

SciREX Online One-day Summer School 2020
APPLICATION GUIDELINES

August 21, 2020

SciREX Core Centers, SciREX Center

Point:

The SciREX Program, having its 5 core centers at 6 universities (GIPS, University of Tokyo, Hitotsubashi University, Osaka University/Kyoto University, and Kyushu University), promotes training of people who will be engaged in making evidence-based policies, new research area of "science of science, technology and innovation policy," and those who will connect policy and research. At the same time, the Program carries world-class research and human resources training to carry relevant basic research.

The SciREX Program has annually held **Summer Camp** ([see the past camps here](#)), but for this particular year of 2020 it will hold a One-day Online Summer School as below. It will be a Webinar by inviting several faculty members of the SciREX Core Centers and members of the related organizations as speakers, which will provide the participants with an opportunity to understand the Core Centers' activities, share their research results, and exchange opinions. An optional online social networking activity will also be held after school. The lectures in Japanese will have a Japanese-English simultaneous interpretation service.

Outline:

Date & Time: **Saturday, September 19, 2020 10:00-17:30**

Sponsors: SciREX Core Centers, SciREX Center

Language: [Japanese with Japanese-English simultaneous interpretation service](#)

Fee: Free

Eligible participants: Those interested in science, technology and innovation policy (high school students and up); Those involved in SciREX projects; Faculty members and those involved in the educational programs at the SciREX Core Centers; Government officials involved in the SciREX Program

Venue: ZOOM online webinar

Number of participants: Up to 300 people

Registration: through [the application form](#) : [Please note that your request for the luncheon topic may not always be accepted.](#)

Application deadline: **Tuesday, September 15, 2020**

Questions: to Scirex-center@grips.ac.jp

Schedule:

10:00-12:10 Lecture 1 "EBPM for STI Policy in the Changing World"

MC: SUMIKURA Koichi, Professor, GRIPS

Lecturers:

ARIMOTO Tateo, Adjunct Professor, GRIPS; KURODA Masahiro, Adjunct Professor, GRIPS, KAWAKAMI Koji, Professor, Kyoto University; SANO Wataru, Professor, Kyoto University

12:10-13:00 BREAK: Lunch-time Sessions (12:15-12:55), inviting government officials; if interested, select the topic you wish to participate on the registration form.

Topic 1: "European Countries' Science and Technology Policies: What Japan can learn from the European countries that make policies beyond the country borders"

Lecturer: IWABUCHI Hideki, Director, International Nuclear and Fusion Energy Affairs Division, Research and Development Bureau, MEXT
(Former Counsellor, Mission of Japan to the EU)

Topic 2: "Science, Technology and Innovation Policy in a Changing Era (focusing on the new corona virus disease)"

Lecturer: NAKAZAWA Keita, Planning Director, Bureau of Science, Technology and Innovation, Cabinet Office, Government of Japan

Topic 3: "Science, Innovation, and Diplomacy/Security: from Cases of Quantum Technology, AI, and Cybersecurity"

Lecturer: UEDA Mitsuyuki, Counsellor, National Center of Incident Readiness and Strategy for Cybersecurity (NISC), Cabinet Secretariat

13:00-15:00 Lecture 2 "Innovation Creation in Local Areas"

Lecturers:

NAGATA Akiya, Professor, Kyushu University

ETO Manabu, Professor, Hitotsubashi University

15:00-15:15 BREAK

15:15-17:15 Lecture 3 "Evidence to Make Decisions for Crisis Governance and

Communication"

Lecturers:

SHIROYAMA Hideaki, Professor, University of Tokyo

MATSUO Makiko, Project Associate Professor, University of Tokyo

HIRAKAWA Hideyuki, Professor, Osaka University

YAGI Ekou, Professor, Osaka University

Commentator:

TANAKA Mikihiro, Associate Professor, Waseda University

17:30 ADJOURN

17:30-19:30 Networking (Optional): The participants can have free discussions on their concerns and research.

