cytometry Res*, 16:33-36, 2006 (in Japanese) .
- 0900C002 K.Fujikawa-Yamamoto, M.Miyagoshi: Cell cycle analysis using flow cytometry II -BrdU continuous labeling and cell cycle time-, *Cytometry Res*, 16:37-41, 2006 (in Japanese) .
- 0900C003 K.Fujikawa-Yamamoto, M.Miyagoshi: Cell cycle analysis using flow cytometry III -stathomokinetic analysis-, *Cytometry Res*, 16:43-49, 2006 (in Japanese) .

## **Presentations at Conference**

### **International Conference (Presentations)**

- 0900I001 K.Fujikawa-Yamamoto, M.Miyagoshi: Harmony between experimental results and predictions from the hypothesis about genome structures in mammalian polyploid cells based on a new concept that genome is fractal of six hierarchies, 14th International Conference of the International Society of Differentiation, (Innsbruck, '06.10), Differentiation, 74: 468-468, 2006.

## 0910 Division of Advanced Medicine

### Faculty

Title	Name	Field of Specialization
Professor	MATSUI Shinobu	Clinical cardiology
Professor	TOMOSUGI Naohisa	Clinical Nephrology
Associate Professor	NAGAO Yosinobu	spermatogenesis, epigenetics, endocrine disruptors

### Keywords of Research

heart failure, cardiomyopathy, neurohumoral factor, immunity, autoantibody, spermatogenesis, cell cycle, epigenetics, endocrine disruptors, meiosis

### Outline of Research

1. Myocardial injury due to autoimmunity against G-protein-coupled receptor. Growing evidence suggested that G-protein-coupled receptor-directed autoimmune mechanism may play an important role in the pathogenesis of idiopathic dilated cardiomyopathy. Our study showed that specific removal of anti-G-protein coupled receptor autoantibodies improved cardiac structure and function in experimental autoimmune cardiomyopathy.
2. Hepcidin, a key regulator of iron metabolism, is expressed in the liver, distributed in blood, and excreted in urine. However, to date, no reliable and practical method for measuring the bioactive form of hepcidin in serum has been developed. Here, we employed surface-enhanced laser desorption ionization time of flight mass spectrometry (SELDI-TOF MS) to analyze the expression of serum hepcidin in hemodialysis patients. Hepcidin-25 was found to accumulate in the serum of hemodialysis patients; this could contribute to the pathogenesis of renal anemia by decreasing the available iron for hematopoiesis.
3. Histone modifications in meiotic prophase of spermatogenesis.

### Publications

#### Originals

- 0910B001 I.Ishikawa, T.Hayama, S.Yoshida, M.Asaka, N.Tomosugi, M.Watanabe, H.Yamato, M.Sugano: Proteomic analysis of rat plasma by SELDI-TOF-MS under the condition of prevention of progressive adriamycin nephropathy using oral adsorbent AST-120, *Nephron. Physiol.*, 103:125-130, 2006.
- 0910B002 S.Matsui, M.Fu, M.Hayase, S.Katsuda, N.Yamaguchi, K.Teraoka, T.Kurihara, H.Murano, N.Takekoshi: Transfer of immune components from rabbit autoimmune cardiomyopathy into severe combined immunodeficiency (SCID) mice induces cardiomyopathic changes, *Autoimmunity*, 39:121-128., 2006.
- 0910B003 I.Ishikawa, Y.Chikazawa, K.Sato, M.Nakagawa, H.Imamura, S.Hayama, H.Yamaya, M.Asaka, N.Tomosugi, H.Yokoyama, K.Matsumoto: Proteomic analysis of serum, outflow dialysate and adsorbed protein onto dialysis membranes (polysulfone and PMMA) during hemodialysis treatment using SELDI-TOF-MS, *Am. J. Nephrol.*, 26:372-380, 2006.
- 0910B004 S.Matsui, L.Larsson, M.Hayase, S.Katsuda, K.Teraoka, T.Kurihara, H.Murano, K.Nisikawa, M.Fu: Specific removal of  $\beta$  1-adrenoceptor autoantibodies by immunoabsorption in rabbits with autoimmune cardiomyopathy improved cardiac structure and function, *J. Mol. Cell. Cardiol.*, 41:78-85, 2006.
- 0910B005 N.Tomosugi, H.Kawabata, R.Wakatabe, M.Higuchi, H.Yamaya, H.Umehara, I.Ishikawa: Detection of serum hepcidin in renal failure and inflammation by using ProteinChip System, *Blood*, 108:1381-1387, 2006.
- 0910B006 S.Matsui, M.Fu: Pathological importance of anti-G-protein coupled receptor autoantibodies, *Int. J. Cardiol.*, 112:27-19, 2006.

