JST's Efforts and Activities in relation to "the Great East Japan Earthquake"

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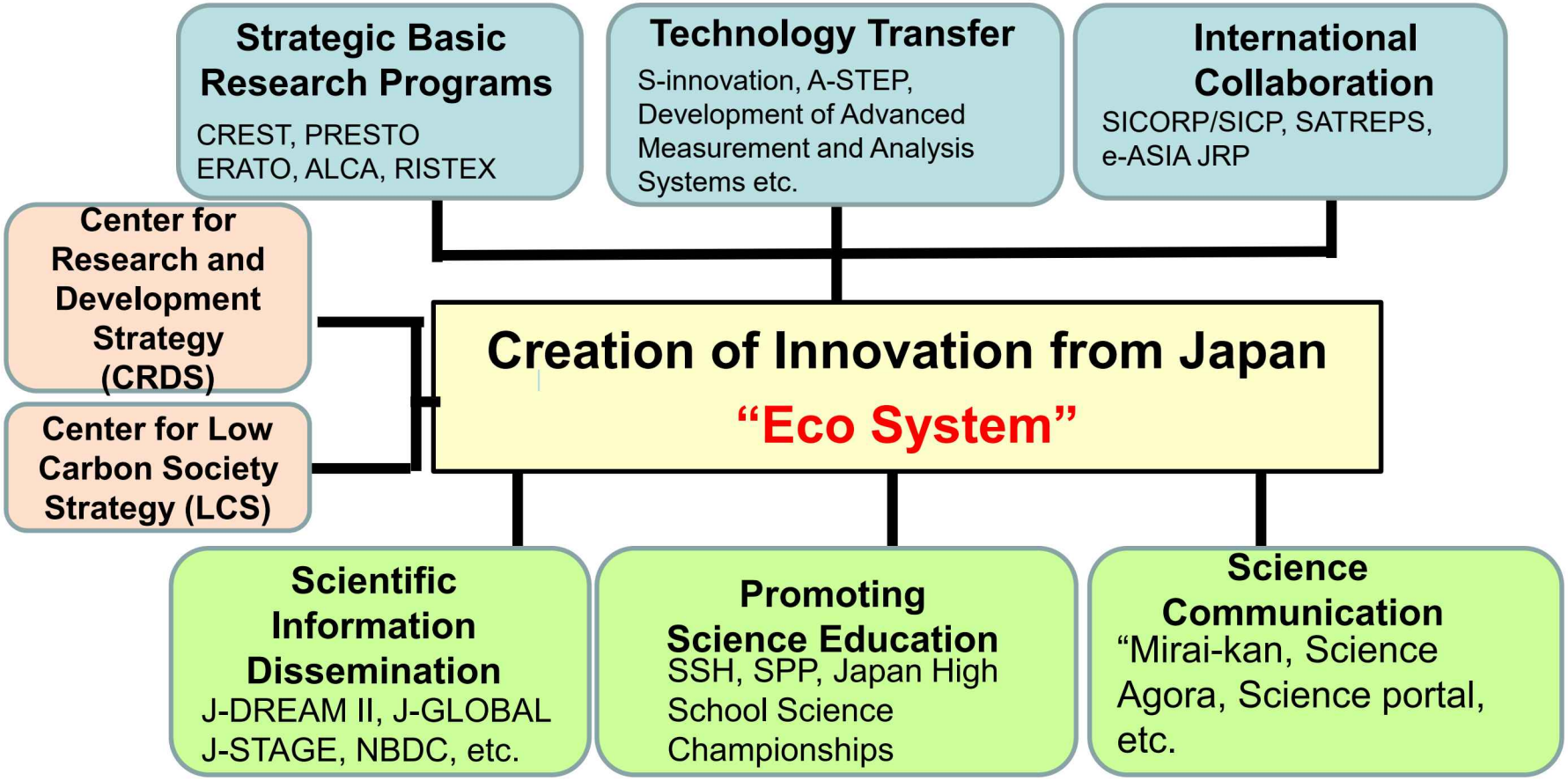
Activities of JST

Virtual Networking Research Institute



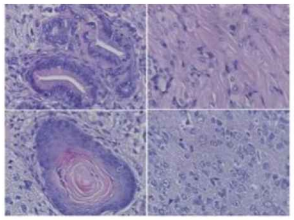
Nobel Prize 2012

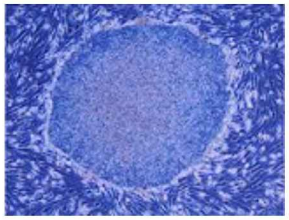
Dr. Shinya Yamanaka (center) Dr. Michiharu Nakamura, President of JST (left), Prof. Hiroshi Matsumoto, President of Kyoto University (right), October 8, 2012 @ Kyoto University

Professor Shinya YAMANAKA,

Nobel Laureate in Physiology or Medicine 2012

Awarded for “The discovery that mature cells can be reprogrammed to become pluripotent.”





