

## With a Focus on Nurturing Talent and Increasing Flexibility, RCAST Takes the Next Step

Interviewer: Takashi Mikuriya, professor

— This time, I'd like to talk to you as the director of RCAST rather than as a researcher. You became director in April 2004, the same time that Japan's national universities were reorganized as corporations, so why don't you start by telling me about the impact that incorporation has had on RCAST?

The first thing I would point to is the fact that the system at RCAST changed when the universities were incorporated, with three extremely important powers--specifically, power over the budget, personnel, and allocation of space--shifting from the faculty to the director. I suppose RCAST is the only institution at the University of Tokyo where such changes took place, and I don't think there is anywhere else in Japan where so much power was put in the director's hands. In the first place, one of the fundamental concepts behind incorporation was to give university presidents the type of power and authority I've just described and allow them to run their universities based on their own judgment. RCAST took the initiative in that regard, with decisions being made from the top down rather than reconciling interests from the bottom up. The director was given the power to run the organization in an ideal way while maintaining a sense of social responsibility. On the other hand, these changes meant that the director would be fired if he didn't do a good job.

In some ways, this significant reform was possible precisely because it was attempted at RCAST. That is, we were able to introduce institutional changes without encountering significant resistance because the scholars affiliated with RCAST conduct research in a wide variety of fields, which means that their interests do not conflict. Shifting functions previously performed by the faculty to the director was an important institutional change because it meant that the director was quite free to issue orders that could change the

direction the organization was heading in. That is why we established a new seven-member management strategy committee consisting of the director, the assistant director, an adviser to the university president, a faculty member in charge of personnel and another in charge of management strategy, and the office manager. The faculty and the office staff had always remained separate, so including the office manager was revolutionary. The idea was to use a system of group leadership to run RCAST, but with the director holding the responsibility. I'm keenly aware of the significance of that responsibility.

The second impact is that, since incorporation actually means that the University of Tokyo became a single corporation, departments like RCAST represent no more than one institution within that larger corporation. The situation was the same before, but after privatization I feel that the status of RCAST within the university became more clearly defined. Until recently, and particularly at RCAST, management could stay one step ahead of the University of Tokyo and the university would follow. But now that RCAST exists within the clearly defined framework of the corporation called the University of Tokyo, there's a chance that we might lose support if we run alone without cooperating with the head office. Then again, we face the dilemma that RCAST could lose its identity if we cooperate too much, and we are thinking even more carefully about how to lead the way while maintaining the administration's understanding.

# The Frontrunner in University-Industry Collaboration Now Focusing on Nurturing Talent

--- In the past, there were some ways in which RCAST was a

frontrunner in university-industry collaboration, but recently I've had the impression that you've been raising the alarm about collaborations that are too simplistic and steering RCAST toward entering collaborative agreements only after a firm foundation has been established. Is that accurate?

That's exactly right. Within the University of Tokyo--within the entire Japanese university system, for that matter-RCAST has always led the way in terms of university-industry collaboration, having created related organizations like CASTI [Center for Advanced Science and Technology Incubation] and ASTEC [Advanced Science and Technology Enterprise Corporation]. Personally, I have been aggressively pursuing such collaborative projects since the 1990s, and I have always felt that Japanese universities, including the University of Tokyo, should do a better job of collaborating with industry. Recently, however, I have a feeling that we may have gone too far.

Actually, there used to be a sense that university-industry collaboration was not a good thing, and when I would meet with businesspeople in the 1990s, we held our discussions in secret on Saturday evenings. And then, sometime around 1995, collaborations started being treated positively, and RCAST broke new ground by establishing CASTI. Now, with incorporation and a sluggish Japanese economy, the government is investing more in universities. Not only is there a trend to expect universities to produce returns on those investments, but now universities are even being told to collaborate with industry in order to make money and put those profits back into society. That is not a bad thing in itself, but I think that universities have a different duty to perform.

That is, a university's first priority should be to nurture new talent through education. Pathbreaking interdisciplinary research comes second, and university-industry collaboration is ultimately just one way of conducting such research. Collaborations can be evaluated in part on the question of "How much will they contribute to society?", but within the university as a whole, the weight of that question should be relatively small. If the question becomes "How much money can we make?", then our priorities are all wrong. It's fine for universities to generate income, but I think that schools are really on the wrong track if making money is their objective, just like corporations.

