Professors and Their Research Interests（教授名, 研究題目等）

Graduate School of Sciences and Technology for Innovation　創成科学研究科

URL(http://pub2.db.tokushima-u.ac.jp/ERD/organization/10992/index-ja.html)

Master Course　博士前期課程

Regional Development and Clinical Psychology　（地域創成専攻・臨床心理学専攻）

Field of Research　研究分野	Faculty　担当教員	Detailed Description of Research Field　研究内容
Regional Development	AIBA Kazuhiko	Security, Democracy and Journalism
	ARATAKE Tatsuro	Modern Chinese History
	ISHIDA Motohiro	Data Science
	KINUGAWA Hitoshi	Japanese Medieval History
	SAKUMA Ryo	Modern British History and Colonial Rule
	SATO Mitsuhiro	Community based Sports Promotion
	TAKAHASHI Shin-ichi	Folk Cultures in East Asia, Urban Cultures
	TSUTSUMI Kazuhiro	Japanese Classical Literature
	TOYODA Tetsuya	Economic Geography and Urban Studies
	NAKAMURA Yutaka	Archeology of Japan and East Asia
	MIURA Hajime	Relationship between Physical Activity and Prevention of Lifestyle-related Diseases/Nursing
	MURAKAMI Keiichi	Sociolinguistic Study on Modern Japanese
	YABE Takuya	Local Community Development
	YAMAGUCHI Tetsuo	Musculoskeletal Injury and Preventive Medicine
	YAMAGUCHI Hiroyuki	Modern Philosophy in France
	YAMADA Hitoko	Language research from the perspectives of cognitive linguistics and pragmatics
	YORIOKA Ryuji	Comparative Literature and Comparative Cultural Studies from Glocal Perspectives
Clinical Psychology	UCHIUMI Chigusa	The impact of traumatic events on mental health
	SATO Kenji	Cognitive behavioral research of Trauma, Anxiety, Depression and Aggressive
	SATO Yutaka	Perceptual Mechanism and Cognitive Function

Master Course　博士前期課程
Science and Technology　（理工学専攻）

Department of Mathematical Sciences　（数理科学コース）

Field of Research　研究分野	Faculty　担当教員	Detailed Description of Research Field　研究内容
Mathematics and Computer Sciences	HASUNUMA Toru	Studies on structural properties of graphs and their applications
	MORIYASU Kazumine	Topological properties of differentiable dynamical systems
Applied Mathematical Sciences	ONO Kosuke	Mathematical models and mathematical analysis of nonlinear phenomena
	MURAKAMI Kouichi	Stability and Bifurcation Theory of Functional Equations
Mathematical Methods in Sciences	OHYAMA Yousuke	Classical analysis on functional equations of the Painlevé-type
	TAKAHASHI Hiroki	Number theory and applications of algebraic systems
	TAKEUCHI Toshiki	High precision and efficient numerical computations

Department of Natural Science　（自然科学コース）

Field of Research　研究分野	Faculty　担当教員	Detailed Description of Research Field　研究内容
Physical Sciences	IZAWA Ken-ichi	Theoretical models of elementary particles and cosmic inflation in the early universe
	KISHIMOTO Yutaka	NMR study on the superconductivity of the strong coupling superconductors and strongly correlated electron systems
	SAITO Takahito	NMR Study on Carbon-containing Inorganic Superconductors
	NAKAMURA Koichi	Study on mechanism of superionic conductivity in electrode materials for advanced rechargeable ion batteries
	FUSHIMI Ken-Ichi	Research and development of highly sensitive radiation detectors to investigate rare events in nuclear, particle, and astrophysical fundamental processes
	MAGISHI Ko-ichi	Elucidation of the novel quantum phenomena in quantum condensed matter physics by nuclear magnetic resonance
Chemistry	IMAI Shoji	Environmental analytical chemistry of toxic elements based on instrumental analysis, and its environmental application
	OGASAWARA Masamichi	Development of novel molecular transformation processes using homogeneous
	MIYOSHI Norikazu	Development of Strontium-mediated new synthetic methods and synthesis of unprecedented functional and fine materials
Geological Sciences	ANMA Ryo	Flow and fracturing of rocks and the crust, influences of crustal deformation and environmental changes on sedimentary processes
Biological Sciences	MAKABE Kazuhiro W.	Research on interactions between genomes and environmental factors, and the subsequent regulations of genome networks
	WATANABE Minoru	Research on the development of new methods and their applications for functional analysis of genes using amphibian embryos as model animals

Department of Civil and Environmental Engineering （社会基盤デザインコース）

Field of Research 研究分野	Faculty 担当教員	Detailed Description of Research Field 研究内容
Structures and Materials	UEDA Takao	Durability evaluation and rehabilitation techniques of concrete structure
	HASHIMOTO Chikanori	High performance of concrete machine with help of the visualization technique of fresh concrete
	NODA Minoru	Evaluation and improvement of dynamic performance of structures under extreme weather
Disaster Science and Mitigation	BABA Toshitaka	Seismogenic process of the subduction zone earthquakes and tsunami prediction
	MUTO Yasunori	Fluvial process on environment restoration and disaster mitigation
	JIANG Jing-Cai	Prediction and countermeasures of landslides and slope disaster
	OGAWA Hiroki	Architectural planning and design for dwellings and public facilities
Regional and Environmental Planning	OKUSHIMA Masashi	Traffic analysis and evaluation of transport policy for ecological city
	KAMADA Mahito	Conservation and usage of regional ecosystems
	KOZUKI Yasunori	Study on coexistence of people and nature（Nature conservation and disaster mitigation）

Department of Mechanical Science （機械科学コース）

Field of Research 研究分野	Faculty 担当教員	Detailed Description of Research Field 研究内容
Material Science	OKADA Tatsuya	Plasticity and recrystallization of metal single- and bi-crystal
	TAKAGI Hitoshi	Development of environment-friendly ecomaterials
	NISHINO Hideo	Ultrasonic material measurement and evaluation
Energy System	ICHIMIYA Masashi	Laminar-turbulent transition in fluid flow
	OHTA Mitsuhiro	Gas-liquid/liquid-liquid two-phase flows and non-Newtonian fluid dynamics
	KIDOGUCHI Yoshiyuki	Combustion improvement and reduction of exhaust emissions
	DEGUCHI Yoshihiro	Development of energy and environmental devices using laser diagnostics
	HASEZAKI Kazuhiro	Fundamental research of Space Solar Power System (SSPS)
	MATSUMOTO Takeshi	Biomedical engineering approach to study bone/microcirculation-related diseases
Intelligent Mechanics	TAKAIWA Masahiro	Development of human support robot system
	HINO Junichi	Dynamic design and vibration control of machinery
Production Engineering	ISHIDA Tohru	Development of EDM system for fabricating complicatedly shaped holes
	YASUI Takeshi	Intelligent terahertz instrumentation and biomedical optics
	YONEKURA Daisuke	Surface engineering for functional materials

Department of Applied Chemistry （応用化学システムコース）

Field of Research 研究分野	Faculty 担当教員	Detailed Description of Research Field 研究内容
Synthetic and Polymer Chemistry	UTE Kohichi	Synthesis and characterization of polymers with controlled structure
	MINAGAWA Keiji	Synthesis and property of stimuli-responsive and other functional materials
	HIRANO Tomohiro	Study on stereospecificity in polymerization reaction
Physico-chemical and Materials Sciences	TAKAYANAGI Toshio	Development of separation and analytical methods on the basis of chemical affinity
	OKAMURA Hidekazu	High pressure research of electronic states in materials
	YASUZAWA Mikito	Research and development of biosensors and biomaterials
Chemical Process Engineering	SUGIYAMA Shigeru	Development of advanced catalysts and alternative resources for resource depletion
	MORIGA Toshihiro	Materials chemistry on oxynitride/oxide semiconductors and phosphors
	KATOH Masahiro	Development of new separation processes using porous inorganic materials

