



Arastirmada Liderlik icin Innovasyon

Tayfun BASAL

**Elsevier BV, Turkiye & Orta Asya
Satis Muduru**

UNIVERSITELERIN AMACLARI



- Evaluate research and establish strengths

“Decision making will always be subjective, but we are trying to move to a more evidence-based model.”

- Recruitment and retention

“We need to put together exceptional research teams in order to solve new problems and get at the funding.” – Vice Chancellor for Research

- Rekabet ve işbirliği

“Often we need to find out for specific areas: how strong we are, who on campus is involved, and what is the scope of our collaboration network?”

- Allocate scarce resources

“We need anything that helps us make – and defend – smarter decisions about allocating internal funding.” – Vice Chancellor for Research

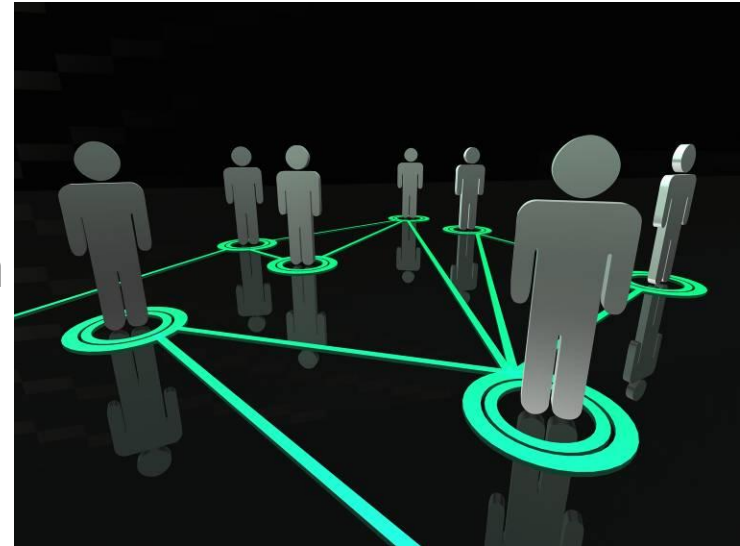


Yeni Gercek

Arastirmanin degisen yuzu

Arastirmanin Gunumuzdeki Yeni Gercekligi

- Ulusal sinirlarin disina tasar
- Overarches multi-jurisdictional regulation
- Gercek ve sanal uzay ve zaman icinde, enerjik ag kurar
- Straddles between competition and collaboration
- Kaynaklarin, insanlarin, fikirlerin, teknolojilerin ve altyapilarin yuksek duzeydeki hareketlilikini sergiler
- Kamu ve ozel baskilara karsi koyar ve cevap verir



FORCES DRIVING THE NEED FOR LEAN RESEARCH



Trend Intensified by Economic Downturn

Lean research

Hukumat politikolari



In 2008, University of California President Mark G. Yudof commits to “comprehensively assess and share the University's progress in meeting key teaching, research and public service goals across its 10 campuses”



“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 College Research Libraries,
February 2009



Japanese universities are quickly adopting “quality assessment and assurance activities” and the Japanese government initiated “corporate-style governance into national universities, accompanied by a new evaluation scheme” in 2004

SciVal

ACCOUNTABILITY SHIFT



- Universities are being held under greater scrutiny
- University performance and investment must be more transparent
- Academia requires objective measurements and benchmarks

ARASTIRMA UZERINE HUKUMET POLITIKALARI



Arastirma Programi

Sponsor

Aciklama



- Assess the quality of research in universities and colleges in the UK
- Enable funding bodies to determine how to allocate grants across research projects
- Detail by institution and by discipline those areas that are internationally competitive, together with emerging areas where there are opportunities for development
- Identify thematic domains for future European support
- Part of EU's strategy to become "the most dynamic competitive knowledge-based economy in the world"



