Toyo University

Graduate School of Life Sciences

Graduate School code:51

Web site: ***http://www.toyo.ac.jp/site/english-glsc/***

1. Graduate School code	51	
2. Maximum number of participants	3 Participants per year	
3. Fields of Study	□Environmental Science □Marine Science □Meteorology □Natual Disaster/ Disaster Prevention Science □Tourism □Politics □Economics □Sociology □Education □Engineering ■Agriculture (incl. Fisheries) □Geology □ICT □Medical Science ■Others(Natural sciences)	
Sub Fields	Irrigation, Water and Soil Management, Crop Science, Biochemistry, Microbiology, Food Science, Marine Fisheries Science	
4. Program and Degree	Program	Life Sciences Program / Master's Degree in Life Sciences
	Degree	Master's Degree in Life Sciences
5. Standard time table (Years needed for graduation)	First 6 months as a Research Student and subsequent 2 years as a Master's Student after passing the entrance examination.	
6. Language of Program	(1) Lecture: All lectures are taught in English. (2) Text: English language materials are mostly used with some occasional use of Japanese language materials. (3) Laboratory work: Supervisors conduct instructions in English. Safety instructions in English are provided. (4) Seminar: Discussions among students in a small class setting are generally in Japanese, but when possible, foreign students are highly encouraged to use English for participation in discussions.	
7. Desirable English level and Necessary Academic background	Linguistic Ability	TOEFL IBT: 80, PBT: 550 is required
	EJU, IELTS, GRE or else	At least 16 years of academic training or equivalent
8. Prior Inquiry From Applicants (Before Submission of Application Documents)		
9. Website	(1) Graduate School of Life Sciences http://www.toyo.ac.jp/site/english-glsc/ (2) Toyo University http://www.toyo.ac.jp/site/english/	
10. Professors and Associated Professors	Name	Research Subject、Contact (e-mail)、Special message for the Future students
	DOKYU, Noriyuki	Application of organic solvent tolerant bacteria and enzymes. **【Contact (e-mail)】** dokyu@toyo.jp

	Professor (male)	
	FUJIMURA, Makoto Professor (male)	Mode of action of fungicides and new targets discovery for fungicide design using fungal genomics and chemical genetics. Development of PCR-based methods for detection and quantification of plant pathogens. Gene regulation in response to stress and during fungal differentiation. **【Contact(e-mail)】** mfujimura@toyo.jp
	HASEGAWA, Teruaki Professor (male)	Design, synthesis, and functional analysis of artificial glycoconjugate materials with amplified affinities towards carbohydrate-binding proteins (lectins) **【Contact(e-mail)】** t-hasegawa@toyo.jp
	HIGASHIBATA, Hiroki Associate Professor (male)	Studies on thermoadaptation mechanism of biomolecules from hyperthermophilic microorganisms. **【Contact(e-mail)】** higashibata@toyo.jp http://researchmap.jp/higashibata/?lang=english
	HIROTSU, Naoki Associate Professor (male)	Physiological analysis of photosynthesis. Genetic improvement of grain production in rice. **【Contact(e-mail)】** hirotsu@toyo.jp http://researchmap.jp/hirotsunaoki
	ICHIISHI, Akihiko Professor (male)	Understanding of molecular mechanisms underlying DNA repair and its regulation in filamentous fungi. **【Contact(e-mail)】** akihiko@toyo.jp
	ITO, Masahiro Professor (male)	Basic science and application for alkaliphilic microorganisms **【Contact(e-mail)】** Masahiro.ito@toyo.jp http://www2.toyo.ac.jp/~ito1107/
	KAMIJO, Kenichi Professor (male)	Statistical Quality Control, Complex System, Chaos and Fractals **【Contact(e-mail)】** kamijo@toyo.jp http://www2.toyo.ac.jp/~kamijo/
	KASHIWADA, Shosaku Professor (male)	Fish Aquatic Eco-Toxicology, Environmental Chemistry, Nanotoxicology、 and Molecular Eco-Toxicology. I have been investigating ecological impacts of environmental pollutants in aquatic ecosystem using knowledge of biology, pharmacology, medical sciences,

