

JSPS Stockholm Newsletter

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Global Standards Prevail, But Local Standards Remain

Tadaharu Tsumoto, Director, JSPS Stockholm Office

In this essay I am referring only to an appearance, attitude and behavior of scientists in scientific meetings, such as seminars, symposia and workshops, not mentioning those of people in general. When I attended scientific meetings in the Nordic countries, I realized that almost all scientists behaved by global standards at least at the surface level. They are very frank with each other in the casual style and none of them usually wear ties and dark suits. Such a behavior of scientists is seen not only in Sweden or other Nordic countries but also perhaps all over the world. This is the case even in Japan these days, although the situation is different if a royal family member or an important person in the government participates in the meeting. When I attended scientific meetings in USA, Canada and Europe in the 1970s, I was very surprised by frank or even straightforward conversations and behaviors of participants. At that time most Japanese scientists behaved in the more formal manner, mostly wearing ties and dark suits in scientific, in particular medical or pharmaceutical meetings. Now the situation in Japan is quite different, as mentioned above. In China, South Korea, Singapore, India, Brazil and Iran I found the same or similar behavior of scientists in scientific meetings that I attended, although I do not know how the situation in these countries was 30-40 years ago. So the globalization of behavior of scientists in scientific meetings seems to prevail everywhere in the world these days.

On the other hand, a certain type of social behaviors has not significantly been changed. When I attend an international meeting and happen to notice a group of Japanese scientists in the far distance in a corridor of a meeting hall, I can recognize that they are Japanese even if I cannot identify their faces and voices. They make a formal bow each other. They do not shake hands nor embrace each other. If they meet for the first time, they usually exchange their business cards together with bow. Such social behaviors are usually not seen in the American and European science community. In this sense the Japanese tradition of politely exchanging bow remains even in the present science community. I often heard that lecturers in Japanese universities do not receive many questions from students while lecturers in American universities are usually exposed to many, lively or sometimes aggressive questions. I also heard that students in Swedish universities are not so aggressive as students in American universities, although I am not sure whether this is the case or not. In any case, some social behaviors seen in Japanese scientists seem to reflect the traditional standards of the so called “vertical” structure of Japanese society (ref. 1). In the Japanese “vertical society”, a polite bow to others in particular to senior people or superiors is supposed to be important for smooth social interactions. So, the behaviors of scientists that I mentioned above reflect the traditional and still surviving standards of Japanese society. If it is possible to generalize behaviors of scientists to non-scientists, people's behaviors based on the local cultural standards seem to firmly remain even in the modern, rapidly changing societies in the world.

1. Nakane, C. (1970). *Japanese society*. Berkeley, CA: University of California Press.



Image source: <https://pixabay.com/en/block-chain-personal-shaking-hands-2850276/>

KI Summer School

On August 14-25, Keio University, Karolinska Institutet (KI), Beijing University and King's College London jointly organized the Summer School at KI. Director Tsumoto, Deputy Director Yoshihara and International Program Associate Yamashita participated. This year's theme of the Summer School was "brain ageing". The aim was to raise the knowledge about the brain's ageing and its cellular and molecular mechanisms, and was aimed for graduate students. Lecturers and graduate students participated from each organizing institution as well as many other participants. On the 16th a mini symposium was held at Nobel Forum at KI, where lecturers from the organizing institutions held presentations. The participants listened attentively. After the symposium, JSPS Stockholm Office sponsored a reception, where the researchers from the four countries could get to know each other, network and exchange information.



The eager participants listening to a lecture



Group photo of the lecturers

KVA-JSPS Seminar with Prof. Kuraku

The first KVA-JSPS Seminar in FY2017 was held on September 4, 6 and 7 at Uppsala University, KI and the University of Gothenburg. Director Tsumoto, Deputy Director Yoshihara and International Program Associate Okamoto attended.

This seminar series is jointly organized by JSPS Stockholm Office and the Royal Swedish Academy of Sciences (KVA). The lecturers for these seminars are proposed by members of KVA, who are eminent researchers within all fields in Sweden, and they suggest a Japanese researcher whose research is of interest in Sweden. For this seminar, Prof. Shigehiro Kuraku, Unit Leader at RIKEN Center for Life Science Technologies in Japan was invited as a speaker. He presented lectures on the theme genomic studies of vertebrates. The lectures were well-attended with many eager participants who asked many questions.

Please find a report by Prof. Kuraku on page 9.



Prof. Kuraku holding his lecture at Uppsala University

KVA-JSPS Seminar with Prof. Urade

On September 4, 6, 7 and 8, the second KVA-JSPS Seminar in FY2017 was held at Lund University, KI (twice) and Uppsala University. Director Tsumoto, Deputy Director Yoshihara and International Program Associate Yamashita attended.

Specially invited speaker from Japan for this seminar was Prof. Yoshihiro Urade, International Institute for Integrative Sleep Medicine (WPI-IIIS) at the University of Tsukuba. On the 4th he held a lecture called “Biochemical properties of lipocalin-type prostaglandin D synthase”, and the following lectures also presented the results of his top-class research. Prof. Urade’s institution at the University of Tsukuba was accredited “World Premier International Research Center Initiative (WPI)” by the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT), and JSPS assists in the implementation of this program. After each lecture a Q&A session was held with many eager participants who wanted to ask many questions. The activities of JSPS and WPI were also presented before each lecture.

Please find a report by Prof. Urade on page 10.



Prof. Urade presenting at Lund University

KVA-JSPS Seminar with Dr. Carninci

On September 18, 19 and 21, the third KVA-JSPS Seminar in FY2017 was held at KI Huddinge Campus, Uppsala University and SciLifeLab at KI Solna Campus. Director Tsumoto, Deputy Director Yoshihara and International Program Associate Okamoto attended. Invited speaker from Japan was Dr. Piero Carninci, Division Director at RIKEN Center for Life Science Technologies in Japan. His lecture on all venues was titled “An emerging landscape of transcriptome complexity” and the lectures were well-attended with many eager participants.

Please find a report by Dr. Carninci on page 11.



Dr. Carninci holding a lecture at KI

Stockholm-Tokyo Workshop

“Living longer and healthier in an ageing world”

On September 21-22, a workshop on Active Ageing – Living longer and healthier in an ageing world – was held at the Nobel Forum at KI. The workshop was jointly organized by the University of Tokyo, Stockholm University, KTH Royal Institute of Technology and KI.

The opening ceremony started with a welcome speech by the university leaders: Prof. Ole Petter Ottersen, Vice-Chancellor of KI, Prof. Sigbritt Karlsson, President of KTH Royal Institute of Technology, Prof. Astrid Söderbergh Widding, Vice-Chancellor of Stockholm University and Prof. Mamoru Mitsuishi, Executive Director and Vice President of the University of Tokyo. Then, H.M. Queen Silvia of Sweden held an inaugural speech and H.E. Ambassador of Japan to Sweden Jun Yamazaki held a speech to the audience of approximately 90 persons. Director Tsumoto presented JSPS activities for the audience on the first day. The lecture hall was filled with lectures and discussions, and the first day was concluded with a reception that was hosted by JSPS Stockholm Office.



H.M. Queen Silvia of Sweden during her inaugural speech



Participants in Nobel Forum listening to the presentations

Signing Ceremony

On September 25, a signing ceremony for a strategic partnership between the University of Tokyo and three universities in Stockholm: Stockholm University, KTH Royal Institute of Technology and KI, was held at Spökslottet, administered by Stockholm University. Director Tsumoto and Deputy Director Yoshihara participated. After the signing ceremony, Stockholm University's Vice-Chancellor Astrid Söderbergh Widding hosted a dinner during which the participants exchanged opinions and deepened their relationships.



