

JSPS Stockholm Newsletter

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In Seminars the Number of Attendants Does not Necessarily Matter, but the Quality Does

Tadaharu Tsumoto, Director, JSPS Stockholm Office

In the Nordic areas there are three JSPS alumni clubs at present, i.e., Alumni Club in Sweden, Finland and Denmark. This year we are looking forward to establishment of the fourth club, JSPS Alumni Club in Norway. Each alumni club holds activity seminars once or twice a year. The organization of seminars is of the type of bottom-up, i.e., the Board of Alumni Club invites proposals of seminars including candidates of invited lecturers from the researcher community in the respective country. The selection committee consisting of the board members evaluates the proposals, and recommends the most appropriate proposal to the JSPS Stockholm Office. Then the proposal is formally approved by the JSPS headquarters unless it deviates from the purpose of JSPS. In these selected seminars, at least one of the speakers is expected to come from Japan, and the JSPS Stockholm Office provides travel and stay expenses for the speaker(s).

Since I came to the Stockholm office in June 2016, I have attended many alumni club activity seminars, as reported in the present and past newsletters. So far I learned that most of the seminars were well-focused and scientifically at the high grade. In a couple of seminars I also realized that there were not so many attendants and empty seats were seen from place to place in the seminar room. So I have a feeling that there are at least two inherent possible problems to be considered in the organization of alumni club activity seminars. The alumni club consists of members of variable fields; biology, medicine, physics, chemistry, astronomy, economy, psychology, literature and so on. Each field contains only a few alumni club members, since each alumni club in the Nordic countries is relatively small in size. Thus a lecturer in a particular field does not have a number of scientists who share the same interest in the field. Another possible problem to be considered is the tendency of interests or likings of scientists. In the modern time most scientists are interested only in topics directly related to their own research fields because each field is so highly specialized that the content of talk including peculiar terminology is often beyond their understandings. Thus, most scientists are not interested in topics other than their own fields. Therefore, they tend to skip a seminar which is outside of their fields.

I guess this is why seminars or symposia which are well-focused to a particular topic do not always attract many scientists outside of the topic, even if the content is scientifically excellent. On the other hand, it is desirable for activity seminars to have attendants as many as possible, because one of the main purposes of the alumni club activity is to provide an opportunity to meet new

friends so as to increase exchange of information and to promote collaboration with domestic and Japanese colleagues. Thus we face a question of which is better as the topic of activity seminar: the topic that covers wide range of fields and thus possibly attract a larger number of audience, or the topic that is well focused on a particular field and thus the number of attendants may be small. In my opinion, we should consider the quality of science first and then the attractiveness to researchers who are outside the field. In other words the scientific quality of the seminar is the priority issue. In well-focused seminars I often observed that questions to lecturers were very sharp and constructive, and lecturer's answers were well interactive and thus the seminar was very fruitful even if the number of audience was limited. The high quality seminar on cutting edge science is expected to give participants a new idea or plan about an inter-disciplinary research and to trigger a new collaboration with other researchers. Of course the large number of audience may enhance networks among members of the alumni club and thus we should not disregard the issue of the number of attendants.

Finally I would like to point out that the issues of the audience size and the attractive topic are not mutually exclusive. In some cases it is possible that the attractiveness of the seminar is also related to the quality of science. In sum we have to compromise these two requirements for organizing good alumni club activity seminars.

So far I have mentioned the issue of the number of attendants and the attractiveness of the topic in alumni club activity seminars. Now I realize that this consideration may apply also to scientific seminars and symposia in general. Thus I give this essay the title that sounds more general.



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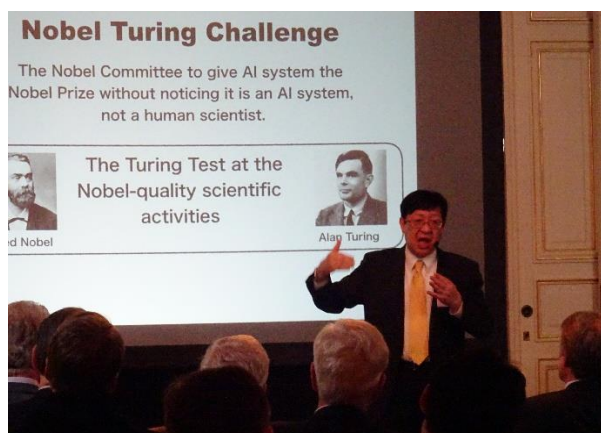
IVA-JSPS Seminar with Dr. Hiroaki Kitano

On October 25, the 2017 IVA-JSPS Seminar “The Nobel Turing Challenge – When will the first Nobel Prize be awarded for AI?” was held at the Royal Swedish Academy of Engineering Sciences (IVA). The seminar was organized by IVA, Sweden-Japan Foundation (SJF), the Embassy of Japan in Sweden and the JSPS Stockholm Office. Director Tadaharu Tsumoto introduced the JSPS programs and activities.

The keynote speakers were Dr. Hiroaki Kitano, President and CEO of Sony Computer Science Laboratories, and Prof. Anders Lansner of Stockholm University/KTH Royal Institute of Technology. Dr. Kitano discussed the possibility of AI building humanoids that could achieve scientific advances that would make it impossible for the Nobel Committee to tell whether the results were achieved by a human or a machine. Prof. Lansner focused on what computer simulations could tell about brain function in a future perspective.

The seminar attracted about 60 participants, and all were curious on the futuristic theme.

The seminar can be viewed online here: <https://www.iva.se/en/tidigare-event/the-nobel-turing-challenge--when-will-the-first-nobel-prize-be-awarded-for-ai/>



Dr. Hiroaki Kitano, Sony Computer Science Laboratories



Prof. Anders Lansner, Stockholm University/KTH Royal Institute of Technology

Fellowship Information Meeting Held in Stockholm

On November 15, JSPS Stockholm Office organized a Fellowship Information Meeting together with the Swedish Foundation for International Cooperation in Research and Higher Education (STINT), and it was held at KTH Royal Institute of Technology. Deputy Director Takao Yoshihara and International Program Associate Fumie Yamashita attended.

