Press Conference

President of JST

October, 2012

Dr. Yamanaka awarded Nobel Prize in Physiology or Medicine

独立行政法人 科学技術振興機構 Japan Science and Technology Agency

Relationship with JST

FY2003 Research leader on the topic of “Generation of Pluripotent Stem Cells for Clinical Application” in JST’s team-oriented strategic basic research program, CREST (through FY2008)

FY2006 Generated iPS (induced pluripotent stem) cells, which are pluripotent like ES (embryonic stem) cells, from skin cells of mice.

Induction of Pluripotent Stem Cells from Mouse Embryonic and Adult Fibroblast Cultures by Defined Factors
Kazutoshi Takahashi[1] **and Shinya Yamanaka**[1, 2,,] Cell 126:663-676.

[1] Department of Stem Cell Biology, Institute for Frontier Medical Sciences, Kyoto University, Kyoto 606-8507, Japan
[2] **CREST**, Japan Science and Technology Agency, Kawaguchi 332-0012, Japan

FY2007 Generated iPS cells from human cells.

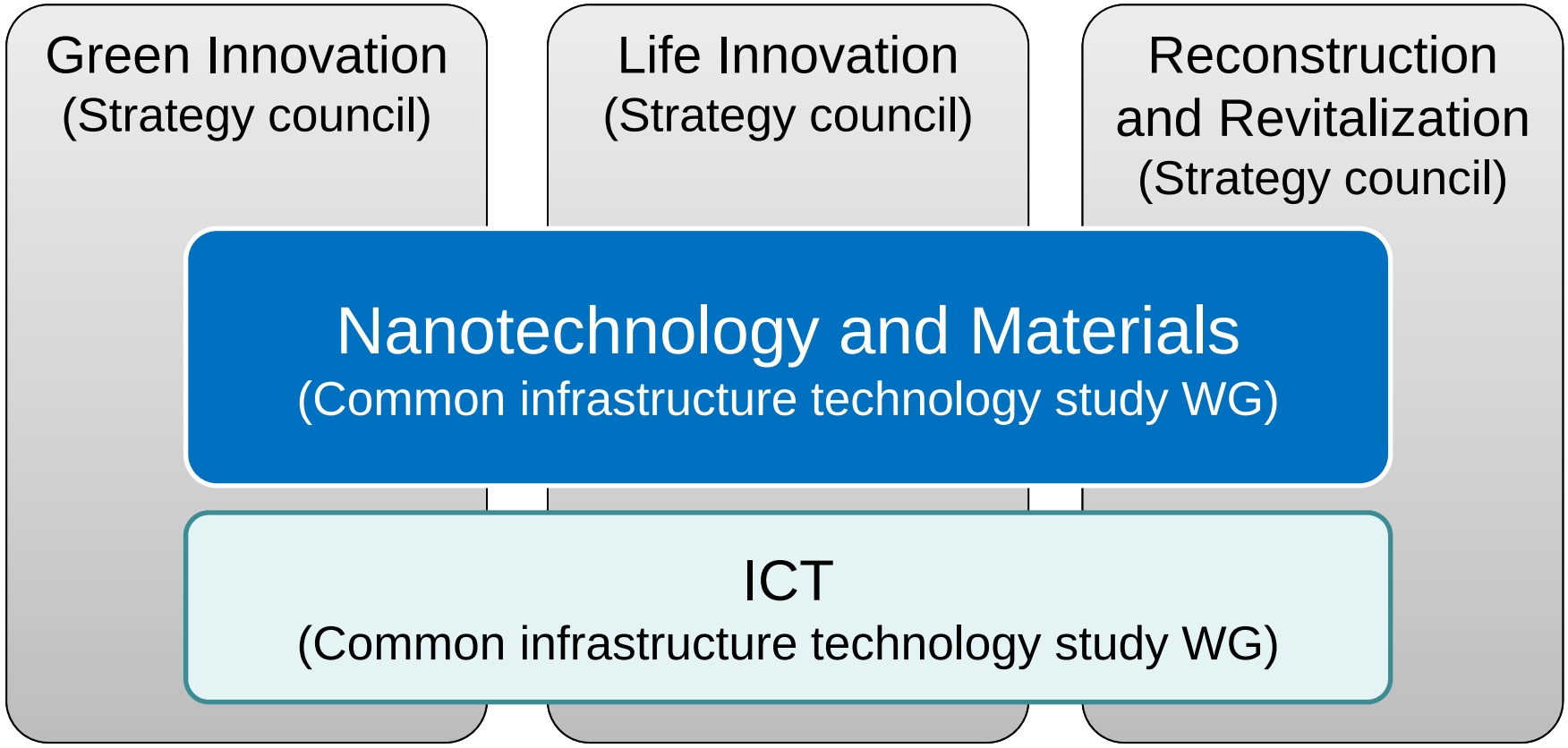
FY2008 Launch of JST’s “Yamanaka iPS Cell Research Project” (through FY2012)

Dr. Yamanaka (center), Mr. Nakamura, president of JST (left) and Mr. Matsumoto, president of Kyoto Univ. (right)

Constructing a renewed R&D system focusing on Nanotechnology and Materials

Framework of the 4th Science and Technology Basic Plan

- **Shift from "S&T-pushing" to "Needs-pulling" Policy**
- **Change from "Science & Technology (ST) Policy" to "ST & Innovation (STI) Policy"**
- **Change from 8 Prioritized Areas to 3 Societal Needs**
  (Nanotech and ICT as Common STI Bases)



Nanotechnology and Materials as the basis of nation/industry

In pursuit of social value-added final products

Addressing renewed industrial structure to maintain global competitiveness

Key Industries
Key Technologies

Materials/Device Industry

Market size in 2010※ (product shipments)

