

Project	Objective	Expertise	Job description	Skills required	Skills to be acquitted during the internship
Examination of “Projection and Analysis Method” in Emerging and Interdisciplinary Science Fields and Formation of Networks	<p>Identifying the emerging and interdisciplinary fields, predicting economic and social impact, and establishing strategies will help us to be ready with uncertainties in the future. To implement these, it is necessary to systematize various methods and establish policy and research capabilities by nurturing policy and research communities ranging from social, natural and engineering scientists, industrial sector, and citizens. As this required long-term efforts, this project will focus on establishing the base for forming long-term network. Also, it will be promoted from a view of how the various methods and activities can be connected to have a valuable output.</p>	<p>None, but desired to have concerns to the S&T and society or related information</p>	<ul style="list-style-type: none"> • Assistance in sorting out knowledge gained from papers on “prediction and analysis method” and by interviewing experts • Assistance in extracting themes to be used in implementing policymaking • Assistance for holding workshops and study meetings 	<p>Ability to read materials in English and ability to review them</p>	<ul style="list-style-type: none"> • Knowledge of “prediction and analysis method,” including “Foresight” activities • Skill and experience of reviewing and summarize papers

Effective Use of Disaster Prevention and Mitigation Research Results	<p>A long-term evaluation and a map of the earthquake prediction are made public, but they are not fully recognized by the local governments, private sector and citizens. Even if they are recognized, it might be difficult to use them in view of social effects. This project will make it clear what the administration can do and cannot, and what are needed for earthquake and disaster prevention research based on interviews and surveys to the relevant people. The project will also hold workshops and make proposals on the issue.</p>	<p>None, but desired to be concerned with earthquake prevention fields, or any social studies</p>	<ul style="list-style-type: none"> • Assistance in analyzing the annual survey by the Earthquake Survey Research Promotion HQ • Assistance in investigating the good cases implemented by the above HQ • Interview to the local governments, industries, and earthquake prevention researchers as to the needs expected for earthquake and disaster prevention 	<p>None, but desired to read materials in English when investigating overseas cases</p>	<ul style="list-style-type: none"> • Knowledge about policy formation process • Text analysis method • Knowledge about disaster-prevention policies at local governments and industries
Analysis of mechanism for strengthening the base for creating innovation, by use of SciREX Policymaking Intelligent Assistance System (SPIAS)	<p>The factors that affect the researchers' research capabilities such as international brain circulation and researchers' mobility and diversity, and the mechanism for knowledge transfer process are not yet comprehensively analyzed. Based on this understanding, it is necessary to establish a system that examines policy effectiveness for advancing research capability and a policy analysis that uses the system.</p>	<p>None, but desired to have knowledge about STI policies or surveys</p>	<ul style="list-style-type: none"> • Production of reviews on papers on policies both in Japan and overseas • Construction and analysis of the data set for prediction and evaluation of policy effects 	<p>Word, excel, powerpoint, desired to be able to reach materials in English</p>	<ul style="list-style-type: none"> • Knowledge about the policies and research trends overseas on S&T and Society • Network with the researchers, administrators and others involved in S&I policies

<p>Study on the Establishment of Innovation Ecosystem that Meets the Basic, Applied, and Commercialization Research in Medical Field</p>	<p>The point of the R&D in medical field is whether the products and technologies are connected with diagnosis and treatment. It also depends on whether each of the basic, applied, and commercialization phases can be effectively “translated.” The environment surrounding the development of new drugs and medicine has recently drastically changed, including the establishment of the Japan Agency for Medical Research and Development (AMED). However, it is not clear whether the series of the administrative reforms has contributed to the barrier for the life cycle of basic research through commercialization (Devil River, Valley of Death, and Darwinian Sea). The project will try to make the above translation more effective, elucidate the reason why “the translation in the industry-based R&D is delayed,” and develop a method to re-design the policies to include the way to solve the gap during the translation. More concretely, the project will find out the reasons for the industries to be inactive in making an effective translation and newly design incentives to change</p>	<p>None, but desired to have interest and concerns to STI policies or medical or BIO sciences</p>	<p>Assistance for:</p> <ul style="list-style-type: none"> • Reviewing the “translational” projects, focusing on the reasons for success or failure, and funding effects • Developing evaluation method for “translational” projects • Theoretical study of hybrid funding (including Yozma fund in Israel, and Singapore) 	<p>None, but statistical software (R, Stata, SPSS) skills are desirable; Also, desirable to read and summarize materials in English on life science policies</p>	<ul style="list-style-type: none"> • Knowledge about the domestic and overseas policy trends on life science • knowledge and experience of designing public funding programs
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	their evaluation methods of research seeds.				
Development of New Measurement Index for Research Capability	<p>They key of this project is how to measure a university's "research capability." It will focus on:</p> <p>(1) What is an appropriate index for measuring quantity, quality and impact (beyond academia)? Does the index make it possible to measure the characteristics of the research results, in a different way from the already-existing index for the number of papers and references, and by-field research capabilities? And (2) What kind of index is it that shows the functions of the universities and research institutions within the by-field research community? Would it be possible to have a result that is based on each organization's missions and unique features, rather than a conventional result that includes the number of papers?</p>	<p>None, but desired to have concerns to STI policies, higher-education policies, and bibliometrics</p>	<p>Choose one of the following:</p> <ul style="list-style-type: none"> • Development and trial analyses of research evaluation index (Altmetrics) in various research fields • Development of an index that measures the research institutions' systems (bibliometrics, mobility data analyses, interviews) and its trial analyses • Research on performance-based funding to universities, especially development of an index using the national university's education and research data and its trial analyses • Research on the evaluation of the MEXT R&D programs 	<p>Desired to have knowledge about program languages, including Python, and experience of statistical analyses using software like R and SPSS</p>	<ul style="list-style-type: none"> • Knowledge about research evaluation, STI policies, higher-education policies • Knowledge and working with central government organizations, national university association, accreditation institution, and JSPS • Experience of statistical analysis and text analysis

<p>Possibility of Disruptive, Inclusive Innovation to attain SDGs</p>	<p>Combining frontier technologies and business models solves societal issues and bears new values. By this process, a new innovation (disruptive, inclusive) is born and impacts the society. This project will examine this process and publish a book on the possibility of the huge impact brought by an inclusive innovation toward realizing a sustainable society as shown in the UN SDGs.</p>	<p>None, but desired to have concerns to inclusive innovation, SDGs, and the roles of IT-related startups in attaining SDGs</p>	<ul style="list-style-type: none"> • Assistance in editing the materials on inclusive innovation obtained from startups and industries (editing the interview materials to Makuake, crowdfunding company and Samurai Incuate, incubator) • Assistance for interviewing to the startups and industries, transcription, and editing 	<ul style="list-style-type: none"> • Ability to read materials in English and to produce reviews • Good ability to write in Japanese 	<ul style="list-style-type: none"> • Network with the startups that are successful in inclusive innovation, industries, and others • Knowledge about SDGs and Inclusive Innovation
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