## **Presentations at Conference**

### **International Conference (Presentations)**

- 0910I001 S.Matsui: Specific removal of beta 1-adrenoceptor autoantibodies by immunoabsorption in rabbits with autoimmune cardiomyopathy improved cardiac structure and function, World Congress of Cardiology 2006, (Barcelona, '06.09).

## 0920 Division of Molecular Oncology and Virology

### Faculty

Title	Name	Field of Specialization
Professor	TAKEGAMI Tsutomu	Molecular mechanism of flavivirus replication, interaction with host cells and viral carcinogenesis
Professor(Additional Post)	MOTOO Yoshiharu	
Associate Professor	OTA Takahide	Molecular analysis of the mechanism of cancer metastasis
Research Associate	MURAKAMI Manabu	Molecular analysis and development of antiviral drugs: Mechanism of antiviral action of RNAi

### Keywords of Research

cancer, carcinogenesis, metastasis, cell transformation, gene expression, hepatitis C virus, flavivirus, Japanese encephalitis virus, virus replication, RhoGDI, Rho family, Eomes, epithelial/mesenchymal, nonstructural protein NS3, RNA synthesis, transfection, persistent infection, RNAi

### Outline of Research

Molecular analyses of virus replication, carcinogenesis and metastasis

### Publications

#### Originals

- 0920B001 (J.Pei-Hong), Y.Motoo, N.Sawabu, T.Minamoto: Effect of gemcitabine on the expression of apoptosis-related genes in human pancreatic cancer cells, *World J. Gastroenterol.*, 12:1597-1602, 2006.
- 0920B002 (J.Pei-Hong), Y.Motoo, S.Garcia, J.L.Iovanna, M.J.Pebusque, N.Sawabu: Down-expression of tumor protein p53-induced nuclear protein 1 in human gastric cancer, *World J. Gastroenterol.*, 12: 691-696, 2006.
- 0920B003 J. F. Guo, K.Higashi, Y.Ueda, M.Oguchi, T.Takegami, H.Toga, T.Sakuma, H.Yokota, S.Katsuda, H.Tonami, I.Yamamoto: Microvessel density : correlation with <sup>18</sup>F-FDG uptake and prognostic impact in lung adenocarcinomas, *J. Nucl. Med.*, 47:419-425, 2006.
- 0920B004 L.Dong: Identification and characterization of novel human recombinant monoclonal fab fragments specific for EBV viral capsid antigen established by phage display, *J. Kanazawa. Med. Univ.*, 31:172-178, 2006.
- 0920B005 T.Ota, M.Maeda, S.Suto, X.Zhou, M.Murakami, T.Takegami, M.Tatsuka: RhoGDI  $\beta$  lacking the N-terminal regulatory domain suppresses metastasis by promoting anoikis in v-src transformed cells., *Clin. Exp. Metastasis.*, 23:323-334, 2006.
- 0920B006 (Y.Ito), Y.Motoo, H.Yoshida, J.L.Iovanna, Y.Nakamura, K.Kuma, A.Miyauchi: High level of tumour protein p53-induced nuclear protein 1 (TP53INP1) expression in anaplastic carcinoma of the thyroid, *Pathology.*, 38:545-547, 2006.
- 0920B007 (U.Tateishi), T.Hasegawa, T.Noijima, T.Takegami, Y.Arai: MRI features of extraskelal myxoid chondrosarcoma, *Skeletal Radiol.*, 35:27-33, 2006.