The four university presidents after the ceremony at Spökslottet (Photo: Yanan Li)

Nobel Prize Announcements

On October 2-6 and 9, the 2017 Nobel Prize announcements were held at KI and KVA in Stockholm and at the Nobel Peace Center in Oslo.

Physiology or Medicine

Jeffrey C. Hall, Michael Rosbash and Michael W. Young “for their discoveries of molecular mechanisms controlling the circadian rhythm”

Physics

Rainer Weiss, Barry C. Barish and Kip S. Thorne “for decisive contributions to the LIGO detector and the observation of gravitational waves”

Chemistry

Jacques Dubochet, Joachim Frank and Richard Henderson “for developing cryo-electron microscopy for the high-resolution structure determination of biomolecules in solution”

Literature

Kazuo Ishiguro “who, in novels of great emotional force, has uncovered the abyss beneath our illusory sense of connection with the world”

Peace

International Campaign to Abolish Nuclear Weapons (ICAN) “for its work to draw attention to the catastrophic humanitarian consequences of any use of nuclear weapons and for its ground-breaking efforts to achieve a treaty-based prohibition of such weapons”

Economic Sciences

Richard H. Thaler “for his contributions to behavioural economics”

MIRAI Seminar

The first MIRAI Seminar was held at Lund University on October 16-19. Director Tsumoto, Deputy Director Yoshihara and International Program Associate Yamashita participated.

The seminar, which was titled “Including Large-Scale Research Facilities and their Potential for Research and Society”, contained lectures on the theme “sustainability” by Japanese and Swedish representatives from the academia and industry sector, as well as a panel discussion. This seminar is the first seminar of the MIRAI Project, which was initiated after the Japan-Sweden University Presidents’ Summit which was held in Tokyo in October 2017. The seminar was jointly organized by 8 Japanese universities and 7 Swedish universities. Many participated from the academia, public officials and the business sector from several different countries.

Torbjörn von Schantz, Vice-Chancellor of Lund University, opened the seminar. This was followed by presentations about the current state of the Swedish and Japanese science and technology policies. Mitsuyuki Ueda, Director, International Science and Technology Affairs Division, Science and Technology Policy Bureau, MEXT, represented the Japanese side and Jonas Björck, Director, Division for Research Policy, Ministry of Education and Research, represented the Swedish side. Then, a panel discussion titled “Challenges for future science”, one of the seminar’s main features, was held among seven researchers from both countries. Concluding the morning session, Director Tsumoto presented JSPS’ activities and Executive Director of the Swedish Foundation for International Cooperation in Research and Higher Education (STINT) Andreas Göthenberg presented STINT’s activities respectively. In the afternoon session, workshops were held in the three fields “Materials Science”, “Sustainability” and “Ageing”. The participants could share their latest results in cutting edge research and network with each other.



The panel discussion



The beautiful venue in the Lund University Main Building



The participants networking and mingling

SAC Activity Seminar with Prof. Osumi

On August 23-24, JSPS Alumni Club in Sweden (SAC) arranged its first SAC Activity Seminar of FY2017. It was held at Linköping University and was organized by SAC member Prof. Heriberto Rodriguez-Martinez. The title of the seminar was “Andrology: Reproduction and health during a man’s lifetime”. The seminar was opened by the organizer and then Director Tsumoto presented JSPS’ activities. Specially invited speaker from Japan was Prof. Noriko Osumi, Department of Developmental Neuroscience at Tohoku University Graduate School of Medicine. She held a lecture titled “Paternal aging affects offspring’s behavior possibly via an epigenetic mechanism involving a transcriptional repressor RE1-silencing transcription factor (REST)”. Approximately 40 participants attended the two-day seminar and it was successful.

Please find a report written by Prof. Osumi on page 13.

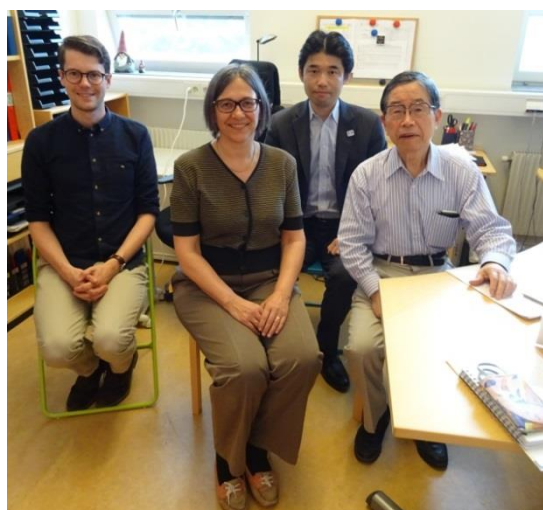


Group photo of the participants

JSPS Pan Nordic Alumni Club Chair Meeting via Skype

On August 25, the second JSPS Pan Nordic Alumni Club Chair Meeting was held at JSPS Stockholm Office through Skype. Adjunct Prof. Kristiina Jokinen, chair of JSPS Alumni Club in Finland (ACF) participated at JSPS Stockholm Office and Prof. Göran Thor, chair of SAC and Prof. Carl Winsløw, chair of JSPS Alumni Club in Denmark (ACD), participated through Skype. Director Tsumoto, Deputy Director Yoshihara and Office Assistant Nielsen attended.

The JSPS Pan Nordic Alumni Club Chair Meeting was initiated in FY2016. It is planned to be held annually in order to create a platform for the chairs of the related clubs to meet and exchange information. Through this meeting, possibilities to hold joint efforts among the three countries open up, while making the most of the respective club’s activities. It also opens up for collaboration. During this year’s meeting, the focus was how to enhance the clubs’ activities in the future.



ACF Chair Adj. Prof. Jokinen visited JSPS Stockholm Office and participated in the meeting

SAC Board Meeting

On September 18, SAC held a board meeting online. SAC board chair Prof. Thor informed what they discussed during the JSPS Pan Nordic Alumni Club Chair Meeting. Prof. Pázsit shared his thoughts about the first SAC Activity Seminar of the year and the board started planning upcoming events that will be held this upcoming winter.

SAC Activity Seminar with Prof. Nishikawa

On October 19, the second SAC Activity Seminar of FY2017 was held at the Swedish School of Textiles at the University of Borås. The title of the seminar was “Smart Textiles – Technology for Medicine and Healthcare”. Specially invited guest from Japan was Prof. Atsushi Nishikawa from Shinshu University.

SAC board member Dr. Joel Peterson, Senior Lecturer at the University of Borås, organized this seminar and it was opened by Dr. Peterson. Prof. Nishikawa gave the first lecture of the day titled “Human Robot Interaction in Minimally Invasive Surgery and Therapy”. He explained the research in the field of robotics in medicine and its connection with the research on textiles. Important connections are, for example, sterile textiles and materials and how they are used together with robots. After Prof. Nishikawa, six speakers talked about smart textiles and how to incorporate them into healthcare and medicine, as well as showing concrete examples of products that were the results of the smart textiles research. For example, the Mollii suit, as seen in the picture, through which electrodes stimulate the muscles in persons who are suffering from conditions that create spastic muscle movements or a compression product that applies exactly the same pressure on all surfaces it covers.

The seminar was attended by approximately 70 people and it was followed by a guided tour of the Swedish School of Textiles.



