# SPS Quartery Japan Society for the Promotion of Science



# FEATURE: Support for Female Researchers in Japan

## TOPICS



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## FEATURE Support for Female Researchers in Japan

#### JSPS's New Restart Postdoctoral Fellowship

This year, JSPS added the new category to its Research Fellowships for Young Scientists Program—a "restart" postdoc (RPD) fellowship. Postdoctoral fellowships under the Young Scientists Program are awarded based on a high level of demonstrated research ability. The ratio of awards versus applications is about the same for male and female researchers; the problem, however, is that there are much fewer female applicants. To lose the special skills and talents of these excellent female researchers due to early career breaks needed for childbearing and rearing would mean a loss of national scientific capacity that Japan can ill afford as it strives to build a creativity-driven society within a highly competitive global environment.

JSPS's restart fellowship was, therefore, initiated to facilitate the sustained participation of Japanese women in science, which it does by providing female postdoc researchers focused assistance in making a smooth transition back into the laboratory after having suspended their research activities for the purpose of childbearing and infant raising.

Male researchers who take time away from their work to help bring up infant children are also eligible for the fellowship. In this way, the RPD fellowship is designed to assist young researchers start a family and support them as scientist-parents, while fostering a family-friendly environment within Japan's research community.

This postdoctoral reentry fellowship not only assists but as importantly encourages talented young female researchers back into the workplace. It returns them to the lab with a great deal of independence, free to choose their own research topics and host institutions. The two years of fellowship and research-grant support provided allows the returnee to get back on the cutting edge of her field, make research advances and publish papers-thus, closing the gap in her career path.

In June, a call for RPD fellowship applications was issued for tenures starting in FY 2006 and 2007. Altogether, 352 applications were received, testifying to the strong desire women have to return to full-time scientific pursuits. From among them, 60 (about 30 for each year) were selected via a screening process of document and panel reviews.

Still at a budding stage in terms of awards granted, the RPD fellowship, which works to reconcile family responsibilities with career building, is one tool in a box of instruments being designed and introduced by JSPS and Japan's Ministry of Education, Culture, Sports, Science and Technology to achieve coequal participation of Japanese women at the forefront of scientific endeavor.

#### Current Actions of Japanese Funding Agencies to Assist Female Researchers

On 28-29 September, a workshop on "Women in Science, Engineering and Technology" was held under the auspices of the Organisation for Economic Co-operation and Development. Traveling to Ottawa, Canada to participate in it, Ms. Maki Kubo, director of JSPS's Administration Department, spoke on the theme "Current Actions of Japanese Funding Agencies to Assist Female Researchers." Before transferring to JSPS, Ms. Kubo had been the director of the Gender Equality Promotion Division in the prime minister's Cabinet Office. Given Ms. Kubo's experience and knowledge of gender issues in Japan, we decided to publish her presentation at the OECD workshop in this issue of the newsletter.

This year, Japan initiated various measures to support female researchers along guidelines set forth in the govern-

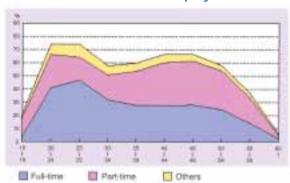


JSPS admin director Ms. Kubo at OECD

ment's newly enacted Third Science and Technology Basic Plan. So, the scheduling of this workshop is most timely.

I wish to touch first upon the circumstances surrounding women in Japan. The ratio of working to non-working women in Japan is shown the graph below. This line, which we call the M curve, dips at ages 30 to 34. This is because a lot of women quit their jobs at this stage to bear and raise children. The line rises again when women enter their 40s.

#### M curve of female employment

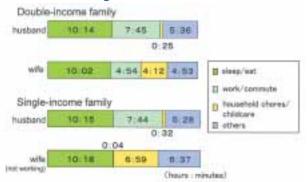


However, closer scrutiny will show it to be more an "n" than an "m" curve when it comes to securing full-time employment. Many women are eager to restart their careers after completing the first stage of child rearing. Unable, however, to find full-time positions, most are relegated to part-time or other jobs.

As a result, women do not usually return to the workplace in positions of responsibility. In fact, the overall ratio of female-to-male executives in Japan is only 10%, while in government it is an incredibly low 1.5%.

Why, you might ask, do so many women quit their jobs to have children? Among the main reasons are long working hours, long commutes, and last but not least an old way of thinking that women should do the housework and child raising. The statistics below give an indication of just what lazybones Japanese husbands can be when it comes to these tasks. Even husbands in double-income families do little to ease the burden on their wives, spending on the average less than 30 minutes a day on housework and childcare. This puts women hard at work both at home and in the office.

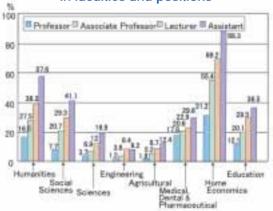
Husband-wife ratio of hours spent doing household chores



Narrowing our focus to women in research, the ratio of female-to-male researchers in Japan is the lowest among OECD countries at 11.6%. It gets even lower as female researchers go up the ladder from research assistants, to associate professors, to professors. This is mainly due to the difficulty they experience in balancing work and family.

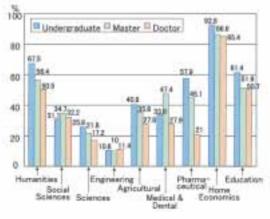
Another problem is that there are very few female faculty in fields of science and engineering. This stands in contrast to the higher concentration of women in other fields conventionally judged suitable for them, such as humanities, home economics and education.

Ratio of female-to-male researchers in faculties and positions



A similar bias exists among university students. There are still few female students majoring in fields of science and engineering. Girls in Japan lack role models in these fields, so have difficulty imagining research in them as a feasible career path to pursue.

## Ratio of female-to-male students in faculties and courses



Last year, the birth rate in Japan was reported to have dropped to 1.25. If this trend continues, the population of Japan in 2050 will have decreased from 120 to 100 million, with the ratio of people 65 and older rising to 35%. This declining birth rate amidst a rapidly aging society has

## **FEATURE**

become an issue of top priority in Japan. It necessitates the proactive hiring and advancement of women if Japan's labor force is to be maintained. It also mandates stronger support for women who bear children so as to bring the birth rate back up.

