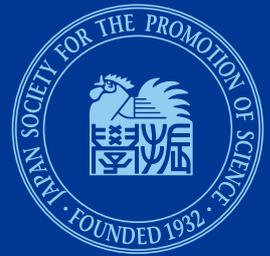


# JSPS Quarterly

Japan Society for the Promotion of Science



## FEATURE: Japan's 4<sup>th</sup> S&T Basic Plan

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No. **38**  
2011  
Winter


 A graphic featuring a blue and white background with a stylized, glowing sunburst or starburst effect on the left side. A curved, multi-colored path (in shades of blue, purple, and white) curves from the bottom left towards the center, leading towards the sunburst. The title 'Japan's Fourth Science and Technology Basic Plan' is written in large, bold, white sans-serif font on the right side of the graphic.
 

# Japan's Fourth Science and Technology Basic Plan

On 19 August, the Japanese government launched its fourth plan to systematically advance science and technology. The following is a summary of this S&T Basic Plan, divided into its major sections.

## Objectives

As stated in Section 1 of the 4<sup>th</sup> S&T Basic Plan, a 5-year national strategy is established with a 10-year vista into the future. The Plan also provides a wider perspective of S&T innovation to the “New Growth Strategy—Blueprint for Revitalizing Japan” inaugurated in June 2010, adding new depth and concreteness to the policies embodied within it. Besides economic and industrial strategies, the new Plan intricately expands linkage with other policies including those initiated to restore and recover the earthquake-ravaged communities in Japan, while strengthening disaster prediction and prevention technologies.

The Plan advances five mid-to-long-term objectives aimed at making Japan a country that

1. Achieves sustainable growth and societal development, particularly the recovery and restoration of earthquake-damaged areas
2. Realizes a safe and secure, high quality of life for its people
3. Takes the initiative in solving global issues, including large-scale natural disasters

4. Possesses a quality of S&T that undergirds national sustainability
5. Continues to create “knowledge” assets and fosters S&T as culture.

To achieve these five objectives, Japan will need to continuously create knowledge assets of the highest world standard, while clearly articulating the issues it must address. Concurrently, Japan will need to systematically pursue a strategy for advancing science and technology that generates innovation.

From these perspectives, the 4<sup>th</sup> S&T Basic Plan will build upon the undertakings and achievements of the 3<sup>rd</sup> Basic Plan in pursuing the following three key S&T policies:

1. Integrated development of an S&T innovation policy
2. Increased policy focus on roles of human resources and the organizations supporting them
3. Establishment of policies to be created and implemented in concert with society.

## Pillars

Section 2 develops strategies for implementing an S&T innovation policy. It has two main pillars: promoting *green innovation* and *life innovation*. Aimed at the environment and energy, green innovation works to sustain Japan's growth into the future, while developing and enriching its society. Life innovation, on the other hand, seeks to effect milestone advances in medicine, health and caregiving. The new Plan also targets the restoration and reconstruction

of Japan's earthquake-damaged areas. In addition, it calls for broad system reforms including the creation of new innovation systems that enhance linkage among academia, industry and government and expand cooperation with various sectors of Japanese society, as such systems will be required to effectively address the increasing sophistication and complexity of S&T and the rapid globalization of its markets.

## Initiatives & Priorities

Section 3 provides strategies for responding to major issues facing Japan. It addresses a wide range of critical issues in seeking to realize a safe and secure life for the Japanese people, including protecting them from the trauma of natural disasters that may occur in the future. Accomplishing this will require advancing R&D initiatives in a strategic manner that links them to the creation of new values. Accordingly, a broad spectrum of institutions within the academic, industrial and governmental sectors will need to be engaged in the planning and synergistic implementation of such initiatives across multiple disciplines.

Differing from the 3<sup>rd</sup> S&T Basic Plan that sought to advance

R&D by prioritizing primary research areas, the new Plan shifts focus to prioritizing strategies for solving specified issues.

At the same time, it is envisioned that over the mid- to long-term serious issues currently confronting Japan will rise to a common global level, beginning with those related to the global environment. While Asia is emerging as a global growth center, Japan's society is aging amidst a declining birthrate. This gives added impetus for Japan to develop itself within the dynamic flow of international S&T advancement if as a nation it is to sustain and strengthen its international competitiveness in S&T innovation.

## Basic Research & Human Resource Development

Section 4 addresses the need to strengthen basic research and human resource development, given the increasing importance of basic research carried out upon researchers' own free ideas. Over recent years, such research has provided a seedbed for innovation, while creating a variety of new knowledge assets and cultural values that directly or indirectly contribute to societal development. To foster and support the talented people of coming generations who will advance such S&T innovation requires mid-to-long-term perspectives and strategies.

As a case in point, the Great East Japan Earthquake compelled many overseas researchers working in Japan to return to their countries and caused others to postpone their trips to Japan. This outflow of researchers, including some Japanese researchers, has caused deep concern, engendering a stronger awareness of the need to strengthen Japan's programs for advancing basic research and fostering talented people, along with the concomitant need to open up Japan much wider to the world, while offering a quality of education and research that is at the highest global level.

## Linkage with Society

Section 5 of the Plan addresses the establishment of policies that can be most effectively created and carried out in coordination with society. It places policies for advancing S&T innovation squarely within the framework of the government's "Policy for Society and the Public." Key to advancing these policies is a need to strengthen the nexus between society and S&T innovation, which can be accomplished through public participation in the policy-formulation process, while expanding science-communication activities, including those related to risks, between the scientific and non-scientific communities.

To steadfastly move forward Japan's S&T innovation policies toward achieving the objectives of the 4<sup>th</sup> S&T Basic Plan, adequate R&D investment must be secured. As other countries are increasing their R&D investment, Japan must also strive to expand its own, as S&T innovation is, it might be said, Japan's core resource. To elevate its competitiveness in this pursuit and sustain its status among the world's nations, Japan must acquire the broad understanding, trust and support of its citizens, whose taxes finance the nation's S&T agenda.

## Enactment

The 4<sup>th</sup> S&T Basic Plan was compiled and is enacted by the Council for Science and Technology Policy, established in 2001. Chaired by the Prime Minister, it comprises the Chief Cabinet Secretary and the Ministers of State for Science and Technology Policy; Internal Affairs and Communications; Finance; Education, Culture, Sports, Science and Technology; and Economy, Trade and

Industry, along with a number of executive members from academia and industry.

