平　成　29　年　度
Academic Year 2017

名古屋大学大学院生命農学研究科

博 士 課 程（後 期 課 程）

学 生 募 集 要 項
（一般入試［英語版］）
（平成29年10月入学募集）

Guidelines for Admission to the Doctoral Program
October 2017 Enrollment

名古屋大学大学院生命農学研究科

Graduate School of Bioagricultural Sciences
Nagoya University

個人情報の取り扱いについて

出願にあたって提供された住所・氏名・生年月日その他の個人情報は，入学選抜，合格発表，入学手続及びこれらに付随する事項並びに入学後の学務業務における学籍・成績管理を行うためのみに利用します。

また，取得した個人情報は適切に管理し，利用目的以外に使用いたしません。

Treatment of information on individuals (at Nagoya University)

Any information regarding individuals which has been obtained from application documents, shall be used for the purposes of notifications concerning the application in hand, entrance examinations, announcements of results of entrance examinations, enrollment procedures and any other items subsidiary to these situations. It will also be used for the administration of the school register and for academic records connected with student academic affairs after enrollment. Furthermore, any information obtained concerning individuals with be treated appropriately, and shall never be used for any reason other than its administrative purpose.

Information for applicants for admission to the Doctoral Program, Graduate School of Bioagricultural Sciences, Nagoya University, beginning in October 2017

1. Requirements for applicants:

Applicants for admission to the Doctoral Program at Graduate School of Bioagricultural Sciences, Nagoya University must come under one of the following conditions:

(1) Applicants who have a master's degree or a professional degree.

(2) Applicants who will receive a master's degree or a professional degree by September 30, 2017.

(3) Applicants approved by the Minister of Education, Culture, Sports, Science and Technology (1994 Ministry Bulletin, Vol. 123).

Applicants must have either graduated from a university or completed a course of 16 years of formal education, followed by research for at least two years at a university or research institute. The results of this research must be recognized by the Graduate School of Bioagricultural Sciences, Nagoya University as the equivalent of a master's degree.

NOTE: See "Candidates applying under requirement (3)" on page 8.

(4) Applicants who have obtained (or will obtain by September 30, 2017) in a foreign country a professional degree equivalent to the master's degree of Nagoya University.

(5) Applicants who are recognized by this Graduate School to be equivalent in academic level to a graduate student with a master's degree or a professional degree.

NOTE: See "Candidates applying under requirement (5)" on page 9.

(6) Applicants who have obtained (or will obtain by September 30, 2017) a degree equivalent to a master's degree or a professional degree, by taking in Japan correspondence courses offered by a foreign school.

(7) Applicants who have obtained (or will obtain by September 30, 2017) a degree equivalent to a master's degree or a professional degree in Japan, by completing one of the relevant courses at an educational institution that is recognized by the authorities of a foreign country as an institution offering graduate courses and is approved by the Ministry of Education, Science, Culture and Sports, Japan.

(8) Have completed the course of the United Nations University and have received a degree equivalent to a Master's degree, or will have completed the course of the United Nations University and will have received a degree equivalent to a Master's degree by the end of September 2017. The United Nations University refers the university established by the United Nations General Assembly's resolution of December 11, 1972. The university is provided for under Paragraph 2 of Article 1 of the Act on Special Measures (Law No. 72, 1976) concerning the Implementation of the Agreement between the United Nations and Japan relating to the Headquarters of the United Nations University.

2. Academic Department / Division / Laboratory offering doctoral programs and maximum number of enrollment

Applicants must ask the Division/Laboratory in which he/she wishes to study for study topics before application.

Department	Division	Number to be admitted
※ Biosphere Resources Science	Resources Cycling System, Bioresource Production and Agroecology, Regional Resources Management, Biological Material Sciences, Ecosystem Conservation	A Several
Biological Mechanisms and Functions	Biodynamics, Molecular and Cellular Biology, Biofunctions Development, Bioresource Functions	
Applied Molecular Biosciences	Biomodeling, Biofunctional Chemistry, Applied Biochemistry, Applied Genetics and Physiology	
Bioengineering Sciences	Biotechnology, Socioeconomic Science of Bioagriculture, Plant and Animal Production, Molecular Cell Function, Plant Genomics, International Cooperation in Agricultural Sciences	

NOTE: See the attached "Laboratories, Areas of Research, and Staff."

※ Students who have been accepted in the Department of Biosphere Resources Science have the opportunity to participate in the Integrated Environmental course. This course was initiated in 2009 in collaboration with the Graduate School of Environmental Studies and offers education, guidance and research opportunities for suitable graduate students. Further information on this program is available from the Students Affairs Section in the Graduate School of Bioagricultural Sciences.
Applicants must ask the Division/Laboratory in which he/she wishes to study for study topics before application.
NOTE: See the attached "Laboratories, Areas of Research, and Staff."

