

Academic Advisor and Topics of Research

Department	Teaching Staff		Main Research Focus
Anatomy and Structural Biology	Toshiyuki Oda	Professor	Structural and functional analyses of motile cilia using cryo-electron microscopy
Anatomy and Cell Biology	Sen Takeda	Professor	Functional analysis on the novel neural signaling system through cilium Interdisciplinary approaches to the development of a new medical diagnostics machine
Integrative Physiology	Takeshi Saigusa	Senior Assistant Professor	Electrophysiological study on the medullary neural network in the control of the sympathetic nervous system
Biochemistry 2	Keiji Miyazawa	Professor	Mechanisms of growth factor signaling
Molecular Pathology	Jianglin Fan	Professor	Molecular pathology, elucidation of molecular mechanisms of the life-related disease, atherosclerosis, translational research
Microbiology	Kohji Moriishi	Professor	Research and development of novel anti Hepatitis virus agents
Immunology	Atsuhito Nakao	Professor	How allergic diseases occur?: molecular mechanisms and new approaches for the prevention and treatment
Legal Medicine	Noboru Adachi	Professor	DNA analysis on the highly degraded samples, mainly ancient human skeletons. Mechanism of the neuronal death and degeneration after trauma.
	Hideki Shojo	Associate Professor	
Health Sciences	Hiroshi Yokomichi	Associate Professor	Observational studies on the risk factors of incident type 2 diabetes Clinical epidemiologic studies on the mortality of the patients with diabetes and dyslipidaemia Observational studies of health check-up participants
Gastroenterology and Hepatology	Nobuyuki Enomoto	Professor	Analysis of the correlation between drug resistance and hepatitis virus genomic structures. A role of DKK family members in colorectal carcinogenesis. Investigation for the molecular mechanism of hepatocarcinogenesis induced by hepatitis virus through determining complete viral genomic sequences.
Cardiovascular and Pulmonary Science and Medicine	Kiyotaka Kugiyama	Professor	A development of non-invasive measurements of unstable atherosclerotic plaque
Nephrology, Endocrinology, and Rheumatology	Kenichiro Kitamura	Professor	Roles of serine proteases in the pathogenesis of kidney diseases, hypertension, and diabetes
Neurology	Yoshihisa Takiyama	Professor	Clinical Neurology, Molecular Genetics in Hereditary Neurodegenerative Disorders, Microneurography in Autonomic Nervous System
	Kazumasa Shindo	Associate Professor	Effects on neural function by artificial high concentrated carbonated water bathing in human Microneurographic analysis in neurodegenerative disorders Autonomic function in older subjects
Hematology/Oncology	Keita Kirito	Professor	Glycolysis and cancer
Pediatrics	Takeshi Inukai	Associate Professor	Analysis of drug sensitivity in leukemia
Neuropsychiatry and Clinical Ethics	Akihiko Nunomura	Associate Professor	Clinical Psychiatry, Geriatric Psychiatry, Neuropathology, Neurobiology of Aging and Age-Associated Degenerative Disorders
Dermatology	Tatsuyoshi Kawamura	Professor	A novel immunotherapeutic approach for cancer (melanoma). Analyses of HIV and herpes virus infection.
Surgery 1	Daisuke Ichikawa	Professor	Novel therapy for esophageal cancer with cancer vaccination., Innovative therapy for inflammatory bowel disease with cytokine regulation., Pancreatic cancer treatment by the improvement of cancer tissue hypoxia., Elucidation of mechanisms and establishment Liquid biopsy in patients with cancers