To read the entire document of the 4<sup>th</sup> S&T Basic Plan, please visit the Cabinet Office's website at <http://www8.cao.go.jp/cstp/english/>.

## Message from New JSPS President Dr. Yuichiro Anzai



Succeeding Prof. Motoyuki Ono, I have been appointed to the post of president of the Japan Society for the Promotion of Science. While holding in high esteem the achievements forged over the 80-year period since JSPS's establishment in 1932 and valuing the support and trust of the Japanese people, I will strive to advance scientific research and foster new generations of talented young researchers.

The Great East Japan Earthquake that struck on 11 March was an unprecedented natural disaster that wreaked immense destruction on our nation. Extending my heartfelt condolences to the affected people, I pray for the speedy recovery and reconstruction of the devastated communities. At JSPS, we have received many messages of condolence and encouragement from counterparts and affiliates in a great many countries. They have been both heartening and uplifting to us. I would like to take this opportunity to extend our heartfelt appreciation to our colleagues for your warm friendship and caring words.

The mega-earthquake and tsunami demonstrated to us science's significance and potential in tackling and taming the ferocity of nature. This goes not only for the natural sciences but also the humanities, social sciences, medicine and engineering. We have learned many valuable lessons from this experience, which will need to be applied in surging forward scientific research and human-resource development through the threshold of a new era. This will be our mandate.

Over the near future, Japan will continue to be confronted with many serious issues, not the least of which are an aging society exasperated by a low birth rate and a prolonged period of economic stagnation. From a wider perspective, international competition

is becoming increasingly more intense as Asian and other nations become newly emerging forces within the global community. Concurrently, heightened expectation is being placed on Japan to help solve, with a long-term vision, the myriad of problems that affect large swaths of the human race. Amidst this milieu, it becomes all the more important for Japan to carry out scientific research and foster the next generations of researchers who will advance it by creating new genres of "knowledge" that can enrich the Japanese people's lives while laying the foundations for achieving greater socio-economic development around the world.

As Japan's core funding agency supporting scientific advancement, JSPS administers the Grants-in-Aid for Scientific Research and other funding programs to underwrite scientific research initiatives. While working to cultivate budding researchers through the Research Fellowships for Young Scientists and other fellowship programs, JSPS places a high value on both researcher autonomy and research diversity. As a key member of the globe-spanning network of science organizations, JSPS also concentrates its effort on promoting international collaboration. Over recent years, JSPS has spearheaded initiatives to advance university reform in Japan, the latest being the "Leading Program in Doctoral Education" launched this fiscal year, while carrying out a broad-ranging program to engage young researchers in the frontiers of scientific progress.

We will strive to carry forward JSPS's program in an even-more efficient and effective manner so as to meet the needs of researchers and students aspiring to careers in science across the spectrum of fields and also society's multifaceted expectations for scientific advancement, while enhancing Japan's contribution to global society. In these pursuits, we will employ a strength of "knowledge" needed to address the challenges of coming periods.

As we move this agenda forward, I ask for your greatly appreciated guidance, support and cooperation.

## Parting Message by Prof. Motoyuki Ono



I retired from my position as president of the Japan Society for the Promotion of Science on 30 September. I had held this post for a period of eight years and eight months, starting from my appointment to it in February 2003. During my tenure, I have enjoyed the warm support of JSPS's many partners and affiliates.

I had three main objectives that I wished to accomplish during my term as JSPS's president. The first was to enhance JSPS's operation in such a way as to engender the resonant trust of researchers. For JSPS to function optimally as a funding agency, it was essential for it to enjoy the confidence of the research community. To fully gain it, I believed that we needed an organization of top-notch researchers as an integral part of JSPS's operation. Accordingly, we established the Research Center for Science Systems,

which is now a vibrant advisory body embedded within JSPS and directed by a Nobel laureate.

My second objective was to create a highly effective framework for carrying out equitable application screening and selection. For that purpose, we established a peer-review system, under which program officers in the Research Center for Science Systems choose the researchers who serve as reviewers. The fair and impartial screening and evaluation processes that this system produced have led to JSPS being entrusted by the Ministry of Education, Culture, Sports, Science and Technology to perform the application screening and other administrative functions for a wide range of its programs.

My third challenge involved the fostering of talented young researchers. To recognize and encourage young researchers with rich creativity and superb research ability, we established the "JSPS Prize" and the "JSPS *Ikushi* Prize," the latter initiated with an endowment from His Majesty Emperor Akihito given to JSPS

for the purpose of identifying and incentivizing outstanding doctoral students.

In addition to these objectives, I wanted to accommodate researchers' desire for more flexible grant usage by allowing them to be easily carried over into the next fiscal year. To accomplish this, we created a multi-year Fund within the program Grants-in-Aid for Scientific Research. I also wanted to provide young researchers from the Asia-Pacific with opportunities to interact with Nobel laureates and other world-leading scientists, like those made available in Lindau Meetings. For that purpose, we launched HOPE Meetings within the region.

Over my years of tenure, I am very pleased that we have been able

to create a variety of innovative programs by working together with the leaders of international counterpart institutions amidst a partnership environment so friendly that we call each other by first name.

On 1 October, I assumed the new post of director of the Center for Graduate Studies at Josai University. Concurrently, I will serve as an advisor to JSPS, in which capacity I look forward to supporting its new administration's efforts to move forward JSPS's development as Japan's core scientific funding agency.

Finally, I wish to extend you all my most heartfelt thanks for the support, guidance and kindness you have so generously accorded me over these several years.

## 2011 Recipient Chosen for International Prize for Biology

On 17 October, the Committee on the International Prize for Biology (chaired by Dr. Takashi Sugimura, vice president, the Japan Academy) of the Japan Society for the Promotion of Science decided to present the 27<sup>th</sup> (2011) International Prize for Biology to Dr. Eric Harris Davidson, who is a Norman Chandler Professor of Cell Biology, Division of Biology, California Institute of Technology, USA.

The field of specialization for the 27<sup>th</sup> Prize is "Developmental Biology." Dr. Davidson proposed the theoretical concept of "Gene Regulatory Networks" and experimentally validated this concept through research on molecular development mechanisms in living organisms. This research exerted a great

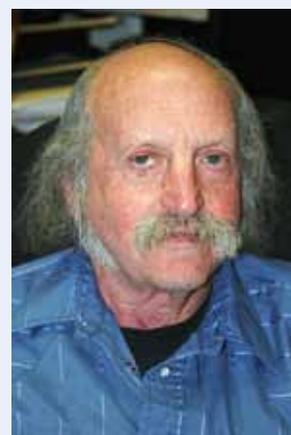
impact on not only the field of developmental biology, but also on genetics, cell biology, molecular biology, neurobiology, immunology and other related fields, while helping to make significant advances across all domains of biology.

