



Japan Society for the Promotion of Science

San Francisco Office

2001 Addison Street, Suite 260 Berkeley, CA 94704 USA

EVENTS OF FALL 2008

Issue December 2008

JSPS San Francisco Office held the 10th Gathering of JSPS Japanese Fellows

Volume XII

On 7 November, JSPS San Francisco Office held its 10th "Gathering of JSPS Japanese Fellows" in New York City, NY.

Inside this issue:



These meetings are meant to promote cross-disciplinary exchange among Japanese researchers laboring in the US. While serving to deepen the friendly relationships amongst them, the meetings also provide the researchers with an opportunity to build working networks. Participating in this year's second gathering were 37 researchers, many of whom were on JSPS Postdoctoral Fellowships for Research Abroad and Research Fellowships for Young Scientists. Still others were invited from among Japanese researchers currently residing in the US.

Events of Fall 2008	1
Events of Fall and Winter 2008	2-3
Announcement of Upcoming Event 2009	4-5
Interview with JSPS Fellow in the U.S.	6-7
Bay Area and Japan Related News	8-9
Report of University Visit	10

In the meeting, San Francisco Office director Prof. Seishi Takeda offered a toast to kick off the confab among the participants. In a pleasantly relaxed atmosphere, they engaged each other in free conversation about their diverse activities and experiences in the US. Time was also set aside for the participants to introduce themselves and briefly describe their research work. Giving them a context to delve deeper into each other's work, this further energized their discussions, which continued on even after closing remarks. It is hoped that such vibrant interchange will lead to wider networking among Japanese researchers in the US.



JSPS San Francisco Center will continue to provide such an opportunity for networkbuilding events among young Japanese researchers.

Next gathering for young Japanese researchers will be held in Berkeley, California in the coming spring.



JSPS SF Office Always Welcomes Your News

We are looking forward to hearing your news regarding international related events and so on.

If you have any news about your institution or your research, please feel free to ask us about including it in this newsletter.

This news letter will be distributed to international sections in Japanese universities and subscribers in Bay Area.

Phone: 510-665-1890

Fax: 510-665-1891

Questions or Feedback?

Email: webmaster@jpsusa-sf.org

EVENTS OF FALL AND WINTER 2008

Public symposium "Sadako Ogata and Japan's International Relations" was held with UC Berkeley

On November 14th, the JSPS San Francisco Office convened a public symposium in co-sponsorship with UC Berkeley's Center for Japanese Studies (CJS). CJS is celebrating its 50th anniversary at UC Berkeley, and has planned a year of special events to honor the occasion. Dr. Sadako Ogata (Former United Nations High Commissioner for Refugees and President of Japan International Cooperation Agency, JICA) was invited to this event as a keynote speaker.



Held in Lipman Room at Barrows Hall, the symposium addressed the theme "Japan's International Relations: Diplomacy and Foreign Aid".

Invited to address the symposium as panelists were two guests from Japan, Prof. Shinichi Kitaoka (Former Permanent Representative of Japan to the United Nations, U of Tokyo) and Prof. Takatoshi Ito (author of *The Japanese Economy* and *The Political Economy of Japanese Monetary Policy*, U of Tokyo), and Prof. T. J. Pempel (UC Berkeley). The room was filled with over 150 participants, from students to researchers to those with a special interest in Japan.

The event started with remarks by CJS chair Prof. Duncan Williams. He was followed by Prof. Steve Vogel (UCB) who welcomed Dr. Ogata and the participants, and Prof. Robert Scalapino (UCB) who talked about Dr. Ogata during her stay at UC Berkeley. A keynote speech named "US-Japan: Global Responsibility and Development" from Ms. Ogata was delivered from the perspective of a diplomat derived from her longtime experiences. The keynote speech was followed by many questions from the audience and Dr. Ogata gave appropriate advice to each questioner.



