Nagoya University

Graduate School of Bioagricultural Sciences

Graduate School code: 32

Web site: ***【https://www.agr.nagoya-u.ac.jp/index-e.html】***

1. Graduate School code	***32***	
2. Maximum number of participants	2 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( )	
Sub Fields	【Agriculture】Crop Science, Animal Science, Biochemistry, Microbiology, Molecular Biology, Biotechnology, Food Science, Forestry, Horticulture, Other Agricultural Fields	
4. Program and Degree	Program	International course in Graduate School of Bioagricultural Sciences, Nagoya University
	Degree	Master's Degree in Agricultural Sciences
5. Standard time table (Years needed for graduation)	2 years as a Master's Student OR Starting as a Research Student up to 6 months, then 2 years as a Master's Student after passing the exam. (Depend on the capacity of the applicants)	
6. Language of Program	(1) Lecture: All lectures in English (2) Textbook: English but Japanese text will be used partially while English instructions are given orally. (3) Laboratory work: Safety instructions are written in English. Conducting of the research is generally instructed by the supervisor in English. (4) Seminar: Seminars with Japanese students are generally in Japanese with support in English.	
7. Desirable English level and Necessary Academic background	Linguistic Ability	(1) TOEFL IBT: 80, PBT: 550 level is required. If TOEFL score is not available, please submit evidence of English skill such as results of other tests or certification of English education etc.
	EJU, IELTS, GRE or else	(2) At least 16 years of academic background or equivalent ・Applicants who hold a Bachelor's Degree and completed total of at least16 years of primary, secondary and university education. ・In case the years of total education is less than 16 years, the years engaged in research activity may be counted as a part of 16 years. It needs to be recognized by the Graduate School of Bioagricultural Sciences, Nagoya University to be equivalent in academic level to Japanese university graduates.

<table>
<tr><td>8. Prior Inquiry From Applicants (Before Submission of Application Documents)</td><td colspan="2">See information 10. Professors and Associate Professors.
Please look for our laboratory which you have an interest in, and ask the professor directly about your research plan, career and so on BEFORE your application.
Please refer to the following information for searching professors and their research activities.
Without inquiry in advance, you will not be accepted to our university.</td></tr>
<tr><td>9. Website</td><td colspan="2">(1) Graduate School of Bioagricultural Sciences
http://www.agr.nagoya-u.ac.jp/index-e.html
(2) Nagoya University http://en.nagoya-u.ac.jp/</td></tr>
<tr><td rowspan="3">10. Professors and Associated Professors</td><td>Name</td><td>Research Subject,Contact (e-mail),Special message for the Future students</td></tr>
<tr><td>Dr. EHARA, Hiroshi
(Mr.)
Professor</td><td>International Cooperation in Agricultural Sciences
-Ecological and physiological characteristics of sago palm (genus Metroxylon) and related species
-Improvement of cultivation techniques to enhance adaptability against environmental stress in rice or other cereal crops
-Growth and physiological response of Vigna (cowpea and related species) or beans against salt stress or acid stress

【Contact(e-mail)】
ehara@ agr.nagoya-u.ac.jp
https://iccae.agr.nagoya-u.ac.jp/eng/staff/teachers.html</td></tr>
<tr><td>Dr. YAMAUCHI, Akira
(Mr.)
Professor</td><td>Crop science:
-Stress tolerance in crop plant
-Development and functions of crop root system and their genetic regulation

【Contact(e-mail)】
ayama@agr.nagoya-u.ac.jp
http://www.agr.nagoya-u.ac.jp/~brc/jyunkanshigengaku/Welcome.html</td></tr>
<tr><td></td><td>Dr. MAKIHARA, Daigo
(Mr.)
Associate Professor</td><td>Crop science, Agronomy
Current research:
(1) Rice cultivation under environmental stress conditions
(2) Interaction between cultivation environment, management, and expression of stress resistance traits in rice</td></tr>
</table>

