

# 平成21年度プログラムオフィサー(PO)セミナー Program Officer Seminar 2009

Transformative Research等のハイリスク研究課題に対するファンディングプログラムの設計とマネジメントについて  
How to design and to manage high risk and high impact funding program such as Transformative Research Funding

## セミナー開催の経緯と各講演の概略・背景 Background of the Seminar

2009年9月16日 科学技術振興機構

主監(プログラムディレクター) 高橋 宏

September 16, 2009 Japan Science and Technology Agency  
Program Director, Hiroshi Takahashi (Ph.D.)

## 本日のPOセミナーの位置づけ

- ✓ 本日のPOセミナーは、内閣府、文部科学省、日本学術振興会、新エネルギー・産業技術総合開発機構、との共催で開催させて頂いております。
- ✓ また、厚生労働省、経済産業省、情報通信研究機構、国際交流基金日米センター、医薬基盤研究所、農業・食品産業技術総合研究機構、鉄道建設・運輸施設整備支援機構、国際環境研究協会、のご後援を頂いております。

**Sponsors and co-host organizations of the PO Seminar are listed.**

# プログラムオフィサー(PO)セミナー開催経緯(1)

## Background of the Seminar (1)

2004---CSTPによるPD・PO制度の導入決定

2004---CSTP decided to introduce PD/PO system into Japan

### ➤これまでのPOセミナー Past PO Seminar in Japan

1.2004.9.21---米NSF(3人)、英Research Council(1人)の4人のPO講演

3 POs from NSF and a PO from UK-RC introduced their PO system

2.2005.1.20---独(DFG: Deutsche Forschungs Gemeinschaft)とNIHのPO講演、  
及びNIHでの日本人PO研修生3人の報告など

2 POs from DFG and NIH introduced their PO system and

3 Japanese PO trainees reported their training experience at NIH

3.2005.3.1 ---加(NSERC: Natural Science and Engineering Research Council)、  
豪(ARC: Australian Research Council)のPO講演、  
政策科学研究所の報告など

2 POs from Canada-NSERC and Australia-RC introduced their PO  
system and The Institute for Policy Science its research result on  
world research funding

## プログラムオフィサー(PO)セミナー開催経緯(1) Background of the Seminar (2)

4. 2006.3.14---NSF,NIH,USDA調査報告、NEDOのPO制度、JSTのPO制度  
調査研究報告など  
Investigation report on NSF, NIH and USDA funding by JST staffs,  
and introduction of NEDO's PO system, etc.
5. 2006.10.31---「テーマ:我が国に最適なPO制度を求めて」:海外PO制度調  
査報告、JSPSのPO制度、MEXT調査報告など  
Investigation report on PO system of DFG, Switzerland, Holland  
and Denmark, and introduction of JSPS's PO system etc.
6. 2007.3.1-----「テーマ:研究開発評価とPOの役割」:内閣府、JST、NEDO、  
産総研の研究開発評価活動の紹介など  
Introduction PO's role in Research Evaluation at CSTP,JST, NEDO  
and AIST, etc
7. 2007.6.27----「テーマ:競争的資金の会計的マネジメントとPOの役割」  
RA (Research Administrator) 's role at USA Univ. in terms of fund  
accounting management
8. 2008.2.22 ----「大学と競争的資金配分機関が協力して競争的資金を使い  
易くする活動の枠組みについて」  
FDP (Federal Demonstration Partnership) 's achievement in  
USA to let funding effective

**第9回 POセミナー 2009年9月16日**  
**9th PO Seminar 2009.09.16**

**Transformative Research等のハイリスク研究課題に対するファンディングプログラムの設計とマネジメントについて**  
**How to design and to manage high risk and high impact funding program such as Transformative Research Funding**

**“Transformative Research” とは何か、  
何故、この概念が出てきたのか**  
**What is “Transformative Research”?**  
**Why it has come?**

## Transformative research概念の経緯

### How the “Transformative research” introduced ?

1999、2000、2003、2004、2006にTransformative researchが言及されている。  
“Transformative research” was mentioned in 1999, 2000, 2003, 2004, 2006.

#### 1. “Transformative research”に関する最初の公式文書

発表者：国家科学審議会 (NSB: National Science Board)

発表年：2005年12月28日

発表文書：“NSB 2020 Vision for the NSF” 文書番号：NSB-05-142

First official announcement of “Transformative research” by NSB in 2005 in the “2020 Vision for the NSF”

#### 2. “Transformative research”に関する2度目の公式文書

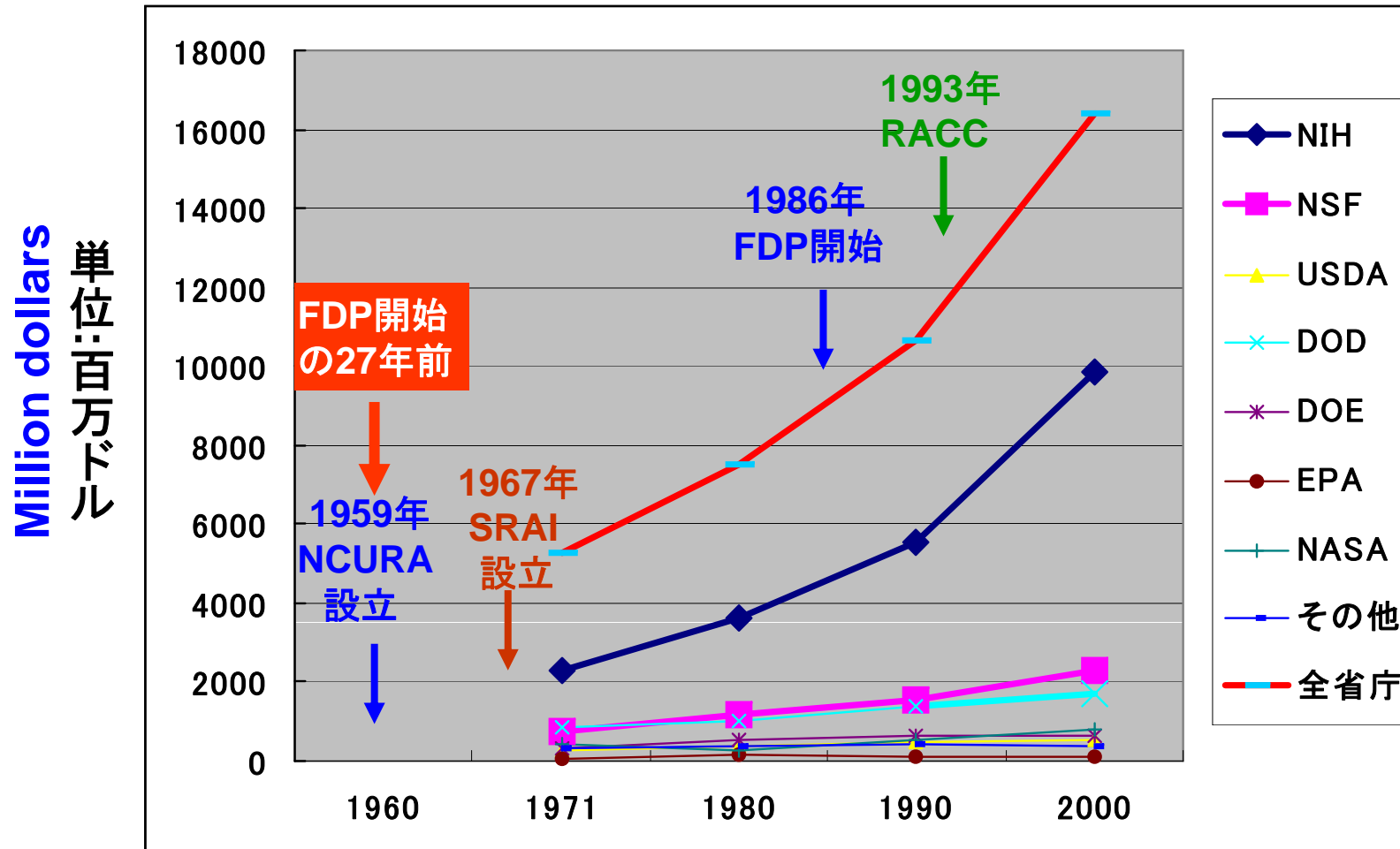
発表者：NSB 発表年：2007年5月7日 文書番号：NSB-07-32

文書タイトル：“NSFにおけるトランスフォーマティブリサーチ支援の促進”

