



Education: Nagoya University Student Association of Medical Research (LOVE LAB)

Nurturing and Expanding Aspirations to Becoming Physician-scientists



Nagoya University School of Medicine has dedicated a great deal of focus and resources on training and nurturing physician-scientists who will engage in basic medical research and who have research-oriented minds. "Nagoya University Student Association of Medical Research, otherwise known as "LOVE LAB," was established during the 2011 academic year.

From early in the undergraduate program, students are encouraged and supported to engage in research activities from the entire School of Medicine faculty. Students are given opportunities to network with other universities and receive financial support to go abroad for foreign study or interaction.

We asked the educator responsible for this project to discuss the appeal of LOVE LAB and its future outlook in a roundtable session with participating students.



The LOVE LAB offers unique support activities to Connect Student Interests with Best-Match Laboratories

Provide a brief overview of LOVE LAB and why you decided to participate

Kuroda: Nagoya University Student Association of Medical Research (LOVE LAB) is a research support project established in the 2011 academic year to encourage and nurture students who wanted to become researchers or had a strong interest in research. All 3rd-year medical students at the School of Medicine are required to participate in a program called Basic Medical Seminar where they engage in basic research for 6 months at a basic medicine laboratory. This program, now a key feature of Nagoya University's medical school, stimulates student interest in basic medical research and expands opportunities to pursue a research-related career, while LOVE LAB supports all medical student research activities throughout 6 full years of medical school. Opportunities are available for interested students to casually visit various laboratories and learn about their research. Two programs are available to provide various forms of support that allow students to continue at their laboratories even after Basic Medical Seminar is over. First, in the basic course before students are assigned to a specific laboratory, there are medical science cafe events where students have an opportunity to tour laboratories or hear directly from the researchers themselves about their research. If an undergraduate student wishes to join one of the research laboratories, they are given support for assignment to the laboratory of their choice. In the advanced course, once students are assigned to a specific laboratory, various opportunities are available to join progress reports meetings or Japan-wide joint retreats with other universities.

A KURODA, Keisuke
Designated Assistant Professor

M.D., Ph.D. Graduate from Nagoya University Graduate School of Medicine. Designated Assistant professor, Nagoya University Graduate School of Medicine. Division of specialization: Neuroscience

B MAEDA, Yuki
6th-year medical student at Nagoya University School of Medicine

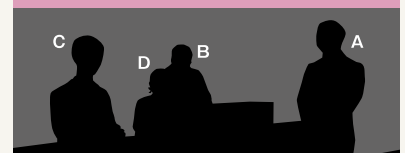
In the LOVE LAB, conducts research at Pathology and Biological Responses

C HASEGAWA, Tomoya
5th-year medical student at Nagoya University School of Medicine

In the LOVE LAB, conducts research at Neurogenetics

D OSAKO, Fumika
4th-year medical student at Nagoya University School of Medicine

In the LOVE LAB, conducts research at Functional Anatomy and Neuroscience





Osako: I was originally interested in research and chose Nagoya University because it has Basic Medical Seminar where I could experience research from early in my college career. However, once I actually started college, I had no idea what I could study or how to get in touch with the various laboratories. Starting in our freshman year, we toured the actual laboratories thanks to the LOVE LAB laboratory tour. At the medical science cafes, we heard stories from many professors which led to me find my research theme. In the summer of my freshman year, I received support for laboratory placement, and I've been there ever since.

Hasegawa: I'd always wanted to become a physician-scientist so when I was accepted to this university through a recommendation admission program, I started with the basic course which is a prerequisite. During my freshman year, I was assigned to Neurogenetics Laboratory for 2 weeks with LOVE LAB support and have continued there doing research in the advanced course.

Maeda: I was also accepted to this university by recommendation and participated in the basic course. However, I felt I needed to bolster my basic knowledge of sciences such as biology before being assigned to a laboratory and I waited until my 3rd year to complete my basic medicine courses before choosing a laboratory. That's why I didn't really start doing research at Pathology and Biological Responses until May of my 3rd year.

Kuroda: While all 3 students have utilized the LOVE LAB resources and are assigned to laboratories, the timing and reasoning for their choices are all different. There are various

patterns in how students begin their research and we hope to provide a variety of opportunities so that the students can choose what suits them best. During the freshman year, students rarely know what they want to study and even when they do, they don't quite understand how that might relate to the research being undertaken at the various laboratories. I feel that's where LOVE LAB plays a vital role in understanding these potential issues and helping students avoid mismatches which might actually cause them to lose interest.