Department of Electrical and Electronic Engineering （電気電子システムコース）

Field of Research 研究分野	Faculty 担当教員	Detailed Description of Research Field 研究内容
Material and Device Science	NAGASE Masao	Study on graphene
	NAOI Yoshiki	Nano structure and photonics devices
Electric Energy Engineering	SHIMOMURA Naoyuki	Applications of pulsed power and discharge plasma
	YASUNO Takashi	Intelligent systems (robotic systems, human friendly motion control systems, renewable energy systems)
	HOJO Masahide	Analysis and controls of modern and advanced power systems
	KAWADA Masatake	Diagnostic techniques for power equipment, measurement of electromagnetic waves, computational electromagnetics, and signal processing
Electrical and Electronic Systems	TAKADA Atsushi	Optical fiber transmission, optical signal processing
	KUBO Tomohiro	Control of time-delay systems
Intelligent Networks and Computer Science	SHIMAMOTO Takashi	Research on CAD algorithms for VLSI design
	NISHIO Yoshifumi	Nonlinear circuit technology, chaos engineering, cognitive engineering

Department of Computer Science （知能情報システムコース）

Field of Research 研究分野	Faculty 担当教員	Detailed Description of Research Field 研究内容
Information Science	UETA Tetsushi	Research on bifurcation problems and visualization of nonlinear dynamical systems
	MATSUURA Kenji	Research on multimedia application for learning and ICT infrastructure
Intelligent Systems	TERADA Kenji	Research on image processing and computer vision
	KINOSHITA Kazuhiko	Research on intelligent information networking
	FUKETA Masao	Research on natural language processing and information retrieval
	SHISHIBORI Masami	Research on multimedia processing techniques
	FUKUMI Minoru	Research on human sensing and signal processing

Department of Optical Science （光システムコース）

Field of Research 研究分野	Faculty 担当教員	Detailed Description of Research Field 研究内容
Terahertz, optical comb, and nonlinear optical microscopy	YASUI Takeshi	Advanced Photonics based on next-generation light
Near-Field Optics and Nanophotonics	HARAGUCHI Masanobu	Photon localization in nano-scale plasmonic structure and its application
Nanomaterial Photonics	FURUBE Akihiro	Advanced laser spectroscopy for optical nanomaterials
Nanophotonics	YANO Taka-aki	Advanced nano-optical devices and their applications to Optical sensing and imaging
Optical Information System	YAMAMOTO Kenji	Visual technologies for ultra-realistic images and 3D images
Medical Image Analysis	KAWATA Yoshiki	Medical imaging, AI-based computer-aided diagnosis systems
Optical communication and computing	FUJIKATA Jun-ichi	High-speed optical communication and computing technology with advanced photoniccomponents and functional optical circuits

Master Course 博士前期課程
Bioresource Science （生物資源学専攻）

Field of Research 研究分野	Faculty 担当教員	Detailed Description of Research Field 研究内容
Biomass Conversion	ASADA Chikako	Study on development efficient processes for the utilization of biomass as useful chemical resources
Medicinal Chemistry	UTO Yoshihiro	Study on medicinal chemistry of anticancer drugs based on tumor implanted chick embryo
Biomass transformation engineering	NAKAMURA Yoshitoshi	Study on efective utilization of biomass and environmental bioremediation technology
Biophysical chemistry	MATSUKI Hitoshi	Biophysicochemical study on aggregate systems of amphiphilic molecules
Food hygiene	KANEMARU Kaori	Microbial control in food environment by food compounds
Applied Microbiology	SAKURADANI Eiji	Study on useful material production using microbial conversion and fermentation
Bioorganic chemistry	TAI Akihiro	Research and development of bioactive products from foods and related materials
Lipid Biochemistry	TANAKA Tamotsu	Study on functional lipids for development of food supplements and medicines
Genetic Engineering	OSAKABE Keishi	Studies on plant genetic engineering and moelcular breeding
Animal Reproduction	OTOI Takeshige	Study on genetically modified animals by reproductive biotechnology
Developmental Biology	TAKEMOTO Tatsuya	Study on cell fate decisions during early embryogenesis
Bio economy	NAKAZAWA Yoshihisa	Research and social implementation for Bioeconomy
Metabolic science for forest microorganisms	HATTORI Takefumi	Elucidation of metabolism in forest microorganisms toward putting high added value on forest products
Aquatic bioproduction science	HAMANO Tatsuo	Aquaculture, stock-enhancement, and conservation of aquatic animals and algae
Insect Science	MITO Taro	Study on insect genome function and utilization of insects as a food resource
Livestock science	MORIMATSU Fumiki	Research and development of animal production system and utilization of livestock products

Doctoral Course 博士後期課程
Sciences and Technology for Innovation （創成科学専攻）

Field of Research 研究分野	Faculty 担当教員	Detailed Description of Research Field 研究内容
Social and Infrastructure System Program	TAKAHASHI Shinichi	Analysis on Asian Folk Culture from the Viewpoint of Cultural Anthropology and Folklore
	MIURA Hajime	Devising novel exercise prescription for the life style disease and care protection
	YABE Takuya	Sociological empirical research for the fomation of sustainable society
	ANMA Ryo	Tectonics, Structural Geology, Ridge subduction and related magmatism, Development of accretionary complexes
	UEDA Takao	Diagnosis techniques and repair methods against various kinds of deterioration mechanism of reinforced concrete structures
	OGAWA Hiroki	Earthquake resistance of the wooden house and utilization of vacant house for extending life of the building
	OKUSHIMA Masashi	Analysis of traffic phenomena, evaluation of urban policy and traffic policy, and evaluation of urban structure in order to form a disaster-resilient and environmentally sustainable urban area
	KAMADA Mahito	Ecological methods and governance system for nature-based solutions
	KOZUKI Yasunori	Studies on Environmental Conservation in the Satoumi and Regional Disaster Prevention
	JIANG Jing-Cai	Analysis and prediction of geotehnical/geological disasters and development of geohazard mitigation techniques
	HASHIMOTO Chikanori	High performance of construction materials and construction method on concrete in order to contribute to SDGs
	BABA Toshitaka	Researches on the mechanisms of tsunami generation associated with earthquakes and landslides, the physics of tsunami propagation and run-up, and tsunami damage mitigation measures
	MUTO Yasunori	Fluvial process on environmental restoration and disaster mitigation
Applied Chemistry and Biological Engineering Program	ASADA Chikako	Bioconversion method using cellulosic biomass into energy and material
	IMAI Shoji	Development of methodology, application and instrument of trace element analysis in environmental, biological, food and materials
	UTO Yoshihiro	Molecular design, synthesis and functional analysis of organic compounds with various biological activities
	OGASAWARA Masamichi	Synthesis of novel organometallic compounds and their application in homogeneous catalysis
	OKAMURA Hidekazu	Materials properties under high pressure up to 400 kbar studied by infrared and optical techniques using synchrotron radiation and other sources
	KATOH Masahiro	Developments of separation materials and processes, utilized properties of powders effectively, for construction of eco-friendly material production systems
	TAKAYANAGI Toshio	Development of high-performance separation and analysis methods for trace substances, similar compounds, and physicochemical properties of functional materials with help of instrumental analyses