The purpose of the meeting was to inform young researchers and graduate students of the JSPS Postdoctoral Fellowships (Short-term, Standard, and Summer Program), which provide applicants excellent opportunities for research in Japan. Two former JSPS fellows also participated and presented their own experiences of the programs.

The meeting was attended by eight participants from Stockholm's various higher education institutions, all actively listening and asking questions.



Group photo with all the participants

JANET Forum 2017

On November 23, the JANET FORUM 2017 was held at the University of Freiburg in Germany. Director Tsumoto, Deputy Director Yoshihara and International Program Associate Yamashita attended from the JSPS Stockholm Office.

The forum was the second joint event of the Japan Academic Network in Europe (JANET), a collaboration network of Japanese academic institutions based in Europe. Opening remarks were given by Hans-Jochen Schiewer, Rector of the University of Freiburg, and Seiichi Matsuo, President of Nagoya University.

Presentations and discussions on topics such as how to enhance student mobility and research collaboration, were held in five sessions. Around lunch time, outreach activities were carried out by each participating institution with presentations and information booths. Approximately 90 participants from academic institutions in Japan and Europe attended to exchange views and deepen friendships.

The next JANET FORUM is scheduled to be held in 2018 in Lyon, France.



Rector Hans-Jochen Schiewer,
University of Freiburg



President Seiichi Matsuo, Nagoya University

The Nobel Week 2017

In the memory of Swedish Scientist Alfred Nobel, the Nobel Prize is awarded to discoveries and inventions of greatest benefit on mankind. In early December 2017, the Nobel Week with lectures, events and ceremonies, was held in Stockholm.

December 7 – Nobel Lectures in Physiology or Medicine and in Literature

The laureates of the Nobel Prize in Physiology or Medicine, delivered their lectures at a packed Aula Medica in Karolinska Institutet (KI). The lectures were then followed by a reception in honor of the laureates.

In the same evening, the Nobel Lecture in Literature by Kazuo Ishiguro was held at the Swedish Academy. Ishiguro jokingly said that he was honored to be the second only person a year to exit through the white doors of the Academy, before giving his lecture to an attentive audience.

December 8 – Nobel Lectures in Physics, Chemistry and Economic Sciences

The Nobel laureates in Physics, Chemistry and Economic Sciences delivered their lectures in Aula Magna at Stockholm University to a broad audience, varying from young school children to professors.

In the evening, the Nobel concert was held at the Stockholm Concert Hall. The internationally renowned conductor Gustavo Dudamel conducted the Royal Stockholm Philharmonic Orchestra in Symphony No. 41 (Mozart), and "Also sprach Zarathustra" (Strauss).

December 9 – Nobel Week Dialogue in Gothenburg

The Nobel Week Dialogue is a symposium open to the general public with Nobel laureates, world-leading scientists, experts, politicians and others participating in the panel discussions. This year, the Dialogue was held at the Swedish Exhibition & Congress Centre in Gothenburg and the theme was "The Future of Truth."

In the evening, a reception was held at the Nordic Museum in Stockholm, and all the participants celebrated the Laureates.

December 10 – the Nobel Prize Award Ceremony and the Nobel Banquet

Dr. Yuichiro Anzai, President of JSPS, and his spouse were invited to the Nobel Prize Award Ceremony held at the Stockholm Concert Hall, where they could witness all twelve Nobel Laureates receiving their diplomas and medals from the hands of H.M. the King Carl XVI Gustaf of Sweden.

The ceremony was then followed by the Nobel Banquet at the Stockholm City Hall, where President Anzai and other invited guests could further enjoy the Nobel festivities.



© Nobel Media AB 2017. Photo: Dan Lepp



Literature Laureate Kazuo Ishiguro
©Nobel Media AB 2017 Photo: Dan Lepp



H.R.H. the Crown Princess Victoria and Physics Laureate Kip Thorne
© Nobel Media AB 2017. Photo: Alexander Mahmoud

New Year Reception held at the Ambassador's Residence in Sweden

On January 11, a New Year reception was held at the Ambassador's residence in Sweden. Among the invited guests were members of the Japanese Association in Stockholm (JFS) and others with close relations to Japan from the business sector, scientific sector and cultural sector. The reception was opened by H.E. Ambassador Jun Yamazaki, where he mentioned the recent economical advancements as well as putting emphasis on the current year's 150 year anniversary of diplomatic relations between Japan and Sweden celebrating their continuing cooperation.

Following Ambassador Yamazaki's speech, Ms. Yoko Kaneko, Chair of the JFS, greeted the audience in a speech that also celebrated this upcoming year of 2018 and the 150 year anniversary with mentions of the two closest upcoming events the JFS New Year's Festival on January 28 and the JFS Sakura Festival to be held on April 21.

The opening speeches were followed by a traditional

opening of a cask of sake, *Kagami Biraki*, leading up to New Year's food and mingle. All in all a lively event where the guests enjoyed great delicacies while meeting new people in celebration of the New Year.



Participants mingling

The Announcement of the Crafoord Prize in Geosciences 2018

On January 18, the Royal Swedish Academy of Sciences (KVA) announced that the Crafoord Prize in Geosciences 2018 was awarded to Dr. Syukuro Manabe, Senior Meteorologist of Princeton University, and Dr. Susan Solomon, Professor of Environmental Studies at Massachusetts Institute of Technology (MIT), “for fundamental contributions to understanding the role of atmospheric trace gases in Earth’s climate system.” The two Laureates will share the prize amount of SEK 6 million.

