

JFY2013 Awardees

[General category: Yen 15 million/(\$135,000)/year for up to 3 years]

[Special category: Yen 30 million (\$270,000)/year for up to 3 years]

Project	PI	Synopsis	Collaborators
[General Category] STI Policies and Policy Proposals on the Development of Complementary Policies and Systems	Reiko AOKI Professor, Institute of Economic Research, Hitotsubashi University	<p>To lead innovative scientific knowledge and technologies to the resolution of social issues as well as the improvement of the quality of people's lives, it is important to make science and technology successful as an industry. However, the more innovative science technology is, the more "creative destruction" will be needed in industries and related institutions. At the same time, it is not easy to flexibly transfer management and human resources from existing industries into new ones.</p> <p>This project applies macroeconomics and analytical methods to scientific and technological innovation and the formulation of complementary policies and systems. Specifically, it applies/introduces industrial organization theory, corporate governance and game theory to the design of deregulation, new legislations, and structural reforms of markets and businesses, which are indispensable to the restructure of an industry (the sixth industrialization of agriculture) and to the creation of innovation and a new industry (the industrialization of regenerative medicine). The project seeks to design complementary systems and presents complementary policy proposals, with a view to providing economic and political incentives to stakeholders.</p>	<p>Graduate School of Bioresources, Mie University Institute of Advanced Biomedical Engineering and Science, Tokyo Women's Medical University Institute of Social and Economic Research, Osaka University Faculty of Humanities, Kochi University Institute of Social Science, The University of Tokyo Graduate School of Economics, Nagoya University Graduate School of Economics, Hitotsubashi University Graduate School of Economics and Business Administration, Hokkaido University</p>
[General Category] Action Research for Realizing Innovation with Infometric Approach	Yuya KAJIKAWA Associate Professor, Graduate School of Innovation Management, Tokyo Institute of Technology	<p>R&D projects should be planned and implemented, taking into consideration rapidly developing and changing global R&D trends. Furthermore, in the early stages of project development, it is also necessary to consider designing the system and roadmap needed to put the results of the project into practice.</p> <p>This project takes an infometric approach to analyze research papers and patent information and studying and designing business eco systems. By doing so, it aims to design innovative R&D themes, evaluate possible industrial applications and assist in the design of business eco systems, policies and institutions. Especially, it is implemented as action research through collaboration with other R&D projects in order to achieve innovation.</p>	<p>School of Engineering, The University of Tokyo The University of Tokyo - Corporate Sponsored Research Programs</p>
[Special Category]	Yasuko KASAI	In most traditional satellite observations, natural scientists provide only seeds – which results	Keio University

A Study on Methods for Objective/Quantitative Assessment of the Impact of Satellite Observations on Environmental Policy	Senior Researcher National Institute of Information and Communications Technology (NICT)	<p>in a lack of quantitative and objective evaluations.</p> <p>This project explores concrete examples in implementing environmental policies where satellite observations have played a part in monitoring and verifying compliance with international agreements and those procedures and results have helped develop international systems. Based on the findings, the project develops a method to evaluate the efficacy of satellite observations as quantitatively and objectively as possible to contribute to the formulation of environmental policies. It aims to present a proposal on “satellite observations for the STI policy” that involves policy makers and stakeholders from the very beginning of planning a satellite observation project.</p>	Japan Aerospace Exploration Agency (JAXA) Institute for Global Environmental Strategies (IGES) National Institute of Environmental Studies (NIES)
Scenario Planning for Making Regulatory Policies and Technical Standards in Advanced Medicine	Shingo KANO Associate Prof. Graduate School of Frontier Sciences, the University of Tokyo	<p>To encourage science technology innovation, it is required to better translate the results of basic research into practical applications. And, in policy studies to serve that purpose, it is also required to combine regulatory science with policy science to contribute to policy making.</p> <p>This project examines policy studies and proposals to expedite the process of establishing technical standards and regulations needed for clinical applications in the advanced medicine sector; and proposes a method to simulate changes a new policy brings to the regulatory structure. Considering the entire process of formulating regulations as a “policy value chain,” it develops policy options, focusing on R&D promotion and international standardization, to initiate the preparation of new regulations in the early stages. Furthermore, it aims to put into practice a policy simulation model built on scenario planning.</p>	<p>National Institute of Health Sciences Japan Science and Technology Agency Foundation for Biomedical Research and Innovation Japan Multiplex bio-Analysis Consortium Medical Device Strategy Institute, Japan Association for the Advancement of Medical Equipment Graduate School of Pharmaceutical Sciences, the University of Tokyo Graduate School of Public Policy, the University of Tokyo Yamanashi University</p>
Resilience Analysis for Social Safety Policy	Kazuo FURUTA Professor/Dir., Resilience Engineering Research Center, Graduate School of Engineering, the University of Tokyo	<p>In Japan where complex risk problems experienced due to the East Japan Great Earthquake and nuclear disasters, it is required to accurately grasp the interdependent relationships of critical infrastructures and, based on that, plan and implement concrete and comprehensive risk management policies to press ahead with the enhancement of the nation’s resilience.</p> <p>This project utilizes the latest modeling and simulation technologies to graphically evaluate the interdependence, vulnerability, and resilience of important infrastructures in order to drive enhancements in the nation’s resilience. It aims to generate recommendations by developing an integrated resilience evaluation system based on scientific information and a decision-making support procedure that can be used to plan for the restoration of important infrastructure.</p>	<p>Policy Alternatives Research Institute, the University of Tokyo Research into Artifacts, Center for Engineering, the University of Tokyo Resilient Governance Study Group, Council on Competitiveness-Nippon</p>

JFY2013 Feasibility Study
Several Million Yen for up to 5 months

Project	PI
Case Studies on Methods of Designing, Promoting, and Evaluation Multidisciplinary Collaboration and the Integration of Different Sectors	Shintaro SENGOKU Associate Professor, Institute for Integrated Cell-Material Sciences (iCeMS), Kyoto University
Basic Research on the Centralization of Medical Health Information and Its Social Implementation	Takeo NAKAYAMA Professor, Graduate School of Medicine, Kyoto University