

Thoughts about Grants-in-Aid for Scientific Research

Masaki Mori

Professor, Gastroenterological Surgery, Graduate School of Medicine, Osaka University



After graduating from the Faculty of Medicine at Kyushu University in 1980, I entered the faculty's Department of Surgery II, which was headed at that time by Prof. Kiyoshi Inokuchi. Since then, I have worked as a surgeon at mainly three institutions, doing diagnosis and treatment along with teaching on one hand and researching cancer from a surgical perspective on the other. In order, the institutions are Kyushu University's Faculty of Medicine and attached hospital in Fukuoka(1980-1994), Kyushu University's Medical Institute of Bioregulation and attached hospital in Beppu (1994-2008), and Osaka University's Graduate School of Medicine and attached hospital in Suita (2008-present).

It is apparent that opportunities for clinicians to receive direct research funding come much later than they do for basic researchers. That's because clinicians must go through several years of training following graduating, after which they finally get hired as full-time staff in the university's graduate school. In many cases the period from graduation to employment takes about 10 years, during which time seeking a Grant-in-Aid is the last thing on their minds. The first time that I directly received a Grant-in-Aid was in 1987, seven years after graduating from the university. I had become an assistant professor in Department of Surgery II after going through clinical training and studying pathology in Kyushu University's graduate school. Up to then, the money I needed to buy instruments, antibodies for immunostaining, film and other items used in my research had all been prepared by my professors. For the first time, I realized that I would myself need to take the initiative in obtaining funds to carry out my research. I hadn't had to worry about finding funds; as they had always been secured by the senior staff in my department, I enjoyed an easy ride. However, things changed when I became a member of the staff: Now I had to secure the funds to cover the research expenses of my juniors, namely research and graduate students. Because ours was a surgery department, you'd think that we'd have received scholarship endowments from pharmaceutical and other companies, but I have no recollection of ever using such money.

By hook or crook, I needed to obtain research funding. But, as a newcomer to the game I didn't have any idea how to go about getting Grants-in-Aid. Unlike the present, universities and graduate departments didn't have strategies for winning grants. So, I talked to senior members of our staff who had had experience in obtaining Grants-in-Aid. What I gleaned as a result was that in applying for a grant I needed to provide a project title, my past achievements, research description, and a concise implementation plan. At that point in time, I had already authored four English research papers. Proceeding in the footsteps of my forerunners, I thought I had a good chance of winning the grant if my application advanced their work. At the time, paraneural infiltration was seen as related to pancreatic cancer while weight was being placed on the metastasis of rectal cancer to the lymph nodes and lungs, leaving little specific interest in paraneural infiltration. Looking, however, at actual resected specimens, I found there to be unexpectedly many cases of paraneural infiltration, so I went about identifying which types were most prevalent. Thinking that my findings could be used as an index for effectively carrying out nerve-preserving operations during rectal cancer surgery, I made that subject the theme of my grant application. As a result, my application was accepted; I was for the first time able to receive a Grant-in-Aid in my own name. I can vividly recall the elation I felt when getting that news.

Since then, I have been very careful to cut down in every possible way on waste when using research funds. Yet, if young researchers do not struggle to get their own funding, no matter how much you yell at them to conserve it will have no effect. Conversely speaking, obtaining one's own funding imbues the researcher with a strong sense of spontaneity and conservation. For that reason, I require all the researchers in my department who are eligible to apply for Grants-in-Aid to do so. I believe this also helps them to get a better grasp of the actual amount of money used in conducting their research.

With the passing of years, besides apply for Grants-in-Aid, I have also had many opportunities to screen grant applications. Among them, I was appointed as a program officer in the Medical, Dental and Pharmaceutical Science Program Group of JSPS's Research Center for Science Systems in 2004. Though I considered this to be a very important position, I expected that it would be difficult for me to get up to Tokyo to attend the group's monthly meetings as a clinician who had to conduct operations and other functions in an understaffed department. Having acquired the understanding of my colleagues, it turned out that I was able to participate in the Center's program without hardly ever missing a meeting. Prof. Hideo Utsumi, who headed the group at that time, gave me a brisk and concise explanation of the group's work, which provided an overall view of the program and our group's position within its framework. For this really useful training opportunity, I remain thankful to him.

In that position as a program officer, I had various important duties, among which I considered the selection of grant application reviewers to be the weightiest. Information on reviewer candidates was input into a database, including their individual achievements, specialized fields, and past receipt of Grants-in-Aid. Based on this data, we endeavored to choose the most appropriate reviewers for the applications submitted. Taking this opportunity, I wish to express my great respect for the people who created this reviewer-screening system, as it allows the objective and impartial selection of the reviewers. In the past, the reviewers had been recommended by academic societies and other organizations, which often included people who had virtually no experience in receiving a Grant-in-Aid. It is difficult to imagine how such people who had never applied for a Grant-in-Aid could effectively screen grant applications. I believe the current system is also effective in dispelling doubts about the fairness of Grant-in-Aid application screening. Through this experience, I was able to gain valuable knowledge about the distribution of researchers around Japan and their fortes in terms of research subjects and approaches.

It goes without saying that Japan's future depends upon science and technology, including medical science and medical treatment. To advance it, leading-edge research is essential. As the instrument supporting the quality of that research, the Grant-in-Aid program is a core pillar undergirding Japan's viability. So as to effectively disburse Grants-in-Aid to active young researchers, application reviewers are required to be assiduous in carrying out their daily duties. As mentioned, a good system is in place for objectively selecting the reviewers. Nevertheless, I believe there is a need for discussion on whether to continue it. This is because in terms of both quality and quantity, there are limits on how effectively the task of selecting reviewers can be carried out as a side job. Many people with knowledge and experience in the Grant-in-Aid program believe that there is a need to develop specialized screeners for selecting the reviewers. Though such a discussion will entail various aspects, I believe that the time is ripe to start it. I would like to see specialized screeners used in the near future so as to accelerate the selection process while making it more effective. As a result, researchers seeking Grants-in-Aid could be expected to achieve results that make even greater contributions to advancing science and technology in both Japan and around the world.