Australian Government
Australian Research Council

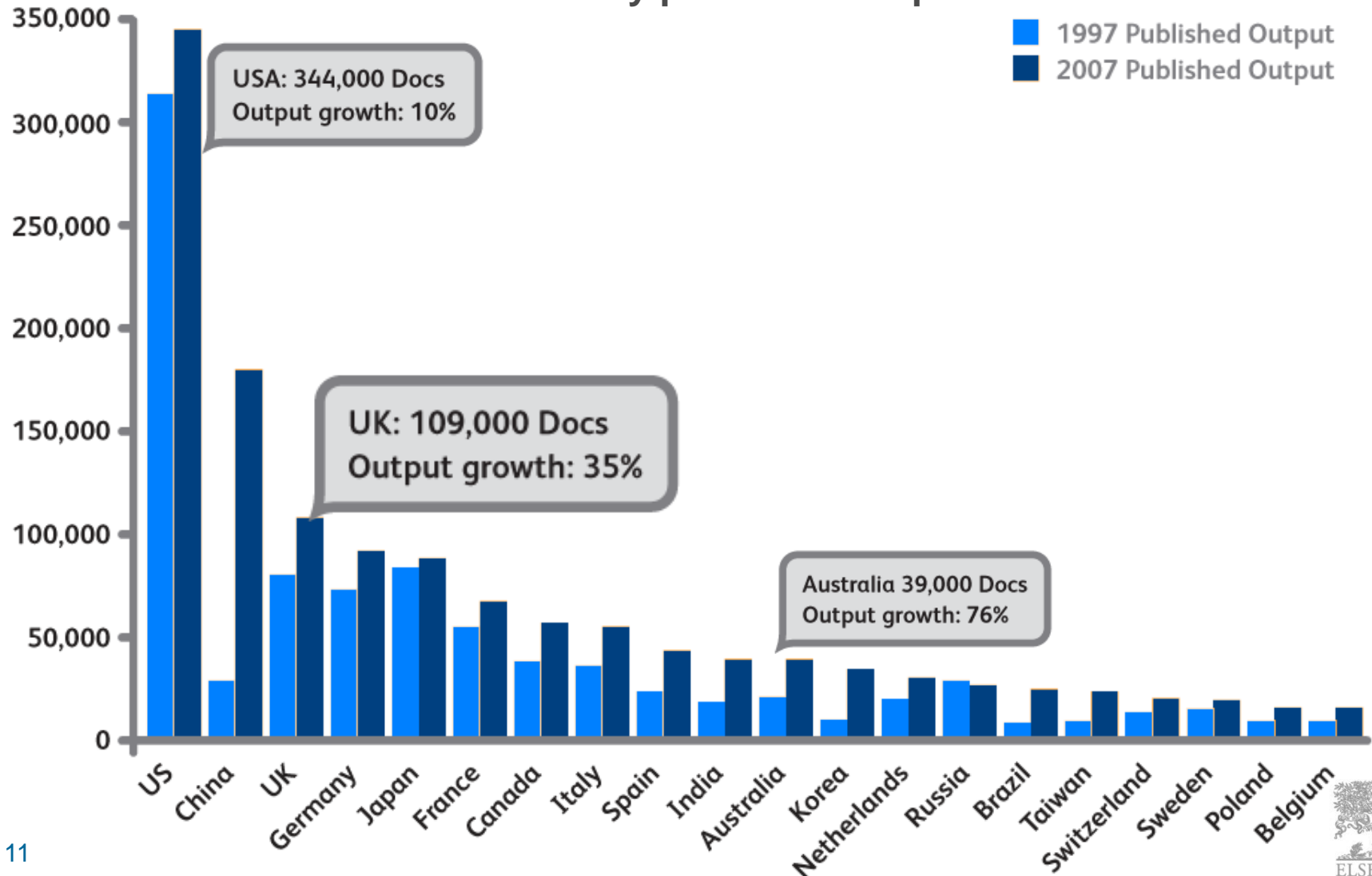


Governments are actively guiding their national research agenda

Lean research
Global competition

GLOBAL COMPETITION HAS INCREASED DRAMATICALLY

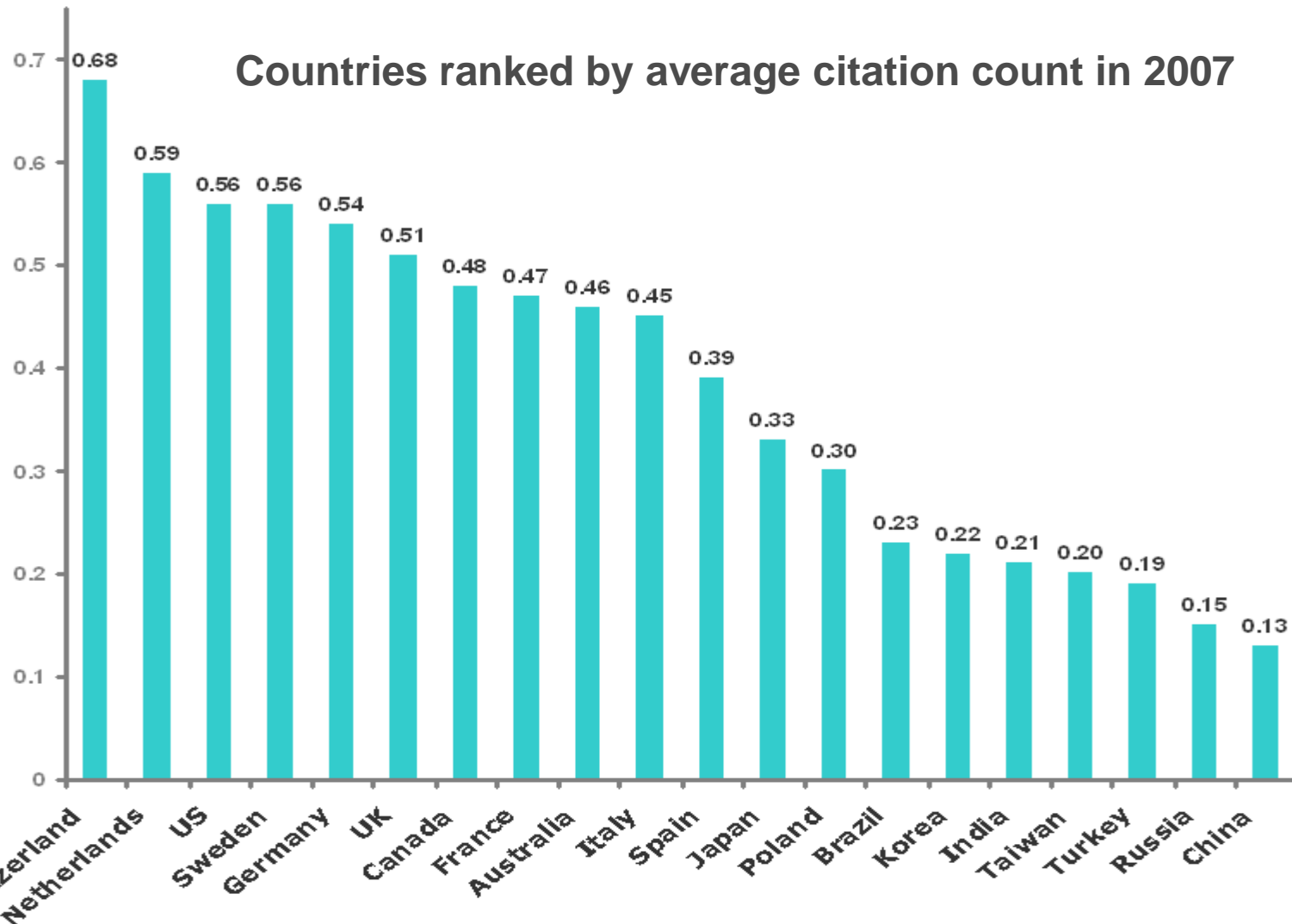
Countries ranked by published output in 2007



