

JSPS SAN FRANCISCO NEWSLETTER

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Message from Director Masayuki Izutsu

California, particularly the San Francisco Bay Area, is now gaining wide and keen attention from Japan, which has a long history with California. In 1872, just after the Meiji Revolution, the Iwakura Mission first made landfall in San Francisco, and the Peace Treaty was signed at the San Francisco Opera House in 1951 to officially end World War II. This year at the end of April, Prime Minister Abe visited San Francisco and Silicon Valley to make inspections of these areas with the hopes to reveal secrets of their vibrancy and also to encourage enterprises and, especially, young entrepreneurs from Japan.

The number of enterprises and companies coming from Japan to Silicon Valley or the Bay Area reportedly increased drastically these past several years, not only in the electronics, robotics, and automotive fields, but also computer software, games, graphic design, retailers of various kinds of goods, communication services, logistic services, and so on. Also, the education field expanded as demands to send high school and university students from Japan to the west coast increased due to its notoriety as one of the best areas to have cultural experiences of diversity and inclusive practice.

Fostering globalized human resources is recognized as one of the key issues for Japan now to revitalize its society after the setbacks of the so-called lost twenty years of Japan from the 1990s. To heal and overcome the economic and societal effect of the lost two decades, and also to adopt unavoidable demographic transition, many people think that a bit more of the animal spirit of the diverse Californian society could be injected into the rather homogeneous and exclusive society of Japan. A diverse and inclusive culture is indispensable to remain competitive and to keep up with the rapid pace of globalization.

The San Francisco office of JSPS (the Japan Society for the Promotion of Science) is entrusted to provide support for academic collaboration between Japan and the west coast of the U.S., Canada, Latin America and the Caribbean, and to support the globalization activities of Japanese universities in these areas. We submitted survey reports on academic research activities carried out in Latin American and Caribbean countries in the last fiscal year, and will hold the symposium, "Japan-Mexico Global Innovation on Practical Engineering Education and Research" in Mexico this year in cooperation with Nagaoka University of Technology and the University of Guanajuato, Mexico. We also held symposia under joint operation with UC Berkeley and UC Santa Barbara last year, and will hold joint symposia with UC San Diego, UC Berkeley and the University of Washington in the present fiscal year.



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To support the activities of JUNBA (the Japanese University Network in the Bay Area) is also one of our major functions. The JUNBA 2015 Symposium and Summit entitled “Governance as a Major Leverage Tool for Improving Quality in Higher Education” was successfully held last January and brought together the highest management from the University of California with top executives from Japanese universities and also MEXT (the Ministry of Education, Culture, Sports, Science and Technology of Japan). In addition, to encourage building networks among researchers we hold gatherings several times a year to provide them a chance to meet and exchange research and living information. In these endeavors, we would like to thank all of you for your kind understanding and cooperation.

PAST EVENTS

JSPS Symposium held at UC San Diego

On May 18 and 19, 2015, JSPS San Francisco and the University of California, San Diego (UCSD) held a joint symposium on the theme “New Approaches for the Promotion of Innovation, Science and Technology: Bridging Japan and San Diego” in the conference room at the Villages West of UCSD.

The objective of this interdisciplinary symposium was to bring together leaders of academia, government and business from Japan and United State to discuss how to expand Japanese competitiveness in a globalized economy and society. The focus of this discussion covered the latest issues and future landscapes on innovation, human resource development, industry-academia-government collaboration, labor market, and the globalization of Japanese society and economics. This symposium also commemorated the inauguration of The Japan Forum for Innovation and Technology, JFIT, which is the research hub for researchers from both countries.

The symposium started with welcome remarks and the scope of the symposium given by Dr. Ulrike Schade, Professor of Japanese Business, School of International Relations and Pacific Studies (IR/PS), UCSD and coordinator of this symposium. This was followed by a lecture on Japanese science policy by Mr. Yoshio Yamawaki, Direc-

tor General of International Affairs, Ministry of Education, Culture, Sports, Science and Technology of Japan (MEXT).

5 sessions and a keynote speech took place during the symposium on the following themes; University Structures and the Promotion of Entrepreneurship, Science Policy and the Promotion of Innovation, The Commercialization of Bio-Science, The Internet of Things as the Next Big Thing, and Ongoing Changes in Japan: Toward a Joint San Diego-Japan Innovation Initiative. 28 scholars from Japan and the US were invited to the symposium, including Hiroshi Komiyama, chairman of Mitsubishi Research Institute, Masaaki Shirakawa, former Governor of the Bank of Japan, and Makoto Suematsu, President of the Japan Agency of Medical Research and Development. More than 100 participants from both the field of academia and business attended the symposium. It provided a valuable opportunity for multi-disciplinary discussions on the topic, and successfully promoted collaborative research between the Japanese and the US researchers. JSPS San Francisco will continually support such symposiums which inspire and broaden networks between academia and societies which will lead to further robust collaboration between Japan and the US.



