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FEATURE

Dr. Knoll: 2018 Recipient of International Prize for Biology

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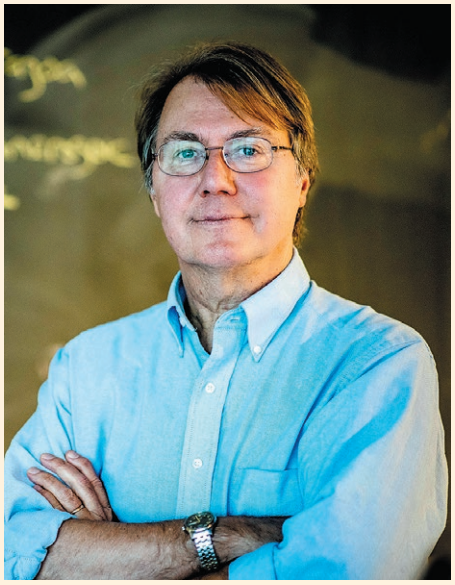
Dr. Andrew Herbert Knoll
Fisher Professor of Natural History, Harvard University



Dr. Andrew Knoll
(official photograph taken by Nerissa Escanlar)

Dr. Knoll sampling Neoproterozoic carbonates in East Greenland

On 23 August, the Committee on the International Prize for Biology, chaired by Dr. Hiroo Imura, Acting Vice President, The Japan Academy, decided to award the 34th, 2018 International Prize for Biology to Dr. Andrew Herbert Knoll, Fisher Professor of Natural History at Harvard University.

Dr. Knoll is one of the world's premier paleontologists and an international leader in research on life and the environment on the early Earth. He has authored and co-authored more than 400 peer-reviewed papers and edited 12 books including one sole authored, which has been translated into several languages including Japanese. His publications have been cited over 43,000 times, exerting an immense impact on our understanding of the early evolution of life on Earth.

Dr. Knoll has conducted numerous field-based studies aimed at enhancing our understanding of Precambrian life, especially during the first three billion years of life on the planet. He discovered microfossil records of early life in Spitsbergen. His continued research in East Greenland, Siberia, China, Namibia, western North America, and Australia revealed a wide diversity of 800-million-year old microfossil and provided the oldest unambiguous records of the Eukaryote. His extraordinarily meticulous observations of the fossil record have firmly established the nature of biological diversity before the initial radiation of animals. These achievements have contributed significantly to our understanding of the evolution of Precambrian life. Dr. Knoll led the establishment of the Ediacaran Period and its inclusion in the geologic time scale.

Also focusing his work on the relationships between the evolution of life and the evolution of Earth surface environments, Dr. Knoll made a major contribution to the study of Proterozoic environmental history through his pioneering research in isotopic chemostratigraphy. Furthermore, he has improved our understanding of the evolutionary history of plants and animals by combining developmental biology and physiology. Dr. Knoll developed the novel hypothesis that rapid CO_2 build-up in the atmosphere governed mass extinction at the end of the Permian Period. This hypothesis predicted the actual pattern of selectivity in Permo-Triassic extinction with high fidelity. It is now widely accepted that CO_2-driven global warming, ocean deoxygenation, and ocean acidification occurred by massive volcanism at the end of the Permian Period. This study has now become a useful predictor of the world's future in relation to current environmental changes occurring on the planet.

Over the past decade, Dr. Knoll has served as a scientist and strategic planner on NASA's exploratory MER mission to Mars. His wealth of knowledge and research experience regarding life in ancient periods and its evolution have enabled Dr. Knoll to contribute substantially to the unravelling of questions related to life on Mars.

These and other of Dr. Knoll's accomplishments have enriched both science and society, eminently qualifying him as the recipient of this year's International Prize for Biology.

For more information about the 34th, 2018 International Prize for Biology, please visit the website:
https://www.jsps.go.jp/english/e-biol/index.html

International Policy Planning Division

Annual Meeting of Global Research Council Held in Moscow

The Global Research Council (GRC) is a high-level international consortium of Heads of Research Councils (HORCs). On 15-16 May, the GRC held its seventh annual meeting in Moscow, Russia. Co-hosted by the Russian Foundation for Basic Research (RFBR) and the National Research Foundation of Korea (NRF), the meeting brought together the heads of 61 science-promotion organizations from 51 countries and of two international agencies. They engaged in an active discussion on two themes: Peer/Merit Review and Science Diplomacy. A "Peer/Merit Review 2018" statement of principles was adopted. It updated the "Scientific Merit Review" statement of principles adopted at the GRC's 2012 annual meeting.

In the interval, the environment surrounding scientific research organizations and funding agencies had changed. "Peer/Merit Review 2018" was amended to reflect those changes by broadening the set of merit criteria for carrying out reviews in line with the missions and program objectives of each organization. The purpose of this year's statement was, therefore, to create a merit-based review system that will widely elicit the mutual trust and recognition of GRC-member organizations across the world.

Members of the GRC Governing Board

Next year's annual GRC meeting will be held in São Paulo, Brazil, co-hosted by the São Paulo Research Foundation (FAPESP) and German Research Foundation (DFG), and cosponsored by the National Scientific and Technical Research Council (CONICET) of Argentina. In the meantime, regional meetings will be held in the five GRC regions: Asia-Pacific, the Americas, Europe, Africa, and Middle East/North Africa. The results of these meeting discussions will be compiled and reflected in the proceedings of the GRC's eighth annual meeting.

At this year's meeting, JSPS president Dr. Susumu Satomi was elected as a member of the GRC decision-making Governing Board. He replaced former JSPS president Dr. Yuichiro Anzai, who had long played a leading role on the Board. Dr. Satomi will continue to lead JSPS in making proactive contributions to the GRC program. Concurrently, the GRC is enhancing its website so to play a wider and more effective role via better information sharing in advancing collaboration among the world's science-promotion organizations in tackling common global issues related to research funding and scientific promotion.

For more information on the GRC program, please visit its website: http://www.globalresearchcouncil.org/

International Policy Planning Division

Anniversary Event Held for Association of the Korea-Japan Researcher Network


Dr. Park


Dr. Kajita


Dr. Iye

JSPS and the JSPS Korea Fellows Alumni Association (Association of the Korea-Japan Researcher Network) held a symposium celebrating the 10th anniversary of the alumni association at the University of Seoul on May 11. JSPS supports a community of alumni associations in 18 countries around the world. Founded in 2008, the Association of the Korea-Japan Researcher Network has as its members researchers invited from Korea to Japan under JSPS programs. As this year marks the association's 10th anniversary, the event enjoyed the full support of the Japanese Embassy in Korea. In addition, it commemorated the 100th anniversary of the University of Seoul, to which alumni association president Prof. Dr. Byung-Eun Park also belongs.