3. Required documents for application

(1)	Application form/Photograph card/Admission ticket for the examination	NOTE: Use each prescribed form
(2)	A photo	A photograph taken within the last three months, affixed to Photograph card.
(3)	Academic Transcripts ＊	The original copy of official transcript from the undergraduate school (including liberal arts) and the graduate school the applicant has attended.

(4)	Certificate of master's degree or of being awarded a master's degree ＊	
(5)	TOEFL or TOEIC score sheet	See Page 4, "6. Examinations", Item 1 "Submission of score sheets for foreign language (English) examination" for details. Applicants exempted from the written examination through application qualifications do not need to submit these.
(6)	A photo copy of Master's Thesis (or its equivalent) and three copies of its summary (Japanese or English)	If the Master's Thesis (or its equivalent) has not been completed, three copies of its summary in around 1,500 words English must be submitted at the time of application.
(7)	Application fee (30,000 yen by postal money order)	Do not fill out the address/name for specified receiver on the postal money order form. However, applicants who will be graduating from the Master's Program of Nagoya University and will proceed to the Doctoral Program need not pay the application fee.
(8)	Certificate of receipt	NOTE: Use the prescribed form, writing only applicant's name.
(9)	Name/ address card	NOTE: Use the prescribed form.
(10)	Return envelope(For the receipt of the Examination Form)	Submit self-addressed envelope with the Applicant's address, postal code, and name clearly indicated. Affix a 362 yen stamp to the envelope. If you reside overseas, enclose a sufficient International Reply Coupon(IRC) to cover the required return postage with your submission, instead of affixing the stamp.
(11)	Letter of approval for taking examination if applicants have a job, using the prescribed form.	NOTE: Needed only for applicants working at a government/public office or a company.
(12)	Personal History for Foreign Applicants	NOTE: Use the prescribed form.
(13)	A photo Copy of Residence Card (both sides).	Needed only for applicants without Japanese nationality, excluding those with official approval of permanent residency in Japan.

＊ For applicants who have graduated from a university and graduate school in China, the required certificates must be submitted to the Student Affairs Section, Graduate School of Bioagricultural Sciences, Nagoya University (Code number: C900808) through China Academic Degree and Graduate Education Development Center (CDGDC) by or on Friday, July 7, 2017. The applications will be rejected unless the certificates reach our office by or on Friday, July 7, 2017.

Certificates submitted directly to our office by the applicant will not be accepted.
Applicants must send their diploma (or certificate of university graduation) and their academic transcript to CDGDC and pay the required fee to CDGDC. The documents must be written in English (those written in languages other than English will not be accepted). Note that it takes more

than one month for the documents to reach our office from CDGDC. Applicants should be aware of this and prepare the documents well in advance.

The details of the process can be verified on CDGDC website (http://www.cdgdc.edu.cn).

The applicant who has submitted the required certificates to our office through CDGDC within the past one year, should consult with us.

4. Application Procedures

The completed application form and required items (1) ~ (13) listed above must be submitted to the Student Affairs Section, Graduate School of Bioagricultural Sciences, Nagoya University, from 9:00 a.m. till noon and from 1:00 to 4:00 p.m. from Tuesday , July 4 to Friday, July 7, 2017.

Applications can also be sent by mail to our Section. (Address: Student Affairs Section, Graduate School of Bioagricultural Sciences,Nagoya University Furo-cho, Chikusa-ku, Nagoya 464-8601)

When sending by mail, indicate on the envelope "Application for Graduate School（Doctral Program）" in red ink. It must reach us by July 7, 2017 by registered mail.

5. Notice

The applicant cannot make any changes or ask for a refund after submitting the application form. Applicants who are residing in a country other than Japan should consult the Student Affairs Section before submitting documents.

6. Examinations

(1) Submission of score sheets for foreign language (English) examination (Applicants under requirement (3) or (5) must submit it.)

TOEFL or TOEIC scores will be used as the means of assessment for the foreign language (English) examination. Note: Applicants fulfilling requirements (1), (2), (4), (6), (7) or (8) are exempted.

1. Examination Method

Submit the score sheet for the results of TOEFL, TOEIC or both. There will be no written examination. The score from either TOEFL or TOEIC will be calculated using the following method, and will be adopted as your foreign language (English) score.

If the applicant submits both TOEFL and TOEIC scores, these will be converted and the higher score will be adopted.

■For TOEFL

English score = 50 + (TOEFL-iBT score – 50) × 5/3 (converted scores of 100 points or higher will all be treated as 100 points)

■For TOEIC

English score = TOEIC score/ 10

＊Any converted score of less than 50 points will count as a failing score. In this case, please be aware that the application fee is still non-refundable.

