



THOMSON REUTERS

THE USE OF THOMSON REUTERS RESEARCH ANALYTIC RESOURCES IN ACADEMIC PERFORMANCE EVALUATION

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Thomson Reuters: Solutions Portfolio to Seamlessly Support Research

Discover Scholarly Output



Organize References & Write Papers



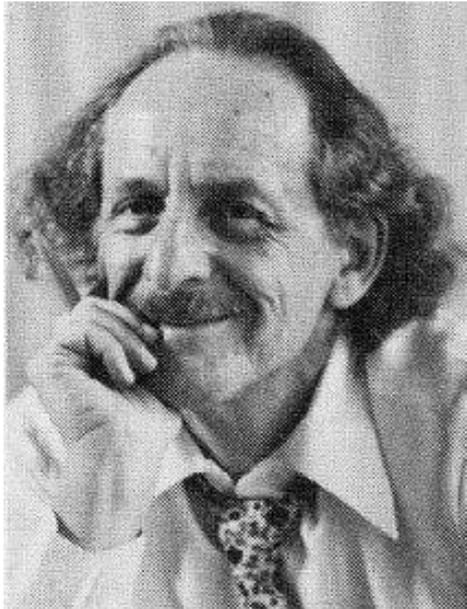
Benchmark & Analyze Performance



Manage & Report on Scholarly Activity



Eugene Garfield's "Association Of Ideas Index"-1955

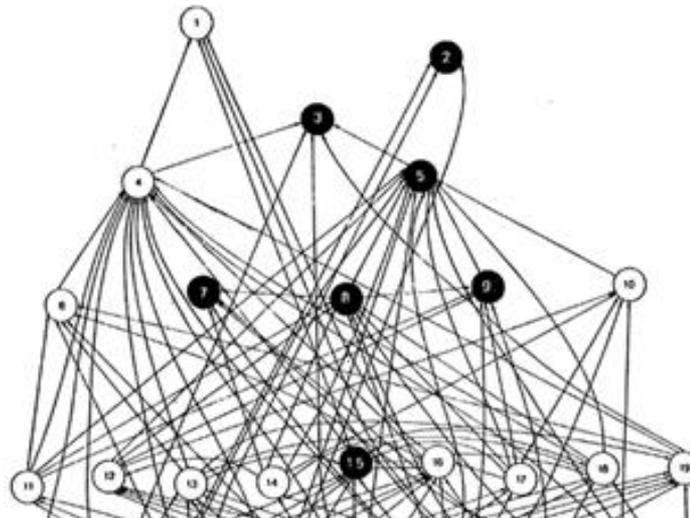


Science, 122(3159), p.108-11, July 1955.

Citation Indexes for Science

A New Dimension in Documentation
through Association of Ideas

Eugene Garfield



50th Anniversary
Science Citation Index

Web of Science is the “web” presentation of journal citation indexes developed five decades ago by Dr. Eugene Garfield, founder of ISI (now Thomson Reuters SSR) and an icon in the realm of scholarly information

Web Of Science Online Citation Database

SELECTIVE.....YET COMPREHENSIVE

- **“Multidisciplinary” coverage**
 - enable to analyze the whole context of scientific research
- **“Multiyear” coverage**
 - enable to analyze the history and development of sciences
- **“Cover to Cover” policy**
 - enable to follow the flow of a topic regardless of communication type
- **“ALL Authors, ALL Addresses”**
 - enable to analyze by author name, by institution
- **“ALL Cited References”**
 - enable to perform analyses on literature that is not indexed



Selection Process For The Web Of Science Core Collection

Four Points of Evaluation

Publishing
Standards

Editorial
Content

International
Diversity

Citation
Analysis

12500 selected Journals

12000 annual selected
conferences

53000 selected books



Applications of Bibliometric Analysis

1. Quantification:

- Data reduction (extracting essential information)
- Data cleaning and data disambiguation



- For more than four decades Thomson Reuters has provided a wide range of tools and services supporting research evaluation.
- Our specialist work with Web of Science data and ensure maximum standardization and unification before delivery to customers.
- Not just simple counts and averages, but real metrics founded on baselines for comparison and normalized statistics.



Applications of Bibliometric Analysis

2. Measuring:

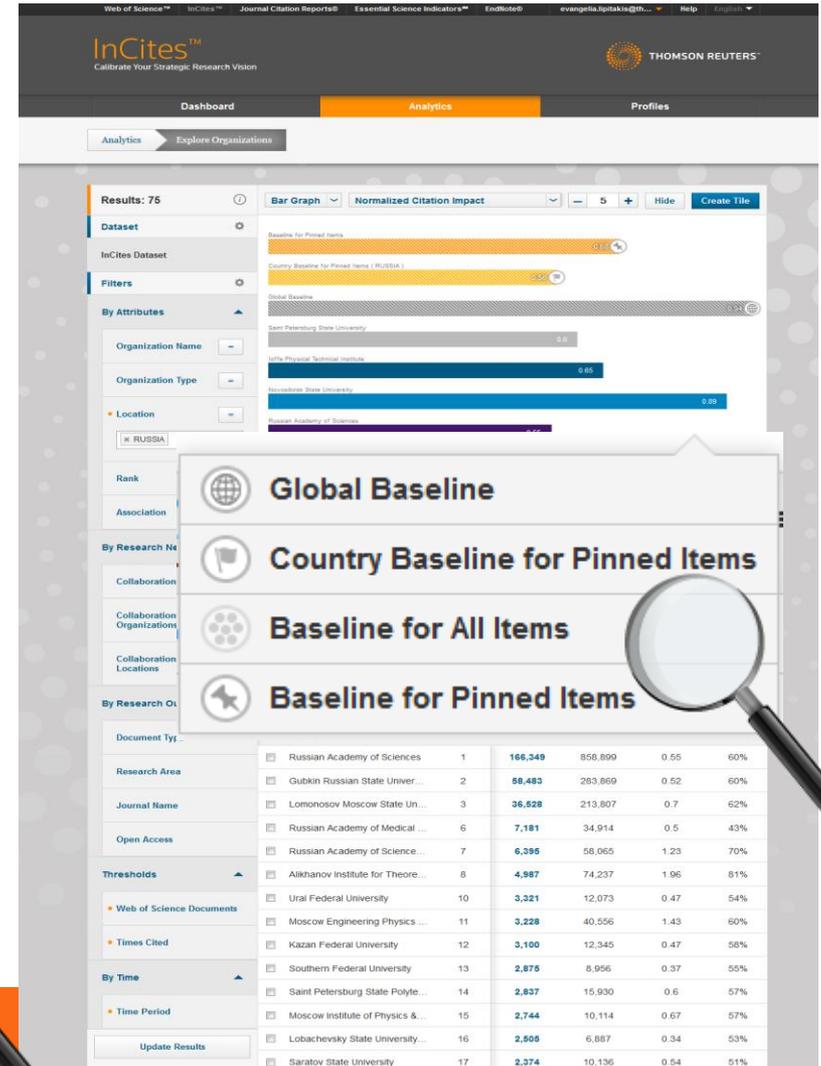
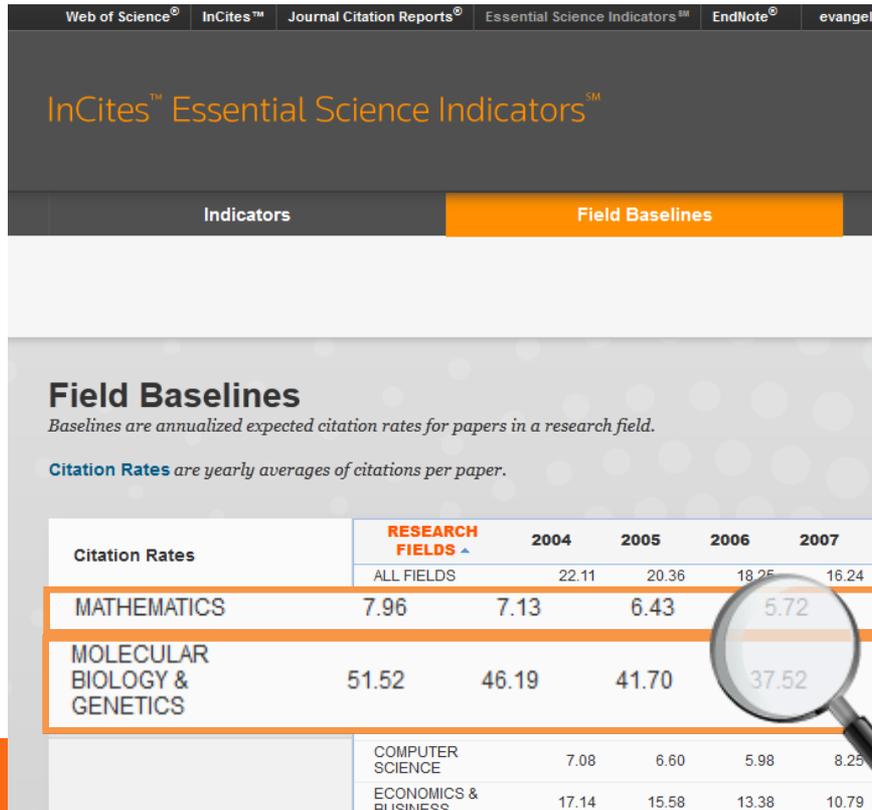
- What *can* and *what* should be measured?
- What are appropriate measures for the purpose?