Field of Research　研究分野	Faculty　担当教員	Detailed Description of Research Field　研究内容
Applied Chemistry and Biological Engineering Program	MAKABE Kazuhiro W.	Genome network responses and functions influenced by endogenous and exogenous environments, and the regulation of gene expression
	MATSUKI Hitoshi	Structural changes and functional expressions for self-organized aggregates of amphiphilic substances
	MINAGAWA Keiji	Synthesis and evaluation of functional organic polymer-based materials
	MIYOSHI Norikazu	Development of new reaction reagents and new organic synthetic methods, and reaserch on the synthesis of new functional organic compounds based on the findings
	MIYOSHI Hirokazu	Developments of radiation energy conversion materials, preparation of functional nanoparticles, and high sensitive detection of radioisotopes and radiations with the nanoparicles using technique of radiation chemistry and photoelectrochemistry
	MORIGA Toshihiro	Design, fabrication and evaluation of inorganic materials exhibiting unique electronic and optical properties
	YASUZAWA Mikito	Development of in vivo biosensors using advanced functional biomaterial technology and electrochemical measurements
	WATANABE Minoru	Development and application of new methods for functional analysis of genes using amphibian embryos as model system
Mechanical Science Program	ISHIDA Tohru	Establishment of innovative manufacturing methods by applying the results obtained through research and development of new manners in the field of manufacturing technology
	ICHIMIYA Masashi	Clarifying laminar-turbulent transition in fluid flow and developing its new measure
	OHTA Mitsuhiro	Research on fluid flows with complex properties, gas-liquid two-phase flows, multiphase flows with phase changes
	OKADA Tatsuya	Influence of grain boundaries and triple junctions on plastic deformation of metals
	KIDOGUCHI Yoshiyuki	Research on highly efficient and low-pollution combustion for effective use of energy and environmental conservation
	TAKAIWA Masahiro	Development of flexible mechanical systems and their effective operation methods in the human support fields
	TAKAGI Hitoshi	Development of new ecomaterials in the field of materials science, their characterization, and their industrial applications
	DEGUCHI Yoshihiro	Basics and industrial applications of advanced laser diagnostics such as CT Tunable Diode Laser Absorption Spectroscopy and Laser Induced Breakdown Spectroscopy
	NISHINO Hideo	Devising novel methods in materials characterizations and nondestructive evaluations based on the theory of ultrasonic wave propagation
	HASEZAKI Kazuhiro	Research on thermal energy and its control to improve energy conversion efficiency

Field of Research　研究分野	Faculty　担当教員	Detailed Description of Research Field　研究内容
Mechanical Science Program	HINO Junichi	The latest examples related to vibration analysis and damping methods will be discussed, and the design methods for structural modifications and other improvements will be enhanced to take into account vibration characteristics
	MATSUMOTO Takeshi	Advanced measurement- and model-based approaches to understanding the mechanical environment in the expression and disorders of biological functions and exploring its therapeutic application
	YONEKURA Daisuke	Strengthening of engineering materials by surface modification techniques
Electrical Engineering, Electronics and Physics Program	IZAWA Ken-ichi	Theoretical models of elementary particles and cosmic inflation in the early universe
	KAWADA Masatake	Development of radio sensing, computational electromagnetics, and signal processing techniques for insulation diagnosis of power equipment
	KISHIMOTO Yutaka	Elucidating superconductivity in strong coupling superconductors and strongly correlated electron systems based on NMR study
	KUBO Tomohiro	Control theory for systems with time-delay and its applications
	SHIMAMOTO Takashi	Research on CAD algorithms for VLSI design
	SHIMOMURA Naoyuki	Developing the applications of pulsed power in the environmental and biotechnological fields, including the generation and measurement technology
	TAKADA Atsushi	Advanced optical communication network based on optical signal propagation analysis, optical node configuration, and optical signal processing technologies
	NAOI Yoshiki	Development of optical measurement technology, optical function materials and photonic devices based on nano-micro optics
	NAGASE Masao	Development of new functional devices based on post-silicon material, graphene
	NAKAMURA Koichi	Elucidating mechanism of ion conduction in solids, and developing advanced superionic conductors
	NISHIO Yoshifumi	Development of analysis methods for synchronization and chaos generated in nonlinear oscillator networks, and their application to engineering systems
	FUSHIMI Ken-Ichi	Experimental research on cosmology based on nuclear and particle physics, such as cosmic dark matter and double beta decay
	HOJO Masahide	Creating a sustainable electric power system with various energy resources, and development of its advanced controller by electric power conversion technology
	MAGISHI Ko-ichi	Mechanism elucidation and the application of the novel quantum phenomenon in the strongly correlated electron systems using the nuclear magnetic resonance method
	YASUNO Takashi	Control and prediction of various systems (robots, medical / welfare equipments, wind / solar power generation, agricultural support system) that apply artificial intelligence

Field of Research　研究分野	Faculty　担当教員	Detailed Description of Research Field　研究内容
Computer Science and Mathematical Science Program	UETA Tetsushi	Developing new modeling, qualitative and quantitative numerical analyses for mathematical models in information science fields
	OHYAMA Yousuke	Analytical research on functional equations through large-scale calculations using computers, based on classical mathematics
	ONO Kosuke	Mathematical model of differential or functional equations for nonlinear phenomena and mathematical analysis theory
	KINOSHITA Kazuhiko	Devising new methods in the field of information networks, and developing network systems based on their applications
	SHISHIBORI Masami	Devising new methods in the field of multimedia engineering, and developing retrieval, classification, and educational support systems based on their applications
	TAKAHASHI Hiroki	Investigation on latest researches and applications in number theory, and presentation on new examples and results for various problems
	TAKEUCHI Toshiki	Efficient, robust and high precision numerical computational methods
	TERADA Kenji	Provide research guidance on devising new methods in the field of image processing and computer vision, and developing industrial image processing methods based on their applications
	HASUNUMA Toru	Studies on graph structural properties, graph algorithms, and their applications
	FUKUMI Minoru	Devising new methods in the fields of human sensing and digital signal processing, and developing intelligent information processing systems based on their applications
	FUKETA Masao	Devising new methods in the field of natural language processing and information retrieval, and developing their applications
	MATSUURA Kenji	Devising new models, methods and technologies of human-centered design in the field of learning support systems
Bioresources Program	OTOI Takeshige	Development of medical and model animals by reproductive technology
	SAKURADANI Eiji	Study on microbial production of functional compounds by metabolic engineering
	TAI Akihiro	Study on identification and application of bioactive compounds from natural resources for disease prevention and treatment
	TAKEMOTO Tatsuya	Study on the regulatory mechanisms underlying cell differentiations and morphogenesis during early embryogenesis
	TANAKA Tamotsu	Study on structure, absorption and metabolism, and biological function of dietary lipids
	NAKAZAWA Yoshihisa	Creation of bioresource industry related to the biobusiness, agribusiness, bioeconomy, etc
	HATTORI Takefumi	Study on metabolic science of forest microorganisms toward sustainable utilization of forest products
	MITO Taro	Study on genome function in insects and use of insects as resources
	MORIMATSU Fumiki	Research on pig breeding, fattening and processed meat products

Field of Research　研究分野	Faculty　担当教員	Detailed Description of Research Field　研究内容
Optical Science Program	HARAGUCHI Masanobu	Advanced nanophotonics devices for seising or signal processing
	FUJIKATA Jun-ichi	High-speed optical communication and computing technology with advanced photonic components and functional optical circuits and its applied technology
	FURUBE Akihiro	Development of spectroscopic technology for ultrafast optical response in nanomaterials and the elucidation of the reaction mechanism
	YASUI Takeshi	Intelligent optical measurement and medical photonics based on next-generation photonics such as terahertz wave and optical frequency comb
	YAMAMOTO Kenji	Photonics and information science to understand human visual perception and create human-oriented novel visual applications

Graduate School of Medicine　医学研究科

URL(http://pub2.db.tokushima-u.ac.jp/ERD/organization/148410/index-en.html)

