2009 New Program

Overview of “S-innovation” - the program for “Strategic Promotion of Innovative R&D”

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Program: Tech Transfer Activities

10:00-	**Overview of JST's Technology Transfer Activities**	
	Competitive Funding Programs	
10:05-	□ New Technology transfer Program “A-STEP”	Bottom-up
10:20-	□ Strategic Promotion of Innovative Research and Development	Top-down
10:35-	□ Comprehensive Support Programs for Creation of Regional Innovation	Regional
10:50-	Q&A(1)	
	Intellectual Property & Various supports	
11:00-	□ The Circumstances of IP surrounding Japanese Universities and Our Mission	IP
11:15-	□ Strategic support for acquisition and licensing of IPR	IP
11:30-	□ Linking mechanism of research results to practical application	Supports
11:45-	Q&A(2)	

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1. Background
2. Features
3. Outline
4. R&D Promotion
5. Conclusion

1. Background

Why Launch "S-innovation"?

- Two kinds of funding programs for R&D in JST
  - A) Basic Research Programs (BRPs)
    - aim to create new "seeds"
    - produce a lot of successful "seeds"

      (ex. iPS cells, transparent semiconductor…)

1. Background (cont.)

Why Launch "S-innovation"?

- Two kinds of funding programs for R&D in JST
  - B) Technology Transfer Programs (TTPs)
    - aim to bring up "seeds" to "technologies"
    - produced successful technologies,
      but the number of successful results is not enough.

JST wants to strengthen TTPs, in order to bring up "seeds" to "technologies" much more.

1. Background (cont.)

Why Launch "S-innovation"?

- Types of TTPs in JST
  - A-STEP (pre- A-STEP)
    - Nation-wide, **bottom-up**
  - Programs for Creation of Regional Innovation
    - Region-based, **bottom-up**

In bottom-up, JST can adopt better proposals from variety of R&D areas.

But, JST can not play the leading role in focusing on specific "seeds".

1. Background (cont.)

Why Launch "S-innovation"?

- Concept of new program: **top-down**
  - focus on specific "seeds", especially from successful results in BRPs.

"S-innovation": "top-down" program to strengthen TTPs.

2. Features

1. Top-down

A) Set up outstanding “R&D theme”

- investigate successful “seeds” from BRPs
- pick up “seeds”
  and set up promising “R&D theme”

2. Features (cont.)

1. Top-down

B) PO shows the concept of R&D theme

- purpose, expected subjects, outputs

(ex.) expected subjects and output images: case of “Organic electronics”,

-) R&D of organic transistor memory

-) R&D of thin film solar cells

-) R&D of dye-sensitized solar cell

-) R&D of OEL light

-) R&D of OEL display …

2. Features (cont.)

1. Top-down

C) Call for proposals under R&D theme with its concept

- proposals have to meet with the concept of R&D theme.

2. Features (cont.)

1. Top-down

“Top-down” enables JST to more actively focus on valuable “seeds” from BRPs.

2. Features (cont.)

2. Long-term seamless funding

- Up to 10-years
- Divided into three stages
  - stage 1: applied basic research
  - stage 2: component technology R&D
  - stage 3: application development
- Approx. ¥100 million (one million US$) per team･year

2. Features (cont.)

2. Long-term seamless funding

R&D team can engage in long-term R&D activity, which enables bringing “seed” to “technology” and also to “application”, with budget support.

2. Features (cont.)

3. Open Innovation

- Industry-academia collaboration in one team
  - tech. transfer from academia to industry
- Information sharing between teams
  - more efficient R&D
    without doing similar tasks
  - ex. of information: meaningful data,
    know-how,
    (patents, if possible)