Finding a theme that sparks your interest and dedicating yourself to research from as early as your freshman year

What kind of research are you currently involved in?

Hasegawa: In my lab, I study molecular hydrogen. I am currently trying to discover what mechanisms are involved in biological effects of molecular hydrogen, and how they may be useful in treating diseases such as Parkinson's disease and stroke where oxidative stress plays a pathogenic role. This type of ambitious theme is something you can only attempt as an undergraduate, and I've received support to present at academic meetings and retreats. Thanks to these opportunities to present and discuss my research at LOVE LAB, I won first prize for my presentation at Basic Medicine Seminar during my 3rd year.

Osako: I belong to Functional Anatomy and Neuroscience laboratory and recently, I've been studying a cell known as peripheral nerve macrophages. They're well-known immune cells that are involved in nerve development. Since they may be associated with demyelinating diseases and inflammatory diseases, I am investigating the developmental stage of nerves.

Maeda: My research theme is asbestos-induced carcinogenesis. Asbestos is a well-known cause of malignant mesothelioma, but the carcinogenic mechanism remains unknown. I am focusing on how iron affects mesothelial cells, and specifically how iron may be involved with asbestos-induced carcinogenesis in an attempt to establish a new treatment for malignant mesothelioma.

Kuroda: Every year 100 to 110 students enroll in our School of Medicine program and approximately 60 to 70 percent of those students go on to the graduate school program. In other words, the majority of students expect

to engage in research at some point in their future. However, as the students have pointed out, university-level research is extremely advanced. Therefore, students can utilize the LOVE LAB resources to deepen their understanding towards research or identify a research theme for Basic Medical Seminar or receive support to continue research after the seminar is completed or assist in ensuring their research activities go smoothly after starting graduate school.

Interaction enhances aspirations illuminating new worlds to discover

What makes LOVE LAB so special and important?

Maeda: Those who are currently doing research are still a minority among all of the medical school students and they may sometimes feel isolated. LOVE LAB offers joint retreats or progress report meetings with other universities in Japan such as the University of Tokyo, Kyoto University, and Osaka University. By interacting with other universities and other students and hearing their stories, students feel less isolated, that they are not the only medical students doing research and encouraging them to work hard. This is a major advantage of these networking opportunities. Through these interactions among students, an advantage is that you can expand on approaches to research. Progress report meetings provide freshmen with an opportunity to directly experience research firsthand.

Hasegawa: Progress Report Meetings are held in small groups and most participants are students so you can feel less intimidated about asking questions freely regardless of content. Not only do you learn about other



areas of research, but you learn to engage in active discussions, and this allows you to hone your basic presentation skills. Since you meet older students who are juggling didactic curriculum with research, you learn how they got through it and this is very useful. And more than anything, LOVE LAB provides



financial support for academic meetings, a huge advantage for an integral part of research activities.

Maeda: Absolutely. Last year, Hasegawa and I went to a research meeting at Korea University in South Korea attended by medical students from all over Asia and gave research reports in English. Just the other day, I participated in a symposium at the General Assembly of the Japan Medical Association and was given an opportunity to present as a symposiast although I am still just a medical student. Through LOVE LAB, I have been given huge opportunities beyond anything imaginable and I have been grateful for the chance to learn so much from my experiences.

Osako: I can't help feeling motivated after participating in these academic meetings and retreats. They give me an opportunity to acknowledge that "there are so many students engaged in research" and I find myself greatly stimulated by the honest dialog and discussion with students from other grades or schools. The retreats held in our school provide opportunities to discuss a wide range of topics with a drink in hand in a relaxed and free environment.

Kuroda: The advantages of LOVE LAB is that like club activities, there are few restrictions and students are free to engage in research that suits their style. You see this type of atmosphere during retreats, too. Of course, it takes a lot of work to bring your research to the point where you can present, but support from LOVE LAB is what gives many students

the chance to try attending and presenting at academic meetings and retreats.

Hasegawa: Another advantage is that there are mentors such as Professor Kuroda who act as our go-betweens with various laboratories, facilitating our activities. As a student, it would be very difficult to suddenly visit a professor's laboratory, but educators like Professor Kuroda give us information on various labs and this is extremely helpful.

