
BIBLIOMETRI KNYTTET TIL H2020-SØKNADER



AARHUS
UNIVERSITY



UX/UI DESIGN

AGENDA

- Præsentation Aarhus Universitet og Forskningsstøtteenheden
- Introduktion til bibliometri
- Strategisk anvendelse af bibliometri i forbindelse med H2020 ansøgninger
- Demonstration af bibliometriske værktøjer

AARHUS UNIVERSITET – AKADEMISK PROFIL

Fakulteter:

- Arts
- Science and Technology
- Aarhus School of Business and Social Sciences
- Health

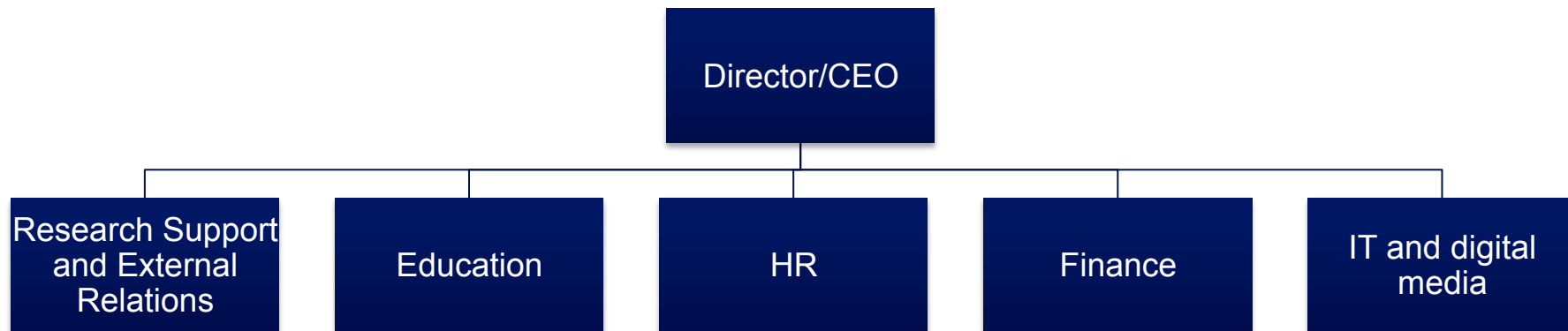


AARHUS UNIVERSITET - FAKTA

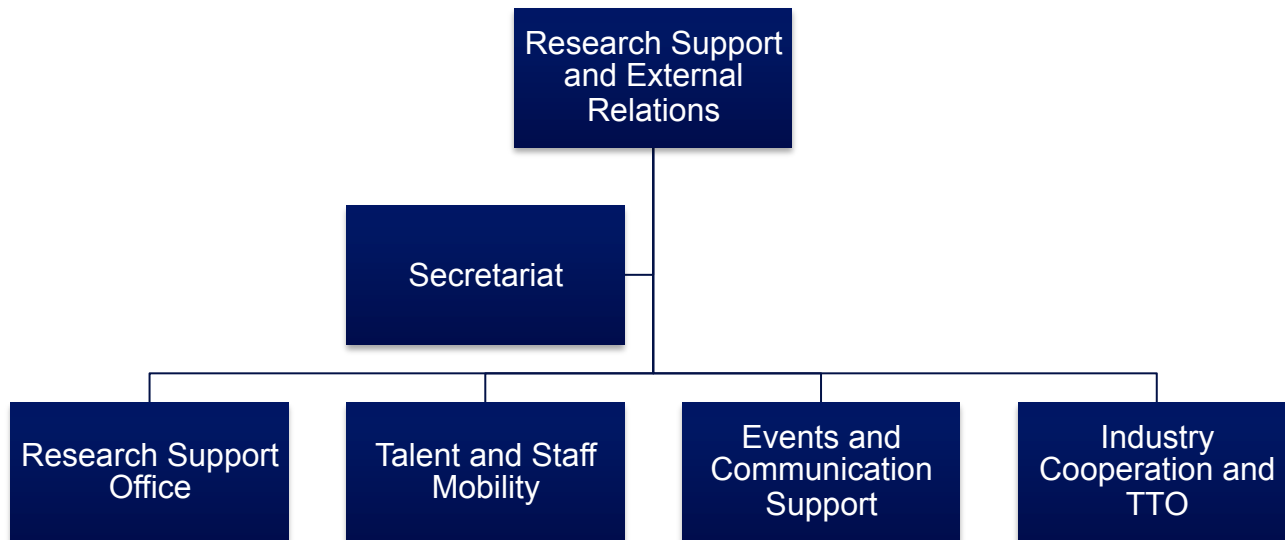
- Grundlagt 1928
- Main campus i Aarhus, Danmark
- Top 100 university
- 43,000 studenter
- 4,400 internationale studenter
- 80 Bachelor and 120 Master degree programmes
- 6,600 academic staff (incl. PhD students)



