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Special Features

Nobel Week 2019

**IVA-JSPS Seminar FY2019 with Dr. Akira Yoshino
ACF 10-year Anniversary Ceremony/All Alumni Meeting**



Contents	Page
Prologue	1
Special Features	2
News	10
Reports	15
Message from the Alumni Club Members	19
Reports from Japanese Researchers in the Nordic/Baltic Countries	21
Column	23
Academic Information	24
Notices	27

Science literacy to antagonize delusive, non-scientific views

Tadaharu Tsumoto, Director, JSPS Stockholm Office

This is the first prologue of the year 2020, so I should have given a New Year greeting here. I realized, however, that this newsletter will arrive to readers in mid-February. In place of such a delayed greeting, therefore, I would like to describe my personal view as a short essay.

Is the earth flat ?

Recently, I was really astounded to see the web news that even in these modern times, some people (not so many, I hope) in UK and USA believe that the earth is flat (https://en.wikipedia.org/wiki/Flat_Earth). According to this article, the Flat Earth Society was set up in 1956 and its succeeding organization still exists in the present age. Actually we live in the 21st century, not in the Middle Ages when the theory of the geocentric system dominated. Such an apparently absurd, non-scientific conception is not limited to the shape of the earth. In a few states of USA there are movements against the theory of evolution. In fact, in some states of USA, there were attempts to introduce anti-evolution bills to prohibit teaching the theory of evolution in public schools. Furthermore, to enhance such an anti-evolution argument the "Intelligence design" theory was proposed (https://en.wikipedia.org/wiki/Intelligent_design). Now the general consensus in the scientific community is that the intelligent design theory is not a scientific theory. For example, the US National Academy of Science declares that "creationism, intelligence design, and other claims of supernatural intervention in the origin of life or species are not science because they are not testable by the method of science" (National Academy of Science 1999, p.25, <http://www.nap.edu/openbook.php?isbn=0309064066&page=25>).

I thought that such non-scientific views similar to superstition were held only by a very small number of people in USA and other countries. In the Nordic countries where scientific literacy seems to be well-established, I expected that nobody would believe such non-scientific claims. When I took a walk near my apartment in central Stockholm, however, I was astonished to find a store named "Homeopatica" and sell "homeopathic products". Homeopathy is a pseudoscientific theory of alternative medicine (<https://en.wikipedia.org/wiki/Homeopathy>). It was created in 1796 by a medical practitioner. He and his supporters believe that a substance that causes symptoms of a disease in healthy people would cure similar symptoms in sick people; this doctrine is called *similia similibus curentur* or homeopathy. Homeopathic preparations are termed *remedies* and are made using a process called homeopathic dilution. This process involves repeatedly diluting a chosen substance so that the original substance is likely to not remain in the product. Nevertheless they claim that it makes the diluent remember the original substance after its removal, and such preparations, upon oral intake, can treat or cure disease. Now it is well established that homeopathic preparations are not effective for treating any medical condition. In fact, the European Academies' Science Advisory Council and the Commission on Pseudoscience and Research Fraud of the Russian Academy of Sciences each

concluded that homeopathy is not effective at all. In Japan, also the president of the Science Council of Japan published the President's Comment on August 14, 2010, stating that the effects of homeopathy are not better than the so-called "placebo effects" (<http://www.sci.go.jp/ja/info/kohyo/pdf/kohyo-21-d8.pdf> in Japanese). In this comment he also referred to the case that a paramedical staff, a follower of homeopathy, did not give necessary vitamins to a baby and consequently led to his/her death. This indicates the risk of believing in the non-scientific theory or idea. Although there is a plenty of such evidence, it astonished me that some people still seem to buy homeopathy products in Stockholm.

Climate change

It may be inevitable that a certain proportion of people in our society has or expresses such non-scientific, delusive views, since the freedom of thought and belief is the main principle of our democratic society. If an unreasonable, absurd idea is limited within a personal, low-risk circumstance, it may be just a laughing topic of chattering: Let them believe it and take the responsibility of the consequence. If it comes to socially important issues, however, an idea that ignores or neglects scientific facts would lead to serious consequences. A good example of this is the issue of the world-wide climate change or global warming. There is a plenty of scientific evidence that the average temperature in many regions of our planet is sharply rising, particularly after the industrialization. The recent scientific observations show the retreat of glaciers, icebergs and permafrost in the polar regions, and the frequent occurrence of heatwaves, wildfires and droughts in other regions of the earth. Therefore, effective social measures are urgently necessary, as pointed out in the Paris Agreement of 2016. In relation to this, I am very much impressed by the recent activities of Ms. Greta Thunberg and other young people who support her. There are, however, some people who do not believe in the scientific evidence for the human-caused global warming. In the 50th World Economic Forum in Davos this year, for example, one of the political leaders claimed that "perennial prophets of doom with predictions of apocalypse" or the pessimism on climate must be rejected. He seems to ignore the scientific observations. These climate change skeptics would not pay attention to the consensus of scientists. How can we convert this kind of people who are bigoted to the unreasonable convictions? Although it seems to be not easy, we should be consistent with the principles of democratic society. In democracy, any leaders of society are expected to listen to opinions of the majority of people. In this sense, the dissemination of scientific evidence to many people in society is very important. If the majority of people in our society have a correct scientific knowledge of the current environments or science literacy, unreasonable, obstinate people will not be elected as leaders of our society. Thus I am rather optimistic in the sense that people will select leaders of our society who are not anti-scientific obstinate, although the persistent dissemination of scientific facts to the public is essential.

Nobel Week 2019

December 10 marks the passing of Alfred Nobel and is when the Nobel Prize Award Ceremony of each prize, except for the Peace Prize, is held at the Stockholm Concert Hall, followed by the Nobel Banquet at the Stockholm City Hall. A week leading up to this day, also called the Nobel Week, is a series of various events that celebrate the laureates for the Nobel Prize.

December 6

Signing Chairs at the Nobel Museum

From 10:00, the laureates visited the Nobel Museum in Stockholm's Old Town where they traditionally write their signatures under the chairs of the museum restaurant, called Bistro Nobel.

Press Conference for the Laureates in Literature

From 13:00, a press conference was held at the Swedish Academy (SA).

Press Conference for the Laureates in Physiology or Medicine

From 15:00, a press conference was held at Nobel Forum, Karolinska Institutet (KI).



Chemistry Laureate Yoshino at Nobel Prize Museum
© Nobel Media. Photo: Alexander Mahmoud

December 7

Press Conference for the Laureates in Physics, Chemistry and Economic Sciences

From 09:30, a press conference was held at Aula Magna, Stockholm University.

Nobel Lectures in Physiology or Medicine

Following the press conference, the Nobel Lectures in Physiology or Medicine were held at Aula Medica, KI. The presentations can be viewed at the links below:

- William G. Kaelin Jr.
"The von Hippel-Lindau Tumor Suppressor Protein: Insights into Oxygen Sensing"
<https://www.nobelprize.org/prizes/medicine/2019/kaelin/lecture/>
- Sir Peter J. Ratcliffe
"Elucidation of Oxygen Sensing Systems in Human and Animal Cells"
<https://www.nobelprize.org/prizes/medicine/2019/ratcliffe/lecture/>
- Gregg L. Semenza
"Hypoxia-Inducible Factors in Physiology and Medicine"
<https://www.nobelprize.org/prizes/medicine/2019/semenza/lecture/>



Prof. Semenza delivering his Nobel Lecture
© Nobel Media. Photo: Nanaka Adachi

Reception for the Laureates in Physiology or Medicine

From 16:00, a reception was held at the Aula Medica, KI.

From JSPS Stockholm Office, Director Tsumoto and Deputy Director Yoshihara joined.

Nobel Lectures in Literature

From 16:45, the Nobel Lectures in Literature were held at the SA as follows:

- Olga Tokarczuk (for 2018)
<https://www.nobelprize.org/prizes/literature/2018/tokarczuk/lecture/>

Nobel Week 2019

December 8

Nobel Lectures in Physics, Chemistry and Economic Sciences

From 9:00, the Nobel Lectures in Physics, Chemistry and Economic Sciences were held at Aula Magna, Stockholm University. The presentations can be viewed at the links below:

Physics

- James Peebles
“How Physical Cosmology Grew”
<https://www.nobelprize.org/prizes/physics/2019/peebles/lecture/>
- Michel Mayor
“Plurality of Worlds in the Cosmos: A Dream of Antiquity,
A Modern Reality of Astrophysics”
<https://www.nobelprize.org/prizes/physics/2019/mayor/lecture/>
- Didier Queloz
“Exoplanets: 51 Pegasis b and all the others ...”
<https://www.nobelprize.org/prizes/physics/2019/queloz/lecture/>

Chemistry

- John B. Goodenough (lecture delivered by Arumugam Manthiram)
“Designing Lithium-ion Battery Cathodes”
<https://www.nobelprize.org/prizes/chemistry/2019/goodenough/lecture/>
- M. Stanley Whittingham
“The Origins of the Lithium Battery”
<https://www.nobelprize.org/prizes/chemistry/2019/whittingham/lecture/>
- Akira Yoshino
“Brief History and Future of Lithium-ion Batteries”
<https://www.nobelprize.org/prizes/chemistry/2019/yoshino/lecture/>

Economic Sciences

- Abhijit Banerjee
“Field experiments and the practice of economics”
<https://www.nobelprize.org/prizes/economic-sciences/2019/banerjee/lecture/>
- Esther Duflo
“Field experiments and the practice of policy”
<https://www.nobelprize.org/prizes/economic-sciences/2019/duflo/lecture/>
- Michael Kremer
“Experimentation, Innovation, and Economics”
<https://www.nobelprize.org/prizes/economic-sciences/2019/kremer/lecture/>

Celebratory Reception by the Ambassador of Japan and his spouse

At the Grand Hotel in Stockholm, a celebratory reception was organized by H.E. Ambassador Shigeyuki Hiroki and his spouse. Congratulatory speeches were made by H.E. Ambassador Hiroki and Ms. Matilda Ernkrans, Swedish Minister for Higher Education and Research. Dr. Yoshino expressed his gratitude to all the people for the honor.