特長：定義を明確化し、導入の具体的道筋を明示

Second official announcement of “Transformative research” by NSB on 7<sup>th</sup> May 2007 defining “Transformative research” clearly in the “Enhancing Support of Transformative research at the NSF”

米国の競争的資金増加推移とFDPの開始時期およびNCURA、SRAI、RACCの設立時期  
 Competitive research fund has increased dramatically after around 1970 in USA



**NCURA** (National Council of University Research Administrations) : 大学において研究を理解し競争的資金の事務を担当する専門職の団体で教育・育成機能も有する。

**SRAI** (Society of Research Administrators International) : 大学において研究を理解し専門事務を担当する専門職の団体で教育・育成機能も有する。

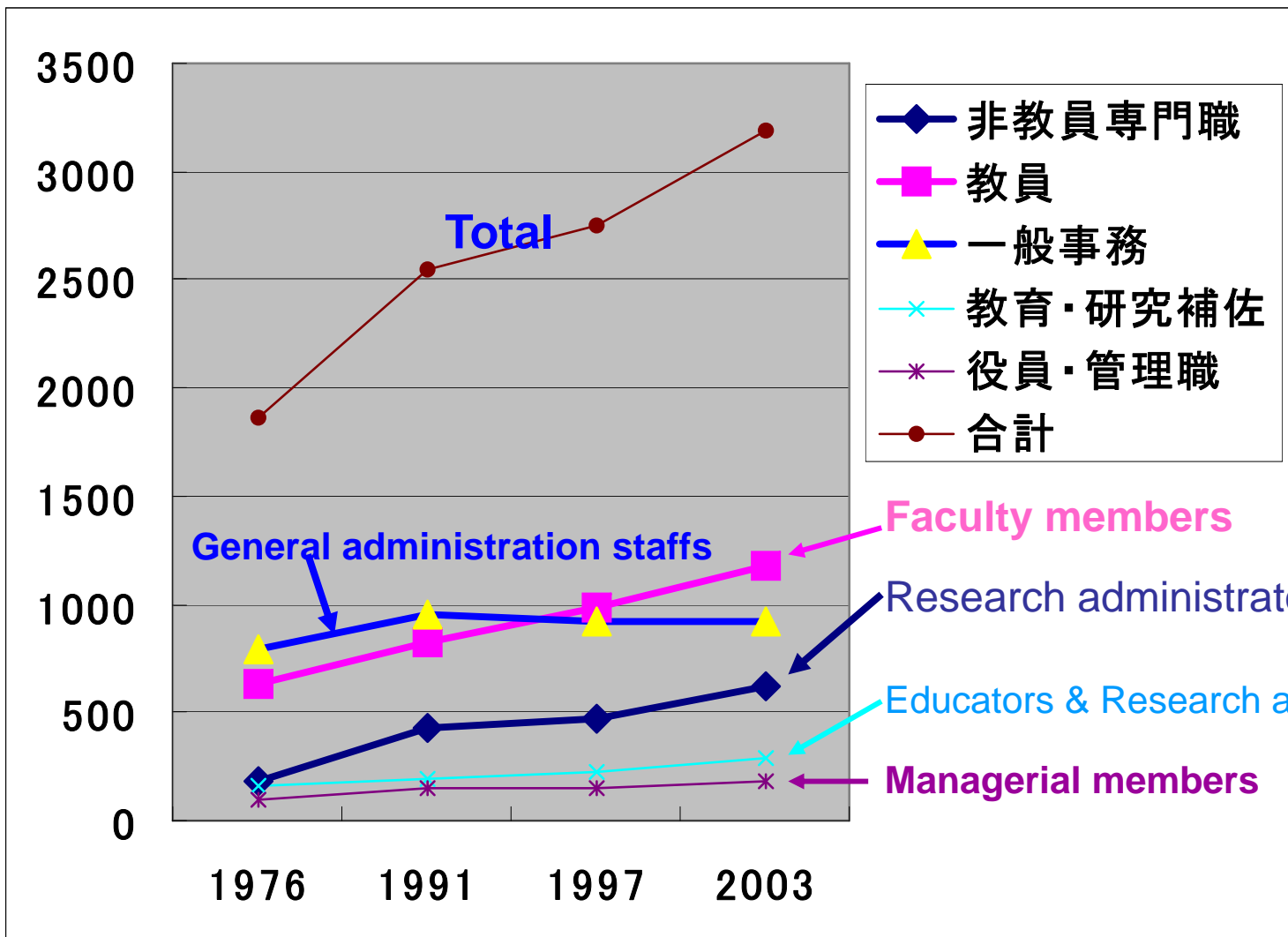
**RACC** (Research Administrator Certification Council) : RA資格認定機関

# 米国の大学構成員の数の推移

## Increased university staffs after around 1970

(×千人)