Getting back to the subject of RCAST, I want us to conceive of university-industry collaboration differently than we have in the past. Specifically, I have two things in mind. First, we should limit our participation to collaborations that are realistic, where working together provides benefits for everyone involved. Second, we should use collaboration to nurture new talent rather than to make money. On one hand, we aim to nurture students, who should gain knowledge of the corporate world from these collaborative projects and become active in that world after graduating. On the other hand, corporate personnel come to the university, where they do research and receive education, learning things that can only be learned at the university that they then take back to the corporation. I think that the next mission for RCAST is to shift university-industry collaboration in this direction, toward nurturing new talent.

— At RCAST, there is a graduate course in "Advanced Interdisciplinary Studies (AIS)," isn't there? What is your vision for the future of this program?

Actually, RCAST is the only research center in the country with its own graduate school. Strictly speaking, the graduate course belongs to the research department, so RCAST does not have its own graduate school. However, thanks to the tireless efforts of the faculty from the center's inception, we have been able to devise a revolutionary system where the "Department of Advanced Interdisciplinary Studies" was created within the engineering school, yet RCAST faculty actually run the department.

Initially, the department was distinguished by the fact that it was intended for working professionals, but now that professionals taking graduate courses have become the norm, I think that the question of how to distinguish the department in that regard is going to become an extremely important strategic problem. For example, the department might get involved in teaching and personnel exchanges in collaboration with other universities, including private universities. It could be used as a place for corporate researchers to brush up on their education, and faculty might give on-site lectures for corporations. These are some of the ways that I'm thinking the department could be turned into a meeting place for the different needs that universities and corporations have for nurturing new talent.

### The Mission of RCAST: Incubation, and Bringing Science and the Humanities Together

— Another of the distinguishing characteristics of RCAST is that it has a system where faculty are appointed for limited terms. With this system, scholars devote themselves to their research during their terms of employment, and then they return to their original employers or seek out new places to work. I imagine that other universities are going to adopt this system as well, but how do you think the system will change at RCAST in the future?

This is an extremely important issue, one that we are still discussing at RCAST, and fundamentally, I think it gets to the question of what RCAST's mission should be. With the incorporation of national universities that took place in 2004, RCAST ceased to be a facility that was used jointly by the whole university, and it acquired a new status as an attached research institute. As a shared-use facility, RCAST had to be flexible, but once it became a research institute, I think that there were expectations not only that fresh new discoveries would be made, but also that the institute would not fail to fulfill the mission it was given at the time of its establishment. That meant that it was necessary to remind ourselves once again about what the mission of RCAST was supposed to be.

I think that RCAST has two missions. The first is to serve as what might be called an incubation facility, with RCAST researchers constantly pursuing groundbreaking research, transplanting that research to other institutions when it starts to produce some results, and then moving on to the next project. In terms of personnel, when faculty come from other departments within the university, for example, they should

conduct their research within RCAST's free environment and then take what they've started back to their own department when that research starts to blossom. In the case of faculty invited from other universities, they should break new ground at RCAST, then take everything they've started to the next suitable place, where they can develop their work even further. I think that one way to understand RCAST's mission is to see it as a place where development is always occurring.

The other major mission is to promote harmony between science and the humanities, a mission that sets RCAST apart as a research institute. For example, there is the "Project for the Safety and Security of Individuals and Society" that is led by you, Professor Mikuriya, and which involves researchers from a variety of fields. Basing our work on those keywords "Individual and Society," we need to clearly define our mission from a unique angle and truly bring sciences and the humanities together, both in name and in reality. It's not normal for a political scientist like yourself to work in the same research center as someone like me, who's involved in physics and chemistry. To put it another way, RCAST itself is like a small liberal arts university. I think we should aspire to become a research center that takes advantage of that quality.

— You referred to RCAST as a unique place, and also as just one part of the University of Tokyo. How would you say that the projects being undertaken at RCAST are viewed by the university as a whole?

After I became the director, what surprised me in meetings with the UT administration and meetings outside the university was the gap in the way RCAST is assessed at the university versus the way it is seen from the outside. (laughs)

I guess I'd say that outside the university, RCAST has a good reputation as a place that's different from UT, a place where innovative work is done, while within the university, RCAST gets a somewhat cold reception. They see us as being different too, but the attitude is something like, "I'm not sure what they're talking about, but it's RCAST, so I guess it's ok." We have a good reputation outside the university for being different, so it's only natural that we developed a bad reputation inside the university for not fitting in. Still, I've been surprised at how big this gap in perception can be. Of course, we don't have to cater to the views of the administration and other departments, but we should try to give them a solid grasp of RCAST's mission and help them recognize us in a more positive light as an organization involved in activities, management practices, and research that are not possible in other departments.