From JSPS Stockholm Office, Director Tsumoto, Deputy Director Yoshihara, International Program Associate Izumi and Yoshinaka attended.



Prof. Peebles delivering his Nobel Lecture
© Nobel Media. Photo: A. Mahmoud



Dr. Yoshino delivering his Nobel Lecture
© Nobel Media. Photo: Alexander Mahmoud



Dr. Yoshino at the celebratory reception
(Source: https://www.se.emb-japan.go.jp/nihongo/activity_191208.html)

Nobel Week 2019

December 9

Nobel Week Dialogue 2019

This year's Nobel Week Dialogue was held at Svenska Mässan in Gothenburg. The theme of the dialogue was "Into the unknown: Uncertainty, risk and opportunity" and 20 panellists, including the former Nobel laureates and world-leading experts, discussed how we deal with what we do not know and accept that there are things we cannot know.

From JSPS Stockholm Office, Director Tsumoto and Deputy Director Yoshihara attended. From the JSPS Headquarters, Dr. Susumu Satomi, President; Ms. Miwa Shimizu, Coordinator; Ms. Eriko Suto, Section Chief; and Ms. Mimi Inagaki, International Program Associate attended.

The event can be viewed online at the link below:

<https://www.nobelprize.org/events/nobel-week-dialogue/gothenburg-2019>



During the Nobel Week Dialogue

Celebratory Reception organized by the Nobel Foundation and KVA

From 18:00, a celebratory reception hosted by the Nobel Foundation and the KVA was held at the Nordic Museum in Stockholm. Nobel Prize laureates from this year, including Dr. Yoshino, participated. The reception is held annually in celebration of the Nobel Prize, and from JSPS, President Satomi and Director Tsumoto were invited and attended the event.

December 10

Nobel Prize Award Ceremony

From 16:30, the Nobel Prize Award Ceremony was held at the Stockholm Concert Hall. JSPS President Satomi was invited and participated among other international guests who represent the sciences and cultural life.

Following the opening speech by Prof. Carl-Henrik Heldin, Chairman of the Board of the Nobel Foundation, the Nobel Prizes of the Physics, Chemistry, Physiology or Medicine, Literature, and Economic Sciences were handed over by H.M. the King of Sweden. The ceremony was closed with the Swedish National Anthem played by the orchestra.



Dr. Yoshino receiving his Nobel Prize from H.M. the King
© Nobel Media. Photo: Alexander Mahmoud



Prof. Heldin delivering the opening address
© Nobel Media. Photo: Alexander Mahmoud

Nobel Banquet

The Nobel Banquet was held from 19:00 in the Blue Hall of Stockholm City Hall. From JSPS, President Satomi was invited and participated.

Following the entry procession of the Royal Family and other guests of honor, the banquet was opened by H.M. the King of Sweden with a toast. The banquet was served to about 1,350 guests, including the Nobel laureates and their families, and they enjoyed the top-quality ingredients with Swedish flavours.



Dr. Yoshino during the Nobel Banquet
© Nobel Media. Photo: A. Mahmoud

Nobel Week 2019

Ministry of Education, Culture, Sports, Science and Technology (MEXT) Minister Koichi Hagiuda visited Sweden to attend the Nobel Prize Award Ceremony and the Nobel Banquet. During his stay in Sweden, Minister Hagiuda held a meeting with young Japanese researchers in Sweden, and also visited the Science for Life Laboratory (SciLifeLab) which is the world leading institution in molecular biology research.

December 11

Meeting for Exchange Opinions between MEXT Minister and Young Japanese Researchers in Sweden

On December 11, 2019, the meeting for exchange opinions between MEXT Minister Hagiuda and young Japanese researchers in Sweden was held at JSPS Stockholm Office. In addition to Minister Hagiuda, Mr. Hiroshi Masuko, Deputy Director-General, Research Promotion Bureau, President Satomi, Director Tsumoto, and Deputy Director Yoshihara attended the meeting.

The five researchers who joined the meeting were: Ms. Aya Aihara, Ph.D. student at Uppsala University; Dr. Mieko Kono, Postdoctoral researcher at the Swedish Museum of Natural History; Dr. Noriko Hamada, Postdoctoral researcher at Karolinska Institutet (KI); Mr. Jumpei Fukumasu, Ph.D. student at Swedish University of Agricultural Sciences; and Dr. Masahito Yoshihara, Postdoctoral researcher at KI.

The meeting was moderated by Director Tsumoto and opened by Minister Hagiuda with the welcoming speech. Following the presentation on an overview of JSPS Stockholm Office by Deputy Director Yoshihara, each researcher gave a self-introduction, followed by a lively exchange of opinions on the differences in the research environment in Japan and Sweden.



During the meeting



Group photo with participants

December 12

Visit to the SciLifeLab

On December 12, 2019, Minister Hagiuda visited the SciLifeLab in Solna. From JSPS, President Satomi joined the visit.

Prof. Olli Kallioniemi, Director of SciLifeLab, welcomed the guests and introduced the institution, then researchers who work at the laboratory gave a presentation on their ongoing international research collaborations. Research equipment, such as electron microscopy, and related facilities were shown to the Minister as well.



SciLifeLab building (Source: <https://www.kth.se/blogs/molecular/2016/12/sci-life-lab-unlocked/>)

IVA-JSPS Seminar FY2019 with Dr. Akira Yoshino

On December 13, 2019, the IVA-JSPS Seminar for FY2019 was jointly held by the Royal Swedish Academy of Engineering Sciences (IVA), Sweden Foundation for Strategic Research (SSF), Sweden-Japan Foundation (SJF), the Embassy of Japan in Sweden, and JSPS Stockholm Office at IVA in Stockholm. From JSPS Stockholm Office, Director Tsumoto, Deputy Director Yoshihara, International Program Associate Izumi and Yoshinaka participated. From JSPS, President Satomi, Coordinator Shimizu, Section Chief Suto, and International Program Associate Inagaki attended.

The seminar titled “Future Battery Technology and Ecosystem” started with opening remarks by Prof. Tuula Teeri, President of IVA, H.E. Ambassador Hiroki, and President Satomi.

The keynote lecture entitled “Current situation of Lithium Ion Battery and future” was presented by Dr. Yoshino, Honorary Fellow of Asahi Kasei Corporation and the Nobel Laureate in Chemistry 2019.

The second presentation “Enabling the future -Chemistry innovations for a low carbon society” was given by Mr. Nobuyuki Kawashima, Councillor, Special Appointive Officer to President/CEO, Mitsui Chemicals, Inc., Chair of Energy & Climate Change LG, ICCA, and Dr. Elizabeth E. Endler, Research Program Manager at Shell International Exploration & Production.

Following the third lecture titled “Battery research activities in Sweden” by Prof. Göran Lindbergh, KTH Royal Institute of Technology, Dr. Emma Nehrenheim, Chief Environmental Officer at Northvolt, gave a lecture “The development of battery production and ecosystem in Europe”.

This seminar was a success with about 200 participants, and it was a great opportunity to enhance the academic collaboration between Japan and Sweden.

The event can be viewed online at the link below:

<https://www.iva.se/en/tidigare-event/future-battery-technology-and-ecosystem/?fbclid=IwAR3SI7V34d8HM64zaX8dL2pwTDxNsb7CFWgB1ERty8KRLSPglVadKw4Ay-g>



From left: Mr. Normark, Dr. Nehrenheim, Prof. Hultman, Dr. Yoshino, President Teeri, Mr. Kawashima, Prof. Lindbergh, Dr. Endler and President Satomi



Dr. Yoshino during his lecture



Dr. Yoshino during the Q&A session

ACF 10-year Anniversary Ceremony/All Alumni Meeting

In this section, we feature the JSPS Alumni Club in Finland (ACF) 10-year Anniversary Ceremony and All Alumni Meeting, as well as ACF's history through a special report by Dr. Kristiina Jokinen, Senior Researcher of AI Research Center of AIST Tokyo Waterfront and former Chair of ACF.

