

# ***The role PRESTO program played in oriented basic research***

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# ***What is the PRESTO program?***

- Among three major JST programs for oriented basic research, Sakigake or PRESTO is an personal type research program for future innovation under the Strategic Sector.
- Under the initiative of the Research Supervisor and Advisors, researchers develop their theme independently from their affiliation.
- Total budget is about ¥40M for 3-year project and ¥100M for 5-year project.

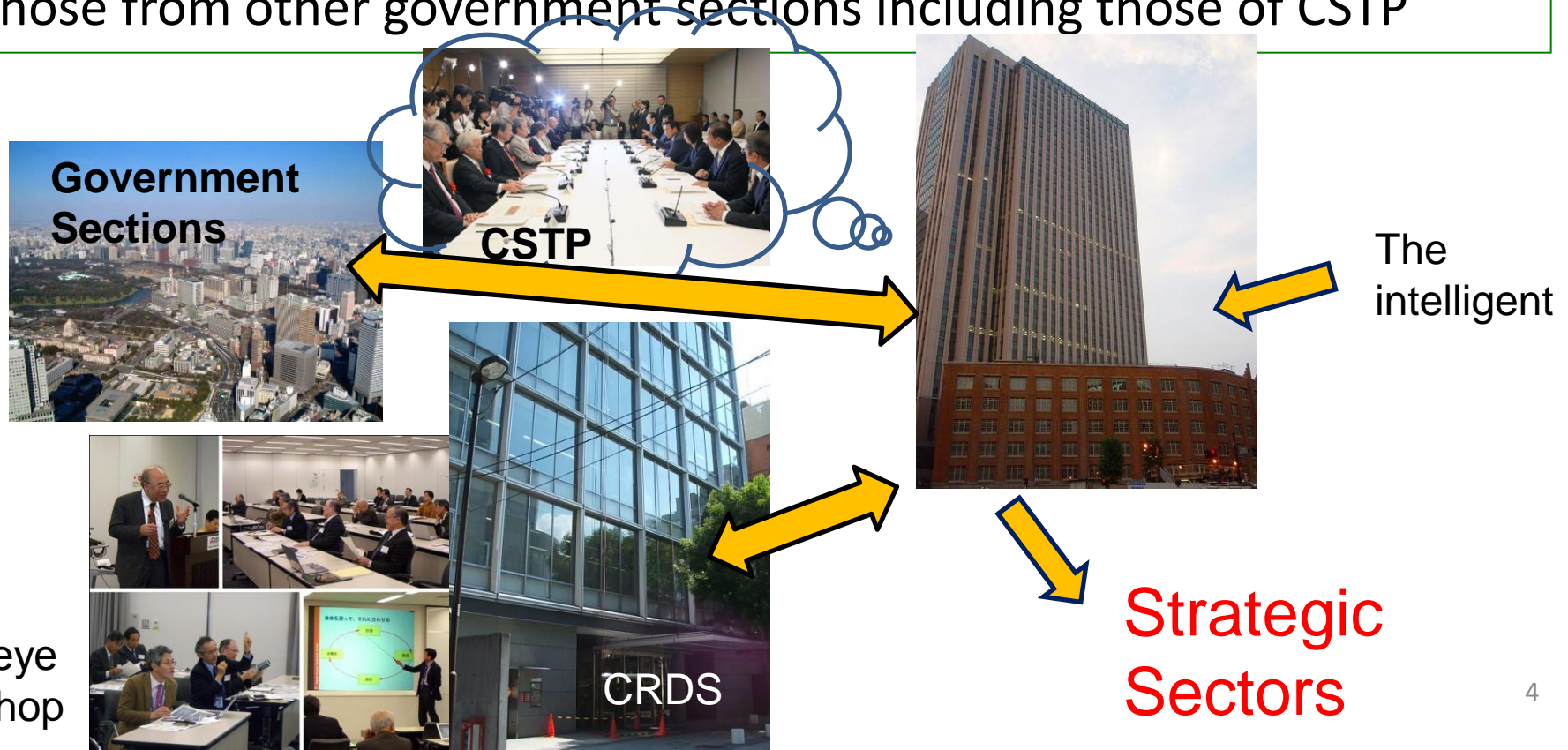
# How the PRESTO programs are promoted?

