

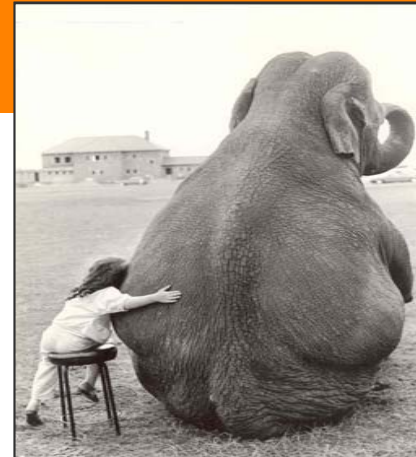


Elsevier Research Intelligence

Current and Future Potential of the University of Idaho

Brad Fenwick DVM, PhD, DACVM
Professor and Jefferson Science Fellow - US Dept. of State
Senior Vice President
Global Strategic Alliances

University of Idaho
Sept, 2015



Empowering Knowledge



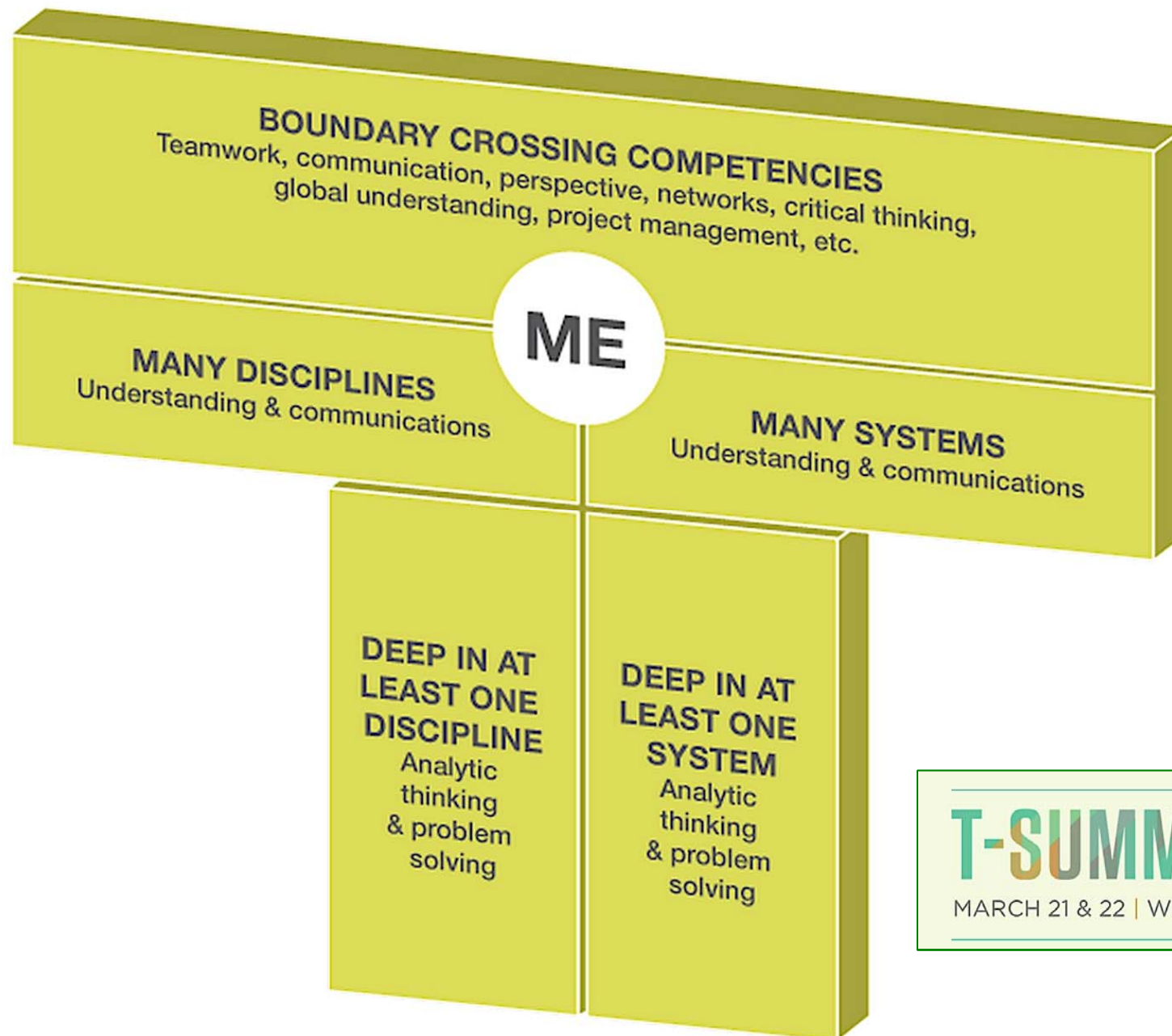
ELSEVIER

NON SOLUS "Not Alone"



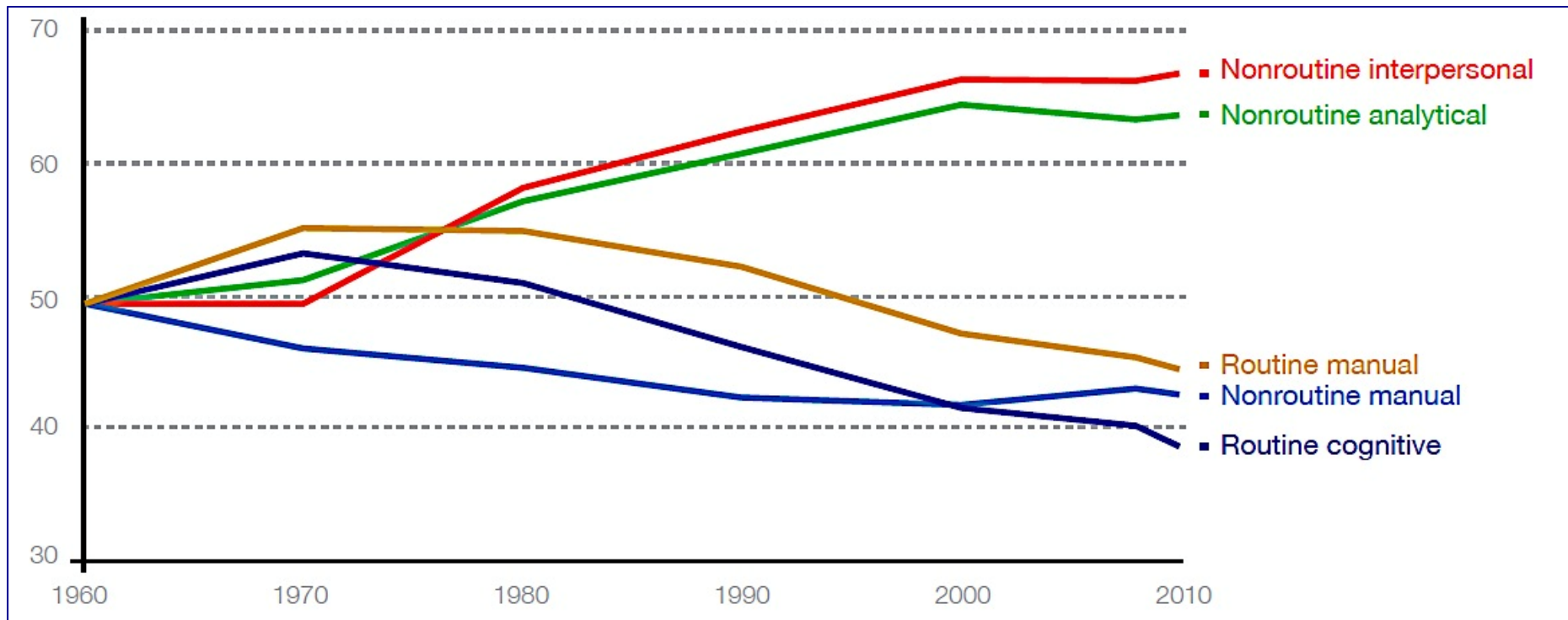
ELSEVIER

If the Research and Higher Education Enterprise
is not Healthy, the Science Publication Business
will also not be Healthy.



T-SUMMIT 2016
MARCH 21 & 22 | WASHINGTON, D.C.

What can be automated will be automated



21st-Century Skills

Foundational Literacies

How students apply core skills to everyday tasks



1. Literacy



2. Numeracy



3. Scientific literacy



4. ICT literacy



5. Financial literacy



6. Cultural and civic literacy

Competencies

How students approach complex challenges



7. Critical thinking/
problem-solving



8. Creativity



9. Communication



10. Collaboration

Character Qualities

How students approach their changing environment



11. Curiosity



12. Initiative



13. Persistence/
grit



14. Adaptability

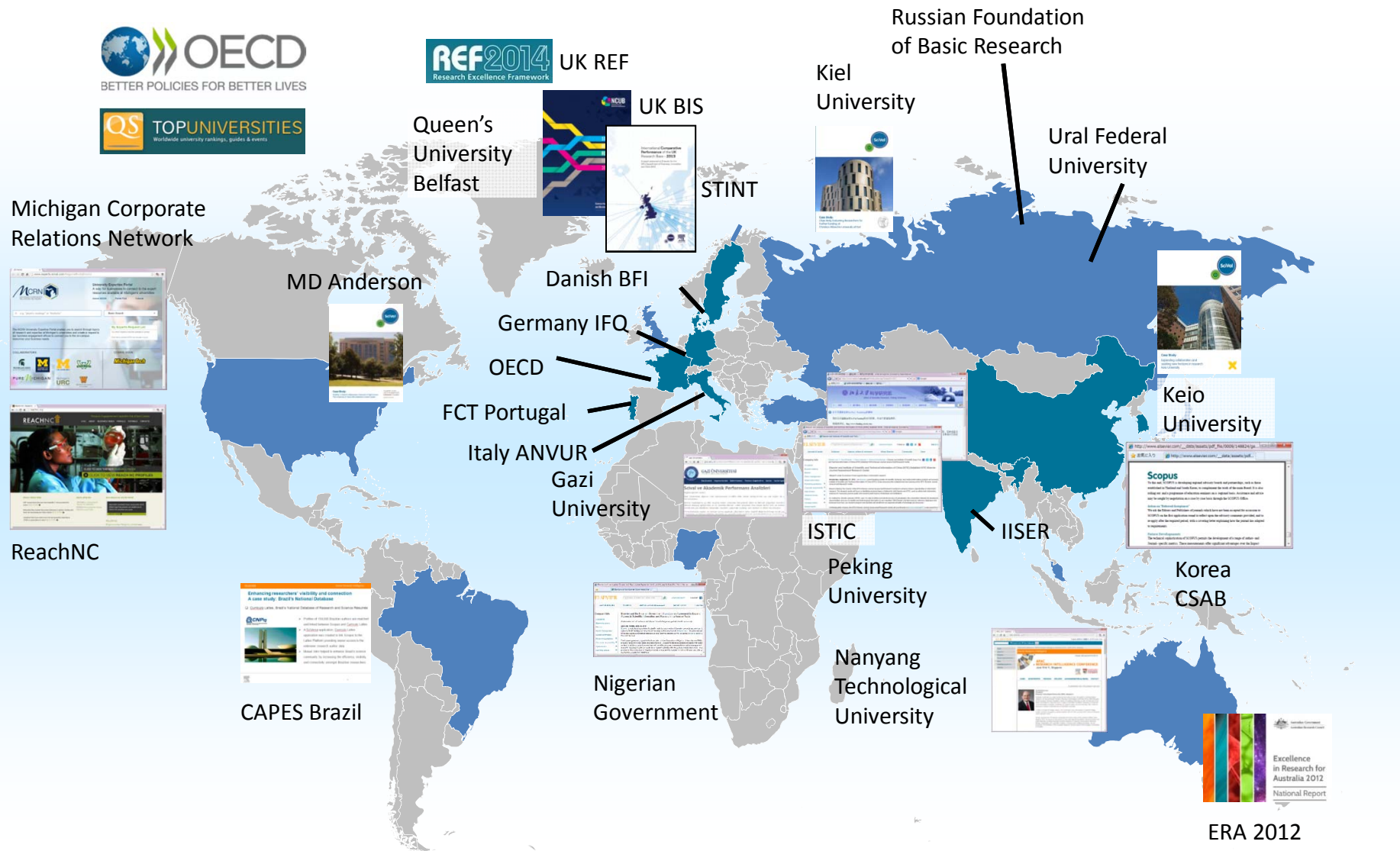


15. Leadership



16. Social and cultural awareness

We take a consultative approach to help answer the challenges research institutions face



Selected Collaborative Initiatives with Universities



Harvard Medical School

Correlation between outcomes and genetic mapping



Carnegie Mellon

Social graph mapping in news



North Carolina State University

Integration of GATE NLP into HPCC and automated optimization of ECL algorithms



Wayne State University

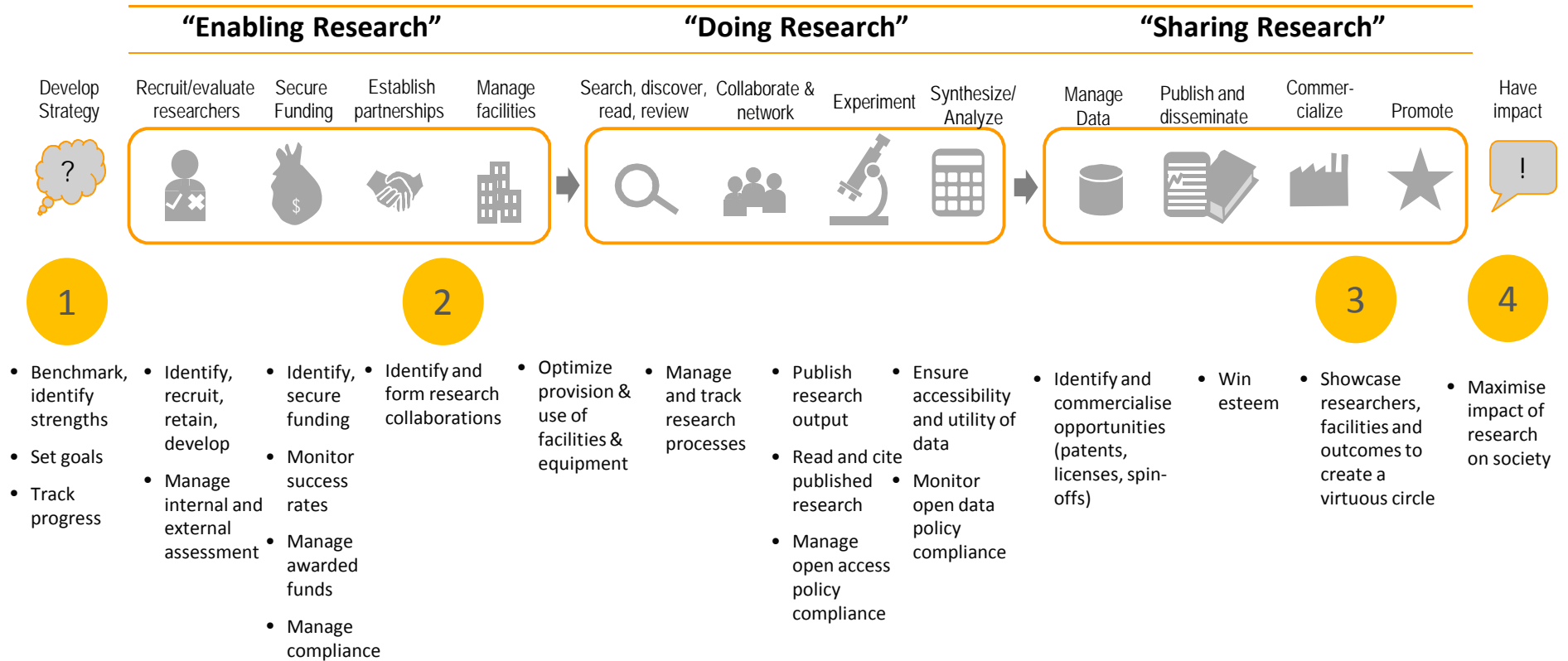
Development of systems and methods for building a corpus of trustworthy information mined from the Web



Georgia Institute of Technology

Enhancements to the HPCC Systems platform including in data security and privacy

Research Support



Elsevier has a unique vantage point on research



Each year

- 1 million article manuscripts received by ~2,000 journals (all offer Open Access options)
- 350,000 new articles published, in addition to 11M existing articles
- 2,000 new books published

Primary publishing

- ScienceDirect: 750M digital article downloads
- Scopus: 55M records, 21,900 titles, 5,000 publishers, 700M citations
- SciVal: 75 trillion metrics values
- Pure: current research information system: >200,000 researchers supported
- Mendeley: 3M users globally
- Grants: 7,000 sponsors, 20,000+ active opportunities, ~5M awarded grants
- Patents: >93m records, 100 patent offices
- Compounds: 22M compounds, 35M reactions; 3.3M molecular facts
- Drug information: 16k branded drugs; 12k generic drugs

Derived and aggregated data

Elsevier is increasingly the partner of choice for global research leaders

National research assessment and benchmarking reports

- US NSF Science & Engineering Indicators
- Research Performance in South-East Asia
- UK REF, UK BIS reports
- ERA (Australia)
- FCT (Portugal)
- VQR (Italy)



Global University Rankings

- Times Higher World University Rankings
- Maclean's
- QS rankings
- US News rankings (Arab Region)

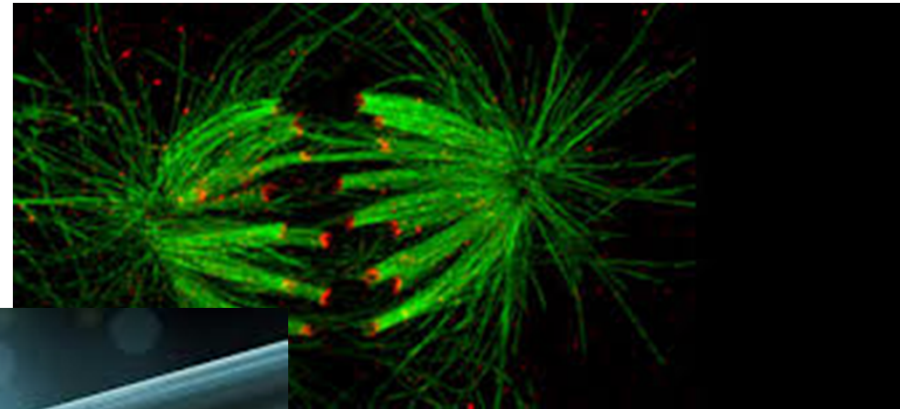
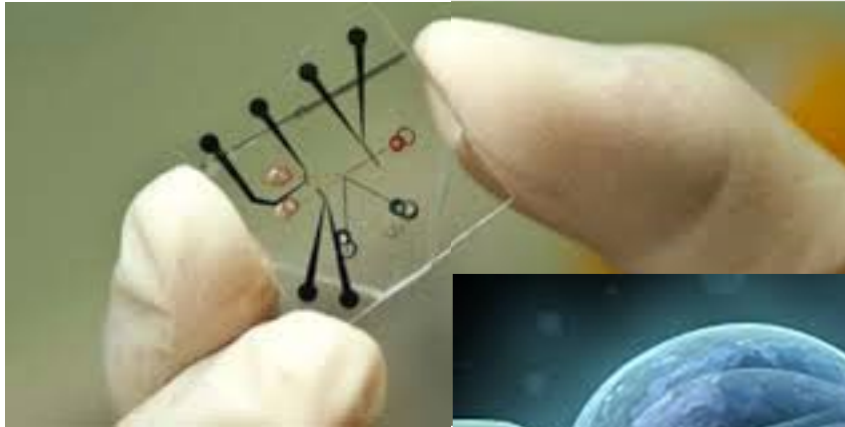


ProBono initiatives and reports (selected examples)

- US Council of State Governments
- NIH Best reports (including Cornell)
- Illinois Science and Technology Road Map
- Sustainability Science (24 September)
- World Bank
- Royal Society
- Science Europe
- EuroStemCell, Kyoto University
- European Commission, FENS, HBP,
- Kavli Foundation, RIKEN BSI



- What worked yesterday will not meet tomorrow's
Education and Information needs -

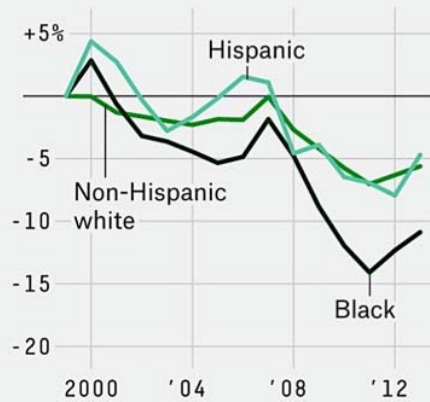


All About the Economics

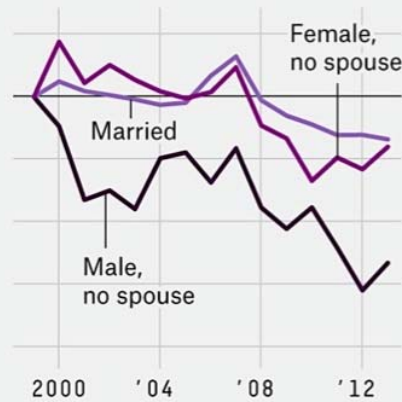
Change In Household Income

Since 1999, adjusted for inflation

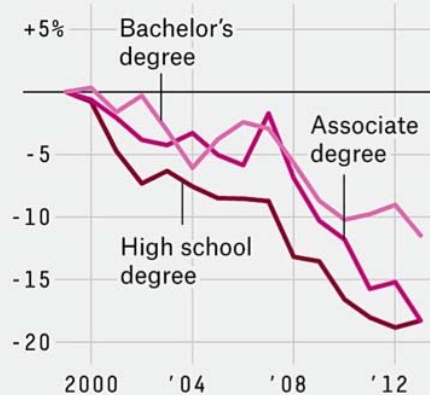
BY RACE



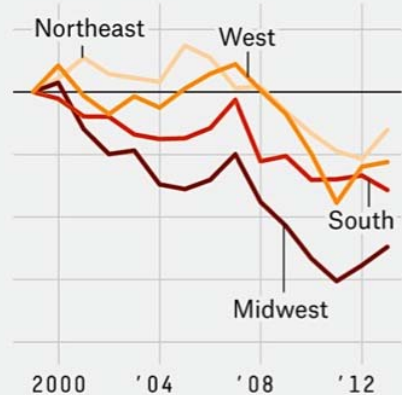
MARITAL STATUS



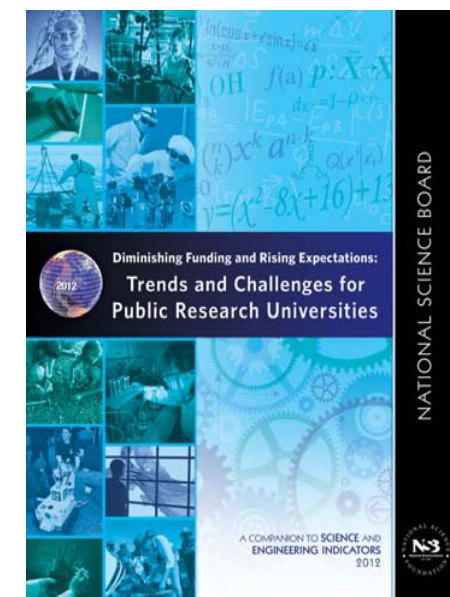
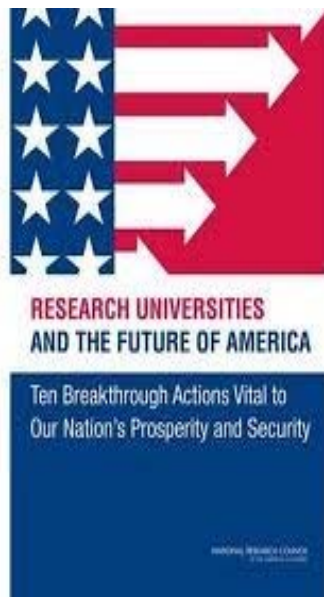
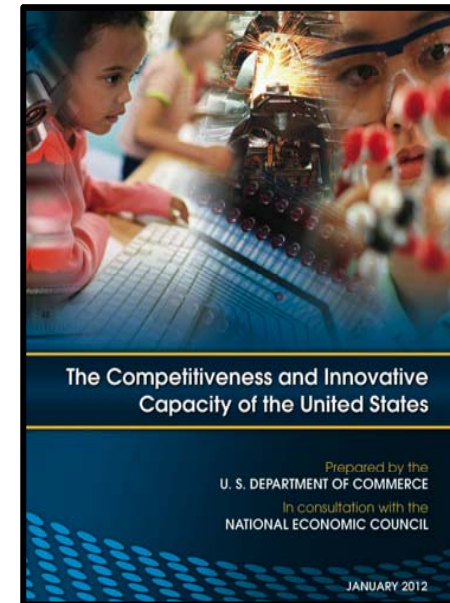
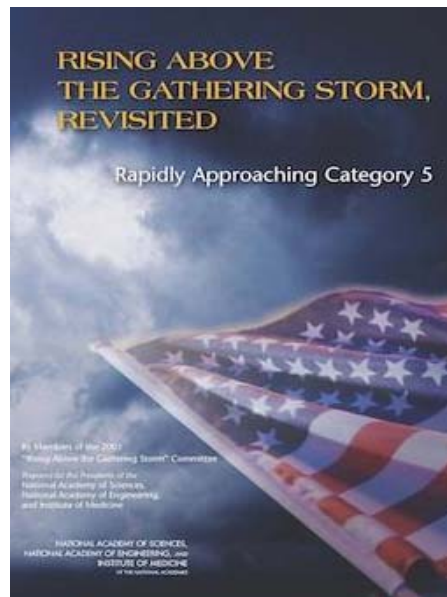
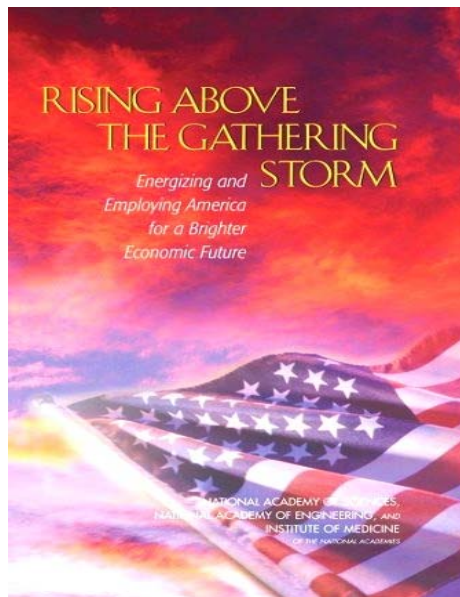
EDUCATION