Relationship between Prof. Yamanaka and JST

- October 2003 to September 2009: Research Director on the topic of “Generation of Pluripotent Stem Cells for Clinical Application” of CREST
- April 2008 to present: Yamanaka iPS Cell Project

Strategic Programs Package

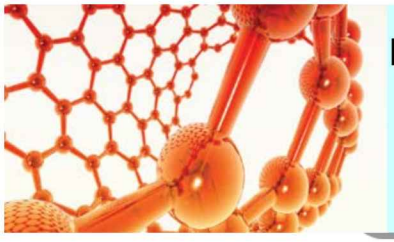
Integrated promotion of science and technology innovation

JST aims at effectively generating new systems and services through combining various programs in specific technology area related to the priority fields

Green Innovation
Open up frontiers for natural energy

Information and Communication Technology
Knowledge infrastructure building and application technology for big data

Life Innovation
Fulfill unmet needs with medical innovation



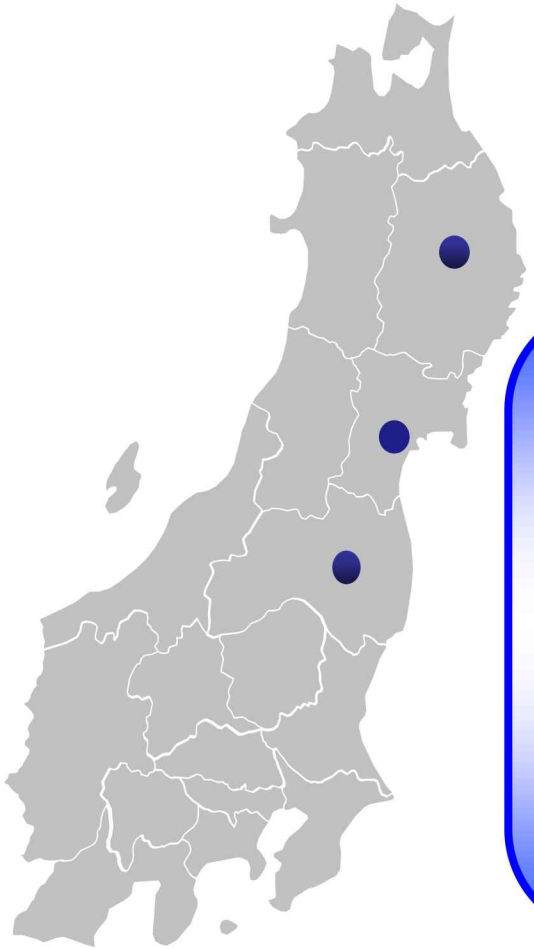
Nanotechnology / Materials
Solve Social Problems through Realization of Nanosystems

Science and Technology for Society and Social Infrastructure
Reconstruction of resilient society

Promoting Tohoku Reconstruction
Manufacturing industry, fishing industry, radiation, and disaster prevention

Contents

-Opening of JST Center for Revitalization Promotion



April 1, 2012
Center for Revitalization Promotion opened
Located in three cities in the disaster area (Morioka, Sendai and Koriyama) in order to provide supports tailored to the local needs.

-Actions
Activities for recovery and rebirth

FY 2012	2013	2014	2015	2016

復興促進プログラム

Program for revitalization promotion

Enhance R&D activities in the disaster area, by supporting companies to commercialize universities' innovative technologies.

放射線計測・分析技術・機器の開発

Developing technologies/devices to measure/analyze radiation

Development of the devices/systems to measure/analyze the dose and density of the radiation in food and soil, for prompt and reliable use in the disaster areas. 14 projects were selected.