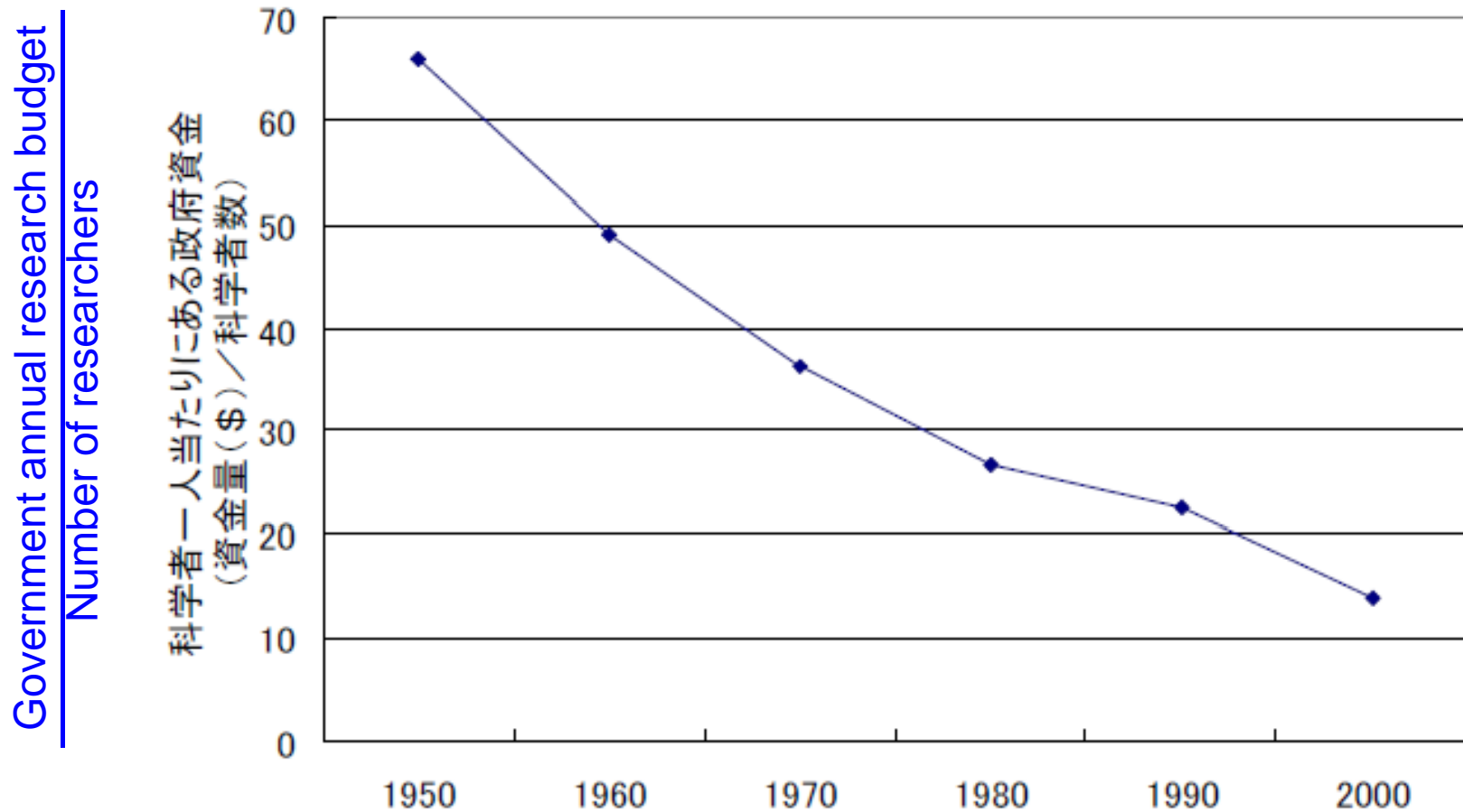
x thousands



出展: 李京柱、アメリカの研究大学における「外部資金支援研究のマネジメント能力」の発展  
 2007年7月6日のデータに基づいてグラフを作成

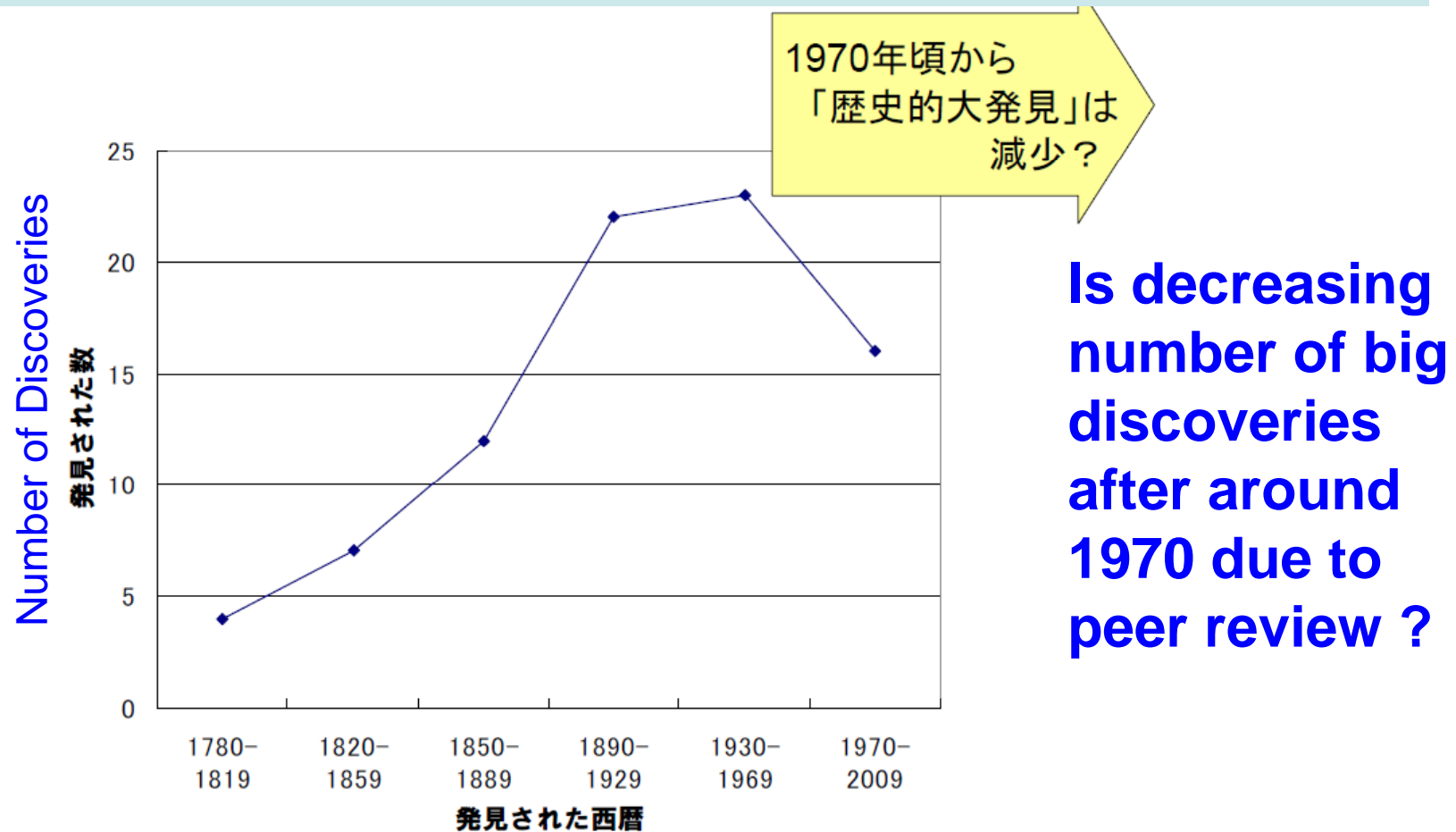


平均値としての米国の科学者一人当たりの政府資金額の推移  
government supported average annual research budget per a researcher  
in USA



参考:小野貴之、奥和田久美、研究技術計画学会 2008.10 2A05  
The Japan Society for Science Policy and Research Management, Annual Meeting

# Science Channel 発表の歴史的な大発見トップ100における時系列変化 Top 100 Discoveries Distribution



The Science Channel 発表の歴史的な大発見トップ100における時系列変化

データ出典: Discovery Channel, The Science Channel “Top 100 Discoveries”