CITATION LEADERS MAINTAIN POSITION

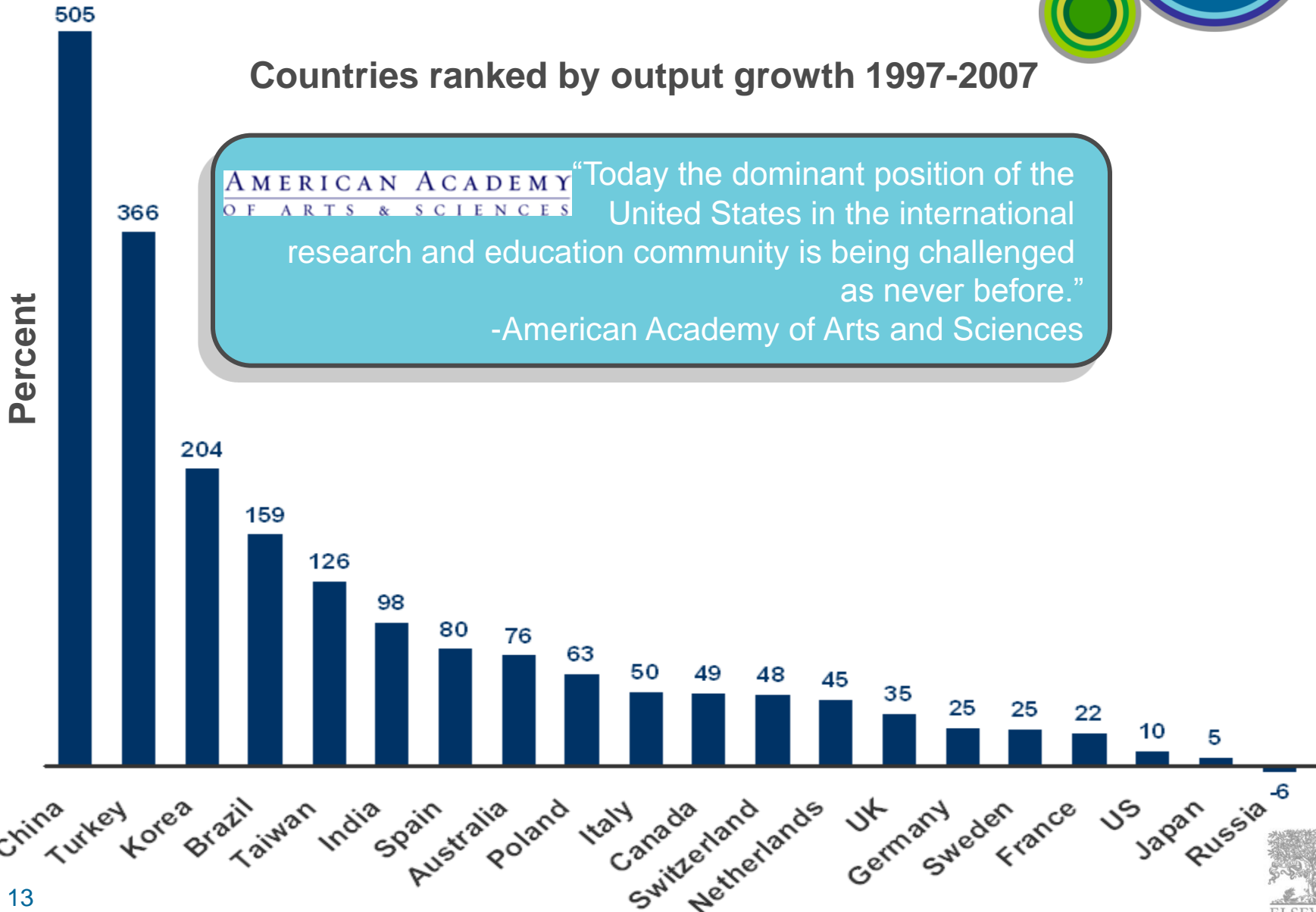


Countries ranked by average citation count in 2007



NEW GLOBAL LEADERS ARE EMERGING

Countries ranked by output growth 1997-2007



AMERICAN ACADEMY
OF ARTS & SCIENCES

“Today the dominant position of the United States in the international research and education community is being challenged as never before.”

-American Academy of Arts and Sciences



Country **Turkey**

Publication Year **2005;2006;2007**

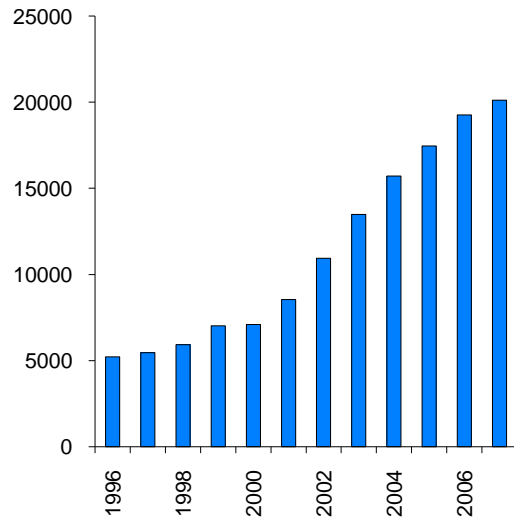
Citation Year **2007**

Country Name(Query 1 with MAS-Scopus)	Article Count (All Authors)	Citation Count(Query 1 with MAS-Scopus)	Average Citation	Field Weighted Impact(Query 1 with MAS-Scopus)	Self Citation Count(Query 1 with MAS-Scopus)	Self Citation %	Country Collaboration Count(Query 1 with MAS-Scopus)	Collaboration %
Turkey	56836	44117	0.78	0.70	9872	22.38 %	8545	15.03 %

