

Japan's foundations still building

JAPANESE pharmaceutical companies, like their counterparts in the United States and Europe, are pouring increasing amounts of money into academic research. As in the West, a lot of the funding is charitable and goes into non-profit foundations that provide grants to researchers in Japan's universities and government research laboratories. But the process of selecting grant recipients is often less open compared with US and European foundations and tends to be controlled by powerful academics who head the grant selection committees.

Japan lacks the research-driven approach to funding by pharmaceutical companies often seen in the United States and Europe, but increasing numbers of Japanese pharmaceutical companies are establishing links with Western universities with long-term goals of drug development (see page 764). Another recent trend is a rush by Japanese pharmaceutical companies to fund endowed chairs at Japanese universities (see below), following a change in government regulations a few years ago that allows the establishment of such privately funded chairs.

There are dozens of non-profit research foundations in Japan supported by the pharmaceutical industry (see table overleaf for some examples). Most are

supported by individual companies but some, such as the Japan Health Sciences Foundation in Tokyo and the Senri Life Science Foundation in Osaka, are funded by groups of companies with national or local government support.

The top 25 foundations (in terms of funds) supported by individual companies distributed nearly ¥2,000 million in grants in 1991. More than half of the money was distributed as small research grants of ¥1 or ¥2 million (\$8,000–\$16,000), many of them for young researchers (under 40). About 10 per cent went to grants for overseas travel.

Nearly all the money is given to Japanese nationals but there is a growing tendency for foundations to provide support for non-Japanese researchers as well. The Takeda Science Foundation supported by Takeda Chemical Company, for example, provides more than 30 fellowships for medical doctors from South-East Asia to receive training in Japanese universities and research institutes. And Yamanouchi Pharmaceutical Company is planning to reorganize its foundation for research on metabolic disorders this year to establish an international section to fund non-Japanese researchers, says Teruhisa Noguchi, executive vice president of the company.

A few foundations openly advertise

their grant opportunities in magazines and elsewhere, but, in keeping with the Japanese tradition of relying on personal contacts, most depend on recommendations of candidates from powerful academics either within or outside the foundation. There is a growing tendency, particularly among the newer foundations, to use external peer review by committees of scientists to select grant recipients, but many foundations still use internal selection procedures. And "personal connections are still very important" in getting awards from most foundations, says Masanori Fukushima of Aichi Cancer Center, a vocal critic of Japan's medical research system.

Most Japanese companies do not expect direct returns on their investment in academic research. "Our foundation is 100 per cent charitable" says Noguchi of Yamanouchi, a view echoed by Tai Matsuzawa, managing director and vice president of the pharmaceutical group of Takeda Chemical Industries, who says "most of the foundations and research supported by Japanese pharmaceutical companies are set up without expecting a return . . . rather we aim at enhancement of the image of the company".

The Japan Health Sciences Foundation, which is supported by about 160 companies and the Ministry of Health

MESC's changes bear fruits in the universities

THE past three years have seen a rush by Japanese pharmaceutical companies to set up endowed chairs at Japanese universities following an easing of regulations by the Ministry of Education, Science and Culture in the late 1980s.

There are now about a dozen endowed chairs, supported with annual budgets of 30 to 50 million yen (\$250,000–\$420,000), and many more are expected to be established in the near future. Nearly all are in medical or pharmaceutical science faculties.

Takeda Chemical Industries, for example, is pumping 250 million yen (\$2 million) into Tokyo University's faculty of pharmaceutical sciences over five years to fund a chair in neuropathology and neurosciences. Selection of the appointment and running of the chair is done "totally" by the university, says Tai Matsuzawa, managing director and vice president of the pharmaceutical group of Takeda. The company may collaborate with the appointee by, for example, contributing research equipment, he says, but the main purpose is to "contribute to the promotion of education in pharmaceutical science". □

ENDOWED CHAIRS AT JAPANESE UNIVERSITIES

Company	University	Period of endowment	Total budget (million yen)
Tsumura & Co.	Gumma University	1988 to 1994	187
	Tokyo University	1991 to 1994	200
Sandoz Pharmaceuticals	Tokyo University	1991 to 1996	250
Eisai Co.	Tokyo University	1990 to 1995	150
Yokogawa Medical Systems	Shiga University of Medical Science	1989 to 1991*	60
Otsuka Pharmaceutical	University of Tokushima	1990 to 1993	130
Teikoku Pharmaceutical	Kagawa Medical School	1991 to 1996	100
Aso Pharmaceutical	Kumamoto University	1991 to 1996	n.a.
Takeda Chemical Industries	Tokyo University	1992 to 1997	250
Tanabe Seiyaku	Osaka University	1993 to 1998	300
Yamanouchi Pharmaceutical	Yamagata University	1993 to 1998	n.a.

* Since April 1990 has been extended each year with annual budget of 30 million yen.