The Crafoord Prize lecture will be held at Lund University on May 22, followed by the Prize symposium the next day in Stockholm. The Prize ceremony will be held on May 24 at KVA in the presence of H.M. King Carl XVI Gustaf and H.M. Queen Silvia of Sweden.

The Crafoord Foundation was founded in 1980 by a donation to KVA from Anna-Greta and Holger Crafoord, with the purpose to promote basic scientific research worldwide. The Crafoord Prize is awarded by the Foundation and KVA in disciplines that complement the Nobel Prizes.

For more information, please go to: https://www.crafoordprize.se/press_release/the-crafoord-prize-in-geosciences-2018



Dr. Syukuro Manabe
©Princeton University



Prof. Susan Solomon©MIT

Norway-Japan Academic Network

On January 31, the Norway-Japan Academic Network was jointly organized for the second time by the Research Council of Norway (RCN) and JSPS Stockholm Office. The event was held at RCN, with Director Tsumoto and International Program Associate Yamashita attending from JSPS Stockholm Office.

The purpose of the event is to promote academic exchange between Japanese researchers living in Norway, Norwegian researchers who have experienced research in Japan, and other researchers interested in collaboration with Japan. This time, approximately 40 participants attended.

Director Tsumoto gave opening remarks and an overview of JSPS activities, followed by a presentation on RCN activities by Ms. Julie Christensen. Ms. Ryoko Tsuchiyama, the Embassy of Japan, informed about the Japanese Government (MEXT) Scholarships.

The symposium’s first scientific presentation titled “International Collaborations to Explore Changing Antarctic Ice Sheet”, was given by Dr. Kenny Matsuoka of the Norwegian Polar Institute. Next, Prof. Rasmus Gjedssø Bertelsen of UiT-The Arctic University of Norway, talked about the “Norway-Japan Arctic Research and Education Cooperation: Learning under Globalization and Power Transition.”

The third presentation was given by Dr. Thorben Dunse of the University of Oslo, on his past experience as a JSPS Fellow in Hokkaido.

The symposium was concluded with a reception where participants could enjoy socializing and exchange ideas.



Dr. Kenny Matsuoka, Prof. Rasmus Gjedssø Bertelsen, and Dr. Thorben Dunse during their presentations

ACD Activity Seminar with Prof. Yoshitaka Mōri

On November 4-5, a JSPS Alumni Club in Denmark (ACD) Activity Seminar was organized by Dr. Gunhild Borggren, University of Copenhagen. The seminar titled “Collaboration and Community-Building in Contemporary Art in Japan and Denmark” was held at the University of Copenhagen, and discussed questions such as how collaboration can be a reactive tool to prevent exclusion, and what potential scholarly, curatorial and artistic exchange between Denmark and Japan.

Director Tsumoto and Deputy Director Yoshihara attended, with Director Tsumoto introducing the JSPS Fellowships and activities of the Stockholm Office.

The invited speaker from Japan was Prof. Yoshitaka Mōri, Tokyo University of the Arts. Prof. Mōri gave the presentation titled “What Can Art Do after a Catastrophe? The Great East Japan Earthquake and New Forms of Art in Contemporary Art in Japan”. Prof. Mōri presented several art projects which aim to raise critical

and environmental awareness after the Fukushima nuclear disaster in 2011.

The seminar was attended by more than 40 participants over the two days, and all were engaging in the discussions and workshops.



Prof. Yoshitaka Mōri giving his lecture

ACF General Assembly and the All Alumni Meeting

On November 13, JSPS Alumni Club in Finland (ACF) held the annual General Assembly (GA) and the All Alumni Meeting at the University of Helsinki, Finland. At the GA, the Chair Dr. Kristiina Jokinen reported on the Club’s recent activities. The members also discussed the activity plan and the election of new board members. Chair Jokinen informed on leaving her position due to a relocation abroad, thus a new Chair was elected. The new Chair from April 1st is Dr. Ville Syrjälä, Tampere University of Technology.

After the GA was concluded, the All Alumni Meeting with the seminar titled “Celebrations!” was held. Director Tsumoto opened the seminar by introducing the JSPS Stockholm Office and its activities.

One of the speakers was PhD student Ryo Umeda from the University of Oulu and the University of Tokyo, who presented his lecture called “100 years of Linguistic Research in Finland and Japan – past and present.”

ACF Chair Dr. Jokinen also participated and gave the presentation titled “Future Views for Science, Research and Society.”

The All Alumni Meeting was concluded with a reception, where participants could enjoy networking and exchange views.

Detailed reports by Mr. Ryo Umeda and Dr. Kristiina Jokinen can be found on page 8 and page 9.



Group photo of the participants

ACD Online Board Meeting Held

On December 14, the board of the Alumni Club in Denmark (ACD) held an online board meeting. Participating in the meeting were Chair Carl Winsløw, Eugen Stamate, Maher Abou Hachem and Jacob Kreutzfeldt. Director Tsumoto and Deputy Director Yoshihara participated from the JSPS Stockholm Office.

The board discussed topics such as the details of the Japan Alumni and Researcher Assembly (JARA) to be held on February 23, ACD Activity seminar applications received, and future activities of the Club.

The ACD General Assembly will be held prior to JARA on February 23 and we encourage all members to attend!

100 Years of Linguistic Research in Finland and Japan – Past and Present –

Ryo Umeda, PhD student, University of Oulu/University of Tokyo



Mr. Ryo Umeda during his lecture

When I received an invitation to the seminar from Professor Kristiina Jokinen, actually I was surprised at the offer. Professor Jokinen asked me to give a talk in the JSPS Alumni Club Finland meeting and told me that the theme could be anything, but it would be better if it was about the history of Japan and Finland, because the seminar was meant to celebrate the 10 years of JSPS Alumni Club Finland and of course Finland 100.