革新的エネルギー研究開発拠点形成事業（受託事業）

Establishing an R&D center for innovative energy (commissioned project)

MEXT and METI collaborate to establish the globally-advanced center for research and development of sustainable energy. JST is commissioned to research and develop innovative super-high-efficient solar cells.

東北メディカルメガバンク（支援業務を実施）

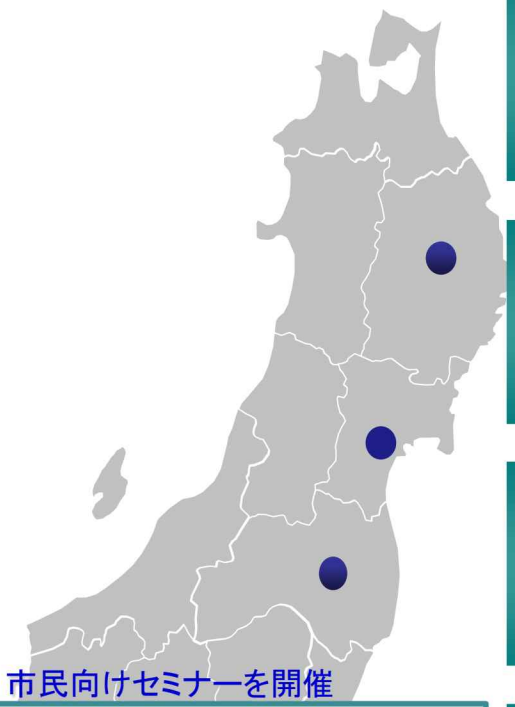
(Providing a support to) Tohoku Medical Megabank

Aims to deliver the next-generation medical service from Tohoku region, conducts health survey on the residents in the disaster areas, and establishes a large scale biobank in collaboration with the medical information network.

東北発素材技術先導プロジェクト（支援業務を実施）

(Providing a support to) Tohoku-based materials technology project

Establishes an Industry-Academia-Government collaborative nanotechnological R&D base in the area of nanotechnology-materials, which the universities and manufacturers in Tohoku are strong at, to boost the development of the materials industry in the region.



市民向けセミナーを開催

Public seminars in collaboration with the Japan Radiation Research Society

Approx. 10 seminars are scheduled for FY 2012

Urgent Support for Researches Discontinued by the Disaster

■ **Research Seeds Quest Program (RESQ)**

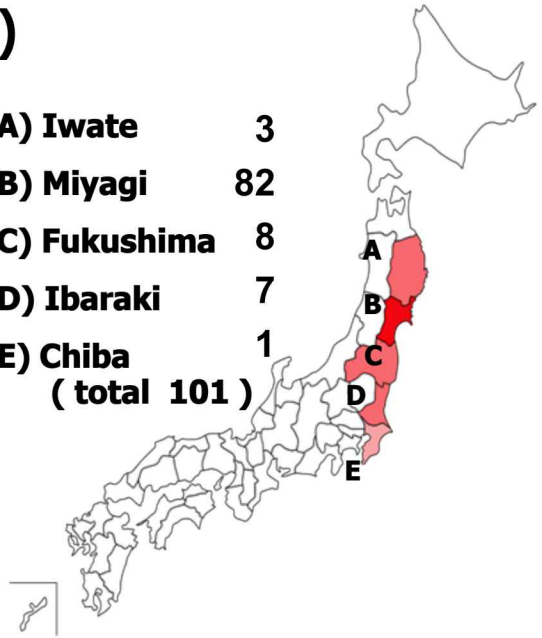
June 24: 101 projects selected

(78 selected projects from Tohoku University)

JST have funded for:

- Repairing or Purchasing new equipment and reagents in order to start research activities again as soon as possible
- Cost for temporary use or rent of experimental equipment outside of the laboratories
- Additional cost for change of experiment plans

A) Iwate	3
B) Miyagi	82
C) Fukushima	8
D) Ibaraki	7
E) Chiba	1
(total	101)



Support for Social Application

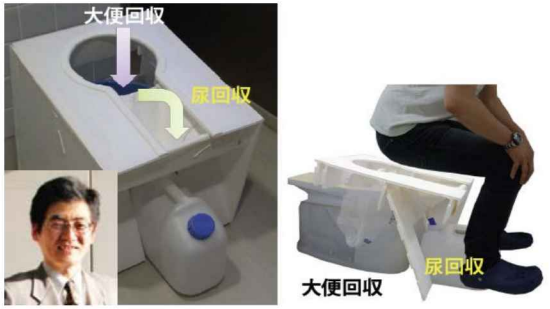
Wooden Comfortable Temporary Housing
(Fukushima Pref.)
Associate Prof. Fuminori TANBA, Fukushima University