2. Eligible scores

Scores from either TOEFL-iBT or TOEIC Secure Program (SP) tests can be submitted.
Scores from group TOEFL-ITP and TOEIC Institutional Program (IP) tests are not accepted. International applicants with TOEFL-PBT scores should consult the Student Affairs Section before submitting documents.

3. Submission of score sheets

For TOEFL, an original of the Examinee Score Report should be submitted with the application documents by July 7, 2017.

For TOEIC, an original of the Official Score Certificate should be submitted with the application documents by July 7, 2017.

*TOEFL the Examinee Score Report can be returned if a self-addressed envelope (12×23cm) is enclosed, with a 362 yen stamp affixed. TOEIC Official Score Certificates cannot be returned.

4. Period of validity of score sheets

Tests from 2 years before the entrance examination date (i.e. August 29, 2015 or later) to those for which results can be submitted by the application deadline are valid.

(2) Oral examination

Date: August 28 (Mon), 2017 Time: one and half hours during 10:00 to 17:00
(or Date: August 29 (Tue.), 2017 Time: one and half hours during 10:00 to 17:00)
(Details will be notified on August 28 (Mon.))

Matter of Oral Examination

Fundamental knowledge in the target academic area in which the applicant wishes to study, research plan, master's thesis, etc., and proficiency of foreign language (English)

(3) Place of Examination

Graduate School of Bioagricultural Sciences,
Nagoya University (School of Agricultural Sciences)
500m eastward from the city bus stop "Nagoyadaigaku" or the subway station "Nagoyadaigaku", or 500m southward from the subway station "Higashiyama-koen"

7. Announcement of examination results

Date: August 30 (Wednesday, evening), 2017

Place: Noticed board at Graduate School of Bioagricultural Sciences (It will be posted on Graduate School of Bioagricultural Science website:https://www.agr.nagoya-u.ac.jp/)

NOTE: Applicants will also be notified by mail.

8. Enrollment Procedures

(1) Detailed enrollment procedures will be notified by mail middle in September, 2017.

(2) Registration fee: 282,000 yen (expected)

(3) Tuition: 267,900 yen per semester (535,800 yen per year) (expected)

NOTE: In case of any revision in tuition, the new rate will be made effective on and after the date of revision.

(4) Registration date: Wednesday , September 20 / Thursday, September 21, 2017 (scheduled)

9. Others

(1) Applicants requesting for this “Guidelines for Admission” booklet by mail, must enclose a self-addressed return envelope (33×24cm) with a 250 yen stamp affixed.
(2) Further notifications for the examination will be given on the notice board on the date of examination. Examinees must be seated in the examination room 20 minutes before the examination starts.
(3) For applicants with disabilities or other special needs
Applicants with disabilities or other special needs that require reasonable accommodations and adjustments for taking the entrance examinations due to their disabilities or other special needs should submit the following documents to the Student Affairs Section, Graduate School of Bioagricultural Sciences, Nagoya University by June 9, 2017(Friday).

1) Application form for reasonable accommodations or adjustments: On A4 size paper in the format of your choice, please provide information regarding the condition of your disabilities or other special needs, which specific accommodations and adjustments are required for you to take the entrance exam and why they are necessary.
2) Medical certificate, any certificates of your disability (e.g., “Shogaisya-techo” in Japan), etc.: Applicants must submit Medical Certificates or other alternative documentation that provides detailed information regarding the limitation on a major life activities caused by the disabilities or other special needs, and provides sufficient justification for the requested accommodations or adjustments. (Copies acceptable)
3) Third Party Statements: Applicants must obtain and submit statements from third parties that are familiar with the applicant's disabilities or special needs and can attest to the resulting limitation on a major life activities and required accommodations (Observations and opinions from medical professionals, relevant faculty from the applicant's school, and other specialists)
4) Other Documents: Applicants may, if desired, submit additional documentation providing additional information regarding their disabilities or other special needs and the recommended accommodations or adjustments.

For inquiries regarding reasonable accommodations or adjustments for taking the entrance examination or while attending Nagoya University, please feel free to contact the Student Affairs Section, Graduate School of Bioagricultural Sciences, Nagoya University by the application deadline.

10. For more information on the examinations, ask:

Student Affairs Section,
Graduate School of Bioagricultural Sciences, Nagoya University
Furo-cho, Chikusa-ku, Nagoya 464-8601
TEL: (052) 789-4967（English）, 789-4299（Japsnese）
E-mail: kyomu@agr.nagoya-u.ac.jp
http://www.agr.nagoya-u.ac.jp

< Changes in examination schedule and procedures due to unforeseen circumstances >

The examination schedule and selection measures may be modified in the event of an outbreak of infectious disease or other unforeseen circumstances. Please check the website regularly for the latest notices, especially in the days preceding the application and examination periods.