REGION

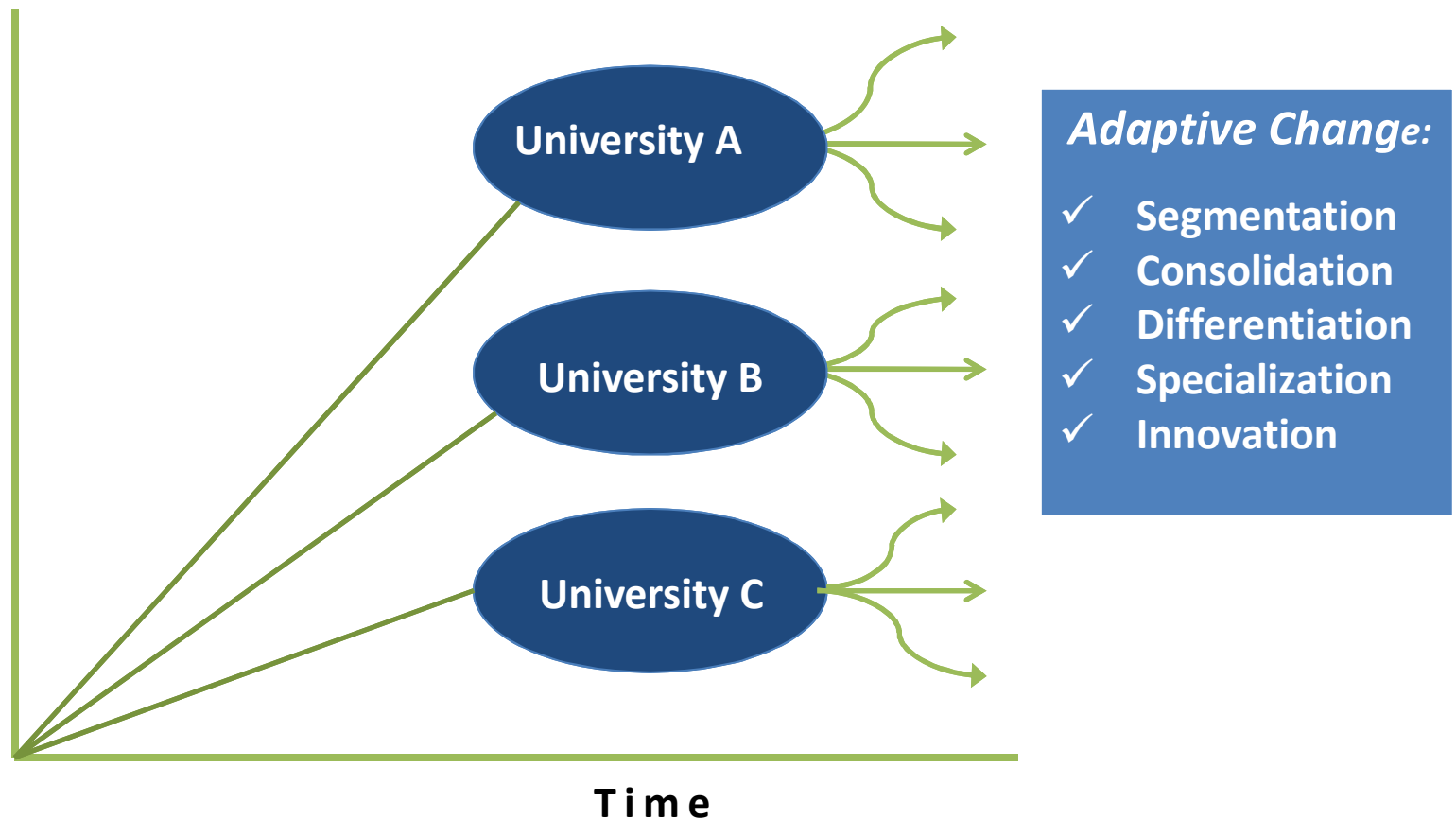


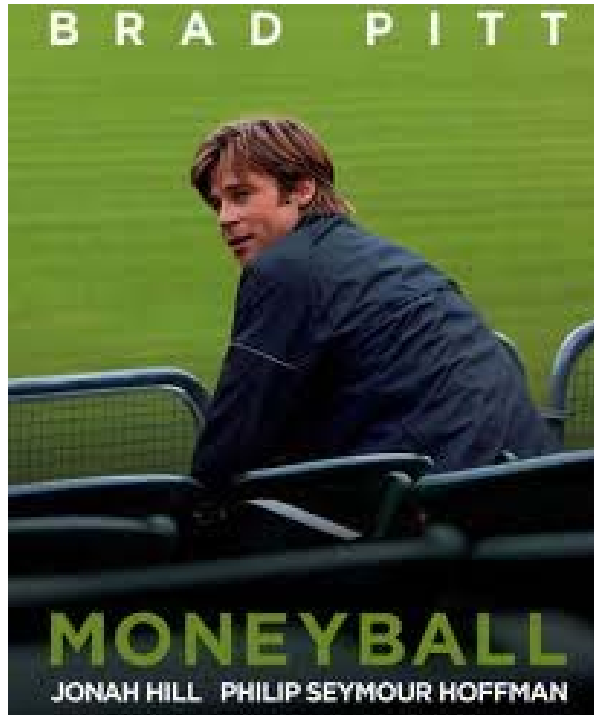
Institution Type	% Agreeing Model Is Sustainable Over a Decade, 2014	% Agreeing Model Is Sustainable Over a Decade, 2015
Public Doctoral	53%	42%
Public Master's	56	31
Public Baccalaureate	50	34
Public Associate	44	36
Private Doctoral/Master's	48	42
Private Baccalaureate	45	41



“Current Model is not Sustainable”

Historical Point of Inflection -- Uncertain Trajectory





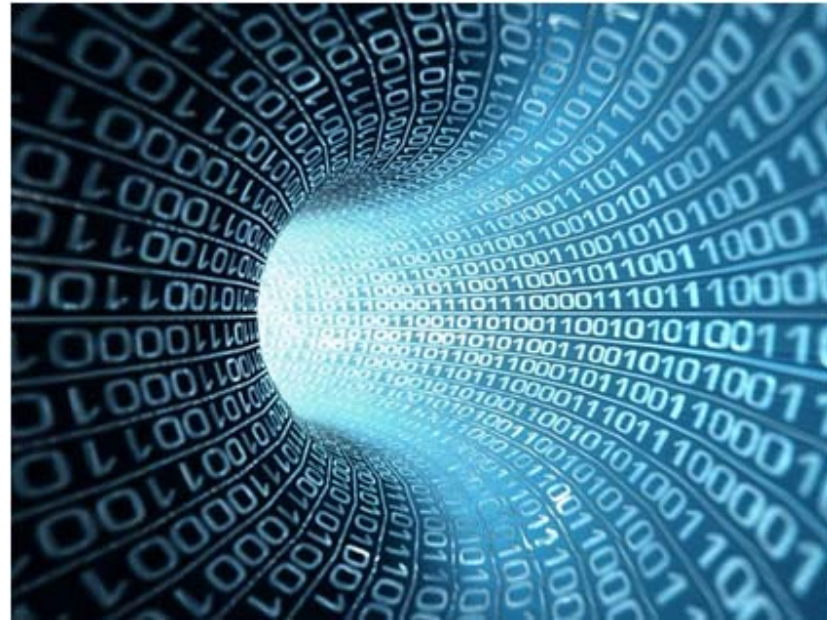
“A Team of Experts is
not an Expert Team
without Data”



“If a better university is your destination,
then better data is your map.”

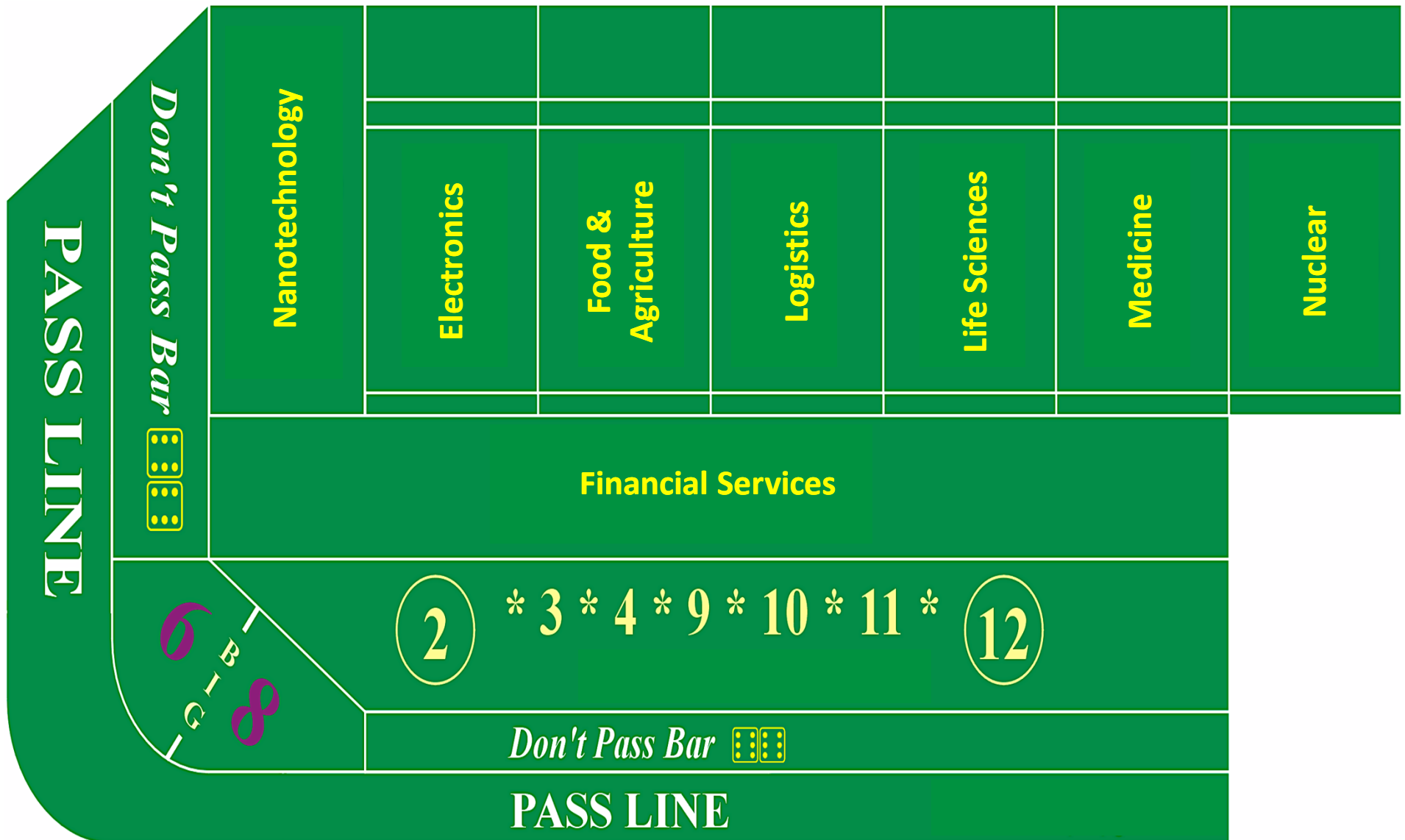


Give me data... NOW!

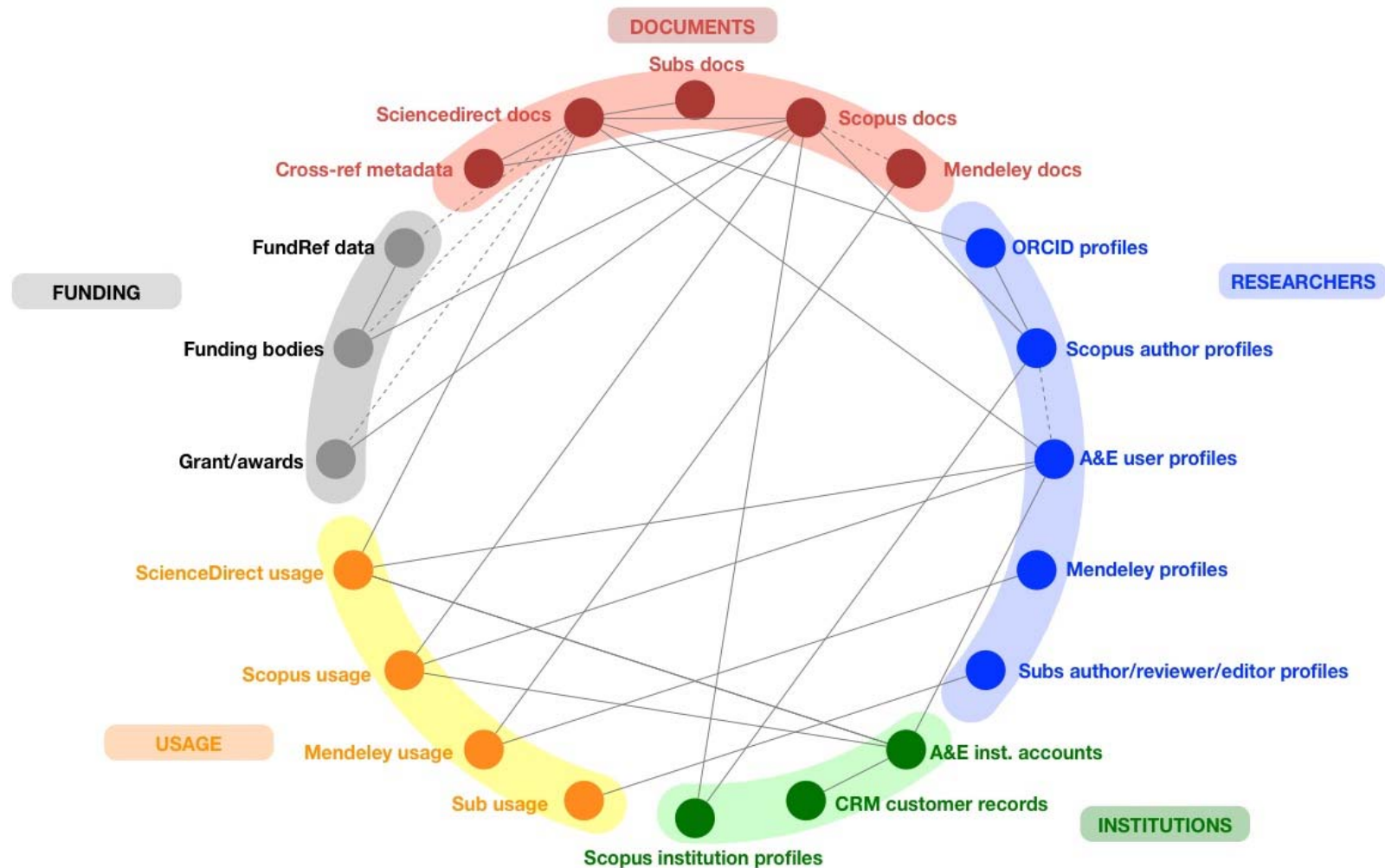


If we want (need) to make higher education and academics research more efficient and effective, we need to know what works.

Which Research areas are you going bet on?



Elsevier's Data and Content Assets



What content does Scopus include?

55.5M records from **22,283** serial titles and **50,316** books
21.3M pre 1996 records | 34.1M post 1995 records

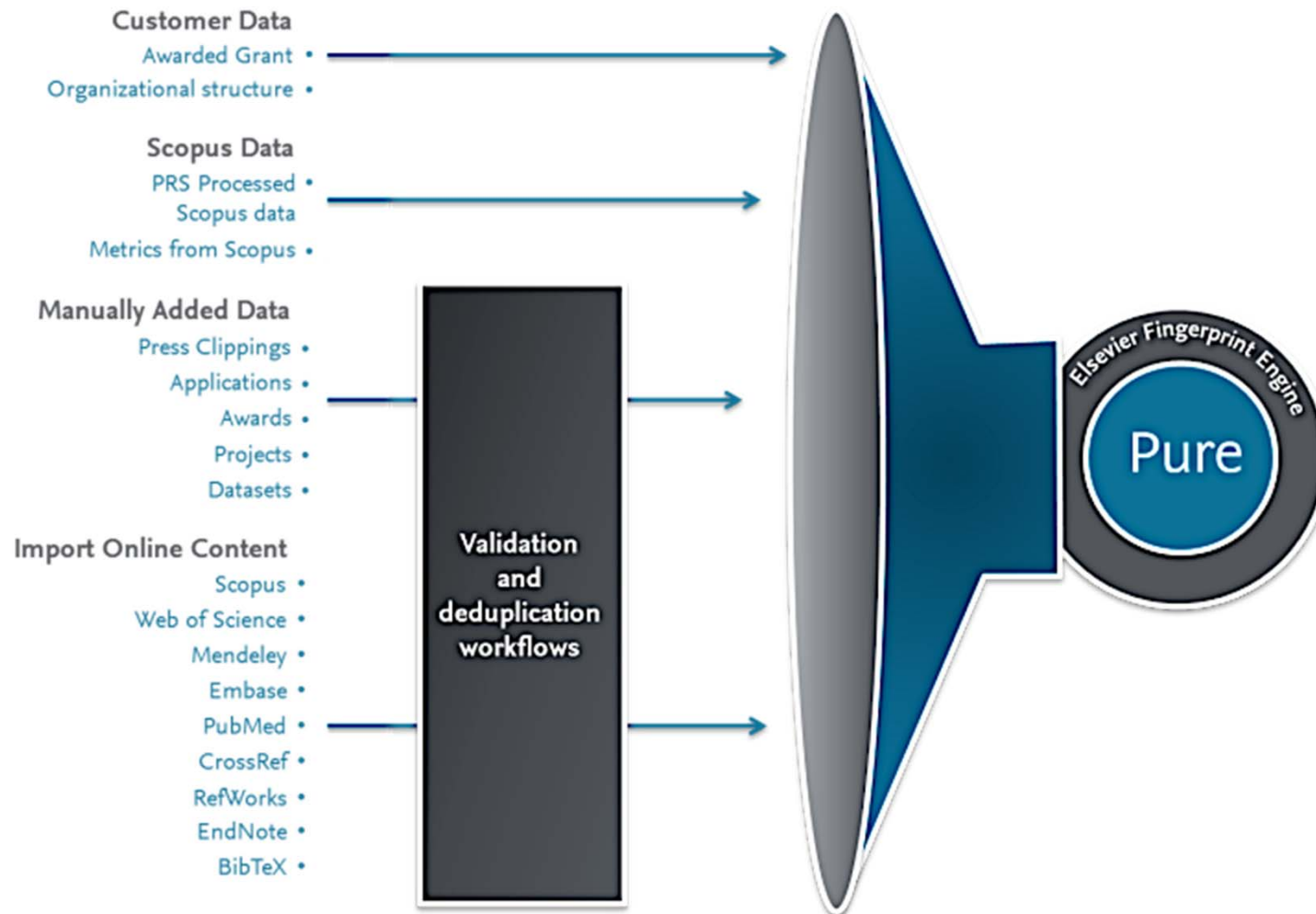
- Content from > 5,000 publishers
- “Articles in Press” from > 3,750 titles
- Titles from 105 different countries in all geographical regions
- 40 “local” languages covered
- More than 2,800 Gold Open Access journals indexed



Scopus is ideal compared to other products because it has the broadest coverage of global, curated, relevant research, with smart, simple tools to help track, analyze and visualize research.



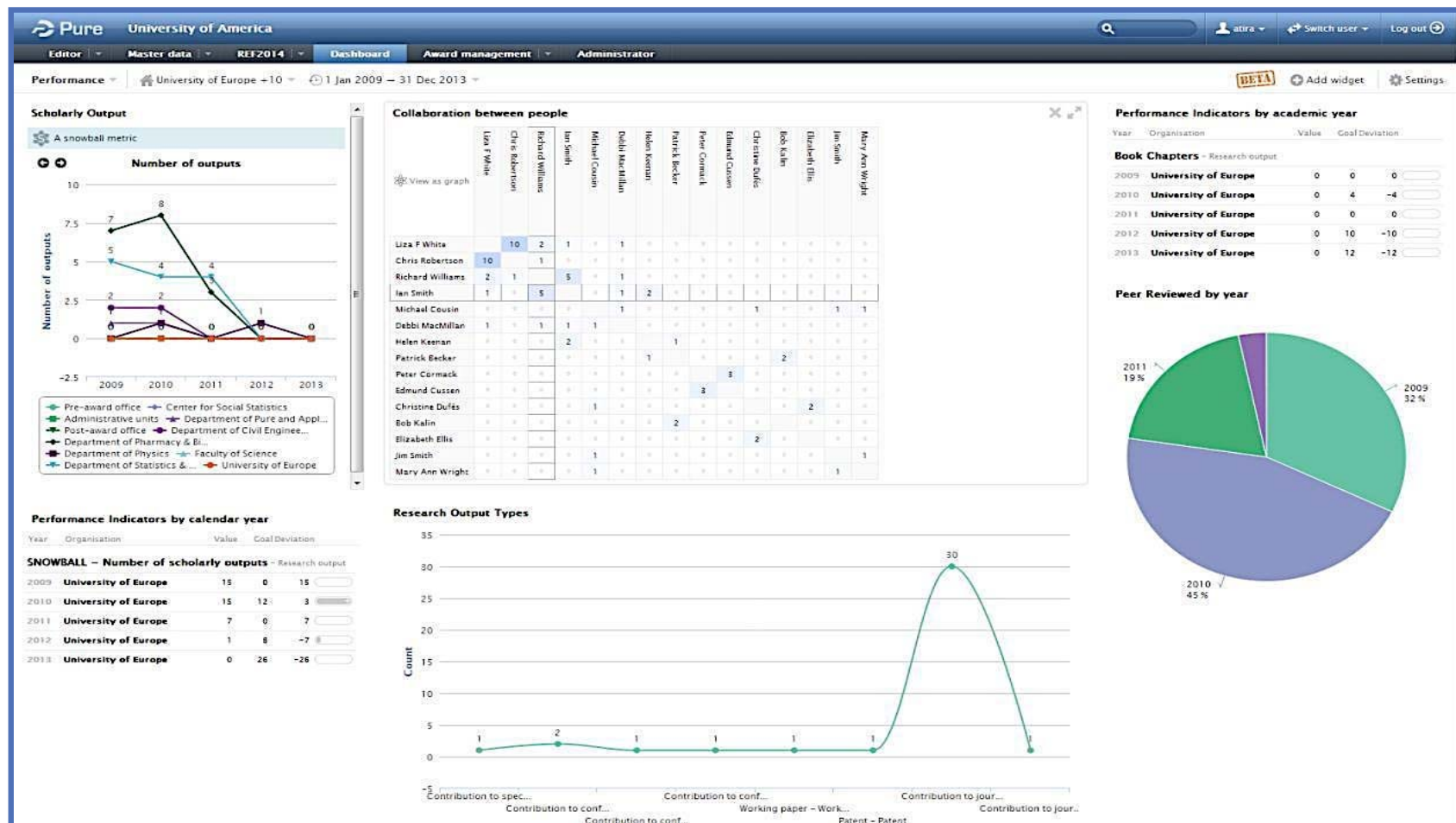
Data captured from multiple channels



Customizable dashboards provide administrators with an overview of strategically important metrics

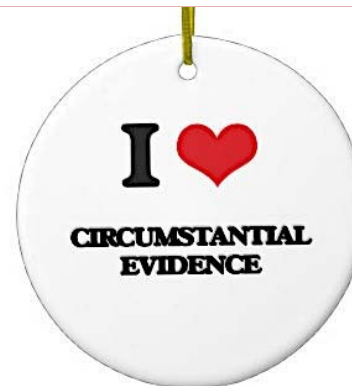


- Dashboards can be **personalized**, **shared** and used for **monitoring and reporting**
- **User controls** ensure that only data relevant to the user are visible



What I wished I would have known - but you can?