#### Reviews

- 0920C009 Y.Motoo, K.Tsutani: Is it possible to develop global clinical practice guidelines for traditional medicine?, *Japanese journal of oriental medicine.*, 57: 465-475, 2006 (in Japanese) .



0920C011 T. Takegami: Japanese encephalitis vaccine, Antibiotics & chemotherapy., 22: 1389–1395, 2006 (in Japanese) .

#### Case Reports

0920D001 J.Yamakawa, J.Moriya, K.Kusaka, T.Itoh, Y.Motoo, T.Kanda: Effectiveness of goshajinkigan on the cold sensation and dyesthesia in a case of nodular multiple angitis, Japanese journal of oriental medicine., 57:651–654, 2006 (in Japanese) .

### Presentations at Conference

#### International Conference (Symposium)

- 0920H001 (A.Kanda), S.Sato, T.Takata, T.Ota, M.Tatsuka: Expression and distribution of Aurora-B in human oral squamous cell carcinoma cell line highly metastatic to lymph node., The 11th International Congress of Metastasis Research Society Jointed with the 15th Annual Meeting of Japanese Association for Metastasis Research, (Hiroshima, '06.09).
- 0920H002 Y.Motoo: How to develop an international clinical practice guideline for lung cancer, WHO Workshop on Guideline Development for Cancer, (Budapest, Hungary, '06.10).

#### International Conference (Presentations)

- 0920I001 Y.Motoo: Down-expression of TP53INP1 in human gastric cancer., American Society of Clinical Oncology-Symposium on Gastrointestinal Cancers (ASCO-GI), (San Francisco, CA, USA, '06.01).
- 0920I002 T.Ota, M.Maeda, M.Murakami, T.Takegami, A.Kanda, M.Tatsuka: RhoGDI  $\beta$  lacking the N-terminal regulatory domain suppresses metastasis by promoting anoikis in v-src transformed cells., The 11th International Congress of Metastasis Research Society Jointed with the 15th Annual Meeting of Japanese Association for Metastasis Research, (Hiroshima, '06.09).
- 0920I003 T. Takegami, M. Murakami, K. Kamimura, T. Ota: Japanese encephalitis virus isolation from mosquitoes in Ishikawa, Japan and inhibitory effect of RNAi on JEV replication., 7th Asia-Pacific Congress of Medical Virology, (New Delhi, '06.11).
- 0920I004 Y.Motoo, T.Shimasaki: Molecular mechanisms of anti-tumor effect of gemcitabine hydrochloride on human pancreatic cancer cells., The 28th World Congress of Internal Medicine, (Taipei, '06.11).

## 0930 Division of Dermatomyiology (Novartis Pharma)

### Faculty

Title	Name	Field of Specialization
Visiting Professor	ISHIZAKI Hiroshi	Medical mycology
Professor(Additional Post)	MOCHIZUKI Takashi	Medical mycology, Dermatomyocosis
Senior Assistant Professor(Additional Post)	KAWASAKI Masako	Medical mycology
Researcher	ANZAWA Kazushi	Medical mycology

### Keywords of Research

fungi, dermatophytes, *Candida* species, *Sporothrix* species, dematiaceous fungi, mitochondrial DNA, restriction fragment length polymorphism, ribosomal DNA, ITS region, sequencing, phylogeny, taxonomy, molecular epidemiology, molecular typing

### Outline of Research

未入力

### Publications

#### Originals

- 0930B001 (T. Uenotsuchi), S. Takeuchi, T. Matsuda, K. Urabe, T. Koga, H. Uchi, T. Nakahara, S. Fukagawa, M.Kawasaki, H.Kajiwara, S.Yoshida, Y.Moroi, M.Furue: Differential induction of T<sub>H</sub>1-prone immunity by human dendritic cells activated with *Sporothrix schenckii* of cutaneous and visceral origins to determine their different virulence, Int. Immunol., 18:1637-1646, 2006.
- 0930B002 (C.J.Jackson), T. Mochizuki, RC.Barton: PCR fingerprinting of *Trichophyton mentagrophytes* var. *interdigitale* using polymorphic subrepeat loci in the rDNA nontranscribed spacer, J. Med. Microbiol., 55:1349-1355, 2006.
- 0930B003 (N.Umemoto), M.Kakurai, H.Yokokura, S.Toda, M.Osawa, H.Abe, Y.Hiratsuka, E.Okada, R.Azuma, Y.Wada, M.Hayashi, T.Mochizuki, T.Demitsu: Analysis of dermatophyte flora for 5 years at Jichi Medical University Omiya Medical Center in Saitama and identification of atypical dermatophytes using molecular biological Technique(PCR-RFLP analysis), Jichi Medical School journal., 29:155-161, 2006 (in Japanese) .