Master Course　修士課程

Medical Science　（医科学専攻）

Field of Research　研究分野	Faculty　担当教員	Detailed Description of Research Field　研究内容
Anatomy and Developmental Neurobiology	TOMITA Koichi	Investigation of the mechanisms involved in cortical development and sensory processing in the visual system
Pediatrics	URUSHIHARA Maki	Pediatric nephrology, cardiology,hematology, neurology, endocrinology and metabolism
Obstetrics and Gynecology	IWASA Takeshi	Reproductive medicine and endocrinology, Women's health care, Gynecologic oncology
Cell Biology	YONEMURA Shigenobu	Molecular mechanism of epithelial polarization, mechanobiology of 3-D morphogenesis through adherens junctions
Gastroenterology and Oncology	TAKAYAMA Tetsuji	Molecular analysis of gastrointestinal cancer, chemotherapy and chemoprevention of gastrointestinal cancer
Preventive Medicine	to be appointed	Environmental epidemiology, Epidemiology of chronic disrupters
Public Health	MORIOKA Hisayoshi	Health Service, Health Systems Governance, Health Administration, Epidemiology
General Medicine	to be appointed	Community Medicine, Rheumatology, Respirology
Immunology and Parasitology	YASUTOMO Koji	Immunology, T-cell development. Cell differentiation, Human genetics
Microbiology	NOMAGUCHI Masako	Molecular genetics of human and simian immunodeficiency viruses, Structural virology
Anatomy and Cell Biology	to be appointed	Functional morphology of endocrine cells, Neurosteroids and sexual differentiation
Physiology	SEI Hiroyoshi	Integrative Neuronal Physiology, Sleep and biological clock, Behavioral control of CNS, Cardiovascular and respiratory control of CNS

Field of Research　研究分野	Faculty　担当教員	Detailed Description of Research Field　研究内容
Psychiatry	NUMATA Shusuke	Psychiatry, Psychosomatic medicine, Psychopharmacology
Neurosurgery	TAKAGI Yasushi	Cerebrovascular diseases, Brain tumor, Climical neuroscience
Molecular Biology	OYADOMARI Seiichi	Endoplasmic reticulum stress in health and disease
Medical Informatics	HIROSE Jun	Data analysis in medical information systems, Regional medical cooperation systems, Hospital management analysis, Privacy protection
Pharmacology	IKEDA Yasumasa	Renal pharmacology, Cardiovascular pharmacology, Oxidative Stress, Nitrite
Anesthesiology	TANAKA Katsuya	Electrophysiology and electropharmacology of the heart, Ventriculo-arterial coupling, Transesophageal echocardiography, Effects of anesthetics on cytosolic Ca concentrations during myocardial ischemia
Nephrology	WAKINO Shu	Nephrology, Diabetic Nephropathy
Emergency and Critical Care Medicine	OTO Jun	Mechanical ventilation, Ventilator-induced lung injury, Acute stroke care, Infection control
Department of Clinical Pharmacology and Therapeutics	ISHIZAWA Keisuke	Cardiovascular pharmacology, Neuropharmacology, Management of Chemotherapy-induced side effects
Ophthalmology	MITAMURA Yoshinori	Ocular infections, Keratoprosthesis, Glaucoma, Uveitis, Diabetic retinopathy, Vitrectomy, Orbital diseases, Strabismus
Otorhinolaryngology and Communicative Neuroscience	KITAMURA Yoshiaki	Neurootology, Neurolaryngology, Head and neck surgery
Neurology	IZUMI Yuishin	Pathophysiology of movement disorders, Physiology of nerve conduction, Molecular genetics of neurological diseases
Molecular Pathology	to be appointed	General Pathology, Surgical Pathology
Digestive Surgery and Transplantation	SHIMADA Mitsuo	FACS Regenerative medicine: Transplantation (liver, pancreas and islet cell), Hepatic regeneration Oncology: Molecular biology based clinical oncology (carcinogenesis, organotrophism), Development of a new minimum invasive surgery
Cardiovascular Surgery	HATA Hiroki	Pediatric cardiac surgery, Surgery for acquired cardiovascular disease, Vascular surgery, and Lymphology, Cellular biology of allograft valve, Pulmonary blood flow, Cardioplegia
Urology	to be appointed	Renal cell carcinoma. Bladder cancer. Tumor invasion and metastasis, Molecular targeted therapy, Laparoscopic surgery, Pediatric urology, Andrology
Cardiovascular Medicine	SATA Masataka	Cardiology, Atherosclerosis, Coronary Intervention, Regenerative Medicine, Stem Cell
Pathology and Laboratory Medicine	TSUNEYAMA Kouichi	General pathology, Cancer pathology, Liver pathology, Environmental pathology, Allergy and autoimmune diseases, Metabolic syndrome-related diseases
Radiology and Radiation Oncology	HARADA Masafumi	Mapping of the function and metabolism using MRI, MRS, and RI, Clinical utility of 3-D medical images
Respiratory Medicine and Rheumatology	NISHIOKA Yasuhiko	Lung cancer. Cancer metastasis, Molecular targeted therapy, Interstititallung disease. Bronchial asthma. Immunotherapy, Rheumatology

Field of Research　研究分野	Faculty　担当教員	Detailed Description of Research Field　研究内容
Thoracic Endocrine Surgery and Oncology	TAKIZAWA Hiromitsu	Development of visualization technology for thoracic surgery and bronchoscopy. DNA methylation in lung cancer and thymic epithelial tumors.
Forensic Medicine	NISHIMURA Akiyoshi	Forensic pathology, Neuropathology
Dermatological Science	KUBO Yoshiaki	Skin carcinogenesis, Molecular diagnosis, Stem cell, Hair biology, Cutaneous physiology, Differentiation mechanism of the skin
Orthopedics	SAIRYO Koichi	Bone lengthening, Distraction osteogenesis
Plastic and Reconstructive Surgery	HASHIMOTO Ichiro	Microsurgery for tissue transplantation, Microcirculation of skin flap, perforator flap, Lymph edema
Biochemistry	SASAKI Takuya	Int racellular signal transduction, Molecular mechanisms of vesicle transport and cytoskeletal control
Hematology, Endocrinology and Metabolism	to be appointed	Endocrinology, Metabolism, Hematology, Vascular biology, Bone biology, Gerontology
Medical Genetics	MORINO Hiroyuki	Research using genetic analysis and bioinformatics. Search for genes associated with hereditary neuromuscular diseases and cancer.
Genetic Information	MINEGISHI Yoshiyuki	Identify causing genes of immunodeficiencies and elucidate molecular mechanisms underlying allergic diseases
Genome Medicine	(KATAGIRI Toyomasa)	Investigation of molecular mechanisms underlying carcinogenesis through comprehensive human genome analysis
Diabetology	MATSUHISA Munehide	Pathophysiology and treatment of diabetes and its complications
Cell Signaling	KOSAKO Hidetaka	Cell signaling, Protein phosphorylation, Proteomics, Mass Spectrometry
Molecular Life Science	SAIO Tomohide	Structural biology and biochemistry to understand life and disease, focusing on molecular chaperones and stress sensors.
Animal Research Resources and Genetic Engineering	MATSUMOTO Takahiro	Mouse genetics, Animal model resources, Biology of sex difference
Molecular Neurobiology	SAKAGUCHI Suehiro	Prion protein signaling, Molecular pathogenesis of prion diseases, Prion vaccines

Doctoral Course　博士課程
Medicine　(医学専攻)

Field of Research　研究分野	Faculty　担当教員	Detailed Description of Research Field　研究内容
Anatomy and Developmental Neurobiology	TOMITA Koichi	Investigation of the mechanisms involved in cortical development and sensory processing in the visual system
Pediatrics	URUSHIHARA Maki	Pediatric nephrology, cardiology,hematology, neurology, endocrinology and metabolism
Obstetrics and Gynecology	IWASA Takeshi	Reproductive medicine and endocrinology, Women's health care, Gynecologic oncology
Cell Biology	YONEMURA Shigenobu	Molecular mechanism of epithelial polarization, mechanobiology of 3-D morphogenesis through adherens junctions