■ Website of Graduate School of Bioagricultural Sciences, Nagoya University
(Admission Information)
http://www.agr.nagoya-u.ac.jp/english/admission/index.html

■ Contact info:
Student Affairs Section, Graduate School of Bioagricultural Sciences,
Nagoya University
Tel (052)789-4967（English）, 789-4299（Japsnese）

Candidates Applying under Requirement (3)

1. Candidates applying under Requirement (3) must meet the following conditions:

By September 30, 2017, applicants must have graduated from a university, followed by research for at least 2 years at a research institute. Applicants must also have published research papers, books, made research presentations, or hold patents recognized as the equivalent of a master's thesis or above.

2. Application for Certificate of Approval as Eligible Applicant.

Applicants under Requirement (3) must either submit or mail the following documents ①～⑨ by or on Friday, June 2, 2017 to the Student Affairs Section, Graduate School of Bioagricultural Sciences, Nagoya University. The set of documents, if mailed, should have "Application for Certificate of Approval as Eligible Applicant." written in red ink on the envelope, and be sent by registered mail.

Applicants will be notified of the results by Friday, June 30, 2017.

Documents required:

① Application Form for the application under Requirement (3)
NOTE: Applicants must fill out and sign the form prescribed by this Graduate School.

② Certificate of graduation from a university

③ Summary of research results.
Note: It should be made up in paper style by the applicant, with approx. 4000 characters in Japanese (1,500 words in English), using the prescribed form.

④ Bibliography
Note: The form prescribed by this Graduate School must be filled out by the applicant.

⑤ Certificate of academic background
Note: The form prescribed by this Graduate School should be signed by the applicant's academic advisor or other proper authority.

⑥ Letter of recommendation written by the head or other proper authority of the belonging institution, using the prescribed form

⑦ A copy of research papers, books, research presentations, or patents, etc.

⑧ Personal History for Foreign Applicants
Note: Use the prescribed form.

⑨ A return envelope to receive results of the application. Enclose a self-addressed envelope (12×23cm) with a 362 yen stamp affixed.

3. Application Procedures

The candidates approved as Eligible Applicants can apply for admission to the Doctoral Program by submitting the set of documents. (see page2) The set of documents for application must be submitted to the Student Affairs Section, Graduate School of Bioagricultural Sciences, Nagoya University, from 9:00 a.m. till noon and from 1:00 to 4:00 p.m. from Tuesday, July 4 to Friday, July 7, 2017. Applications can also be sent by mail to our office. (Address: Furo-cho, Chikusa-ku, Nagoya 464-8601)

When sending by mail, indicate on the envelope "Application for Graduate School" in red ink. It must reach us by July 7, 2017 by registered mail.

4. Notice

The applicant cannot make any changes or ask for a refund after submitting the application form.

Candidates Applying under Requirement (5)

1. Candidates applying under Requirement (5) must meet the following conditions:

Applicants under Requirements (5) must be recognized by the Graduate School of Bioagricultural Sciences, Nagoya University to be equivalent in academic level to a graduate student with a master's degree or a professional degree, and must reach 24 years old by September 30, 2017.

* Applicants who have graduated from any school in China must ask the Student Affairs Section, Graduate School of Bioagricultural Sciences for details.

2. Application for Certificate of Approval as Eligible Applicant.

Applicants under Requirement (5) must either submit or mail the following documents by or on Friday, June 2, 2017 to the Student Affairs Section, Graduate School of Bioagricultural Sciences, Nagoya University. The set of documents, if mailed, should have "Application for Certificate of Approval as Eligible Applicant." written in red ink on the envelope, and be sent by registered mail.

Applicants will be notified of the results by Friday, June 30, 2017.

Documents required:

① Application Form for the application under Requirement (5)
NOTE: Applicants must fill out and sign the form prescribed by this Graduate School.

② Reference material showing that the applicant is equivalent in academic level to a graduate student with a master's degree or a professional degree;
*Submit one or more relevant materials listed below. For example: 1) or3)
1) Applicants who have graduated or will be graduating from a junior college, technical college, special school or other school:
- Diploma or certificate of graduation/ expected graduation
- Official transcript (academic record)
- Syllabus
2) Applicants who have technical/ professional career:
- Certificate of employment, specifying its period and matter of tasks, and report of his/her career achievements prepared by the applicant (form not specified).
3) Applicants with academic work:
- Certificate of academic background
Note: The form prescribed by this Graduate School should be signed by the applicant's academic advisor or other proper authority.
- Bibliography
Note: The form prescribed by this Graduate School should be filled out by the applicant.
-Summary of research results
Note: It should be made up in paper style by the applicant, with approx. 4000 characters in Japanese (1,500 words in English), using the prescribed form.
4) Applicants with published research papers or books, research presentations, patents, etc.:
- Any reference material showing each

③ Others
- Any material for examination purposes (e.g.: Letter of recommendation)

④ Personal History for Foreign Applicants
Note: Use the prescribed form.

