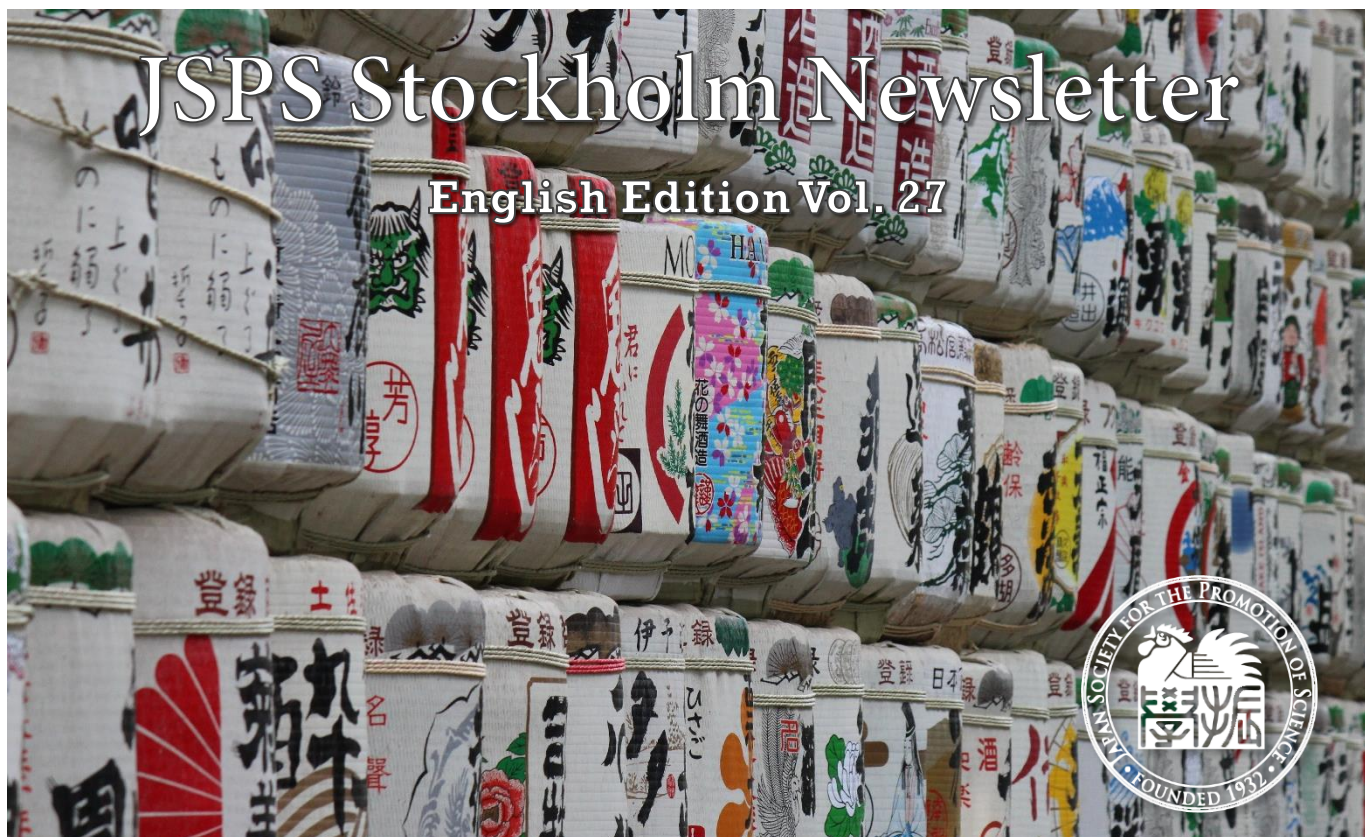


JSPS Stockholm Newsletter

English Edition Vol. 27



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A pleasure to know the unknown - Few descriptions of Swedish history in Japanese textbooks

Tadaharu Tsumoto, Director, JSPS Stockholm Office

Usually a prolog of a winter issue of Newsletter of the JSPS Stockholm Office refers to a series of events of the Nobel Week in December of the preceding year. This is quite natural for us who witnessed a series of such splendid events. Last year in particular I experienced never forgettable events for celebrating Professor Yoshinori Ohsumi who was awarded the 2016 Nobel Prize in Physiology or Medicine, and therefore I am fascinated by an idea of writing my moving experiences in this Newsletter. However, these events have been reported repeatedly in past Newsletters and currently on websites (For example, see Tokyo Tech Correspondence from Stockholm

<http://www.titech.ac.jp/news/2016/037081.html>), and also reported in this issue of Newsletter (pages 4-5). Therefore, I would like to write those experiences somewhere else and instead to describe another topic in this Newsletter.

I came to Stockholm in last June. Since then I have looked around many museums or art galleries in Stockholm like a country bumpkin. Then I realized that I was completely ignorant of the history of Sweden. When I was a high school student I learned the history of Europe and thus I thought that I know European history to some degree. Regarding the history of Sweden, however, I only knew that Sweden was one of the original areas of Vikings and had a famous king who won a military fame through many battles during the Thirty Years' War in Germany. This implicated my ignorance and illiteracy, which made me feel shameful. Recently I had experiences which suggested that not only I but also many Japanese are ignorant of the history of Sweden and thus my ignorance might not be so shameful. Here I would like to describe such an experience and then my contrary view that the ignorance gives me a pleasure to know the unknown in Sweden.

As one of the above-mentioned Nobel Week events a reception by the Nobel Foundation was held in the Nordic Museum (Nordiska museet in Swedish) on 9th December 2016, a day before the Award Ceremony. I had an opportunity to attend the reception. On entering the Nordic Museum I found a huge statue of Gustav I of Sweden (or Gustav Vasa) gazing at me. I was overwhelmed by the large size of the statue which was lit up by lighting from the ceiling, although the size was not as large as the Great Buddha in Nara, Japan. This king, Gustav Vasa, is very well known in Sweden, as a king who made Sweden a strong country governing almost whole the Baltic Sea area. However, this king is not well known in Japan. For example, some Japanese professors whom I met in the reception asked me who the statue was. I said "He is Gustav Vasa". Then they asked me another question. "Gustav Vasa? In which period or when did he live in Sweden?". Honestly speaking, I myself also did not know

who Gustav Vasa was before I visited the Nordic Museum last summer. When I knew that not only I but also many Japanese did not know the famous king in Sweden, I felt a bit released. Why are many Japanese ignorant of a very famous figure in Sweden or Swedish history itself?

When I thought over this question, I had a suspicion that I had not learned history of Sweden when I was a high school student. However, there is another possibility that I simply forgot the lecture of Swedish history in my high school because recently I suffer from slips of memory from time to time. To confirm this possibility I purchased a textbook of world history that is currently used in senior high schools in Japan, "Detailed World History B" which was authorized by the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) on 5 March 2016 (Reference #1). Then I realized that descriptions of Sweden are extremely sparse. I checked how often the word "Sweden" appeared in the index of this text book, and found that it appeared only twice. Even if the word "Sweden" was not cited in the index, there might be some descriptions in the text. So I carefully checked the content of the text book, and found a very brief description of the Great Northern War against Russia in addition to the short descriptions of the Vikings and the involvement in the Thirty Years' War in Germany. Altogether the description regarding Sweden occupies only about 10 lines of 416 pages of the whole text. Now I have understood that a reason why most Japanese do not know Swedish history may be ascribable to such few descriptions of Sweden in the history text book in Japanese high schools.



The Nordic Museum as seen from Strandvägen
Photo: Mats Landin, Nordiska Museet



Then another question arises: Why is the description of Sweden so sparse in the history text book in Japan? An obvious answer may be as follows: Sweden is located not in the center of Europe as France and Germany are. It is located in the northern periphery of Europe and the population is not so large. One cannot deny this view. When I read books describing the history of Sweden (References 2-4), however, I realized that Sweden had no war against foreign countries for more than 200 years since the war against Norway in 1814, and this may be one of the factors for such a few descriptions in the history text book. In particular, during the World Wars I and II in which almost all countries in Europe were involved, Sweden remained neutral and did not play a role in the battles.

On the other hand there are a lot of descriptions of Germany which initiated and played a major role in the Wars. Such a bias for many descriptions of war-involved countries and few of neutral countries may not be surprising because almost all text books are filled with description of conflicts, battles and wars between various countries and subsequent meetings for reconciliation. All of the above-mentioned books (References #2-4) point out that the maintenance of the neutral position led to the flourishing of Sweden after the Wars. This may be true, and to this I would like to add my impression that it is not possible to maintain the neutral position with just observing the wars as an outsider. The maintenance of the neutral position requires a very careful analysis of affairs and situation of the world including neighboring countries and a sharp insight for the future or consequence of the war. In particular, it is said that Sweden managed to maintain the neutral position despite of strong pressures from Imperial Germany and Russia during the World War I and near compulsive pressures from Nazis Germany during the World War II. I am not in a position to describe details of these affairs so that I would like to omit these points in the present essay. Anyway, I have an impression that Sweden had the outstanding analytic ability on international affairs and diplomatic strategy.



