



ELSEVIER

圖書館創新服務再加值 Supporting The Research Lifecycle

-廣泛應用電子資源支援學術研究

Using new evaluation tools to promote the value of
libraries for research and researchers

Presented by:

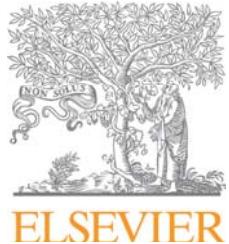
Virginia Chiu 邱嘉慧

Product Sales Manager, Elsevier Taiwan

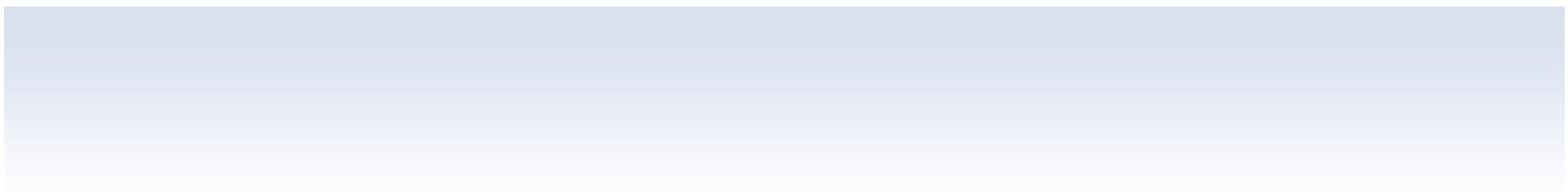
Date: Nov 7th, 2012

Session Outline

- Trends in Publishing
- Lean Research
- Be a Solution Provider



TRENDS IN PUBLISHING



Global Trends that challenge Publishers

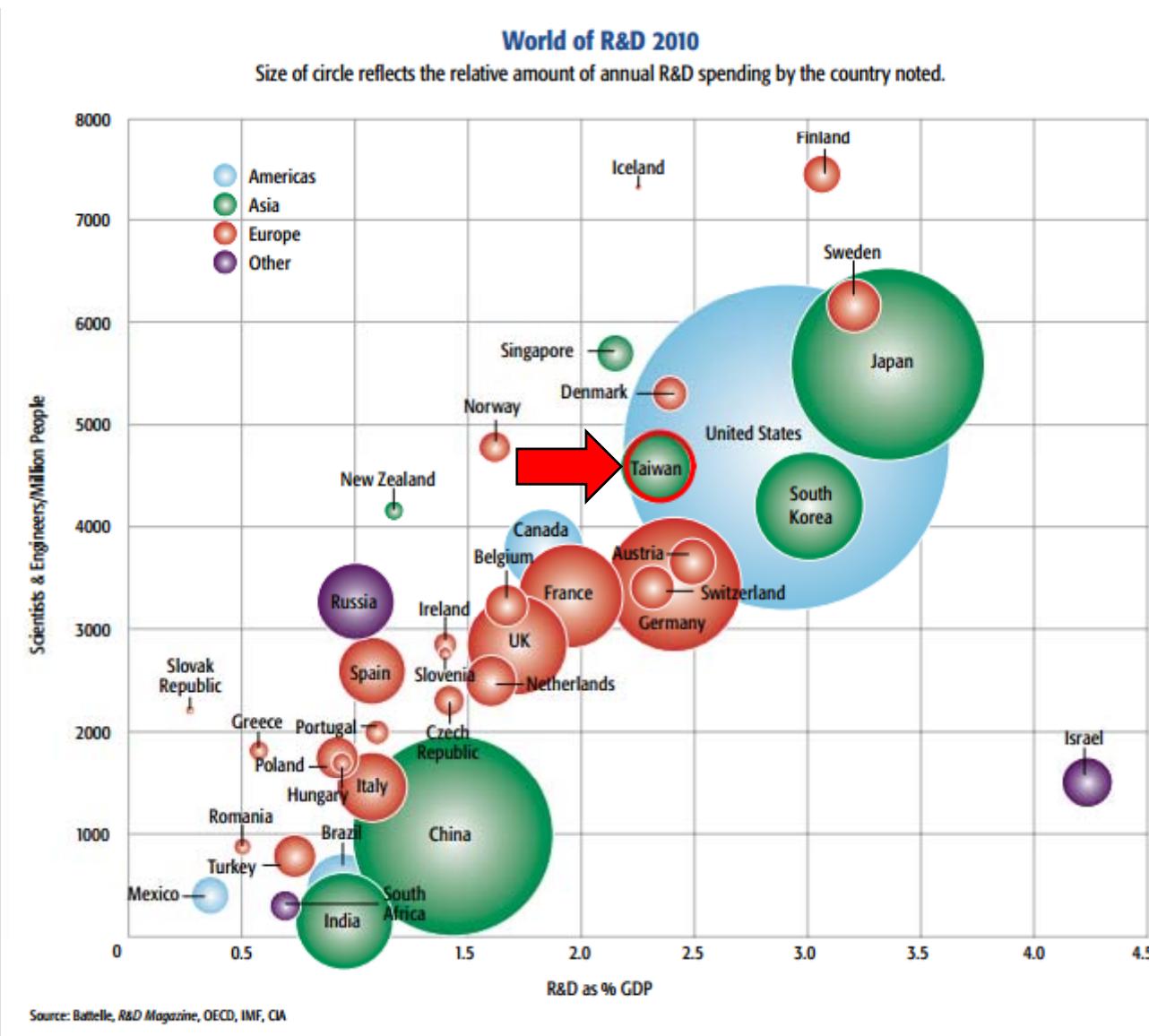
1. The Rapid Impact of Technology
2. The Rise of Specialized and Interdisciplinary Fields of Study
3. The Emerging Global Network of Scientific Research
4. Ensuring Global Access and Dissemination

What do you hear around the globe?

