

# Who Collaborates Internationally, How and Why Some preliminary findings from IIR/NISTEP Scientists Survey

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# Purpose of the IIR (Hitotsubashi University) /NISTEP (MEXT) Scientists Survey project

- ▶ To deepen our understanding of the knowledge creation process in science and in science-based innovation based on project level information
  - Motivation and process
  - Knowledge source and management
  - Research/personal environment, e.g., competition; use of advanced research facilities, databases, and the internet
  - Inputs, e.g., research funds, total research man-months
  - Research team, e.g., composition of authors
  - Outputs, e.g., papers, training of researchers
  - Commercialization, e.g., patents, licensing or sales
- ▶ And to assess the impact of research management, collaborations, etc.

# Our research strategy

- ▶ Collect the profiles of research projects in all fields of science through a comprehensive questionnaire survey for scientists
- ▶ Analyze the characteristics of the research projects
- ▶ Compare Japan vs. US
- ▶ Japanese survey completed and the workshop introducing the initial basic findings were held on October 4<sup>th</sup> 2010

# Sampling

## ▶ Population

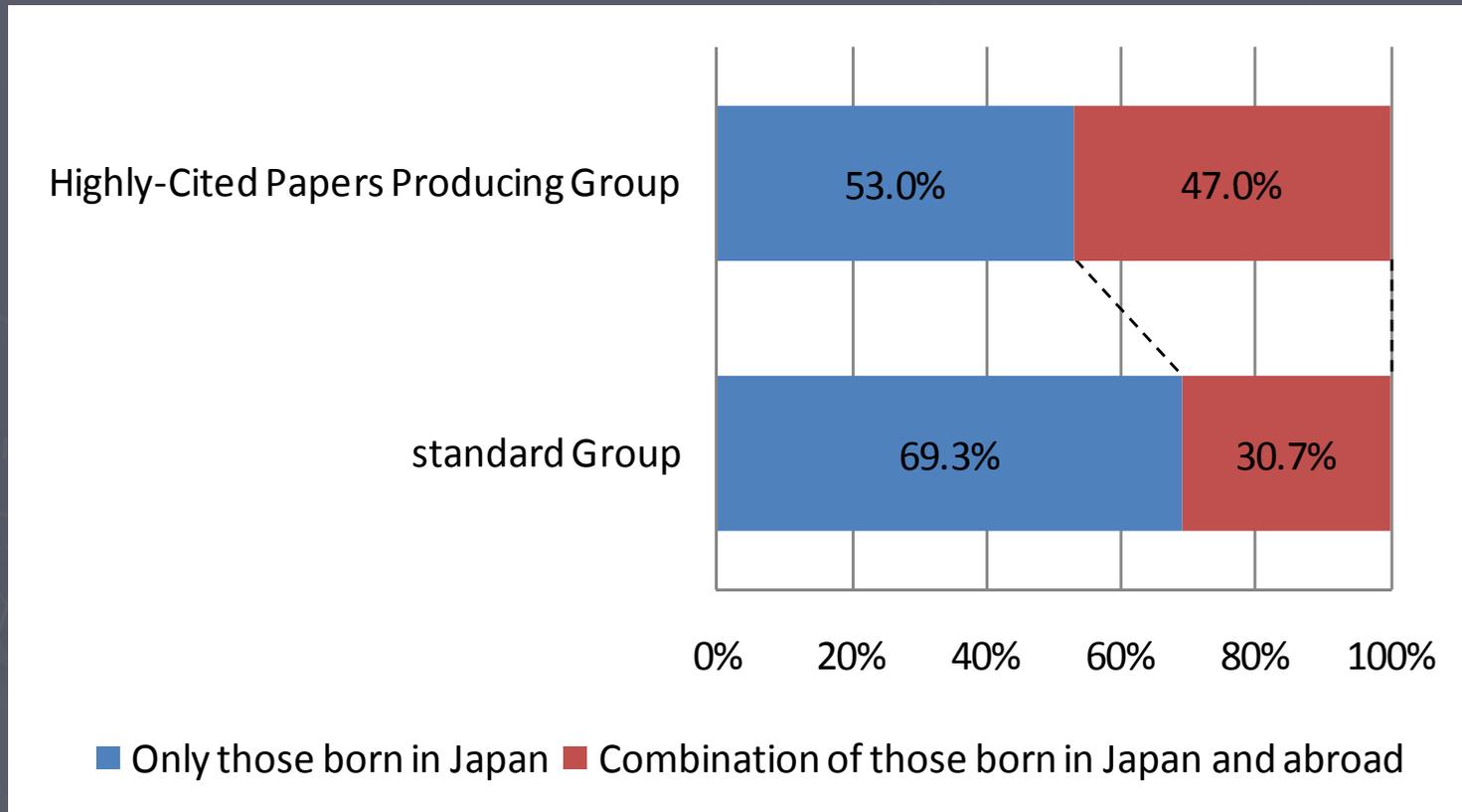
- Articles and letters in Science Citation Indexes-Expanded (Thomson Reuters) Reviews excluded.
- Time window: 2001 – 2006 (database year)
- Forward citation counts were retrieved on December 31, 2006