- (1) MEXT designates **Strategic Sector**
- (2) Fixing Research Areas following the **Strategic Sector**
- (3) Designation of **Research Supervisor** by JST staffs
- (4) Publication of Supervisor's Policy and solicitation of themes
- (5) Two stage\* screening; (1) examine papers (2) interview
- (6) Selection by JST following the Supervisor's recommendation
- (7) Cordial research support system by Research Office
- (8) Publicity of the research achievements by JST PR staff

\*Three times screening for high risk project

# ( 1 ) How is the **Strategic Sector** designated?

- Center of R&D Strategy (CRDS), a *think-tank* of JST, works out proposals through survey S&T fields, by drawing "bird's-eye view maps", and by listing up important R&D subjects  
→ MEXT designates Strategic Sectors using the proposals as well as those from other government sections including those of CSTP

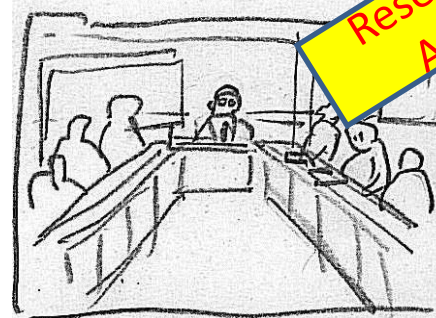


## (2) JST establishes **Research Areas** based on the Strategic Sector

- Based on strategic sectors, JST establishes research areas.
  - My case :  
Strategic Sector is “R & D for beyond-CMOS Devices”  
Designated Project Name is  
“**Materials and Processes for Next-Generation Innovative Devices**”



Strategic  
Sector



PD Meeting

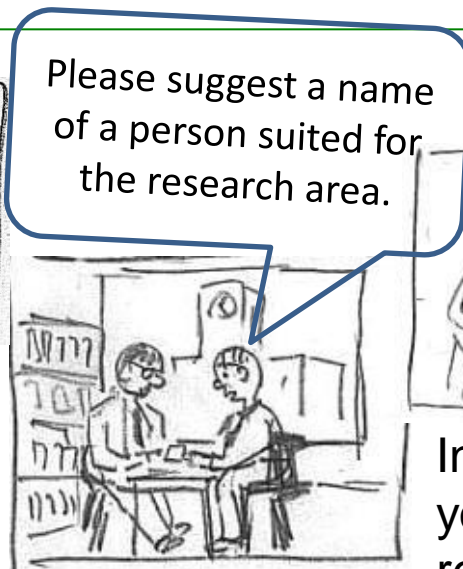
Research  
Area

### (3) JST selects **Research Supervisor**

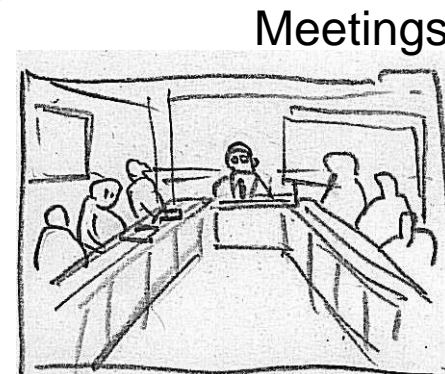
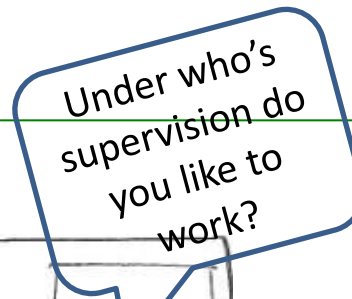
- Once the Research Area is fixed, then a Research Supervisor is selected by JST staffs based on list of candidates obtained by surveys and interviews to young researchers.