⑤ A return envelope to receive results of the application. Enclose a self-addressed envelope (12cm×23cm) with a 362 yen stamp affixed.

3. Application Procedures

The candidates approved as Eligible Applicants can apply for admission to the Doctoral Program by submitting the set of documents . (see page2)

The set of documents for application must be submitted to the Student Affairs Section, Graduate School of Bioagricultural Sciences, Nagoya University, from 9:00 a.m. till noon and from 1:00 to 4:00 p.m. from Tuesday, July 4 to Friday, July 7, 2017. Applications can also be sent by mail to our office. (Address: Furo-cho, Chikusa-ku, Nagoya 464-8601)

When sending by mail, indicate on the envelope “Application for Graduate School” in red ink. It must reach us by July 7, 2017 by registered mail.

4. Notice

The applicant cannot make any changes or ask for a refund after submitting the application form.

Laboratories, Areas of Research, and Staff

Graduate School of Bioagricultural Sciences, Nagoya University

Department	Division	Laboratory	Area of Research	Staff			
				Professor	Associate Professor	Lecturer	Assistant Professor
1. Biosphere Resources Science	1. Resources Cycling System	1. Biosphere Resources Cycling	Physiological and molecular mechanism of crop stress tolerance.	YAMAUCHI, Akira		MITSUYA, Shiro	NAKATA, Mana***
		2. Resources Cycling in Pedosphere	Dynamics of carbon, nitrogen, and trace elements in pedosphere and related environments. Chemistry of humic substances.	WATANABE, Akira			
		3. Biomass Resource Utilization	Isolation and structural elucidation, biosynthesis, distribution and utilization of wood extractives.		IMAI, Takanori		
	2. Bioresource Production and Agroecology	4. Crop Science	Physiological, ecological studies on crop production: nutrient acquisition and growth response to environment.	KONDO, Motohiko	YANO, Katsuya		SUGIURA, Daisuke
		5. Plant Resources and Environment	Studies at ultrastructural and molecular levels on structure, function and environmental response of plant resoureces.	TANIGUCHI, Mitsutaka			OI, Takao
		6. Forest Environment and Resources	Effects of environmental changes on forest ecosystems from viewpoints of physiological mechanisms in individual trees and of assessment of forest resources using a GIS system and a remote sensing technique.	TAKENAKA, Chisato	YAMAMOTO, Kazuki*yo		TOMIOKA, Rie
		7. Forest Ecology and Physiology	A wide range of research themes closely relating to forest ecology, forest genetics, and tree ecophysiology.	TOMARU, Nobuhiro	NAKAGAWA, Michiko	OGAWA, Kazuharu	
	3. Regional Resources Management	8. Forest Resources Utilization	Studies on forest management policy for realizing both tropical forest conservation and local livelihoods increase, forest certification and participatory forest management in developing countries, and tree harvesting techniques, ergonomic analysis of forestry works, compatibility between utilization and conservation and technology of sustainable forest management in Japan.	HARADA, Kazuhiro			KONDO, Minoru (Scheduled to retire in March 2018) SUNANO, Yui*** (Serving as a concurrent faculty member untirl March 2018)
		9. Forest Meteorology and Hydrology	Understanding the water, energy and carbon cycles in a biosphere. Understanding the relationship between forest structure and meteorological condition. Understanding the mechanism of natural disasters.	OHTA, Takeshi	TANAKA, Takafumi		KOTANI, Ayumi
	4. Biological Material Sciences	10. Timber Engineering	Mechanical durability in structural use of wood and wood-based materials, Analysis of mechanical behavior in timber structure, Quality-of-material distribution and the plan for demand and supply of forest resources, Wood utilization in urban design.	SASAKI, Yasutoshi (Scheduled to retire in March 2018)	YAMASAKI, Mariko		ANDO, Kosei
		11. Bio-material Physics	Generation processes of growth stress and wood properities during tree growth, Growth and maturation of tropical plantation species, Analysis of reaction wood formation by molecular approach , Physical and mechanical properties of wood materials.	YAMAMOTO, Hiroyuki	YOSHIDA, Masato		MATSUO, Miyuki
		12. System Engineering for Biological Resources	Studies on measurement system and precise mechanical process for biological resources.	TSUCHIKAWA , Satoru	YOKOCHI, Hideyuki (Scheduled to retire in March 2018)	INAGAKI, Tetsuya	
		13. Forest Chemistry	Studies on biochemistry of lignification, chemistry of wood extractives, chemistry of lignin, preparation of functional materials from lignin, pulp and paper science, and cellulose chemistry.	FUKUSHIMA, Kazuhiko	MATSUSHITA , Yasuyuki		AOKI, Dan
	5. Ecosystem Conservation	14. Forest Protection	Forest entomology focusing on insect-plant and insect-fungus interactions. Forest ecosystem conservation based on the management of biological communities.	HIJII, Naoki	KAJIMURA, Hisashi		TOKI, Wataru