#### Reviews

- 0930C003 T.Mochizuki, H.Tanabe, A.Wakasa, M.Kawasaki, K.Anzawa, H.Ishizaki: Survey of *Trichophyton tonsurans* infection in Japan—Molecular epidemiology and factors affecting adequate hairbrush sampling—, The Japanese Society for Medical Mycology., 47:57-61, 2006 (in Japanese) .

#### Case Reports

- 0930D001 (K.Haruna), Y.Shiraki, M.Hiruma, S.Ikeda, M. Kawasaki: A case of lymphangitic sporotrichosis occurring on both forearms with a published work review of cases of bilateral sporotrichosis in Japan, J. Dermatol., 33:364-367, 2006.
- 0930D002 S.Watanabe, H.Tanabe, T.Mochizuki, M.Yanagihara, H.Ishizaki: Two Cases of Toe Web Infection by *Pseudomonas Aeruginosa*, Skin research., 5:53-56, 2006 (in Japanese) .

- 0930D003 M.Nakagawa, K.Takeda, M.Yanagihara, H.Ishizaki, T.Mochizuki, T.Iura, S.Kataoka: A case of viper bite that occurred during pregnancy, *Nishinohon j. dermatol.*, 68:40–42, 2006 (in Japanese) .
- 0930D004 M.Nakagawa, H.Tanabe, M. Yanagihara, H.Ishizaki, T.Mochizuki: A case of meningomyelocele diagnosed with malum perforans pedis, *Skin research.*, 5:22–26, 2006 (in Japanese) .
- 0930D011 (M.Maeda), T.Mochizuki: A case of onychomycosis caused by *Fusarium oxysporum* infection, *Nishinohon j. dermatol.*, 68:652–655, 2006 (in Japanese) .
- 0930D012 H.Ogawa, S.Watanabe, S.Abe, H.Tanabe, T.Mochizuki: A case of external region basal cell carcinoma the study of basal cell carcinoma for past 15 years in our department, *Skin research.*, 5:411–414, 2006 (in Japanese) .
- 0930D016 H.Tanabe, M.Terada, M.Hasei, H.Ogawa, K.Anzawa, M.Kawasaki, T.Mochizuki, N.Ishikura: Problems of hairbrush test for monitoring of *Trichophyton tonsurans* infection, *Skin research.*, 5:430–434, 2006 (in Japanese) .

#### Short Communications

- 0930E001 (P.Campos–Macias), R.Arenas, Me Vega–Memije, M. Kawasaki: *Sporothrix schenckii* Type 3D (mtDNA– RFLP) : Report of an osteoarticular case, *J. Dermatol.*, 33:295–299, 2006.