参考: 小野貴之、奥和田久美、研究技術計画学会 2008.10 2A05

The Japan Society for Science Policy and Research Management, Annual Meeting

## When and how was the word of “Transformative research” born?

「トランスフォーマティブリサーチ (TR)」という言葉の誕生

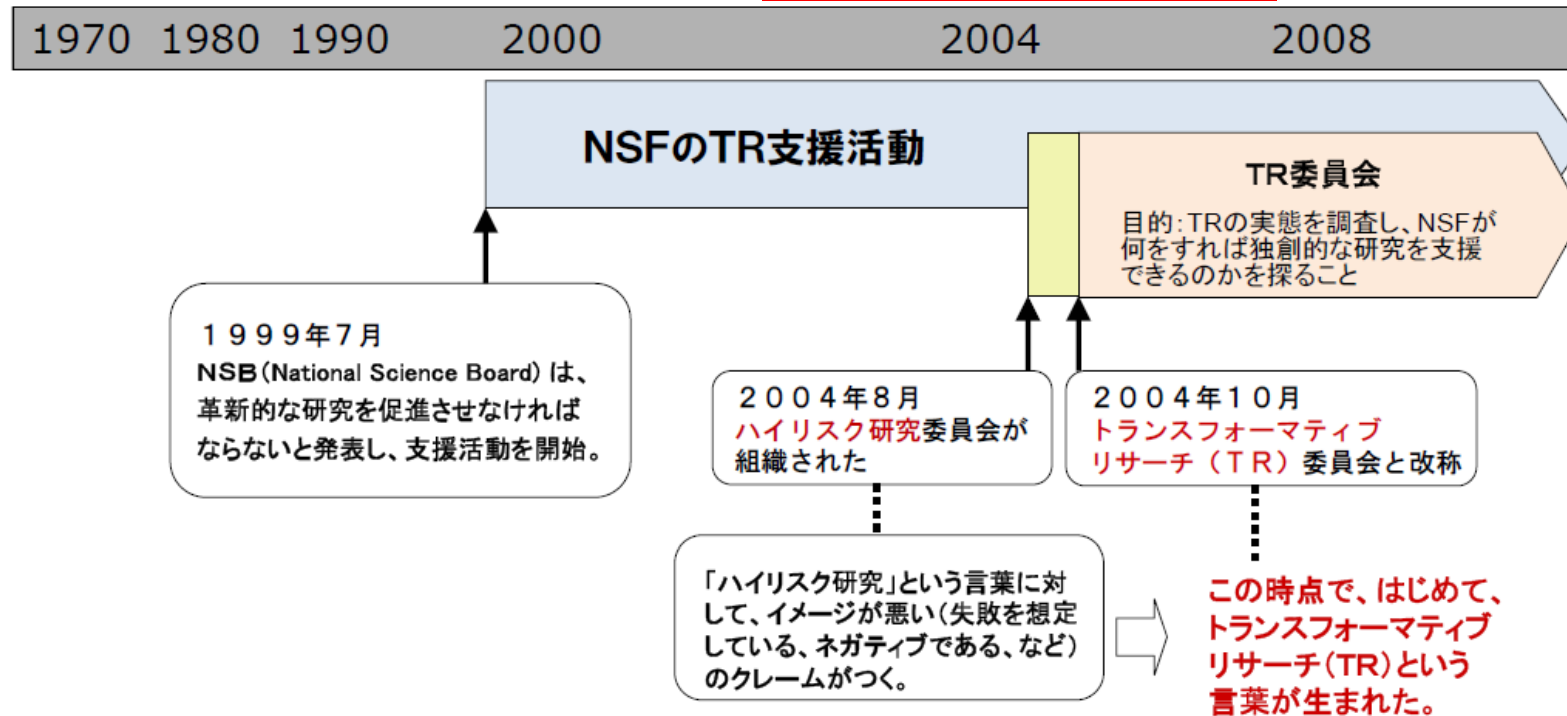
— NSFにTR委員会が設けられた経緯 —

1970年～  
ピアレビューの導入

1999年頃  
ピアレビューと、画期的な研究成果の  
激減との間に、なんらかの相関関係が  
あるとの議論が起こる。

✓In 2004, an *ad hoc* Task Group on  
*High-Risk Research* was formed.

✓In December 2004, the National Science  
Board established a Task Force on  
Transformative research.



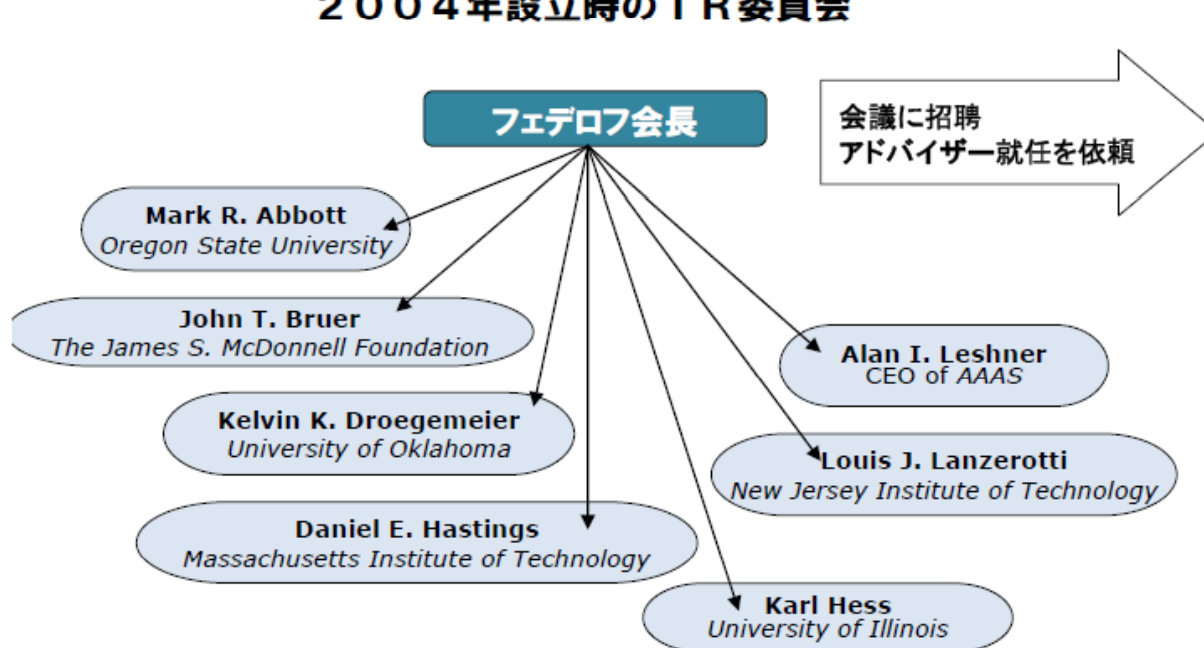
参考: 小野貴之、奥和田久美、研究技術計画学会 2008.10 2A05

The Japan Society for Science Policy and Research Management, Annual Meeting

Dr. D. W. Braben's strong contribution on the “transformative research argument.”  
“Pioneering Research: A Risk Worth Taking”, Wiley-Interscience (1980s) (2004)

＜TR委員会の歴史認識・コンセプト作りにおいて、  
極めて大きな影響を与えている1人の英国科学者がいる。＞

2004年設立時のTR委員会



Dr. D. プレーベン



- 英国人
- 1980年代に、「社会に変革を与える研究の減少」に言及。
- その著作は、全英の出版界で出版拒否（理由：あまりに過激）
- 2004年に米国でやっと出版

Donald W. Braben,  
“Pioneering Research: A Risk Worth Taking”,  
Wiley-Interscience (2004)

参考:小野貴之、奥和田久美、研究技術計画学会 2008.10 2A05

The Japan Society for Science Policy and Research Management, Annual Meeting

## Transformative Researchとは

### Definition of Transformative Research

2007年5月7日、国家科学委員会(NSB)報告書 NSB-07-32

”NSFにおけるトランスフォーマティブリサーチ支援の促進”における定義：  
「重要な科学的あるいは工学的概念に関する我々の理解を根本的に変え、  
新たなパラダイム、あるいは科学や工学の新分野の創出を先導するようなア  
イデアに基づく研究で、新たなフロンティアを目指す現在の理解や筋道に挑  
戦することを特徴とする。」

**May 7, 2007 ”Enhancing Support of Transformative Research at the NSF” was published by National Science Board: NSB-07-32**

**Transformative research is defined as research driven by ideas that have the potential to radically change our understanding of an important existing scientific or engineering concept or leading to the creation of a new paradigm or field of science or engineering. Such research also is characterized by its challenge to current understanding or its pathway to new frontiers.]**

The term also appears to be used synonymously with other terms, including “innovative”, “high risk”, and “bold”.