Determination of heavy-metal pollution caused by Tsunami
(Miyagi Pref.)
Prof. Noriyoshi TSUCHIYA, Tohoku University

Decontamination technique using rapeseed
(Miyagi Pref.) Prof. Yutaka NAKAI, Tohoku University

Fatigue measurement for prevention of disease
(Kesennuma City, Miyagi Pref.)
Prof. Toshiko YOSHIDA, Miyagi Universit

Water quality improvement using micro-bubble method
(Ofunato City, Iwate Pref.)
Prof. Hirofumi OHNARI, Tokuyama College of Technology



Splitting portable toilet
(Minami Sanriku-cho, Miyagi Pref.)
Prof. Yoshihisa SHIMIZU, Kyoto University

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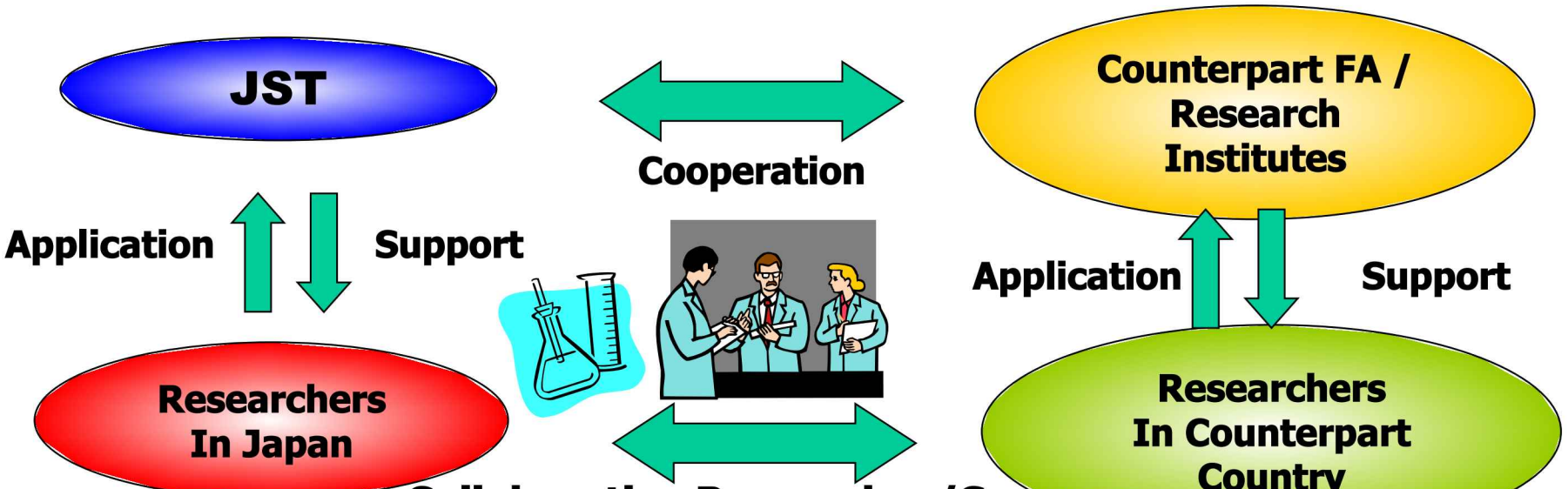
1. Outline of JST
2. Urgent Funding for Affected Areas by JST
3. Overview of J-RAPID

Urgent Funding for International Collaborative Research

■**J-Rapid Program:**

responds to immediate needs for
international collaborative research/survey
that arise from unanticipated situations



Urgent Funding for International Collaborative Research

J-Rapid Program:

In the Case of Great East Japan Earthquake

JST opened the call for proposals immediately after The Great East Japan Earthquake