- ✓ What are my institution's verifiable research strengths?
- ✓ What are my institution's emerging strengths that are good bets for the future and warrant additional resource allocations?
- ✓ Are there institutional level collaborations that would leverage the institution's inherent competitive advantages?
- ✓ Which researchers are most at risk of being recruited and most important to maintain or advance institutional research strengths?
- ✓ Which researchers should be proactively recruited and would provide the best ROI.



“Everyone has a right to their own opinion, but no one has a right to be wrong in their facts.” Bernard Barush 1950’

How publication metadata maps research

Chemical Society Reviews
Volume 41, Issue 10, 21 May 2012, Pages 3969-4009

Recent developments in asymmetric multicomponent reactions (Review)

De Graaff, C., Ruijter, E. ✉, Orru, R.V.A. ✉

Department of Chemistry and Pharmaceutical Sciences, Amsterdam Institute for Molecules, Medicines and Systems (AIMMS),
VU University Amsterdam, De Boelelaan 1083, 1081 HV Amsterdam, Netherlands

Abstract

Multicomponent reactions (MCRs) receive increasing attention due to their complexity in organic synthesis. Thus, in principle, a wide range of pure compounds for pharmaceutical and agricultural development of asymmetric multicomponent reactions have been applied to the total synthesis of natural products.

Researcher affiliated with Vrije University Amsterdam

Cited by 150 documents since 1996

Recent advances in enantioselective vanadium-catalyzed asymmetric transformations
Pellissier, S. (2015) *Chemical Society Reviews*

A domino Michael-aldol process for the synthesis of polysubstituted tetrahydro-4H-pyrido[1,2-b]pyrimidin-5(1H)-ones
Yan, Z.-F., Jia, J., Da, Y.-X. (2014) *Chemical Communications*

Condition-dependent multicomponent reactions of 1,3-dicarbonyl compounds and formaldehyde
Liu, C., She, Y. (2014) *ACS Catalysis*

Count (150) of other papers citing this publication

References (409)
First 80 references displayed (View all references)

Page | CSV export | Print | E-mail | Create bibliography

1 Orru, R.V.A., De Greef, M.
Recent advances in solution-phase multicomponent methodology for the synthesis of heterocyclic compounds
(2003) *Synthesis*, (10), pp. 1471-1499. Cited 704 times.
View at Publisher

2 Ruijter, E., Scheffelaar, R., Orru, R.V.A.
Multicomponent reaction design in the quest for molecular complexity and diversity
(2011) *Angewandte Chemie - International Edition*, 50 (28), pp. 6234-6246. Cited 289 times.
doi: 10.1002/anie.201006515
Full Text | View at Publisher

Count (409) of other papers cited by this publication

2

Concepts are derived from the text. Each concept is found in an underlying thesaurus suitable for the scientific area of the text. Concepts are weighted to create a precise summary of the text's meaning.

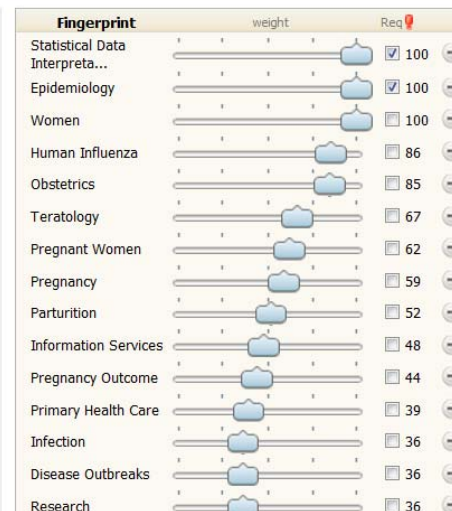
Influenza A/H1N1v in pregnancy: An investigation of the characteristics and management of affected women and the relationship to pregnancy outcomes for mother and infant

Show Grant Application Details

Edit Grant Application

Abstract

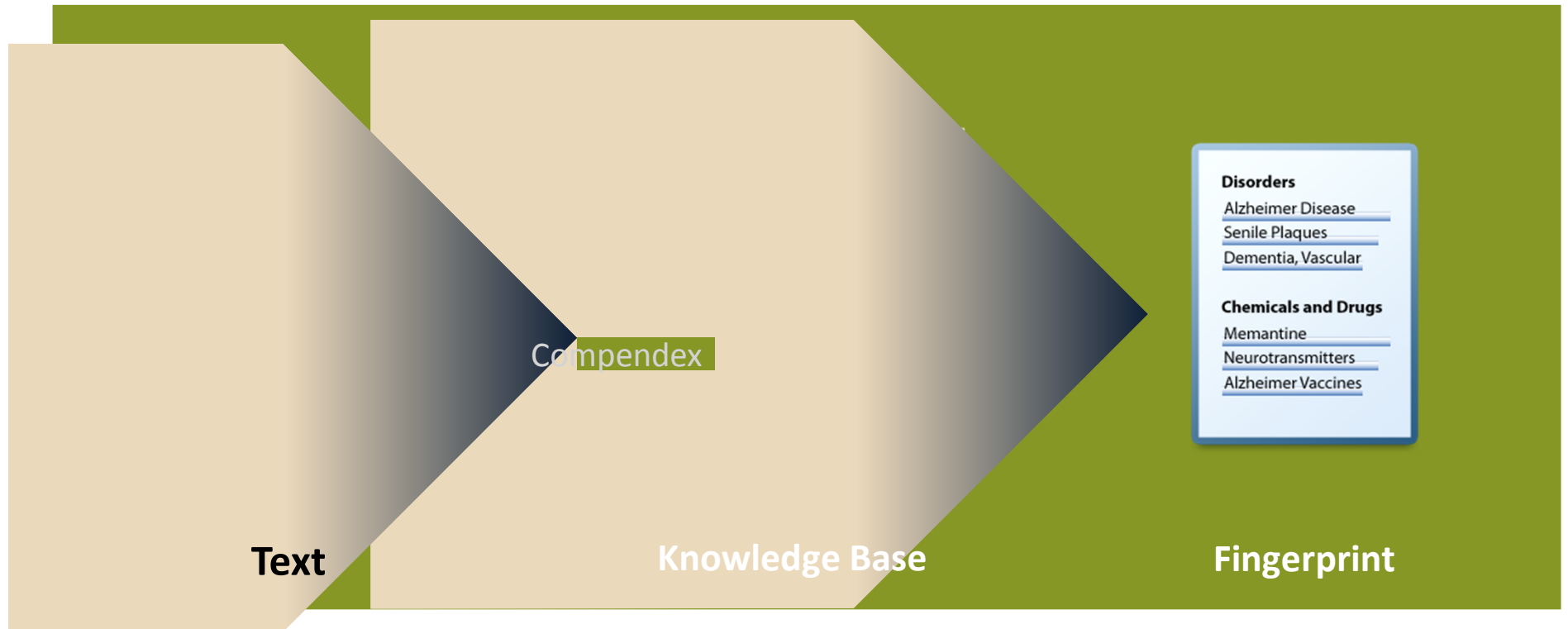
Influenza infection during pregnancy is associated with adverse maternal and fetal outcomes, including probable increases in the risk of maternal pneumonia and possible increases in risks of certain congenital malformations. Recent US H1N1 pandemic experience as well as data from previous influenza pandemics indicates higher morbidity and mortality among pregnant women. DESIGN: Systematic review and a subsequent prospective observational cohort study using several different sources to identify pregnant women needing treatment or prophylaxis. Information about pregnancy management and outcomes will be collected directly from health professionals, as well as women themselves where infection is managed in primary care. COHORT IDENTIFICATION: All women in the UK identified with confirmed or suspected influenza H1N1v or requiring antiviral prophylaxis, identified through the UK Teratology Information Service (UKTIS), the Reproductive Medicine and Childbirth Research Network, the Primary Care Research Network, the HPA Regional Microbiology Laboratory Network, self reporting by patients and active negative surveillance through the UK Obstetric Surveillance System (UKOSS). Information about comparison women will be obtained from the existing UKOSS database of over 1200 women giving birth in the UK. VIROLOGICAL CONFIRMATION OF H1N1: Women will undergo H1N1 testing arranged through the research network staff or by a self testing kit if not done already. DATA GATHERING: 1. Consenting women identified through UKTIS will be contacted by telephone (a) two weeks after the reported exposure/ first contact. Details of them and their illness will be collected (b) Patients who remain unwell will be followed up at two weekly intervals until recovery (c) Final follow up will be of maternal and pregnancy outcome two weeks after birth. 2. Nominated UKOSS reporting clinicians will report anonymised details of all pregnant women admitted with confirmed or suspected H1N1v infection via a specific web-based rapid reporting and data collection system. STUDY SIZE: We anticipate identifying 500-1000 affected pregnancies during the 6 month initial study period. Information on 1200 comparison women is available from existing UKOSS data. ANALYSIS: We will investigate the relationship between demographic, pregnancy characteristics, management and clinical outcomes in order to generate immediate recommendations for changes in practice to improve outcomes for this vulnerable group.

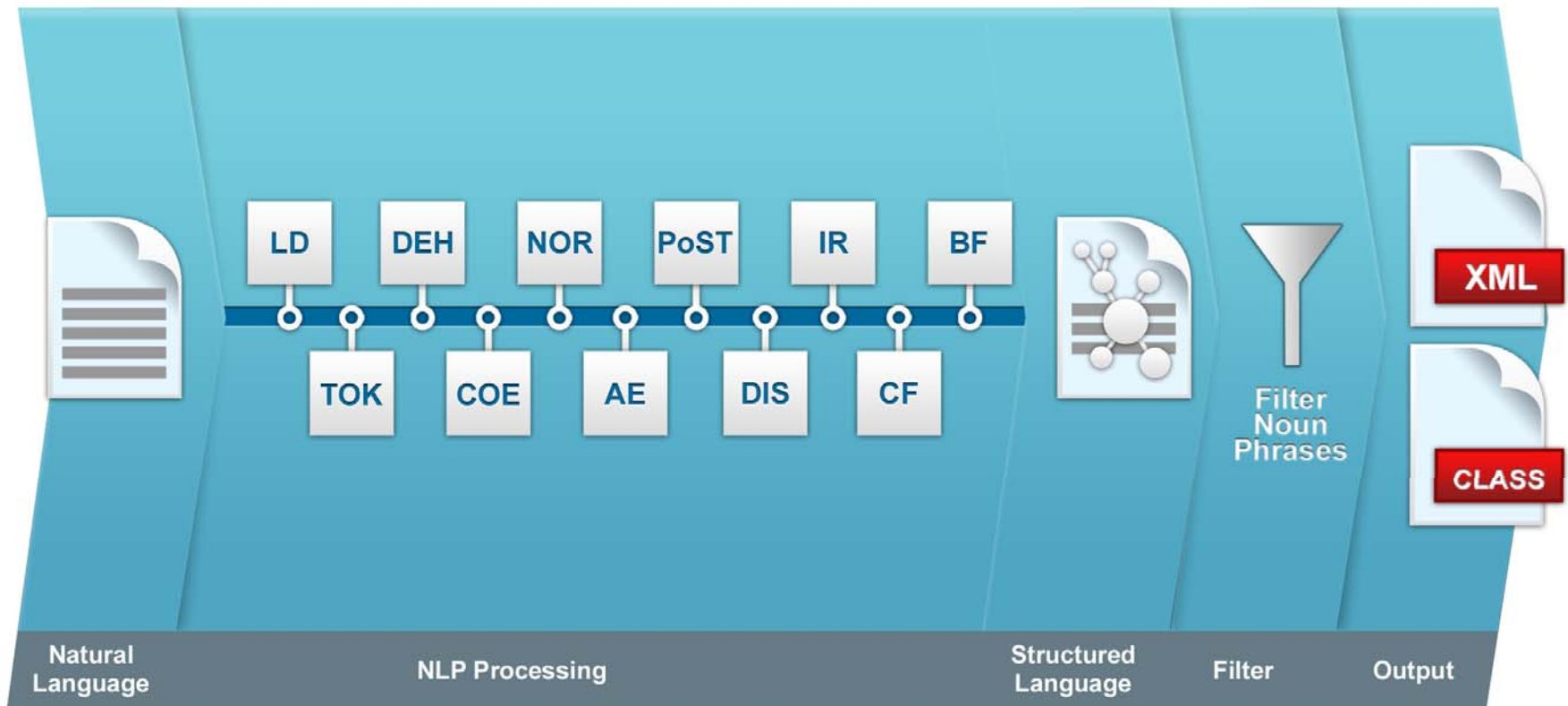


1

- Any text can be Fingerprinted, from grant applications to publications
- Fingerprints are generated from the title and abstract
- Natural Language Processing techniques are applied

Fingerprint Technology







LD

Language Detection:
Detects in which language
a text is written.



PoST

Part-of-Speech Tagging:
Tags a tokenized text
with the linguistic part
of speech (verb, noun
etc). Tagging is context
dependent, e.g. the word
'lead' can be tagged as
a noun or verb: "it lead
to the conclusion" versus
"the lead concentration
was high".



COE

Coordination Expansion:
Detects abbreviated
coordinations and
reconstructs full forms.
For instance, the phrase
"intra- and extramural" is
expanded to "intramural
and extramural". Similarly,
full noun phrases are
reconstructed from
abbreviated ones, e.g.
"Hepatitis A and B" is
expanded to "Hepatitis A
and Hepatitis B".



IR

Idiom Removal: Excludes
known idioms from
concept finding. For
instance, "on the other
hand" will not produce
the concept "hand".



TOK

Tokenization:

Tokenizes a text, splitting it in tokens, e.g. by recognizing word and sentence boundaries.



NOR

Normalization:

Produces normal forms converting plural forms to singular (children > child) and British to American (gynaecology > gynecology).



AE

Abbreviation Expansion:

Detects and expands abbreviations that are defined in a text. For instance, if the phrase "Blood group (BG)" is detected all occurrences of "BG" in the same text are expanded to "Blood group".



DEH

Dehyphenation:

Recognizes sentence-final hyphenations and reconstructs the original words, for instance "dehyph- enation" > "dehyphenation".



DIS

Disambiguation:

Disambiguates thesaurus terms based on their part-of-speech tags. For instance, the term “lead” from a chemistry thesaurus may be omitted if it is tagged as a verb in the text.



LS

Language Support:

English, German, Dutch, Spanish, Portuguese, and Chinese. Additional languages can be added.



CF

Concept Finding:

Finds occurrences of terms from a controlled vocabulary in a piece of unstructured text.



NPD

Noun Phrase Detection:

Detects noun phrases in tokenized text. This can be used for thesaurus term suggestion. For instance, processing “The novel association at the ABO locus provides evidence” produces “novel association”, “ABO locus” and “evidence”.



BF

Balanced Fingerprinting:

Combines different document sections with different base weights.

How does the Elsevier Fingerprint Engine work?

- ① Mine Text
- ② Identify Concepts
- ③ Create Document Fingerprint



- MeSH
- Compendex
- GeoTree
- GESIS
- and more



Disorders

Uterine Cervical Neoplasms

Neoplasms

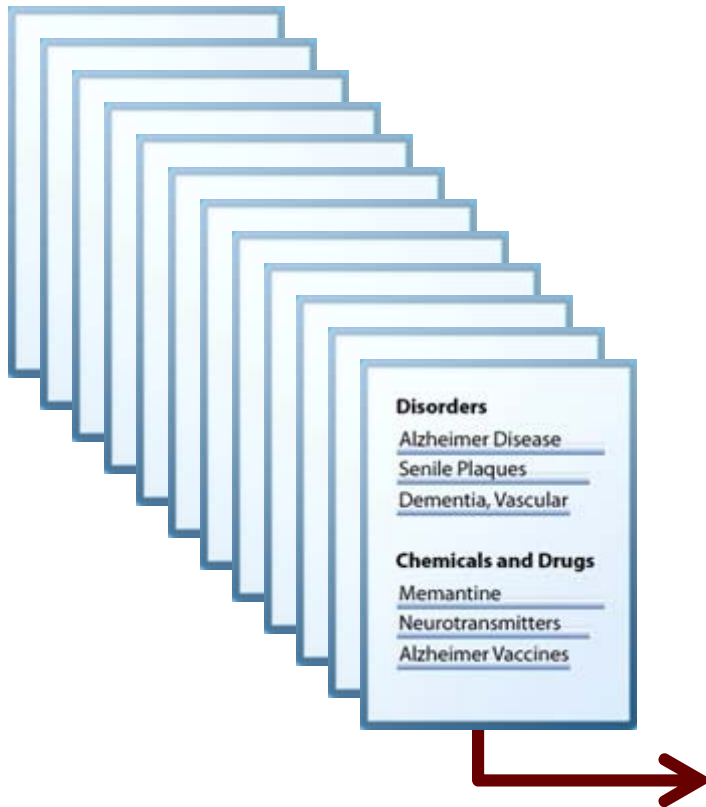
Breast Neoplasms

Chemicals & Drugs

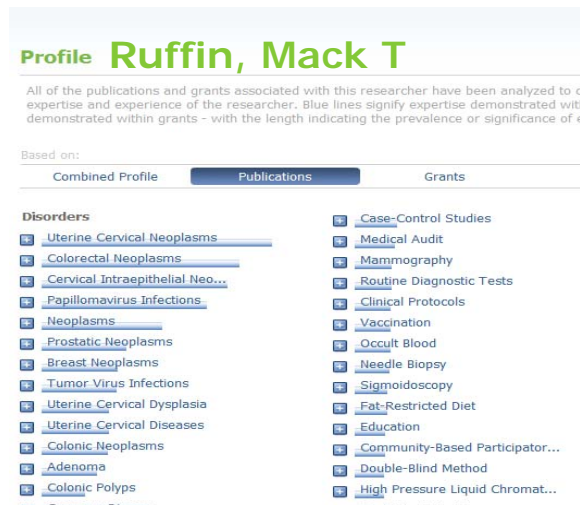
Biological Tumor Markers

Papillomavirus Vaccines

Aspirin



Generate a researcher's unique Fingerprint by aggregating the Fingerprints of each of their publication abstracts



Showcase researchers, facilities and outcomes

Daniel W. Belsky

DUKE, University Institutes & Centers, Social Science Research Institute

[Edit your profile](#)

Home

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- Publications
- Patents
- Similar Experts
- Journals
- Institutional Network
- Coauthor Network
- Research Network
- Curriculum Vitae

Fingerprint

more >

- Longitudinal Studies
- United States
- Cohort Studies
- New Zealand
- Medicare
- Male
- Veterans Disability Claims
- American Civil War
- interaction research
- obesity

Publications

more >

- Idan Shalev; Avshalom Caspi; Antony Ambler; Daniel W. Belsky; Simon Chapple; Harvey Jay Cohen; Salomon Israel; Richie Poulton; Sandhya Ramrakha; Christine D. Rivera; et al.

Perinatal complications and aging indicators by midlife

Pediatrics. 2014;134(5):e1315-e1323.
- Daniel W. Belsky; Nis Palm Suppli; Salomon Israel

Gene-environment interaction research in psychiatric epidemiology: a framework and implications for study design

Social Psychiatry and Psychiatric Epidemiology. 2014;49(10):1525-1529.
- Benjamin W. Domingue; Daniel W. Belsky; Kathleen Mullan Harris;

Similar Experts

more >

	Publications
Frank A. Sloan	264
Truls Ostbye	340
Philip R. Costanzo	53
Terrie E. Moffitt	299
Avshalom Caspi	263

Journals

more >

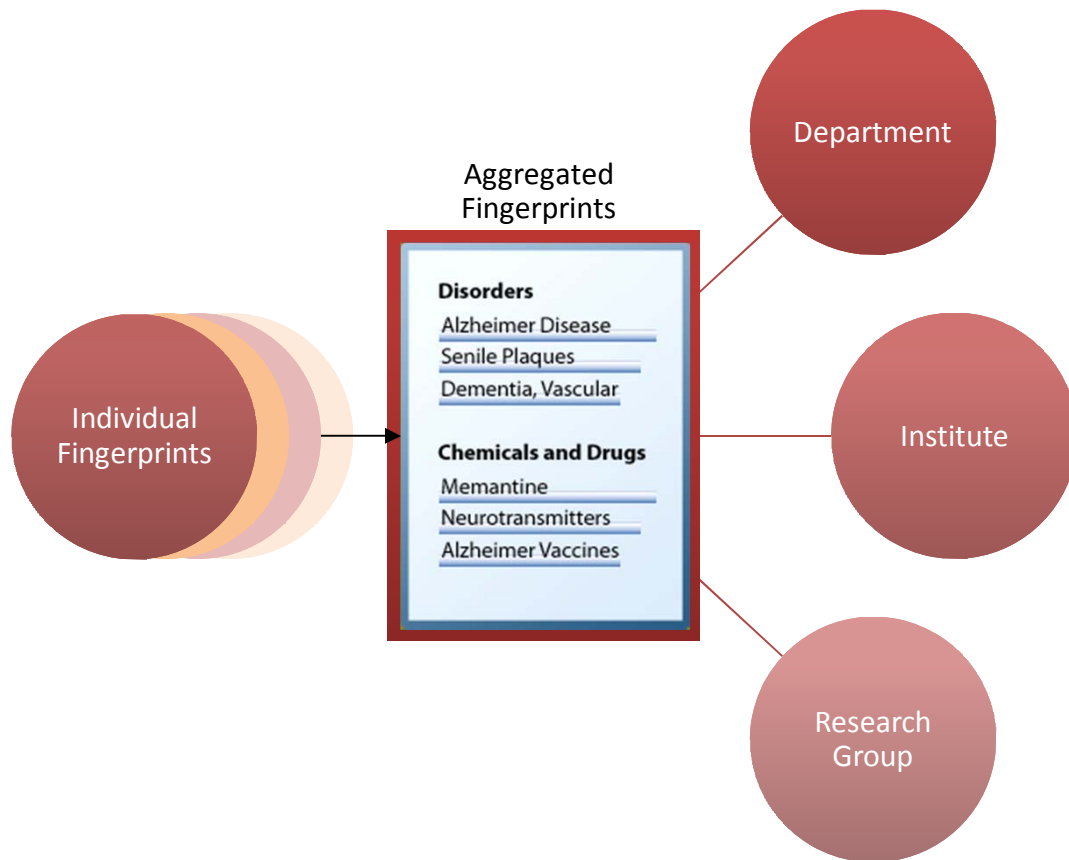
	Publications
Bulletin of the America...	3
Pediatrics	2
American Journal of E...	2
Archives of Ophthalmo...	2
Biodemography and S...	2

Research Network

Daniel W. Belsky

- Organizations

Aggregating researchers' Fingerprints across organizational units allows for the institution to know what individuals know and what groups know...