Visit intellectuals  
and authorities



Interview with  
young  
researchers



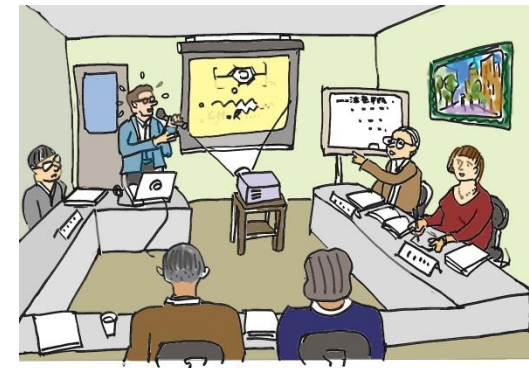
Meetings

## (4) **Solicitation of Research Themes** based on **Supervisor's Policy**

- The research supervisor and JST staffs publish “**Research Outline**”, “**Supervisor's Policy**”, and start **solicitation** of “**Research Themes**”, and select nearly ten Advisors from academia and industry.
- Most important issue on the solicitation is how you can draw up *attractive and timely* **outline and policy**, since *without application of researchers of high potentiality*, no supervisor can act as **MEKIKI**!
- 40%-success of the project may be determined at this stage.

## (5) Two stage screening: (1) papers (2) interview

- The Research Supervisor conducts two-stage screening of the application together with advisors from the research area.
- **Screening by Papers:** Research Supervisor select candidates for interview by examining submitted application papers with a help of area advisors  
EX: *25 interviewees from nearly 100 applicants*
- **Screening by Interview:** Research Supervisor select candidates by interview consulting with advisors  
EX: *10 from 25 interviewees*
- *Based on the selection, JST determines individual researchers and research themes*



## (6) Management after Selection (1)

### Research Office

- Research offices are established for each research area and take daily care of researches under the guidance of Supervisors.
- Research managers (who coordinate the research, determine research progress and give support for presentations), administrative managers (who purchase equipment and materials and deal with procedures for business trips) and office staffs are stationed in all research offices.



# (7) Management after Selection (2)

## A “Site-Visit” to individual researcher’s labs

- The **Research Supervisor visits the laboratories of individual researcher’s affiliation** and *grasp research environment and explain to his or her boss about the mission of the Program and ask to allow to conduct an independent research.*
  - This process has an indispensable importance for researcher to conduct researches on a theme independent from the affiliation.
  - Supervisor can conduct careful management in accordance with the situation of the researcher.



## (8) Management after Selection (3)

### Research Area Meetings

- JST holds *Research Meetings* sponsored by the Supervisor **twice a year** to discuss the research plan, to report the progress or to promote communication among researches in the research area.
- Researchers are **very much activated** by joining the Meeting through severe discussion with Supervisor, Advisors and other researchers.
- These research meetings help researchers to build wide personal networks across the organization and position.



Active discussion among researchers

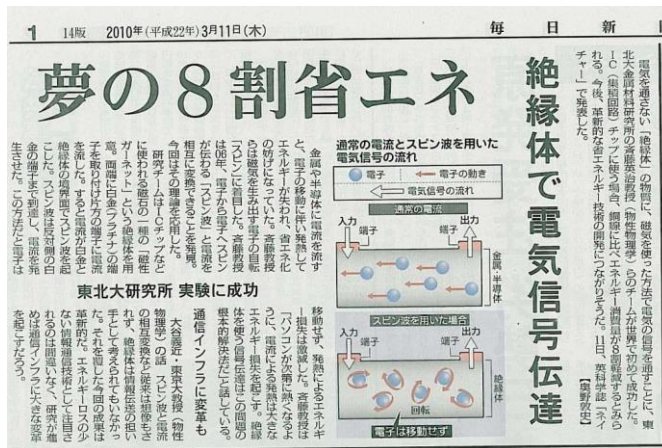
Discussion continues to late at night



フルメンバー33名が3日にわたって熱い討論と研究交流を行う。

## (9) Publicity of Achievements by JST staffs

- Dept. of Public Relations & Science Portal help Press Release
  - Press releases and press lecture of research achievements are conducted by JST specialist of publicity.
  - JST News, a monthly magazine, introduce the research outcomes
- Dept. of Science Network send introduction video to Web
  - Science News, a JST Web Animation Site dispatches the contents of researches



# PRESTO is a unique system to promote young researchers

- Individual Research Themes independent from affiliation
- Reasonable amount of budget
- Flexible managements of research fund
- Acceleration of research by leadership of Supervisor
- Management such as Research Meetings, Site-Visits as Virtual Institute
- Support by Research Office : Research Administrators
- Recommendation to Awards
- Confidence and Aggressive Minds by stimulation by Colleagues
- Interdisciplinary relationship to build wide personal networks across the organization and position.