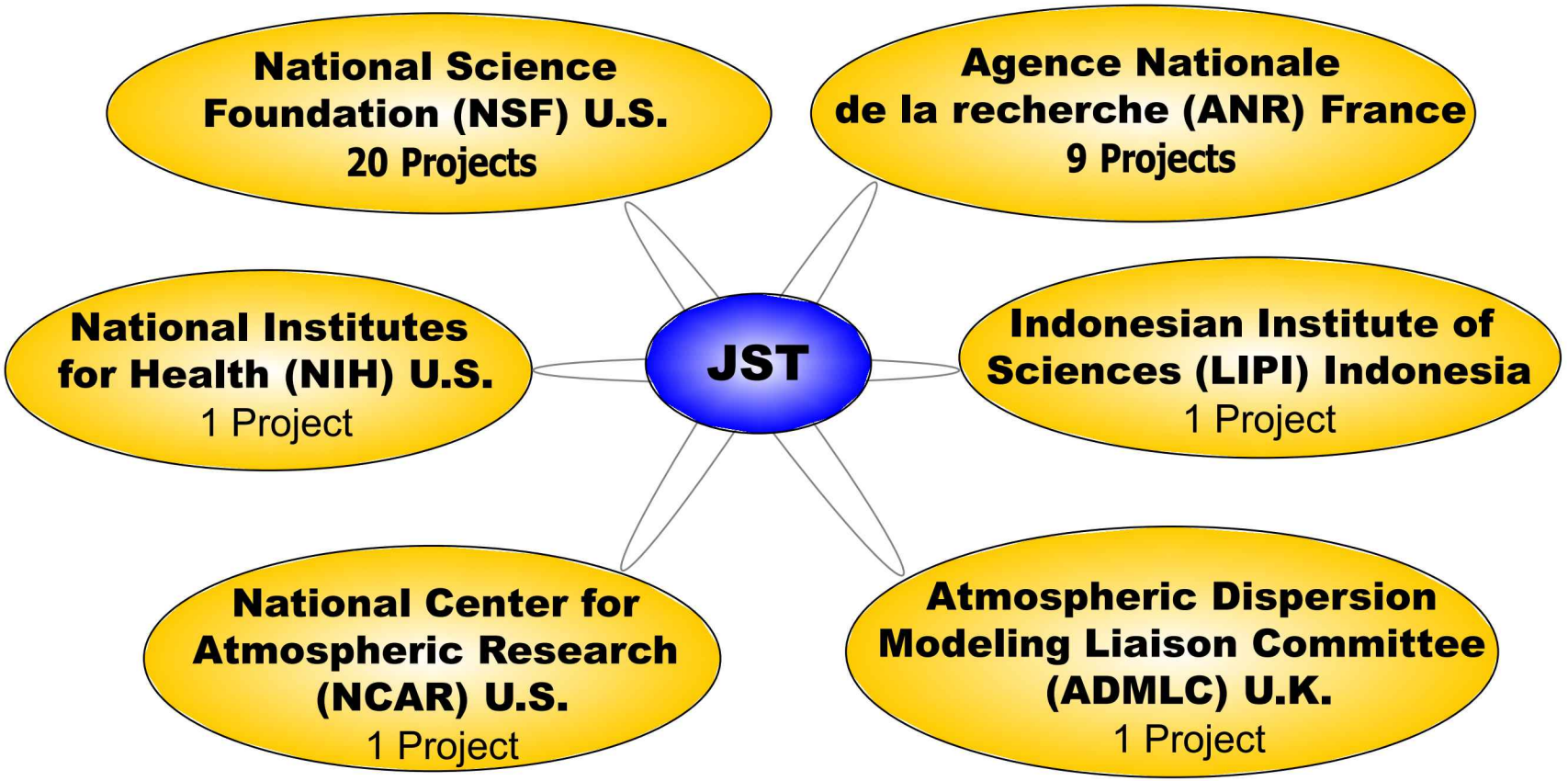
Started the call for proposals on April 18, 2011

Average grant amount : Yen 3 – 5 Million (US$ 33K-55K)