Dr. Peterson opening the seminar



Prof. Nishikawa during his presentation



Group photo of the participants



The Mollii suit

Visiting Sweden for KVA-JSPS Seminar

Shigehiro Kuraku, Unit Leader, Phyloinformatics Unit,
RIKEN Center for Life Science Technologies

I experienced quite a few times when completely separate pieces of knowledge, ideas, and human ties suddenly get linked to each other through unexpected reaction. In everyday research activities, what we plan is rarely processed just as planned and often delayed if not organized very well. But, such unexpected reaction between different elements can accelerate research advancement and provide new insights. In fact, my visit to Sweden bore exactly this type of reactions.

It was a few years ago when Prof. Dan Larhammar of Uppsala University first allured me to visit Sweden, especially in a warm season, before October. As a chief applicant, he kindly applied for the chance for KVA-JSPS Seminar, and it was finally approved earlier in 2017. My track record may not be so attractive as that of many other awardees, but there was no reason to miss this exceptional opportunity. I made an arrangement at my work so that my leave did not cause difficulty, and left for Sweden in early September in 2017.

Since I started biological research, my field has shifted from molecular evolution to developmental biology, and later to genome informatics. These fields overlap with each other, but they leave only little overlap of typical approaches and researchers' communities for those fields. I have strived to bridge these separate fields, and I am still far from completion. Prof. Larhammar has also bridged different fields, namely, between neuroendocrinology, molecular evolution, and genome informatics. In his case, he has already established his expertise in neuroendocrinology when he stepped into molecular evolution and genome informatics, which I heard was assisted largely by Dr. Lars G. Lundin who first showed whole genome duplication with solid evidence of genomic sequences. It goes without saying that evolutionary approaches and genome-wide view assist deeper understanding of the origin of the groundplan of molecular dynamics in the human as well as the mechanism that gave rise to biodiversity.

In Uppsala University, I gave a lecture in the Svedberg Seminar about the whole genome duplication in relation to the advent of vertebrates on September 4th. During the two-day long stay in Uppsala, I discussed a lot about genome evolution with Prof. Larhammar and Dr. Lundin, and visited four different laboratories including the one led by Prof. Per E. Ahlberg for various exchanges about molecular and morphological evolution, as well as technological development for studying them. It was especially insightful to meet Prof. Ulf Gyllenstein who supervises SciLifeLab, the national infrastructure for molecular technologies in life sciences, because one of my missions at my affiliation is facility management, including equipment maintenance, human resource organization, and achievement promotion.

In the morning of September 6th, I left Uppsala for Stockholm, where I gave a lecture introducing a new hypothesis about a mechanism that allows secondary gene loss at KI. I was not confident enough to attract researchers outside the fields, but after my lecture I could receive a few insightful questions. Thanks to a well-organized escort by Prof. Sten Linnarsson, my short visit to Stockholm only for five hours or so was very fruitful, which also allowed me to meet a few rising Japanese researchers.

By train, I moved to Gothenburg on the Swedish west coast in the early afternoon of the same day. It was surprising but useful that one can get access to Wi-Fi even at railway stations and airports in Sweden, with an 'eduroam' account. This could mean tight backup for those involved in education and academic research and differ between countries. On the 7th at Gothenburg University, I gave a lecture about shark genome evolution, for the audience also working on marine organisms with little molecular sequence information, in the campus including its prestigious botanical garden. On the 8th, Dr. Tomas Larsson, the host of my stay, very kindly guided me to Kristineberg Marine Station of Gothenburg University, where I learned a lot about research about marine, cold-water fauna.

Through my lectures at three different places, I got wealth of inspiration about ongoing research projects. In addition, it allowed unexpected reaction in key themes that I will probably pursue. They include how the general public and biologists in a country that depends on seafood live with biodiversity and how a sustainable research environment should be organized, the latter of which should be crucial in overcoming growing concerns about decreasing competitiveness of Japanese academia. At last, I would like to give my sincere gratitude to those who supported my seminar trip.



Prof. Kuraku delivering his lecture

KVA-JSPS Seminar 2017 Report

Yoshihiro Urade, Professor, WPI-International Institute for Integrative Sleep Medicine (WPI-IIS), University of Tsukuba

On Sept 4, 6, 7 and 8, I gave four lectures about my studies on prostaglandin D₂ (PGD₂), which is a prostanoid produced by two distinct types of synthase (H- and L-PGDS), stimulates 2 G-protein-coupled receptors (DP1 and DP2), and acts as an endogenous sleep substance in the brain as well as also functions as an inflammatory mediator.

In the 1st lecture at Lund University, hosted by Prof. Bo Åkerström, I introduced the biochemical and structural properties of L-PGDS as a member of the lipocalin superfamily, in which his target protein α_1 -microglobulin is also included. L-PGDS is responsible for the biosynthesis of the endogenous sleep substance PGD₂ in the brain. L-PGDS is also secreted into the cerebrospinal fluid as β -trace protein, a major protein of human cerebrospinal fluid, and likely acts as an extracellular transporter of PGD₂. In the 2nd lecture, given at KI and hosted by Emeritus Professor Bertil Fredholm and Prof. Torbjörn Åkerstedt, I talked about the research on sleep substances including PGD₂ and adenosine. I started the research on adenosine as a mediator of PGD₂-induced sleep and then collaborated with Prof. Fredholm to demonstrate that the awaking effect of caffeine depends on adenosine A_{2A} receptors. We published this finding in 2005 in *Nature Neuroscience*. This study led to the development of an adenosine A_{2A} receptor-activating sleep supplement composed of Japanese sake yeast in 2015 and the demonstration of the crucial role of adenosine A_{2A} receptor-possessing neurons in the nucleus accumbens on motivational arousal, findings published this year in *Nature Communication*. In the 3rd lecture at the biomedical center of Uppsala University and hosted by Terese Bergfors, a senior research engineer of protein crystallography, I introduced the crystallographic structures of L-PGDS and H-PGDS. Both enzymes catalyze the same reaction, although there is no homology in their amino acid sequence and tertiary structure. L-PGDS is the only enzyme among the lipocalin family composed of various secretory transporter proteins, whereas H-PGDS is the first known vertebrate homolog of the sigma class of glutathione S-transferase. These enzymes have evolved from different origins and acquired the same catalytic function as PGD₂ synthase; i.e., they are a new example of functional convergence. I have used for these past twenty years the International Space Station to generate high-quality crystals of both enzymes under a microgravity condition with very little convection flow and thereby developed inhibitors highly selective for H-PGDS based on high resolution (about 1 Å) crystallographic structures of human H-PGDS complexed with lead compounds of inhibitors. In the last lecture, again at KI and hosted by Emeritus Professor Fredholm, the title of my talk was “Biochemical and physiological studies on two distinct types of PGD synthase, with special reference to possible treatment of Duchenne muscular dystrophy (DMD)”. DMD is the most common type of muscular dystrophy, affecting about 1 out of 3,500 boys. DMD is a severe X-linked muscle disease caused by a mutation in the gene of dystrophin, a cytoskeletal protein, and is characterized by progressive skeletal muscle atrophy. There is still no cure for DMD. We found that grouped necrotic muscle fibers in patients with DMD expressed H-PGDS and so we developed potent inhibitors, whose IC₅₀ values for PGD₂ production in cultured human cells were 30 to 80 nM, based on the fine structure of the inhibitor within the catalytic pocket of human H-PGDS. Chronic treatment with those inhibitors efficiently prevented the expansion of muscular necrosis in dystrophin-deficient *mdx* mice and DMD beagle dogs. Clinical trials of TAS-205, an H-PGDS inhibitor, for treatment of DMD patients began in Japan starting in Sept. 2014. The Phase 1 study was successfully completed (see the entry in clinical trials.gov, NCT02246478). The Phase 2 study was initiated in May 2016 (NCT02752048) to evaluate the efficacy of this drug to prevent the locomotive disability after administration of it to DMD patients for 24 weeks. I hope that TAS-205 will be demonstrated to be able to slow down the loss of skeletal muscle in DMD boys.

