## RIKEN President's comments on the report of the investigation of STAP cell research articles in *Nature*

### 1. Reaction to the report on research misconduct

I received the report from the investigative committee regarding the allegations concerning two papers published in *Nature* authored by researchers from RIKEN. The committee confirmed that research misconduct was indeed carried out by one of the authors of the papers during the process of formulation of the papers. Additionally, several of the co-authors failed to discover that there were problems with the accuracy of the data and the legitimacy of the conclusions of the papers, and the report pointed out their heavy responsibility for this instance of research misconduct. This is extremely regrettable.

I would like to take this opportunity to apologize once again for the fact that papers authored by researchers at RIKEN have harmed the public's trust in the scientific community.

#### 2. Disciplinary action toward the individuals involved

Researchers must maintain a high ethical awareness, and bear full responsibility for all the observations presented in their papers and for their own scientific conclusions resulting from these observations. In particular, authors have a duty to handle the results of their own experiments with utmost care and objectivity.

I have informed the authors of the results of this investigation. I will, if the misconduct is confirmed following the proper appeals process, recommend that one of the papers in question be retracted. Further, strict but fair disciplinary action will be taken on the basis of recommendations by a disciplinary committee set up for this purpose.

Research misconduct is not something that can be treated lightly. On the other hand, it is not proper to adopt measures which constitute personal attacks or violations of the human rights of the authors. We will adopt disciplinary actions based on full consideration of this point.

#### 3. Reforms of RIKEN's operations

(1) Resolution to adopt changes in governance and policies to prevent recurrence

RIKEN's mission is to contribute, through our research activities, not only to the scientific community but to society as a whole. Leaders in charge of research groups and teams at RIKEN have recruited talented researchers and technicians from both inside and outside Japan, and through their efforts to bring in young researchers based not only on their past achievements but on their future potential, have made significant achievements.

Within collaborative research projects, the division of responsibilities between individual researchers and groups must be made clear, from the formulation of the project to the publication of results. Unfortunately, within the collaboration between researchers in the current case, research misconduct occurred due to a young research's lack of experience and awareness of the importance of research ethics, the lack of leadership among researchers in a position to help her, and a lack of mutual verification among the groups.

We humbly accept the fact that this has happened, take a fresh look at RIKEN's organizational governance, and endeavor to restore high standards. To do so, we will establish an internal reform office, which I will personally lead, and will establish a committee of external experts to appraise our research procedures from the management of data to the publication of results. We will put our utmost efforts into improving our regulations and procedures for preventing research misconduct and negligence. In particular, we will fundamentally rethink our provision of ethical education, and will urgently put in place an effective platform.

# (2) Ensuring a research environment where young researchers can maximize their abilities

In the world of scientific research, it is extremely important to recruit a diversity of human resources in order to bring new perspectives into research fields and change existing values. It is in fact RIKEN's responsibility to aim for innovations in science and technology by nurturing young researchers, guaranteeing them adequate independence while providing them with appropriate leadership.

From this perspective, we plan in the future to proactively recruit excellent young researchers, establish an environment where they can make the best of their talents, and continue to nurture scientists who can win society's trust.

#### (3) Efforts to reproduce the STAP cell phenomenon

We will establish a framework so that the STAP cell phenomenon can be tested scientifically by third parties. RIKEN researchers will attempt to replicate the findings very strictly, and will offer their active cooperation to outside researchers attempting to reproduce them, including the provision of necessary information.

I will, in response to this incident, take the leadership and put my greatest efforts into implementing these actions.