

NAGOYA UNIVERSITY Graduate School of Medicine, and School of Medicine

Mission of the Nagoya University School of Medicine

1

To develop cutting-edge medical research that will contribute to an improvement in the health of mankind and to create new medical technology.

2

To foster medical researchers and medical professionals who respect medical ethics, and take pride in contributing to the welfare of mankind.

3

To enhance the quality of local medical services in cooperation with local institutions, both in medical research and medical care, and to improve medical care standards in Japan and the world.

4

To develop an open system to utilize sources of talented people which can serve as the hub for medical research and medical care.



Logo

A combination of three cranes, symbolizing love (humanity), harmony (partnership), and honesty (good faith) respectively.

This symbol represents the essence of healing and diligent medical study that physicians must embrace and hand down to the next generation.

CONTENTS

	History				02-03
	Past deans				04
Education/	Organizational chart				06
research organization	Executives				07
01 yannzanon 05	Tsurumai Campus	Graduate School of	Doctor of Medical Science	Program in Integrated Molecular Medicine	09
	Graduate School of Medicine Doctor of Medical Science/	Medicine		Program in Cell Information Medicine	10
	Master's Course			Program in Function Construction Medicine	11
	School of Medicine School of Medicine			Program in Health and Community Medicine	12
	08		Dean's Direct Graduate Cou		13
			Special Researcher Course		
			Affiliated graduate schools		14
			Endowed Chair		15-17
			Master's Course	Program in Medical Science	18
				Program in Medical Science, Healthcare Administration 0	Course 19
		School of Medicine	School of Medicine		20
		University facilities	Medical Library		21
			Center for Neural Disease ar	nd Cancer	21
			Center for Research of Labor	ratory Animals and Medical Research Engineering	22
			Center for Medical Education	1	22
	Daiko Campus Graduate School of Medicine Doctoral Course School of Medicine	Graduate School of Medicine	Doctoral Course	Program in Nursing	24
				Program in Radiological and Medical Laboratory Sc	ciences 24
				Program in Physical and Occupational Therapy	24
	School of Health Sciences 23	School of Medicine	School of Health Sciences		25
Data	Administration office org	anizational chart			28
27	Number of personnel				
	Maximum enrollment Graduate School of Medicine				
	and current ————————————————————————————————————				
	Number of Graduate School of Medicine graduates				
	Number of School of Medicine graduates/Number of students granted doctorates (MDs)				
	Number of foreign students/researchers and the like				
	Number of students sent out/accepted under international exchange agreements				
	Number of exchange students sent from the Graduate School of Medicine/School of Medicine by country				
	Medical Library/Use survey of Skills & IT Laboratory/Number of dissections				
	Data on government-industrial-academic collaboration: intellectual property				
	Data on government-industrial-academic collaboration: collaborative/funded research				
	News release				
	Extension courses at Tsu	rumai C <u>ampus</u>			42
Locations	Tsurumai Campus map				44-45
43	Daiko Campus map				46
	Land and buildings				47

Available prorging the bonds of medicing booklets at the bonds of medicing the bonds of the bonds of medicing the bonds of the bon

This DATABOOK presents an outline of the School of Medicine and the Graduate School of Medicine, focusing on data. FORGING THE BONDS OF MEDICINE presents the vision, activities, and people associated with the Graduate School of Medicine and School of Medicine. The articles contained in this DATABOOK will point you to the relevant page numbers in FORGING THE BONDS OF MEDICINE for easy reference.

History

1871	Temporary public hospital established at the School of Medicine on the site of the former Nagoya Domain conference chamber
	(now 3-1 Marunouchi, Naka-ku) (closed 1872). A temporary medical school was set up at Motomachi town office (closed in 1872).
1872	After the domain's abolition, the hospital resumed operating as an alms clinic supported by contributions from donors
	(closed February 1873).
1873	Resumed operating as a temporary hospital (Nishihonganji-Betsuin, now 1 Monzen-cho, Naka-ku) with contributions from
	residents of the prefecture.
1873	Established Medical Training School as Alms Clinic.
1875	Renamed Aichi Prefecture Hospital.
1876	Renamed Public Medical Training School and Public Hospital.
1876	Renamed Public Medical School.
1877	Relocated to Tennozaki-cho (now 1-17 and 1-18 Sakae, Naka-ku) (opening ceremony for the hospital was held on July 1).
1878	Renamed Public Medical School.
1881	Renamed Aichi Medical School and Aichi Hospital.
1901	Renamed Aichi Prefectural Medical School.
1903	Designated as the Aichi Prefectural Medical College.
1914	Relocated to a new building constructed in Tsurumai-cho, Naka-ku (now Showa-ku).
1920	Established Aichi Medical College.
1922	Renamed Aichi Medical College Hospital.
1924	Renamed Aichi Medical College Clinic.
1931	Nationalized and renamed Nagoya Medical College and Nagoya Medical College Clinic.
1939	Nagoya Imperial University School of Medicine opened. Renamed Nagoya Imperial University School of Medicine Hospital.
1939	Established Nagoya Imperial Temporary Medical College (abolished in 1949).
1943	Established Research Institute of Aeromedical Medicine (abolished in 1946).
1944	Renamed to Nagoya Imperial University Medical College.
1944	Branch hospital of Nagoya Imperial University School of Medicine Hospital established
	(merged with Nagoya University Hospital in 1996).
1946	Established Research Institute of Environmental Medicine.
1947	Renamed to Nagoya University School of Medicine and Nagoya University Hospital.
1947	Renamed Nagoya University Medical College Clinic (abolished in 1950).
1949	University reorganized as Nagoya University under the new educational system. Clinic renamed Nagoya University Hospital.

1951	School of Nursing of Medicine was established at the School of Medicine (abolished in 1980).
1955	School of X-ray Technology School was established at the School of Medicine.
1959	School of Midwifery was established at the School of Medicine (abolished in 1981).
1959	Research Institute of Germfree Life was established at the School of Medicine (reorganized in 1983).
1961	School of Medical Technology was established at the School of Medicine.
1962	Cancer Research Institute was established at the School of Medicine (reorganized in 1983).
1965	Research Institute of Medical Mycology was established at the School of Medicine (reorganized in 1983).
1966	Graduate Course of School of X-ray Technology was established at the School of Medicine.
1969	School of X-ray Technology was renamed School of Radiological Technology at the School of Medicine (abolished in 1982).
1972	Renamed School of Medical Laboratory Technology at the School of Medicine (abolished in 1981).
1977	College of Medical Technology was established (abolished in 2001).
1983	Research Institute for Disease Mechanism and Control was established at the School of Medicine (reorganized in 2003).
1996	Nagoya University Branch Hospital was unified with Main Hospital.
1996	Nagoya University Daiko Medical Center (medical clinic) was established (abolished in 2011).
1997	Established Nagoya University School of Health Sciences.
2000	Accomplishment of Prioritization of Graduate School.
2001	Master's Course Program in Medical Science was established.
2001	Affiliation of Research Institute for Disease Mechanism and Control and Institute for Laboratory of Animal Research were
	transferred to the Graduate School of Medicine from the School of Medicine.
2002	Renamed Graduate School of Medicine. Master's Course Program in Nursing, Program in Radiological and Medical Laboratory
	Sciences and Program in Physical and Occupational Therapy were established at the Graduate School of Medicine.
2003	Center for Neural Disease and Cancer was established at the Graduate School of Medicine.
2003	Master's Course Program in Medical Science and Healthcare Administration was established at the Graduate School of Medicine.
2004	Doctor of Medical Science and Doctor's Course Program in Nursing, Program in Radiological and Medical Laboratory Sciences,
	Program in Physical and Occupational Therapy constituted Graduate School of Medicine.
2004	Center for Research of Laboratory Animals and Medical Research Engineering was established at the Graduate School of Medicine.
2005	Center for Medical Education was established at the School of Medicine.

Past deans

TAMURA, Harukichi	April 1, 1939 – January 31, 1946
TAMURA, Harukichi	January 31, 1946 – February 9, 1946
TOGARI, Chikataro	February 9, 1946 – February 9, 1952
KUNO, Yasu	February 9, 1952 - March 31, 1954
TOGARI, Chikataro	April 1, 1954 – March 31, 1958
YAMADA, Kazumaro	April 1, 1958 – March 31, 1960
MURAMATSU, Tsuneo	April 1, 1960 – March 31, 1962
KANDA, Zengo	April 1, 1962 – March 31, 1964
HASHIMOTO, Yoshio	April 1, 1964 – March 31, 1966
OGASAWARA, Kazuo	April 1, 1966 – October 20, 1967
KOJIMA, Koku	October 20, 1967 - March 31, 1969*
TAKAGI, Kentaro	April 1, 1969 – April 1, 1972*
ISHIZUKA, Naotaka	April 1, 1972 – March 31, 1974
TAUCHI, Hisashi	April 1, 1974 – March 31, 1976
KATOH, Nobuo	April 1, 1976 – March 31, 1978
SOBUE, Itsuro	April 1, 1978 – March 31, 1980
IIJIMA, Soichi	April 1, 1980 – July 21, 1981
KATOH, Nobuo	July 22, 1981 – July 21, 1985
SAKUMA, Sadayuki	July 22, 1985 – July 21, 1987
AOKI, Kunio	July 22, 1987 – July 21, 1989
NAGATSU, Toshiharu	July 22, 1989 – July 21, 1991
SAITOH, Hidehiko	July 22, 1991 – July 21, 1995
AWAYA, Shinobu	July 22, 1995 – March 31, 1997
NAKASHIMA, Izumi	April 1, 1997 – March 31, 1999
KATSUMATA, Yoshinao	April 1, 1999 – March 31, 2003
SUGIURA, Yasuo	April 1, 2003 – March 31, 2005
HAMAGUCHI, Michinari	April 1, 2005 – March 31, 2009
SOBUE, Gen	April 1, 2009 –

Education/ research organization

Sharing two campuses in the Tsurumai area in Showa-ku and in the Daiko area in Higashi-ku, the Nagoya University School of Medicine and Graduate School of Medicine have been successfully developing as centers of medical research and medical services.

With three core elements of Education, Research, and Treatment, the schools' broad organization, including its hospital, established a shared goal of contributing to the health and happiness of humankind and pursuing advanced domains specializing in each organizational component's area of expertise.

The following pages provide an outline of the parts of the organization that take charge of Education and Research.