Prostaglandins were first discovered at the KI by Ulf von Euler (Nobel Prize winner in 1970), and their chemical structures were thereafter determined by Sune Bergström and Bengt Samuelsson (Nobel Prize winners in 1982). At Uppsala University, many physical theories and technologies used for protein analyses have been developed by many excellent scientists, such as Anders Ångström, Svante Arrhenius, and Theodor Svedberg (Nobel Prize winners in 1926). I am proud to have been given the opportunity to present my studies on PGD₂ and H/L-PGDS in these outstanding institutes. Finally, I wish to express my appreciation to the members of the JSPS Stockholm Office, including Dr. Tadaharu Tsumoto, for having arranged my lecture series.



Prof. Urade during his lecture

Globalization of Japanese Science Goes through Sweden

Piero Carninci, Division Director, Division of Genomic Technologies (DGT),
RIKEN Center for Life Science Technologies

I visited Sweden for giving talks at the JSPS-KVA Seminar from 18 to 24 September. The choice of Sweden is not random at all for us, because we have been interacting with researchers in Sweden over the past fifteen years during FANTOM project where we started a large international collaboration for genome-wide RNA analysis, particularly with the strength of bioinformatics in Sweden and the strength of RIKEN to produce datasets on its original technologies, called full-length cDNA technology and CAGE technology.

Because of this existing interactions, I visited three labs giving talks, at KI, Uppsala University and Science for Life Laboratory. There were fresh chances to broaden existing collaborations, to start new collaborations and to reinforce existing interactions.

My talks were centered on the FANTOM project, which aims to understand the mechanisms of human genome by large-scale RNA analysis.

In the early phase of FANTOM, we developed technologies, the full-length cDNA and CAGE, to make possible accurate identification of genes and discovered large amount of non-protein-coding RNAs (ncRNAs), which was out of common sense at that time and hard to be believed by some researchers. We had to handle the rejection from parts of scientific community and finally our ideas were broadly accepted, which developed a new paradigm how genome works. I tried to bring this example to let young investigators know how to handle rejections in science and how to continue to insist the real interpretation of the data till it has been broadly recognized.

I also emphasized a little bit the importance of surprises in this project. Many things that we have understood during this project, for instance, the existence of many ncRNAs, had not been planned at the beginning, but very often in data something hidden and we must discover those hard to be seen without bias.

As ongoing projects, I discussed particularly the work on RIKEN Single Cell Project that is again creating strong loops with researchers in Sweden. Also I introduced a large international collaboration, the Human Cell Atlas, which is a project not led by only the US and the UK, but various other countries, including Sweden and Japan.

I believe that the visit was successful. I could have large number of interactions with researchers at both senior and young levels. All talks were well attended, especially by many young investigators, which is very important to develop the next generation of scientists.

Finally, I really appreciate this invitation of JSPS, which gave me a chance to bring researchers in Sweden to know better what we have been doing. I also would recommend anyone to take advantage of this chance by JSPS to visit Sweden and learn different way to research, different way of thinking, different way to interact, different way to manage situation and different philosophy, because the interaction between Japan and Sweden should be strengthened to take these countries' science to an even higher level.



Dr. Carninci during his lecture



The large audience at KI

Strategic partnership workshop:

“Active ageing: Living longer and healthier in an ageing world” held jointly by the University of Tokyo and Stockholm University Group

Yuto Kitamura, Associate Professor, Graduate School of Education, The University of Tokyo

Akiko Kakuta, Assistant Manager, International Affairs Department, The University of Tokyo

As part of a strategic partnership project between the University of Tokyo and the “Stockholm University Group” (Stockholm University, the Royal Institute of Technology (KTH) and KI), an international workshop titled “Active ageing: Living longer and healthier in an ageing world” was held from September 20 to 22 at the Nobel Forum, KI. Ageing, the theme of this joint workshop, is an important social issue in both Sweden and Japan. Workshop participants shared the findings of past interdisciplinary research activities and discussed future collaborative research opportunities. From Japan, 25 faculty members and students of the University of Tokyo, Osaka University, RIKEN, Tokyo City University and other institutions participated. On the Swedish side, more than 80 participants took part, comprising of faculty members, students of the above three academic institutions and government officials. This workshop was funded under the Top Global University Project administered by Japan’s Ministry of Education, Culture, Sports, Science and Technology (MEXT), and held with the assistance of the Japan Society for the Promotion of Science (JSPS) Stockholm Office. The workshop has also been recognized by the Embassy of Japan in Sweden as an official project marking the 150th anniversary of the establishment of diplomatic relations between Sweden and Japan.

Following the welcome reception held at the Nobel Museum on the 20th, the opening ceremony took place on the 21st with H.M. Queen Silvia of Sweden and H.E. Jun Yamazaki, Ambassador of Japan to Sweden. On behalf of the Stockholm University Group, KI’s Vice Chancellor, Ole Petter Ottersen, delivered his welcome remarks, followed by a speech by the University of Tokyo’s Executive Director and Vice President Mamoru Mitsuishi. Naoto Sekimura, Vice President of the University of Tokyo and Deputy Director General of the Division of International Affairs, then gave a presentation about the university’s strategic partnerships project. The presentation was followed by lectures and discussions regarding active and healthy ageing from three different perspectives: biophysics, biomedical science and social science.

On the 22nd, participants were divided into groups matching the three different perspectives and attended sessions, mainly given by young researchers, and participated in discussions regarding future collaborative research opportunities between the three leading academic institutions in Stockholm and universities in Japan. The participants then reassembled for a closing session. Chaired by Peter Gudmundson, former President of KTH, a lively discussion took place regarding future academic exchanges and collaborations between Sweden and Japan.

This joint workshop was held as part of the University of Tokyo project which was adopted by MEXT as the Top Global University Project. In this project, the university has established strategic partnerships with leading academic institutes around the world. After the workshop, on September 25th, the university signed a collaboration agreement with the three leading universities in Stockholm. Based on the strategic partnership agreement, the four universities are implementing interdisciplinary and cross-departmental research collaborations with a common theme of “sustainability,” and plan to further promote sustainable and diverse collaborative activities, including interactions between students and joint research projects in a wide range of fields.

A decision was made for the next joint workshop to be held in Tokyo in 2018, the year marking the 150th anniversary of diplomatic relations between Sweden and Japan. The workshop will provide an opportunity to think collaboratively from a variety of perspectives about the concept of a sustainable society, tackling not only the issues related to ageing, but also themes that are pertinent to both countries and are in need of academic attention. Such workshops are expected to further promote ongoing research collaborations and also increase future interactions among researchers and students beyond their fields of specialization.



The university presidents and H.M. Queen Silvia of Sweden
(Photo by The University of Tokyo)



Group photo of the participants
(Photo by The University of Tokyo)

SAC Seminar on Andrology: Reproduction and health during a man's lifetime

Noriko Osumi, Professor, Department of Developmental Neuroscience,
Tohoku University Graduate School of Medicine

On August 23 and 24, SAC activity seminar “Andrology: Reproduction and health during a man's lifetime” was held at Linköping University with the generous support by the Japan Society for the Promotion of Science (JSPS). Fortunately, I attended the seminar as a guest speaker from Japan. With a great effort by Prof. Heriberto Rodriguez-Martinez at Linköping University who organized and selected distinguished speakers within Sweden, a wide variety of topics were discussed from sperm to aging spanning man's lifetime, as well as issues related with gender dysphoria such as health care, egg preservation, and hormone treatment.