Welcome remark by Dr. Schade



Mr. Yamawaki

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Audience at the symposium



Panel discussion by speakers

JSPS Fellowship Information Session at UCSD

A JSPS fellowship information session took place at the University of California, San Diego (UCSD) on May 20. JSPS San Francisco holds fellowship information sessions regularly to promote JSPS fellowship programs for overseas researchers in the West Coast.

The session was made possible by the kind support from Zoe Ziliak Michel, Graduate Fellowship Advisor at UCSD. Following the presentation on the overview of JSPS Fellowship programs and its application process, Dr. Yunde Zhao, professor of cell and developmental biology, shared his experience of participating in the JSPS invitation fellowship programs in 2011. His fruitful and exciting

research experience was encouraging to the attendees, mainly early stage researchers. They raised many questions, about detailed eligibility information, the language to use for the application, how to obtain a visa, housing in Japan and so on, all of which only prospective candidates would ask.

Hoping more applications will be coming in from them and others in the future, JSPS San Francisco concluded the session successfully and will continue to hold similar sessions across universities on the West Coast.



Presentation by JSPS Deputy Director



Dr. Zhao

JUNBA General Assembly Meeting

The Japanese University Network in the Bay Area (JUNBA) held its 9th general assembly meeting on May 13, 2015 in San Francisco, CA. The purpose of this annual meeting is to broadly report on JUNBA's affairs over the course of an entire year.

The meeting brought together 16 participants and started with remarks from JUNBA president Dr. Mat-

suo followed by self-introductions from each member. Then, JUNBA director-general Dr. Izutsu reported on JUNBA's affairs of FY2014. A plan for FY2015 was also explained by each member.

14th Workshop for Japanese University Administrative Staff in the U.S.

JSPS San Francisco office held the 14th workshop for Japanese University Administrative Staff in the U.S. on May 27, 2015 in Boston, MA during the week of the NAFSA 2015 Annual Conference.

The purpose of this workshop is to exchange information and establish a network between administrative staff from Japanese universities. Nine participants attended the workshop from High Energy Accelerator Research Organization, Nagoya Institute of Technology, Niigata University, Kyoto University, Kyushu University, The University of Electro-Communications, and the Min-

istry of Education, Culture, Sports, Science and Technology (MEXT).

In the meeting, participants briefly introduced themselves and shared the experiences they went through so far, along with information and ideas they obtained through attending the NAFSA Conference. The next workshop will be held in January 2016 in Berkeley, CA.

NAFSA 2015 Annual Conference

On May 25-29, JSPS San Francisco staffs joined the NAFSA 2015 Annual Conference & Expo in Boston, Massachusetts. NAFSA is a large-scale forum in the field of international education which more than one million people get together from all over the world. Participants can learn the latest situation of higher education through attending the various seminars. In addition, NAFSA offers the great opportunity for foreign universities to look for universities to tie up with. Our staff took part in various

kinds of seminars about higher education.

*The report will be uploaded on our website.

URL: <http://www.jspsusa-sf.org/news/>

*about NAFSA

URL: http://www.nafsa.org/Connect_and_Network/Engage_with_a_Community/NAFSA_Regions/Region_II/About/



UPCOMING EVENT

“Japan-Mexico Global Innovation on Practical Engineering Education and Research in University-Company-Governmental Cooperation”

Symposium co-organized by JSPS San Francisco and Guanajuato University

This symposium aims to discuss the present situation and the expansion in the future about education, research and industrial innovation between Japan and Mexico.

Date: September 17-19, 2015

Venue: Poliforum Leon, Guanajuato, Mexico

“Thoughts from a birthplace of atomic bombs after 70 years”

**Symposium co-organized by JSPS San Francisco and
the Center for Japanese Studies, University of California, Berkeley**

The symposium provides various thoughts and observations on atomic bombing and evolution in both countries during the 70 years, not in a confrontational but reflexive/comparative manner.

Date: September 29-October 1, 2015

Venue: UC Berkeley

For further information, please contact JSPS San Francisco at: webmaster@jpsusa-sf.org

INTERVIEW WITH JSPS FELLOW IN THE U.S.

