

JSPS Quarterly

Japan Society for the Promotion of Science



FEATURE: Building and Supporting Researcher Networks

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Building and Supporting Researcher Networks



Why researcher networks

In May 2008, the Council for Science and Technology Policy issued a report titled “Toward the Reinforcement of Science and Technology Diplomacy.” Diplomacy centered upon science and technology is carried out as a means of contributing to the solution of problems besetting society through a combination of bi- and multilateral cooperation. While promoting international research collaboration, it works to build and strengthen networks among researchers of different countries. For this policy to be successful, talented people will need to be fostered who can support and ad-

vance S&T diplomacy. Whereas the intent of JSPS’s fellowship programs that invite overseas researchers to Japan is not to promote S&T diplomacy per se; these programs, however, do create viable connections between Japanese researchers and researchers of other countries with whom they do research during their stays in Japan. Building enduring collaborative relationships out of these connections is a facet of S&T diplomacy. It is from this perspective that JSPS carries out its program for supporting alumni associations.

JSPS’s researcher networks

Every year, overseas researchers at various stages of their careers come to Japan via JSPS’s invitational programs. They range from young researchers to eminent scientists. After finishing their tenures, some of them return to their home countries, others go to third countries to advance their work, while still others continue their research in Japan. What all of them have in common is their experience of having stayed in Japan under a JSPS program. To sustain the relationship between these researchers and Japan over the long term, JSPS helps to establish and supports networks in the form of JSPS alumni associations. To date, 12 such alumni associations have been established. By supporting their activities, JSPS works to build networks among its former fellows and Japanese research-

ers, and, through these linkages, to develop and strengthen scientific exchange between their countries and Japan.

The main functions of JSPS’s alumni associations are as follows:

- Holding symposiums in collaboration with JSPS
- Holding general meetings of their membership
- Holding pre-departure orientations for researchers who will go to Japan to participate in JSPS programs
- Disseminating information by publishing newsletters and operating websites
- Implementing the BRIDGE Fellowship Program for the benefit of their members

BRIDGE Fellowship Program

The BRIDGE Fellowship Program was established in FY 2009 for the purpose of sustaining and strengthening networks among former JSPS fellows and their Japanese colleagues. What distinguishes it from other fellowship programs is that it only applies to the members of JSPS alumni associations. For former JSPS fellows to pursue research with Japan requires above all that they sustain and develop their networks with Japanese counterparts, which is the primary objective of the BRIDGE Program. It provides alumni association members with an opportunity to revisit Japan for the purpose of creating, sustaining or strengthening collaborative relation-

ships with Japanese researchers. To do this, BRIDGE Fellows visit their former host institutions, participate in joint research projects and seminars, or help to foster young researchers who may become future participants in JSPS programs. To effectively achieve these program objectives, the selection process for the BRIDGE Program differs from those of JSPS’s other fellowship programs: It is carried out by a selection committee established by each country’s alumni association, which makes the fellowship program an integral part of the association’s activities.

Future Direction

Since the first alumni association was established in Germany in 1995, the JSPS alumni community has grown to embody 12 countries and regions. They are not established for static purposes, but are rather dynamic organizations that work to build bilateral networks used to advance scientific exchange between their countries and Japan.

The original group of alumni associations was established in countries with JSPS liaison offices; more recently, however, they have been established in countries without JSPS offices, including India, Korea, Bangladesh and Finland. In substitution of a JSPS office, coordinators will be appointed in these countries to act as a vestibule between alumni associations and JSPS headquarters and to provide administrative assistance for symposiums and other alumni association events. On another plane, JSPS encourages and supports self-initiated international exchanges and actives among the alumni associations themselves. Through these and other initiatives, JSPS is strengthening its support for the alumni associations.

Efforts within this evolving context of JSPS-alumni cooperation are bearing tangible results, such as an increase in the number of young researchers applying for JSPS's Postdoctoral Fellowships



Participants of Thai alumni association's inaugural ceremony

for Foreign Researchers from countries with alumni associations. In fact, one of the alumni associations' greatest attributes has been the opportunity they provide researchers who have conducted research in Japan under JSPS programs to convey those experiences to younger researchers in their countries, giving rise to new generations of researchers aspiring to do research in Japan. As the benefactor of these positive results, JSPS will continue to proactively support its alumni associations in carrying forward their efforts and activities.



General meeting of Alumni Club in Finland



Gathering of European alumni association executives

Alumni Associations Established as of July 2010

German JSPS Club	(established: 1995)	JSPS Alumni Association in Egypt	(2008)
JSPS French Alumni Association	(2003)	Eastern Africa JSPS Alumni Association	(2008)
UK JSPS Alumni Association	(2004)	Korean JSPS Fellows Alumni Association	(2008)
US JSPS Fellows Alumni Association	(2004)	Bangladesh JSPS Alumni Association	(2009)
JSPS Alumni Club in Sweden	(2005)	JSPS Alumni Club in Finland	(2009)
Indian JSPS Alumni Association	(2006)	JSPS Alumni Forum of Thailand	(2010)

JSPS French and German Alumni Associations Hold First Joint Forum

On 21-22 May, the forum “Food Science and Society” was held jointly by JSPS French and German alumni associations and the JSPS Strasbourg and Bonn Offices. It marked the first time for the JSPS alumni associations and centers of two countries to co-organize a forum. Venued at the Institute of Chemistry of the co-sponsoring University of Strasbourg, this ground-breaking event was successful in attracting some 300 French, German and Japanese participants.

The German JSPS Club was established in 1995, and the JSPS French Alumni Association in 2003. In 2005, the executives of alumni associations in Europe got together and formed a council of European alumni associations (currently comprising five associations), which meets once a year for the purpose of promoting alumni activities on the Continent. This jointly implemented forum had its beginnings in an effort to catapult the council’s international



agenda. Strasbourg was chosen as an ideal location for holding the forum as it is situated in the middle of Europe on the border between France and Germany.

The forum itself featured an interdisciplinary dialogue among French, German and Japanese researchers of the subject of “food.” The theme was explored and advanced from a wide variety of angles, including philosophy, social science, medicine, nutrition, neurology, geology, culinary science and gastronomy, with presentations and discussions held on the latest research results in areas related to health, food supply, and palatability. It was amply demonstrated that “food science” is grounded in a great many diverse fields, while “food culture” is imbuing the French, German and Japanese peoples with a wealth of wisdom.

