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The Nagoya University Academic Charter

In recognition of the unique role of seats of learning and their historical and social missions, this document establishes the guiding principles for scholarship at Nagoya University. Nagoya University maintains a culture of free and open-minded academic endeavor and aspires to contribute to the prosperity and happiness of all people through research and education in those fields studying human beings, society, and the natural world. Above all, it aims to foster the harmonious development of humanity and science, to conduct advanced research, and to provide an education that encompasses the full range of the humanities, the social sciences, and the natural sciences. To these ends, we outline below the goals and guidelines for carrying out the required measures for continuing to perform our duties as a leading university.

1 Fundamental Objectives: Research and Education

- 1) Nagoya University, through its creative research, shall pursue truth and produce world-leading intellectual achievements.
- 2) Nagoya University, through an education that values independent thinking, shall foster individuals who possess intellectual courage, the power of rational thought, and imagination.

2 Fundamental Objectives: Contribution to Society

- 1) Nagoya University shall spearhead scientific research and foster individuals capable of exercising leadership both in the domestic and international arenas so they can contribute to human welfare, the development of culture, and global industry.
- 2) Nagoya University shall put to good use the specific qualities of the surrounding community and, through multifaceted research activities, contribute to the development of the region.

3) Nagoya University shall promote international academic co-operation and the education of international students. It will contribute to educational and cultural exchange with other countries, especially those in Asia.

3 Fundamental Policies: Research and Education System

- 1) Nagoya University shall study the humanities, society, and nature from an inclusive viewpoint, respond to contemporary issues, and change and enrich its education and research system to generate new values and a body of knowledge based on humanitarian values.
- 2) Nagoya University shall support an education system that inherits and develops intellectual resources cultivated from the world's intellectual traditions. It will promote advanced and innovative education.
- 3) Nagoya University, through disseminating information, exchanging people, and cooperating with institutions in Japan and abroad, shall create the foundation for an international academic culture.

4 Fundamental Policies: University Administration

- 1) Nagoya University shall always support scientific inquiry based on the autonomy and initiative of its members, guaranteeing them the right to freely conduct their research.
- 2) Nagoya University shall ask its members to take part in the formulation and implementation of our foundational principles for research and education and the objectives and policies for administration.
- 3) Nagoya University, aspiring to be an open and accessible university, shall promote both internal and external independent assessment and evaluation of its research, education and administration.

Greetings from the President

Nagova University has a history of 146 years, with its roots in a temporary medical school/hospital established in 1871. Once the last university to become a Japanese Imperial University in 1939, our University has since then continued to achieve significant growth. We've maintained a tradition of having a free and vibrant academic culture, and after setting a high basic objective in the 2000 Nagoya University Academic Charter, we have worked hard to achieve that objective. The fact that 6 out of the 16 Japanese Nobel laureates who were awarded in the 21st century clearly shows that our research abilities are top class on a global scale. Nagova University. throughout its long history, has produced many leaders in various areas of society and introduced them to the world, and thus contributed to the development and growth of not only Japan but also the world.

In recent years, our university has been focusing on further strengthening our research and educational abilities while simultaneously investing our full efforts towards internationalization, gender equality, and social contribution. In regards to internationalization, we are taking 3 different approaches. The first is to move away from a one-dimensional perspective focusing on the West towards a multi-dimensional perspective. Asia is the highest priority area. The second is the invigoration of bilateral student exchange, and the third is strengthening English education in support of internationalization. Talented individuals from around the world have gathered in our campuses, forming an environment in which students or researchers can interact with each other on a daily basis.

In addition, in regards to gender equality, our university has not only established nursery care facilities, but also pioneered the establishment of Afterschool programs for elementary school children ahead of the national universities around the country. By supporting and expanding the scope of employment of female researchers, we have been attracting talented female researchers from around the country. As the result, Nagoya University was selected, as the only Japanese university, to be one of 10 universities around the world by UN Women to support the HeForShe Campaign.

Meanwhile, much has been expected of us as the core university within an area with the highest concentration of the manufacturing industry. To meet and exceed those expectations, we have cooperated closely with the government, local governments, private industries, other universities, and citizens to pursue various collaborative projects in order to create a vigorous community that is prepared to greet the future and to promote exchange with the world. Moreover we have introduced new systems for these several years and achieved great results.

Our university is a future-oriented university. And our goal is to foster human resources who have high aspirations to contribute to society, have deep specialty and broad perspectives, and are able to exhibit leadership in various fields. Innumerous challenges may await us on our path to the future, but I believe from the bottom of my heart that, together with various people from our society, we will be able to continue moving forward with courage and contribute to creating a Japan, and furthermore a world, that is bright and full of hope.

Dr. Seiichi MATSUO

- 1981 M.D., Ph.D., Nagoya University
- 1986 Research Associate, School of Medicine, Nagoya University
- 1997 Associate Professor, School of Medicine, Nagoya University
- 2002 Professor, Graduate School of Medicine, Nagova University Director Clinical Department of Nephrology Nagova University Hospital
- 2004 Vice-Director, Nagoya University Hospital 2007 Director, Nagoya University Hospital
- 2009 Vice-President, Nagoya University
- 2015 President, Nagoya University

Area of Expertise

General internal medicine (including psychosomatic medicine Kidney internal medicine



Dr. Seiichi MATSUO Nagova University

Nagoya University: A Designated **National University**

The designation system for national universities is a strategic and practical initiative that endeavors, through promoting the world's highest level of education and research, to realize a positive cycle of attracting talented people and strengthening research capabilities while at the same time obtaining evaluations and support from society. The Minister of Education, Culture, Sports, Science and Technology (MEXT) only selects for designated national university status those national universities that can, within a time period specified by themselves, realize with certainty their proposed programs. Designated universities are expected to play a role in promoting national university reform, and to actively disseminate their influence on social and economic development as well as the specific achievements of their programs.

In order to carry out the above mission as a specially designated national university, Nagoya University will move forward with the efforts outlined in "Nagoya University Proposal to Become a Designated National University", contributing to world peace and society's sustainable development as a world-leading university.

Executive Summary:

Nagoya University Proposal to Become a Designated

National University

The youngest of the former imperial universities, Nagoya University was founded in 1939. It is located in the Greater Nagoya Region of central Japan, the country's manufacturing belt. Our history as a comprehensive university is shortest among the seven former imperial universities and we are also the smallest. Our free and open academic culture has been the springboard for many remarkable research achievements. This is due to Nagoya University's collegial atmosphere which has nurtured a number of outstanding contributors to society. Among our alumni, for instance, are some of Japan's most prominent industrial leaders. From current and former faculty, we also can name recipients of six Nobel Prizes since 2001. Further, we lead other universities in engaging with the countries of Asia. We are also working hard to support our female faculty and staff.

As stated in the NU MIRAI 2020 policy document, Nagoya University's central medium-term goal is to rise to the rank of an elite research university. This will allow us to contribute to the peaceful co-existence and sustainable development of society. We are reforming our management so we can better develop talented people who will lead the next generation. To stimulate innovation and contribute to the search for truth, our faculty members pursue groundbreaking research.

In this application for the status of a Designated National University, we describe our vision for Nagoya University. Based on the NU MIRAI 2020 plan, and taking advantage of our strengths, we will:

- Set up research hubs to lead their respective fields
- Train Ph.D. graduates to play leading roles in advancing our knowledge-based society
- Make the campus environment more international
- Develop a comprehensive management network within ten years to support and promote transfer of fundamental research success into technical achievement
- Encourage innovation in collaboration with industry

To achieve these aims, we want to manage our university based on the principle of shared governance; create a positive cycle for generating revenue to strengthen our finances; and establish a multi-campus system. Nagoya University aims to join the global elite of research universities through the following seven points.



Nagoya University Matsuo Initiatives for Reform, **Autonomy and Innovation 2020**

Education

By promoting a world-class education, we aim to foster courageous intellectual leaders that can contribute to human well-being. We are changing the relationship between Nagoya University and secondary schools.

- Admitting excellent students Improving admission system and establishing admission center
- Reforming three policies Degree conferment, curriculum design & student admissions
- Improving international compatibility of educational system

Introducing quarter system and international joint degree programs

Research

Inspired by our Nobel laureates, we are committed to the creation & discovery of knowledge through research.

- Supporting frontier research led by
- •"Institute for Advanced Research" for basic research
- •"Institute of Innovation for Future Society" for practical research
- •"ITbM" for WPI program
- Establishing new research centers i.e. WPI-Next
- Recruiting, retaining & supporting most talented faculty & fostering world-class researchers

Greater support for women, non-Japanese & early-career

NU MIRAI International 2020

We are developing a university that attracts the best students, faculty & staff from around the world & contributes to creating a more sustainable society. In particular, we seek to work closely with countries in Asia.

- By 2020
- Increasing number of international students to 3000
- Increasing internationally experienced faculty members to 650
- Increasing domestic students studying abroad to 1000
- Increasing international students enrolled in English-taught curriculum & number of English-taught courses

i.e. G30 NEXT

• Implementing strategies with focus on Asian countries

i.e. Asian Satellite Campus & ASEAN Net PLUS

University-Industry Collaboration

As a core university located in one of the world's most dynamic industrial clusters, we conduct research and pursue innovation that contributes to value creation for betterment of society.

Establishing a new

"industry-academia-government collaboration" to implement open innovation

Establishing new research center on gallium nitride (GaN) & "Future Integrated Electronics Research Center"

- Fostering people who contribute to society Increasing entrepreneurial education & industry-academia collaboration
- Increasing regional resilience for safety & disaster relief

Establishing Disaster Mitigation Research Center & new model for industry-academia-government-civil society collaboration

Organizational Management

Reforming structures of Schools/Graduate Schools

Strengthening education and research activities through comprehensive evaluation of the fields of engineering, informatics, humanities & social sciences

Strengthening financial base

Raising 10 billion yen fund by 2021, increasing competitive funding, promoting joint research projects through industry-academia collaboration & strengthening hospital activities

- Improving university-wide communication to more effectively & flexibly assign resources
- Collaborating with Asia and wider world to promote gender equality on campus

Establishing Gender Equality Promotion Center, increasing female faculty members to 20% & promoting women in leadership positions

Nagoya University Aims for "The World's Best Research University" - Seven Visions to Support It -



Becoming an elite research university that produces world-leading research

Creating an international

people from around the world,

and developing overseas outreach

Nagoya University aims to increase our intake of international students to

3,200 in ten years. We will also expand opportunities for Japanese students to

enroll in English-Taught courses offered in our **G30 international programs**.

Also, we aim to increase the proportion of students who experience study or

training abroad to 70 percent. The recently established Applied Social

System Institute of Asia (ASIA) is a platform that facilitates research

cooperation with scholars throughout Asia to solve problems of a

global scale. Nagoya University will benefit from greater

international cooperation by increasing faculty and student

awareness of global issues. A more international campus will

also help attract students, faculty and administrative staff from

campus that attracts



Building on the track record displayed by our Nobel Prize winn University will establish new research hubs (Stage III research). These will be modeled on our successful Institute for Transformative Bio-Molecules (ITbM) WPI research center and the Kobayashi-Maskawa Institute for the Origin of Particles and the Universe (KMI). To develop such research hubs, we recognize the importance of encouraging young researchers and founding new academic fields. To meet these needs, we plan to provide multitier support optimized for different research achievements. includes Stage I support for young researchers and Stage II support for training next-generation research leaders. These efforts will include interdisciplinary studies linking researchers in different schools within the university, including the humanities and social sciences, so they underpin future society.



Training outstanding doctoral researchers to lead our knowledge-based society



Training PhDs is our core mission. We will build on our track record of success in the Leading Graduate School Programs and the **Institute for Promotion of Doctoral Education**. We aim to train our PhDs in three core skills:

- the capacity to address new challenges in research · the capacity to communicate with an international audience
- · the capacity to connect with society

We will provide interdisciplinary education by collaborating with research hubs; developing international networks by expanding our joint degree programs; and training students in transferable skills. At the same time. we will promote a new approach to postgraduate education

involving close collaboration between industry and university called the Sharing Education Initiative. Financial support for Ph.D. students will increase using a special fund, and career paths for graduate students will be promoted.



Developing synergies outside of academia



Nagoya University aims to take advantage of its location in one of the world's premiere manufacturing belts. We will increase the responsibilities of URAs, along with unifying management of research and technical support for innovation creation, training personnel, and contributing more to industry. By encouraging industry, university and government to cooperate, we are setting up education programs that take full advantage of cross-sector cooperation. We will form

research and development centers for "open innovation." New research labs and a center for collaborative industryacademia research will introduce a true organizational partnership. Last, we plan to bolster support for entrepreneurship education and university-based start-up companies.



the global talent pool.

Presidential Leadership and a Flexible System for Proposing, Debating, and Enacting Policies through Shared Governance

03

The university will appoint a provost responsible for education and research under the university president. Under shared governance, the board of trustees and those leading each school can share responsibilities. The Office of Institutional Research will also fulfill the following roles:

- Summarizing information about university management and collecting information from students and other members of the community
- · Proposing measures based on data analysis
- · Training personnel as future managers

We wish to design and manage Nagoya University so it can respond to political, economic and social change. Importantly, we will continue to strengthen policies promoting gender equality. For the future, we must also nurture faculty who can become administrators through university design workshops. Enhancing training of faculty and staff is essential for developing a university that



Strengthening our financial basis through a positive cycle of management resources

Nagoya University contributes to Japan's economic growth by creating knowledge and developing human resources. This attracts management resources which we can then invest in creating more knowledge and developing more human resources in a positive cycle. To support this, further deregulation is necessary so we can diversify our sources of revenue and continue our drive for greater efficiency. Nagoya University seeks to increase its budget size 1.4 times, or, by 40 06



Creation of Positive Cycle for Continuous Development with the New Multicampus **Tokai National University System**

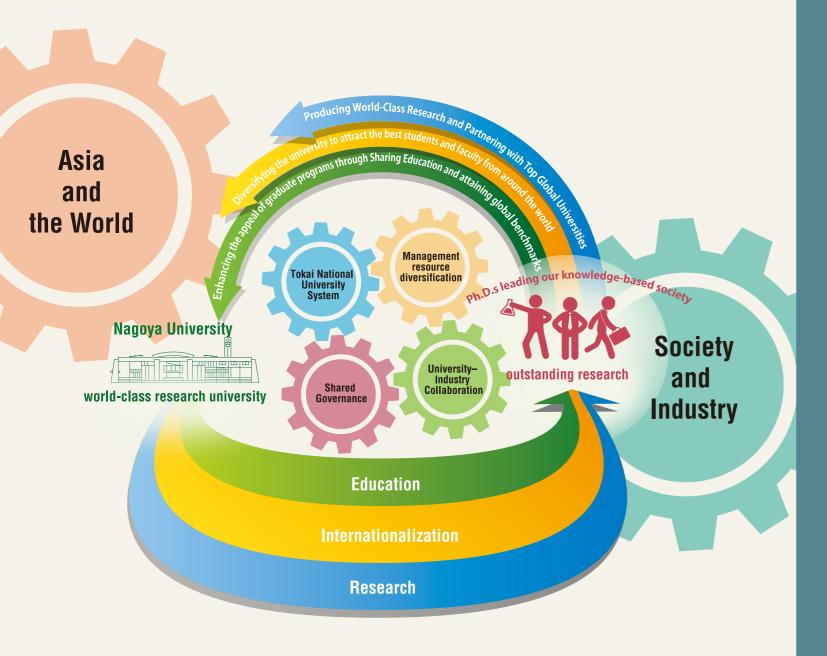
Nagoya University plans to remove institutional barriers with our partner universities and establish a new regional multi-campus system. The provisional name is the Tokai National University System. Member universities in this group will preserve their autonomy. But each will contribute to the organization by strengthening education and research functions. Our hope is that the strengthened education and research functions will contribute to world peace and sustainable development. Greater economies of scale will make it easier for the acquisition of

external funds, strengthen international competitiveness and form one of the world's leading national university organizations.