*To save patients waiting
100 years in the future*

Tell us your outlook for the future

Kuroda: At the core of our initiative is Basic Medical Seminar that Nagoya University has continued to offer for over 30 years. We gather students seeking to conduct research through admission by recommendation programs and LOVE LAB supports these research activities. Thanks to these initiatives unique to Nagoya University, there has been a definite increase in students who enter our university aspiring to become physician-scientists. We are creating an environment conducive to supporting students who actively seek out research opportunities and hope to take this even further. In the future, we will expand our approach to high school students and believe we need to change the mindset of those laboratories that will be training these students.

Hasegawa: In order to increase the number of students who take advantage of the LOVE LAB resources, it is important to ensure that students are informed before admission. I'm also interested in how I personally can continue my research activities in the future. As more undergraduates get involved in research, we, as students, will have to consider how we can continue to pursue research opportunities after graduation. The university and university hospital should also offer ways to support students and graduates by offering programs and suggesting career paths that will allow us to continue doing research while acquiring clinical experience to ultimately become true physician scientist researchers.

Osako: I agree. After hearing your opinions, what really stood out for me was that almost all the activities mentioned were approaches by the university. Now it's our turn as students to share our opinions on what we need to continue conducting research. We are the pioneers responsible for changing the status quo where physician-scientists continue to decrease.

Maeda: Thanks to support from LOVE LAB,



I was able to participate in an academic society conference and receive guidance from our professors to continue research, I believe it is my role to help younger students understand this. I also hope to share how much fun we have with LOVE LAB and appeal the advantages of the encouraging environment provided by Nagoya University to others outside our institution and teach other students that the physician-scientist is a viable career choice. Of course, the physician's job of helping the patient before you is both worthy and a clear path to pursue. However, when it comes to basic research, you have to understand it takes perhaps 50 to 100 years before we get to see research results come to fruition. But licensed physicians also need to engage in scientific research. If doctors comprehend the significance of basic research which provides the foundation of future medical care while they are still in medical school, I am sure more people will pursue careers as physician-scientists.

Kuroda: Nagoya University School of Medicine should be engaged in nurturing graduates with a research-oriented mind. Although it is sometimes difficult to envision how basic research is going to help society, it is our current research that will eventually form the foundation for cures that save tens or hundreds of thousands or even millions and billions of people 100 years in the future. LOVE LAB is dedicated to passionately educating medical students on how appealing the career of a physician-scientist can potentially be.





Research: Nagoya University three medical and pharmaceutical departments exchange symposium

Research collaborations to create the next generation

Associate Professor of Tumor Pathology, Graduate School of Medicine **ENOMOTO, Atsushi**



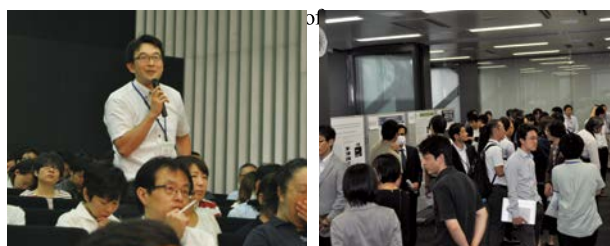
Commenced exchange symposium with Graduate School of Medicine, Graduate School of Pharmaceutical Sciences, and Research Institute of Environmental Medicine

In recent years, graduate schools in medical fields are anticipated to contribute to pharmaceutical research in addition to conventional medical education, basic medical research, and clinical medical research. In addition, the importance of industry-academia collaboration has become increasingly clear with organizations distributing various types of competitive research funds to support research that can be applied to drug development. Fundamentally, producing results that lead to drug development should be one of the purest motivations for many medical researchers. That is why universities need to pursue the kind of pharmaceutical research that cannot be conducted by pharmaceutical companies or startup companies.

Under these circumstances, Nagoya University has held the “Nagoya University three medical and pharmaceutical departments exchange symposium” with the Graduate School of Medicine, Graduate School of Pharmaceutical Sciences, and Research Institute of Environmental Medicine annually since 2016. One of the highlights of this exchange symposium is the opportunities for a few young researchers to lead the symposium to improve their research abilities, regardless of their presentation styles or format. Since the first symposium, young researchers from Graduate School of Pharmaceutical Sciences,

Research Institute of Environmental Medicine, and Graduate School of Medicine, have been taking turns leading the symposium, and it will be hosted by the same order hereafter. The symposium consists of oral and poster presentations and discussions by young and senior researchers from each department and special lectures by guest researchers, and with 100 to 150 participants each year. An information exchange meeting follows the symposium.

