



Withdrew from the Doctorate Program, Osaka University Graduate School of Medicine. PhD in Medicine. After a professorship at Osaka City University Graduate School of Medicine, currently professor of the Nagoya University Graduate School of Medicine and vice-dean of the Graduate School of Medicine (Responsible for graduate school education) Areas of specialization: neuroanatomy, neuroregeneration

\*1/Designated National University
Designated National Universities provide
the highest quality education on par with
leading universities of the world. They are
national university corporations selected by
the Ministry of Education, Culture, Sports,
Science and Technology, and are expected
to contribute to social and economic
advances in an internationally-competitive
environment with enthusiasm. Currently, the
five designated national universities in
Japan are: Tohoku University, the
University of Tokyo, Tokyo Institute of
Technology, Nagoya University, and Kyoto
University.

## Students are starting their research abroad as the JDP goes into full swing

In 2015, the "International Collaborative

Department in Comprehensive Medical

Science between Nagoya University and the University of Adelaide" was established as the first joint degree program (JDP) in Japan. Students will spend at least 1 year abroad at the other university during the 4 years of the doctoral program and conduct research there. After completion of the full program and successful defense of their dissertation, the student will receive a joint PhD degree from Nagoya University and the partner university. Unlike a double degree program where each school confers a degree, a single ioint degree will be provided under the JDP and it will be essential to adjust the curriculum in tandem between the two universities. Our graduate school of medicine has cleared these challenging hurdles and established an additional joint program with Lund University in Sweden in April 2017, adding to our existing agreement with the University of Adelaide in Australia. Currently, the inaugural students in the JDP are studying abroad at both of our partner universities, while students from our partner universities have started their research projects at Nagoya University Graduate School of Medicine, proving the program is off to a healthy start. In October 2018, we will sign a further agreement with Freiburg University in Germany, furthering our lead among Japanese universities

All three universities have a long and reputable history in education and their outstanding research strengths are widely-recognized throughout the world. All three universities have produced multiple Nobel prizes in physiology or medicine, ensuring our program is of the highest quality. One challenge is since students will have an opportunity to conduct studies at both universities, it will be essential to match students with the right laboratory to pursue their research question at the partner university. An educator assigned to each of our partner universities is available at the office of international affairs of our graduate school to facilitate detailed communication between each student and the partner university to ensure their collaborative research can start free of any issues. We also provide each student with a monthly stipend (about a few thousand US dollars) so that the student will be able to focus on research. We feel that both the content and support provided by this program is exceptionally appealing, and hope that graduates from our medical school will come back to graduate school after their clinical training to help create a healthy flow of outstanding students from Nagoya University going abroad to conduct research and brilliant foreign students gathering at our institution to pursue their investigations.

A first step in international collaboration leading to a prosperous research career

There are many advantages to the JDP. but from a research perspective, one of its most attractive features is the ability to use the resources available at more than one university. For example, experimental samples prepared at Nagoya can be analyzed at the partner university, or a research question developed at Nagoya University may be assaved on equipment at the partner university, or vice versa, allowing the student to conduct their studies most efficiently. The ultimate objective of these activities is for candidates to successfully present their doctoral dissertation as international collaborative research. Such research will provide students with an opportunity to elevate the quality of their doctoral theses. allowing them to publish articles that will be quoted by researchers worldwide, proving beneficial not only for the individual's career, but in helping to elevate Nagova University's presence on the international stage.

From a career perspective, the PhD (doctorate) degree is regarded with far more respect internationally than in Japan. A doctorate from a globally-prominent university such as Adelaide, Lund, or Freiburg in addition to Nagoya, will be proof that the student has engaged in an internationally-recognized level of research and this will prove beneficial to the individual's future career.

Experience in a highly-stimulating environment abroad while the student is still young will accelerate the student's development as an international researcher. If the student can begin research abroad during graduate school instead of waiting until he graduates, it



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would provide a huge advantage. Medical school graduates tend to enter graduate school much later than graduate students who pursue other majors. By providing them with early opportunities to become involved in international collaborative research, we hope to allow them to produce results while they are still doctoral candidates.

Promoting seamless globalization of education from undergraduate education to research activities

At our graduate school of medicine, we have multiple international programs in addition to the JDP. One of these is the Global Alliance of Medical Excellence (GAME) which began in 2017. This is a consortium of 9 universities from countries in Europe, Asia, North American and Oceania such as Ludwig-Maximilians-University Munchen and University of Nottingham, where we collaborate on research. We have also started a cooperative relationship with the University of North Carolina at Chapel Hill where our students study abroad for short terms ranging from 3 to 12 months

This provides an environment where our students have many opportunities to study outside Japan, for the long term in the JDP, or in a short-term program. For researchers, GAME facilitates cooperative research among a myriad of universities around the globe. Nagoya University prioritizes globalization of its undergraduate medical school program; undergraduates begin learning medical English in their freshman year and by their 5th or 6th year, roughly 20% of students will have participated in clinical clerkships outside Japan. These opportunities spanning undergraduate studies to graduate-level research provide a seamless program that will assuredly produce outstanding results. This substantial cooperation with foreign universities, both in research and education, is highly admired in many circles. As a Designated National University\*1, we will open our program to other universities in the region and support local students by providing opportunities to study outside Japan. In the future, we intend to continue to fortify our program into one that leads all Japanese universities.

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