Dr. Kristiina Jokinen

Senior Researcher, AI Research Center of AIST Tokyo Waterfront and former Chair of ACF



The JSPS Alumni Club in Finland (ACF) celebrated its 10th Anniversary with a Congratulatory Event and an All Alumni Meeting on December 12, 2019 in Helsinki. The All Alumni Meeting was also a jubilee seminar marking the 100th Anniversary of diplomatic relations between Japan and Finland, and it was jointly organized by the Academy of Finland, Hokkaido University Europe Office in Helsinki, ACF and JSPS Stockholm Office, and supported by the Embassy of Japan in Finland.

Both events took place at the premises of the Academy of Finland in Helsinki. As a former chair of ACF (2014-2017), I was invited to attend the two events and gave a congratulatory talk as well as a presentation.

JSPS Alumni Club in Finland 10-year Anniversary Ceremony

The ACF 10-year Anniversary Ceremony featured congratulatory speeches by five distinguished guests: H.E. Ambassador Takashi Murata from the Embassy of Japan in Finland; Executive Director Yasuhiro Iye from JSPS Headquarters; Director Tsumoto, Prof. Shinichiro Tabata, Director of Hokkaido University Europe Office in Helsinki; and Prof. Heikki Mannila, President of the Academy of Finland. Moreover, Professor Emeritus Matts Roos, the first Chair of ACF, provided a short overview of the start of the club up until the first meeting and official approval of ACF by the JSPS Headquarters in Tokyo, and I presented memories of the seminars and alumni events that we organized during my time as a chair.



Group photo with Prof. Gasik, Executive Director Iye, Prof. Saarinen, Dr. Roos, Director Tsumoto, Prof. Mannila, H.E. Ambassador Murata, Prof. Tabata, Dr. Jokinen and guests

All Alumni Meeting FY2019

“Japan-Finland 100 years / JSPS Alumni Club in Finland 10-year Anniversary Seminar”

The All Alumni Meeting was attended by about 80 participants, and it featured six speakers. The opening remarks were offered by Executive Director Iye and by Prof. Michael Gasik, Aalto University and Vice-Chair of ACF.

The special lectures were a video message by Ms. Motoko Ishii, Lighting Designer, President of Motoko Ishii Lighting Design Inc., and 100-year of Finnish-Japanese Friendship Envoy; and a lecture “Valo from Finland, Hikari from Japan” by Lighting Designer Ms. Akari-Lisa Ishii. The lecture presented connections on architecture and lighting between Finland and Japan as well as lighting design and light shows on renowned landmarks.

In the second talk, Prof. Maarit Karppinen from Aalto University talked about her decades long collaboration with Japan on novel functional materials for different energy technologies. After the coffee break, Prof. Tabata from Hokkaido University talked about people and communities in the Arctic and the possibilities of sustainable development. Dr. Aki Tsuruta from the Finnish Meteorological Institute (FMI) described the research collaboration between Finland and Japan on greenhouse gases, while my own talk focused on issues, challenges and future views concerning interactions with social robots. Each talk was accompanied by questions and comments and lively discussions continued during the coffee break. The closing remarks were given by Dr. Tsumoto and the seminar finished with a reception with food and wine.

The following day, I joined Executive Director Iye and Section Chief Masaki Nakano from JSPS Headquarters with board members of ACF, including Prof. Gasik and Dr. Joni Kujansuu, to visit Prof. Kaarle Hämeri, Chancellor of the University of Helsinki. Prof. Hämeri made a presentation on an overview of the University of Helsinki and we talked about research collaboration. Afterwards Executive Director Iye, Section Chief Nakano and I visited the Finnish Center for AI (FCAI) at Aalto University which is one of the flagship projects supported by the Academy of Finland, focusing on the excellence of AI Research.

I am very happy that I could attend the ACF 10-year Anniversary Ceremony and the All Alumni Meeting. The ACF has grown from a small group of dedicated members into a larger group with almost 100 members, and its activities support a wide range of seminars in different locations in Finland. As a former chair, I am especially glad that the new chair and the new board share the same dedication as their predecessors to provide opportunities to promote scientific exchange between Japan and Finland. I would like to congratulate the 10-year old ACF, and I wish many happy returns during the years to come.



Group photo with Prof. Gasik, Dr. Tsuruta, Executive Director Iye, Prof. Karppinen, Prof. Tabata, Director Tsumoto, Dr. Jokinen and participants

Memories of ACF and my time as chair of the club

The starting point of the ACF was the meeting called by Prof. Roos in November 2007, where some dedicated members who had been to Japan and had contacts with Japanese researchers, discussed issues like how to keep in contact, exchange experience, disseminate information, and organize events in a structured way.

Next spring, in April 2008, a general assembly and seminar were held in Mekrijärvi. At the seminar held in Rovaniemi in September of the same year, bylaws were formulated and JSPS Headquarters accepted the Articles the next year. Thus ACF officially started in 2009 with the inauguration ceremony in Turku in May, and Dr. Antero Laitinen was elected as a chair and Prof. Matti Leppäranta as a vice-chair.



Meeting in November, 2007

Special Features 3

I joined the ACF as a board member in 2010. Next year I organized a seminar jointly with Prof. Markku Hauta-Kasari, University of Eastern Finland, in Mekrijärvi. The seminar was titled "Gazing East and West -Interactions inside the Borders", and invited Prof. Seiichi Yamamoto from Doshisha University. He made a presentation on eye-gaze and gaze-tracking research in human interactions. The seminar included a trip to Virtajärvi, the easternmost point of Finland and the continental European Union, where the participants could literally gaze east and west at the border located on an island in the lake.

The following years we had several events in Helsinki, e.g. the seminar titled "Ice and Snow" in 2012 and "Environmental Science" in 2013.

In 2014, I started my term as a ACF chair. I organized a event "Languages, Translations, and Interactions" which focused on spoken language studies and dialogue systems. The invited speaker from Japan was Prof. Satoshi Nakamura from Nara Institute of Science and Technology (NAIST) where I had spent my two JSPS Fellowship years in the mid-1990's.



ACF members at a dinner after the annual meeting in September, 2010



Group photo at Virtajärvi in June, 2011



ACF seminar in May, 2014

The board wanted to expand events also to other parts of Finland, and thus organized an activity seminar in Turku in 2015. The title of the seminar was "Future Diagnostics", and had Prof. Seiji Shibasaki from Hyogo University of Health Sciences as the Japanese speaker. The following year 2016, ACF organized the 2nd Bone and Biomaterials workshop in Inari Lapland. The Japanese invited speaker was Prof. Takao Hanawa from Tokyo Medical and Dental University.

The board members had active contacts with Japanese researchers and regular visits to Japan, and it so happened in the spring 2015 that the chair and two board members, Dr. Tapani Jussila and Dr. Kujanssu, were in Japan at the same time. It was quite natural to agree to have an unofficial board meeting in Japan. The meeting took place in Takarazuka on the way to the summit of Mt. Nakayama, and offered beautiful views of the Osaka City.

In 2017 ACF organized a seminar titled "Future Views for Science, Research, and Society" in Helsinki. The year 2017 marked 100th Anniversary of Independence of Finland, and the seminar was thus related to this topic. As one of the highlights of the program, we were shown excerpts from the documentary film about Prof. Gustaf John Ramstedt, a Finnish linguist, explorer and diplomat, who was the first Finnish envoy to Japan in 1917. He was also a frequent guest lecturer at Tokyo Imperial University and a respected colleague to many prominent Japanese linguists. The seminar was also my farewell seminar as the chair of ACF, and after many active years on the board, I had moved to Japan in 2017 to take up a senior researcher position at the AI Research Center of AIST.



Mt. Nakayama summit meeting in May, 2015



Group photo at the All Alumni Meeting in November, 2017



Dr. Jokinen during her lecture at the All Alumni Meeting in November, 2017

The JSPS alumni club continues to have an important role in promoting scientific exchange between Japan and Finland. It provides a forum to keep in contact and share experience, disseminate information and make new contacts through organizing events and meetings. I consider the time in ACF very valuable. The seven years provided me with many opportunities to contribute to Japanese-Finnish collaboration and to learn from prominent Japanese researchers and Finnish colleagues about cutting-edge research in various topics. The seminars were interesting and organizing them with the help of wonderful colleagues and JSPS was a great experience.

JANET Forum 2019 in London

On November 4-5, 2019, the JANET Forum 2019 was jointly organized by Osaka University and hosted by University College London in collaboration with the related institutions. The theme of this event was “Demographic Change and Higher Education in the Global Context”.

From JSPS Stockholm Office, Director Tsumoto and International Program Associate Yoshinaka attended. JANET (Japan Academic Network in Europe) was established in 2015 to promote networks among Japanese universities, which have liaison offices in Europe.

The program started with opening address by Prof. Shojiro Nishio, President of Osaka University, and Prof. Katharine Carruthers, Pro-Vice-Provost of University College London, followed by presentations and discussions on networking of higher education and of overseas alumni.

Other JSPS overseas offices from: London, Bonn, Strasbourg also participated in the forum, and JSPS’s mission was explained by Dr. Masataka Ando, Deputy Director of JSPS London Office, and Mr. Yosuke Nishida, Advisor.

The next JANET Forum 2020 will be held in Berlin by the organization of Chiba University and Charité-University Medicine Berlin.