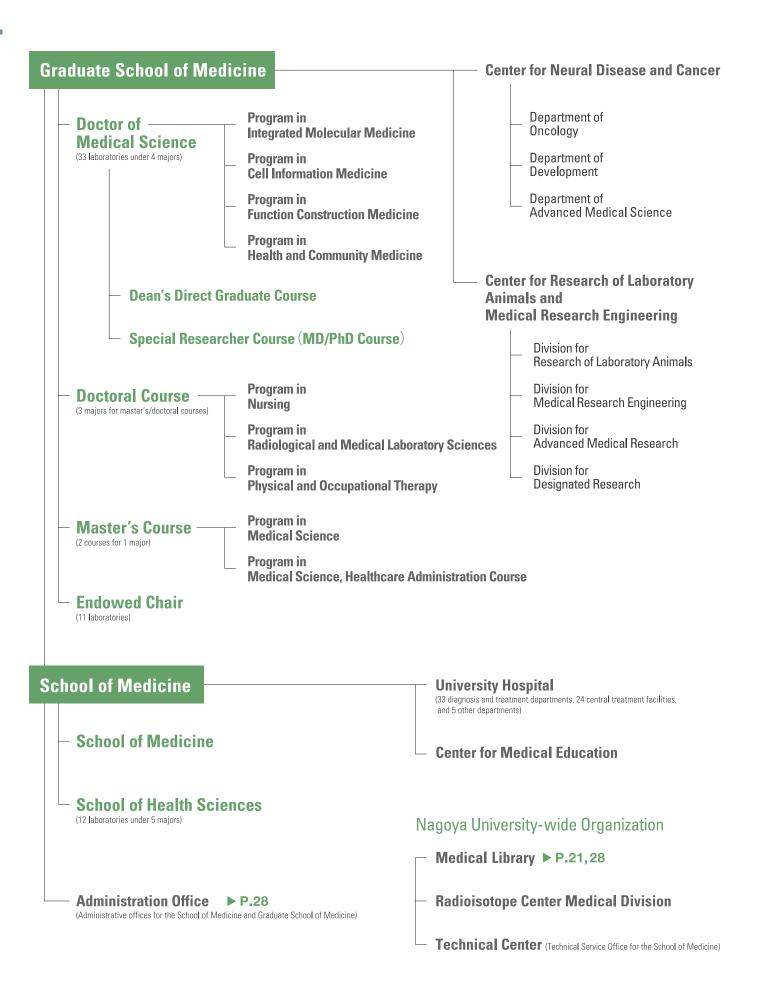
Executives		07	
Surumai Campus Graduate School of Medicine Doctor of Medical Science/ Master's Course School of Medicine School of Medicine School of Medicine D8	Graduate School of Medicine	09	
	School of Medicine	20	
	University facilities	21	
Daiko Campus Graduate School of Medicine Doctoral Course	Graduate School of Medicine	24	

School of Medicine

Organizational chart

23

Organizational chart



Executives

Dean of Graduate School of Medicine	SOBUE, Gen (Professor)*	
Vice-Dean for Medical Education	FUJIMOTO, Toyoshi (Professor)	
Vice-Dean for Personnel Affairs and Labor	NAOE, Tomoki (Professor)	
Vice-Dean for Graduate Program	FURUKAWA, Koichi (Professor)	
Vice-Dean for Graduate School Affairs and Ethics	OHNO, Kinji (Professor)	
Vice-Dean for Finance and Resource Planning	TAKAHASHI, Masahide (Professor)*	
Vice-Dean for Research and Evaluation	WAKABAYASHI, Toshihiko (Professor	
School of Medicine		
Dean of School of Medicine	SOBUE, Gen (Professor)*	
Head of School of Medicine	SOBUE, Gen (Professor)*	
Director of University Hospital	MATSUO, Seiichi (Professor)*	
Head of School of Health Sciences	SAKAKIBARA, Hisataka (Professor)*	
Other facilities		
Director of Center for Neural Disease and Cancer	TAKAHASHI, Masahide (Professor)*	
Director of Center for Research of Laboratory Animals and Medical Research Engineering	TAKAHASHI, Masahide (Professor)*	
Director of Nagoya University Medical Library	OHISO, Yutaka (Professor)	
Director of Radioisotope Center Medical Division	ISOBE, Kenichi (Professor)	
Administrative Offices		
Director of Administration	AOYAMA, Masaharu	
Chief of General Affairs Division	KAWAMURA, Atsushi	
Supervisor for Personnel Affairs and Labor	SAKURAI, Masanori	
Chief of Student Affairs Division	NISHIO, Naoto	
Chief of Management and Planning Division	NAGAYA, Kiyoyasu	
Chief of Accounting Division	SUGIURA, Yoshiyuki	
Supervisor for Facilities Management	SOBUE, Nobukazu	
Chief of Hospital Affairs Division	NAKAI, Seiichi	
Chief of Medical Service Division	NAKANISHI, Tatsuhiro	

^{*} Professors marked with an asterisk are members of the Nagoya University Education and Research Council

Chief of General Administration Division, Daiko Campus

(as of April 1, 2011)

YAMASHITA, Keiji

Tsurumai Campus

Graduate School of Medicine

Doctor of Medical Science/Master's Course

School of Medicine

School of Medicine

Located next to Tsuruma Park in Showa-ku, Nagoya city,

the Doctor of Medical Science, the Master's Course, the School of Medicine programs and associated facilities are concentrated on the Nagoya University Tsurumai Campus.

The School of Medicine carries out quality education and research in close collaboration with the hospital popularly known as "Meidai Hospital" among area citizens.

Graduate School of Medicine Doctor of Medical Science/Master's Course

Established in 1955, the Nagoya University Graduate School of Medicine has been consistently engaged in education and research on academic theory and the application of medicine while training academic researchers and professional technicians with advanced skills. In an effort to respond to today's highly advanced and diverse medical studies and establish a comprehensive and open research environment, the School of Medicine reorganized its educational system into four majors. This reorganization took three years, and was completed in the year 2000. Today's system was created by enhancing the Center for Neural Disease and Cancer, which actively pursues cutting-edge research, the Center for Research of Laboratory Animals and Medical Research Engineering, Master's Course, and so on.

Graduate and undergraduate educational programs are provided concurrently with research in each major program.

School of Medicine School of Medicine

In line with the university mission, including "fostering medical researchers and medical professionals who respect medical ethics, and take pride in contributing to the welfare of mankind," the Graduate School of Medicine provides a six-year integrated education, including a special curriculum to address the future international activities of the students. Studies at the Nagoya University Graduate School of Medicine are implemented in a broad, comprehensive, and cross-disciplinary manner covering various areas of medicine.

Graduate School of	Doctor of Medical Science	Program in Integrated Molecular Medicine	09
Medicine		Program in Cell Information Medicine	10
		Program in Function Construction Medicine	11
		Program in Health and Community Medicine	12
	Dean's Direct Graduate Course		13
	Special Researcher Course	(MD/PhD Course)	
	Affiliated graduate schools		14
	Endowed Chair 15-		
	Master's Course	Program in Medical Science	18
		Program in Medical Science, Healthcare Administration Course	19
School of Medicine	School of Medicine		20
University facilities	Medical Library		21
	Center for Neural Disease and Cancer		21
	Center for Research of Labor	ratory Animals and Medical Research Engineering	22
	Center for Medical Education	1	22

Doctor of Medical Science

Program in Integrated Molecular Medicine

Maximum 52

The purpose of this program includes clarification of etiology and pathological conditions as well as the development of innovative diagnosis and medical treatment through molecular analysis in a comprehensive manner.

The Program in Integrated Molecular Medicine includes four major seminars, and can be divided into two groups: (1) basic medicine, primarily pursuing analytical medical techniques and consisting of Biological Chemistry, and Microbiology and Immunology, and (2) clinical medicine consisting of Internal Medicine and High-Technology Application of Medicine. In addition to the above, there are two other cooperating seminars and two partnership seminars.

Organization

Major seminar	Specialty area		Professor in charge
	Molecular Biology		KADOMATSU, Kenji
Biological Chemistry	Biomacromolecules		
	Molecular and Cellular Biology	(FURUKAWA, Koichi)	
	Molecular Bacteriology		ARAKAWA, Yoshichika
Microbiology and	Drug Resistance and Pathogenesis		
Immunology	Immunology	ISOBE, Kenichi	
	Cellular Immunology		
	Molecular Virology		NISHIYAMA, Yukihiro
	Hematology and Oncology		NAOE, Tomoki
	Cardiology		MUROHARA, Toyoaki
Internal Medicine	Gastroenterology		GOTOH, Hidemi
intornal modifino	Respiratory Medicine	HASEGAWA, Yoshinori	
	Endocrinology and Diabetes		OHISO, Yutaka
	Nephrology		MATSUO, Seiichi
	Radiology		NAGANAWA, Shinji
High-Technology	Interventional & Therapeutic Radiology		
Application of Medicine	Clinical Pathophysiology	NAKAMURA, Shigeo	
	Clinical Pathology		
	Molecular Biochemistry		FURUKAWA, Koichi
Advanced	Molecular Mycology and Medicine	Center for Neural Disease and Cancer	
Medical Science	Neurogenetics and Bioinformatics	Department of Advanced Medical Science	OHNO, Kinji
(Cooperating seminar)	Disease Models		,
	Bioinformatics Analysis	Graduate School of Engineering	HONDA, Hiroyuki
	Nanoengineered Molecular Diagnostics		BABA, Yoshinobu
Laboratory Animal Science (Cooperating seminar)	Laboratory Animal Science	Center for Research of Laboratory Animals and Medical Research Engineering Division for Research of Laboratory Animals	
Aging Research (Partnership seminar)	Aging Research	Research Institute, National Center for Geriatrics and Gerontology	MARUYAMA, Mitsuo* YANAGISAWA, Katsuhiko*
AIDS Research (Partnership seminar)	AIDS Research	National Hospital Organization Nagoya Medical Center	SUGIURA, Wataru*

Doctor of Medical Science

Program in Cell Information Medicine

Maximum 43

This program bridges the Program in Integrated Molecular Medicine and Program in Function Construction Medicine to study cell information related to these two fields. Research in biological information, including cell information, will become

the mainstream in the future medicine and the life sciences. Program includes three major seminars, and can be divided into two groups: (1) basic medicine pursuing Cell Science and (2) clinical medicine pursuing Clinical Neurosciences and Head and Neck and Sensory Organ Medicine. In addition to the above, there are six other cooperating seminars and a partnership seminar.

Organization

Major seminar	Specialty area		Professor in charge
	Cell Biophysics		SOKABE, Masahiro
	Imaging Physiology		
Cell Science	Cell Physiology		
	Cell Pharmacology		
	Molecular Pharmacology		(KAIBUCHI, Kozo)
	Neurology		SOBUE, Gen
	Psychiatry		OZAKI, Norio
Olimical Naumanaiamana	Psychobiology		
Clinical Neurosciences	Neurosurgery		WAKABAYASHI, Toshihiko
	Frontier Surgical Neuroscience		
	Endovascular Neurosurgery		
	Ophthalmology		TERASAKI, Hiroko
	Protective Care for Sensory Disorders		
Head and Neck	Otorhinolaryngology		NAKASHIMA, Tsutomu
and Sensory Organ Medicine	Cognitive and Speech Medicine		
	Maxillofacial Surgery		UEDA, Minoru
	Protective Care for Masticatory Disorders		
Neuroscience (Cooperating seminar)	Neuroscience	Center for Neural Disease and Cancer Department of Development	KAIBUCHI, Kozo
Oncology	Molecular Carcinogenesis	Center for Neural Disease and Cancer	TAKAHASHI, Takashi
(Cooperating seminar)	Cancer Biology	Department of Oncology	
Clinical Pharmacology (Cooperating seminar)	Clinical Pharmacy	Department of Hospital Pharmacy	YAMADA, Kiyofumi
	Visual Neuroscience		KOMATSU, Yukio
Higher Nervous Control (Cooperating seminar)	Neuroimmunology	Research Institute of Environment Medicine	SUZUMURA, Akio
(cooperating commun)	Brain Life Science		SAWADA, Makoto
Regulation of Organ Function	Neural Regulation	December Institute of Environment Medicine	
(Cooperating seminar)	Cardiovascular Research	Research Institute of Environment Medicine	KAMIYA, Kaichiro
Molecular and	Teratology and Genetics		MURATA, Yoshiharu
Cellular Adaptation	Cell Signaling and Molecular Medicine	Research Institute of Environment Medicine	TAKEKAWA, Mutsuhiro
(Cooperating seminar)	Genome Dynamics		MASUTANI, Chikahide
Neurochemistry		Aichi Prefectural Colony	NAKAYAMA, Atsuo*
(Partnership seminar)	Neurochemistry	Welfare Center for Persons with Developmental Disabilities	NAGATA, Koichi*

Program in Function Construction Medicine

and can be divided into two groups: (1) basic medicine, primarily

Maximum and menrollment 39

The major concern of this program is to reconstruct and restore body function at the organ or body level by studying the parts and tissues of the body. Program includes five major seminars,

pursuing Morphologic analysis technics and consisting of Anatomy and Cell Biology and Pathology, and (2) clinical medicine pursuing Surgery, Musculoskeletal and Cutaneous Medicine, and Biomedical Regulation. In addition to the above, there are two other cooperating seminars and a partnership seminar.