Held on the theme "The Importance of Fundamental Research and Basic Science and the Future of Academic Exchanges," the event opened with greetings by Mr. Yasumasa Nagamine, Japanese Ambassador to the Republic of Korea, Prof. Yun-Hi Won, president of the University of Seoul, and Dr. Yasuhiro Iye, executive director of JSPS. Dr. Prof. Takaaki Kajita, director of the Institute for Cosmic Ray Research at the University of Tokyo (2015 Nobel laureate in Physics) delivered the keynote speech in which he reviewed research carried out at the Kamioka cosmic ray observatory that led to his winning the Nobel Prize. He described the importance of fundamental research and the need for international collaboration in advancing it. He stated his expectation for expanded Korea-Japan collaboration across many fields in the future. He was followed by stimulating speeches from Prof. Dr. Nobuo Arimoto of Seoul National University, Dr. Myung-Ja Kim, president of the Korean Federation of Science and Technology Societies (KOFST), and Dr. Kwang-Yun Wohn, chairman of the National Research Council of Science & Technology (NST).


Mr. Nagamine

More than 300 researchers and students participated enthusiastically in this event, which provided a vibrant platform for sharing views and advancing academic exchanges between Korea and Japan. The participants took away from it both new information and spirited colleagueship.

International Policy Planning Division

JSPS Summer Program 2018

Summer Program 2018 Poster

Attended by 102 pre- and post-doctoral researchers from Canada, France, Germany, Sweden, the UK and the US, JSPS Summer Program 2018 was co-organized by JSPS and SOKENDAI (The Graduate University for Advanced Studies) and held in Japan over a two-month period between 12 June and 22 August.

Featuring a research internship at host institutions, the program began with a one-week orientation held in the seaside town of Hayama. At it, the fellows received special lectures, participated in a poster session, learned Japanese language and about Japanese culture, and experienced life in Japan through homestay with local families. An excursion was made to Kamakura, in which the fellows enjoyed visiting historical sites such as the Great Buddha and Tsurugaoka Hachimangu shrine.

After the orientation, the young researchers moved to their respective host institutions. Their summer internship afforded the fellows an experience upon which to consider coming back to Japan at future junctions of their careers. On the day before the program ended, the participants reassembled to report on their summer research activities.

Overseas Fellowship Division

The centerpiece of this program is the internship at the fellows' host research institutions, where they take part in research activities with frontline researchers in Japan. Here are comments on that experience by two of this year's participants.

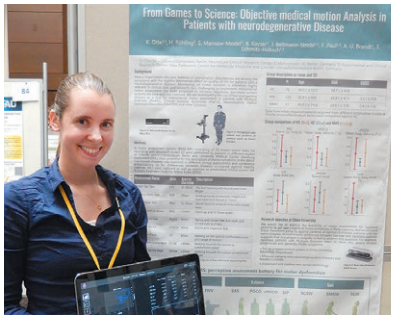
Mr. Pierre-Emmanuel Bachelet

(PhD Student, École Normale Supérieure de Lyon, France) at the University of Tokyo
His host:
Prof. Masashi Haneda

I am extremely grateful for this opportunity given by the JSPS. As a PhD candidate in early modern Japanese history, I was able to gather ancient documents and maps for my dissertation while being hosted at the University of Tokyo, one of the most prestigious institutions in Japan. Thanks to the JSPS summer program, I have met people from all around the world and discovered new fascinating research topics.

Ms. Karen Otte

(PhD Student, Charité-Universitätsmedizin Berlin, Germany) at Chiba University
Her host:
Prof. Satoshi Kuwabara



Here in Japan, I have been treated only with kindness. It's an honor to be part of a collaboration between Chiba University and Charité Berlin. In the University's neurology department, I was able to study new technology for comparing the movement behavior in Japanese and German patients with neurodegenerative diseases.

Orientation for New Fellows

Every year, JSPS carries out five orientations for newly arrived JSPS fellows under its Postdoctoral Fellowships for Research in Japan. They are designed to help the fellows adapt to the Japanese cultural and research environment while making their research life in Japan comfortable. This time, 19 fellows gathered for the first orientation of FY 2018, held in Tokyo between 19-21 June.

After some icebreaking remarks, JSPS executive director Dr. Yasuhiro Iye gave a lecture on the history of science, in which he talked about how science has been advanced by generation upon generation of researches devoted to the pursuit of truth and new knowledge. Three current and former JSPS fellows (Dr. Radim Hladik of the Research Organization of Information and Systems (ROIS), Dr. Richard Culleton of Nagasaki University, and Dr. Sakthi Kumar of Toyo University) talked about their experiences of living and advancing their careers in Japan and about their JSPS alumni activities. In the following Q&A session, the new fellows asked the presenters questions that delved deeper into their Japan experiences, including any difficulties they had encountered.

The second day began with a course to orient the new fellows on the basics of the Japanese language. It was followed by lectures delivered by Dr. David Slater of Sophia University and Dr. Richard Wilson of International Christian University (ICU). Dr. Slater described the Japanese concept of *uchi-soto* (inner versus outer), seeding group discussions on aspects of Japanese culture. Dr. Wilson talked about Japan's internationalization, including such aspects as world heritage, tourism, and Japanese *omotenashi* (hospitality). The fellows' responses to the lectures and their spirited engagement in the discussions demonstrated a quickly deepening understanding of Japanese culture.


Receiving lectures


Japanese language course

The latter part of the second day and the third day featured field trips. Visits were made to the Edo-Tokyo Museum, where life-like model towns allowed the fellows to interact with Tokyo history, and to Tokyo Fire Department's Ikebukuro Life Safety Learning Center, where they learned what to do when a fire or earthquake occurs through simulations, including one that allowed them to experience firsthand a magnitude 7 earthquake. They, then, went to the old Asakusa district of Tokyo, where they learned through temple visits about differences between Japanese Shinto and Buddhist religions, and from there to the University of Tokyo's museum near Tokyo Station. The field trips culminated with an opportunity for the fellows to experience a traditional Japanese tea ceremony.


Asakusa Shrine


Edo-Tokyo Museum


Experiencing a tea ceremony

This 3-day orientation is seen as having been fruitful in not only preparing the fellows for their new research life in Japan but also for giving them a unique opportunity to create among each other friendship and collegial ties that overarch a plethora of nationalities.

International Program Department

JSPS-NIH Forum Held in Bethesda

Opening remarks by Dr. Hirata, director, JSPS Washington Office

On 9 March, the JSPS Washington Office, together with the Fogarty International Center (FIC) of the National Institutes of Health (NIH), held the 2018 JSPS-NIH Forum on the NIH campus in Bethesda, Maryland. The forum, which is held annually, features special lectures from invited guest speakers on a range of topics in biomedical research, as well as presentations from former and current JSPS-NIH fellows.

Following the opening remarks, two invited guest speakers who had been JSPS-NIH fellows early in their careers gave lectures.


Dr. Tsumaki


Dr. Azuma

Dr. Noriyuki Tsumaki, professor of Kyoto University, presented his research on therapeutic applications of iPS cell technologies, and Dr. Mizuki Azuma, associate professor of the University of Kansas, spoke about her work on Ewing sarcoma proteins.