## 前記報告書(2007)の要点(1) Key points of the report (2007)(1)

科学を前進させる基本的な二つの方法---両者はいづれも重要。

1. **Innovative research:**現在行われている大部分の研究で、過去の成果に基づく新たな成果が時間を経てパラダイムを形成。

---この研究に対してはピアレビューは、黄金の方法。

2. **Transformative research:** 過激なアプローチや解釈が、時として、科学を劇的に前進させ、新たなパラダイムや学術分野を形成することがある。

---この種の研究はピアレビューでは評価されず、採択されない傾向がある。

**Science progresses in two fundamental and equally valuable ways.**

1. **Innovative research:** The vast majority of scientific understanding advances and extends prevailing paradigms over time incrementally, with new projects building upon the results of previous studies or testing long-standing hypotheses and theories.

---Peer review is golden way to select awardees of this type of research proposals.

2. **Transformative research:** Less frequently, scientific understanding advances dramatically, through the application of radically different approaches or interpretations that result in the creation of new paradigms or new scientific fields.

---Peer review tends to decline this type of research proposals.

## 前記報告書(2007)の要点(2) Key points of the report (2007) (2)

- ✓ Transformative research のファンディングには、従来の peer review に代わる方法が必要。新たにどのような審査方法を設計すれば良いのか。  
それは、またどのようにマネジメントすれば良いのか。
- ✓ 即ち、PO は新たな業務に挑戦することが求められている。新たな業務には新たな能力が要求される。新たな能力は如何にして修得すれば良いのか。
- ✓ **New type of review process and management is necessarily for transformative research funding. How to design it ? And how to manage it?**
- ✓ **Then, POs are expected to challenge new type of responsibility, which requires new type of capability. How can POs obtain such capability?**



## Transformative research が議論されるようになった背景 Background of the discussion of transformative research

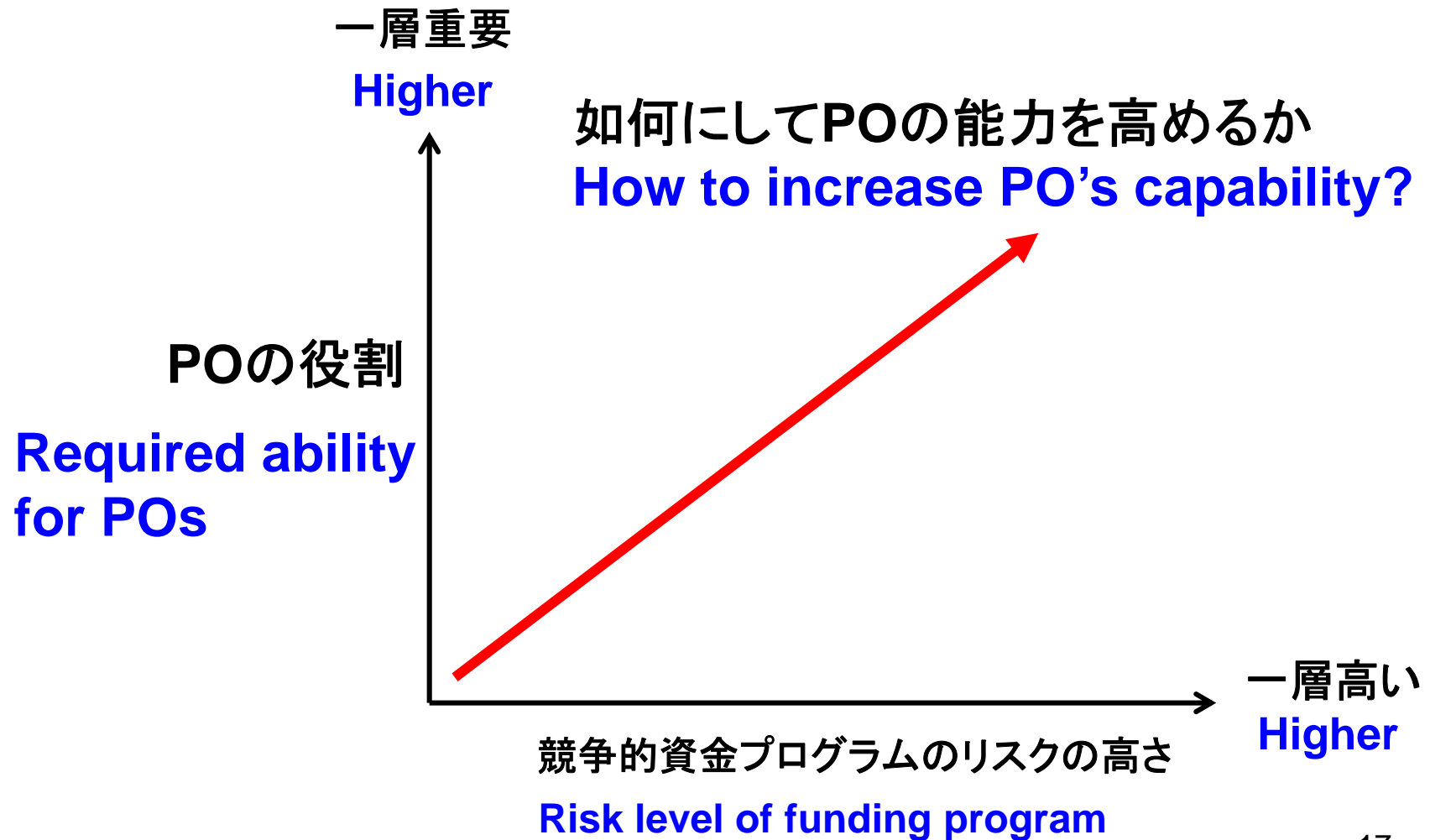
ファンディングはある意味で、不平等な研究資金であり、かつ税金に基づく活動である。それだけに公平性、透明性、民主主義が厳しく求められ、ピアレビューによる審査が最適とされている。しかし、ピアレビューは実績主義的側面があり、確実に目先の成果の得られる研究提案を採択する傾向があり、挑戦的、革新的研究提案は、採択され難い傾向があるとの指摘がある。一方、挑戦的、革新的研究こそが、イノベーションを起こし、人類に恩恵をもたらす、との指摘がある。

**Funding is unequal research budget in a certain sense, and an activity to use tax. Therefore, it requires fairness, transparency and democracy, and peer review is considered to be the best way to manage the subjects.**

**However, since peer review is based on performance-based evaluation, it is pointed out to tends to conservative. As the result, it is pointed out to tends to award research proposals which create short-term gain only, instead of challenging and innovative research results.**