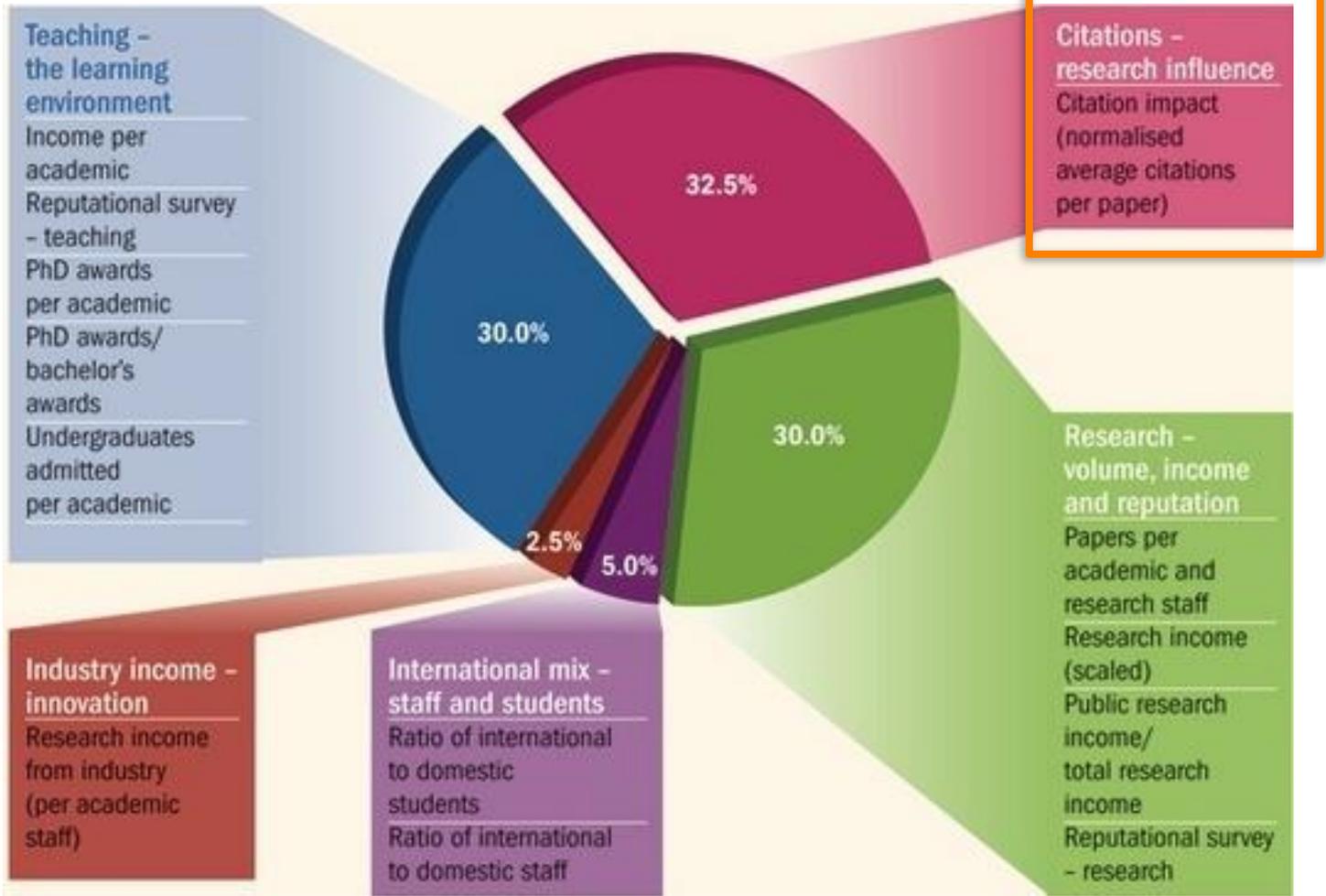


Applications of Bibliometric Analysis

3. Benchmarking

- Comparison (like with like)
- Putting data into context
- Consider limitations





Teaching - the learning environment
 Income per academic
 Reputational survey - teaching
 PhD awards per academic
 PhD awards/bachelor's awards
 Undergraduates admitted per academic

Citations - research influence
 Citation impact (normalised average citations per paper)

Research - volume, income and reputation
 Papers per academic and research staff
 Research income (scaled)
 Public research income/total research income
 Reputational survey - research

Industry income - innovation
 Research income from industry (per academic staff)

International mix - staff and students
 Ratio of international to domestic students
 Ratio of international to domestic staff

The “SHANGHAI RANKING”



Indicators and Weights for ARWU

Criteria	Indicator	Code	Weight
Quality of Education	Alumni of an institution winning Nobel Prizes and Fields Medals	Alumni	10%
Quality of Faculty	Staff of an institution winning Nobel Prizes and Fields Medals	Award	20%
	Highly cited researchers in 21 broad subject categories	HiCi	20%
Research Output	Papers published in Nature and Science*	N&S	20%
	Papers indexed in Science Citation Index-expanded and Social Science Citation Index	PUB	20%
Per Capita Performance	Per capita academic performance of an institution	PCP	10%
Total			100%



CWTS
Meaningful metrics

Leiden Ranking

Data collection

The CWTS Leiden Ranking 2013 is based on data from the Web of Science bibliographic database produced by Thomson Reuters. The ranking includes the 500 universities worldwide with the largest publication output in the Web of Science database. Although the ranking is limited to universities, it does include organizations directly related to universities, in particular hospitals associated with universities. Changes in the organizational structures of universities up to 2012 have been taken into account.