Field of Research　研究分野	Faculty　担当教員	Detailed Description of Research Field　研究内容
Gastroenterology and Oncology	TAKAYAMA Tetsuji	Molecular analysis of gastrointestinal cancer, chemotherapy and chemoprevention of gastrointestinal cancer
Preventive Medicine	to be appointed	Environmental epidemiology, Epidemiology of chronic disrupters
Public Health	MORIOKA Hisayoshi	Health Service, Health Systems Governance, Health Administration, Epidemiology
Medical Education	AKAIKE Masashi	Simulation-based medical education, Inter professional education
General Medicine	to be appointed	Community Medicine, Rheumatology, Respirology
Immunology and Parasitology	YASUTOMO Koji	Immunology, T-cell development. Cell differentiation, Human genetics
Microbiology	NOMAGUCHI Masako	Molecular genetics of human and simian immunodeficiency viruses, Structural virology
Anatomy and Cell Biology	to be appointed	Functional morphology of endocrine cells, Neurosteroids and sexual differentiation
Physiology	SEI Hiroyoshi	Integrative Neuronal Physiology, Sleep and biological clock, Behavioral control of CNS, Cardiovascular and respiratory control of CNS
Psychiatry	NUMATA Shusuke	Psychiatry, Psychosomatic medicine, Psychopharmacology
Neurosurgery	TAKAGI Yasushi	Cerebrovascular diseases, Brain tumor, Climical neuroscience
Molecular Biology	OYADOMARI Seiichi	Endoplasmic reticulum stress in health and disease
Medical Informatics	HIROSE Jun	Data analysis in medical information systems, Regional medical cooperation systems, Hospital management analysis, Privacy protection
Pharmacology	IKEDA Yasumasa	Renal pharmacology, Cardiovascular pharmacology, Oxidative Stress, Nitrite
Anesthesiology	TANAKA Katsuya	Electrophysiology and electropharmacology of the heart, Ventriculo-arterial coupling, Transesophageal echocardiography, Effects of anesthetics on cytosolic Ca concentrations during myocardial ischemia
Nephrology	WAKINO Shu	Nephrology, Diabetic Nephropathy
Emergency and Critical Care Medicine	OTO Jun	Mechanical ventilation, Ventilator-induced lung injury, Acute stroke care, Infection control
Department of Clinical Pharmacology and Therapeutics	ISHIZAWA Keisuke	Cardiovascular pharmacology, Neuropharmacology, Management of chemotherapy-induced side effects
Ophthalmology	MITAMURA Yoshinori	Ocular infections, Keratoprosthesis, Glaucoma, Uveitis, Diabetic retinopathy, Vitrectomy, Orbital diseases, Strabismus
Otorhinolaryngology and Communicative Neuroscience	KITAMURA Yoshiaki	Neurootology, Neurolaryngology, Head and neck surgery
Neurology	IZUMI Yuishin	Pathophysiology of movement disorders, Physiology of nerve conduction, Molecular genetics of neurological diseases
Molecular Pathology	to be appointed	Cell Biology of Macrophage, Lipid Metabolism, Amyloidosis, General Pathology

Field of Research　研究分野	Faculty　担当教員	Detailed Description of Research Field　研究内容
Digestive Surgery and Transplantation	SHIMADA Mitsuo	FACS Regenerative medicine: Transplantation (liver, pancreas and islet cell), Hepatic regeneration Oncology: Molecular biology based clinical oncology (carcinogenesis, organotrophism), Development of a new minimum invasive surgery
Minimum-invasion and Tele-mentoring Surgery	to be appointed	
Cardiovascular Surgery	HATA Hiroki	Pediatric cardiac surgery, Surgery for acquired cardiovascular disease, Vascular surgery, and Lymphology, Cellular biology of allograft valve, Pulmonary blood flow, Cardioplegia
Urology	to be appointed	Renal cell carcinoma. Bladder cancer. Tumor invasion and metastasis, Molecular targeted therapy, Laparoscopic surgery, Pediatric urology, Andrology
Cardiovascular Medicine	SATA Masataka	Cardiology, Atherosclerosis, Coronary Intervention, Regenerative Medicine, Stem Cell
Pathology and Laboratory Medicine	TSUNEYAMA Kouichi	General pathology, Cancer pathology, Liver pathology, Environmental pathology, Allergy and autoimmune diseases, Metabolic syndrome-related diseases
Radiology and Radiation Oncology	HARADA Masafumi	Mapping of the function and metabolism using MRI, MRS, and RI, Clinical utility of 3-D medical images
Respiratory Medicine and Rheumatology	NISHIOKA Yasuhiko	Lung cancer. Cancer metastasis, Molecular targeted therapy, Interstititallung disease. Bronchial asthma. Immunotherapy, Rheumatology
Thoracic Endocrine Surgery and Oncology	TAKIZAWA Hiromitsu	Development of visualization technology for thoracic surgery and bronchoscopy. DNA methylation in lung cancer and thymic epithelial tumors.
Forensic Medicine	NISHIMURA Akiyoshi	Forensic pathology, Neuropathology
Dermatological Science	KUBO Yoshiaki	Skin carcinogenesis, Molecular diagnosis, Stem cell, Hair biology, Cutaneous physiology, Differentiation mechanism of the skin
Orthopedics	SAIRYO Koichi	Bone lengthening, Distraction osteogenesis
Plastic and Reconstructive Surgery	HASHIMOTO Ichiro	Microsurgery for tissue transplantation, Microcirculation of skin flap, Perforator flap, Lymph edema
Biochemistry	SASAKI Takuya	Int racellular signal transduction, Molecular mechanisms of vesicle transport and cytoskeletal control
Hematology, Endocrinology and Metabolism	ABE Masahiro	Endocrinology, Metabolism, Hematology, Vascular biology, Bone biology, Gerontology
Medical Genetics	MORINO Hiroyuki	Research using genetic analysis and bioinformatics. Search for genes associated with hereditary neuromuscular diseases and cancer.
Genetic Information	MINEGISHI Yoshiyuki	Identify causing genes of immunodeficiencies and elucidate molecular mechanisms underlying allergic diseases
Genome Medicine	(KATAGIRI Toyomasa)	Investigation of molecular mechanisms underlying carcinogenesis through comprehensive human genome analysis
Molecular Function Analysis	HORIKAWA Kazuki	
Diabetology	MATSUHISA Munehide	Pathophysiology and treatment of diabetes and its complications
Cell Signaling	KOSAKO Hidetaka	Cell signaling, Protein phosphorylation, Proteomics, Mass Spectrometry

Field of Research　研究分野	Faculty　担当教員	Detailed Description of Research Field　研究内容
Molecular Life Science	SAIO Tomohide	Structural biology and biochemistry to understand life and disease, focusing on molecular chaperones and stress sensors.
Animal Research Resources and Genetic Engineering	MATSUMOTO Takahiro	Mouse genetics, Animal model resources, Biology of sex difference
Pathology and Metabolome Research for Infectious Disease and Host Defense	KIDO Hiroshi	Medical Application of Proteases and Its Inhibitors, Mucosal Vaccination, Allergy, Mechanism of Influenza Virus Infection
Molecular Neurobiology	SAKAGUCHI Suehiro	Prion protein signaling, Molecular pathogenesis of prion diseases, Prion vaccines
Genomics	to be appointed	
Space Medical Science	to be appointed	
Imaging Probe Sciences	DOI Hisashi	
Molecular Imaging Sciences	WATANABE Yasuyoshi	

Graduate School of Medical Nutrition　医科栄養学研究科

URL(http://pub2.db.tokushima-u.ac.jp/ERD/organization/148408/index-en.html)