I could learn a lot of knowledge that I rarely get in touch with, and also talked at the session for Epigenetics on “Paternal aging affects offspring's behavior possibly via an epigenetic mechanism involving a transcriptional repressor REST”. Human epidemiological studies including a meta analysis using data of 5.77 million subjects obtained in Denmark, Norway, Sweden, Australia, and Israel have indicated that paternal age, rather than maternal one, has deleterious impacts on risk for various mental illnesses such as schizophrenia and autism spectrum disorders in their offspring. This could be an explanation why there is an epidemic rise in the number of autism spectrum disorder in modern countries where the marriage age is gradually increasing and more artificial reproductive technology has been used in these a few decades.

We have addressed this issue by using the mouse model. We have identified differentially methylated regions (DMRs) in aged sperm, among which existed a common motif for binding REST transcriptional repressor/chromatin modulator. We also found leaky/ectopic expression of genes in the developing brain derived from aged father. We are currently struggling to bridge these facts to draw a conclusive picture. It was fortunate that I could share my idea with audience by discussion at the session and over lunch and dinner.

The venue was the lecture hall near the cafeteria that provides meals, drinks, and snacks, helping participants to easily communicate with each other. I believe that “meetings” are held in order to meet people and know their ideas. In this regard, I think this SAC seminar was successful.

An authority in reproductive science Prof. Rodriguez-Martinez, who did a great job of well maintaining the seminar, was previously supported by JSPS to spend several months in Okayama University in Japan, and visited various places in Japan including Sendai where I am. His postdoc, Dr. Manuel Alvarez-Rodriguez, recently stayed at Yamanashi University for five months to learn experimental techniques. They both are grateful for their experience in Japan. I do hope that through such real communication with JSPS Alumni, more researchers/students in European countries will come to study in Japan in the future. Of course, I look very much forward to hosting someone who attended this seminar in our lab at Tohoku University that can provide comfortable accommodation within the campus and pleasant atmosphere to enjoy life.

Our webpage: <http://www.dev-neurobio.med.tohoku.ac.jp/english/index.html>

Tohoku University: <http://www.tohoku.ac.jp/en/>



Prof. Osumi during her lecture at Linköping University

On the following pages, reports from participants of the FY2017 JSPS Summer Program are published. This year's program was held between June 13 and August 23 and the following five young researchers from Sweden visited Japan to learn more about the Japanese research system and gain invaluable experiences. Please enjoy their reports.

Name: Ricardo Santos
Title: Ph.D. Student
Institution: Karlstad University
Host Institution in Japan: Tokyo Institute of Technology



Whether I was able to conduct my research according to my plan:

While I was at the Tokyo Institute of Technology, I was able to fulfill all the goals in my research plan, while establishing great relationships within my lab. The experimental work I did produced positive outcomes, which included several practical demonstrations and one accepted conference paper that I will later present this year. This was possible due to the proximity and availableness of everyone that I worked with.

Accomplishments and experiences I have never get unless I joined the Summer Program:

Regarding my research, I was able to use experimental wireless equipment related to my research that I don't have access to my home institution. Other than that, I travelled to different places in Japan and contemplated its beauty, often with other Summer Program fellows. My experience with my host family was so good that we have kept in touch since this program and I revisited them while I was still in Japan.

How do I make good use of this experience in my future research:

Most importantly, I will continue to work with my host research lab at the Tokyo Institute of Technology. Although most of that work will be done remotely, later this year I will spend four weeks in Berlin working with some of the researchers I met in Tokyo. We will perform larger scale experiments with a bigger testbed. With that, I'm positive that we will be able to disseminate our joint work in further publications in the near future.

Message for future participants:

Please enjoy Japan as much as possible. Work is very important, but the fact that you are on the opposite side of the world having this unique life experience should also mean that you should make the best of it. Eat a lot, drink a lot, travel a lot, sing a lot and go on adventures while you're there!

Name: Jakob Helander
Title: Ph.D. Student
Institution: Lund University
Host University in Japan: Tokyo Institute of Technology



Whether I was able to conduct my research according to my plan:

I shared an office with the assistant professor and a couple of Ph.D. students, and this helped me progress my work significantly since the close contact enabled us to participate in discussions on a regular basis. The host department also provided me with a desktop computer. Although the time span of the program was short, I felt that I got a lot of output from the two-month stay.

Accomplishments and experiences I have never get unless I joined the Summer Program:

I had the chance to get a hands-on experience with state of the art measurement equipment used in my field of study (antenna technology) at the institutional microwave laboratory. I also found it very rewarding to get to know the other JSPS participants. There was an enormous spread of academic disciplines and cultural backgrounds, but a common factor for all participants I met seemed to be their ambition and the devotion to their topic. Culture-wise, I attended the Yokohama Pikachu festival and experienced some beautiful views while biking the 70 km long Shimanami Kaido Bikeway running from Imabari to Onomichi.

(Continued from previous page)

How do I make good use of this experience in my future research:

I have obtained a better perception of how to conduct research in an international environment, which I think is a very valuable experience, especially if I want to pursue an international career after graduation. More specific for my field of research, I have learned a lot about alternative methods and techniques for addressing the same sorts of problems that I commonly encounter when conducting research in my department in Sweden.

Message for future participants:

I would encourage all future participants to be an active member of the host research group in order to not only maximize the research output, but also experience Japanese customs and culture through social interaction. This is essential in order to establish a long-term academic collaboration that is mutually beneficial. As an active member of the group, I also got to participate in research meetings and institutional seminars with international guest lecturers, a valuable experience that has helped me to gain a broader perspective on well-established and potential areas of application within my research field. Lastly, the JSPS program is an opportunity to conduct research in a new environment and a completely different setting, and as such it is a possibility to work with equipment and software that might be inaccessible otherwise.

Name:	Maximilian Thaller
Title:	Ph.D. Student
Institution:	Chalmers University of Technology
Host University in Japan:	Rikkyo University

**My backgrounds:**

Roughly speaking, in my doctoral studies I consider models of the universe filled with Vlasov matter - a matter model to describe, for example, galaxy clusters. I had observed that a group of Japanese researchers around Tomohiro Harada had published work in which they studied the system by numerical means. I also heard a member of the group, Chulmoon Yoo, talking at a conference in Vienna, in February 2017. This made me very curious to learn about their insights into the nature of the equations and their experiences with numerics, to get new inspiration for my own ongoing numerical project or possible analytical work. In Japan I could indeed solve some problems and make progress. I wrote code for a solver of the Vlasov equation based on the particle in cell method and learned strategies to solve the constraint equations.

Accomplishments and experiences I have never get unless I joined the Summer Program:

At several universities I gave talks and always found a very interested audience. The researchers in Japan were often used to different approaches of General Relativity from my research environment in Europe. This led to a fruitful exchange and some concrete project ideas that were not expected or planned. Most of all, I want to mention a project that I started towards the end of my stay together with my host professor, Tomohiro Harada. We had discussed several times some unique results for matter solutions of the Einstein equations. A physical interpretation of these results can be that if a star is not rotating, it has to be spherically symmetric. We want to apply a mathematical theorem proved by R. Beig and W. Simon to establish the same for globular clusters. This means if a globular cluster does not change its overall shape and is not rotating, it must be spherically symmetric.