### Award Ceremony

The award ceremony for Dr. Davidson was held on 28 November at the Japan Academy, attended by Crown Prince Naruhito on behalf of Emperor Akihito. Empress Michiko attended the reception.

### Commemorative Symposium

To commemorate the award to Dr. Davidson, the 27<sup>th</sup> International Prize for Biology Commemorative Sym-



Dr. Eric Harris Davidson

posium on Developmental Biology was held on 30 November and 1 December in Kyoto.

### Dr. Eric Harris Davidson

**Nationality:** United States of America

**Present position:** Norman Chandler Professor of Cell Biology, Division of Biology, California Institute of Technology, USA

#### Curriculum Vitae:

1981-present Norman Chandler Professor, California Institute of Technology  
1974-1981 Professor, California Institute of Technology  
1971-1974 Associate Professor, California Institute of Technology  
1965-1971 Assistant Professor, Rockefeller University  
1963-1965 Research Associate, Rockefeller University  
1963 Ph.D., Rockefeller University

#### Awards and Distinctions:

2007 Lifetime Achievement Award, Society for Developmental Biology  
2002 Alexander Kowalevsky Medal and Honorary Member, St. Petersburg Society of Naturalists  
1985 Member of the National Academy of Sciences  
1980 Awardee of the Alexander von Humboldt Foundation  
1980 Fellow of the American Association for the Advancement of Science

— General Affairs Division

## Meeting of Heads of Research Councils in Asia Held in Korea

On 26-27 September, the ninth meeting of the Heads of Research Councils in Asia (A-HORCs) was held in Daejeon, Korea. These meetings are held annually for the purpose of allowing the heads of the top science-promotion organizations in Japan, China and Korea to meet and exchange views on their countries' S&T policies and other matters of mutual interest. This year's meeting was attended by Prof. Motoyuki Ono, president, JSPS, Prof. Se-Jung Oh, president, National Research Foundation of Korea (NRF), and Prof. Minghong He, vice president, National Natural Science Foundation of China (NSFC).

Each gave a country presentation and answered the other's questions on the theme "S&T Policy for Enhancing Green Innovation," while engaging in a discussion on the S&T strategies of each country and programs carried out by each organization. They also discussed their two jointly implemented programs—the A3 Foresight Program and Northeastern Asian Symposiums.

Concurrent with the A-HORCs meeting, the 13<sup>th</sup> Northeastern Asian Symposium was held on the theme "Plasma Fusion." At-



Professors Ono, Oh and He

tended by 41 researchers from the three countries, the symposium laid the groundwork for advancing future joint research in this critical field.

Next year, the 10<sup>th</sup> A-HORCs meeting and 14<sup>th</sup> Northeastern Asian Symposium will be hosted by JSPS in Japan.

— Asian Program Division

## ASIAHORCs Joint Symposium Held in China

On 25-26 October, the Asian Heads of Research Councils (ASIAHORCs) held its third joint symposium, this year in Beijing. The first of these symposiums was held in FY 2009. They work to foster and network young researchers who can tackle common issues within the Asian region. This year's symposium was con-



vened by the National Natural Science Foundation of China on the theme "Global Change in Asia: A Perspective of Land Use Change." Seventy-five researchers, many of a younger generation, gathered together from eight countries. Giving presentations, they engaged each other in spirited exchanges of views.

From Japan, the symposium was attended by research groups from Gifu and Hokkaido Universities. They have been carrying out projects under JSPS's A3 Foresight Program since FY 2007, and reported on the research results obtained up to now. Ms. Akie Hoshino, head of JSPS's Asian Program Division, offered opening remarks.

The interaction enjoyed by the young researchers promises strong networking among them and future advances in the area of climate change and its ramifications on land usage within the Asian region.

— Asian Program Division

## Korean JSPS Fellows Alumni Association Holds General Meeting

On 7 July, the Korean JSPS Fellows Alumni Association held its seventh general meeting, this time venues at the Seoul Metropolitan Fire and Disaster Headquarters.

At the meeting, the dissemination of information based on scientific facts to the non-scientific public was addressed, for example as it occurred in the aftermath of the 11 March Great East Japan Earthquake. Themed "Science Communication," the discussion delved into how information was conveyed to the general public via various media amidst uncertainty in the wake of the earthquake and how it worked to spread confusion and anxiety within society.

The meeting began with greetings from the Korean JSPS Fellows Alumni Association chair Dr. Se-Jin Seong, followed by remarks from Mr. Woong-Gil Choi, administrator, Seoul Metropolitan Fire and Disaster Headquarters; Mr. Takayoshi Seiki, executive director, JSPS; Mr. Nobukatsu Kanehara, Minister, Embassy of Japan in Korea; and Dr. Shin-Won Kang, former president, Korea Basic Science Institute. Then, lectures were delivered



Panel discussion

by five speakers, including Prof. Norio Okada, Kyoto University, and Prof. Boo-Sung Kang, Seoul National University of Science & Technology. In the panel discussion that followed, a lively give and take of views evolved with the panelists fielding questions from the floor on the Japanese government's response to the earthquake and tsunami and other stirring issues.

— Overseas Fellowship Division

## Forum and General Assembly Held by US JSPS Alumni Association

On 28 October, a Multidisciplinary Science Forum was held by the US JSPS Fellows Alumni Association at Western Michigan University in Kalamazoo. Among the five fora held by the association to date, this was the second to be held on a multidisciplinary theme, featuring speakers across various fields.

The event opened with remarks from Dr. John M. Dunn, president, Western Michigan University, and Dr. Hirotaka Sugawara, director, JSPS Washington Office, followed by Dr. Anthony Leggett, Nobel laureate in physics, who delivered the keynote address.

Presentations were given by three invited speakers from the US and four from Japan on research spanning such fields as astrophysics, agriculture, medicine, and social science. During the lunch session, the association's executive board put on a bazaar to raise funds to support the earthquake relief efforts in Japan. The forum was attended by some 80 people.

The next day, the alumni association held its annual general

assembly, in which the state of its activities were discussed and next year's program planned.