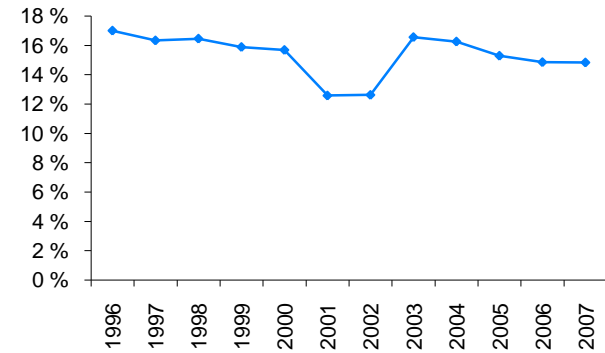
TURKEY



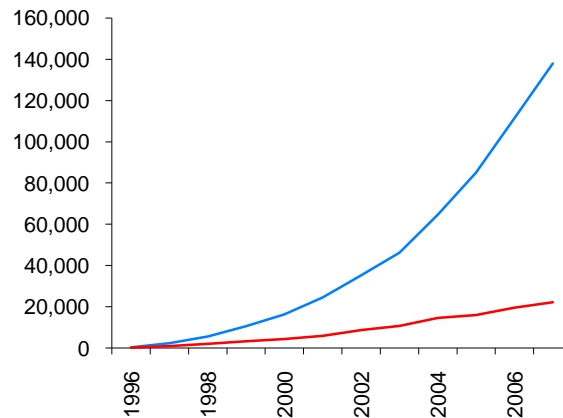
Articles Published 1996 - 2007



Percentage of Articles Published with Another Country



Total Citations & Self Citation Counts 1996-2007



TURKEY

Publisher Data within Country

Publisher	Articles	Article Share	Citations	Influence	Average Citations	Field Weighted Impact
ELSEVIER	14043	23.45 %	16508	36.96 %	1.18	1.06
Springer	6389	10.67 %	3918	8.77 %	0.61	0.58
Wiley-Blackwell	6062	10.12 %	5356	11.99 %	0.88	0.75
Taylor & Francis Informa	3289	5.49 %	1896	4.25 %	0.58	0.52
Wolters Kluwer	2071	3.46 %	1762	3.95 %	0.85	0.76
Scientific and Technical research Council of Turkey	1333	2.23 %	430	0.96 %	0.32	0.28
IEEE	861	1.44 %	884	1.98 %	1.03	2.15
KARGER	722	1.21 %	635	1.42 %	0.88	0.66
Logos Tip Yayıncılığı	654	1.09 %	20	0.04 %	0.03	0.05
Galenos Yayıncılık	617	1.03 %	107	0.24 %	0.17	0.21

TURKEY

Subject Data within Country

Subject	Articles	Citations	Self Citations	Field Weighted Impact
Medicine (all)	9165	6528	1257	0.67
Environmental Science (all)	5729	5319	1268	0.87
Engineering (all)	5918	4593	1351	0.95
Earth and Planetary Sciences (all)	4716	4421	1100	0.88
Materials Science (all)	2554	2336	779	0.97
Surgery	3790	2209	205	0.60
Social Sciences (all)	1791	1992	313	1.13
Biochemistry	1063	1819	565	1.00
Food Science	1647	1691	290	0.97
Psychology (all)	1418	1599	255	1.14
Neuroscience (all)	1277	1594	298	0.78
Cardiology and Cardiovascular Medicine	2563	1558	188	0.45
Electrical and Electronic Engineering	1536	1505	511	1.38
Arts and Humanities (all)	1228	1456	228	1.20
Pediatrics, Perinatology and Child Health	2432	1439	109	0.54
Health Professions (all)	1089	1408	216	1.21
Neurology (clinical)	1849	1393	174	0.56
Organic Chemistry	1057	1371	492	0.92
Condensed Matter Physics	1659	1341	726	0.91
Radiology, Nuclear Medicine and Imaging	1722	1272	113	0.65

TURKEY

Cited Countries - this country is cited by

Country	Citations	% Citations received
Turkey	14203	31.66 %
United States	7918	17.65 %
China	3068	6.84 %
United Kingdom	2493	5.56 %
Germany	2092	4.66 %
Italy	1822	4.06 %
France	1471	3.28 %
Spain	1408	3.14 %
India	1315	2.93 %
Japan	1307	2.91 %
Canada	1289	2.87 %
Brazil	892	1.99 %
Korea, Republic of	823	1.83 %
Netherlands	806	1.80 %
Australia	795	1.77 %
Iran, Islamic Republic of	785	1.75 %
Greece	691	1.54 %
Taiwan, Province of China	590	1.32 %
Poland	560	1.25 %
Switzerland	514	1.15 %

Citing Countries - this country is citing

Country	Citations	% Citations given
Turkey	14203	25.52 %
United States	11883	21.36 %
United Kingdom	3763	6.76 %
Germany	3124	5.61 %
Italy	2615	4.70 %
China	2275	4.09 %
Japan	2147	3.86 %
France	1981	3.56 %
Canada	1859	3.34 %
India	1733	3.11 %
Spain	1692	3.04 %
Netherlands	1294	2.33 %
Australia	1195	2.15 %
Switzerland	890	1.60 %
Korea, Republic of	879	1.58 %
Brazil	876	1.57 %
Greece	821	1.48 %
Sweden	811	1.46 %
Taiwan, Province of China	804	1.44 %
Belgium	799	1.44 %

Lean research
Funding pressures

FUNDING PRESSURES



- 30% of a researcher's time is spent applying for grants¹
- On average, biomedical researchers receive their first National Institutes Health (NIH) grant at the age of 42
- National Science Foundation (NSF) grant approval rates are down to 15%
- Limited Submission Programs
- Economic stimulus packages
 - American Recovery and Reinvestment Act (\$21.5 B)
 - China's 4 trillion yuan (\$586 B) stimulus package



LEAN TIMES ARE HERE



“Our planning for 2009-10 assumes that our endowment will have lost roughly 30% of its value in 2008-09 – before subtracting the additional \$1.4 B that will go toward current operations.”