The Army Museum

Photo: "PKron"

<https://commons.wikimedia.org/wiki/File:Armemuseum.jpg>

Recently this year I visited the Army Museum (Armémuseum in Swedish) located in the center of Stockholm for the first time. I found that exhibitions in this museum are focused not only on weapons but also on disastrous consequences of wars, and learned that Sweden held powerful military strength with modernized arms during the World Wars in order to remain neutral. In another visit to the Swedish History Museum in Stockholm (Historiska museet in Swedish) I was also very surprised by learn that the Viking activities reached beyond the Black Sea and Caspian Sea areas and a Buddha figure of bronze which had been made in north India was found in the remains at Helgö, Sweden (Reference #5). Thus I have experienced a fresh joy to know the unknown. Curiosity is one of human natures and I am now enjoying fresh learning of the Swedish history that was unknown to me.



The statue of Gustav Vasa

Photo: Mats Landin, Nordiska Museet

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The Nobel Week 2016

In the memory of the Swedish scientist Alfred Nobel, the Nobel Prize is awarded to discoveries and inventions of greatest benefit on mankind. In October 2016 the Nobel Prize laureates were announced, and the laureate of the Nobel Prize in Medicine or Physiology was Honorary Prof. Yoshinori Ohsumi from Tokyo Institute of Technology. He was awarded the Nobel Prize "for his discoveries of mechanisms for autophagy". In early December, the Nobel Week was held in Stockholm, which was filled with different lectures, events and ceremonies.

December 7 – Nobel Lecture in Physiology or Medicine at Karolinska Institutet

The laureate of the Nobel Prize in Medicine or Physiology Prof. Yoshinori Ohsumi delivered a lecture during which he presented his research on autophagy in Aula Medica at Karolinska Institutet. Prof. Ohsumi received standing ovations from the audience that filled all of the seats in Aula Medica.



Prof. Ohsumi delivering his Nobel Lecture at KI



Prof. Ohsumi together with representatives from the Nobel Committee and KI

December 8 – Nobel Lectures in Physics, Chemistry and in Economic Sciences at Stockholm University, Reception for the Japanese Laureate at Grand Hôtel and the Nobel Prize Concert at Stockholm Concert Hall

The Nobel Laureates in Physics, Chemistry and in Economic Sciences delivered their Nobel Lectures in Aula Magna at Stockholm University where they presented their research in front of an audience consisting of a wide spectrum of people.

Around lunch time the Ambassador Yamazaki and his spouse organized a reception to congratulate the Nobel Prize Laureate in the magnificent Hall of Mirrors at Grand Hôtel in Stockholm. Ambassador Jun Yamazaki congratulated the laureate and mentioned that this was the third year in a row that Japanese researchers have been awarded the prestigious prize. He praised Prof. Ohsumi's scientific achievements and talked about the increased scientific exchange between Sweden and Japan, which will deepen even more thanks to the upcoming Nobel Prize Dialogue Tokyo 2017 and the 150 years' anniversary of the diplomatic relations between Sweden and Japan in 2018. The reception was followed by a press conference for the Japanese media.

In the evening the Nobel Prize Concert was held at the Stockholm Concert Hall. This year, world-renowned Gianandrea Noseda conducted the Royal Stockholm Philharmonic Orchestra and the evening's soloist was the violinist Janine Jansen.



The three Nobel Laureates in Physics



Prof. Ohsumi delivering a speech at the Reception

December 9 – Nobel Week Dialogue in Stockholm

The Nobel Week Dialogue, which is a symposium that is open for the general public, was held at the Stockholm City Conference Centre and had the theme “Your Plate – Our Planet: The Future of Food”. Nobel laureates, world-leading scientists, experts, musicians and politicians engaged in discussions regarding the theme.



Mr. Mattias Fyrenius, CEO of Nobel Media, Deputy Prime Minister of Sweden Isabella Lövin and Nobel Prize Laureate Steven Chu



Singer, author Patti Smith also attended the event



Lettuce and spices for the participants’ food

December 10 – 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 which was held at the Stockholm Concert Hall. The Nobel Laureates in Medicine or Physiology, Physics, Chemistry and Economic Sciences received their diplomas and medals from the hands of H.M. the King Carl XVI Gustaf of Sweden. The Nobel Prize Award Ceremony was followed by the Nobel Banquet at Stockholm City Hall. President Anzai and his spouse were among the invited guests.



The Nobel Prize Award Ceremony
© Nobel Media AB 2016. Photo: Pi Frisk



The Nobel Banquet
© Nobel Media AB 2016. Photo: Dan Lepp

KVA-JSPS Seminar Series: "Topological Superconductors", with Prof. Masatoshi Sato, Kyoto University

Since 2009, JSPS has organized seminars together with the Royal Swedish Academy of Sciences. Distinguished Japanese researchers, whose work is of great interest in both countries, are invited to give lectures during these seminars. The third seminar of the FY2016 series was held at Uppsala University on October 26, at Stockholm University on November 1 and at the University of Gothenburg on November 3. Prof. Masatoshi Sato, Yukawa Institute for Theoretical Physics, Kyoto University, was invited as the speaker.

Prof. Sato is an internationally renowned expert in topological phases of matter, in particular exotic forms of superconductivity, where his work on non-centrosymmetric superconductors has been of fundamental importance.

At Uppsala University and at the University of Gothenburg he held a seminar with the title "Topological Superconductors and Majorana Fermions". At this seminar he discussed that topological superconductors may host Majorana fermions, which may provide topologically protected non-Abelian qubits, and then outlined his work on the realization of Majorana fermions in condensed matter physics, with an emphasis on some of his recent results. At Stockholm University he

delivered a seminar with the title "Topological Superconductivity in doped topological materials", where he presented how nontrivial topological structures of such materials in their normal states may affect their topological properties in their superconducting states.

The participants seemed very interested in the lectures and Prof. Sato was willing to answer their questions one by one. The active and deepening discussions between Prof. Sato and the participants continued after the seminars.



Prof. Sato at Uppsala University

Stockholm University Student Fair

On November 30, International Program Associates Nakakane and Kitajima participated in the Student Fair 2016 at Stockholm University. The theme was "Go Global" and the students at Stockholm University were informed about their opportunities to go abroad during their studies. Mr. Nakakane and Ms. Kitajima presented JSPS fellowship programs along with different institutions and departments from Stockholm University, foreign universities, embassies and external organizations for the eager visitors.



International Program Associate Nakakane at the JSPS booth



International Program Associate Kitajima presenting JSPS programs

Seminar organized by the Japanese Association in Stockholm

On November 30, the Japanese Association in Stockholm organized a seminar of academic lectures that are easy for everyone to understand. This was the fourth year they organized this kind of seminar, with a focus on medicine. Three lectures were given by Dr. Kayoko Hosaka, Dr. Kaneyasu Nishimura and Professor Emeritus Tadaharu Tsumoto, Director of JSPS Stockholm Office.

Dr. Hosaka from the Department of Microbiology, Tumor and Cell Biology at Karolinska Institutet, gave a lecture on the latest information on cancer and blood vessel research where she presented her and her laboratory's latest research progress. Dr. Nishimura from the Department of Medical Biochemistry and Biophysics at Karolinska Institutet gave a lecture on creating nerve cells from pluripotent stem cells, during which he presented his research projects. The last lecture was given by JSPS Stockholm Office Director Tsumoto on the function development and critical period of the brain, during which he presented the recent state of the research about brain function development as well as trends in neuro science in the world.

The three lectures were followed by mingling where the participants could ask questions to the lecturers and network.



Dr. Hosaka



Dr. Nishimura



Director Tsumoto

IVA-JSPS Seminar "Social and Humanlike Robots", with Prof. Hiroshi Ishiguro

On January 24, the IVA-JSPS Seminar was held at IVA in Stockholm. JSPS Stockholm Office, IVA, Sweden-Japan Foundation (SJF) and the Embassy of Japan in Sweden jointly organize these seminars where they invite renowned Japanese lecturers whose research is of great interest for both countries. The theme of this year's IVA-JSPS Seminar was "Social and Humanlike Robots". Prof. Hiroshi Ishiguro from Osaka University was invited to deliver a lecture at this seminar. He focuses on developing systems that are inspired by and resemble human appearance, which is one of the important research areas in the field in Japan. He has even built a robot that is an exact copy of himself.