— JSPS Washington Office

## San Francisco Office Holds Symposium with Stanford University

On 7-9 October, the JSPS San Francisco Office held a jointly sponsored symposium with Stanford University on the theme "Japanese Imperial Maps as Sources for East Asian History: A Symposium on the History and Future of the *Gaihozu*." Venued on the university's campus, the symposium utilized the set of maps, called



*gaihozu*, produced in mainly the 1930s and 40s for the purpose of Japan's colonial rule in the Asia-Pacific region. Many of them had recently been found in a state of disarray at Stanford University.

The aim of the symposium was to use these maps as valuable source material across a spectrum of fields (e.g., history, geography, environmental science) in exploring the modern history of relationships between Japan and other Asian countries. Japanese specialists in *gaihozu* research and American and Japanese scholars in modern Japan-Asia history presented reports on their research and engaged each other in lively discussions. A closed workshop was also held in which map librarians at Stanford reported on their work with the archived maps and Taiwanese researchers, who are compiling a *gaihozu* database, described their efforts to create a geographic information system (GIS) using the *gaihozu* collection. The participants discussed enthusiastically possibilities of initiating joint research, culminating the event on an optimistic note.

— JSPS San Francisco Office

## JSPS Colloquium Held in Norway

The JSPS Stockholm Office sponsored a colloquium titled "Abiotic Stress from Genes to Biosphere," held at the Stavanger Forum, Stavanger, Norway, on 20 August. Planned by Prof. Matsuo Uemura, Iwate University, and Prof. Vaughan Hurry, Umeå University, the colloquium featured presentations around a theme on the environmental adaptation of plants, delivered by frontline researchers from Japan and four Scandinavian countries—namely, Sweden, Finland, Norway and Denmark. This was the first colloquium for the Stockholm Office to hold in Norway.

Explored were ways that humans can address the effects of climate change on plant life. So as to expand an understanding of topical issues across a stratum of researchers and students, this colloquium was held as a pre-meeting to a larger conference convened by the Scandinavian Plant Physiology Society, which helped it attract some 70 people mostly from countries of Northern Europe.

Abstracts of the presentations delivered are posted in the



Norwegian University of Life Sciences Dr. Øystein Johnsen giving presentation

"Past Activities" section of the Stockholm Office's website (<http://www.jsps-sto.com>).

— JSPS Stockholm Office

## JSPS Abend Held in Bonn

Every year, the JSPS Bonn Office puts on the JSPS Abend, to which it invites representatives of JSPS's partner and other organizations in Germany. The event is held to introduce JSPS's programs and expand the office's circle of German counterparts and affiliates. For the second year in a row, JSPS president Prof. Motoyuki Ono participated in the Abend, convened this time on 16 September at Hotel Bristol in Bonn, attended by some 70 people.

Following remarks from Prof. Ono, messages were delivered



Professors Baba and Meyer delivering lecture

by Prof. Dr. Matthias Kleiner, president, German Research Foundation (DFG), Prof. Dr. Max Huber, vice-president, German Academic Exchange Service (DAAD), and others. Highlighting the event was a Germany-Japan 150<sup>th</sup> anniversary lecture jointly delivered by Prof. Akira Baba, University of Tokyo, and Prof. Dr. Harald Meyer, University of Bonn, using the Trautz Collection of historical photographs of Japan stored at the university. These more than 1,000 photographs mainly taken during Meiji Japan had apparently been collected by Friedrich Max Trautz (1877-1952), who was the director of the Berlin-Japan Research Institute (*Berliner Japaninstitut*), and were recently discovered by Prof. Baba in the archives of the University of Bonn. Enhanced with these photographs, the lecture introduced various aspects of historical life and culture in Japan along with the early beginnings of Germany-Japan exchange.

In the latter half of the event, on behalf of Prof. Dr. Helmut Schwarz, president, Alexander von Humboldt Foundation, AvH secretary general Dr. Enno Aufderheide presented Prof. Ono, who would soon be retiring as president of JSPS, with a medal conferred on those who have made special contributions to the Foundation and its programs.

— JSPS Bonn Office

## Event Held in Germany to Introduce Japanese Universities

This event was held on 21 October in the Senckenberg Museum, located adjacent to Goethe University Frankfurt. Calling for the participation of Japanese universities with bases in Europe, the JSPS Bonn Office organizes it every year to pique the interest of students in Germany to take advantage of educational opportunities in Japan. About 80 people mostly students and faculty of the university attended the event.

The meeting was opened by JSPS Bonn Office director Prof. Dr. Keiichi Kodaira, followed by remarks from Prof. Dr. Matthias Lutz-Bachmann, vice-president, Goethe University Frankfurt. Following them officials of the Embassy of Japan in Germany outlined Japan's research framework, policy for receiving overseas students, and scholarship schemes; the deputy director of JSPS Bonn Office introduced its fellowship and other programs; and university representatives gave short presentations. After a coffee break, two former JSPS fellows spoke about their experiences in Japan, while a member of the German JSPS Club described its alumni



Special student corner

activities. A special corner was set up in the hall for the students to converse with the university reps during the coffee breaks.

— JSPS Bonn Office

## Workshop on Field Research and African Studies Held in Kenya

On 1-2 September, the JSPS Nairobi Research Station cosponsored a workshop with the Research Institute for Languages and Cultures of Asia and Africa, Tokyo University of Foreign Studies. Venued in Nairobi, it addressed the theme "Approaches and Methodologies of Field Research in Africa."

The event brought together young researchers from Japan and East Africa who are doing field research in and across such disciplines as cultural anthropology, sociology, ethnobotany, and

area studies. They discussed their research activities and the approaches and methodologies they employ in carrying them out. The speakers described their own research processes as cases, touching upon their histories of identifying research topics and concepts, relationships with informants, research assistants and others, experiences in securing funding, and the societal impact of their research results.

The some 20 participants enjoyed sharing ideas and informa-



tion amidst an intimate atmosphere of collegueship.

Though situated in Asia, Japan is energetically engaged in African research. Nevertheless, its research findings are not well known among academic societies in Africa and the West. It is believed that the discussion in this workshop on such subjects as doing basic research within the social sciences and the merits of interdisciplinary research can be of meaningful reference to academic societies in Africa, which tend to put their energy into promoting the kind of practicable studies that support socioeconomic development.

— JSPS Nairobi Research Station

## Seminar Held at Thailand's Research Expo

On 27 August, the JSPS Bangkok Office teamed up with the National Research Council of Thailand (NRCT) to hold a seminar on the theme "Advanced Technology in Japan—Research for the Disabled and Elderly" as an event of Thailand Research Expo 2011, held in the Bangkok Convention Centre.