### Presentations at Conference

#### International Conference (Presentations)

- 0930I001 M.Kawasaki: Genetic and phenotypic variations among F1 progenies of *Arthroderma benhamiae*, 16th Congress of the International Society for Human and Animal Mycology, (Paris, '06.06).
- 0930I002 M.Kawasaki, A.Wakasa, K.Anzawa, H.Tanabe, T.Mochizuki, H.Ishizaki, S.Kagawa, B.Hemashettar: Multi-locus analysis of infra- and inter-species variations among *Trichophyton* species, 16th Congress of the International Society for Human and Animal Mycology, (Paris, '06.06).
- 0930I003 S.Watanabe, K.Anzawa, M.Kawasaki, T.Mochizuki, H.Ishizaki: Strain typing of *Fonsecaea pedrosoi* strains by PCR–RFLP analysis, 16th Congress of the International Society for Human and Animal Mycology, (Paris, '06.06).
- 0930I004 T.Mochizuki, M.Kawasaki, H.Tanabe, K.Anzawa, H.Ishizaki, J. Choi: Molecular epidemiology of *Trichophyton tonsurans* isolation in Japan, 16th Congress of the International Society for Human and Animal Mycology, (Paris, '06.06).
- 0930I005 H.Ishizaki, M.Kawasaki, T.Mochizuki, A.Chakrabarti, R.Ungpakorn, J.Yamashita, C.Zaitz, H.Guerrero, C.Toriello, R.Arenas: Mitochondrial DNA analysis of *Sporothrix schenckii* isolated from India, Thailand, Brazil, Guatemala, Colombia and Mexico., 16th Congress of the International Society for Human and Animal Mycology, (Paris, '06.06).
- 0930I006 K.Anzawa, M.Kawasaki, T.Mochizuki, H.Ishizaki: Identification of species from scale from dermatophytosis lesions by PCR–RFLP analysis, 16th Congress of the International Society for Human and Animal Mycology, (Paris, '06.06).
- 0930I007 K.Anzawa, M.Kawasaki, T.Mochizuki, H.Ishizaki: Identification of dermatophytes in the nail by PCR–RFLP analysis, 16th Congress of the International Society for Human and Animal Mycology, (Paris, '06.06).
- 0930I008 K.Anzawa, M.Kawasaki, H.Tanabe, T.Mochizuki, H.Ishizaki: Genotype analysis of *Candida albicans* isolated from the human oral cavity, 16th Congress of the International Society for Human and Animal Mycology, (Paris, '06.06).
- 0930I009 (C. Jackson), T.Mochizuki, R.Barton: Recent developments in the molecular subtyping of anthropophilic dermatophyte fungi, 16th Congress of the International Society for Human and Animal Mycology, (Paris, '06).

## 0940 Division of Taxus Research (Kotosugi)

### Faculty

Title	Name	Field of Specialization
Professor	NOBUKAWA Takahiro	
Professor(Additional Post)	HIRAI Keiichi	
Senior Assistant Professor(Additional Post)	SHIMADA Hiroki	

### Keywords of Research

Taxaceae, Taxus, Pseudotaxus, Hongdoushan, Kotosugi, Sennenichii, lignan, taxiresinol, secoisolariciresinol, isotaxiresinol, DPPH free radical, nitric oxide, taxane diterpenoids, antiproliferative activity, apoptosis, hepatoprotective effect, TNF- $\alpha$ , phytoestrogen, biochemical marker, hypoglycemic effect

### Publications

#### Originals

- 0940B001 (J.Yin), Y.Tezuka, Subehan, L.Shi, M.Nobukawa, T.Nobukawa, S.Kadota: In vivo anti-osteoporotic activity of isotaxiresinol, a lignana from wood of taxus yunnanensis, *Phytomedicine*, 13(2006)37-42, 2006.
- 0940B002 (J.Koyama), I.Morita, N.Kobayashi, K.-I.Hirai, E.Simamura, T.Nobukawa, S.Kadota: Antiallergic activity of aqueous extracts and constituents of *Taxus yunnanensis*, *Biol.Pharm.Bull.*, 29:2310-2312, 2006.
- 0940B003 (L.Shi), Y.Tezuka, Subehan, JY.Ueda, T.Miyahara, J.YIN, T.Nobukawa, S.Kadota: Inhibitory effect of Kampo medicines on bone resorption in vitro and preventive effect on bone loss in vivo, *J. Trad. Med.*, 23(3), 92-100, 2006.
- 0940B004 K.Ikai, E.Simamura, K-I.Hirai: The mechanisms of anti-cancer activity by the natural constituents of *Taxus yunnanensis*, *J. Kanazawa. Med. Univ.*, 31:165-171, 2006 (in Japanese) .

#### Others

- 0940F001 (JY.Ueda), S.Awale, Y.Tezuka, E.Simamura, K.-I.Hirai, T.Nobukawa, A.Sato, S.Kadota: Growth inhibitory activity of wood of *Taxus yunnanensis* and its liquid chromatography fourier-transform mass spectrometry analysis, *Planta Med.*, 72:1241-1244, 2006.