Prof. Danica Kragic Jensfelt, from KTH, opened the seminar, followed by the lecture "Studies on humanlike robots" by Prof. Ishiguro. He talked about what it means to be a human in order to conduct research on humanlike robots. He showed demonstrations and videos on how to create a conversation between a robot and a human, and discussed philosophical questions such as where the feeling of human existence comes from. Then Dr. Ginevra Castellano, Uppsala University, gave a lecture called "Affective and social human-robot interaction: bringing the human in the loop". She presented experiments that have been conducted regarding the peculiar phenomenon when people feel uneasy with robots that look like real human beings more than a certain level. The seminar was concluded by Prof. Kragic Jensfelt and was followed by a dinner gathering held at IVA's premises.

Both during the Q&A sessions of the lectures and during the dinner, the participants were engaged in deep discussions and had many questions for the speakers.



The speakers and some of the organizers



Prof. Ishiguro during his lecture

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

On January 25, 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 and others with close relations to Japan, both from the business sector and the scientific sector.

The reception was opened by a speech by H.E. Ambassador Jun Yamazaki, where he mentioned the scientific process Japan has been making in the past year and he praised the Nobel Laureate Prof. Yoshinori Ohsumi, as well as the recent Crafoord Prize Laureate Prof. Shimon Sakaguchi. He believes that these prizes, as well as the upcoming 150 years' anniversary of diplomatic relations between Japan and Sweden will contribute to strengthening the cooperation between the two countries.

Following Ambassador Yamazaki's speech, Ms. Yoko Kaneko, Chair of the Japanese Association in Stockholm, greeted the audience. Then the participants could eat Japanese New year's food and mingle.



The participants mingling while eating traditional Japanese new year's food

JSPS Meeting and Norway-Japan Academic Network

On January 30, JSPS Stockholm Office and the Research Council of Norway (RCN) jointly organized a "JSPS Meeting" and "the Norway-Japan Academic Network" on the premises of RCN.

"The JSPS Meeting" was the first meeting in Norway with JSPS alumni where discussions on a possible establishment of a JSPS Alumni Club in Norway were held. Deputy Director Kawakubo chaired the meeting and after greetings by Director Tsumoto, the participants held short self-introductions. Then, Deputy Director Kawakubo presented the JSPS Alumni Clubs. She talked about the overall objectives of JSPS as well as the activities of JSPS Stockholm Office and emphasized the importance of autonomy of the alumni clubs, and the initiative from the alumni.

Ms. Julie Christiansen, Senior Adviser at RCN, presented how the JSPS Alumni Club could be connected with the NorAlumni Japan, that is a network for researchers with connection to Norway and Japan.

During the discussion, the eager participants had many questions and ideas for the establishment of a JSPS Alumni Club in Norway, but due to time limits, the meeting had to be concluded.

"The JSPS Meeting" was followed by "the Norway-Japan Academic Network". This event is targeted to Japanese researchers and students living in Norway and Norwegian researchers and students interested in science in Japan. The purpose of the event is to create an opportunity to deepen and develop further research exchange and joint research between the two countries. Deputy Director Kawakubo chaired the event and opened it. Director Tsumoto presented JSPS Stockholm Office's activities and JSPS' programs.

Ms. Christiansen held a presentation titled "Cooperating with Japan in R&D", where she explained that Japan is one of the eight prioritized research countries at RCN, and that RCN has organized the Japan-Norway Science Week once every year since 2014 with big success. Ms. Christiansen explained that RCN is cooperating with several institutions in their cooperation with Japan and she also presented the NorAlumni Japan network.

Following Ms. Christiansen, Ms. Ryoko Tsuchiyama, Second Secretary, Culture and Information Section at the Embassy of Japan in Norway, presented some of the embassy's activities that were of interest to the participants.



First out of the invited lecturers was Dr. Mariko Hara from Inland Norway University of Applied Sciences. She delivered a lecture titled “A Sociological Study of Migrant Musicians’ Career Paths”. Dr. Hara’s research is a substudy below an overarching research project called “Musical Gentrification and Socio-Cultural Diversities”. Dr. Hara talked about how the demographic changes are apparent in the local music scene, and she is especially interested in what factors are needed for migrant musicians to succeed in Norway. She concluded her presentation by explaining about how it has been for her as a postdoc researcher in Norway.

The second lecture was held by Dr. Anders Øverby, Study Program Developer at the Høgskolesenteret i Kongsvinger, and it was titled “My Journey to Japan - 終わりのなき日本への探求の旅”. He started his presentation by telling the audience that he thought his

field of research, cancer research, would be too technical and difficult to present, so he focused on his research career and what possibilities he has had to go to Japan. Dr. Øverby received a lot of help from both JSPS and the Sasakawa foundation to be able to conduct his research. During the discussion, the eager participants had many questions and ideas for the establishment of a JSPS Alumni Club in Norway, but due to time limits, the meeting had to be concluded. In Japan, where he visited 2014-2016 as a post-doctoral fellow through JSPS.

Deputy Director Kawakubo concluded the first session of the event. Then followed networking with mingling, where the participants could talk to other researchers within their research fields as well as with others. It seemed to have been a very successful networking event for the participants.



Director Tadaharu Tsumoto



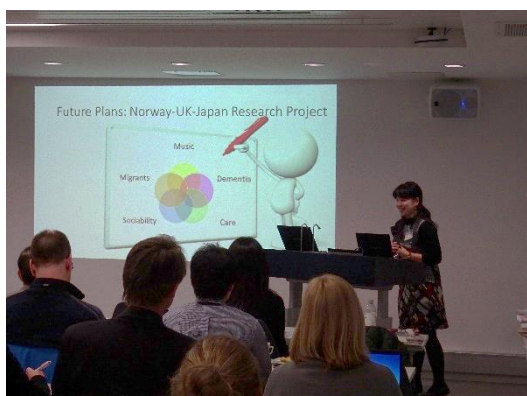
Deputy Director Yuriko Kawakubo



Ms. Julie Christiansen



Ms. Ryoko Tsuchiyama



Dr. Mariko Hara



Dr. Anders Øverby

Report of the XVth KICancer Retreat at Djurhamn

Kohei Miyazono, Professor, Graduate School of Medicine, the University of Tokyo

Researchers and graduate students of the Graduate Program for Leaders in Life Innovation (GPLLI), the University of Tokyo (UTokyo), participated in the XVth KICancer Retreat on September 26-27, 2016 with the support of the JSPS Stockholm, and visited Karolinska Institutet (KI) on September 28.

GPLLI (started in 2011) is designed for the purpose of guiding outstanding students to be globally active leaders in industry, academia and government, with wide vision and creativity, in the field of life innovation. Students of the Graduate School of Medicine, Science, Pharmaceutical Sciences, and Engineering at UTokyo, can join the program. This year, ten graduate students and 6 senior researchers of UTokyo participated in the KICancer Retreat.

Professor Ingemar Ernberg at KI is the chair of the KICancer Retreat, and organized the retreat at Djurönäset, a resort hotel, in Djurhamn (I believe that “Djurönäset” is one of the most difficult words for Japanese people to pronounce). The KICancer Retreat of this year is the 15th memorial event; graduate students, postdocs and senior researchers from 15 KI departments participated in the retreat, and presented their data by oral or poster presentations during the two-day retreat. Scientists from KI, UTokyo, and other countries, including Germany and Canada, participated in the retreat of this year. The conference center of Djurönäset can accept only a limited number of participants; in fact, the lecture hall was very crowded, and the organizers told us that many scientists could not join the retreat. We appreciate that Prof. Ernberg and the organizers kindly accepted us to participate in the retreat.

Djurhamn is 1 hour by bus from Stockholm. We enjoyed a beautiful Swedish autumn day during the bus tour and arrived at Djurönäset. At lecture sessions, I (Miyazono) introduced the research activities in life science and medicine at UTokyo. Prof. Mutsuhiro Takekawa (Institute of Medical Science) reported the function of MCRIP1, a novel target of the ERK MAP kinase pathway, which regulates the progression of an epithelial-mesenchymal transition (EMT) and cancer. Prof. Yasuteru Urano (Graduate School of Pharmaceutical Sciences) presented their recent data on development of novel fluorogenic probes, which allow visualization of tumors in vivo and can be used for clinical application during endoscopic or surgical procedures. Prof. Yoshinori Murakami (Institute of Medical Science) reported their data regarding an immunoglobulin superfamily cell adhesion molecule, CADM1. In his presentation, Prof. Murakami presented recent findings on the roles of CADM1 in cell proliferation, apoptosis, and cancer invasion and metastasis. Prof. Hidenori Ichijo (Graduate School of Pharmaceutical Sciences) reported the functions of apoptosis signal-regulating kinase (ASK) family molecules. ASK1, 2, and 3 are MAPKKK, which are involved in stress-responsive signaling pathways and play important roles in cancer metastasis.