– Drew Faust, Harvard University President, 18 February 2009

LEAN TIMES = **LEAN** RESEARCH

The ingenuity for success

Introducing SciVal



Responding to this changing landscape, Elsevier has developed...

- **SciVal Spotlight** - a customized web-based tool that enables your institution to evaluate its research performance and adjust strategies
- **SciVal Funding** - a funding intelligence tool that combines funding opportunities and award data in a unique platform

UNIVERSITY OBJECTIVES



- Evaluate research and establish strengths
- Recruitment and retention
- Competition and collaboration
- Allocate scarce resources



EVALUATE RESEARCH AND ESTABLISH STRENGTHS



CURRENT CHALLENGES

- Incomplete, fragmented, and anecdotal information
- No consistent metrics
- Top down evaluation

SCIVAL SPOTLIGHT

“Pinpointing new interdisciplinary themes is like looking for a needle in a haystack. We need to take the guesswork out of it.” – Director, Office for Research

- Identify:
 - ✓ key competitors and potential collaborators
 - ✓ growing areas of interdisciplinary research
 - ✓ distinctive competencies

KEY DISTINCTIONS

- Begin with an innovative, bottom-up aggregation of research output

RECRUITMENT AND RETENTION



CURRENT CHALLENGES



- Evaluation is mostly qualitative
- Quantitative metrics are limited

SCIVAL SPOTLIGHT



- ✓ Decide who to keep and who to approach
- ✓ Complement strong research teams

KEY DISTINCTIONS



- Quantitative analysis to:
 - Find and support influential professors

“We have never heard of this guy... He could be a rising star; this tool would move him up on our radar.”

COMPETITION AND COLLABORATION



CURRENT CHALLENGES



- Individuals
- Institutions

SCIVAL SPOTLIGHT



- Distinctive competencies show direct/true competitors in individual areas of research

KEY DISTINCTIONS



- Highly specific information
- Information at your fingertips year-round

“This could be highly useful in identifying collaborators for multi-Institutional grants initiatives, which continue to increase in number.” – Vice Chancellor for Research

ALLOCATION OF SCARCE RESOURCES

“We try to figure out where our strengths are, but we are half guessing where to put our resources.” – University Vice President



- Specialist reports
- Purchase data



- ✓ Utilize innovative ways to apply the data
- ✓ Make efficient, well-informed decisions throughout the year
 - Evaluation
 - Planning



Frequency that publication and citation data is updated

- Treats a university strategy as a business strategy, including resource management risks

CONCLUSION



Tesekkurler

Tayfun BASAL

t.basal@elsevier.com

APPENDIX I

The ideal funding intelligence solution

history: Funding program What does SciVal... Search results -... Search results -... Search

search for Opportunities Awarded grants

SciVal Funding: Quick, comprehensive and targeted

More about SciVal Funding

SciVal Funding delivers quick and comprehensive access to current funding opportunities and award information. The tool is designed to support research administrators and researchers in the pre-award stage of funding and increases the effectiveness and increases grant submission success rates.

SciVal Funding benefits

More benefits

- Explore funding opportunities outside familiar territories.
- Seek collaborators for multidisciplinary projects.
- Stay on top of the activities of colleagues and peers.

Use SciVal Funding to find opportunities, awarded grants and recommendations

Find opportunities

Search for current funding opportunities.

E.g., "heart attack" AND aspirin

Search for opportunities

[More search options](#)

Find awarded grants

Search for previously awarded grants.

E.g., energy AND "Smith, John"

Search for awards

[More search options](#)

Personal recommendations

Retrieve your research profile to see targeted funding opportunity recommendations.

Retrieve my research profile

[More about recommendations](#)

Comprehensive, Current and Accurate Funding Opportunity Content

Funding Intelligence; awards data supporting performance measurement and strategic decision-making

Targeted funding opportunity Recommendations matched on pre-populated profiles

history: What does SciVal...

search for Opportunities | Awarded grants

Search results - Opportunities

You searched for: heart

Refine search results

Refine your search by sponsor or sponsor type, deadline, award ceiling or award type, or subject area

Sponsor type	Sponsor	Deadline	Award ceiling	Award type	Subject area
<input type="checkbox"/> International	<input type="checkbox"/> National Science Foundation (6)	<input type="checkbox"/> November 08	<input type="checkbox"/> < 50,000 (3)	<input type="checkbox"/> Grant (1)	<input type="checkbox"/> Immunology (6)
<input type="checkbox"/> Federal	<input type="checkbox"/> National Institute of Health (1)	<input type="checkbox"/> December 08	<input type="checkbox"/> 50,000-100,000 (6)	<input type="checkbox"/> Cooperative Contract (3)	<input type="checkbox"/> Infection (3)
<input type="checkbox"/> State	<input type="checkbox"/> Research Council of Canada (1)	<input type="checkbox"/> January 09	<input type="checkbox"/> 100,000-500,000 (1)	<input type="checkbox"/> Unspecified (1)	<input type="checkbox"/> Biotechnology (1)
more »	more »	more »	more »	more »	more »