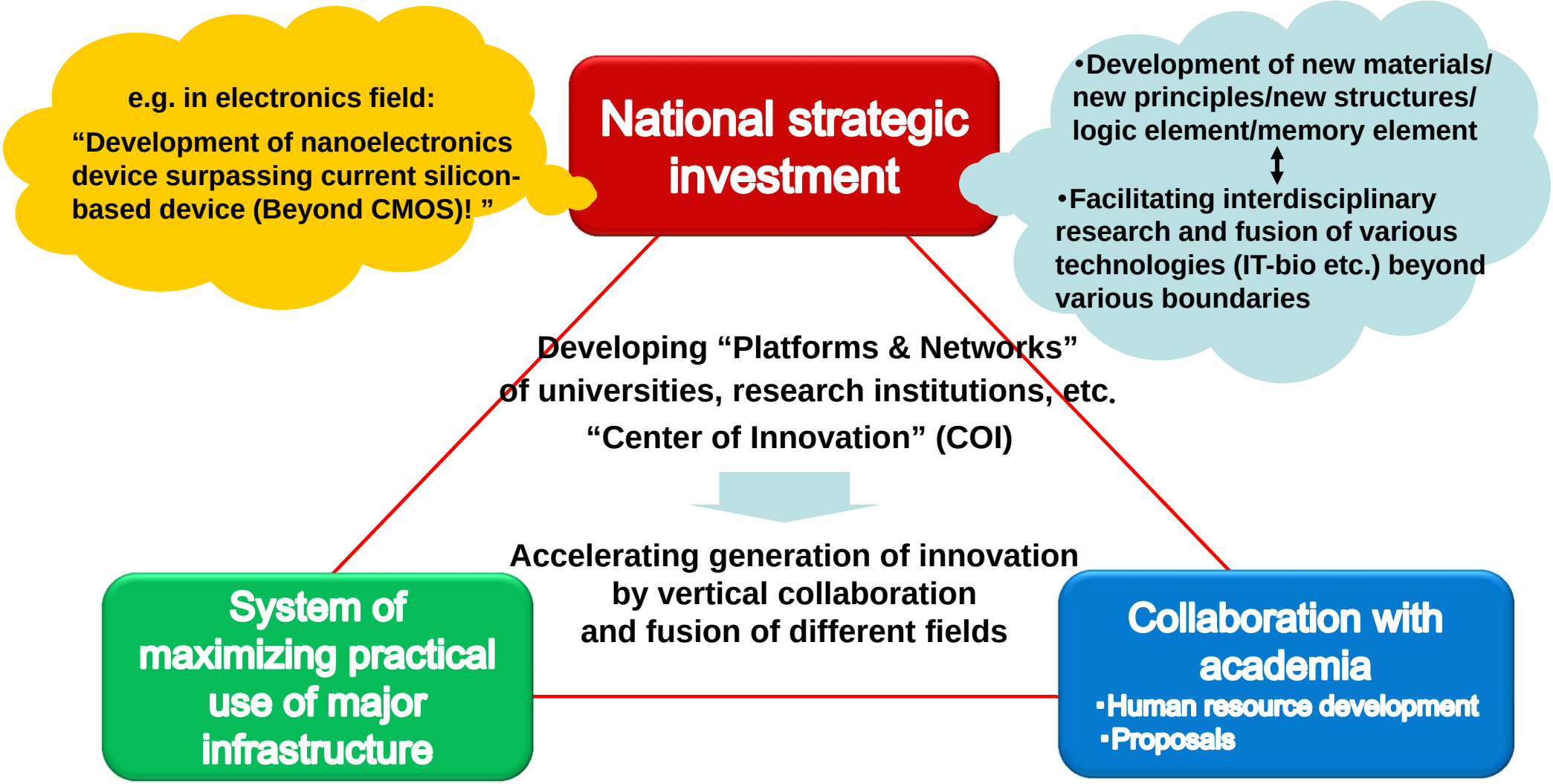
136 trillion yen in Japan

Electronics Industry

17 trillion yen in Japan

※Calculated by JST based on “Indices of All Industry Activity of 2010” published by Research and Statistics Department in METI’s Secretariat on 13 April 2012

Direction of nanotechnology investment



- Common Infrastructures such as TIA, SPring-8, J-PARC, etc.
- K computer, etc.

Example of “Platforms & Networks”: Element Strategy

Strategic Basic Research Programs		
CREST: Element Strategy	PO：Kohei Tamao (Riken)	2010-2017
PRESTO: Element Strategy	PO：Hideo Hosono (Tokyo Institute of Tech.)	2010-2016
Collaborative Research Programs Based on Industrial Demand		
Heterogeneous structure control on metal	PO：Masaharu Kato (Tokyo Institute of Tech.)	2010-
High-performance magnet	PO：Hirotoshi Fukunaga (Nagasaki Univ.)	2011-
Promotion and Support for International Cooperation		
SICORP: Substitutions of critical raw materials (Japan - EU)	PO：Kazuyuki Kuroda (Waseda Univ.)	Selection in progress
Projects entrusted by MEXT (Ministry of Education, Culture, Sports, Science and Technology)		
Element Strategy Project <Industry-academia-government collaboration type>		2006-2013
Element Strategy Project <Research platform formation type>※		2012-2021
Tohoku Innovative Materials Technology Initiatives for Reconstruction		2012-2016

※ Magnet materials: NIMS, Electronic materials: Tokyo Institute of Tech., Catalysis/Battery materials: Kyoto Univ., Structural materials: Kyoto Univ.

- Promoting collaboration with SPring-8/SACLA, J-PARC, K computer, Nanotechnology Platform
- Planning of symposium etc. at related academic societies (physics, chemistry, metals, ceramics, etc.)