I (Miyazono) have worked as a researcher (1985-1988) and later as a group leader of a research group (1990-1995) at Uppsala University. Prof. Ichijo has worked as a postdoc at Uppsala University from 1990-1993. Both of us are still working on research projects, which originally started during our stay in Sweden. I am closely collaborating with colleagues in Sweden for more than 20 years after I came back to Japan in 1995. We are very pleased that we met some of our colleagues who used to work with us at the same lab.

After the KICancer Retreat, the students and some senior researchers (Dr. Shogo Ehata, GPLLI Project Associate Professor, Prof. Murakami, and Prof. Takekawa), visited KI on September 28. Dr. Tadaharu Tsumoto, Ms. Yuriko Kawakubo, and the staffs at the JSPS Stockholm Office kindly introduced the campus of KI. KI is well known to have both beautiful modern and classic buildings, and they enjoyed their visit at the KI campus very much.

It is quite important and memorable for both Japanese and Swedish sides that young students as well as senior researchers of UTokyo had opportunities to interact with Swedish researchers during their stay in Sweden. We thank Prof. Ernberg, the staffs at KI and the JSPS Stockholm Office for kindly allowing us to visit the KICancer Retreat and KI.



Director Tsumoto, Prof. Miyazono, Prof. Ichijo and Deputy Director Kawakubo

Report on 2nd KVA-JSPS Seminar in 2016

Shigeru Ida, Professor, Earth-Life Science Institute, Tokyo Institute of Technology

On October 10th, 2016, I arrived in Sweden. Dr. Anders Johansen at Lund Observatory invited me for the KVA-JSPS seminar. I visit European cities almost every year, but this was the first time for me to come to a Scandinavian country. In 2016, I had already visited Nice, France in April and Leiden, Netherland in July. Although it should be in summer in Leiden, the wind from the North Sea was chilly.

I heard from many people that Scandinavian countries are beautiful, in particular in summer. Due to conflict of the schedule, I decided to visit Sweden in the mid October. Since we still have warm days in Tokyo, I expected nice weather. But, actually, in Sweden, it was winter with the Tokyo standard. I should have predicted the cold weather from the chilly wind in Leiden in July... Even in a hotel room, it was too cold for me and I wore a down jacket.

Everything was more expensive than what I imagined. It may be due to expensive tax for high quality social serves and welfare. The towns are beautiful and I heard that medical and educational services are free to everybody. I was also surprised with the complete cashless system. Even for a fee of public toilet at a station, we can pay with a credit card! Because this was my first time visit to a Scandinavian country, I found many new and interesting things.

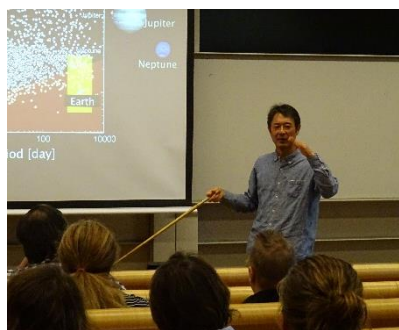
I first visited Lund, which is a college town. The Lund University, where the observatory is located, has beautiful campus with historical buildings. I have been studying formation theory of our Solar system and exoplanetary systems. Dr. Anders Johansen is one of young rising stars in our field. He proposed "pebble accretion" model of planet formation that now attracts a lot of attentions. I visited Lund observatory for 4 days (October 11-14), giving three different seminars and having scheduled discussions with individual researchers. It was a dense and stimulating visit for me.

In the formal KVA-JSPS seminar for broad field audience, I explained current understanding of planet formation and its difficulties, and discussed an unsolved problem, how the Earth acquired water. I also presented a more specific seminar, discussing our model on the pebble accretion. Because the result was before publication, the researchers expressed a lot of interests. Finally, I gave a white board seminar without any power point slide nor distributed resume for grad students. After explaining basis of tidal heating, I discussed our model on why a Saturnian satellite, Enceladas, has high thermal activity and geyser. These seminars with different topics and different audience were very valuable experience for me.

During the weekend, I moved from Lund to Stockholm by train. At Stockholm University, I gave the KVA-JSPS seminar of the same topic as that in Lund in the morning of October 17th. In the afternoon on the same day, I gave another talk that explains the activities of Earth-Life Science Institute to which I belong and Japan Astrobiology Center for which I works as a board member. Since there is an interdisciplinary Astrobiology network in Stockholm University, they had interests in these activities in Japan.

On the next day, I moved to Uppsala University, which is the oldest university in Sweden and gave the final KVA-JSPS seminar. I heard that people of Tokyo Tech including the president visited here in the last summer.

I really enjoyed Lund, Stockholm and Uppsala that have different atmosphere from one another. I want to thank the warm hospitality from the researchers at each institute. I also want to thank Dr. Tsumoto, Ms. Kawakubo and Ms. Kitajima for their careful arrangements for my visit.



Prof. Ida at Lund University



Prof. Ida at Stockholm University



Prof. Ida at Uppsala University

Music Interaction for Health – Novel Methods for Using Music Interaction to Address Wellbeing and Health Improvement in Training and Leisure

Rumi Hiraga, Professor, Tsukuba University of Technology

First, I would like to express my appreciation for having had the opportunity to attend and give a talk at the SAC Activity Seminar “Music Interaction for Health – Novel Methods for Using Music Interaction to Address Wellbeing and Health Improvement in Training and Leisure”. It was my third time to visit Stockholm—late winter, late summer, and early winter this time. I like visiting Stockholm in any season. A week before this visit, the temperature rose up to around 30 deg. Celsius in Japan, but even so I prepared my clothes for the cold winter weather—this was, of course, the right choice! I had some issues getting the hang of the bathroom facilities in Swedish hotels in the past (I always wonder how the elderly Swedish manage to take a bath or shower), but this time I stayed in a roomy hotel just outside the Stockholm city center, and my stay was much more comfortable. It is always fun to find shops, restaurants, streets, and islands in Stockholm which I learn in the Scandinavian mystery novels. I found Strandvägen in a novel that I am reading and remember the scene.

Dr. Kjetil F. Hansen, who arranged this seminar, visited the Tsukuba University of Technology (NTUT) as part of a JSPS Postdoctoral Fellowship for Overseas Researchers from 2012 to 2013. Both of us are interested in how hearing-impaired people enjoy music and how we can provide an environment that will help improve their listening abilities. Since we first met in 2012, we have held frequent meetings on promoting listening experiences for hearing-impaired young people either in Stockholm and Tsukuba.

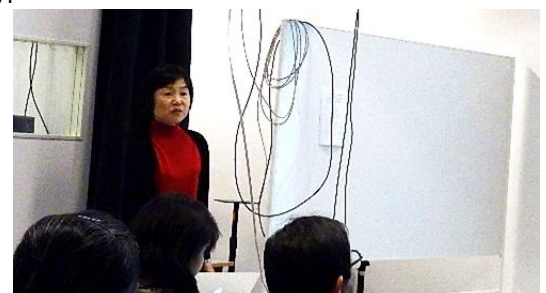
At the seminar, my presentation was about students at NTUT, all of whom have some form of hearing impairment, and about their research as well as our collaborative research using a game called “Music Puzzle” that Dr. Hansen developed at KTH.

One student developed a system to help small children learn environmental sounds. This system was designed on the basis of her own experiences of having insufficient time to learn environmental sounds and of experiencing danger as a result of misunderstanding the sound of a driving car. Her system not only lets children listen to and understand the source of an environmental sound; it also allows them to feel or react to or identify the situation around the sound, which she calls “contextual understanding”. One of her future works is to assist profoundly deaf children to understand environmental sounds by means of a multimodal interface. Another student has investigated which timbres of musical instruments are easy (or not easy) to perceive. In this student’s case, her musical experiences seem to affect her perception of timbres. This is exciting because it means we are going to discover the relationships between musical experiences, hearing acuity, listening properties, the acoustic properties of timbres, and timbre perception by a hearing-impaired person.