CWTS Leiden Ranking 2013

Select field and region/country

Field:

Region:

Country:

Select indicators

Type of indicators:

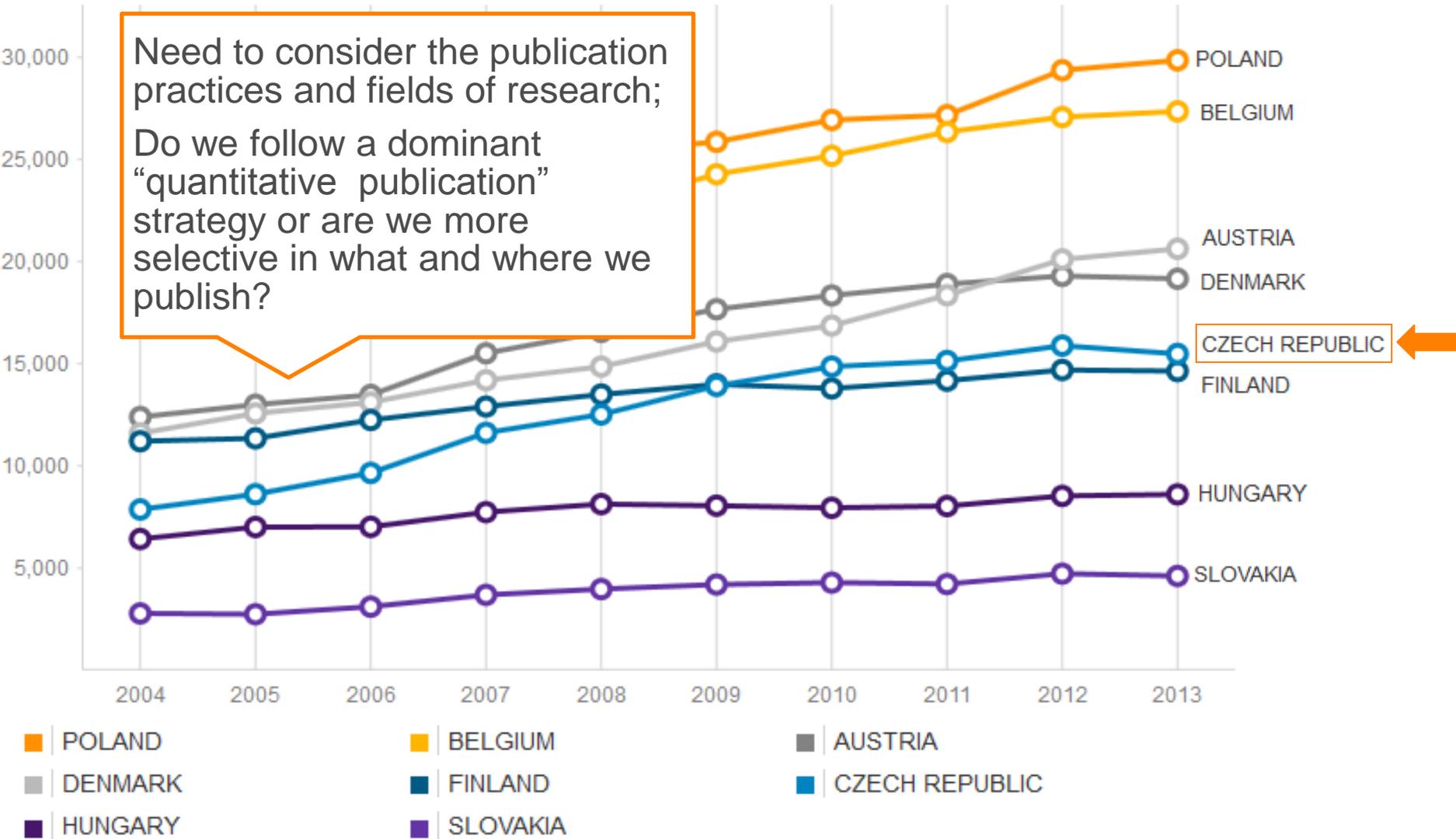
Indicator used for ranking:

Minimum number of publications:

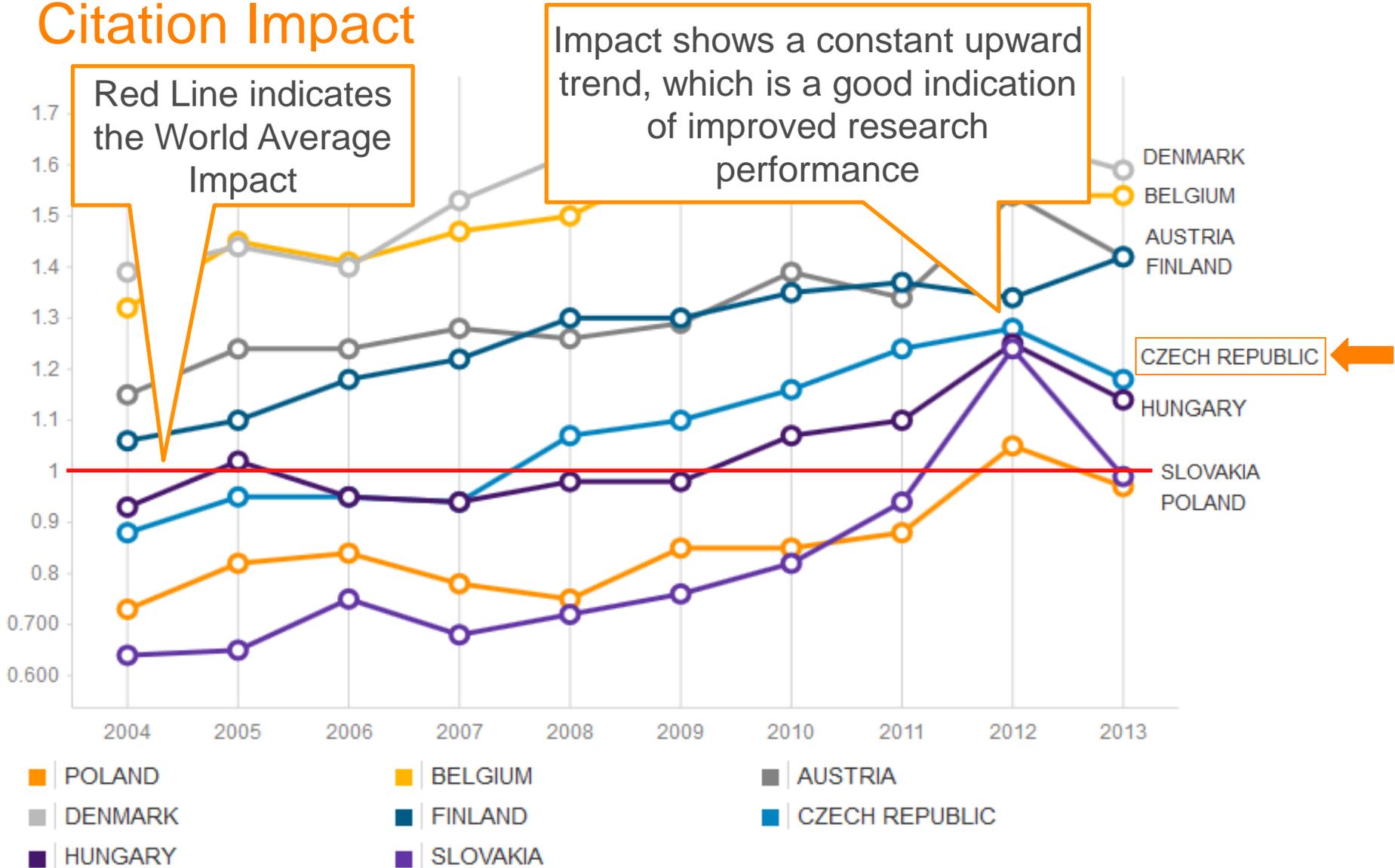
Rank	University	Country	P	PP(top 10%)	Stability interval
1	Nankai Univ		3673	14.4%	
2	Hunan Univ		1969	14.3%	
3	Hong Kong Univ Sci & Technol		2797	13.5%	
4	Univ Sci & Technol China		4914	13.3%	
5	City Univ Hong Kong		3242	12.4%	

National Comparisons – Monitor your Productivity

Need to consider the publication practices and fields of research;
Do we follow a dominant “quantitative publication” strategy or are we more selective in what and where we publish?