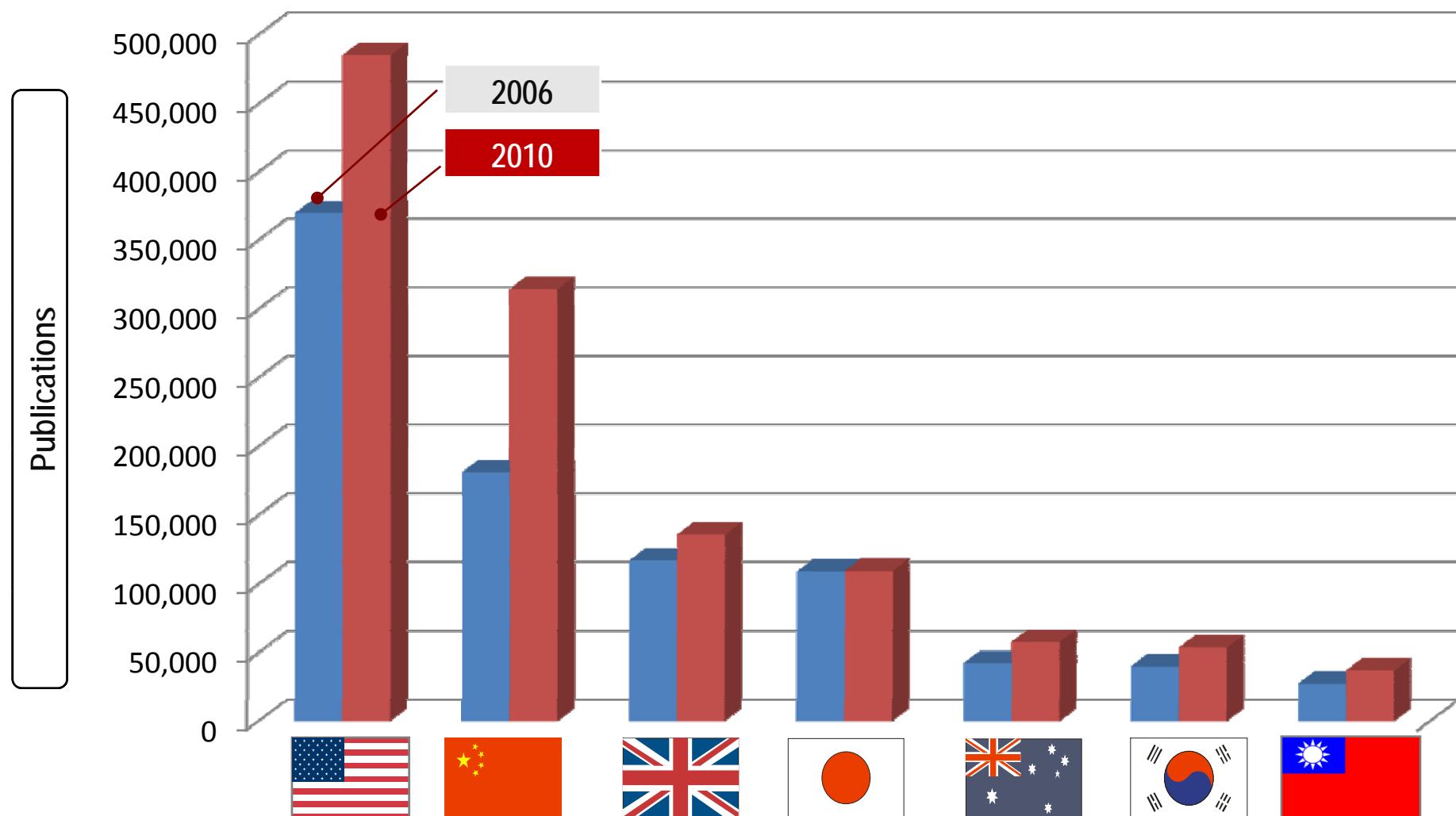
emerging university exposure retain
improve defend increase
funding
centres effectively students
investment measurement make impact
measurement level class ranking industry
output specialization
claim award understand
selecting rate transparent
institutional grants money
facts measurement win
raise selecting institutional
ability difference supporting postgrad
attract disciplinary rate
position **investment** **justify** true better
disciplines **collaborations** phd identify publications
areas focus teams demonstrate
partnerships application alternative **international**
nurture