Two former fellows who have remained at NIH and one recent fellow delivered presentations on their research activities. Then, the newly incoming 14 fellows gave "flash talks," in which they introduced within three minutes the research they'll be conducting during their tenures at NIH. The event attracted a full-capacity audience, who regularly engaged the speakers in discussions during several lively Q&A sessions.


Dr. Kilmarx

A reception held afterwards opened with heartfelt remarks from FIC deputy director Dr. Peter Kilmarx and a toast offered by Dr. Michael Gottesman, deputy director for Intramural Research at NIH. The reception gave guests and speakers alike a good chance to relax and mingle.

The forum was seen to have strengthened collegial connections among former/current JSPS-NIH fellows and NIH affiliated researchers, while testifying to the excellent relationship enjoyed between NIH and JSPS.

For further details on this forum including speaker presentations and interviews, please visit the Washington Office's website.
http://jspsusa.org/wp/2018-jsps-nih-forum-held-at-nih-bethesda-campus/

JSPS Washington Office

"Science in Japan" Forum Held at National Museum of the American Indian

On 15 June, the JSPS Washington Office held its 23rd annual "Science in Japan" Forum, venued this time in the Rasmuson Theater at the Smithsonian National Museum of the American Indian (NMAI) in Washington, D.C. Located on the National Mall, NMAI was established in 2004 as the first national museum in the US dedicated exclusively to Native Americans. Themed "Memory and the Museum," the event featured special lectures from American and Japanese speakers on such topics as the role of objects in preserving memories, how museums and ethnographers can support communities affected by natural disasters, and exploring ways to ensure that communities have an equal voice in designing exhibitions that portray their cultures. The speakers included five members of Japan's National Museum of Ethnology (Minpaku), and experts from NMAI, Smithsonian National Museum of Natural History (NMNH), Brown University, and University of Houston.

Approximately 100 people attended this full-day event, comprising a mix of museum curators, professors, students, and interested members of the public. Several attendees were participating in a JSPS event for the first time, drawn to the forum by its attractive topic. The audience actively engaged the speakers in discussions during the Q&A sessions and breaks between the speaker sessions.

The forum's opening remarks were delivered by JSPS Washington Office director Dr. Kohji Hirata, NMAI deputy director Ms. Machel Monenerkit, and Ambassador Kazutoshi Aikawa, who is currently serving as the deputy chief of mission at the Japanese Embassy in Washington, D.C. Dr. Hirata introduced the forum's program and emphasized the importance of the humanities as a cornerstone of science. In the panel session, the speakers animated the discussion with a give-and-take of views that crisscrossed the forum's topics in ways that riveted the audience's interest and sparked a short but highly spirited Q&A discussion.

After the forum, several members of audience remained to further discuss the forum topics with the speakers. The speakers met on the following day to consider whether to produce further outputs, such as a report or publication, or to launch collaborations stemming from the forum's discussions.

For more details on this event, please visit the Washington Office's website: http://jspsusa.org/wp/sijforum/

JSPS Washington Office

Japanese Researchers Gather for Summer Event in Berkeley

Networking and building connections are important for researchers. Through them they can learn new things and get valuable feedback from their peers. For more than a decade JSPS's San Francisco Office has been hosting biannual gatherings to promote interaction between US-based Japanese researchers from various disciplines, age groups, and positions. The number of attendees has grown steadily over the years.

On 18 August, JSPS San Francisco held its 2018 Summer Researcher Gathering at the David Brower Center in Berkeley. This gathering was attended by higher education administrators, researchers (resident and visiting), representatives of research institutes and US-based companies, and JSPS research fellows.

Dr. Toru Tamiya, director of JSPS San Francisco, gave opening remarks to an audience of more than 70, which was followed by four research presentations. A speech was given by Dr. Takaaki Taira, assistant research seismologist at the UC Berkeley Seismological Laboratory, who addressed various topics including career development and research life in the Bay Area. He touched upon his experience as a principle investigator in research projects conducted in the US and suggested strategies for acquiring research grants. He ended by briefly introducing the Seismological Laboratory at UC Berkeley and disaster mitigation efforts being advanced in several ongoing research projects. Radiating a warm personality, Dr. Taira imbued the session with a casual yet lively atmosphere, inviting active audience participation and a spirited Q&A discussion.

Dr. Taira

Moving to the next session, the participants split up into 10 groups comprising individuals from different backgrounds. They exchanged views and shared experiences related to such themes as career advancement and strategies for creating a productive research life. Afterwards, the San Francisco Office delivered a brief presentation on JSPS's funding programs available to Japanese researchers.

The day's events concluded with a toast by Dr. Yasunori Nomura, professor, Department of Physics, UC Berkeley, which kicked off a networking reception. The participants enjoyed chatting in a relaxed setting, meeting new people, and reconnecting with colleagues. We were pleased to see this event serve as a venue for researchers to expand their networks and make new connections. The Office's next Researcher Gathering will be held in Berkeley in February of 2019.

JSPS San Francisco Office

"UK-Japan Bilateral Meeting" Held with The Royal Society

On 14-15 June, the JSPS London Office and The Royal Society held a UK-Japan Bilateral International Meeting in the charming English town of Dorking. It brought together highly influential researchers from the two countries with an aim to advance even further Anglo-Japanese collaboration in the sciences.

The meeting featured sessions on two themes: Materials for Energy and Regenerative Medicine. Held simultaneously, eleven Japanese lecturers took the podium in the sessions, which saw leading-edge research reported and discussions advanced by top-flight researchers toward spurring robust joint research between the UK and Japan. The meeting's opening remarks were delivered by JSPS executive director Dr. Yasuhiro Iye, who spoke about JSPS's long-enjoyed relationship with The Royal Society.

In the Materials for Energy session, there were four co-chairs: Prof. Richard Catlow and Prof. Anthony Cheetham on the UK side and Prof. Susumu Kitagawa and Prof. Hiroshi Nishihara on the Japan side. Prof. Susumu Kitagawa, who is the director of the Institute for Integrated Cell-Material Sciences (iCeMS) at Kyoto University, described in his lecture the "World Premier International Research Center (WPI) Initiative," under which iCeMS is selected for funding.

In the Regenerative Medicine session, Prof. Hideyuki Okano and Sir Ian Wilmut, who co-chaired the meeting, held an insightful discussion that penetrated the core of issues in this evolving field of medical research.

In both sessions, the lecturers were showered with questions while a cascading exchange of views was had among the two countries' researchers. Over the meeting's two days, discussions that crisscrossed the sessions' fields overflowed into the coffee breaks and meal times. After the meeting, several participants told us that they had enjoyed and found very useful the meeting's exchange of information and views.

JSPS London Office

Research and Career Forum for Japanese Researchers in Germany

On 8 June, the JSPS Bonn Office held a gathering for young Japanese researchers currently residing in Germany with JSPS Overseas Research Fellowships. Venued at the Gustav Stresemann Institute in Bonn, this year's gathering brought together 11 fellows including some who were dispatched to Germany in the previous fiscal year. The Office launched this event in 2016 to create and support a Japanese researcher network in Germany. Due to the diverse research specialties of the fellows, their separate arrival dates, and their scattering across the country, it had not been easy for them to get to know each other.