Nagoya University

Nagoya University

- Aims for One of the World's Best Research Universities -



Education

Institute for doctoral education to train students in 3 core skills: ability to take on ground-breaking research, international communication proficiency, ability to use research skills to the benefit of society

Dynamic state-of-the-art interdisciplinary education that works in tandem with multi-tiered research system

Internationalization

- Further development of Joint Degree Programs (JDPs)
- Increase the number of international students and faculty through expanding and developing programs taught in
- Working in Asia to solve the world's problems through the activities of the Applied Social System Institute of Asia

Research

Continuous production of world-class research sustained by a multi-tiered research system in three stages.

Discovery recruiting and support of outstanding young researchers

Development of the next generation research hubs

Construction of world-leading research

Excellence in Research Fostered by a Free and Vibrant Academic Culture



Six Nobel Laureates Demonstrate Nagoya University's World-class Research Excellence



New Flagship Research Initiatives

Disaster Mitigation Research Center (DMRC)

Six Nobel Laureates Demonstrate Nagoya University's

World-class Research Excellence



Dr. Isamu AKASAKI

Research Associate, School of Engineering,

Ph.D., Nagoya University

Emeritus Professor, Nagoya University

University Professor, Nagova University



Dr. Hiroshi AMANO

Graduated from School of Engineering,

1988 Ph.D., Nagoya University

Professor, Graduate School of Engineering

Since entering the 21st century, 16 Japanese researchers have received a Nobel Prize. Among these, six are graduates of or have been affiliated with Nagoya University as faculty members during their career. This number of Laureates is the highest in Japan.

It is said that the main reason for Nagoya University's surge of progress in this area is its free and vibrant academic culture. Of the seven former imperial universities, Nagoya University was founded last. Faculty at that time came to Nagoya from all over Japan; they helped students and young researchers pursue their research freely, and this academic culture has been inherited by today's generation. We will now give an introduction of each Laureate as follows.

Nobel Prize in Physics, 2014

In October 2014, the Royal Swedish Academy announced its awarding of the Nobel Prize in Physics to Dr. Isamu Akasaki, Dr. Hiroshi Amano and Dr. Shuji Nakamura for the invention of the efficient blue light-emitting diode (LED), which enables bright and energy-saving white light sources. In the spirit of Alfred Nobel, the Prize rewards inventions of great benefit to mankind and, indeed, the blue LED has led to the revolution of indoor and other lighting by making this kind of white light possible. With the advent of LED lamps, lightbulb technology has made a quantum leap not only in energy efficiency but also in durability.

Dr. Akasaki began his career in academia as a Research Associate at the Nagoya University School of Engineering in 1959, eventually advancing to Associate Professor while working on his PhD from Nagoya University, which he obtained in 1964. Following this, he worked in the private sector before returning to Nagoya University as Professor of Engineering in 1981. Dr. Akasaki moved on to the neighboring Meijo University in 1992, but in December 2004 was reappointed by Nagoya University as a Distinguished Professor.

Dr. Hiroshi Amano graduated from the Nagoya University School of Engineering in 1983 and, after obtaining his PhD in 1988, was appointed Research Associate at Nagova University, advancing to Assistant Professor. He then joined Dr. Akasaki as a Professor at Meijo University, before returning to Nagoya University's Graduate School of Engineering.







Dr. Ryoji NOYORI

1967 Ph.D., Kyoto University

Associate Professor of Chemistry,

Dean, Graduate School of Science,

Jniversity Professo



Dr. Toshihide MASKAWA

Graduated from School of Science.

School of Science,

Distinguished Invited

Nagova University

Dr. Makoto KOBAYASHI Dr. Osamu SHIMOMURA

Graduated from School of Science,

1972 Ph.D., Nagoya University

Distinguished Invited University Professo Nagoya University

University Professor

Ph.D., Nagoya University

1963 Associate Professo School of Science,



Dr. Maskawa and Dr. Kohavashi



At the 3rd Yoshimasa Hirata Memorial Lecture

Nobel Prize in Chemistry, 2001

In October 2001, the Academy announced its award of the Nobel Prize in Chemistry to Dr. Ryoji Noyori and Dr. W. S. Knowles (USA) for their work on chirally catalyzed hydrogenation reactions, and to Dr. K. B. Sharpless (USA) for his work on chirally catalyzed oxidation reactions. Their research - an important topic of study in the 20th century - enabled Dr. Noyori and his fellow laureates to realize their dream of making possible the artificial and preferential production of enantiomers. Enantiomers are molecules existing in many organic compounds that are mirror images of each other but not identical, i.e., with a right- and left-side relationship but with each side having a different character. While one side could become a promising medicine, the other could equally become a dangerous toxin. It has therefore become a major issue in chemistry to find ways to preferentially produce right- and left-side products. Dr. Noyori's research makes it possible to artificially produce right- and left-side molecules using catalysts. This research has tremendous potential in the creation and production of medicines, aromatic chemicals, and materials in harmony with the natural environment.

Presently, Dr. Noyori is an organic chemist based at Nagoya University and Director-General of the Center for Research and Development Strategy (CRDS), Japan Science and Technology Agency (JST) and continues to realize remarkable achievements in the field of organic chemistry through his collaborations with numerous researchers worldwide.

Nobel Prize in Physics, 2008

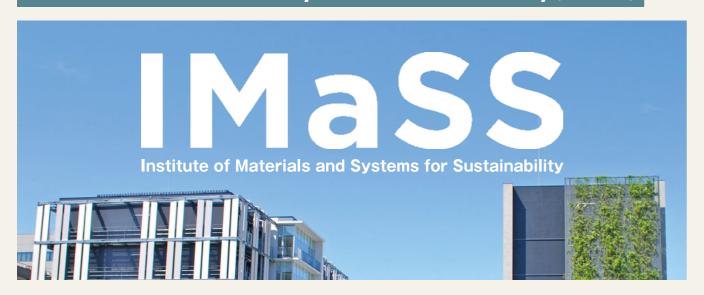
In October 2008, the Academy announced its award of the Nobel Prize in Physics to three esteemed scientists: Yoichiro Nambu (USA), and Nagoya University graduates Toshihide Maskawa, a Distinguished Invited University Professor at Nagoya University, professor emeritus at Kyoto University, and professor of physics at Kyoto Sangyo University, and Makoto Kobayashi, professor emeritus at the High Energy Accelerator Research Organization (KEK). The two Nagoya University scientists received the Nobel Prize for forecasting, over three decades ago, "the discovery of the origin of the broken symmetry which predicts the existence of at least three families of quarks in nature." In 1972, the two presented their Kobayashi-Maskawa theory, which states that CP symmetry violation can be explained with six types of quarks, one of the subatomic particles that constitute matter. This theory was proved in 1995 with the discovery of the sixth quark, known as the top quark. Among the numerous theories attempting to explain CP symmetry violation, the Kobayashi-Maskawa theory remains the most concise and well-formed, and today is one of the key components of the standard model of particle physics.

Nobel Prize in Chemistry, 2008

In October 2008, organic chemist and marine biologist Professor Osamu Shimomura from Nagoya University was announced as one of three distinguished scientists to receive the 2008 Nobel Prize in Chemistry, sharing it with Martin Chalfie of Columbia University and Roger Y. Tsien of the University of California, San Diego. They received this award for the discovery and development of the green fluorescent protein, GFP. Professor Shimomura was the first to discover and successfully refine GFP in luminous jellyfish. Using this GFP as a marker, it is now possible to directly observe protein behavior in living cells. This significantly contributes to the development of molecular biology and biosciences.

New Flagship Research Initiatives

Institute of Materials and Systems for Sustainability (IMaSS)



About IMaSS

In order to contribute toward the realization of a safe and sustainable future society amidst global-scale environmental and resource-related restrictions, the Institute of Materials and Systems for Sustainability (IMaSS) promotes research ranging from materials and electronics science to systems technologies.

IMaSS consists mainly of 2 research centers and 2 research divisions, along with several other funded and collaborative labs.

Center for Integrated Research of Future Electronics (CIRFE) focuses on the development of power devices for reducing electric power consumption, and research consortiums are steadily being arranged throughout Japan. Nagoya University is well known for the achievement in gallium nitride semiconductor technology, and collaborations with various research groups within and beyond country boundaries are being strongly promoted.

Advanced Measurement Technology Center(AMTC) specializes in research and development of basic sciences using the electron microscope technologies and also other advanced facilities. The center aims to explore and develop novel measurement techniques, operate multi-user instruments, provide opportunities for collaborative research, and train highly skilled scientists and engineers.

Division of Materials Research (DM) carries out research on advanced materials that are applied to devices for future energy systems, while Division of Systems Research (DS) is engaged in developing systems technologies toward practical deployment in the society.

Funded Research Divisions and other Industry-Academia collaborative labs are devoted to respective researches in cooperation with the research centers and divisions of IMaSS.

(ICMaSS 2017) International Conference on Materials and Systems for Sustainability 2017





Organization chart

Device Innovation Section Multiphysics Simulation Section Materials Nano-Characterization Section System Applications Section International Research Section **Electron Nanoscopy Section** Electromagnetic Wave Measurements Section Elementary Particle Measurements Section X-Ray Spectroscopy Section Nanofabrication & Characterization Section Materials Physics Section Materials Design Section Director Materials Processing Section **Conversion Systems Section** Network Systems Section Circulation Systems Section ergy Systems (Chubu Electric Power Toyota Advanced Power Electronics AIST-NU GaN Advanced Device Open Innovation Laboratory Toyota Advanced Power Electronics ndustry-Academia Collaborative Chair DENSO Automotive Power Electronics Industry-Academia Collaborative Chair TOYODA-GOSEI GaN leading Innovative R&D Industry-Academia Collaborative Chair High Voltage Electron

Microscope Laboratory Research Facility for

Advanced Science and Technology

Project MEXT GaN R&D Project

MEXT "Program for research and development of next-generation semiconductor to realize energy-saving society"



Nagoya University has been engaged in MEXT "Program for research and development of next-generation semiconductor to realize energy-saving society" since 2016.

As shown in the adjacent graphic, this project is composed of three research domains organized around the "Kernel Center." Nagoya University is tasked with advancing research and development, by studying gallium nitride (GaN) crystals and coordinating the entire project at the "Kernel Center," as well as developing the devices capable of handling high levels of power at the "Power Device System Domain."

Furthermore, we are engaged in collaborations with the National Institute for Materials Science responsible for the "Evaluation Domain" and Meijo University is responsible for the "Laser Device System Domain," thereby bringing the strengths of each institution and conducting research and development together.

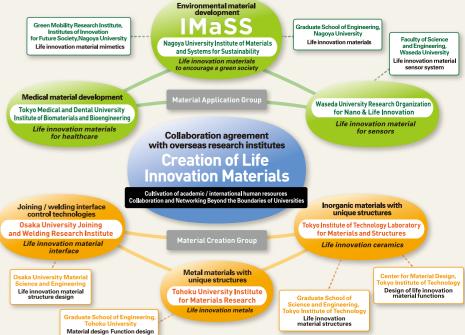
By utilizing GaN in this project, we are contributing to the development of power and laser devices and the ultimately realization of energy-efficiency.

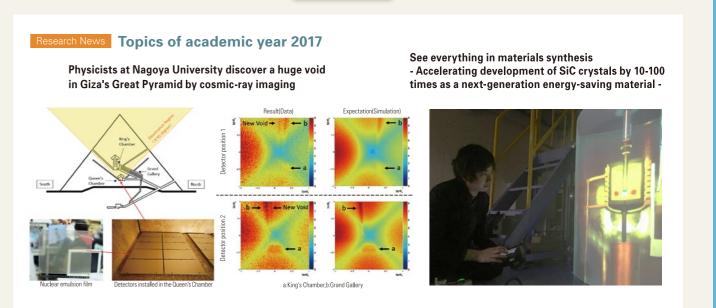
MEXT Life Innovation Materials Project

Creation of Life Innovation Materials for Interdisciplinary and International Researcher Development

This project, which began in 2016, is notable for its collaboration between the research laboratories of six universities. IMaSS is in charge of the coordination of this project.

With the concept of developing new materials which can revolutionize the way we live ("life innovation materials"), the project promotes academic expansion, materials development, and practical applications.





New Flagship Research Initiatives

Institute of Transformative Bio-Molecules (ITbM)





Institute of Transformative Bio-Molecules (ITbM)

The Institute of Transformative Bio-Molecules (ITbM) was launched at Nagoya University in December 2012 and is supported by the World Premier International Research Center Initiative (WPI), the flagship program of the Ministry of Education, Culture, Sports, Science and Technology (MEXT).

ITbM aims to create a new interdisciplinary field of research through the collaboration of cutting-edge molecular synthetic chemistry, animal/plant biology, and theoretical science, and to deliver bio-molecules that change the way we live. Such molecules are defined as "transformative bio-molecules."

Many transformative bio-molecules have been developed up to now. A few examples of molecules that have changed the world include the antibiotic, penicillin; the anti-influenza drug, Tamiflu; the revolutionary bio-imaging tool, the green fluorescent protein (GFP); and the next generation solar cell material, fullerene. Extensive collaboration between chemists, biologists and theoretical scientists are ongoing at ITbM to generate a new research area on the boundaries of chemistry and biology. ITbM has defined its flagship research areas as "plant chemical biology,"

"chemical chronobiology," and "chemistry-enabled live imaging." By exploring a new interdisciplinary field through the integration of chemistry and biology, ITbM aims to create transformative bio-molecules to "understand," "see" and "regulate" living organisms, and addresses urgent social issues regarding the environment and food production, along with advances in medical technology.

What is WPI?

The WPI program was launched in 2007 by the MEXT with the aim to build "globally visible" research centers with high research standards and an outstanding research environment that will attract frontline researchers from around the world to carry out their research at the centers. The WPI has four objectives: (1) advancing leading-edge research, (2) creating interdisciplinary domains, (3) establishing international research environment, and (4) reforming research organizations. A total of eleven WPI centers have been selected up to now.

Message from the Director, "Changing the world with molecules"

Molecules are extremely small, but they are essential to all life on the planet. It is my strong belief that molecules have the power to change the way we do science and the way we live. ITbM's main focus is to develop transformative bio-molecules that will be key to solving urgent problems at the interface of chemistry and biology. The identity of ITbM is its capability to develop completely new bioactive molecules with carefully designed functions. With biologists knowing what functions they need in molecules, and chemists knowing how to install these functions, huge advances in interdisciplinary research are expected to take place at ITbM. This unique approach will surely attract researchers from around the world and also nurture the next generation of researchers.



ITbM will connect molecules, create value, and change the world, one molecule at a time.