Currently, we have delivered a proposal to the UT administration. We're asking them to create a variety of systems within the university and give each department the option of adopting one of the systems. We want them to introduce a non-uniform system where, for example, the system that RCAST opted for could spread to other departments if it works out well.

— This idea of an "option" system makes a lot of sense. It sounds like you're saying that you want a system that is as free as possible, within a certain framework, rather than

having RCAST do whatever it feels like, only to have progress made here disappear before anyone realizes what happened. I think that would be the best shortcut to getting the UT community to recognize what RCAST is doing.

Even now, RCAST is a significant presence within the university, but it's a fact that part of that presence includes the idea that "RCAST is a weird place." That was one of the good things about RCAST, but I have a feeling that this stance is going to change now that the national universities have been incorporated. You could say that this is a good opportunity for RCAST. I think that the situation is going to change, and the new things that RCAST has been attempting will spread throughout the university. RCAST won't be the only place to change. I think that the entire University of Tokyo, and all of Japan in turn, will change too.

— The adjunct faculty system is probably one sign of that impending change. It's a system that got its start at RCAST and is spreading to other universities. The Strategic Research Center Development (Super COE) Project was a symbol of that new system, and now the project is just one year away from ending. Would you mind giving a basic overview of the project?

The Super COE project started four years ago, in 2001, with a budget of approximately one billion yen [roughly 9.3 million USD] in grants-in-aid for promoting science and technology. Under the leadership of Nanya Takashi, the director of RCAST at the time, nearly 70 percent of that budget of slightly less than one billion yen was used for labor costs, a watershed decision that was apparently beyond MEXT [Ministry of Education, Culture, Sports, Science and Technology] expectations. That money was used to introduce a system of appointing adjunct faculty who were not part of the regular academic staff, and currently RCAST has sixty of these adjunct faculty members. That is roughly the same number of regular faculty employed with state subsidies, which means that RCAST approximately doubled in size at the beginning of the Super COE project. That is, RCAST became twice as powerful, and in fact, the amount of outside funding we have secured since the beginning of the Super COE project has doubled as well.

What should we do now that the program is almost over? There's no point if all of these twofold increases go back to normal after the program ends, so I think it's our mission--our duty, really--to figure out how to maintain that new power. That doesn't mean that we aim to fix people in place. I think that the transfer of personnel that will occur when the sixty adjunct researchers who were trained here move on to their next places of employment, and the expansion of the new fields they cultivated during their tenure here, are the two biggest challenges RCAST faces now. The adjunct faculty system started at RCAST, so I think that if we can get the adjunct researchers to make a smooth transition into the next stage of their careers, the system will really take hold. To that end, we are thinking of ways that RCAST can function as a gobetween to help them in that process.

In addition, considering the fact that a variety of new fields developed thanks to the twofold increase in outside funding, I want to promote the effort to devote all of our energy to creating a foundation for those new fields to become established in society, with RCAST playing a central role in that effort. There may be some shrinkage once we lose the grants-in-aid that were part of the Super COE project, but I think that most of the significant gains will remain at RCAST. I'm counting on you [Prof. Mikuriya] to help us! (laughs)

### —— (laughs) Finally, I wonder if you could tell me about a day, or a week, in the life of the RCAST director.

In the past, I was working on the front lines of research, so when I was appointed as director, I was quite concerned about how I would balance my research with my new responsibilities. When I decided to accept the position, I was thinking it would be ideal if I could spend half of my time on research and half of my time on my duties as the director, but that in reality I would probably spend seventy percent of my time on my work as director and thirty percent on research. Now, however, I spend about ninety-eight percent of my time on my administrative work, and about two percent on research?quite a miscalculation! (smiles) I'm near the end of the second year of a three-year term, and it's a serious thing to stay away from the lab for two years. I'm always worried that if this goes on for another year, it might be the end of my career as a researcher. I feel that I have to do my best because RCAST is in the midst of a critical period of reform, and it's also in my nature as a researcher to devote myself to the duties I'm assigned and get absorbed in the work. I didn't mean to let it go this far, but I really have lost myself in the job.

As for my current lifestyle, I spend thirty percent of my time in the director's office, thirty percent visiting Kasumigaseki [where many government ministries are located] and private corporations in my capacity as director, and about thirty percent in meetings on the Hongo campus and at other locations. In general, each of these three categories takes up about one-third of my time. I've always been one to stay up late, but now I stay in the director's office every night until eleven or twelve o'clock without once returning to the lab--a truly sad life. Everyone, please take pity on me! (laughs)

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#### Links

#### **RCAST**

http://www.rcast.u-tokyo.ac.jp

### Hashimoto Laboratory

http://www.light.t.u-tokyo.ac.jp/