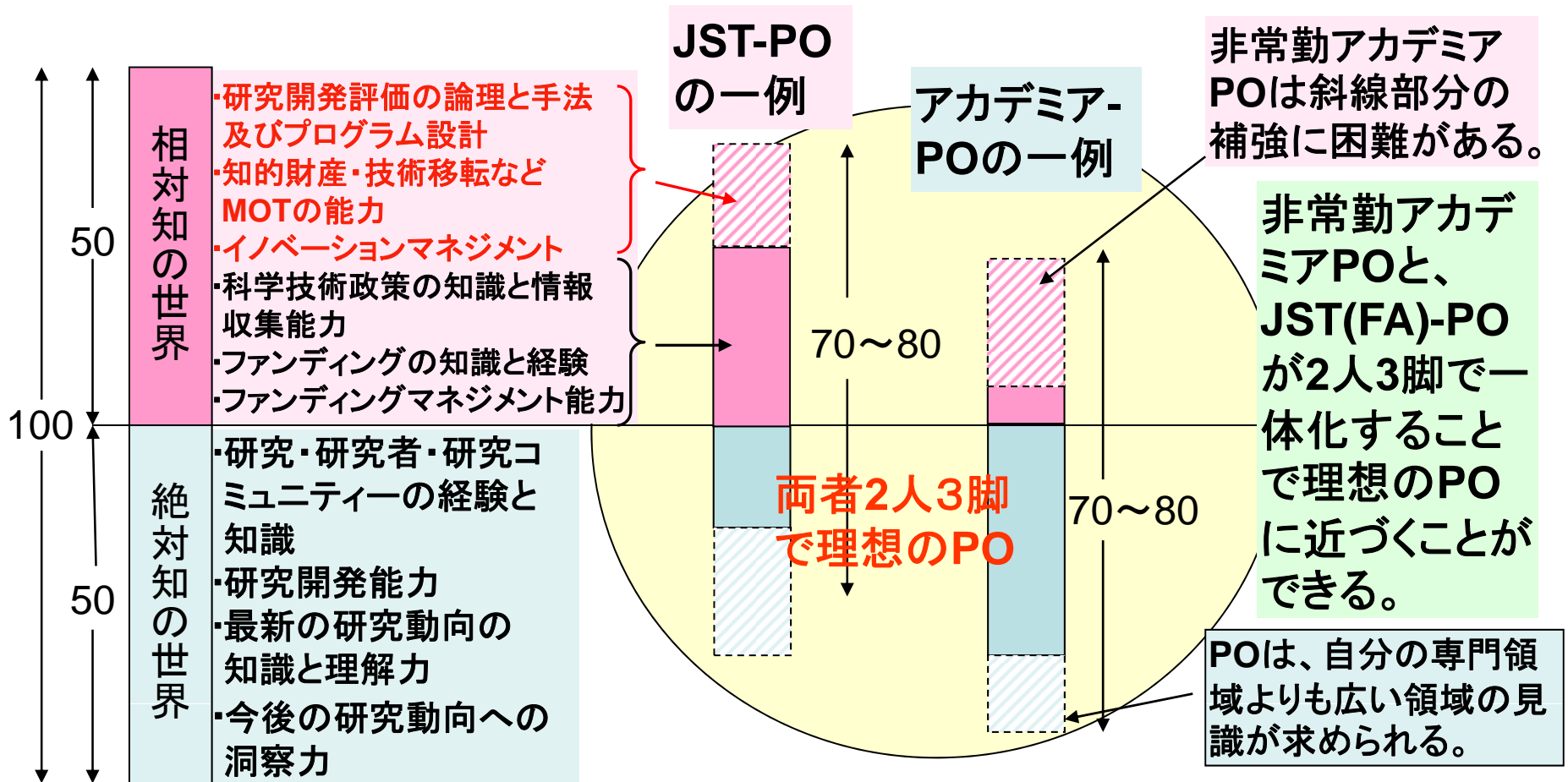


イノベーションにつながるトランスフォーマティブ研究へのファンディングが  
求められている – POには従来以上に高度な能力が求められている –  
PO is required to hold higher capability to manage transformative  
research funding to achieve innovation



# POに必要な資質とPO育成の考え方

(非常勤アカデミアPOは、上半分の能力がほとんど補強されない。  
特に研究開発評価に関する研究は欧州が進んでいて専門領域を形成している)

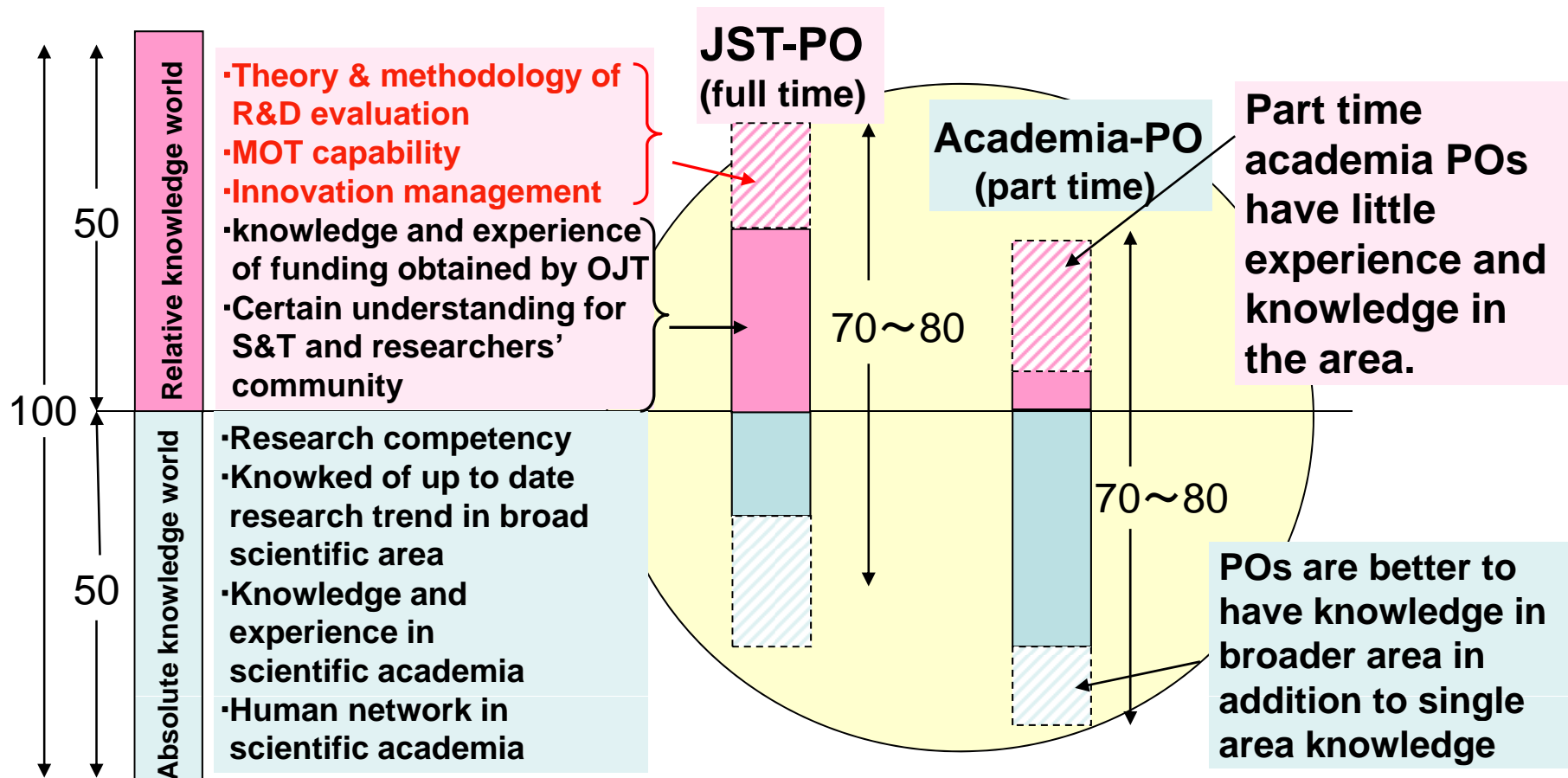


個人として100点満点の理想のPOの実現は困難

実線部分は現在の能力。斜線部分は、POとなるために新たに修得すべき能力。特に近年、研究開発評価の論理と手法やプログラム設計、イノベーションマネジメントは高度化している。

# How to realize perfect R&D evaluation staffs (POs)

(In Japan most of POs from academia work in part time and lack upper half abilities such as theory & methodology of R&D evaluation.)