Currently, female researchers may be characterized as a "following wind" behind Japan's scientific thrust. To fan this wind, the Japanese government set a goal for a ratio of female-to-male researchers in its Third S&T Basic Plan. The overall target is 25%, with 20% in science, 15% in engineering, and 30% in both agriculture and medical science by 2010. This goal reflects the ratio of students currently enrolled in PhD courses. Though research institutions are not obligated to reach this goal, setting it should exert an impact on the gender direction of Japan's academic community.

A package of measures was launched this year to support female researchers and to encourage girls to pursue careers in science. Toward its implementation, the government has allocated a budget of ¥725 million (\$6.2 million).

First, a fellowship program, operated by JSPS, has been put in place to help postdoc female researchers restart their careers after suspending their research activities to bear and raise children. Generally, female researchers without tenure are given maternity leave in Japan, but they are not granted leave to raise infants. When they go to restart their careers, this gap in their work record poses an obstacle to finding a full-time research job. The fellowship is designed to close that gap by financially supporting the researcher for two years so that she can concentrate on restarting and advancing her research. To this end, a monthly stipend of  $\pm 364,000$  (\$3,100) is provided along with a  $\pm 1.5$  million (\$13,000) annual research grant. We believe that after this two years of supported research, the fellow should be able to secure a regular position.

The second is a grant awarded to universities and research institutions that proactively hire and promote female scientists and create frameworks for them to balance work and family. Each institution may apply for an annual grant of from  $\pm 30\text{-}50$  million (\$260,000-430,000) over a 3-year program duration.

Ten institutions were selected for grants this year. They are carrying out a variety of prototype measures under this program. These include setting their own targets for hiring female researchers, improving daycare nurseries on campus, making work schedules more flexible, introducing teleworking systems to allow researchers to do work at home via IT networks, and adding assistants to labs where female researchers are away on maternity or childcare leave. Workshops are also being held on their campuses to educate faculty members on principles and practices of gender equality.

Third, initiatives have been implemented to familiarize junior and senior high school girls with fields of science, engineering and technology and to encourage them through tailored programs and counseling to pursue studies in those directions. Programs include interaction between schoolgirls and female researchers to expose them early on to role models whom they can emulate.

Through this 3-pronged approach of fostering female researchers from an early stage in their education, taking affirmative action in hiring and promoting women faculty at universities, and creating opportunities and frameworks for women to raise a young family while continuing to pursue their research activities, we hope in time and with redoubled effort to see female researchers flourish and be a powerful force driving Japan's future scientific advancement. The very prosperity of the nation will depend upon it.

#### **Events**

#### **Stockholm Office**

The 6<sup>th</sup> JSPS Science Forum
"Frontiers in Influenza Research"
Karolinska Institute, Stockholm, 9 March 2007

#### Recruitments

For FY 2007

JSPS Postdoctoral Fellowship (Short-term) for North American and European Researchers

Application deadline from host institution to JSPS: 5-9 February 2007
JSPS Postdoctoral Fellowship for Foreign Researchers (Standard)
JSPS Invitation Fellowship for Research in Japan (Short-term)
Application deadline from host institution to JSPS: 7-11 May 2007

For details, ask a prospective host researcher or visit our website.

## JSPS President Receives Chevalier dans l'Ordre National de la Légion d'honneur

On 27 September, JSPS president Prof. Motoyuki Ono received the *Chevalier dans l'Ordre National de la Légion d'honneur*, bestowed by the President of the French Republic. A ceremony and reception were held at the French Embassy in Tokyo to present Prof. Ono with this prestigious decoration.

At the ceremony, French ambassador Monsieur Gildas Le Lidec presented Prof. Ono with the decoration, followed by a message of appreciation by Prof. Ono and a toast proposed by Prof. Atsuko Toyama, former Minister of Education, Culture, Sports, Science and Technology. Among the some 100 people attending the ceremony were parliamentarian Mr. Yoshitaka Murata, former Minister of State and chairman of the National Public Safety Commission, and Nobel laureates Dr. Masatoshi Koshiba and Dr. Leo Esaki.

The decoration *Chevalier dans l'Ordre National de la Légion d'honneur* was established by Napoleon Bonaparte in 1802. Ever since, it has been awarded to recognize the meritorious service of

soldiers and civilians in both times of war and peace. Given its long history and ranking as the highest formal recognition of merit bestowed by the government, the *Chevalier dans l'Ordre National de la Légion d'honneur* is said to be the flower of the French merit award system.

The decoration was presented to Prof. Ono for his steadfast contributions over many

years, since the time he held executive posts in the Ministry of Education, Culture, Sports, Science and Technology, to advancing academic and cultural activities between France and Japan, including scientific collaborations, researcher exchanges, and joint research projects and seminars. These contributions to Franco-Japanese partnership were highly appraised by the French government.



Ambassador Le Lidec, Mrs. Ono, Prof. Ono, Former MEXT Minister Prof. Toyama

When accepting the decoration, Prof. One said, "As president of the Japan Society for the Promotion of Science, Japan's core research-funding agency, I will strive to advance basic research through inter-university collaboration and to promote international exchange between our two countries. I pledge to use the prestige of this award in strengthening my efforts to further French-Japanese scientific collaboration."

## Strategic Program for Building an Asian S&T Community

JSPS has inaugurated a new program titled "Strategic Program for Building an Asian S&T Community." Building upon JSPS's networks cultivated with countries over long years, this program seeks to establish an Asian science and technology community at the center of which Japan plays a leading role. A variety of activities are to be implemented over the program's 5-year duration.

Under the program, multilayered collaboration will be carried out: Top executives of funding agencies and research councils in Asia will meet together in summits; a heightened sense of Asia as an integrated body will be cultivated and the first steps taken to build an S&T community within it. Ascertaining the policy and scientific needs of each country, international collaborations on a range of related topics will be implemented in a highly responsive manner. These collaborations will form the infrastructure upon which a matrix of effective cooperative relationships will

be built. By way of these activities, Japan will be able to strengthen its networks with Asian countries and both optimize and diversify the effects of its collaborations with them.

#### Supporting Multilayered Collaboration Asian Summit of Funding Institutions

A program of Asian science summits will be established to bring together under one roof the heads of leading funding agencies and research councils in Asia. At the summits, issues shared among the Asian countries will be discussed along with global problems, common needs identified, and information on leading-edge scientific pursuits in Asia disseminated to the wider global community.