Organization

Major seminar	Specialty area		Professor in charge
	Molecular Cell Biology		FUJIMOTO, Toyoshi
Anatomy and	Functional Anatomy and Neuroscience		KIYAMA, Hiroshi
Cell Biology	Cell Biology		MIYATA, Takaki
	Ultrastructural Morphology		
	Biological Response		TOYOKUNI, Shinya
Pathology	Molecular Diagnosis		
ratiiology	Tumor Pathology		(TAKAHASHI, Masahide)
	Neuropathology		
	Surgical Oncology		NAGINO, Masato
	Vascular Surgery		KOMORI, Kimihiro
	Gastroenterological Surgery		
Surgery	Transplantation and Endocrine Surgery		KIUCHI, Tetsuya
ourgory	Cardiac Surgery		UEDA, Yuichi
	Thoracic Surgery		
	Pediatric Surgery		ANDOH, Hisami
	Urology		GOTOH, Momokazu
	Orthopaedics		ISHIGURO, Naoki
	Rheumatology		
Musculoskeletal and Cutaneous	Hand Surgery		HIRATA, Hitoshi
Medicine	Dermatology		AKIYAMA, Masashi
modiomo	Connective Tissue Disease and Autoimn	nunity	
	Plastic and Reconstructive Surgery		KAMEI, Yuzuru
Biomedical	Anesthesiology		NISHIWAKI, Kimitoshi
Regulation	Infectious Diseases		
	Emergency and Critical Care Medicine		MATSUDA, Naoyuki
Development (Cooperating seminar)	Molecular Pathology	Center for Neural Disease and Cancer Department of Development	TAKAHASHI, Masahide
	Operation Medicine	University Hospital Department of Surgical Center	
	Cell Therapy Medicine	University Hospital Department of Blood Transfusion Service	MATSUSHITA, Tadashi
Clinical	Anatomical Pathology	University Hospital Department of Pathology	
Management Medicine	Diagnostic and Therapeutic Endoscopy	University Hospital Department of Endoscopy	
(Cooperating seminar)	Clinical Radiology	University Hospital Central Block of Radiology	
	Clinical Oncology and Chemotherapy	University Hospital Department of Clinical Oncology and Chemotherapy	
	Diagnostic Medical Image Processing	Graduate School of Information Science	
	Cancer Genetics		SETO, Masao*
Cancer Genetics	Cancel Delieucs	Aichi Cancer Center Research Institute	SEKIDO, Yoshitaka*
(Partnership seminar)	Cellular Oncology	Alon Ganger Genter nesearch institute	INAGAKI, Masaki*
	Genulal Officiology		KUZUSHIMA, Kiyotaka*

Doctor of Medical Science

Program in Health and Community Medicine

Maximum enrollment 27

This program carries out research from a social and preventive medicine perspective. Its purpose includes recovery from disease focusing on social contact, which is based on social changes such as the globalization of medicine, lower birthrates, and the graying of society as well as the significance of primary care against the backdrop of advancing medicine.

Program includes two major seminars, and can be divided into two groups: (1) social medicine pursuing Social Life Science and (2) clinical medicine pursuing Medicine in Growth and Aging. In addition to the above, there are four other cooperating seminars and a partnership seminar.

Organization

Major seminar	Specialty area		Professor in charge
	Legal Medicine and Bioethics		ISHII, Akira
	Occupational and Environmental Health		NASU, Tamie
Social Life Science	Preventive Medicine		HAMAJIMA, Nobuyuki
	Public Health and Health Systems		AOYAMA, Atsuko
	Healthcare Administration		SAKAMOTO, Junichi
	Pediatrics		KOJIMA, Seiji
	Developmental Pediatrics		
	Developmental and Geriatric Psychiatry		
Medicine in Growth and Aging	Community Healthcare and Geriatrics		KUZUYA, Masafumi
medicine in drowth and Aging	Obstetrics and Gynecology		KIKKAWA, Fumitaka
	Reproductive Oncology		
	Family and Community Medicine	University Hospital General Medicine	BAN, Nobutaro
Maternal and Perinatal Care (Cooperating seminar)	Maternal and Perinatal Care	University Hospital Maternity and Perinatal Care Center	
Psychiatry for Parents and Children (Cooperating seminar)	Child and Adolescent Psychiatry	University Hospital Psychiatry for Parents and Children	HONJOH, Shuji
	Clinical Preventive Medicine	University Hospital Clinical Preventive Medicine	
Comprehensive	Hospital Management Strategy and Plan	ning	
Ambulatory Medicine (Cooperating seminar)	Medical Education	Center for Medical Education	UEMURA, Kazumasa
	Quality and Patient Safety	University Hospital Quality and Patient Safety	NAGAO, Yoshimasa
	Human Nutrition		ISHIGURO, Hiroshi
Health Promotion Medicine (Cooperating seminar)	Sports Medicine	Research Center of Health, Physical Fitness and Sports	OSHIDA, Yoshiharu
(oooperating seminal)	Psychopathology and Psychotherapy		OGAWA, Toyoaki
Epidemiology (Partnership seminar)	Epidemiology	Aichi Cancer Center Research Institute	TANAKA, Hideo* KONDOH, Eisaku*

Dean's Direct Graduate Course Special Researcher Course (MD/PhD Course)

Dean's Direct Graduate Course

This course allows research-oriented doctors to concentrate on their studies at an early stage by allowing them to enroll in graduate school immediately after finishing undergraduate school without belonging to a clinical laboratory (see diagram below (A)). The dean participates in this comprehensive education program as an education leader in collaboration with basic and clinical laboratories. If necessary, the dean provides financial assistance to the students. In general, those who have transferred to the third year of the Graduate School of Medicine should enroll in this course.

Eligible persons

Doctors who have recently graduated from the school of medicine, immediately or not more than two years after completing post-graduation training.

Selection method

Candidates will be questioned about their aspirations when they file their applications for the Graduate School of Medicine to confirm their intensions. Eligible persons will be selected based on their qualifications for candidacy. A letter of recommendation issued by a preceptor or the like from a basic medicine seminar or clinical training should be attached to the application form. About ten are selected each year from those students enrolled in the Graduate School of Medicine.

Special Researcher Course

(MD/PhD Course)

This course allows research-oriented undergraduate students at the School of Medicine to enter the Graduate School of Medicine early to experience research very early on in their training (see diagram below (B)).

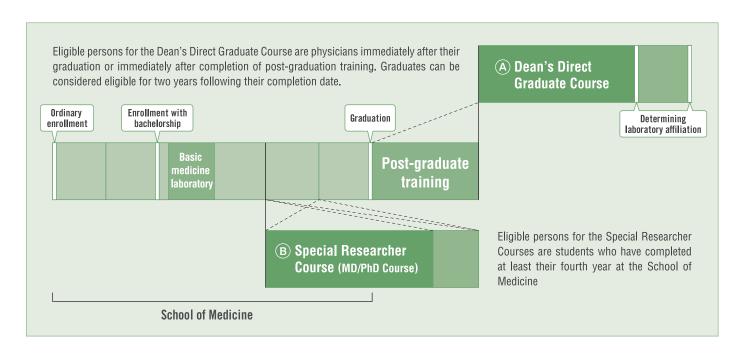
The students take a temporary leave of absence from the School of Medicine during their fourth or fifth year to train at the Graduate School of Medicine and obtain their Doctor of Medical Science (PhD) degree. They may return to the School of Medicine to obtain their Doctor of Medicine (MD) degree.

Eligible persons

Research-oriented undergraduate students at the Nagoya University School of Medicine with excellent academic performance who have completed their fourth or fifth year of study. A handful of students will be selected from each grade each year.

Selection method

Recommended by the preceptor of basic medicine laboratories and examined by committee.



Affiliated graduate schools

Affiliated graduate schools pursuing research to produce even more distinguished and higher achievements through collaboration with unique and outstanding research institutes in the region. Joint research with four outside research institutes

is currently ongoing throughout the Nagoya University Graduate School of Medicine as a whole. A total of six affiliated laboratories are available, one or two for each of the four major programs in the Graduate School of Medicine.

Aging Research

Associated program	Program in Integrated Molecular Medicine	
Established	September 1, 2000	
Collaborative organization	Research Institute, National Center for Geriatrics and Gerontology	
Teacher in charge	MARUYAMA, Mitsuo (Visiting professor) YANAGISAWA, Katsuhiko (Visiting professor)	

This laboratory promotes cutting-edge research to gain a deep understanding of the mechanisms operating at the molecular/cellular level to find clues that will identify the symptoms of old age and old-age specific disorders, focusing on aging-associated genes. This laboratory also actively works to develop new ideas (seeds) for treating Alzheimer's disease as trial efforts stretching from basic research to clinical application.

AIDS Research

Associated program	Program in Integrated Molecular Medicine	
Established	April 1, 2009	
Collaborative organization	National Hospital Organization Nagoya Medical Center	
Teacher in charge	SUGIURA, Wataru (Visiting professor)	

Despite significant improvement in the prognosis for those with AIDS/HIV infection due to advances in antiviral treatments, this is still an incurable disease. This laboratory pursues research to identify how to treat hosts (humans) and the mechanism of viral drug-tolerance at the molecular level.

Neurochemistry

Associated program	Program in Cell Information Medicine		
Established	April 1, 1999		
Collaborative organization	Aichi Prefectural Colony Welfare Center for Persons with Developmental Disabilities		
Teacher in charge	NAKAYAMA, Atsuo (Visiting professor) NAGATA, Koichi (Visiting professor)		

This seminar is provided within the Aichi Prefectural Colony Welfare Center for Persons with Developmental Disabilities, our collaborative organization. Research on the development and control mechanisms of the nerve system is conducted with the prevention and treatment of developmental disorders in mind. The seminar includes three major research areas, one of which is the action mechanism and neuronal development of proteins related to cell polarity.

Cancer Genetics

Associated program	Program in Function Construction Medicine	
Established	May 29, 2000	
Collaborative organization	Aichi Cancer Center Research Institute	
Teacher in charge	SETO, Masao (Visiting professor) SEKIDO, Yoshitaka (Visiting professor)	

This program carries out hematologic malignancy research in collaboration with the Cancer Center Hospital. It is known that there is a close relationship between cause, classification or disease evolution and abnormalities in the genome (chromosomes) or hematologic malignancy genes. By clarifying this relationship, this program strives to obtain a deeper understanding of human tumors from the perspective of genetics and molecular biology.

Cellular Oncology

Associated program	Program in Function Construction Medicine	
Established	April 1, 2007	
Collaborative organization	Aichi Cancer Center Research Institute	
Teacher in charge	INAGAKI, Masaki (Visiting professor) KUZUSHIMA, Kiyotaka (Visiting professor)	

Since the immune system's response to cancer has not been fully identified, it is critical to promote clinical research and basic research in a balanced manner. Based on this concept, this program aims to carry out activities in harmony with nonclinical studies using human immunocompetent cells and clinical studies with the Cancer Center Hospital and nationwide colleges and institutions.

Epidemiology

Associated program	Program in Health and Community Medicine		
Established	October 29, 1998		
Collaborative organization	Aichi Cancer Center Research Institute		
Teacher in charge	TANAKA, Hideo (Visiting professor)	KONDOH, Eisaku (Visiting professor)	

In 2007, Aichi prefecture formulated a prefectural plan to promote anticancer activities. The purpose of the plan is to reduce the carcinoma death rate (for those under age 75) by 20% including natural attrition over the next decade. To make headway towards this goal, this seminar promotes studies of analytical epidemiology, preventive intervention epidemiology, and descriptive epidemiology.

Endowed Chair

With the help of donations from the private sector intended to promote academic activities, this seminar was established through a Nagoya University initiative. The endowed scholarship funds facilitate and diversify education and research according to a given theme. The seminar title represents the theme of the

education and research conducted and if the donator desires, the name of the donator is also used as the seminar name. The Graduate School of Medicine has eleven endowed chairs at this time.