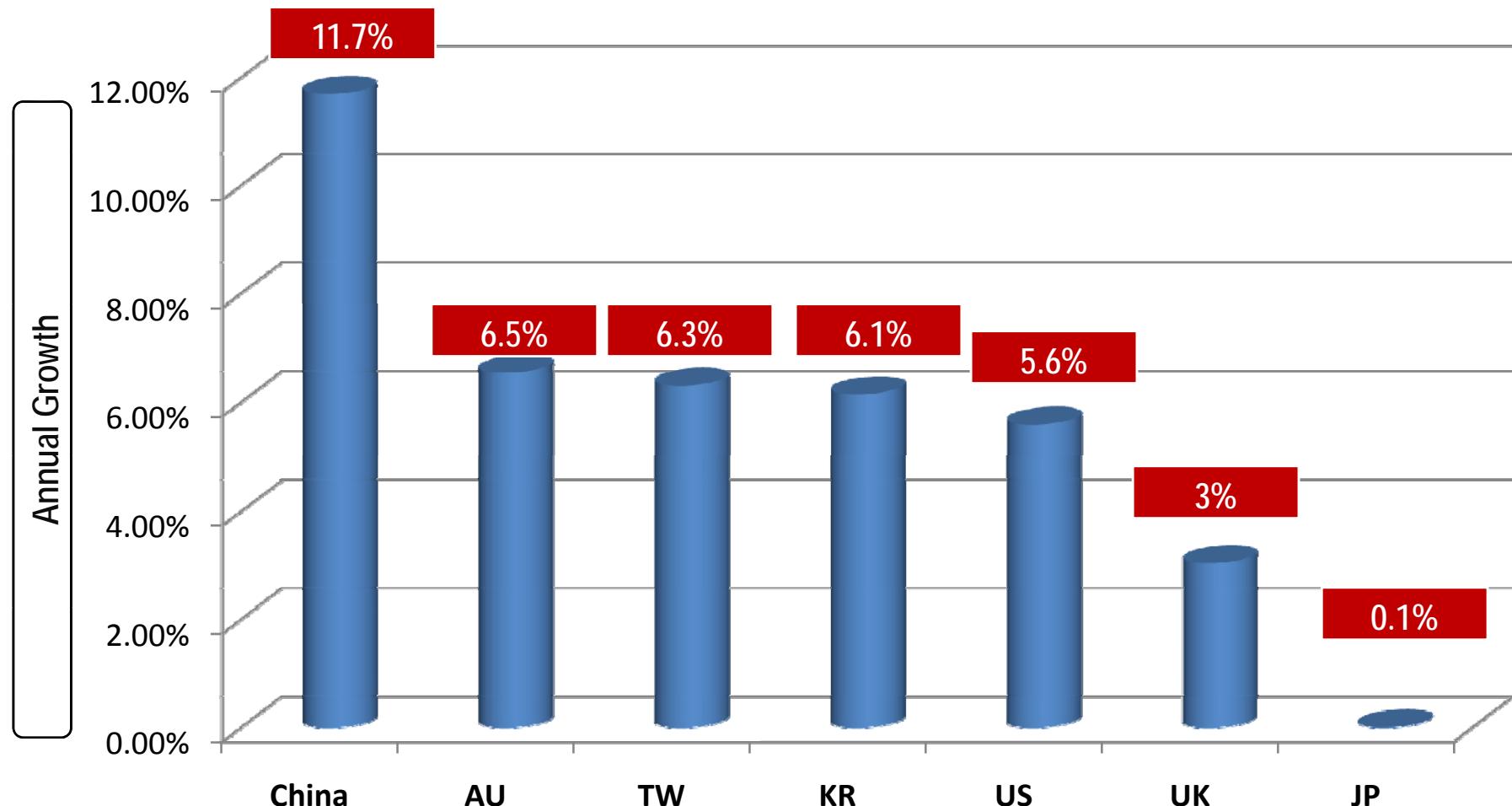
Taiwan: A Spot Not to be Missed



Article Output of Key Countries (2006-2010)



Article Output Growth of Key Countries (2006-2010)



Source: Scopus Data

ELSEVIER

Building Insights. Breaking Boundaries.™



ELSEVIER





Lean Research

THE NEW REALITY...

LEAN TIMES = LEAN RESEARCH

“More data will be needed for evaluation/decision making locally to better manage in the economic climate and in response [to] assessment requirements at the national level.”

– Association of Research Libraries
February, 2009



A RESEARCHER'S WORKFLOW



Tasks / Activities

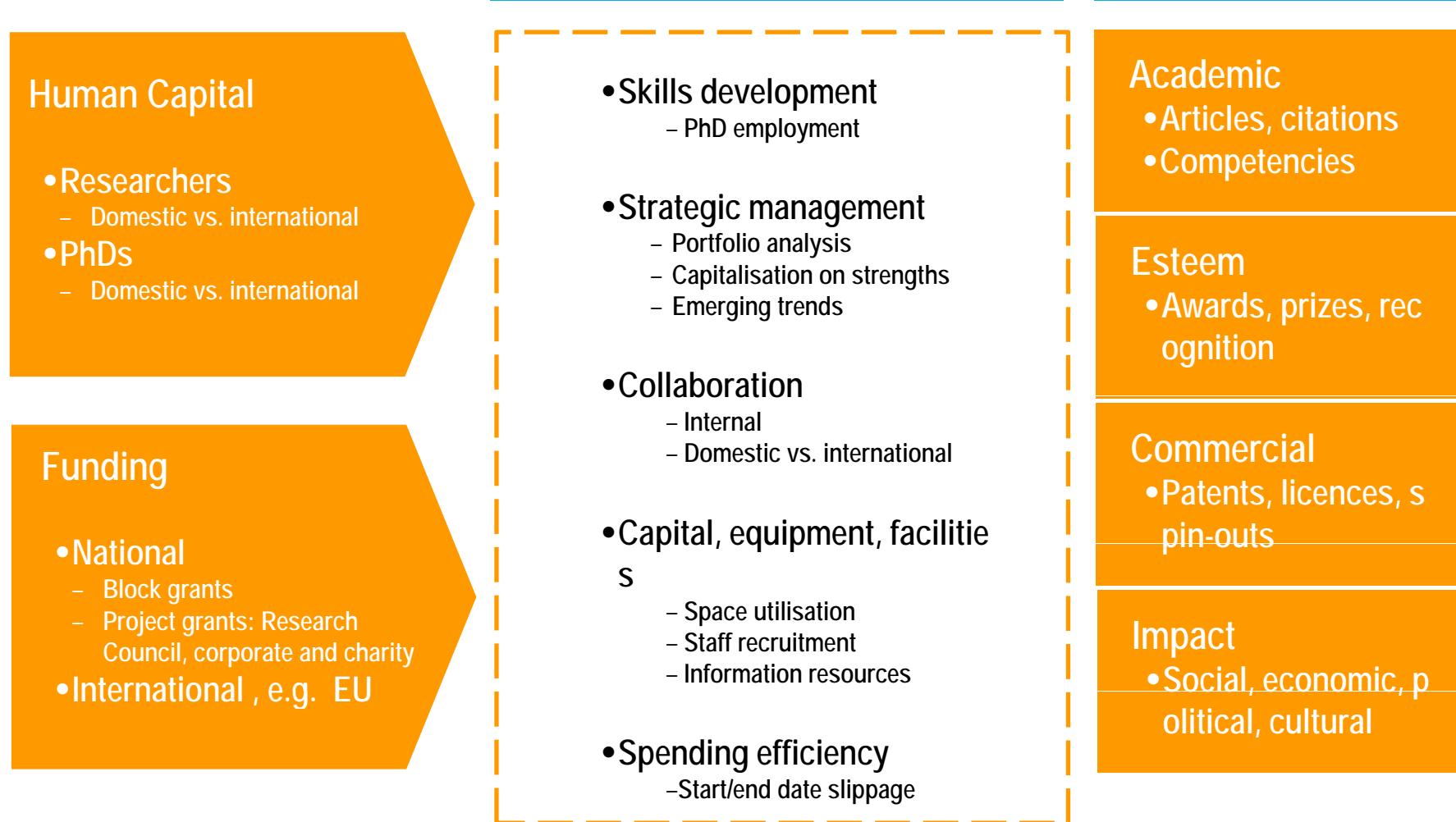
- | | | | | |
|--|--------------------------------------|--|---|-------------------------|
| ● Search Information/ new literature | ● Identify collaboration partners | ● Plan research | ● Submit / track drafts | ● Develop metrics |
| ● Sort and organize Information | ● Identify relevant funding agencies | ● Conduct/ supervise experiments/ research | ● Edit after review, resubmit | ● Collect relevant data |
| ● Read Information | ● Write proposals | ● Collaborate with partners | ● Attend/organize conferences/ seminars | ● Measure performance |
| ● Evaluate research need and likelihood of funding | ● Submit proposals | ● Discuss/share/ check findings against literature | | |