As a linguist, I must confess that I know very little about history. However, Prof. Jokinen told me that I could talk about G. J. Ramstedt – the first Finnish envoy to Japan and a legendary Altaic linguist – and I found out that this key person would unite Finland and Japan also from a linguistic point of view. Then I decided to give a presentation on the history of linguistic research in Finland and Japan, emphasizing the role of G. J. Ramstedt.

Thus I gave a presentation on November 13 at the JSPS Alumni Club Finland meeting held at the University of Helsinki. My talk was titled "100 Years of Linguistic Research in Finland and Japan – Past and Present" and I especially dealt with three topics: 1) tradition of linguistic research in Finland and Japan, 2) possible G. J. Ramstedt's influence on Japanese linguistics, 3) current trends in descriptive linguistics, especially documentation linguistics.

First, I briefly described the tradition of linguistic research in Finland and Japan. What I wanted to emphasize here was a surprising similarity of research traditions in both countries. Both Finland and Japan have a strong tradition in descriptive and historical linguistics, and in both countries fieldwork research has played an important role. In Finland, for example Elias Lönnrot, the collector of *Kalevala*, conducted abundant research based on fieldwork. G. J. Ramstedt can be seen as a foster child of this tradition and he also conducted several expeditions to the East, especially in Mongolia, which are described in his book *Seitsemän retkeä itään 1898–1912* ("Seven Journeys Eastward 1898–1912"). In Japan, in the past 100 years linguists such as Kunio Yanagita (ethnology, Japanese dialects) and Kyosuke Kindaichi (Ainu language) conducted much fieldwork research and their successors too.

Second, I pointed out that G. J. Ramstedt could have influenced Japanese linguists, based on a fragment from his book *Lähettiläänä Nipponissa: muistelmia vuosilta 1919–1929* ("The Memoirs of a Finnish Envoy to Tokyo"), where it was written that G. J. Ramstedt gave a lecture in Tokyo and "a professor named Jamagida" was listening to his speech. This "professor Jamagida" was actually the legendary ethnologist Kunio Yanagita, and it was possible that he was influenced by G. J. Ramstedt's speech.

Third, I went on to talk about the current trends in descriptive linguistics. As I mentioned before, there have been strong traditions in fieldwork research both in Finland and Japan, but the current trends surrounding descriptive linguistics (especially fieldwork research) have been changing. In the past, linguists just went to the area where the target language was spoken somewhat "coloniastically", got the data and published them. However, the data were usually not accessible to the language speakers themselves, and the privacy of the language speakers was rarely taken into consideration. Besides, linguists were not concerned with the sustainability of the data. Recently, a growing area in descriptive linguistics called "documentary linguistics" is concerned with those aspects that were ignored in the past research, i.e. the accessibility/sustainability of data, ethical issues concerning the language speakers' privacy and the importance of collaborative research. Accessibility of the data means that the data should be accessible to all, i.e. not only to linguists but also to researchers of other fields and language users themselves. Sustainability means that the data should be accessible to later generations. Ethical issues are very important nowadays, and more and more linguists are paying attention to research ethics. Research collaboration is also important today. Formerly, it was normal that one talented linguist did all, but nowadays it cannot be done and should not be done so. Linguistic research is involving more and more people from other fields, and the collaborative research is necessary across fields and also linguists across geographical boundaries.

To sum up, there are surprising similarities in linguistic tradition of Finland and Japan in that they have a long tradition of descriptive and historical research, and G. J. Ramstedt could have been the person having bridged those two traditions across two countries. The current trends in linguistic research are changing, and the collaborative research is necessary. I believe that JSPS would be a bridge between Finland and Japan by promoting science and collaborative research also in humanities, including linguistics.

Report of the Annual General Meeting and Special Seminar of the JSPS Alumni Club in Finland

Kristiina Jokinen, Adjunct Professor,
the University of Helsinki and Artificial Intelligence Research Center (AIRC)

The Annual General Assembly of the JSPS Alumni Club in Finland (ACF) was held on Monday November 13, 2017, at the University of Helsinki, Main Building. The meeting was followed by the All Alumni Meeting including a seminar and a reception. The seminar was chaired by the ACF Chair Adjunct Professor Kristiina Jokinen and it was entitled *Celebrations!* The title refers to the double anniversary events that were celebrated by the seminar: the 10th Anniversary of JSPS Alumni Club Finland and the 100th Anniversary of the Independence of Finland.

The celebratory seminar was opened by JSPS Stockholm Office Director Tadaharu Tsumoto who gave a short overview of the JSPS activities in general. This was followed by the Academy of Finland's Project Manager Ulla Ellmén who surveyed the JSPS and the Academy of Finland collaboration on promoting research and researcher collaboration between Japan and Finland in her talk *Academy of Finland and JSPS – Collaborating on Promoting Science for 30 years*. The collaboration started by signing a formal agreement 30 years ago, and due to the excellent mutual relationship, the two organisations have always been able to discuss and explore new ways for bilateral collaboration. The seminar continued by PhD Candidate Ryo Umeda (University of Oulu and University of Tokyo) with the presentation *100 years of Linguistic Research in Finland and Japan – past and present*. The presentation focused on descriptive linguistics and field linguistics and gave an excellent review of the history of the research in Finland and Japan, also addressing current trends in descriptive linguistics such as language documentation and language revitalization. Both Finland and Japan have been leading countries in the field of descriptive linguistics and already more than hundred years ago, a number of Finnish and Japanese scholars conducted field trips to collect linguistic data. In Finland, work by M. A. Castrén (Finno-Ugric languages), G. J. Ramstedt (Altaic languages) and T. I. Itkonen (Saami languages) were important, while in Japan Kunio Yanagita (Japanese dialects) and Kyosuke Kindaichi (Ainu language) did groundbreaking research. They were influenced by G. J. Ramstedt when he served as a Finnish diplomat in Tokyo, so this year also marks 100 years of research contacts between Japan and Finland in descriptive linguistics. The seminar then continued on G.J. Ramstedt as film director Niklas Kullström from Hillstream Pictures presented the documentary film *The World of G.J. Ramstedt*. The film is about the Finnish adventurer, diplomat and linguist Gustaf John Ramstedt