- What new publications and grants have been produced?
- What trends have emerged over time?
- Who is working together?
- With what other organizations (internal and external) are we collaborating?
- **What do we know?**

Broadly Distributed Publication Portfolio with Quality Above the World Average

Publications
4,192 ▲

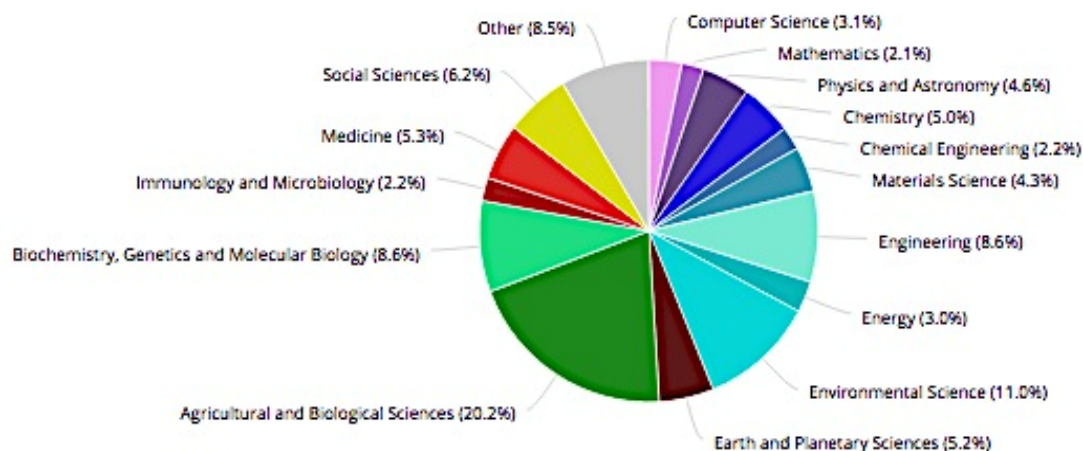
Citations
28,743

Authors
2,307 ▲

Field-Weighted Citation Impact
1.31

Citations per Publication
6.9

[View list of publications](#)



Broadly Distributed Publication Portfolio with Quality Above the World Average



Publications
4,192 ▲

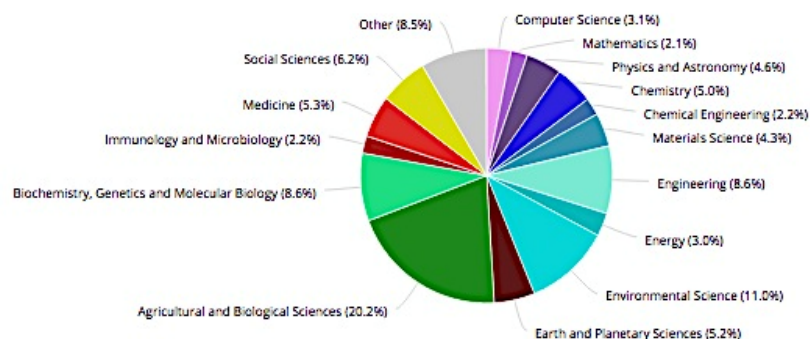
Citations
28,743

Authors
2,307 ▲

Field-Weighted Citation Impact
1.31

Citations per Publication
6.9

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Publications
10,866 ▲

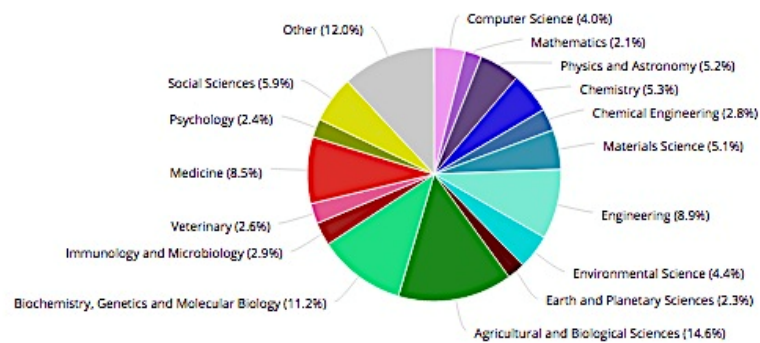
Citations
68,971

Authors
5,662 ▲

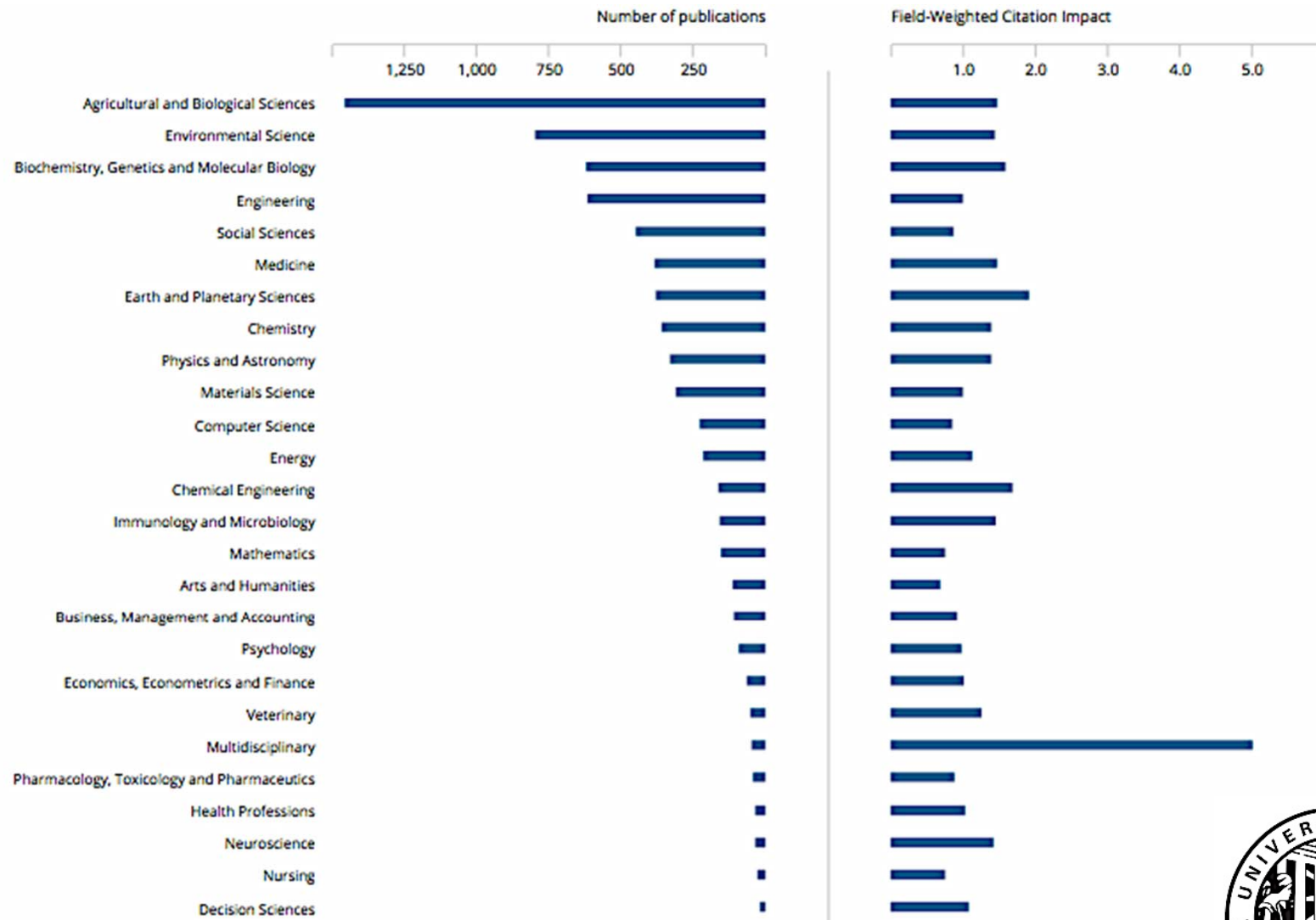
Field-Weighted Citation Impact
1.43

Citations per Publication
6.3

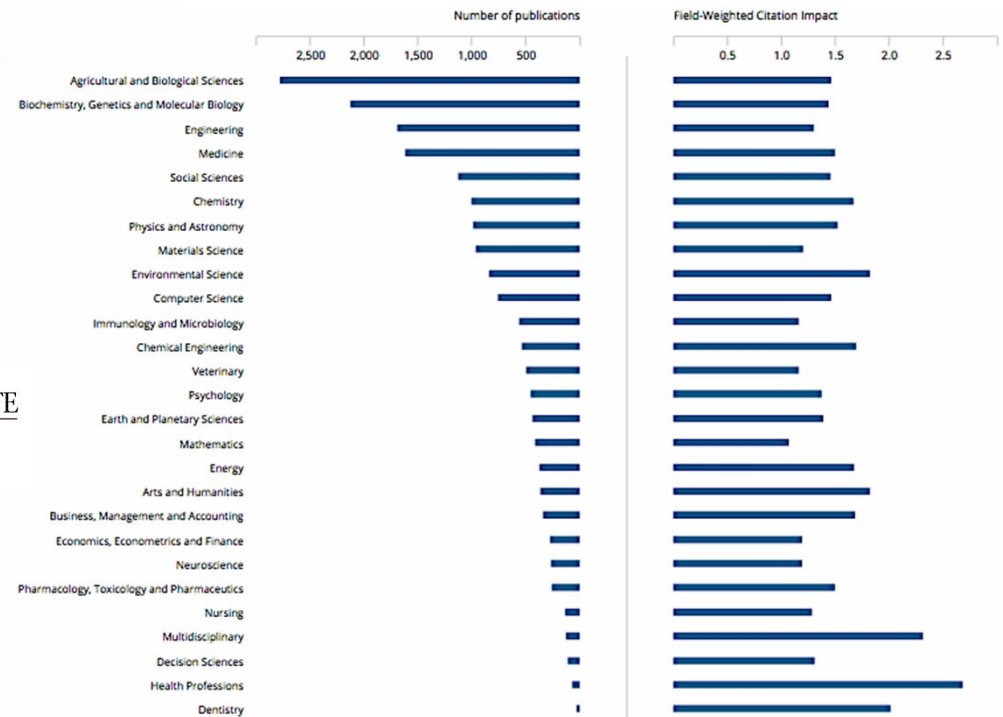
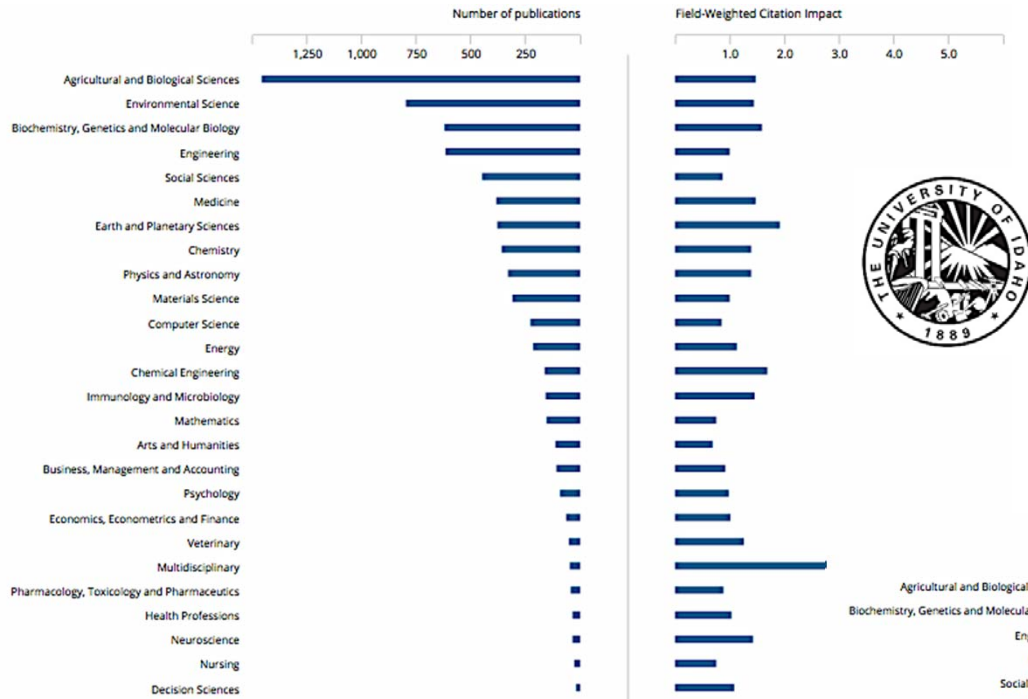
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Alignment between Quantity and Quality



Alignment between Quantity and Quality



Broadly Distributed “*Agriculture / Life Science*” Publication Portfolio with Quality Above the World Average

Publications

1,453 ▲

Citations

11,119

Authors

957 ▲

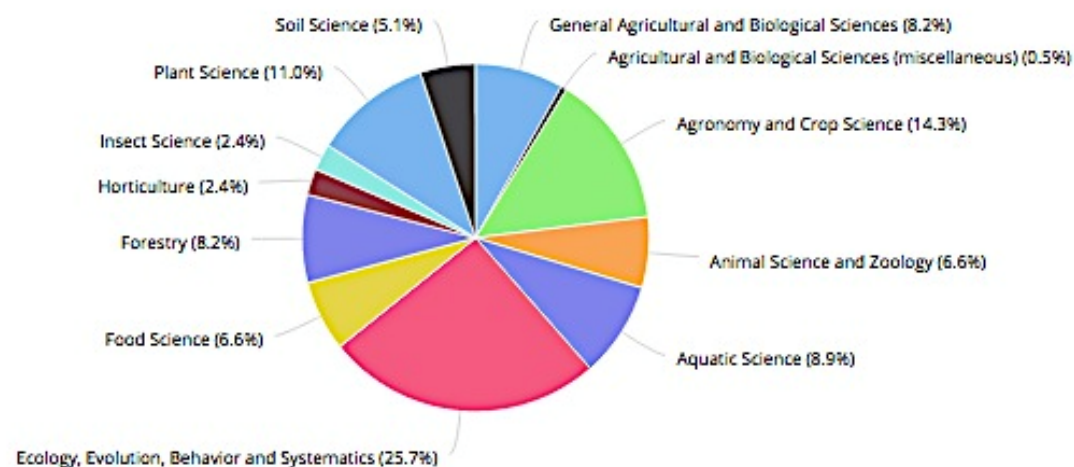
Field-Weighted Citation Impact

1.49

Citations per Publication

7.7

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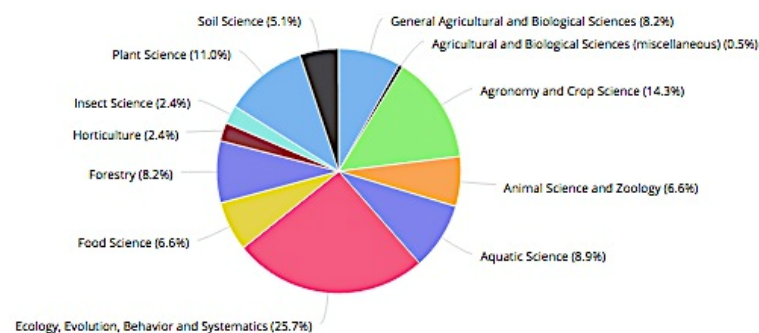


Broadly Distributed “Agriculture / Life Science” Publication Portfolio with Quality Above the World Average



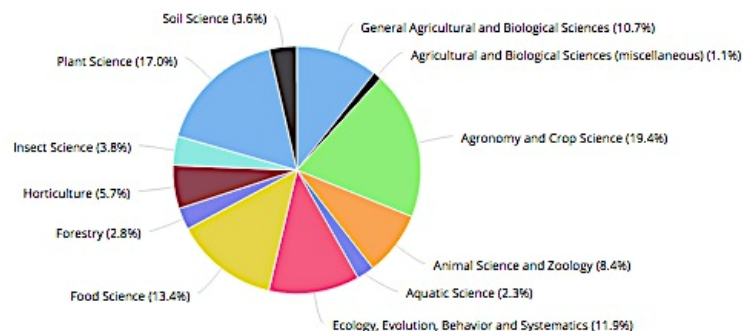
Publications **1,453** ▲ Citations **11,119** Authors **957** ▲ Field-Weighted Citation Impact **1.49** Citations per Publication **7.7**

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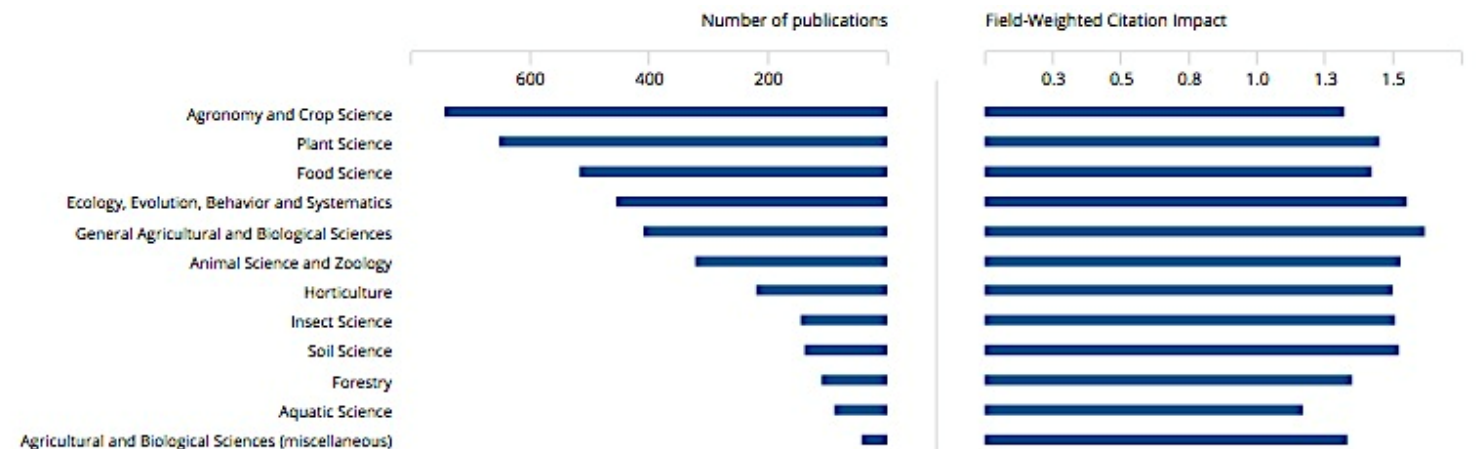
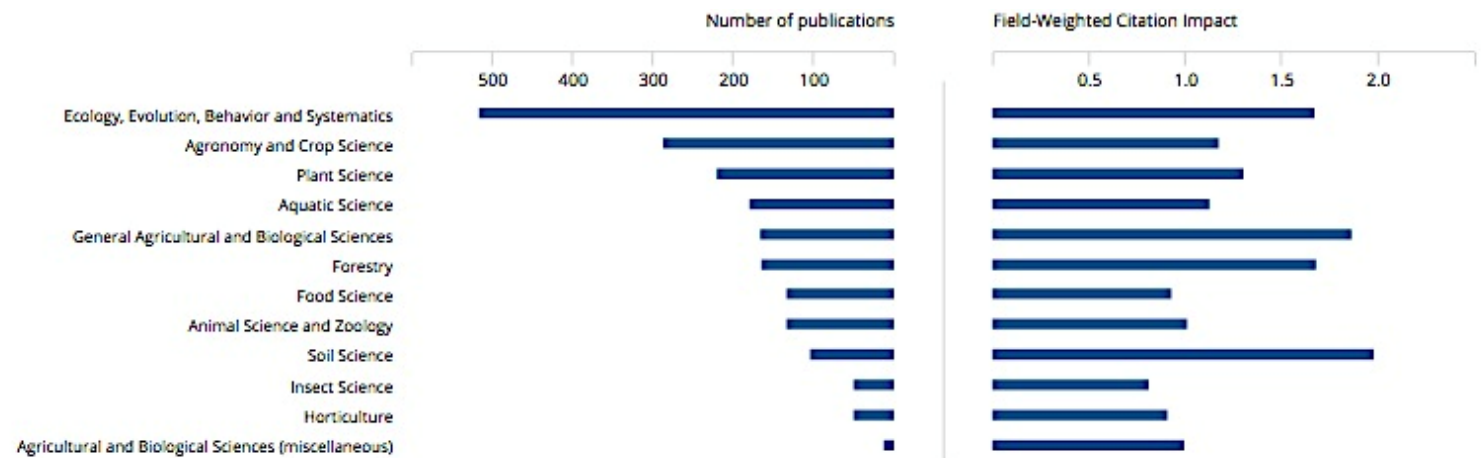


Publications **2,776** ▲ Citations **17,820** Authors **1,921** ▲ Field-Weighted Citation Impact **1.47** Citations per Publication **6.4**

[View list of publications](#)

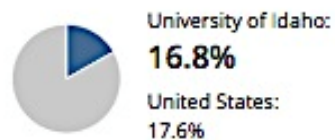


Broadly Distributed “*Agriculture / Life Science*” Publication Portfolio with Quality Above the World Average




Outputs in Top Percentiles

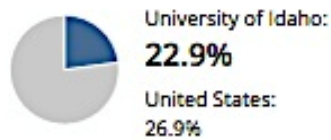
Publications in top 10% most cited worldwide



→ [Analyze in more detail](#)

Publications in Top Journal Percentiles

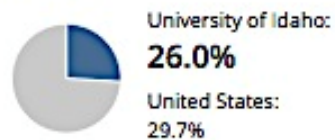
Publications in top 10% journals by SNIP 



→ [Analyze in more detail](#)

International Collaboration

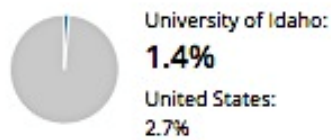
Publications co-authored with institutions in other countries



→ [Analyze in more detail](#)

Academic-Corporate Collaboration

Publications with both academic and corporate affiliations

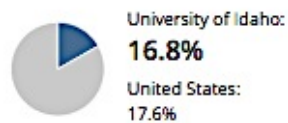


→ [Analyze in more detail](#)



Outputs in Top Percentiles

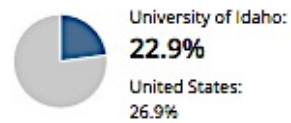
Publications in top 10% most cited worldwide



→ [Analyze in more detail](#)

Publications in Top Journal Percentiles

Publications in top 10% journals by

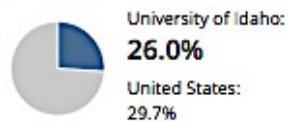


→ [Analyze in more detail](#)



International Collaboration

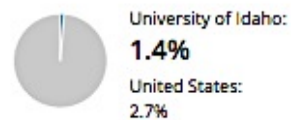
Publications co-authored with institutions in other countries



→ [Analyze in more detail](#)

Academic-Corporate Collaboration

Publications with both academic and corporate affiliations



→ [Analyze in more detail](#)

Outputs in Top Percentiles

Publications in top 10% most cited worldwide



→ [Analyze in more detail](#)

Publications in Top Journal Percentiles

Publications in top 10% journals by



→ [Analyze in more detail](#)



International Collaboration

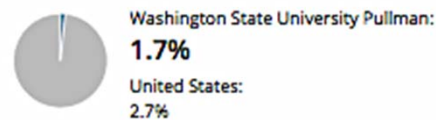
Publications co-authored with institutions in other countries



→ [Analyze in more detail](#)

Academic-Corporate Collaboration

Publications with both academic and corporate affiliations



→ [Analyze in more detail](#)

Collaboration

Shortcuts ▾

Publications at the University of Idaho, by amount of international, national and institutional collaboration



Metric		Publications	Citations	Citations per Publication	Field-Weighted Citation Impact
■ International collaboration	26.0%	1,089	13,171	12.1	1.93
■ Only national collaboration	41.2%	1,726	10,886	6.3	1.36
■ Only institutional collaboration	24.4%	1,021	4,055	4.0	0.86
■ Single authorship (no collaboration)	8.5%	356	631	1.8	0.50

Academic-Corporate Collaboration

Shortcuts ▾

Publications at the University of Idaho with both academic and corporate author affiliations



Metric		Publications	Citations	Citations per Publication	Field-Weighted Citation Impact
■ Academic-corporate collaboration	1.4%	58	3,045	52.5	4.43
■ No academic-corporate collaboration	98.6%	4,134	25,698	6.2	1.27



Collaboration

Shortcuts ▾

Publications at the University of Idaho, by amount of international, national and institutional collaboration



Metric	Publications	Citations	Citations per Publication	Field-Weighted Citation Impact
International collaboration	26.0%	1,089	13,171	12.1
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Only institutional collaboration	24.4%	1,021	4,055	4.0
Single authorship (no collaboration)	8.5%	356	631	1.8



Academic-Corporate Collaboration

Shortcuts ▾

Publications at the University of Idaho with both academic and corporate author affiliations



Metric	Publications	Citations	Citations per Publication	Field-Weighted Citation Impact
Academic-corporate collaboration	1.4%	58	3,045	52.5
No academic-corporate collaboration	98.6%	4,134	25,698	6.2

Collaboration

Shortcuts ▾

Publications at Washington State University Pullman, by amount of international, national and institutional collaboration



Metric	Publications	Citations
International collaboration	31.5%	3,419
Only national collaboration	34.0%	3,699
Only institutional collaboration	25.9%	2,814
Single authorship (no collaboration)	8.6%	934



Academic-Corporate Collaboration

Shortcuts ▾



Publications at Washington State University Pullman with both academic and corporate author affiliations



Metric	Publications	Citations
Academic-corporate collaboration	1.7%	186
No academic-corporate collaboration	98.3%	10,680



Top 100 authors, by number of publications at the University of Idaho over the period 2010 to 2015.