OTHER FORCES THAT SHAPE LEAN RESEARCH



Trend Exacerbated by Economic Downturn

"Performance levers" to influence research success



ELSEVIER

Building Insights. Breaking Boundaries.™



Be a Solution Provider

- Case Study

FUNDING PRESSURES

42

is the average age when biomedical researchers receive their first grant from the National Institute of Health

15%

is the approval rate for National Science Foundation grant applications by new researchers

Competition for funding is intense and will continue to intensify

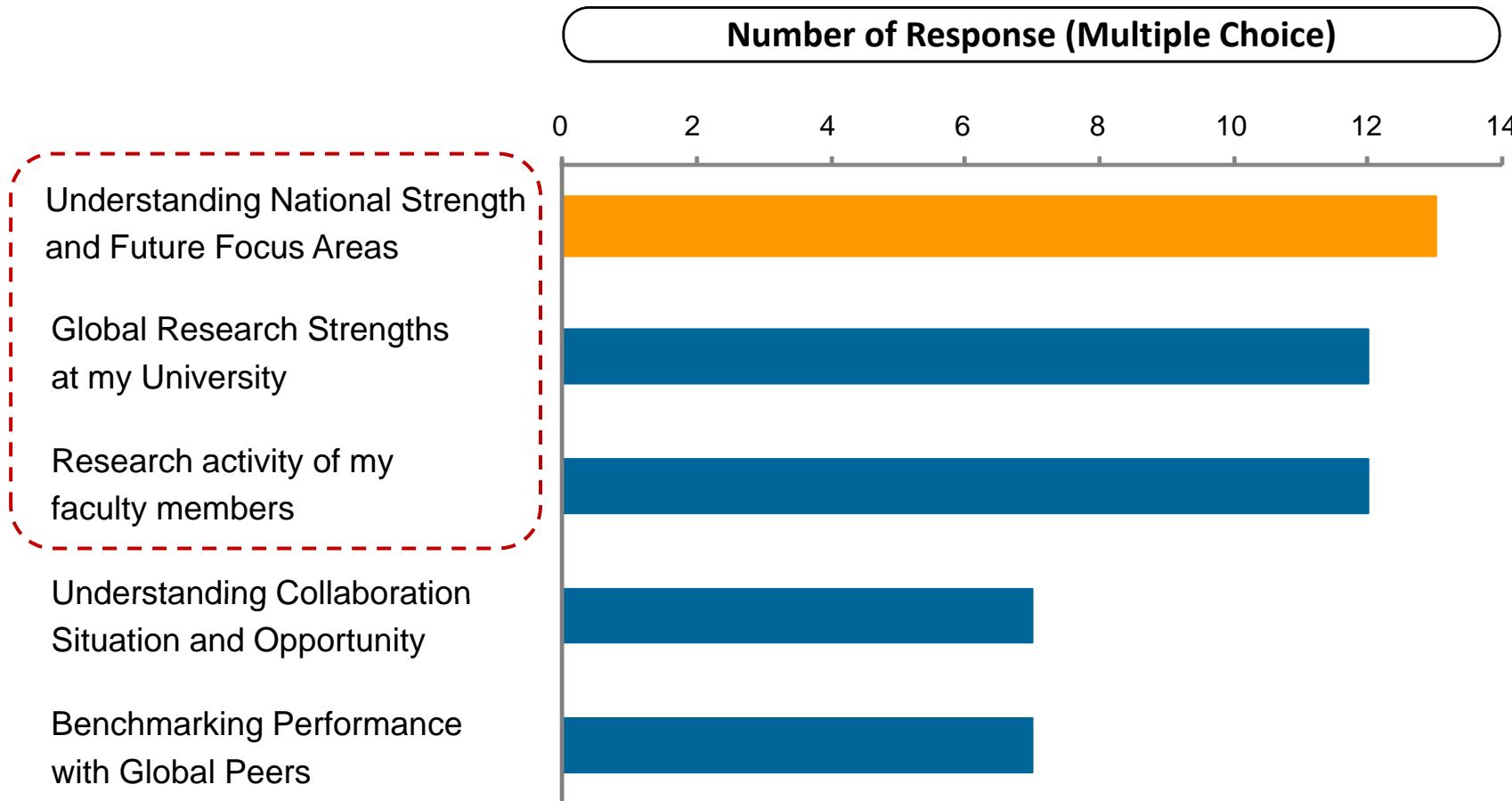
“Early career faculty face greater obstacles than their more senior colleagues in securing research grants to inaugurate what should be one of the most productive stages of their careers.”