Dr. Kristiina Jokinen introducing her presentation

who, following the independence of Finland in 1917, became Finland's first envoy to Japan. The director showed a short clip of the film, and told about the creation of the film when travelling in Ramstedt's footsteps in Japan and Mongolia, as well as thoughts concerning Finland-Japan diplomatic relations which will celebrate 100 years in 2019. The seminar finished with the talk *Future Views for Science and Society* by Adjunct Professor Kristiina Jokinen (University of Helsinki and AIRC, Japan). She discussed research challenges and views of the future society brought in by digitalization and interaction technology, especially considering AI-based robot research and autonomous agents which can communicate with human users in natural language. The starting point was the general view represented by the AI Research Center of the National Institute of Advanced Industrial Science and Technology (AIST) Tokyo Waterfront, whereby the role of AI is seen not simply to improve operational efficiency or to lower costs, but to improve the quality of life of the citizens and the quality of services aiming to bring new value to the society. This was also Jokinen's farewell talk after four years of service as the Chair of JSPS ACF.

The celebrations continued by the reception in Flyggelisal, generously supported by JSPS. Opening and welcome remarks were given by Director Tsumoto of JSPS Stockholm Office and Mr. Takehiro Okabe, Deputy Director of the Hokkaido University Europe Office in Helsinki, and toast by Ms. Masako Saito, Head of Cultural Affairs and Public Relations of the Embassy of Japan in Finland. Discussions and interactions continued in a lively manner creating new connections as well as supporting the existing relations, and everyone joined to wish many happy, strong and successful years to come for ACF, Japan, and Finland.

JSPS BRIDGE Fellowship Research Report (ACF)

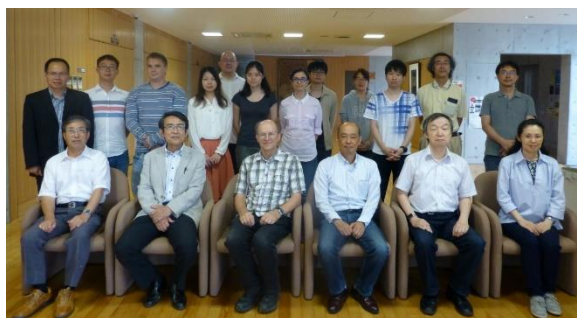
Matti Vuorinen, Professor, Department of Mathematics and Statistics, University of Turku

Background. My research area is mathematical analysis, more precisely, Geometric Function Theory. The research carried out in Finland in this area is world famous due to the work of L.V. Ahlfors, R. Nevanlinna and E. Lindelöf. This good reputation brought many visitors to Finland. Already in my PhD study time in the middle of the 1970's, I met Prof. M. Ohtsuka from Japan, who was staying one year in Helsinki and whose book was the key reference of my MSc thesis and whose research papers and encouraging remarks were important for my PhD thesis work. Twenty years later, in 1997, I met Prof. Toshiyuki Sugawa, in a conference in Spain. He is nowadays working at Tohoku University (Sendai City). This contact led to his visit to Helsinki as my guest in 2000-2002 (2 years). This long research visit, supported by the Academy of Finland, had far-reaching consequences, it led to several joint papers with me and also with my other visitors. Our regular contacts started: during the past twenty years, we exchange monthly several emails about latest mathematical news and research problems and this way we have written several joint papers. Face to face we meet in conferences two-three times a year.

Host Institution in Japan: Tohoku University, Graduate School of Information Sciences
Host researcher: Prof. Toshiyuki Sugawa
Fellowship period: 2017.08.01-2017.08.14



Sendai City view



Workshop group photo with Prof. Vuorinen in the front row, third from left

Research visit. On August 1-14, 2017, I visited Tohoku University in the framework of JSPS research grant program as a guest of Prof. Sugawa. All the arrangements were perfect, in the same way as during my previous visits to Japan as his guest, and my questions about local arrangements were answered even before I had uttered them. I participated a workshop in Geometric Function Theory (<http://www.math.is.tohoku.ac.jp/sugawa/Workshop2017/>) organised by Prof. Sugawa. This small workshop was highly interesting for me. One of the speakers, Prof. Shingo Takeuchi, reported his recent research which provided an answer to a question I had presented him a year ago. Another speaker, Prof. Masayo Fujimura is my coauthor: with her we are planning two papers which we both hope to finish within this year. These two papers have required massive exchange of e-mails during the past year and are joint work with my PhD student, Parisa Hariri, who also participated in this workshop, and with Prof. Marcelina Mocanu from Romania. One more speaker, Dr. Tanran Zhang, a former PhD student of Prof. Sugawa, spoke about our three-way joint paper: Sugawa-Vuorinen-Zhang, which we finished and submitted for refereeing and publication shortly after this visit. This paper deals with so called hyperbolic metric of subdomains of the complex plane, which is one of the key notions in function theory. With Prof. Sugawa we have also started a research on conformal maps of the upper half plane onto the exterior of polygonal quadrilaterals and have some preliminary results. This will be my next research project.

During this visit, Prof. Sugawa had also made arrangements to visit Sapporo where I gave a talk in the seminar of Prof. Hiroaki Aikawa. During my visits to both Sendai and Sapporo, my hospitable hosts had made arrangements to see the beautiful nature of Japan.