The forum proceedings were broadcast over and archived in the French Ministry of Higher Education and Research’s Canal-U (<http://www.canal2.tv/>).

— JSPS Strasbourg Office

Indian JSPS Alumni Association Holds Its First Symposium

On 10 May, the Indian JSPS Alumni Association held its first symposium at the Indian Institute of Technology Delhi (IIT Delhi) in New Delhi. Its theme “Recent Advances and Future Directions in Science and Technology” attracted some 120 people, including graduate and undergraduate students as well as alumni members, from around India to the event.

The symposium opened with greetings from the alumni association’s general secretary Dr. Pravin D. Kunte, followed by a message from Mr. Masashi Mizukami, Chargé d’Affaires, Embassy of Japan in India. Then, a traditional “lighting of the lamp” ceremony was conducted with sober solemnity to pray for the success of the symposium, after which the association’s chair Prof. D. Sakthi Kumar, Toyo University, delivered opening remarks. He was followed by IIT Delhi deputy director Prof. M. Balakrishnan and Dr. Yozo Fujino, professor, University of Tokyo, and senior program officer, JSPS Research Center for Science Systems, who offered congratulatory messages.

On the topic “Background and Bases of Manufacturing in Japan,” Dr. Manabu Kiuchi, emeritus professor, University of Tokyo, delivered a keynote address, followed by lectures on various aspects of the symposium’s theme by Dr. Yoshio Bando, chief operating officer, International Center for Materials Nanoarchitectonics (MANA), Professors B.R. Mehta and Joby Joseph of IIT Delhi, and Prof. A. Misra of Intellectual Ventures.



Lighting of the lamp

Innovations made in the design of the symposium gave it an added dimension. Besides the lecture hall, the foyer was occupied as a space for former JSPS postdoctoral fellows to introduce their host institutions in Japan to IIT students, giving them an informed opportunity to consider studying or researching in Japan.

On the day following the symposium, the Indian JSPS Alumni Association held its first general meeting.

— Overseas Fellowship Division



Greetings from the Indian JSPS Alumni Association

By IJAA Chair, Prof. D. Sakthi Kumar

Having received the prestigious JSPS fellowship, I joined the Bio-Nano Electronics Research Centre of Toyo University in 2001. Almost all of the faculty members and administrative staffs were very cooperative and extremely helpful in making my life most comfortable in Japan. The positive working environment and support I received from the Centre and university encouraged me to continue my work at Toyo University, where I was eventually absorbed into faculty of the Centre and the newly established Graduate School of Interdisciplinary New Science.

The Indian JSPS Alumni Association (IJAA) was formed in 2006 to provide a platform for Indian scientists who have been JSPS fellows (including STA fellows) to exchange ideas, collaborate, and discuss various work and society-related topics. Realizing that scientific research is advanced through a combined effort of good brains, the association was initiated to provide linkage among alumni members working in various parts of the world. Summed up, the objectives of our alumni association are to promote scientific exchange along with research and cultural collaboration between India and Japan, while encouraging collaborative work between JSPS fellows, their host professors and the association's honorary members. We also provide information that Indian JSPS fellows need to make their stays in

Japan go smoothly. Currently, we have more than 180 members, and the number is growing day by day.

We have launched a website (<http://www.indianjpsalumni.org>) to bring all the Indian JSPS alumni together under one umbrella. We have also launched an alumni Yahoo Group site to facilitate group discussions regarding various issues related to the association and other matters. We also use the site to conduct polls when making some official decisions. Initially, the Yahoo Group was started because of the vast geographical distribution throughout the world among the alumni members, which of course poses a limiting factor on conducting meetings. The executive members of the association handle its day-to-day activities. In addition to providing information to current JSPS fellows, they also answer the questions of new JSPS fellowship aspirants in India. To coordinate the alumni association's activities, we have formed four chapters based on India's geography: one in the north, east, west and south. We conduct a nationwide alumni association get-together every year, with its organizer rotating among the four chapters.

We have started publishing an in-house magazine titled Concord, in which members and their family members share their creative skills and their experiences of living



and doing research in Japan. We issue Concord as an e-newsletter. Our editorial board is responsible for selecting its articles and getting out the publication.

We have already taken the first step toward officially registering our alumni association with the Indian government. We are very interested in creating collaborations with other JSPS alumni organizations with an eye to exchanging ideas and developing fruitful relationships. It is our wish to play a positive role in advancing science around the world, led by JSPS fellows and associates in all countries.

Speaking on behalf of Indian JSPS Alumni Association, we extend a welcome invitation to all Indian JSPS fellows to join our club.

Indian JSPS Alumni Association

Please visit the following website for more information on the Indian JSPS Alumni Association.
<http://www.indianjpsalumni.org>



G8 Research Councils Initiative

At the 2008 G8 Heads of Research Councils meeting in Kyoto, the German Research Foundation (DFG) made a proposal to start a program of multilateral joint research projects to be implemented by the G8 countries. Upon deliberation by the respective countries, seven of them decided to initiate the “G8 Research Councils Initiative.” The participating science-promotion agencies are JSPS, DFG, US National Science Foundation (NSF), French National Research Agency (ANR), Research Councils UK (RCUK), Natural Sciences and Engineering Research Council of Canada (NSERC), and the Russian Foundation for Basic Research (RFBR).

The program provides funding to promote collaboration among researchers from the participating countries in advancing cross-disciplinary research, carried out upon the researchers’ own free ideas, that addresses such well-known global issues as climate, water, energy, pollution, infectious diseases, and food supply. The program seeks to generate new knowledge and innovation, provide highly effective support for top-class scientists, offer opportunities

for young researchers to participate in multinational research projects, and advance cutting-edge multilateral joint research.

This new multilateral research program targets all fields of the humanities, social sciences, and natural sciences. Joint application calls are issued for multilateral joint projects on mutually agreed upon research themes. The funded projects give university and other excellent researchers from the participating countries an opportunity and matrix for collaborating with each other.