		(3) Crop production in relation to soil water balance and soil type **【Contact (e-mail)】** makihara@agr.nagoya-u.ac.jp https://iccae.agr.nagoya-u.ac.jp/eng/
	Dr. ITO Kasumi (Ms.) Associate Professor	Agriculture and rural development, forest management -Promotion of processed agricultural products for rural development -Influence of household size biogas plant for forest resources utilization -Capacity building of researchers for rural development in developing countries **【Contact(e-mail)】** kasumito@agr.nagoya-u.ac.jp https://iccae.agr.nagoya-u.ac.jp/eng/staff/teachers.html
	Dr. KAWAKITA Kazuhito (Mr.) Professor	Plant pathology Current research: The ultimate goal of our research is to develop strategies to prevent plant diseases through the better understanding of the molecular basis of plant-microbe interactions. The recent research projects are as follows: 1. Characterization of genes involved in NO production in plant disease resistance. 2. Purification and characterization of elicitors derived from P. infestans. 3. Identification of proteins modified by NO in disease resistance. 4. Imaging of plant-microbe interactions with GFP and modified fluorescence proteins. 5. Identification and characterization of the genes from symbiotic fungi required initiating and maintaining mutualistic association with host plant. **【Contact(e-mail)】** kkawakit@agr.nagoya-u.ac.jp http://www.agr.nagoya-u.ac.jp/english/organization/dept2-4.html

	Dr.TANIGUCHI Mitsutaka (Mr.) Professor	Plant resource and environment Current research: Plant resources are defined as various kinds of utilizable plants in addition to crop species. The research objective of this laboratory is to explore the structure, function and environmental responses of higher plants with the aid of experimental anatomy, electron microscopy and molecular biology for the basis of exploitation of plant resources. In recent years special efforts have been made for the differentiation mechanism of photosynthetic cells and epidermal cells in C_4 plants. The current research projects are; 1. Mechanisms of chloroplast movement in response to environmental stresses 2. Differential sensitivity of C_4 photosynthetic cells to salinity stress 3. Salt excretion mechanism from salt glands 4. Mechanisms of metabolite transport across chloroplast envelope membranes **【Contact(e-mail)】** taniguti@agr.nagoya-u.ac.jp http://www.agr.nagoya-u.ac.jp/english/organization/dept1-2.html
	Dr. IKEDA, Mokoto (Ms.) Professor	Insect pathology Baculovirus infection Antiviral response Host range determination Our interest is concentrated on learning about and explaining the living potency of insects that are the most successful organisms on this planet. Through the molecular studies on silkworm physiology and pathology as the core subject, we are now trying to construct a new insect science that provides fundamental insight for future development of agriculture and biotechnology. To achieve this domestic and international cooperation is actively encouraged.

		1. Molecular Mechanisms of Baculovirus Infection 2. Molecular Mechanisms of Antiviral Response in Baculovirus 3. Molecular Mechanisms of Host Range Determination of Baculovirus
	Dr. TOMARU, Nobuhiro (Mr.) Professor	Forest science Studies of our laboratory cover a wide range of research themes closely relating to forest ecology, forest genetics, and tree ecophysiology. The research projects can be divided into the following four major topics concerning forests and forest trees: 1. Ecological studies on forest structure and dynamics. 2. Population genetic studies on genetic diversity and structure within species. 3. Ecological and genetic studies on reproductive systems and processes composed of flowering, pollen flow, mating, fruiting, and seed dispersal, etc. 4. Ecological and physiological studies on the CO2 gas exchange and dry matter production. **【Contact(e-mail)】** tomaru@agr.nagoya-u.ac.jp http://www.agr.nagoya-u.ac.jp/~seitai/index-e.html
	Dr. IWASAKI, Yugo (Mr.) Associate Professor	Biotechnology and bioengineering Current research: Our final goal is to establish the new disciplines of molecular bioengineering and bioprocess engineering. Presently, fundamental and applied studies in the field of applied molecular biology, protein engineering, and enzyme engineering are being carried out, The following research projects are currently in progress **【Contact(e-mail)】** iwasaki@agr.nagoya-u.ac.jp http://www.agr.nagoya-u.ac.jp/~molbiote/index-e.html
	Dr. TSUKAMURA Hiroko (Ms.) Professor	Reproduction health Current research: The laboratory is carrying out studies on neuroendocrine control of