Principal Investigators of ITbM. Front row, left to right: Keiko Torii (University of Washington, USA), Jeffrey Bode (ETH-Zurich, Switzerland), Kenichiro Itami (Director), Cathleen Crudden (Queen's University, Canada), Stephan Irle (former PI), Takashi Ooi, Takeshi Yanai; back row, left to right: Tetsuya Higashiyama (Vice-Director), Toshinori Kinoshita, Takashi Yoshimura, Shigehiro Yamaguchi (Vice-Director), Florence Tama, Steve Kay (University of Southern California, USA), Wolf Frommer (Düsseldorf University, Germany).











Ambitious, full-scale international collaboration of synthetic chemists, plant/animal biologists, and theoreticians

ITbM's team of Principal Investigators (PIs) is an innovative mix of chemists and biologists from Japan and abroad, chosen for their excellence in science, diversity, and commitment to the project and for the sustainability of the Institute. With the average age of the founding PIs in their forties, they will be highly active throughout the duration of the project and well beyond the ten year funding envelope.

ITbM has introduced a Co-PI (Cooperative-PI) system, whereby young scientists are paired with overseas PIs to facilitate the research activities in ITbM.

Mix Lab concept

ITbM has set up "Mix Labs," which are lab spaces where synthetic chemists and biologists work next to each other, along with theoretical scientists situated nearby to enable interactive discussions. This has led to effective mixing of research areas by integrating researchers from different disciplines into the same environment. ITbM's research center (opened in April 2015) directly reflects the Mix Lab concept, where new interdisciplinary research is initiated by removing the barriers between research fields/groups and integrating people, ideas, equipment and research.

The ITbM Research Award has also been established to acknowledge and provide funding for interdisciplinary research proposals by young ITbM researchers, which enhances further mixing of research areas.

The majority of the postdoctoral researchers at ITbM are from overseas and they are conducting research in the Mix Labs with Japanese graduate students of Nagoya University. This also enables Japanese graduate students to experience an international research environment, whilst being in Japan. In addition, ITbM's Administrative Department consists of bilingual staff to effectively support overseas researchers, thus creating an international environment.

Heading for tomorrow

The success of ITbM is considered to be crucial to further enhance the prestige and international visibility of Nagoya University, and also to reconstruct its research culture. ITbM will establish the stage on which researchers, sharing the responsibility and project objectives, can talk about their dreams freely and can put their innovative ideas into practice immediately. What ITbM's future success brings will not be limited to innovations in bio-molecular research. With a diversity of researchers from different backgrounds, ITbM will accelerate the mixing of people, ideas, and research, and also help nurture a new generation of scientists unrestricted by the bounds of traditional disciplines. This will surely have a positive influence on the way Japanese universities carry out research and education.

Excellence in Research Fostered by a Free and Vibrant Academic Culture 15 14 Nagoya University

New Flagship Research Initiatives

National Composites Center (NCC)









Figure 1 Hydraulic Press Machine

Figure 3 Lightning Strike Test Facility



Figure 2 LFT-D Chassis Structure

On April 1, 2012, the National Composites Center (NCC) was established at Nagoya University. Although the carbon fiber (CF) manufacturing industries in Japan are considered to be one of its strongest fields, holding a 70% share of the world market, we cannot necessarily state that Japanese carbon/polymer composite processing industries are sufficiently strong when compared with their European counterparts. In order to energize these composite processing industries and promote the innovation of related technologies, a budget for Nagoya University from the Ministry of Economics, Trades and Industries (METI) was approved in 2011, and installation operations for NCC began. The above figure shows the activities of NCC, focusing on automotive and aerospace industries, which are based in the Greater Nagoya Area and which lead the world in their respective fields.

A national project aiming at applying thermoplastic CFRP to automotive industries has already begun. 11 Japanese companies, including automotive, carbon fiber, and automotive parts companies, are participating in this project to develop a technology to manufacture large structures using thermoplastic CFRP produced by LFT-D (Long Fiber Thermoplastic-Direct) technologies, which will enable high productivity and low cost processes for future automotive industries. Figure 1 shows the hydraulic press machine (35,000kN) with twin extruder (LFT-D device). Figure 2 shows the full-scale LFT-D chassis structure consisting of LFT-D parts including floor panel, side sills and front and rear parts which are joined together using ultrasonic welding technology. These results shown in Figure 2 indicate the advantages of the LFT-D technology, especially in comparison with conventional CF/thermoplastic technologies, which have difficulty making such three-dimensional complicated shape. Another project is being focusing on the development of composite structure evaluation technologies, especially for lightning tests on aircraft. Test facility is shown in Figure 3.

Mobility Innovation Center (Nagoya University COI)

- Empowering an aging society through advanced mobility -





Slocal Self-driving System offers mobility to those that cannot drive and supports so called "last mile" transportation

Japan has already shifted to become a super-aging society. In order to retain and enhance the sustainability of our society, it is important to encourage activities that can prevent the mental and physical depression of seniors. Mobility is not only limited to transportation or automobiles, but also represents the ability to move freely and safely. To make a sustainable aged-society a reality, it is essential that seniors are able to lead active life styles regardless of age, region, or individual situations.

To empowering an aging society through advanced mobility, we implements innovative technologies with three pillars of 1) Driving Assistance System and Autonomous Cars for safe and reliable mobility, 2) Physical Conditions and Mental Inspiration to stimulate going outside, and 3) Participatory Society to foster mutual aid and self-esteem.

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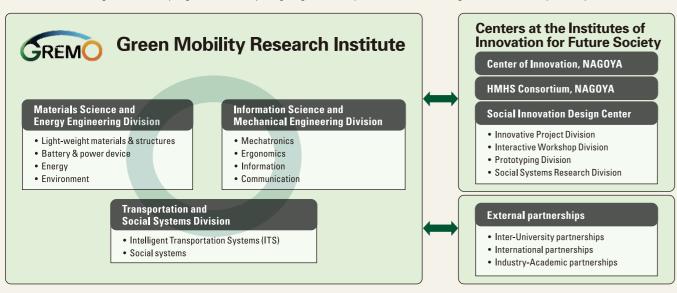
Green Mobility Research Institute (GREMO)



On April 1, 2016, the Green Mobility Research Institute (GREMO) was founded in the Institutes of Innovation for Future Society at Nagoya University to expand the activities of its predecessor, Green Mobility Collaborative Research Center.

Due to the reorganization, six research fields in the predecessor, light-weight material & structure, battery & power device, energy & environment, mechatronics & ergonomics, information & communication and ITS & social system have been combined to three divisions of Materials Science & Energy Engineering, Information Science & Mechanical Engineering and Transportation & Social Systems.

The mission of GREMO is to realize a harmonic society between technology, humans and the environment through green innovation in the safe and secure transport means and systems. The establishment of GREMO has not only brought together different existing expertise in automotive research, but also an intimate global collaboration between industry, academic and government. GREMO also has been conducting educational programs to train young engineers responsible for the next generation mobility society.



Disaster Mitigation Research Center (DMRC)

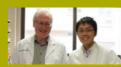




The Disaster Mitigation Research Building

The Disaster Mitigation Research Center (DMRC) was founded in January 2012. Nagoya City and the surrounding Chukyo area are vulnerable to natural hazard risks due to the high possibility of large earthquakes along the Nankai Trough plate boundary. The Japanese government estimates the probability of the occurrence of the next large earthquake during the next 30 years as 70%, and the worst-case scenario predicts that economic losses will reach as much as 220 trillion yen. The area also has a history of destructive floods and storms. Since this area is the center of industrial production in Japan, these natural hazard risks may cause a serious crisis at a national level. The DMRC, which brings together experts with various backgrounds such as engineering, earth science, social science and humanities, promotes cooperative multidisciplinary research for developing a state-of-the-art disaster mitigation model and applying it to ensure safety and security of the local community. The DMRC provides a cooperative framework for local government, companies, and citizens to improve the preparedness of the local community for future natural hazards. In addition, the DMRC offers disaster mitigation training courses for local public officers and volunteers. The Gensaikan Building, where the DMRC is located, has an exhibition hall and a library, which are open to the public for self-learning about natural disasters and their mitigation.

Nurturing Future Global Leaders



- An Asian Hub University Contributing to a Sustainable Society in the 21st Century -



The Development of Joint Degree Program



The Nagoya University Global 30 International Programs - Undergraduate and Graduate Degrees Taught in English -



Fresh Insights, Intellectual Stimulation, and a Global Perspective through Student Exchange (NUPACE)



Nagoya University Summer Intensive Program (NUSIP)



Nagoya University Overseas Take-off Initiative (NU-OTI)



Nagoya University Short-Term



- Five-Year Doctoral Programs for Training and Developing Future



- Transnational Doctoral Programs for Leading Professionals in Asian Countries -



Other International Programs



Applied Social System Institute of Asia (ASSIA)

World-Class Research University Asian Hub University

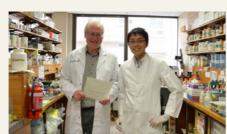


To cultivate human resource that will contribute to creation a sustainable society

The environment surrounding Japanese higher education is entering a transition phase, with a decrease in working-age people due to declining birthrates and the ageing population, and the increasingly speedy globalization of economic and social activity. Japan's universities, which must live up to society's expectations as intellectual bases that drive the growth of the nation, are strongly expected to gather outstanding researchers from around the world, and to nurture talented young professionals with an understanding of different cultures who will play active roles in and contribute to the solving of

global-scale problems and building towards the future, as well as those who have a strong desire to actively make a contribution to regional communities while maintaining a global mindset. At the same time, our universities must make their presence felt in the international higher education community and work to rank alongside top universities worldwide.

Based on the Nagoya University ideals, NU is to implement the Top Global University Project; in terms of research its goal is the "enhancement of cutting-edge research at a world-class level," while in terms of education it aims to "become an attractive and global Nagoya University." Achieving these goals in the field of Asia, it is determined to become an "Asian hub university." By realizing these three goals, NU intends to play a role as a key university in Asia, which is working hard to build a sustainable world, and, by providing the strong spirit and ability needed to actually make a contribution to twenty-first-century human society, to be fully worthy of being called a top, world-class university. The project concept is as can be seen in the figures above and below.



Top Global University Project: Operation Sheet

			3 units			3 units
Creative Scientific Research Unit		'		or female and international scholar	s)	
Joint Degree		Adelaide (1 Unit)	• Edinburgh (3 Units)	• Lund (1 Unit)	Kasetsart (4 Units)Freiburg (1 Unit)	• W.Australia (4 Units)
		2 units	5 units	7 units	10 units	12 units
	Introduction of qu	arter system				
Educational		 Formulating basic outline 				
Reinvention		Numbering all courses	Syllabi of graduate program in Japanese and English			
	100	Improve and ex	cpand G30 programs	170		2
Inbound	850 courses	Expand English	taught courses			1000 cours
students and supports		 Providing career counseling and Increasing support in internation Introduce new short term Japan program[NUSTEP] 	al dormitories			Completion of International residence
Outbound		Starting NU-OTI Establish safety and risk mar	nagement orientation			
students	220 Develop "	deposit system" for students to su	pport their study abroad	400		(
	3	countries (Mongolia, Cambodia, V	/ietnam)			
Asian Satellite		3 countries (U	zbekistan, Philippines, Laos)			
Campus	Establishi I ntern As	ment of Nagoya University ational Student Alumni ssociation Network				
	2012 201	2015	2010	2017	2010	2010

Nagoya University continuously aspires to improve the international compatibility of our education system with the aim of fostering global talent.

As part of such efforts, the Graduate School of Medicine, in collaboration with the University of Adelaide Faculty of Health Sciences, established Japan's first joint degree program through which a single degree is awarded conjointly with an overseas university ("International Collaborative Program in Comprehensive Medical Science between Nagoya University and University of Adelaide") in October 2015.

Shortly thereafter, in October 2016, the Graduate School of Science also established an international collaborative program with the University of Edinburgh College of Science and Engineering named the "International Collaborative Programme in Science between the University of Edinburgh and Nagoya University". In addition, in April 2017, the Graduate School of Medicine collaborating with the Lund University Faculty of Medicine established a joint degree program titled the "International Collaborative Program in Comprehensive Medical Science between Nagoya University and Lund University". In April 2018, the Graduate School of Bioagricultural Sciences in collaboration with the Kasetsart University Faculty of Agriculture will be launching the "International Collaborative Program in Agricultural Sciences between Nagoya University and Kasetsart University". Each school has begun accepting talented applicants to enroll in these programs.

In the joint degree program, students receive a single diploma with the names of both universities upon completion of the program and spend a predetermined period of time studying in both universities without extending their period of enrollment. This program strives to offer students high-quality educational opportunities by providing a mutually complementary education program that cannot be created within a single university or country.

Nagoya University's objective is to establish 10 to 20 international joint education programs with leading Western and Asian universities by 2020, and is currently pursuing the expansion of international joint education program partners primarily with top international universities who have a history of exchange with Nagoya University. By pursuing the establishment of joint degree programs and international joint research projects, Nagoya University aims to increase the number of international joint research articles produced and international faculty, establish an international joint research center, and rank within the top 100 of well-known ranking lists such as THE and QS.



Action Plan

- Increase Number of International Joint Education and Research Units Aiming for Joint Degree
- •10 to 20 units university-wide with leading
- Western and Asian universities by 2020 • Existing Joint Supervision Program /
- Double Degree Program → Joint Degree Program: Towards a curriculum
- with mutually complementary consistency • Proceed with supporting career paths as a world citizen for graduates.
- Increase in number of international joint research articles and international faculty
- Stimulate the exchange of human resources with the establishment of joint education units as a foundation
- \rightarrow Increase in number of international joint research articles and international faculty
- Aim to place in Top 100 of Rankings such as THE and QS · Enhance Nagoya University's reputation by increasing recognition among universities through international joint education programs
- · Stimulate the establishment of international research networks by virtue of acquiring accomplished international faculty



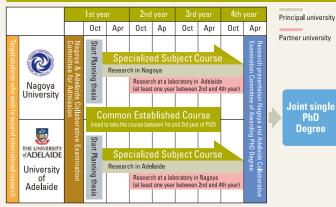
1 Joint selective system · Joint examination (Oral, Basic English required) · Eligibility which satisfies mutual requirements for application Strengthening the Relationship between the two Universities Research 2 Joint Program in Medical Education University •Faculties provide practical training •Mutual and complementary program in medical education Careful support system for students by Administrative Advisor. Top 100

Producing talented graduates who have

satisfied the diploma policy

• Acquisition of outstanding faculty • Connecting with top universities • International Research Center (network)

Outline of International Collaborative Program in Comprehensive Medical Science between Nagoya University and the University of Adelaide



Nurturing Future Global Leaders 21 20 Nagoya University

The Nagoya University Global 30 International Programs

- Undergraduate and Graduate Degrees Taught in English -

The Nagoya University Global 30 International Programs offer undergraduate and graduate full-degree programs taught in English. Since 2011, we have introduced 11 Undergraduate, 10 Master's, and 6 Doctoral programs to give students the chance to follow their academic interests, improve their language abilities, and hone their communication skills. All faculty teaching in the G30 programs are experts in their field. Small class sizes mean that instructors can provide students with

individual attention. The first and second year of the undergraduate curriculum includes Liberal Arts and Science courses that expose students to subjects outside their field. First year students also enroll in Japanese language classes. The second and third year offer laboratory courses, seminars and specialized courses to prepare students for their fourth year when they will study, research, and write their graduation thesis.