#### **HOPE Meetings**

With an eye to fostering the next generation of researchers who will shoulder the future of Asia's S&T community, a forum series will be launched that brings talented young researchers and students from the region's countries together with Nobel laureates and other front-running researchers from Japan and around the world. These fora will give the young participants an opportunity to receive lectures from the senior scientists and to engage them in small-group discussions.

#### Flexible International Exchanges

Responding to the needs, including policy imperatives, of Asian countries, researcher exchanges, seminars, symposia and other activities will be carried in an expeditious manner.

#### **Database for Networking Researchers**

To advance the building of the Asian S&T community, a database will be compiled of researchers in the region who have experienced research in Japan, and networks will be strengthened among them and with their Japanese colleagues.

— Asian Program Division

## 2006 Recipient Chosen for International Prize for Biology

On 7 September, JSPS's Committee on the International Prize for Biology (chaired by Dr. Saburo Nagakura, president of The Japan Academy) decided, based on the recommendation of the Prize's Selection Committee, to present the 2006 International Prize for Biology to Dr. Serge Daan, Niko Tinbergen Chair in Behavioral Biology, University of Groningen, The Netherlands. The field of specialization for the 2006 Prize is "Chronobiology."

## Achievements Recognized by the Award

Conducting detailed observations and investigations using rodent behavior as an indicator, Dr. Daan elucidated the basic properties of circadian rhythm and its role in behavior expression and physiological phenomena. By formulating models based on these findings, he succeeded in explaining the underlying mechanisms of rhythmicity, thereby laying the foundations of chronobiology.

In this work, Dr. Daan conducted both empirical and theoretical analyses on virtually all the important properties of circadian rhythms and their adaptive significance. Among the questions he investigated were the mechanism by which circadian rhythm is synchronized to light-dark cycle (entrainment) and its ecological significance; the after-effects of entrainment;

seasonal adaptation; and a regulatory mechanism for bimodal rhythms (those with dawn and dusk activity peaks) which involves separate morning and evening (M-E) oscillators. The five papers in which these findings were published in the Journal of Comparative Physiology in 1976 are now regarded as classics in the field of chronobiology and are required reading for every scientist who studies biological clocks. In particular, the M-E two-oscillator model proposed in these papers renders a masterful explanation of the diurnal cycle of circadian rhythms, seasonal adaptation, and photoperiodic response, so it has been highly influential in all subsequent research on the clock mechanism.

In his work on human sleep, Dr. Daan contributed to our understanding of the human sleep rhythm by demonstrating that sleep duration is determined by fluctuations in sleep-regulating variables between the upper and lower thresholds of the sleep rhythm, whose range is entrained to the circadian rhythm. His research on animal hibernation changed the accepted view of a phenomenon long believed to be similar to sleep, demonstrating that hibernation is in fact a kind of sleep deprivation.

Further, Dr. Daan was one of the first researchers to focus on the ecological significance of annual cycles and re-



Dr. Serge Daar

lated circadian rhythms from the viewpoint of ecological energetics. By analyzing the temporal organization of a predator-prey system, the kestrel and the common vole, he showed that, for both predators and prey, daily habits have survival value. In an analysis of the timing and success rate of reproduction in kestrels, he showed that reproductive timing is tuned to stored energy resources in the female. These studies made a profound contribution to understanding the adaptive significance of circadian rhythms and seasonality.

These many research breakthroughs, which have contributed greatly to the advancement of chronobiology, make Dr. Daan a worthy recipient of the International Prize for Biology.

#### **Process of Selection**

The Selection Committee composed of a chair (Dr. Motonori Hoshi, professor emeritus, Tokyo Institute of Technology) and 18 other members, including four overseas members, functioned as a sub-committee of the Committee on the International Prize for Biology. It sent out invitations for candidate nominations to Japanese and overseas universities, research institutions. academic societies and individual experts in the subject field of specialization. Altogether these comprised 1,794 mailing addresses. Sixty-eight nominations were received by the deadline. After adjustment for overlapping nominations, there were nominations

#### Nationality: Kingdom of the Netherlands

**Present Position:** Niko Tinbergen Chair in Behavioral Biology, University of Groningen, The Netherlands

#### **Curriculum Vitae:**

2003-today	Niko Tinbergen Chair in Behavioral Biology,
	University of Groningen
1996-2004	Full Professor of Ethology, University of Groningen
1990-1996	Associate Professor of Chronobiology,
	University of Groningen
1985-1990	Associate Professor of Animal Ecology and Ethology,
	University of Groningen
1975-1985	Senior Scientist, Zoological Laboratory,
	University of Groningen
1973-1975	Postdoctoral Fellow, Stanford University
1973	Ph.D. in biology, University of Amsterdam

for 31 individuals who reside in 14 countries spread throughout the world. Upon careful deliberation of the nominees at its first through fourth meetings, the Selection Committee decided to recommend Dr. Daan as the nominee for the 2006 Prize. Thereafter, the Committee on the International Prize for Biology formally endorsed the Selection Committee's recommendation.

## **Ceremony, Commemorative Lecture** and Symposium

The award ceremony was convened on 20 November at The Japan Academy. This year for the first time, an after-ceremony lecture open to the public was held to celebrate the award presentation on 28 November. At it, Dr. Daan offered in layman's language an introduction to chronobiology, giving

the attentive public a deeper understanding of the workings of biology in people's everyday lives.

To commemorate the award to Dr. Daan, an International Prize for Biology Commemorative Symposium on Chronobiology was convened on 1-2 December at the Tokyo International Forum.

- Carried out by the General Affairs Division

## **N**SF Assistant Director Gives Talk at JSPS

On 31 August, Dr. David W. Lightfoot, assistant director of the US National Science Foundation, delivered a lecture



on "The Intertwinement of Fundamental Work in the SBE and Physical Sciences" at JSPS's Research Center for Science Systems. Some 40 people, including JSPS president Prof. Motoyuki Ono, a number of JSPS's executives and of the Center's program directors and officers, and interested members of JSPS's staff, attended the session.

Dr. Lightfoot spoke on latest activities being carried out at NSF's Directorate for Social, Behavioral and Economic Sciences in such forefront areas as "the science of science policy," policy-relevant science metrics, and cyber-infrastructure. His talk vested all in attendance with a deeper understanding of the interdisciplinary initiatives being undertaken in SBE sciences at NSF. An energetic Q&A exchange followed the lecture, running the session way beyond its scheduled time.