DR. YASUHIRO HAYASHI

2015- | Postdoctoral Associate, Sanford-Burnham Medical Research Institute at Lake Nona
2014- | JSPS Postdoctoral Fellow for Research Abroad
2013- | Postdoctoral Associate, Sanford-Burnham Medical Research Institute at Lake Nona
2012 | Ph.D., Life Science, Hokkaido University
2009- | Project Research Assistant Professor, Faculty of Pharmaceutical Sciences, Hokkaido University
2009- | Project Research Associate, Faculty of Pharmaceutical Sciences, Hokkaido University
2008- | JSPS Research Fellow (DC1), Faculty of Pharmaceutical Sciences, Hokkaido University
2008 | M.S., Life Science, Hokkaido University
2006 | B.S., Pharmaceutical Sciences, Hokkaido University



Yasuhiro Hayashi has been working as a Postdoctoral Researcher in Daniel Kelly's lab at Sanford-Burnham Medical Research Institute. He received his Ph.D from Hokkaido University, where he studied novel therapeutic target discovery for obesity and type 2 diabetes with a combination of transcriptomics and non-viral siRNA delivery system. As a Project Research Assistant Professor, he had been working in the field of nanotechnology for developing systemic non-viral gene & siRNA delivery vehicles. Upon postdoctoral training, he transitioned his research area from nanotechnology to basic cardiovascular research. His current project is to delineate the potential actions of nuclear receptors in the heart and how gene regulatory machinery impact cardiac metabolism and physiology in a failing heart. My overall research interests include discovery & validation of novel therapeutic targets in metabolic diseases by using molecular biology techniques and developing new nucleic acid based therapy approaches.

Why did you choose the U.S. to conduct your research?

I joined Dr. Harashima's Lab (Mentor: Prof Hideyoshi Harashima) at Hokkaido University in 2005 when I was an undergraduate student. The lab's main interest was to design and develop non-viral nucleic acid delivery systems. I was fascinated by the research, because the research field has been growing very rapidly and lots of researchers from different fields such as chemists, biolo-

gists, and engineers, entered into the research. However, I believed that the most important thing that makes the delivery system more appealing is how the system is applied in the context of biology and medicine towards translational research.

My main project in my PhD work was to identify novel therapeutic targets for type 2 diabetes by using liver specific siRNA delivery system. This was a challenging project because candidate target genes should be screened from the whole genome (about 20000 genes) by transcriptomic analyses, and validated in vivo by using siRNA delivery system to make sure that they are important targets that are physiologically relevant. Luckily, I was able to validate a promising therapeutic target named Mogat1 that regulates lipid metabolism, which shows better pharmacological effects for steatosis, obesity and type 2 diabetes. Through the project, I was beginning to be more interested in some basic biological questions like how individual gene expression in transcriptomic profiling is controlled, and how gene regulatory programs regulate cellular energy metabolism and ultimately, lead to physiological changes. I strongly felt that candidate targets should be validated in a variety of aspects including not only phenotypic changes, but also molecular & physiological mechanism for realizing novel therapeutic purposes.

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What is your impression of the research environment in the U.S.?

The institute has an excellent state-of-the-art research environment for scientists. First, the institute provides various types of core facilities which give services to scientists including animal surgery and phenotyping, metabolomics, RNA-sequencing and microarray technologies, cell imaging, and histology. Therefore, scientists can work on their projects in a smooth way by collaborating with core facilities. Also technicians take care of the animals, including regular maintenance, breeding, and genotyping so we don't have to waste time with routine work. In addition, the IT system and data storage are well organized. Lab members can have access to a shared lab folder, which contains lab protocol, lab meeting slides, and reagent information, and we can use the server for data storage. Also my lab introduced an electronic lab notebook, so that lab members can share and see their data over the website. I think this research environment is completely different from an academic lab though.

Second, research discussion is active. Lab members have a regular meeting every week and they often ask lots of questions in the middle of presentations, including technical aspects and interpretation of the data. After the meeting, we have another discussion in a small group. We confirm or sometimes update priorities on next plans based on current data, and I think this results in a very productive discussion. I have noticed through these scientific discussions that the most important thing for foreign researchers is to express opinions and ideas clearly and logically. And it seems that lab members want to know other people's opinion, even if it's a small thing or critical comments, in order to lead in a better research direction.