This year, open calls for applications were issued by the G8 participating agencies for the first of this program’s projects, themed “Interdisciplinary Program on Application Software towards Exascale Computing for Global Scale Issues.” The second and third calls will be issued in 2011 and 2012. Acting as the secretariat for the second call, JSPS will coordinate among the participating agencies in soliciting and selecting research project applications.

— Research Cooperation Division I

New Project Launched under WPI Program

The World Premier International Research Center Initiative (WPI Program) was initiated by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) in FY 2007. By advancing operational and administrative reforms in Japanese research institutions, the program seeks to establish research centers that boast the kind of excellent research environments and high research standards that give them elevated global visibility—research centers that prompt frontline researchers from around the world to want to pursue their work at them. In FY 2007, the first five research centers (WPI centers) were selected and their operations launched under this program. Over a period of 10 to 15 years, each of them is receiving annual funding in an amount of about ¥1.4 billion.

This fiscal year, one new WPI center has been adopted in an environmental field expected to contribute to the advancement of low-carbon societies. Nine institutions answered the call for proposals and were vetted through a process of document reviews and hearings conducted by the WPI Program Committee, with JSPS assisting as the program’s administrative secretariat. Selected as



Meeting of WPI Program Committee

a result was the Carbon-Neutral Energy Research Institute of Kyushu University, whose prospective center director is Prof. Petros Sofronis of the University of Illinois at Urbana-Champaign. The new center is scheduled to go into operation in December.

— University-Industry Cooperation and Research Program Division

Ikushi Prize Newly Established

Last year, JSPS received an endowment from Emperor Akihito on the 20th year of his reign. Amidst a severe economic environment in Japanese society, His Majesty’s desire was to encourage and support young scientists who are working diligently to advance their studies and research.

In deference to his wishes, JSPS has established the *Ikushi* Prize program, which was placed into operation this fiscal year. It functions to officially recognize outstanding doctoral students who can be expected to contribute to Japan’s future scientific advancement, while seeking to fan their enthusiasm for educational and research pursuits.

Eligible for this Prize are doctoral students who have an excellent academic record and a rich sense of humanity and

who are self-motivated in their studies and research activities. They may major in any field of the humanities, social sciences or natural sciences. Such students are nominated to JSPS by the heads of Japanese universities and academic institutions.

Awardees are chosen through a process of document and panel reviews, with the final decisions made by a selection committee established within JSPS. This year’s approximately 16 awardees are scheduled to be announced early next year. They will receive a certificate, a medal and a scholarship grant of ¥1.1 million. For those awardees who wish one, they are also given a JSPS Research Fellowship for Young Scientists, to begin from the following fiscal year.

— Research Fellowship Division

Japan-Korea Joint Committee for Basic Scientific Research

On 18 June, the 20th meeting of the Japan-Korea Joint Committee for Basic Scientific Research was convened in Tokyo. The Japanese chair of the committee is Dr. Kunio Takayanagi, professor, Tokyo Institute of Technology, and the Korean chair, Prof. Mancheol Suh,



president, Kongju National University. Dr. Takayanagi and Dr. Jaeho Yeom, professor, Korea University, moderated the meeting. It marked the first time for the National Research Foundation of Korea, established through a reorganization of the Korea Science and Engineering Foundation, to represent the Korean side since the committee was established in 1991.

In the meeting, a report-based review was conducted of the joint research projects and seminars carried out in FY 2009 and their topics for FY 2010 were decided along with the theme of the Asian Science Seminar. Thirty-one joint research projects were selected from among 69 applications, while 11 seminars were chosen out of 28 applications. During the meeting, the members engaged in a vigorous discussion on future Japan-Korea collaboration.

— Asian Program Division

Fifteenth “Science in Japan” Forum Held in Washington, DC

On 15 June, the 15th “Science in Japan” Forum was held at the Cosmos Club in Washington, DC. The topic this year was “Energy and Environment.”

The Forum opened with remarks by Prof. Motoyuki Ono, president of JSPS, and Mr. Kenji Shinoda, Minister of the Embassy of Japan. Then, Washington Office director Dr. Hirota Sugawara explained the significance of the “Science in Japan” Forum and why “Energy and Environment” was chosen as its theme this year.

The Forum featured four sessions, themed “Environment,” “Renewable Energy and Energy Efficiency,” “Advanced Energy Sources” and “Government Policy.” In each of them, all of the speakers were leading experts in their respective fields. Listening attentively, the audience of specialists and science administrators showed keen interest via their questions and comments to the speakers.

The Forum assembled some 100 government administrators, university researchers and other interested individuals, whose ani-



ated interchange with the speakers and among each other highlighted the success of the event.

— JSPS Washington Office

First Meeting of Japanese University Faculty Members in the US

On 25 June, the JSPS San Francisco Office held its first meeting to bring together Japanese university faculty members in the US as a new component of its initiative to build a network among Japanese academics and scientists on the faculties of American universities.



Participating in the meeting were 15 faculty members of UC Berkeley, Stanford, the University of Illinois, and other US institutions of higher education. Counting the staffs of the San Francisco Office of Tokyo University of Science and the JSPS San Francisco Office, altogether 19 people attended the meeting.

San Francisco Office director Dr. Seishi Takeda started off the get-together with opening remarks, followed by self-introductions from the participants, who briefly described their respective research activities. Then, a discussion was held on the state of higher education in Japan, particularly the educational environment and the sort of faculty reforms that could be made to improve it. The animated exchange of views that evolved was greatly enjoyed by all.

The meeting concluded successfully with some of the participants saying that they wanted to continue using the network of colleagues formed at it after they return to Japan.

— JSPS San Francisco Office

Symposium at UC Berkeley on Prehistoric Climate Change in Japan

On 19-20 June, a symposium and workshop were held on the theme “Climate Change and Subsistence in Prehistoric Japan.” Venued at the Institute of East Asian Studies (IEAS) on the University of California, Berkeley campus, the event was sponsored by UCB’s Center for Japanese Studies, IEAS and Department of Anthropology, along with JSPS and the Henry Luce Foundation. Over the two days of the event, the participating scientists and archaeologists used an array of data in discussing prehistoric changes in climate and the eating habits of the Japanese.