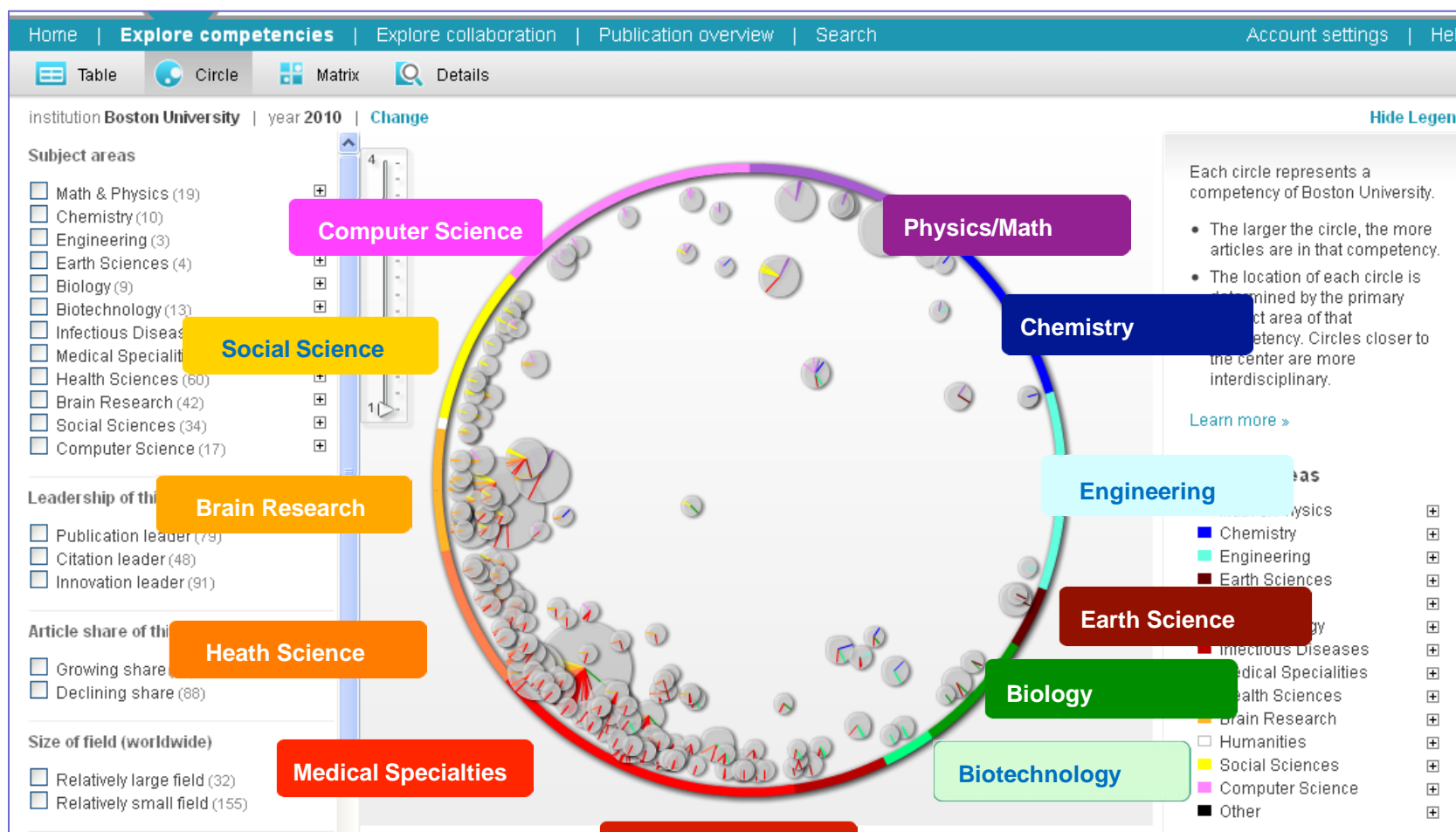
Note that some authors may no longer be affiliated with the University of Idaho.

Name	Publications 	Most recent publication	Citations 	<i>h</i> -index
1. Shreeve, Jean'Ne M.	93	2015	1,936	52
2. Waits, Lisette P.	73	2015	1,002	39
3. Manic, Milos	72	2015	325	12
4. McDonald, Armando Gabriel	66	2015	370	18
5. Barnes, Jason W.	50	2015	1,165	25
6. Harmon, Luke J.	46	2015	1,049	30
7. Abatzoglou, John T.	42	2015	480	17
8. Charit, Indrajit	39	2015	99	14
9. Vierling, Lee A.	39	2015	426	29
10. Allen, Richard Glen	38	2015	488	36
11. Hrdlička, Patrick J.	37	2015	359	16
12. Beyerlein, Steven W.	35	2015	32	5
13. Cain, Kenneth D.	35	2015	114	17
14. Qiang, You	35	2015	107	20
15. Eigenbrode, Sanford D.	33	2015	199	24
16. McIlroy, David N.	33	2015	164	23
17. Hill, Rodney Allan	32	2015	159	11
18. Wai, Chien	31	2014	160	37
19. Forney, Larry J.	29	2015	2,269	40
20. Hardy, Ronald W.	29	2015	293	32

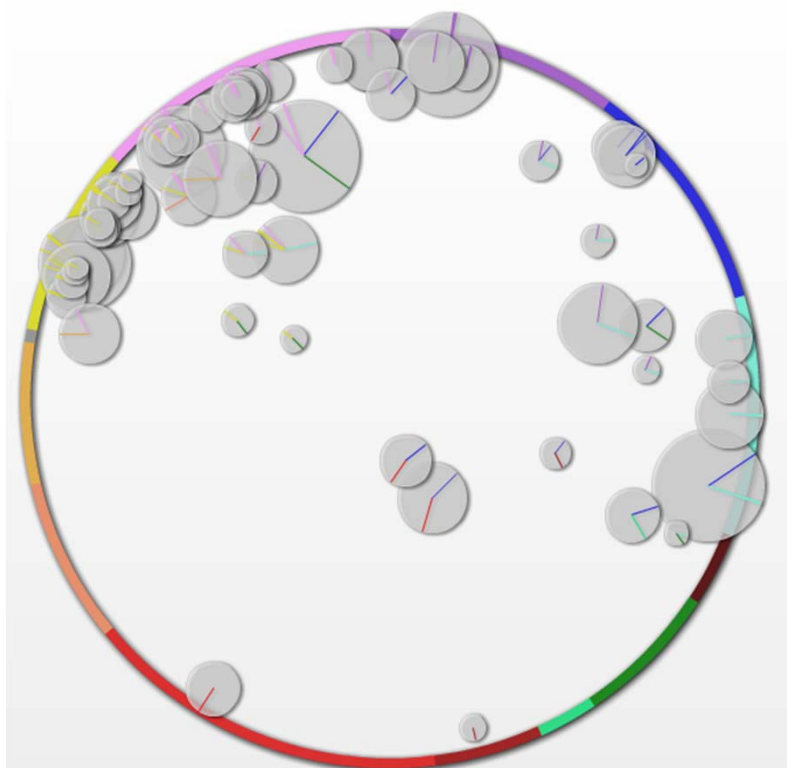
Top 100 authors, by number of publications at the University of Idaho over the period 2010 to 2015.

Note that some authors may no longer be affiliated with the University of Idaho.

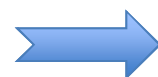
Name	Publications	Most recent publication	Field-Weight 		<i>h</i> -index
1. Forney, Larry J.	29	2015	6.90		40
2. Abdo, Zaid O.	20	2013	4.31		20
3. Goldberg, Caren S.	20	2015	4.20		13
4. Hicke, Jeffrey A.	27	2015	4.07		23
5. Hohenlohe, Paul A.	17	2015	4.04		21
6. Foster, James A.	19	2015	3.75		18
7. Pennell, Matthew W.	16	2015	3.72		7
8. Harmon, Luke J.	46	2015	3.49		30
9. Barnes, Jason W.	50	2015	3.25		25
10. Tonina, Daniele	25	2015	3.17		14
11. Karasev, Alexander V.	23	2015	3.09		20
12. Allen, Richard Glen	38	2015	2.95		36
13. Smith, Alistair Matthew Stuart	27	2015	2.77		22
14. Kolden, Crystal A.	17	2015	2.71		8
15. Linda, Ondrej	24	2014	2.49		8
16. Brooks, Erin S.	20	2015	2.48		11
17. Barlow, Fred D.	24	2015	2.48		9
18. Machleidt, Ruprecht	28	2015	2.46		23
19. Pregitzer, Kurt S.	22	2015	2.31		54
20. Locke, Kenneth D.	17	2015	2.25		14



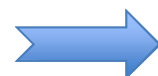
Institution's Research Strengths



Publication Leadership.
Competencies where Institution produces the largest number of articles in the world



Citation Leadership.
Competencies where Institution receives the most citations in the world

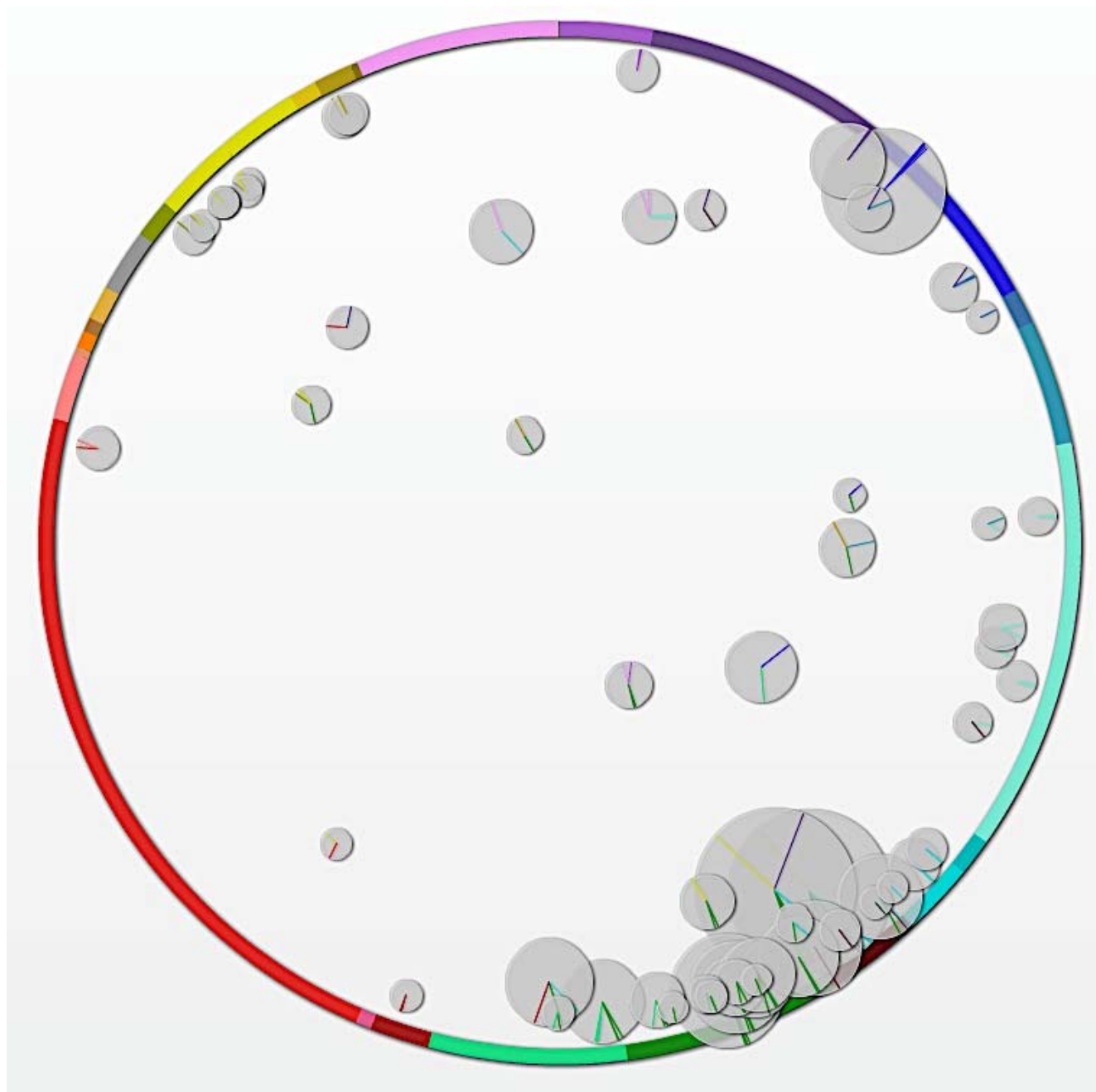


Innovation Leadership.
Competencies where Institution in citing more recent articles compared to the world average

Dedicated and Emerging Research Competencies



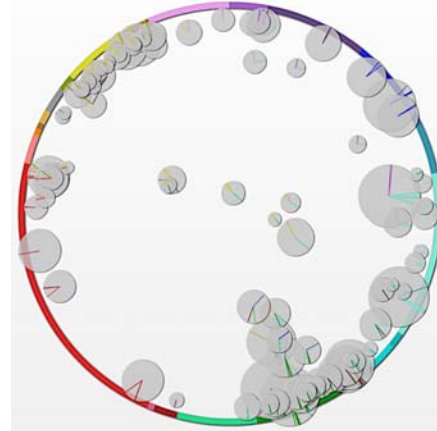
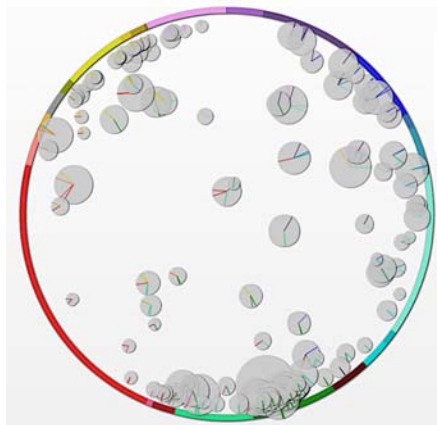
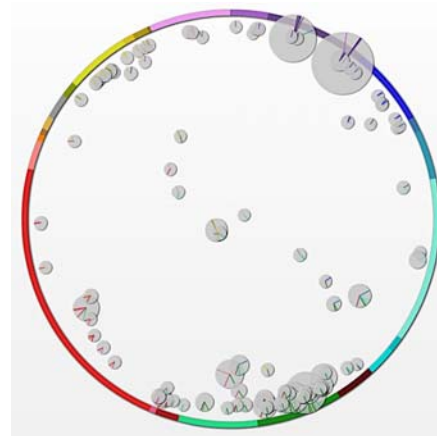
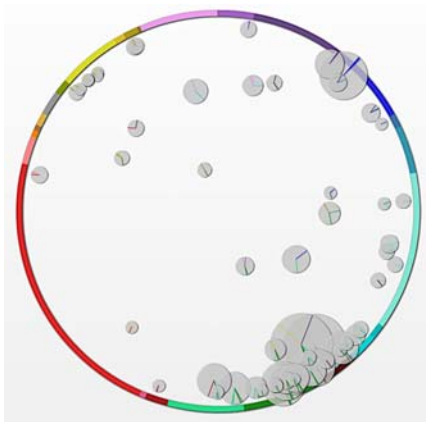
ID	Keywords				
EC #1	forest; fire; data	EC #21	Wood; Weathering; Composite materials	EC #41	HSP90 Heat-Shock Proteins; Molecular Chaperones; Proteins
EC #2	landscape; landscapes; habitat	EC #22	Finite difference time domain method; Ground penetrating radar	EC #42	root-knot nematodes; Meloidogyne; yields
DC #3	population; genetics; microsatellite repeats	EC #23	Pyrolysis; Lignin; Biomass	EC #43	Graph in graph theory; Disjoint; Cycle
DC #4	phylogeny; speciation; phylogenetics	EC #24	planets; stars; planet	EC #44	sea level; sea level change; vulnerability
EC #5	ozone; soil; glucosinolates	EC #25	Delphi Technique; Consensus; Data Collection	EC #45	wildfire; fire; fires
DC #6	mutation; evolution; Selection, Genetic	EC #26	bird; birds; surveys	EC #46	cloud; Clouds; Radiometers
DC #7	Evapotranspiration; Water supply; energy balance	EC #27	Asbestos; Asbestos, Amphibole; Mesothelioma	EC #47	Biodiesel; Transesterification; Ultrasonics
EC #8	sampling; spatial distribution; density	EC #28	Potato virus Y; potatoes; Potyvirus	EC #48	alluvial plain; snake; hot spot
EC #9	Fuzzy logic; Fuzzy sets; Fuzzy systems	EC #29	Buildings; Office buildings; Lighting	EC #49	seedling; seedlings; root
EC #10	fish meal; diet; fish	EC #30	market; forest; Trade	EC #50	model; Water resources; groundwater
DC #11	Detonation; Explosives; Salts	EC #31	tourism; Experience; Adventure tourism	EC #51	music; essay; film
EC #12	wildfire; management; fire	EC #32	Fans; Nanoindentation; Pressure	EC #52	school; leadership; principal
EC #13	Nucleic Acids; Oligonucleotides; RNA	EC #33	snail; DNA; invasive species	EC #53	fire; coarse woody debris; fires
EC #14	fish; fishery; fisheries	EC #34	potatoes; farms; tubers	EC #54	Derrida; Literary; Women
DC #15	genitalia; male genitalia; sexual selection	EC #35	Phaseolus vulgaris; beans; cultivars	EC #55	Heat transfer; Computational fluid dynamics; Fluids
EC #16	Intrusion detection; SCADA systems; Critical infrastructures	EC #36	Perception; Distance Perception; Space Perception	EC #56	Ochratoxins; Mycotoxins; Wine
EC #17	Pedestrian safety; Vehicles; Accidents, Traffic	EC #37	Substrates; Nanostructures; Raman scattering	EC #57	teacher; mathematics; coaching
EC #18	matter (physics); neutrons; energy	EC #38	Creep; Deformation; Grain boundary sliding	EC #58	Chytridiomycota; amphibians; frogs
DC #19	Plasmids; plasmid; Gene Transfer, Horizontal	EC #39	social network; governance approach; network analysis	EC #59	fish; streams; stream
EC #20	Titan; methane; surface	EC #40	cost; Travel cost method; Estimate	EC #60	learning; teacher; practice
				EC #61	Myxococcus xanthus; Myxococcales; Cells



Subject areas

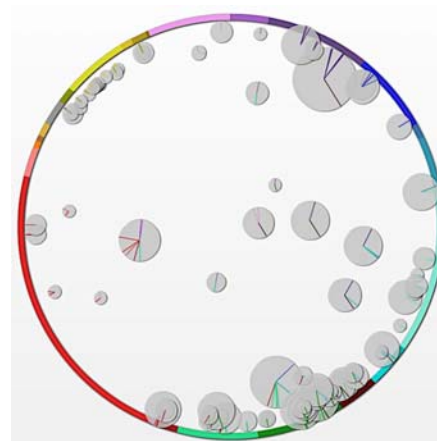
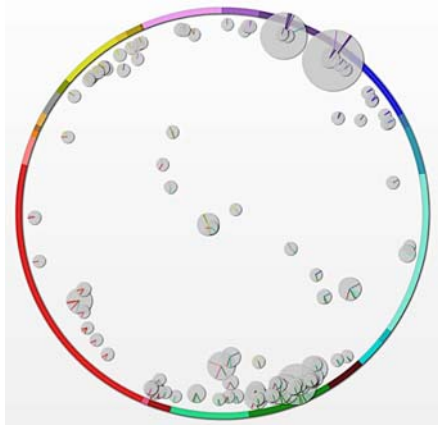
- Math & Physics
- Chemistry
- Engineering
- Earth Sciences
- Biology
- Biotechnology
- Infectious Diseases
- Medical Specialties
- Health Sciences
- Brain Research
- Humanities
- Social Sciences
- Computer Science
- Other



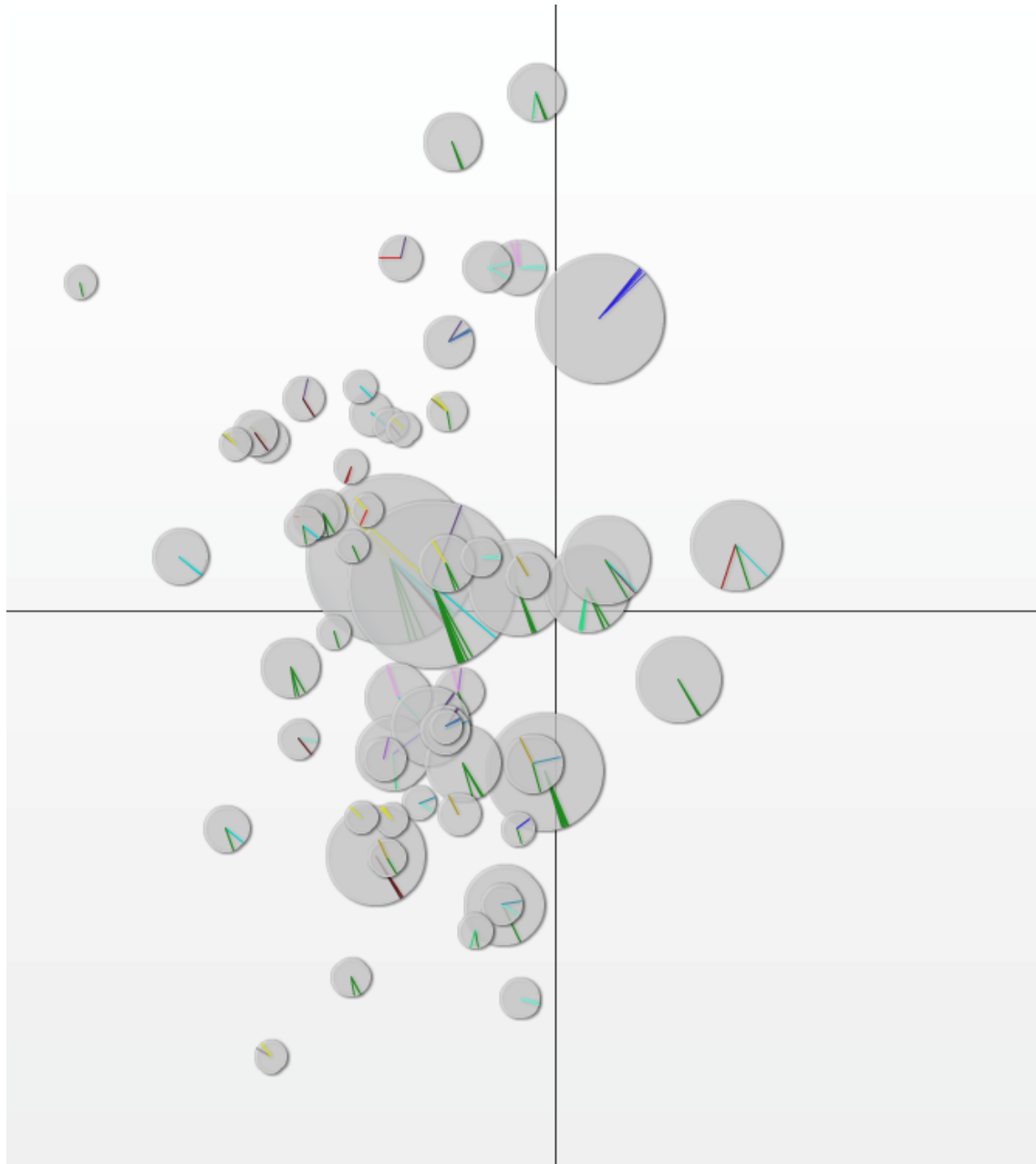


Subject areas

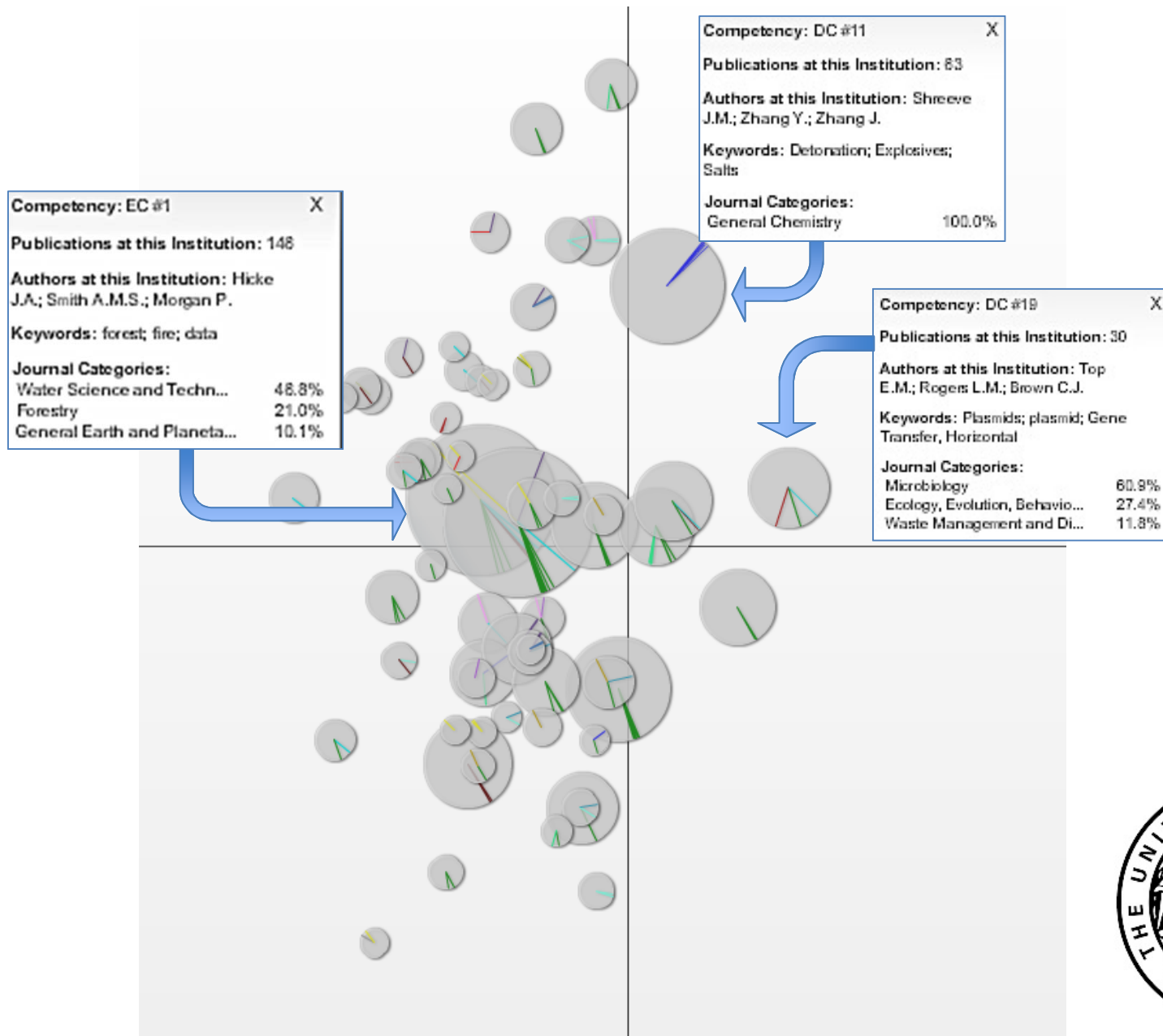
- Math & Physics
- Chemistry
- Engineering
- Earth Sciences
- Biology
- Biotechnology
- Infectious Diseases
- Medical Specialties
- Health Sciences
- Brain Research
- Humanities
- Social Sciences
- Computer Science
- Other



