



STS forum, October 7-9, 2012, International Conference Center, Kyoto

Summary of the Third Funding Agency Presidents' Meeting, October 8, 2012

Co-Chairs:

Professor Dr.-Ing. Matthias Kleiner, President, German Research Foundation (DFG), DE Dr. Michiharu Nakamura, President, Japan Science and Technology Agency (JST), JP

Participants:

Actual Participants List (**Rapporteurs, country alphabetical) (Total 26: EU-15, Asia-6, Americas-1, Middle-East-2, Africa-1, Oceania-1)

*Prof. Aidan Byrne, Chief Executive Officer, Australian Research Council (ARC), AU

*Prof. José Arana Varela, President of the Executive Board, State of São Paulo Research Foundation (FAPESP), BR

- *Dr. Vladimir Nekvasil, Member of Academy Council, Academy of Sciences of the Czech Republic, CZ
- **Prof. Dr.-Ing Matthias Kleiner, President, German Research Foundation (DFG), DE
- *Dr. Mahmoud Sakr, Executive Director, Science and Technology Development Fund (STDF), EG
- *Prof. Marja Makarow, Vice President, Academy of Finland (AKA), FI
- *Prof. Pascale Briand, Director, Agence Nationale de la Recherche (ANR), FR
- *Dr. Alain Fuchs, President, Centre National de la Recherche Scientifique (CNRS), FR
- *Prof. André Syrota, Chairman, Institut National de la Santé et de la Recherche Médicale (INSERM), FR
- *Prof. Hanoch Gutfreund, Executive Committee Chairperson, Israel Science Foundation, IL
- *Dr. Krishnan Lal, President, Indian National Science Academy (INSA), IN
- *Prof. Luigi Nicolais, President, The National Research Council (CNR), IT
- *Dr. Yuichiro Anzai, President, Japan Society for the Promotion of Science (JSPS), JP
- *Prof. Dr. Takayoshi Mamine, Executive Director, Japan Science and Technology Agency (JST), JP
- **Dr. Michiharu Nakamura, President, Japan Science and Technology Agency (JST), JP
- *Dr. Marc Schiltz, Secretary General, FNR, Fonds National de la Recherche Luxembourg, LU
- *Prof. Andrzej Jajszczyk, Director, National Science Centre (NCN), PL
- *Prof. Dr. Michał Karoński, President, National Science Centre (NCN), PL
- *Prof. Seabra Miguel, President, Foundation for Science and Technology, PT
- *Mr. Mikhail Rogachev, Director, Russian Foundation of Technological Development, RU
- *Dr. Andreas Göthenberg, Executive Director, Swedish Foundation for International Cooperation In Research and Higher Education (STINT), SE
- *Mr. Lennart Stenberg, Senior Advisor, Agency for Innovation Systems (VINNOVA), SE
- **Dr. Raj Thampuran, Managing Director, Agency for Science, Technology and Research (A*STAR), SG

*Dr. Thaweesak Koanantakool, President, National Science and Development Agency (NSTDA), TH

- *Prof. Arif Adli, Vice President, Scientific and Technological Research Council of Turkey (TÜBITAK), TR
- * Mr. Steve Visscher, Deputy Chief Executive and Chief Operating Officer, Biotechnology and Biological Sciences Research Council (BBSRC), U.K.

Discussions

The Third Funding Agency Presidents' Meeting (FAPM) was held on October 8, 2012 in Kyoto on the occasion of the Ninth Annual Meeting of the Science and Technology in Society (STS) *forum* to share and discuss common experiences and to enhance networking and cooperation among the funding agencies. Total 26 representatives of funding agencies from 19 countries participated in the meeting, which was co-chaired by Professor Dr.-Ing. Matthias Kleiner, President of the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation), and Dr. Michiharu Nakamura, President of the Japan Science and Technology Agency (JST).