The first day began with opening remarks by UCB Prof. Junko Habu. Next, presentations were delivered by Japanese, US and other researchers. The workshop on the second day featured an interim report on IEAS’s research project “Understanding Lifeways and Biocultural Diversity in Prehistoric Japan.” The Q&A session that followed generated a spirited discussion among the participants.

The event contributed to creating a shared perception among scientists and archaeologists who specialize in climate change and subsistence research. It also offered an effective platform for sharing the results of Japan’s prehistoric archaeological research with scientists of other countries and interested members



UCB Prof. Habu giving presentation

of the public.

Please see the following website for more details on the event: http://events.berkeley.edu/?event_ID=31873.

— JSPS San Francisco Office

Kenya National Development Conference Cosponsored by JSPS Nairobi Research Station

Held on 3-7 May, a conference themed “Harnessing Science, Technology and Innovation for National Development” was cosponsored by the JSPS Nairobi Research Station and the Kenyan National Council for Science and Technology (NCST). Venued at Kenyatta International Conference Centre in Nairobi, the conference attracted more than 200 participants.



The Kenyan government has established a national development plan, called “Vision 2030,” which sets a goal of the nation reaching a “middle-income country” level by the year 2030. Science and technology are considered to be a vital driving force in pushing this plan toward achieving its aim. In that vein, NCST has over the past two years been holding this conference, titled the “National Conference on Dissemination of Research Results and Exhibition of Innovations,” in which researchers from around Kenya gather and report their research results. This third conference in the series updated the progress being made through such domestic research initiatives, while holding a discussion on a view advocated by

Mr. William Ruto, Minister of Higher Education, Science and Technology, that middle-level research institutions can play an instrumental role in advancing Kenyan science and technology. With a research-cooperation agreement soon to be concluded between JSPS and NCST in the pipeline, the Nairobi Research Station cosponsored this conference. It was the first time for Japanese researchers to give keynote addresses at it. They were delivered by Prof. Tsutomu Fujihara, Mie University, and Prof. Seiji Utsumi, Ochanomizu University.

Mr. Shigeo Iwatani, Ambassador of Japan to Kenya, and Mr. Kilemi Mwiria, Assistant Minister of Higher Education, Science and Technology, attended the conference’s opening ceremony, while Mr. Ruto attended its closing ceremony.

As a token of appreciation, the JSPS Nairobi Research Station was presented a trophy for its cooperation in so successfully carrying out this event.



Ministry officials visit research exhibit

— JSPS Nairobi Research Station

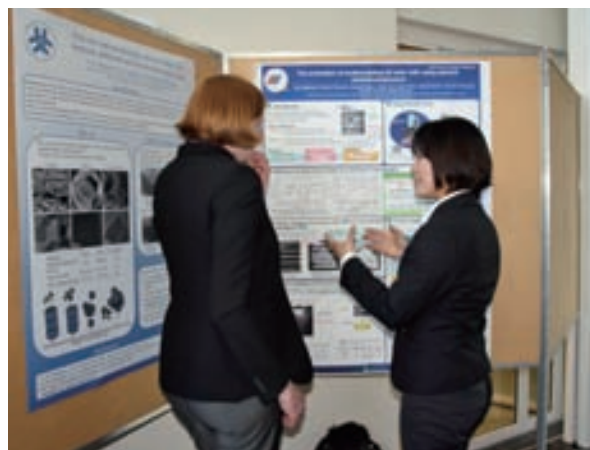
Colloquium on “Nanofabrication and Functional Device” Held in Sweden

On 15 June, the JSPS Stockholm Office held a Sweden-Japan colloquium at Linköping University (LiU). It was focused on the theme “nanotechnology.” Leading its planning were Prof. Per-Olof Holtz, LiU, and Prof. Takashi Fuyuki, Nara Institute of Science and Technology (NAIST). Its implementation was supported by the 174th Committee on Molecular Nanotechnology, one of the JSPS University-Industry Cooperative Research Committees.

Over recent years, advances have been made in the development of many new materials created by fine-tuning their nanometer-order controlled structures and compositions. Such advances are at the core of nano-technological research progress. At the colloquium, researchers from Sweden and Japan reported and discussed a range of research initiatives aimed at applying these advanced technologies to the development of functional devices that can be used to enrich society and protect the environment.

The event also featured a poster session by postdoctoral researchers and doctoral students, giving young researchers from the two countries an ideal platform to engage in a lively exchange of views and information.

Attended by some 65 researchers and students from Sweden and Japan, the colloquium provided a powerful catalyst for strength-



Young researchers interacting in poster session

ened exchange between LiU and NAIST, and the wider research communities of the two countries.

— JSPS Stockholm Office

Colloquium on “Microbes at Work” Held in Sweden

On 21-23 June, the JSPS Stockholm Office sponsored a colloquium entitled “Microbes at Work,” held at the Swedish University of Agricultural Sciences (SLU) in Uppsala and in outlying Krusenberg. Focused on biochemistry, the colloquium was planned around the leadership of SLU professor Dr. Johan Schnürer.

Heightened expectation is being placed in microorganisms to



solve complex issues associated with such things as climate change, population explosion, food supply, soil contamination, and use of bio-energy. This colloquium sought to contribute to the solution of these globally challenging issues through an exchange of knowledge and experience between Swedish and Japanese researchers and the amplifier effect exerted by such interchange on advancing related research.

Open to the public, the first day of the colloquium at SLU was attended by about 50 people. Over the next two days, it was venued in Krusenberg amidst a beautiful natural setting some distance from the city of Uppsala. Lodging together, the participants gave presentations and engaged each other in intensive discussions. Giving the attending young researchers an opportunity to report on their studies, the colloquium also acted as a catalyst in fostering the next generation of researchers who will advance the use of microorganisms as “green chemists.” The event created a platform for sustained collaboration between the two countries in this vital field of biochemistry.

— JSPS Stockholm Office

Call for JARC-Net Registration

JSPS operates the Japan-Asia Research Community Network (JARC-Net) as a researcher information database. Its purpose is to support the maintenance and expansion of working networks between researchers in Japan and other countries of the Asian region, which have been cultivated over long years through JSPS programs, including fellowships, researcher exchanges, joint projects and seminars.