Master Course　博士前期課程

Medical Nutrition　（医科栄養学専攻）

Field of Research　研究分野	Faculty　担当教員	Detailed Description of Research Field　研究内容
Applied Nutrition	SEGAWA Hiroko	Mineral and bone/kidney metabolism, Nutritional biochemistry of calcium, phosphorus and amino acids, Physiological regulation of phosphate transporters
Nutritional Physiology	NIKAWA Takeshi	Space biology, mechano-biology, and mitochondrial biology of skeletal muscle, Functional foods in space, Chrono-nutrition of skeletal muscle, Structural biology
Food Science	AKAGAWA Mitsugu	Prevention and improvement of lifestyle-related diseases by functional food factors
Metabolic Nutrition Science	SAKAUE Hiroshi	Diabetes and cardiovascular disease, Exercise physiology, Aadiposcience, Clinical Nutrition
Preventive Environment Nutrition	TAKAHASHI Akira	Pathogenicity of Food poisoning bacteria
Clinical Nutrition and Food Management	TAKETANI Yutaka	Nutritional assessment and management of life-style related diseases, Evaluation and development of functional foods in humans, Metabolism of calcium / phosphorus / vitamin D and dietary management of ageing, osteoporosis and chronic kidney disease, Dietary habit and palatability
Public Health and Applied Nutrition	SAKAI Tohru	Nutritional Immunology, Mucosal Immunity, Tumor and Nutrition, Public Health Nutrition
Therapeutic Nutrition	HAMADA Yasuhiro	Research of nutrition support team, Clinical research for medical nutrition, Protein energy wasting in patients with chronic kidney disease

Doctoral Course 博士後期課程
Medical Nutrition （医科栄養学専攻）

Field of Research 研究分野	Faculty 担当教員	Detailed Description of Research Field 研究内容
Applied Nutrition	SEGAWA Hiroko	Mineral and bone/kidney metabolism, Nutritional biochemistry of calcium, phosphorus and amino acids, Physiological regulation of phosphate transporters
Nutritional Physiology	NIKAWA Takeshi	Space biology, mechano-biology, and mitochondrial biology of skeletal muscle, Functional foods in space, Chrono-nutrition of skeletal muscle, Structural biology
Food Science	AKAGAWA Mitsugu	Prevention and improvement of lifestyle-related diseases by functional food factors
Metabolic Nutrition Science	SAKAUE Hiroshi	Diabetes and cardiovascular disease, Exercise physiology, Aadiposcience, Clinical Nutrition
Preventive Environment Nutrition	TAKAHASHI Akira	Pathogenicity of Food poisoning bacteria
Clinical Nutrition and Food Management	TAKETANI Yutaka	Nutritional assessment and management of life-style related diseases, Evaluation and development of functional foods in humans, Metabolism of calcium / phosphorus / vitamin D and dietary management of ageing, osteoporosis and chronic kidney disease, Dietary habit and palatability
Public Health and Applied Nutrition	SAKAI Tohru	Nutritional Immunology, Mucosal Immunity, Tumor and Nutrition, Public Health Nutrition
Therapeutic Nutrition	HAMADA Yasuhiro	Research of nutrition support team, Clinical research for medical nutrition, Protein energy wasting in patients with chronic kidney disease

Graduate School of Health Sciences 保健科学研究科

URL(http://pub2.db.tokushima-u.ac.jp/ERD/organization/131051/index-en.html)

Master Course 博士前期課程
Health Sciences （保健学専攻）

Field of Research 研究分野	Faculty 担当教員	Detailed Description of Research Field 研究内容
Nursing Education	IWASA Yukie	Nursing education, Nursing physiology
Nursing Outcome Management	TANIOKA Tetsuya	Nursing outcome management, Psychiatric mental health nursing, Nursing theory
	YASUHARA Yuko	Nursing skill, Nursing outcome management
Cancer Nursing	IMAI Yoshie	Cancer Nursing
Rehabilitation Nursing	BANDO Takae	Perioperative Nursing, Cancer Nursing, Rehabilitation Nursing
Community Health Nursing	OKAHISA Reiko	Community Health Nursing, Health Promotion, Public Health Nurses' Practices
	MATSUSHITA Yasuko	
Child Health Nursing	HASHIMOTO Hiroko	Child health nursing
School Health	OKUDA Kikuko	Health education and management, school nurses' practices, family and community health

Field of Research　研究分野	Faculty　担当教員	Detailed Description of Research Field　研究内容
Mental Health Nursing	CHIBA Shin-ichi	Conduct research on mental health problems, mental health nursing and health outcomes for mentally handicapped person and families.
Mental Health Support	TOMOTAKE Masahito	Mental Health, Psychological Medicine
	MORI Kenji	Medicine on Developmental Disabilities
Oncological Medical Support	KONDO Kazuya	Estimating QOL of the patients with cancer using patient related QOL questionnaire
Women's Health・Midwifery	HAKU Mari	Midwifery, Midwifery Education, Breastfeeding
Reproductive and Menopausal Health Science	YASUI Toshiyuki	Reproductive Medicine, Perimenopausal Medicine
Advanced Medical Image Equipment Engineering	YOSHINAGA Tetsuya	Medical image reconstruction, BiologIcal engineering, Nonlinear dynamical system
Nuclear Medicine Therapy and Nuclear Chemistry	SAKAMA Minoru	Radioanalytical chemistry, nuclear chemistry and nuclear physics, radiological protection, environmental radiactivity
Radiation Biology and Medicine	MORITA Akinori	Radiation Biology, Molecular Oncology
Advanced Medical Image Informatics	HAGA Akihiro	Medical Physics, Atomic and Nuclear Physics, Machine Learning, Image Informatics
Brain Functional Imaging Analysis	KOHNO Satoru	Imaging techniques, experimental designs and statistical analysis methods for functional magnetic resonance imaging
Diagnostic Radiology	TAKAO Shoichiro	Semi-quantitative Image Analysis of Magnetic Resonance in Medicine.
Metabolic / Functional Image Information Analysis	OTSUKA Hideki	Nuclear Medicine, Molecular Imaging, Magnetic Resonance in Medicine
Therapeutic Radiology	IKUSHIMA Hitoshi	Radiation Oncology, Radiation Therapy Technology
Department of Bioregulatory Sciences	ENDO Itsuro	Translational and clinical research for Endocrine disorder and Metabolic bone diseases
Microbiology and Genetic Analysis	KATAOKA Keiko	Commensal bacteria and human health, Host-bacteria interaction in opportunistic infection, Prebiotics and disease prevention
Analytical Pathology	YAMASHITA Michiko	Correlation of histopathology findings with various laboratory findings. Efficient pathology techniques.
Bioanalytical Technology	TOMINAGA Tatsuya	Elucidation of the pathogenic mechanism of diabetic nephropathy and development of diagnostic technologies
Cells and Immunity Analytics	AKI Kensaku	Analysis of NK cell function and its application to clinical laboratory.
Assisted Reproductive Technology	YASUI Toshiyuki	Reproductive Medicine, Perimenopausal Medicine
Tumor Control Study	KONDO Kazuya	Estimating QOL of the patients with cancer using patient-related QOL questionnaire