InCites - Country Comparison and Normalized Citation Impact

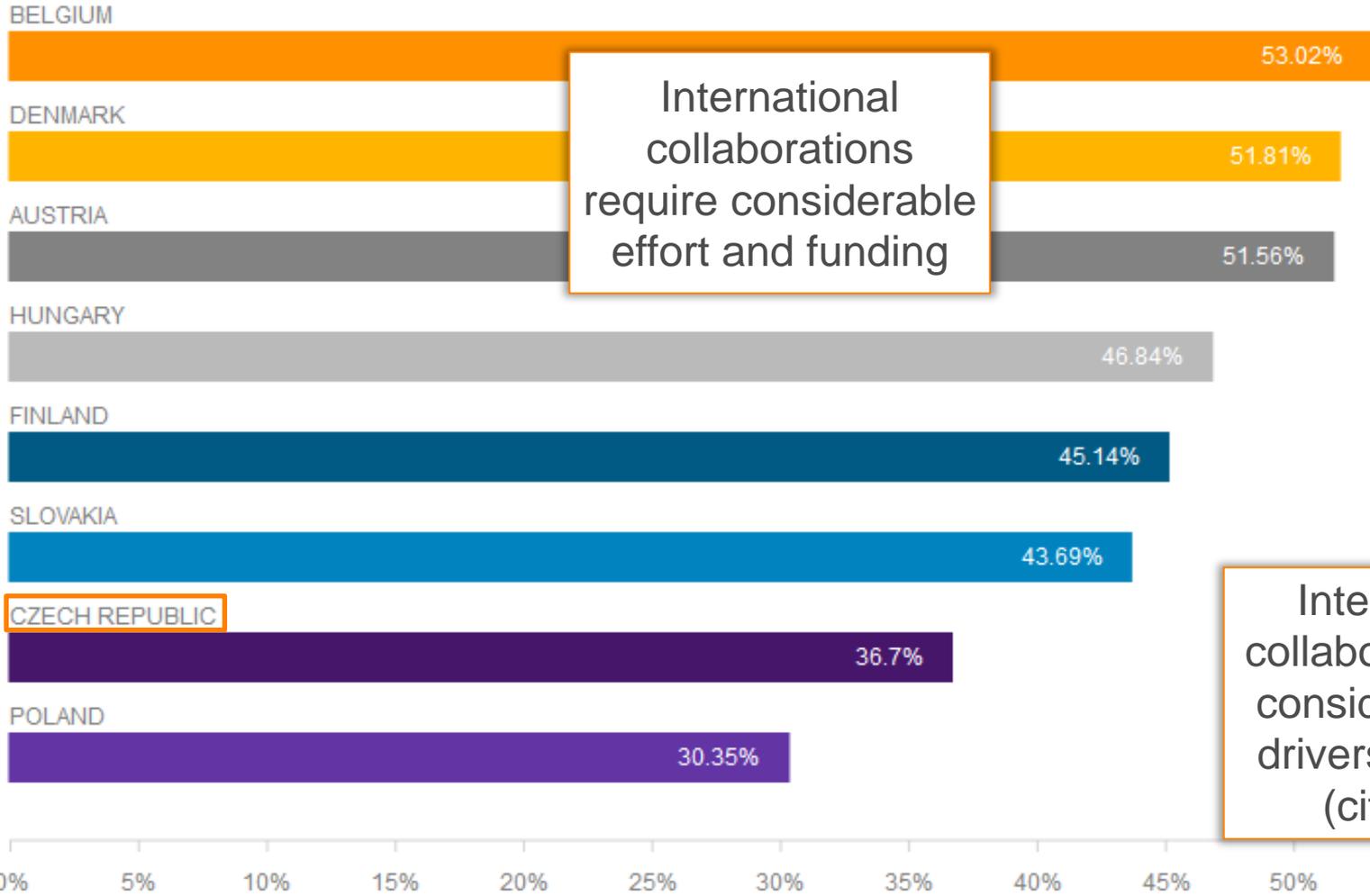


InCites – Monitor your International Collaboration

- International research collaboration has intensified and is often regarded as an indicator of quality and a way to develop and disseminate scientific knowledge
- Funding agencies such as the EC stimulate collaboration within the European Union by applying it as a funding criterion

What is the return on international collaboration?

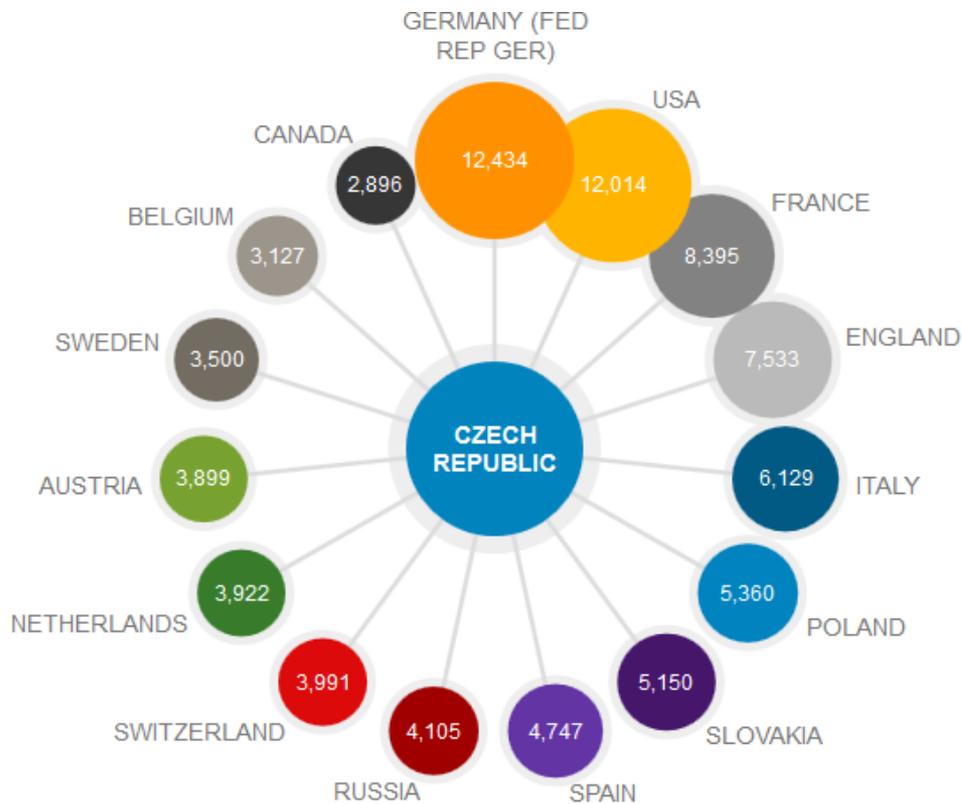
How much Czech Republic is collaborating internationally?