Limited submission
 Opportunities with limited submission

Find opportunities that are restricted to limited submission

Limit to Exclude

Results: 100

20 results per page 1 to 20 next

Select all | Print selected | Email selected | Export selected | Add selected

	Title	Sponsor	Deadline	Type	Amount
1. <input type="checkbox"/>	COORDINATION OF VASCULARIZATION AND LUNG DEVELOPMENT	Department of Health and Human Services, National Institutes of Health	03-19-2003	Grant	\$ 0
2. <input type="checkbox"/>	ASTHMA CLINICAL RESEARCH NETWORK	Department of Health and Human Services, National Institutes of Health	10-24-2002	Cooperative Agreement	\$ 0
3. <input type="checkbox"/>	Critical Issues in Post-phlebotic Syndrome	Department of Health and Human Services, National Institutes of Health	05-24-2005	Grant	\$ 4,000,000
4. <input type="checkbox"/>	Summer Institute Program to Increase Diversity in Health-Related Research	Department of Health and Human Services, National Institutes of Health	09-11-2005	Grant	\$ 980,000
5. <input type="checkbox"/>	ASTHMA EXACERBATIONS: BIOLOGY AND DISEASE PROGRESSION	Department of Health and Human Services, National Institutes of Health			
6. <input type="checkbox"/>	NHLBI PROGRAMS OF EXCELLENCE IN NANOTECHNOLOGY	Department of Health and Human Services, National Institutes of Health			
7. <input type="checkbox"/>	NHLBI CLINICAL PROTEOMICS PROGRAMS	Department of Health and Human Services, National Institutes of Health			
8. <input type="checkbox"/>	INTERVENTIONS TO IMPROVE HYPERTENSION CONTROL RATES IN AFRICAN AMERICANS	Department of Health and Human Services, National Institutes of Health			
9. <input type="checkbox"/>	OVERWEIGHT AND OBESITY CONTROL AT WORKSITES	Department of Health and Human Services, National Institutes of Health	03-12-2004	Grant	\$ 0
10. <input type="checkbox"/>	CELLULAR AND MOLECULAR IMAGING OF THE CARDIOVASCULAR, PULMONARY, AND	Department of Health and Human Services, National Institutes of Health	01-22-2004	Grant	\$ 0

Link to award details to find information about the sponsor, opportunity, funding details, and document history

COORDINATION OF VASCULARIZATION AND LUNG DEVELOPMENT

Sponsor

Funding organization: [NSF Division of Atmospheric Sciences](#)
 Contact person: If you have any problems linking to this funding announcement, please contact the contact person.
[View full announcement »](#)
[View previously awarded grants »](#)

Organization in context: National Science Foundation \...\a NSF Division of Atmospheric Sciences

Evaluate your success rate by viewing **previously awarded grants** as well as **related publications**

Related opportunities

- [Next-Generation Explosive Detection Systems](#) ▶
- [TECHNOLOGIES TO FIND FUNCTIONAL ELEMENTS IN GENOMIC DNA](#) ▶
- [SUCCEED: Early Learning for School Success in Bangladesh](#) ▶

[View all 55 related](#) ▶

Opportunity description

Synopsis

The National Heart, Lung, and Blood Institute (NHLBI) invites applications to address the interactive relationships between vasculogenesis, including angiogenic/angiostatic modulation, and the developing lung. The purpose of this RFA is to stimulate research that will increase our knowledge of these interactive processes by supporting fundamental studies focusing on the cellular and molecular mechanisms that coordinate the formation of the lung and its vasculature during the process of normal lung development or that contribute to arrested or aberrant lung development. It is expected that these studies will involve a systems biology approach to lung development and will gather information on the temporo-spatial expression of regulatory genes, growth factors and receptors involved in the process of vasculogenesis and angiogenesis during lung development. Such new information would provide the basis for intervention to reverse arrested alveolization, which is a feature of the chronic lung disease observed in very-low-birth-weight premature infants. Such new information might also clarify some of the apparent associations between early developmental events and the pathobiology of adult lung disease.

Read the **synopsis** of the funding opportunity

Classification

Keywords: RFID devices, Transportation systems
 SciVal Funding classification: (ASJC)
 NSF classification: Climate Related Activities
[View full announcement »](#)

Link to the **full announcement** of the funding opportunity

Funding details

Funding number:	RFA-HL-03-006	Estimated amount of total funding:	\$ 1,300,000
Funding type:	Grant	Estimated number of awarded grants:	Not Available
Status:	Active	Award ceiling:	\$ 0
Deadline for proposals:	April 24, 2008	Award Floor:	\$ 0
Eligibility:	State governments, County governments, City or township governments, Special district governments, Independent school districts, Public and State controlled institutions of		

Look at the **funding details** of the award

SciVal Funding: Quick, comprehensive and targeted

SciVal Funding delivers quick and comprehensive access to current funding opportunities for research administrators and researchers in the pre-award stage of funding and increases success rates.

Use SciVal Funding to find opportunities, awarded grants and recommendations

Analyze the funding environment

SciVal Funding benefits

[More benefits](#)

- Explore funding opportunities outside familiar territories.
- Seek collaborators for multidisciplinary projects.
- Stay on top of the activities of colleagues and peers.

Find opportunities

Search for current funding opportunities.

E.g., "heart attack" AND aspirin

Search for opportunities

[More search options](#)

Find awarded grants

Search for previously awarded grants.

E.g., energy AND "Smith, John"

Search for awards

[More search options](#)

Personal recommendations

Retrieve your research profile to see targeted funding opportunity recommendations.

Retrieve my research profile

[More about recommendations](#)

- Predict your probability of success by viewing historical award information
- Identify potential collaborators
- Link to publications that resulted from awards

history: Funding program What does SciVal... Search results -... Search results -... Search

SciVal Funding: Quick, comprehensive and targeted

[More about SciVal Funding](#)

SciVal Funding delivers quick and comprehensive access to current funding opportunities and award information. The tool is designed to support research administrators and researchers in the pre-award stage of funding and increases the effectiveness and increases grant submission success rates.