- Research and Analysis Division

## Revised MoU Signed with LIPI

On 29 August, a joint staff meeting was held at JSPS with a delegation from the Indonesian Institute of Sciences led by its vice chairman Prof. Dr. Lukman Hakim. The meeting was preceded by a signing ceremony for a revised memorandum of understanding between the two organizations. Accompanying Prof. Dr. Hakim were Dr. Neni Sintawardani, head of LIPI's Bureau for Cooperation and Promotion of Science and Technology, and Ms. Nur Tri Aries S., head of the same bureau's Cooperation Division.

At the MoU signing ceremony, JSPS president Prof. Motoyuki Ono thanked

LIPI for their cooperation in creating the new program framework embodied in the revised MoU and asked their cooperation in implementing Asian Summit of Funding Institutions and HOPE Meetings as part of a wider initiative to build a vibrant S&T community in Asia. Prof. Dr. Hakim thanked JSPS for their long-enduring cooperation and said that LIPI would be happy to support and participate in the community-building programs.

The discussion in the following joint staff meeting centered on ways to pursue joint investigations into the earth-



Prof. Ono and Prof. Dr. Hakim

quakes and tsunami that had recently occurred in Indonesia. It was decided to hold a workshop on the subject in or around December.

Asian Program Division

## Symposium on Mitigating Climate Change Held in London

On 28-29 September, the JSPS London Office cosponsored a large-scale symposium with The University of Tokyo and Imperial College London. It was held at Imperial College London on the theme "Energy and Green House Gas Mitigation Technologies." This was the twelfth in the series of symposia to be held by the London Office. Its theme of climate change is of very high interest

in both the UK and Japan, attracting some 200 researchers, students, and



representatives of UK and Japanese government agencies and corporations to the event. Seven researchers from Japan and eight from the UK were invited to speak on the latest counter global warming technologies and future warming mitigation strategies.

An opening speech was given by Sir Richard Sykes, rector, Imperial College London, followed by presentations from Dr. Hiroshi Komiyama, president, The University of Tokyo, on "The Role of Research Universities as an Engine for Innovation"; Prof. Yoichi Kaya, directorgeneral, Research Institute of Innovative Technology for the Earth (RITE), on "Long Term Strategies for Mitigating Climate Change: Barriers and Responses"; Dr. Steve Koonin, chief scien-

tist, BP, on "The Promise of Energy Biosciences"; Mr. John Loughhead, executive director, UK Energy Research Centre, on "Trends in Energy Research"; and Prof. Hisashi Ishitani, Keio University, on "Post-Kyoto Framework for Long-Term and Substantial CO<sub>2</sub> Emission Mitigation." On the second day, carbon capture and storage and other state-of-the-art warming

mitigation technologies were introduced by the speakers.

Just before the symposium convened, The University of Tokyo and Imperial College London signed an agreement to conduct more extensive campus-wide exchange activities between them.

- JSPS London Office

# European Executive Committee Meeting and Annual General Meeting of UK JSPS Alumni Association

On 7 September, the second meeting of the executive committee of European JSPS alumni associations was convened at JSPS's office in London. In tandem with it, the third annual general meeting of the UK JSPS Alumni Association was held that evening at the Attlee Room, House of Lords. Attending the executive committee meeting were officers of the UK alumni association along with representatives of the other JSPS alumni clubs in Europe: namely. French club chair Prof. Marie-Claire Lett. Swedish club chair Dr. Ma-Li Svensson, and German club treasurer Dr. Arnulf Jäger-Waldau. They reported on their respective club activities and discussed future collaboration among the clubs including a

**EU Executive Meeting** 

concept of establishing a European Alumni Club that would organize seminars on topics of shared interest and other pan-European activities. The committee's next meeting will be held in Bamberg, Germany, in May of next year.

At the general meeting, a new group of executive officers was elected, as the term of office for the current officers had expired and association chair Prof. Peter Sammonds had stepped down to give another alumnus a turn at the helm. Newly elected were chair Dr. Martyn Kingsbury, vice-chair Dr. Hugo Dobson, treasurer Ms. Melody Liles, secretary Dr. Che Connon, and associates Dr. John Fossey and Dr. Ruth Goodridge.

After discussing several items of business among the members, the meeting was opened to representatives of UK's government, funding agencies, Japanese organizations based in the UK, Japanese researchers residing in the UK as well as members of the UK alumni association. Some 50 in num-



Lord Hunt leading tour of House of Lords

ber, these participants engaged in a spirited exchange of views and opinions. Then, Mr. Hiroshi Okajima, project manager, Research and Development Management Division, Toyota Motor Corporation, spoke about the company's R&D thrust in environmentally friendly technologies, including a hybrid car. As a grand finale, Prof. Lord Julian Hunt, University College London, who had arranged the venue, gave the participants a rare experience by escorting them on a tour of the House of Lords.

- JSPS London Office

## Executive Committee of US JSPS Fellows Alumni Association Held

On 30 September, the US JSPS Fellows Alumni Association held an executive committee meeting at the JSPS Washington Office. It was attended by the representatives of the association's five districts, who were:

Northeast region: Dr. Jan Zeserson (Cornell University)

Southeast region: Dr. Wael Zatar (Marshall University)

Midwest region: Dr. Blanca Chattin-Kacouris Southwest region: Dr. Arup Neogi (University of North Texas)

West region: Dr. Hedong Niu (California Department of Transportation)

These new officers elected Dr. Neogi as the chair and Dr. Zatar as the vicechair. Dr. Neogi has been deeply involved in JSPS's program: He did a postdoctoral fellowship in Japan on the research theme "Semiconductor Optical Materials with Nano Structure." This



year, he organized a symposium on Nanoscale Materials for Optelectronics and Biotechnology sponsored by the Washington Office. This summer, he revisited Japan as a fellow under a JSPS Invitation Fellowship for Research in Japan. Dr. Zatar had been the alumni association's first vice-chair. Giving expression to that experience, he is expected to make great contributions to advancing the association's program in the next period.

In planning future activities, the members decided to draft guidelines for preparing Science Symposia. It was reported that the association's first newsletter had been compiled. A decision was made to distribute it by email to the members and to post it on the alumni association's homepage of the

Washington Office's website for wider dissemination.

Alumni association's homepage: http://www.jspsusa.org/Alumni\_association/ alumni.htm

- JSPS Washington Office

## JSPS President Attends Japan-France Symposium on Higher Education

On 5-6 October, the fourth Japan-France Symposium on Higher Education was held in Grenoble. JSPS president Prof. Motoyuki Ono traveled to France to participate in it as a speaker.