During the event

MIRAI Seminar 2019

On November 11-14, 2019, MIRAI seminar titled “Moving together towards a sustainable future” was held in Stockholm and Uppsala. Director Tsumoto, Deputy Director Yoshihara and International Program Associate Yoshinaka participated from JSPS Stockholm Office.

On the first day, the welcome reception sponsored by JSPS Stockholm Office was held at the Nobel Museum, where welcome remarks were given by Ms. Matilda Ernkrans, Swedish Minister for Higher Education and Research, Vice-Chancellor Astrid Söderbergh Widding, Stockholm University, Executive Vice President Masato Wakayama, Kyushu University, and Director Tsumoto.

On the second day, the opening ceremony was held at the Uppsala Castle, where presentations were made by researchers from Japan and Sweden: Prof. Johan Kuylenstierna from the Swedish Climate Policy Council, Prof. Yoshiyuki Sankai from University of Tsukuba, and Prof. Kristina Edström from Uppsala University.

During last two days, parallel scientific sessions in four themes, which including ageing, materials science, sustainability, and innovation/entrepreneurship, were held respectively.

The 4-day seminar was closed with the farewell reception at the residence of the Japanese Ambassador.



Group photo at the farewell reception, provided by the Embassy of Japan in Sweden

The ACN Activity Seminar FY2019

On November 19, 2019, the Alumni Club in Norway (ACN) Activity Seminar for FY2019, which was titled “Science-based innovation: connecting research and business for a sustainable future” was jointly held by the Research Council of Norway (RCN), ACN, and JSPS Stockholm Office at RCN in Oslo. From JSPS Stockholm Office, Deputy Director Yoshihara and International Program Associate Izumi participated.

The seminar started with the opening remarks which were made by Dr. Alexander Karl Rothkopf, University of Stavanger and ACN board member. For this seminar Dr. Munetaka Shimizu, Hokkaido University, was invited from Japan and gave a presentation titled “Fish Physiology and Sustainable Aquaculture”. Dr. Shimizu’s detailed report can be found on page 18.

Following a presentation about JSPS activities and three lectures by researchers from Norway and Sweden, a panel discussion regarding how science and innovation can help achieve the UN’s Sustainable Development Goals was held which was moderated by Prof. Bruno Laeng, University of Oslo and ACN board member.

The event was concluded with a reception where participants could enjoy social gathering.



Group photo with the seminar participants

Japan’s Foreign Minister’s Commendations for FY2019

On November 26, 2019, in honor of the contribution to the promotion of mutual understanding between Japan and Sweden, and the strengthening of relations, H.E. Ambassador Hiroki awarded the Japanese Foreign Minister’s commendation for FY2019 to Dr. Mitsuru Suzuki, Advisor of Linnaeus University.

Source and photo: https://www.se.emb-japan.go.jp/nihongo/activity_191126.html

<https://www.mofa.go.jp/files/000498451.pdf>



From left: Dr. Suzuki and H.E. Ambassador Hiroki

ACF General Assembly FY2019

On December 12, 2019, ACF held a General Assembly at the Academy of Finland before the ACF 10-year Anniversary Ceremony and All Alumni Meeting. From JSPS Stockholm Office, International Program Associate Izumi participated.

At the assembly, it was discussed and approved that Dr. Ville Syrjälä stepping down from Chair of the club in the end of 2019. This was followed by electing the new Chair, Prof. Jyrki Saarinen, University of Eastern Finland, whose term of office starts in January, 2020.

In addition, Vice-Chair Prof. Gasik presented the outline of club's activities in FY2019 and shared the preliminary activity plan for FY2020 with the information on future activities and plans.



Prof. Saarinen

Photo: <https://www.uef.fi/en/web/photonics/jyrki-saarinen>

Courtesy visit to Chancellor of Helsinki University & Meeting between JSPS Executive Director and ACF board members

On December 13, 2019, Executive Director Iye, together with ACF board members, including Prof. Gasik, Dr. Kujansuu and Dr. Jokinen, paid a courtesy visit to chancellor of the University of Helsinki, Prof. Kaarle Hämeri. From JSPS, Section Chief Nakano and International Program Associate Izumi participated.

Chancellor Hämeri presented an overview of the University of Helsinki including the university's vision and research fields, while Executive Director Iye shared information on JSPS international programs and alumni club activities.

After the visit, Executive Director Iye had a meeting for exchange opinions with ACF board members at the University of Helsinki. ACF Board shared the current situation related to the club and its activities, and they further discussed future cooperation between ACF and JSPS.



From left: Prof. Gasik, Ms. Nakano, Dr. Jokinen, Executive Director Iye, Chancellor Hämeri, and Dr. Kujansuu

The 2nd ACD Board Meeting FY2019

On December 17, 2019, the 2nd Alumni Club in Denmark (ACD) Board Meeting was held at Copenhagen University. Prof. Carl Winsløw, Dr. Anemone Platz, Dr. Gunhild Borggreen, Dr. Jacob Kreutzfeldt and Prof. Leila Lo Leggio attended. From JSPS, Director Tsumoto, Deputy Director Yoshihara and Liaison Officer Ishii participated via Skype.

Following the opening words by Prof. Winsløw, recent activities of the club, including the call for BRIDGE Fellowship Program and the screening of Activity Seminar FY2020 applications were updated and discussed. This was followed by discussions on the upcoming events in March and future changes of the board members.



JSPS Stockholm Office during the meeting

New Year Reception at the Ambassador's Residence in Sweden

On January 30, 2020, a New Year Reception was held at the Ambassador's residence in Stockholm. Among the invited guests were members of the Japanese Association in Stockholm (JFS) and others with close relations to Japan from the business, scientific and cultural sectors. From JSPS Stockholm Office, Director Tsumoto, Deputy Director Yoshihara, International Program Associate Izumi and Yoshinaka attended.

At the reception, greetings were delivered by H.E. Ambassador Hiroki and Ms. Yoko Kaneko, Chairperson of JFS. This was followed by a traditional opening of a cask of sake, which is called *Kagami Biraki* in Japanese, by Mr. Akinori Nagano, Chairperson of Japanese Businessmen's Club, and mingling with Japanese new year's dishes where the participants deepened their friendship in a cozy atmosphere.



During the reception, photo provided by the Embassy of Japan in Sweden

SAC Joint Board Meeting and General Assembly FY2019

On February 5, 2020, Alumni Club in Sweden (SAC) Joint Board Meeting and General Assembly for FY2019 was held at the Swedish Museum of Natural History before the 8th Sweden-Japan Academic Network. From JSPS Stockholm Office, Director Tsumoto, Deputy Director Yoshihara and Liaison Officer Ishii attended.

Following the opening remarks by Chair Elin Palm and Director Tsumoto, Chair Plam reported the alumni club's activities during FY2019 and then presented the preliminary activity plan for FY2020. The board members discussed the future activities and plans for FY2020 including BRIDGE Fellowship Program and SAC Activity Seminar as well as topics such as how to attract participants to a seminar.



During the meeting



From left: Dr. Güler, Deputy Director Yoshihara, Director Tsumoto, Dr. Peterson, Dr. Palm, Dr. Blomberg, Prof. Pázsit, Dr. Eriksson, and Prof. Asadzadeh

The 8th Sweden-Japan Academic Network Seminar

On February 5, 2020, the 8th Sweden-Japan Academic Network Seminar was jointly organized by the KVA, the Embassy of Japan in Sweden, SAC and JSPS Stockholm Office at the Swedish Museum of Natural History. From JSPS Stockholm Office, Director Tsumoto, Deputy Director Yoshihara, International Program Associate Izumi and Liaison Officer Ishii participated. From JSPS, Ms. Hiroko Yoshikawa, international Program Associate, joined.

Opening remarks were given by Prof. Göran K. Hansson, Secretary General of KVA, and H.E. Ambassador Hiroki, the Embassy of Japan in Sweden, followed by an introduction of JSPS activities by Director Tsumoto.

The first lecture entitled “Planned science with the Japanese-Swedish electric field instrument on board the BepiColombo mission to planet Mercury” was given by Prof. Tomas Karlsson, KTH Royal Institute of Technology.

The second lecture was given by Dr. Yoshifumi Futaana, the Swedish Institute of Space Physics (IRF), titled “Chasing water in the Solar System: Exploration of Moon, Mars, Venus, and Jupiter system”. Dr. Futaana’s detailed report of the event can be found in the next issue.

The lectures were followed by a reception where Dr. Elin Palm, Linköping University and Chair of SAC, offered a toast.

The event was a great success with the attendance of 50 participants, and it was a excellent opportunity to network and enjoy social and academic exchange.



Prof. Karlsson during his lecture



Dr. Futaana during his lecture

JSPS Europe Offices Deputy Directors Meeting FY2019

On February 7, 2020, the JSPS European Offices Deputy Directors meeting was held at JSPS Strasbourg Office in France. The meeting serves to offer the various overseas JSPS offices to evaluate and share ideas. For this meeting Deputy Director Yoshihara was in attendance together with Deputy Director Hiroshi Iijima, JSPS Strasbourg Office; Deputy Director Makoto Aoyama, JSPS Bonn Office; and Deputy Director Masataka Ando, JSPS London Office.