Use SciVal Funding to find opportunities, awarded grants and recommendations

Find opportunities

Search for current funding opportunities.

E.g., "heart attack" AND aspirin

Search for opportunities

[More search options](#)

Find awarded grants

Search for previously awarded grants.

E.g., energy AND "Smith, John"

Search for awards

[More search options](#)

Personal recommendations

Retrieve your research profile to see targeted funding opportunity recommendations.

Retrieve my research profile

[More about recommendations](#)



- Pre-populated research profiles from Scopus Author IDs
- Ability to modify profile with keywords or recommendation criteria
- Targeted recommendations, sorted by relevancy

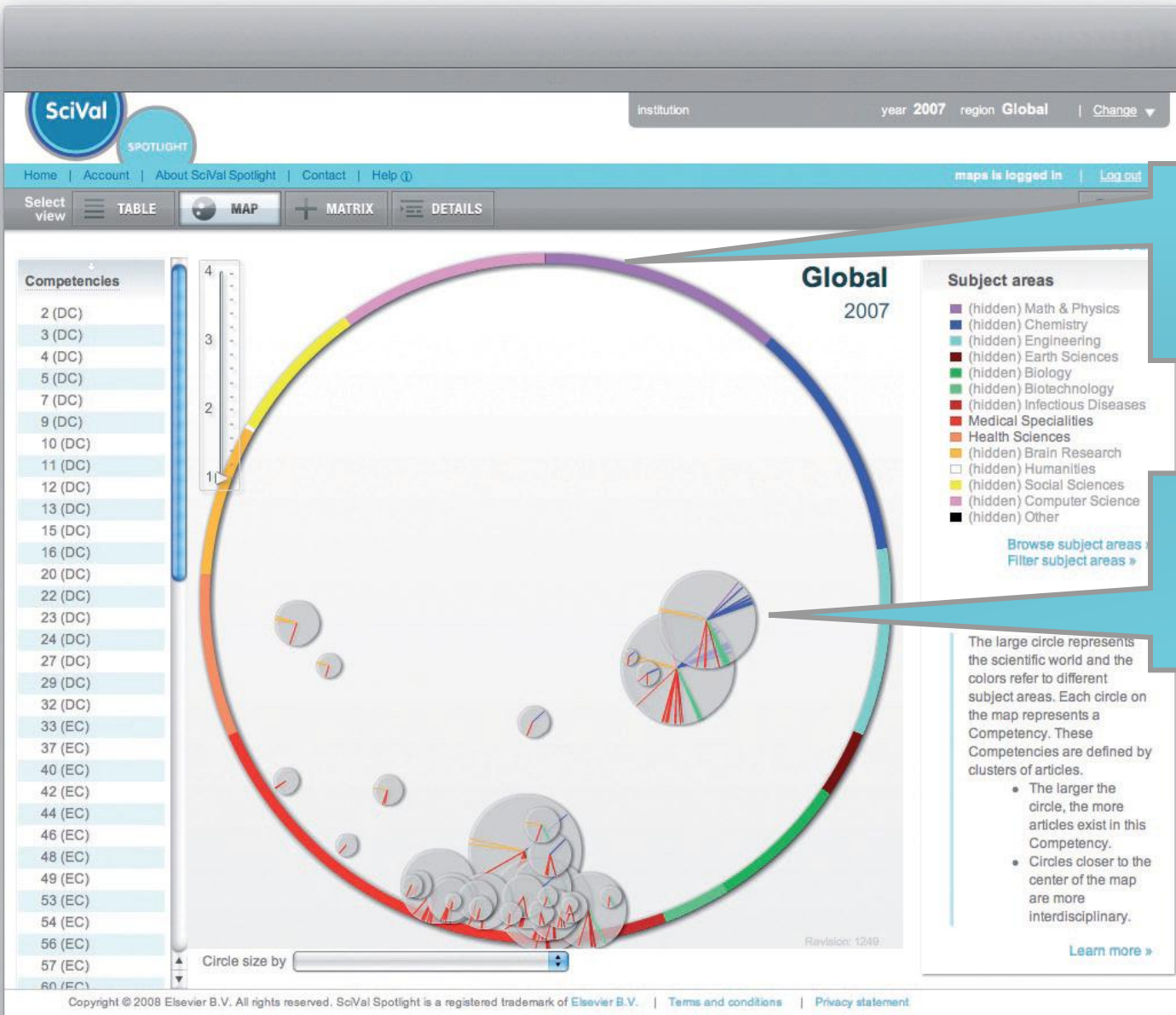
APPENDIX II

Evaluate, establish, and execute your
research strategy

The Circle Map allows you to quickly understand where your Institution's Strengths lie