Global 30 International Programs (Undergraduate)

Programs	Affiliated Schools
Automotive Engineering	• School of Engineering
Fundamental and Applied Physics	• School of Engineering • School of Science
Chemistry	• School of Science • School of Engineering
Biological Science	• School of Science • School of Agricultural Sciences
Social Sciences	• School of Law • School of Economics
Japan-in-Asia Cultural Studies	• School of Humanities

Global 30 International Programs (Graduate)

O a Lata Bassassa	ACCI IO I I	Degree		
Graduate Programs	Affiliated Schools	Master's	Doctoral	
Automotive Engineering	Graduate School of Engineering	•		
Civil and Environmental Engineering	Graduate School of Engineering • Graduate School of Environmental Studies	•	•	
Earth and Environmental Sciences	Graduate School of Environmental Studies	•	•	
Physics and Mathematics	Graduate School of Science • Graduate School of Mathematics	•	•	
Chemistry	Graduate School of Science • Graduate School of Engineering	•	•	
Biological and Bioagricultural Sciences	Graduate School of Science • Graduate School of Bioagricultural Sciences	•	•	
Biological and Bioagricultural Sciences	Graduate School of Medicine	•		
Medical Science	Graduate School of Medicine		•	
Economics and Business Administration	Graduate School of Economics	•		
Linguistics and Cultural Studies	Graduate School of Humanities	•		
Japan-in-Asia Cultural Studies	Graduate School of Humanities	•		









What is Special about the Global 30 International Programs?

✓ Academics

English-taught Curriculum

Nagoya University offers a selection of undergraduate and graduate programs fully taught in English. No Japanese language ability is necessary for admission.

Teaching and Training in Research Skills

Nagoya University is one of Japan's top research universities. Our faculty bring recent discoveries in their fields straight to the students. Small class sizes and laboratories emphasize critical thinking, hands-on research skills, and communication abilities.

Japanese Language Education

Although the G30 curriculum is in English, Nagoya University offers a Japanese language program for students from beginner to advanced.

✓ Admission

Online Application

Candidates for the G30 program apply online. Nagoya University evaluates applicants through document screening followed by interviews via video conference platforms.

Y Finances

Non-discriminatory and Affordable Tuition Fees

International students at Nagoya University pay the same tuition fees as domestic students.

G30 Undergraduate Scholarship for Selected Students

Nagoya University selects a limited number of students for scholarships covering tuition fees and a living allowance.

Y Student Life

Housing

Students in the G30 programs are housed in one of the university dormitories during their first year.

On-Campus Cafeterias

On-campus cafeterias and cafes offer food to satisfy different tastes and dietary needs.

Academic Advising and Counseling

Specialized faculty, teaching assistants, research assistants and tutors help incoming students adjust to academic and daily life.

Career Support

The Career Services Office provides counseling and career path guidance for international students. Students may also join internship programs, corporate information sessions, company-student mixers, and job fairs.

Social Events

Throughout the academic year, Nagoya University provides opportunities for students, faculty, and the local community to meet and talk.



http://admissions.g30.nagoya-u.ac.jp/en/

and a Global Perspective through Student Exchange (NUPACE)

NUPACE

Established in February 1996, the Nagoya University Program for Academic Exchange (NUPACE) is an academic student exchange program through which international students enrolled at Nagoya University's partner institutions can study in Japan for four to twelve months. The program aims to foster friendships that extend beyond borders, internationalize through education, and motivate overseas students to pursue more extensive studies about Japan. The NUPACE academic year runs on a semester basis, and students can choose one of two admission periods: Mid-September or early April.

NUPACE offers a unique and flexible curriculum comprising Japanese language instruction, Japan area studies, and a wide range of courses in the student's major field of study, including those available through the G30 International Programs. Provided that they take at least fifteen credits per semester, students can design their own curriculum, balancing their interest in Japanese language and area studies with the desire to pursue their major. Guided research for graduate students is also available. Moreover, whilst a fully-developed, comprehensive English language program is provided, those students proficient in Japanese are eligible to register and earn credits for any course offered to degree-seeking students at Nagoya University.

NUPACE has hosted a total of 1,955 international students from 132 institutions in thirty-three countries. The programme is renowned, in both domestic and international arenas, for its quality and leadership in exchange student education.









With support and cooperation from the Japanese automotive industry and related enterprises, the Graduate School of Engineering offered a 6-week summer program entitled "Latest Advanced Technology & Tasks in Automobile Engineering," from June 14 to July 20, 2017 in which 37 overseas students and 25 Nagoya University students participated. Conducted entirely in English, the program was aimed at overseas students and Nagoya University students in engineering-related fields. The program's greatest feature was its exciting lectures from various viewpoints on state-of-the-art technologies in areas such as hybrid automobiles, fuel cells, environmental strategies, accident prevention, and expressway traffic. The lectures were conducted with support from some of the industry's leading technologists and researchers, as well as Nagoya University faculty members. Although of short duration, the program's objectives enabled overseas students to study some of the various fields that are particularly advanced in Japan, as well as increase their interest in this country and its culture. The program also enabled Nagoya University students to improve their English and communication skills and broaden their international horizons in conjunction with studies in their specialist fields.

(Refer to: http://www.engg.nagoya-u.ac.jp/en/nusip/index.html)









1 Partner Institution : University of Iceland 2 Partner Institution : University of Leeds 3 Partner Institution : The University of Adelaide 4 Partner Institution : Peking University

University-Wide Student Exchange Program

Over 180 universities/institutions are possible exchange partners

Three internal selection rounds per year (June, November, January)

Duration of Exchange is one semester or one year

Participants join local students in taking classes in their field of study or other related areas of interest. As a representative of Nagoya University, participants must engage in their academic studies with a sincere attitude and are required to periodically submit a report during their exchange. Participants must plan ahead and consider their future plans. Those wishes to transfer credits must follow each departments' rules accordingly

Merits

○ Support from Study Abroad Office

Study Abroad Office support students participating in exchange by helping them choose their destination, preparing them for language requirements, providing various orientations and risk managements. Office can also advice students while they are on the program through e-mails.

Tuition waiver

Nagoya University has established a mutual tuition fee waiver with most partner institutions. As long as students pay tuition to Nagoya University, they do not have to pay tuition at the destination university. Therefore, the costs of their exchange are less than a self-funded study abroad.

Short Term Program

We also offer various short-term programs. Please refer to the website: http://ieec.iee.nagoya-u.ac.jp/ja/abroad/program/tanki-tokubetsu.html

Nagoya University Short-Term

Japanese Language Program (NUSTEP)

Established in February 2016, the Nagoya University Short-Term Japanese Language Program (NUSTEP) is an academic exchange program in which international students enrolled at Nagoya University's partner institutions study intermediate-level Japanese language in an intensive two-week program. Its purpose is to provide participants with the opportunity to improve their language skills and also learn about the culture and society of Aichi Prefecture. Some who enjoy their experience may return to Japan later either through a longer-term exchange program, like NUPACE, or enroll as a graduate student. During the program, participants study in the classroom from 8:45 am to 12:15 pm each day. In

the afternoon, they join activities to experience local society and culture including dressing in a kimono, writing Japanese calligraphy, attending a social event with Nagoya University students, and touring an automobile plant. Nagoya University faculty members also lecture participants on specialized subjects, host a workshop on exploring career options in Japan, and welcome participants to see some of the research conducted in on-campus laboratories. This program will not only encourage cooperation between Nagoya University and its partner institutions, but also provide a new generation of students a small taste of what it is like to study in Japan.

Schedule: February 8-22,2018

	8(Thu)	9(Fri)	10(Sat)	11 (Sun)	12 (Mon)	13 (Tue)	14(Wed)
8:45 ▶ 9:00		Opening Ceremony				Morning Meeting	
9:00 ▶ 10:30		Orientation			Japanese 1	Japanese 3	Japanese 5
10:45 ► 12:15	Housing	Placement Test	Eigld Trip	Marian Haran	Japanese 2	Japanese 4	Japanese 6
Lunch break	Check-in		Field Trip	Holiday			
13:00 ► 14:30		Campus Guidance			Cultural	Career	Laboratory Visit/
14:45 ▶ 16:15		Welcome Party			Excursion	Exploration Workshop	Specialized Lecture

	15 (Thu)	16 (Fri)	17(Sat) · 18(Sun)	19(Mon)	20 (Tue)	21 (Wed)	22 (Thu)
8:45 ▶ 9:00	Morning	Meeting			Morning Meeting		
9:00 ▶ 10:30	Japanese 7	Japanese 9		Japanese 11	Japanese 13	Japanese 15	
10:45 ▶ 12:15	Japanese 8	Japanese 10	City Tour/	Japanese 12	Japanese 14	Final Exam	Housing
Lunch break			Holiday				Check-out
13:00 ► 14:30	Japanese	Social Event		Laboratory Visit/ Specialized	Self Study	Closing Ceremony	
14:45 ▶ 16:15	Company Visit	with NU Students		Lecture	Sen Study	Farewell Party	







1 Hands-On Painting Experience 2 Social Exchange with NU Students 3 Presentation in Japanese Cl

- Five-Year Doctoral Programs for Training and **Developing Future International Leaders -**











Number of Research Assistants 19 (FY2013) 16 (FY2014) 11 (FY2015) 11 (FY2016) 6 (FY2017)

Number of Students who received a study grant

- 12 (85,000 yen/month) (FY2014) 2 (50,000 yen/month) (FY2014)
- 13 (200,000 yen/month) (FY2015)
- 13 (85,000 yen/month) (FY2015)
- 23 (200,000 yen/month) (FY2016)
- 2 (150,000 yen/month) (FY2016)
- 14 (85,000 yen/month) (FY2016)
- 37 (200,000 yen/month) (FY2017) 12 (85,000 yen/month) (FY2017)
- 2 (50,000 yen/month) (FY2017)



Number of Research Assistants 56 (FY2013) 54(FY2014)

Number of Students who received a study grant

- 19 (150,000yen/month) (FY2014)
- 32 (150,000ven/month) (FY2015)
- 34 (150,000yen/month) (FY2016)
- 9 (200,000yen/month) (FY2016) 41 (150.000ven/month) (FY2017)
- 14 (200,000yen/month) (FY2017)

Graduate Program for Real-World Data Circulation Leaders

The field of real-world data circulation aims to integrate the acquisition, analysis, and implementation of data in engineering, information science, medicine, and economics. Data acquisition involves observing digital data from real-world phenomena, while data analysis involves evaluating this data using information science. Data implementation then follows by developing innovative products and services using the analysis results. This Program will foster leaders in industrial technologies, rather than in basic sciences, who can generate effective data circulation to create positive social values. Students in the Program gain fundamental knowledge of real-world data circulation processes, the comprehensive understanding needed to recognize data circulation within various technologies that drive the world, and the skill to create new values. In addition, the Program provides practical experiences, such as research internships in industry or academia, while thesis work allows students to incorporate their experience and knowledge into a Ph.D. dissertation. Furthermore, students in this Program may be offered financial assistance.

Women Leaders Program to Promote Well-being in Asia

This program has been designed to address problems that must be solved in the Asian region, which consists of multicultural societies in various stages of development. These problems include poverty, diverse health problems, and gender gaps. With a focus on food, health, environment, social systems, and education, we aim to foster women leaders who can work in a global context to achieve well-being in Asia. Well-being refers to a situation in which the rights and personal fulfillment of individuals are guaranteed and to a state characterized by good physical, mental, social, and economic conditions. This program is jointly undertaken by four graduate schools: International Development, Education and Human Development, Medicine (including Health Sciences), and Bioagricultural Sciences, as well as the International Cooperation Center for Agricultural Education and the Center for Gender Equality.



3 (FY2013) 4 (FY2014) 10 (FY2016) 7(FY2017)

Number of Research Assistants 44 (FY2012) 53 (FY2013)

Number of Students who received a study grant

- 4 (200,000yen/month) (FY2013) 3 (170,000yen/month) (FY2013)
- 6 (200,000yen/month) (FY2014) 3 (170,000yen/month) (FY2014)
- 16 (150,000yen/month) (FY2014) 12 (85,000yen/month) (FY2014)
- 6 (200,000yen/month) (FY2015)
- 1 (170,000yen/month) (FY2015) 14 (150,000ven/month) (FY2015)
- 18 (85,000yen/month) (FY2015)
- 3 (200,000yen/month) (FY2016) 35 (150,000yen/month) (FY2016)
- 1 (200,000yen/month) (FY2017 33 (150,000yen/month) (FY2017)



62 (FY2013) 92 (FY2012) 6 (FY2016)

23(FY2014)

11(FY2015)

15(FY2014)

Number of Students who received a study grant

- 13 (200,000yen/month) (FY2013)
- 7 (85.000ven/month) (FY2013)
- 27 (200,000yen/month) (FY2014)
- 43 (200,000yen/month) (FY2015)
- 11 (85,000ven/month) (FY2015)
- 52 (200,000yen/month) (FY2016
- 14 (85,000yen/month) (FY2016)
- 57 (200,000yen/month) (FY2017
- 8 (85.000ven/month) (FY2017)

Leadership Development Program for Space Exploration and Research

This program aims to expand the utilization of the space environment, the final frontier for humankind, by fostering world-class leaders who can integrate advanced technologies and knowledge with broad perspectives and utilize them in industries, and by creating a network of next-generation industry leaders who will expand the utilization of space technologies and infrastructures that improve people's daily lives. Our graduates will have broad visions and solid expertise, project planning, management and execution, problem-solving, and global communication skills. A flagship of this program is the ChubuSat instrument development projects, where teams of students with different sets of interests, skills and expertise develop instruments for the industry-academia microsatellite project, ChubuSat. Students can exercise their problem-solving and project management skills through the hands-on experience of instrument development. One of the projects proposed by our students was launched as ChubuSat-2 in February, 2016.

PhD Professional: Gateway to Success in Frontier Asia

For Japan to regain its former vitality, it is essential to regenerate manufacturing industry by more expanding the operation into the global markets. Under these circumstances, this program aims to cultivate next-generation leaders who play active roles in developing and implementing new growth strategies by collaboration with Frontier Asia including Vietnam, Cambodia and Indonesia. Through the collaboration, we believe it is important for both parties to build win-win relationship while each party plays a respective role; namely Frontier Asia as production bases and Japan as expert and investor in technology. This program is intended to train young talents from all-round graduate schools (integration of arts and sciences) to become global leaders strengthening the ties between Japan and Frontier Asia.

Asia Satellite Campuses Institute

- Transnational Doctoral Programs for Leading Professionals in Asian Countries -

Programs Offe	red at a Glance				
	Graduate School of Law	Graduate School of Medicine	Graduate School of Bioagricultural Sciences	Graduate School of International Development	Graduate School of Environmental Studies
★ Vietnam					
Cambodia					
Mongolia					
Laos					
Uzbekista	n 💮				
Philippine	s				
Myanmar		*Program offi	ered without Satellite Campus.		







Up to now, Nagoya University has been actively nurturing talented young professionals from Asian countries through initiatives such as legislation-related professional development programs at the Center for Asian Legal Exchange (CALE), and the Young Leaders' Program (YLP) at its Graduate School of Medicine. Students graduating from NU have gone on to play active roles as government executives and potential executives for positions such as vice minister and bureau director in their various Asian countries. Among those graduates who already hold master's degrees, some wish to study for a doctoral degree at an overseas university, so that they can further develop their policy-making skills in order to tackle the various issues Asian countries are dealing with; however, many graduates would find it difficult to study abroad again while remaining in their current jobs.