Opening the meeting, the 11 fellows introduced themselves and their research activities. Ms. Sabine Ganter-Richter, a board member of the German JSPS Alumni Association (German JSPS Club) gave a briefing on support for scientific exchange between Germany and Japan. Two lectures by senior Japanese researchers based in Germany highlighted the event. Dr. Hiroyuki Nakamura, scientist, Max Planck Institute for Solid State Research, shared his experience on setting up a research environment after arriving in Germany and gave the young researchers some tips on how to survive and thrive within the German research system. Dr. Shigeyoshi Inoue, professor, Department of Chemistry, Technical University of Munich, told about how his experience as a JSPS overseas research fellow and a Humboldt research fellow had paved the way to his current position at the university, and spoke about multi-track research career paths available in Germany. The young fellows listened with riveted attention to the two lectures, asking a volley of questions.


Dr. Nakamura


Dr. Inoue

This year, members of JSPS's Overseas Training Program Division took part in the event, providing information on support for young researchers wanting to build scientific careers in Japan. The event closed with remarks from JSPS Bonn Office director Dr. Keiichi Kodaira, after which the participants continued to discuss their research and life in Germany over refreshments.

The Bonn Office believes that strengthening collegial ties among the young Japanese fellows by providing them opportunities to gather and interact will help to make their research stays in Germany all the more fruitful.

JSPS Bonn Office

MIRAI Sustainability Workshop Held in Sweden

On 7-8 June 2018, a MIRAI Sustainability Workshop was held at the University of Gothenburg on the theme "From Source to Sink—Human Society and the Flow of Water." It was carried out under the MIRAI Project, launched via an agreement to strengthen the bilateral collaboration that was concluded at the Japan/Sweden University Presidents' Summit held in Tokyo in October 2015. Eight Japanese and seven Swedish universities comprise the members of the Project, which organizes workshops in three scientific fields: Aging, Materials Science, and Sustainability.

About 30 researchers from MIRAI Project-member universities participated in this sustainability workshop, in which an active exchange of ideas and views was had after each presentation on three sub-topics addressed over the two days: Marine Ecosystem Services, Water Treatment, and Water in Human Society.

On the second day, presentations were given by Dr. Tadaharu Tsumoto, director of JSPS Stockholm Office, and Dr. Andreas Göthenberg, executive director of the Swedish Foundation for International Cooperation in Research and Higher Education (STINT), on their respective organizations' research funding programs. The participants shared their research results and discoveries on water-related issues from the perspective of sustainability.

After the workshop, information regarding the annual MIRAI Seminar and next workshop held in Tokyo in October was announced.

For more details on these events, please see the following website: http://www.mirai.nu/seminar2018/

JSPS Stockholm Office

JSPS Strasbourg Office Holds JSPS Briefing at Aix-Marseille

On 3 July, the JSPS Strasbourg Office held a JSPS program briefing at Aix-Marseille University (AMU) in Marseille, a large city of Southern France situated on the Mediterranean coast.

In the briefing, members of the Strasbourg Office introduced JSPS and its international exchange programs with special focus on JSPS's Postdoctoral Fellowships for Research in Japan, to an audience of students, postdocs and young researchers. After which Dr. Giuseppe Di Molfetta and Dr. Philippe Mossé, both members of the JSPS French Alumni Association, shared their personal experiences in talking about their stays in Japan under JSPS's invitation fellowships and how after coming back to France they have applied their Japan experiences to their research activities.

The Q&A session that followed these interesting presentations added to the fruitfulness of the briefing in that the nature of the

questions conveyed a concrete interest in research in Japan and JSPS programs. It was asked, for example, how host researchers are secured when going to Japan to do research under JSPS's invitational fellowships, and what differences there are in the fellowship selection ratio among various fields of research.

After the briefing, our hosts were kind enough to give the Strasbourg Office staff an observation tour around the facilities of AMU's Institute for Advanced Study (IMéRA). Also visiting its Maison méditerranéenne des sciences de l'homme (MMSH) and Mediterranean Institute of Oceanography (MIO), the staff got a good look at the high level of research being carried out at the university.

The day after our visit, the Strasbourg Office received a letter by email from the university thanking us warmly for our briefing and informing us that our pamphlets on JSPS's international exchange programs were being distributed throughout the campus.

Visiting MIO

JSPS Strasbourg Office

NRCT-JSPS-JAAT Seminar in Thailand Research Expo 2018

On 9 August, the JSPS Bangkok Office and National Research Council of Thailand (NRCT) co-organized an NRCT-JSPS-JAAT Seminar, held in collaboration with the JSPS Alumni Association of Thailand (JAAT). Its main theme was "Thai-Japan Academic and Scientific Collaboration—Past, Present, and Future."

In 1978, JSPS and NRCT concluded a collaborative MOU to support joint research projects and researcher exchanges between Japan and Thailand. Since then, the two funding agencies have enjoyed a strong and unfolding partnership. To celebrate its 40th anniversary, this seminar was held as part of Thailand Research Expo 2018, which is organized each year by NRCT. It featured keynote speeches by NRCT secretary-general Prof. Dr. Sirirurg Songsivilai and JSPS president Dr. Susumu Satomi, who revisited the 40 years of NRCT-JSPS cooperation and spoke to new vistas over the next 40 years.

The JSPS Bangkok Office and NRCT selected four highly evaluated projects conducted by excellent joint research teams under the bilateral MOU to be highlighted in this seminar. The following distinguished teams of speakers delivered presentations on their joint research and modes of collaboration.

- Prof. Takaaki Nakaya (Kyoto Prefectural University of Medicine)
- Prof. Prasit Pavasant (Chulalongkorn University) and Prof. Hiroshi Egusa (Tohoku University)
- Dr. Kalyanee Paithoonrangsarid (National Science and Technology Development Agency) and Prof. Iwane Suzuki (University of Tsukuba)
- Prof. Waraporn Putalun (Khon Kaen University) and Assoc. Prof. Hiroyuki Tanaka (Kyushu University)

To conclude the seminar, JSPS Bangkok Office director Prof. Kuniaki Yamashita delivered remarks, in which he expressed expectation for the future fruits of Thai-Japan collaboration and extended appreciation to all those whose efforts accrue to strengthening the close relationship enjoyed between JSPS and NRCT.

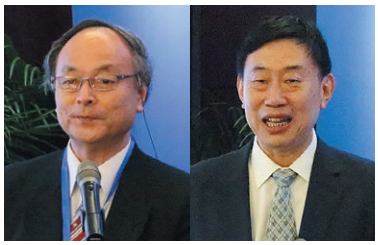
JSPS Bangkok Office

CASS-JSPS Hold Joint Symposium on Aging Populations

On 9 June, the JSPS Beijing Office and the Chinese Academy of Sciences (CASS) held a joint symposium in Beijing on the theme "China-Japan Cooperative Preparing for Aging Society: Road and Future."

