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Amidst Changes in the Grants-in-Aid Program

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When I graduated from the Faculty of Medicine in 1966, Japan was still in a period of postwar economic recovery, so there was little funding available to support basic research. As the Department of Medical Chemistry that I entered as a graduate student at Kyoto University received only a paltry amount of research funding, the very first thing I learned was how to economize in doing my research, calculating what it would cost in my experiments and try to optimize experimental conditions by carefully reading the literatures and conducting meaningful experiments. In the meantime, I watched my seniors make various efforts to procure more funds. As one salient example, a distinguished professor used a go-between to meet with then-Prime Minister Eisaku Sato. Explaining the dismal situation plaguing scientific research funding, he persuaded the Prime Minister to augment financial support from the government.

In the 1960s, frontline researchers used to carry out their work with critical funding from grants awarded by the National Institutes of Health (NIH) in the US. Wanting to maintain Japan's scientific autonomy, the government at that time decided, however, to prohibit Japanese researchers from obtaining NIH grants. This gave rise to quite a commotion—that Japan's internationally frontline researchers may relocate to the US to pursue their work. Looking back now, I think it was a good policy decision to establish Japanese autonomy by the government taking responsibility for supporting research in Japan.

Moving into the 1970s, a necessary funding was increased by up to ten times for advancing molecular biology and introducing genetic engineering. Researchers who were taking a lead amidst international competition sent funding requests to the Ministry of Education and Science, explaining their need for increased research allocations. As such effort by individual researchers strengthened and Japan's economy developed, the government came to understand that science and technology advancement was a vital component of economic growth. As such, it expanded Grants-in-Aid in the 1980s, placing Japan on an internationally competitive par with other countries.

In 1981, I took charge of a new research lab. I had learned from my mentor that a professor's responsibility was not only to achieve world-leading research results, but was also to acquire required research funding and to create an environment in which the members of the lab can carry out their research based on their own free ideas. In the following year, the Specially Promoted Research category of Grants-in-Aid was newly established, and we had the good fortune to receive a grant under it. To demonstrate creativity amidst international competition, it is necessary to continuously develop one's own initiative new and innovative fields. As our grant had a 5-year duration, we had to produce persuasive results in new fields to acquire further funding, which added a dimension of stress to our day-to-day research life. As a result, however, we were fortunate enough to be able to pioneer with the aid of government funding a new field on a cycle of about every five years.

Over the past ten years, Japan has suffered stringent fiscal conditions, causing a pronounced change in the state of the government's research support. As a member of its drafting committee, I participated in the Council for Science and Technology Policy's third S&T Basic Plan, the basic stance of which emphasized "selection" and "consolidation" in research funding. Looking back over the past years, I can't help from thinking that, whereas the Basic Plan called for futurevision in selecting research fields and consolidating support for them, facts on the ground have shown support too much to be concentrated on certain research institutions and groups without definitive future vision.

The fourth S&T Basic Plan is constructed upon pillars of innovation. It is my hope that researchers will not get caught up superficially in the word "innovation," but will advance the kind of genuine research that spawns the next generations of innovation. To this end, I hope that the government will not just concern itself with producing short-ranged research results, but that it will set a direction for life sciences over a five to ten-year horizon and create a sound vision to underscore it, upon which research is supported.