### Presentations at Conference

#### International Conference (Presentations)

- 0940I001 (S.Kadota), Y.Tezuka, S.Awale, JY.Ueda, J.Yin, T.Nobukawa: Investigation on the Chemical Constituents and Biological Activities of the Wood of Taxus Yunnanensis, an example of EBM to EBM, International Conference & Exhibition of the Modernization of Chinese Medicine & Health Products, (Hong Kong, '06.08).
- 0940I002 T.Nobukawa, O.Nakajima, M.Nobukawa, K.Kubo, T.Okano: The new herbal medicine: Taxus yunnanensis had beneficial effects for interleukins of the Rheumatoid Arthritis, 1st Joint Meeting of European National Societies of Immunology, (Paris, '06.09).

## 0970 Division of Vision Research for Environmental Health

### Faculty

Title	Name	Field of Specialization
Visiting Professor	SASAKI Kazuyuki	cataract, epidemiology, optics, ocular pharmacology, ocular toxicology, uveitis, electromagnetic wave induced ocular tissue changes
Professor(Additional Post)	SASAKI Hiroshi	
Senior Assistant Professor(Additional Post)	KOJIMA Masami	
Researcher	YAMASHIRO Yoko	cataract, electromagnetic wave induced ocular tissue changes, epidemiology

### Keywords of Research

electromagnetic waves, micro waves, millimeter waves, ultraviolet rays, infrared rays, non ionizing-radiation, mobile phone, environmental health, cataract epidemiology, prevention of blindness, cataract, pterygium, glaucoma, age related macular degeneration, JICA, WHO, outdoor temperature, risk factors search, Reykjavik eye study, Monzen eye study, Liaoning eye study, racial differences

### Outline of Research

Main research themes are (1) Population based survey of ocular diseases in the farmers with low income living in the small village of Shanxi Province. China and (2) Radio frequency (RF) effects on health ; Acute ocular tissue damages by 60 GHz RF exposure. Study No.1 : The survey was carried as a part of JICA project on July 2006. Total number of participants was 710, response ratio was 93.9%. Cataract was a top ranked blindness cause. Although, number of patients was small, cases with diabetic retinopathy and age related macular degeneration were noticed. No.2 : The study on acute ocular tissues injuries induced in rabbit eyes by exposure of 60 GHz millimeter RF has been carried out. No ocular injuries were noticed without high dose of the above RF exposure. Among corneal superficial damages which were pointed out by previous investigators, no RF exposure specific damages were seen. No one has pointed out the above up to now.

### Publications

#### Originals

- 0970B001 (T.Takata), T.Shimo-Oka, M.Kojima, K.Miki, N.Fujii: Differential analysis of D- $\beta$ -Asp- containing proteins found in normal and infrared irradiated rabbit lens, *Biochem. Biophys. Res. Commun.*, 344:263-271, 2006.
- 0970B002 (A.Arnarsson), T.Sverrisson, E.Stefansson, H.Sigurdsson, H.Sasaki, K.Sasaki, F.Jonasson: Risk factors for five-year incident age-related macular degeneration: The Reykjavik Eye Study, *Am. J. Ophthalmol.*, 142:419-428, 2006.
- 0970B003 (GM.Zoega), A.Fujisawa, H.Sasaki, A.Kubota, K.Sasaki, K.Kitagawa, F.Jonasson: Prevalence and risk factors for cornea guttata in the Reykjavik Eye Study, *Ophthalmology*, 113:565-569, 2006.
- 0970B004 (A.Hirata), S.Watanabe, M.Kojima, I.Hata, K.Wake, M.Taki, K.Sasaki, O.Fujisawa, T.Shiozawa: Computational verification of anesthesia effect on temperature variations in rabbit eyes exposed to 2.45 GHz microwave energy, *Bioelectromagnetics*, 27:602-612, 2006.
- 0970B005 (A.Hirata), S.Watanabe, O.Fujiwara, M.Kojima, K.Sasaki, T.Shiozawa: Temperature elevation in the eye of Japanese male and female models for plane wave exposures, *EMC*, 17:29-32, 2006.