The purpose of the Music Puzzle game I mentioned earlier is to train the listening ability of hearing-impaired people by having them listen to music with concentration. It is quite an inclusive, economical, and sustainable music game. Essentially, a player has to listen to and remember the melody, pitch, and timbre of a piece of music, which is in contrast to the many other musical training techniques for hearing-impaired people that have them concentrate on a single element of music, such as tempo or melody. Also, some music trainings require professionals (such as a music teacher) in special locations (such as a laboratory) to teach or guide the students. Music Puzzle is different in that any person who has a tablet can play it, alone, at any place and at any time. The key benefit of Music Puzzle is that users are able to listen to music attentively with no special resources. Moreover, by switching up the songs played in Music Puzzle, users can enjoy Music Puzzle repeatedly.

We conducted an experiment with four participant groups using Music Puzzle to determine the effect of hearing loss, music experience, and native language on music game playing. Specifically, we analyzed the logs of participants playing the game with instrumental music, with speech, and with a mix of the two and found that native language had an effect on the latter two. Within the four groups, we did not see any specific effect of music experience when playing Music Puzzle. Although hearing loss affected the playing speed and game performance of the hearing-impaired participants, they preferred playing music the best among the three types of sound.

Music and various sound-related presentations at the SAC Activity Seminar were hugely motivating for me in terms of my own future work. Dr. Hansen’s group at KTH established the world’s premier research team on music and sound, and we can see many hearing-impaired young people at NTUT. Our research group consisting of KTH, NTUT, and other researchers is constantly pushing forward research that makes use of music to improve the listening abilities of hearing-impaired people. I’m excited about where we’re heading in the future.



Prof. Hiraga during her lecture

Paper Yarn in Textiles and Fashion – a compostable raw material for the future?

Dr. Joel Peterson, Senior lecturer, The Swedish School of Textiles, University of Borås

Awareness of our environment and the stress that our modern lifestyle causes is a major problem to solve in the future. For example in the textile and fashion industry, it is urgent to find less environmentally damaging alternative yarns for the manufacture of clothing and other textile products. Consumption of cotton and oil-based fibres types is a major problem because it needs the help of fertilizers and toxic pesticides to grow in many places. Another problem is that the demand for paper is decreasing because many people of today read newspapers and pay their bills on the Internet creating an overcapacity in the pulp industry. This industry is looking for new business opportunities for the future. One solution of these problems can be yarn made of paper as a raw material and this is an old Japanese craft called *SHOHESENHI*. In old days, people used to make paper from mulberry, linen or paper, and then slit it into thin tapes and finally twist it into yarn. In this 21st century, this natural eco-friendly paper yarn is in the spotlight again. The manufacturing process of paper-yarn is definitely different from that of conventional spun- or filament yarns and can be an alternative for many textile products.

JSPS Stockholm Office supported to organize JSPS Alumni Club in Sweden Activity Seminar with the title “Paper yarn in Textiles and fashion – a compostable raw material for the future?” The seminar was organized by The Swedish School of Textiles, University of Borås in collaboration with JSPS Stockholm office.

The first lecture was given by Mr. Hiroyuki Shiraishi Vice President of OJI FIBER, one of the leading paper making companies in Japan, experts in the area of paper yarn for textile products. The presentation was an overview about paper yarn: manufacturing, properties and applications. Mr. Shiraishi also showed many samples of products made of paper yarn as technical textiles, home textiles and fashion garments which was much appreciated by the audience. The second lecture was given by Professor Hideaki Morikawa, Faculty of Textile Science and Technology, Shinshu University, Ueda, Japan about “Education and research activities” at Shinshu University. Next presentation was held by designer Marie Stark from The Swedish School of Textiles, University of Borås with the title “Paper Knitting (to body)”. This presentation focused on paper yarn used in fashion with a design perspective, also fashion garments was shown. Dr. Patrik Lennartsson from Department of Resource Recovery and Building Technology, University of Borås talked about the environmental aspects of paper yarn textiles. A presentation with the title “A compostable product for the future”.

Then two groups of bachelor students presented their result and experiences from their examination work. A collaboration between Shinshu University and University of Borås. The collaboration between the universities and exam works were made possible by funding from JSPS and Tekoutbildningarnas Stipendiefonder. Liv Persson, The Swedish School of Textiles and Minako Shitara, Shinshu University presented a speech with title “A touch of paper yarn”. “Paper yarn in knitted textiles”, Josefine Hjälms and Karin Backe from The Swedish School of Textiles. Both groups of students made parts of their work at Shinshu University in Ueda, Japan. During the end of the seminar a guided tour was arranged to see the facilities at “The Swedish School of Textiles”. Among participants at the seminar were many from companies related to the textile and fashion business in Sweden as H&M, Ikea, Lindex and Autoliv.



Dr. Peterson to the left with Prof. Morikawa to the right

Towards a dialogue system that can perform casual conversation

Dr. Ryuichiro Higashinaka, Senior Research Scientist, NTT Media Intelligence Laboratories, NTT Corp.

In September 2016, at a scientific conference called SIGDIAL, which is related to discourse and dialogue, I was asked by Prof. Kristiina Jokinen (Helsinki Univ.) to give a talk at the All Alumni Meeting. Although there was very little time for preparation, I thought it would be a great opportunity to strengthen ties between Japan and Finland and to get to know Finland. I therefore accepted her invitation and flew to Helsinki in October. The title of my talk was "Towards a dialogue system that can perform casual conversation", the content of which I briefly describe below.

I'm working in the field of dialogue systems; that is, I'm researching computers that can perform conversation with people. In what's called task-oriented dialogue systems (such as those that give you weather information or that search for restaurants by voice), we have been seeing real-world applications such as Apple's Siri and NTT Docomo's Shabette-Concier. However, in recent years, as people have become more familiar with task-oriented dialogue systems, the desire for systems that are capable of casual conversation has been increasing. This is because of our tendency to view a computer as we would a friend or acquaintance: If systems are installed all around us and they are able to interact with us, we expect that they should be able to engage in some kind of casual conversation, because that is what we normally do with friends and colleagues. Indeed, according to a survey by the National Institute for Japanese Language and Linguistics, more than 60% of our conversations are casual ones.

However, it is not easy to realize dialogue systems that can engage in casual conversation. Such systems need to cope with the many topics that users may want to talk about. Currently, there are three major approaches to realizing casual conversation by computers. The first approach is a rule-based one, in which developers handcraft response rules. The second approach is a retrieval-based one, in which responses are retrieved from the web (mainly, social media data). These approaches are either costly or have the problem of low-quality utterances. Hence, we adopt the third approach, in which user utterances are understood by using natural language processing techniques and system utterances are generated based on structured knowledge created from the large text data on the web. In my talk, I showed a demo video of our text-based chat-oriented dialogue system and a demo video of an android equipped with our system (which is the result of our research collaboration with the Ishiguro Lab of Osaka University). In the videos, the system sometimes uttered inappropriate utterances, which led to some laughter among the audience, which I thought was a good indication that my talk was well understood and received with interest.

After the talk, I demonstrated a Japanese chat-oriented dialogue system that uses speech as input and responds vocally using speech synthesis. Some Finnish participants successfully chatted with the system in Japanese. Some talked in Finnish to challenge the system. Since the system has the capability to repeat what it has heard, it repeated a Finnish phrase, which astonished the participants. Of course, the system does not understand Finnish at all. In this case, the system recognized the utterance "Mitä kuuluu?" (How are you?) as "Miku (a Japanese name) kouro (route)", which was just repeated as a Japanese phrase.

The next day, I was invited to give a talk at a seminar held at Helsinki University. The topic of the talk was the difficulty of evaluating chat-oriented dialogue systems. Soon after the talk, in a bit of haste, sadly, I had to leave for Japan. In my short stay in Finland, I must say I had a wonderful experience and had a great opportunity to talk to many Finnish people who are knowledgeable about Japan. The next SIGDIAL conference will be held in the Nordic region in summer. I hope I'm able to take this wonderful opportunity to visit Helsinki again.



Dr. Higashinaka delivering his lecture

All Alumni Meeting in Finland

Dr. Ayaka Taheuchi, Junior Associate Professor, Laboratory of Environmental Business, Toho University

On 27th October in 2016, I had the opportunity to participate in an all alumni meeting in Finland as a guest speaker. I will introduce my speech, along with the discussion with other researchers and other participants and what I learned from the short stay in Helsinki.

At the all alumni meeting I introduced the Japanese case study of offshore wind energy with the title: "Risk communication toward successful offshore wind projects in Japan". The Japanese government introduced the feed in tariff scheme in 2012 in order to promote renewable energy installation. However, offshore wind energy projects in Japan are still in an early phase with some pilot projects and big scale projects currently under planning. As there are not enough laws and regulations to adjust the utilization of the sea area, the local governments support the coordination between developer and other stakeholders. For consensus building between fishermen and developer, it is required to develop a sound scientific methodology to support the discussion.