Registered members of the database are able to access other members' profiles, including their names, affiliations, positions, research fields, and education/work histories. They can then use this information to look for new research partners or to broaden support for their activi-

ties by mobilizing past colleagues, such as university or JSPS program alumni, from Asian countries. Members are also provided an information mail service on JSPS's exchange and cooperation programs within the Asian community. JARC-Net is open to all those who are interested in research cooperation and network building in Asia.

To register onto JARC-Net or peruse the site, please visit the following webpage:

<http://www.jsp.go.jp/english/e-astrategy/jarcnet.html>

— Asian Program Division

JSPS Summer Program

Attended by 114 young pre- and postdoctoral researchers from the US, UK, France, Germany and Canada, the JSPS Summer Program, cosponsored by the Graduate University for Advanced Studies (Sokendai), was held over a 2-month period from 15 June to 25 August.

Featuring a research internship for the participants at a Japanese host institution, the program began with a one-week orientation held at the Shonan Village Center in the seaside resort town of Hayama. At it, the fellows received special lectures, gave poster presentations, attended classes in Japanese language learning, engaged in Japanese culture activities, and were given a taste of Japanese living through a homestay experience with a Japanese family. After the orientation, the young researchers went their separate ways to their respective host universities and research institutions. Their summer internships afforded them an experience upon which to consider coming back to Japan to do research at future



junctions in their careers. On the day before the program ended, the participants reassembled to present reports on their summer research activities.

For more detailed information on the JSPS Summer Program, please see our website: <http://www.jsp.go.jp/english/e-summer/>

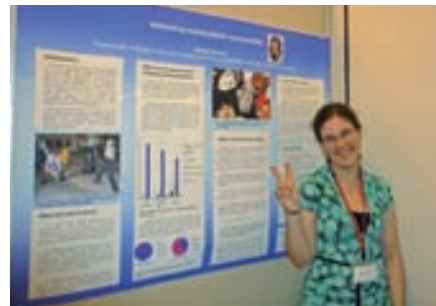
— Overseas Fellowship Division

The centerpiece of the JSPS Summer Program is the fellows' internship at a host research institution, where they take part in research activities with frontline Japanese researchers in their respective fields. The following are comments offered by two of the fellows on their experiences in the program.

Ms. Sandra Annett

(PhD student, University of Manitoba) at Wako University
Her host: Prof. Toshiya Ueno

"I came to Japan to research how people create communities across cultural differences through a shared interest in Japanese animation. And I can't imagine a more perfect program for forming cross-cultural connections than this! Through the JSPS orientation session and my host researcher, I met with anime fans and scholars from all around the world. I conducted fieldwork at various sites favored by anime fans, such as Akihabara, and recruited respondents for a survey on animation-related media use and global networking practices. At the same time, I was able to immerse myself in contemporary Japanese life and language. I would urge new fellows to



Ms. Annett giving poster presentation

embrace life in Japan and recognize how their research can be enriched by opening cross-cultural dialogues."

Mr. Timothy Downing

(PhD student, University of California, Berkeley) at Kyoto University
His host: Dr. Shinya Yamanaka

"In only the first five weeks of the JSPS Summer Program I have sea kayaked, climbed Mt. Fuji, seen many of Kyoto's beautiful temples and shrines, walked side-by-side with snow monkeys, and introduced four transcription factors into human skin cells in order to reprogram them into induced pluripotent stem (iPS) cells. I think it goes without saying, but this summer has been an AMAZING experience thus far. The preparedness and hospitality of the JSPS staff made me feel very welcomed in my arrival to Japan, and my host family exposed me to much of Japan's wonderful sites, culture and cuisines, which were *totemo oishii!* My experience in working in Dr. Shinya Yamanaka's laboratory at the Center for iPS Cell Research and Application (CiRA) at Kyoto University has been phenomenal. I have learned so much from Dr. Masato Nakagawa and many other



Mr. Downing with his supervisors

members of CiRA. Working in this environment has definitely made me a better scientist. In all, this summer experience has been perfect, and I definitely intend to apply for the JSPS Postdoctoral Fellowship Program!"

Washington, DC

Washington Office Holds Orientation for Summer Fellows

On 11-13 April, the JSPS Washington Office assisted the National Science Foundation (NSF) in holding an orientation for its "2010 East Asia and Pacific Summer Institutes" program. Sixty-five of the attendees would



participate in the JSPS Summer Program. For them, Washington Office director Dr. Hirotaka Sugawara and his staff prepared specially tailored sessions.

Following an overview of the entire program and a panel discussion, two sessions, led by JSPS representatives, were held on the theme "Living and Doing Research in Japan." Talks were given by Dr. Machi Dilworth, director, NSF Tokyo Regional Office, and Ms. Naoko Yamaoka and Ms. Yu Yonehara from JSPS's Overseas Fellowship Division. They provided basic information on the JSPS Summer Program including financial support, logistics, schedules, and passport/visa require-

ments. Then, Dr. Sugawara talked about research conditions in Japan and host researcher expectations.

In addition to these informative lectures, Washington Office deputy director Mr. Kotaro Kodera gave the Japan-bound fellows a lesson in Japanese language fundamentals, including some basic phrases useful in daily living.

Overall, the 3-day event proved to be very meaningful in orienting the new fellows to residing and doing research in Japan while dispelling any anxiety they may have had about the experience that lay ahead.

— JSPS Washington Office

Bonn

Pre-Orientation for JSPS Summer Program Held in Bonn

On 7 May, a pre-departure orientation meeting was held by the JSPS Bonn Office for young German researchers going to Japan to participate in the Summer Program. Every year this meeting is held to get the young researchers off to a good start with their research in Japan, while deepening friendship and collegiality among themselves and with past fellows.

The meeting began with remarks from JSPS Bonn Office director Prof. Dr. Keiichi Kodaira, followed by an introduction of the German-Japanese exchange programs by Ms. Karin Möller of the German Academic Exchange Service (DAAD) and by JSPS Bonn Office deputy director Mr. Hirohisa

Miyamoto. After a break, German JSPS Club executive Ms. Sabine Ganter-Richter offered an introduction to the German alumni association. She was followed by two fellows from last year's Summer Program, Mr. Daniel Schütze and Ms. Sarah Schlachetzki, who commented on their experiences and



answered questions.