- 0970B006 (A.Hirata), S.Watanabe, M.Taki, O.Fujiwara, M.Kojima, K.Sasaki: Temperature elevation in rabbit eye irradiated by 2.45-GHz exposure systems, *IEICE*, 50:29-34, 2006.
- 0970B008 M.Fukuda, H.Sasaki, Y.Ohashi: Intraocular penetration of moxifloxacin ophthalmic solution in rabbit eyes – calculation of maximum drug concentration in aqueous–, *Journal of the eye.*, 23:1353-1357, 2006 (in Japanese) .

## Presentations at Conference

### International Conference (Presentations)

- 0970I001 K.Kitagawa, K.Hagihara, M.Fukuda, H.Sasaki, K.Shimoyama, K.Fujimoto, N.Ogawa, S.Sugai: Can lissamine green replace rose bengal as the golden standard for Sjogren’s syndrome diagnosis, IX International Symposium on Sjogren’s Syndrome, (Washington DC, ’06.04).
- 0970I002 H.Sasaki, K.Nagai, M.Kojima, Y.Sakamoto, R.Honda, F.Jonasson, K.Sasaki: Cataract in diabetes ; The Reykjavik Eye Study, The Association for Research in Vision and Ophthalmology, (Florida, ’06.05).
- 0970I003 H.Yaguchi, Y.Sakamoto, J.Qu, K.Nagai, M.Kojima, H.Sasaki, K.Sasaki: Localization of fiber folds in the crystalline lens and influence on visual function, The Association for Research in Vision and Ophthalmology, (Florida, ’06.05).
- 0970I004 J.Qu, H.Sasaki, Y.Sakamoto, M.Kojima, H.Yaguchi, Y.Yamashiro, R.Honda, K.Sasaki: Change in light scattering intensity of crystalline lens over five years in the Japanese population – The Monzen Eye Study –, The Association for Research in Vision and Ophthalmology, (Florida, ’06.05).
- 0970I005 K.Sasaki, H.Sasaki, K.Nagai, H.Yaguchi, M.Kojima, Y.Sakamoto, R.Honda, F.Jonasson: Five-Year’s light scattering changes in lens layers in diabetics – The Reykjavik Eye Study –, The Association for Research in Vision and Ophthalmology, (Florida, ’06.05).
- 0970I006 M.Kojima, Y.Yamashiro, H.Sasaki, J.Qu, M.Hanazawa, K.Wake, S.Watanabe, M.Taki, Y.Kamimura, K.Sasaki: Investigation of safety exposure range by 60 GHz millimeter-wave for rabbit eyes, The Association for Research in Vision and Ophthalmology, (Florida, ’06.05).
- 0970I007 Y.Yamashiro, J.Qu, J.Tao, Y.Kawakami, M.Kojima, R.Honda, H.Sasaki, K.Sasaki: Characteristics of cataract in eyes with long axial length in a Chinese population, The Association for Research in Vision and Ophthalmology, (Florida, ’06.05).
- 0970I008 H.Sasaki: Epidemiology Classification and diagnostic technique of cataract, The 6th Asian Cataract Research Conference – Clinical Workshop –, (Beijing, ’06.06).
- 0970I009 J.Qu, H.Sasaki, Y.Sakamoto, M.Kojima, H.Yaguchi, Y.Yamashiro, R.Honda, K.Sasaki: Change in light scattering intensity of crystalline lens over five years in the Japanese population – The Monzen Eye Study –, The 6th Asian Cataract Research Conference, (Beijing, ’06.06).
- 0970I010 (J.Tao), J.Qu, R.Honda, M.Kojima, Q.Yan, J.Zhang, H.Sasaki, K.Sasaki: Prevalence of three main and six subtype lens opacities in a rural Chinese population, The 6th Asian Cataract Research Conference, (Beijing, ’06.06).
- 0970I011 K.Nagai, H.Sasaki, Y.Sakamoto, M.Kojima, K.Sasaki, F.Jonasson, R.Honda: Characteristics of lens opacity in diabetic patients – Reykjavik Eye Study –, The 6th Asian Cataract Research Conference, (Beijing, ’06.06).
- 0970I012 M.Kojima, Y.Suzuki, Y.Yamashiro, Y.Sakamoto, M.Hanazawa, S.Watanabe, M.Taki, H.Sasaki, K.Sasaki: Visualization of convective heat transportation of aqueous humor, The 6th Asian Cataract Research Conference, (Beijing, ’06.06).
- 0970I013 (X.An), H.Sasaki, Y.Sakamoto, M.Kojima, Y.Kawakami, J.Tao, J.Qu, Z.Liu, J.Zhang, K.Sasaki: True exfoliation in Chinese population in a tropical area – The Senya Eye Study –, The 6th Asian Cataract Research Conference, (Beijing, ’06.06).
- 0970I014 Y.Sakamoto, H.Nakaizumi, H.Sasaki, K.Sasaki: Higher order wavefront aberrations with silicone aspheric and acrylic spherical intraocular lenses, The 6th Asian Cataract Research Conference, (Beijing, ’06.06).