***Designated Assistant Professor

(as of April 1. 2017)

Laboratories, Areas of Research, and Staff

Graduate School of Bioagricultural Sciences, Nagoya University

Department	Division	Laboratory	Area of Research	Staff			
				Professor	Associate Professor	Lecturer	Assistant Professor
2. Biological Mechanisms and Functions	6. Biodynamics	15. Cell Dynamics	Molecular structures, reaction mechanisms, cell specificity, and physiological functions of membrane transporters, channels, and signal transducers in plants.	MAESHIMA, Masayoshi (Scheduled to retire in March 2019)	KAWACHI, Miki* (concurrent faculty member until March 2019)		NAKANISHI, Yoichi SEGAMI, Shoji***
		16. Defense in Plant-Pathogen Interactions	Studies on the molecgular mechanisms of plant immune response in plant-pathogen interactions.		YOSHIOKA, Hirofumi		
	7. Molecular and Cellular Biology	17. Applied Microbiology	Molecular and chemical genetic studies on signal transduction and gene regulation of agriculturally and industrially important microorganisms, especially filamentous fungi.	KOBAYASHI, Tetsuo	KIMURA, Makoto	KANAMARU, Kyoko	
		18. Molecular and Functional Genomics	Biochemical, cellular and genetic studies on molecular mechanisms of chlorophyll biosynthesis, nitrogen fixation, circadian rhythm and phytochrome signal transduction in cyanobacteria and plants.	FUJITA, Yuichi	YAMASHINO, Takafumi		MAEO, Kenichiro
		19. Biological Chemistry	Studies on molecular mechanisms underlying optimization of plant growth and development in response to environmental cues with focusing on phytohormone function.	SAKAKIBARA, Hitoshi	ISHIGURO, Sumie		HACHIYA, Takushi *** TABATA, Ryo***
		20. Molecular Plant Physiology	Studies on molecular mechanisims of regulation of carbon and nitrogen assimilation and chlorophyll biosynthesis in photosynthetic organisms.	OMATA, Tatsuo			MAEDA, Shin-ichi
		21. Plant Environmental Responses	Genetic, cell biological, and physiological studies on the molecular mechanism for perception and response to environmental changes in higher plants.	MORITA, Miyo			HASHIMOTO, Mimi
	8. Biofunctions Development	22. Applied Entomology	Studies on the development of insect pest management methodology via physiological and molecular approaches.		MIURA, Ken	MINAKUCHI, Chieka	
		23. Sericulture and Entomoresources	Molecular mechanisims of baculovirus infection, baculovirus-host interaction and antiviral responses in insects.	IKEDA, Motoko			YAMADA, Hayato
		24. Fish Biology	Morphological, physiological, and behavioral studies of the brain, sensory receptors, motor systems, and peptidergic neurons in aquatic animals.	YAMAMOTO, Naoyuki	ABE, Hideki		GOTO, Maki
		25. Animal Morphology and Function	Morphological studies on nervous and reproductive tissues in mammals and birds.	HONDO, Eiichi	OHMORI, Yasushige (Scheduled to retire in March 2019)		
	9. Bioresource Functions	26. Horticultural Science	Physiological, biochemical and molecular biological approarch to the mechanism of flower formation, flower opening and fruit set, growth of horticultural crops to improve their productivity.	MATSUMOTO, Shogo	SHIRATAKE, Katsuhiro		OTAGAKI, Shungo
		27. Plant Pathology	Physiological, biochemical and molecular-biological researches on defense mechanisms of plants against plant pathogens. Development of biocontrol measures and understanding of its mechanisms.	KAWAKITA, Kazuhito	TAKEMOTO, Daigo CHIBA, Soutaro*		SATO, Ikuo
		28. Soil Biology and Chemistry	Studies on the microbial population, and the chemical and biological processes occurring in the paddy field ecosystem.	ASAKAWA, Susumu	MURASE, Jun	WATANABE, Takeshi	
		29. Plant Genetics and Breeding	Genetical and developmental research by biotechnological analyses with respect to evolution, morphogenesis, gene expression, and functional development of plant cultivated species.	NAKAZONO, Mikio			TAKAHASHI, Hirokazu

* Designated Associate Professor
***Designated Assistant Professor

(as of April 1, 2017)