After the keynote speech, the panel discussion about "Japan's International Relations: Diplomacy and Foreign Aid" was followed with the above three panelists. They gave presentations and panel discussion focused on the topic of Japan's International Relations from various viewpoints such as diplomatic policy based on politics and monetary policy based on economics.

The event continued with a light reception where participants enjoyed associating with each other. After this, Dr. Ogata and the panelists, including those concerned with this event, held a meeting to discuss the event. Naoki Murata, Executive Director of JSPS headquarters and Dr. Seishi Takeda, Director of JSPS San Francisco attended this meeting.

Further information about this symposium and the program of this event can be found on the following website of CJS: http://ieas.berkeley.edu/cjs/50th_Anniversary

EVENTS OF FALL AND WINTER 2008



11th Japanese-American Frontiers of Science Symposium

DATE : December 5th—7th, 2008

VENUE : **University of California, Irvine**
The Beckman Conference Center (U.S National Academy of Sciences)

SESSION TOPICS :

- **Evolution of Sleep and Memory** (Biology/ Life Science)
- **New Chemistry for Renewable Raw Materials** (Chemistry/ Biochemistry)
- **Prediction of Future Sea Level in a Greenhouse World– Theory and Observation** (Earth Science/ Environment)
- **Nanomedicine** (Material/ Biomaterial Science)
- **Bayesian Statistics and Massive Data Streams** (Math/ Applied Math/ Informatics)
- **Optical Measurement and Control of Neuronal Activity** (Medical/ Neuroscience)
- **Detecting Dark Matter** (Physics/ Astrophysics)
- **Measurements and Conditions for Happiness** (Social Science)



On December 5th-7th, the 11th Annual Japanese-American Symposium was held in cooperation with the National Academy of Sciences (NAS) at Beckman Conference Center in Irvine, CA. This symposium is organized to bring talented young researchers from Japan and the USA together in cross-disciplinary discussions on cutting-edge fields of science, encouraging the young participants to re-conceptualize the borders separating their fields with an eye to creating new academic disciplines.

About 80 young researchers from these two advancing countries attended this symposium. Covering the eight fields, this symposium featured discussions on such topics as “New Chemistry for Renewable Raw Materials”, “Nanomedicine” and “Measurements and Conditions for Happiness.” Stimulated by each field presentation, the young researchers asked many questions and participated in vibrant dialogue with speakers after their talks. In addition, a poster session was held displaying the research results of individual members. Rotating, they each described their work in one-minute “flash talk,” after which the participants gathered around the various posters and engaged in free discussions with presenters. The information about JAFoS can be found on the following website.



JSPS JAFoS website: http://www.jsps.go.jp/j-bilat/fos_ja/jishi_11.html

JUNBA

JAPANESE UNIVERSITY NETWORK IN THE BAY AREA

<http://www.junba.org/>

JUNBA2009
NEXT STEP TO A GREENER EARTH

Solar Energy, Fuel Cells, Hydrogen, Electric Cars, Environmental Issues, Bio Fuel, Bio Technology, Rare Metal Recovery...and More!

Date:
Jan 13 (Tue), 2009

Symposium:
 8:20 AM to 12:00 PM
 Registration from 7:30AM

Speakers:
 Yasushi Taguchi (MEXT)
 Barry Klein (UC Davis)
 Steven W. Relye (UC San Diego)
 Christopher Somerville (UC Berkeley)
 Arun Majumdar (Lawrence Berkeley National Lab)
 Katherine Moortgat (Mohr Davidow Ventures)
 Saeed Amidi (Plug & Play Tech Center)
 Jay Lytle (Sughrue Mion, PLLC)