The purpose of this symposium is to share information about research done by each department and to seek opportunities to establish research collaborations. The Graduate School of Medicine has important clinical research subjects, clinical data and samples, the Research Institute of Environmental Medicine studies about various tissues in vivo • organ homeostasis and its functions from a unique perspective, and the Graduate School of Pharmaceutical Sciences focuses on structural biology and highly specialized research such as drug discovery science. The first symposium featured a researcher





drug transporters, and last year we also had a special lecture from a researcher of an artificial intelligence in drug discovery which promoted a big response from the audience. When a young researcher who had just returned from studying abroad gave a presentation in the latest development in a research field that was a hot

topic at the moment, there was a surge of energy in the audience with some attendees exclaiming, "I can't believe I can hear about that here!" I have a clear memory of hearing the details of the latest innovation in pharmaceutical research that had been a top of interest on TV and in the newspapers during a poster session. It left a deep impression on me.

Deepening interaction triggers research collaboration

Thanks to this exchange symposium, research collaborations between the Higashiyama and Tsurumai campuses is spreading. We established a research collaboration with researchers from the Research Institute of Environmental Medicine regarding fibrosis of fat and inflammation which is currently in progress. Thinking about research collaborations with this experience in mind, I got the feeling that such collaborations start naturally when researchers have the opportunity to hear and get to know about the work of other researchers, and have the chance to speak about their own work at academic conferences. Although some research collaborations get started out of a sense of obligation, such collaborations don't often turn out to be very enjoyable. In that sense, I believe that the Higashiyama and Tsurumai campuses ought to be psychologically closer, and that opportunities to learn more about each other's research should be increased. Since this symposium aims to produce deep collaboration between departments, we are planning retreats which provide opportunities to give presentations and to communicate among researchers.

Research collaboration beyond Nagoya University, and its foothold of the next breakthrough

Researchers from other universities also frequently participate in this exchange symposium, in addition to the researchers from three departments within the university. So far, researchers from Gifu Pharmaceutical University, the Institute for Molecular and Cellular Regulation from Gunma University, Center for Highly Advanced Integration of Nano and Life Sciences, Gifu University (G-CHAIN) have participated. RaQualia Pharma

Inc (RaQualia) based in Nagoya University has also been a participant since the third symposium. At the symposium, both RaQualia and the Graduate School of Medicine presented about our research collaboration taking place in RaQualia which sprang from basic research from the Graduate School of Medicine. I certainly witnessed the on-going industry-academia project at that time.

I have also heard that a research collaboration on iron sensitive fluorescent probe between Gifu Pharmaceutical University and Nagoya University Graduate School of Medicine is currently under way. A PhD student I supervise who is hoping to launch a drug innovation startup company receives valuable advice from RaQualia. As a result, this symposium has led not only to research collaborations within departments in a same university, but also to collaborations beyond the boundaries of universities.

The Tokai National Higher Education and Research System (THERS) will be established in the next fiscal year, and Nagoya University and Gifu University are scheduled to be placed under its umbrella. In order to link the establishment of THERS to new industry-academia research collaboration and improvement of international branding, it will be essential to produce the kind of research results that cannot be produced by a superficial connection but by deep integration. Nagoya University has a long history of glycan research, and produces some of the leading results in this field in Japan. It is hoped that this symposium will strengthen cooperation with Gifu University's G-CHAIN, which is also producing outstanding results in the field of glycan research. As a result, we hope that Nagoya University will make major breakthroughs in the field of drug discovery and other fields, and will establish the distinctive research contents and research base unique to the three departments.

第3回 名大医薬系3部局(創薬/環医/医)交流シンポジウム
 ~岐阜薬科大学・岐阜大学G-CHAIN・ラクオリア創薬合同シンポジウム~

2018年11月30日(金)
 10:00-17:30(9:30-受付/18:00-情報交換会)
 親野キャンパス医系研究棟1号館地下会議室
 参加登録受付中・当日参加可能

特別講演(16:20)
 東京医科歯科大学 田中博先生
 「AI創薬の研究の現状と展望」

Speaker
 10:05 医学系研究科 竹森幹人「Gタンパク質と薬理薬理」
 10:35 環境医学研究所 中沢由華「ケム不安定性を示す遺伝性疾患の分子病態」
 11:05 創薬科学研究科 山口鼎英「抗菌活性を持つ核酸系天然物をリードとした創薬研究」