In speaking about their stays in Japan, the former fellows touched upon the research they had conducted with Japanese colleagues and their outside-the-lab experiences, such as the interesting places they visited while in Japan. The vivid images they portrayed of the Summer Program drew volley of questions, sparking animated conversations that continued through the evening's dinner party. The meeting proved to be successful in not only orienting the young fellows to the Summer Program, but also in exciting them about living and doing research in Japan.

— JSPS Bonn Office

London

Pre-Departure Seminar Held in London

On 27 May, the JSPS London Office held a pre-departure seminar for UK researchers who would be going to Japan to participate in JSPS's Summer Program and other fellowship programs—both the Postdoctoral Fellowship for Foreign Researchers and the Postdoctoral Fellowship (Short-term) for North American and European Researchers, followed by an Alumni Evening.

The seminar was kicked off with opening remarks by London Office director Prof. Kozo Hiramatsu, after which members of the Office staff introduced JSPS and described its various programs. Next, Mr. Antonio Caraballo-Ortiz and Dr. Mark Tame

gave presentations on their experiences in Japan as JSPS fellows. Their remarks were tuned to easing any anxiety that the outbound researchers might have had about living in Japan. The wealth of advice they offered evoked cascades of questions. Then, representatives of the Royal Society and the Great Britain Sasakawa Foundation offered briefings on their organization's various programs and provided information on career-building opportunities available to the researchers upon their return to the UK.

After the seminar, the Alumni Evening was held. At it, Dr. Martyn Kingsbury, chair of the UK JSPS Alumni Association, described



the group's activities. As many of the alumni members were in attendance, the event gave the Japan-bound researchers an ideal opportunity to interact with them and other fellowship participants.

— JSPS London Office

Chiba Prefectural Kashiwa High School

Date: 18 June

Dr. Hui Liu

(Australia)

Host institution: National Agriculture and Food Research Organization

Title: "Agricultural Research: A Bright Future Ahead"



Junior High and Senior High School at Komaba, University of Tsukuba (Tokyo)

Date: 19 June

Dr. Marc A. Humblet

(Belgium)

Host institution: The University of Tokyo

Title: "Coral Reefs: Wonder of the Sea"



Fukui Prefectural Fujishima Senior High School

Date: 25 May

Dr. Karl J. Krogness

(Denmark)

Host institution: Ritsumeikan University

Title: "I Love You, I Love My Name"



Kumamoto Prefectural Daini High School

Date: 17 June

Dr. Adam A. Sobczuk

(Poland)

Host institution: Sojo University
Title: "From Chaos to Highly-Ordered Nano-Architectures—Playing with Oligothiophenes Aggregation Modes"



Gifu Prefectural Gizan Senior High School

Date: 24 May

Dr. Alok Kalla

(India)

Host institution: Fisheries Research Agency

Title: "Endoscopic Observations in Pallial Cavity of Asari Clam during Feeding"



Kyoto Prefectural Yamashiro High School

Date: 12 June

Dr. Philip Britz-McKibbin

(Canada)

Host institution: Kyoto University
Title: "Better Living through Chemistry: Applications to Human Health"



Date: 31 May

Dr. Jean-Michel Fustin

(Belgium)

Host institution: Kyoto University

Title: "Introduction to the Biological Clock"



Mukogawa Women's University Junior & Senior High School (Hyogo)

Date: 5 June

Dr. Dana Ulanova

(Russia)

Host institution: Osaka University
Title: "Invitation to Microbiology: The Role of Microorganisms in Nature and Human Life"



Ikeda High School (Kagoshima)

Date: 28 June

Dr. Jaeheon Chung

(Korea)

Host institution: Kyushu University

Title: "Introduction to Medical Robotic System"



Seishin Girls' High School (Okayama)

Date: 1 June

Dr. Mohammad Moniruzzaman

(Bangladesh)

Host institution: Kobe University

Title: "Growth of Oocytes in Domestic Animals"



Senior High School Attached to Kyoto University of Education (Kyoto)

Date: 26 June

Dr. Boyen Huang

(Taiwan)

Host institution: Kyoto University

Title: "A Journey to Scientific Research"



Shizuoka Prefectural Iwata Minami High School

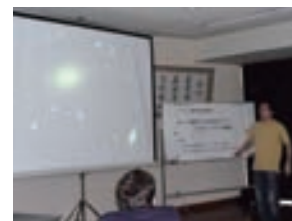
Date: 23 June

Dr. Frederico M. Anacleto Arroja

(Portugal)

Host institution: Kyoto University

Title: "Our Universe"



Shizuoka Kita High School (Shizuoka)

Date: 7 June

Dr. Sebastian O. Danielache

(Argentina)

Host institution: Tokyo Institute of Technology

Title: "Topics about Climate Change"



Dr. Brian Moore

(Canada)

Host institution: Advanced Telecommunications Research Institute International

Title: "Robotics: Today and Tomorrow"



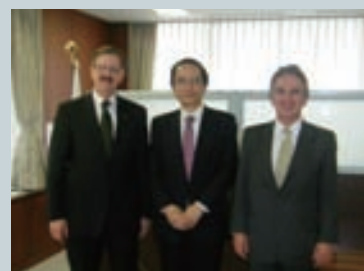
Recent Visitors to JSPS (May-July 2010)

CONACYT Director General

On 18 May, Mr. Juan Carlos Romero Hicks, director general, National Council on Science and Technology (CONACYT), Mr. Miguel Ruiz-Cabañas, Ambassador, and Ms. Sara Luna Camacho, third secretary, Education, Academic Exchange and Cooperation, Embassy of Mexico in Japan, paid a courtesy visit to JSPS. Based on a memorandum of understanding, JSPS and CONACYT currently

support a program of researcher exchange between Japan and Mexico. CONACYT director general Mr. Romero Hicks and Ambassador Ruiz-Cabañas exchanged views with JSPS president Prof. Motoyuki Ono on possibilities of expanding the scope of the exchange program.

— Research Cooperation Division II



Minister of Education, Youth and Sports of the Czech Republic

On 26 May, Dr. Miroslava Kopicová, Minister of Education, Youth and Sports of the Czech Republic, paid a courtesy visit to JSPS president Prof. Motoyuki Ono.