Surgery2	Hiroyuki Nakajima	Professor	Cardiac surgery for ischemic, valvular and congenital heart diseases. Vascular surgery. Thoracic surgery for benign and malignant lung diseases. Pediatric surgery.
Orthopaedic Surgery	Hiroataka Haro	Professor	#1: Development of surgical treatment for spine and spinal cord disorders, bone and soft tissue tumors, hand and pediatric disorders, and reconstruction of extremity and joints. #2: Molecular biologic investigation for spinal disorders, rheumatoid arthritis
Neurosurgery	Hiroyuki Kinouchi	Professor	Innovation of the surgical treatment for stroke based on the advanced pathophysiology
Anesthesiology	Takashi Matsukawa	Professor	Anesthesia for patients with coronary artery disease, Cerebral circulation and anesthesia, Thermoregulation and anesthesia, Neuropathic pain
	Takeshi Oguchi	Associate Professor	Preconditioning effects of high dose insulin in the ischemic heart Cardiovascular effects of protamine
Obstetrics and Gynecology	Shuji Hirata	Professor	Regenerative Medicine using Somatic Cell Nuclear Transfer, Study of Carcinogenesis of Uterine Cervical Cancer.
	Akihiko Hashi	Associate Professor	The analysis of uterine endocervical glandular lesions with gastric mucin
Urology	Masayuki Takeda	Professor	Lower Urinary Tract Dysfunction, Minimally Invasive Therapy, Endoscopic Surgery, Urological Oncology, Treatment of Renal Failure, Renal Transplantation
	Takahiko Mitsui	Associate Professor	
Ophthalmology	Hiroyuki Iijima	Professor	Chorioretinal disorders, ocular genetics, macular diseases and optical coherent tomography, diagnostic system for glaucoma, mechanism of retinal ganglion cells, ophthalmological telemedicine system
	Kenji Kashiwagi	Associate Professor	Glaucoma, Regional medical coalition
Otolaryngology, Head & Neck Surgery	Keisuke Masuyama	Professor	Functional reconstructive surgery and adoptive immunotherapy for head and neck cancer, Pathophysiology of mucosal immune system in upper respiratory tract, Molecular biology of inner ear ion homeostasis, Functional surgery and implantation for hearing rec
Radiology	Hiroshi Onishi	Professor	Diagnostic imaging, magnetic resonance imaging, radiation oncology, interventional radiology
	Utarō Motosugi	Associate Professor	Development of new MR technique for imaging diagnosis
Oral and Maxillofacial Surgery	Koichiro Ueki	Professor	Jaw bone regeneration using bio-materials and dynamic stimulation Morphological and dynamic analysis related to incidence of jaw deformity and temporomandibular joint dysfunction Changes in trigeminal somato-sensory evoked potential and nerve tissue after maxillofacial surgery Research of mode of invasion in oral cancer
Clinical and Laboratory Medicine	Katsue Suzuki-Inoue	Professor	A role of Platelets beyond clotting focusing on a platelet activation receptor, CLEC-2 Signal transduction pathways in platelet activation mediated by adhesion molecules and receptors Monitoring of anti-platelet drug
Pathology	Tetsuo Kondou	Associate Professor	Molecular mechanism of thyroid cancer
Department of Advanced Biomedical Research	Masaru Iwasaki	Professor	Methodology for biomedical research The clinical application of advanced biomedical research
Community and Family Medicine	Wataru Sato	Professor	Community health policy, health economics, evaluation of the quality of medical care, electronic medical records, utilization of medical information
Emergency and Critical Care Medicine	Kenichi Matsuda	Professor	Development of novel treatment for multiple organ failure(MOF). Mechanisms of MOF. Blood purification. Liquid ventilation.
Clinical Pharmaceutics	Toshio Oguchi	Professor	Improved stabilization of pharmaceutical preparations, Optimization study of drug therapy through pharmaceutical design, Development of medication information sharing system among medical institutions
Center for Medical Education and Sciences (Molecular and Cellular Biology)	Masao Saitoh	Professor	Molecular mechanisms of tumor progression, epithelial-mesenchymal transition(EMT)
Center for Medical Education and Sciences (Physics)	Shinji Akiyama	Professor	1.Numerical verification of the dynamical foundation of statistical mechanics, focussing especially on invariant measures realized by a single orbit. 2.Classification by statistical properties of chaotic orbits in conservative dynamical systems, focussing mainly on how they are approximated by periodic orbits.