JFY2017 Awardees
Up to Yen 5 million ($45,000)/year for up to 3 years

Project	PI	Synopsis	Collaborators
Introduction of energy-saving equipment for strengthening resilience	Akane UEMICHI Assistant Prof. Graduate School of Engineering, Department of Mechanical Engineering	Securing energy at disasters is the most critical issue. The hospitals to be used during disasters are required to have self-generating energy facilities that can generate 60% of the normal-time energy. The introduction of self-generating energy facilities is not systematized, nor has gone through sufficient research. This project is to establish a tool that supports the introduction of energy-saving equipment that meets “economic and environmental standards” and “strengthening of resilience” by using open data such as disaster occurrence rate. It will also establish a system that offers financial support for introducing energy-saving equipment.	University of Tokyo Disaster Medical Assistance Team (DMAT) Central Research Institute of Electric Power Industry National Research Institute for Earth Science and Disaster Resilience
Meta system for advanced medical regulations	Shingo KANO Associate Prof. Department of Computational Biology and Medical Sciences	To use emerging medical technologies by ensuring safety, effectiveness, and quality, the innovation and regulation processes need to be comprehensively defined. Also, the interaction between them is required to be systematically analyzed along with exploration of an appropriate time for starting rules, preparation of rules for the rules, and monitoring of the interaction. The project will establish a system of systems by (1) developing a prototype for technology prediction system; (2) analyzing past cases to establish new medical evaluation technology guidelines and proposing Japanese version of guidelines for guidelines; and (3) establishing a system that will accelerate the interaction in heart simulation technologies.	University of Tokyo Aoyama Gakuin University Yamaguchi University Japan Association for the Advancement of Medical Equipment Japan Multiplex bio-Analysis Consortium
Star scientists and innovation in Japan	Kanetaka MAKI Associate Prof. Waseda Business School	It is essential to continue funding for excellent R&D to effectively promote Japanese science, technology and innovation. The U.S. has “star scientists” who produce excellent research results and also establish venture businesses of high performance. They make great contributions in making economic and social impacts with their proactive contribution to industries with their scientific background. This project is to develop a method for identifying star scientists in Japan, analyze how the star scientists have been born, and establish the database. All of these will lead to an	Waseda University National Graduate Institute for Policy Studies (GRIPS)

		evidence that will help distribute research fund with industrialization in mind.	
Analyses of the motivation for female students to major in mathematics and physics	Hiromi YOKOYAMA Professor University of Tokyo KAVLI/IPMU	Next-generation STI personnel education is critical. Japanese 5th STI Basic Plan encourages securing personnel of diversity and mobility. Among other things, it is important to involve women researchers in the workforce. Many efforts have already been made to encourage female students to major in science, but those who major in math and physics are very few compared with those in BIO. There are some countries where female students occupy 50% of the math and physics classes. It is possible in Japan that some social factors hinder the number from increasing. This project will use psychology in surveying math and physics researchers, female students and their parents, and after-school students, and analyze the social factors that prevents them in majoring in math and physics. It will also propose policies for securing diverse personnel who will make contributions in making innovations.	University of Tokyo Shiga University