## ▶ The papers in which at least one author was affiliated with a Japanese organization were selected

## ▶ Top 1% highly cited papers (HC papers) & Randomly sampled papers (1: 2)

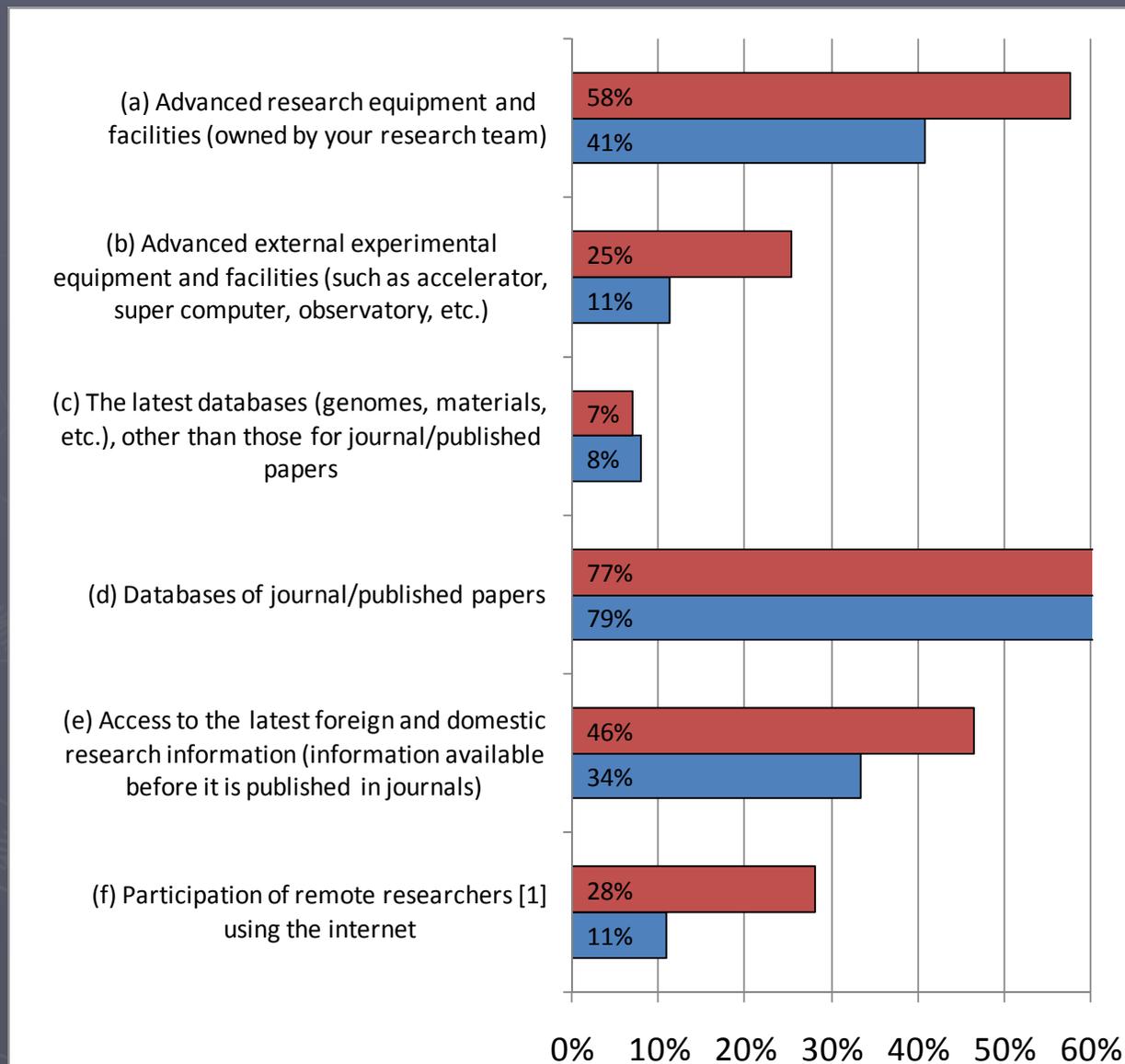