Technology Fair:
 1:00 PM to 6:00 PM

Presenters/Exhibitors:
 Tesla Motors, Sol Focus
 BrightSource Energy, Cobalt Biofuels
 UC Berkeley, UC Davis, UC Santa Cruz
 Hiroshima U, Kagoshima U, Kanazawa U
 Kyushu U, Niigata U, Osaka U, Ritsumeikan U
 Shibaura Institute of Tech, Shinshu U
 Tohoku U, Tokyo Medical and Dental U
 Tokai U, Tokyo Metropolitan U
 Tokyo U of Agriculture and Tech
 Tokyo U of Marine Science and Tech
 Tokyo U of Science, U of Tokyo
 U of Yamanashi, Yokohama City U

Venue:
San Francisco Airport Marriott
 1800 Old Bayshore Highway, Burlingame, CA 94010

For More Information:
www.junba.org

Organized by:
Japanese University Network in the Bay Area

Co-Organized by: Consulate General of Japan in San Francisco
JSPS (Japan Society for the Promotion of Science)
JETRO San Francisco

Supported by: Ministry of Education, Culture, Sports, Science and Technology of Japan

Sponsored by: Sughrue Mion, PLLC



JUNBA 2009 -Next Step to a Greener Earth-

JUNBA will hold the annual event "JUNBA 2009" -Next Step to a Greener Earth-. 17 Universities will present their exhibitions at JUNBA Technology Fair. The details are as follows;

DATE: January 12(Mon) and 13(Tue), 2009

VENUE: San Francisco Airport Marriott (1800 Old Bayshore Highway, Burlingame, CA 94010)

ORGANIZED BY: Japanese University Network in the Bay Area; JUNBA

CO-ORGANIZED BY: Consulate General of Japan in San Francisco

JSPS (Japan Society for the Promotion of Science), JETRO San Francisco

SUPPORTED BY: Ministry of Education, Culture, Sports, Science and Technology of Japan

SUPPOSED BY: Sughrue Mion PLLC

Program Schedule

Summit (Invitation Only) Monday January 12th, 2009

Time: 1:00pm - 4:30pm Venue: Irvine/ Anaheim, 1st Floor

Symposium (Open to the Public) Tuesday January 13th, 2009

Time: 8:20am - 12:00pm Venue: Salon F, 2nd Floor

Technology Fair (Open to the Public) Tuesday January 13th, 2009

Oral Presentation: 1:00pm-6:15pm

- Breakout Session A at Anaheim Room

SessionA-1. Solar Energy, Fuel Cells

SessionA-2. Hydrogen

SessionA-3. Electric Cars, Thermal Energy and Others

- Breakout Session B at Newport Beach Room

SessionB-1: Electric Cars

SessionB-2. Bio Fuel, Bio Technology

SessionB-3. Rare Metal Recovery

Exhibition: 1:00pm-6:00pm

Venue : Irvine



Dr. Yuki Nakatake

BS: Department of Pharmaceutical Sciences, University of Kyoto, 1999

MS: Department of Pharmaceutical Sciences, Graduate School, University of Kyoto, 2001

DS: Department of Medicine and Faculty of Medicine, Graduate School, University of Tokyo 2005

Research scientist, Laboratory for Pluripotent Cell Studies, RIKEN Center for Developmental Biology, 2005-2008

JSPS Postdoctoral Fellow for Research Abroad, Laboratory of genetics, NIA, NIH, 2008-present

I am working on stem cell biology, related to regenerative medicine. The recent work on regenerative medicine is very active in Japan, because a Japanese group found that defined transcriptional factors can reprogram somatic cells to pluripotent cells that are quite similar to embryonic stem (ES) cell. My interest is how the cell can be reprogrammed, and what is the key for the cells to change their cell fate. I have been studying the function of transcriptional factors one by one in Japan, and now I am going to study it as a network in a comprehensive manner.

Q1 Why did you choose the U.S. to pursue your research?

Actually, the current laboratory was one of the collaborators in my previous study in Japan. The collaboration gave me the opportunity to be here. The chief director Dr. Ko is working on an interesting project using ES cells and their unique methodology is very impressive to me. As you know, the U.S. is very familiar to the Japanese, and open to foreign people, so it is just lucky for me to study here. If Dr. Ko was not here, I might be in some different place. He is very active, and gives me good suggestions to do some new experiments, so I'm very happy to study in one of the best situation.