At it, Prof. Yoshiyuki Sankai, University of Tsukuba, spoke on the subject "Cybernetics—Fusion of Human, Machine and Information Systems," introducing and giving a demonstration of the robot suit HAL (Hybrid Assistive Limb), which is used to restore the motion function of limbs in people who have lost it due to an accident or illness. HAL is shown to be more effective in rehabilitation support than methods that rely upon physical strength by physiotherapists.

Then, Assoc. Prof. Kazuhiro Sakai, Niigata University of Health and Welfare, gave a presentation on the use of biomechanics in rehabilitation under the title "Biomechanics and Human Motion Analysis for Rehabilitation Professionals." He demonstrated how the body load of both care providers and recipients can be lightened by measuring their movements with a special video camera



Prof. Sankai answering questions

and analyzing the dynamic characteristics revealed.

It was readily apparent from the large attendance, far exceeding expectations, that the state-of-the-art technologies introduced in the seminar promise to resonate widely within the Thai scientific and medical communities.

— JSPS Bangkok Office

## JSPS-NRCT Seminar Gives Voice to Perspectives on Thailand

On 15 October, the JSPS Bangkok Office and the National Research Council of Thailand (NRCT) held a seminar on the "Study and Research Opportunities in Japan and Perspective of Thailand by Japanese Social Scientists." Venued in the Siam City Hotel, Bangkok, the seminar attracted over 90 researchers, most of them working in scientific research organizations around Thailand, despite the



once-in-50-years flood that threatened the city. An enthusiastic exchange of information and views was enjoyed by the participants.

In the morning, representatives of JSPS and the Japan Student Services Organization introduced their various programs in Asian countries, after which a poster session by 17 Thailand offices of 14 Japanese universities was held. These posters may be viewed on the Bangkok Office's website (<http://www.jspsth.org>).

The afternoon session featured research presentations by four Japanese social scientists on aspects of Thailand, who spoke on the subjects of disaster mitigation systems, resource politics in state-society relations, religion and culture of ethnic minorities, and political stability in Thailand. Engaging the keen attention of the audience, these presentations spurred volleys of questions and comments, which conveyed a high interest in the future direction of Thai society and a thirst for academic analysis in envisaging it. The Bangkok Office looks forward to its partnership with NRCT working to build robust bridges of scientific exchange between Thailand and Japan.

— JSPS Bangkok Office

## JSPS Beijing Office Supports University of Tsukuba Alumni Forum

The JSPS Beijing Office cooperates proactively with Japanese universities conducting symposiums, seminars and other events in China. In October, the Office cosponsored or otherwise supported events held by six Japanese institutions of higher education.



One of them was the China Alumni Forum of the University of Tsukuba held at China University of Geosciences in Beijing on 29 October. The event was carried out to strengthen ties among the Tsukuba alumni in China. Transcending the framework of a usual alumni meeting of students who had returned home after studying in Japan, the forum provided a platform for a mix of Chinese and Japanese alumni of the University of Tsukuba to gather together. It has set in motion a trend of holding of such alumni gatherings with other universities and countries. At the forum, 100 alumni of the University of Tsukuba assembled, networked, and gave presentations on university-industry cooperation and other topics of interest.

The Beijing Office will continue to support events that promote Sino-Japanese exchange, build networks and foster young researchers, and will widely disseminate related information via its website and newsletter.

— JSPS Beijing Office

## JSPS-Sponsored Symposium Held at Cardiff University

On 18-19 August, a research symposium on the topic “The Cornea and Tissue Engineering” was held at Cardiff University. Selected for support under the JSPS London Office’s symposium scheme for the UK JSPS Alumni Association, it was held between Cardiff University and Kyoto Prefectural University of Medicine. The UK scientific lead, Prof. Andrew Quantock, has experienced research in Japan under a JSPS program. Participating in the symposium were some 60 researchers in medicine, pharmacology, and fields of science and engineering.

In the symposium, presentations were given on the application of regenerative medicine in corneal research, and the latest research advances introduced with a focus on stem-cell tissue engineering. On the first day of the event, Dr. Justyn Regini, Cardiff University, held a public lecture on the theme “Changing Vision Seen through the Paintings of Monet,” in which he described how the progression of cataracts effects color perception, which sparked keen audience interest as he traced the color and visual changes in Monet’s paintings and explained them scientifically.

Many of the UK participants had gone to Japan through JSPS



Prof. Quantock offering remarks

programs while there were also Japanese participants who had come to Cardiff under JSPS’s Institutional Program for Young Researcher Overseas Visits. This kind of matrix created between UK and Japanese researchers through JSPS programs is expected to dramatically advance scientific research in this and other vital fields.

— JSPS London Office

## JSPS Programme Introduction Day Held at Aston University

On 30 September, staffs of the JSPS London Office visited Aston University in Birmingham to offer a briefing on JSPS’s fellowships and other programs. It was attended by nearly 30 researchers and university staffs. Following the program introduction, presentations were delivered by Drs. Dmitry Nerukh and Alex Rozhin,



Dr. Rozhin talking about his Japan experiences

who are members of the university’s faculty. Both are former JSPS postdoctoral fellows and current UK JSPS Alumni Association members. They spoke about their experiences in Japan.

With JSPS’s support, Dr. Nerukh had visited several research institutions during his tenure in Japan. Talking about that experience, he added that he is currently carrying out collaborations with RIKEN, which had hosted him, and other research institutions. After finishing his JSPS postdoctoral fellowship, Dr. Rozhin was selected for JSPS London’s FURUSATO Award, under which he revisited Japan. He said that he continues to enjoy a very good relationship with Japanese colleagues and is currently preparing to hold a joint workshop with them.

In the Q&A session that followed, the attendees showed a wide range of interest, inquiring about the details of JSPS programs and probing the former fellows’ experiences.

— JSPS London Office

# Introducing JSPS Alumni Associations



## UK JSPS Alumni Association

Since its establishment in 2004 with 116 fellows, the membership of the UK JSPS Alumni Association has grown to over 320. Registering in the Association means more than just having done a JSPS fellowship: The members are committed to developing UK-Japan academic linkages as part of their research work. This connects, focuses and invigorates the members in their research activities. A good balance exists within the membership among postdoctoral, mid-career and senior scientists. Regional managers are assigned to England, Wales, Scotland and Northern Ireland and a representative to Ireland so as to create an overarching network and to promote JSPS while coordinating its activities across breadth of the UK and Ireland.

