

Tokai Cancer Specialist Medical Personnel Education Project (Tokai GanPro)

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Figure 2: THP Course seminar



Figure 1: Tokai GanPro poster (Nagoya University)

The Tokai Cancer Specialist Medical Personnel Education Project (Tokai GanPro) of the Ministry of Education, Culture, Sports, Science and Technology (MEXT) was established to develop human resources as leaders in oncology medicine. With Nagoya University as the representative, the project includes Gifu University, Hamamatsu University School of Medicine, Nagoya City University, Fujita Health University, Aichi Medical University, and Meijo University. While the project primarily targets medical graduate students, it also offers intensive courses including seminars and practical training for medical professionals (such as physicians, nurses, and pharmacists) who are engaged in cancer treatment on a daily basis, as well as open lectures for the public. Similar human resource development projects have been carried out three times since academic year 2007 with each term comprising five years. The present fourth term is slated for six years from academic year 2023. Although the project in each term is independent of the other terms, all projects share the same goal of developing human resources as leaders in oncology medicine and are, therefore, commonly referred to as “GanPro.”

The background to the launch of GanPro is the Cancer Control Act that was enacted in 2006. The Act stipulates that “the national and local governments shall take the necessary measures for developing physicians and other healthcare professionals with specialized knowledge and skills in surgery, radiotherapy, chemotherapy, ... and other cancer care.” In the

past, anticancer drugs with new effects and treatment technologies were sequentially introduced into the cancer treatment settings, which required a high level of expertise for up-to-date cancer care. In the meantime, while the number of cancer patients increased as the population aged, the supply of cancer treatments could not keep up with the needs of cancer patients. In rural areas in particular, the lack of access to adequate and appropriate cancer treatment compared to urban areas has become a social issue. The term “cancer refugees” was also often heard around 2006. The background to this situation was the shortage of human resources to provide cancer treatment. In particular, there was a shortage of healthcare professionals that could provide treatment, such as physicians for pharmacotherapy, radiation therapy, and palliative care, as well as nurses and pharmacists specializing in cancer treatment. Under these circumstances and in response to the establishment of the Cancer Control Act, which included the development of physicians and other healthcare professionals, GanPro was launched with the MEXT as the competent authority. Almost all universities in Japan that have medical schools participated in the first through fourth terms of GanPro. In the fourth term, 76 universities at 11 bases across Japan participated. This was because GanPro aims at equal access to cancer treatment, one of the goals of the Cancer Control Act, in order to correct disparities among the regions in medical technology, so that residents in any part of Japan could receive standard specialized cancer care.

For each of the first to fourth terms of GanPro, a key theme had been set. The first term was focused on the development of healthcare professionals—pharmacotherapy specialists, radiotherapists, palliative care specialists, nurses, and pharmacists. In addition, the second term promoted the development of surgeons and oncology researchers. The third term focused on adding the development of human resources capable of handling genomic medicine, pediatric cancer, rare cancer, and other advanced cancer care. The current fourth term features the development of radiotherapists, pathologists, pain clinicians for pain care and treatment, and physicians in cancer-related interdisciplinary fields, as well as human resources for cancer prevention, analysts for medical big data, and drug discovery researchers. As anticancer drugs with new effects have been introduced into medical practice in recent years, specialized knowledge and expertise have become necessary to enhance therapeutic effects and to adequately control the variety of adverse reactions. In addition, as the population ages, combinations with treatment of other diseases are required on an increasing number of occasions. Therefore, there is a need for physicians and healthcare professionals familiar with interdisciplinary fields that had been relatively irrelevant to cancer care, such as cardiology, nephrology, and geriatrics.

Tokai GanPro (<https://www.tokaigannpro.com/>) promotes the development of human resources that match regional needs and circumstances by leveraging its geographical advantage of all member universities being located in the Tokai region. A total of 25 new educational courses were launched at seven universities

by academic year 2024 (Figure 1). Graduate students registered with GanPro attend lectures and receive practical training in the recommended courses. The project plans to develop 675 medical human resources specializing in cancer, including 415 graduate students, by academic year 2028. Tokai GanPro uses a dedicated learning system that shares lectures for graduate students simultaneously or on demand among member universities. In academic year 2024, a total of 83 lectures were delivered. The sharing of lectures enables the effective use of educational resources while improving the levels of education. In addition to the regular graduate courses, Nagoya University offers the Tsurumai Genetics Course on the Tsurumai campus, an intensive course for physicians intending to become specialists in clinical genetics and healthcare professionals that can lead genetic care. The university also offers the cancer total health planner (THP) course as a regular graduate course and an intensive course on the Daiko campus for nurses, physical therapists, and other health professionals aimed at human resource development for promoting team-based cancer care (Figure 2).

On February 18, 2025, Nagoya University served as a host for the Nationwide GanPro Joint Education Forum for academic year 2024 (Figure 3). The Nationwide GanPro Council was established in 2011 during the first term of GanPro as a liaison forum for GanPro member universities across Japan. In addition to holding the annual joint education forum for information exchange and discussion, the Council conducts research activities related to GanPro and sponsors open lectures for the public. The overall theme of the latest forum was “Human Resource Development in Interdisciplinary Fields” with 52 on-site (Tsurumai campus) and 150 online participants, including 22 on-site and 8 online (30 in total) participants from the Tokai GanPro. This first on-site forum in four years due to the spread of COVID-19 was successfully completed, which promoted the Tokai GanPro to GanPro representatives nationwide.

I expect that the Tokai GanPro will promote the development of human resources as leaders in cancer treatment, which will enhance the quality of cancer care in the Tokai region and enable the provision of better medicine.



Figure 3: Nationwide GanPro Joint Education Forum

