SPECIAL INTERVIEW

Promoting "Interesting" Research with International Institutions and Industries

A Vision for Kyoto University's Research Promotion Policy

In October 2014, Kyoto University came under the leadership of a new president, Dr. Juichi Yamagiwa, and a new team of executive staff. The new executive line-up will bring fresh ideas and approaches to Kyoto University's research and education activities. In this interview, President Yamagiwa is joined by Prof. Nagahiro Minato, executive vice-president for research, planning, and hospital administration, to discuss their plans and vision for the university's future.

(Photographs by Dr. Stefan Gruber, Associate Professor, The Hakubi Center for Advanced Research)

— Before we discuss your concrete plans to promote the university's research, please share your thoughts about the particular characteristics and strengths of Kyoto University's research activities. (Editor)

Yamagiwa: I think the primary characteristic of our research activities is "originality." In addition to work by our scholars which has long been acknowledged around the world, such as the primatology studies of Dr. Kinji Imanishi¹⁾ and the philosophy of Dr. Kitaro Nishida,²⁾ Kyoto University continues to foster a diverse range of internationally acclaimed research in fields such as iPS cell research,³⁾ which is led by Dr. Shinya Yamanaka, the director of our Center for iPS Cell Research and Application (CiRA), and also in areas of regenerative medicine.

Minato: Originality is certainly a characteristic of our research that we can be proud of in the

international academic community, along with the actual achievements of our researchers. Kyoto University is a mid-sized institution by international standards. However, our research activities are remarkably diverse for its size. I would also say that "diversity" is a distinctive quality of Kyoto University's research.

Yamagiwa: I agree, and such diversity is reflected in the fact that we have the largest number of research institutes and centers of any university in Japan, ⁴⁾ and in general those facilities have always been established at the request of our research communities. When our researchers have forged into new frontiers of knowledge, the university has supported them in developing a new field of study, rather than try to confine them in an existing area.

In addition, the university has historically maintained an environment that encourages free thinking, and has allowed researchers to pursue

please see *Research Activities*, **3**(4), 4–6 (2013). 3) For more information about the Nobel Prize-winning work of Dr. Shinya Yamanaka and the Center for iPS Cell Research and Application (CiRA), please see *Research Activities*, **3**(1), 6 (2013).

¹⁾ For more information about Kinji Imanishi and Kyoto University's heritage of fieldwork and primatology please see *Research Activities*, **3**(4), 4–6 (2013). 2) For more information about Kitaro Nishida and the Kyoto School of philosophy,





ideas which at fist may even seem absurd, or which cannot be expected to produce quick results. Such an environment enables researchers to faithfully pursue their own interests, and can lead to new discoveries. This approach is doubtlessly one of the reasons that Kyoto University has produced so many of Japan's Nobel laureates.⁵⁾

Minato: Kyoto University has a longstanding tradition of academic freedom, of valuing and supporting the diverse curiosity of its researchers. It also has as an institutional agility and flexibility which enables it to integrate new academic knowledge at any time, as testified by our many research institutes and centers. It's impossible to imagine what new discoveries and innovations might be waiting in the future.

— Bearing in mind the academic culture that you have just described, could you tell us about the university's current policies and plans for research promotion?

Yamagiwa: Japanese universities are currently undergoing a period of transition. Interaction through dialogue is becoming an increasingly important factor in both human resource development and academic research. Through our "pocket seminars" and other hands-on experiences, Kyoto University is providing students with opportunities to learn on-site at the very frontline of research. In 2013, our Institute for Liberal Arts and Sciences was established to systematically enhance our liberal arts and science programs. Through a combination of robustly structured

4) Kyoto University has produced five Nobel Prize laureates in Physics, two in Chemistry, and two in Physiology or Medicine. Profiles of the laureates and information about their achievements can be found in "LAUREATES: Award-Winning" Scholars at Kyoto University" (2014). 5) As of 1 October 2014, Kyoto University has fourteen research institutes and seventeen research centers. 6) The slogan of Kyoto University's recently formulated international strategy, by means of which

fundamental education and rich experience-based education, we aim to provide students with clear paths for advancement in their chosen fields of study. We are now focused on pursuing this kind of multi-dimensional approach to clearly guiding our students in their education.

Based on our international strategy The 2x

by 2020 Initiative, 6) and utilizing our overseas liaison offices, we seek—through exchange programs, double and joint degree programs with international partners, and internship programs with global companies—to cultivate individuals of talent and ability who will provide leadership to the global community.

Minato: By strategically establishing overseas liaison offices, we expect to dramatically accelerate our industry-academia collaboration engagements with international companies. We are now looking into the establishment of a support mechanism for research collaboration with domestic and

international industries, and various ways in which the yet-to-be-exploited results of fundamental research can be used to genuinely benefit society. We also want to put more effort into creating a place to foster interdisciplinary collaboration, where researchers from different disciplines can meet, and where unforeseen cross-fertilization can be allowed to give birth to new knowledge and breakthroughs. We hope to

enhance our system to support such developments.

Yamagiwa: I anticipate that our International Center for Scientific Innovation (provisional name) will be such a place. The facility is currently in the process of construction, but as of the next fiscal year, the offices of various different companies

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will be established within it, and it is anticipated to provide academic and industrial researchers with an environment in which they can easily and freely share information and knowledge. It will also provide students with opportunities to experience industrial research through internship programs.

Minato: At present, there are several facilities on campus where academic and industrial researchers are engaged in research collaboration. However, the establishment of a dedicated venue where researchers can meet across the boundaries between academia and industry, and share not only information, but also their ideas and

vision, will be vital for academic progress in the future

Industry-academia collaboration in Japan tends to be heavily focused on exit strategies. What is really important, however, is to understand that the best products can only be derived from the best science. Without truly excellent scholarship, we cannot produce truly excellent outcomes. Kyoto University is expected

the university aims to double its international indices in research, education, and international service by the year 2020.

7) Not including the overseas offices of individual faculties and

departments, Kyoto University currently has liaison offices in London (UK), Heidelberg (Germany), and Bangkok (Thailand).



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Nagahiro Minato, MD, PhD, Executive Vice-President for Research, Planning, and Hospital Administration. Graduated from Kyoto University's Faculty of Medicine in 1975. Primary research interests: immunology, cell biology, medicine.

to make significant contributions to society by producing truly innovative research results. To meet those expectations, the university must excel in advanced fundamental research, and it must also cover a broad range of basic research areas.

Yamagiwa: Since its foundation, Kyoto University has been committed to creative research based on a philosophy of academic freedom and a creative spirit. To put it very simply, the university is committed to "interesting" research. That orientation will never change. Such "interesting research" has the power to capture people's attention and imagination, so that they can share in the experience. In the past, the influence of such research would often be limited—to an individual

researcher or a few specialists in a narrow field, or perhaps it would be unknown outside of Japan. But now, as an international academic institution, we aim to share our distinctive research with the world. We will continue to expand and develop our collaboration with academic and industrial partners throughout the world, and ensure that the results of our research are applied for the betterment of human society and the planet as a whole. I hope that all of our readers will keep a close eye on Kyoto University, and join us in moving forward with our "interesting research!"

— Thank you very much for sharing your plans and ideas with us as we embark on this new phase for Kyoto University.