2. Features (cont.)

3. Open Innovation

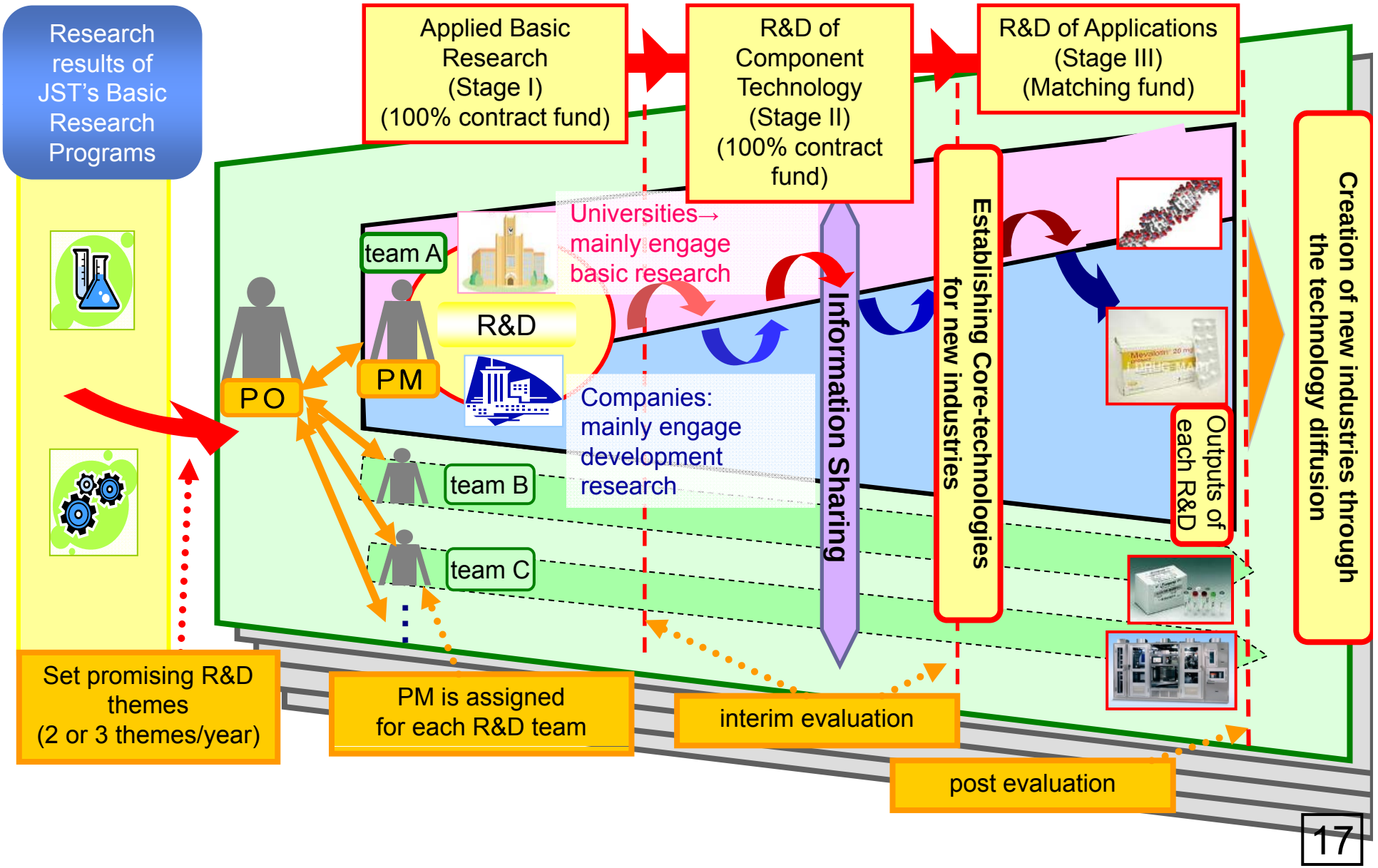
JST expects “Open Innovation” make R&D activities more efficient to stimulate innovation.

“S-innovation” is an unique program in Japan. (in the world?)

3. Outline

R&D Period	Up to 10 years (expect more than 5 years) Divided into three stages
Annual R&D expenses	~¥100M (~1 M$) per team (matching fund at stage 3)
Theme & PO	JST sets up R&D themes and designates POs. Each PO shows R&D concept (purpose, outputs images etc).
Call for proposals	Applicants submit proposals in accordance with the R&D concept. PO adopts five teams (five proposals) per theme.
Team	At least one academic institution and one company should be in one team (industry-academia collaboration). Each team assigns PM (project manager).
Evaluation	PO evaluates R&D progress at the end of each stage. (interim evaluation and post evaluation)
Contract	JST and each institution make R&D contract.

4. R&D Promotion



5. Conclusion

“S-innovation” is …

1. Top-down program

to play in the leading role in focusing on specific “seeds”

2. Long-term seamless program

up to 10 years, longest in JST

3.Open Innovation program

to make R&D more efficient

S-innovation aims to establish “core-technologies”, and create “new industries” in order to provide benefits to our society.

(appendix) Theme selection process

Valuable seeds from basic research

CREST, ERATO, PRESTO, etc

(1) Investigation of theme candidates
- list up valuable seeds
- have interviews with experts
- pick up theme candidates, investigate PO candidates

(2) Workshop (WS) for each theme candidate
(with about 100 experts from companies & universities)
- discuss possibility, importance, direction of R&D for theme candidate
- discuss output image, effect of open innovation in the program

(3) Promotion Committee
（with each WS moderator）
- **discuss themes and PO candidates**
- **recommend them.**

(4) JST sets themes and POs

(5) Each PO shows R&D concept (purpose, output images, etc)

(6)Application starts

(appendix) Theme candidates

- iPS cells
- Organic Electronics
- Photonics Polymer
- Transparent Oxide
- Superconductivity system