Laboratories, Areas of Research, and Staff

Graduate School of Bioagricultural Sciences, Nagoya University

Department	Division	Laboratory	Area of Research	Staff			
				Professor	Associate Professor	Lecturer	Assistant Professor
3. Applied Molecular Biosciences	10. Biomodeling	30. Genome and Epigenome Dynamics	Epigenetic regulatory systems for transposons and genes in vertebrates. Epigenome regulation during germ cell development. Geneme–epiegenome interactions during evolution.	ICHIYANAGI Kenji			
		31. To be determined	Isolation, structure determination, synthesis, and modes of action of bioactive natural products that regulate biologically and physiologically intriguing phenomena. Anesthetic substances from venomous mammals, and key substances for marine symbiotic relationships. Development of new analytical methods for target molecules using fluorescent probes.	KITA, Masaki			
	11. Biofunctional Chemistry	32. Organic Chemistry	Bioorganic studies on naturally occurring organic molecules possessing novel structure and biological activity: development of new synthetic methodologies, total synthesis of natural products, elucidation and control of the biofunctions.	NISHIKAWA, Toshio	NAKAZAKI, Atsuo		ADACHI, Masaatsu
		33. Bioactive Natural Products Chemistry	Studies on identification, action mechanisim, biosynthesis and receptor of bioactive natural compounds (hormones, antibiotics, etc.) produced by plants, microorganisms, and marine organisms.	OJIKA, Makoto	NAKAGAWA, Yu	KONDO, Tatsuhiko	
		34. Food and Biodynamics	Chemical biology of electrophilic ligands, such as lipid peroxidation products and functional food molecules.		SHIBATA, Takahiro		
		35. Polymer Chemistry	Studies on controlled syntheses and functions of biomaterials and medical polymers including artificial glycoconjugates, biofunctional polymers and environmentally friendly synthetic polymers.	AOI, Keigo	NOMURA, Nobuyoshi		
	12. Applied Biochemistry	36. Biomacromolecules	Mechanistic enzymology of pyridoxal and flavin enzymes. Physiological function of D–amino acids. Lipid biosynthesis in Archaea. Methodology for screening of useful genes from environmental microorganisms.	YOSHIMURA, Tohru	HEMMI, Hisashi	ITO, Tomokazu	
		37. Molecular and Cellular Regulation	Biochemical and molecular cell biological studies on signal transduction, intra/extracellular traffic, gene expression regulation in animal cell differentiation, growth and cell death.	MAKI, Masatoshi (Scheduled to retire in March 2019)	SHIBATA, Hideki		TAKAHARA, Terunao
		38. Molecular Bioregulation	Biochemistry and molecular cell biology on the biosynthesis and dynamics of proteins, nucleic acids and glycoconjugates in higher animal and plant bodies, and on the function of proteins and glycoconjugates in immunity, fetilization, development, and differentiation.	MATSUDA, Tsukasa	NADANO, Daita		OHSHIMA, Kenji MIYATA, Shinji*
		39. Nutritional Biochemistry	Nutritional regulation of enzyme and gene expression in mammals. Molecular mechanisms for hepatocyte differentiation in 3–dimensional culture systems. Physiological significance of liver circadian rhythm. Metabolism and physiological functions of branched–chain amino acids.	SHIMOMURA, Yoshiharu (Scheduled to retire in March 2019)	ODA, Hiroaki	KITAURA, Yasuyuki	
	13. Applied Genetics and Physiology	40. Animal Physiology	Understanding the regulatory mechanisms of circadian rhythms and photoperiodism in vertebrates. Development of transformative bio–molecules that improve animal production and human health. Studies on physiological regulation of gene expression and release of growth factors in birds.	YOSHIMURA, Takashi	OHKAWA, Taeko	NAKANE, Yusuke**	TSUKADA, Akira
		41. Animal Nutrition	Analysis of the causative genes and nutritional factors for type II diabetes and metabolic syndrome. Physiological significance of vitamin C (L–ascorbic acid). Studies on the transport mechanism of yolk precursor (e.g. IgY) in avian ovarian follicles. Physiological significance of grain feedstuffs.	HORIO, Fumihiko	MURAI, Atsushi	KOBAYASHI, Misato	
		42. Animal Genetics	Studies on molecular basis of genetic mechanisms in animals, and genome and chromosome evolution; evaluation, conservation and utilization of animal genetic resources; development of new laboratory animal models for human disease and biological functions; and understanding the genetic basis of quantitative traits .	MATSUDA, Yoichi	ISHIKAWA, Akira		YAMAGATA, Takahiro

**Designated Lecturer

(as of April 1. 2017)