		reproductive phenomena, such as puberty, estrous cycle, pregnancy, lactation, and sexual differentiation of the brain, focusing on the role of kisspeptin in regulating hypothalamo-pituitary-gonadal axis. **【Contact(e-mail)】** htsukamu@agr.nagoya-u.ac.jp http://www.agr.nagoya-u.ac.jp/~hanshoku/ReprodWeb/index.html
	Dr. MINAKUCHI Chieka (Ms.) Assistant Professor	Entomology Current research: We contribute to Bio-Agricultural Science fields by elucidating physiological function of insects at the molecular level through biochemical, physiological, morphological and toxicological approaches in the context of relationships among insects, as well as with other organisms and xenobiotics. We aim at applying knowledge gained from these studies in pest management. Ongoing projects are as follows: 1. Insect Immune Defense against Eukaryotic and Prokaryotic Pathogens 2. Molecular Mechanisms of Insecticides Resistance 3. Molecular Modes of Action of Insect Hormones 【Contact(e-mail)】 c_mina@agr.nagoya-u.ac.jp http://www.agr.nagoya-u.ac.jp/~gaichu/english.html
	Dr. INUKAI Yoshiaki (Mr.) Associate Professor	Plant science Plant Genetics and Breeding -Molecular mechanism of root system formation and their application to breeding for stress avoidance such as shortages in water and nutrients in rice **【Contact(e-mail)】** inukaiy@agr.nagoya-u.ac.jp https://iccae.agr.nagoya-u.ac.jp/eng/staff/teachers.html

	Dr. DOI Kazuyuki (Mr.) Associate Professor	Plant production: Our research focuses on biodiversity and its application for plant production, especially in rice. The genomic sequence of rice greatly facilitated the molecular cloning of rice genes, discovered from both mutants and naturally occurring variation. This enabled us to know the genetic variation in the nucleotide sequence level. Our target is to develop genetic methods and materials for discovering and utilizing the potential useful genes hidden in germplasm collections. **【Contact(e-mail)】** kdoi@agr.nagoya-u.ac.jp http://www.agr.nagoya-u.ac.jp/english/organization/dept4-3.html
	Dr. MITSUYA Shiro (Mr.) Assistant Professor	Crop science: -Stress tolerance in crop plant -Development and functions of crop root system and their genetic regulation **【Contact(e-mail)】** mitsuya@agr.nagoya-u.ac.jp http://www.agr.nagoya-u.ac.jp/~brc/jyunkanshigengaku/Welcome.html
	Mr. MIURA Satoshi (Mr.) Assistant Professor	Agricultural economics and policy: Current research: Socioeconomic science of food production concerns the economic and managerial aspects of agriculture and rural resources. Agricultural production systems are studied with stress on the compatibility of ecological balance and vitality of rural society. Those must be efficient in the sense not only of the market systems but also of non-monetary systems such as shadow works and communal cooperation. For this purpose, studies are carried out on relations between natural and historical characteristics of agriculture in a region and the relation between a nation and the world economy. **【Contact(e-mail)】** miuranet@agr.nagoya-u.ac.jp http://www.agr.nagoya-u.ac.jp/~syokkan/english.html

	Dr. TAKENAKA Chisato (Ms.) Professor	Forest science Current research: Forest ecosystems have been globally recognized as a sustainable resource. In spite of this, environmental changes such as global warming and environmental pollution as well as unsuitable forest management continue to pose a serious problem. The research objective of this laboratory is the development of optimum sustainable management of forest ecosystems with regard to economics and environment. The studies are based on remote sensing, geographic information system (GIS), environmental chemistry, and plantphysiology and forest measurement. **【Contact(e-mail)】** chisato@agr.nagoya-u.ac.jp http://www.agr.nagoya-u.ac.jp/~shinkan/english.html
	Dr.YAMAMOTO Hiroyuki (Mr.) Professor	Forest science Current research: The major research objective of BMP is to understand the material properties of wood as well as to clarify the processes of tree growth and cell wall formation, from the physical point of view. Methodology extends over the physical, mechanical, chemical, anatomical and computing methods. Recent our research covers the following topics. (1): Biomechanics of the living tree: Generation of growth stress and its biological meanings are investigated by means of the field measurement, laboratory analysis, and computing mechanics. (2) Generation mechanism of the physical properties of wood cell wall: Material testing, electron-microscopic observation, UV-micro-spectrophotometry, X-ray diffraction analysis, molecular biology, as well as theoretical modeling, are employed to make clear the diversity in the physical properties of wood cell wall. (3) Growth properties and wood qualities of tropical fast-growing species: Wood qualities and maturation properties of tropical fast-growing species are investigated in relation to their rapid lateral growth rate. Our research fields extend over many countries, e.g., Indonesia, Malaysia, Philippine, Brazil, French Guyana, Australia, Argentina, and so forth.