This was the seventh in this series of annual joint symposiums, launched in 2012 for the purpose of promoting exchange in the humanities and social sciences between researchers in China and Japan. It was attended by more than 100 researchers and other interested individuals from the two countries.

In the opening ceremony, representatives on the Chinese and Japanese sides offered remarks. Then, keynote lectures were delivered by three distinguished researchers, who talked about strategies to address population aging issues observed at the national and governmental levels of both countries. In the following sessions, some 19 researchers gave presentations on aging-related issues from the perspectives of their various fields of specialization. In recapping the day's discussions, the importance was reiterated of learning from the various and differing aspects accompanying aging in the two countries and of generating from new concepts and approaches which will accrue to a bright future for the world's people.



JSPS Beijing Office director Dr. Kaoru Hirota (left picture) and CASS vice president Dr. Peilin Li (right picture) delivering remarks at the opening session

Amidst an accelerating rate of population aging, the collaborative milestones achieved in this symposium set the stage for ever-closer teamwork between Japanese and Chinese researchers in taking the next steps toward solutions in this critical field of population aging.

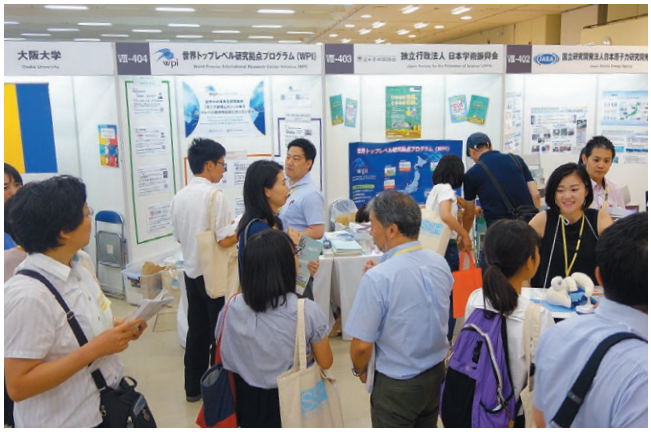
JSPS Beijing Office

JSPS and WPI Program Showcase Future Science at SSH Students Fair

The WPI Program Center, located within JSPS, supports the World Premier International Research Center Initiative (WPI program). On 8-9 August, 11 WPI-funded research centers participated in Super Science High School (SSH) Students Fair 2018, held at Kobe International Exhibition Hall.

With science, technology and innovation playing a premier role in societal development around the world, the WPI program sees this SSH event as being an ideal opportunity to reach out to the young generation of budding scientists. Since 2013, the WPI representatives have participated in the Fair to introduce the WPI program initiatives and visions to the young participants. This year, some 240 high schools, including 26 overseas high schools, participated in the Fair. Students from each of the high schools gave presentations in a poster session as did outreach personnel from the WPI centers. Several of the students also took the podium to deliver presentations on their science projects and engage the audience in spirited discussions.

Over the course of this two-day event, more than 3,000 high school students along with their teachers participated in the Fair. They enjoyed learning about each other's scientific pursuits and making new friends and future colleagues at the starting blocks of their careers in science. Interacting with the WPI program members and learning about their world-leading research activities imbued the students with expanded



perspectives and new horizons to reach for as they advance their science studies.

As for JSPS, it was the first time for our staff to take part in this energetic event. The Fair gave them a unique opportunity to introduce teachers to JSPS programs designed to enrich high school education, such as the Science Dialogue Program in which JSPS international research fellows visit high schools throughout Japan to give lectures on their research and talk about their home countries and cultures, all while interacting closely with the students.

For details about the WPI Program, please visit
https://www.jsps.go.jp/english/e-toplevel/
For the Science Dialogue Program, please see
https://www.jsps.go.jp/english/e-plaza/e-sdialogue/index.html
For more information about the event, please see
https://www.jst.go.jp/cpse/ssh/ssh/public/sshevent.html (available only in Japanese)

WPI Program Center
Public Relations Office

Briefing Held in Tokyo for Embassy Attachés

On 29 May, JSPS held a briefing at its Tokyo headquarters for science and technology attachés of embassies in Tokyo.

It opened with welcoming remarks by JSPS president Dr. Susumu Satomi, who briefly introduced JSPS's history and mission. Dr. Mariko Kobayashi, senior managing director, JSPS's Headquarters for International Affairs, delivered a presentation titled "JSPS Mobility Programs and JSPS's Function as a Major Funding Agency in Japan," in which she described Japan's academic and S&T policies, JSPS's role in carrying them out, Japan's Grants-in-Aid for Scientific Research (KAKENHI) system, and JSPS's international mobility programs and activities. She was followed by Ms. Kazuko Shimizu, head, Office for World Premier Research Centers, who briefed the attachés on the World Premier International Research Center Initiative (WPI) program's top world-level research centers and scientific initiatives.


Dr. Satomi

During the Q&A session, questions were asked on many subjects, including Japan's grant application review system, JSPS's cooperative relationships with African nations, and progress in expanding collaboration with the EU through the building of

research hubs. In turn, JSPS asked whether it would be possible for science attachés based in Tokyo to support young Japanese researchers going to their countries.

The 23 attachés and about 20 JSPS officials who attended the meeting engaged each other in active discussions amidst a friendly atmosphere. This was the first time for JSPS to hold such an event, which was deemed successful as many of the participants said afterwards that it was a good opportunity for them to deepen their understanding of the wide range of JSPS programs.

International Policy Planning Division

Science Dialogue

Scientific Adventure of a Turkish Fellow in Japan

Dr. Sinan Levent

On 3 July, JSPS postdoctoral fellow Dr. Sinan Levent visited Fukushima Prefectural Fukushima High School to give a lecture in English under the JSPS Science Dialogue Program. It was attended by 48 third-year students. Coming to Japan from Turkey, Dr. Levent is currently doing research on the theme "Politics and Perception toward the Middle East in Post-War Japan" at Rikkyo University. Oral history plays a key role in his research. He is currently carrying out interviews with people involved in Japanese-Middle East affairs across a wide range of fields. They include Japanese politicians, diplomats, journalists and businessmen.

His lecture began with a discussion on Japanese diplomacy toward the Middle East after World War II, the linage of which he traced from the Ottoman Empire to the current situation in Turkey. As this history is rather complex, Dr. Levent tried to gear his lecture to the students' level of understanding. To aid that process, he invited and answered a volley of questions from them. The students looked very serious as they concentrated on learning about new things in a foreign language.

When & why Dr. Levent decided to study Japan's political history

Dr. Levent told the students that he decided to become a researcher when he was in his junior year of college. He stated his reasons as being first the political environment in Turkey, where people love to talk about soccer and politics. Secondly, the things he studied in schools were mostly related to Western Europe. Wanting a challenging change of venue, he turned his interest to Japan, whose GNP was the second highest in the world after the US at that time. He knew that pursuing a study of Japan would require mastering the Japanese language as well as English, which was not his native tongue. His current research has led him to also learn Korean, which he uses to study source documents.