Quantity vs. Quality



Quantity vs. Quality



Agriculture and Biological Sciences Research Competencies



	ID	Keywords	Most published authors	Publications	Citations
→	EC #1	forest; fire; data	Hicke J.A., Smith A.M.S., Morgan P.	146 ▲	1,597
	EC #2	landscape; landscapes; habitat	Vierling L.A., Keefer M.L., Waits L.P.	139 ▲	1,316
	DC #3	population; genetics; microsatellite repeats	Waits L.P., Adams J.R., Rachlow J.L.	59 ▼	414
	DC #4	phylogeny; speciation; phylogenetics	Harmon L.J., Pennell M.W., Rosindell J.	37 ▲	886
	EC #5	ozone; soil; glucosinolates	Morra M.J., Brown J.H., Handiseni M.	14 ▼	62
	DC #6	mutation; evolution; Selection, Genetic	Miller C.R., Wichman H.A., Joyce P.	34 ▲	291
	DC #7	Evapotranspiration; Water supply; energy balance	Allen R.G., Trezza R., Kjærsgaard J.H.	36 ▲	305
	EC #8	sampling; spatial distribution; density	Ma Z., Krings A.W., Ma Z.	8 ▼	31
→	EC #10	fish meal; diet; fish	Hardy R.W., Cain K.D., Long A.	29 ▲	198
→	EC #14	fish; fishery; fisheries	Quist M.C., McCormick J.L., Moffitt C.M.	11 ▲	13
	DC #15	genitalia; male genitalia; sexual selection	Hohenlohe P.A., Sullivan J., Goldberg C.S.	18 ▲	199
	DC #19	Plasmids; plasmid; Gene Transfer, Horizontal	Top E.M., Rogers L.M., Brown C.J.	30 ▲	270
	EC #21	Wood; Weathering; Composite materials	McDonald A.G., Fabiyi J.S., Devadoss S.	15 ▼	75
	EC #26	bird; birds; surveys	Conway C.J., Manning J.A., Garton E.O.	6 ▼	19
→	EC #28	Potato virus Y; potatoes; Potyvirus	Karasev A.V., Nikolaeva O.V., Kerlan C.	22 ▲	171
	EC #31	tourism; Experience; Adventure tourism	Houge Mackenzie S., Ham S., Mackenzie S.H.	8 ▲	56
	EC #33	snail; DNA; invasive species	Moffitt C.M., Waits L.P., Goldberg C.S.	10 ▲	81
→	EC #34	potatoes; farms; tubers	Stark J.C., Shiffler A.K., Bowen T.R.	7 ▲	31
	EC #35	Phaseolus vulgaris; beans; cultivars	Singh S.P., Viteri D.M., Terán H.	20 ▲	81
	EC #41	HSP90 Heat-Shock Proteins; Molecular Chaperones; Proteins	Johnson J.L., Xiao F., Du X.	12 ▲	120
→	EC #42	root-knot nematodes; Meloidogyne; yields	Stark J.C., Olsen N.L., Brandt T.L.	7 ▼	7
→	EC #45	wildfire; fire; fires	Koyama A., Stephan K., Kavanagh K.L.	12 ▼	44
→	EC #49	seedling; seedlings; root	Davis A.S., Marshall J.D., Robertson N.D.	7 ▼	45
→	EC #53	fire; coarse woody debris; fires	Smith A.M.S., Hyde J.C., Morgan P.	8 ▼	56
	EC #56	Ochratoxins; Mycotoxins; Wine	Ryu D., Nguyen K.T.N., Lee H.	4 ▲	3
	EC #58	Chytridiomycota; amphibians; frogs	Rosenblum E.B.R., Poorten T.J., Voyles J.L.	10 ▼	218
→	EC #59	fish; streams; stream	Quist M.C., Zaroban D.W., Steinhorst R.K.	5	8

Competency EC #1

forest; fire; data

Summary

Trends

Journal Categories

Institutions

Authors

Compare

Methodology

Based on an analysis of publications over the period 2010-2014, SciVal has identified EC #1 as a emerging competency of the University of Idaho

[See why this field is an emerging competency of the University of Idaho](#)

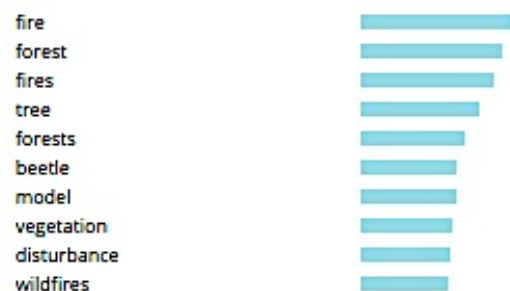
Publications in this field (2010-2014)

	Publications	Annual growth	Citations
Publications worldwide	4,954	+ 5.2% ▲	31,494
Publications in the United States	2,386	+ 5.1% ▲	18,941
Publications at the University of Idaho	146	+ 7.3% ▲	1,597

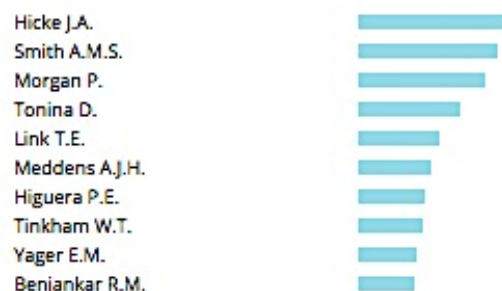
Show the contribution to this field from:

- ☒ University of Idaho
- ☐ all contributing Institutions worldwide

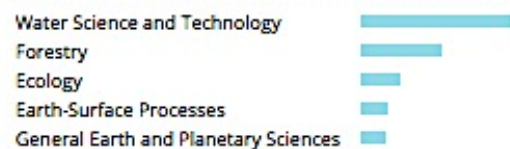
Top keywords for the University of Idaho [show all »](#)



Top authors from the University of Idaho [details »](#)



Top Journal Categories for the University of Idaho [details »](#)



Top journals for the University of Idaho



Competency EC #1

forest; fire; data

Summary	Trends	Journal Categories	Institutions	Authors	Compare	Methodology
---------	--------	--------------------	--------------	---------	---------	-------------

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Show the contribution to this field from:

- ☒ University of Idaho
- ☐ all contributing Institutions worldwide

Top keywords for the University of I

fire
forest
fires
tree
forests
beetle
model
vegetation
disturbance
wildfires

Top Journal Categories for the Univ

Water Science and Technology
Forestry
Ecology
Earth-Surface Processes
General Earth and Planetary Science

Competency EC #1

forest; fire; data

Summary	Trends	Journal Categories	Institutions	Authors	Compare	Methodology
---------	--------	--------------------	--------------	---------	---------	-------------

Contributing Institutions in the United States

[View a different set of Institutions](#)

☒ overview ☐ breakdown by

Institution		Publications in this field	Fractionalized publication count	
1. U.S. Department of Agriculture	United States	461	166.8	
2. U.S. Geological Survey	United States	296	107.7	
3. University of Idaho ★	United States	146	78.9	
4. Colorado State University	United States	142	58.0	
5. University of Washington	United States	130	44.9	
6. Oregon State University	United States	126	43.6	
7. University of Colorado	United States	114	42.5	
8. Utah State University	United States	82	34.2	
9. University of Wisconsin	United States	79	27.7	
10. University of Arizona	United States	86	26.8	



Competency EC #12

wildfire; management; fire

Summary	Trends	Journal Categories	Institutions	Authors	Compare	Methodology
---------	--------	--------------------	--------------	---------	---------	-------------

Based on an analysis of publications over the period 2010-2014, SciVal has identified EC #12 as a emerging competency of the University of Idaho

[See why this field is an emerging competency of the University of Idaho](#)

Publications in this field (2010-2014)

	Publications	Annual growth	Citations
Publications worldwide	831	+ 5.4% ▲	3,270
Publications in the United States	495	+ 1.2% ▲	1,800
Publications at the University of Idaho	13	+ 53.4% ▲	27

Show the contribution to this field from:

- ☒ University of Idaho
☐ all contributing Institutions worldwide

Top keywords for the University of Idaho [show all »](#)

wildfire	<div></div>
management	<div></div>
watershed	<div></div>
fire	<div></div>
perception	<div></div>
forest management	<div></div>
Water conservation	<div></div>
mountain	<div></div>
disturbance	<div></div>
hurricane	<div></div>

Top authors from the University of Idaho [details »](#)

Higgins L.L.	<div></div>
Shafii B.	<div></div>
Mahler R.L.	<div></div>
Newman S.M.	<div></div>
Hall T.E.	<div></div>
Wulforst J.D.	<div></div>
Shook S.R.	<div></div>
Pinel S.L.	<div></div>
Brooks J.	<div></div>
Daniel J.R.	<div></div>

Top Journal Categories for the University of Idaho [details »](#)

Ecology	<div></div>
Management, Monitoring, Policy and Law	<div></div>

Top journals for the University of Idaho

Society and Natural Resources	<div></div>
Journal of Forestry	<div></div>
Canadian Journal of Forest Research	<div></div>
Environmental Management	<div></div>
Journal of the American Water Resourc...	<div></div>



Competency EC #12

wildfire; management; fire

Summary

Trends

Journal Categories

Institutions

Authors

Compare

Methodology

Based on an analysis of publications over the period 2010-2014, SciVal has identified EC #12 as a emerging competency of the University of Idaho

[See why this field is an emerging competency of the University of Idaho](#)

Publications in this field (2010-2014)

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Publications in the United States	495	+ 1.2% ▲	1,800
Publications at the University of Idaho	13	+ 53.4% ▲	27

Show the contribution to this field from:

☒ University of Idaho

☐ all contributing Institutions worldwide

Top keywords for the University of

wildfire
management
watershed
fire
perception
forest management
Water conservation
mountain
disturbance
hurricane

Top Journal Categories for the Uni

Ecology
Management, Monitoring, Policy and
Law



Competency EC #12

wildfire; management; fire

Export ▼ Shortcuts ▼

Summary

Trends

Journal Categories

Institutions

Authors

Compare

Methodology

Contributing Institutions in the United States

[View a different set of Institutions ▼](#)

☒ overview ☐ breakdown by

Institution			Publications in this field	Fractionalized publication count	
1.	U.S. Department of Agriculture	United States	97	42.4	<div></div>
2.	Oregon State University	United States	33	16.4	<div></div>
3.	The Ohio State University	United States	23	12.8	<div></div>
4.	Colorado State University	United States	21	8.8	<div></div>
5.	University of Montana	United States	21	8.3	<div></div>
6.	University of Colorado	United States	19	8.1	<div></div>
7.	University of Idaho ★	United States	13	8.0	<div></div>
8.	Washington State University Pullman	United States	12	7.8	<div></div>
9.	North Carolina State University	United States	17	7.6	<div></div>
10.	University of Florida	United States	17	7.1	<div></div>

Competency EC #45

wildfire; fire; fires

Summary	Trends	Journal Categories	Institutions	Authors	Compare	Methodology
---------	--------	--------------------	--------------	---------	---------	-------------

Based on an analysis of publications over the period 2010-2014, SciVal has identified EC #45 as a emerging competency of the University of Idaho

See why this field is an emerging competency of the University of Idaho

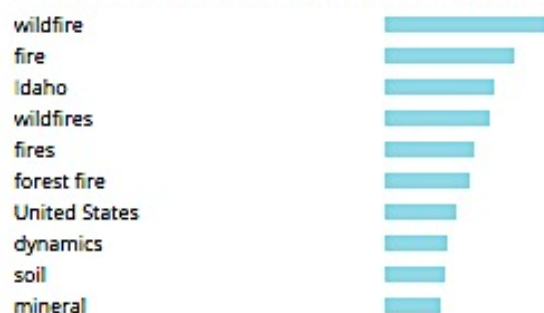
Publications in this field (2010-2014)

	Publications	Annual growth	Citations
Publications worldwide	372	+ 6.7% ▲	2,089
Publications in the United States	140	+ 8.7% ▲	894
Publications at the University of Idaho	12	-12.3% ▼	44

Show the contribution to this field from:

- ☒ University of Idaho
- ☐ all contributing Institutions worldwide

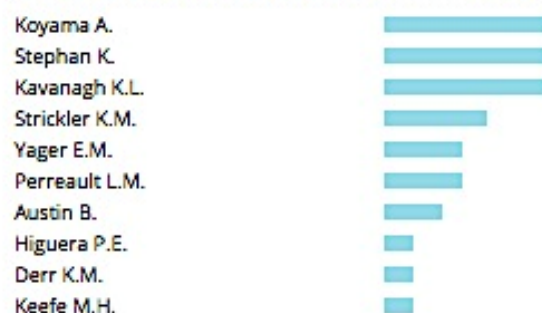
Top keywords for the University of Idaho [show all »](#)



Top Journal Categories for the University of Idaho [details »](#)



Top authors from the University of Idaho [details »](#)



Top journals for the University of Idaho



Competency EC #45

wildfire; fire; fires

Summary	Trends	Journal Categories	Institutions	Authors	Compare	Methodology
---------	--------	--------------------	--------------	---------	---------	-------------

Based on an analysis of publications over the period 2010-2014, SciVal has identified EC #45 as a emerging competency of the University of Idaho

See why this field is an emerging competency of the University of Idaho

Publications in this field (2010-2014)

	Publications	Annual growth	Citations
Publications worldwide	372	+ 6.7% ▲	2,089
Publications in the United States	140	+ 8.7% ▲	894
Publications at the University of Idaho	12	-12.3% ▼	44

Show the contribution to this field from:

- ☒ University of Idaho
☐ all contributing Institutions

Top keywords for the University

wildfire
fire
Idaho
wildfires
fires
forest fire
United States
dynamics
soil
mineral

Top Journal Categories for the U

Ecology
Soil Science



Competency EC #45

wildfire; fire; fires

Export ▼ Shortcuts ▼

Summary	Trends	Journal Categories	Institutions	Authors	Compare	Methodology
---------	--------	--------------------	--------------	---------	---------	-------------

Contributing Institutions in the United States

☒ overview ☐ breakdown by keyword

View a different set of Institutions ▼

Institution	Publications in this field	Fractionalized publication count
1. U.S. Geological Survey United States	35	12.6
2. U.S. Department of Agriculture United States	40	9.9
3. Colorado State University United States	11	4.2
4. University of Idaho ★ United States	12	4.1
5. Oregon State University United States	10	4.1
6. Idaho State University United States	7	3.1
7. University of Florida United States	7	2.9
8. University of Colorado United States	6	2.9
9. University of Alaska Fairbanks United States	4	2.3
10. University of California at Davis United States	3	2.2

Competency EC #10

fish meal; diet; fish

Summary	Trends	Journal Categories	Institutions	Authors	Compare	Methodology
---------	--------	--------------------	--------------	---------	---------	-------------

Based on an analysis of publications over the period 2010-2014, SciVal has identified EC #10 as a emerging competency of the University of Idaho

[See why this field is an emerging competency of the University of Idaho](#)

Publications in this field (2010-2014)

	Publications	Annual growth	Citations
Publications worldwide	968	-10.5% ▼	4,255
Publications in the United States	220	-6.5% ▼	1,350
Publications at the University of Idaho	29	+ 11.6% ▲	198

Show the contribution to this field from:

- ☒ University of Idaho
- ☐ all contributing Institutions worldwide

Top keywords for the University of Idaho [show all »](#)

Flavobacterium psychrophilum	<div></div>
protein	<div></div>
fish	<div></div>
rainbow	<div></div>
Oncorhynchus mykiss	<div></div>
fish meal	<div></div>
diet	<div></div>
proteins	<div></div>
feed conversion	<div></div>
feeds	<div></div>

Top Journal Categories for the University of Idaho [details »](#)

Aquatic Science	<div></div>
-----------------	-------------

Top authors from the University of Idaho [details »](#)

Hardy R.W.	<div></div>
Cain K.D.	<div></div>
Long A.	<div></div>
Fehring T.R.	<div></div>
Plant K.P.	<div></div>
Lafrentz B.R.	<div></div>
Powell M.S.	<div></div>
Sealey W.M.	<div></div>
Hill R.A.	<div></div>
Polinski M.P.	<div></div>

Top journals for the University of Idaho

Aquaculture	<div></div>
Journal of Fish Diseases	<div></div>
Aquaculture Nutrition	<div></div>
Aquaculture Research	<div></div>
FEMS Microbiology Letters	<div></div>



Competency EC #10

fish meal; diet; fish

Summary Trends Journal Categories Institutions Authors Compare Methodology

Based on an analysis of publications over the period 2010-2014, SciVal has identified EC #10 as a emerging competency of the University of Idaho

See why this field is an emerging competency of the University of Idaho

Publications in this field (2010-2014)

	Publications	Annual growth	Citations
Publications worldwide	968	-10.5% ▼	4,255
Publications in the United States	220	-6.5% ▼	1,350
Publications at the University of Idaho	29	+ 11.6% ▲	198

Show the contribution to this field from:

- ☒ University of Idaho
☐ all contributing Institutions

Top keywords for the University

Flavobacterium psychrophilum
protein
fish
rainbow
Oncorhynchus mykiss
fish meal
diet
proteins
feed conversion
feeds

Top Journal Categories for the

Aquatic Science



Competency EC #10

fish meal; diet; fish

Export ▼ Shortcuts ▼

Summary Trends Journal Categories Institutions Authors Compare Methodology

Contributing Institutions in the United States

View a different set of Institutions ▼

☒ overview ☐ breakdown by keyword ▼

Institution		Publications in this field	Fractionalized publication count
1. U.S. Department of Agriculture	United States	61	22.6
2. University of Idaho ★	United States	29	17.6
3. Auburn University	United States	21	9.3
4. Washington State University Pullman	United States	12	8.1
5. Texas A and M University	United States	17	6.3
6. Mississippi State University	United States	13	4.5
7. Southern Illinois University	United States	14	4.3
8. US Fish & Wildlife Service	United States	8	4.0
9. The Ohio State University	United States	10	3.6
10. Michigan State University	United States	5	2.2

Competency EC #14

fish; fishery; fisheries

Summary	Trends	Journal Categories	Institutions	Authors	Compare	Methodology
---------	--------	--------------------	--------------	---------	---------	-------------

Based on an analysis of publications over the period 2010-2014, SciVal has identified EC #14 as a emerging competency of the University of Idaho

See why this field is an emerging competency of the University of Idaho

Publications in this field (2010-2014)

	Publications	Annual growth	Citations
Publications worldwide	761	+ 5.0% ▲	2,811
Publications in the United States	363	+ 9.5% ▲	1,311
Publications at the University of Idaho	11	+ 5.3% ▲	13

Show the contribution to this field from:

- ☒ University of Idaho
☐ all contributing Institutions worldwide

Top keywords for the University of Idaho [show all »](#)

fisheries	<div></div>
fishery	<div></div>
Idaho	<div></div>
angling	<div></div>
bias	<div></div>
sport fishing	<div></div>
Oncorhynchus tshawytscha	<div></div>
Iowa	<div></div>
sports	<div></div>
sport	<div></div>

Top authors from the University of Idaho [details »](#)

Quist M.C.	<div></div>
McCormick J.L.	<div></div>
Moffitt C.M.	<div></div>
Anlauf K.J.	<div></div>
Vierling K.T.	<div></div>
Sullivan S.M.P.	<div></div>

Top Journal Categories for the University of Idaho [details »](#)

Aquatic Science	<div></div>
Ecology, Evolution, Behavior and Syst...	<div></div>
Sociology and Political Science	<div></div>

Top journals for the University of Idaho

North American Journal of Fisheries M...	<div></div>
Journal of Freshwater Ecology	<div></div>
Freshwater Biology	<div></div>
Journal of Fish and Wildlife Management	<div></div>



Competency EC #14

fish; fishery; fisheries

Summary	Trends	Journal Categories	Institutions	Authors	Compare	Methodology
---------	--------	--------------------	--------------	---------	---------	-------------

Based on an analysis of publications over the period 2010-2014, SciVal has identified EC #14 as a emerging competency of the University of Idaho

See why this field is an emerging competency of the University of Idaho

Publications in this field (2010-2014)

	Publications	Annual growth	Citations
Publications worldwide	761	+ 5.0% ▲	2,811
Publications in the United States	363	+ 9.5% ▲	1,311
Publications at the University of Idaho	11	+ 5.3% ▲	13

Show the contribution to this field from:

- ☒ University of Idaho
- ☐ all contributing Institutions

Top keywords for the University of Idaho

fisheries
fishery
Idaho
angling
bias
sport fishing
Oncorhynchus tshawytscha
Iowa
sports
sport

Top Journal Categories for the University of Idaho

Aquatic Science
Ecology, Evolution, Behavior
Sociology and Political Science



Competency EC #14

fish; fishery; fisheries

Export ▼ Shortcuts ▼

Summary	Trends	Journal Categories	Institutions	Authors	Compare	Methodology
---------	--------	--------------------	--------------	---------	---------	-------------

Contributing Institutions in the United States

☒ overview ☐ breakdown by keyword ▼

[View a different set of Institutions ▼](#)

Institution		Publications in this field	Fractionalized publication count
1. U.S. Geological Survey	United States	41	14.0
2. University of Wisconsin	United States	20	11.3
3. University of Florida	United States	22	9.1
4. University of Idaho ★	United States	11	8.5
5. South Dakota State University	United States	14	8.1
6. University of Nebraska	United States	12	7.7
7. Iowa State University	United States	14	6.8
8. NOAA	United States	21	5.9
9. Michigan State University	United States	17	3.5
10. North Carolina State University	United States	8	3.3

University of Idaho Aquaculture Research Institute

ID, United States
Affiliation ID: 60015257

[About Scopus Affiliation Identifier](#) | [View potential affiliation matches](#)

Other name formats: **University of Idaho**

Documents: 111

[+ Add to my list](#)