		【Contact(e-mail)】 hiro@agr,nagoya-u.ac.jp http://www.agr.nagoya-u.ac.jp/~butsuri/english.html
11 . Features of University	【11-2. Nagoya University】 Nagoya University (NU) was first founded in 1871 as a temporary hospital and medical school on the site of a local feudal council building in Nagoya. After undergoing several transitions, NU received its charter as a Japan's seventh Imperial University and it has grown to be one of the world's top research universities. After 1949, in the comprehensive post-war reform of the nation's educational system, Nagoya University was given a leadership role in the Chubu region. It has since grown into one of the foremost national universities in Japan. In April 2004, Nagoya University was reformed as a "National University Corporation". This transition to National University Corporation status has made it possible to manage the University under the strong leadership of the President founded upon university-wide consensus while still continuing to respect the independence and unique features of each school and department. Throughout its history, NU has maintained a free and vibrant academic culture. Conducting research and education on all aspects of human beings, society, and nature, the university pursues its goal of contributing to the well-being and happiness of humankind. As an educational institution, NU aims at cultivate leaders with genuine courage and intellect. We call such leaders "Yuuki-aru chishiki-jin"; social contributors endowed with the powers of rational thought and creative imagination who have the ability to open up a new age. The large and lush green campus of the University, only a short subway ride from the lively city center of Nagoya, provides a comfortable setting for students to focus on fulfilling ambitious goals and satisfying their thirst for knowledge Today, NU is taking new steps to become a globalized university where students are able to acquire comprehensive knowledge, develop personal ethics and aspire to international careers.	
12 . Features of Graduate School	【Graduate School of Bioagricultural Sciences 】 The School of Biogricultural Sciences was established in 1951. The School has been engaged in the pursuit of education and research in the biological, biochemical and environmental sciences, which provide the foundation for agricultural and bio-industrial advancement. Since its foundation, the quality, intensity, and forward focus of education at our school have led to great success for our students; many of our graduates now play important role in agriculture and related fields all over the world, especially in Asia. Currently, the School consists of three departments: Department of Bioenvironmental Sciences, Department of Bioresource Sciences, and Department of Applied Biosciences. We have also the Field Science Center organized by the University Farm, the University Forest and have the Avian Bioscience Research Center. Today, people are world-widely facing a variety of issues such as sufficient and stable food supply, global environmental protection, development of new energy and so forth. The research on agricultural and life sciences could contribute as a driving discipline to solve the issues, and its research areas are expanding by harmonizing with different academic fields. In this background, one of the missions of the Graduate School of Bioagricultural Sciences is not only to deepen basic researches, which have been accumulated, but also to develop interdisciplinary researches. Another mission is to put more emphasis on recruiting and fostering students who have strong motivation of studying agricultural and life sciences in order to put the knowledge, information and technology obtained in the graduate programs into practice. Furthermore, we have to make efforts to bridge ever-lasting exchange of human resources and research cooperation initiating technological innovation at the requests from the developing countries. At the same time, we are carrying out two research projects on the Global Center of Excellence,	