Dr. Levent's message to the students

Thank you for listening so intently to my lecture. Sharing time with you was very special for me. I'd like to leave you with a bit of advice, which I hope you will find useful in the future.

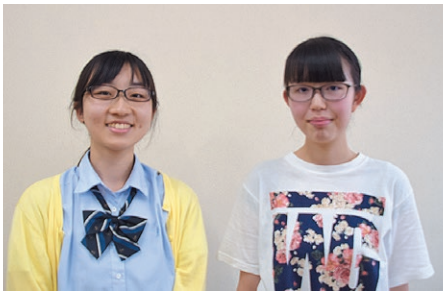
- Think about what meaning the word "time" holds. Time is given to us equally, but what you gain from time depends on how you use it. Wavering equals wasting time. When you can't decide what to pursue, studying whatever you're interested in will probably lead you along a path to the answers you're seeking.
- When facing difficulties, don't forget your dreams—believe in yourselves. See failures as turning points along your chosen path. They present an opportunity for you to choose which way to go next.

Students' voices

I was happy to listen to Dr. Levent's lecture today. It was my first time to hear a lecture in English, and to learn about Japan's relationship with the Middle East after the war. I will pay greater attention to what is going on around the world from now on. (Student 1)

As I've just heard that Turkey hopes to become a member of EU, Dr. Levent's lecture was very timely. I learned that Turkey is a mainly Muslim-populated country, but has a policy of separation between religion and state, though it seems not to always be an easy policy to implement. (Student 2)

I regret that I didn't catch the chance to tell my thoughts after the lecture, because I was a little nervous. I'd like to study English much harder and talk with the people from various countries and study about them. (Student 3)



Students who told us their impressions

Teachers' voices

Thank you Dr. Levent for giving our students such a fabulous lecture. The students have already studied about the Ottoman Empire, so they could use that knowledge as background to understanding your lecture. We'd like them to feel a dynamic connection between the history they read in books and the real world, learned from a person like you who hailing from Turkey knows the region's history and culture firsthand. Your lecture and close interaction with the students were both a valuable and inspirational experience for them.

Overseas Fellowship Division

Top Global University Project
Introducing the Participating Schools

HOKKAIDO UNIVERSITY

Hokkaido Universal Campus Initiative —Collaborating with the World

The origins of Hokkaido University (HU) date back to the Sapporo Agricultural College, founded in 1876 as Japan's first modern university to award bachelor's degrees. Throughout its long 142-year history, HU has adopted and cultivated as its ethos four basic philosophies: "Frontier Spirit," "Global Perspectives," "All-round Education," and "Practical Learning."

Selected for the Top Global University Project in 2014, HU created and launched several educational programs based on the university's strengths and distinctive features. The Hokkaido Universal Campus Initiative (HUCI) promotes international collaborations in education and research, while fostering world leaders capable of contributing to the resolution of global issues. This Initiative is carried out via programs that utilize international networks that span a wide spectrum of fields.
https://www.global.hokudai.ac.jp/

Hokkaido Summer Institute & Learning Satellite

Hokkaido Summer Institute (HSI) and Learning Satellite (LS) are short-term educational programs carried out in collaboration with world-leading researchers. HSI offers more than 100 intensive courses during the summer, which enable HU students and overseas students to expand their knowledge of academic subjects via interactive lectures and field seminars on HU's campus and at our other facilities in Hokkaido. LS offers a variety of courses held in many parts of the world, which allow students to acquire first-hand experience at the forefront of research and education.
http://hokkaidosummerinstitute.oia.hokudai.ac.jp/

NITOBE Education System

This system comprises two special education programs for highly talented students: (1) Nitobe College for undergraduate students and (2) Nitobe School for graduate students to cultivate true global leaders. Among the system's resources are the Nitobe College Fellows and the Nitobe School Mentors, alumni who utilize their wealth of international experience to enhance our students' educational experience; compulsory study abroad for Nitobe College students; and team-based, active learning curricula, tailored learning portfolios for Nitobe School students. Those who complete these programs receive special certificates in addition to standard bachelor's, master's, and doctoral degrees.
https://nitobe-college.academic.hokudai.ac.jp/en
https://nitobe-school.academic.hokudai.ac.jp/en/


HSI at HU's Botanic Garden

GI-CoRE & New Graduate Schools

The Global Institution for Collaborative Research and Education (GI-CoRE) is a faculty organization that brings together world-class researchers from abroad and from within the university in an initiative to promote international collaborative research and education in ways that leverage HU's strengths and distinctive features. Through GI-CoRE's international joint efforts, new graduate schools have been launched that traverse multiple academic fields and foster specialists who possess the expertise to contribute to the resolution of specific issues, such as cancer therapy, zoonosis control, and global food resources.
https://gi-core.oia.hokudai.ac.jp/main/


Fieldwork

Dr. Mayumi Ishizuka
Advisor to the President,
Institute for International Collaboration
Hokkaido University

I am a professor of Toxicology in HU's Faculty of Veterinary Medicine. I simultaneously chair the Intensive Learning Center of Hokkaido University, which is a virtual body aimed at supporting two unique international educational programs offered by the university: Hokkaido Summer Institute (HSI) and Learning Satellite (LS).

HSI provides active learning programs in fields of arts and sciences. Participants are given the opportunity to attend classes that employ engaging educational techniques, such as field training in Hokkaido's vast outdoors, other active learning activities, attractive seminars and advanced lectures. The program enables students to develop into professionals capable of thriving as leaders on the world stage. Every year, a large number of international researchers and students enroll in this educational program, taking advantage of the opportunity that it offers to interact with researchers and students of our university and to participate in educational events during Hokkaido's mild summer season.

Our LS program is supported by numerous HU professors and advanced research institutes around the world. LS program offers opportunities for research-based overseas activities to participating HU students. For examples, these include fieldwork and research activities at glaciers, on agricultural/aquaculture farms, and in overseas research institutes—highly appealing opportunities geared to various curricular options. LS has met our highest expectations as it provides substantial opportunities for advancing collaborative research and contributes to the dynamic expansion of the university's international research networks.

We look forward to you joining us!

The aim of the Top Global University Project is to enhance the international compatibility and competitiveness of higher education in Japan. It provides prioritized support for top world-class and highly innovative universities that can lead the internationalization of Japanese universities.