Benefits to research community. My research contact with Prof. Sugawa has been very valuable for my research group: he has acted also as an opponent or pre-examiner of some of my PhD students. Moreover, Dr. Tanran Zhang has visited Univ. of Turku twice. At the present time some PhD students of Prof. Sugawa are working on hyperbolic geometry, our common research area, and also reading some of my unpublished manuscripts. Also, during the past ten years, Prof. Sugawa has kindly invited my coauthors Prof. Dubinin, Prof. D. Kalaj, Prof. M. Mateljevic and Prof. V. Manojlovic to Tohoku Univ. In this way, Prof. Sugawa has helped the mobility within my research network which presently contains approximately 70 nodes in different countries around the globe.

Publications. It is my expectation that this visit and the aforementioned three publications will stimulate further collaboration of Japanese mathematicians with my research group. My vision is that the real harvest of this research visit will be visible in the works of our students during the next few years.

JSPS BRIDGE Fellowship Research Report (SAC)

Inga Tuminaite, PhD Student, Lund University

I am currently in my third year of PhD studies in biology at Lund University and in August 2017, I was hosted by Prof. Makoto Tominaga who leads the Cell Signaling Group at National Institute for Physiological Sciences (NIPS) in Okazaki. Prof. Tominaga and his lab are world-renowned experts regarding transient receptor potential (TRP) channels, and my specific interest is temperature induced activation of mammalian thermoreceptor TRPs. In my PhD project, I focus on the sensation of cold and cold pain in animals well adapted to withstand freezing ambient temperatures. In collaboration with Prof. Tominaga's lab, I've been exploring the temperature induced gating of the cold and menthol receptor TRPM8 and the potentially cold activated receptor TRPA1 in dog. During my last stay as a BRIDGE fellow, I continued exploring the thermosensitivity of these channels and the results seem very promising. During this visit, however, I mostly focused on expanding my professional network in Japan.

Host Institution in Japan: National Institute for Physiological Sciences (NIPS)

Host researcher: Prof. Makoto Tominaga

Fellowship period: 2017.07.31-2017.09.05

I attended a summer school organized by Okazaki Institute for Integrative Bioscience that covered biodesign of living systems and included interesting talks from renowned scientists within the field. I could also attend the thermal physiology workshop that was organized by my host at NIPS and it was highly relevant for my line of work. The highlight of the stay was definitely the International Symposium for Thermal Biology that my host, Prof. Makoto Tominaga, organized. Speakers were invited from all over the world and the symposium was both informative and inspiring. The day was filled with interesting lectures, questions and opportunities to meet and discuss with leading scientists within the field of thermal biology. The symposium was held in the beautiful City of Kyoto which I also had the time to explore. The symposium ended with an impressive dinner party with all the attendees, amazing Japanese food and performances by *maiko*, geisha apprentices.

I have been visiting Prof. Tominaga's lab at least once a year since I first went there as part of the JSPS Summer Program in 2014. All the visits have been a great pleasure and productive both professionally and personally. The ideas and support from Japan have aided me to shape my PhD project and develop the skills to execute it. My host researcher has always been a great support and made me feel at home in his research group. My last visit as a BRIDGE fellow was not any different, I felt very welcome. I love spending time in Japan not only for professional reasons but also because, since the first time there, I was mesmerized by its nature and culture. Summer in Japan is hot and humid but a great change considering Sweden's not always so generous summer weather. I truly enjoyed spending this month surrounded by colleagues that have now become dear friends and I hope to be back in Japan again in 2018.

I would like to extend my sincere gratitude both to JSPS and my host researcher for this great experience during my fellowship.



Together with host Prof. Tominaga



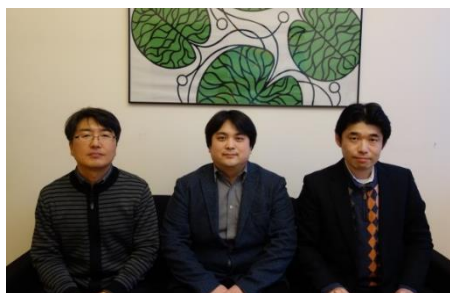
A visit to Kyoto

2017.10.03 Visitors from Kyushu University

Mr. Tatsuya Kono, Head of the International Affairs Department, and Ms. Saori Suenaga, Liaison Officer of the International Affairs Division, Kyushu University, visited JSPS Stockholm Office. They were visiting Stockholm to coordinate the symposium held on October 20, which was partially supported by JSPS.



Deputy Director Yoshihara, Mr. Kono, Ms. Suenaga and Director Tsumoto



Director Moon, Coordinator Jaesung and Deputy Director Yoshihara

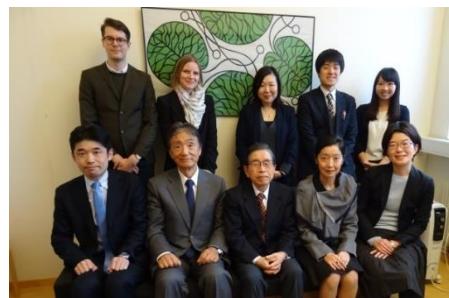
2017.11.08 Visitors from the National Research Foundation of Korea (NRF), Stockholm Office

Director Sunyong Moon and Coordinator Jung Jaesung of the NRF Stockholm Office, visited the JSPS Stockholm Office. We discussed the activities of both offices and shared information on academic exchange.

2017.12.11 Visit by Dr. Yuichiro Anzai, President of JSPS

Dr. Yuichiro Anzai, President of JSPS, visited the JSPS Stockholm Office. President Anzai was visiting Stockholm because he and his spouse had been invited to the Nobel Prize Award Ceremony.

We informed the office's latest activities and exchanged opinions on how to further enhance collaborations between Japan and Sweden.