		ecology, and chemistry for at least two decades. My research's final goal is to elucidate and/or find out any anthropogenetic implication on ecological evolution by environmental pollution, indeed to contribute to environmental conservation from human activity. **【Contact(e-mail)】** kashiwada@toyo.jp **【Special message for the Future Students】** For all students, to make your country be clean, fine, well balanced and managed environment is the one of the strongest criteria. Imagine how you can contribute to your country and work there with your knowledge from Japan. I will ask you to work hard in my lab. You are welcome! http://www.aqua-env.org/Research/Medaka/
	KAWAGUCHI, Hideo Professor (male)	Behavioral Neuroscience: ・Correlation between behavior and social relationship ・Correlation between handwriting and mental health **【Contact(e-mail)】** hkawaguchi@toyo.jp
	KOJIMA, Nobuhiko Professor (male)	Mechanisms underlying synaptic plasticity and learning & memory: From molecules to animal behavior **【Contact(e-mail)】** kojima033@toyo.jp
	MIURA, Takeshi Associate Professor (male)	Isolation of new microorganisms with useful functions **【Contact(e-mail)】** t-3ura@toyo.jp
	NAGASAKA, Seiji Professor (male)	Analysis of iron uptake and translocation mechanism in graminaceous plants using molecular and morphological biology. **【Contact(e-mail)】** nagasaka@toyo.jp
	NARUMI, Issay Professor (male)	Research works related to radiation biology: (1) DNA repair mechanisms of radioresistant bacteria (2) microbial mutation breeding using quantum beams. **【Contact(e-mail)】** narumi@toyo.jp

		http://www2.toyo.ac.jp/~narumi/index_en.html http://www.researchgate.net/profile/Issay_Narumi **【Special message for the Future Students】** You are expected to develop your intuitive ability and enhance insight through the study in this lab.
	NEDACHI, Taku Professor (male)	(1) Molecular basis of frontotemporal dementia and related disorders (Especially focus on novel growth factor, progranulin). (2) Nutrient- and exercise-dependent regulation of skeletal muscle cell function. **【Contact(e-mail)】** nedachi@toyo.jp **【Special message for the Future Students】** Many exciting opportunities are available to students who are interested in neuronal and skeletal muscle cell biology. Studies on nutrition science and exercise physiology are also welcome. Please visit our website for more details. http://www2.toyo.ac.jp/~nedachi/top_en.html
	OHTANI-KANEKO, Ritsuko Professor (female)	(1)Biology dealing with animals. (2) Neurobiology including neurodevelopmental as well as neurodegenerative disorders and sexual differentiation of the brain. (3) Biological analysis of endocrine disruptors using cultured cells. **【Contact(e-mail)】** r-kaneko@toyo.jp **【Special message for the Future Students】** Let's study hard together and take a master's degree! http://www2.toyo.ac.jp/~r-kaneko/member.html https://www.researchgate.net/profile/Ritsuko_Ohtani-Kaneko/
	SHIMIZU, Bun-ichi Professor (male)	Biochemistry and molecular biology of plant secondary metabolism. **【Contact(e-mail)】** bsimz@toyo.jp
	TAKEI, Hiroyuki Professor (male)	Optical detection methodologies for biomolecules such as surface-enhanced Raman spectroscopy, localized surface plasmon resonance sensing, and surface-enhanced fluorescence detection.

		Microfluidic devices for bioanalytical detection. **【Contact(e-mail)】** h_takei@toyo.jp **【Special message for the Future Students】** Our course is intended for those who are interested in combining knowledge in bioanalytical and optical detection techniques. Prior exposure to electromagnetism at an undergraduate level is necessary.
	UMEHARA, Mikihisa Professor (male)	Plant physiology: physiological roles and biosynthetic pathway of plant hormones. **【Contact(e-mail)】** umehara@toyo.jp
	YAMAMOTO, Hirobumi Professor (male)	Pharmacognosy. Natural product chemistry and biochemistry of plant secondary metabolites. **【Contact(e-mail)】** yamamoto-h@toyo.jp
	KOSHIBA-TAKEUCHI, Kazuko Professor (female)	Heart development and evolution
	SHIIZAKI, Kazuhiro Associate professor (male)	(1) Environmental toxicology: Evaluation of the genotoxicity of environmental chemicals. (2) Physiological role of nuclear receptor for exogenous substances; aryl hydrocarbon receptor (AhR) on immune tolerance.
	YOSHINAGA, Jun Professor (male)	Environmental Health Risk Assessment, Human Ecology
11. Features of University	Toyo University is one of the largest private universities in Japan. It was founded in 1887 as "Tetsugakukan (School of Philosophy)" by the philosopher Dr. Enryo Inoue. It was reorganized in 1906 and has since been known as Toyo University. In 2017, the University will celebrate its 130th anniversary. Through this long history of academic contribution, the university has grown and currently, there are over 31,000 students in eleven undergraduate programs and ten graduate school programs. Toyo University was selected as one of the "TOP GLOBAL UNIVERSITY PROJECT" by the Japanese	

