Science Council of Japan

19 April, 2016

G-Science Academies call for actions on brain science, disaster resilience, and future scientists

Today, Professor Onishi, President of Science Council of Japan, handed over three joint statements endorsed by the G-Science Academies, to Prime Minister Abe, accompanied by Ms. Shimajiri, Minister of State for Science and Technology Policy, toward the G7 Summit at Ise-Shima and the Science and Technology Ministers' Meeting at Tsukuba City in May this year.

This year's G-Science Academies Meeting, which was hosted by Science Council of Japan, was convened on the 18th and 19th of February in Tokyo, and was inaugurated with the opening address by Minister Shimajiri.

Science Council of Japan invited the science academies of 13 countries and the regional science academy of Africa to work together to provide coordinated science-based input to three important global challenges: "Understanding, protecting, and developing global brain resources", "Strengthening disaster resilience is essential to sustainable development", and "Nurturing future scientists". These challenges are faced by all countries, and are addressed by global, regional, and national organizations. Seven of these academies are from the countries which attend the G7 Summit, and they commend these recommendations to their governments. All of the participating academies consider that these perspectives and recommendations are important for their own countries, and for continuing regional and global advancements.

Discussions over the three themes were highly intensive, in a fruitful manner, and some scientific remarks also covered various relating issues, such as the meaning of open access in science, relationship between disasters and migration, and sustainable development goals. These issues were not included, but remained for future discussions.

Furthermore, in the meeting of February, a follow-up to the joint statements recommended toward last year's G7 Summit held in Schloss Elmau, Germany, was conducted. The participating academies recognized that, in each country, steady implementations had been made in the fields of "Infectious diseases and antimicrobial resistance", "Neglected tropical diseases", and "Future of the ocean", and welcomed this.

Summaries of Joint Statements of G-Science Academies Meeting 2016

Understanding, Protecting, and Developing Global Brain Resources

The human brain is civilization's most precious resource. Investment in brain science is, therefore, an investment in the future of society, and nations must cooperate to understand, protect, and foster optimal development of the brain.

To cultivate global brain resources, the G-Science Academies propose four Objectives, to be pursued in parallel, where strategic support for neuroscience will benefit society: (1) Support fundamental research with international collaboration; (2) Establish global programs for the diagnosis, prevention and treatment of brain disorders; (3) Promote theoretical modeling of the brain and the development of brain-based artificial intelligence; and (4) Integrate neuroscience with the social and behavioral sciences to improve education and life management as essential components of a brain-aware society.

Strengthening Disaster Resilience is Essential to Sustainable Development

Losses due to disasters are increasing in both developed and developing countries. Human factors together with increased extreme events aggravate the negative consequences of hazards. In the globalized 21st century, a disaster in one country creates disruptions in others. In 2015, the international community agreed on three major accords: the Sendai Framework for Disaster Risk Reduction 2015-2030, the Sustainable Development Goals and the Paris Agreement on Climate Change.

To expedite the Sendai Framework, G-Science Academies exhort six policy actions for disaster resilience and sustainable development: (1) Develop metrics and indicators for evaluating exposure, vulnerability and resilience; (2) Advance science and technical knowledge and improve assessment of disaster risk including building relevant data infrastructure; (3) Develop innovative engineering for disaster prevention and raise political and public awareness; (4) Strengthen inter- and trans-disciplinary collaborative efforts to accelerate our transformations to a sustainable world; (5) Engage the investor community; and (6) Initiate a forum for information sharing with the private sector and relevant stakeholders to provide practical solutions.

Nurturing Future Scientists

The present-day society heavily relies upon science-based discovery, technology and policies. In light of this, nurturing future scientists is important for the development of society. Connecting scientists and society, and creating a diverse global workforce need to be promoted.

The G-Science Academies recommend the followings: (1) Further promotion of science education for necessary capacities; (2) Supporting young scientists for development of career in broader sectors; (3) Implementation of scientists' assessment based on quality and diverse activities; (4) Prioritizing science communication to the public and children; (5) Training scientists for science advice to policies; (6) Improving working conditions of women and minority groups for career development; (7) Developing science capacity and mutual mobility by collaboration of developed and developing countries; and (8) Ensuring access to academic literatures and information, and opportunities of publication of research results.