This meeting involved presentations and discussions regarding respective office’s activities. Deputy Directors confirmed further collaboration in the near future.



From left: Deputy Director Iijima, Deputy Director Ando, Deputy Director Yoshihara and Deputy Director Aoyama

The ACF Activity Seminar FY2019

“Biomaterials in cellular and tissue microenvironments”

Michael Gasik, Professor, Aalto University Foundation, Vice Chair of JSPS Alumni Club in Finland

The JSPS Alumni Club in Finland (ACF) held its activity seminar jointly with "Turku Biomaterials Days", at the University of Turku, Finland, on 24-25 October, 2019. The main focus of the seminar was highlighting and discussing the challenges of biomaterials in cellular and tissue microenvironments, such as those relevant to dentistry and other medical areas (orthopaedics, tissue engineering, and pharmacology). The goal was to provide useful information on biomaterials and techniques at the cellular level for different applications in dentistry and medicine.

The seminar was generously organized by the University of Turku, BioCity Turku Biomaterials and Medical Device Research Program, Turku Science Park Ltd. and ACF together with JSPS Stockholm Office. The opening remarks were made by Prof. Pekka Vallittu, Dean of the Institute of Dentistry at the University of Turku, Finland, and Mr. Takao Yoshihara, Deputy Director of JSPS Stockholm Office. The topic was highly attractive, leading to more than 80 participants in Arje Scheinin auditorium, Dentalia building, also from outside of Finland and Scandinavia - and, of course, from Japan.

The key challenges in developing medical devices are device efficacy, suitability and patient safety. The main issue related to implants is strongly connected to quality, design of the implant and the interface between implant and the surrounding tissues. Demand for different implants has grown astronomically over the last several decades as an ageing but lively generation searches for ways to remain active.

Many types of biomaterials are presently available for use in different implants: metallic alloys, ceramics, composites and polymers are all used, whether with or without living cells, medical substances or some other additions like antifouling or anti-bacterial factors. There is also a growing trend of use of different scaffolds in tissue engineering applications to support and promote correct tissue formation. Three-dimensional biomaterial structures (scaffolds) are too highly desirable matching the biomechanical properties of the tissue, closely mimicking *in vivo* behaviour (facilitating cell adhesion, growth, and tissue formation). Such biomaterials assist the body to rebuild the damaged tissue and eventually they minimize associated pain and healing time, and their mechanical properties are becoming one of the most critical issues to address.

In dentistry, the success of a dental implant depends on a sound osseointegration (integration with a bone) and a stable attachment to the surrounding tissues. This is essential to have a healthy sealing which protects the underlying tissues from the harsh environments (not limited just to hot coffee or sweets, but to a spectra of intra-oral and external bacteria and other factors). The ability of an implant abutment to form a firm bond with its surrounding gingival tissue is highly dependent on the biocompatibility, surface topography, and surface free energy of the dental abutment material, which sets on the



Prof. Gasik during his lecture

top of a dental screw but below the crown. These properties are key influencing factors in adhesion, proliferation and colonization of cells involved in the wound healing process around the abutment and the subsequent attachment to the surrounding tissue.

Despite the plenty of research conducted on the interface of implants and bone, till date, our knowledge of soft-tissue/implant interface is still limited and further research evaluating the interface with different implant materials is necessary. Furthermore, developing new implant materials or optimizing current materials to truly bond with surrounding soft-tissue is very important.

In addressing these topics, the seminar was very successful in combining different aspects and outlooks from research, clinical, regulatory and industrial points of view. Very interesting key presentations from Japanese guests were given by Prof. Takao Hanawa, Tokyo Medical and Dental University and by Prof. Masamoto Tafu, National Institute of Technology, Toyama College. Prof. Hanawa has given an expressive outlook on status and the perspectives of chemical and topographical modification of materials surface to add biofunctions to biomaterials in medicine. Prof. Tafu has shown new details on new nano-hybrids of calcium phosphates for dental applications; their morphology and reactivity improvements.

ACF would like to thank all the speakers, organizers and participants for their interest and support for making this 2019 seminar a success.

The 2nd SAC Activity Seminar FY2019 “Orthopedic Musculoskeletal Regeneration”

Christer Rolf, Professor, Clintec, Karolinska Institutet (KI)

On October 28, 2019, Clintec/KI had the great privilege of co-organizing a JSPS Alumni Club in Sweden Activity Seminar on Musculoskeletal Research at KI South Campus Huddinge.

The Seminar was organized in honor of Prof. Mitsuo Ochi's first visit to KI as President of the prestigious Hiroshima University, Japan. It was great pleasure to be offered to moderate the seminar. Prof. Ochi and I have a longstanding common interest as orthopedic surgeons with our joint career's spanning decades in Orthopedic Sports Medicine and in knee surgery. We have met on a number of occasions since I joined the Chinese University of Hong Kong as a visiting professor 23 years ago and joined the Asian Federation of Sports Medicine.

Prof. Ochi and his team along with the participants were welcomed by the Dean of KI South, Prof. Maria Eriksdotter, and by the Director of JSPS Stockholm Office, Dr. Tadaharu Tsumoto. The seminar aimed to be broad and open minded and a first personal introduction both for the participants and audience towards a potential future collaboration on research and education within this field.

Prof. Li Felländer-Tsai, Clintec/KI informed on “Trends in orthopedic specialty training in Sweden and Europe”. This area is affected not only by major reorganization within different countries, but also by the increasing demands from an elderly population and a new way of online and simulator-based training for young surgeons. She referred to studies which compared the simulator training of pilots to improve safety and standardisation with that currently used for training surgeons.

Prof. Ochi, then gave a fascinating presentation of a novel way to guiding stem cells after transplantation to their cartilage base. He demonstrated their use of intracellular iron markers that could be steered and controlled by external magnetic forces until they got stuck at expected site of cartilage injury. This was a brilliant example of cutting-edge translational orthopedic research which Japan is famous for.

I then had the great honor to introduce MRN, an international network for Musculoskeletal research that started in Hong Kong in 2012 with senior colleagues, initially from 13 universities. MRN then was invited to KI where we in 2015 organized its third meeting. The MRN has so-far resulted in joint research programs between KI and Chinese University of Hong Kong and Taipei Medical University with ongoing joint research along with continuous educational exchange of students and scholars. It is my hope that Prof. Ochi and his team's visit to Stockholm will be a starting point of such a new adventure.

Dr. Hans Berg, Clintec/KI introduced a project of mutual interest "Muscle atrophy and reduced performance in orthopaedic patients". This is of course a universal clinical problem in an aging population where we may be able to provide joint replacements and fracture fixations, but if patients' neuromuscular function due to inactivity or age is not up to standard we have a truly joint problem. Dr. Berg



Prof. Rolf during his lecture

demonstrated ways to measure muscle volume and structure in relation to function which should be, but is not, standard in orthopedic surgery.

Dr. Yan Li, Clintec/KI then presented "Percutaneous osseointegrated prostheses for amputees" with an excellent and instructive presentation of universal interest. The problem of integration into the limbs of amputees is of similar clinical magnitude as the problem presented by Prof. Ochi after cartilage transplants. We may as surgeons be good at surgery but the healing process is still a challenge. No doubt this is an area of joint interest to explore.

Prof. Björn Rydevik, University of Gothenburg, gave us an exciting summary of his vast experience with a lecture called "Back pain: new insights into old problems". This clinical area is the most costly for healthcare in all developed societies and despite the fact that so many of us suffers from back pain during our lives we still in most cases don't understand the cause of the pain and disability.

Prof. Stefan Lohmander from Lund University then challenged us all on the very heart of all orthopedic research, evidence base, and a survey of how we apply the basic principles of science. He presented a number of articles challenging our current and previous clinical concepts and routines and it was not silent in the audience when he showed data indicating a use, or rather misuse, of arthroscopic surgery in various knee conditions. His presentation reminded us all that we have to remember to be self-critical and that we should base all treatment on sound evidence base.

Lastly, Dr. Ken Iseri from KI gave a presentation titled "Hip fracture trend in Swedish general population and dialysis patients". Hip fracture incidence has declined over the last decade in dialysis patients, which is an unexpected and unexplained finding.

We ended a very exciting seminar with a very generous and outstanding reception hosted by JSPS Stockholm Office.

Organizing this seminar led to the invitation to Hiroshima University as a visiting professor, and my first visit to Japan is planned in late spring of 2020. I would like to take this opportunity to further promote academic collaboration between the two countries.

The ACN Activity Seminar FY2019

“Science-based innovation: connecting research and business for a sustainable future”

Munetaka Shimizu, Associate Professor, Hokkaido University

On November 19, 2019, I had an opportunity to give a talk at the JSPS Alumni Club in Norway (ACN) Activity Seminar FY2019 held at the Research Council of Norway (RCN), Oslo. This seminar was organized by ACN, RCN and JSPS Stockholm Office, and Dr. Alexander Karl Rothkopf from University of Stavanger was a host of the seminar. What made this seminar unique was that four speakers were selected from very different research fields but discussed a common, broad theme "Science-based innovation: connecting research and business for a sustainable future".