President Anzai in front row, second from the left



Deputy Director Yoshihara, Prof. Ikuhara and Director Tsumoto

2017.12.11 Visit by Prof. Yuichi Ikuhara, the University of Tokyo

Prof. Yuichi Ikuhara, School of Engineering at the University of Tokyo, was in Stockholm to attend the Nobel Prize Award Ceremony. He visited the JSPS Stockholm Office to confer on academic information and discussed the future of science.

2018.01.23 Visit by Prof. Tomoko Nakanishi, the University of Tokyo

Prof. Tomoko Nakanishi, Graduate School of Agricultural and Life Sciences at the University of Tokyo, visited JSPS Stockholm Office. She was selected as a member of the Royal Society of Arts and Sciences in Gothenburg (KVVS), and visited Stockholm to attend the award ceremony.



Deputy Director Yoshihara, Prof. Nakanishi and Director Tsumoto

Importance of Connecting Theory with Practice – Music Education and Club Activities

Viktor Granström, JSPS Stockholm Office Assistant

In an article published in 2017, SVT reports that out of the 31 musicians employed by the Swedish Radio Symphony Orchestra, only 11 had taken music education in Sweden. This is reportedly a consequence of shorter lesson time and smaller genres of music are pushed aside in both compulsory music education and at culture schools. It was also observed a decline in interest in playing classical orchestral instruments. Erik Lanninger, who is responsible for planning and quality control of education and research at the Royal Music Academy in Stockholm, reports to another SVT article, agreeing that there has been a rise of competition for Swedish musicians, but there is also a large number of Swedish musicians that work internationally.



He continues to explain that while there is larger international competition, this is how most European orchestras are operating currently. Diversity in the orchestral performance scene is something to look positively at, but the decreasing interest in music education and seemingly lowered status of the subject leading to decrease in lecture time could be argued to be unsatisfactory.

In my bachelor's thesis titled *Music Education in Japan - An observational and comparative analysis (2015)*, I conducted an empirical research where the research goal was to analyze and compare pedagogy of music for compulsory education in Japan and Sweden, it was observed that the time spent in music classrooms was the same among the countries. However, there was overall larger focus on practical education, playing with various instruments and performing music freely in class, in the Swedish education, in comparison to the larger theoretical focus on music theory in Japanese education. Knowing this one might argue that the Japanese music subject is lacking in practical education which distances students from new instruments. Although, outside of the main research field of curricula and classrooms, something else was discovered; *bukatsu*, or club activities.

Something lacking in the Swedish music education is a follow up from classroom experiences. Events within the school such as singing in chorus around summer time, but there is a clear lack of options to perform music regularly. The Japanese school system at elementary to high school level education and in similar form at Universities, have *bukatsu*, run by the schools themselves with supervising teachers. *Bukatsu* is a part of schools and gives students options to do many things after their school day has ended. These range from sports activities to the more relevant music bands or school orchestras. The existence of these *bukatsu* allow the students to extend their theoretical knowledge obtained in classrooms and merge it with practical experiences. Haruto Imai from Saga University, in his research on University School orchestras, argues that these "amateur orchestras" not only serve as a place for students to pursue their interests and experience and create culture, but also exist as an extension of the music education system and integrate into the general Japanese education's philosophy of "lifelong learning" offering work-like experiences with teamwork and working towards a common goal.

Bukatsu is not compulsory for students, however, it could be argued that these kinds of activities are essential for cultivating interest and providing proper combination of theory and practice within the field of music in schools and it is personally something I wish to have existed, or to exist, during my own time in the Swedish education system.

Sources:

<https://www.svt.se/kultur/musik/svenska-orkestrar-rekryterar-allt-farre-svenska-musiker>
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 Photo: <https://pixabay.com/en/classical-music-concert-macro-music-1838390/>

Prof. Dan Larhammar Elected as the New President of KVA

On December 13, the Royal Swedish Academy of Sciences (KVA) announced that Prof. Dan Larhammar was elected as the next President of the Academy, and he will succeed the current President Prof. Christina Moberg on July 1, 2018.

Prof. Larhammar is a professor at the Department of Neuroscience, Uppsala University, and conducts research within the fields of evolution, neurobiology, endocrinology, genetics and pharmacology.

As the new President, one of Prof. Larhammar's goals will be to make KVA and the scientific message more visible in the societal debate.



Photo: Markus Marcetic, ©Kungl. Vetenskapsakademien

Free Higher Education Offered to Low-Income Families in Japan

Education costs in Japan are averaging out at 30% of household expenses compared to 16% worldwide, as reported by the OECD, and private universities which corresponds to 80% of Japanese universities are charging up to ¥1.2 million (\$10,800) annually, nearly double the cost of tuition fees and entrance fees at national public universities.

To combat this, families are forced to take large loans to allow their kids to have a chance at a higher education which is leading to larger debts for the households. It is estimated that the Japanese economy loses out on around ¥40 trillion in terms of productivity and consumer spending by restricting the chances of low-income families to attend universities.

A new ¥800 billion package announced by the Japanese government last year aims to enable students from these families to be eligible for free education at national universities and reduced tuition costs at private universities from 2020. The scholarship is reported to work as an extension of existing programme that provides ¥20,000 to ¥40,000 a month.

Ministry of Education, Culture, Sports, Science and Technology (MEXT) stated that their objective is to free student of the debts and to support them in taking new ventures while achieving innovation in higher education and boosting the nation's international competitiveness. According to MEXT, the details of the new scholarship programme are still being debated by experts.

Source:

<http://www.universityworldnews.com/article.php?story=20180118083451687>

Nobel Laureate Prof. Hiroshi Amano and His Team to Pursue Gallium Nitride Technology and Wireless Power Transmission

Hiroshi Amano, a professor at Nagoya University and 2014 Nobel Prize Laureate in Physics, and his team are developing with other researchers a remote power supply system that allows energy to travel to distant places using electromagnetic waves. This technology could benefit all of society in ways such as to allow electric vehicles to recharge while running.