Q2 What is your impression of the research environment in the U.S.? How is it different from your lab in Japan?

Everything is large scale, the institute is large enough, the budget is big enough, and collaboration between scientists is active. You can also imagine a huge cultural difference in every situation between the U.S. and Japan. I can feel free and clear doing my own study as well as everyday stuff. I think this kind of feeling is also good for producing something new. In addition, the members of US laboratories are from various countries, China, Korea, Russia, Italy, India, and so on. Each of their way of thinking is inspiring to me. English is very helpful to communicate with each other, working as a filter to focus on what we want to say in a straight forward way.

Q3 What merits do you derive from conducting your research in the U.S.?

One of the best merit is gaining toughness. My research area is stem cell biology and is encouraged by the current US government, so that means there are many competitors in the U.S. and the situation is tough, of course. I have developed my job skill in Japan. I am a believer that "Made in Japan" is one of the best in the world. I think this occasion is ideal to test the concept. I expect that I can enforce and enlarge myself more in the U.S. than in Japan. Necessity is the mother of invention,

progression or improvement, as you know.

Q4 What is your dream? And do you have any advice about doing research abroad for young researchers?

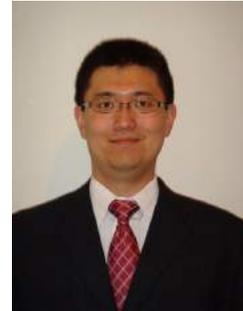
My dream is just studying while keeping an interest. I wish to feel excited by study, and contribute to future study somewhere. If that is possible, I don't mind any boring or painful things for study. I think science is one of the most wonderful amusements for human beings. We have an opportunity to enjoy the amusement, but never forget the duty for translating the joy to benefit for the people who have supported us. Unfortunately, the job of a scientist is not so respected in Japan, but is actually respected enough in the U.S. or another country as a doctor who can produce new technology with special skill. Young researchers will realize the big difference in that when they go abroad and research there. Anyway, what I really want to tell young researchers is that doing research abroad is very exciting and interesting.

INTERVIEW WITH JSPS FELLOW IN THE U.S.

Dr. Toru Watanabe

BS : Department of Civil Engineering, Tohoku University, 1998
Ph.D.: Department of Civil Engineering, Tohoku University, 2006

Visiting Research Assistant Professor,
Department of Civil, Architectural and Environmental Engineering (CAEE), Drexel University



I graduated from the Department of Civil Engineering, Tohoku University, Japan in 1998. Since graduation I worked for 10 years as an Instructor/Assistant Professor at the same department and I got a Ph.D. in 2006. Last April I left and started my postdoctoral study sponsored by JSPS at CAEE, Drexel University.

Q1 Why did you choose the U.S. to pursue your research?

The topic of my research is "Risk evaluation and management of infectious diseases in case of water-related disasters" which aims at providing a science-based framework to minimize the risk of infectious diseases during or after water-related disasters such as flood. I decided to work here mainly for the following reasons. (1) I would like to work with Dr. Charles N. Haas who is a pioneer of quantitative microbial risk assessment (QMRA). I visited and talked with him five years ago and I had wished to work here since then. (2) Dr. Haas has currently led a big project named Center for Advancing Microbial Risk Assessment (CAMRA) (<http://camra.msu.edu/index.html>) supported by the Department of Homeland Security (DHS) and Environmental Protection Agency (EPA) to develop scientific knowledge on the fate and risk of bioterrorist and other high priority infectious agents. This center is a consortium of scientists at Drexel and other universities in the U.S. who have extensive expertise in QMRA methods, bio-security and infectious disease trans-

mission through environmental exposure. I thought I could get cutting-edge knowledge needed for my research and build up a network of connection with young researchers who have similar interests through CAMRA project. (3) Outbreaks of infectious diseases associated with hurricanes on the Gulf coast could be analyzed as case-studies for my research.