Department of Renal Replacement Therapy

Established	February 1, 2010	
Teacher in charge	ITOH, Yasuhiko (Professor in charge of Endowed Chair)	

In Japan, there are nearly 290,000 chronic renal failure patients. Given this fact, we as a society must comprehensively manage patients with kidney failure while fully using the benefits of the three dialysis methods: hemodialysis, peritoneal dialysis, and renal transplant. With this theme, treatment and research have been carried out for five years since 2005. Starting in February 2010, the current program title was used to further vitalize kidney failure treatment in this region while promoting an educational program that is almost fully established in the region among healthcare professionals throughout Japan.

Department of Metabolic Medicine

Established	October 1, 2010	
Teacher in charge	HAMADA, Yoji (Associate professor in charge of Endowed Chair)	

Lifestyle-related diseases have become a critical social problem throughout the globe. In particular, the metabolic syndrome that has recently drawn attention is a condition that comes with increased risks of arterial sclerosis in addition to the underlying visceral adiposity. This seminar primarily studies metabolic syndrome to identify molecular mechanisms, discover new therapeutic targets, and develop pharmacological treatments. Pursuing this theme can also contribute to the identification of conditions of other lifestyle-related diseases so that innovative treatment methods can be established for those diseases as well.

Department of Advanced Research of Gastroenterology

Established	January 1, 2011	
Teacher in charge	ISHIGURO, Kazuhiro (Associate professor in charge of Endowed Chair)	

The primary purpose of this seminar is to identify the conditions associated with intractable diseases in the gastroenterology field as well as new treatment and testing methods. The seminar works to identify the clinical conditions of inflammatory bowel disorders (e.g. colitis ulcerosa and Crohn's disease), hepatic diseases, malignancy, and other diseases at the molecular level in order to apply this knowledge to the development of new treatments and test methods. In addition, the development of new animal models and tools are carried out to support research.

Department of
HSCT Data Management and
Biostatistics
Endowed Chair:
The Japan Society for
Hematopoietic Cell Transplantation

Established January 1, 2009

Teacher in charge SUZUKI, Ritsuro (Associate professor in charge of Endowed Chair)

Taking charge of the operation of the Annual Report of Nationwide Survey for Hematopoietic Cell Transplantation in Japan, this seminar endeavors to increase the registration rate and accuracy of information. With the authorization of the Japan Society for Hematopoietic Cell Transplantation, the seminar discloses and uses survey results collected nationwide in collaboration with the Japanese Society for Pediatric Hematology, Japan Marrow Donor Program, Japanese Cord Blood Bank Network, and other organizations. The seminar aims for further improvement in Japanese medical transplants through various support, including clinical testing for medical transplants, while contributing to the improvement of hematopoietic cell transplantation throughout Asia.

Department of Molecular Cardiology Endowed Chair: Kowa

Established July 1, 2010

Teacher in charge OHUCHI, Noriyuki (Professor in charge of Endowed Chair)

Lifestyle-related diseases have been steadily increasing, and establishing treatment methods has become a major concern in society. This seminar identifies the pathophysiology of lifestyle-related diseases (e.g. metabolic syndrome, arterial sclerosis, and ischemia disease), particularly the physiopathological significance of secreted factors (e.g. Adipo-cytokine and Myokine) at the cell or body level. Based on the unique basic research described above, the seminar seeks to explore new paths towards innovative treatment methods and the development of new drugs.

Department of Applied Immunology

Established April 1, 2007

Teacher in charge KOBAYASHI, Takaaki (Professor in charge of Endowed Chair)

To resolve the numerous issues in organ transplantation in Japan, this seminar promotes fundamental research that can be used in medical transplantation by establishing broad cooperative research relationships that extend beyond existing borders. Carrying out studies closely related to clinical research, the seminar directly provides information that can be applied to the treatment of transplant patients. Contributions will be made to the development of transplantation in Japan by creating a new research community, fostering personnel, and generating intellectual achievement.

Department of CKD Initiatives Regional cooperative system

Established November 1, 2008

Teacher in charge YASUDA, Yoshinari (Associate professor in charge of Endowed Chair)

The number of Chronic Kidney Disease (CKD) patients has reached 13.3 million. They are not only in pre-end stage renal disease, but are also at serious risk for cardiovascular diseases such as myocardial infarctions and apoplexy. In light of this situation, coping with these diseases is a pressing problem. To treat CKD, cooperation between primary care doctors and medical specialists is critical. However, the system has yet to be established at this moment. This seminar aims to strengthen CKD countermeasures in Japan by promoting the establishment of an effective treatment and treatment system.

Department of Advanced Medicine for Uremia

By identifying uremia metabolism primarily from the perspectives of uremic toxins to establish a scientific foundation for preventing/controlling complications. So far, the seminar has revealed the mechanism of uremia development and involvement of protein metabolites deprived from diet (e.g. indoxyl sulfate as uremic toxin). The seminar identifies further in-depth molecular mechanisms, particularly intracellular communication, in addition to the molecular mechanism for complications such as arterial sclerosis.

Established April 1, 2009

Teacher in charge NIWA, Toshimitsu (Professor in charge of Endowed Chair)

Study of Medical System Management

As a center for creating cutting-edge innovations, the seminar pursues the establishment of new systems for preventive/preemptive medical care using information technology under the research concept of "putting talented physicians and major hospitals in the palm of your hand." Also, the seminar conducts social experiments (e.g. the Geographic Medical Information System (GMIS) and Ubiquitous Mobile Infrastructure (UMIS) using cell phones and other devices).

Established April 1, 2009

Teacher in charge SUGIURA, Shinichi (Associate professor in charge of Endowed Chair)

Department of Surgical Infection

Established October 1, 2009

Teacher in charge SUGAWARA, Gen (Lecturer in charge of Endowed Chair)

As a variation of perioperative infections, wound infection is a simple complication. However, it is a critical issue since treatment is often painful and the length of the patient's hospital stay may be extended. However, studies based on well-established evidence-based medicine for perioperative infections are scant. This seminar has the goal of identifying best practices in wound coverage through proactive surveys of perioperative infections, identifying risks, and random comparison surveys of methods to close wounds.

Department of Education for Community-Oriented Medicine

Established	October 1, 2009
Teacher in charge	YASUI, Hiroki (Associate professor in charge of Endowed Chair)

This seminar takes innovative initiatives to secure and create regional medical treatment through collaboration among Aichi prefecture, the Nagoya City University Community-based Medicine Education Center, and the Nagoya University Graduate School of Medicine. Three core elements of the activities are: "Conducting local needs surveys for medical services and policy recommendation", "Promoting educational activities and mutual understanding", and "training health professionals who are oriented towards the needs of the local community".

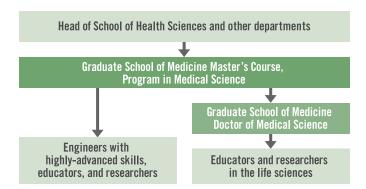
Master's Course

Program in Medical Science

Maximum 20

This course provides basic medical knowledge and expertise to apply this knowledge to other areas by setting a model course for students who have graduated from undergraduate schools other than medicine, odontology, or veterinary medicine and desire to pursue those domains and medical fields by blending them together. After completion of the course, some students go on to become engineers and educators, while others further enroll in a Doctor of Medical Science to become educators or researchers

(See diagram below). This course provides highly advanced professional knowledge and skills to both types of students.



Model courses to take:

Course title	Major subject	Details			
Genetic medicine course	Biochemistry	The purpose of this course includes conducting research assignments on the border between molecular biology and clir medicine (e.g. gene therapy and gene diagnosis) by learning how to introduce new approaches and effective diagnosis			
	Pathology				
	Immunology	method to foster professionals engaged in these studies and promote technical development.			
Cell medicine	Anatomy	The purpose of this course includes conducting various research (e.g. correlations between the fine structure of cells and cell			
	Physiology	function, the stimulus reception/response mechanism of cells, intracellular signal transduction mechanisms, molecular mechanisms such as the behaviors of chemical agents in the cells, tissue or body function/signaling mechanism in terms of			
course	Pharmacology	the cell system) to foster professionals engaged in these studies and promote technical development.			
Medical engineering/ medical	Medical information	The primary purpose of this course is to train researchers and engineers working in the manufacturing industry and in developing devices used for medical treatment and medical studies, or to train those who work in the food manufacturing industry are researchers or engineers studying the areas of bionomy, pharmacology, pathology, anatomy, bioengineering, and other areas,			
information course	Bionomy	highly-skilled engineers with advanced skills in medical science and professional knowledge who work for hospitals and are engaged in medical electronics, medical engineering, development of prosthetic appliances, or medical information system management.			
Medical pharmacy course	Medical pharmacy	This course aims to foster clinical research coordinators who can arrange clinical experiments (graduates from the universit department of pharmacy) and require professional medical/pharmacological knowledge, persons in charge of monitoring an audits to evaluate/audit clinical experiments, or clinical pharmacists to provide pharmaceutical care focused on drug therapy			
Human ecology course	Microbiology	Throughout history, humans have fought to maintain their health and lives while fighting microbes and parasitic worms. Thanks to the discovery of highly effective antibiotics and anthelminthics, we have almost entirely conquered infections. However, numerous new problems have now surfaced; for example, persistent infectious diseases caused by resistant bacteria or atopic dermatitis rashes. Further, global environmental changes and health problems have emerged, such as			
	Immunology	endocrine-disrupting chemicals and ozone depletion. This course is intended to train personnel who can consider the relationship between human beings and various environmental factors (e.g. microbes and parasitic worms) and play a central role in the food business, health and medical industry, and public administration.			
Health promotion/ sports	Social medicine	The evolution of our information-based society and advancing motorization has brought a set of ailments known as lifestyle-related diseases. Kinesitherapy has been introduced to prevent or conquer such diseases, boosting demand for personnel who can accurately prescribe or coach patients while maintaining close contact with the family doctor. Followed			
medicine course	Pathology	by an ever-increasing motivation of people to spend quality and active post-retirement years, more of these personnel are needed by welfare institutions. The course aims to train such personnel.			
Medical management - course	Social medicine	This course is intended to foster professionals with a basic knowledge of medicine and medical treatment and an expert knowledge of research methods from the approach of social medicine. In addition, the professionals must also learn the real significance of managing medical systems and medical business administration to take leadership in various tasks such as			
	Medical information	management of medical-related businesses, public administration in central or local governments, and management of international cooperation projects.			

Program in Medical Science, Healthcare Administration Course

Young Leaders' Program (YLP)

Maximum 10

The Young Leaders' Program (YLP) contributes to establishing a global leadership network by fostering future national leaders in countries in Asia and Eastern Europe and deepening understanding of Japan. It also aims to establish amicable relationships between Japan and other countries and help strengthen policy-making abilities. The program is one of the governmentfinanced foreign student programs under Japanese government (Ministry of Education, Culture, Sports, Science and Technology). The program begins in October and typically extends for one year. Students are granted a master's degree upon completion of the program. Lectures are given entirely in English. Making use of Japan's advantage of having keen relationships with both Western and Asian countries, the program offers a wide curriculum that fits the purpose of the program fostering future national leaders who are capable of establishing global personal networks. For example, special lectures, internships, and externships provided by professionals with various backgrounds from medical administration, in addition to lectures by overseas lecturers, are occasionally offered.

Another core feature of the YLP is the importance placed on producing essays. This means that the program requires students to produce a master's thesis in English within the very short period of one year and publish it in an international journal written in English. The curriculum is designed to cultivate students' ability to produce essays that can be accepted by international journals and give presentations on these essays. If their master's thesis is accepted by international journals, it becomes valuable global property in terms of information sharing—not only for the student but also for Nagoya University and the student's home country.

Many students who have completed this program in the past are now playing an active role in ministries in charge of the medical sector, including the Ministry of Public Health, in their own countries or international institutions such as the WHO. The diagram below shows the 14 participating countries in the YLP. Candidates can apply only through the diplomatic missions stationed in those countries (Direct applications to Nagoya University are not accepted).