It is hard to have perfect PO's ability for a single person.

\*Solid parts show current ability. Shaded parts should be added to be a certified PO.

\*Almost perfect PO will be realized by collaboration of two types of POs.

# JSTにおけるPO研修制度

## PO training program at JST

科学技術は、未知への挑戦。その科学技術のマネジメントに従事するPOには、絶えず新たな課題が要求される。

この課題に応えるため、JSTでは3年前よりPO研修制度を開始。これは、JSTの職場内大学院。ファンディングに係わる業務をテーマとして研究し、論文を作成。JST-PO資格を認定する。研究成果の一端を本日紹介。

**The purpose of science & technology is to challenge to the unknown. Then, PO, who faces always new challenging subjects, is always required advanced capability.**

**In order to level-up PO's capability, JST has started three years ago "PO training program", which is a kind of internal graduate course within JST . Trainees are required to issue an academic article by investigation of interesting subject of funding.**

**One of those research subjects will be introduced today.**

## 本日のPOセミナーの主題

### The subject today

イノベーションを実現するために、公平性、透明性、を実現しつつ、トランスフォーマティブリサーチのような、挑戦的、革新的研究提案を採択するには、どのようにファンディングプログラムを設計し、審査方法を設計すれば良いのか、そして研究成果を生み出すためにどのようにマネジメントすれば良いのか。

**In order to realize innovation, how to design funding programs and review process to award challenging and innovative research proposals like transformative research, keeping fairness and transparency? And how to manage it?**

# 本日のPOセミナーのプログラム構成と講演者の紹介(1)

## Introduction of the program of the seminar and speakers(1)

### ➤「開会の挨拶」

本庶 佑(総合科学技術会議議員)

“Opening remarks”

Dr. Tasuku Hojo, *Member of Council of Science and Technology Policy*

*(CSTP)*

### ➤「本日のPOセミナーの背景説明と講演者紹介」

高橋 宏 (プログラム主監、総務部、科学技術振興機構)

“Background of the seminar and introduction of speakers”.

Dr. Hiroshi Takahashi, *Program Director, Dept. General Affairs,*

*Japan Science and Technology Agency (JST)*

### ➤昼休み (Lunch brake)

### ➤R&D managements in JST-ERATO program: toward the facilitation of a transformative research

古川雅士(科学技術振興機構、研究プロジェクト推進部 JST-PO認定者)

Dr. Masashi Furukawa, *JST-PO, Dept. Research Project, Innovation*

*Headquarters, Japan Science and Technology Agency (JST)*

## 本日のPOセミナーのプログラム構成と講演者の紹介(2)

### Introduction of the program of the seminar and speakers(2)

- “Funding potentially transformative research at the National Science Foundation”  
Dr. Clifford J. Gabriel, *Acting Executive Officer,*  
*National Science Foundation (NSF)*
- “Program design and management for transformative research funding at NIH”  
Dr. Richard S. Fisher, *Associate Director for Science Policy and Legislation,*  
*Director, Office of Program Planning and Analysis, NIH*  
*Roadmap Nanomedicine Initiative, National Eye Institute,*  
*National Institute of Health (NIH)*
- “Program design and management of transformative research funding at DARPA”  
Mr. Richard McCormick, *Special Assistant to the DARPA Director,*  
*Defense Advanced Research Project Agency (DARPA)*
- 閉会 (Closing Remarks)

## PD・POの勤務形態別人数比較

### Number of PD・PO and their working styles

|           | Permanent<br>終身雇用   | Non-permanent<br>非終身雇用               |  |                                      | 合計<br>Sum                           |  |
|-----------|---|--------------------------------------|--|--------------------------------------|-------------------------------------|--|
|           |   | Full time<br>常勤                      |  | Part time<br>非常勤                     |                                     |  |
| All Japan | 終身 (Permanent full time):0,<br>常勤 (Non permanent full time):98,<br>兼任・併任 (Doubled responsibility):196 |                                      |  | 337                                  | 631 <sup>1)</sup>                   |  |
| NSF       | 371 <sup>2)</sup><br>212 <sup>4)</sup>  | Rotator                              |  |                                      | Intermittent                        | 700 <sup>2)</sup><br>~400 <sup>3)</sup><br>438 <sup>4)</sup> |
|           |   | VSEE <sup>5)</sup>                   | IPA <sup>6)</sup>                      | Temporary                            |                                     |  |
|           |   | 34 <sup>2)</sup><br>53 <sup>4)</sup> | 143 <sup>2)</sup><br>129 <sup>4)</sup> | 87 <sup>2)</sup><br>44 <sup>4)</sup> | 65 <sup>2)</sup><br>? <sup>4)</sup> |  |
| NIH       | ~1100 <sup>3)</sup>   | No rotators probably at NIH          |  |                                      | probably zero                       | ~1100 <sup>3)</sup>  |
| DARPA     | ~140 <sup>3)</sup> DARPA's program managers are often changed like rotators.                          |                                      |  | probably zero                        | ~140 <sup>3)</sup>                  |  |

- 1) 平成20年度PD会議資料(PD meeting in 2008) 2) 2004年9月21日POセミナー資料より  
 3) CSTPホームページより(恐らく2002年頃のデータ) 4) 2007 March NSB-07-22  
 5) 6) NSFのVSEE (Visiting Scientist, Engineers & Educators), IPA (Intergovernmental Personnel Act)、TemporaryがRotatorと呼ばれる。  
 NSFのIntermittentがどのような雇用・勤務形態か要確認





## Important Notice No. 130: Transformative Research

National Science Foundation  
Office of the Director  
Arlington, Virginia 22230

**September 24, 2007**

### **IMPORTANT NOTICE TO PRESIDENTS OF UNIVERSITIES AND COLLEGES AND HEADS OF OTHER NATIONAL SCIENCE FOUNDATION AWARDEE ORGANIZATIONS**

#### **Subject: Transformative Research**

At the 399th meeting<sup>1</sup> of the National Science Board (Board), the Board unanimously approved a motion to enhance support of transformative research at the NSF. Additionally, the Board approved a change to the Intellectual Merit Review Criterion specified in Part I of the *NSF Proposal & Award Policies & Procedures Guide: the Grant Proposal Guide*<sup>2</sup> to specifically include review of the extent to which a proposal also suggests and explores potentially transformative concepts. The full text of the newly revised criterion is as follows:

#### **What is the intellectual merit of the proposed activity?**

How important is the proposed activity to advancing knowledge and understanding within its own field or across different fields? How well qualified is the proposer (individual or team) to conduct the project? (If appropriate, the reviewer will comment on the quality of prior work.) To what extent does the proposed activity suggest and explore creative, original, **or potentially transformative** concepts? How well conceived and organized is the proposed activity? Is there sufficient access to resources?