Based on their needs, NU has taken advantage of its great achievements and experience in the Asian region to date, and, from 2014, began the "Transnational Doctoral Programs for Leading Professionals in Asian Countries," which are targeted at executives from various Asian countries and enable them to get a doctoral degree without leaving their workplace for an extended period of time.

In these Programs, students are enrolled in a Nagoya University doctoral program (Final Three-year Program), and work towards a doctoral degree by receiving education both in Japan and at one of NU's Satellite Campuses. For the majority of the time they learn skills such as academic writing and get research guidance at the Satellite Campus established in their own Asian country, as well as receiving long-distance guidance using ICT from their academic advisor in Japan. In addition, there are fixed periods of "schooling", during which students will travel to Japan to receive intensive teaching and research guidance from their academic advisor directly. Through this system of education, students are able to enjoy the same high standard of education as they would on Nagoya University's home campuses, without having to be absent from their workplace for long periods of time.

These Programs are offered in seven countries, namely Cambodia, Laos, Mongolia, Myanmar, Philippines, Uzbekistan and Vietnam by five graduate schools: Law, Medicine, Bioagricultural Sciences, International Development and Environmental Studies.

Other International Programs

International Development and Cooperation Course (Master/ Doctoral)

The program aims at equipping students with knowledge of a wide range of issues of developing countries. By imparting knowledge and understanding of the realities of the developing world, students will be equipped with skills to work in a variety of related professional fields. Drawing on Japanese development experience, it provides alternative perspectives which differ from the conventional development theories of the Western model

LL.M. (Comparative Law) and LL.D. (Comparative Law) Programs in Law and Political Science. **Department of the Combined Graduate Program in Law and Political Science**

In this program, a traditional curriculum in law and politics is complemented by social activities, student mentorship arrangements, and private and public sector internships. Students may take advantage of language instruction through the Education Center for International Students, annual participation in the Japan Inter-Collegiate Negotiation Competition, and a set of student-driven cross-national seminars (the Peer Support Initiative). The extended features of our environment supplement the academic program, creating additional opportunities for cross-border and cross-cultural teaching and learning.

Young Leaders' Program (Master)

The Young Leaders' Program at Nagoya University is a one-year Master's degree course in Healthcare Administration. The Young Leaders' Program (YLP), which aims to foster the development of future national leaders in Asian and other countries, is one of the Japanese Government Scholarship Student systems and it should help form a network among national leaders, contributing to the establishment of friendly relationships and improved policy planning among Asian and other countries including Japan. (Not open for general admission)

Nagoya University **Global Environmental Leaders Program** (Master/ Doctoral)

Nagoya University Global Environmental Leaders Program (NUGELP) aims to foster future environmental leaders who can propose concrete solutions to various environmental problems around the world, particularly in Asia and Africa. NUGELP is interdisciplinary and covers various research fields such as Civil Engineering, Environmental Systems Analysis, Transportation Planning, Land Use Planning, Architecture, Economics, and Policy Studies.

Forefront Studies Program (Master/ Doctoral)

The objective of the Forefront Studies Program is to develop international civil engineers who have advanced expertise, ability to make comprehensive judgement and deployment capabilities for sustainable co-development of Japan and foreign countries in civil engineering field. This Program offers the financial aid of the Japanese Government Scholarship Program

Other International Programs (Graduate)

D	Affiliated Schools	Degree		
Programs	Arrillated Schools		Doctoral	
International Development and Cooperation Course	Graduate School of International Development	•	•	
Department of the Combined Graduate Program in Law and Political Science LL. M. (Comparative Law) Program and LL.D.(Comparative Law)	Graduate School of Law	•	•	
Young Leaders' Program (YLP)	Graduate School of Medicine	•		
Nagoya University Global Environmental Leaders Program (NUGELP)	Graduate School of Environmental Studies Graduate School of Engineering	•	•	
Forefront Studies Program	Graduate School of Environmental Studies Graduate School of Engineering	•	•	

Applied Social System Institute of Asia (ASSIA)





ASSIA is a new institute launched in April of 2017. To begin, let us explain the circumstances leading to its establishment. In 2015 Nagoya University released the "Nagoya University Matsuo Initiatives for Reform, Autonomy and Innovation 2020" (NU MIRAI 2020), which set forth several medium-term objectives that the University will endeavor to achieve in the future. Central among the challenges introduced is the goal of growing Nagoya University into a world-leading research university, with "the establishment of research institutes for the sustained creation of human knowledge" provided as one of the concrete policies toward achieving this goal.

"The creation of human knowledge" implies, in other words, the integration of knowledge and expertise possessed by the diverse research personnel belonging to Nagoya University as a comprehensive research university. In the past, Nagoya University has prioritized the establishment of interdisciplinary research organizations in the natural sciences, however it has become apparent that finding solutions to many global challenges requires incorporating the knowledge and expertise of the social sciences. To this end, Nagoya University decided to create a new research organization for the integration of the social sciences: the Applied Social System Institute of Asia (ASSIA). While there are many research institutes for specialized fields in the social sciences at national universities in Japan, ASSIA is unique in that it is composed of research personnel who themselves work across a number of fields in the overall sciences.

Now, let us introduce ASSIA's organizational structure. The following six research groups were launched in 2017 with the cooperation of Nagoya University's social sciences departments, and span the three research areas of "Environments," "Institutions," and "Human Resources":

- 1. Sustainable development with realization of a carbon-free society (Graduate School of International Development, Graduate School of Economics, and Graduate School of Environmental
- 2. Strengthening food security and community development in Asia by interdisciplinary approaches (Graduate School of Bioagricultural Sciences and Graduate School of International
- 3. Legal research into ASEAN through field studies and theoretical analysis (Graduate School of Law, Graduate School of International Development, and Graduate School of Environmental Studies)
- 4. The governance of Al networking- Mainly from social, ethical, economic, and legal viewpoints - (Graduate School of Law and Graduate School of Economics)
- 5. Skills and knowledge for youths in developing countries (Graduate School of International Development, Graduate School of Humanities, and Graduate School of Education and Human
- 6. Construction of an international network for Lesson Studies and development of a teacher education program in Asia (Graduate School of Education and Human Development)

NU MIRAI 2020 takes as another of its policies "the cultivation of personnel motivated to learn with Asia and challenge the world." ASSIA develops human resources and facilitates creative research by utilizing as its foundation the international collaborative networks that each researcher and graduate school at the University have been building in the past. Furthermore, ASSIA contributes to the restructuring of Nagoya University into a "hub university in Asia" by showcasing researches that fuse disciplines and open up new areas of study to the world.

International Cooperation



Nagoya Endoscopy Training Center



Center for Asian Legal Exchange (CALE)



International Center for Research and Education in Agriculture (ICREA) - A leading center for international cooperation in agricultural education -



ESD Demonstration at Sirirai Hospital, Mahidol University

Recent advances in health care have improved the rate of mortality from infectious disease in developing countries. On the other hand, mortality from all forms of malignant neoplasms, including gastrointestinal cancer, has become a major problem worldwide. Early diagnosis is critical in the treatment of gastrointestinal cancer, but there are many patients who do not receive the appropriate medical care because of a shortage of doctors who are qualified to perform a gastrointestinal endoscopy. The training of doctors is an important step toward solving this problem. Japanese gastrointestinal endoscopy techniques and equipment are the most advanced in the world, making them indispensable for the early diagnosis and treatment of various digestive diseases. The "Nagoya Endoscopy Training Center" was opened at Hue University of Medicine and Pharmacy in Vietnam in September 2013. The purpose of this Center is to disseminate the endoscopic diagnosis and treatment techniques that have been developed by the Department of Gastroenterology and Hepatology in Nagoya University, Graduate School of Medicine to Asian countries. The Center boasts state-of-the-art endoscopy systems, and many young doctors have received instruction on the techniques of endoscopic diagnosis and treatment there as well as at Nagoya University itself. The doctors who studied at the Center have since provided the highest quality care in diagnosis and treatment using gastrointestinal endoscopy. After Hue, the second Center was opened at Bach Mai Hospital in Hanoi, Vietnam in July 2014 and the third at Yangon General Hospital in Yangon, Myanmar in February 2015. In September 2015, through the

cooperation between the Japanese Ministry of Health, Labour and Welfare and the Thai Department of Medical Services, the Early Cancer Detection Training Center was established within the National Cancer Institute in Bangkok, where a delegation from Nagoya University visited and contributed to the promotion of endoscopic skills acquisition by young Thai doctors. These training centers constitute an Asian network and accelerate the training process, contributing not only to daily practice but also to academic affairs in Asian countries. Using this network to support other countries in the Mekong region, we started to hold GI (Gastrointestinal) endoscopy workshops at Mahosot Hospital in Laos and at Calmette Hospital in Cambodia from 2016. In 2017, we held three conferences via the internet, providing easy access to consultation for those in Asian countries and allowing for the discussion of many cases in real time.

Several doctors who received training at the Nagoya Endoscopy Training Centers, where they acquired new and high-level endoscopic skills, have begun to perform Endoscopic submucosal dissection (ESD) for the early detection of gastric cancer and colon cancer. They reported the preliminary results of ESD implementation during an international meeting for GI endoscopy. Our efforts, developed step by step, have been a success in training ESD experts in Asian countries. The Nagoya Endoscopy Training Center, supported by the Department of Gastroenterology and Hepatology, is central to the treatment and diagnosis of digestive diseases and contributes to health care



uilding Asian Legal Exchange Plaza 2.3 2017 Summer Seminar 4 CJLV 10th Anniversary Ceremony



Research and Education Center for Japanese Law

- 2 National University of Mongolia, School of Law, Mongolia
- 4 Royal University of Law and Economics, Cambodia
- 5 Ho Chi Minh City University of Law, Vietnam
- (Est. Jan. 2012)

Myanmar-Japan Legal Research Center 6 University of Yangon, Myanmar (Est. Jun. 2013)

Indonesia-Japan Legal Research and Education Center

Laos-Japan Legal Research and Education Center

CALE was established in 2002 as a research base for Asian Law and a coordinating center for Japanese research and practice on legal assistance in Asia. It has been expanding its cooperation activities into several countries in Asia, and remains the only center within a Japanese university to be professionally involved with legal assistance research and implementation projects. The Center is committed to playing a major role in carrying out legal assistance projects centering on Asia, disclosing research outcomes related to those projects, disseminating research and legal information on countries in Asia, and expanding the network of specialists within this field.

The Center's legal assistance activities include cooperation with developing countries which are making the transition to a market economy, to assist them in promoting the necessary reform of their legal systems and enable them to achieve a working market economy, the rule of law, human rights, and democracy. Activities in the field include the following:

- Cooperating in the drafting of laws and promoting judicial system reform
- Cooperating in the consolidation of legal infrastructure such as the improvement of maintenance and access to legal and judicial information.
- Cooperating in human resources development in the judicial sector

Establishment of centers for research and education in the field of law

Eight centers have been established jointly by Nagoya University and partner universities in seven Asian transitional countries – Uzbekistan, Mongolia, Vietnam, Cambodia, Myanmar, Indonesia, and Laos, where the Japanese government is implementing legal assistance projects, and where local legal experts with sufficient knowledge and understanding of Japanese law and language are becoming indispensable. Some of these centers provide law students in partner universities with knowledge of Japanese Law through the Japanese language, to foster experts who can contribute to their own country's legal development in the future by benefiting from Japanese knowledge and experience.

These centers are designed as a central point of dissemination of information about Japanese law, and as a hub for the collection and sharing of information about the laws of these countries. They are also aimed at facilitating research on both comparative and country-focused topics, and to coordinate joint research projects between academic and professional institutions of the two countries in order to enhance deeper mutual understanding between professionals and to promote expert knowledge on the law and society of these Asian countries.

International Center for Research and Education in Agriculture (ICREA)

- A leading center for international cooperation in agricultural education -







Interview to rice liquor producer by students



The International Center for Research and Education in Agriculture (ICREA) is a research institute mandated to function as a leading center for international cooperation in agricultural education. It was established in April 1999, at Nagoya University, under the initiative of the Ministry of Education, Culture, Sports, Science and Technology (MEXT) of Japan.

In developing countries, many problems related to agriculture (for example, food shortages, downturns in agricultural production, poverty, and environmental devastation) have yet to be solved by the international community. To solve these global-scale issues, it is important to develop appropriate agricultural technologies while paying careful attention to socioeconomic impact, effective use of natural resources, and respect for the environment. In both developing countries and Japan, the development of human resources is a pressing issue. In recent years, the need for international cooperation to overcome these problems and to facilitate human resources development has increased. Japan has been expected to work actively to resolve these issues.

To respond to such expectations, ICREA was established by the MEXT of Japan at Nagoya University. ICREA's goal is to become a leading center for international cooperation to help solve problems in agricultural and rural development in developing countries.

Global Network



Nagoya University around the Globe

- International Liaison Offices and Bases -



Academic Consortium for the 21st Century (AC21)



MIRAI — Connecting Swedish and Japanese Universities through Research, Education and Innovation



Japan-UK Research and Education Network for Knowledge Economy Initiatives (RENKEI)



APRU (Association of Pacific Rim Universities)

— Linking together the influential research universities of the Pacific Rim



Our Partner Institutions

Nagoya University around the Globe

- International Liaison Offices and Bases -

In order to establish a world presence to develop true research excellence, Nagoya University has international liaison offices, research and education bases and a technology transfer office around the world. These stations are strategically positioned to recruit top-level students and teaching staff, organize academic exchanges, host workshops, interact with world-level researchers, learn about different countries' education systems, and promote Nagoya University around the globe.

International Liaison Offices







Uzbekistan Office
(Tashkent, Uzbekistan): Est. November 2009–@



European Center

(Freiburg, Germany): Est. April 2010-



Bangkok Office

(Bangkok, Thailand) : Est. April 2014–4

 Technology Partnership of Nagoya University Inc.



North Carolina, USA Est. January 2008

• Field Research Center





Ulaanbaatar, Mongolia Est. September 2009

 Nagoya Endoscopy Training Center (refer to: P34)









Hue, Vietnam
Est. September 2013-1



Hanoi, Vietnam Est. July 2014–2



Yangon, Myanmar Est. February 2015–3

●Asia Satellite Campuses Institute (refer to: P30)









Phnom Penh, Cambodia Est. August 2014–

●



Ulaanbaatar, Mongolia Est. August 2014



Hanoi, Vietnam Est. August 2014–2



Tashkent, Uzbekistan Est. April 2015



Vientiane, Laos Est. October 2015



Los Banos, Philippine
Est. November 2015-



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Academic Consortium for the 21st Century (AC21)



Towards "The Global University — Architect of the New Century"

The Academic Consortium for the 21st Century (AC21) was established in 2002, at the initiative of Nagoya University, with the aim of founding a new and vigorous global partnership in higher education.

Over the fifteen years of its history, the AC21 network has steadily grown, currently with 19 member universities from 11 countries spanning five continents. With the ambitious vision "The Global University - Architect of the New Century," the Consortium has conducted an array of initiatives and programs through which the member institutions can develop and contribute to addressing global issues of the 21st century.



AC21 Activities

As a dynamic consortium, AC21 supports its mission and fosters collaboration amongst members through the following programs and activities:

✓ Collaboration in Research & Education

-International Forums (IF)

Held every two years, International Forums provide members with the opportunity to reassess the role of higher education in society through keynote addresses by prominent public figures, presentations and panel discussions

—Special Project Fund (SPF)

The AC21 Special Project Fund, launched in 2009, endeavors to promote research and educational exchanges between member institutions.