I chose Murakami City in Niigata prefecture as an example for my research and analyzed the dialogue materials of stakeholder meetings in order to investigate which kind of topics were more actively discussed regarding the development of offshore wind energy project plans. In Murakami City, salmon is regarded as a main tourism attraction. Therefore, issues arising from offshore wind plans that have an adverse effect salmon are relevant to promote the plan. During the stakeholder dialogue, the developers asked fishermen to jointly create an investigation methodology, because it is difficult to investigate effect on salmon under the EIA (environmental impact assessment) scheme. In addition to salmon as a discussion topic, ferry routes which connect between Murakami city and the small island of Awashima-Machi were also discussed. However, topics such as legislation as well as information sharing methodology with local citizens were not actively discussed as part of the stakeholder dialogue. From the results, it was pointed out that the theme about investigation methodologies and results which can be connected to stakeholder concerns are appropriate themes for stakeholder dialogue. In addition, it has to be pointed out that in order to promote active discussion, it is required to provide more detailed and more clear

information material to stakeholders.

I reflected on my presentation and acknowledged that my chosen case study in Japan might have been too specific. The consideration of common issues and energy status in Finland would have been beneficial in order to promote discussion with other researchers. After returning home, I researched the offshore wind status in Finland and I was surprised that an offshore project exists also in Finland. It would have benefited my research if I had the time to visit the site and investigate the case study. There are some common issues in Finland and in Japan like salmon fishery and ferry routes, so I am very interested in the case study, especially the dialogue with fishermen. I hope I can plan to visit Finland's offshore projects next time.

Secondly, the knowledge exchange with other researchers was very valuable for me. During my stay in Helsinki, I had often talked to Mr. Higashinaka, who develops communication technologies between humans and robots, and I was able to learn that the methodologies and roles of research are gradually changed through technology development and it gives me a chance to consider my role as a researcher.

After the presentation, I also discussed with a Japanese who is living and working in Helsinki about the cultural difference between Finland and Japan and it was very interesting for me.

I had not enough time to go sightseeing in Helsinki. However, I was very surprised by the supermarket in Helsinki. It is open 24 hours, similar to a convenience store in Japan. On the other hand, there are shops, which are operated by small companies or are privately owned and it reminded me of the Japanese rural area. As I studied and worked in Germany, all stores are closed on Sunday. I could think about the social and cultural difference including the history of countries.

At the end of my report, I would like to thank Dr. Kujansuu and the JSPS Stockholm office. Thank you very much that you gave me this opportunity. I hope that the research exchange between Finland and Japan will be fostered in the future.



Dr. Takeuchi during her presentation

2016.11.08

Visit by staff from Osaka University

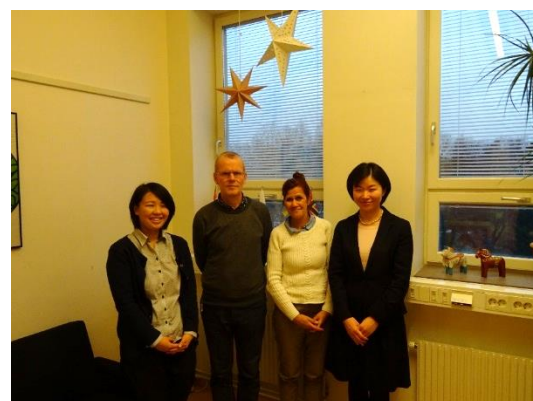
Ms. Mariko Eguchi, Ms. Maiko Yamaguchi and Ms. Marika Kume from Osaka University visited JSPS Stockholm Office while visiting Karolinska Institutet for a short-term staff training program with the theme “internationalization of the university”. They explained about their respective training subjects as well as about the goals with the training program. Director Tsumoto explained about JSPS Stockholm Office’s activities, mission and its projects. Deputy Director Kawakubo explained the exchange of Osaka University and Karolinska Institutet, as well as other seminar which was held with collaboration of researchers of Osaka University.



2016.11.18

Visit by SAC Board Member Dr. Joel Peterson and others

JSPS SAC Board Member Dr. Joel Peterson, the Swedish School of Textiles, University of Borås, Mrs. Carina Peterson and Ms. Minako Shitara, Interdisciplinary Graduate School of Science and Technology, Department of Bioscience and Textile Technology, *Kansei* Engineering, Shinshu University visited JSPS Stockholm Office. Deputy Director Kawakubo explained the different programs which Dr. Peterson and his students can apply. Deputy Director Kawakubo explained to Ms. Chitara about different JSPS programs which she can apply in her future.



2016.11.28

Lunch Meeting at the Research Council of Sweden

Director Tsumoto and Deputy Director participated in a lunch meeting at the Research Council of Sweden, where delegates from different Nordic research funding agencies held a meeting about a possible joint Nordic initiative to cooperate with Japan. This was the first time these Nordic research funding agencies held this kind of meeting and Director Tsumoto and Deputy Director Kawakubo explained about which JSPS programs can be useful in a deepened cooperation between the Nordic Countries and Japan.



2016.12.05

Visit by staff from Tokyo Institute of Technology

General Affairs Department Director Hirokazu Kurosawa, International Affairs Department Director Toshiaki Mizuno and Mr. Hisatoshi Hasegawa from the foreign student exchange section, from Tokyo Institute of Technology, visited Sweden during the 2016 Nobel Week together with President Yoshinao Mishima to participate in the Nobel Prize Award Ceremony and Banquet. While in Stockholm they also paid a visit to JSPS Stockholm Office, where they discussed how excited they are that a researcher from their university was awarded the Nobel Prize. JSPS Stockholm Office explained the 1st and 3rd Tokyo Institute of Technology – Uppsala University Joint Symposium, which were successfully held in 2014 and 2016 together with JSPS Stockholm Office.



2016.12.11

Visit by staff from JSPS Headquarter Office in Tokyo and from JSPS London Office

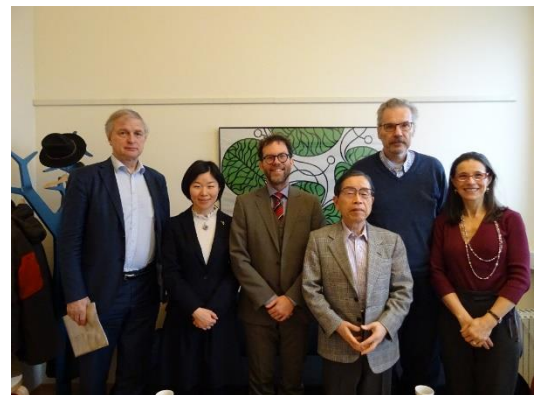
JSPS President Dr. Yuichiro Anzai, International Program Department Director Dr. Mariko Kobayashi, Head of the Research Cooperation Division Ms. Ayaka Sasagawa and Ms. Mihoko Mizota from the International Program Department from JSPS Headquarter Office in Tokyo and Advisor Ms. Atsuko Nakatsuka from JSPS London Office visited JSPS Stockholm Office. Director Tsumoto and Deputy Director Kawakubo explained the recent activities of JSPS Stockholm Office and the state of the academic exchange between the Nordic and the Baltic countries. They also shared opinions on upcoming events.



2017.01.24

Visit by representatives from the MIRAI Project

Prof. Leif Kirsebom, Vice-Chancellor's Adviser for Internationalization of Uppsala University, Mr. Henrik Hofvendahl, Regional Manager Asia of Lund University, Ms. Sonia Coelho Sutton, Senior International Coordinator of Lund University and Mr. Edvard Fleetwood, Secretary General of the Sweden-Japan Foundation visited JSPS Stockholm Office. They reported the plans and state of progress of the MIRAI Project, which was a follow up to the Japan-Sweden University Presidents' Summit that was held in Tokyo 2015. The MIRAI Project is planned to be implemented in 2017-2019. The representatives and JSPS Stockholm Office also exchanged ideas and opinions.



Gold – the kanji of 2016

Oskar Nielsen, JSPS Stockholm Office Assistant

Each year since 1995, the Japan Kanji Aptitude Testing Foundation has conducted a nationwide survey to which anyone can submit suggestions on which kanji will best represent the events and sentiments of the past year in Japan. Then, when the deadline for submitting characters is crossed, the voting begins. In 2016, more than 153 000 submissions were sent in and the kanji 金, meaning gold or money, got the most votes. The presentation and calligraphy ceremony was held at the famous Kiyomizu Buddhist temple in Kyoto on December 12, 2016. The ceremony was conducted by Mr. Seiha Mori, the head priest at the Kiyomizu temple, where he drew the year's character with a big calligraphy brush on a large piece of Japanese paper.