## ▶ Sample 7,652 and responses 2,081

# International research team (% , where foreign born researchers participate)

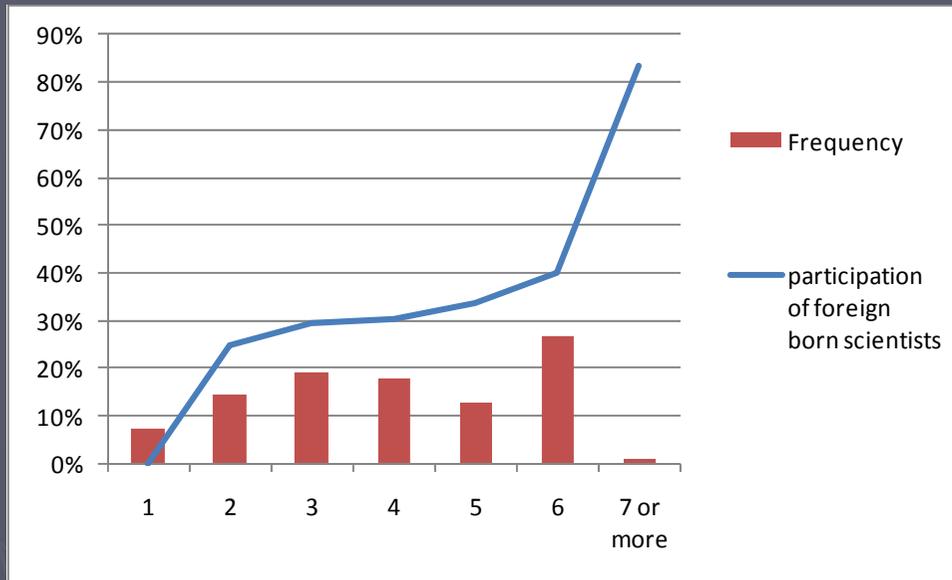


- ▶ Research team is often international and more so in HCPs.