13:15 ラクオリア創薬産学協同研究センター 川村清「名古屋大学のシーズから新薬創出へ、新規心不全治療薬の創薬研究」
 13:45 岐阜薬科大学 井上直樹「感染動物モデルを用いた先天性サイトメガロウイルス感染における防御免疫、免疫回避、免疫経路の解析」
 14:15 岐阜大学 木塚康彦「N型細胞の枝分かれ構造の生合成と疾患との関連性」

ポスター発表 11:35-13:15 / 14:45-16:15

連絡先: 医学部 櫻本篤・創薬 兒玉哲也・環医 濱口博之

Logos: RaQualia, G-CHAIN, and other participating institutions.



Global: GAME (Global Alliance of Medical Excellence)

The world's top level international collaborative program

Professor of International Medical Education,
Graduate School of Medicine **KASUYA, Hideki**



An unprecedented international network between medical schools

GAME is an international collaborative network that was established in 2017 by Prof. Francis Chan, Dean of school of Medicine, the Chinese University of Hong Kong, taking initiative in gathering the world's top-level medical schools. Currently, GAME is formed with 9 universities; Nagoya University, the Chinese University of Hong Kong (Hong Kong), Korea University (South Korea), Monash University (Australia), Ludwig-Maximilians-University Munich (Germany), Erasmus University Rotterdam (Holland), the University of Bologna (Italy), the University of Nottingham (UK), and University of Alberta (Canada).

According to the World University Rankings 2019 from the UK's THE (Times Higher Education), these universities rank as follows. 53rd in The Chinese University of Hong Kong, 198th in Korea University, 84th in Monash University, 32nd in Ludwig-Maximilians-University Munich, 70th in Erasmus University Rotterdam, 180th in the University of Bologna, 149th in the University of Nottingham, 132nd in University of Alberta, and 301-350th in Nagoya University. There are many inter university consortia, but such an international program consisting only some of the world's top-level medical schools and graduate schools of medicine is very unique.

The purpose of GAME is to promote innovative medical education, and to undertake impactful research that influences the world. To pursue this goal, we will strengthen the international network that connects prominent research in each field, through strategic, cross-disciplinary and will promote long-term collaborative education and research. Representatives from the member universities have an annual meeting and discuss development of the program and launch new initiatives.

Summer camp where students learn in a different country

In GAME, in order to promote exchange between both undergraduate and graduate students among member universities, a basic agreement for student exchange was signed off. With this agreement, we seek to secure opportunities to undertake short and mid-term clinical clerkships and visits to research laboratories.

Moreover, the first 5-day "GAME summer camp" will be hosted by Nagoya University from July 29 to August 2, 2019. At the camp, medical students from member universities have opportunity to learn by sharing experiences with local academics and students, gain an international perspective, broaden their networks, and finally, to partake in a culturally different way of life. The theme of this summer camp is "Medical Professionalism in Disaster Conditions." The theme was chosen due to the fact Japan is known as one of the countries most affected by natural disasters. Japan has always suffered from frequent earthquakes, volcanic eruptions, damages caused by typhoons, and a nuclear accident caused by tsunamis. This has led to the establishment of Nagoya University's Disaster Mitigation Research Building (DMRB) at the Higashiyama campus, a cutting-edge research facility that researches ways to reduce the damage caused by disasters. DMRB aims to develop the latest disaster reduction research and create a mitigation model for the region. The summer camp participants from member universities will not only visit the DMRB but also areas

| Create | Enhance | Facilitate |
|---|---|---|
| To create a greater impact on health science & medical education and achieve sustainable outcomes | To enhance global networks of research excellence in complementary fields and disciplines | To facilitate member institutions to achieve strategic, cross-disciplinary, long-lasting and impactful collaborations in research and education |

that are difficult to reinhabit in Fukushima prefecture that were heavily damaged by the tsunamis. They will visit medical institutes that were affected by the disaster and receive lectures about medical professionalism and how medical workers made decisions at the time of earthquake under intense pressure. In addition, they will learn triage classifications in disaster conditions, role-sharing between leaders and other team members as well as precautions for dealing with compression injuries.

Toward a leading position in international joint education and international research collaboration

Nagoya University and the Chinese University of Hong Kong are in the process of establishing a joint educational program to promote innovative medical education. When it is established, this will be our 5th international joint educational program followed by Joint Degree programs* with University of Adelaide, Lund University, and University of Freiburg, along with a student exchange program with the University of North Carolina at Chapel Hill.