International collaborations require considerable effort and funding

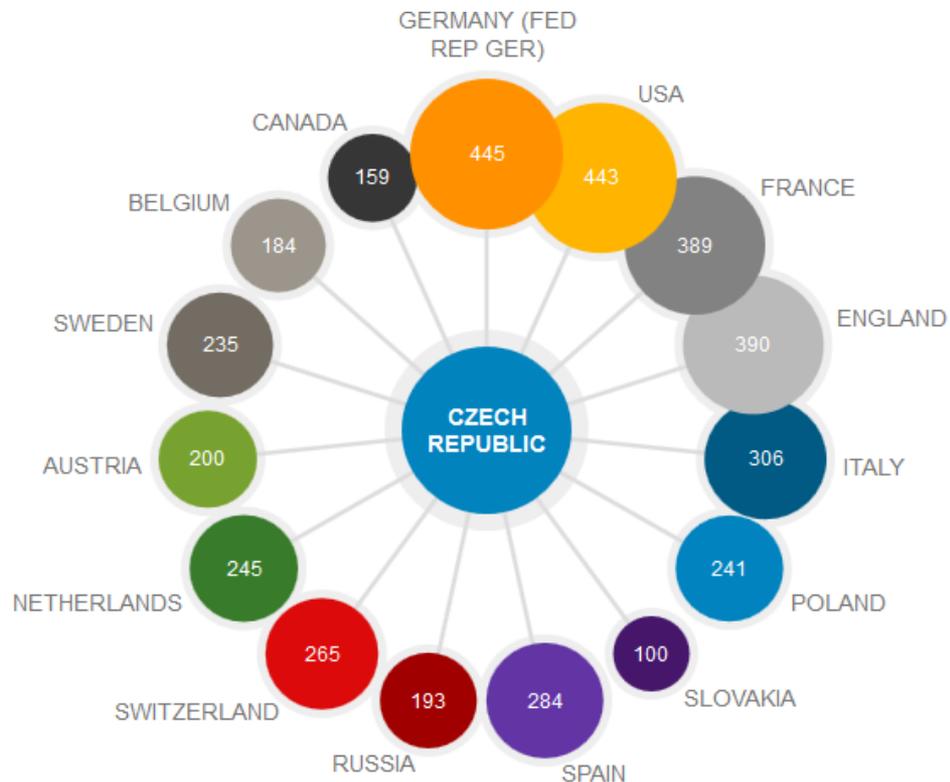
International collaborations are considered to be drivers of impact (citations)

International Collaborations - Countries

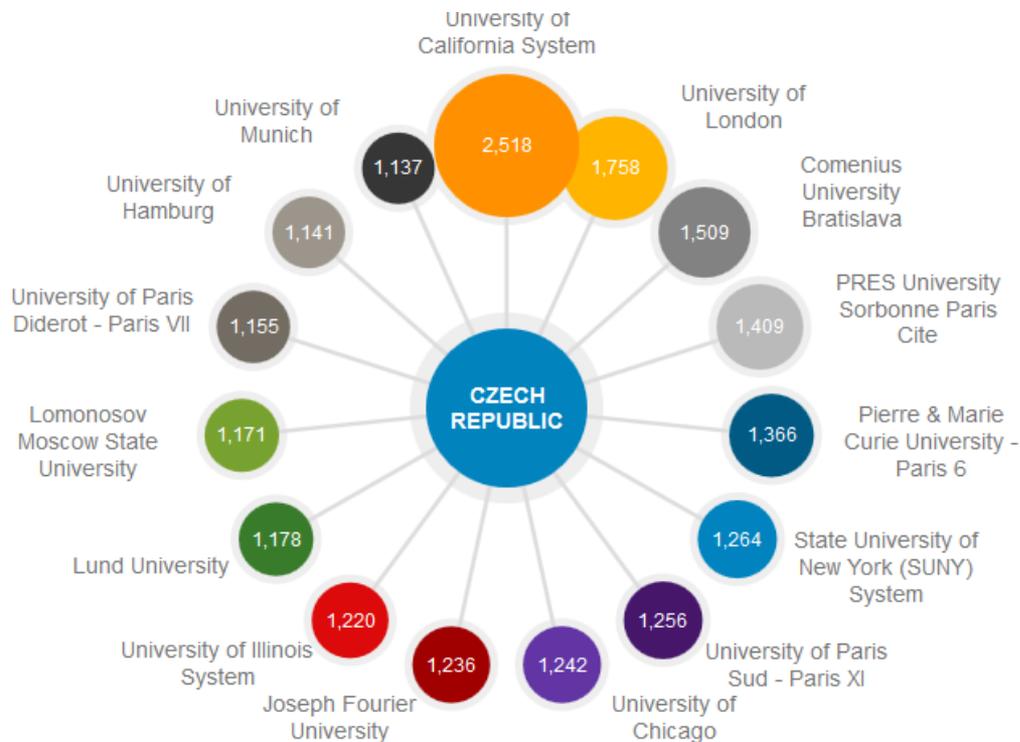


With which countries Czech Republic has produced most collaborations (#of documents)?

With which countries Czech Republic has produced most Highly Cited Papers?