Third, the research level is high. The institute is dedicated to not only discovering the fundamental molecular causes of disease, but also enhancing novel drug discovery research. Indeed, there are many collaborations with

big pharmaceutical companies in the institute to identify novel therapeutic targets in metabolic diseases. Also, I feel that they want to examine novel scientific questions very deeply for high impact results. It often takes many years to write one paper, but they never compromise until they think they are confident of each data. I feel that this is key to high impact research that leads to drug discovery.

How do you take advantage of your experiences in the U.S. and apply it to your research or career?

I learned through research in the U.S. that you have to be more active, independent, and, more importantly, persistent in order to succeed in science. You may feel that the same is true of Japanese academics. Of course, I would say, "Yes, you are right". However, the most precious experiences in the U.S. would be that you can definitely develop mental strength in environments where your Japanese common sense isn't always accepted. Also, you can recognize a different set of values by communicating with people of different nationalities. Those experiences will motivate you to think about what you really want to achieve, and how to make an impact in your own scientific career. Not only will this lead to self-improvement but networking with scientists in the U.S. could be advantageous to your scientific career. I believe that a valuable network with scientists, including Dr. Kelly, my colleagues, and talented young scientists in the institute will be helpful to develop a new interdisciplinary research in the future.

In the end, I would like to thank JSPS for giving me the wonderful opportunity to engage in a new research field in the U.S. and Dr. Kelly and my colleagues for mentoring and supporting my current research.

ADVISOR'S INSIGHT IN THE BAY AREA

Why don't you also try something new?

Tokushima Prefecture in Japan is famous for Awa Odori (a traditional dance originating in Tokushima). I am ashamed to admit that I had never danced it though I am originally from Tokushima. I also never thought that I would start to perform it in the United States.

Shortly after my arrival in the U.S., Julie, the Liaison Officer in our office, introduced me to a dance group of Awa Odori called "Sakura Ren" because she knew I was a native of Tokushima. I took the opportunity and joined Sakura Ren at once and not even one month after arriving here, made my debut as an Awa Odori dancer at the 48th Northern California Cherry Blossom Festival. There is a saying in Awa Odori that "Dancing fool, watching fool: all fools, so let's all dance!" That debut of mine was the very moment which I became one of the fools.

In the San Francisco Bay Area, there are various events all year round including the Northern California Cherry Blossom Festival which introduces Japanese culture and various groups engaged in activities such as *taiko*, classical Japanese dance, *kagura*, tea ceremony, *ikebana*, *bonsai*, traditional crafts, and Awa Odori. Not only Japanese people but also non-Japanese people take part in these activities.

The Japanese government has a goal of increasing the number of tourists from abroad to 30 million per year and is working on this promotion in cooperation between the government and private sector. Their view is to establish the Japanese brand through introducing Japanese culture and art such as traditional culture and local culture, spreading Japanese culture broadly all over the world and attracting many foreigners. Although a top-down national policy like this is important, we must not forget the local individuals and groups in the U.S. whose steady activities also contribute greatly to the spread of Japanese culture so supporting these people and groups is also significant.

I am going to take part in as many events as possible and do what I can to spread Japanese culture until I go back to Japan. Why don't you also try something new on the occasion of coming to the U.S.?



OFFICE STAFF SWITCH

Farewell to Our Deputy Director and International Program Intern

Chihiro Watanabe and Kenta Suzuki have completed their commitment to JSPS San Francisco. Returning to Japan at the end of July, they start working for the Institution which they each belong to. Here are some comments from them about their stay in the U.S.

Chihiro Watanabe (Deputy Director from the University of Tokyo)

It has been two years since I joined JSPS San Francisco, and although that time seems to have flown by, an astonishing amount has been accomplished by our team. Our mission of cooperating with academic and research institutions, co-organizing academic symposia with research universities, creating networks among Japanese researchers in the US, supporting the activities of Japanese universities, and promoting JSPS fellowship programs for overseas researchers has been strengthened. Our team has worked diligently to “build robust international cooperative networks between Japan and the US.”

We have also taken introductory steps with Latin American countries in 2013. During my term, we visited Brazil, Mexico and Argentina to establish a more robust international cooperative network between Japan and those countries. I am delighted to see how our relationships have been enhanced by these efforts.

What has given me the greatest satisfaction during these 2 years is meeting wonderful faculty and administrative professionals, not only in the US and Canada, but also Latin American countries. I traveled to many places for business and for fun, which I couldn't do a lot during my first stay in the US. I learned a lot from people, nature, culture and history. This experience has broadened my horizons. It has been a great experience to serve as a deputy director alongside wonderful directors and colleagues. Now we are delighted to welcome Junji Oshima who will join us as deputy director in July. I am very happy to leave JSPS San Francisco in such capable hands.