These symposia have been held alternately between Japan and France since 1998 for the purpose of reexamining higher education paradigms in each country with an eye to exploring new areas of inter-university cooperation between Japan and France. They are attended by university representatives of the two countries, with this year's symposium assembling some 50 university presidents; officials from Japan's Ministry of Education, Culture, Sports, Science and Technology (MEXT) and Ministry of Foreign Affairs (MOFA), and from France's Ministry of National Education, Higher Education and Research (MENESR) and Ministry of Foreign Affairs (MAE); and representatives of research institutions.

The symposium addressed four topics:

- Evaluation of tools already in place to promote exchanges of students and researchers between the two countries
- Internationalization of universities: towards stronger international linkages between universities
- University-industry cooperation
- Higher education and research initiatives in favor of developing countries: trilateral cooperation between the two countries and a third country

In the first session on evaluation of existing programs, Prof. One gave a presentation through which he described the state of the SAKURA Program, Frontiers of Science Symposia and other ongoing JSPS programs with France, and newly launched initiatives as well as previewing initiatives on



JSPS's drawing board. Thereafter, discussions were advanced on each of these four topics. In the course of the discussions, JSPS's program was lauded for its success in promoting exchange between Japanese and French researchers, particularly younger researchers of the two countries.

The next symposium, to be held in Japan in 2008, will commemorate the  $150^{\rm th}$  anniversary of the Treaty of Amity and Commerce between Japan and France.

- Research Cooperation Division

## JSPS President Addresses EuroHORCs Symposium

JSPS president Prof. Motoyuki Ono was invited to deliver a presentation at an international conference on "Peer Review—Its Present and Future State," held in Prague on 12-13 October. At it, he introduced enhancements that JSPS has made over recent years to the peer review system it uses to screen applications for Grants-in-Aid for Scientific Research (Kakenhi).

The symposium was organized by the European Heads of Research Councils



(EuroHORCs) in cooperation with the European Science Foundation and the Czech Science Foundation, and was attended by about 40 top executives and leading experts from science-promotion agencies and research institutions of mainly European countries.

Sessions were held on grant-screening methodologies, approaches to evaluating international networking activities, institutional assessment, and other review-related issues and challenges. Representatives from each country introduced the trends, policies and issues related to peer review in their respective countries, ensued by vigorous discussions on how the peer review process is understood and performed and ways in which it may be enhanced to meet contemporary demands.

In his presentation, Prof. One placed focus on a system JSPS has devised to improve the quality of peer review examiners, which starts from the selection of document review examiners by JSPS's program officers and ends with a check of each examiner's performance, the results of which are fed into next examiner selection cycle. Strong interest was expressed in this approach from the floor.

Note: EuroHORCs was established in 1992 as an informal association of the heads of national research councils and leading research organizations in the EU member states. It serves as an advisory body to the European Commission and functions as a key player in the EU's science policy-decision process.

- Research Cooperation Division

## Joint JSPS/CJS Colloquium Held on Earthquakes in Japan

On 13 October, the ISPS San Francisco Office convened the third in its annual series of joint colloquia, this time in co-sponsorship with UC Berkeley's Center for Japanese Studies (CJS). Held in the University's Alumni House, the colloquium addressed the theme "Responses to Destruction in Japan." Its timing coincided with the 100th anniversary of the Great 1906 San Francisco Earthquake.

Invited to address the colloquium were eight leading researchers from Japan, the US, and Singapore, who gave presentations revolving around the topic of "earthquakes." They not only attracted researchers to the event, but also numerous other people interested in the subject.

The event started with remarks by CJS chair Prof. Alan Tansman, who described the colloquium's purpose and program. He was followed by San Francisco Office director Prof. Seishi Takeda, who welcomed the participants. In the morning, keynote speeches were



delivered and the first session held: two more sessions were held in the afternoon. Each of the sessions featured paired presentations, followed by questions from the floor. One speaker answered a question while the other provided added commentary. This Q&A format worked to jell the speakers and audience into what felt to be an organic whole.

On the next day, a closed session was convened by the session chairs and speakers, who engaged in a spirited exchange of views on points distilled from the previous day's discussions. This face-to-face process of brainstorming is thought to have strengthened colleagueal ties among these researchers from Pacific Rim countries.

Usual discussions on earthquakes tend to focus on matters of prediction and disaster prevention. This colloquium added "disaster culture," urban planning, and other societal, economic and geographical perspectives to the dialogue. It delved into the response taken for the Great Kanto (Tokyo) Earthquake, Great Hanshin-Awaji (Kobe) Earthquake, and other seismic catastrophes in Japan. The colloquium's interdisciplinary, multifaceted approach also addressed future earthquake preparedness, including the roles of individuals, municipalities, and governments.

The program of this event can be found on the following website: http://www.jspsusa-sf.org/event06.html

- JSPS San Francisco Office

### Recent Visitors to JSPS (August-October 2006)

#### **DFG Delegation Visits JSPS**

A 5-member delegation from the German Research Foundation (DFG) visited JSPS on 28 August. It was headed by DFG vice president Prof. Matthias Kleiner, who is also DFG's president-elect for the next period of office. The meeting began with presentations by JSPS president Prof. Motoyuki Ono and Prof. Kleiner, who spoke about program developments at their respective organizations. Following them was a spirited exchange of ideas on future JSPS-DFG partnership, conditions conducive to interuniversity exchange between the two countries, and other subjects viewed from a wide vista of bilateral scientific collaboration.

Research Cooperation Division



#### Minister-led German Delegation Visits JSPS

On 30 October, Dr. Annette Schavan, Minister of Education and Research, and a high-level delegation from Germany made a courtesy visit to JSPS's executives in Tokyo.

JSPS president Prof. Motoyuki Ono welcomed Dr. Schavan and briefed her delegation on JSPS's programs and its scientific exchange activities with four partner agencies in Germany. Dr. Schavan thanked JSPS's members for their welcome and told them about recent trends in S&T policy in Germany. The group enjoyed a lively discussion about wide-ranging topics including Germany's Excellence Initiative program to promote top-level university research and JSPS's initiatives to enhance university education and research.