Dr. Kopicová offered a brief summary of the Czech government's education, science and technology policies, especially the forms they have taken since the country's independence in 1993. She emphasized her government's interest in strengthening its bilateral partnership with Japan in such priority S&T

areas as agriculture, medicine and energy. In response, Prof. Ono explained JSPS's role as a funding agency in providing bottom-up support for research carried out on the researchers' own initiative.

Both Dr. Kopicová and Prof. Ono expressed strong recognition in the importance of encouraging further cooperation among excellent researchers in their two countries.

— Research Cooperation Division I



NSFC Vice President

On 28 May, a delegation led by Prof. Jiaguang Sun, vice president, National Natural Science Foundation of China (NSFC), came to JSPS to inquire about its system of grant application screening and project assessment. After receiving a briefing from JSPS's staff on the screening and evaluation systems that JSPS uses in its Grants-in-Aid for Scientific Research program and on the role of the program officers in its Research Center for Science Systems, the delegation met with JSPS

president Prof. Motoyuki Ono, who took the opportunity to express his appreciation for the cooperation NSFC accords JSPS in carrying out collaborative activities between China and Japan. Both Professors Ono and Sun said they thought it would be very meaningful for their two agencies to communicate closer in sharing information on their respective programs, especially as they evolve with increased allocations of competitive research funding.

— Asian Program Division



Hailing from Bangladesh, Dr. Mohammad Moniruzzaman has since October 2008 been conducting research with his host Dr. Takashi Miyano at the Laboratory of Reproductive Biology and Biotechnology, Kobe University, under the JSPS postdoctoral fellowship. After obtaining his MSc degree in Bangladesh, he was selected for a Japanese government scholarship to pursue his graduate work at Kobe University from 2001.

Dr. Moniruzzaman's 6-year-old son was born in Japan and has what his father calls a Japanese spirit.

What are you currently researching under the JSPS fellowship?

I am investigating the mechanism regulating the activation of oocytes, immature egg cells, in primordial cow and pig follicles, small ovarian sacs.

How did you become interested in your research field?

Mammalian ovaries contain a lot of primordial follicles. A small number of these follicles are activated, i.e., they develop and take part in ovulation and fertilization, while a large number of them remain quiescent. The mechanism regulating the activation and dormancy of these follicles is not well understood. If we were to elucidate it, we could control animal production and human fertility. That challenge is what sparked my interest in this field.

How did you get to know your Japanese host researcher?

First, I found some excellent articles he published in good journals. Then, I wrote him about my interest in studying at his laboratory. I did my master's and doctoral course work under his supervision.

Why did you choose Japan to pursue your research?

In the biological sciences, Japan offers a sophisticated environment, both in terms of technology and experimental apparatus, as well as the presence of top-notch researchers. I am very appreciative of my host professor's effort to provide me with an optimum research environment, and am thankful to the other faculty and students for the support and kindness they always accord me. The people in the neighborhood are also very kind to me, making my stay in Kobe most enjoyable.

What is your impression of your Japanese host institution?

Kobe University has an excellent standard of higher education and advanced research. There are around a thousand overseas students currently enrolled in the university. It has a vibrant international environment, which always impresses me.

Generally speaking, what's your impression of Japan's research environment?

Most of the laboratories in Japan are carrying out cutting-edge research of a high global standard. Japanese universities and research institutes have an abundance of scientific knowledge, research funding, and state-of-the-art facilities.

What have been the highlights of your research under the JSPS fellowship?

I found that primordial oocytes from prepubertal pigs took a longer time to initiate growth in xenografts, tissue taken from one species and grafted into another, compared to those from neonates. I proposed that ovaries of neonatal mammals contain a mixed population of quiescent and activated primordial oocytes, while almost all primordial oocytes are quiescent in adult females. My results revealed that primordial oocytes become dormant through a FOXO3-related mechanism, whereby a non-growing oocyte pool is established within the ovary for future recruitment.

What do you do outside your research work?

I play with my 6-year-old son when I get free time.

What do you think of life in Japan—its culture and customs?

I like the Japanese lifestyle, culture and customs very much. I try to attend festivals and ceremonies here in Kobe in my free time.

By the way, you gave a lecture under JSPS's Science Dialogue Program at Seishin Girls' High School, didn't you? How was that experience?

It was a great experience. I was very happy to visit that nice high school and have the opportunity to introduce my country and research to the younger generation of Japanese.



Dr. Mohammad Moniruzzaman

Associate Professor, Department of Animal Science, Bangladesh Agricultural University (BAU)

Ph.D. (Animal Science), Kobe University, Japan, 2007

M.Sc. (Agriculture), Kobe University, Japan, 2004

M.Sc. (Animal Science), BAU, 2000

B.Sc. (Animal Husbandry), BAU, 1996

What do you plan to do after your fellowship ends?

I shall go back to my country and continue my teaching and research at Bangladesh Agricultural University as an associate professor.

Do you have any advice for young researchers who may be thinking about doing research in Japan?

The JSPS fellowship offers overseas researchers a really good research opportunity, so there's no excuse not to take maximum advantage of it. It provides a great chance to improve your research skills while advancing your work. Moreover, I recommend going outside the university and communicating with people, and enjoying the Japanese language and culture. Learning more about Japan—its customs and concepts—can help to expand your personal perspectives and perceptions.

You are skillful in Japanese. How might other researchers go about developing their Japanese language skills?

My Japanese was zero when I first came to Japan. Before coming, I practiced greetings, such as "ohayo gozaimasu," again and again to say to my host researcher. But when I tried to use the words in Japan, I suffered a complete memory lapse.

Taking a Japanese language course is

normally not sufficient to master Japanese. So I tried to speak Japanese as much as I could in the lab. By doing so, I was able to build up my Japanese proficiency. I feel sorry when I see other foreign researchers stop using Japanese when it is not understood by their colleagues. Learning Japanese is challenging, but if you persist you can gain confidence in your ability to communicate in the

language, and that will make your life in Japan much more enjoyable.

When we asked Dr. Moniruzzaman "what his career goal is," he thought for a while then said that the biggest problem in Bangladesh is unexpected growth of population, causing electricity outages, food shortage and other difficulties. To make things worse, he said that

the population is expected to keep growing rapidly. Therefore, there is an urgent need to control the birth rate to reduce these problems. He hopes his research will help contribute to solving population issues in his country. We hope his experience as a JSPS fellow will help contribute to his successfully advancing his research and achieving his important goal.