### How We Communicate

Communication to and among members is web-based. Those on the mailing list automatically receive notices, such as of calls for grants and announcements of events. These emails are hyperlinked to the website of the Alumni Association, upon which expanded details are provided. Alumni members may also post their activities on the site and use it as an effective means to disseminate their latest undertakings and achievements linked with Japan. This may include books, papers and articles, seminars, and symposia. The Association has also recently set up a Facebook page on which the latest information from JSPS London can be found. We are developing it as an ideal means for the Association to communicate with its alumni and for them to interact with each other.

### Alumni-Support Schemes

Between 2008 and 2009, the launching of two re-visitation programmes helped spur a



Alumni Evening: Re-visitation and symposium awardees seated in the front row, October 2011

100-member jump in the alumni ranks. These are the FURUSATO Award and BRIDGE Fellowship programmes. They offer opportunities for members to revisit Japan for the purpose of renewing and cultivating cooperative links with colleagues in the Japanese academic community. Application calls for both schemes have garnered very good response. These programmes and the revisits under them have spawned a wide range of research initiatives from East Asian warfare and security policy to plant microbial ecology and accelerator physics. These projects have enjoyed the inter-generational participation of both UK and Japanese scientists. As so evidenced, there is a vibrant interest among UK researchers in developing collaborative ties and carrying out joint research with counterparts in Japanese universities and research institutes. In turn, the schemes play an integral part in strengthening scientific links between the UK and Japan.

In 2010, the Association established a symposium scheme, funded by JSPS London, to allow its members of a principal investigator or equivalent status to apply for support to hold symposia. Organized on the departmental or institutional level, these symposia work to promote a high quality of collaboration in cutting-edge, internationally competitive areas with counterparts in Japan. We are now about to launch the second phase of the scheme, which will fund follow-on activities. To qualify, applicants must show a progression in collabora-

tive work and network building with Japanese counterparts in the wake of their first symposium. Such follow-on UK-Japan activities may be a symposium or smaller scale seminar.

### Other Activities

Aside from these support schemes, Alumni members engage in other activities to help raise JSPS's profile and visibility across the British Isles. For one, JSPS London conducts between 10 to 15 university visits each year to promote its activities and funding programmes. Alumni based in those institutions are invited to speak at these briefings, sharing their experiences of living and doing research in Japan with young researchers and encouraging them to take advantage of opportunities to apply for JSPS fellowships. Similarly, at pre-departure seminars organised twice a year by JSPS London to help prepare new fellows for their visits to Japan, alumni give advice on how to get the most out of their tenures. These events are followed by an Alumni Evening, where the new fellows and Alumni members mix and network in an informal, relaxing environment.

All in all, the Alumni Association's annual schedule of activities is replete with opportunities for members to participate, interact and contribute. We hope to develop a new dimension to our Association's agenda by engaging with other JSPS alumni associations in joint activities in the near future.

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



JSPS programme introduction at Aston University, September 2011

## Akashi National College of Technology (Hyogo)

Date: 1 July

**Dr. Luca Stefanini** (Italy)

Host institution: Kyoto University

Title: "Life in the World of Research in the Years of Globalization"



## Ikeda High School (Kagoshima)

Date: 4 July

**Dr. Shu-Ping Huang** (China)

Host institution: Kyushu University

Title: "Magical Carbon Based Nano-materials"



## Chiba Prefectural Kashiwa High School

Date: 12 July

**Dr. Rekha G. Shrestha** (Nepal)

Host institution: Tokyo University of Science

Title: "Nepal: A Brief Introduction and My Research in Japan"



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

Date: 17 September

**Dr. Christelle A. Not** (France)

Host institution: The University of Tokyo

Title: "Paleoclimate Research"

## Kumamoto Prefectural Daini High School

Date: 13 September

**Dr. Michael Breedon** (Australia)

Host institution: Kyushu University

Title: "An Introduction to Australia & Gas Sensor Technology"



## Fukui Prefectural Koshi Senior High School

Date: 10 September

**Dr. Matthew A. Addicoat** (Australia)

Host institution: Nagoya University

Title: "Shape and Function of Molecules"

## Fukui Prefectural Takefu High School

Date: 11 July

**Dr. Jonathan K. H. Tan** (Australia)

Host institution: Kyoto University

Title: "Making Artificial Immune Tissue"

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



Date: 17 September

**Dr. Thomas M. Conrad** (USA)

Host institution: Nara Institute of Science and Technology

Title: "For Science! Opportunities and Explorations"

## Gunma Prefectural Takasaki Girls' High School

Date: 6 September

**Dr. Mourad Benoussaad** (Algeria)

Host institution: The University of Tokyo

Title: "Musculoskeletal System in Generation of Human Motion"

**Dr. Anna M. Barron** (Australia)

Host institution: The University of Tokyo

Title: "Hormone-Based Therapies for Alzheimer's Disease"

**Dr. Rosen N. Diankov** (USA)

Host institution: The University of Tokyo

Title: "Robotics Engineering"

## Nagano Prefecture Suwa Seiryō High School

Date: 16 September

**Dr. Johannes Schmude** (Germany)

Host institution: The University of Tokyo

Title: "Perturbation Theory and Elementary Particle Physics"

## Ibaraki Prefectural Namiki Secondary School/Namiki High School

Date: 15 July

**Dr. Giuseppe Lorusso** (Italy)

Host institution: RIKEN

Title: "The Origin of the Chemical Elements in the Universe"



## Ritsumeikan Moriyama Senior High School (Shiga)

Date: 25 July

**Dr. Natthanon Phaiboonsilpa**

(Thailand)

Host institution: Kyoto University

Title: "Bioethanol"



## Shiga Prefectural Hikone Higashi High School

Date: 11 July

**Dr. Yu-Lin Chung** (Taiwan)

Host institution: Kyoto University

Title: "Subduction Zone Earthquake versus Large-Scale Structure: The Influence of Coming Long-Period Ground Motion Hazard"

## Shizuoka Prefectural Hamamatsu Minami High School

Date: 22 August

**Dr. Ooi-Kock Teh** (Malaysia)

Host institution: Kyoto University

Title: "Seeing the Cellular World through Green Fluorescent Protein"

## Shizuoka Prefectural Numazuhigashi Senior High School

Date: 23 September

**Dr. Laurent Demonet** (France)

Host institution: Nagoya University

Title: "Coxeter Frieze and Cluster Algebras"