The reason why I was invited to this seminar was due to my collaborative activity with Norwegian researchers. Dr. Ivar Rønnestad and Dr. Tom Ole Nilsen from Department of Biological Sciences, University of Bergen and myself have been running an INTPART (International Partnerships for Excellent Education, Research and Innovation) project "Norway-Japan Partnership for Excellent Education and Research in Aquaculture (ExcelAQUA)" funded by RCN from 2017 to 2019. Other partners of this project include Miyagi University of Education, University of Tokyo, St. Marianna University School of Medicine, Nagoya University and National Research Institute of Aquaculture from Japan, and the Norwegian Research Centre AS (NORCE) from Norway. Aquaculture for salmon is a rapidly growing industry worldwide. However, farming more salmon will result in the consumption of more fish protein source and cause problems with high-density rearing and poor water quality. We are a group of fish physiologists who believe that understanding how animals work (physiology) can contribute to improving salmon farming while considering its sustainability. In this project, we hosted two-week summer courses three times and exchanged graduate students for research stay.

The topics of the four speakers were as follows: 1. "Fish Physiology and Sustainable Aquaculture" by this author, 2. "Learning Japanese with an Artificial Intelligence Tutor" by Mr. Christian Moen from Atilika, 3. "Hydrogen-Rich Solids in Hydrogen Economy and Beyond" by Dr. Olena Zavorotynska from University of Stavanger, and 4. "Digital Innovation for Sustainable Business" by Dr. Maria Åkesson from Halmstad University, Sweden. Given that topics were very different, I spent extra time to make my talk understandable and relevant for the audiences. The same attitude was seen in the other speakers, so that the seminar was very interesting and informative. I briefly introduced the above project and talked about endocrine regulation of salmon growth. I emphasized the importance of the presence of a negative feedback loop in the endocrine system for "normal/healthy" growth. At the end of my talk, I pointed that having a negative feedback loop is also necessary for approaching sustainable development of economics and society.

A panel discussion after the seminar was interesting. Four days before I left Japan, Dr. Rothkopf sent us three questions for the discussion: 1. How can science help to



Dr. Shimizu during his lecture

change existing business models to become more sustainable and how sustainable is science and research itself?, 2. What can universities, funding agencies and trade organizations do to support the establishment of a science economy?, and 3. Will the science economy overcome the infinite growth paradigm or will it enable it? These were very important but tough questions. I thought about those on the plane and spent a whole day in my hotel room in Oslo trying to answer the questions, and was still not sure if I had good answers. I was a little concerned about how the panel discussion would go since the questions were rather broad. However, we had a good discussion among people with different backgrounds. The seminar ended up with success and I enjoyed this unique opportunity to meet and discuss with researchers from different fields.

Another good memory of the seminar was seeing my former graduate student Dr. Nobuto Kaneko in Oslo. He is now a postdoctoral fellow co-supported by RCN and JSPS and working with Dr. Nilsen at NORCE in Bergen. It was indeed an alumni gathering for me. I would like to express my gratitude to the organizers for hosting the seminar.

November 2019 was my "Norwegian month" since I was also invited to the Norwegian Embassy in Tokyo on November 7. It was an honor to present our INTPART-ExcelAQUA project along with other project leaders for the Minister of Research and Higher Education, CEO of RCN and rectors from nine Norwegian universities, and discuss how to strengthen the connection between Norway and Japan at an institutional level. We have submitted our application for INTRPART-Phase 2 to extend the project for next three years. I hope we are able to continue the project and exchange more students to promote our collaborative research for sustainable aquaculture.

2019.12.2 Visit by Prof. Naoto Sekimura from the University of Tokyo

Prof. Naoto Sekimura, Vice President of the University of Tokyo, visited our office together with eight staff of the University of Tokyo, and met with Director Tsumoto and Deputy Director Yoshihara. They visited Stockholm University for staff training program and took this opportunity to visit our office.

We exchanged opinions on our activities in the Nordic countries and the university's policy regarding internationalization of students and staff.



Prof. Sekimura in the second from the left

2020.2.4 Visit by Dr. Yoshifumi Futaana from the Swedish Institute of Space Physics (IRF)

On February 4, 2020, Dr. Futaana, Docent/Associate Professor of IRF, visited us at the JSPS Stockholm Office. Dr. Futaana was invited to Stockholm as a guest lecturer at the 8th Sweden-Japan Academic Network which was held on the following day. We shared information on our activities and exchanged opinions on further academic exchange between Sweden and Japan.



Dr. Futaana in the middle

2020.2.5 Visit by Ms. Hiroko Yoshikawa from the JSPS Headquarters

On February 5, 2020, Ms. Hiroko Yoshikawa, University Cooperation Program Division, International Program Associate of JSPS Headquarters, visited us. She visited Stockholm in order to attend the 8th Sweden-Japan Academic Network. We provided information about our mission and activities of JSPS Stockholm Office.



Ms. Yoshikawa

The JSPS Alumni Club in Norway (ACN)

In this section we introduce JSPS Alumni Clubs through an interview with a club member. This time we met Dr. Renée Schulz, who is a regular member of ACN.

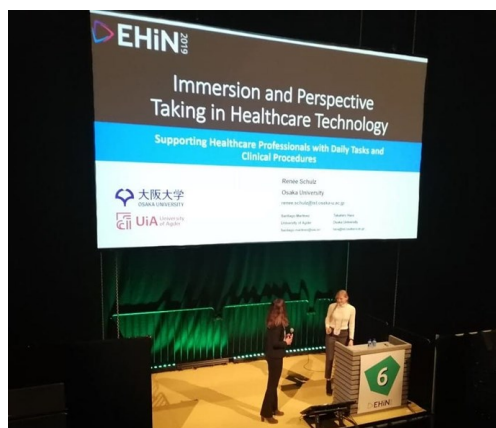
- * **Name:** Renée Schulz
- * **Title/ Position:** JSPS Postdoctoral Research Fellow
- * **Affiliation:** Osaka University



Q: Could you briefly introduce yourself and tell us about your relationship with the JSPS Alumni Club in Norway?

A: Currently, I work at Osaka University as a postdoc in the field of healthcare technology design for practice and education. My main research focus is user-centred design, interaction design and usability. Fields of application include e-learning technology and eHealth technology – which in this project is overlapping to a certain degree. I finished my PhD at the University of Agder (Norway) in 2018, and for this postdoctoral project, Osaka University and the University of Agder cooperate.

In the beginning of my postdoctoral fellowship, I participated in the Science and Technology in Society (STS) forum 2018 in Kyoto. I met one of the founders of the newly set up JSPS Alumni Club in Norway there, and therefore I immediately joined the club as soon as it was established. I was able to join the last Activity Seminar held at the Research Council in Norway, in November 2019, since I was a speaker at the Scandinavian Conference on Health Informatics (SHI) 2019 / E-Health in Norway (EHIN) in November at Oslo Spektrum. I was really happy that both events happened so close to each other which made it possible for me to join. I think that a collaboration between Japan and Norway is very interesting and can help both countries to improve their research together and I am very happy to be able to be a part of that.



My presentation at Oslo Spektrum for SHI 2019 in conjunction with EHIN

Q: How did you get interested in your research subject?

A: I got interested in my current focus in health technology, because of the discussions around digitalization of processes in Norway and the fascination that is health and medicine related projects.

Q: Which JSPS program are you participating in? What motivated you to participate in the program?

A: I am a postdoctoral research fellow under JSPS Postdoctoral Fellowship Program for Research in Japan (Standard). Previously, I participated in a 3-month exchange program to Osaka University during my PhD studies. From there, I knew the lab I wanted to work at as a postdoctoral fellow and the JSPS program made this possible.

Message from the Alumni Club Members

Q: Could you tell us about your experience in Japan as a JSPS fellow?

A: I am incredibly thankful for this opportunity and would always choose to participate in the JSPS fellowship again. I can highly recommend to anyone who is interested in new perspectives and change, to apply for this program. However, I would like to mention that moving to other countries and changing into a new work environment abroad can be very stressful and requires a lot of mental and emotional resilience.

Q: How do you evaluate your research so far? Tell us about things that worked well and/or were challenging for you.

A: After figuring how processes and workflow work in my new environment, my research progress has become stable and more predictable. We/I faced some predicted but also very unexpected problems in the beginning phase of the project. For example, the expected language barrier was indeed existing but wasn't the factor that kept user interactions and user testing on hold. It was more about how faculties work and collaborate in Japan, that made exchange with other departments/faculties and professors more complicated than we anticipated.

Q: How will your current experience in Japan affect your alumni club activities in the future?

A: Due to my current positive experience in Japan, I would be inclined to prolong my stay if possible. After finishing my stay in Japan, I would be happy to participate and keep myself up to date on the club's activities.

Q: Do you have any message for aspiring applicants for the JSPS programs and Alumni Clubs?