✓ Initiatives for Students

-Student World Forums (SWF)

Student World Forums are conferences at which students from member institutions are invited to exchange ideas on issues of international concern. The SWF facilitates international friendship, encourages students to develop a global mindset and strengthens the AC21 network.

-International Graduate Schools (IGS)

While SWFs target mainly undergraduate students, a new program was launched in 2013 in order to inspire graduate students of member institutions. Lectures in the IGS are offered by leading scholars with outstanding credentials in their respective fields.

✓ Industry-Academia-Government Collaboration

Taking advantage of its international network, the AC21 seeks to facilitate collaboration between academia, industry and government at the global level.

AC21 Member Institutions

Australia 💮

• The University of Adelaide



- Jilin University
- Nanjing University
- Northeastern University Shanghai Jiao Tong University
- Tongji University

France

• University of Strasbourg



- Technische Universität Chemnitz
- University of Freiburg

Indonesia

• Gadjah Mada University

Japan

Nagoya University



National University of Laos
 Chulalongkorn University

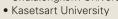


• University of Canterbury

As of February 2017

South Africa • Stellenbosch University

Thailand



USA

• North Carolina State University

University of Minnesota

AC21 Second International Graduate School hosted by Gadjah Mada University, Indonesia

From July 11 to 15, 2017, the AC21 International Graduate School (IGS) 2017 was organized by Gadjah Mada University, Indonesia, with the theme "Community and Indigenous-based Technology for Sustainable Development towards Resilience Society."

The second AC21 IGS saw around 50 graduate students from 11 universities who were keen to acquire broad and in-depth knowledge and understanding of different aspects of the sustainability from scholars and experts through lectures and hands-on experience, such as an internship, community service, etc. The five-day program provided participants with valuable opportunities to grow and expand their academic and personal horizons, comprised not only learning content but also of cultural experience opportunities. At the closing ceremony on the final day, a certificate was conferred by Gadjah Mada University to students who completed the entire IGS programs

15th Steering Committee Meeting 2017

The AC21 Steering Committee (STC) Meeting 2017 coincided with the IGS 2017, on July10 at Gadjah Mada University. Discussions at the Meeting include increase in the maximum number of the AC21 Special Project Fund recipients, having more frequent STC Meetings via Skype, and how to develop future research collaboration within the AC21 network

The STC serves as a guiding and advisory body to the AC21 activities, developing and reviewing the strategic direction and implementation of AC21 policies and collaborative projects. The Committee is currently comprised of seven members, including Nagoya University.

MIRAI — Connecting Swedish and Japanese Universities

through Research, Education and Innovation

The MIRAI Project is a Japan-Sweden initiative for the enhancement of collaborative research and the development of networks among early career researchers in the two countries, planned to continue from 2017 to 2019. It offers various programs, such as scientific conferences in which the following core themes are explored: Sustainability, Materials Science, and Aging.

MIRAI's 2017 Seminar and Scientific Sessions were successfully organized at Lund University, Sweden, drawing more than 170 participants from both inside and outside the MIRAI member

Toward the 2018 MIRAI Seminar in Tokyo

MIRAI's 2018 Seminar will be organized in Tokyo, celebrating

the 150th anniversary of diplomatic relations between Japan and Sweden. The event will consist of keynote speeches by Nobel laureate and research-related events, such as panel discussions. The event is expected to lead to future joint activities between the universities of our countries.



2017 MIRAI Seminar in Lund University, Sweden

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Japan-UK Research and Education Network

for Knowledge Economy Initiatives (RENKEI)





As of Feb. 2017

RENKEI member universities



- Kyoto University
- Kyushu University
- Nagoya University
- Osaka University • Ritsumeikan University
- Tohoku University



- University of Leeds
- University of Liverpool
- Newcastle University
- University of Southampton

In March 2012, a consortium known as the "Research and Education Network for Knowledge Economy Initiatives (RENKEI)" was launched by six Japanese and six UK universities in order to promote multilateral collaboration involving academia, industry, government and even society through education and research between the two countries. RENKEI member universities form Working Groups to plan and design the RENKEI Workshops.

Nagoya University held in 2014 a week-long RENKEI Workshop entitled "Japan-UK Joint Workshop on Aerospace Engineering," in collaboration with partner UK universities. The Workshop, attended by 20 participants who were students and early-career researchers of the member institutions, was a success with support from local industry and business leaders including Mitsubishi Heavy Industries, Ltd. 2017 saw two RENKEI Workshops, which were designed with the unique themes of "Digital Cultural Heritage Business and Open Data: Bringing Rome to Japan" and "RENKEI PAX SCHOOL 2017 -Emancipating the Mind: History, Politics and Heritage."

From 2018, the second term of a five-year RENKEI scheme has begun with enhanced visions and goals in order to pursue more active collaborations with industry and civil society.

APRU (Association of Pacific Rim Universities)



— Linking together the influential research universities of the Pacific Rim



APRU is the only network of leading universities bringing together the Americas, Asia, and Australasia. As the voice of knowledge and innovation in the Asia-Pacific region, it was established in 1997. It aims to bring together thought leaders, researchers, and policy-makers to exchange ideas and collaborate on effective solutions to the challenges of the 21st century. Over 50 universities representing the Asia-Pacific region are participating in the association, with Nagoya University joining in 2017. In terms of cross-border collaboration among multiple universities, Nagoya University will strengthen its involvement in the organization to address the challenges we face in becoming one of the world's best research universities.

Our Partner Institutions

Academic Exchange Agreements

- = Inter-University Agreement
- o = Inter-School Agreement

Asia

BANGLADESH

- o Bangladesh Agricultural University
- o Bangladesh University of Engineering & Technology, Department of Physics
- o University of Dhaka, Faculty of Social Sciences
- o SAARC Meteorological Research Centre

BHUTAN

o The Centre for Bhutan Studies

CAMBODIA

- Royal University of Phnom Penh
- Royal University of Agriculture
- Royal University of Law and Economics

CHINA

- Nanjing University
- Jilin University
- Huazhong University of Science and Technology
- Tsinghua University
- Fudan University
- Xi an Jiaotong University
- Zhejiang University
- Shanghai Jiao Tong University
- Tongji University
- Northeastern University
- Peking University
- Harbin Institute of Technology
- University of Science and Technology of China
- Chinese Academy of Sciences,
- the Shanghai Institute of Organic Chemistry
- The Chinese University of Hong Kong
- The University of Hong Kong
- Dalian University of Technology
- · City University of Hong Kong
- o Central South University
- Beijing University of Technology
- o Chinese Academy of Sciences
- Purple Mountain Observatory o Chinese Academy of Sciences,
- National Astronomical Observatories
- o China University of Political Science and Law

o Chinese Academy of Social Sciences, Institute of

- East China Normal University, Faculty of Education Sciences
- Literature and Institute of Literature of National Minorities
- o Peking University, School of International Studies
- o East China University of Political Science and Law
- o Chinese Academy of Sciences. Institute of High Energy Physics
- o Beijing International Studies University
- Naniing University of Aeronautics and Astronautics
- o Jiangsu Provincial Academy of Social Sciences (JSASS)
- o Chinese Academy of Sciences, Institute of Process Engineering
- o Polar Research Institute of China
- Southwest Jiaotong University, School of Economics and Management

- Beijing Institute of Technology, School of Management and Economics
- o Chinese Academy of Sciences,
- Research Center for Eco-Environmental Sciences Tianiin University, School of Management
- and School of Public Administration
- Chinese Academy of Social Sciences, Institute of Population and Labor Economics
- University of International Business and Economics, School of International Trade & Economics
- Chinese Academy of Sciences. Xinjiang Institute of Ecology and Geography
- o Chinese Academy of Sciences, Shanghai Institute of Ceramics
- China Meteorological Administration, Institute of Desert Meteorology
- o Hainan University, Law School
- o The Hong Kong University of Science and Technology, School of Engineering
- o Renmin University of China, School of Law
- o Renmin University of China, School of Foreign Languages
- Shenyang University of Technology
- o Sun Yat-sen University, Lingnan College
- o Ministry of Health, P.R.China, China-Japan Friendship Hospital Beijing Normal University, Academy of Disaster Reduction and Emergency Management State Key Laboratory of Earth Surface Processes and Resource Ecology
- o Xiamen University, School of Law
- o Chinese Academy of Sciences. Institute of Theoretical Physics
- o Chinese Academy of Sciences, Institute of Geographic Sciences and Natural Resources Research
- Nanjing Normal University,
- School of Energy & Mechanical Engineering o Donghua University, College of Foreign Languages
- o Shanghai International Studies University School of Japanese Studies and School of Chinese Studies and Exchange
- o Beijin Normal University, Faculty of Education
- o Institute of Science and Technology for Development of Shandong (ISTD)
- o Xi'an International Studies University, School of Japanese Culture and Economy
- o Tianjin University, School of Architecture
- o Institute of Geophysics, China Earthquake Administration

INDIA

- University of Pune
- Indian Institute of Science, Bangalore
- Tata Institute of Fundamental Research
- o Tata Institute of Fundamental Research, Natural Sciences Faculty
- o Indian Institute of Technology Madras
- o Indian Institute of Technology Delhi

INDONESIA

- Gadjah Mada University
- The State University of Surabaya
- Institute of Technology Bandung
- o Indonesian National Institute of Aeronautics and Space
- o Padjadjaran University, Faculty of Letters
- o Syiah Kuala University, Faculty of Basic Science
- o Diponegoro University, Pusat Studi Asia
- o Agency for the Assessment and Application of Technology (BPPT), Center for the Assessment and Application of Environmental Technology

- University of Indonesia, Faculty of Engineering
- University of Indonesia, Faculty of Computer Science
- Sepuluh Nopember Institute of Technology
- Sriwijava University, Faculty of Agriculture

o Universitas Halu Oleo

- REPUBLIC OF KOREA Mokpo National University
- Gyeongsang National University
- Ewha Womans University
- Hanyang University
- Korea University
- Seoul National University
- Kyung Hee University
- Yonsei University Sungkyunkwan University
- Pohang University of Science and Technology
- Korea Advanced Institute of Science and Technology (KAIST)
- Korea Maritime and Ocean University Korean Research Institute of Standards and Science.
- Astronomy Observatory
- o Chungnam National University, College of Economics and Business Administration
- Korea University, College of Education Korea Institute for Advanced Study, School of Mathematics
- Seoul National University, College of Law
- O Kyungnam University, Industry Academic Cooperation Foundation
- o Korea Legislation Research Institute o Pukyong National University, College of Fisheries Sciences
- o Pusan National University, College of Engineering
- Hankuk University of Foreign Studies. Graduate School and
- Graduate School of International Area Studies Chonnam National University.
- College of Business Administration University of Seoul, College of
- Public Affairs and Economics Chonbuk National University.
- Institute for North-East Asian Law Korea Institute of Geoscience and Mineral Resources,
- Geologic Environment Research Division

Korea Institute of Geoscience and Mineral Resources,

- Kyungpook National University, Faculty of Engineering • Institute of Sunchang Fermented Soybean Products
- Geologic Environment Research Division
- Seoul National University Hospital
- Korean Space Weather Center
- o ASAN Medical Center Dong-A University,
- College of Natural Resources and Life Science Korea Aerospace University,
- College of Engineering, Department of Materials Science, Center of Surface Technology and Applications
- Pusan National University, Professional Graduate School of Law
- o Korea Institute of Ocean Science and Technology, Korea Ocean Satellite Center
- Chungnam National University, College of Agriculture and Life Sciences Seoul National University Asia-Pacific Law Institute
- Chonnam National University. School of Mechanical Engineering Automobile Research Center

LAOS

- National University of Laos
- o National Agriculture and Forestry Research Institute
- O Champasack University

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MALAYSIA

- MARA University of Technology, Faculty of Mechanical Engineering
- O Universiti Putra Malaysia, Faculty of Science

MONGOLIA

- National University of Mongolia
- Mongolian University of Science and Technology
- Ministry of Health and Sports, Mongolia
- The Ministry of Environment and Tourism of Mongolia
- Mongolian National University of Medical Sciences
- Mineral Resources and Petroleum Authority of Mongolia, Geological Information Center
- National Legal Center of Mongolia
- Mongolian University of Science and Technology, School of Geology and Petroleum Engineering
- Mongolian Academy of Sciences, Institute of Geography
- Mongolian Academy of Sciences, Institute of Philosophy, Sociology and Law
- o Institute of Meteorology, Hydrology and Environment, Mongolia Mongolian National University of Education

MYANMAR

- University of Yangon
- The University of Medicine 1, Yangon

NEPAL

Kathmandu University, School of Science

PHILIPPINES

- University of the Philippines, Los Banos
- University of the Philippines
- University of the Philippines, Diliman
- University of the Philippines, Manila, UP College of Nursing
- Gokongwei College of Engineering, De La Salle University

SINGAPORE

- Nanyang Technological University
- National University of Singapore
- National University of Singapore, Yong Loo Lin School of Medicine, Alice Lee Centre for Nursing Studies
- National University of Singapore, NUS Business School
- National University of Singapore, Office of Safety, Health & Environment
- National University of Singapore. Center for Quantum Technologies
- Nanyang Technological University, National Institute of Education
- National University of Singapore Centre for Asian Legal Studies (CALS)

SRILANKA

 University of Sri Jayewardenepura, Faculty of Humanities and Social Sciences

THAILAND

- Kasetsart University
- Chulalongkorn University
- Chulabhorn Research Institute/
- Chulabhorn Graduate Institute
- Rajamangala University of Technology Thanyaburi
- Bangkok Dusit Medical Services Public Company Limited
- King Mongkut's University of Technology North Bangkok. Science and Technology Research Institute

- o Thammasat University, Faculty of Economics
- o Mahidol University ASEAN Institute for Health Development
- Chiang Mai University, Faculty of Economics
- Mahidol University, Faculty of Medicine Ramathibodi Hospital
- o HRH Princess Chulabhorn College of Medical Science

VIETNAM

- Hanoi University of Science and Technology
- Vietnam National University, Hanoi
- The Ministry of Justice of the Socialist Republic of Viet Nam
- Vietnam Institute of State and Law
- o Hanoi Law University
- o Ho Chi Minh City University of Law
- o Vietnamese Academy of Science and Technology, Ho Chi Minh City Institute of Resources Geography
- Vietnam National University- Ho Chi Minh City, University of Science, Faculty of Environmental Science
- Foreign Trade University
- Hue University of Medicine and Pharmacy
- Vietnam Academy of Science and Technology, Institute of Mathematics

o University Medical Center, Ho Chi Minh City

National Taiwan University

TAIWAN

- National Chengchi University
- National Tsing Hua University
- National Chung Cheng University
- National Chengchi University, College of Law
- National Taiwan Normal University, College of Education
- Soochow University, School of Law
- Soochow University, School of Foreign Languages and Cultures
 FRANCE
- National Taiwan University,
- Department of Atomospheric Sciences
- Taiwan Ocean Research Institute National Chiao Tung University.
- College of Electrical and Computer Engineering
- o National Chung Cheng University, Center for International Affairs and Exchange
- National Center for Theoretical Sciences, Mathematics Division
- o National Central University, Collage of Science
- Academia Sinica, Institute of Chemistry

Pacific

AUSTRALIA

- · University of Sydney
- Monash University
- Flinders University
- University of South Australia
- The University of Adelaide • The Australian National University
- The University of Western Australia
- o The University of Melbourne, Asian Law Centre
- Commonwealth Scientific and Industrial Research
- Organization, Divison of Ecosystem Sciences (CSIRO) o The University of Adelaide, Faculty of Health Sciences

NEW ZEALAND

- o National Institute of Water and Atmospheric Research
- University of Auckland, Center for Geophysical Research
- University of Canterbury, Faculty of Science

ARMENIA

Yerevan Physics Institute

AUSTRIA

- University of Innsbruck
- o Johannes Kepler University Linz, Faculty of Law
- o The Medical University of Vienna
- o FH JOANNFUM Gesellschaft mbH University of Applied Sciences
- Universität Klagenfurt, Institute of Social Ecology, Faculty for Interdisciplinary Studies

BELGIUM

KU Leuven

NETHERLANDS

University of Twente

BULGARIA

- Sofia University, Department of Astronomy
- o Bulgarian Academy of Sciences, Institute of Electronics and Space Research Institute, Space Astronomy Division
- o Bulgarian Academy of Sciences, Institute of Mathematics

DENMARK

- University of Copenhagen
- Aarhus University

FINLAND

o Finnish Meteorological Institute, Department of Geophysics

- Ecole Nationale des Ponts et Chaussées (ENPC)
- Université Paris Diderot-Paris 7
- Université Jean Moulin-Lvon 3
- Université de Grenoble • Université Paris-Est
- Université de Strasbourg
- École Normale Supérieure de Lyon
- Fondation Maison des Sciences de l'Homme
- Aix-Marseille Université
- Université Paris-Sud o Université Stendhal (Université de Grenoble 3)
- o Université de Paris-Sorbonne, Paris 4
- o Université Panthéon Assas, Paris 2
- o École Nationale Supérieure d'Architecture Paris Val-de-Seine
- o Université de Technologie de Belfort-Montbéliard
- o Université de Reims Champagne-Ardenne
- Université de Grenoble represents Université Joseph Fourier (Grenoble 1), Université Pierre Mendès France (Grenoble 2), Université Stendhal (Grenoble 3), Institut d'Etudes Politiques de Grenoble, Institut Polytechnique de Grenoble, Université Savoie Mont Blanc.