– American Academy of Arts and Sciences



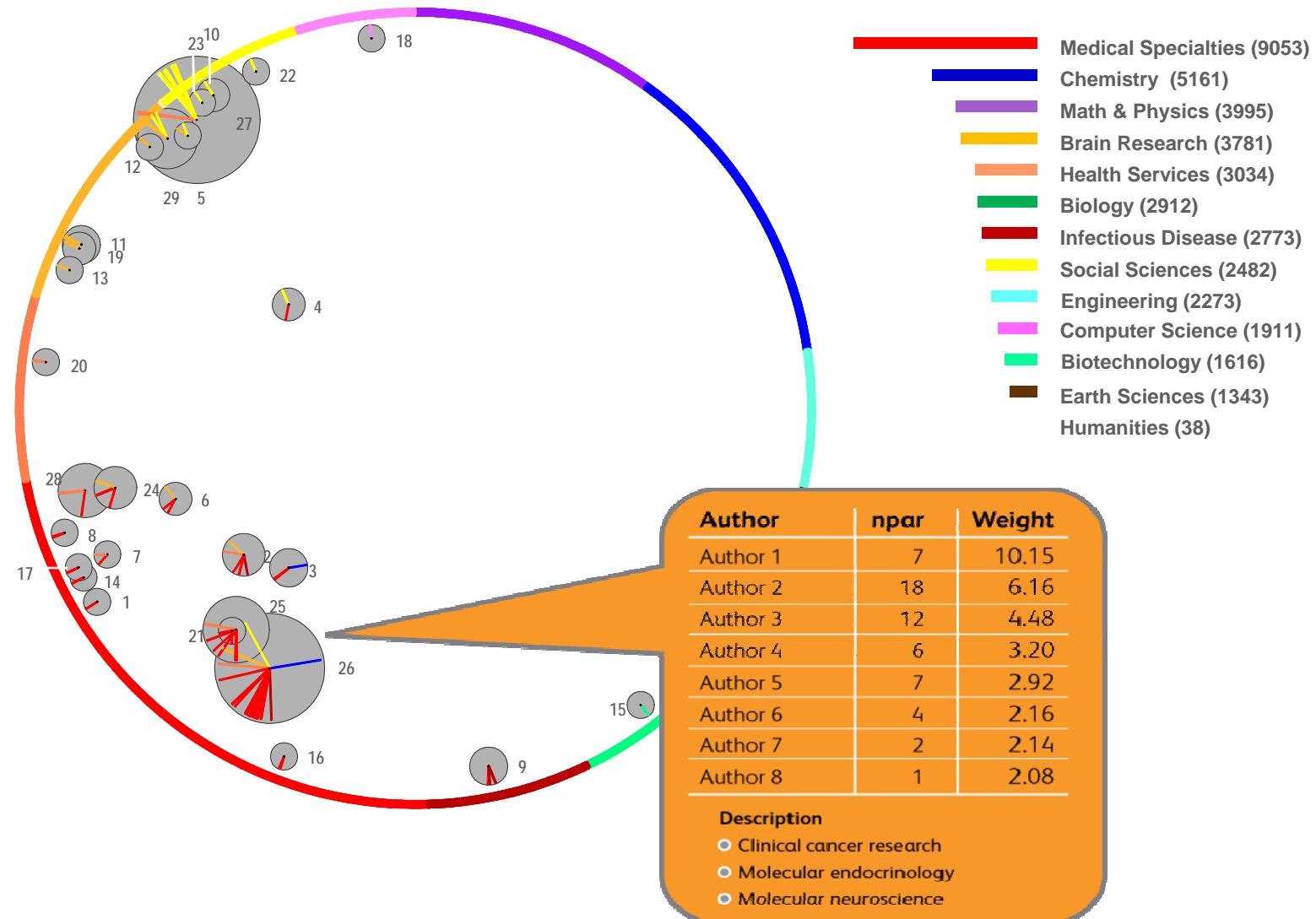
Source: American Academy of Arts and Sciences (www.scienceprogress.org)

Survey Result: What kind of information are you looking for?



Survey (n=20), Respondents: Presidents or Vice Presidents from Japanese universities, Conducted Feb 24-March 10, 2011
Source: Survey

A UNIVERSITY'S "DISTINCTIVE COMPETENCIES"



Making investment choices

A case study: A Japanese University



Case Study:
Objectively Distributing Research Funds
Tohoku University

Solution and Methodology:

Traditionally, these decisions were made based only on peer review. Top researchers from each department would get together and make decisions based on their impressions of the applications and their knowledge of the candidates.

EVP Kitamura and his team decided they should take a different approach. Their plan to include insights from data analysis in their decision-making process, in addition to the results from peer review. Peer review, as a qualitative analysis, was still needed to help evaluate the innovative nature of the topics and identify subject areas that may not be suitable for an evaluation solely on publication data. For this reason,

Using SciVal Spotlight to see how groups are contributing to research strengths:

Step 1: List a list of universities included in each application. Incorporate not only the head of the group, but all members included in the project. Source: [EVA Japan](#).

Step 2: Search each name in SciVal Spotlight. Check if their research activities (publications) are related to the research competitiveness at Tohoku University.

Step 3: Add up the total competitiveness for each research concern. If the total number is high, it indicates that the research group has a high contribution to Tohoku University to research activities.

SciVal Spotlight

SciVal Spotlight

Case Study: Objectively Distribute Research Funds, Tohoku University

- **The University management team decided to create a special funding budget to allocate to selected research groups**
- **The challenge – objectively distribute funds to stimulate research activity**



ELSEVIER

Building Insights. Breaking Boundaries.™

University used data from multi sources as one metric to make the peer-review process effective



'Quantitative Analysis'



'Qualitative Analysis'

Searched each applicant's name in various databases to objectively understand performance

- SciVerse Scopus
- SciVal Spotlight
 - Number of competencies etc.
 - Other databases...