Kenta Suzuki (International Program Intern from KEK)

It went fast, but it has been a fulfilling two years. I was a little uneasy at first because this was my first time staying overseas. However, due to the support of many friends, I was able to enjoy my stay. I worked in a physics research institute in Japan and was interested in trends of science and policies in technology, particularly physics in the United States.



The discussion with researchers, government staff and university staff in the U.S. brought me a lot of findings. I could be in contact with university researchers, postdocs, staff and students of various fields through JSPS events. Thanks to those opportunities, I gained knowledge of not only physics but also biology, engineering, the humanities and the social sciences. They were valuable experience for me.

During winter vacation, I went on a trip by sleeper train from Los Angeles to Washington D.C. The scenery from the windows of the transcontinental train impressed me. I was overwhelmed by the large-scale nature in the U.S. Finally I am very grateful for JSPS's cooperation.

Introducing Our New Adviser and Program Coordinators

Yasuyuki Nakayama came as an adviser of JSPS San Francisco from MEXT (Ministry of Education, Culture, Sports, Science and Technology) at the beginning of April 2015. As adviser, Mr. Nakayama supports the operation of our office. He worked at MEXT for 9 years prior to working for JSPS. He has been mainly engaged in special needs education at MEXT. Therefore he is very interested in special education in the United States. He hopes to visit universities and elementary schools here to investigate the current situation of special education in each school.

He was born in Tokushima Prefecture in Japan and holds a third degree black belt in judo. Since he wants to spread Japanese culture, he began to practice Awa Odori (a famous dance originating in Tokushima) and Judo again just after having arrived in California. He also loves fishing. Since California is the perfect place for fishing, he claims he won't go back to Japan until he catches a lot of big fish.



(Right)



Kazuhiro Kosaka joined our office as the Program Coordinator and is in charge of administrative affairs for the Japanese University Network in the Bay Area (JUNBA) along with coordinating workshops for administrative staff of Japanese universities in the U.S. and editing the office newsletter.

Last year, he worked in the Research Cooperation Division at JSPS headquarters, where he coordinated multilateral research collaboration between research institutions in Japan and other countries. Prior to that, he had been working for the Research Cooperation Division at Kyoto University, where he was mainly engaged in accounting and collaborative research agreements between companies and Kyoto University.

During his stay here, he looks forward to running on beautiful mountain trails and mixing with the local runners.

Rika Nakashima joined our office as the Program Coordinator and is in charge of the accounting affairs and coordinating gatherings for researchers and JSPS fellows from Japan in the U.S.

Last year, she worked in the Overseas Fellowship Division at JSPS headquarters and was in charge of the RONPAKU (Dissertation PhD) Program. Prior to that, she had been working for the Department of Human Resources Management at Nagoya Institute of Technology, where she was engaged in personnel management.

During her stay here, she looks forward to enjoying the delicious seafood and sweets in California.





JSPS FELLOWSHIP PROGRAMS UPCOMING APPLICATION DEADLINES

Postdoctoral Fellowship for North American and European Researchers

Short-term (1-12 months)

<http://www.jsps.go.jp/english/e-fellow/application.html>

Application period: October 5-9, 2015

*Candidates must be citizens or permanent residents of the U.S., Canada, European Union countries, Switzerland, Norway or Russia. Applications must be submitted to JSPS Headquarters by host researchers in Japan.

Postdoctoral Fellowship for Overseas Researchers

Standard (12-24 months)

<http://www.jsps.go.jp/english/e-fellow/application.html>

Application period: August 31-September 4, 2015

*Applications must be submitted to JSPS Headquarters by host researchers in Japan.

JSPS Postdoctoral Fellowship Program for Overseas Researchers

Pathway to University Positions in Japan (12-24 months)

<http://www.jsps.go.jp/english/e-fellow/application.html>

Application period: August 31-September 4, 2015

*Applications must be submitted to JSPS Headquarters by host researchers in Japan.

Invitation Fellowships for Research in Japan

Long-term (2-10 months)

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

Application period: August 31-September 4, 2015

*Applications must be submitted to JSPS Headquarters by host researchers in Japan.

Invitation Fellowships for Research in Japan

Short-term (14-60 days)

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

Application period: August 31-September 4, 2015

*Applications must be submitted to JSPS Headquarters by host researchers in Japan.



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