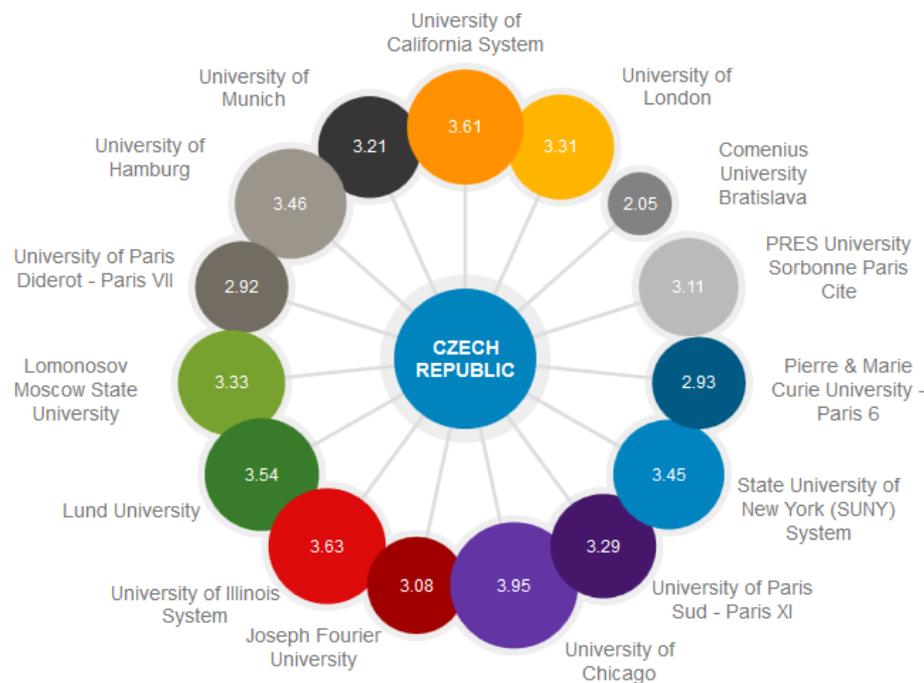


International Collaborations - Institutions

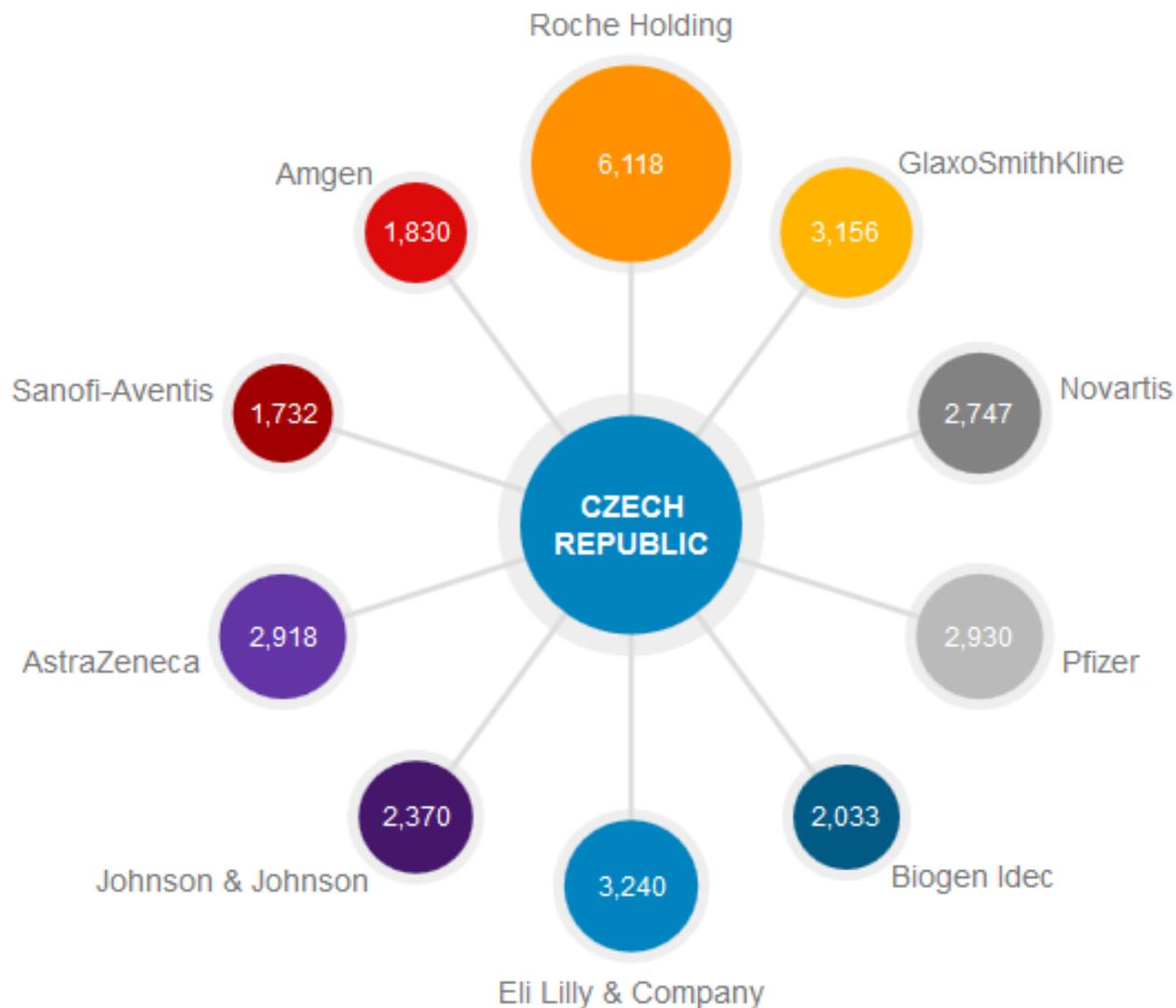


With which institutions Czech Republic has produced most collaborations (#of documents)?

With which institutions Czech Republic has produced the most successful collaborations (NCI)?