SciVal

SPOTLIGHT



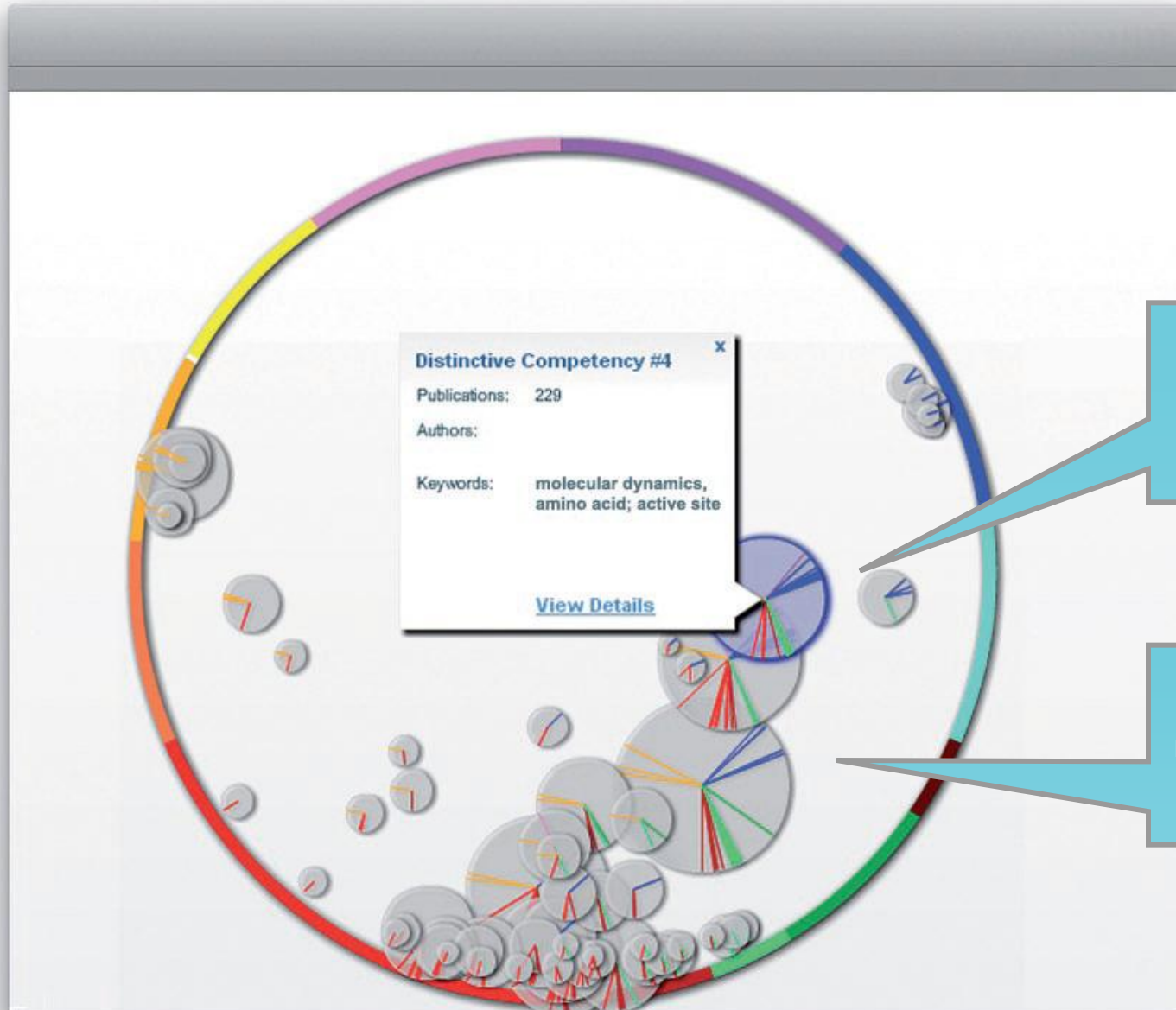
Each color on the circle represents a subject area, such as earth sciences, biology and social sciences

Each circle represents a Distinctive Competency for your institution

The large circle represents the scientific world and the colors refer to different subject areas. Each circle on the map represents a Competency. These Competencies are defined by clusters of articles.

- The larger the circle, the more articles exist in this Competency.
- Circles closer to the center of the map are more interdisciplinary.

A customized view of Distinctive Competencies helps you to navigate the scientific landscape



Circles positioned towards the middle indicate an interdisciplinary mix

A larger circle means a larger market size for this Distinctive Competency

Select the Matrix view to see Distinctive Competency performance relative to your largest competitor



Find rapidly emerging areas of research; potential areas for further investment

Select a view to see in which areas you are growing or reducing market share

Identify research strengths where you have a history of being leaders but are now losing ground

Use the Details view to gain insight into top competing institutions and top authors within a Distinctive Competency



The screenshot shows the SciVal interface. At the top, there's a navigation bar with "Home", "Account", "About SciVal Spotlight", "Contact", and "Help". Below that, a "Select view" dropdown is set to "DETAILS". The main content area is titled "Distinctive Competency #4" with main keywords "amino acid; amino acids; fatty acid". There are tabs for "General", "Top Authors", "Top Institutions", "Circle", and "Cluster Map". The "Top Institutions" tab is active, showing a table with columns: Market Size (Global), Institute, Relative Article Share, State-of-the-Art, and Reference. Below this, there's a section for "Institute articles" and "Top authors institute".

	Market Size (Global)	Institute	Relative Article Share	State-of-the-Art	Reference
Growth	3352.7	229.0	6.8%	5.36	1.0
	10.65% ▲	4.11 ▲	-0.12% ▼	▲	

Institute articles

Fractionalized	229.0	(3.8% of 6011 articles total for this institution past 5 years)
Articles	391	View 391 articles in Scopus
Rank past 5 years	1	
Rank past 2 years	1	
Citation count	1685.4	

Top authors institute

Name	Fractions
Author	57.6
Author	29.5
Author	28.2
Author	25.1
Author	17.5

[Go to authors](#)

View the 'Top Authors' for retention and recruitment purposes

View the 'Top Institutions' to identify competitors and potential collaborators



Siz bilimsel arastirmanizi nasil yoneteceksiniz?

Biz cevaplari biliyoruz ve sizin kendi cevaplarinizi bulmaniza yardimci olacak yeni urunlerimizle sizlere destek olacagiz.

- *SciVal Spotlight*
- *SciVal Funding*

Sorulariniz ve yardim istekleriniz icin;

Tayfun BASAL

t.basal@elsevier.com

Tel: 0 533 7718689