Supplement

DATABOOK P31 and 33/ Forging the Bonds of Medicine P25-26

Target countries



For more information on the Young Leaders' Program (YLP), see the link below

http://www.med.nagoya-u.ac.jp/ylp/jp/index.html

School of Medicine

School of Medicine

The Nagoya University School of Medicine provides a consistent six-year education with the goal of developing creative doctors and medical researchers with a well-rounded character, high ethical standards, and a scientific mind.

In response to the 1998-2000 reorganization of the Graduate School of Medicine, all teachers in the School of Medicine

concurrently serve as teachers in the Graduate School of Medicine. This system provides a well-developed education program according to a detailed teaching scheme. The syllabus is specially designed for students of the School of Medicine by teachers of the Graduate School of Medicine, who are also doctors or researchers with a high degree of professionalism.

Program

First	First semester	Cross-departmental subjects (Lectures, training, and practice)	Elementary	
year	Second semester	(Lectures, training, and practice) Basic subjects (science, liberal arts, cross-departmental)	medicine	
Second	First semester	Academic subjects (science, liberal arts, cross-departmental)		
year	Second semester	Basic medicine (lectures/training)		
Third	First semester			
year	Second semester	Basic seminar for medicine		
	First	Social medicine (lectures/training)		
Fourth	semester	······Clinical med	icine	
year	Second semester	(tutorials, lectu basic clinical techniqu	ires, Social medicine (lectures)	
Fifth	First semester		Clinical pathology	
year	Second semester	Clinical prac	; tige······	
Sixth year	First semester	Choice prac	tice	
	Second semester	Final exam		

University facilities

Medical Library

Located on the Tsurumai Campus, the Nagoya University Medical Library is mainly used by undergraduates, graduate students, researchers, and medical experts at the School of Medicine and Graduate School of Medicine.

The library provides services to support education and research in addition to its previous role of providing library materials. The new services include introduction of new electric documents (e.g. e-journals, e-texts, and databases), hosting various guidance programs and seminars, installing a PC corner, publishing the Nagoya Journal of Medical Science, editing scientific

achievements in international languages, and publishing activities online.

Serving as center that locates the history of the Nagoya University School of Medicine in the Tokai region as we look towards the future, the Exhibition Room of the School of Medicine on the fourth floor exhibits, stores, and publishes via website documents related to the School of Medicine.

► Independent website for Medical Library

http://www.med.nagoya-u.ac.jp/medlib/

University facilities

Center for Neural Disease and Cancer

(Established: April 1, 2003)

This center facilitates the development of two particular areas such as neurological disorders and malignancies. Systematically promoting research with a strong social need (e.g. identifying etiologic mechanisms of diseases, creating animals

models, and developing new genetic diagnostic methods and molecular-targeted therapy), the center strives to bridge the obtained results and establish an international presence.

Department	Area	Purpose	Teacher in charge
Department of Oncology Clarifies carcinogenic mechanisms due to genetic mutation and	Division of Molecular Carcinogenesis	Comprehensively identifies molecular pathogenesis of carcinoma to develop innovative diagnosis/treatment methods for intractable cancers.	TAKAHASHI, Takashi (Professor)
molecular mechanisms of invasion/ metastasis of carcinoma cells.	Division of Cancer Biology	Clarifies oncogenic molecular mechanisms due to oncogenes/antioncogenes.	SENGA, Takeshi (Associate professor)
Department of Development Conducts research related to	Division of Molecular Pathology	Conducts research related to survival and differentiation mechanisms due to neurotrophic factors and development of kidneys.	TAKAHASHI, Masahide (Professor)
the molecular mechanisms of development/differentiation of nerve cells and development of kidneys.	Division of Neuroscience	Clarifies molecular mechanisms in polarization of nerve cells and formulation of axonal guidance and synapses.	KAIBUCHI, Kozo (Professor)
	Division of Molecular Biochemistry	Pursues development of new treatments for incurable diseases by clarifying control mechanisms for propagation, differentiation, and death of carcinoma cells and nerve cells.	FURUKAWA, Koichi (Professor)
Department of Advanced Medical Science Clarifies pathologic conditions of	Division of Molecular Mycology and Medicine	Conducts molecular genetic/cell biological research on target molecules of chemical therapy for cancer, focusing on the genes involved in cell division.	NAKAGAWA, Yoshiyuki (Associate professor)
malignancy and neurodegenerative diseases and creates animal models while developing treatment methods.	Division of Disease Models	Strives to clarify causal factors of diseases and establish treatment methods by making disease-model animal using genetically-modified mice and the like.	TAKEI, Yoshifumi (Associate professor)
	Division of Neurogenetics	Clarifies molecular mechanisms of pathological conditions in myoneural junctions and conducts research on controlling pathological conditions, while clarifying the molecular mechanism of splicing mutation in neurological disorders.	OHNO, Kinji (Professor)

University facilities

Center for Research of Laboratory Animals and Medical Research Engineering (Established: May 1, 2004)

This Center consists of four divisions, including two divisions (Laboratory Animals and Medical Research Engineering) that were established a quarter of a century ago and integrated in 2004. The center responds to highly advanced and diverse

study needs by concentrating both research facilities and technical staff together. The Center provides a broad range of support for education and research at the Graduate School of Medicine and School of Medicine.

Department	Purpose	
Division for Research of Laboratory Animals	This division provides centralized control of the animal testing required by the Graduate School Medicine and University Hospital. The environment established in this facility allows for appropriate action in terms of animal welfare and scientifically valuable animal testing.	
Division for Medical Research Engineering	This division is designed to manage shared use of various analytical/measuring devices in the Graduate School of Medicine. Concentrating the devices in one place instead of having them in each laboratory can facilitate more effective use of this state-of-the-art equipment. The devices are accessible to other schools at Nagoya University and the outside world.	Supplement FORGING THE BONDS OF MEDICINE P17-18
Division for Advanced Medical Research	Division designed to fostering successors in basic studies.	
Division for Designated Research	Division run by outside funds to achieve active and dynamic development, promotion, and reinforeducation at the Graduate School of Medicine.	rcement of research and

University facilities

Center for Medical Education

(Established: August 1, 2005)

This Center develops and spreads the educational program for medical students and hospital medical care personnel to improve their techniques and attitudes while maintaining a close relationship with the committee of the School of Medicine and the Nagoya University Hospital. At the same time, the Center conducts research on medical education and training medical care personnel.

As another critical task, the Center takes charge of the control

Teacher in charge UEMURA, Kazumasa (Professor)

and operation of the Skills & IT Laboratory. The laboratory is used by a total of 20,000 or more people each year, including medical students, medical interns, and hospital staff. Its usage rate is one of the highest in Japan.

Before the Objective Structured Clinical Examination (OSCE, designed to objectively test clinical skills and other performance and competence measures), the center receives an avalanche of reservations for facility use from medical students.

Supplement

DATABOOK P38/FORGING THE BONDS OF MEDICINE P12

Daiko Campus

Graduate School of Medicine

Doctoral Course

School of Medicine

School of Health Sciences

The Doctoral Course at the Graduate School of Medicine and the School of Health Sciences at the School of Medicine are located at the Nagoya University Daiko Campus, Higashi-ku, Nagoya. In cooperation with the School of Medicine and the University Hospital, the Daiko Campus comprehensively promotes education and research in the assistant medical field, in specialties such as nursing, medical techniques, and rehabilitation aid.

Graduate School of Medicine Doctoral Course

Amidst the ever-changing medical and health system as medical technologies and social structures advance, the Daiko Campus promotes the development of medical service providers who can play a central role in clinical, management, and policymaking activities. At the same time, the campus attaches importance to fostering high-performance researchers/educators that will promote academic pursuits in the health sciences through interdisciplinary and pioneering research.

School of Medicine School of Health Sciences

With our changing social conditions, the assistant medical field is also advancing and increasing in complexity day by day. To cope with this, the campus pursues the development of outstanding medical service providers, educators, and researchers, while keeping with a basic approach of establishing medical science technology as an academic domain.

Graduate School of	Doctoral Course	Program in Nursing			
Medicine		Program in Radiological and Medical Laboratory Sciences	24		
		Program in Physical and Occupational Therapy	24		
School of Medicine	School of Health Sciences		25		

Doctoral Course

Program in Nursing

Maximum enrollment First semester: 18 Second semester: 6

Respecting the dignity of humankind, this course cultivates healthcare professionals with outstanding specialist capabilities. Further, the course strives to foster creative and inquisitive researchers/educators to formulate evidence-based learning in the medical technology sciences.

Master's program	Doctor's program	
Fundamentals of Nursing	Nursing for Health Risk	
Clinical Nursing		
Human Development Nursing and Midwifery	Nursing for Developmental Health	

Program in Radiological and Medical Laboratory Sciences

Maximum enrollment First semester: 20 Second semester: 7

This program is primarily concerned with cultivating researchers and educators by approaching and understanding information on the human body from both a macro and micro perspective, in addition to developing professionals with advanced specialist capabilities such as medical physicians.

Master's program	Doctor's program
Radiological Sciences	Radiological Sciences
Pathophysiological Laboratory Sciences	Pathophysiological Laboratory Sciences

Program in Physical and Occupational Therapy

Maximum enrollment First semester: 10 Second semester: 4

The program is designed to develop researchers and professionals with highly advanced skills who can sufficiently respond to ever-changing medical situations. Meanwhile, the program aims to establish a diverse and vital education system (e.g. collaboration between various clinical practices and areas of study) to define new fields of inquiry.

Master's program	Doctor's program
Physical Therapy	Physical and Occupational Therapy
Occupational Therapy	Friysical and Occupational Therapy

School of Medicine

School of Health Sciences

The purpose of the School includes the development of medical service providers, educators, and researchers with a broad range of basic knowledge and sophisticated expertise, an outstanding ability to solve problems, as well as a rich sense of humanity. This purpose is pursued by establishing medical

technology science as a field of study, while educating in and studying science, technology, and implementation techniques. The course consists of 5 majors and 12 seminars, providing a four-year integrated education from basic to professional disciplines.

Organization

Major	Seminar	Professor in charge
		TAMAKOSHI, Koji
		YAMAUCHI, Toyoaki
	Fundamentals of Nursing	OHTA, Katsumasa
		FUJIMOTO, Etsuko
		HORI, Yoko
	Clinical Nursing	IKEMATSU, Yuko
Department of Nursing	Clinical Nursing	ANDOH, Shoko
(Maximum enrollment: 80)		NARAMA, Miho
	Human Development Nursing and Midwifery	ASANO, Midori
		SUZUKI, Kazuyo
		SAKAKIBARA, Hisataka
	Dublic Health and Herea Care Nursing	KAJITA, Etsuko
	Public Health and Home Care Nursing	MAEKAWA, Atsuko
		HIRAI, Makoto
		IKEDA, Mitsuru
	Basic Radiological Technology	A0YAMA, Takahiko
	-	ISODA, Haruo
Department of Radiological Technology		OBATA, Yasunori
(Maximum enrollment: 40)		KODERA, Yoshie
	Medical Radiological Technology	KATOH, Katsuhiko
	, , , , , , , , , , , , , , , , , , ,	SHIMAMOTO, Kazuhiro
		ISHIGURE, Nobuhito
		ISHIKAWA, Tetsuya
	Basic Medical Technology	WAKUSAWA, Shinya
	, ,	KONDOH, Takaaki
Department of Medical Technology		KAWABE, Tsutomu
(Maximum enrollment: 40)		NAGATA, Kozo
	Medical Laboratory Technology	MURATE, Takashi
	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	K0JIMA, Tetsuhito
		NAGASAKA, Tetsuro
		KAWAMURA, Morio
	Basic Physical Therapy	TORIHASHI, Shigeko
Department of Physical Therapy		SUZUKI, Shigeyuki
(Maximum enrollment: 20)	Applied Physical Therapy	YAMADA, Sumio
		UCHIYAMA, Yasushi
		SUZUKI, Kunifumi
Department of Occupational Therapy	Basic Occupational Therapy	HOHSHIYAMA, Minoru
(Maximum enrollment: 20)		KARASHIMA, Chieko
	Applied Occupational Therapy	SAWADA, Yuji