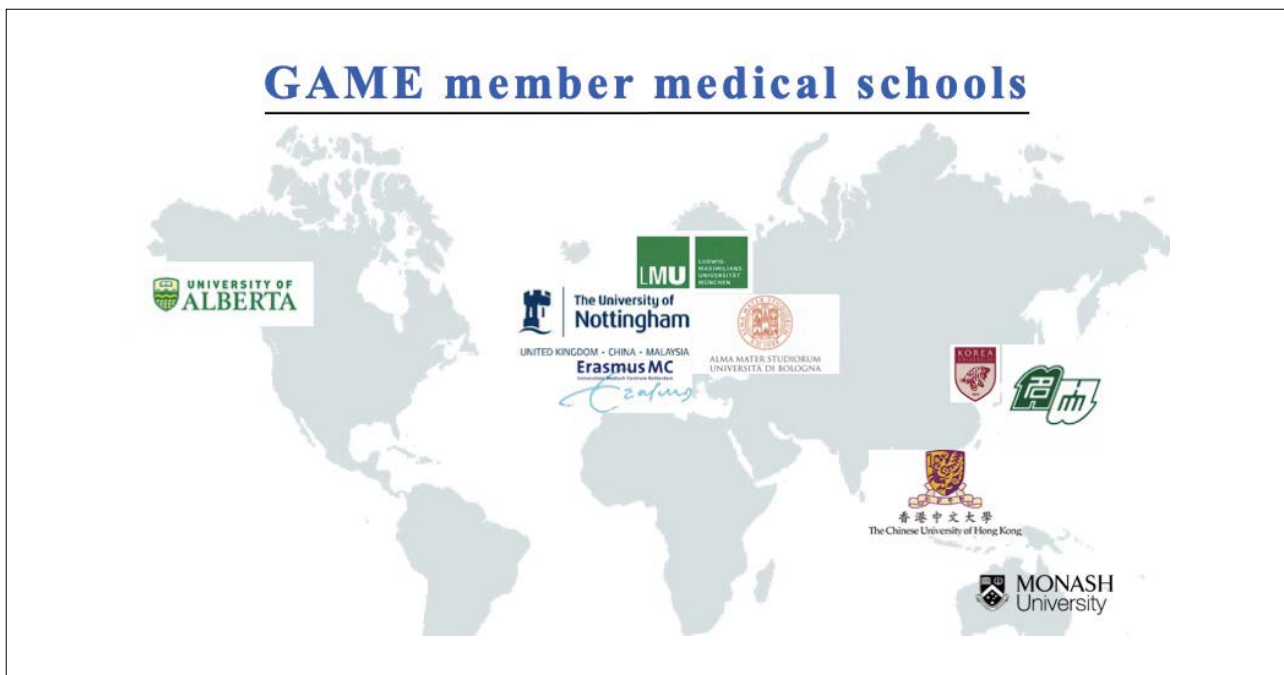
Another of GAME’s commitments is to generate research with a global impact. Each university proposed research themes and the 9 themes in Chart were chosen. The research is being conducted under the supervision of a leader from each university. Data will be collected from member universities, and the research paper is scheduled to be published as an international co-authorship. From Nagoya University, “International Collaboration for At Risk Cohort of Lewy Body Disease” has been proposed as a research theme by Prof. Masahisa

Katsuno from Neurology. Immediately following the establishment of GAME as a joint program, the 3rd annual meeting will be held at Korea University from September 26 to 27, 2019. Member universities are very enthusiastic about the meeting and as a member, Nagoya University will explore the possibilities of international joint education and international research collaboration. Through GAME that will innovate and have a global impact on education and research.

***Joint Degree program**

A single academic degree jointly conferred on students who have completed a single joint educational program established by the partner universes.

| Impact Research |
|--|
| Building a Magnetic Resonance Imaging Consortium Leading University: University of Nottingham |
| Building a Research Network in Preventive Gerontology Leading University: Monash University |
| Collaboration in Health Data Management Leading University: University of Alberta |
| Healthy Start Network Leading University: Erasmus MC |
| International Collaboration for At Risk Cohort of Lewy Body Disease Leading University: Nagoya University |
| International Microbiota Research Network: Gut Microbiota Across Ethnicities and Populations Leading University: The Chinese University of Hong Kong |
| International Network of Drug-induced Liver Injury Research Leading University: Ludwig Maximilian University of Munich |
| International Online Barrett’s Esophagus Registry (IOBER) Leading University: University of Bologna |
| Transnational Educational Initiative (TEI) Leading University: Korea University, Nagoya University |