GERMANY

- Technische Universität Braunschweig
- Technische Universität München
- Technische Universität Chemnitz
- University of Freiburg RWTH Aachen
- University of Freiburg, Faculty of Economics and Behavioral Sciences

o University of Cologne, I Physical Institute

- Johannes Gutenberg University Mainz, Faculty of Chemistry, Pharmaceutical Sciences and Geoscience
- o German Aerospace Center, Institute of Aerospace Medicine
- University of Ulm, Faculty of Mathematics and Economics
- o University of Freiburg, Faculty of Medicine
- o University of Regensburg, Faculty of Law
- University of Münster, Faculty of Chemistry and Pharmacy
- o Ruhr-Universität Bochum, Faculty of Physics and Astronomy and Faculty of Electrical Engineering and Information Technology
- o Technische Universität Kaiserslautern, Faculty of Architecture, Spatial and Environmental Planning and Civil Engineering
- o Freie Universität Berlin, Environmental Policy Research Centre
- o The Research Center for Eastern and South Eastern Europe in Regensburg, Institute for East European Law o Technische Universität Darmstadt.
- Department of Civil Engineering and Geodesy o Ruhr Universität Bochum, Faculty of Mathematics
- O University of Duisburg-Essen, Institute of East Asian Studies o Fraunhofer Institute for Chemical Technology ICT,
- Fraunhofer-Gesellschaft o CFK Valley Stade e.V.
- o EBS Law School
- o Johannes Gutenberg University Mainz, Faculty of Physics, Mathematics and Computer Science
- O Leibniz Institute of Ecological Urban and Regional Development

HUNGARY

O Hungarian Academy of Sciences, Institute for Legal Studies

ICELAND

ITALY

University of Iceland

- National Institute of Nuclear Physics (INFN)
- University of Catania
- University of Bologna

Information Engineering

 Sapienza University of Rome o University of Padova, Department of

KAZAKHSTAN

- Kazakh Humanitarian and Law University o Legislation Research Institute, Republic of Kazakhstan

LATVIA

Latvian State University

NORWAY

- University of Oslo
- o University of Tromso, Faculty of Science

POLAND

- University of Warsaw
- Institute of High Pressure Physics (UNIPRESS), Polich Academy of Sciences
- Medical University of Gdańsk
- Warsaw University of Technology
- o Polish Academy of Sciences. Institute of Geological Sciences, Krakow Research Centre

RUSSIA

- Inffe Institute
- Rzhanov Institute of Semiconductor Physics Siberian Branch of Russian Academy of Sciences
- Institute of Theoretical and Experimental Physics o Ministry of Health of Russia.
- Institute of Biomedical Problems

- Lomonosov Moscow State University, Faculty of Physics
- Moscow State Engineering and Physics Institute (Technical University-MEPhI)
- Russian Academy of Sciences.
- Institute of Computer Aided Design
- Russian Academy of Sciences, Far Eastern Branch, Institute of Cosmophysical Research and Radiowave Propagation (IKIR)
- Russian Academy of Sciences, Siberian Branch. Institute of Solar-Terrestrial Physics (ISTP)
- o M.V. Lomonosov Moscow State University, Department of Chemistry
- o Russian Academy of Sciences, Siberian Branch, YuG. Shafer Institute of Cosmophysical Research and Aeronomy (IKFIA)
- The Polar Geophysical Institute, Murmansk

SPAIN

• University of Barcelona

SWEDEN

o Institute of Space Studies of Catalonia (IEEC)

- Uppsala University • Royal Institute of Technology
- Swedish Institute of Space Physics
- o Lund University, Faculty of Law
- o SAFER Vehicle and Traffic Safety Centre at Chalmers o Lund University, Faculty of Medicine

Interdisciplinary Center for General Ecology (IKAOe)

SWITZERLAND

- University of Geneva University of Bern,
- U.K.
- The University of Sheffield The University of Warwick
- University of Bristol University of London.
- School of Oriental and African Studies (SOAS) The University of Leeds
- The University of Edinburgh University of Cambridge, St John's College
- Durham University • The University of Nottingham, School of Biosciences
- University of East Anglia, Faculty of Social Sciences, School of International Development
- The University of Manchester, Faculty of Life Sciences o University of Leicester, Department of Physics and Astronomy

School of Environment & Development

- o The University of Manchester,
- The University of Warwick • The University of Edinburgh.

o The University of Oxford, Department of Physics

- College of Science & Engineering, School of Chemistry The University of Edinburgh, Higgs Centre for Theoretical Physics
- The University of Edinburgh, College of Science and Engineering

O Ukrainian Academy of Sciences, Institute of Theoretical Physics **UZBEKISTAN**

UKRAINE

- Tashkent State University of Law (TSUL)
- University of World Economy and Diplomacy • Tashkent State Technical University named after Abu Raykhan Beruniy
- The Academy of Public Administration under the President of the Republic of Uzbekistan
- Samarkand State University

North America

CANADA

- York University
- University of Toronto, the Faculty of Arts and Science
- Université de Montréal
- University of Alberta
- University of Ottawa
- University of Calgary
- o Carleton University, Faculty of Science
- University of Toronto, Ontario Institute for Studies in Education (OISE) O University of Victoria, Centre for Asia-Pacific Initiatives

USA

- Oberlin College
- North Carolina State University
- Harvard-Yenching Institute
- University of Cincinnati
- St. Olaf College
- Southern Illinois University, Carbondale
- University of **Ill**inois at Urbana-Champaign New York University
- University of Kentucky University of Minnesota
- The University of North Carolina at Chapel Hill

• University of California, Los Angeles

- University of California, Davis University of California, Berkeley
- University of Florida Iowa State University
- University of Michigan, College of Engineering University of California, Los Angeles,
- Department of Education University of Houston, Cullen College of Engineering
- University of California, Berkeley, Department of Physics University of North Carolina at Chapel Hill, School of Medicine
- University of California Berkeley, College of Natural Resources

University of Alaska Fairbanks, Geophysical Institute

National Oceanic and Atmospheric Administration,

- National Oceanic and Atmospheric Administration. Space Environment Laboratory
- National Geophysical Data Center
- Massachusetts Institute of Technology. Havstack Observatory
- Harvard Medical School Tulane University, School of Medicine

University of Pennsylvania, School of Medicine

Center for Astrophysics and Space Sciences

- University of California, San Diego, Colorado School of Mines
- o University of Alaska Fairbanks, Geophysical Institute Duke University, School of Medicine

o Johns Hopkins University, School of Medicine

- University of Wisconsin Law School University of Wisconsin Law School. East Asian Legal Studies Center
- Department of Mechanical Engineering O University of Washington, Genetically Engineered Materials Science and Engineering Center University of California, Los Angeles,

University of Maryland,

California NanoSystems Institute O Northwestern University, Materials Research Institute

Center for Global Metropolitan Studies

 Michigan State University, Department of Physics and Astronomy

University of California, Berkeley.

o Green Mountain College

Global Network 45 44 Nagoya University

- o University of California, Santa Barbara, Bren School of Environmental Science and Management
- University of Michigan, College of Literature, Science, and the Arts, Department of Chemistry
- University of Michigan, College of Engineering, Macromolecular Science and Engineering Center
- O University of Pittsburgh, School of Education
- The Ohio State University, Center for Cosmology and AstroParticle Physics; College of Arts and Sciences, Department of Physics and Department of Astronomy
- University of Colorado Boulder, Laboratory for Atmospheric and Space Physics
- Virginia Polytechnic Institute and State University. Center for Space Science and Engineering Research
- University of Washington, College of Engineering
- The Ohio State University, College of Education and Human Ecology
- The University of Akron, School of Law
- The Ohio State University, Translational Data Analytics

Latin America and the Caribbean

ARGENTINE

- National University of Rosario, Faculty of Biochemical and Pharmaceutical Sciences
- Luis F, Leloir, Campomar Foundation, The Research Institute of Biochemistry

BOLIVIA

o Universidad Mayor de San Andres, La Paz, Faculty of Sciences, Chacaltaya Cosmic Ray Observatory

BRAZIL

- Universidade de Brasília
- Universidade de São Paulo
- National Institute for Space Research
- Fundacao Joaquim Nabuco

GUATEMALA

o Del Valle de Guatemala University, School of Engineering

MEXICO

- Universidad Nacional Autonoma de Mexico
- O Universidad de Sonora

Middle East

University of Kurudistan, Faculty of Engineering

TURKEY

- Bilkent University
- o Istanbul Technical University

ISRAEL

 Tel Aviv University Raymond and Beverly Sackler School of Physics and Astronomy

Africa

EGYPT

- Cairo University
- Tanta University, Faculty of Engineering

GHANA

University of Ghana, Faculty of Social Studies

- University of Nairobi
- African Institute for Capacity Development (AICAD)

SOUTH AFRICA

- Stellenbosch University
- South African Astronomical Observatory
- The Human Sciences Research Council (HSRC)

International Organization

- Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA)
- European Organization for Nuclear Research (CERN)
- United Nations Centre for Regional Development (UNCRD)
- o International Institute for the Unification of Private Law

Multilateral

- Chulalongkorn University (Thailand); Hanoi University of Science and Technology (Vietnam) and National University of Laos (Laos)
- Tashkent State Technical University named after Abu Raykhan Beruniy (Uzbekistan); University of Tsukuba (Japan)
- The University of Adelaide. Faculty of Health Sciences (Australia); University of Freiburg, Faculty of Medicine (Germany)

Agreements for Industry-**University Collaboration**

Europe

- University of Warwick
- O NCC Operations Ltd. as legal entity for the University of Bristol National Composites Centre

North America

North Carolina State University

Multilateral

o Pôle EMC2 (France); IRT Jules Verne (France); Gifu University, Composite Materials Center (Japan); Kanazawa Institute of Technology, Innovative Composite Materials Research and Development Center (Japan)

Agreement for International Joint Research

Asia

REPUBLIC OF KOREA

 Sungkyunkwan University, Center for Advanced Plasma Surface Technology

Agreements for Internship

International Organization

- Food and Agriculture Organization of the United Nations (FAO)
- o The United Nations Educational Scientific and Cultural Organization. Asia and the Pacific Regional Bureau for Education (UNESCO Bangkok)
- The International Organization for Migration (IOM)

Memorandum of Understanding on the Establishment of the Office

Asia

THAILAND

 Chulalongkorn University, Research Services Center of Petroleum and Petrochemical College

International Networks

- Academic Consortium 21 (AC21)
- Association of Pacific Rim Universities (APRU)
- University Mobility in Asia and the Pacific(UMAP)
- Open Education Consortium
- Japan-Canada Academic Consortium(JACAC) Japanese-Swedish University Connection (MIRAI)
- Japan-UK Research and Education Network for Knowledge Economy Initiatives(RENKEI)

Overseas Research and **Education Bases**

- China Center for International Exchange (Shanghai, China)
- Uzbekistan Office (Tashkent, Uzbekistan)
- European Center (Freiburg, Germany)
- Bangkok Office (Bangkok, Tailand)
- Technology Partnership, Inc. (North Carolina, USA)
- Centers for research and education in the field of law(Tashkent, Uzbekistan • Ulaanbaatar, Mongolia • Hanoi/Ho Chi Minh City, Vietnam • Phnom Penh, Cambodia • Yangon, Myanmar • Yogyakarta, Indonesia • Vientiane, Laos)
- Field Research Center (Ulaanbaatar, Mongolia)
- Nagoya Endoscopy Training Center (Hue/Hanoi, Vietnam • Yangon, Myanmar)
- Asian Satellite Campuses Institute (Phnom Penh, Cambodia/Ulaanbaatar, Mongolia/ Hanoi, Vietnam/Tashkent, Uzbekistan/ Vientiane, Laos/Los Banos, Philippine)
- Nagoya University/Mongolian National University of Education Joint Support Center for Child Development(Ulaanbaatar, Mongolia)
- The Cooperative Center for Resilience Research, National University of Mongolia and Nagoya University (Ulaanbaatar, Mongolia)

Nagoya University Outline

- Organizational Structure
- Figures / International Exchange
- Access / The City of Nagoya



	School of Science		
	School of Medicine	U	Iniversity Hospital
	School of Engineering		
	School of Agricultural Sciences		
te Schools	Graduate School of Humanities	— С	Center for Transregional Culture and Society
	Graduate School of Education and Human Development	L R	Research Center for Cultural Heritage and Texts
	Graduate School of Law		·
	Graduate School of Economics	— Е	conomic Research Center
	Graduate School of Informatics	— С	Center for Embedded Computing Systems
		— G	Global Media Research Center
		L F	uture Value Creation Research Center
	Graduate School of Science	S	lugashima Marine Biological Laboratory
		- N	lagoya University Southern Observatories
		— s	Structural Biology Research Center
		— Та	au-Lepton Physics Research Center
		└ N	leuroscience Institute
	Graduate School of Medicine	— С	Center for Research of Laboratory Animals and Medical Research Engineering
		L C	Center for Neural Disease and Cancer
	Graduate School of Engineering	P	Plasma Nanotechnology Research Center (PLANT)
		R	Research Center for Materials Backcasting Technology
		— C	Center for Computational Science
		— C	Center for Micro-Nano Mechatronics
		L E	ducation and Research Center for Flight Engineering