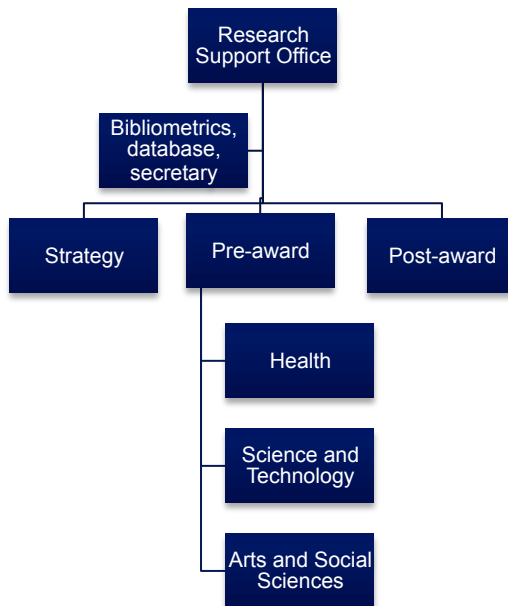
AARHUS UNIVERSITET - ADMINISTRATION



FORSKNING OG EKSTERNE RELATIONER



FORSKNINGSSTØTTEENHEDEN



FORSKNINGSSTØTTEENHEDEN

- Etableret i 2001/2002.
- 26 medarbejdere
- Supporterer forskere med tilknytning til Aarhus Universitet, Aarhus Universitetshospital og regionshospitalerne (omkring 2.000 henvendelser fra forskere årligt)
- Strategisk arbejde med ledelsen på universitet, særligt i forbindelse med H2020
- Projektadministration
 - - Obligatorisk projektstøtte og kontrol af projekter under EU's rammeprogram
 - - Management af større og komplekse forskningsprojekter
- Vedligehold og udvikling af fondsdatabasen www.researchfunding.net

AGENDA

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BIBLIOMETRI - DEFINITION

- “All studies which seek to quantify the process of written communication”

Pritchard, A (1969)

“Anvendelse af statistiske metoder til at undersøge
forfatterskabsmønstre, publikationsmønstre, og litteraturens brug”

Informationsordbogen.dk

BIBLIOMETRI - ANVENDELSE

- Måle information:
 - **Publikationsanalyser:** kvantitative studier af forskellige dokumentsamlinger
 - **Citationsanalyser:** kvantitative studier af dokumenters litteraturlister/referencelister