Q2 What is your impression of the research environment in the U.S.? How is it different from your lab in Japan?

There are much more researchers specializing in QMRA here than in Japan and they have both a competitive and collaborative environment to discuss freely amongst each other. I don't feel there's any other difference in the research environment between here and my former laboratory in Japan.

Q3 What merits do you derive from conducting your research in the U.S.?

Although it may be related to the answer in Question 1, I can gain a great deal of knowledge of QMRA directly from the pioneer. Of course, his literatures are informative but he gives me even his unpublished know-how here. It is also the merit that, through CAMRA project, I will have an opportunity to demonstrate the result of my research to governmental officers who are involved in making

policies on homeland security and environmental protection.

Q4 What is your dream? And do you have any advice about doing research abroad for young researchers?

In the current globalized world, as discussed in the case of influenza pandemic, the risk of infectious diseases is no longer a domestic issue. We should tackle this risk in collaboration with not only developed but also less-developed countries. In the future I would like to play a role in promoting such an international collaboration as an expert in QMRA. This is my dream and I am sure that I have just marked a first step toward it. To young researchers who are thinking about doing research abroad, I recommend that you evaluate carefully the advantages in doing so, especially if you have dependents. I think you should not sacrifice them for your uncertain dreams.

BAY AREA & JAPAN RELATED NEWS



Todai-UC Berkeley Symposium

Hybrid Japan, Hybrid California: Global Engagement in the 21st Century

On Tuesday, November 11, 2008, the Todai-UC Berkeley Symposium "Hybrid Japan, Hybrid California: Global Engagement in the 21st Century" was held at the University of Tokyo and was attended by over 200 participants. Five sessions were held covering five different fields of study. In each, a representative from each university made a fifteen-minute presentation followed by a discussion and a Q&A session. The speakers and program were as follows.

Welcome/Opening Remarks

Welcome Remarks Prof. Makoto Asashima, Todai

Opening Remarks Prof. Duncan Williams, UC Berkeley

"The Public University and Global Education in the 21st Century"

UCB: Chancellor Robert J. Birgeneau

Todai: President Hiroshi Komiyama

"Hybrids and Beyond: Global Environment and Energy Challenges"

UCB: Prof. Daniel M. Kammen

Todai: Prof. Kazuhiko Takeuchi

"Globalization and Multiculturalism: Japan and California"

UCB: Prof. John Lie

Todai: Prof. Kiichi Fujiwara

"Religious Pluralism in a Multireligious World"

UCB: Prof. Duncan Williams

Todai: Prof. Susumu Shimazono

"Democracy and Politics: U.S. and Japan"

UCB: Prof. Steven Vogel

Todai: Prof. Nobuhiro Hiwatari



▲ Presentation by UCB Chancellor Robert J. Birgeneau



▲ The auditorium



▲ Discussion between UCB Chancellor Robert J. Birgeneau and Todai President Hiroshi Komiyama



▲ A question from the floor

BAY AREA & JAPAN RELATED NEWS



Prof. MOTOJIMA, Director-General of the National Institute for Fusion Science (NIFS), was awarded Distinguished Career Award by the Fusion Power Associates in the United States (FPA) on Wednesday, December 3, 2008 in Livermore, CA.

The FPA, consisting of 18 research institutes in the US, has annually awarded the said prize ever since 1987 to researchers who made brilliant achievements in their study as well as R&D in the area of nuclear fusion energy.

Prof. L. Spitzer from the Princeton Plasma Physics Laboratory who proposed the Hubble Space Telescope in 1987, and in recent years, Prof. R. AYMAR, Director-general of CERN, who was in charge of the LHC Project was awarded with the prize in 2003. Every one of the awardees is an excellent researcher with great achievements.