[Students' presentations]: Students will have an opportunity (casual, not formal) to make 1-2 paged power point presentations, including their self-introductions. If you wish to make such a presentation, please check mark the item on the registration form. It would be a good opportunity to have comments from the faculty members and students of other universities.

Lectures and Luncheon Topics Outlines:

Lecture 1	EBPM for STI Policy in the Changing World
MC & Lecturers	MC: SUMIKURA Koichi, Professor, GRIPS Lecturers: ARIMOTO Tateo, Adjunct Professor, GRIPS KURODA Masahiro, Adjunct Professor, GRIPS KAWAKAMI Koji, Professor, Kyoto University SANO Wataru, Professor, Kyoto University
Outline	Prof. Arimoto will introduce how the Evidence Based Policy Making (EBPM) has developed and what the issues are by showing cases and theories. First he will present how the science-politics-society has changed in recent years by following the discussions at the United Nations (UN), OECD, and the International Network for Government Science Advice (INGSA). It will include the issues surfaced from the new corona virus pandemic. Prof. Kuroda will present the SciREX Program activities and show the domestic issues that emerged by promoting the Program. Prof. Sano will talk about the theoretical background of EBPM, and Prof. Kawakami will show how the local governments' data on school physical

	exam can be used for policy formation. The speakers will discuss among themselves, followed by a discussion with the participants.
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Lecture 2	Innovation Creation in Local Areas
Lecturers	NAGATA Akiya, Professor, Kyushu University ETO Manabu, Professor, Hitotsubashi University
Outline	<p>Part 1: “Is it possible to create an “Innovation Ecosystem”?” (Prof. Nagata) “Innovation Ecosystem” is a metaphor for the interaction between various players involved in creating innovation and the ecosystem surrounding it. This word appeared in the 1990’s to reflect the problem that innovation cannot be realized only by the efforts within corporate organizations, and has spread to be used at policy discussions after 2000. Such policies that try to create an innovation ecosystem has recently been introduced to Japan as seen in the MEXT’s Local Ecosystem Formation Program. However, this ecosystem metaphor tells that its sustainability as a system depends on the exquisite balance between the players, which makes it uneasy to introduce it as a policy. The lecture extracts the factors for an innovation ecosystem to be created from the cases in the local areas where an innovation ecosystem is in the early stage of establishment, and discusses the policy issues for an innovation ecosystem to be created.</p> <p>Part 2: “What are the Local Areas’ strengths to Create Innovation” (Prof. Eto) It looks like that an innovation ecosystem is easily created in urban areas like Tokyo where funds, information, and human resources are abundant. However, local areas have various factors specific to the area, e.g., resources, culture and rules. If an innovation ecosystem is created based on these factors, innovation creation is realized in local areas. The lecture will use such cases as “Yubari Coal Mine Zuri (to convert waste to resources),” “Fine Bubble in Kochi and Miyagi (to find the areas where the technologies can be used),” “Tuna in Miyagi (good use of the difference in place and time for supply and demand),” “Towel in Imabari and Senshu (combination of local area trademarks and branding),” “Electric assisted bicycle (By-country difference of rules). These cases make us think about the involvement of stakeholders for an innovation creased from “difference” and how to use policies.</p> <p>The session will have 30-minutes Q&A and discussion between the speakers.</p>