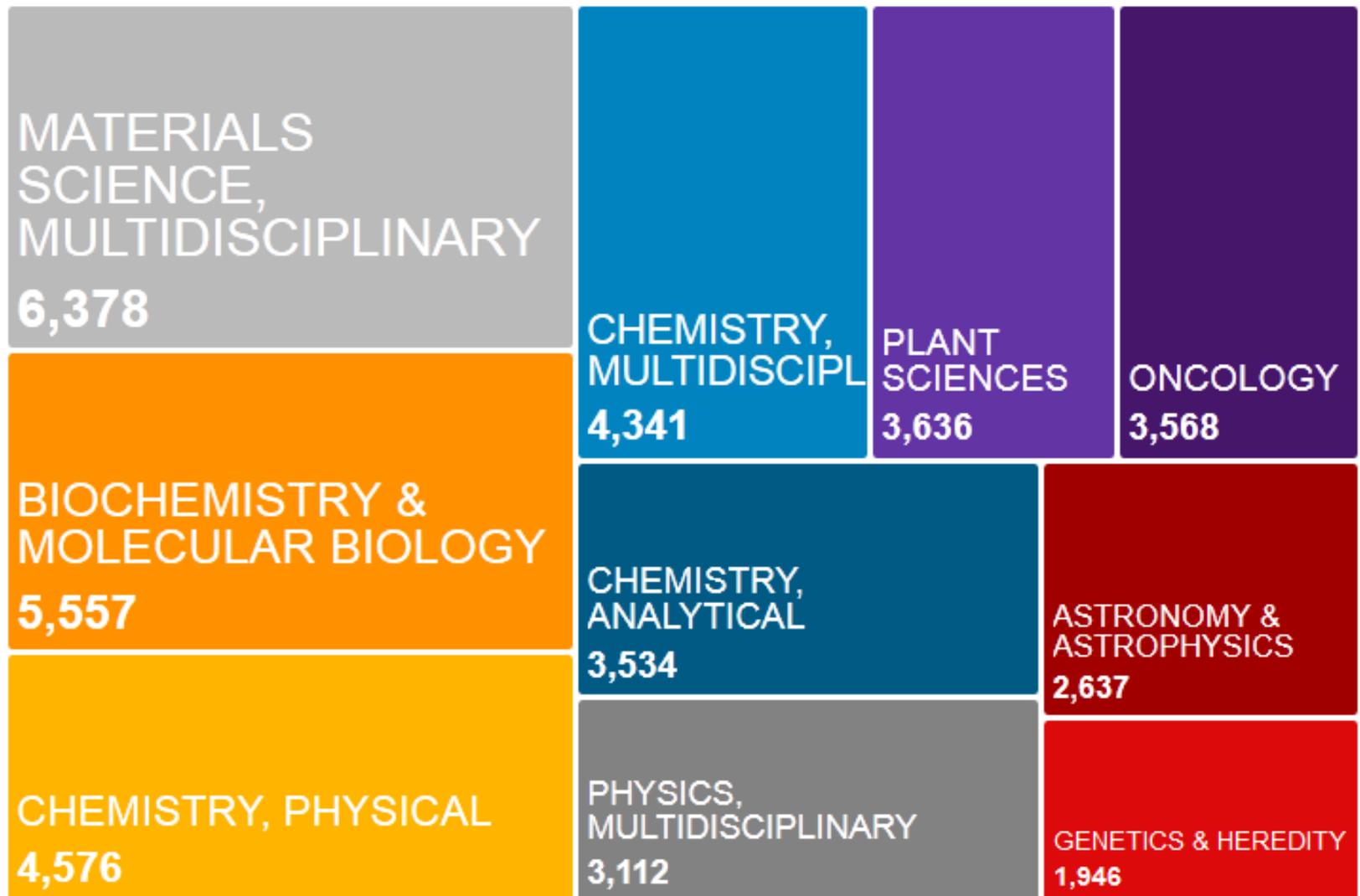


Industry Collaborations – Impact of publications

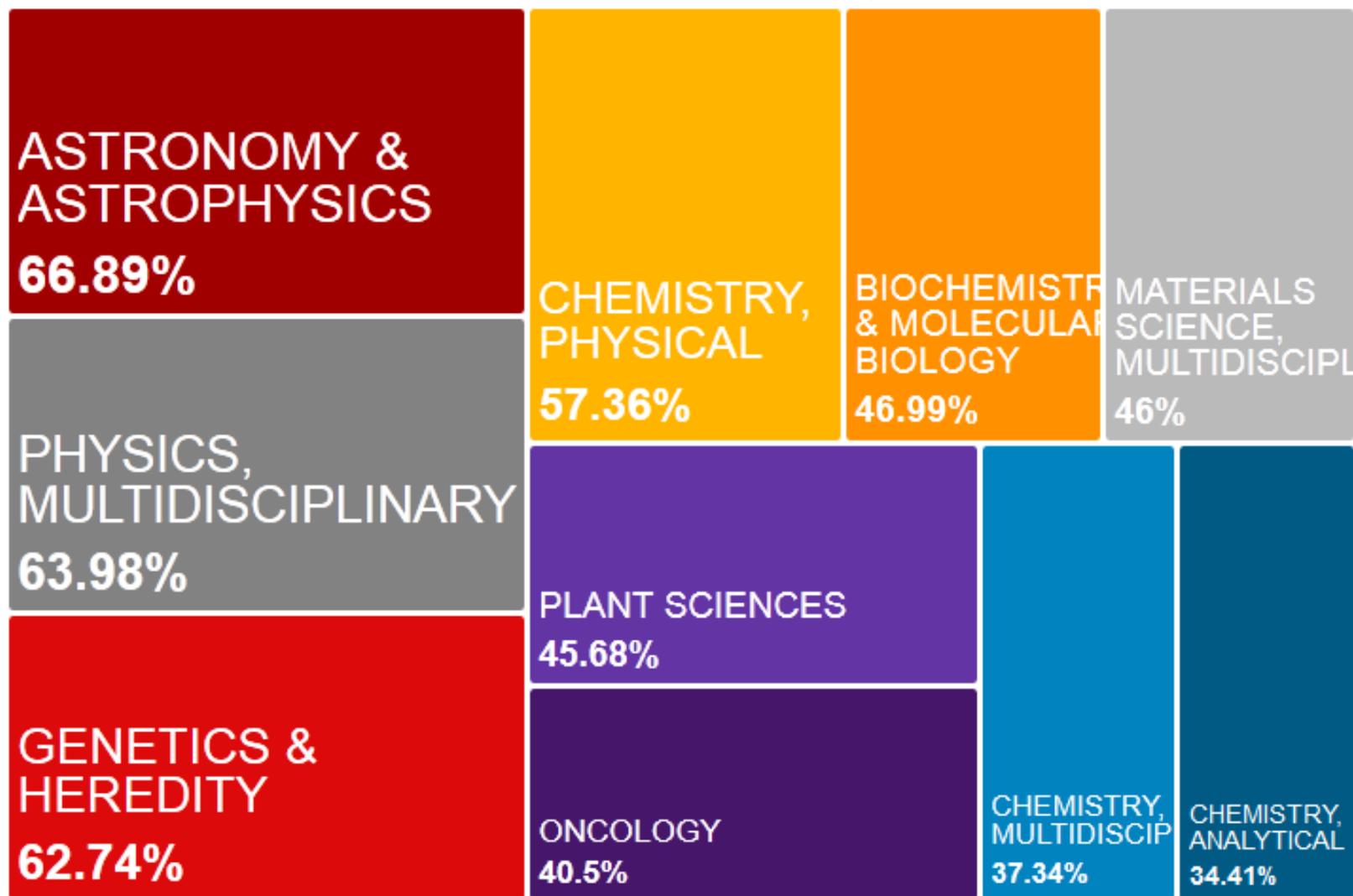


How impactful are Czech Republic publications in collaboration with the industry?

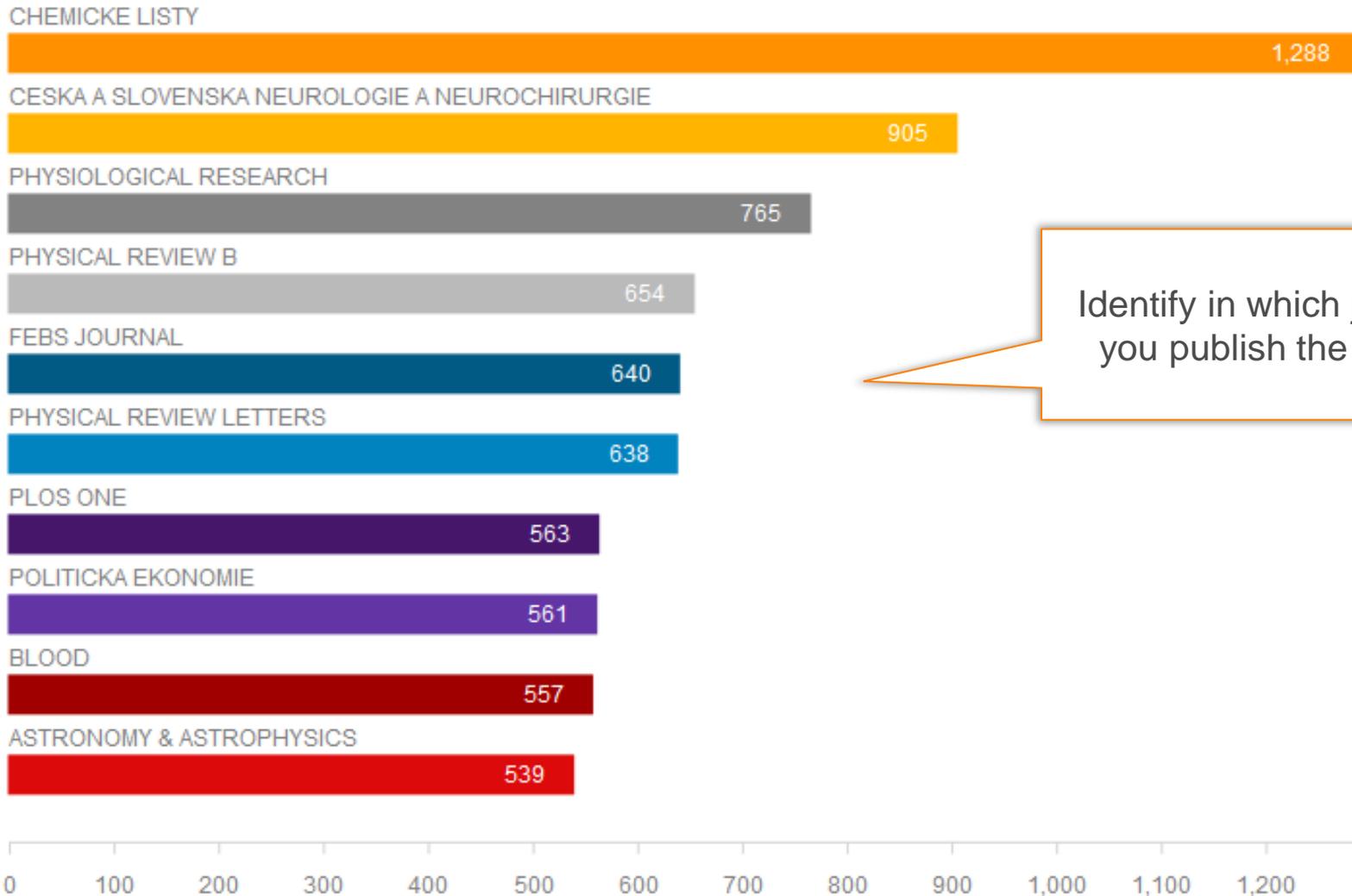
In which disciplines are Czech Republic researchers most active?



How much Czech Republic researchers collaborate in the disciplines they are most active?