# Use of Advanced Research Facilities, Databases, and the Internet

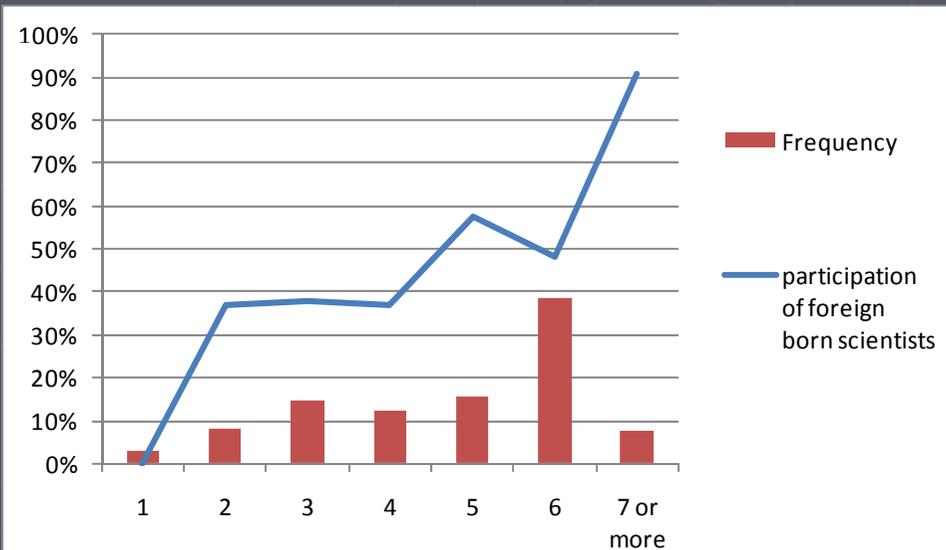


# Author size and participation of foreign born scholars (%)

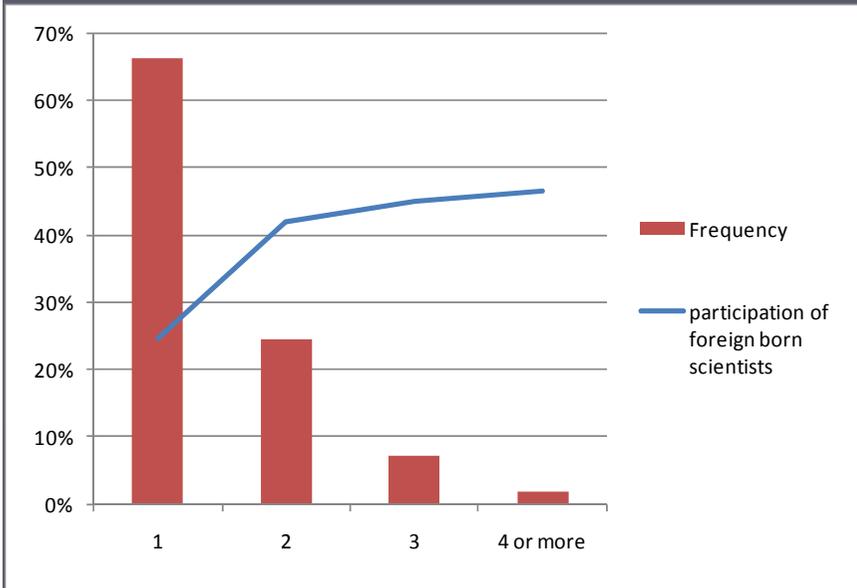


Standard project

