

KAKENHI ESSAY SERIES No. 23 (Dec.2010)

Thoughts About the Situation Surrounding Grants-in-Aid

By Tetsuro Matsuzawa

Director, Primate Research Institute, Kyoto University



I have studied chimpanzees to think about “what is uniquely human?” My first research partner was a chimpanzee named Ai, who came to our laboratory at the age of one in 1977. Our close relationship has continued since then, a period of over 34 years. The first day I met her was in a dimly lighted room without any windows. When I looked into her eyes, she gazed back at me. I removed the black sleeve cover from the arm of my white smock and handed it to Ai. I was amazed when she put it on her own arm, moved it up and down, and handed it back to me.

To better understand the environment in which chimpanzees live in the wild, I journeyed to Africa. My last trip marked the twenty-sixth time. I’ve conducted an annual field study on that continent. I have watched how each group of chimpanzees passes down its own culture to the next generation, such as the knowledge of how to crack the hard nuts of oil palms with a set of stones.

Ai gave birth to a son, Ayumu, in 2000. At 4 years old, he began to remember numbers. In a test conducted when he was five and a half, Ayumu outperformed college students in recalling in ascending order the placement of numbers 1-9 that had been put on and then removed from a touch screen, showing chimpanzees’ eidetic memory to be superior to humans. I wrote a book that reflected my 10 years of experience with Ai and Ayumu, titled “*Ningen to wa nani ka: Chinpanji-kenkyu kara miete kita koto*” (What is uniquely human? : From the perspective of chimpanzee research), published by Iwani-shoten in 2010.

This entire period of research was covered by KAKENHI, Grants-in-Aid. Having received grants under the categories Scientific Research C, B and A, we are now conducting our research under the category Specially Promoted Research. I had studied psychology in the university’s philosophy department, which placed my research in the grant category “humanities and social sciences.” When I heard about the Grants-in-Aid program, a feeling of gratitude welled up within me. Without them, I would have had no means to continue my research on chimpanzees.

When asked to write this essay, I went back over earlier essays in the series. Over a 2-year period, there have been 23 authors, starting with Dr. Makoto Kobayashi and the latest being Dr. Ichiro Kanazawa. Each wrote about his/her own experience with Grants-in-Aid and offered recommendations regarding the system. All had in common a high appraisal of the system's effectiveness. I, myself, have had experience doing document and panel reviews of Grant-in-Aid applications. This screening system carried out by researchers has evolved over many years into its present form.

Reading Dr. Hideki Shirakawa's essay, I was reminded that in FY 1969, the year I entered the university, the scale of the Grant-in-Aid program was about ¥6 billion. Tracing its transition, it grew to ¥53 billion in FY 1989 and was ¥200 billion in FY 2010. Whereas the rate of increase has slowed of late, the amount of the Grant-in-Aid budget continues to grow steadily.

Indirect expenses are now covered under the grants. From FY 2011, it will be possible to carry over grant funds into the next fiscal year. An electronic application system has also been installed, and a program has been introduced for recognizing excellent reviewers. While such innovations are being added, the system is currently carried out through the infusion of some 6,000 reviewers, who evaluate more than 10,000 new grant applications over the course of a year.

I do not feel that there is any major problem with the Grant-in-Aid program per se, so I'll turn my eye to the situation surrounding the financial award system and touch upon some issues related to scientific research from the perspectives of research funding and researcher development.

I'll use the operational funding allocated to national universities to illustrate the case of research funding. In FY 2010, it amounted to ¥1.1585 trillion. This funding, which is absolutely essential to maintaining the operation of the national universities, is not increasing, but rather decreasing year by year. It had been ¥1.2415 trillion when the universities were incorporated in FY 2004. This makes an ¥83.0 billion, or 6.7%, budget reduction over the past six years. When you consider that the operating budget allocated in FY 2010 to the University of Tokyo is ¥85.6 billion, this reduction would be equivalent to wiping out almost the entire annual budget of that university in just six years.

I believe it would be effective to have a 3-tiered system of research funding. The first level would be operational funding used to give excellent researchers a stable source of research funding. Above that, would be selective funding, with concentrated investment in fields selected from a policy perspective. This would entail a layout of public funding for scientific research on par with other countries, as Japan is the only country out of step with this funding trend. Desperately needed to begin this process would be restoring the national universities' operational budgets.

The third tier would be funding for fostering the next generation of researchers. There is a tendency for the best students not to remain in graduate school or to set their sights on becoming researchers. Age 25 is the turning point. Students enter the university at 18, graduate at 22 and then enter graduate school. They are approaching 25 when deciding whether to pursue a doctoral degree. At that age, a student who has graduated from a department of medicine can obtain an internship that pays an annual salary of about ¥4 million. Compare that to an annual stipend of ¥2.4 million for a DC1 Research Fellowship for Young Scientists. Even then, fewer than one person is chosen for a fellowship out of every three applicants. In the PD category, only one person is selected out of every eight applicants. This system design is unreasonable as it sets a great many young researchers adrift.

What is most important for young researchers is to secure status—a post in which they can carry out their research with a sense of security. My proposal for solving this problem swiftly and skillfully would be to create a “1,000 Special Associate Professor Plan.” Under it, 10-year associate professor posts would be established. Modeling it after the fellow program at the Royal Society, 1,000 researchers would be employed with a yearly salary of ¥6 million. This would require an annual budget of ¥6 billion, only 0.5% of the overall operational budget for the national universities.

Though falsely, this may appear similar to the SPD category of Research Fellowships for Young Scientists. First of all, the participants would have status—be faculty members with guaranteed tenure over a long period of 10 years. Other than salary, the participants' other expenses would be covered by the host institution. The researchers would be required to securing their own research funding. As the participants would be excellent researchers, it could be assumed that they would secure tenured positions within about five years, on average. Given this calculation, around 200 people could be selected under the program each year.

What I'm advocating is to prepare a post for young researchers in which they can carry out their research in stable manner without undue anxiety.