## Using Grants-in-Aid for Fostering Researchers



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I always remember the time when I was first selected for a Grant-in-Aid after having been employed at Kobe University.

I started my career at Kobe University in 1994, following more than 20 years of research work at a private corporation's laboratory. In that different environment from my previous one I had to start from scratch. Together with a few researchers and some students, I worked hard through a process of trial and error to get our research on track. Our failures to obtain the desired results often left us frustrated. What made things worse was the Great Hanshin-Awaji Earthquake in 1995. After about ten months I was finally getting accustomed to the university's system of education and research when the earthquake struck. Not only our experimental apparatus but the lab itself was in shambles—an utterly miserable sight. At first, we didn't have the slightest idea how long it would take to restore the lab. Days passed as we were at a loss for what to do with the documents and instruments scattered across the tables, the broken glass strewn on the floor, and the cracks in the walls.

Amidst the aftermath of the disastrous earthquake, there came a piece of bright news. It was a Grants-in-Aid award notice for the research project that I had applied for as a principal investigator. I can still clearly remember how excited the lab's researchers, students and I were to receive this news. The grant helped us to advance our research by leaps and bounds.

Needless to say, one person alone cannot pursue a research project. In preparing a grant application for a large-scale basic research project, it is important to maintain and take advantage of organizational capacity. It also goes without saying that close communication is indispensable to create tight-knit cooperation among researchers. The basic elements in business communication, which are reporting to your supervisors and colleagues and seeking advice from those concerned, are also a matter of common sense in any organizations.

In university labs, the presence of many young students contributes to novel ideas and even their bold approaches to research often yield innovative results. I can say this from my own experiences: Some of my students who conducted experiments behind my back over my objections have obtained unexpected data. As a researcher myself, I have been delighted to work in such an inspiring environment. Presumably Grants-in-Aid support advancement of both basic and applied research across the full spectrum of fields from the humanities, social sciences to the natural sciences. Basic research is linked to applied research. Though it may take considerable time to obtain research outcomes, the results contribute to the society in some way or another. Yet, basic research is not the sole contributor to the society. The most important thing is to balance basic and applied research, as well as transitional research to link the two.

Obviously, yielding practical applications is not the only way to contribute to the society. It is necessary for each researcher who receives Grants-in-Aid to always be mindful of what kind of research they pursue and how its result will benefit society.

When preparing a grant application, researchers often struggle to find good wording and structures for documentation. Nevertheless, a researcher can experience a wonderful sense of happiness when thinking of a new research theme, particularly if a novel research idea is conceived. In fact, a research theme can be made more sophisticated through the process of delineating ideas on a grant application. This application process is very important, especially for young researchers, as it helps them to gain the ability of logical explanation and expression in addition to research ability

Professor Shinya Yamanaka of Kyoto University who won this year's Nobel Prize in Physiology or Medicine said in one of his speeches that the ability to deliver a good presentation is an important skill for researchers to possess, and researchers need to make effective use of easily understandable graphs and diagrams in order to obtain a better understanding. Indeed, preparing Grant-in-Aid applications is a very useful means of cultivating a researcher's presentation skills and ability. Even in today's globalized world Japanese researchers should develop a firm ability to prepare well-articulated applications in Japanese before improving their English

Unlike project-based research, academic research originates from boundless scholarly ideas. The support by Grants-in-Aid is very meaningful in the sense that academic research contributes to society by not only producing scientific results but also nurturing individual capacity through research activities.

An essential aspect of research is the linkage it creates among individuals. Building such networks enhances and advances academic research in Japan, which leads to make outstanding contributions to the betterment and advancement of humankind by pursuing truth.