

**“Nano-Dialogue and Future Foods in Asia and the Pacific: improving science and society dialogue around the introduction of nanotechnology and nanofoods in Japan and New Zealand”**

**Japan-New Zealand STS Research Workshop**

**International Christian University Mitaka, Tokyo, 24 August, 2010.**

**Aim and Objectives**

The aim of this workshop is to increase international understanding of ‘science and society’ engagement methods, by providing an opportunity for Japanese and New Zealand social scientists to share their research on nanotechnology and dialogue. The objectives are to:

1. Identify key issues and lessons learned from previous approaches to public engagement in science and technology issues in both countries, around the introduction of biotechnology and nanotechnology.
2. Present and discuss current research projects in New Zealand and Japan using dialogue engagement methods for nanotechnology, notably for nanofoods.
3. Identify the significant factors contributing to social and consumer acceptance or rejection of nanofood applications in both countries.
4. Identify critical success factors for the design of deliberative dialogue interventions.
5. Discuss the implications for international best practice in public engagement.
6. Contribute to the development of STS knowledge and research capacity in the Asia Pacific region.
7. Establish the basis for a social science research collaboration between Japan and New Zealand and other Asia Pacific countries.

**Programme and Venue**

There will be presentations from 4 Japanese and 3 New Zealand social scientists, with in depth discussions after each talk. The workshop is designed to promote cross-country learning and to support future research partnerships. Participants will include around 15-20 social scientists and government officials from Japan and New Zealand, and wider members of the Asia Pacific STS Network. The half day workshop at ICU will be followed by an informal dinner [venue to be advised].

**Registration**

There is no registration fee but it is essential to register as there are only limited places. Please reply by 31 July 2010 to A. Prof Tomiko Yamaguchi: [tyamaguc@icu.ac.jp](mailto:tyamaguc@icu.ac.jp).

**Organisers** Assoc. Professor Tomiko Yamaguchi, International Christian University, Tokyo, Japan and Dr Karen Cronin, ESR, Wellington, New Zealand. With the valued support of:

The Asia Pacific Science, Technology and Society Network

The Social Science Research Institute, International Christian University, Tokyo

Environmental Science and Research (ESR) Crown Research Institute, Wellington

UNESCO Bangkok

The Embassy of New Zealand, Tokyo

**Further information** Tomiko Yamaguchi [tyamaguc@icu.ac.jp](mailto:tyamaguc@icu.ac.jp) or Karen Cronin [karen.cronin@esr.cri.nz](mailto:karen.cronin@esr.cri.nz)

or visit the Asia Pacific STS Network Website at: [www.esr.cri.nz/asiapacificstsnetwork](http://www.esr.cri.nz/asiapacificstsnetwork)

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**PROGRAMME** at 23/6/10

**1pm Welcome** – Director, Social Science Research Institute, International Christian University, Tokyo  
Reply from visitors from Aotearoa New Zealand - Maori song

**1.10pm Workshop Introduction**

Aims and outcomes – Assoc Prof Tomiko Yamaguchi, ICU  
Programme format – Dr Karen Cronin, ESR  
Participant introductions

Each presenter will talk for 15-20 minutes followed by 20 minutes workshop discussion.

**Recent research in Japan. Chair – Tomiko Yamaguchi**

1.20pm Assoc. Prof. Naoyuki Mikami, Center for Research and Development in Higher Education, Hokkaido University. NanoTRI and the Next Agenda of Public Engagement in Nanofood

1: 50pm Assoc. Prof. Tomiko Yamaguchi, International Christian University, Tokyo. Discussing nascent technologies: Citizens confront nanotechnology in food.

2.20pm Dr. Makiko Matsuo, Project Researcher, Graduate School of Public Policy, the University of Tokyo. Institutionalizing Technology Assessment (TA) in Japan - experimental TA on food nanotechnologies.

2.50 Assoc. Prof. Masashi Tachikawa, Ibaraki University. Governance Issues surrounding Food Nanotechnologies in Japan

**3.20pm Afternoon tea**

**Recent research in Aotearoa New Zealand. Chair – Karen Cronin**

3.40pm Dr Jessica Hutchings, NZ Council for Educational Research, Wellington. An indigenous perspective on public engagement in new technologies: observations from the biotechnology debate in NZ and lessons for introducing nanotechnology

4.20pm Prof Andrew Moore, Otago University, Dunedin. Using dialogue to improve understanding of the ethical issues around emerging technologies.

5.00pm Dr Karen Cronin, ESR, Wellington. Engaging scientists, business and the community on future nanofood technologies through dialogue.

#### **5.40- 6.30pm Closing session**

Japan- NZ research collaboration: building a future vision. Plenary discussion led by Dr Bob Frame, Landcare NZ and Member Asia Pacific STS Network Steering Committee

Building regional connections – observations on the day and promoting the outcomes in the Asia Pacific region. Dr Darryl Macer, Regional Adviser for Social and Human Sciences in Asia and the Pacific UNESCO Bangkok.

Next steps including proposed academic publication – Tomiko Yamaguchi/Karen Cronin

**7.00pm Social function.** Informal dinner [venue to be advised]. Participants pay for their own meal.

## **Background Statement**

The development of new technologies can raise concerns among the public about social, cultural, ethical, economic and ecological impacts. The interplay between techno-science development and socio-political responses has been closely studied by scholars in the field of Science, Technology and Society (STS) research. There is now a growing body of international knowledge on the effects of technological change and the implications for economic transformation. STS can provide insights into the dynamics of 'science and society' relations, which in turn can be used to design effective processes for engaging scientists, policymakers and the public. This has direct benefits for science governance. In particular, STS practitioners have been active in developing public engagement methods to reduce social conflict and generate more constructive conversations between the developers and users of new technologies.

Best practice public engagement involves two-way communication or 'dialogue' between stakeholders, which recognises a range of technical and social values - rather than one-way communication approaches that assume a deficit in public understanding and privilege techno-centric knowledge. A key condition for effective dialogue is to engage stakeholders early enough in the technology innovation cycle for a genuine exploration of issues and alternatives. Historically, public engagement has tended to occur only after technology decisions have already been made, and have focused on managing downstream effects. Engagement programmes are now being implemented at an earlier stage, and focused on strategic questions about the purpose and direction of science and research trajectories, and science policy decisions. This is referred to as 'upstream engagement.' The latest approaches involve integrating the attributes dialogic communication with the processes of decision-making by government and industry, to achieve what is termed 'deliberative dialogue.'

Japan and New Zealand have had similar experiences around the introduction of new technologies, particularly biotechnology and nanotechnology. Consistent with wider international experience, emerging technologies have tended to encounter social and consumer resistance. However the drivers for technology acceptance or rejection are unique to each country, reflecting underlying cultural patterns of science and technology development, and past experiences of civic engagement. Similarly, the implementation of dialogue engagement methods needs to be tailored to the situation in each country, to take account of the expectations of scientists, policy makers and the public, and relevant cultural and democratic practices. Over the last 5 years STS researchers in New Zealand and Japan have been experimenting with new interventions to provide a greater understanding of the social context for technology development and to design more effective processes for public engagement. There is now an opportunity to compare methods and experiences in both countries.

We therefore propose to hold a joint Japan- New Zealand STS research meeting on recent approaches for public engagement in emerging technologies. This will reflect on experiences with biotechnology engagement, and identify new research methods/ outcomes on engagement around nanotechnology. It will support a valuable cross-country comparison of current applied research interventions, contributing to international understandings in STS theory and practice with further collaborations across Asia and the Pacific in cooperation with UNESCO.