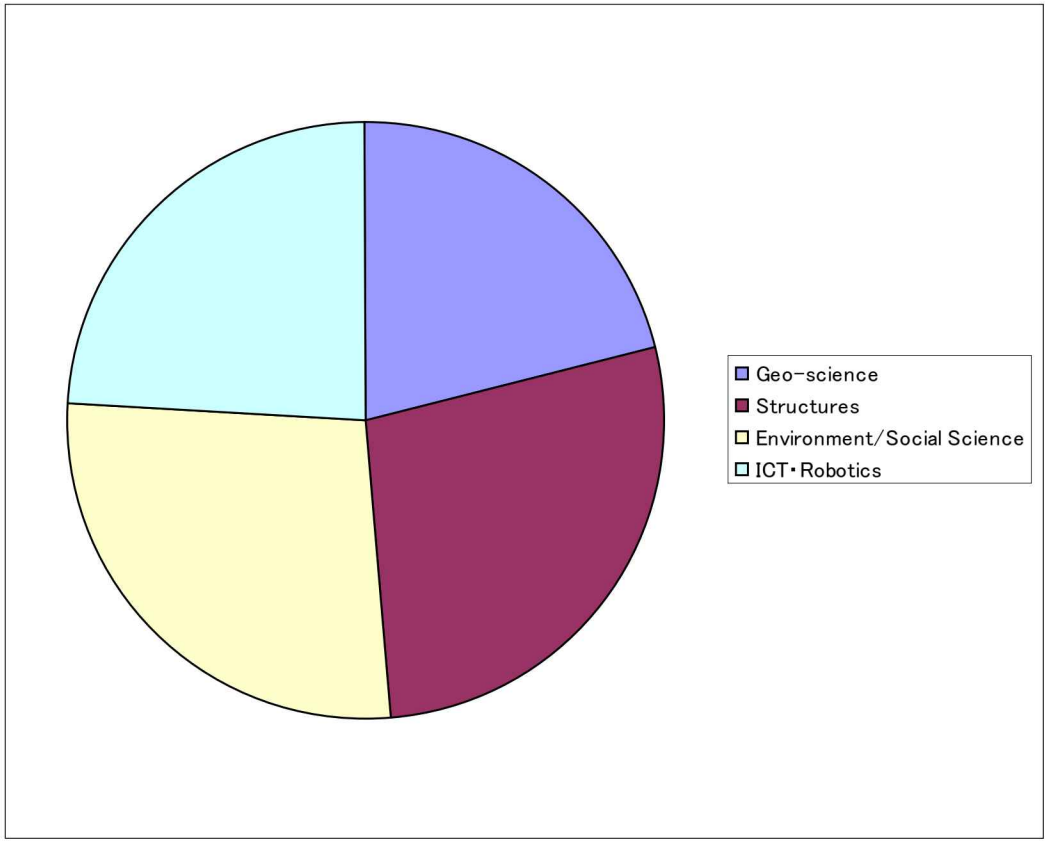
Urgent Funding for International Collaborative Research

Counterpart Funding Agencies/Research Institutes of J-RAPID Program

In the Case of Great East Japan Earthquake



Urgent Funding for International Collaborative Research - Breakdown of research areas



Geo-science	7
Structures	9
Environment /Social Science	9
ICT・Robotics	8

Urgent Funding for International Collaborative Research

液状化被害調査
a. 液状化による道路の陥没
b.浮き上がったマンホール】

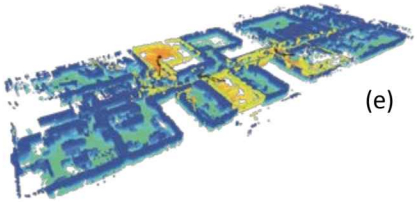
(a)

(b)

ロボット探査c. 探査対象の東北大学の被災建物、
d.日米のロボットによる探査、e. 探査エリアの地図の一例

(c)

(d)



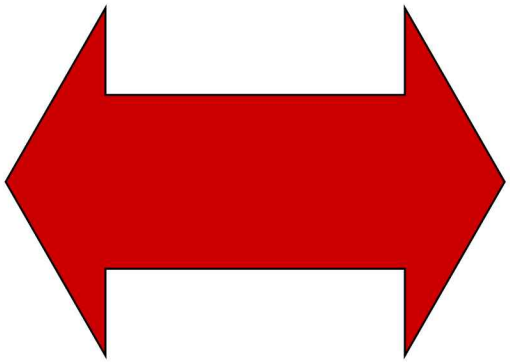
(e)

Urgent Funding for International Collaborative Research - Thailand

Counterpart Funding Agencies/Research Institutes of J-RAPID Program

In the Case of Thai Flood in 2011

JST



NSTDA

NSTDA
(National Science and Technology Development Agency, Thailand)

Duration: 12 months
Funding: Yen 3 MM (approx.)=US$33K
2 Projects

Thank You For Your Attention