Doctoral Course 博士後期課程
Health Sciences （保健学専攻）

Field of Research 研究分野	Faculty 担当教員	Detailed Description of Research Field 研究内容
Nursing Education	IWASA Yukie	Nursing education, Nursing physiology
Outcome Management	TANIOKA Tetsuya	Nursing outcome management, Psychiatric mental health nursing, Nursing theory
	YASUHARA Yuko	Nursing skill, Nursing outcome management
Cancer Nursing	IMAI Yoshie	Cancer Nursing
Rehabilitation Nursing	BANDO Takae	Rehabilitation Nursing,Cancer Nursing
Community Health Nursing	OKAHISA Reiko	Community Health Nursing, Health Promotion, Public Health Nurses' PractIces
School Health	OKUDA Kikuko	Health education and management, school nurses' practices, family and community health
Midwifery	HAKU Mari	Midwifery, Development of Midwifery care model
Reproductive and Menopausal Health Science	YASUI Toshiyuki	Reproductive Medicine, Perimenopausal Medicine
Mental Health Support	TOMOTAKE Masahito	Mental Health, Psychological Medicine
Medicine on Developmental Disabilities	MORI Kenji	Medicine on Developmental Disabilities
Oncological Medical Support	KONDO Kazuya	Molecular research for thoracic malignancies-lung cancer, thymoma, etc
Advanced Medical Image Equipment Engineering	YOSHINAGA Tetsuya	Medical image reconstruction, Medical englneerlng, Medical imaging equipment, Nonlinear dynamical system
Nuclear Medicine Therapy and Nuclear Chemistry	SAKAMA Minoru	Radioanalytical chemistry, nuclear chemistry and nuclear physics, radiological protection, environmental radiactivity
Radiation Biology and Medicine	MORITA Akinori	Radiation biology, Molecular oncology
Advanced Medical Image Informatics	HAGA Akihiro	Medical Physics, Atomic and Nuclear Physics, Machine Learning, Image Informatics
Therapeutic Radiology	IKUSHIMA Hitoshi	Radiation Oncology, Radiation Therapy Technology
Metabolic / Functional Image Information Analysis	OTSUKA Hideki	Nuclear Medicine, Molecular Imaging, Magnetlc Resonance in Medicine
Department of Bioregulatory Sciences	ENDO Itsuro	Translational and clinical research for Endocrine disorder and Metabolic bone diseases
Microbiology and Genetic Analysis	KATAOKA Keiko	Commensal bacteria and human health, Host-bacteria interaction in opportunistic infection, Prebiotics and disease prevention
Bioanalytical Technology	TOMINAGA Tatsuya	Elucidation of the pathogenic mechanism of diabetic nephropathy and development of diagnostic technologies
Tumor Control Study	KONDO Kazuya	Molecular research for thoracic malignancies-lung cancer, thymoma, etc

Graduate School of Oral Sciences 口腔科学研究科

URL(http://pub2.db.tokushima-u.ac.jp/ERD/organization/148409/index-en.html)

Master's Course 博士前期課程
Oral Health Science （口腔保健学専攻）

Field of Research 研究分野	Faculty 担当教員	Detailed Description of Research Field 研究内容
Hygiene and Oral Health Science	HINODE Daisuke	Halitosis, Professional oral health care, Oral health promotion
Oral Health Care Management	FUJIWARA Natsumi	Association with periodontopathic bacteria and systemic diseases, Effects of environmental pollutant on oral cavity, Development of educational system for dental hygienists
Oral Health Care Promotion	OZAKI Kazumi	Periodontal Medicine, Antibacterial material, Development of ICT platform to prevent deterioration of cognitive function and oral function
Oral Health Care and Rehabilitation	MATSUYAMA Miwa	Gerodontology, Dysphagia Rehabilitation, Oral Health Care and Oral Rehabilitation
Oral Health Science and Social Welfare	KATAOKA Kosuke	Program Construction for Oral Health Promotion, Mucosal Immunology, Nasal Vaccine, Prophylaxis for Periodontal Disease
Community Medical and Welfare	SHIRAYAMA Yasuhiko	Higher brain dysfunction, Burnout, Care burden, Community-based Integrated Care System

Doctor's Course 博士後期課程
Oral Health Science （口腔保健学専攻）

Field of Research 研究分野	Faculty 担当教員	Detailed Description of Research Field 研究内容
Hygiene and Oral Health Science	HINODE Daisuke	Halitosis, Professional oral health care, Oral health promotion
Oral Health Care Management	FUJIWARA Natsumi	Association with periodontopathic bacteria and systemic diseases, Effects of environmental pollutant on oral cavity, Development of educational system for dental hygienists
Oral Health Care Promotion	OZAKI Kazumi	Periodontal Medicine, Antibacterial material, OSCE method, ICT support services on oral care
Oral Health Care and Rehabilitation	MATSUYAMA Miwa	Gerodontology, Dysphagia Rehabilitation, Oral Health Care and Oral Rehabilitation
Oral Health Science and Social Welfare	KATAOKA Kosuke	Program Construction for Oral Health Promotion, Mucosal Immunology, Nasal Vaccine, Prophylaxis for Periodontal Disease
Community Medical and Welfare	SHIRAYAMA Yasuhiko	Higher brain dysfunction, Burnout, Care burden, Community-based Integrated Care System

Doctoral Course　博士課程
Oral Sciences　（口腔科学専攻）

Field of Research　研究分野	Faculty　担当教員	Detailed Description of Research Field　研究内容
Oral and Maxillofacial Anatomy	BABA Otto	Gross anatomy of the head and neck, Development of teeth and periodontium
Tissue-regeneration	YAMAMOTO Akihito	Development of regeneration therapies using stem cells from oral cavity, Analysis of the tissue-regenerative mechanisms by the factors-derived from stem cells
Molecular Oral Physiology	YOSHIMURA Hiroshi	Integration of oral sensory information, Aquaporins and exocrine function, Salivary gland and defense system of oral cavity
Oral Bioscience	KUDO Yasusei	Molecular mechanism on pathogenesis of oral diseases including oral cancer
Oral Molecular Pathology	ISHIMARU Naozumi	Pathogenesis of autoimmunity and carcinogenesis
Oral Microbiology	SUMITOMO Tomoko	Pathogenesis of oral microorganisms in systemic diseases, Development of high-performance small molecule antibodies, Application and bioengineering of bacteriophage, Mechanism of oral antimicrobial peptides
Biomaterials and Bioengineering	HAMADA Kenichi	R & D of biomedical/dental alloys, ceramics and composite materials.
Preventive Dentistry	ITO Hiro-O	Saliva and mucosal immunity, Oxidative stress and oral health, Public dental health promotion
International Oral Health Science Education	RODIS Omar Marianito Maningo	Dental English, Dental education, Curriculum development
Regenerative Dental Medicine	HOSAKA Keiichi	Adhesive Dentistry, Operative Dentistry, Cariology, Pulp pathology, Pathogenesis of apical and marginal periodontitis
Periodontology and Endodontology	YUMOTO Hiromichi	Periodontology, Bone metabolism, Gingival overgrowth, Diagnostic indicators in periodontal disease, Diabetes and periodontitis, Endodontology
Prosthodontics and Oral Rehabilitation	ICHIKAWA Tetsuo	Removable Prosthodontics, Gerodontology, Oral Implantology, CAD/CAM Technology, Oral Physiology and Behavior
Stomatognathic Function and Occlusal Reconstruction	MATSUKA Yoshizo	Fixed Prosthodontics, Jaw movement, Dental occlusion, Orofacial pain, Neurobiology, Tissue regeneration
Oral Medicine	to be appointed	Cell biology, Functional regeneration of salivary glands, Prevention of cancer development
Oral Surgery	MIYAMOTO Youji	Bone tissue engineering, Biomaterials, Dental implant, Oral Surgery, Oncology, Molecular target Treatment for oral cancer
Orthodontics and Dentofacial Orthopedics	TANAKA Eiji	Craniofacial growth and development, Biological response to mechanical stress, Bone cell biology
Pediatric Dentistry	IWASAKI Tomonori	Sleep apnea, relationship of between maxillofacial growth and respiration, Tooth and craniofacial development, Dental pulp stem cell research
Oral and Maxillofacial Radiology	to be appointed	Digital radiography, Image analysis, Interpretation of oral lesions by CT or MRI
Dental Anesthesiology	KAWAHITO Shinji	Myocardial protection via mTOR, Periodontal-induced vascular abnormality, Angiogenesis and anesthetics
Comprehensive Dentistry	to be appointed	Biomechanics, Biomaterials, Occlusal schemes of prosthesis, Sleep Bruxism

Graduate School of Pharmaceutical Sciences 薬学研究科

URL(http://pub2.db.tokushima-u.ac.jp/ERD/organization/148357/index-en.html)