Peer-review process among top researchers from each research department

- Potential of research topic
- Consistency with university's overall strategy
- Other criteria...

**Result: Successfully narrowed down
48 applicants to 8 projects that would receive funding**



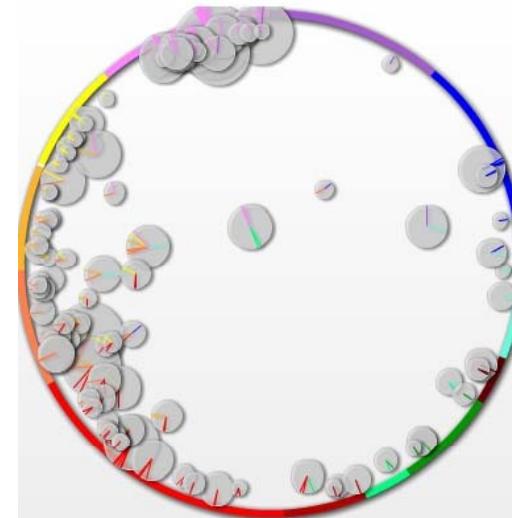
Source: Interview

Shed light on research strengths



Identify and analyze interdisciplinary areas of research excellence

- Identify multidisciplinary strengths at an institutional and national level
- Identify top researchers for retention or recruitment decisions
- View institutions that share similar strengths for potential collaboration

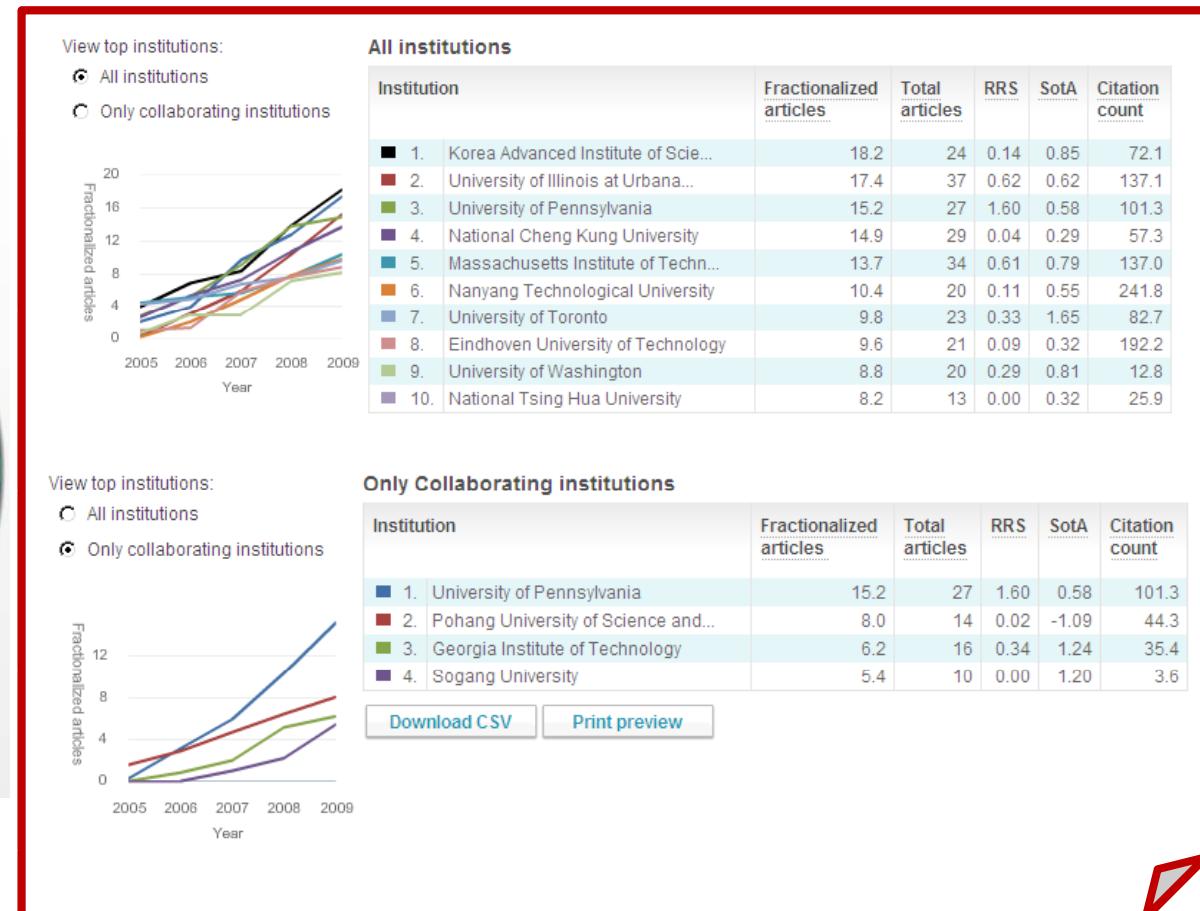
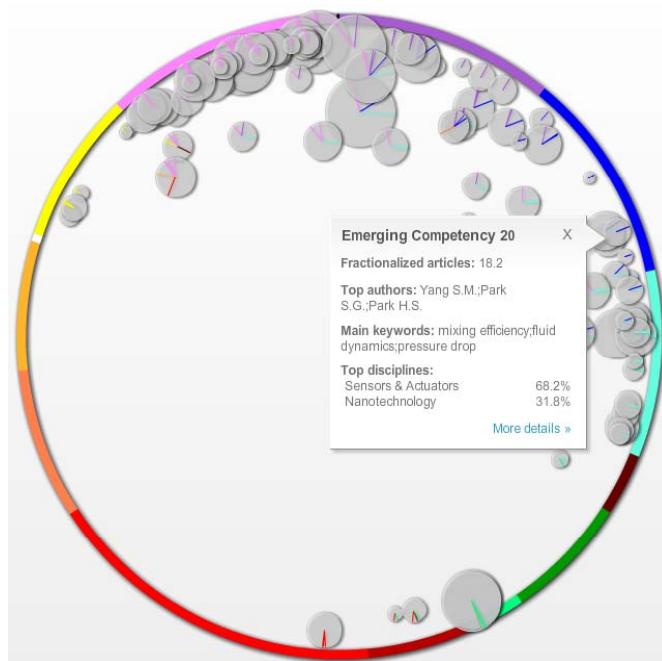