Graduate School of Bioagricultural Sciences

Research Institute of Environmental Medicine

Field Science Center

Avian Bioscience Research Center

Earthquake and Volcano Research Center

Futuristic Environmental Simulation Center

Green Mobility Research Institute
Social Innovation Design Center

Center for Theoretical Studies

Center for Experimental Studies

Center for Integrated Research of Future Electronics - Advanced Measurement Technology Center Center for International Collaborative Research — Center for Integrated Data Science Center for Orbital and Suborbital Research

- Education and Research Center for Sustainable Co-Development

- Administration Bureau

School of Humanities

School of Education

School of Law School of Economics School of Informatics

Administrative Support Organizations

Graduate School of International Development Graduate School of Mathematics Graduate School of Environmental Studies Graduate School of Pharmaceutical Sciences Institute of Liberal Arts & Sciences Education Planning & Development Center Asian Satellite Campuses Institute Institute for Advanced Research

		Institute of Materials and Systems for Sustainability
		Institute for Space-Earth Environmental Research
	University Library	Nagoya University Library Studies
_	Inter-Departmental	Radioisotope Research Center
	Education and Research	Center for Gene Research
	Centers, etc.	Research Center for Materials Science
		Center for the Studies of Higher Education
		International Center for Research and Education in Agriculture
		Nagoya University Museum
		Psychological Support & Research Center for Human Development
		Center for Asian Legal Exchange
		Bioscience and Biotechnology Center
		Synchrotron Radiation Research Center
		Center for Theoretical Studies
		Center for Experimental Studies
		Disaster Mitigation Research Center
		Cellular and Structural Physiology Institute
		Brain & Mind Research Center
		National Composite Center
		Innovative Research Center for Preventive Medical Engineering
		Center for Gender Equality
		Center for Student Counseling

	Brain a mina moodaron contor					
	National Composite Center					
	Innovative Research Center for Preventive Medical Engineerin					
	Center for Gender Equality					
	Center for Student Counseling					
Inter-University Service	Information Technology Center					
Facilities	Institute of Materials and Systems for Sustainability					
	Institute for Space-Earth Environmental Research					
Research Center of Health, P	hysical Fitness and Sports					
Institute of Innovation for Future Society						
Annlied Social System Institute of Asia						

Institute of Transformative Bio-Molecules

Research Institutes

Kobayashi-Maskawa Institute for the Origin of Particles and the Universe (KMI)

- Campus Consortiums

Nagoya University - Headquarters

Audit Office

Schools

Graduate

*English names for the above organizations are tentative.

Figures

Staff

Otan		As of	May 1, 2017
Members	of the Board of Trustees		
Presider	nt		1
Trustees			7
Auditors			2
Total			10
Staff (Ful	l-time)		
Faculty	Professors	665	(65)*1
	Associate Professors	504	(105)
	Lecturers	161	(116)
	Assistant Professors	397	(336)
	Research Associates	3	
	Researchers	0	(181)
Specialis	st	3	(1)
Universi	ty Research Administrator	0	(34)
School T	eachers at Affiliated Schools	39	
Adminis	trative / Technical Staff*2	2,116	(163)
Total	Total		(1,001)

^{*1} Data in parenthesis show the number of staff under limited-time contracts.

International Students by School	FY201
School / Graduate School	
Humanities	209
Education	89
Law	305
Economics	183
Informatics and Sciences	34
Science	115
Medicine	167
Engineering	522
Agricultural Sciences	125
International Development	255
Mathematics	12
Languages and Cultures	170
Environmental Studies	153
Information Science	76
Pharmaceutical Sciences	2
Environmental Medicine	5
Research Center of Health, Physical Fitness and Sports	2
International Education & Exchange Center	86
International Language Center	61
Others	6
Total	2,577

Student Enrollment

As of May 1 2017

Name of Cabania / Craduata Cabania	Undergraduate Courses		Graduate Courses		As of May 1, 2017
Name of Schools / Graduate Schools	Degree seeking	Non-degree seeking	Degree seeking	Non-degree seeking	Total
Humanities	590	81	337	18	1,026
Education	311	31	231	14	587
Law	681	27	238	84	1,030
Economics	967	20	146	11	1,144
Informatics	144	9	_	-	153
Informatics and Sciences	292	-	177	17	486
Science	1,214	18	557	8	1,797
Medicine	1,547	41	992	31	2,611
Engineering	3,294	46	1,645	18	5,003
Agricultural Sciences	750	8	435	4	1,197
International Development	_	_	259	7	266
Mathematics	-	-	152	3	155
Languages and Cultures	_	_	129	6	135
Environmental Studies	_	_	435	18	453
Information Science	_	_	208	3	211
Pharmaceutical Sciences	_	_	87	1	88
Human Informatics	_	-	1	-	1
International Language Center	_	34	_	-	34
Research Institute of Environmental Medicine	-	3	_	-	3
Institute for Space-Earth Environmental Research	-	2	_	-	2
Institute of Materials and Systems for Sustainability	_	2	_	_	2
Research Center of Health, Physical Fitness and Sports	_	3	_	_	3
Total	9,790	325	6,029	243	16,387

^{*2} Data include medical staff of the University Hospital.

International Students by Country / Region

illeriiatioi	iai Students by C	Journ
Asia	Bangladesh	27
	Bhutan	5
	Cambodia	82
	China	1,029
	East Timor	1
	Hong Kong	23
	India	35
	Indonesia	100
	Republic of Korea	209
	Laos	17
	Malaysia	49
	Mongolia	51
	Myanmar	22
	Nepal	7
	Pakistan	3
	Philippines	37
	Singapore	16
	Sri Lanka	15
	Taiwan	73
	Thailand	88
	Vietnam	136
	Subtotal	2,025
acific	Australia	19
	Republic of the Marshall Islan	nds 1
	New Zealand	2
	Papua New Guinea	1
	Solomon Islands	2
	Kingdom of Tonga	2
	Subtotal	27
urope	Armenia	2
	Austria	3
	Azerbaijan	1
	Bulgaria	1
	Republic of Cyprus	1
	Republic of Croatia	1
	Czech Republic	2
	Denmark	3
	Estonia	2
	Finland	4
	France	24
	Cormony	41
	Germany	41

Europe	Hungary	4
	Republic of Iceland	2
	Ireland	1
	Italy	9
	Kazakhstan	5
	Kyrgyz Republic	3
	Latvia	1
	Republic of Lithuania	1
	Montenegro	2
	Norway	2
	Poland	10
	Romania	2
	Russia	3
	Slovak Republic	1
	Spain	7
	Sweden	9
	Switzerland	5
	U.K.	31
	Ukraine	4
	Uzbekistan	37
	Subtotal	227
North America	Canada	9
North America	United States	104
	Subtotal	113
Latin America	Argentina	2
and	Brazil	20
the Caribbean	Colombia	3
	Republic of Costa Rica	1
	Ecuador	1
	El Salvador	1
	Honduras	1
	Jamaica	2
	Mexico	13
	Peru	7
	Venezuela	4
	Subtotal	55
	Afghanistan	24
Middle East	Iran	7
	Iraq	1
	Israel	1
	Lebanese Republic	2

Middle East	Syria	2
Wildule Last	Turkey	12
	Yemen	3
	Subtotal	54
Africa	Benin	1
Africa	Cameroon	2
	The Democratic Republic	
	of the Congo	3
	Egypt	17
	State of Eritrea	1
	Ethiopia	5
	Republic of The Gambia	1
	Ghana	4
	Guinea	2
	Ivory Coast	2
	Kenya	7
	Lesotho	1
	Madagascar	2
	Republic of Mali	1
	Kingdom of Morocco	3
	Mozambique	4
	Nigeria	9
	Senegal	3
	Seychelles	1
	Republic of South Africa	1
	Tanzania	1
	Tunisia	1
	Uganda	1
	Republic of Zimbabwe	1
	Zambia	2
	Subtotal	76

Students Going Abroad by Country / Region

Asia	Cambodia	33
	China	55
	India	7
	Indonesia	27
	Republic of Korea	57
	Laos	7
	Malaysia	12
	Mongolia	24
	Myanmar	8
	Nepal	2
	Philippines	88
	Singapore	18
	Taiwan	6
	Thailand	98
	Vietnam	67
	Subtotal	509
Pacific	Australia	66
	New Zealand	4
	Subtotal	70

Europe	Austria	6
	Denmark	4
	Finland	2
	France	9
	Germany	68
	Ireland	2
	Italy	3
	Kyrgyzstan	6
	Malta	1
	Netherlands	1
	Norway	2
	Poland	7
	Portugal	1
	Russia	6
	Spain	3
	Sweden	8
	Switzerland	21
	U.K.	62
	Uzbekistan	7
	Subtotal	219

		FY 2016
North America	Canada	20
	United States	156
	Subtotal	176
Latin America	Mexico	6
and the Caribbean	Subtotal	6
Middle East	Iran	1
	Jordan	1
	Subtotal	2
Africa	Benin	1
	Cameroon	1
	Egypt	2
	Ghana	2
	Kenya	2
	Republic of Burundi	2
	South Africa	1
	Tanzania	1
	Subtotal	12
Total (49 Countries	994	

Access For Gifu Inuyama Komaki · Inuyama Tajimi For Seto Kamiiida Nagoya Dome-mae Yada For Kvoto · Osaka Daiko Campus For Takabata For Fujigaoka Nakamura Kuyakusho Nagoya Daigaku 🗞 For Osaka For Akaike · Toyota For Toyohashi Kinjo-Futo Aratama-bash

Subway Higashiyama Line
Subway Sakura-dori Line
Subway Tsurumai Line
Subway Meijo Line
Subway Kamiiida Line
Subway Meiko Line
JR Tokaido Shinkansen
JR Tokaido Line
JR Chuo Line
JR Chuo Line

++++ Meitetsu Line

++++- Kintetsu Line

Aonami Line

To Higashiyama Campus

From Nagoya Station: Take the Subway Higashiyama Line to Motoyama Station (16 min), then transfer to the Subway Meijo Line to Nagoya Daigaku Station (2 min). Higashiyama Campus is just off the subway exit.

From Centrair (Central Japan International Airport): Take the Meitetsu Line to Kanayama Station (24 min), then transfer to the Subway Meijo Line to Nagoya Daigaku Station (21 min).

To Tsurumai Campus

From Nagoya Station: Take the JR Chuo Line (bound for Tajimi) to Tsurumai Station (6 min), then walk 5 min.

To Daiko Campus

From Nagoya Station: Take the Subway Higashiyama Line to Sakae Station (5 min), transfer to the Subway Meijo Line to Nagoya Dome-mae Yada Station (12 min), then walk 5 min.

To Nagoya Station

From Centrair (Central Japan International Airport): Take the Meitetsu Line (28 min).
From Tokyo Station: Take the Shinkansen (101 min).
From Shin-Osaka Station: Take the Shinkansen (52 min).

The City of Nagoya



Located in the heart of Japan, the Chubu region has played a central role in Japan's history and has long enjoyed a flourishing culture and economy. The area is well known as the home of Oda Nobunaga, Toyotomi Hideyoshi and Tokugawa Ieyasu, the three leaders who unified Japan over 400 years ago, bringing an end to the "Period of Warring States." Nagoya Castle, originally built by Tokugawa Ieyasu and famous for the pair of golden dolphins on top of its donjon, serves as the region's landmark.

Today, this vibrant metropolis occupies an important place in Japan's political and economic spheres. With a population of 2.2 million, Nagoya is the nerve center of the Chubu Industrial Zone, a merger of both traditional and modern industries, most notably the automotive industry. Nagoya offers a variety of urban conveniences, with shops, restaurants and leisure activities that cater to any taste, making it an exciting place to live, work and study.

Nagoya University Nagoya University

^{*}Regional classification is based on the standards of the Ministry of Foreign Affairs in Japan.

^{*}Regional classification is based on the standards of the Ministry of Foreign Affairs in Japan.

Promoting Gender Equality

What's new

Phumzile Mlambo-Ngcuka, Executive Director of UN Women and HeForShe IMPACT Champions

Nagoya University is famous for producing many Nobel Prize winning scientists. Nagoya University is also famous for its strong commitment to promoting gender equality. In response to the enactment of the Basic Law for a Gender-Equal Society in 1999, Nagoya University became the first Japanese university to establish a university-wide committee for promoting gender equality in 2002 and the Office for Gender Equality in 2003. Ever since, promoting gender equality has continued to be given high priority among Nagoya University's important goals.

As the first initiative of promoting gender equality, Nagoya University established two nursery schools and an after-school childcare facility on campus. Those facilities became symbols to demonstrate the university's strong determination to achieve gender equality. Following the initiative, Nagoya University has introduced many other innovational approaches to promoting gender equality and women's empowerment, such as women-only positions in natural sciences, women's leadership programs both for faculty members and graduate students, and industry-university-government cooperation for gender equality. As a result of various efforts to promote gender equality, the Nagoya University's gender equality model has diffused to not only Japanese universities but also many other Asian universities through its satellite offices and partnership network in Asia.

from Nagoya to the World!

Today, Nagoya University is promoting gender equality globally. Nagoya University has been selected as one of the ten University IMPACT Champions by UN Women to support the HeForShe initiative, together with University of Leicester, University of Hong Kong, Science Po, Georgetown University, Stony Brook University, University of Waterloo, University of São Paulo, Kenvatta University, and University of the Witwatersrand, Johannesburg. HeForShe is a solidarity movement for gender equality on a global scale, and engaging men in gender equality is a major objective.

As a HeForShe University IMPACT Champion, Nagoya University has made three commitments. The first commitment is to build a center for gender equality to serve as the home for the gender equality movement. The second commitment is to drive parity from the top, increasing the representation of female faculty members and women in leadership positions to 20% by 2020. The third commitment is to work with the government and private sector to champion gender equality across Japan.

In September 2017, the HeForShe Parity Report was launched on the sidelines of the 72nd United Nations General Assembly in New York. Together with UN Women Goodwill Ambassador and Phumzile Mlambo-Ngcuka, and Executive Director of UN Women, Nagoya University President Matsuo and eight other presidents of University IMPACT Champions participated in the press conference.

In order to implement our second HeForShe commitment (driving parity from the top, increasing the representation of female faculty members and women in leadership positions to 20% by 2020), we established "Gender Equality and Justice Fund." By using this fund, we provide financial incentives for schools and centers in the case of hiring new female faculty members, promoting female faculty members to full professors, and selecting female deans. Furthermore, each school and center has its own numerical targets in terms of the representation of female faculty members.



Gender Research Library, Nagoya University

Gender Research Library, Nagoya University

Gender Equality benefits not only women but also men. Thus, men's commitment is as equally as important as women. As one of the world's leading universities of promoting gender equality, Nagoya University will continue striving to be a frontrunner of gender equality not only in Japan but also in the world.

Gender Research Library (GRL), Nagoya University, opened on November 1, 2017 for the purpose of the general advance in the gender research. GRL serves as a research center for researchers, students and the general public. GRL can hold a maximum of 40,000 volumes. Our primary collection is donated by the Tokai Foundation for Gender Studies (TFGS) and Professor Emerita Tamae Mizuta of Nagoya University of Economics, who is also an advisor of TFGS. As the gender research is the cross-disciplinary and comprehensive field, GRL gathers and preserves a wide range of books and materials. We are open to anyone who is interested in feminism and gender problems.