Message for future participants:

For me the JSPS Summer Program was a very enriching and nice experience. It was very well organized and I felt well taken care of. I know that the atmosphere at the department can be very different at different institutions but I perceived it as open, friendly, social and with normal working hours. Of course there are many small cultural pitfalls but that is part of the experience and in the frame of the Summer Program I never felt awkward or alone.

Name: Giulia Gaudenzi
Title: MSc, Ph.D. Student
Institution: Karolinska Institutet
Host University in Japan: Institute of Tropical Medicine at Nagasaki University



Overview of my stay in Japan:

Dear JSPS, it has been a privilege and an honour to have been selected as a fellow of the Summer Program. I had a superb time in Japan with my colleagues from the Institute of Tropical Medicine (NEKKEN) of Nagasaki University and with JSPS Summer Program participants. Alongside my research, seminars and learning activities, I visited museums, art exhibitions - including Ghibli Studio's itinerary exhibit, beautiful temples and shrines. I learnt about Japanese culture by interacting with local people at amazing culinary experiences and the summer traditional fireworks festivals. During weekends, I extensively visited Kyushu hotspots and I enjoyed the beautiful nature and seaside around Nagasaki prefecture. As my research is in international health, I also had the chance to conduct part of my field work in Nepal together with Prof. Taro Yamamoto's research team and one week at Juntendo University, Department of Cellular and Molecular Parasitology, in the laboratory of Prof. Toshihiro Mita. JSPS Summer Program has been a truly memorable time, not only for the strong scientific value of it but because it was embedded in the wonderful Japanese cultural experience.

Accomplishments and experiences I have never get unless I joined the Summer Program:

Two months turned out to be not enough to fully execute my research plan; however, I had the chance to contribute to two major research projects that were ongoing in the host laboratory and will likely result in a research publication during next year. It was a true exchange of knowledge as my research expertise matched the needs of the laboratory, and I could conduct my research on rare samples only available at Institute of Tropical Medicine. Although short, it has been very rewarding scientifically.

The Department of International Health at NEKKEN integrates a variety of approaches in epidemiology, statistics, ecology and biological evolution to provide more detailed understanding and insight on infectious diseases of global health importance. This short-term pre-postdoctoral scholarship from JSPS gave me a chance to join the research group of Prof. Yamamoto and contribute to multiple projects within the department, including biomedical field research in Nepal. I also participated in the research life of the institute by attending seminars, public talks and research presentations. All of these activities have made the learning experience invaluable. The department is also active on a policy level, emergency relief, in health promotion activities and empowerment at the rural community level; therefore, I could integrate a new dimension of translational medical research in my project. JSPS activities, from the organized conference and scientific exchange to the language classes, have been of high quality and very engaging.

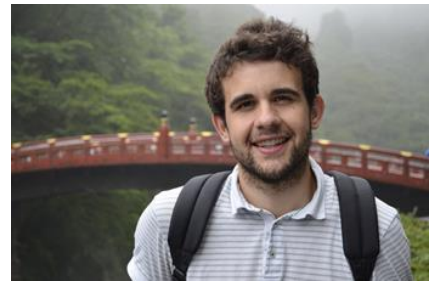
Thanks to JSPS Summer Program grant, I was allowed to explore a new scientific subject for my future research career and this was an invaluable opportunity. The Institute of Tropical Medicine where I conducted my fellowship is one of the few in the world dedicated to global health research and be part of it was very exciting and unique! My scientific network and experience is thanks to being part of the program.

Message for future participants:

Apply, apply, apply! The Summer Program has been a great pre-postdoctoral experience. Use your brain like a sponge to learn as much as you can and explore beautiful Japan in your free time. An overseas experience will make you richer, not only scientifically but also as a person. You'll learn about another culture but also about yourself and your own culture. Japan is a genuinely hospitable country and JSPS Summer Program is incredibly engaging. You also expand your network and make friends for life!

Reports – Summer Program

Name: Ruben Asensio-Torres
Title: Ph.D. Student
Institution: Stockholm University
Host University in Japan: University of Tokyo and National Astronomical Observatory



Whether I was able to conduct my research according to my plan:

In the beginning it was difficult to get the data we wanted for reasons beyond our control. However, my host researcher and I started to practice and developed the pipeline that I was going to use later on. I was provided with an office that was meant to be for visiting researchers.

Accomplishments and experiences I have never get unless I joined the Summer Program:

First of all, I got the experience of conducting research with Japanese colleagues in a Japanese environment, which is pretty different when comparing it to Sweden. In particular, I enjoyed the first-week orientation session with the rest of the other JSPS fellows and the cultural immersion activities. I also took the opportunity to discover the two sides of Japan: from the modern and innovative Tokyo to more traditional and historical places such as Kyoto.

How do I make good use of this experience in my future research:

Besides all one can learn being in contact with a different culture and way of doing research, I also got involved in a Japanese-American collaboration. This group controls a top-notch instrument specific to my research field. This partnership will allow me to get several data sets to work with in the future, and to continue the cooperation with these institutions.

Message for future participants:

From the research point of view, I would suggest to collaborate as much as they can with their host researcher and try to give as many talks as possible at different institutions. This will hopefully create a long-term stable collaboration. Other than that, enjoy the experience and travel a lot during the weekends (get a JR pass). Learning a bit of Japanese beforehand will also be more than useful.

Reports – Meetings

2017.08.02

Visit by First Secretary Akira Suzuki from the Embassy of Japan in Sweden

The new First Secretary, Mr. Akira Suzuki, of the Embassy of Japan in Sweden, visited JSPS Stockholm Office and met with Director Tsumoto and Deputy Director Yoshihara. He took the position in late July and introduced himself. The participants shared information on upcoming events and confirmed future collaborations.



(From the left) Deputy Director Yoshihara, First Secretary Suzuki and Director Tsumoto

2017.08.10

Visit by staff from Hokkaido University Europe Office

Prof. Shinichiro Tabata, Director, Mr. Takehiro Okabe, Deputy Director and Dr. Tomoko Tabata, Associate researcher, visited JSPS Stockholm Office and met with Director Tsumoto and International Program Associate Yamashita. Director Tabata has just taken office in Helsinki and introduced himself. They discussed the activities of both offices.



Mr. Okabe, Prof. Tabata, Director Tsumoto, Dr. Tabata and Ms. Yamashita

2017.08.25

Visit by Prof. Noriko Osumi, Tohoku University

Prof. Osumi from the Department of Developmental Neuroscience at Tohoku University Graduate School of Medicine visited JSPS Stockholm Office and met with Director Tsumoto, Deputy Director Yoshihara, International Program Associate Okamoto and Office Assistant Nielsen. They exchanged opinions about the SAC Activity Seminar organized at Linköping University, to which Prof. Osumi was invited as a lecturer.



Assistant Nielsen, Deputy Director Yoshihara, Prof. Osumi and Director Tsumoto

2017.08.30

Visit by former International Program Associate Eriko Kitajima

Ms. Kitajima, an officer of the International Student Exchange Division at Tokyo Institute of Technology, visited JSPS Stockholm Office and met with all the staff. Ms. Kitajima worked at JSPS Stockholm Office as an International Program Associate last year. She visited the office since she was visiting Stockholm as a part of an exchange program together with students from Tokyo Institute of Technology. They discussed her new position and updated her on JSPS activities.