Wireless charging is on the rise as demonstrated at the recent Consumer Electronics Show (CES 2018) where outside of other advances in consumer electronics such as virtual reality, there was a surprising amount of wireless charging devices on display. Wireless charging is nothing new as shown by charging standards such as the Qi standard. Apple has recently decided to include said standard in their new devices which might explain the rise in demand in wireless charging and the competition to develop wireless power transmission is growing increasingly fierce.

However, Amano and his team aim to develop a technology that will enable the supply of power by sending electronic waves to faraway places such as remote islands while also allowing offshore wind power to transmit back electricity efficiently to cities. Amano comments, "I believe that the remote power supply system will become the technology that can make a greater contribution than the blue LED to the well-being of the people all over the world."

Development of wireless charging is rushing forward and it is a great time for the consumer while also a promising future for remote power supply technology and society as a whole as we wait to see what Amano's team will bring us.



Prof. Hiroshi Amano when he was visiting Stockholm in 2014

Sources: <https://www.japantimes.co.jp/news/2018/01/15/national/nobel-winner-hiroshi-amano-team-tap-gallium-nitride-technology-bid-transmit-power-wirelessly-distance/#.WmnfBDdG2Uk>
<https://www.theverge.com/ces/2018/1/10/16873020/qi-wireless-charging-pad-dock-apple-iphone-samsung-lg-ces-2018>

Japanese Universities to Join Radiation Monitoring Project

A new organization to monitor the spread of radiation is to be established, with 10 universities in Japan possessing radiation facilities participating in the project. The purpose is to prepare for possible accidents at nuclear power plants and terrorist attacks using nuclear materials.

When the Fukushima nuclear power plant accident occurred in 2011, municipalities measured radioactivity, but suffered from shortage of staff and equipment, while little information was provided to residents causing confusion. To avoid such confusion and concerns, the new organization will complement the existing monitoring networks, with accurate information provided by experts. These experts will collect data for purposes such as evacuating residents and providing medical treatment to those exposed to radiation. If an accident occurs, teaching staff and officials with certificates to handle radiation will examine the spread of radioactive materials near the accident site, while students trained in measuring methods will help measure the radiation near their homes.

The University of Tokyo, Kyoto University, Nagoya University and Kyushu University are among the 10 universities participating, and another 49 are considering joining the project. They aim to establish the organization within several years.

Source:
<http://the-japan-news.com/news/article/0004183449>

Finnish Universities Aim to Increase International Students by 2020

Five Finnish higher education institutions together with Eduration, an education export company, are aiming to attract 150,000 new international students by the year 2020.

Lappeenranta University of Technology (LUT) was one of the first universities to sign an agreement with Eduration to increase the enrollment of overseas students, especially from China and India.

Since the Finnish government decided to charge tuition fees for students outside of the European Economic Area (EEA), the number of students applying for residence permits at higher education institutions in 2017 have decreased by 23% compared to the previous year.

To be able to reach the goal, Eduration has developed an app to ease the application process for students, making it possible to apply almost all year round with result notification one month after submission.

Sources:

https://yle.fi/uutiset/osasto/news/finnish_universities_aim_to_enlist_150k_foreign_students_by_2020/9875349

<http://www.universityworldnews.com/article.php?story=20171014071948950&query=finland>

Notice

Welcome!

Hej! My name is Viktor Granström and I am the new office assistant at the JSPS Stockholm Office from January 2018. I have a great interest in language, Japanese culture and musicology which lead me to pursue my bachelor's degree in Asian studies with surrounding language and musicology at Stockholm University. During my academic life, I have also had exchange studies at Saga University and Chuo University in Japan. I am looking forward to working at the JSPS.

Viktor Granström



Thank you!

Hello everyone!

I have been working at the JSPS Stockholm Office as assistant for 1.5 years and now the time has come for me to move on. I have learnt a lot and it has truly been an exciting time working for JSPS.

I hope we will meet somewhere in the future!

Oskar Nielsen

Upcoming Seminars and Symposia

Japan Alumni and Researcher Assembly in Denmark

This event aims to create a networking platform among JSPS Fellows, Japanese Researchers and Danish researchers who are interested in research in Japan. Prior to the event, the JSPS Alumni Club in Denmark (ACD) will hold its annual General Assembly.

Date: February 23, 13:30-17:30

Venue: University of Copenhagen, Faculty of Science, Bülowsvej 17, 2000 Frederiksberg C

Nobel Prize Dialogue Tokyo 2018

The Nobel Prize Dialogue is organized for the third time by the Nobel Foundation and the Japan Society for the Promotion of Science. The event is open to the public and aims to stimulate discussion at the highest level on a topical science related theme. Participants include Nobel Laureates, world-leading scientists, policy makers, experts and others.

Date: March 11, 10:00-17:00

Venue: Pacifico Yokohama Conference Center, Main Hall/301/302

Theme: The Future of Food

For registration and more information, please go to <http://www.nobelprizedialogue.jp/tokyo2018/>

Please find more information on <http://www.jsps-sto.com/activities.aspx>

JSPS Stockholm Office Facebook Page

We have started a Facebook page for JSPS Stockholm Office. Please follow us (JSPS Stockholm Office) for the latest information and news.

https://www.facebook.com/JSPS-Stockholm-Office-1793731447305912/?ref=aymt_homepage_panel

The next issue of JSPS Stockholm Office's newsletter is planned to be released in the end of May, 2018.

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Editors: Takao Yoshihara & Marika Tashima

Address: JSPS Stockholm Office, Retzius Väg 3, 171 65 Solna, Sweden

Tel: +46(0)8-524 84561

Website: <http://www.jsps-sto.com/> **E-mail:** jspd-sto@jspd-sto.com

Facebook: https://www.facebook.com/JSPS-Stockholm-Office-1793731447305912/?ref=aymt_homepage_panel

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