Authors at Athena University
Top 100 authors by number of published articles (2004-2008)

Author	Published articles	Articles in competencies	Competencies
1. Stickley T.	196	115	3
2. Pepper J.M.	167	50	2
3. Ferguson E.M.P.	141	84	4
4. Schneider J.M.	138	76	4
5. Timmons S.A.	122	45	3
6. Cox T.	104	91	3
7. Kai J.	95	64	3
8. Stevenson N.	81	22	1



Identify global institutions actively conducting research in your strength areas



Source: SciVal Spotlight 2009 (May 2011), Analysis

22

ELSEVIER

Building Insights. Breaking Boundaries.™

Building a global network to fight cancer

A case study: An US institution



A collage of images illustrating the case study. It includes a photograph of the MD Anderson Cancer Center building, a screenshot of the SciVal Experts software interface showing researcher profiles and publications, and a presentation slide titled "Case Study: Building a Global Collaboration Network to Fight Cancer" from The University of Texas MD Anderson Cancer Center.

- The VP of Global Academic Programs at The University wanted to create a network among researchers and its 23 sister institutions around the world to help achieve its mission "Making Cancer History"
- The challenge – enabling researchers and administrators to easily identify experts across institutions and facilitate opportunities to collaborate



ELSEVIER

Building Insights. Breaking Boundaries.™

to help researchers make valuable connections



Understanding the research activities of faculty members

Guillermina (Gigi) Lozano
Cancer Center Support Grant (CCSG) Programs, Head & Neck Cancer

Home

Expert Overview

[Profile](#)

[Publications](#)

[Grants](#)

[Similar Experts](#)

[Journals](#)

[Trends](#)

[Institutional Network](#)

[Coauthor Network](#)

[Research Network](#)

Profile

[Tumor Suppressor Protein p53](#)

[Proto-Oncogene Proteins c-m...
Proto-Oncogene Proteins](#)

[Genes, p53](#)

[Nuclear Proteins](#)

[Apoptosis](#)

[Mutation](#)

[Micro, Transgenic](#)

[Ubiquitin-Protein Ligases](#)

[Micro, Knockout](#)

Publications

2011

1. Yongxing Wang; Young-Ah Suh; Maren Y. Fuller; James G. Jackson; Shunbin Xiong; Tamara Terzian; Alfonso Quintas-Cardama; James A. Barkovich; Adel K. El-Naggar et al
Restoring expression of wild-type p53 suppresses tumor growth but does not cause tumor regression in mice with a p53 missense mutation
Journal of Clinical Investigation 2011;121(3):893-904.

2. Ruiying Zhao; Sai-Ching J. Yeung; Jian Chen; Tomoo Iwakuma; Chun-Hui Su; Bo Chen; Changju Qu; Fannmo Zhang; You-Tzung Chen et al
Subunit 6 of the COP9 signalosome promotes tumorigenesis in mice through stabilization of MDM2 and is upregulated in human cancers
Journal of Clinical

Similar Experts

Publications

Jack A. Roth 561 publications

Men-Chie Hung 390 publications

Peter H. Kammerer 415 publications

Timothy J. McDonnell 189 publications

Gordon B Mills 461 publications

Journals

Publications

Oncogene 20

Molecular and Cellul... 10

Cancer Research 8

Proceedings of the Na... 7

PLoS ONE 5

Each profile includes lists of publications, awarded grants & co-authors, et al.

"Elsevier has made it easier to find the right expert at our institution, and so has lowered the barrier for potential collaborators to make a good connection."

Identifying the right collaborators for grant proposals

Hagop M. Kantarjian
Cancer Center Support Grant (CCSG) Programs, Hematological Malignancies

Home

Expert Overview

[Profile](#)

[Publications](#)

[Grants](#)

Similar Experts

[Non-Coauthors](#)

30 Similar Experts

By using the profile that has been created for this researcher, this page computes what similar experts in the institution have a matching profile. By clicking the [+] next to each researcher, suggested overlapping publications by the similar expert will appear that match the profile of this researcher.

Non-Coauthors	Publications
Aman U. Budar MD Anderson, Cancer Center Support Grant (CCSG) Programs, Breast Cancer; MD Anderson, Breast Medical...	550 publications
Isabell J Fidler MD Anderson, Cancer Center Support Grant (CCSG) Programs, Melanoma; MD Anderson, Cancer Center Suppo...	644 publications
Jonathan C. Trent MD Anderson, Cancer Center Support Grant (CCSG) Programs, Molecular Diagnostics & Systems Biology; M...	87 publications
Wenqi Xie He MD Anderson, Cancer Center Support Grant (CCSG) Programs, Head & Neck Cancer; MD Anderson, Cancer Ce...	515 publications
David M. Gershenson MD Anderson, Cancer Center Support Grant (CCSG) Programs, Cancer Metastasis and the Organ Microenvir...	375 publications
Rubulko U. Komiss MD Anderson, Cancer Center Support Grant (CCSG) Programs, Radiation Oncology, Physics & Biology; MD ...	346 publications
Kelly K. Hunt MD Anderson, Cancer Center Support Grant (CCSG) Programs, Breast Cancer; MD Anderson, Surgical Oncol...	361 publications
Richard J. Jones MD Anderson, Lymphoma/Myeloma	183 publications
Vicente Valero	238 publications

Find potential collaborators by accessing a list of faculty conducting similar research

Source: Vice President of Global Academic Programs, The University of Texas MD Anderson Cancer Center



ELSEVIER

Building Insights. Breaking Boundaries.™

How can we assemble research teams?