According to the Japan Kanji Aptitude Testing Foundation, the reason 金 symbolizes 2016 is that the Japanese athletes won a record number of gold medals at last year's Olympic Games in Rio de Janeiro, but it is not only gold medals that represents the year. Financial political scandals were one of the reasons as well.

This is actually the third time 金 has been chosen as the kanji of the year. The first time was in 2000 and the second time was in 2012 – all three times have been coinciding with the Olympic Games.

In 2016, following the kanji 金, on second place was the kanji 選 (election) and on the third place was the kanji 変 (change). Things and events that happen around the world also reflect the characters that are voted for. "Election" reflects the presidential election in the United States, and "change" the many natural disasters that happened in Japan during 2016.

Sources:

<https://www.japantoday.com/category/national/view/%E9%87%91-chosen-as-kanji-character-best-representing-2016>

http://www3.nhk.or.jp/news/html/20161212/k10010803811000.html?utm_int=news-culture_contents_list-items_016

<http://www.kanken.or.jp/project/edification.html>



Automatic voice translators under development

Japan is expecting an increasing number of visitors over the coming years because of the 2020 Tokyo Summer Olympic Games. Since many of these visitors do not understand Japanese, the public and private sectors are working together to develop technology that makes communication simpler.

A number of public transport operators have introduced devices for automatic translations to help tourists. These devices are based on the automatic translation technology developed by the National Institute of Information and Communications Technology (NICT). Public transport operators and manufacturers are repeatedly conducting demonstration tests on these devices in order to improve their accuracy and practical operability.

One of these devices is a megaphone-shaped automatic audio translator, developed by Panasonic Corp. It is called the “Megahonyaku”, which combines the words “megaphone” and “honyaku”, Japanese for translation. This device is specialized in travel related phrases, and it is being developed so that it only will take about one to two seconds for it to translate a phrase.

It works in a way so that when you hold down a button on the megaphone, and talk to it in Japanese, it translates the phrase into English, Chinese or Korean and reads it aloud with an automatic machine voice.

Sources: <http://www.asahi.com/ajw/articles/AJ201612060013.html>
<http://www.itmedia.co.jp/business/articles/1611/17/news124.html>



The megahonyaku
Image by Panasonic

(<http://news.panasonic.com/jp/press/data/2016/11/jn161117-1/jn161117-1.html#>)

The Swedish government plans to strengthen research quality

The Swedish government presented a bill to the parliament, where they unveiled plans to strengthen the quality of research in the end of November 2016. They plan to do this by investing in more research time for existing staff, opening up paths into a research career, especially for women and by making employments safer for PhD students.

The Minister of Higher Education and Research Helene Hellmark Knutsson's aim with the presented bill is to shape the direction of Swedish research for the next 10 years, and outline the spending priorities for 2017-2020. According to the bill, the increase in strengthening the basic component of higher education institutions' budgets will be 1.3 billion SEK. However, there will not be an increase in the number of researchers, but the universities will be able to use their extra funds to the existing researchers, and it is directed to the challenges such as climate, increased digitalization, health, sustainable development and quality in Swedish schools.

There is also a plan to double the number of women professors to achieve gender parity by 2030. Then, half of all new recruits as Swedish university professors shall be women, which one can compare to the 25 % as of today.

In the new budget proposal, Swedish PhD students will not be included as students under higher education anymore, instead they will be registered as university staff and the majority of them will be employed with a salary and welfare provisions. This is one of the ways the Swedish government open up paths for research careers.

Source: <http://www.universityworldnews.com/article.php?story=20161130235352229>

Vegetarian blood is being created at SLU Alnarp

At the Swedish University of Agricultural Sciences (SLU) Alnarp campus, Prof. Li-Hua Zhu is conducting research on how to produce human hemoglobin from tobacco plants. Hemoglobin is a protein in the blood that transports oxygen in the human body. However, it is not only blood that contains hemoglobin, but also plants have it. In plants, the hemoglobin also helps the oxygen transportation so that their metabolism can continue even during the night when the plant otherwise cannot produce any oxygen.

In order to create a kind of hemoglobin that could be transferred to humans, Prof. Zhu injects the tobacco plants' leaves with genes for human hemoglobin. The reason Prof. Zhu chose tobacco plants is because they grow quickly and their leaves get big. The main aim for her research is to find an effective way of producing the hemoglobin. Then she tries it in cell cultures in mice before testing it on humans. Her goal is to be able to extract hemoglobin from the plants and then turn it into a powder with long durability. This powder will then be mixed with water and injected into humans in need where donated human blood is difficult to get, for example after big disasters, earthquakes, wars, etc. If the researchers can find a working and sustainable substitute for human blood, many more lives can be saved in the future.

Source: <http://www.sydsvenskan.se/2016-12-07/hon-gor-vegetariskt-blod-av-tobak>



A blooming tobacco plant

Photo by "Kotoviski" (https://commons.wikimedia.org/wiki/File:Tobacco_flowers_poland1.jpg)

Danish students oppose bill to limit funding of second degrees

On December 19, the Danish parliament voted in favor of a bill that will make it impossible for students to obtain student financing aid or a second degree at a Danish institution of higher education if you already have completed a degree at the same or at a higher level. The proposal calls for a "higher education ceiling" and the law will come in effect by the summer of 2017. This bill has been strongly opposed by students.

In 2014, around 2200 students had started a second full-time degree, after having completed a higher or same level degree. The reason behind this bill is that it is expected to save about 342 million DKK (US\$ 49 million) in 2020 when the initiative has been fully phased in.

The National Union of Students in Denmark, DSF, that represents 170 000 Danish students, called for a protest demonstration in central Copenhagen on December 18. DSF mobilized support on social media against the new law and gathered over 57 000 signatories on a petition urging the government to drop the then planned law. According to DSF, the law will lock thousands of students into a higher education where they see no future and cannot achieve the academic profile they actually want. They also mean that fields of work, where multidiscipline education background is needed for innovation and progress, will lose a lot of qualified students, who instead might move abroad. DSF means that this petition shows that Danish students want a flexible higher education system in which they themselves can decide if they want to educate themselves throughout life or not.

Source: <http://www.universityworldnews.com/article.php?story=20161213192914619>

The Research Council of Norway launches a research program targeted towards municipalities

The municipalities in Norway are going to be facing major challenges in the future – demographic changes will lead to a considerably larger number of the elder population and effects of the climate change will impact the municipalities throughout the country. Therefore the Research Council of Norway is launching a program that is designed to promote research-supported innovation in the municipal sector and to expand the municipalities' capacity and ability to innovate. This program is called the Program for Research and Innovation in the Municipal Sector (or FORKOMMUNE in Norwegian).

Even though the government administration will implement national policies and provide national funding for these issues, the municipalities will have to manage many of these challenges on their own, which is one of the main reasons behind the launching of this program.

Jesper W. Simonsen, Executive Director of the Division for Society and Health at the Research Council of Norway, says that "there has been too little research targeted towards the societal challenges facing the municipalities, and the current level of activity does not reflect the major tasks the municipalities are responsible for". That is why the FORKOMMUNE program will promote innovation in the municipal sector by encouraging the development of new and relevant knowledge, as well as the establishment of closer links between the municipal sector, research groups and other knowledge actors. One of the important objectives of the program is to ensure better utilization of the collective knowledge of the Norwegian society throughout the whole municipal sector, not just some parts of it.

This new research program will be launched in the beginning of 2017.

Source:

http://www.forskningradet.no/en/Newsarticle/New_research_programme_targeted_towards_the_municipalities/1254022790616/p1177315753918

Finland – to be one of the leading countries in open science and research

The Finnish Ministry of Education has outlined that Finland will become one of the leading countries in open science and research by 2017, with the objective to have open access to all scientific publications by 2020.

The EU has set a common goal for its member states to open access to all scientific publications by 2020, and Finland is one of the countries that are most committed to these principles. However, in order to realize this goal, immediate and concrete actions are needed to change the current culture of the access to scientific publications.

Between the years 2010-2015, the subscription fees for scientific publications rose by around 10% per year in Finland. This has led Finland to start conducting national negotiations with the biggest international scientific publishers on the contracts for their materials. The Finnish Ministry of Education means that it is necessary that these negotiations find a solution that is financially and economically sustainable for the scientific community. This leads to changes, not only for the scientists, but also for the business models of the scientific publishers, which needs to be renewed and take into account the raising demand for openness in society as a whole.