Laboratories, Areas of Research, and Staff

Graduate School of Bioagricultural Sciences, Nagoya University

Department	Division	Laboratory	Area of Research	Staff			
				Professor	Associate Professor	Lecturer	Assistant Professor
4. Bioengineering Sciences	14. Biotechnology	43. Industrial Bioscience	Studies on fucntions of extracellular matrix, transporter proteins, and signal transduction.		MATURANA, Andrés Daniel	NIIMI, Tomoaki	
		44. Developmental Signaling Biology	Studies on regulatory mechanisms of biochemical and molecular processes involved in the growth and development of higher plants.	MORI, Hitoshi	ITO, Masaki		
		45. Molecular Biotechnology	Molecular bioengineering for novel biomolecules, bioprocesses and analytical processes.	NAKANO, Hideo	IWASAKI, Yugo	KOJIMA,Takaaki	DAMNJANOVIC, Jasmina
		46. Reproductive Science	Basic studies on neuroendocrinological mechanism of the reproductive system and its application to animal production and drug discovery.	TSUKAMURA, Hiroko	UENOYAMA, Yoshihisa	INOUE, Naoko	IEDA, Nahoko*** (Serving as a concurrent faculty member untirl March 2018)
	15. Socioeconomic Science of Bioagriculture	47. Socioeconomic Science of Food Production	Socioeconomic studies on food system, regional resource management and multifunctional roles of agriculture.		TAKESHITA, Hironobu		MIURA, Satoshi
	16. Plant and Animal Production	48. Microbes and Plant Production	Studies on functions of pathogenic and symbiotic microorganisms relating to plant production.	TSUGE, Takashi			
		49. Biodiversity and Plant Production	Studies on rice genetic diversity and the utilization of Information and Communication Technology (ICT), and these applications for breeding and crop production.		DOI, Kazuyuki		NISHIUCHI, Shunsaku
		50. Animal Production Science	Studies on regulatory mechanism of physiological functions in ruminants and its utilization for animal production.	OHKURA, Satoshi			
	17. Molecular Cell Function	51. Animal Cell Function	Studies on roles of cell surface glycan chains in the cell–cell interaction and signal transduction in fertilization, early development, neural functions and immunological phenomena.	KITAJIMA, Ken	SATO, Chihiro		
		52. Molecular Biosystem	Molecular studies on environmantal adaptation in plant.	ASHIKARI, Motoyuki			
		53. Plant Cell Function	Molecular mechanisms of plant growth and development, and their regulation in response to evironmental signals..	HATTORI, Tsukaho	UEGUCHI, Chiharu TAKEDA, Shin		
	18. Plant Genomics	54. Plant Molecular Breeding	Studies on organ development and hormone signaling in higher plants, and their application in plant molecular breeding.	MATSUOKA, Makoto	SAZUKA, Takashi		
		55. Plant Bioresource	Collecting rice genetic resources. Discovering and isolating an important agricultural genes. Molecular breeding.	KITANO, Hidemi (Scheduled to retire in March 2019)	UEGUCHI, Miyako		
	19. International Cooperation in Agricultural Sciences	56. Project Development	Study on solutions for addressing agricultural problems, such as poverty, food security, and environmental issues that developing countries face by developing human resource through international cooperation.		ITO, Kasumi INUKAI, Yoshiaki		
		57. Network Development	Agronomic studies on issues relating to crop production in developing countries.	EHARA, Hiroshi	MAKIHARA, Daigo		
	20. Biofunctional Systems	58. Plant Metabolic System	Omics–based studies on the regulatory mechanisms of plant metabolism and application studies aiming at improving plant production.	HIRAI, Masami Yokota			
		59. Metabolic Balance of Ecosystem	Methodology development of analysis of metabolic balance of ecosytem and its application to applied sciences.	KIKUCHI, Jun			

***Designated Assistant Professor

(as of April 1. 2017)

平成28年度博士課程(後期課程)入学(進学)試験実施状況

Admission Data for the Doctoral Program of Academic Year 2016

専　　攻	入学定員 Admission Quota	〈平成28年2月実施入学試験〉 志願者数 Number of Applicants	受験者数 Number of Examinees	合格者数 Number of Successful Candidates	〈平成28年8月実施入学試験〉 志願者数 Number of Applicants	受験者数 Number of Examinees	合格者数 Number of Successful Candidates
生物圏資源学 Biosphere Resources Science	10	3	0	3	0	0	0
生物機構・機能科学 Biological Mecanism and Functions	11	1	1	0	0	0	0
応用分子生命科学 Applied Molecular Biosciences	12	1	1	1	0	0	0
生命技術科学 Bioengineering Sciences	9	3	3	3	0	0	0
合　　計 Total	42	8	8	7	0	0	0

注) [　]：社会人入試, distinguished students who are holding a job
(　)：外国人留学生　いずれも内数, foreign students