Among the 27 members of the German delegation were also Prof. Dr. Ernst-Ludwig Winnacker, president, German Research Foundation (DFG); Dr. Georg Schütte, secretary general, Alexander von Humboldt Foundation (AvH); Prof. Dr. Ernst Rietschel, president, Wissenschaftsgemeinschaft Gottfried Wilhelm Leibniz (WGL); and members of the national parliament.

- Research Cooperation Division





The following fellows participated in JSPS's Science Dialogue Program during the period from August through October 2006. For details about the program, please see its webpage at: http://www.jsps.go.jp/english/e-plaza/e-sdialogue/

Overseas Fellowship Division

#### **IWATE**

#### Iwate Prefectural Mizusawa High School

Date: 19 October Dr. Paras Bhalla (India) Host institution: Tokyo Institute

of Technology

Title: "Solubilities of Metal in Silicate Melts: Behavior of Tin and Platinum in Nature'



#### **SAITAMA**

#### Warabi High School

Date: 25 September

Dr. Manush S. Mohammed

(India) Host institution: Fisheries Re-

search Agency

Title: "Impact of Global Warming and Climatic Changes in the

Present Scenario<sup>n</sup>



#### **NIIGATA**

#### Niigata Prefectural Niitsu **High School**

Date: 4 September Dr. Vladimir A. Valera

(Venezuela)

Host institution: Niigata University Title: "Proteomics and Cancer"



#### **OKINAWA**

#### Kaiho Senior High School

Date: 14 October

Dr. Rayhan Z. Hossain (Bangladesh) Host institution: University of the Ryukyus

Title: "A Brief Introduction to Bangladesh and My Research

on Urinary Calculi in Japan<sup>a</sup>



#### **YAMANASHI**

#### Yamanashi Prefectural Tsuru High School

Date: 31 August

Dr. Qamar U. Zaman

(Pakistan)

Host institution: Tokyo University of Agriculture and Technology Title: "Precision Agriculture in

Florida Citrus"



Dr. Jose Geraldo A. Brito Neto (Brazil)

Host institution: Science Uni-

versity of Tokyo

Title: "Porous Silicon as Base Material of MEMS-Compatible Fuel Cell Components"





Date: 21 September Dr. Sos S. Margaryan

(Armenia)

Host institution: Building Re-

search Institute

Title: "Earthquakes, Seismicity

and Seismic Hazard"

Date: 10 October Dr. Hoshang Heydari

(Sweden)

Host institution: Nihon University Title: "Quantum World"





Date: 26 October Dr. Nadine Richard (France) Host institution: Research Organization of Information and Systems

Title: "Affective Computing Applied to Interface Agents"

#### JSPS Fellows Plaza Website

JSPS Fellows Plaza is continually in the process of updating its website, which provides information for present, past and prospective JSPS fellows. Please give us a visit at:

#### http://www.jsps.go.jp/english/e-plaza/

You'll find pages on "How to Apply," "Experiences and Messages from JSPS Fellows," "Program Guidelines," "e-Orientation," "Find Nearby Fellows," "Science Dialogue," and "Alumni Associations." The site also carries current and back copies of our newsletter "JSPS Quarterly" and the booklet Life in Japan for Foreign Researchers.

If you have any opinions or impressions you wish to share regarding our website, please contact us at the JSPS Fellows Plaza. JSPS Fellows Plaza





## 先輩からのメッセ

## Message from Former JSPS Fellow (6)

#### JSPS helps nurture Japan-US connection

My introduction to Japan began in the late 1960s when I became a PhD candidate in Human Genetics at the University of Michigan in Ann Arbor. The Chairman of my department had been the principal investigator of a research project on the Genetic Effects of the Atomic Bomb. After spending several years in Hiroshima, he continued the study at Michigan. There was a steady flow of Japanese and American physicians and scientists back and forth.

When we began our research, I was fortunate to be accepted by Dr. Arthur Bloom, a cytogenetist. Dr. Bloom had done chromosome studies in Hiroshima, and I knew that he enjoyed Japanese culture, even studying koto and the language. Ultimately, I started working with a Japanese pediatrician, Dr. Yasuo Nakagome. While Yasuo was a clinician, his real love was the laboratory. We worked closely together and had much success and enjoyment. When Yasuo was leaving he said to me, "Some day I'll see you in Japan," and I chuckled.

In 1972, I took a position at the University of South Carolina, while Yasuo had gone to the Children's Medical Research Center in Tokyo. We stayed in touch with annual letters at New Years and by sending reprints of our publications. We were both enjoying exciting careers in the fast moving field of human genetics—Yasuo doing molecular work and I running a large prenatal diagnostic facility.

In 1988, Yasuo sent me a letter inviting me to spend a 6-month sabbatical with him. I didn't hesitate before asking my Chairman. Both he and my family endorsed the idea. I spent mid-1989 with Yasuo and enjoyed every minute. On weekdays, we worked hard in the lab and every weekend I was kept busy. It was as if people in the lab planned that I always had something to do. I climbed Mt. Fuji with them, participated in my neighborhood (NishiKoyama) mikoshi (carrying a portable shrine—for what

seemed like miles), and my family spent August with me.

Following a prenatal diagnosis lecture I gave at Hiroshima, the Chairman of Obstetrics asked me if he could send a faculty member to my lab for a year or two. I arranged for this, including a small departmental stipend. Dr. Tomoya Mizunoe spent 1991 and was replaced by another obstetrician, Dr. Norio Miharu, who stayed two years. Over the last 15 years, I have hosted seven obstetricians for 1-2 year fellowships. I hope they all had as rewarding a work/play experience as I had enjoyed in Japan.

In 1998, I learned from Dr. Miharu that he was starting a new delicate microscopic procedure that we were already doing. I offered to go to his lab and assist them with the important details. He was agreeable but the trouble was funding. I had previously heard of JSPS and inquired of possible short-term support. Our joint proposal was awarded and we spent three weeks in a successful venture. I am sure that it saved Dr. Miharu several months of work and many thousands of dollars in reagents.

A similar thing occurred in 2005 when I learned that a friend of mine (Prof. Jun Fujita of Kyoto University School of Medicine) was starting a Masters Degree Program in Genetic Counseling. I had started a similar Program in 1985 and we had accrued considerable experience by then.