	government in 2014. Internationalization is one of the focuses of Toyo University, and currently there are 354 international students from 14 countries.
12. Features of Graduate School	The Graduate School for Life Sciences aims to train students to solve various problems facing the humanity in the 21st century. It is a pressing issue to create a sustainable society with the least amount of stress to the environment. Life Sciences are expected to play a central role in improving and sustaining desirable environments and providing medical cares to the aging population. Two pillars of our school are Life Sciences Course and Applied Biosciences Course; through interactions among these disciplines, we are constantly engaged in the most advanced research topics. Specifically, we are internationally competitive in areas related to agricultural produces and microbiology in extreme environments.
13. Features and Curriculum of Program	Developing countries today are facing various difficulties, including rapid population growth, regional conflicts, deteriorating standard of living, and environmental problems. Insufficient social infrastructure, particularly in education and medical conditions and technological level, impedes socioeconomic development in developing countries. Therefore, it is of the utmost urgency that we nurture young researchers and planners who are experts in their specialized areas and have willingness to contribute to international cooperation. Through its innovative educational program, the Graduate School of Life Science aims to provide educational opportunities for students to learn about the interdisciplinary and practical subjects necessary for international development and cooperation, including environmental science, engineering, agricultural science, and medical science. The graduate school as a gathering of international characters offers a special place where the students with different expertise from various countries with different cultural, social, educational, political, and economical backgrounds are able to foster closer ties with each other and share the common agenda and goals in international development cooperation.
14. Academic Schedule	Early October: Starting as a Research Student Mid February: Entrance Examination (Written and oral examinations) Spring Semester (Reference) Early April: Beginning of Academic Year Early April: Guidance, Course Registration Early April: Entrance Ceremony Early April – Late July: Classes Continuously throughout the semester: Life Science Experiments, Life Science Reading Seminar Early June: Annual Founder's Day Celebration Early August – Late September: Summer Vacation Fall Semester (Reference) Late September: Guidance, Course Registration Late September – Late January: Classes Continuously throughout the semester: Life Science Experiments, Life Science Reading Seminar The first weekend of November: University Campus Festival Late December -Early January: Winter Vacation Early January*: Submission of Master's Thesis Mid February*: Thesis Defense (Oral Presentation) Mid March*: Announcement of Completion Results Mid March: Progress Report for First Year Students (Poster Presentation) Early February – Late March: Spring Vacation Late March*: Graduation Ceremony Late March: End of Academic Year Note: Asterisk* designates events for the second year of the 2-year Master's program.

15. Supporting service to International Students	
International Students Support Center for Consulting or counseling about daily life, campus life, cross-cultural adjustment etc.	Consultation Service If you have any concerns or worries, consult with a staff member at the Student Consultation Office on your campus. Professional counselors are there to help you. For further information, please visit the website at http://www.toyo.ac.jp/site/english-ss/consultation.html Infirmary There is an infirmary on each campus where students can be treated for sudden illnesses or injuries. For further information, please visit our website at http://www.toyo.ac.jp/site/english-ss/infirmary.html
Provision of Student Dormitory	
Japanese Language Education Program for International Students	
Cultural Activities	
Any special attention to Religious Practice	
facilities (Library etc)	Library Currently, the university has libraries at Hakusan (Main), Asaka, Kawagoe, and Itakura campuses with more than 1,260,000 volumes and periodicals. For further information, please visit our website at http://www.toyo.ac.jp/site/english-campuslife/libraries.html
Please state other particular supporting service you are endeavoring, if any.	Please state any other financial aid you are applying to.
16. Message to Prospective International Students	
Message from University	Please visit our website for details.
Voice of International Students	