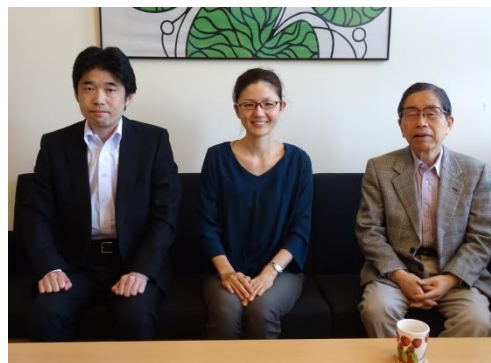


Ms. Yamashita, Ms. Kitajima, Ms. Okamoto, Director Tsumoto, Dep. Director Yoshihara and Mr. Nielsen

2017.09.05

Visit by Dr. Sachiko Baba, Osaka University

Dr. Baba, Vice Director at the Center for International Relations at the Osaka University Graduate School of Medicine, visited JSPS Stockholm Office and met with Director Tsumoto, Deputy Director Yoshihara and International Program Associate Okamoto. Dr. Baba visited the Stockholm to discuss a joint seminar which is planned to be organized by Osaka University and KI next year.

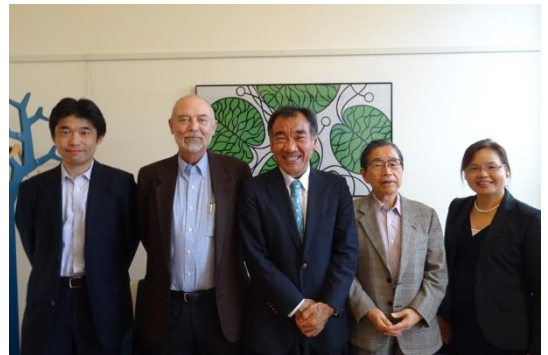


Dep. Director Yoshihara, Dr. Baba and Director Tsumoto

2017.09.06

Visit by Prof. Yoshihiro Urade, University of Tsukuba

Prof. Urade, International Institute for Integrative Sleep Medicine (WPI-IIIS) at the University of Tsukuba and two more related to the KVA-JSPS seminar visited JSPS Stockholm Office and met with Director Tsumoto, Deputy Director Yoshihara and International Program Associate Yamashita. Prof. Urade was the speaker at the KVA-JSPS Seminar series which were being held on different universities in Sweden. They discussed these seminars as well as the future of science.



Dep. Director Yoshihara, Prof. Fredholm, Prof. Urade, Director Tsumoto and Ms. Wang

2017.09.22

Visit by staff from the University of Tokyo

Vice President of the University of Tokyo and Deputy Director General of the Division of International Affairs Naoto Sekimura, Associate Professor Yuto Kitamura and Assistant Manager Akiko Kakuta from the University of Tokyo visited JSPS Stockholm Office and met with Director Tsumoto, Deputy Director Yoshihara and International Program Associate Yamashita. They visited Stockholm to organize a workshop together with Stockholm University, KTH Royal Institute of Technology and KI. They discussed the progress of the event.



Dep. Director Yoshihara, Vice-President and Dep. Director General Sekimura, Director Tsumoto, Ms. Kakuta and Ass. Prof. Kitamura

2017.09.26

Visit by staff from Shizuoka University

Prof. Shigehiko Suzuki, Vice-President and Prof. Toru Aoki, president adviser from Shizuoka University visited JSPS Stockholm Office and met with Director Tsumoto and International Program Associate Yamashita. Vice-President Suzuki presented the university's international efforts and programs. They shared academic information from both sides.



Prof. Aoki, Director Tsumoto and Vice-President Prof. Suzuki

The International Language

Oskar Nielsen, JSPS Stockholm Office Assistant

People have in all times been moving between cities, countries and continents in search for new knowledge. This is also very evident for universities and institutions for higher education. International mobility has always been the first way of internationalization of the universities. International mobility was one of the main roles in the creation of the University of Tokyo in Japan, to which professors were recruited from all over the world. For a researcher, moving abroad to another country for conducting their research could be of uttermost importance and create new results that wouldn't be found at their home institution. Widening one's perspectives culturally and mentally is also one of the results of going international, both on a personal and a public stage.

However, the biggest problem when talking about internationalization is communication. How does one communicate with other researchers within the same field, or with people in one's surroundings? Today, the unofficial lingua franca of the world is English. Most people around the globe know it to some extent, but although this, it is always easier to gain information and express your opinions in your native language. This might create problems at, for instance, universities where researchers need to, as precisely and adequately as possible, present their research results in a language they weren't born into.

Another problem is the teachers at the universities who have objections to teaching in English. At institutions with a large number of international students, this means that these teachers might limit their teaching, and its quality, to local students only. This creates disadvantages both for the international students as well as for the institutions, which might lose future international students.

In Swedish there is a phrase called "domänförlust", which translated into English becomes "loss of domain". The definition of a loss of domain is when one specific field, for example, at a Swedish university, only uses English – during lectures, in papers and reports. And therefore the Swedish within that field "disappears" and is lost. In Sweden this is common in the fields of natural sciences and IT.

However, using more and more English within the higher education institutions is not only equivalent to problems. It opens up doors for international students to come and widen their horizons, gain invaluable experiences and get outstanding results on their research.

Sources:

<http://www.universityworldnews.com/article.php?story=20170829100757301>

<http://www.universityworldnews.com/article.php?story=2017100413425211>

<https://newsvoice.se/2017/02/05/engelska-spraket-koncernsprak/>

Academic Information

Jonas Gardell Awarded the KTH Great Prize 2017

Each year one recipient is awarded the KTH Royal Institute of Technology's Great Prize. The prize was initiated in 1944 when KTH received a donation from an anonymous donator. This donation still finances the prize today and the prize amount stands on 1.2 million Swedish kronor. The prize is awarded to a Swedish citizen who promotes the prosperity of the Swedish people through epoch-making efforts or discoveries and the creation of new values, especially in the field of technology, but also in science and art. Alternatively the prize can be awarded to a person who has had a big influence on the spiritual life of his/her own people through artistic activities.

This year's recipient was the Swedish author, playwright, comedian and artist Jonas Gardell. The reason he was awarded reads as follows: "With a mixture of deep seriousness and intense humor, Jonas Gardell gently helps us to confront our prejudices and shortcomings. Through his borderless artistry, he has changed and deepened our perspective when it comes to alienation and its devastating consequences. At the same time, he earnestly defends human dignity and the right to self-determination."

The prize award ceremony was held during the KTH's annual promotion ceremony in the Stockholm Concert Hall on November 17.

Source: <https://www.kth.se/en/om/fakta/fame/kths-stora-pris/2017-jonas-gardell-1.738203>

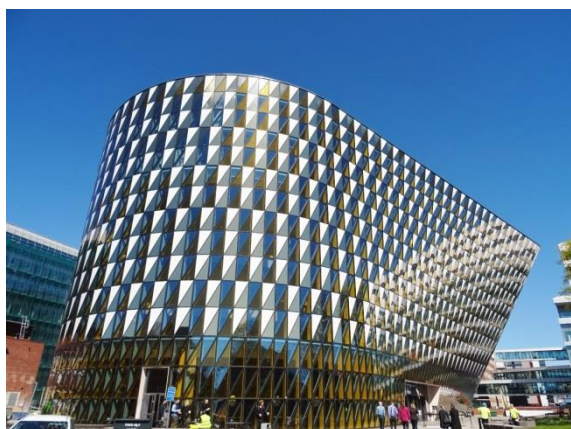
Karolinska Institutet the Best Swedish University

The Shanghai Ranking issued by the organization Academic Ranking of World Universities has been published. According to this ranking, KI is the top Swedish university, on place 44, which is higher than last year. Number one on the list is Harvard University in the USA.