The three main discussion topics were

- (1) Role of Funding Agencies in Securing Scientific Integrity and Ethical Behavior of Scientists
- (2) Importance of Open Access to Scientific Data
- (3) Scientific Oriented Funding (Curiosity Driven) and Policy Oriented Funding

There is an increasing demand for discussion on "Research Integrity" and "Open Access" among the scientific communities worldwide. The second FAPM in 2011 made obvious that funding agencies need to discuss how to deal with such basic questions and issues. -Therefore, FAPM-participants highly acknowledged the opportunity for discussion which FAPM and Global Research Council¹ provide. The following major points were raised during the meeting:

Discussion Topic (1)

Role of Funding Agencies in Securing Scientific Integrity and Ethical Behavior of Scientists

- How to deal with dual-use technology (technology which can be used for both peaceful and military aims)
- How to support researchers to judge the legitimacy of their research activities

Participants recognized the necessity to deal with ethical aspects of R&D activities because of the big impact if problems should occur. The responsibility for good academic behavior should be placed primarily in the hands of the researchers themselves. For example, in terms of dual use technology issues, researchers should recognize that their research could be applied to both civil use and military purpose. In order to help researchers to make right decisions and encourage their recognition, a "code of conduct" has to be defined by scientific academies, universities, research institutes and organizations. Therefore, a "code of conduct" is the initiation point to enforce research integrity.

¹ Global Research Council: Established by the initiative of Dr. Subra Suresh, Director of U.S. National Science Foundation (NSF), in May 2012. The Council consists of major funding and research performing organizations worldwide which meet in regional conferences to prepare joint statements on common challenges. Heads of many of these organizations meet annually (Summit) to discuss and endorse the statements developed from these regional events.

Under these circumstances, participants discussed the roles of funding agencies. First, the research community should take over the responsibility of defining a "code of conduct" while funding agencies should play a central role in promoting the "code of conduct since the real difficulty lies in its implementation. Second, as globalization of R&D activities is accelerated, funding agencies should share a general "code of conduct" in order to establish internationally accepted standards for scientific ethical behavior. It was also noted that in an increasingly international academic environment, the variation in ethical frameworks between different countries can lead to difficulties in the regulation of ethical issues. The establishment of a database could be an efficient measure to achieve the goal of sharing a common "code of conduct". Furthermore, it could ensure that researchers who have been discovered for scientific misconduct in one national research system cannot go on in the same wrong way somewhere else.

<u>Discussion Topic (2)</u> Importance of Open Access to Scientific Data

- Sharing best practices of open access to researcher or research project databases
- What is the role of the FAPM platform in promoting information sharing among funding agencies

It was agreed that open access is an important topic to be discussed on a global level. However, a number of difficult hurdles need to be overcome to identify the most appropriate frameworks and financial structures to achieve open access to scientific publications and research results.

Participants recognized there is no shortage of ideas for expanding the databases containing extensive information in English on research, researchers, or on-going funded research projects. However, there might be difficulties in countries whose official language is not English. These difficulties need to be overcome because there is high global demand for sharing such data.

In terms of open access to publications, the fact that different situations exist in different countries and that there are various interest groups, including academic communities as well as the publication industry and libraries, makes open access issues more difficult to be solved. However, it is attractive for researchers to reach leading journals by this option. Therefore, there is necessity to advance open access. However, funding agencies may have to share a part of the costs for promoting open access, especially that of publications. The Golden Road² was discussed as an effective approach to achieve this goal.

Discussion Topic (3)

Scientific Oriented (Curiosity Driven) Funding and Policy Oriented Funding

On the one hand, the discussion confirmed that both curiosity driven funding and policy oriented funding are important and that they should be balanced adequately. There is no doubt that revolutionary technologies result from fundamental research. On the other hand, since the expectations of society towards innovation through R&D activities are rising, policy oriented funding, which promotes R&D

² Golden Road: Open Access approach to encourage researchers to publish his/her article in an open access journal which makes this article free to all readers worldwide. The publication costs have to be covered by the authors rather the readers.

in accordance with high social needs, is also significant. Therefore, funding agencies need to maintain their central role to keep the best balance between the two funding schemes.

When researchers choose R&D activities supported by policy oriented funding, they are skilled to select the best approaches based on their fundamental S&T knowledge in order to achieve their given goals. Thus, the researchers' curiosity is respected as well as significance. In addition, it was emphasized that the influence of economic pressure should not lead to the reduction of support for fundamental/basic research.

Beyond the agenda

Professor Kleiner raised – as he did in the last two years – the issue of financial contributions by funding agencies on a voluntary basis to the STS *forum*. A note on this behalf was released accordingly.