Introducing Japan: Kobe

By Dr. Mohammad Moniruzzaman

During my stay in Japan over a period of about seven years, I have felt that Kobe is one of the world's most beautiful and convenient cities. I love Kobe for its great combination of natural and urban or architectural beauties. Kobe is situated at the foot of Mt. Rokko (931 meters). On one side (north) of Kobe are mountains and on the other (south) the sea, making the city a haven of nature. A lot of beautiful high-rise buildings with modern architectural design make Kobe a modern city with international allure. In 2008, Kobe was selected as a UNESCO City of Design. The night view of the city from atop the Kobe's adjacent mountains is ranked one of three most spectacular in Japan. A cable-car tram just a short bus ride from Sannomiya, Kobe's gateway train station, makes a steep, sight-filled ascent to the mountaintops.

Kobe is well known for having one of Japan's busiest harbors. The bay area features Harborland and Meriken Park with its Kobe Port Tower. It is a place where city dwellers are fond of walking about and enjoying the beauty of the urban seascape, especially in a summer breeze. Throngs of people gather to celebrate the *minato matsuri* (harbor festival) and to enjoy the *hanabi* (fireworks) display every year in this place. Another festive event is the Kobe Matsuri which attracts lively participation by the people in parades with floats, music and dancing.

Kobe has pretty much recovered from the devastating 1995 Great Hanshin-Awaji Earthquake, in which more than 6,000 people perished. To commemorate the quake, the city puts on a fabulous light festival every December. Called the Kobe Luminarie, an installation of archways illuminated with arrays of lights is erected.

As one of the first ports in Japan to open to foreign trade in the 19th century, Kobe has a long history as a cosmopolitan center. Even today, about 50 thousand of its 1.5 million residents are foreigners from both Europe and Asia. Most of the Kobe's Western architecture, including houses, shops and churches, are found in a district named Kitano, overlooking the city from a hill near Sannomiya Station. Of course, Kobe also boasts one of Japan's most colorful and vibrant Chinatowns, called Nankin-machi.



Fireworks festival

Besides a huge assortment of Chinese and Western cuisine, Kobe is also famous for its own tender, well-marbled Kobe beef from *wagyu* cattle raised according to a highly refined local tradition.

When I go back to my country, I shall miss this wonderful city—the beautiful views from Mt. Rokko, the picturesque scenes of Akashi Kaikyo Bridge, the hot springs at Arima, the city's festivals and fireworks, and the boat cruise around the bay area, along with so many other enjoyable things.



Dr. Moniruzzaman and family in Chinatown



Kobe Port Tower





Cover photo:

Yellow-gold paddies of rice promise an abundant fall harvest.

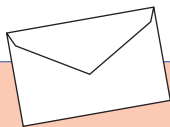
About JSPS

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, Emblem of the Japan Society for the Promotion of Science

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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E-mail: quarterly@jps.go.jp

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● **JSPS Fellows Plaza**

6 Ichibancho, Chiyoda-ku, Tokyo 102-8471
Tel: +81-3-3263-1872 Fax: +81-3-3263-1854
<http://www.jps.go.jp/english/e-plaza/>

Information can also be obtained from our regional offices listed below.

● **JSPS Washington Office**

2001 L Street, N.W., Suite 1050,
Washington, D.C. 20036, USA
Tel: +1-202-659-8190 Fax: +1-202-659-8199
E-mail: info@jpsusa.org
<http://www.jpsusa.org/>

● **JSPS San Francisco Office**

2001 Addison Street, Suite 260,
Berkeley, CA 94704, USA
Tel: +1-510-665-1890 Fax: +1-510-665-1891
E-mail: webmaster@jpsusa-sf.org
<http://www.jpsusa-sf.org/>

● **JSPS Bonn Office**

Wissenschaftszentrum, Ahrstr. 58, 53175,
Bonn, GERMANY
Tel: +49-228-375050 Fax: +49-228-957777
E-mail: info@jps-bonn.de
<http://www.jps-bonn.de/>

● **JSPS London Office**

14 Stephenson Way, London, NW1 2HD, UK
Tel: +44-20-7255-4660 Fax: +44-20-7255-4669
E-mail: enquire@jps.org
<http://www.jps.org/>

● **JSPS Stockholm Office**

Retzius Vag 3, S171 77 Stockholm, SWEDEN
Tel: +46-8-5248-4561 Fax: +46-8-31-38-86
E-mail: info@jps-sto.com
<http://www.jps-sto.com/>

● **JSPS Strasbourg Office**

Maison Universitaire France-Japon
42a, avenue de la Forêt-Noire,
67000 Strasbourg, FRANCE
Tel: +33-3-6885-2017 Fax: +33-3-6885-2014
E-mail: jps@japon.u-strasbg.fr
<http://jps.u-strasbg.fr/>

● **JSPS Bangkok Office**

113 TWY Office Center, 10th Fl., Serm-mit Tower,
159 Sukhumvit Soi 21,
Bangkok 10110, THAILAND
Tel: +66-2-661-6453 Fax: +66-2-661-6454
E-mail: bkk02@jps-th.org
<http://www.jps-th.org/>

● **JSPS Beijing Office**

616 Library of Chinese Academy of Sciences (CAS)
33 Beisihuan Xilu, Zhongguancun,
Beijing 100190, P. R. CHINA
Tel: +86-10-6253-8332 Fax: +86-10-6253-8664
E-mail: beijing@jps.org.cn
<http://www.jps.org.cn/>

● **JSPS Cairo Research Station**

9 Al-Kamel Muhammad Street,
Flat No.4, Zamalek, Cairo, EGYPT
Tel & Fax: +20-2-27363752
E-mail: jpscairo@hotmail.co.jp
<http://jpscairo.com/>

● **JSPS Nairobi Research Station**

209/346/39 Riverside Drive Chiromo,
Nairobi, KENYA
Tel: +254-20-4442424 Fax: +254-20-4442112
E-mail: jps1@africaonline.co.ke
<http://www.jpsnairobi.org/>