## Yamanashi Prefectural Kofu Higashi High School

Date: 27 July

**Dr. Quang-Cuong Pham** (Vietnam)

Host institution: The University of Tokyo

Title: "Motion Planning in Robotics: From Research to Applications"

## Tochigi Prefectural Utsunomiya Girls' High School

Date: 28 September

**Dr. Emanuel Blei** (Germany)

Host institution: National Institute for Environmental Studies

Title: "Plants and Our Atmosphere"

**Dr. Guangai Xue** (China)

Host institution: RIKEN

Title: "Studies on the Host Factors Regulating HIV-1 Replication in Human Dendritic Cells"

**Dr. Wooseok Seo** (Canada)

Host institution: RIKEN

Title: "Studying Science in a Foreign Country"

**Dr. Ping Jiang** (China)

Host institution: National Institute for Environmental Studies

Title: "Dream City—A Carbon Zero City in the Future"

**Dr. Paul D. Nation** (USA)

Host institution: RIKEN

Title: "Why Choose a Career in Science"

## Yamanashi Prefectural Yoshida High School

Date: 25 August

**Dr. Petronella H. Van Riet** (The Netherlands)

Host institution: National Institute of Infectious Diseases

Title: "Improving Influenza Vaccines"

## Recent Visitors to JSPS (August-October 2011)

### First Deputy Head, State Agency for Science, Innovation and Informatization of Ukraine

On 26 August, Dr. Boris Victorovich Grinyov, first deputy head of the State Agency for Science, Innovation and Informatization of Ukraine, and Mr. Yurii Kushnar'ov, first secretary (Science and Technology Issues, Press), Embassy of Ukraine in Japan, paid a courtesy visit to JSPS president Prof. Motoyuki Ono.

In their conversation, Dr. Grinyov introduced his agency, which had been newly

established last year, and told about how the Ukraine has priority areas in common with Japan, including energy, the environment and life science, and about how research on handling nuclear reactor accidents is being carried out in the Ukraine in the aftermath of Chernobyl. He and Prof. Ono exchanged views on research cooperation between Japan and Ukraine.

— Research Cooperation Division I



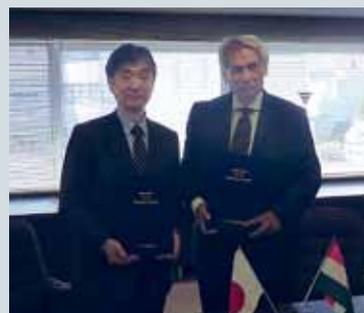
### INSA President

On 6 October, Dr. Krishan Lal, president of the Indian National Science Academy, came to JSPS to participate in the signing ceremony for an updated agreement between INSA and JSPS. The two organizations had concluded their initial "Agreement on Scientific Exchanges" in 1976, under which exchanges of individual researchers have been carried out between the two countries. This updated agreement has raised the curtain on a new era of Indo-Japanese scientific exchange, ushered in by both domestic and international

demand for researcher exchange on a group level. This first modification of the JSPS-INSA agreement in 35 years provides support for joint research projects and seminars.

At the signing ceremony Dr. Lal and JSPS president Dr. Yuichiro Anzai, both of whom are deeply engaged in Indo-Japanese exchange, discussed the importance of scientific collaboration between the two countries.

— Asian Program Division



Hailing from Pakistan, Dr. Rashid Manzoor has been conducting research with his host researcher, Dr. Ayato Takada, in the Research Center for Zoonosis Control, Hokkaido University, under a JSPS postdoctoral fellowship since August 2010. After obtaining his master's degree in Pakistan, he decided to come to Japan as a PhD student. He has now been in Japan for over seven years.

*What are you currently researching under the JSPS fellowship?*

I am working on elucidating the mechanisms by which different host-proteins interact with the influenza A virus polymerase proteins and influence interspecies transmission of influenza A viruses.

*How did you become interested in your research field?*

Influenza A viruses infect a wide range of hosts including humans. Annually, thousands of people die from seasonal flu. In addition, human fatalities are caused by influenza epidemics or pandemics such as Spanish flu in 1918. Economic losses incurred by avian influenza in the poultry industry have been considerable. Moreover, the zoonotic (animal-human transmission) potential of these viruses and the consequent effects can also be devastating. These facts and my experience of observing avian influenza outbreaks in poultry in Pakistan led me to choose this field as my area of interest. I decided to do research on the mechanisms whereby these viruses cross the species barrier and adapt to new hosts. Information gained through such research can be very helpful in developing strategies to combat this menace.

*Why did you choose Japan to pursue your research?*

In Pakistan, we have an impressive im-

age of Japan, its people and its technology. I worked as a researcher in a research organization in Pakistan. Depending on the nature of the work, I often had to refer to research papers. Most of the time I found that part or all of the research had been conducted in Japan. When awarded a scholarship for PhD study, I was given the option to choose a country, and selected Japan without hesitation. Now, I feel really satisfied with that decision.

*How did you get to know your Japanese host researcher?*

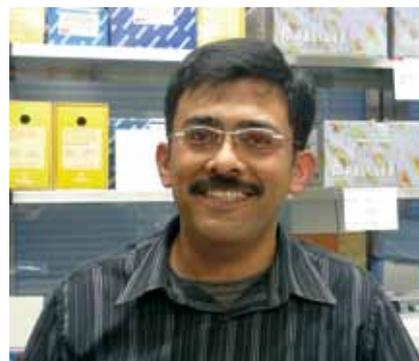
I was a PhD student under Dr. Kida who is a very famous researcher on influenza in Japan. During that time, I had an opportunity to attend a WHO workshop, where I met Dr. Takada and discussed different aspects of my research with him. He gave me very nice suggestions. So, later when I had other chances to converse with him, I found him to be a talented, humble and kind-hearted person. Therefore, I decided I wanted to work with him. Immediately after receiving my PhD, he offered me a postdoc position leading to my JSPS fellowship.

*What is your impression of your host institution?*

The Research Center for Zoonosis Control (CZC) was established within Hokkaido University in 2005. The laboratories of CZC are furnished with state-of-the-art equipment and are run by very motivated and zealous staffs. The working environment is very friendly and supportive. I am really grateful to my host researcher and colleagues, who are very cooperative and helpful in solving my problems even outside the lab.

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

Japanese universities are among the best in the world, and they have produced many eminent scientists. I am really impressed



**Dr. Rashid Manzoor**

Ph.D. (Veterinary Medicine), Hokkaido University, Japan, 2008

M.Sc. (Hons.) (Veterinary Microbiology), University of Agriculture, Faisalabad, Pakistan, 2000

DVM (Veterinary Science), University of Agriculture, Faisalabad, Pakistan, 1997

by the fact that everybody, whether student or teacher, works very hard and with passion.