Authors: 12

Patent results: 235

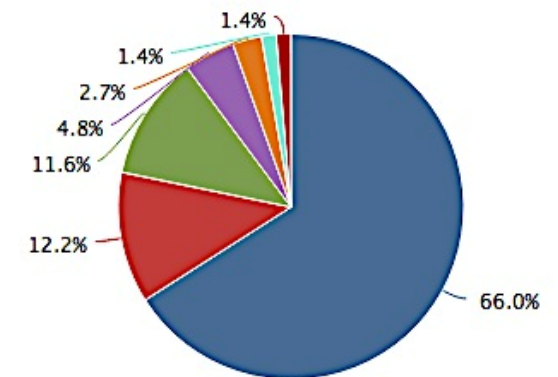
Collaborating affiliations

University of Idaho
USDA Agricultural Research Service, Washington DC
University of Washington Seattle
Clear Springs Foods Incorporated
Washington State University Pullman
NOAA Northwest Fisheries Science Center
Bozeman Fish Technology Center
NOAA National Marine Fisheries Service Northwest Regional Office
Purdue University
Centro de Investigacion en Alimentacion y Desarrollo
Aquaculture and Pathology Consulting
United States Department of Agriculture
Idaho State University
Idaho Fish and Game
Columbia River Inter Tribal Fish Commission
University of Alaska Fairbanks
University of Glasgow
CINVESTAV Unidad Merida
Texas A and M University
West Vancouver Laboratory
Universidad Autonoma de Nayarit
USDA Agricultural Research Service, Stoneville
Food Research and Development Center A.C.
Western Fisheries Research Center
University of Wisconsin Milwaukee
USDA ARS Small Grains and Potato Germplasm Research Unit
Landcatch Natural Selection Ltd
National Center for Mariculture Israel
Fishery Industrial Technology Center
Cheju National University
University of Maine
National Oceanic and Atmospheric Administration

Documents by source

Documents	Source	Documents
23	Aquaculture	25
21	Journal of Fish Diseases	16
	Aquaculture Nutrition	15
14	Aquaculture Research	12
12	Journal of the World Aquaculture Society	4
6	American Fisheries Society Symposium	3
5	Comparative Biochemistry and Physiology B Biochemistry and Molecular Biology	3
5	Journal of Fish Biology	3
5	Comparative Biochemistry and Physiology A Molecular and Integrative Physiology	2
5	Fish Physiology and Biochemistry	2
4	G3 Genes Genomes Genetics	2
4	General and Comparative Endocrinology	2
4	Journal of Nutrition	2
4	North American Journal of Aquaculture	2
3	Physiological Genomics	2
	Animal Feed Science and Technology	1
3	Comparative Biochemistry and Physiology Part D Genomics and Proteomics	1
3	Developmental and Comparative Immunology	1
2	Diseases of Aquatic Organisms	1
2	Environmental Biology of Fishes	1
2	FEMS Microbiology Letters	1
2	Israeli Journal of Aquaculture Bamidgah	1
2	Journal of Animal Science	1
2	Journal of Applied Aquaculture	1
2	Journal of Aquatic Food Product Technology	1
2	Journal of Food Science	1
2	Latin American Journal of Aquatic Research	1
2	Marine Biotechnology	1
2	Molecular Ecology	1
2	North American Journal of Fisheries Management	1
2	Reviews in Fisheries Science	1

Documents



Agricultural and Biological Sciences
Biochemistry, Genetics and Molecular Biology
Veterinary
Medicine
Environmental Science
Earth and Planetary Sciences
Immunology and Microbiology

Competency DC #7

Evapotranspiration; Water supply; energy balance

Summary	Trends	Journal Categories	Institutions	Authors	Compare	Methodology
---------	--------	--------------------	--------------	---------	---------	-------------

Based on an analysis of publications over the period 2010-2014, SciVal has identified DC #7 as a distinctive competency of the University of Idaho

[See why this field is a distinctive competency of the University of Idaho](#)

Publications in this field (2010-2014)

	Publications	Annual growth	Citations
Publications worldwide	1,018	+ 5.2% ▲	4,621
Publications in the United States	325	+ 4.6% ▲	2,401
Publications at the University of Idaho	36	+ 2.3% ▲	305

Show the contribution to this field from:

- ☒ University of Idaho
- ☐ all contributing Institutions worldwide

Top keywords for the University of Idaho [show all »](#)

Evapotranspiration	<div></div>
energy balance	<div></div>
Remote sensing	<div></div>
Landsat	<div></div>
Water supply	<div></div>
Interfacial energy	<div></div>
surface energy	<div></div>
calibration	<div></div>
Satellites	<div></div>
satellite	<div></div>

Top authors from the University of Idaho [details »](#)

Allen R.G.	<div></div>
Trezza R.	<div></div>
Kjaersgaard J.H.	<div></div>
Robison C.W.	<div></div>
Allen R.E.	<div></div>
Kra E.Y.	<div></div>
Oliveira A.S.	<div></div>
Kelly C.	<div></div>
Dhungel R.	<div></div>
Ryu J.	<div></div>

Top Journal Categories for the University of Idaho [details »](#)

Water Science and Technology	<div></div>
Atmospheric Science	<div></div>
Agronomy and Crop Science	<div></div>

Top journals for the University of Idaho

Journal of the American Water Resourc...	<div></div>
IAHS-AISH Publication	<div></div>
Hydrological Processes	<div></div>
Agricultural Water Management	<div></div>
Remote Sensing	<div></div>



Competency DC #7

Evapotranspiration; Water supply; energy balance

Summary Trends Journal Categories Institutions Authors Compare Methodology

Based on an analysis of publications over the period 2010-2014, SciVal has identified DC #7 as a distinctive competency of the University of Idaho

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Publications in the United States	325	+ 4.6% ▲	2,401
Publications at the University of Idaho	36	+ 2.3% ▲	305

Show the contribution to this field from:

- ☒ University of Idaho
☐ all contributing Institutions w

Top keywords for the University of

Evapotranspiration
energy balance
Remote sensing
Landsat
Water supply
Interfacial energy
surface energy
calibration
Satellites
satellite

Top Journal Categories for the Un

Water Science and Technology
Atmospheric Science
Agronomy and Crop Science



Competency DC #7

Evapotranspiration; Water supply; energy balance

Export ▼ Shortcuts ▼

Summary Trends Journal Categories Institutions Authors Compare Methodology

Contributing Institutions in the United States

☒ overview ☐ breakdown by keyword

View a different set of Institutions ▼

Institution	Publications in this field	Fractionalized publication count
1. University of Idaho ★	36	21.4
2. U.S. Department of Agriculture	64	17.6
3. Colorado State University	24	11.1
4. University of Nebraska	19	10.4
5. University of California at Davis	16	10.0
6. South Dakota State University	13	7.7
7. Utah State University	18	7.5
8. U.S. Geological Survey	23	6.2
9. Texas A and M University	19	5.4
10. University of Arizona	20	4.5

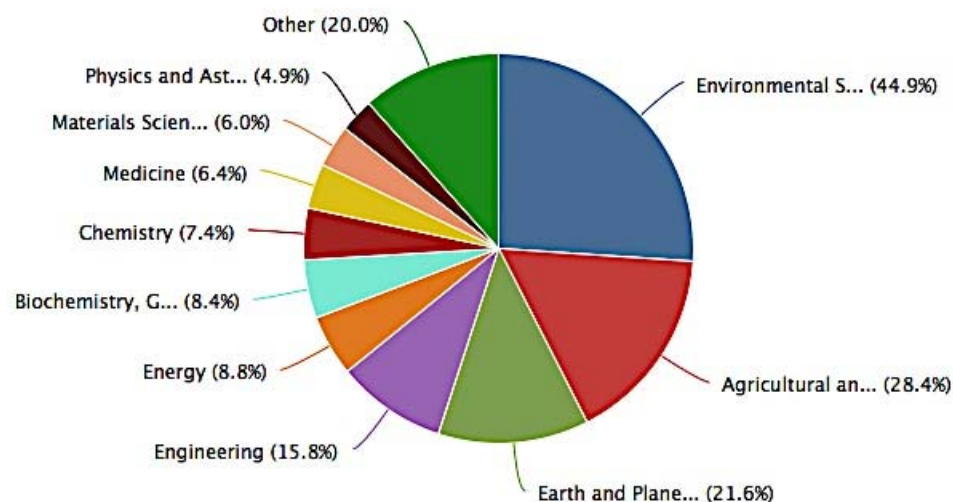
(KEY (water) AND AFFILORG (university of Idaho)) AND PUBYEAR > 2009 [Back to your search results](#)

514 document results Choose date range to analyze: 2010 to 2016 [Analyze](#)

Year	Source	Author	Affiliation	Country/Territory	Document type	Subject area
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Subject Area	Documents
Environmental Science	231
Agricultural and Biological Sciences	146
Earth and Planetary Sciences	111
Engineering	81
Energy	45
Biochemistry, Genetics and Molec...	43
Chemistry	38
Medicine	33
Materials Science	31
Physics and Astronomy	25
Chemical Engineering	23
Immunology and Microbiology	17
Social Sciences	16
Computer Science	14
Multidisciplinary	10
Mathematics	7
Pharmacology, Toxicology and Ph...	6
Business, Management and Acco...	4
Economics, Econometrics and Fin...	3
Arts and Humanities	2
Health Professions	1
Total	514

Documents by subject area



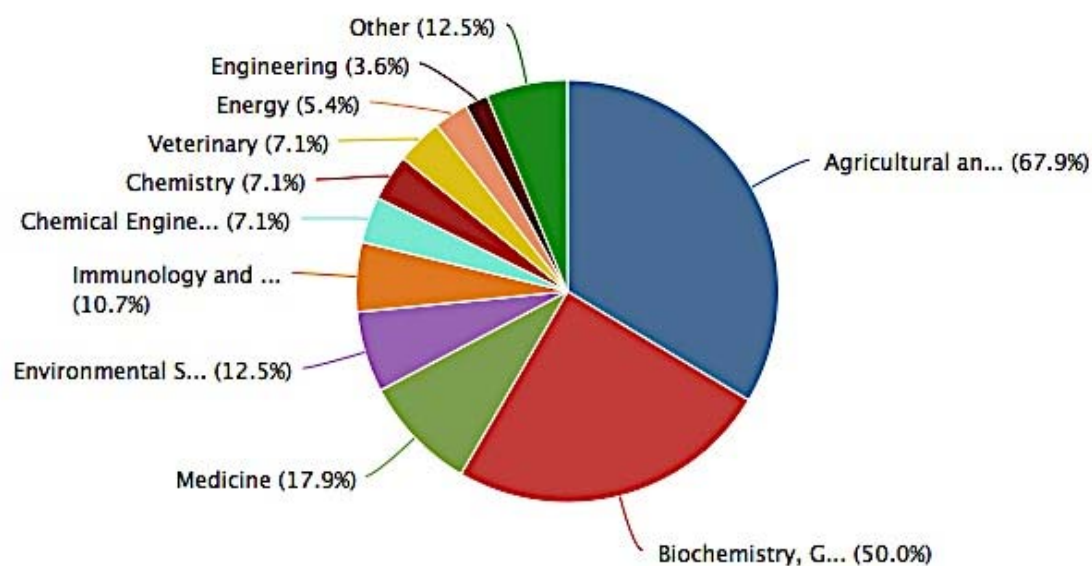
(TITLE-ABS-KEY (dairy) AND AFFILORG (university of Idaho)) AND PUBYEAR > 2009 [Back to your search results](#)

56 document results Choose date range to analyze: 2010 ▼ to 2015 ▼ [Analyze](#)

Year	Source	Author	Affiliation	Country/Territory	Document type	Subject area
------	--------	--------	-------------	-------------------	---------------	--------------

Subject Area	Documents ▾
Agricultural and Biological Sciences	38
Biochemistry, Genetics and Molec...	28
Medicine	10
Environmental Science	7
Immunology and Microbiology	6
Chemical Engineering	4
Chemistry	4
Veterinary	4
Energy	3
Engineering	2
Nursing	2
Business, Management and Acco...	1
Economics, Econometrics and Fin...	1
Materials Science	1
Physics and Astronomy	1
Social Sciences	1
Total	56

Documents by subject area



Competency EC #39

social network; governance approach; network analysis

Summary

Trends

Journal Categories

Institutions

Authors

Compare

Methodology

Based on an analysis of publications over the period 2010-2014, SciVal has identified EC #39 as a emerging competency of the University of Idaho

[See why this field is an emerging competency of the University of Idaho](#)

Publications in this field (2010-2014)

	Publications	Annual growth	Citations
Publications worldwide	471	+ 11.9% ▲	2,445
Publications in the United States	180	+ 9.8% ▲	976
Publications at the University of Idaho	7	+ 73.3% ▲	23

Show the contribution to this field from:

- ☒ University of Idaho
- ☐ all contributing Institutions worldwide

Top keywords for the University of Idaho [show all »](#)

adaptive management
resilience
water management
governance approach
adaptation
ecosystem resilience
resource management
trajectory
water
conflict

Top authors from the University of Idaho [details »](#)

Cosens B.A.
Alessa L.(I.
Kliskey A.D.
Shrestha M.K.

Top Journal Categories for the University of Idaho [details »](#)

Ecology

Top journals for the University of Idaho

Ecology and Society
Sustainability
Water (Switzerland)



Competency EC #39

social network; governance approach; network analysis

Summary

Trends

Journal Categories

Institutions

Authors

Compare

Methodology

Based on an analysis of publications over the period 2010-2014, SciVal has identified EC #39 as a emerging competency of the University of Idaho

[See why this field is an emerging competency of the University of Idaho](#)

Publications in this field (2010-2014)

	Publications	Annual growth	Citations
Publications worldwide	471	+ 11.9% ▲	2,445
Publications in the United States	180	+ 9.8% ▲	976
Publications at the University of Idaho	7	+ 73.3% ▲	23



Show the contribution to this field from:

- ☒ University of Idaho
- ☐ all contributing Institutions worldwide

Top keywords for the University of Idaho

adaptive management
resilience
water management
governance approach
adaptation
ecosystem resilience
resource management
trajectory
water
conflict

Top Journal Categories for the University of Idaho

Ecology

Competency EC #39

social network; governance approach; network analysis

Export ▼ Shortcuts ▼

Summary

Trends

Journal Categories

Institutions

Authors

Compare

Methodology

Contributing Institutions in the United States

☒ overview ☐ breakdown by keyword ▼

[View a different set of Institutions ▼](#)

Institution		Publications in this field	Fractionalized publication count
1. U.S. Environmental Protection Agency	United States	16	5.7
2. University of Arizona	United States	10	5.2
3. University of Idaho	United States	7	4.9
4. University of California at Davis	United States	12	4.3
5. University of New Mexico	United States	5	4.1
6. Syracuse University	United States	6	3.6
7. Florida State University	United States	8	2.7
8. Oregon State University	United States	5	2.7
9. U.S. Department of Agriculture	United States	6	2.5
10. University of Maryland	United States	8	2.4

Competency EC #52

school; leadership; principal

Summary	Trends	Journal Categories	Institutions	Authors	Compare	Methodology
---------	--------	--------------------	--------------	---------	---------	-------------

Based on an analysis of publications over the period 2010-2014, SciVal has identified EC #52 as a emerging competency of the University of Idaho

[See why this field is an emerging competency of the University of Idaho](#)

Publications in this field (2010-2014)

	Publications	Annual growth	Citations
Publications worldwide	348	-6.6% ▼	1,081
Publications in the United States	120	+ 9.5% ▲	625
Publications at the University of Idaho	2	+ 11.6% ▲	0

Show the contribution to this field from:

- ☒ University of Idaho
- ☐ all contributing Institutions worldwide

Top keywords for the University of Idaho [show all »](#)

impact	<div></div>
incident	<div></div>
secondary school	<div></div>
emotion	<div></div>
United States of America	<div></div>
leadership	<div></div>
meaning	<div></div>
event	<div></div>
empirical research	<div></div>
will	<div></div>

Top Journal Categories for the University of Idaho [details »](#)

Education	<div></div>
Sociology and Political Science	<div></div>

Top authors from the University of Idaho [details »](#)

Gardiner M.E.	<div></div>
Tenuto P.L.	<div></div>
Jain S.K.A.	<div></div>
Canfield-Davis K.	<div></div>
McMurtry J.	<div></div>
Wattam D.K.	<div></div>
Johnson M.	<div></div>

Top journals for the University of Idaho

Educational Management	<div></div>
Administration...	<div></div>



Competency EC #52

school; leadership; principal

Summary	Trends	Journal Categories	Institutions	Authors	Compare	Methodology
---------	--------	--------------------	--------------	---------	---------	-------------

Based on an analysis of publications over the period 2010-2014, SciVal has identified EC #52 as a emerging competency of the University of Idaho

[See why this field is an emerging competency of the University of Idaho](#)

Publications in this field (2010-2014)

	Publications	Annual growth	Citations
Publications worldwide	348	-6.6% ▼	1,081
Publications in the United States	120	+ 9.5% ▲	625
Publications at the University of Idaho	2	+ 11.6% ▲	0

Show the contribution to this field from:

- ☒ University of Idaho
- ☐ all contributing Institutions worldwide

Top keywords for the University of Idaho

impact
incident
secondary school
emotion
United States of America
leadership
meaning
event
empirical research
will

Top Journal Categories for the University of Idaho

Education
Sociology and Political Science



Competency EC #52

school; leadership; principal

Export ▼ Shortcuts ▼

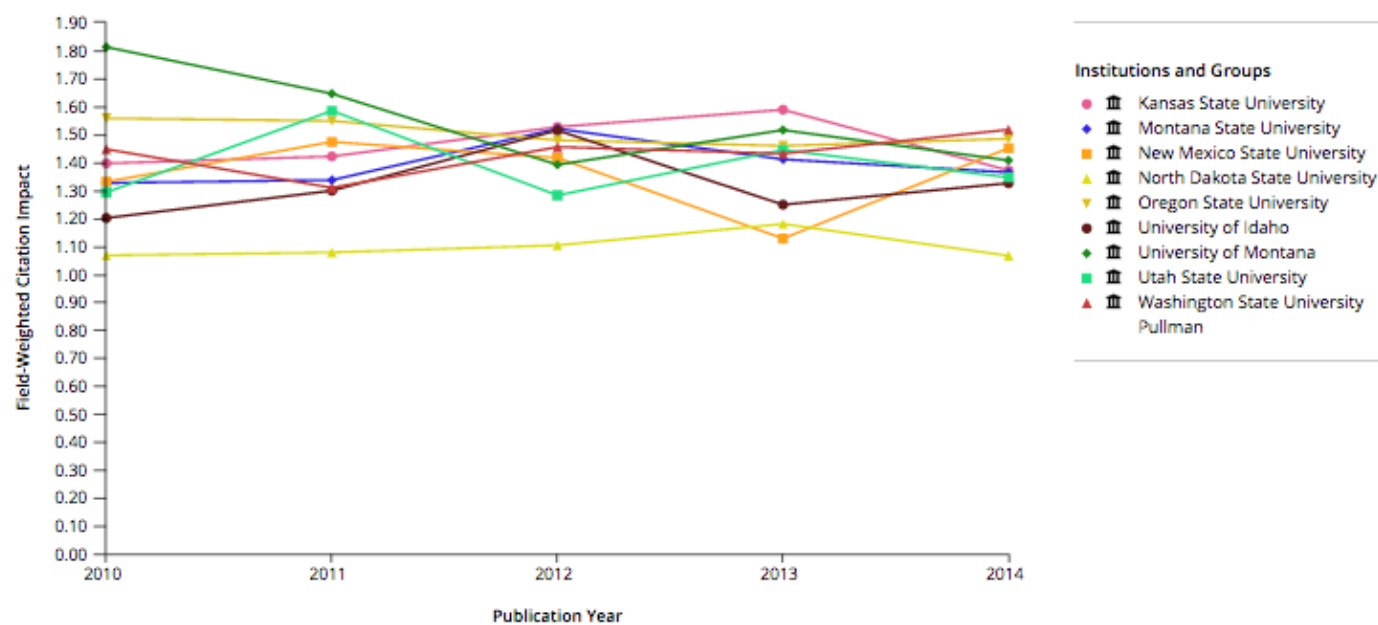
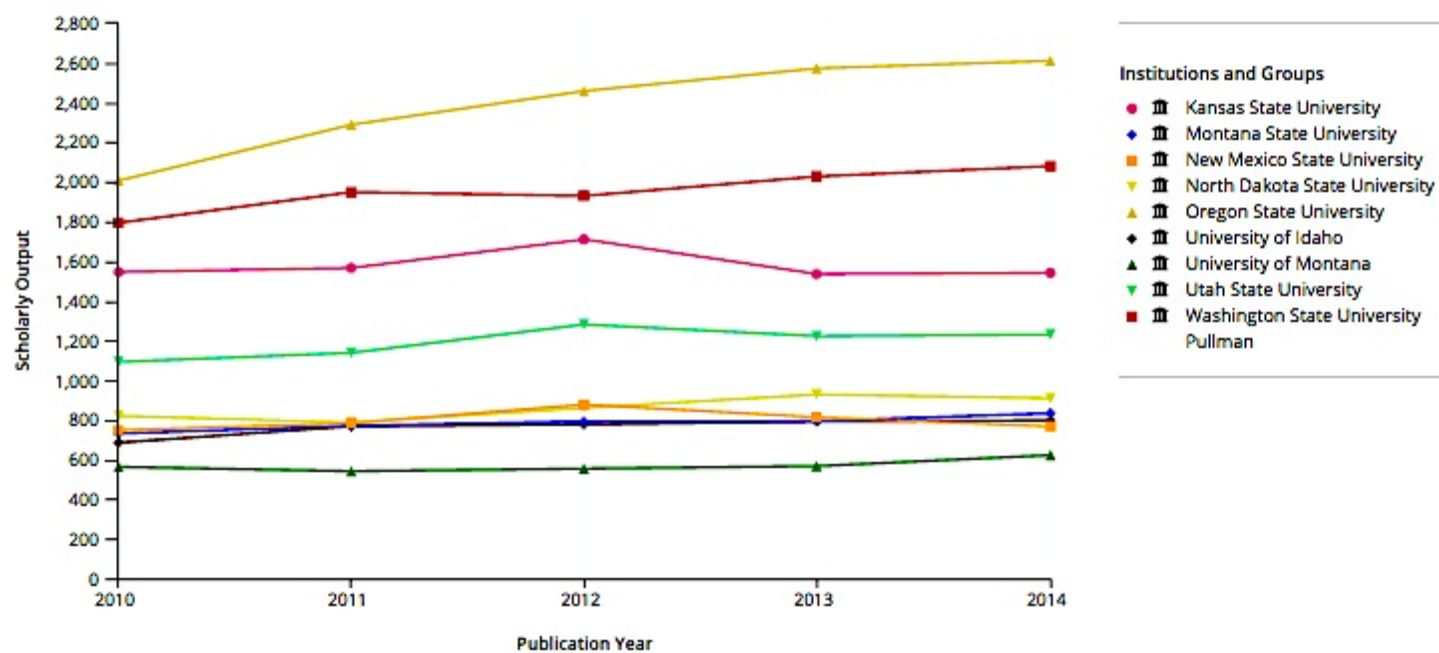
Summary	Trends	Journal Categories	Institutions	Authors	Compare	Methodology
---------	--------	--------------------	--------------	---------	---------	-------------

Contributing Institutions in the United States

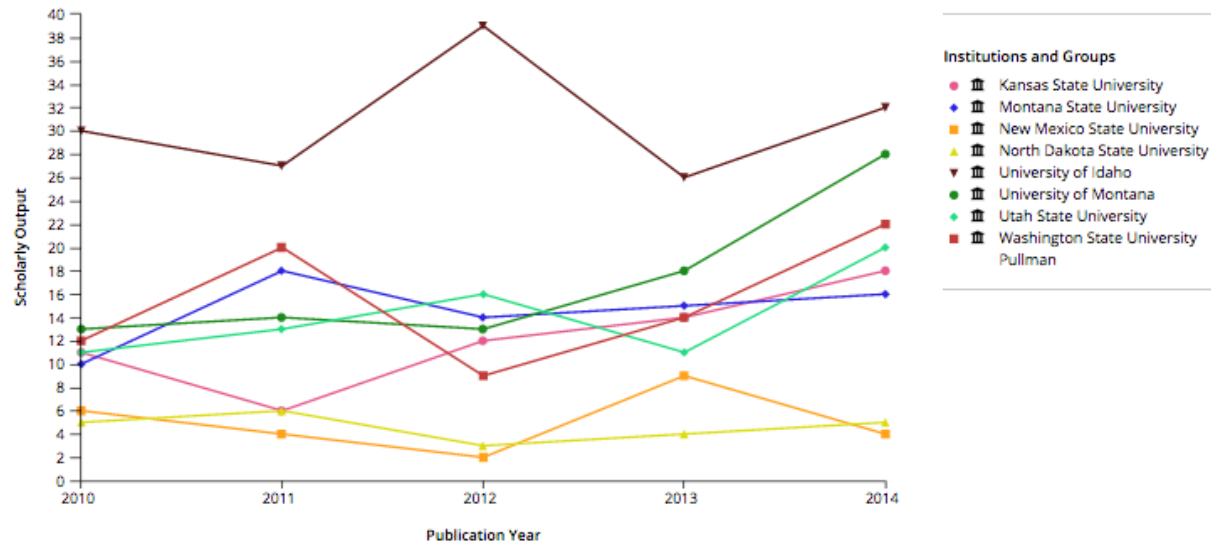
☒ overview ☐ breakdown by keyword ▼

[View a different set of Institutions ▼](#)