Effective October 1, 2007, the *Grant Proposal Guide*, as well as new funding opportunities issued after that date, will incorporate the revised new Intellectual Merit criterion. Necessary changes also will be made to NSF reviewer systems to incorporate the revised language. All proposals received after January 5, 2008, will be reviewed against the newly revised criterion.

The term "transformative research" is being used to describe a range of endeavors which promise extraordinary outcomes, such as: revolutionizing entire disciplines; creating entirely new fields; or disrupting accepted theories and perspectives — in other words, those endeavors which have the potential to change the way we address challenges in science, engineering, and innovation. Supporting more transformative research is of critical importance in the fast-paced, science and technology-intensive world of the 21st Century.

## 前ページの赤枠の中の記述

### Description in the red square of the previous ppt

Transformative researchという言葉は、画期的な成果、例えば、全ての学問領域を変革するとか、全く新規の分野を創造するとか、既存の理論や予測を覆すような、そういう成果を生み出すための広範な努力を表現する言葉である。言い換えれば、科学・技術・イノベーションを変革しようとしている我々のやり方に変更を迫るような、そういう努力である。

Transformative research を支援することは、急速に科学技術志向を強めつつある21世紀社会にとって極めて重要なことである。

The term “transformative research” is being used to describe a range of endeavors which promise extraordinary outcomes, such as: revolutionizing entire disciplines; creating entirely new fields; or disrupting accepted theories and perspectives- in other words, those endeavors which have the potential to change the way we address challenges in science, engineering, and innovation. Supporting more transformative research is of critical importance in the fast-paced, science and technology-intensive world of the 21<sup>st</sup> Century




search

>> [Advanced Search](#)

[Home](#) > [News & Events](#) > [NIH Radio](#) > [October 2008 Audio Reports](#)

[Email this page](#)

## NIH Radio

### Quick Links

[About NIH Radio](#)

[Archived Audio Reports](#)

[NIH Podcast](#)

## NIH Extends Its Commitment to Transformative Research with \$138 Million for Director's Pioneer and New Innovator Awards in 2008

[Right Click to Download MP3 File](#)

### Brief Description:

Forty-seven scientists have won funding from the National Institutes of Health worth some 138-million dollars over five years.

### Transcript:

**Balintfy:** Forty-seven scientists have won funding from the National Institutes of Health worth some 138-million dollars over five years. While it's not unusual for the NIH to award research grants—more than 80 percent of the NIH's budget goes to fund medical research through almost 50-thousand competitive grants—these recent awards reflect increased support of high-impact research.

**Zerhouni:** The word "pioneer" is a very important word because when you look at science, you have very different ways of doing science.

**Balintfy:** Dr. Elias Zerhouni is the director of the NIH.

**Zerhouni:** So I wanted to send a signal that we needed to really encourage no-boundary blue sky research from the best and brightest and not limit them, you know fund them well, give them five years of freedom and see what happens. So that's what the Pioneer Award is all about.

**Date:** 10/24/2008

**Reporter:** Joe Balintfy

**Sound Bite:** Dr. Elias Zerhouni, NIH Director

**Topic:** pioneer award, new innovator, grant

**Institute(s):**

[NIGMS](#)

[OPASI](#)



## ONGOING RESEARCH PROGRAMS

DARPA programs focus on high-risk research with that will have payoffs that could provide dramatic advances in military capabilities. Each DARPA office manages a large portfolio of programs. Find out more about DARPA's programs by visiting our five technical offices:

- [Defense Sciences Office \(DSO\) Programs](#)
- [Information Processing Techniques Office \(IPTO\) Programs](#)
- [Microsystems Technology Office \(MTO\) Programs](#)
- [Strategic Technology Office \(STO\) Programs](#)
- [Tactical Technology Office \(TTO\) Programs](#)



### MORE INFORMATION

[Visiting DARPA](#)[About DARPA](#)[Newsroom](#)

New to  
DARPA?





## DARPA MISSION

DARPA's mission is to maintain the technological superiority of the U.S. military and prevent technological surprise from harming our national security by sponsoring revolutionary, high-payoff research bridging the gap between fundamental discoveries and their military use.

Over the years, DARPA has responded to issues of national importance with new ideas and technology that have changed the way wars are fought and even changed the way we live. Since the very beginning, DARPA has been the place for people with ideas too crazy, too far out and too risky for most research organizations. DARPA is an organization willing to take a risk on an idea long before it is proven.



### MORE INFORMATION

[History](#)[Strategic Vision](#)[FAQ](#)[Events](#)[Visiting DARPA](#)[DARPA Alumni](#)



# TACTICAL TECHNOLOGY OFFICE



OVERVIEW

PERSONNEL

PROGRAMS

SOLICITATIONS

RELATED SITES

BRIEFINGS

FEEDBACK

SEARCH

site map

privacy &  
security  
notice

## OVERVIEW

### TTO Mission

- The **Tactical Technology Office** engages in high-risk, high-payoff advanced technology development of military systems, emphasizing the "system" and "subsystem" approach to the development of Aerospace Systems and Tactical Multipliers.

### TTO Goals

- Create highly capable systems that enable "order of magnitude" improvement in military capabilities.
- Avoid technological surprise in areas of TTO emphasis.
- Efficiently manage and transition existing programs.

### TTO Strategy

- Understand and address critical deficiencies in crucial mission areas including:
  - Early Engagement
  - Seamless Joint Operations
  - Situational Awareness
  - Global Surveillance
- Develop, demonstrate, and transition advanced technologies and concepts for effective



# DEFENSE SCIENCES OFFICE

[HOME](#)

[PROGRAMS \(A-Z\)](#)



[NEWS & EVENTS](#)

[SEARCH](#)

[STRATEGIC THRUSTS](#)

[PERSONNEL](#)

[SOLICITATIONS](#)

[WORKING WITH DSO](#)

[SITE UPDATES](#)



**IDEAS BEGIN HERE**

The mission for DARPA's Defense Sciences Office (DSO) is to bridge the gap from fundamental science to applications by identifying and pursuing the most promising ideas within the science and engineering research communities, and is committed to transform these ideas into new DoD capabilities.

Montage of Techn

[Privacy & Security Notice](#)



[Archives](#)

[Disclaimer](#)

[Contact](#)

# 第6回イノベーションジャパン(2009)の紹介

## Introduction of 6<sup>th</sup> Innovation Japan (2009)

Transformative research はイノベーション実現に向けた研究活動のひとつ。

イノベーションジャパン2009 大学見本市 9月16ー19日 東京国際フォーラム  
主催: JST、NEDO 共催: 文部科学省、経済産業省、内閣府  
イノベーション創出を目指し、大学の技術シーズと産業界のニーズの出会いを  
目的とした国内最大級のマッチングイベント  
大学のイノベーションシーズ研究のエグジビションと説明会

Transformative research is one of approaches to realize innovation.

6<sup>th</sup> Innovation Japan (2009) is held from 16<sup>th</sup> September through 19<sup>th</sup> September in the hall of next door, arranged by JST and NEDO, supported by MEXT, METI and Cabinet Office, one of biggest events to exhibit and explain universities' research which are potential seeds of innovation, to stakeholders of research results.