ESF International Workshop 'DEVELOPING RESEARCH CAREERS IN AND BEYOND EUROPE'

#### **ISSUES IN CAREER TRACKING ACTIVITY**

#### TOSHIYUKI 'MAX' MISU

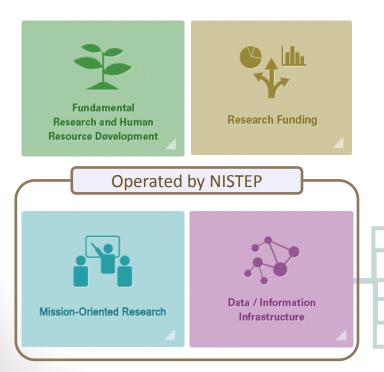
NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY POLICY, JAPAN

Science for RE-designing Science, Technology and Innovation Policy (SciREX)

#### SciREX: Data/Information Infrastructure

http://scirex.mext.go.jp/ (FY2011- )

**SciREX** aims to prepare a system and foundation for the realization of "evidencebased policy formation": proposal of policies effective in addressing different challenges, based on multifaceted analyses and assessments of social and economic impacts from STI. **SciREX** is composed of the following four parts.

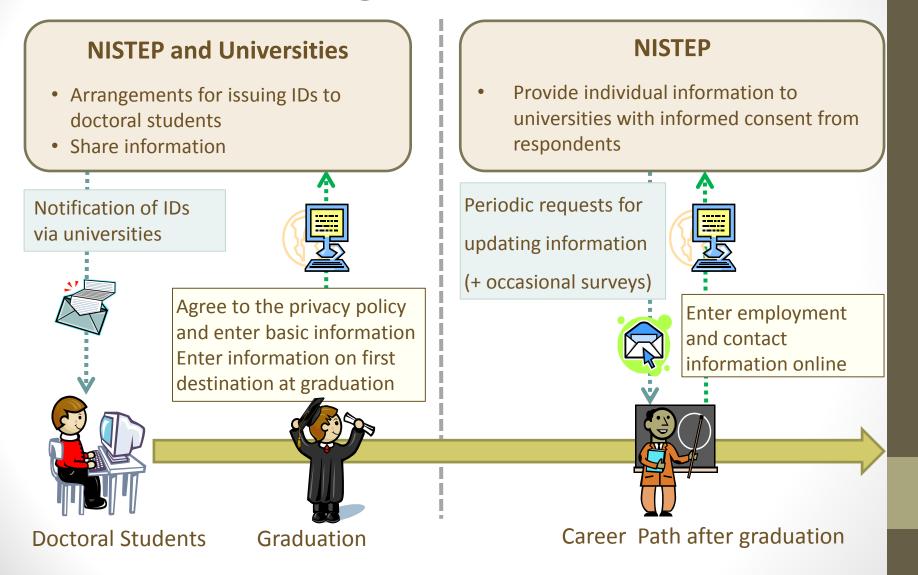


Data on knowledge production in public research
 Data on innovation in industries
 Panel Data on consciousness survey on STI experts

**Database of doctoral graduates** 

Database of intangible assets and productivities Database of budget allocations and key policies

### Initial database design for tracking careers of doctoral graduates (to be redesigned)



## **Project Schedule**

**FY2011** • Conceptual planning of tracking doctoral graduates

- Investigate tracking surveys in foreign countries (e.g. SDR, L-DLHE, GENERATION, CDH, etc.)
- **FY2012** Start developing the database system
  - International Symposium on Tracking Careers of Doctoral Graduates

FY2013 Launch a trial database system for tracking doctoral graduates for feasibility study with several g universities
 Reexamining Plan

In relation to the recommendations described in "Developing Research Careers In and Beyond Europe"

Key words

- Career tracking helps to identify struct "Innovation" and "Globalization"?
  How to use the results for policy imprementation?
  (Basic statistics + α)
- Setting up career tracking studies: choosing the right dimension, resources and outsourcing

How to ensure the resources if long-term initiatives?