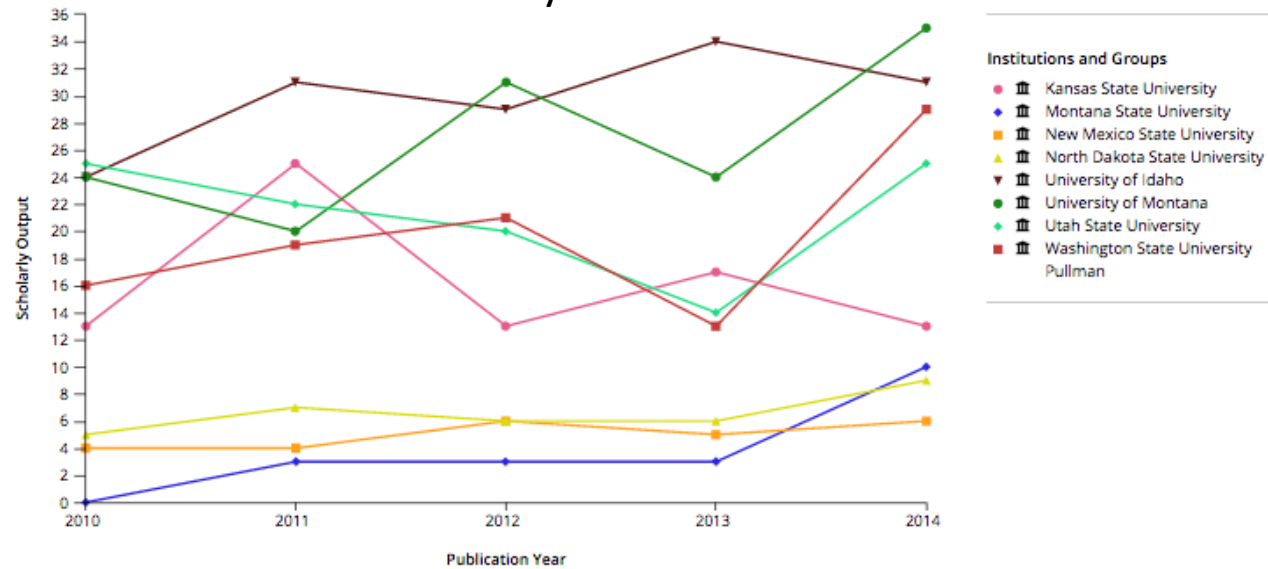
Institution		Publications in this field	Fractionalized publication count
1. Clemson University	United States	6	3.7
2. University of Idaho	United States	2	1.8
3. North Carolina State University	United States	3	1.4
4. Vanderbilt University	United States	5	1.3
5. Florida Atlantic University	United States	5	1.3
6. University of Illinois at Urbana-Champaign	United States	4	1.3
7. SUNY Albany	United States	3	1.1
8. University of Maryland	United States	3	1.1
9. University of North Carolina	United States	2	1.0
10. Stanford University	United States	1	1.0



Aquatic Science



Forestry



Corporate Collaborations



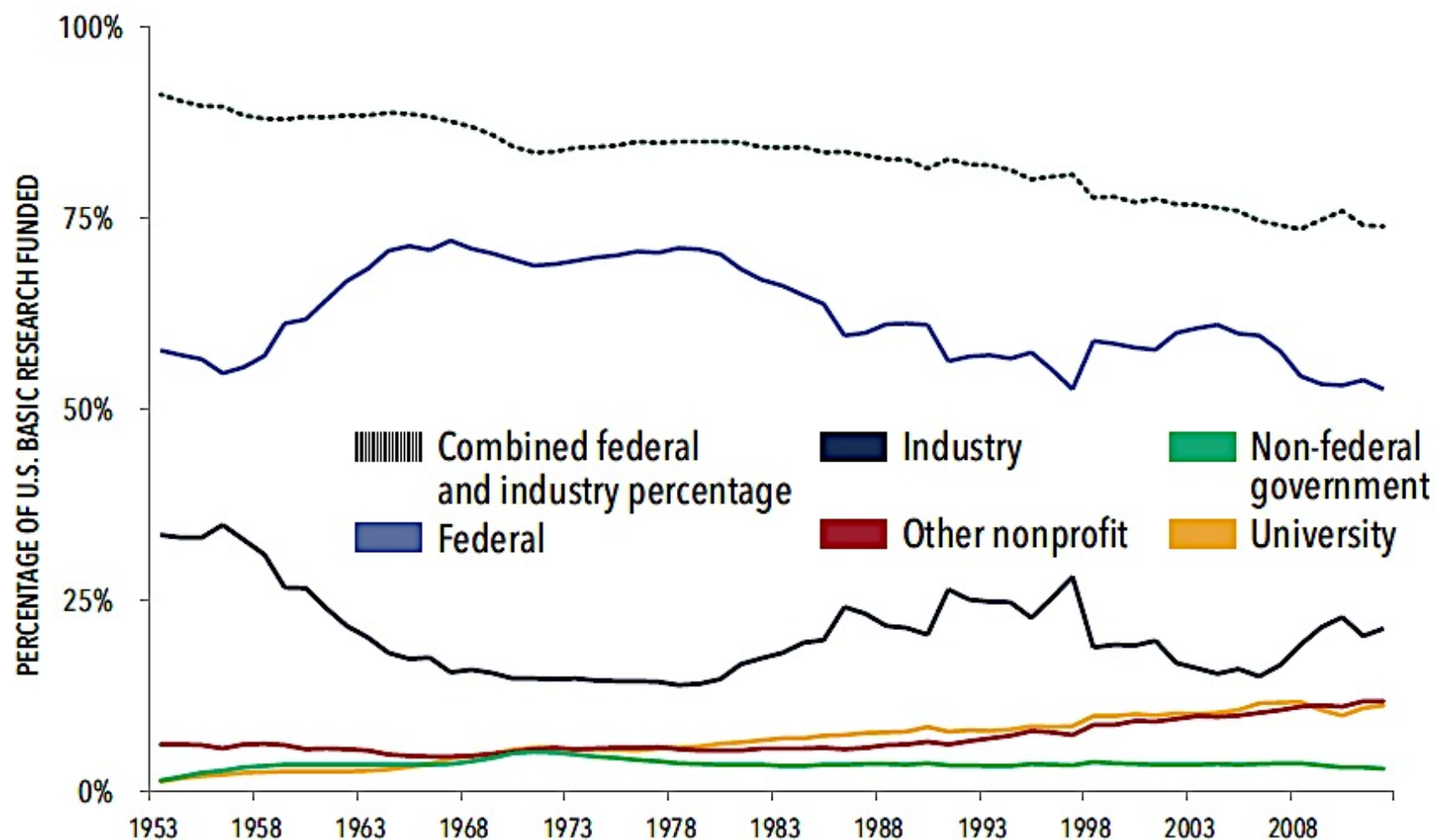
Institutions collaborating with the University of Idaho

North America Corporate

29 collaborating Institutions 38 co-authored publications

Institution	Co-authored publications	Co-authors at the University of Idaho	Co-authors at the other Institution	Field-Weight
Procter and Gamble	6 ▼	10 ▼	5 ▼	18.33
Battelle	3 ▼	3 ▼	2 ▼	0.33
DuPont	3 ▲	5 ▲	2 ▲	0.67
Hewlett-Packard	3 ▲	3 ▲	4 ▲	0.00
Aerospace Corporation	2 ▼	2 ▼	3 ▼	0.00
Agilent Technologies	2	2	2	4.00
Caterpillar Inc.	2 ▼	2 ▼	1 ▼	0.00
ConocoPhillips	2	3	2	0.00
Pfizer	2 ▼	2 ▼	2 ▼	22.50
Amgen Incorporated	1 ▲	1 ▲	6 ▲	4.00
AT&T	1	2	1	0.00
Dow Chemical	1	3	1	0.00
Electric Power Research Institute	1	1	1	0.00
Eli Lilly	1	1	1	45.00
ExxonMobil	1	1	1	0.00
Ford Motor	1 ▲	1 ▲	2 ▲	0.00

Who Funds Basic Research ?



Source: National Science Foundation, National Center for Science and Engineering Statistics. 2013. National Patterns of R&D Resources: 2011-12 Data Update.



Government Collaborations

Institutions collaborating with the University of Idaho

North America | United States | Government | [reset filter](#)

49 collaborating Institutions | 819 co-authored publications

Institution	Co-authored publications	Co-authors at the University of Idaho	Co-authors at the other Institution	Field-Weight
U.S. Department of Agriculture	365	268	416	1.82
Idaho National Laboratory	126	77	93	1.06
U.S. Geological Survey	113	95	113	2.86
Naval Research Laboratory	49	30	9	2.43
Jet Propulsion Laboratory, California Institute of Technology	43	18	50	4.56
NOAA	31	24	26	1.03
Pacific Northwest National Laboratory	28	31	55	1.39
Oak Ridge National Laboratory	20	17	24	7.20
Los Alamos National Laboratory	16	15	19	7.62
Lawrence Berkeley National Laboratory	15	28	24	7.60
NASA Goddard Space Flight Center	15	18	36	7.13
National Institutes of Health	12	21	52	12.67
NASA Ames Research Center	11	8	25	3.09
U.S. Environmental Protection Agency	10	7	12	0.90
Argonne National Laboratory	7	9	7	3.29
Jackson Laboratory	6	6	6	2.33
U.S. Nuclear Regulatory Commission	6	9	1	5.67
United States Army	6	6	10	0.50
National Center for Atmospheric Research	5	3	21	2.00
National Institute of Standards and Technology	4	7	7	0.00
Sandia National Laboratories NM	4	4	8	0.00
U.S. Department of Energy	4	6	4	0.25
U.S. Food and Drug Administration	4	6	4	13.25

Collaboration with Idaho National Laboratory



Year range: 2010 to 2015

Export ▾

Shortcuts ▾

Overview

Current co-authors

Potential co-authors

University of Idaho

77 ▾ co-authors with
Idaho National Laboratory

Total output of this Institution

Citations	28,743
Citations per Publication	6.9
Field-Weighted Citation Impact	1.31
Publications	4,192 ▲
Authors	2,307 ▲

Co-authored publications

126 ▲

[View list of publications](#)

Citations	383
Citations per Publication	3.0
Field-Weighted Citation Impact	1.06

Idaho National Laboratory

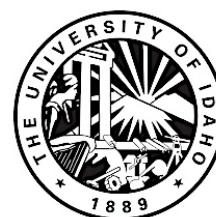
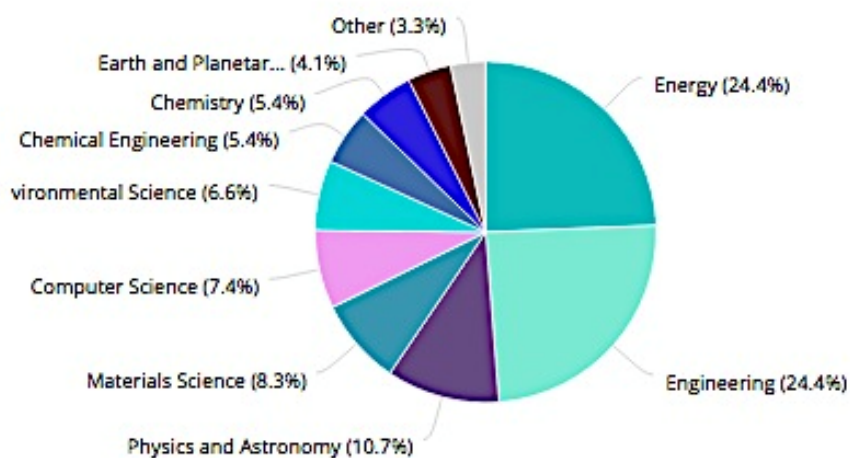
93 ▾ co-authors with the
University of Idaho

Total output of this Institution

Citations	6,539
Citations per Publication	3.1
Field-Weighted Citation Impact	1.00
Publications	2,086 ▾
Authors	934 ▾

Co-authored publications by Journal Category

[Pie chart](#) [Bar chart](#)



Collaboration with the U.S. Department of Agriculture



Year range: 2010 to 2015

Export ▾

Shortcuts ▾

Overview

Current co-authors

Potential co-authors

University of Idaho


268 ▲ co-authors with the
U.S. Department of Agriculture

Total output of this Institution

Citations	28,743
Citations per Publication	6.9
Field-Weighted Citation Impact	1.31
Publications	4,192 ▲
Authors	2,307 ▲

Co-authored publications

365 ▲

 [View list of publications](#)

Citations	3,272
Citations per Publication	9.0
Field-Weighted Citation Impact	1.82


U.S. Department of Agriculture


416 ▲ co-authors with the
University of Idaho

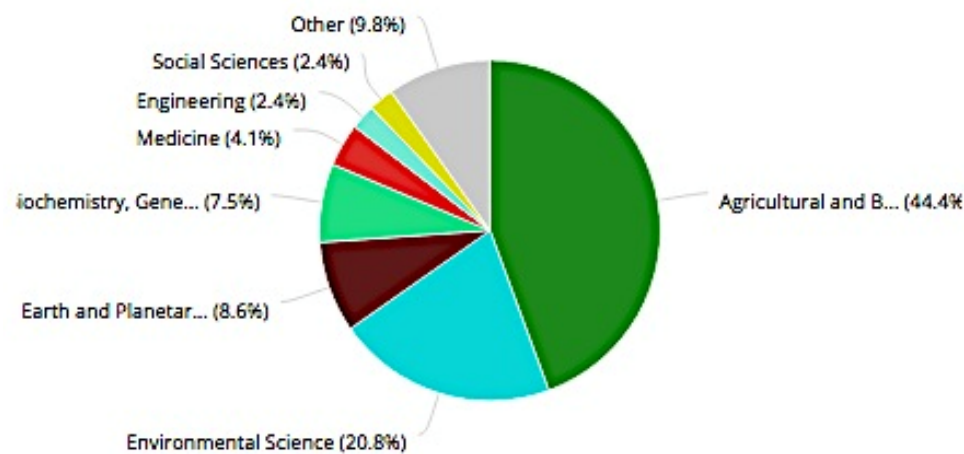
Total output of this Institution

Citations	216,482
Citations per Publication	7.1
Field-Weighted Citation Impact	1.43
Publications	30,639 ▼
Authors	12,428 ▼

Co-authored publications by Journal Category

 Pie chart

 Bar chart





International Collaborations

Institutions collaborating with the University of Idaho

Asia Pacific

All countries

Academic

reset filter

245 collaborating Institutions 355 co-authored publications

Institution	Co-authored publications	Co-authors at the University of Idaho	Co-authors at the other institution	Field-Weight
Sichuan University	21	11	42	3.14
China Agricultural University	17	10	4	1.94
Chinese Academy of Sciences	15	14	28	5.27
Hefei University of Technology	13	7	33	0.92
University of Tasmania	12	12	10	1.33
Korea University	12	11	17	4.50
Huazhong Agricultural University	11	11	31	1.73
Macquarie University	9	10	9	6.89
Shanghai Jiaotong University	9	11	18	5.78
University of Science and Technology of China	8	3	6	5.75
Nagoya University	8	6	6	6.75
University of Canterbury	8	9	11	0.75
Australian National University	7	9	10	2.00
Monash University	7	5	10	8.71
Seoul National University	7	12	14	8.29
National Dong Hwa University	7	9	3	0.29
James Cook University Queensland	6	6	7	2.67
University of Melbourne	6	5	10	11.50
University of New South Wales	6	5	9	7.17
Beijing University of Technology	6	3	13	0.67

Collaboration with Sichuan University



Year range: 2010 to 2015

Export ▾

Shortcuts ▾

Overview

Current co-authors

Potential co-authors

University of Idaho

11 ▲ co-authors with
Sichuan University

Total output of this Institution

Citations	28,743
Citations per Publication	6.9
Field-Weighted Citation Impact	1.31
Publications	4,192 ▲
Authors	2,307 ▲

Co-authored publications

21 ▲

[View list of publications](#)

Citations	1,097
Citations per Publication	52.2
Field-Weighted Citation Impact	3.14

Sichuan University

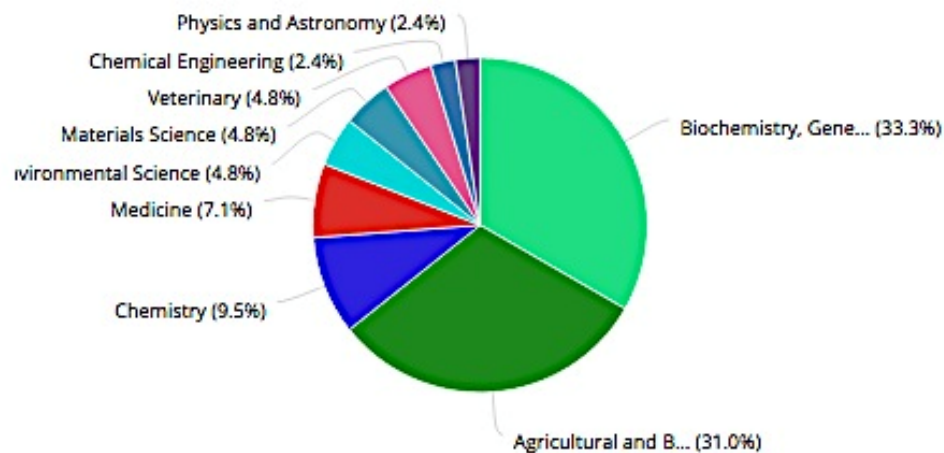
42 ▲ co-authors with the
University of Idaho

Total output of this Institution

Citations	132,093
Citations per Publication	4.0
Field-Weighted Citation Impact	0.86
Publications	32,942 ▲
Authors	32,096 ▲

Co-authored publications by Journal Category

[Pie chart](#) [Bar chart](#)





University of Idaho

Co-authors with Sichuan University

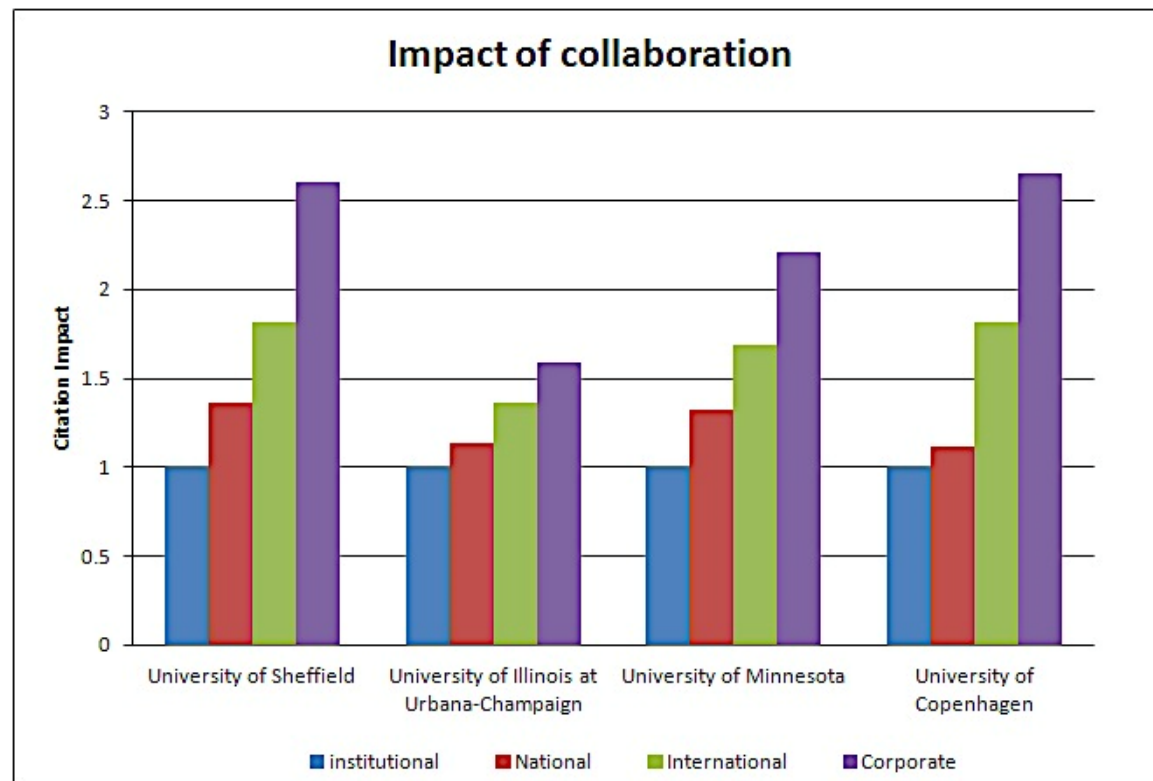
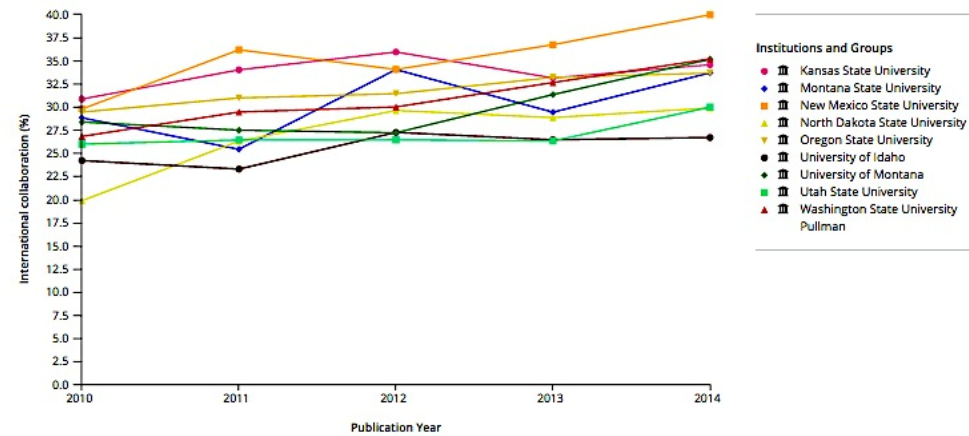
Author	Co-authored publications	Citations
► Xiao, Fangming	16	63
► Miao, Min	5	22
► Shreeve, Jean'Ne M.	4	61
► Kuhl, Joseph C.	2	10
► Du, Xinran	2	7
► Kud, Joanna	2	7
► Niu, Xiangli	2	7
► Caplan, Allan B.	1	973
► Huang, Weizao	1	5
► Thottempudi, Venugopal	1	0
► Vo, Thao	1	0

Sichuan University

Co-authors with the University of Idaho

Author	Co-authored publications	Citations
► Liu, Yongsheng	11	35
► Miao, Min	7	46
► Tang, Xiaofeng	7	40
► Liu, Jikai	5	19
► Tao, Guohong	3	61
► He, Ling	3	32
► Gao, Yongfeng	3	11
► Hou, Pei	3	4
► Zeng, Deer	3	4
► Huang, Shengxiong	2	27
► Li, Yuxiang	2	10
► Tian, Xuefen	2	10
► Sun, Xiaochun	2	9
► Cao, Ying	2	4
► Liu, Yongsheng	2	2
► Huang, Canhua	1	973
► Liu, Bo	1	973
► Fei, Zhangjun	1	19
► Lin, Lin	1	19
► Liu, Fangfang	1	19
► Liu, Yongsheng	1	19
► Meng, Meng	1	19
► Min, Ya	1	19
► Sun, Jiaqi	1	19
► Tang, Wei	1	19
► Yu, Jinde	1	19
► Zhang, Xia	1	19
► Gao, Lanyang	1	8
► Zeng, Hui	1	8
► Li, Hanjing	1	7
► Deng, Heng	1	4
► Zhang, Peng	1	4
► Li, Xiao	1	2
► Tang, Zizhi	1	2
► Yang, Jian	1	2
► Zhao, Yun	1	2
► Zhao, Zhulu	1	2
► Fan, Jing	1	1
► Qiao, Maiju	1	1
► Yu, Guirong	1	1
► Zhang, Ni	1	1
► Zhang, Zhiguo	1	1







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Questions and Discussion

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