Data

Administration office orq	ganizational chart	28	
Number of personnel		29	
Maximum enrollment	Graduate School of Medicine	30-31	
number of students	School of Medicine	32	
Number of Graduate Sch	nool of Medicine graduates	33	
Number of School of Me	dicine graduates/Number of students granted doctorates (MDs)	34	
Number of foreign stude	nts/researchers and the like	35	
Number of students sent	t out/accepted under international exchange agreements	36	
Number of exchange stu	dents sent from the Graduate School of Medicine/School of Medicine by count	ry 37	
Medical Library/Use sur	vey of Skills & IT Laboratory/Number of dissections	38	
Data on government-ind	ustrial-academic collaboration: intellectual property	39	
Data on government-ind	ustrial-academic collaboration: collaborative/funded research	40	
Vews release		41	
Extension courses at Tsı	urumai Campus	42	

Administration office organizational chart

Administration Office Manager		
O LAW : D' : :	General Affairs & Planning	Canaval Affaira & Planning Castian
General Affairs Division Manager	Office Manager*	General Affairs & Planning Section
General Affairs Division Manager	Assistant to the Manager	General Affairs Section II
	Assistant to the Manager	General Affairs Section I
		Clinical Training Section
	Г	Personnel Affairs & Labor Section I
Personnel Affairs & Labor Group,	— Assistant to the Manager —	Personnel Affairs & Labor Section II
General Affairs Division	L	Personnel Affairs & Labor Section III
Personnel Affairs &	Safety & Health Control	——— Safety & Health Control Section
Labor Group Manager	Office Manager*	Specialized Personnel
		0. 1
O. I. ANG. B. D. I.	A : - 4 4 4 4 4 8 M	Student Affairs Section
Student Affairs Division	Assistant to the Manager	— Graduate School Section — International Exchange & Foreign
Student Affairs Division Manager	_	Students Section
	_	—— Management & Planning Section
		——— Specialized Personnel
		——— Research Cooperation Section
— Management & Planning Division —		Clinical Trial Promotion Section
Management & Planning		—— Information System Section
Division Manager		—— Specialized Personnel
		—— Management Analysis Section
A C Divi		Accounting Section
Accounting Division	Assistant to the Manager	Supplies Section
Accounting Division Manager	Contract Office Manager*	Medical Equipment Section Contract Section
	— Contract Office Manager* ————————————————————————————————————	Contract Section
	Accountant	
	F	—— Facilities Management Section
F 37% M	-	—— Building & Repairs Section
—— Facilities Management Group, ————————————————————————————————————		Electricity Section
Facilities Management	L	—— Machinery Section
Group Manager		
Group Manager	Γ	Medical Affairs Section
		Outpatient Section
	A	Admission Section
Hospital Affairs Division	Assistant to the Manager	Medical Welfare Section Cashier's Section
Hospital Affairs Division Manager		——— Cashler's Section ——— Hospital Affairs & Accounting Section
		Medical Record Control Section
		modical necestal control cocacin
	F	—— Patient Service Section
	A * 4 44 4 BH	Community Liaison Section
Medical Service Division	Assistant to the Manager	Clinical Laboratory & Examination Section
Medical Service Division Manager	L	—— Specialized Personnel
L	— Medical Safety Control —————	—— Medical Safety Control Section
	Promotion Office Manager*	
		Administration Section
General Administration Division, Daiko Campus		Student Academic Affairs Section
General Administration Division,	_	Treasury Section
Daiko Campus Manager		
	Nagoya University Medical Library	
	raayoya omversity ivietited Library	Information Management Section
	Librarian —	—— Information Service Section
	L	Health Science Information Section
		(Daiko Campus)

 $[\]boldsymbol{\ast}$ For the position with asterisk, Assistant to the Manager is in charge.

Number of personnel

Title		Graduate Scho	ool of Medicine	School of Medicin	School of Health Sciences
	Professor	50	(4)	0	39
	Associate Professor	53	(12)	0	17
	Lecturer	10	(19)	0	3
Faculty member	Assistant Professor	42	(47)	0	29
	Research Associate	2		0	0
	Researcher	0	(7)	0	0
	Research Assistant	0		0	1
Sul	Subtotal		(89)	0	89
General office staff	Administrative Staff	151			
Total				397 (89)	

Note: Numbers in parentheses indicate additional number of specially appointed teachers.

Maximum enrollment and current number of students

Graduate School of Medicine

[Doctor of Medical Science]

		Maximum Cu		rent number of stude	ents
		enrollment	Male	Female	Total
	First year	52	45	20	65
Program in Integrated	Second year	52	35	19	54
Molecular Medicine	Third year	52	32	9	41
	Forth year	34	42	9	51
Subtotal		190	154	57	211
	First year	43	23	10	33
Program in Cell	Second year	43	33	8	41
Information Medicine	Third year	43	35	10	45
	Forth year	39	40	10	50
Subtotal		168	131	38	169
	First year	39	32	10	42
Program in Function	Second year	39	33	5	38
Construction Medicine	Third year	39	25	6	31
	Forth year	49	35	10	45
Subtotal		166	125	31	156
	First year	27	12	12	24
Program in Health and	Second year	27	14	19	33
Community Medicine	Third year	27	10	15	25
	Forth year	39	20	24	44
Subtotal		120	56	70	126
Total		644	466	196	662
Postgraduate and t	he like	198	5	5	10

(as of April 1, 2011)

[Dean's Direct Graduate Course]

	Maximum		Current number of students	S
	enrollment	Male	Female	Total
Second year	_	2	0	2
Forth year	_	1	0	1
Total	_	3	0	3

(as of April 1, 2011)

[Special Researcher Course (MD/PhD Course)]

	Maximum	Current number of students		
	enrollment	Male	Female	Total
Forth year	_	0	1	1
Total	_	0	1	1

[Doctoral Course]

Master's program

		Maximum	Current number of students		
		enrollment	Male	Female	Total
Program in Nursing	First year	18	2	14	16
Frogram in Nursing	Second year	18	1	23	24
Program in Radiological and	First year	20	13	9	22
Medical Laboratory Sciences	Second year	20	16	12	28
Program in Physical and	First year	10	9	8	17
Occupational Therapy	Second year	10	13	5	18
Total		96	54	71	125

(as of April 1, 2011)

Doctor's program

		Maximum	Current number of students		
		enrollment	Male	Female	Total
	First year	6	0	7	7
Program in Nursing	Second year	6	3	5	8
	Third year	6	1	15	16
Program in Radiological and Medical Laboratory Sciences	First year	7	0	3	3
	Second year	7	2	3	5
medical Laboratory Sciences	Third year	7	5	3	8
D	First year	4	6	0	6
Program in Physical and Occupational Therapy	Second year	4	3	4	7
	Third year	4	2	2	4
Total		51	22	42	64

(as of April 1, 2011)

[Master's Course]

			Current number of students		
		enrollment		Female	Total
Program in Madical Caionas	First year	20	7	12	19
Program in Medical Science	Second year	20	8	8	16
Program in Medical Science, Healthcare Administration Course (Young Leaders' Program (YLP))	First year (government- sponsored)	10	5	3	8
Total		50	20	23	43

Maximum enrollment and current number of students

School of Medicine

[School of Medicine]

	Maximum	Current number of students		
	enrollment	Male	Female	Total
First year	107	79	28	107
Second year	107	91	17	108
Third year	108	88	22	110
Forth year	100	80	23	103
Fifth year	100	89	15	104
Sixth year	100	87	23	110
Total	622	514	128	642
Postgraduate and the like	560	50	17	67

(as of April 1, 2011)

[School of Health Sciences]

	Maximum	m Current number of students		
	enrollment	Male	Female	Total
First year	200	58	151	209
Second year	206	61	152	213
Third year	226	58	167	225
Forth year	226	61	175	236
Total	858	238	645	883
Postgraduate and the like	30	1	0	1

Number of Graduate School of Medicine graduates

[Doctor of Medical Science]

Note: Figure exclude those who finished the PhD program without completing a dissertation, and include those who completed the program more quickly.

Major	Number of students who completed the program [2010 academic year]
Program in Integrated Molecular Medicine	27
Program in Cell Information Medicine	18
Program in Function Construction Medicine	11
Program in Health and Community Medicine	11
Total	67

(as of March 31, 2011)

[Doctoral Course]

Note: Figure exclude those who finished the PhD program without completing a dissertation, and include those who completed the program more quickly.

Master's program

Major	Number of students who completed the program [2010 academic year]
Program in Nursing	16
Program in Radiological and Medical Laboratory Sciences	28
Program in Physical and Occupational Therapy	16
Total	60

(as of March 31, 2011)

Doctor's program

Major	Number of students who completed the program [2010 academic year]
Program in Nursing	0
Program in Radiological and Medical Laboratory Sciences	6
Program in Physical and Occupational Therapy	2
Total	8

(as of March 31, 2011)

[Master's Course]

Number of students who completed the program

Major	Number of students who completed the program [2010 academic year]
Program in Medical Science	13 (8)

Note: Numbers in parentheses indicate additional number of YLP graduates

(as of March 31, 2011)

Careers of those who completed the course

Proceed to	Employed			Other	
higher education	Government offices	Private sector	Medical institutions	Utiloi	
3	2	5	2	1 (8)	

Note: Numbers in parentheses indicate additional number of YLP graduates

(as of March 31, 2011)

Number of School of Medicine graduates

[Number of successful undergraduates]

Scho	ol	Period	Number of graduates
Aichi Medical School		October 1881 — June 1903	1,082
Aichi Prefectural Medical College		July 1903 — June 1920	1,967
Aichi Medical College		July 1920 — April 1931	427
Nagoya Medical College		May 1931 — March 1939	695
Nagoya Imperial University School of Mo	edicine	April 1939 — September 1947	749
Nagoya Imperial University Medical Coll	lege*	April 1944 – March 1950	744
Nagoya University School of Medicine (Under Old Educational System)		October 1947 — March 1954	688
Nagoya University School of Medicine		May 1040 Mayah 2010	7,308
	School of Medicine	May 1949 — March 2010	(5,359)
	School of Health Sciences	March 2002 — March 2010	(1,949)
	Total		20,968

^{*} Renamed Nagoya University Medical College Clinic in October 1947

[Number of School of Medicine graduates in 2010 academic year]

		Number of graduates
Negove University Cohool of Medicine	School of Medicine	96
Nagoya University School of Medicine	School of Health Sciences	223
Total		319

(as of March 31, 2011)

Number of students granted doctorates (MDs)

[Number of persons granted degrees]

Degree	2010 academic year
Graduates of Doctor's Course	113
Doctor's Approved by Thesis	20
Total	133

(as of March 31, 2011)

[Number of degrees granted under old school system]

Period	Number of degrees granted
From: January 23, 1926 To: March 31, 1960	3,709

Number of foreign students/researchers and the like

[Number of foreign students accepted]

Status	Government-financ	ed foreign students	Privately-finance	Total	
Status	Male	Female	Male	Female	Total
Undergraduate Students	0	0	0	2	2
Research Students	0	0	0	0	0
Special Undergraduate Students	0	0	0	0	0
Graduate Students in Doctor's Course	12	10	26	30	78
Research Students in Doctor's Course	0	1	4	3	8
Special Graduate Students in Doctor's Course	0	0	0	0	0
Special Research Students	0	0	0	0	0
Japanese Studies Students*	1	0	0	0	1
Total	13	11	30	35	89
Visiting Research Fellow, etc.	46				

^{*} Japanese Studies Students belong to the Education Center for International Students, Nagoya University. Those students become research students pursuing doctoral degrees at the Graduate School of Medicine after completing the program (April through September).