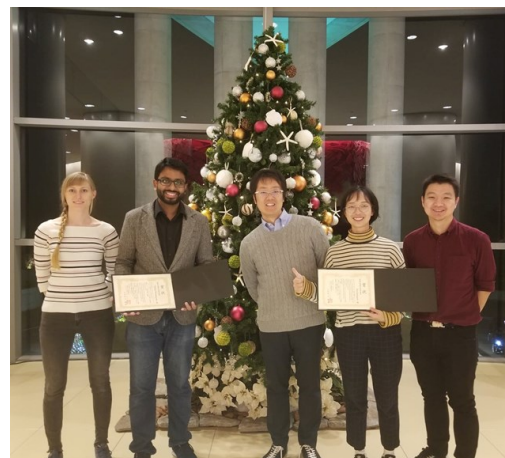
A: Especially for postdocs, I can highly recommend the JSPS Postdoctoral Fellowship (Standard). Settling in and getting to the core of the research takes time, and therefore I would highly recommend applying for a 2-year project span. Once you are there, apply for a language class and visit places – it will help you to understand your research environment better, too.

You can follow my research activities on [ResearchGate](#) or on Twitter [@Sciencefication](#)!

Hope to talk to you soon!



Japan is beautiful and has incredible nature. Traveling and discovering places is important to keep the mind fresh. Here: Kurama-dera in Kyoto.



Attending the local Japanese UBI/HCI conference at Awajishima, December 2019 with my colleagues

Reports from Japanese Researchers in the Nordic/Baltic Countries

In this section we ask Japanese researchers to present their experiences and research in their respective countries. For this issue we asked Dr. Nobuto Kaneko, a researcher at NORCE, to present his research and experiences in Norway.

Dr. Nobuto Kaneko

Title/Position: Postdoctoral Fellow



Years	Degree	Institute	Location
2017	Ph.D.	Graduate School of Fisheries Sciences, Hokkaido University	Hokkaido, Japan
2014	M.S.	Graduate School of Fisheries Sciences, Hokkaido University	Hokkaido, Japan
2012	B.S.	Undergraduate School of Fisheries Sciences, Hokkaido University	Hokkaido, Japan

Years	Position	Institute	Location
2018 - present	Personal postdoctoral fellow, Stipend	Japan-Norway Researcher Mobility Programme (JSPS, RCN), NORCE Environment, NORCE (Norwegian Research Centre AS)	Bergen, Norway
2016-2018	Ph.D. Researcher Stipend	Young Scientists of Japan Society for the Promotion of Science (JSPS) Graduate School of Fisheries Sciences, Hokkaido University	Hokkaido, Japan



Urlikken; the highest mountain
in Bergen

Q: What are you currently researching in Norway?

A: The main focus of my research is the endocrine mechanisms regulating growth in salmonids. Recent interest is to utilize hormone as a biomarker of growth retardation, which is induced into the circulation under catabolic conditions such as fasting and stress.

Q: How did you get interested in your research subject?

A: I was interested in the biology and ecology of marine fish (such as migration behavior and competition among/between species). However, I noticed that these biological activities are the output triggered and regulated by a complex physiological mechanism.

Q: Why did you choose your current institution to conduct your research?

A: Because the present lab has a rich storage of available samples of the small- and large-scale experiments for investigating physiological mechanisms of growth, stress, and reproduction in Atlantic salmon. In addition, the previous lab in Japan has been collaborating with the present lab and we knew each other very well.



Atlantic salmon (*Salmo salar*) sampled
for the experiment

Q: Do you think the experiences as a postdoctoral researcher under JSPS's Research Fellowship for Young Scientists at Hokkaido University affect your current research?

A: Absolutely it does. The present study is based on the understandings of a previous project funded by the JSPS. It included a collaborative work with members of current affiliation. At that time, I was not supposed to work as a postdoc in Norway, however, I got the great opportunity to do continuous and advanced research, fortunately.

Q: Compared to Japan, what is your impression of the research environment in Norway?

A: I was really impressed by the size and diversity of available budget, facilities, and human resources for progressing fisheries science. In addition, there are a lot of applicable grants/funds for aquaculture fields because the Norwegian government is trying to increase the production of aquaculture as a national direction. As a result, this field seems to be very attractive for students, thus, the entire fisheries industry including the research circulates and works well. On the other hand, I also feel so great for Japanese researchers because they produce excellent research results even in a limited environment.



Field trip to a facility of aquaculture
during the summer course in 2019

Q: Do you have any advice for young scientists who dream of going to Norway to do research?

A: I can highlight some great advantages for working in Norway; good public safety, a stable climate (in Bergen, it is mostly cloudy or rainy), and a good work-life balance, high potential demand for a researcher in fisheries science and relevant fields. In addition, the experience worked in other countries would improve your ability to acclimate to a new environment, as compared to a short-term research stay. Of course, I sometimes feel inconvenience, but the key is an attitude to enjoy the inconvenience.

A New Perspective on Language Differences

Hedda Hansson, Liaison Officer, JSPS Stockholm Office

Differences between Japanese and English have been on my mind lately, as I'm in the process of writing my Bachelor's thesis on Japanese-English translation. Translating between two such remote languages is not always easy. My own limited experience with it is associated with headaches, as it often took quite some time just to figure out which part of the sentence should go where. Beside the complex *kanji* characters, different grammatical structures are part of the difficulty in learning Japanese for Western speakers. One example is how the subject is often omitted in Japanese. Instead of saying "I drank tea", it is enough to say "drank tea". This can be hard to get used to, and in the beginning learners of Japanese often start their sentences with the Japanese equivalent of I (*watashi*) even though Japanese speakers rarely do this. One thing that remained a mystery for me for long was how, in Japanese books, present tense and past tense were mixed in way that didn't seem to make sense. One sentence could for example read: "A woman crosses the street. She was in a hurry."

I never really stopped to think about why such differences might exist, until I came across a couple of articles by a Japanese linguist¹ for my thesis. There, it was proposed that Japanese speakers omit the subject of the sentence because of cognitive reasons, namely: Japanese speakers describe things from an internal perspective, whereas English (and Western) speakers describe them from an external perspective. What does this mean? An internal perspective is simply what you see if look out in front of you. You see what is around you, but just like a camera can't take a picture of itself, you don't actually see yourself. From this vantage point, it therefore makes sense not to mention the subject. In order to say "I see the room" you have to actually imagine yourself from the outside. Furthermore, it was suggested that several other Japanese language characteristics, such as the switching between past and present tense, could be explained by Japanese speakers preferring an internal perspective. Since the internal perspective is standard, Japanese speakers also quite naturally imagine the internal experience of someone else. When the narrative switches to the present tense, it is a way for the reader to "jump into" the scene as if experiencing it on the spot together with the character. In English on the other hand, the storytelling is generally more consistently detached, something that is further emphasized by having to spell out the subject.

If Japanese and English speakers actually have different perspectives as standard, it is not hard to imagine that it could have an effect on culture and traditions. One such example could be the rhetorical effect *futaku*² that stems from traditional Japanese poetry. It is a method whereby the writer's feelings are described by something concrete in order to evoke the same feeling in the readers through their empathy. To understand the essence of the poem, the readers therefore have to imagine themselves in the shoes of the writer. This is possible if readers are used to taking on the internal perspective of another, but may not be as



Photo: https://cdn.pixabay.com/photo/2015/07/11/14/00/railway-840793_960_720.jpg

accessible for an English reader who is not familiar with this tradition. Different customs like this could also affect translation. For example, an internal perspective in Japanese might change to an external perspective in the English translation. A classic example of this is the opening lines of the novel *Yukiguni* ("Snow Country") by Yasunari Kawabata, a Japanese writer and a winner of the Nobel Prize for Literature in 1968:

Official translation: The train came out of the long tunnel into the snow country.

Literal translation: Going out of the long boundary tunnel, there was the snow country.

In the original, the viewpoint is placed within the protagonist who is inside a train, and we get to experience the changing landscape as he perceives it. In the English translation however, the viewpoint has been placed outside of the train. Could it be that the translator was drawn to this external perspective because it sounds more natural to English speakers?

Whether or not this cognitive theory holds all the truth when it comes to explaining these language differences, it was interesting to consider that there might be a deeper reason behind them. It reflects the development in linguistics and translation studies, which started out with language as an isolated system, to consider context, society and now also cognition. Also in other fields, it seems like we are moving more towards interdisciplinary approaches as our understanding of reality grows more and more complex.

References:

¹ Ikegami, Yoshihiko. "Subjectivity, Ego-orientation and Subject-Object Merger: A Cognitive Account of the Zero-Encoding of the Grammatical Subject in Japanese." "Subjective construal as a 'fashion of speaking' in Japanese."

² Maynard, Senko K. "A Poetics of Grammar: Playing with Narrative Perspectives and Voices in Japanese and Translation Texts."



Swedish Research Council requests increased appropriations for undirected research and research infrastructure

For the upcoming government research bill, the Swedish Research Council has requested more resources for undirected research and research infrastructure. In addition, initiatives to provide scientific advice and open access to research results were proposed so that new knowledge will be able to benefit society more quickly.

Source: <https://www.vr.se/english/just-now/news/news-archive/2019-10-31-increase-the-appropriations-for-undirected-research-and-research-infrastructure.html>



Former SAC Chair Göran Thor received HM The King's Medal

On June 10, 2019, Prof. Göran Thor, the Swedish University of Agricultural Sciences and former SAC chair, was awarded HM The King's Medal for outstanding contributions within research and conservation. Prof. Thor has studied lichens all over the world, including Japan, and discovered some 90 new species.