150th anniversary of the founding

History and Future of Nagoya University School of Medicine

Professor of Obstetrics and Gynecology,
Graduate School of Medicine **KIKKAWA, Fumitaka**



Photograph of the School of Medicine in 1958

Temporary public hospital, temporary medical school

In May 1871, a temporary public hospital was established at the former site of the Nagoya Clan's judicial council in response to a request for the establishment of a western medical hospital, followed by a temporary medical school which was established at a former town hall. From this humble beginning, Nagoya University School of Medicine has continued its development to this day, and will celebrate the 150th anniversary of its founding in 2021.

The temporary public hospital closed in February 1872 due to abolition of feudal domains and establishment of prefectures, and in August of the same year the temporary medical school closed due to education system reform.

With donations, it re-opened as Alms clinic, but closed again in February 1873 due to financial difficulties. With the help of Moritome Iseki, a prefectural governor, the temporary hospital re-opened at the separate temple of Nishi Honganji Temple. At the same time, Dr. Junghans, an American physician, was invited with under a three-year employment contract. In November of the same year, a medical training school was established and started lectures in English.

Aichi Prefectural Hospital • Public Hospital • Public Medical Center • Public Medical School

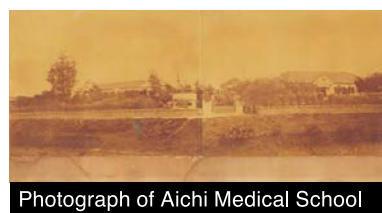
The temporary public hospital was re-named Aichi Prefectural Hospital in January 1875, and then changed from the prefectural hospital to the public hospital in April of 1876. A medical training school also changed to Public Medical Training School and then changed to Public Medical Center in June. An Austrian medical doctor, Albrecht von Roretz arrived as a successor to Dr. Junghans in May 1876, at which time the language used in the lectures was switched from English to German.

The Public Medical Center gained trust as technology advanced, and a new hospital and school were built on a 4.65 ac (18,842m²) site on the former Senga residence site in Tennohaki-cho near Horikawa River. In July 1877, the opening ceremony was held. In April 1878, its title was changed from Public Medical Center to Public Medical School. The function of the hospital and medical school were enhanced by the establishment of an anatomic station, Okazaki Branch Hospital,

and a contagious sick house, and by providing more courses and issuing the latest medical reports. Dr. Roretz's achievements were great, and after extending his contract by one year, he retired in April 1880 and left Nagoya. In May of the same year, Shinpei Goto became the vice-principle of the school and contributed to its subsequent development.

Aichi Hospital • Aichi Medical School

In September 1881, the public hospital became Aichi Hospital, and in October, the Public Medical School was renamed Aichi Medical School. In addition, Shinpei Goto was appointed as Director of Aichi Hospital and Principal of Aichi Medical School and served in that capacity until January 1883. In May 1882, the Japanese medical school system was reformed, which led to medical schools classified into two classes. Class A (to educate in general medicine), and class B (to provide intensive training with simple medical education). Aichi Medical School was classified as class A in April 1883. Aichi Hospital had three departments: internal medicine, surgery, and ophthalmology. However, in November 1889, a women's department was established to treat gynecology and pediatrics patients. In April 1893, in order to allow junior high school graduates to enter the medical school, a 2-year college preparatory course was set up with a capacity of 200 students. In May 1894, the Aichi Medical Association was formed in the medical school, and in July of the same year, the first issue of Aichi Medical Association Journal was published, and later to be Chuo Medical Association Journal. In July, a training center for midwives and nurses was built on the medical school campus. In September 1900, the alumni association was organized, and in October, a kick-off meeting was held, and in December, the first issue of the alumni booklet was published.



Photograph of Aichi Medical School

Aichi Prefectural Medical School

In August 1901, the name of Aichi Medical School was changed to Aichi Prefectural Medical School, and in July 1903, it was promoted to Aichi Prefectural Medical College. This 4-year college offered courses in Ethics, Anatomy, Histology, Physiology, Pathology, Pharmacology, Internal Medicine, Surgery, Ophthalmology, Obstetrics and Gynecology, Hygiene, Legal Medicine, Physics, Chemistry, German, and Physical education. In July 1905, an Otolaryngology department and a Dermatology and Venereal Diseases department are newly added due to reorganization of the hospital body. In February 1910, it was decided to attach a graduate school to Aichi Prefectural Medical College. In March 1911, Surgery III, which is equivalent to

today's Orthopedic Surgery, was added. (Surgery III was renamed Orthopedic Surgery in March 1920.)