Project with a HCP

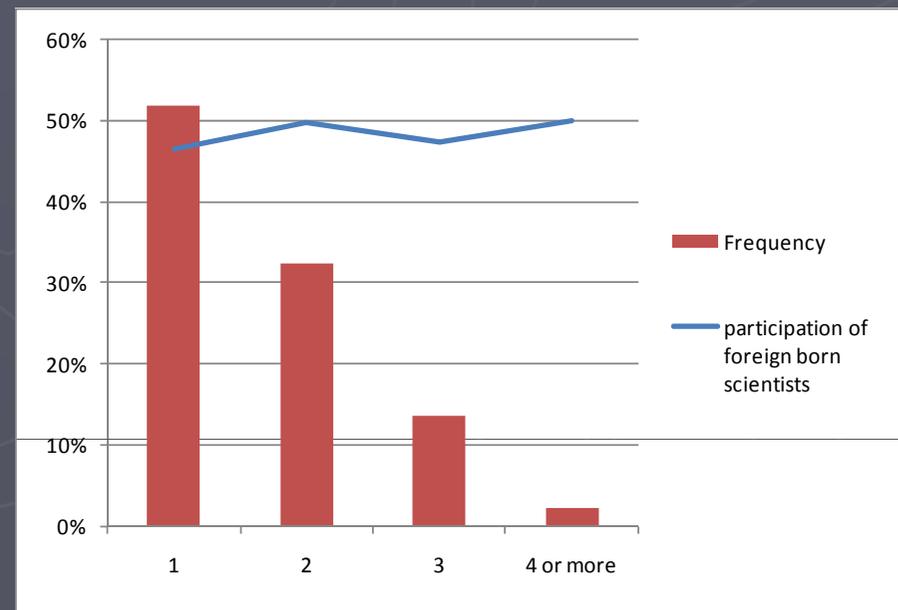


# Field variety and participation of foreign born scholars (%)



Standard project

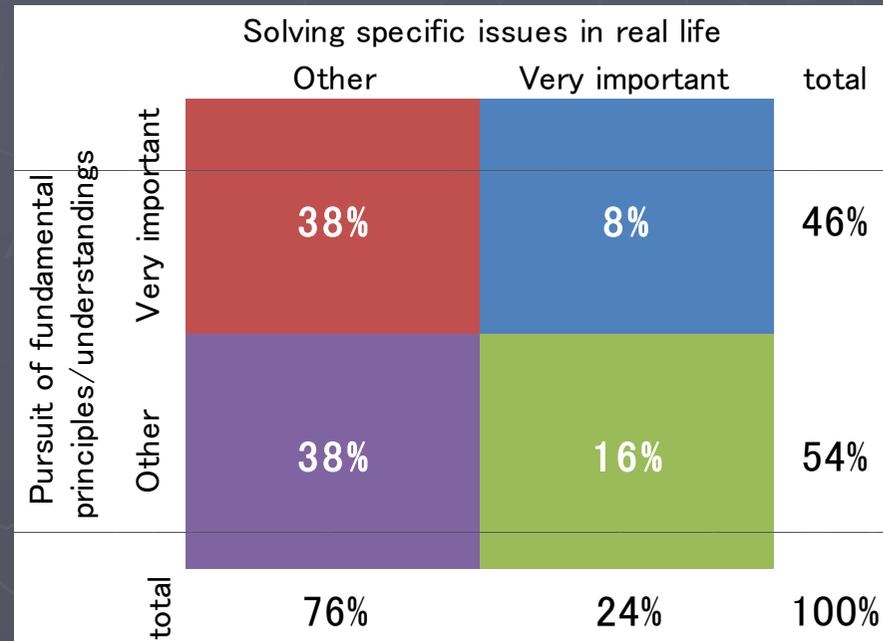
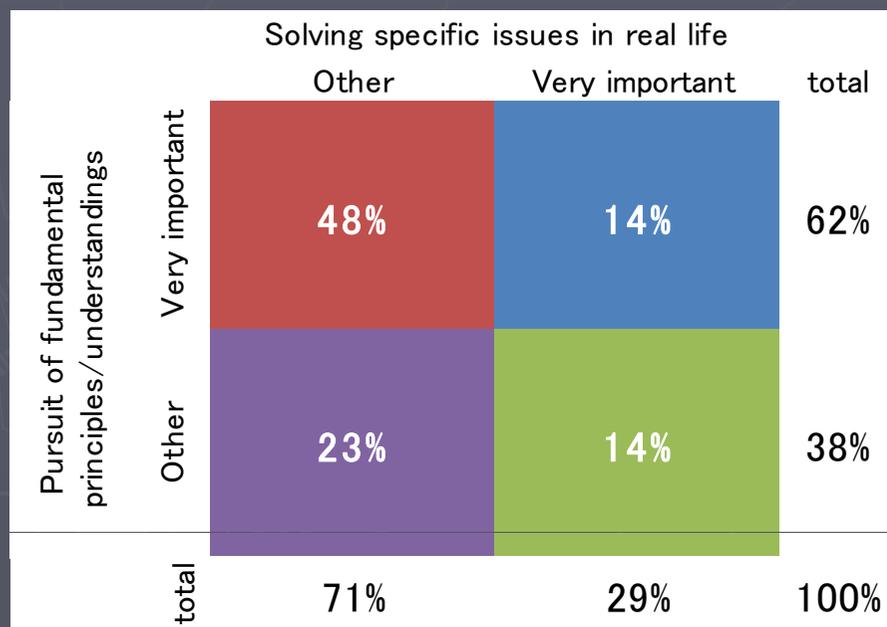
Project with a HCP