Sources and photo: <https://www.kungahuset.se/royalcourt/latestnews/2019/2019/thekingawardsmedals.5.75e24df916a59c781651615b.html>

<https://www.slu.se/ew-nyheter/2019/6/lavforskaren-goran-thor-far-kunglig-medalj/>



Prof. Göran Thor



Academy of Finland grants 13 million euros for building and developing research infrastructures

On December 9, 2019, the Finnish Research Infrastructure Committee at the Academy of Finland granted 12.8 million euros for building and developing national research infrastructures. The Academy is prepared to grant a total of some 21 million euros under the FIRI spring 2019 call for research infrastructures.

Source: <https://www.aka.fi/en/about-us/media/press-releases/2019/academy-of-finland-grants-13-million-euros-for-building-and-developing-research-infrastructures/>



Photo: mohamed_hassan (<https://pixabay.com/illustrations/doctor-research-chemical-observes-3822863/>)



Parliament agrees to provide DKK 1.5 billion to green research

On November 6, 2019, all parliamentary parties agreed on the research reserve for 2020. Out of the total DKK 1.925 billion, 1.5 billion was allocated to green research, which is 1 billion more than in 2019. Research areas include agricultural transformation, environmentally-friendly transport and sustainable cities.

Source: <https://ufm.dk/en/newsroom/press-releases/2019/parliament-agrees-to-provide-dkk-1-5-billion-to-green-research>



Photo: annca (<https://pixabay.com/photos/nature-earth-sustainability-leaf-3289812/>)



Cooperation with the UN on marine plastic litter from shipping and fisheries

Norway has allocated NOK 40 million to a new project under the International Maritime Organization (IMO) that aims to prevent plastic litter from shipping and fisheries in developing countries. The Food and Agriculture Organization of the United Nations (FAO) is also involved in the project named GloLitter.

Source: <https://www.norway.no/en/india/norway-india/news-and-events/new-delhi/news/norway-to-strengthen-cooperation-with-the-un-on-marine-plastic-litter-from-shipping-and-fisheries/>



Photo: IMO (<http://www.imo.org/en/MediaCentre/PressBriefings/Pages/20-marinelitteractionmecp73.aspx>)



Number of higher education institution in Latvia is not optimal

On November 28, 2019, Latvian Education and Science Minister Ilga Šuplinskā said that there are too many higher education institutions in Latvia. While the existing infrastructure is large enough for 160,000 students, there are only 80,000 people studying in Latvia. Minister Šuplinskā said that there will be an assessment of higher education institutions based on their academic achievements, which means that institutions with weak academic performance will lose government funding.

Source: https://www.baltictimes.com/number_of_higher_education_institutions_in_latvia_is_not_optimal_-_education_minister/



Council for Science, Technology and Innovation to discuss the support for basic research and young scientists

On November 11, 2019, the 46th Council for Science, Technology and Innovation was held at the Prime Minister's Office. It was joined by Nobel laureate in Chemistry Dr. Yoshino, who participated in discussions about the support for basic research and young researchers.

Source and photo: https://www.kantei.go.jp/jp/98_abe/actions/201911/11kagaku.html



During the council



Prototype of Japanese supercomputer Fugaku ranks No.1 in power efficiency

A prototype of the Fugaku supercomputer has been rated the best in the world in terms of energy efficiency. The supercomputer is being developed by Fujitsu Ltd. and research institute Riken. It is expected to have more than 100 times more computing power than its predecessor, K computer. Fugaku will be put into operation around 2021 at the Riken Center for Computational Science in Kobe.

Source: <https://www.japantimes.co.jp/news/2019/11/19/business/corporate-business/japanese-supercomputer-fugaku-power-efficiency/>



Fine-tuning Japan's strategy to attract African students

In order to increase the number of African international students coming to Japan, Prime Minister Shinzo Abe launched the African Business Education Initiative for Youth 3.0 at the 7th Tokyo International Conference on African Development (TICAD 7) in August 2019. It will see Japan invite 3,000 African students to study in Japanese universities and to undertake internships in Japanese companies by the year 2026.

Source: <https://www.universityworldnews.com/post.php?story=20191210135737247>



IBM and the University of Tokyo launch quantum computing initiative for Japan

On December 19, 2019, IBM and the University of Tokyo announced the formation of the Japan-IBM Quantum Partnership. This broad national partnership framework involves other universities, industry and government in order to grow a quantum computing community and to foster new economic opportunities across Japan.

Source: <https://www.u-tokyo.ac.jp/content/400129074.pdf>

Call for Applications

International Fellowship for Research in Japan

JSPS Postdoctoral Fellowships for Research in Japan (Short-term) FY2020

The program provides opportunities for pre-/ post-doctoral researchers to conduct cooperative research with leading research groups in universities and other Japanese institutions with the duration of 1 to 12 months.

Recruitment	Application deadline (from host institution to JSPS)	Periods for arrival in Japan
3rd	Jun 5, 2020	Jan 1, 2021 - Mar 31, 2021

URL: <https://www.jsps.go.jp/english/e-oubei-s/index.html>

JSPS Postdoctoral Fellowships for Research in Japan (Standard) FY2020

The program provides opportunities for postdoctoral researchers to conduct cooperative research with leading research groups in universities and other Japanese institutions with the duration of 12 to 24 months.

Recruitment	Application deadline (from host institution to JSPS)	Period for arrival in Japan
2nd	May 8, 2020	Sep 1, 2020 - Nov 30, 2020

URL: <https://www.jsps.go.jp/english/e-ippan/index.html>

JSPS Invitational Fellowships for Research in Japan (Short-term) FY2020

The program provides overseas researchers who have an excellent record of research achievements with an opportunity to conduct collaborative research, discussions, and opinion exchanges with researchers in Japan.

This program consists of three options of Long-term and Short-term.

Recruitment	Application deadline (from host institution to JSPS)	Period for arrival in Japan
2nd	May 8, 2020	Oct 1, 2020 - Mar 31, 2021

URL: <https://www.jsps.go.jp/english/e-inv/index.html>



Brochure Download (PDF):

https://www.jsps.go.jp/english/e-inv_researchers/data/2020_fellowships_leaflet_e.pdf

Upcoming Seminars and Symposia

The 4th Norway-Japan Academic Network

Date: February 26 (Wed), 2020

Venue: RCN, Oslo, Norway

Speakers: Prof. Jim Tørresen, University of Oslo

Dr. Shiori Koga, Norwegian Institute of Food, Fisheries and Aquaculture Research

Dr. CJ Beegle-Krause, SINTEF

Prof. Thomas Ågotnes, University of Bergen

Organizers: RCN, Diku, ACD, JSPS Stockholm Office

URL: <https://www.jspss-to.com/event/the-4th-norway-japan-academic-network-seminar/>

* Please visit the link above to register and it is required by February 20, 2020.



The 5th Japan Alumni and Researcher Assembly in Denmark (JARA) “Transnational Exchange in Art and Design”

Date: March 6 (Fri), 2020

Venue: University of Copenhagen, Copenhagen, Denmark

Speakers: Prof. Michio Hayashi, Sophia University

Prof. Emerita Tania Ørum, University of Copenhagen

Prof. Mette Sandbye, University of Copenhagen

Dr. Mette Højsgaard, University of Copenhagen

Dr. Karen Kitani Harsbo, The Royal Danish Academy of Fine Arts

Organizers: The Embassy of Japan in Denmark,

Tokai University Alumni Association in Denmark,

ACD, JSPS Stockholm Office

URL: <https://www.jspss-to.com/event/japan-alumni-and-researcher-assembly-in-denmark-fy2019/>

* Registration in advance is required: send an email with name and affiliation to info@ch.mofa.go.jp by February 28, 2020.

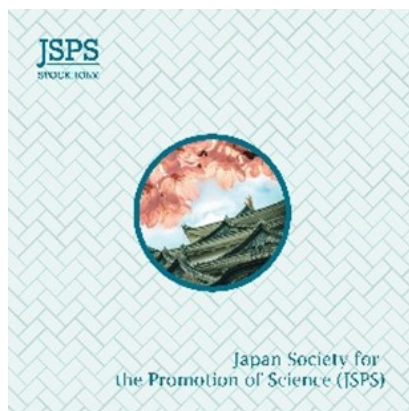


JSPS Stockholm Office's New Brochure

We have undated our office's brochure.

Please visit the link below:

<https://www.jsps-sto.com/wp-content/uploads/2019/07/2019brochure.pdf>



JSPS Stockholm Office E-mail Magazine

We began issuing an e-mail magazine in April 2019, which includes information about our seminars, symposia, alumni activities and international fellowship programs.

To sign up for our e-mail magazine, please register from here:

<https://www.jsps-sto.com/newsletter-2/emailmagazine/>

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If you are interested in receiving our newsletter by e-mail, please sign up for the newsletter on our website:

<https://www.jsps-sto.com/newsletter-2/>

Our newsletters are also available on our website for reading online.

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Photo by Tomoko Svedlund Ishii