Carrying mikoshi in NishiKoyama (Tokyo), where he spent sabbatical with Prof. Nakagome



Dr. S. Robert Young

Distinguished Professor Emeritus, Department of Obstetrics and Gynecology, University of South Carolina School of Medicine

JSPS Invitation Fellow (Short-term), 2005

Again it seemed an on-site visit might be a meaningful experience. With Prof. Fujita's assistance, I was able to secure another JSPS Short-term Fellowship to meet with genetic counseling program directors at Kyoto (Profs. Ito and Kosugi), Shinshu (Prof. Fukushima) and Ochanomizu (Profs. Chiyo and Tamura) Universities.

I have thoroughly enjoyed my Japanese professional and personal experiences and hope that they were as rewarding to others. I want to thank JSPS not only for its financial support but also for its efficient and effective administration of these undertakings. I hope many, many other investigators will have the opportunities that I have had.



Talking to a group of students about "genetic counseling" at Kyoto University

## Introducing JSPS Overseas Offices: San Francisco

JSPS's office is actually located in Berkeley across the bay from San Francisco. Revolving around the UC Berkeley campus, the city teams with college students and shops that cater to them. Having many Hispanics, Asians and other ethnicities, Berkeley is a cosmopolitan place, one where the hippie movement started and where an academically charged atmosphere radiates a uniquely free and casual ambience.

The office was formally established in May 2003. Still less than three years old, the office's activities are being expanded year upon year, as is its staff which currently comprises a director, Prof. Seishi Takeda, an advisor, Mr. Ryuji Koyama, and five other members.



Differing from JSPS's Washington, DC office, which has developed strong connections with government-related agencies, the San Francisco office is working to build relationships with universities and other academic institutions. To this end, the office holds jointly sponsored colloquiums and its staff visit college campuses to give briefings on JSPS programs. So far, the office has cultivated good working relations with UC Berkeley and other UC campuses, University of Texas at Austin, and University of British Columbia in Canada.

With an eye to advancing research exchange by inviting researchers from the US and Canada to Japan, the office advertises JSPS's fellowship programs, giving special emphasis to JSPS Postdoctoral Fellowships (Short-term) for North American and European Researchers, a program geared to providing younger researchers with an opportunity to try joint research in Japan.

Another of the office's important roles is to network young, highly promising Japanese researchers residing in the US. The office holds gatherings to bring together these researchers twice a year. These meetings have been praised by the participants for helping them to create new and expanded ties among colleagues working in the US.

Further, the office is a member of JUNBA (Japanese University Network in the Bay

Area), comprising Japanese universities with bases in the area. It also serves as the organization's secretariat. In this capacity, the staff is working to support the activities of the Japanese universities while helping them to foster a sense of consortium via which they may communicate collective messages. They will have a chance to do so through JUNBA's first commemorative event, scheduled to be held next January in Palo Alto



The office's wish is to keep growing its program and serve as many people as possible. If you are interested in the office or our programs, please feel free to drop by.

- JSPS San Francisco Office

#### Staff of San Francisco Visit West Coast Universities

One important function of the JSPS San Francisco Office is to conduct academic exchanges with universities and sciencepromotion agencies in the US. In this vein, the staff recently made visits to Stanford University and the Irvine and Davis campuses of the University of California. The following is a brief description of those visits.

#### Stanford University

Office director Prof. Seishi Takeda gave a briefing on JSPS's fellowships and other programs at the "Scientific Mobility Conference" held at Stanford University on 7 September. The staff also set up a booth, which was visited by a good number of inquisitive young researchers from the university.



On 11 September, the staff participated in a workshop at UC Irvine. Prof. Takeda gave a presentation on JSPS's programs and the office's activities. He fielded many questions



particularly regarding JSPS's fellowship programs. Even after the workshop, many professors and students stayed to ask about and discuss with the staff opportunities to do research in Japan offered by JSPS.

#### **UC Davis**

The staff held a workshop at UC Davis on 5 October. It focused mainly on JSPS's fellowship program and the joint colloquium organized by the office. The majority of the participants were university faculty, who engaged the staff in a spirited discussion about the two programs. Follow-up information was sent to the faculty in expectation of even stronger collaboration between the university and the office in the future.



All of these visits were conducted very successfully as they accorded opportunities for the office staff to exchange views with the staffs of the universities and with the participants of the meetings, who in each case showed a high interest in JSPS's activities.

- JSPS San Francisco Office

## Research and Life in Japan by a JSPS Fellow (11)

Hailing from Tanzania, Dr. Prosper Mfilinge first came to Japan in 1999 under a postgraduate scholarship from Japan's Ministry of Education, Culture, Sports, Science and Technology (MEXT). He obtained both a master's and doctoral degree from the University of the Ryukyus in Okinawa. In April 2005, he went on to conduct research in the University's Faculty of Science under a JSPS Postdoctoral Fellowship.

Of Dr. Mfilinge, his host Prof. Makoto Tsuchiya said, "He's a very serious person, actively engaged in his research. He provides a wonderful role model for the university's students, sharing both his knowledge and techniques with his juniors, overseas and Japanese alike."



Dr. Mfilinge with his host Prof. Tsuchiya

After finishing his JSPS fellowship, Dr. Mfilinge plans to go back to Tanzania and continue his work as a research scientist.

#### What are you researching under the JSPS fellowship?

As a marine biologist, I am working on mangrove trophic ecology. Mangroves are tropical and sub-tropical trees restricted to intertidal and adjacent communities, and are adapted to living in salt water. They provide food, shelter, protection and nurseries for many species of fish. My current research work is to identify lipid markers that can be used to distinguish mangrove organic matter from terrestrial organic matter in a marine environment and food webs, and also to identify fatty acid biomarkers that are unique to marine fungi. Existing difficulties in differentiating the contribution of mangrove organic matter from terrestrial inputs in marine food webs are what prompted me to undertake this investigation. A lot of my work involves field experiments. I also gather mangrove and terrestrial plant leaves, crabs and other specimens, and examine and analyze them back in the lab. My findings will help in estimating mangrove contribution to higher trophic levels more accurately.

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

It started with a strong interest I had had in wetlands ecology in particular mangroves since I was an undergraduate student at the University of Dar es Salaam in Tanzania. Taking field trips and participating in the establishment of marine parks on Mafia Island did much to heighten my interest in studying mangroves.

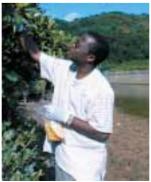
#### What led you to pursue research in Japan? How did you get to know your Japanese host researcher?

I chose Japan first of all because it is well known for its advanced technologies. Having a good research environment is a key to producing good results. Such an environment would allow me to conduct my research with a high level of accuracy while giving me many experimental possibilities.