Master Course 博士前期課程

Pharmaceutical Sciences （創薬科学専攻）

Field of Research 研究分野	Faculty 担当教員	Detailed Description of Research Field 研究内容
Analytical Sciences	TANAKA Hideji	Flow-based analysis (Flow injection analysis, Feedback-based flow ratiometry, Amplitude-modulated flow analysis), Analysis of aquatic environment
Molecular Medicinal Chemistry	SANO Shigeki	Organic chemistry, Medicinal chemistry, Functionalized heterocycles, Bioactive compounds
Molecular Design and Synthesis	OTAKA Akira	Peptide & Protein Chemistry, Peptide-based chemical biology, Bioorganic medicinal chemistry
Pharmaceutical Organic Chemistry	YAMADA Ken-ichi	Organic synthesis, Methodology development, Asymmetric synthesis
Theoretical Chemistry for Drug Discovery	TACHIKAWA Masanori	Blood-tissue barrier science, Membrane transport and drug targeting, Central nervus system drug design, Quantitative
Pharmacognosy	TANAKA Naonobu (Associate Professor)	Natural products chemistry, Bioactive natural products from plants and marine organisms, Pharmacognosy, Ethnobotany
Synthetic Organic Chemistry	NAMBA Kosuke	Total synthesis, Practical synthesis, Molecular probes
Bioorganic Chemistry	MINAKAWA Noriaki	Nucleic acid chemistry, Nucleoside, Nucleotide, Oligonucleotide, Medicinal chemistry
Medicinal Biotechnology	to be appointed	
Clinical Pharmacology	to be appointed	
Pharmaceutical Information Science	SATO Youichi	Pharmacoepidemiology, Pharmacogenetics, Human genetics, Andrology, Reproductive medicine and biology
Pharmacokinetics and Biopharmaceutics	ISHIDA Tatsuhiro	Drug delivery with liposome or lipid nanoparticle, Pharmacokinetic, Innate immunity to nanocarriers, Antibody production, Modulation of tumor microenvironemnt, Bacterial cellulose nanofiber, Ionic liquid
Neurobiology and Therapeutics	KASAHARA Jiro (Associate Professor)	Pathophysiological analysis of Parkinson's Disease, ischemia/reperfusion-induced neurodegeneration, depression, and development of novel therapeutics for them.
Pharmacology for Life Sciences	FUJINO Hiromichi	Understanding of the molecular & cellular pharmacology of G protein coupled receptors (GPCRs) is one of the goals for our research. To understand roles of prostanoid receptor signaling in cancer malignancy, especially in the early stages of development as well as the alternative functions of endogenous prostanoids as biased ligands are the main researches. Histamine H1 receptors, their singaling and gene expression are also studying.
Medical Pharmacology	TSUCHIYA Koichiro	Electron paramagnetic resonance, Free radicals, Nitric oxide, Oxydative stress, I-R Stress, Nitrite metabolism
Molecular Cell Biology Medicine	YAMAZAKI Tetsuo	Cell Biology, Immunology, Signaling properties of the endoplasmic reticulum and mitochondria
Pharmaceutical Health Chemistry	KOGURE Kentaro	Effective delivery of macromolecules by weak electric current, antioxidants, Anti-obesity, Anti-oxidative stress, Correction of splice defects by modified U1 snRNA

Field of Research　研究分野	Faculty　担当教員	Detailed Description of Research Field　研究内容
Clinical Pharmacy Practice Pedagogy	ABE Shinji	Evaluation of risk factors for adverse drug reactions, Clinical pharmacy education, Cancer immunotherapy
Physical Pharmacy	UENO Satoru (Associate Professor)	Membrane interaction of polypeptides and macromolecules
Natural Products Chemistry	OOI Takashi (Associate Professor)	Isolation and structure elucidation of bioactive natural products especially from marine organisms
Medicinal Biochemistry	SHINOHARA Yasuo	Studies on the regulation of energy metabolism and mitochondrial functions

Doctoral Course　博士後期課程
Pharmaceutical Sciences　（創薬科学専攻）

Field of Research　研究分野	Faculty　担当教員	Detailed Description of Research Field　研究内容
Synthetic Organic Chemistry	NAMBA Kosuke	Total synthesis, Practical synthesis, Molecular probes
Analytical Sciences	TANAKA Hideji	Flow-based analysis (Flow injection analysis, Feedback-based flow ratiometry, Amplitude-modulated flow analysis), Analysis of aquatic environment
Bioorganic Chemistry	MINAKAWA Noriaki	Nucleic acid chemistry, Nucleoside, Nucleotide, Oligonucleotide, Medicinal chemistry
Pharmaceutical Organic Chemistry	YAMADA Ken-ichi	Organic synthesis, Methodology development, Asymmetric Synthesis
Theoretical Chemistry for Drug Discovery	TACHIKAWA Masanori	Blood-tissue barrier science, Membrane transport and drug targeting, Central nervus system drug design, Quantitative proteomics
Pharmacognosy	TANAKA Naonobu (Associate Professor)	Natural products chemistry, Bioactive natural products from plants and marine organisms, Pharmacognosy, Ethnobotany
Medicinal Biotechnology	to be appointed	
Molecular Medicinal Chemistry	SANO Shigeki	Organic chemistry, Medicinal chemistry, Functionalized heterocycles, Bioactive compounds
Pharmacology for Life Sciences	FUJINO Hiromichi	Understanding of the molecular & cellular pharmacology of G protein coupled receptors (GPCRs) is one of the goals for our research. To understand roles of prostanoid receptor signaling in cancer malignancy, especially in the early stages of development as well as the alternative functions of endogenous prostanoids as biased ligands are the main researches. Histamine H1 receptors, their singaling and gene expression are also studying.
Molecular Design and Synthesis	OTAKA Akira	Peptide & Protein Chemistry, Peptide-based chemical biology, Bioorganic medicinal chemistry
Pharmaceutical Health Chemistry	KOGURE Kentaro	Effective delivery of macromolecules by weak electric current, antioxidants, Anti-obesity, Anti-oxidative stress, Correction of splice defects by modified U1 snRNA
Physical Pharmacy	UENO Satoru (Associate Professor)	Membrane interaction of polypeptides and macromolecules
Natural Products Chemistry	OOI Takashi (Associate Professor)	Isolation and structure elucidation of bioactive natural products especially from marine organisms
Medicinal Biochemistry	SHINOHARA Yasuo	Studies on mitochondrial functions and regulation of energy metabolism

Doctoral Course　博士課程

Pharmacy　（薬学専攻）

Field of Research　研究分野	Faculty　担当教員	Detailed Description of Research Field　研究内容
Clinical Pharmacology	to be appointed	
Pharmaceutical Information Science	SATO Youichi	Pharmacoepidemiology, Pharmacogenetics, Human genetics, Andrology, Reproductive medicine and biology
Pharmacokinetics and Biopharmaceutics	ISHIDA Tatsuhiro	Drug delivery with liposome or lipid nanoparticle, Pharmacokinetic, Innate immunity to nanocarriers, Antibody production, Modulation of tumor microenvironemnt, Bacterial cellulose nanofiber, Ionic liquid
Neurobiology and Therapeutics	KASAHARA Jiro (Associate Professor)	Pathophysiologial analysis of Parkinson's Disease, ischemia/reperfusion-induced neurodegeneration, depression, and development of novel therapeutics for them.
Medical Pharmacology	TSUCHIYA Koichiro	Electron paramagnetic resonance, Free radicals, Nitric oxide, Oxydative stress, I-R Stress, Nitrite metabolism
Molecular Cell Biology Medicine	YAMAZAKI Tetsuo	Cell Biology, Immunology, Signaling properties of the endoplasmic reticulum and mitochondria
Clinical Pharmacy Practice Pedagogy	ABE Shinji	Evaluation of risk factors for adverse drug reactions, Clinical pharmacy education, Cancer immunotherapy

Research Center for Higher Education, Division of Academic Learning Support, Section of International Education　高等教育研究センター学修支援部門国際教育推進班

International Office　インターナショナルオフィス

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Faculty　教員	Research Field　研究分野
JIN Cheng-hai	Numerical Analysis
HASHIMOTO Satoshi	Japanese as a Foreign Language
SAKATA Hiroshi	English Education
TRAN Hoang Nam	Sociology of Education