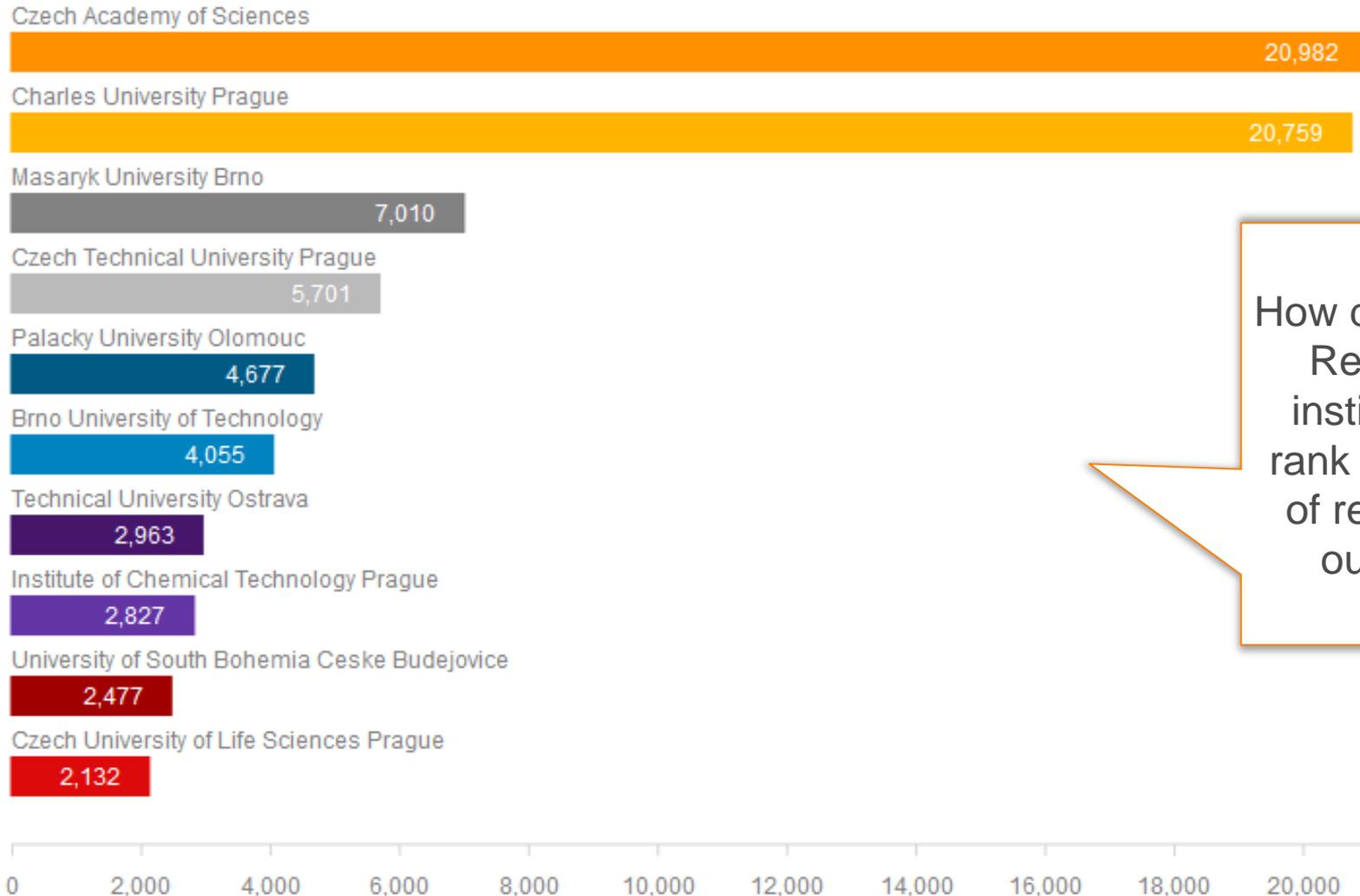


Assess your journal strategy in all disciplines with journal ranking indicators



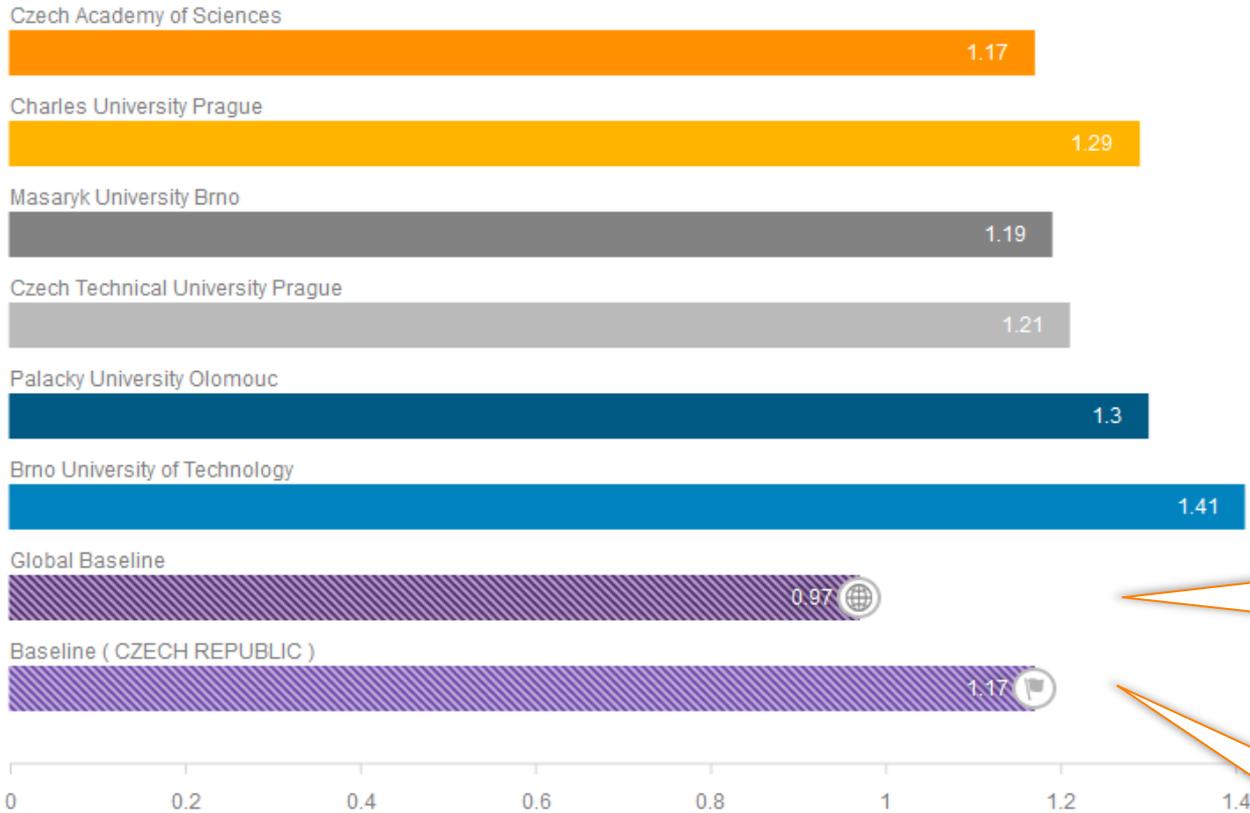
Identify in which journals you publish the most..

Institutional Comparisons – Monitor your Productivity



How do Czech Republic institutions rank in terms of research output?

Institutional Comparisons –Normalized Citation Impact for 2008-2012



How do Czech Republic institutions rank in terms of performance in the fields they publish (NCI)?

How does your institution compare with the Global Average?

How does your institution compare with the National Country Average?

Article Title	Authors	Source	Volume	Issue	Pages	Publication Date	Times Cited	Journal Expected Citations	Category Expected Citations	Journal Normalized Citation Impact	Normalized Citation Impact	Percentile in Subject Area	Journal Impact Factor
Phase III Trial of Cisplatin Plus Gemcitabine With Either Placebo or Bevacizumab As First-Line Therapy for Nonsquamous Non-Small-Cell Lung Cancer: AVAL	GORBOUNOVA, VERA, RAMLAU, RODRYG, RECK, MARTIN, VON PAWEL, JOACHIM, ZATLOUKAL, PETR	JOURNAL OF CLINICAL ONCOLOGY	27	36	1227-1234	2009	565	68.9	19.17	8.2	29.47	0.08	17.88

At any time you can drill down to article level metrics analysis

CURRENTLY APPROXIMATELY 600 INCITES CUSTOMERS WORLDWIDE

Selected major InCites customers in Europe:

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Austria
Bulgaria
Czech Republic
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Ireland
Portugal
Romania
Russia
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Slovenia
Turkey
U.K.

Research Institutes and Universities

Max Planck Society
Kings College London
KTH Royal Institute of Technology
Russian Academy of Sciences
University of Geneva
Utrecht University
University of Oslo
Catholic University in Leuven
University of Helsinki
University of Barcelona
University of Vienna
Masaryk University Brno
University of West Bohemia Pilsen
IPN Methodology Project



THANK YOU!



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