Lecture 3	Evidence to Make Decision for Crisis Governance and Communication
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Lecturers & Commentator	<p>Lecturers: SHIROYAMA Hideaki, Professor, University of Tokyo MATSUO Makiko, Project Associate Professor, University of Tokyo HIRAKAWA Hideyuki, Professor, Osaka University YAGI Ekou, Professor, Osaka University</p> <p>Commentator : TANAKA Mikihiro, Associate Professor, Waseda University</p>
Outline	<p>In the midst of the new corona virus pandemic severely affecting the society, how the “evidence” for making decisions and the communication with the society should be are newly questioned. The response to infectious diseases is a comprehensive political and policy decision on “various miscellaneous items” including economic and social effects, in addition to the “scientific advice” of the infectious disease itself. What the evidence is, how to make it evidence, who provides it, how to prioritize and make decision on them, and how to appropriately relay the message to society: all of these bring such issues as system design for decision making, how the specialists (both science and non-science fields) are involved, distance between specialists and political and policymaking people, risk information communication and behavior, establishment of trust, and stakeholders’ involvement in policymaking. These issues have been discussed every time when issues of science-society interaction emerged as seen in BSE and Great East Japan Earthquake cases. Based on that, another question arises as to what has repeatedly discussed (and ultimately solved), what has been left as issues, what the newly emerging issues are. Also, to be considered is what should be done in parallel to be prepared in the future when encountering similar cases.</p> <p>This session consists of 2 parts. The first half will be lectures based on the relevant subjects in the SciREX Core Contents and deepen them with examples. Concretely, based on the lectures on Governance/system design (Prof. Matsuo, University of Tokyo) and Society and Communication (Prof. Hirakawa, Osaka University), such cases as the new corona virus pandemic (Prof. Shiroyama, University of Tokyo) and Great East Japan Earthquake (Prof. Yagi, Osaka University) will be presented. The latter half will be allocated for discussions among the lecturers followed by a discussion open to the participants via an online tool.</p>

Luncheon Topic 1	European Science and Technology Policy: What Japan can learn from the European countries that make policies beyond country borders
Lecturer	IWABUCHI Hideki, Director, International Nuclear and Fusion Energy Affairs Division, Research and Development Bureau, Ministry of Education, Culture, Sports, Science and

	Technology (MEXT) (Former Counsellor, Mission of Japan to the EU)
Outline	He will talk about his experience of working as Counsellor for Science and Technology, Education, Culture and Sports, at the Mission of Japan to the EU in Brussels for 3 years from 2017-2020. The science and technology policies in Europe stem from the crisis they felt in 1970-80 days that the US and Japan were to surpass their technological level, which triggered the European countries to promote science and technology policies altogether. Consequently, the number of papers per EU27 countries' population has increased very fast to reach 1.5 times of that for Japan these days. Twenty-eight European countries produce more papers per population than that for Japan, leaving Japan to learn a lot from them. He will briefly introduce the history and current status of the European science and technology policies.

Luncheon Topic 2	Science, Technology and Innovation Policy in a Changing Era (focusing on the new corona virus disease)
Lecturer	NAKAZAWA Keita, Planning Director, Bureau of Science, Technology and Innovation, Cabinet Office
Outline	Japan's "6 th Science, Technology and Innovation Basic Plan" will begin in 2021. The Basic Plan is established every 5 years and the 6 th Basic Plan is under discussion at the Japanese government. The new corona virus pandemic has totally changed the world. Where our daily life is heading for and how the international relations will change? The science, technology and innovation policies are closely related to such directions and results of change. He will introduce the points and issues in establishing the next Basic Plan.

Luncheon Topic 3	Science, Innovation, and Diplomacy/Security: from Cases of Quantum Technology, AI, and Cybersecurity
Lecturer	UEDA Mitsuyuki, Counsellor, National Center of Incident Readiness and Strategy for Cybersecurity (NISC), Cabinet Secretariat
Outline	Fourteen years have passed since a prominent paper on deep learning was made public; 21 years since a prominent paper on superconductive quantum bit was made public; Cases are seen these days that science causes innovation and affects the competition between countries

and technological supremacy (including diplomacy and security). By overviewing the trends in quantum technology, AI, and cybersecurity, he will challenge the following difficult questions and use half of his time for Q&A and discussions.

1. The “sign” in science can be measured real time? When is a good time for leveraging science and technology policies?
2. Assuming that US-China conflict continues, what stance Japan should take and what kind of science and technology policies Japan should take?
3. How can we use EBPM in coping with these critical issues?