I first met my host researcher in 1999 through a friend who had previously studied at the University of the Ryukyus. At that time, I was interested in doing my master's in marine science in Japan under MEXT's scholarship program. As required, I prepared a research proposal and looked for a likely advisor in Japan, who turned out to be Prof. Tsuchiya. I feel lucky he accepted me; I've gotten my best education and done my best research work under his guidance.

#### What merits do you find in conducting research in Japan?

There is a good working environment with a high level of organization, and well-



Dr. Mfilinge collecting mangrove leaves



#### Dr. Prosper Mfilinge

Ph.D. (Marine and Environmental Science), University of the Ryukyus, Japan, 2004

M.Sc. (Chemistry, Biology and Marine Science), University of the Ryukyus, Japan, 2001

M.Sc. (Inland Fisheries Management), University of Hull, UK, 1997

B.Sc. (Marine Biology with Applied Microbiology), University of Dar es Salaam, Tanzania, 1994

funded, well-equipped laboratories, even more so than those I experienced at universities in other countries. Most importantly for me is the presence of mangrove forests. Okinawa, with its subtropical climate, is a perfect place as it harbours vast, undisturbed mangrove forests in its islands.

What are your impressions of your host institution? How about the research environment for overseas researchers at the University of the Ryukyus?

Very good indeed, there is a welcoming international atmosphere here for researchers. The university's high level of research attracts many foreigners. In fact, it's a joy to just get the opportunity to come here and conduct research. The environment for overseas researchers at the university is ideal: friendly atmosphere, well organized labs of high standard, most being well equipped with up-to-date facilities. The friendly staffs and students make research and everything else go smoothly. Whatever your research needs, the staff quickly meets them.

#### What do you usually do outside your research?

Okinawa is a beautiful and wonderful island with a very natural environment. When I have enough time especially on weekends I normally travel to the north or south to explore new places. Otherwise, I enjoy hiking and bicycle riding. There is a lot to discover here!

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

My image of Japan was of technological development and a faster life style than you might find in most of the world's wealthy countries. I knew a little bit about Japanese culture and traditions, but thought they may have been left behind in the wake of the country's rapid development. I was

wrong! When I came to Japan, I found that tradition, culture and technology are inseparable here.

What advice would you give someone about to begin a JSPS fellowship?

You might try to learn a few Japanese words before you come here. Just five words can help a lot. As every conversation should start in a polite way, using these words before continuing on in English is important: *Ohayo gozaimasu* (Good morning), *konnichiwa* (Good afternoon),

konbanwa (Good evening), sumimasen (Excuse me!...used if you want to ask for something anywhere), gomennasai (Sorry). If you should be lucky enough to come to Okinawa, daily life isn't too difficult to manage as so many people here speak English. Whenever you have a problem, first ask your host researcher. Definitely, set some time aside to enjoy and explore the rich culture of Japan.

Interview by JSPS Fellows Plaza

## Introducing Japan: Okinawa

The Wonderful Islands of Okinawa Dr. Prosper Mfilinge

The hospitality of the Okinawan people, with their beautiful nature and rich culture and history, are among the many things I find captivating about Okinawa.

Okinawa, the southernmost prefecture of Japan, is a subtropical paradise. Comprising an archipelago of more than 50 islands, the prefecture is engulfed in an emerald-green sheen sea, inhabited by the world's finest coral reefs. This island paradise is also home to the world's healthiest and longest-living people.

With its beautiful beaches, marine sports and spectacular natural scenery, Okinawa has it all when it comes to having fun in the water. The archipelago's natural attractions have given rise to world-class beach resorts on Okinawa, Yaeyama, Miyako and other islands. The vast evergreen subtropical forests of northern Okinawa and Iriomote Island, with its rich biodiversity of plants and animals, are ideal for trekking. The beautiful estuarine mangrove forests in those places and on Ishigaki Island are perfect for canoeing or kayaking, snorkeling and boat touring. Apart from alluring tourists, these natural environments attract researchers from both in and outside Japan.

There are also many interesting places to see. Located in the town of Motobu, Churaumi Aquarium features the world's largest fish observation window. Perhaps most fascinating are UNESCO's world cultural heritage sites: the Gusuku (castle ruins) Sites and Related Properties of the Kingdom of Ryukyu. These castles were constructed sometime between the ends of the 14<sup>th</sup> and 18<sup>th</sup> centuries. The most famous is the restored Shurijo Castle, seat of the Ryukyu Dynasty kings, located in what's now the capital of the prefectural government, Naha city. Also in the vicinity is Gyokusendo Cave, offering the visitor the country's second longest subterranean walk, with footsteps that echo among about a million stalagmites and stalactites. First

discovered in 1967, the cave is now safe and user friendly, equipped as it is with safety stairs and handrails throughout the walkway. Of course, there



At entrance to Shurijo Castle



Inside Gyokusendo Cave

are a myriad of other fascinating places, but I'll leave them for you to discover and explore when you come to Okinawa.

Okinawan foods and cooking styles are simply fantastic! And, they give clues to the people's secret of longevity and healthy aging. On top of lifelong, regular physical exercise, they eat a mostly plant-based diet that includes fish and soy foods with a great variety of vegetables. Okinawa tofu, jasmine and oolong teas, seaweed (mozuku, asa and suna), and locally grown Okinawa soba (a favorite among foreigners) are just a few of the treats in store for you.



#### To Past and Present JSPS Fellows:

We are in the process of updating our mailing list. If you have changed your address or would like to add your name to the *JSPS Quarterly* mailing list, please mail your full name and address (including country) to JSPS Fellows Plaza, 6 Ichibancho, Chiyoda-ku, Tokyo 102-8471 or fax it to us at +81-3-3263-1854. Please indicate whether you are a current or former JSPS fellow.



**Cover photo:** 

Hoarfrost tinseled forest in mountains of Nagano Prefecture

#### **About JSPS**

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



#### 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



## Request for Reader Comments

We are taking a survey with an eye to reflecting reader interests in the JSPS Quarterly. If you have an opinion of our newsletters, we would like to hear from you. We would also like to know your impressions of the JSPS Fellows Plaza webpage. Please e-mail your comments to the JSPS Fellows Plaza at

fellowsplaza@jsps.go.jp or fax them to us at +81-3-3263-1854.

For further information on JSPS's organization and programs, please visit our website [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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