*What are your research achievements under the JSPS fellowship so far?*

Currently, I am looking for host cellular proteins that interact with the influenza virus polymerase proteins and am trying to figure out the role played by them during influenza virus replication. Fortunately, I have found some interacting proteins, so now I am planning to write and submit a research paper for publication in a scientific journal.

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

Obviously there are cultural differences between Pakistan and Japan; despite them, I like the Japanese lifestyle. I have found people, although shy, to be very nice and caring. The way customers are treated by store clerks is really impressive: They are humble, polite, and always ready to help. Festivals are

## Welcome to JARC-Net

JSPS operates the Japan-Affiliated Research Community Network (JARC-Net) database. Its purpose is to support the maintenance and expansion of working networks forged between Japan and other countries over long years of implementing JSPS's various international exchange and fellowship programs.

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 activities by mobilizing past colleagues, such as university or JSPS program alumni. Members are also provided an information mail service on JSPS's international exchange and cooperation programs.

Registration in JARC-Net is open to all who are interested in research exchange between Japan and other countries, including but not limited to overseas students and researchers who have experienced stays in Japan, Japanese researchers interested in research exchanges with colleagues in other countries, international exchange program administrators in universities and research institutions, and corporate R&D personnel.

We look forward to you registering on and taking active advantage of our JARC-Net service. Please visit our website: <http://www.jsps.go.jp/english/e-affiliated/>.

— Asian Program Division

celebrated with an exuberant spirit. I have participated in some of them, and have unforgettable memories of those moments.

*Before coming to Japan, what kind of image did you have of the country? Has your perception changed after coming here?*

I did not know much about Japan except that it is a technologically very advanced country. Then, I learned a little about Japan just before my departure in a crash course on Japanese culture held by the Japanese Embassy in Pakistan. After coming here, I discovered that despite their country's technological advancements, the Japanese people have been able to maintain their cultural values. I appreciate this very much.

*By the way, you live in Japan with your family. Is your family happy with your decision to come here?*

Yes, my family is very happy in Japan. When I came, it was only with my wife and one

son. Now, we have two sons and a daughter. They really enjoy the life in Japan, though my wife is busy taking care of them. The Pakistan community in Sapporo helps my family; and thanks to the Internet, we can even buy *halal* foods through online shopping.

*What do you plan to do after your fellowship ends?*

I want to work in a university as a teacher and share my experiences with the students. I believe teaching is a bi-directional learning process. A teacher while imparting knowledge simultaneously learns a lot from the students.

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

Well, I strongly suggest that they come to Japan as the research environment here is very good and supportive. The major problem that a foreigner may encounter in Japan

is the language barrier, which can be a cause of frustration. Therefore, I would recommend that they study Japanese by, for example, taking lessons, which will not only enable them to communicate with people but also to understand the culture and live in harmony.

*After a short conversation with his host researcher, we were convinced that Dr. Manzoor is a very talented researcher. He has already had three co-authored papers published in a major journal at an early stage of his career, and is on pace to advance his research further. As mentioned, he expressed a strong desire to educate aspiring young researchers, along with a willingness to spend considerable time in the classroom while presumably continuing his own research pursuits. His passion for both research and education will surely help to foster excellent young researchers capable of seeding their research endeavors.*

## Introducing Japan: Sapporo

By Dr. Rashid Manzoor

I've lived in Sapporo for more than seven years, and always feel at home here. Unlike the megalopolises on Honshu, Japan's main island, Sapporo is not overcrowded though its population of 1.9 million ranks it as the country's fifth largest city. The name Sapporo originates in the language of the Ainu, Hokkaido's indigenous people. It most likely stems from the words *sari-poro-pet*, meaning "river lined with large reeds." In fact, Sapporo lies on the alluvial fan of the Toyohira River. The slopes of the surrounding mountains, such as Teine, Moiwa and Maruyama, won Japan its bid to host the 1972 Winter Olympics, for which Sapporo may be best known internationally.

I'd like to recommend visiting the Ski Jump Stadium on Mt. Okura. You can take a chairlift to the top of the approach and look straight down at the steep slope. There is also a beau-

tiful viewing lounge at the top of the mountain (about 300 meters in elevation) from where a spectacular panoramic view can be had of the Sapporo area. The Ski Jump Stadium includes the Sapporo Winter Museum, which vividly introduces the history of winter sports through exhibitions and simulations.

The city offers many other attractions, highlighted by Odori Park where the Sapporo Snow Festival (*Yuki Matsuri*) is held every winter. This 7-day event features hundreds of crystal-like ice sculptures and snow structures of everything from traditional buildings that light up at night, statues of the pharaohs and other historical figures, and sculptures of cartoon characters to a huge snow maze, and even ice slides for the children.

I also like to go with family and friends to Odori Park to see the Yosakoi Soran Festival, with its teams of costumed dancers performing to music based on *soran bushi* songs, and to Yurigahara Park to enjoy the vast array of 6,000 flowers and plants. We also like going to the Maruyama Zoo to enjoy a "good relationship with the animals." My children can touch small animals like guinea pigs and rabbits and feed squirrel monkeys.

All in all, I'd say that Sapporo offers attractions for people with a wide range of interests.



Viewing platform atop Mt. Okura



Inside Yurigahara Park



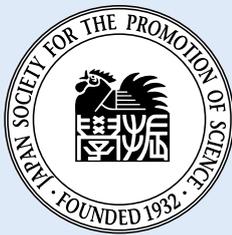


### Cover photo:

Shot in Jigokudani Onsen, Nagano  
Like humans, the Japanese macaque, or "snow monkeys," enjoy bathing in a hot spring and even wash their food before eating.

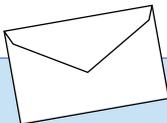
## About JSPS

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.



## New Subscribers, Address Changes, Reader Comments

Contact us at the below email address or fax number if you are not a current subscriber and interested in receiving the *JSPS Quarterly*, or are a subscriber but have changed your mailing address.

Please let us have your comments and impressions about the newsletter.

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For further information on JSPS's organization and programs, please visit our website [[www.jsps.go.jp/english/](http://www.jsps.go.jp/english/)], or mail or fax inquiries to JSPS Fellows Plaza using the address or fax number given below. JSPS Quarterly and our brochure may also be downloaded.

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