	so-called Global COE; one is titled “Advanced Systems-Biology: Designing The Biological Function” which is operated in the cooperation of the Graduate School of Science of Nagoya University, and another is titled “From Earth System Science to Basic and Clinical Environmental Studies” which is in cooperation with the Graduate School of Environmental Studies of Nagoya University. The purpose of the Global COE projects is to cultivate young researchers and highly specialized engineers through the sophisticated and comprehensive program. These projects are expected to develop unique horizon of systems biology and environmental science, and to open new carrier path for the students in the Graduate School of Bioagricultural Sciences in near future.
13 . Features and Curriculum of Program	Students may create their own program among the following lecture, laboratory courses and seminars based on their specialty. All of the following courses are implementing by English. Other courses also may conduct in English by request from trainees. Trainees need to take 30 credits or more according to requirement of your study area.
14 . Academic Schedule	Example of academic schedule of fiscal year of2017 as reference April 1- September 30 : Spring Semester October 1- March 31 : Fall Semester April 5 : Entrance Ceremony April 7 : University Orientation for International Students for Spring 2017 May 1 : University Anniversary July 25- August 7 : Examination Period August 8 - September 30: Summer Vacation September 28: University Orientation for International Students for Autumn 2017 December 28- January 7 : Winter Vacation January 29- February 9 : Examination Period March 27: Commencement

15. Supporting service to International Students

International Students Support Center for Consulting or counseling about daily life, campus life, cross-cultural adjustment etc.	One-stop service desk for international students on their campus/daily life and cultural adjustment / Counseling services and social services / Coordinating Japanese language & culture course for international students' family members
Provision of Student Dormitory	Nagoya University has 6 dormitories for international students. For more information, please visit the website below: http://en.nagoya-u.ac.jp/academics/campus_life/housing/index.html
Japanese Language Education Program for International Students	International Center for Languages offers the following courses in Japanese language. (1) Standard Courses in Japanese / Intensive courses in Japanese, (2) Online Japanese Courses, (3) Kanji, (4) Introductory Lectures in Japanese Studies, (5) Intensive Course in Elementary Japanese, (6) Intensive Course in Advanced Japanese.

Cultural Activities	・Day Trip for International Students which is deepen understanding of Japan through visiting historical and traditional sites including the world heritages. ・Cooperation to community-based sightseeing tours for international students.
Any special attention to Religious Practice	Halal food available in a restaurant on campus / Halal shop & restaurant near campus / Consideration to religious practices
facilities (Library etc)	The University Library is composed of the Central Library, the Medical Library, and departmental libraries. As of April 1st, 2012, the Library holds 3,160,130 volumes of books in total, including 1,507,006 foreign books, as well as a large amount of electronic resources and audio visual collections.
Please state other particular supporting service you are endeavoring, if any.	Many outreach programs and opportunities of cultural exchange, global leadership, etc., on campus / Services for students with disabilities / supporting Japanese language & culture course for international students' family members

16. Message to Prospective International Students

Message from University	Nagoya University (NU) was first founded in 1871 as a temporary hospital and medical school on the site of a local feudal council building in Nagoya. After undergoing several transitions, NU received its charter as a Japan's seventh Imperial University and it has grown to be one of the world's top research universities. After 1949, in the comprehensive post-war reform of the nation's educational system, Nagoya University was given a leadership role in the Chubu region. It has since grown into one of the foremost national universities in Japan. In April 2004, Nagoya University was reformed as a "National University Corporation". This transition to National University Corporation status has made it possible to manage the University under the strong leadership of the President founded upon university-wide consensus while still continuing to respect the independence and unique features of each school and department. Throughout its history, NU has maintained a free and vibrant academic culture. Conducting research and education on all aspects of human beings, society, and nature, the university pursues its goal of contributing to the well-being and happiness of humankind. As an educational institution, NU aims at cultivate leaders with genuine courage and intellect. We call such leaders "Yuuki-aru chishiki-jin"; social contributors endowed with the powers of rational thought and creative imagination who have the ability to open up a new age. The large and lush green campus of the University, only a short subway ride from the lively city center of Nagoya, provides a comfortable setting for students to focus on fulfilling ambitious goals and satisfying their thirst for knowledge Today, NU is taking new steps to become a globalized university where students are able to acquire comprehensive knowledge, develop personal ethics and aspire to international careers.
Voice of International Students	I am from Afghanistan first year doctoral course student in laboratory of Reproductive Science. I have been given a very warm welcome since arriving in Nagoya University last April. The Graduate School of Bioagricultural Sciences has a good range of facilities and an attractive location with extensive, clean and green campus in the Nagoya I like it. The teaching staff and official at the School are friendly and open, in briefly I can say this is an ideal place to study as an International Student.