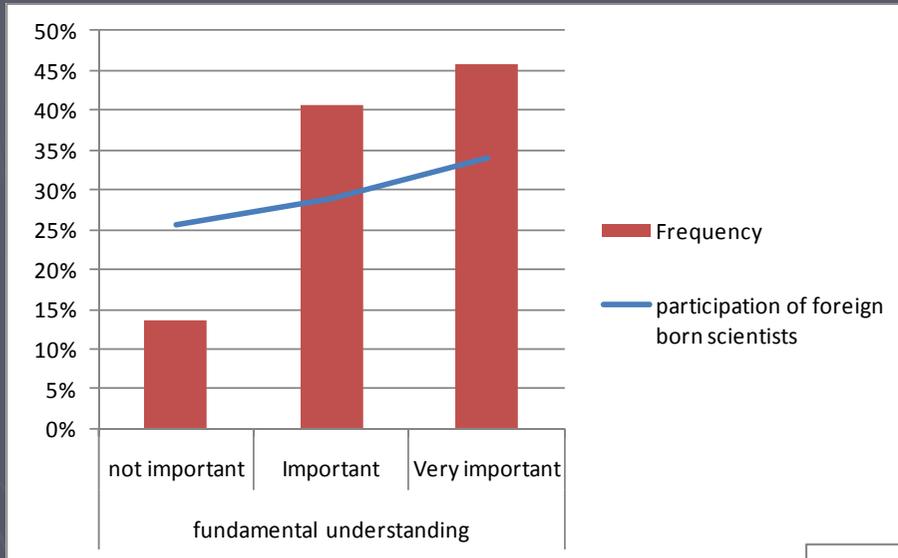
# Table 1. Project incidence by motivations

(a) Motivations for the Research Project with the HCP

(b) Motivations for a standard Research Project

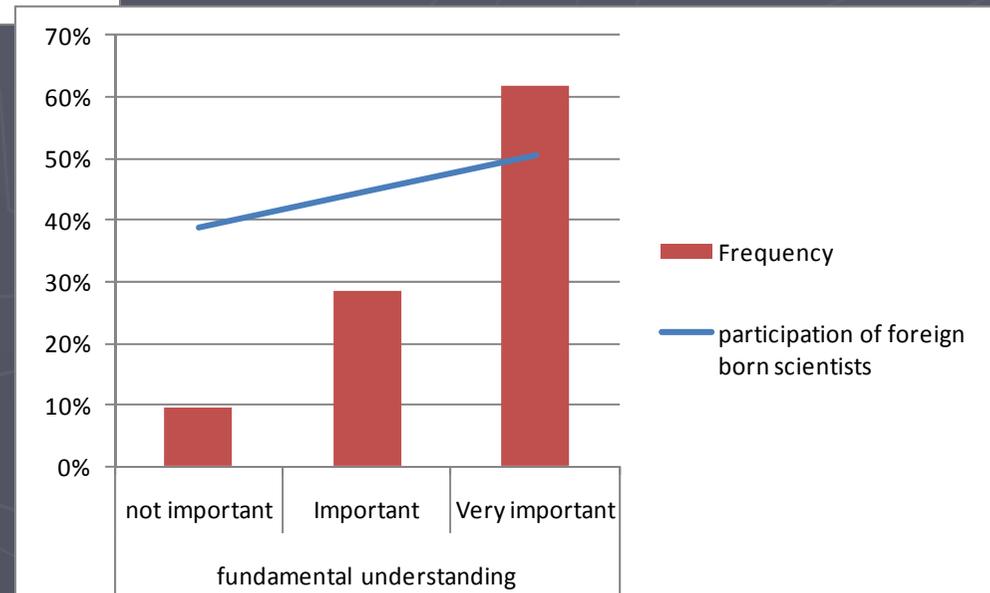


# Fundamental quest and participation of foreign born scholars



Standard project

Project with a HCP



Thanks a lot for your  
attentions