Prof. MOTOJIMA was awarded with the prize for his lifelong research in heliotron-type devices ever since he was a graduate student in Kyoto University, construction of the Large Helical Device (LHD) after NIFS was established in 1989 and a series of experiments using LHD, and also his contribution to various international collaborative researches.

Prof. Motojima and his wife visited JSPS San Francisco Office before this award ceremony.



NIFS promotes fusion research toward the realization of fusion energy with both experimental research based on LHD and theoretical simulation research. NIFS is always leading the frontier of scientific and technological research in the world.

As a member of National Institutes of Natural Sciences (NINS), an inter-university research institute corporation, NIFS plays an important role of an organization representing Japan in the international coordination of fusion research. NIFS actively promotes international agreements and academic exchange agreements along with encouraging coordinated research. For example, in the Bay Area, the Center of Energy Science and Technology Advanced Research, UCLA, made an academic exchange agreement with NIFS.



Inside of the LHD vacuum vessel

What is LHD?

LHD, the Large Helical Device, is the world's largest superconducting device, which employs a heliotron magnetic field originally developed in Japan. The objectives of the LHD operation are to conduct fusion-plasma confinement research in a steady-state machine and to elucidate important research issues in physics and engineering for helical magnetic fusion reactors.

Specification of LHD

External diameter	13.5 m
Plasma major radius	3.9 m
Plasma minor radius	0.6 m
Plasma volume	30 m ³
Magnetic field	3 T
Total weight	1,500 t



The LHD experimental hall

For more information, please visit our web site.
<<http://www.nifs.ac.jp/index.html>>

REPORT OF UNIVERSITY VISIT



The Todai-Yale Initiative

Academic Collaboration of The University of Tokyo and Yale University

<http://todai-yale.jp/>

On Nov 6th the staff of JSPS San Francisco Office visited one of the elite universities on the East Coast of the U.S. We organized the visit to the office of The Todai-Yale Initiative at Yale University in the heart of downtown New Haven, Connecticut, just one and a half hour from New York City. We visited Prof. Makoto Abe, The Todai-Yale Initiative, to interview him about its activities.

In September 2007, the University of Tokyo established "The Todai-Yale Initiative for Japanese Studies and Related Humanities and Social Sciences" with Yale University, which is a member of International Alliance of Research Universities, IARU. IARU is a partnership of ten of the world's leading research-intensive universities. This initiative is the first university-wide multidisciplinary base of education and research in the U.S. for the University of Tokyo.

Exchange Activities

Within the framework of The Todai-Yale Initiative, each year The University of Tokyo shall send several Professors, Associate and Assistant Professors and researchers having completed graduate studies working in fields related to Japanese Studies or Japan-related research to Yale University as visiting fellows for the purpose of promoting academic exchange with Yale. The University of Tokyo shall promote the development of young researchers by sending several individuals to the Yale University [Visiting Assistants in Research \(VAR\)](#) and [Yale Summer Session](#) programs. JSPS supports this exchange activities by "JSPS International Training Program (ITP)". Young researchers working in the above fields have been sent to Yale University.

Events

The Todai-Yale Initiative, with the cooperation of [the Council on East Asian Studies](#) of the Yale University [the MacMillan Center](#), will hold several workshop series, seminars and symposiums within Yale University.

The Todai-Yale Initiative's main objectives are:

- (1) to contribute to the development of Japanese studies at Yale and in the United States, both in education and research
- (2) to encourage greater international involvement by the University of Tokyo faculty involved in Japanese studies
- (3) to strengthen ties with scholars of Japanese studies at various US universities
- (4) through constant activity, to enhance the presence of the University of Tokyo in the United States.



As always, should you have any specific questions, or if you would like

to be added to our mailing list, feel free to contact us at webmaster@jpsusa-sf.org.

Check out our website !
www.jpsusa-sf.org