Top Global University Project website: http://www.jsps.go.jp/english/e-tgu/index.html

APU Shape your world
Ritsumeikan Asia Pacific University

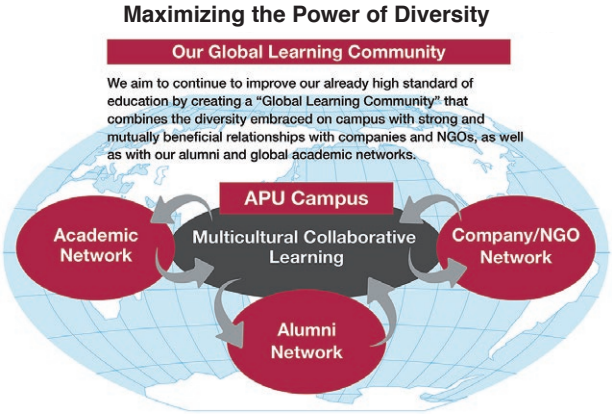
Global Learning: Towards New Horizons in University Education

Molding the Future Shape of APU

Based on our basic ideals of "Enhancing freedom, peace, and humanity," "Promoting international mutual understanding," and "Shaping the future of the Asia Pacific Region," APU has enjoyed success in creating an internationally diverse university (a multicultural campus) which, boasting a high global level of education, is spurring the internationalization of higher education in Japan. Building upon its rich diversity, APU is working to transition from being "Japan's No. 1 International University" to becoming the "World's No. 1 Global Learning University." The Top Global University Project is playing an integral part in carrying out this transition.

Process of Transition

Leveraging the environment and systems that APU has built thus far (e.g., an academic system of high international standard characterized by bilingual education and an internationally viable admission system), APU is striving to attain a lofty global reputation while crafting a university model that advances globalization. In this process, APU is (i) developing Global Learning methods, (ii) performing quality assurance in improving its global education, research, and university administration, and (iii) carrying out various forms of international outreach in support of Global Learning.



APU's plan for Global Learning embodies an educational system that fosters excellent human resources, implemented based on the following elements: (i) Creating a formidable multinational, multicultural environment (we aim to steadily enroll students from 100 countries and regions), (ii) offering countless opportunities for growth in all aspects of student life (in the class, in student activities, in the dormitory), and (iii) engaging a diverse array of stakeholders in our educational programs (e.g. alumni, companies, and organizations from around the world).

Educational development is progressing at APU in several ways. Examples include cooperative learning using multicultural environments, a Multicultural FD/SD Center, a dormitory established for the education of all incoming freshmen, expansion of overseas experiences for Japanese students, development of multicultural Honors Programs, establishment of learning systems for acquiring third and fourth languages other than Japanese and English, and classes and internships in which alumni from around the world participate. The quality of APU's curricula will be comprehensively enhanced through the acquisition of international accreditation (e.g., AACSB). Moreover, progress is being made in the creation of communities for Global Learning, which invite the participation of diverse stakeholders.

For more information about APU's Top Global University Project, please visit our APU Global Learning website at:
http://en.apu.ac.jp/home/global/

Dr. Sei Isomine
Associate Professor, Education Development and Learning Support Center
Ritsumeikan Asia Pacific University

The first of its kind in Japan and quite possibly in the world, the Honors Program for Global Citizenship at APU is a very unique four-year residence education program. Its aim is to cultivate young, aspiring students from all over the world who strive to become role models by demonstrating excellence in academic pursuits, cross-cultural peer-leadership, and service learning. As a faculty advisor, I take much pride in designing programs to provide unique opportunities for students to acquire essential skills and cultivate attitudes of service to others through residence experiences, lectures and workshops, as well as projects and events devised by the students themselves.

Since its foundation, APU has relied on and valued its students taking initiatives to enhance the university's multicultural community both in and out of the classroom. Such student engagement takes many forms: Undergraduate teaching assistants facilitating discussions in small classes; resident assistants in AP House (APU's residence halls) working to create multicultural and friendly communities on their floors; and upper-class students teaching their juniors of various nationalities how to implement "multicultural week shows." It is the culmination of such student-driven efforts that has shaped our small yet global community, while giving impetus to the creation of our Honors Program for Global Citizenship. Its focus is placed on cultivating global *citizens*, not global leaders. This is because after graduation, no matter where they may go, our honor students will be globally-minded citizens as they act to better the lives of people and contribute to societal progress in the world.

Research and Life in Japan
By a JSPS Fellow
No. 47

Dr. Zabelina Valeriya

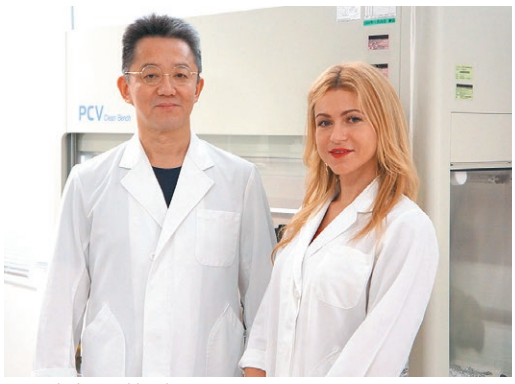
"Genome Engineering and Parthenocloning in the Silkworm, Bombyx mori"

JSPS Postdoctoral Fellow, National Agriculture and Food Research Organization, 2016-2018
Postdoctoral Fellow, Institute of Entomology, Biology Centre, Czech Academy of Science, Czech Republic, 2010-present
Ph.D. (Biological Sciences), V.N. Karazin Kharkiv National University, Ukraine, 2010

Coming from Ukraine, Dr. Zabelina Valeriya is conducting research under a JSPS Postdoctoral Fellowship with her host Dr. Naoyuki Yonemura at the National Agriculture and Food Research Organization (NARO). We asked Dr. Valeriya to tell us about her research activities and life in Japan.

Q. What are you currently researching under the JSPS fellowship?

My research area is parthenocloning in the silkworm *Bombyx mori*. Parthenocloning is the propagation of organisms that maintain their original genotype by specific thermal treatment that induces parthenogenesis in eggs dissected from virgin females of *Bombyx mori*. Parthenoclones obtained through selection for maximal capacity to parthenogenesis have been maintained without sexual reproduction for decades with conserved genetic and morphological traits until nowadays. That is the best evidence for introducing this historical finding into current silkworm biotechnologies such as genetic manipulations leading to new kinds of silk and to use of silkworms as bioreactors for the production of precious proteins. Parthenocloning provides a basis for setting up standards for the products of biotechnological and pharmacological sericulture. Our aim is to construct cloned transgenic silkworm strains efficient for commercial use.



Dr. Valeriya and her host Dr. Yonemura

Q. What got you interested in this research subject?

I became interested in parthenocloning in the silkworm as an undergraduate student at the department of Genetics and Cytology, Karazin Kharkiv National University, Kharkiv, Ukraine. I was lucky to meet Prof. V. V. Klymenko who supervised my Master's and PhD studies and taught me how to deal with the silkworm. Prof. Klymenko is a student of the famous Russian geneticist B. L. Astaurov who discovered ameiotic parthenogenesis in the silkworm and predicted the mechanism of heat-induced parthenogenesis. Both scientists have established strong collaborations with Japanese colleagues since a long time ago. My PhD studies concerned silkworm genetics and parthenogenesis. I continued and extended these investigations during my postdoctoral stay in the Biology Centre of the Czech Academy of Sciences. I examined the capacity for parthenogenesis in ovaries of a parthenoclone transplanted into male hosts of a standard silkworm strain and analyzed interactions between the implant and recipient cytologically and biochemically. I found that ovary cultivation in the male hosts induced phenotypic variability in the progeny developed from the implant due to partial expression of some dominant alleles. I showed that deviations from the donor phenotype were temporary modifications and were not inherited by the following parthenogenetic generations; ovaries transferred from parthenoclone larvae to non-parthenogenetic hosts retain the capacity of ameiotic parthenogenesis.