Welcome to the Research Profiles!

In an effort to synergize inter-disciplinary clinical and translational research, Michigan is committed to using innovative research tools and information technologies to promote collaboration regardless of organizational affiliation or position within the bench-to-bedside-to-population spectrum of science. This expertise portal is a key component of Michigan's mission to catalyze the application of new knowledge and techniques to clinical practice at the front lines of patient care.

Home

Departments

Centers

Recent Grants

Training Resources

Office of Research

Recent Grants

Profile

Publications

Similar Experts

Journals

Trends

Couauthor Network

Research Network

1. YAMASHITA, YUKIO
Asymmetric midbody inheritance during germline stem cell division in Drosophila
16 December 2010 - 30 November 2012
DUNCLE KENNEDY SHIVER
NATIONAL INSTITUTE OF CHILD HEALTH & HUMAN DEVELOPMENT

2. HANA, PHILIP C
Mechanism of spore germination
15 December 2010 - 30 November 2012
NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

www.experts.scival.com/Umichigan

Peter Abadir

Home

Profile

Publications

Similar Experts

Journals

Trends

Research Network

Profile

Publications

Similar Experts

Journals

Trends

Research Network

1. Abdel-Rahman Emad M; Abadir Peter M; Scragg Helen M
Reactive oxygen and reduced 1,25(OH)2-hydroxyvitamin-D₃-tetranoic acid in diabetes by angiotensin AT1 and AT2 receptors.
American journal of physiology. Regulatory, integrative and comparative physiology 2008;295(5):R1473-8.

2. Abadir Peter M; Persamany Anand; Carey Robert M; Scragg Helen M
Angiotensin II Type 2 Receptor-bradykinin receptor functional heterodimerization.
Hypertension 2006;46(2):316-22.

3. Scragg Helen M; Xue Chun; Abadir Peter; Carey Robert M
Angiotensin subtype-2 receptors inhibit renin biosynthesis and angiotensin II formation.
Hypertension 2006;46(2):316-22.

www.experts.scival.com/JHU

Form effective research teams within your institution and across organizations. Access accurate, comprehensive author profiles of your researchers, including publication lists, without burdening authors to input data. Grant, patent and CV data can also be integrated to provide a more comprehensive picture of your institution's research expertise.

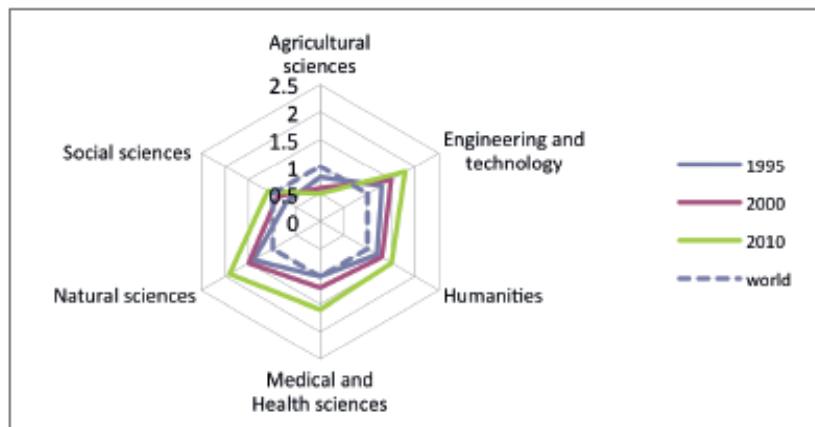


Note: SciVal Experts is customized for the institution. Sample screens from other organizations provided.

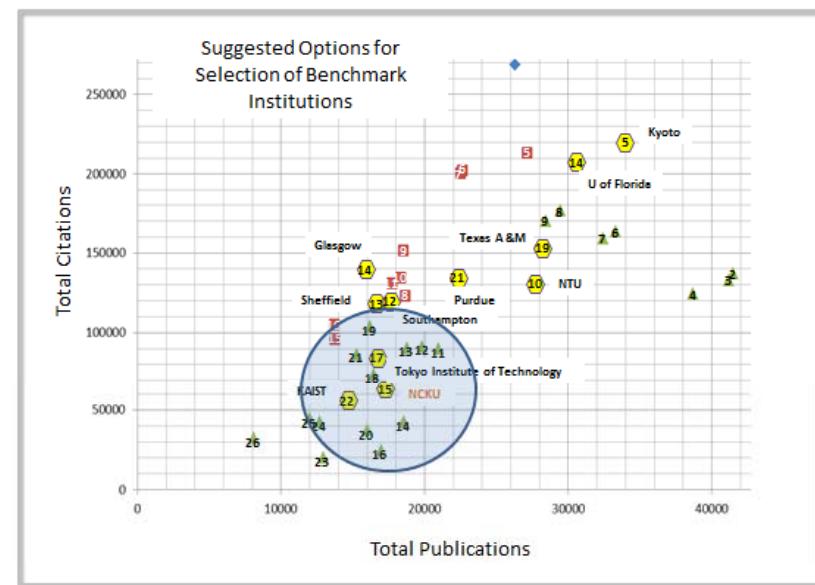
Source: SciVal Experts (April 2011), University of Michigan, Johns Hopkins University

Analytical Report – further information

Research Radar



Benchmarking Radar



SUMMARY

- Economic downturn has intensified focus on research effectiveness and efficiency, bringing a new reality for us all...
- Efficiency and effectiveness can only be realized by taking a deeper look at the research activity workflows and identifying improvement opportunities
- Lean research presents an opportunity for the **LIBRARIANS** to play an enhanced role in the research process
- **YOU** can dramatically transform the role in line with this new reality and support institutions in becoming lean research organizations



ELSEVIER

Thank You For Listening