Research Areas

Graduate School of Health and Environmental Sciences Master's Program for Health and Environmental Sciences

Division of Natural Sciences and Environment

Name	Research theme	Research topics
Ikeda, Norihiro	Physical chemistry	 Thermodynamic studies of the adsorption of surfactant at the water/air and water/oil interfaces Micelle formation of surfactant in aqueous solution Miscibility of two kinds of surfactants in the adsorbed film and micelle
Sato, Kazuki	Environmental organic chemistry	Structure-function relationships of peptide toxins
Fujioka, Yuichi	Energy and environmental science	 Advanced technology for utilization of wood biomass Low energy solvent for CO₂ capture Coal gasification and desulfurization Countermeasures against global warming
Yoshimura, Toshio	Eco-friendly polymer chemistry	 Synthesis and characterization of eco-friendly polymers Functionalization of naturally occurring polymers Development of biodegradable superabsorbent hydrogels Effective utilization of sea lettuce pullulating in Hakata bay
Kuroki, Shoichi	Physics of nonlinear non-equilibrium system	Pattern Entropy of diffusive complex time series.Transport phenomena caused by non-linear motions.
Ma, Chang-Jin	Atmospheric environment	 Atmospheric pollution in life environment Local and global scale atmospheric environment Trace element analysis in the sample of atmospheric environment
*Tamura, Noriaki e-mail: tamura@fwu.ac.jp	Plant physiology	 Primary processes in photosynthesis Molecular mechanisms of adaptation to environmental stresses in plants Molecular Mechanisms of Sex differentiation in the

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		green algae Chlamydomonas
Yamada, Machiko	Environmental biology	Environmental conservation and bioremediation of
		coastal habitats in enclosed seas
		Environmental assessment with bioindicator
		 Diversity and physiological and ecological
		characteristics of important diatom Skeletonema
Inomata,	Evolutionary genetics	 Genetic basis of adaptive evolution
Nobuyuki		Phylogeography of organisms
Matsuo, Ryota	Neurobiology	 Molecular mechanism of DNA amplification in
		neuron
		• Neural/molecular mechanism of olfactory learning in
		slug
		Spontaneous regeneration of nervous system in slug
		 Neural mechanism of phototaxis in slug
Yuge, Masahiro	Developmental biology	Early development of vertebrate embryos

Division of Nutritional and Health Sciences

Name	Research theme	Research topics
Hayabuchi, Hitomi	Public Health Nutrition	Nutritional management for prevention of
		lifestyle-related diseases
		Nutritional epidemiological study
		Promotion activity of dietary salt reduction
		Promotion activity of "Shokuiku"
*Nakamura,	Basic Nutritional Science	Effects of antioxidants on Liver disease, Crohn's
Tsuyoshi		disease etc.
e-mail:		Studies of enteral or oral nutrition
t-naka@fwu.ac.jp		 Studies of lipid nutrition and metabolism
		 Studies of digestion and absorption
Hamada, Shun	Neuroscience	• Function of vitamins and biofactors in the nervous
		system
		$\boldsymbol{\cdot}$ Mechanisms for formation and maintenance of taste
		buds
		Evolutionary neuroscience of basal metazoans
Ohta, Masanori	Public Health	\cdot A practical research on the effect of
		health-promoting activity focusing on exercises on
		multilateral aspects

		 A study regarding the association between exercise and oxidative stress A study on the ability to work
Funaki, Junko	Cookery science	 Improvements of the taste, and texture Developments of cooking properties using proteases Taste-modifying substances
Katagiri, Yoshinori	Management of providing meals	 Management of nutrition management departments at medical institutions Nutritional assessments for hospitalized patients Dietary therapies for diseases Nutrition Support Teams (NST) Training of registered dietitians working in the medical field
Mizumoto, Kaori	Clinical nutrition	 Nutritional management for prevention and treatment of lifestyle-related diseases Women's BMI and its associated factors during pregnant and lactation period Diet and health related issues in the globalizing world Double burden of malnutrition among low-income population
Ishikawa, Hiroya	Food science	 Elucidate the physiological activities (e.g. antioxidative property) of various compounds in natural and food products. Evaluation of the volatile flavor profiles in various food products with sniffing-GC-MS instrument. Micro-encapsulation of functional compounds from food and natural products. Development of food products with novel extraction and drying methods.
Takahashi, Toru	Nutritional Biochemistry	 Mode of sugar absorption in the intestine Mode of water absorption in the intestine Study on mastication.
Shinkai, Shoji	Food business and marketing	 Analysis of food production, marketing and consumption Organization and management of farming businesses International trade of food

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Kobayashi, Koji	Food safety science	Studies on Injury and Recovery of Campylobacter
		jejuni
		•Development of rapid detection method of norovirus
		• Development of novel method for the evaluation of
		food additives

Division of Environmental Management

Name	Research theme	Research topics
Ohnaka, Tadakatsu	Living Environmental Health	 Study on bathing and bathroom environments in Japan Study on thermal comfort in residential houses Study on sleep and bedroom environments Study on indoor air quality and health influences
* Morita, Takeshi e-mail: morita@fwu.ac.jp	Residential architecture and environmental science	• Influence of light on human biological rhythm
Syouyama, Shigeko	Environmental design	 Study on landscape color in the urban space Evaluation of the outdoor advertisement in the urban space Evaluation of the uniforms for medical care staffs
Iwasaki, Shinpei	Environmental Life Science	 Evaluation of Human Attitude and Behavior Based on Environmental Education and Information Environmental Resource Management A Study on Environmental Change and Its Socio-Economic Impacts in Communities
Okayama, Toshinao	Environmental Policy	 Study on environmental governance and policy in Japan including low carbon society, sound material cycle society and nature conservation Comparative study of environmental policy in and outside Japan
Fujino, Tomokazu	Environmental informatics	 Development of new framework of statistical analysis and data visualization for environmental data and massive dataset Study on a method for effective use of official statistics for designing and evaluating environmental policy

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Fujioka, Kaoru	Environmental and	Mathematical models of environment and social
	mathematical Sciences	phenomenon
Shimada, Daisaku	Environmental	Research on sustainable use of common-pool
	economics	natural resources
		Research on nature access institutions