Q. Why did you come to Japan to pursue that research? What motivated you to further your research here?

During my postdoctoral fellowship at the Biology Centre of the Czech Academy of Sciences under a European project I had to stay abroad for several months. The main purpose of that stay included experience exchange, learning new techniques, lab organization and functioning. At that time we were searching for a laboratory that better fits the topic of my research and has conditions for fast and smooth obtaining of results. There were just a few labs in the world corresponding our search criteria. Deployment of a highly parthenogenetic silkworm strain for transgenesis was the primary field of my interest. The use of a parthenoclone can considerably accelerate the selection of successfully transformed individuals and the establishment of a homozygous line. Combining my knowledge of silkworm parthenogenesis with the expertise of silkworm transgenesis available in the Transgenic Silkworm Research Unit, Division of Biotechnology, Institute of Agrobiological Sciences, NARO was the key objective of my stay in Japan. So, that was my best choice.

Q. You are residing Japan with your daughter. How do you find creating a balance between conducting your research and taking care of your daughter while living in Japan?

From the moment I decided to come to Japan for a research stay with my daughter I understood that I could hardly predict all the possible difficulties related to the organizing of my stay in a way that balanced conducting my research with taking care of my daughter. Before coming to Tsukuba I made an on-line search of schools and got feedback on some forums. Upon our arrival I received huge support by my host researcher in all organizational issues — he accompanied me when visiting all the necessary institutions and made communication possible. I am really grateful for his help. Also my colleagues are always eager to help in any matter I may encounter in my everyday life. They always give me very good advice. Later on, I got acquainted with other parents in my daughter's

school and when I have a tight schedule due to my experiments, they also help out with my daughter. I am very lucky to have met nice and kind local people; with their help, taking care of my child and conducting research appears to be quite manageable.

Q. What's your interest outside your research work? What do you usually do on your days off?

My interests are very wide. I love nature and my passion is travelling, I prefer active rest. So my daughter and I became members of a Tsukuba hiking club. If we have time and the chance to be involved in such activities, we join trips or travel with friends. As a parent I wish to give and show as much as possible to my child. Also, I am interested in cultural exchange. I think it is a very important mission for parents to transfer their own culture and traditions to their children being raised abroad so that they will know their roots and, at the same time, know how to integrate into surrounding society. Sometimes we attend events organized by local cultural clubs and participate in performances during international festivals, as I am a folk dancer. Both of us study Japanese a bit. We like winter sports such as skiing and skating and summer sports such as windsurfing, swimming, and badminton. From time to time, we visit a nearby gym as physical activity is very important for both mental and physical health.

Q. Please give some advice for young researchers who may be thinking about doing research in Japan?

The JSPS fellowship is known as one of the most prestigious fellowships around the world. Being highly competitive, many young researchers hesitate to apply for it. Do try to apply for your research project. If you succeed in winning the fellowship, you will never regret this challenging experience. Moving abroad itself requires a lot of courage. Only when you leave your comfort zone and take on a new life opportunity, can you widen your perception of the world. Life is in motion and power is in change. Living abroad helps you to see your own values more clearly, which is linked to better well-being, more success in your career, stronger ability to cope with stress, making clearer decisions, and becoming more creative and open-minded. Japan has very good facilities for conducting your research with hi-tech equipped, modern laboratories, and well-organized working systems where everyone does their specific jobs. Under these conditions, it is easy to concentrate on your own research, not wasting your time on organizational procedures. You will for sure advance your research while having a chance to travel around this beautiful country and come in touch with its culture and traditions. Networking is very important in our lives. You should develop your communicative skills to be able to establish good connections. Attending scientific meetings may help in search for your future collaborators.


Dr. Valeriya in the lab

As we began our interview with Dr. Valeriya, our impression was that coming to Japan from Ukraine, she had various concerns about doing research while living with her daughter in an unfamiliar country. As our conversation with her unfolded, however, we found that she is enjoying both doing research and living in Japan. Whereas she and her daughter felt some anxiety before coming here, their experiences while living in Japan have dispelled it. Not only do her host researcher and lab mates lend a helping hand in her daily living but also the parents of her daughter's friends offer support and held out in child raising. Watching Dr. Valeriya as she engages in her research, we saw her as being a superb example of how a scientist can achieve a balance between research and child raising while residing in a foreign land. We hope that her experience will provide impetus to others who are considering coming to Japan to do their research.

National Agriculture and Food Research Organization and its Neighborhood

Predecessor of the current Division of Biotechnology of National Agriculture and Food Research Organization was founded by Japanese government in 1911 with the aim to control the quality of silkworm eggs and silk fiber for exporting mainly to the United States. At that time the best quality of silk was obtained from Europe – Italy and France, then China and Japan. To be more competitive in silk production in the international market, the facility expanded its research field to study of silkworm genetics and its diseases. The research activities have been continuing for over a century.


Dr. Valeriya and her daughter

Tsukuba is an unusual city located in Ibaraki Prefecture just 40 km from Narita Airport and about 50 km from Tokyo. Selected as the new "home" for science by Japanese government in the early 1960's, the number of research institutions in the city already reached 40 by 1980. Rural landscapes and the richness of nature perfectly suited for various research and studies. Tsukuba has been attracting researchers from all over the world.

In the north of the prefecture views above the horizon are dominated by majestic Mount Tsukuba, and in the east there is the second largest lake in Japan, Kasumigaura. Mount Tsukuba is 877 meters high, and you can climb it on foot or by cable car.

There are a lot of places that interest people.

Firstly, Tsukuba Expo Center which once had the world's largest planetarium, where the most modern technologies are presented. Secondly, Tsukuba Space Center is dedicated to the development of outer space and the training of astronauts. Toyosato Yukari no Mori park in summer offers artisan workshops teaching how to make pottery, bamboo ornaments and Ikebana.

Sea Slug
Called *umiushi* (sea cow) in Japanese because of its cow-like shape, the sea slug is not only the subject of extensive research in Japan but is also an object of public fascination because of its mysterious beauty.

About JSPS

The Japan Society for the Promotion of Science (JSPS) operates as an independent administrative institution to perform the following main functions: fund scientific research, foster researchers, promote international scientific exchange, and advance university reform.

Crowing Rooster

From days of old in Japan, it has been the belief that the vigorous cry of the rooster in the gray of the morning augurs the coming of a new and bright day. As the crowing rooster can therefore be thought of as a harbinger of the kind of new knowledge that promises a brilliant future for humankind, it was chosen as the emblem of the Japan Society for the Promotion of Science. This emblem was designed in 1938 by Professor Sanzo Wada of Tokyo Fine Arts School to depict the rooster that symbolizes the breaking dawn in a verse composed by Emperor Showa.

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