

# What is the Cross-ministerial Strategic Innovation Promotion Program (SIP)?

## Implementation Structure

A strong central headquarters structure is vital for effective coordination between ministries and among industry, academia and government agencies. The Cross-ministerial Strategic Innovation Promotion Program has selected program directors (PDs) to be responsible for each of the individual programs making up this government initiative. Each PD has been selected for their proven leadership, which allows them to effectively manage industry-

academia-government coordination. The Cabinet Office has set aside a budget, shifting funds to various ministries on the path to creating this first-of-its kind breakthrough program.

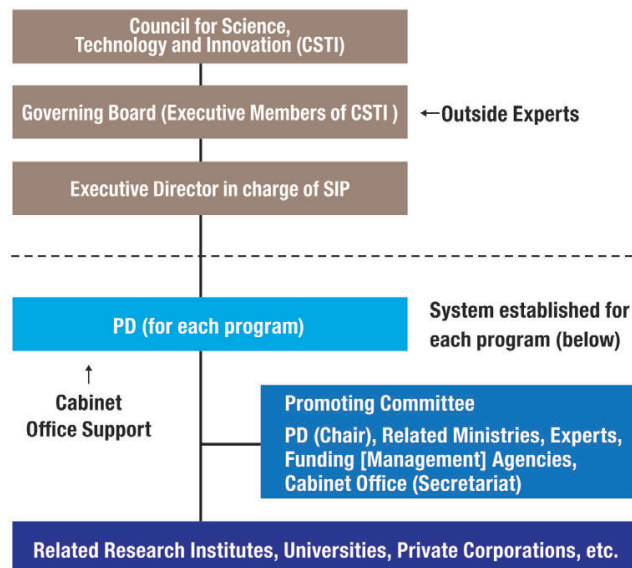
**Implementation Structure**

- ▶ Select a **PD for each program**.
- ▶ PDs break through ministerial silos, managing programs from a cross-ministerial perspective.
- ▶ **Governing Board** (comprised of executive members of the Council for Science, Technology and Innovation) provides **advice and assessments**.
- ▶ **Executive Director in charge of the SIP** assists the work of the **Governing Board**.

**Budget Flow**

- ▶ Cabinet Office has secured a **budget for science, technology and innovation promotion expenditures**.  
Cabinet Office → Ministries → Funding [Management] Agencies → Research Organizations

PDs selected by invitation from among top-class leaders in industry and academia














### The 2nd Period Program Directors

Program Name	Program Director/Affiliation	Page
<b>Big-data and AI-enabled Cyberspace Technologies</b>	ANZAI Yuichiro Senior Advisor, Director of Center for Science Information Analysis, Japan Society for the Promotion of Science	10-13
<b>Intelligent Knowledge Processing Infrastructure Integrating Cyber and Physical Domains</b>	SASO Hideyuki Senior Fellow, FUJITSU LIMITED	14-17
<b>Cyber Physical Security for IoT Society</b>	GOTO Atsuhiko President, Institute of Information Security	18-21
<b>Automated Driving for Universal Services</b>	KUZUMAKI Seigo Toyota Motor Corporation Advanced R&D and Engineering Company Fellow	22-25
<b>"Materials Integration" for Revolutionary Design System of Structural Materials</b>	MISHIMA Yoshinao President, Japan Agency for Medical Research and Development Professor Emeritus and Former President, Tokyo Institute of Technology	26-29
<b>Photonics and Quantum Technology for Society 5.0</b>	NISHIDA Naoto Fellow Toshiba Corporation	30-33

Program Name	Program Director/Affiliation	Page
<b>Technologies for smart bio-industry and agriculture</b>	KOBAYASHI Noriaki Kirin Holdings Co. Ltd. Director of the Board, Senior Executive Officer Member of the Government's Bioeconomy Strategy Council	34-37
<b>Energy system for an IoT society</b>	KASHIWAGI Takao Distinguished Professor and Professor Emeritus, Tokyo Tech Chairman, Solution Research Center for Advanced Energy Systems	38-41
<b>Enhancement of National Resilience against Natural Disasters</b>	HORI Muneo Director-General, Research Institute for Value-Added-Information Generation (VAiG), Japan Agency for Marine-Earth Science and Technology (JAMSTEC)	42-45
<b>Innovative AI Hospital System</b>	NAKAMURA Yusuke Director Cancer Precision Medicine Center, Japanese Foundation for Cancer Research	46-49
<b>Smart Logistics Services</b>	TANAKA Yorimasa Executive Officer, Yamato Holdings Co., Ltd.	50-53
<b>Development of Innovative Technologies for Exploration of Deep-sea Resources</b>	ISHII Shoichi Corporate Advisor of Japan CSS Co., Ltd.	54-57

### The 1st Period Program Directors

Program Name	Program Director/Affiliation*	Page
 <b>Innovative Combustion Technology</b>	SUGIYAMA Masanori Toyota Motor Corporation	60-61
 <b>Next-generation Power Electronics</b>	OOMORI Tatsuo Mitsubishi Electric Corporation Chief Technical Adviser, Corporate Research and Development Group	62-63
 <b>Structural Materials for Innovation (SM<sup>4</sup>)</b>	KISHI Teruo Science and Technology Advisor to the Minister for Foreign Affairs President, Innovative Structural Materials Association Professor Emeritus, The University of Tokyo Advisor Emeritus, National Institute for Materials Science	64-65
 <b>Energy Carriers</b>	MURAKI Shigeru Tokyo Gas Co., Ltd. Advisor	66-67
 <b>Next-generation Technology for Ocean Resources Exploration</b>	URABE Tetsuro Professor Emeritus, The University of Tokyo Executive Adviser, Japan Mining Engineering & Training Center (JMEC)	68-69
 <b>Automated Driving for Universal Services</b>	KUZUMAKI Seigo Toyota Motor Corporation Advanced R&D and Engineering Company Fellow	70-71

Program Name	Program Director/Affiliation*	Page
 <b>Infrastructure Maintenance, Renovation, and Management</b>	FUJINO Yozo Yokohama National University Institute of Advanced Sciences Distinguished Professor	72-73
 <b>Enhancement of Societal Resiliency against Natural Disasters</b>	HORI Muneo Professor/ Head of Center (as of the end of the 1st term) Research Center for Large-scale Earthquake, Tsunami and Disaster (LsETD) Earthquake Research Institute, The University of Tokyo	74-75
 <b>Cyber-security for Critical Infrastructure</b>	GOTO Atsuhiko President Institute of Information Security	76-77
 <b>Technologies for Creating Next-generation Agriculture, Forestry and Fisheries</b>	NOGUCHI Noboru Hokkaido University Graduate School of Agriculture Professor, Research Faculty of Agriculture	78-79
 <b>Innovative Design/ Manufacturing Technologies</b>	SASAKI Naoya Hitachi, Ltd. Corporate Chief Engineer, Research & Development Group	80-81

\* The affiliation and title of PD shall be as of the end of the 1st period (the end of FY2018 or FY2019).

## What is the Mission of the Governing Board?

The Governing Board is a steering committee that deliberates and considers basic SIP policies, research and development plans, budget allocations, follow-up matters and other affairs for each SIP program to ensure the progress of the SIP. The Governing Board also plays a role in offering necessary advice and assessments about SIP and about research and development plans and progress

of individual programs. The results of the Governing Board assessments are reflected in annual SIP policy guidelines. The Board is comprised of Executive Members of the Council for Science, Technology and Innovation, and where necessary, may also bring in outside experts to offer assessments.