In March 1914, a new school and hospital building were completed in the present Tsurumai district, and lectures and medical services started in April of the following year. One of the subjects, Physics was changed to Medical Electrical Engineering in October 1909, but it was renamed as the Physical Therapy Department in April 1916. Also, in the following year, A Dentistry department opened as well.



Photograph of Aichi Prefectural Medical College

Aichi Medical college and Nagoya Medical College

The president, faculty, alumni association, prefecture and city council, and medical association petitioned the government, resulting in Aichi Prefectural Medical College was promoted to Aichi Medical College in July 1920.

With the support of college authorities, alumni association, prefectural council, city council, city educational association, and newspaper companies, it was promoted to a national university and changed to Nagoya Medical College in May 1931. Therefore, preparatory course for Aichi Medical College was closed with its last graduates in March 1933.

Nagoya Imperial University

As a result of repeated negotiations with the government, Nagoya Imperial University, consisting of the School of Medicine and the School of Science and Engineering was became a reality in April of 1939. The School of Medicine was formed with 24 departments; 3 Anatomy departments, 2 Physiology departments, Biochemistry, 2 Pathology departments, Pharmacology, Bacteriology, Hygieneology, Legal Medicine, 3 Internal Medicine departments, 2 Surgery departments, Orthopedics, Obstetrics and Gynecology, Ophthalmology, Psychiatry, Pediatrics, Dermatology and Urology, Otolaryngology.

Nagoya Imperial University Provisional Affiliated Medical Division was urgently established in May 1939 due to the rapid increase in demand for military physicians due to the influence of the Sino-Japanese War, and after the war, the last graduates were produced in 1950. Moreover, in September 1941, an affiliated hospital component opened with the donation of Mutsuda Building in Higashi-Shincho in Naka Ward and was renamed a branch hospital of Nagoya Imperial University School of Medicine-Affiliated Hospital in 1944.

Nagoya University

From October 1947, the name Nagoya Imperial University was changed to Nagoya University.

The announcement of the National School Establishment Law in May

1949, led to launching the university under the new education system. At that time Nagoya University School of Medicine -Affiliated Hospital was changed to Nagoya University Hospital. In April 1953, the first Graduate School was established in Nagoya University, and two years after that, the Graduate School of Medicine was established. A branch hospital of Nagoya University School of Medicine-Affiliated Hospital was relocated to a new building in Higashimonzen-cho in Higashi ward in September 1961. It was later moved to the current location, Daiko, in July 1975, and Nagoya University Medical Technology Junior College being established in October 1977.

In April 2000, prioritization of the School of Medicine in the Nagoya University Graduate School was completed and the system was reorganized to a graduate school-centered system. In April 2004, Nagoya University embarked on a new journey as a national university corporation. In March 2018, Nagoya University was selected as Designated National University by the Ministry of Education, Culture, Sports, Science and Technology (MEXT), and the Graduate School of Medicine started to promote world-leading educational research activities. Over its 150 years of history, Nagoya University School of Medicine has undergone great change and transformation. The reformation in last quarter of the century has been remarkable, and Graduate School of Medicine has transformed into a large organization which includes 56 divisions of Basic Medicine (including cooperating and partnership fields), 53 divisions of Clinical Medicine (including cooperating fields), 6 divisions of Clinical Pharmacology, 9 divisions of Neurological Diseases and Cancer, 12 Endowed Chairs, 3 Industry-Academia Collaborative Chairs, and other affiliated hospitals and centers.

Furthermore, as Nagoya University approaches the celebration of the 150th anniversary of its founding in 2021, the Nagoya University School of Medicine continues its plans to improve its brand recognition and become a campus that will form a part of the identities of everyone related to it, and forever hold a place in their hearts. Additional plans include rebuilding the experimental animal facility, issuing 150-year history commemorative books, and holding a commemorative ceremony. On this occasion, the 150th anniversary, we hope for the continued developments of the Nagoya University Graduate School of Medicine and School of Medicine.



Photograph of the School of Medicine in current