- 0970I015 M.Kojima, Y.Suzuki, Y.Yamashiro, M.Hanazawa, A.Hirata, S.Watanabe, M.Taki, H.Sasaki, K.Sasaki: Assessment of the thermal insult on aqueous humor convection utilizing micro – encapsulated thermo – chromic liquid crystal, The Bioelectromagnetics Society the 28th Annual Meeting, (Cancun, '06.06).
- 0970I016 M.Kojima, Y.Suzuki, Y.Yamashiro, Y.Sakamoto, M.Hanazawa, S.Watanabe, M.Taki, H.Sasaki, K.Sasaki: Investigation of convective heat transportation of aqueous humor during 60 GHz millimeter wave exposure, 4th International Workshop Biological Effects of Emfs, (Crete, '06.10).
- 0970I017 M.Kojima, Y.Suzuki, Y.Yamashiro, M.Hanazawa, S.Watanabe, M.Taki, Y.Sakamoto, H.Sasaki, K.Sasaki: Relationship between the thermal insult by electromagnetic wave exposure and convective heat transportation of aqueous humor, 2006 KMU Workshop on Ocular Changes Induced by Electromagnetic Waves, (Uchinada, '06.11).
- 0970I018 Y.Sakamoto, H.Sasaki, M.Kojima, M.Ono, K.Sasaki: Sun altitude and effective protection items against UV exposure to the ocular surface – UV dosimetry by mannequin head, 2006 KMU Workshop on Ocular Changes Induced by Electromagnetic Waves, (Uchinada, '06.11).
- 0970I019 (Y.Suzuki), M.Kojima, Y.Yamashiro, K.Wake, M.Taki, M.Hanazawa, S.Watanabe: In-situ 3D temperature imaging with micro – encapsulated thermo – chromic liquid crystal for electromagnetic field dosimetry, 2006 KMU Workshop on Ocular Changes Induced by Electromagnetic Waves, (Uchinada, '06.11).
- 0970I020 Y.Yamashiro, M.Kojima, Y.Sakamoto, H.Kawada, H.Sasaki, K.Sasaki: Suitable methodology to detection ocular injury for millimeter wave exposure, 2006 KMU Workshop on Ocular Changes Induced by Electromagnetic Waves, (Uchinada, '06.11).
- 0970I021 H.Sasaki, R.Honda, M.Kojima, Y.Kawakami, Y.Sakamoto, J.Qu, K.Sasaki: High prevalence of pterygium in the population of tropical area in China, 2006 KMU Workshop on Ocular Changes Induced by Electromagnetic Waves, (Uchinada, '06.11).
- 0970I022 (H.Wakatsuchi), M.Hanazawa, T.Sakai, S.Watanabe, M.Kojima, Y.Yamashiro, K.Sasaki, O.Hashimoto: Complex permittivities measurements of eye tissues in quasi – millimeter wave band, 2006 KMU Workshop on Ocular Changes Induced by Electromagnetic Waves, (Uchinada, '06.11).