(as of April 1, 2011)

[Number of foreign students by country/visiting research fellows, etc.]

Country	Foreign students (as of April 1, 2011)	Visiting research fellows, etc. [2010 academic year]
China	52	19 (Hong Kong 1)
Taiwan	3	1
Korea	1	3
Mongolia	2	0
Thailand	1	11
Cambodia	1	0
Bangladesh	10	2
Laos	1	0
Vietnam	2	0
Indonesia	1	0
Uzbekistan	2	0
Kyrgyz	1	0
India	2	1
Turkey	1	0
Guatemala	1	0
Egypt	3	2
Iran	0	1
Germany	0	1
Pakistan	1	0
Malaysia	3	0
Ethiopia	1	0
UK	0	2
Austria	0	1
Iraq	0	1
Total	89	46

Note: Numbers in parentheses are in addition to those already indicated

Number of students sent out/accepted under international exchange agreements

Tulane University, School of Medicine

	Country	School	Agreement established on	Number of students sent	Number of students accepted
	The University of North Carolina, School of Medicine at Chapel Hill	July 3, 1989	2	0	
		Harvard University Medical School	November 28, 1995	0	0
		Tulane University, School of Medicine	November 29, 1995	1	0
	U.S.A. (7 institutions)	University of Pennsylvania, School of Medicine	March 26, 1997	1	0
		Duke University, School of Medicine	December 20, 2002	2	0
		Johns Hopkins University, School of Medicine	January 1, 2003	2	0
Main Sister		The University of Texas, School of Medicine	August 8, 2007	0	0
University	Poland (1 institution)	Medical University of Gdansk	July 31, 1995	0	1
	Germany (1 institution)	Albert-Ludwigs-University Freiburg, School of Medicine	April 5, 2000	0	1
	UK (1 institution) Warwick University, Medical School July 22, 2005		2	1	
	Austria (1 institution) The Medical University of Vienna July 12, 2005		July 12, 2005	0	2
	Mongolia (1 institution) Health Sciences University of Mongolia August 26, 2004		August 26, 2004	0	0
	Shanghai Jiao Tong University December 1, 2009		December 1, 2009	0	2
	(2 institutions)	Peking University Health Science Center	November 10, 2010	0	0
	North Americ	a		1	1
	South America			0	0
Out of Main Sister				0	3
University				1	1
	Oceania			5	0
	Africa			0	0
		Total		17	12

(2010 academic year)

Number of exchange students sent from the Graduate School of Medicine/School of Medicine by country

Country	State	Number of students studying abroad
	California	1
	Maryland	2
U.S.A.	Pennsylvania	2
	North Carolina	4
	New Orleans	1
UK		5
Australia		6
China		1
Ţ	otal	22

Note: Figures include students sent abroad.

(2010 academic year)

Medical Library (including Health Science Library Room)

[Number of books collected]

	Number of books collected
Japanese Books	103,990
Foreign Books	114,048
Total	218,038

(as of April 1, 2011)

[Number of journal types]

	Number of types
Japanese Journals	2,639
Foreign Journals	2,791
Total	5,430

(as of April 1, 2011)

[Open-access journal] (website released in February and August)

Nagoya Journal of Medical Science

http://www.med.nagoya-u.ac.jp/medlib/nagoya_j_med_sci/

Use survey of Skills & IT Laboratory

[Status of use by room]

Room	Number of uses [2010 academic year]
Storage Room	13
Diagnostic imaging lab	81
Ultrasonography lab	18
Skills lab	496
Microscope lab	191
Medical examination and treatment simulation room	527
IT laboratory	2
Total	1,328

[Status of use by department]

Department	Number of uses [2010 academic year]
School of Medicine	836
School of Health Sciences	79
Graduate School of Medicine	39
Center for Medical Education	68
Hospital	290
Other	16
Total	1,328

Number of dissections

Academic year	Bodies donated for systemic anatomy (number of donor bodies)	Bodies for pathologic autopsy
2004	37	50
2005	39	36
2006	49	42
2007	52	33
2008	45	38
2009	64	32
2010	49	27

Data on government-industrial-academic collaboration: intellectual property

After university incorporation in 2004, Nagoya University has strived to achieve further effective use of intellectual property created at the university by securing ownership as a university organization as a whole, rather than by individual researchers.

To be in line with cross-departmental policy, the Graduate School of Medicine disseminates its intellectual properties as "seeds" to contribute to wider society, while effectively using them with the comprehensive strength of its organization.

[Patents]

Number of patents (filed)

Organization	Dom	estic	Over	rseas	Total
Organization	Sole application	Joint application	Sole application	Joint application	TULAI
Graduate School of Medicine	8	3	2	0	13
University Hospital	3	4	_	<u> </u>	7
Total	11	7	2	0	20

(as of April 1, 2011)

• List of patents (filed, Graduate School of Medicine/University Hospital, domestic sole application)

Title of invention	Date of registration	Patent number	Inventor(s)
Cytodiagnostic marker easy-to-perceive with naked eye	March 11, 1997	2615427	YOSHIDA, Yasuhiko
Midkine receptor, method for suppressing survival of midkine-dependent cell and method for stimulating survival of midkine-dependent cell	July 8, 2005	3694731	MURAMATSU, Takashi MURAMATSU, Hisako
Positive pressure chamber for extremities	January 9, 2009	4243647	HIRATA, Hitoshi et al.
Material for ameliorating skin tissue and method for producing the same	January 23, 2009	4247333	EBISAWA, Katsumi KATOH, Ryuji KAGAMI, Hideaki UEDA, Minoru
External wound fixing device	May 15, 2009	4304321	HIRATA, Hitoshi TATEBE, Masahiro SHINOHARA, Takaaki
Biomarker for the estimation of acute renal disorder and prognosis of the disorder, and use of the biomarker	December 18, 2009	4423375	KADOMATSU, Kenji YUZAWA, Yukio HAYASHI, Hiroki MATSUO, Seiichi et al.
Strong inhibition of vascular endothelial growth factor onset using SiRNA	March 26, 2010	4480125	TAKEI, Yoshifumi KADOMATSU, Kenji MURAMATSU, Takashi
Optical interference tomograph	April 30, 2010	4501007	ITOH, Yasuki
Activation inhibitor of mechanoreception (stretch activated) channel	January 7, 2011	4654432	NARUSE, Keiji SOKABE, Masahiro
Detector for magnetic signal from cellular structure	January 21, 2011	4665105	NAKAYAMA, Shinsuke UCHIYAMA, Tsuyoshi et al.
Method of detecting IgA nephropathy-related antibody	March 18, 2011	4701391	TORII, Keizo OHTA, Michio OKAMOTO, Akira

(as of April 1, 2011)

Data on government-industrial-academic collaboration: collaborative/funded research

As with the management of intellectual property, collaborative activities with the private sector have now shifted from efforts based on individual researchers to organizational efforts as a whole.

Supplement DATABOOK P15-17

[Collaborative research]

Number of collaborative research projects carried out with the private sector and amount received

Academic year	Number of projects	Amount received (Unit: 1,000 yen)
2005	29	37,221
2006	34	78,525
2007	34	67,369
2008	38	74,205
2009	43	74,653
2010	38	76,357

Note: Figures include researcher costs and business-academic collaboration costs (indirect costs)

[Funded research]

Number of projects/amount accepted for funded research expenses (including government-sponsored funds)

Academic year	Number of projects	Amount received (Unit: 1,000 yen)
2005	41	212,480
2006	39	211,495
2007	40	268,700
2008	38	376,149
2009	65	514,376
2010	68	416,558

Note: Including indirect expenses

For more information on collaborative/funded research, see the link below

▶ http://www.med.nagoya-u.ac.jp/medical/1916/1917/index.html

Inquiries/administrative office in charge

School of Medicine/Graduate School of Medicine Research Assistance Subsection

TEL: +81-52-744-2429 FAX: +81-52-744-2881 E-mail: iga-kenkyu@post.jimu.nagoya-u.ac.jp

The Nagoya University Graduate School of Medicine selected research achievements with particularly strong social impact

and published the details to the public as news. Within the given period, the following four projects were released:

[List]

Date	Research details	
December 8, 2009	Discovery of new functions of sugar chain	
April 1, 2010	Pancreas regeneration	
October 21, 2010	Mechanism for improving vascular function through exercise for aged mice	
January 13, 2011	Minocycline to prevent osmotic demyelination syndrome by inhibiting activation of microglial cells	

[Commentary]

Discovery of new functions of sugar chain

Recently, the role of sugar chains manifesting outside the cell membrane has been closely watched. A new function of sugar chains called ganglioside that is often found in brain neurons has been revealed through joint research with the Chubu University College of Life and Health Sciences. Deficiency in ganglioside causes inflammation due to the activation of a complement, a type of immunity. The study showed that inflammation is the cause or a factor that worsens metamorphosis in nerve tissues such as in Alzheimer's disease.

Mechanism for improving vascular function through exercise for aged mice

An experiment using aged mice revealed that exercising is effective for preventing or treating age-related ischemia disease such as apoplexy and part of the pathogenic mechanism. This underscores the significance of education in lifestyle habits and exercise therapy, in addition to drug therapy and surgery. Further, clarifying the mechanism suggests potential for new medicines and treatment approaches.

Pancreas regeneration

Joint research with the Aichi Cancer Center, Gastroenterology Department at the University Hospital/Graduate School of Medicine revealed the world's first ever pancreatic regeneration, which had never been seen before. This suggests the potential for a basic remedy for pancreatic disease instead of supportive care that was previously thought to be the only way to treat diseases caused by inflammation of pancreas and other factors.

Minocycline to prevent osmotic demyelination syndrome by inhibiting activation of microglial cells

Treating the common disease hyponatremia may cause complications with osmotic demyelination syndrome (ODS). As of now, no effective cure has been found, meaning that the onset of this complication often results in death. Through joint research with the Research Institute of Environment Medicine, the Endocrinology and Diabetes department found that minocycline (a type of antibiotic substance) prevents ODS. This suggests the potential for new ODS treatments.

For more News Releases, see the link below

http://www.med.nagoya-u.ac.jp/medical/1796/index.html

Extension courses at Tsurumai Campus

Since 2005, the School of Medicine and the University Hospital have co-hosted an annual updated seminar specially designed for the general public. All themes are selected by considering social background or providing subjects that can be useful in the daily lives of the audience. Fortunately, a significant number of citizens participate in the seminars. The participants are of all

ages, from their 20's to their 80's, and include many repeat participants. The participants not only listen to the lectures, but also actively ask questions. With these seminars, the school has successfully played a key role in offering opportunities to boost interaction between the School of Medicine/University Hospital and the local community.

[History of extension courses at Tsurumai Campus]

Academic year	Seminar	Date	Number of participants
2005	In the news! What is metabolic syndrome?	December 10	About 100
2006	Ever-evolving cancer treatments: Heartening news and a good education	October 29	85
2007	Futuristic treatments within our grasp — is it really possible?!	October 27	65
2008	Breakthroughs with our aging population — You're getting older and so am I	October 4	About 130

[Extension courses held during 2009 academic year]

Building sound body and mind to stay independent

Date: November 21, 2009

Number of people participated: about 200

Japan now faces a society that is aging faster than any in our world history. Knowing that this issue was one of the most talked-about topics in Japan, the School offered seminars featuring the keywords "aging" and "nursing care". The seminars were given by three lecturers, promoting ideas for healthy aging and tips for successful home nursing.