The world's universities are reviewed regarding the number of researchers who have become Nobel laureates and other distinct awards. It also considers the number of researchers who have been cited by Thomson Reuters and how many papers have been published in the journals Nature and Science. The ranking also looks at the number of papers indexed in Science Citation Index and Social Science Citation Index.

According to the Shanghai Ranking, only Uppsala University and Stockholm University make it within the top 100. One of the common critics regarding this ranking is that many of the top universities conduct very little basic research and thus publish a lot of scientific articles and therefore climb the ranking lists.

Source: <https://www.dn.se/ekonomi/jobbb-karriar/karolinska-bast-av-svenska-universitet-pa-varldsranking/>



Aula Medica at KI

Decreased Interest in Language Studies

The interest in studying languages at Danish higher educational institutions is decreasing. Not only is the number of language courses taught at Danish universities dropping, there are also many empty seats at the language courses that are being offered. The number of Danish university students marking the languages German, Spanish and French as their first choice dropped from 371 in 2011 to 280 in 2017, in contrast with the 91,832 first priority choices in total at the Danish universities and higher education institutions.

This decrease is happening despite a warning done by the Confederation of Danish Industry (DI) as a result of a survey regarding the need of language competence among its member companies. They found out that more than 80% of the companies reported communication is taking place in other languages than Danish. The companies stress that it will keep being important in the future with language competence and that the lack of knowledge has led to difficulties in negotiation processes. This warning and the overall decrease has led to a national debate among scholars and the Danish government. The Danish Ministry of Higher Education and Science has addressed the situation of languages at Danish universities many times and means that foreign languages are important for a small and cultural nation like Denmark that has big ambitions in playing important roles in the more and more globalizing world. Danish scholars are working towards restoring the high status of language studies in the Danish society.

Source: <http://www.universityworldnews.com/article.php?story=20170902060850363>

Popular TV Show Sparks Interest in Research

The Estonian Research Council (ETAg) is funding a televised research competition, which is currently on its seventh season. The purpose behind the show is to show that research is important, useful and fun, and also to inspire more young people to study the natural sciences and technology. The competition is open for the public, not only Estonian citizens, but they have to be between the ages 16-23. The winner receives a scholarship worth 100,000 euros, which he or she can use for any kinds of studies. All the previous winners have used the scholarship for studying, and the majority within the natural scientific fields.

The competitions contain exercises from a wide range of fields: physics, mathematics, technology, biology and chemistry. Some of the moments are conducted in the studio while others are conducted in situ on different institutions in relation to their current research projects.

The show started as a result of a meeting at ETAg, where one researcher proposed an idea that something was needed to increase the public's interest in science and research. A competition was proposed, and when the ETAg later proposed this to an Estonian TV channel, it was swiftly accepted. Both researchers and students are responsible for the contents of the show. There is a team of researchers who decides what kind of exercises the competitors can do, and a team of media staff who proposes how to make it look appealing on the screen. The show has over 100,000 viewers per episode, and it has made research very popular among the young Estonian citizens. An effort has been made in Estonia to increase the interest in research, and at the universities digital learning is a popular field with many students, also more and more elementary school students chose more mathematics courses as a preparation for higher education.

Source: <https://www.tidningencurie.se/nyheter/2017/08/23/tv-tavling-triggar-intresse-for-vetenskap/>

Nobel Laureate Prof. Ohsumi Starts Foundation

Last year's Nobel Laureate Honorary Prof. Yoshinori Ohsumi has founded the Ohsumi Frontier Science Foundation (OFSF). Hon. Prof. Ohsumi was awarded the Nobel Prize in Medicine or Physiology 2016 for his basic research that led to the discovery of the phenomenon autophagy. He started this foundation in order to support basic research in the long run and will use parts of the award he received through the Nobel Prize and the Breakthrough Prize. Donations are also planned to fund this foundation.

Hon. Prof. Ohsumi means that research with clear results within a few years are increasing and that basic research, within which results take time, is overlooked. That is why he established this foundation to change this and make the research environment better for researchers conducting basic research.

Source: <http://www.asahi.com/articles/ASK9D4D44K9DULBJ004.html>

Japanese Government Focuses on Regional Universities

The Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) has set up a plan to enhance smaller regional universities' international competitiveness and improve their collaborations with international scholars and institutions. This plan that is welcomed by many scholars and academic is also expected to narrow the wide gap between the Japanese elite research institutions and their regional counterparts.

In 2007, MEXT launched the project "World Premier International Research Center Initiative (WPI)" in order to improve Japan's competitiveness in international research. This project focuses on the big research institutions, and as a reaction to this, MEXT gives focus and funds to regional universities as well so that they get the opportunity, for example, to bring internationally renowned researchers and scholars into their smaller universities.

Source: <http://www.universityworldnews.com/article.php?story=20170808134553924>

Open Calls

JSPS Headquarters offer several fellowship programs to give opportunities for excellent researchers from all around the world to conduct scientific collaboration in Japan with their Japanese colleagues.

JSPS Stockholm Office and Nordic/Baltic nominating authorities support researchers who wish to go to Japan through these programs.

Please consider firstly to apply through the nominating authorities in your country.

For detailed information about all JSPS Fellowship programs, please check:

<http://www.jsps-sto.com/jspsfellowships.aspx>

JSPS Postdoctoral Fellowship for Research in Japan (Short-Term)

Eligibility: Pre/Postdocs

Number of people granted in Sweden: 10

Duration of stay: 1-12 months

The application period is October 27, 2017 to February 28, 2018.

For detailed information regarding the application, please check the link below:

<http://www.jsps-sto.com/fellowship-short-term.aspx>

JSPS Postdoctoral Fellowship for Research in Japan (Standard)

Eligibility: Postdocs

Number of people granted in Sweden: 5

Duration of stay: 12-24 months

The application period is October 27, 2017 to February 28, 2018.

For detailed information regarding the application, please check the link below:

<http://www.jsps-sto.com/fellowship-standard.aspx>

JSPS Summer Program

The JSPS Summer Program provides opportunities for young pre- and post-doctoral researchers from Sweden to receive an orientation on Japanese culture and research systems and to pursue research under the guidance of host teachers at Japanese universities and research institutes over a period of two months during the summer.

The application period is October 31, 2017 to February 8, 2018.

Note that the application is done through **STINT**.

For detailed information regarding the application, please check the link below:

<http://www.stint.se/1/263>

Welcome back!

Hello!

This is Marika Tashima, assistant at JSPS Stockholm Office. I am now back at the office after being on parental leave for a little more than a year.

I am looking forward to working with everyone again and building new, fruitful relationships.

Let's meet at the upcoming seminars and symposia!



Upcoming Seminars and Symposia

Norway-Japan Academic Network

This event aims to create a networking platform among JSPS Fellows, Japanese researchers and Norwegian researchers who are interested in research in Japan.

Date: January 31, 2018

Venue: The Research Council of Norway (RCN), Oslo, Norway

Sweden-Japan Academic Network

This event aims to create a networking platform among JSPS Fellows, Japanese researchers and Swedish researchers who are interested in research in Japan. The event will be preceded by the SAC General Assembly.

Date : February 14, 2018

Venue: The Royal Swedish Academy of Sciences (KVA), Stockholm, Sweden

Japan Alumni and Researchers Assembly in Denmark

This event is held in Denmark and aims to create a networking platform among JSPS Fellows, Japanese researchers and Danish researchers who are interested in research in Japan. The event will be preceded by the ACD General Assembly.

Date: February 23, 2018

Venue: **To be decided**

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 February, 2018.

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