Source: http://www.minedu.fi/OPM/Tiedotteet/2016/12/avoim_tiede.html?lang=en

Osaka University to open a genome-editing research center

Osaka University is the first university in Japan that has opened a genome-editing research center facility, which permanently will conduct genome-editing research. Genome-editing involves technologies to insert and delete or replace DNA at a specific site in the genome of an organism or cell. These new technologies are becoming more and more accurate and are coming into a wider use than before. The research at the new center is planned to be conducted by ten researchers from Osaka University, and the center will also hold seminars for researchers from Japan and from abroad. One of the aims for the center is to make it a global hub for genome-editing technologies, and always to conduct research on how these new technologies can be applied in the medical sector.

Source: <http://www.japantimes.co.jp/news/2016/12/15/national/science-health/osaka-university-opens-genome-editing-research-center/>

The Crafoord Prize in Polyarthritis 2017

The Crafoord Prize in Polyarthritis of 2017 has been awarded the three researchers Professor Shimon Sakaguchi, Osaka University, Osaka, Japan, Dr. Fred Ramsdell, Head of Research, Parker Institute for Cancer Immunotherapy, San Francisco, USA and Professor Alexander Rudensky, Memorial Sloan Kettering Cancer Center, New York, USA.

The Royal Swedish Academy of Sciences is awarded to these researchers “for their discoveries relating to regulatory T cells, which counteract harmful immune reactions in arthritis and other autoimmune diseases.” The research that has been awarded is for the discovery of regulatory T cells, that can be seen as the security guards of the immune system. The T cells put a break on cells that are overzealous and attack the body’s own tissue. This discovery might lead the way to new and effective treatment methods for autoimmune diseases, such as rheumatoid arthritis, MS and type 1 diabetes.

Anna-Greta and Holger Crafoord’s fund was established in 1980, with the purpose to promote international basic research in the disciplines of astronomy and mathematics, biosciences (with particular emphasis on ecology), geosciences and polyarthritis (rheumatoid arthritis). These disciplines have been chosen in order to complement those for which the Nobel Prizes are awarded. It is awarded once every year by the Royal Swedish Academy of Sciences. The order in which the disciplines are being awarded is set in a scheme, however, the prize in Polyarthritis is only awarded when a special committee has shown that there has been scientific progress in that field which can be justified an award. The Crafoord Prize sum is 6 million SEK, which makes it one of the world’s largest scientific prizes.

The Prize lecture will be held at Lund University on May 16, followed by the Prize symposium on May 17 in Stockholm. The Prize ceremony is on May 18 at the Royal Swedish Academy of Sciences.

Sources: <http://www.kva.se/en/pressroom/2017/crafoord-prize-in-polyarthritis-2017/>
<http://www.crafoordprize.se/abouttheprize.4.2f692b3510dbfce339680003512.html>



The Academy building. Photo: Thomas Wingstedt, ©The Royal Swedish Academy of Sciences

Record of foreign students finding jobs after graduating in Japan

Japanese firms and companies, especially in the information technology sector, are working towards becoming more global. This has led to a big increase in foreign students and professionals who are being hired in Japan right after graduating from universities and vocational schools. The number of students was 15 657 in 2015, which is more than double the number 5 878 in 2005. This is the result of a government effort to make highly skilled foreign professionals boost the competitiveness of Japanese companies. The Japanese government has acted as a bridge between students and employers by organizing recruitment seminars, and they have a plan with the target of raising the employment rate of foreign students in Japan from 30%, which is the current rate, to 50%.

Source: <http://www.universityworldnews.com/article.php?story=20161118211059978>

6. Notice

Upcoming Seminars and Symposia

2017-02-23 (Thursday)

(1) JSPS Alumni Club in Sweden (SAC) Joint Board Meeting and General Assembly

It is only for JSPS SAC members.

(2) JSPS SAC Seminar event

(2) Is open for all, and will consist of several lectures. The keynote lecture will be held by Prof. Susumu Kitagawa, Kyoto University. The theme of the event is "Future collaborations Sweden – Japan: towards sustainable societies and environments".

Speakers:

Keynote speech by Prof. Susumu Kitagawa, Kyoto University
Dr. Andrew Kentaro Inge, Stockholm University
Dr. Yuki Hasegawa, Saitama University and Linköping University
Prof. Helena Filipsson, Lund University
Dr. Joel Peterson, University of Borås
Dr. Merima Hasani, Chalmers University of Technology

(3) The 5th Sweden-Japan Academic Network

(3) Is an annual event open for the public. After the lectures there will be time for networking and mingling.

Speakers:

Prof. Lars Öhrström, Chalmers University of Technology
Prof. Susumu Kitagawa, Kyoto University

Time: (1) 12:00-13:30, (2) 13:45-16:45, (3) 17:00-19:30

Venue: The Royal Swedish Academy of Sciences (KVA), Lilla Frescativägen 4A, 114 18 Stockholm

Upcoming Seminars and Symposia

2017-02-26 (Sunday)

Nobel Prize Dialogue Tokyo 2017

On 26 February a unique panel of thought leaders including Nobel Laureates will meet at Tokyo International Forum to discuss challenges and opportunities in light of the new frontiers of human and artificial intelligence. This free whole-day conference brings together Nobel Laureates, world-leading scientists, policy makers and the general public will join in an inspiring event, moving science and society closer together. Nobel Prize Dialogue Tokyo 2017 is produced by Nobel Media in cooperation with the Japan Society for the Promotion of Science (JSPS).

Time: 09:00-17:30

Theme: The Future of Intelligence

Venue: Tokyo International Forum

More information: The deadline for the registration has passed, so if you cannot participate on the 26th, you can watch the event online on the link below:

www.nobelprizedialogue.org/tokyo2017

2017-03-08 (Wednesday) – 2017-03-09 (Thursday)

Japan-Danish Joint Workshop on Biomass 2017

A workshop on the collaborative research between Denmark and Japan, which are two leading countries in the biomass field, will be held in Lyngby, Denmark. The researchers and students from Hiroshima University and Gifu University will participate in the workshop.

Time: 09:00-17:00 both days.

Venue: Technical University of Denmark (DTU Lyngby Campus), Building 113, Room 011

Speakers :

Prof. Claus Felby, University of Copenhagen

Ms. Farida Rahayu, Hiroshima University

Prof. Yutaka Nakashimada, Hiroshima University

Mr. Lars Ellegaard, BWSC

Assistant Prof. Jin Mi Triolo, University of Southern Denmark

Dr. Yifeng Zhang, Technical University of Denmark

Assoc. Prof. Yoshiko Okamura, Hiroshima University

Mr. Ryo Shimizu, Hiroshima University

Senior Researcher Henrik Bjarne Møller, Aarhus University

Prof. Yukihiro Matsumura, Hiroshima University

Prof. Lasse Rosendahl, Aalborg University

Assoc. Prof. Shuhei Inoue, Hiroshima University

Assoc. Prof. Yoshinori Itaya, Gifu University

Assoc. Prof. Ib Johannsen, Aarhus University

Prof. Jeppe Lund Nielsen, Aalborg University

Researcher Panagiotis Kougias, Technical University of Denmark

6. Notice

Upcoming Seminars and Symposia

2017-03-10 (Friday)

(1) JSPS Alumni Club in Denmark (ACD) General Assembly

The ACD General Assembly is only open for JSPS ACD members.

(2) Japan Alumni Researchers Assembly 2017

The Japan Alumni Researchers Assembly 2017 is open for all.

JSPS Stockholm Office, JSPS Alumni Club in Denmark, the Embassy of Japan in Denmark, Tokai University Europe Liaison Office and the Technological University of Denmark jointly organize the assembly. Speakers from Japan and Denmark are invited to deliver lectures and there will be a social gathering after the lectures.

Speakers: Professor Masao Mizuno, Hokkaido University

Associate Professor Gunhild Borggreen, University of Copenhagen

Time: (1) 13:45-14:50, (2) 15:00-17:30

Venue: Technical University of Denmark (DTU Lyngby Campus), Building 101, Meeting room 01 (2nd floor)

2017-03-24 (Friday)

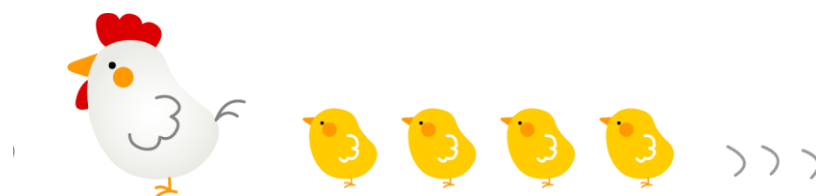
Meeting for Japanese researchers

A meeting for Japanese researchers living in Sweden will be held with the goal to create a network platform for the researchers.

Time: 19:00-

Venue: To be decided

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



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JSPS Stockholm Newsletter #27

Published on: February 20, 2017

Editors: Yuriko Kawakubo & Oskar Nielsen

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: jsps-sto@jsps-sto.com

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