[Extension courses held during 2010 academic year]

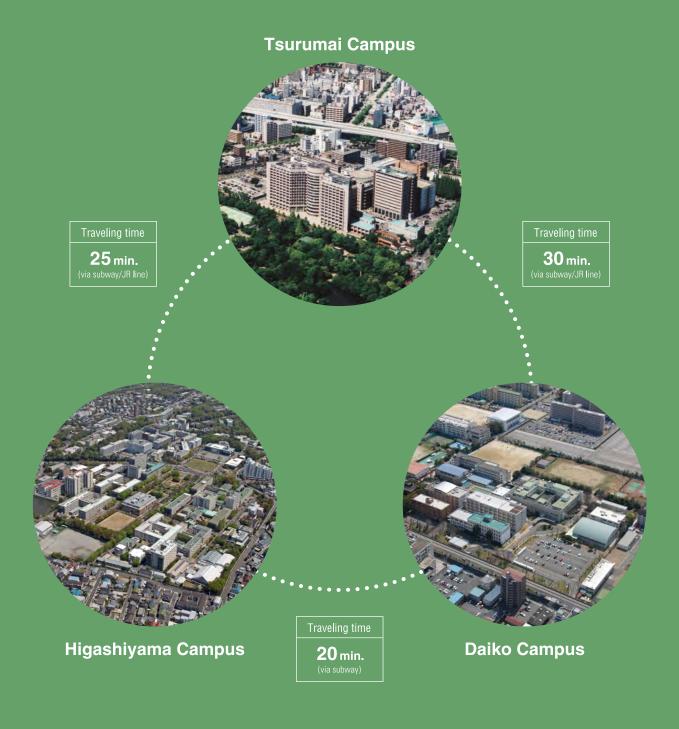
Food: A direct path to health

In Japan, the cost of social security benefits packages including medical care coverage have reached a record level, making disease prevention more important than ever. To respond to this trend, seminars were given on the topic of "nutrition", as one of the three core elements of health. Nutrition can also be thought of as "diet". Three lecturers gave seminars under the keywords of "lifestyle-related diseases", "compatibility of medicines and foods", and "nutrition for the elderly".



Date: November 20, 2010 Number of people participated: about 230

Locations



Tsurumai Campus map



(as of April 1, 2011)

- 1 Building for Medical Research
- 2 Annex, Medical Research
- Medical Science Research Building 1
- 4 Medical Science Research Building 2
- 5 Center for Research of Laboratory Animals and Medical Research Engineering (Division for Research of Laboratory Animals)
- 6 Radioisotope Center Medical Division

- 7 Human Anatomy Laboratory
- 8 Medical Library and Cafeteria
- 9 Welfare Facilities
- 10 Kakuyu Alumni Hall
- 11 Wards
- 12 Out-patients Clinic
- 13 Clinical Laboratory and Examination Center

- 14 Energy Center
- 15 Dormitory for Nurses A
- 16 Dormitory for Nurses B
- 17 Former Ward
- 18 Specialized Clinical Division*
- * facilities marked with an asterisk are being demolished

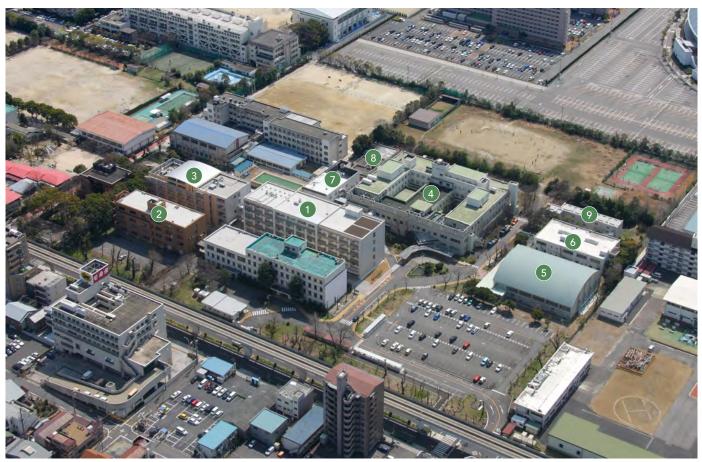
General Affairs Division	(3) Clinical Laboratory and Examination Center	7F
Personnel Affairs and Labor Group	12 Out-patients Clinic	4F
Student Affairs Division	Building for Medical Research	1F
Management and Planning Division	12 Out-patients Clinic	4F

Accounting Division	12 Out-patients Clinic	4F
Facilities Management Group	12 Out-patients Clinic	4F
Hospital Affairs Division	12 Out-patients Clinic	1F
Medical Service Division	(13) Clinical Laboratory and	2F/4F
Clinical History Management Section	2 Examination Center Out-patients Clinic	4F

[Guide map for Graduate School of Medicine/School of Medicine] (as of April 1, 2011)

12F	Orthopedic Surgery, Rheumatology, Otorhinolaryngology		
11F	Ophthalmology, Oral and Maxillofacial Surgery		
10F	Psychiatry, Neurosurgery		
9F	Gastroenterology, Nephrology, Neurology		
8F	Radiology, Department of Clinical Oncology and Chemotherapy		
7F	Hematology, Cardiology, Clinical Pathophysiology	Public Health and Health Systems, Occupational and Environmental Health, Division for Medical Research Engineering, Global COE Promotion Office	
6F	Respiratory Medicine, Endocrinology and Diabetes, Geriatrics	Preventive Medicine, Physiology 1, Physiology 2	
5F	Obstetrics and Gynecology, Pediatrics	Immunology, Cancer Biology, Molecular Carcinogenesis	
4F	Urology, Anesthesiology	Pharmacodynamics, Bacteriology, Neurogenetics	Lecture Room 4
3F	Gastroenterological Surgery 1, Vascular Surgery, Cardiac Surgery, Thoracic Surgery	Biochemistry 1, Biochemistry 2, Molecular Virology	Department of Metabolic Medicine, Department of Applied Immunology, Department of Renal Replacement Therapy, Biochemistry 2, Cardiology, Lecture Room 1, Lecture Room 2, Seminar Room
2F	Gastroenterological Surgery 2, Implant Surgery, Lacteal Gland/Endocrine Surgery, Emergency Department	Pathology 1, Pathology 2, Anatomy 1	Department of Molecular Cardiology Endowed Chair: Kowa, Department of Advanced Research of Gastroenterology, Human Nutrition and Molecular Pathology, Seminar Room, Lounge
1F	General Medicine, Department of Hospital Pharmacy, Convenience store	Anatomy 2, Anatomy 3, Legal Medicine and Bioethics, Division for Medical Research Engineering	International Affairs Office, Young Leaders' Program (YLP), Meeting Rooms, Changing Rooms, Administration Office
B1F	Meeting Room, Hand Surgery		
	Medical Science Research Building 1	Medical Science Research Building 2	Building for Medical Research

Daiko Campus map



(as of April 1, 2011)

- School of Health Sciences
- 2 Annex, School of Health Sciences
- 3 School of Health Sciences (East Building)
- 4 School of Health Sciences (South Building)
- 6 Gymnasium
- 6 Daiko Student Hall

- 7 Energy Center
- 8 Radioisotope Laboratory (60 Co)
- Researchers Village DAIKO

Land and buildings

Tsurumai Campus

Area (land) 89,137 m²

Location 65 Tsurumai-cho, Showa-ku, Nagoya

Buildings [building area] $33,108 \text{ m}^2$ [total floor area] $202,699 \text{ m}^2$

Name of building	Architecture	Building area (m²)	Total floor area (m²)
Building for Medical Research	RC4-1	1,651	6,585
2 Annex, Medical Research	RC5	695	3,158
3 Medical Science Research Building 1	S13-2	1,493	20,875
4 Medical Science Research Building 2	RC7	1,515	10,300
© Center for Research of Laboratory Animals and Medical Research Engineering (Division for Research of Laboratory Animals)	RC7-1	889	6,488
Radioisotope Center Medical Division	RC4·RC2	695	1,803
Human Anatomy Laboratory	RC1	301	301
Medical Library and Cafeteria	RC4-1	974	3,138
Welfare Facilities	RC3	308	760
™ Kakuyu Alumni Hall	RC3	550	1,354
11 Wards	S14-2	4,721	52,297
② Out-patients Clinic	RC4	5,309	19,446
(3) Clinical Laboratory and Examination Center	SRC7-2	5,881	43,612
14 Energy Center	RC3-1	903	3,199
(5) Dormitory for Nurses A	SRC10	675	6,158
10 Dormitory for Nurses B	RC6	563	2,741
17 Former Ward	RC6-1	1,584	14,525
® Specialized Clinical Division*	RC5-1	322	1,702
Others		4,079	4,257
Total		33,108	202,699

 $oldsymbol{st}$ facilities marked with an asterisk are being demolished

(as of April 1, 2011)

Daiko Campus

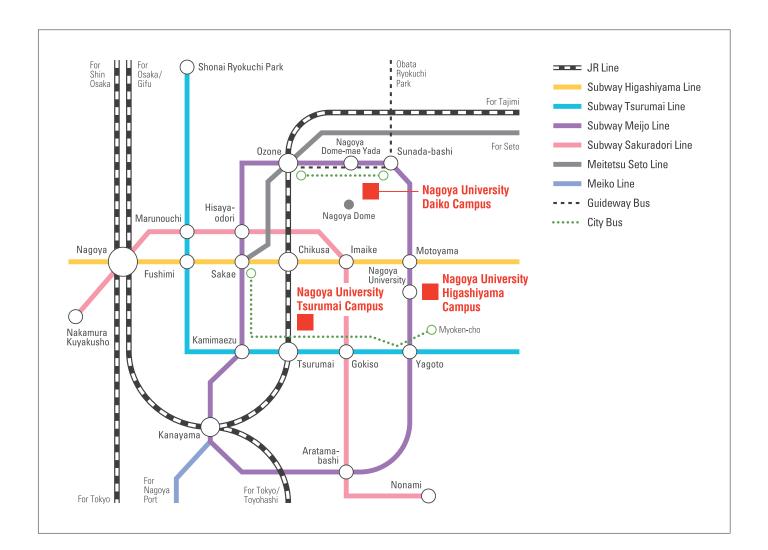
Area (land) 48,463 m²

Location 1-20 Daiko-Minami 1-chome, Higashi-ku, Nagoya

Buildings [building area] 10,712 m² [total floor area] 28,474 m²

Name of building	Architecture	Building area (m²)	Total floor area (m²)
School of Health Sciences	RC5	1,414	5,835
2 Annex, School of Health Sciences	RC4	579	2,431
3 School of Health Sciences (East Building)	RC4	1,040	3,331
4 School of Health Sciences (South Building)	RC4	3,021	8,067
5 Gymnasium	SRC1	1,369	1,369
6 Daiko Student Hall	RC2	678	1,338
7 Energy Center	RC2	606	894
8 Radioisotope Laboratory (60Co)	RC1	353	353
Researchers Village DAIKO	RC3	280	720
Others		1,372	4,136
Total		10,712	28,474

(as of April 1, 2011)



To Tsurumai Campus

- Take the JR Chuo Line to Tsurumai Sta. (Meidai Hospital exit), then walk 3 min.
- Take the Subway Tsurumai Line to Tsurumai Sta., then walk 8 min.
- Take the City Bus from Sakae Terminal to Meidai Byoin bus stop via Sakae Route No. 18 bound for Myoken-cho

To Daiko Campus

- Take the JR Chuo Line to Ozone Sta. (North gate), then walk 15 min.
- Take the Subway Meijo Line to Nagoya Dome-mae Yada Sta., then walk 10 min., or to Sunada-bashi Sta., then walk 7 min.
- Take the City Bus from Ozone Terminal to Meidai Daiko Iryo Center bus stop via Meieki Route No. 15 bound for Sunada-bashi
- Take the Guideway Bus to Nagoya Dome-mae Yada Sta., then walk 10 min., or to Sunada-bashi Sta., then walk 7 min.

To Higashiyama Campus

- Take the Subway Meijo Line to Nagoya Daigaku Sta.
- Take the City Bus from Sakae Terminal to Nagoya Daigaku bus stop via Sakae Route No. 16/17 bound for Nagoya Daigaku

TEL: +81-52-744-2008

Nagoya University

Graduate School of Medicine, and School of Medicine