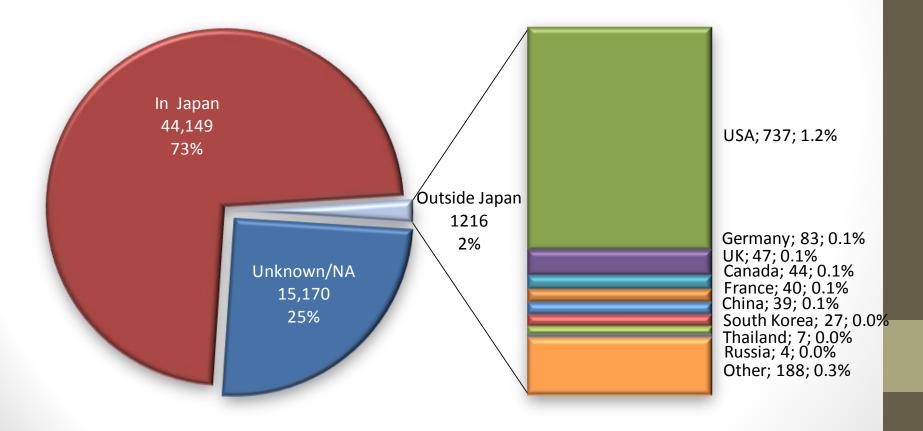
- Methodological awareness
  - Who collects and maintains privacy information? (Risk management)

## International Mobility of Japanese Graduates



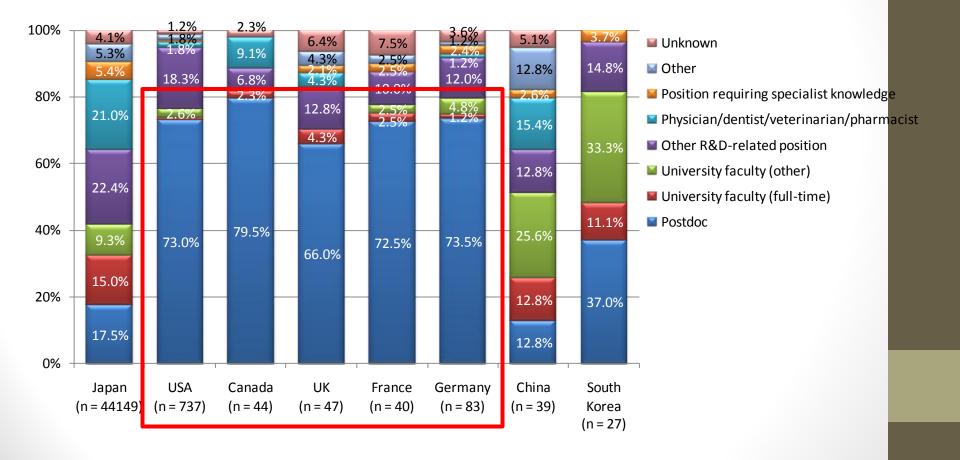
#### Locations of Japanese graduates immediately after completing doctoral courses (for all doctorates completed during FY 2002–2006)

As for the locations immediately after completing doctoral courses, 73 percent of Japanese graduates remained in Japan, while just 2 percent moved overseas. North America and Europe were the main overseas destinations.



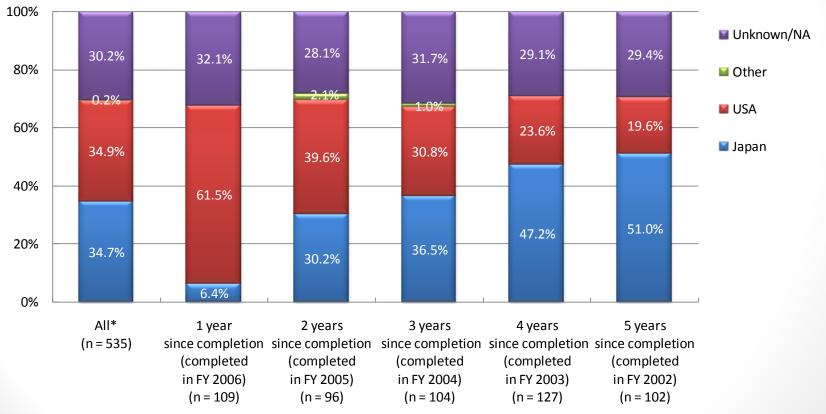
Locations and occupations of Japanese graduates immediately after completing doctoral courses (for all doctorates completed during FY 2002–2006)

Most Japanese graduates moving overseas obtained positions as postdocs.



#### Current locations of Japanese graduates who became postdocs in the USA immediately after completing doctoral courses

Of Japanese who completed doctoral courses and immediately became postdocs in the USA, the percentage who returned to Japan increased with each year after completion. In particular, more than half of those who completed their doctoral courses five years ago have returned to Japan.



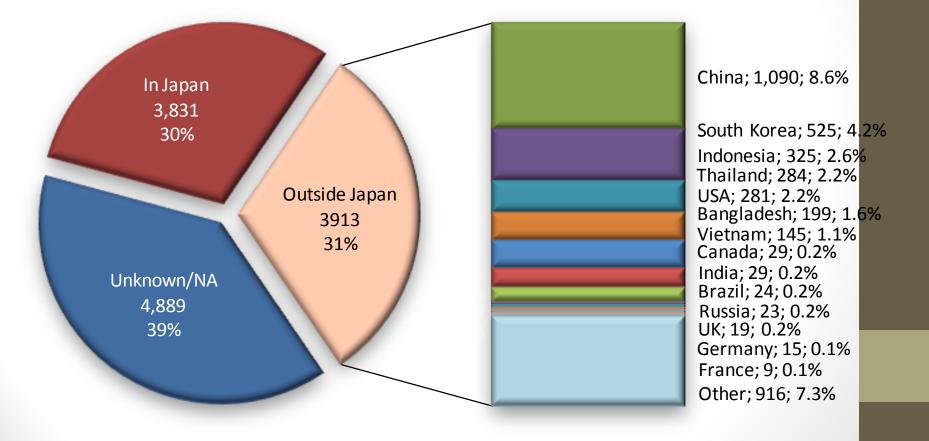
\*"All" refers to all those of Japanese nationality who completed doctoral courses and then immediately became postdocs in the USA.

## **International Mobility Asian Graduates**



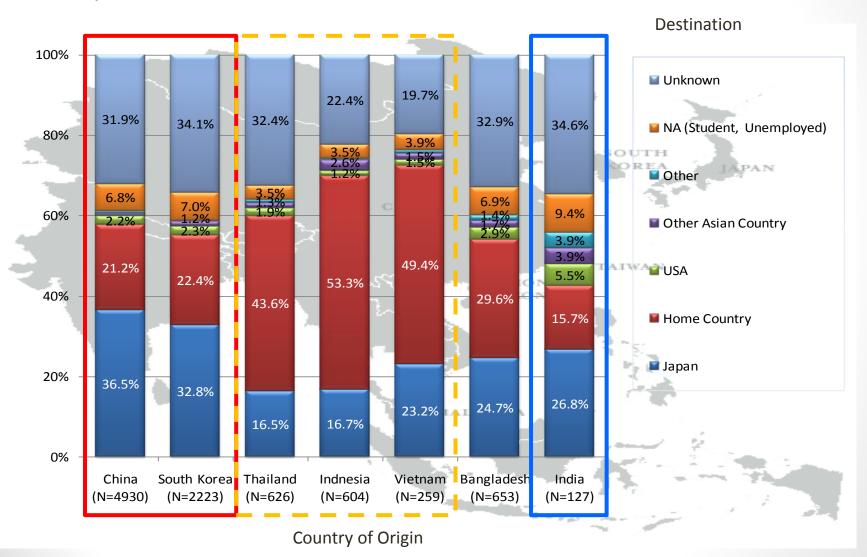
Locations of international graduates immediately after completing doctoral courses (for all doctorates completed during FY 2002–2006)

Of international students who completed doctoral programs, 30 percent remained in Japan immediately after completion, while at least 31 percent moved overseas.



#### Mobility of Asian graduates -immediately after completion -

At least 1/3 of graduates who came from China and South Korea remained in Japan.
 Many of those who came from Southeast Asia returned to their home countries.



In relation to recommendations "Developing Research Careers In and Beyond Europe"

- Career tracking helps to identify structural problems
  How to use the results for policy implementation? (Basic statistics + α)
- Setting up career tracking studies: choosing the right dimension, resources and outsourcing

How to ensure the resources if long-term initiatives?

Methodological awareness

Who collects and maintains privacy information?

## Further improvements

- Incentives for better participation and cooperation
- Potential linkage between career tracking data/system and other database/services
- Application of the results for policy formation

# Thank you

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