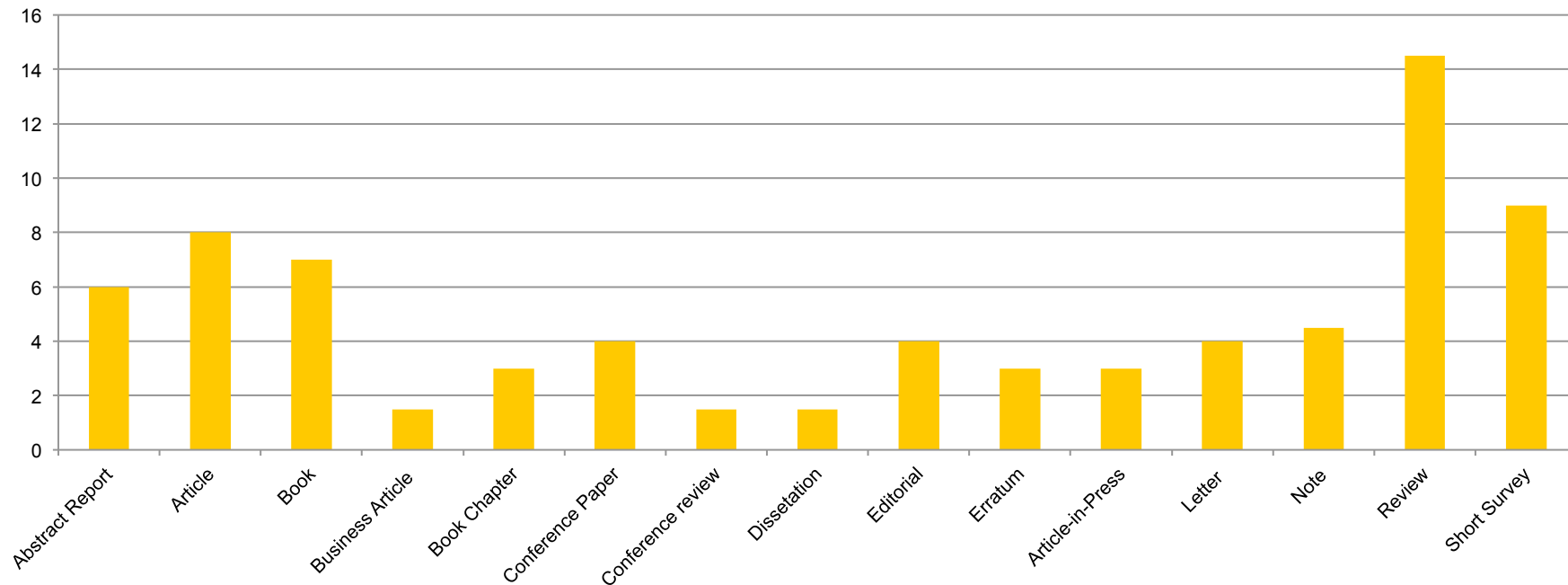
FAKTORER DER HAR INDFLYDELSE PÅ DE BIBLIOMETRISKE INDIKATORER

- Størrelse! (eksempelvis vil antallet af citationer generelt være højere ved større samarbejdsnetværk)
- Publikationstype
- Fagområde
- Databasens dækning
- Tid (eksempelvis akademisk alder)
- Manipulation (eksempelvis selvcitationer)

Source: elsevier.com/research-intelligence/scival

PUBLIKATIONSTYPE

Gennemsnitligt antal citationer pr. publikationstype indtil august 2013 publiceret i perioden 2008-2012 (Kilde: Scopus)



FAGOMRÅDE

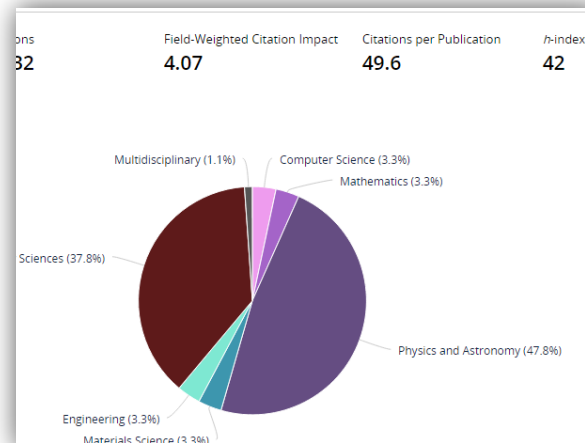
Forskelle i antallet af citationer kan være influeret af:

- Publikationsfrekvens
- Længden af referencelister
- Antallet af medforfattere

Løsning: normalisering af data (eksempelvis Journal Citations Report (JCR) og SciVal)

NORMALISERING - EKSEMPEL

Publications by Scopus Source				Export ▾
Top 10 Scopus Sources, by number of publications authored by Perlmutter, Saul				
Scopus Source	Publications ▾	Citations	SJR ▾	
Astrophysical Journal	19	1,647	2.808	
Astronomy and Astrophysics	6	163	1.905	
Astronomical Journal	3	31	2.178	
Monthly Notices of the Royal Astronomical Society	3	180	2.760	
Proceedings of SPIE - The International Society for Optical Engineering	3	7	0.212	
Astrophysical Journal Letters	3	50	2.992	
Nature	1	0	17.313	
Astroparticle Physics	1	2	2.077	
Astrophysical Journal, Supplement Series	1	120	5.524	
AIP Conference Proceedings	1	1	0.152	



FAGOMRÅDE

Neurosciences
Life Sciences
Pharmacology & Toxicology
Chemistry & Chemical Engineering
Physics
Environmental Sciences
Health Sciences
Biological Sciences
Social Sciences
Material Science & Engineering
Mathematics & Computer Science
Arts & Humanities

Høj



Publikationsfrekvens
Længden af referencelister
Antallet af medforfattere

Lav



Source: elsevier.com/research-intelligence/scival

DATABASENS DÆKNING

- Der er forskelle på databaserne. Med i betragtning bør tages:
 - Emnemæssig dækning
 - Geografisk dækning
 - Indekseringsperiode
 - Publikationstyper

DATABASENS DÆKNING

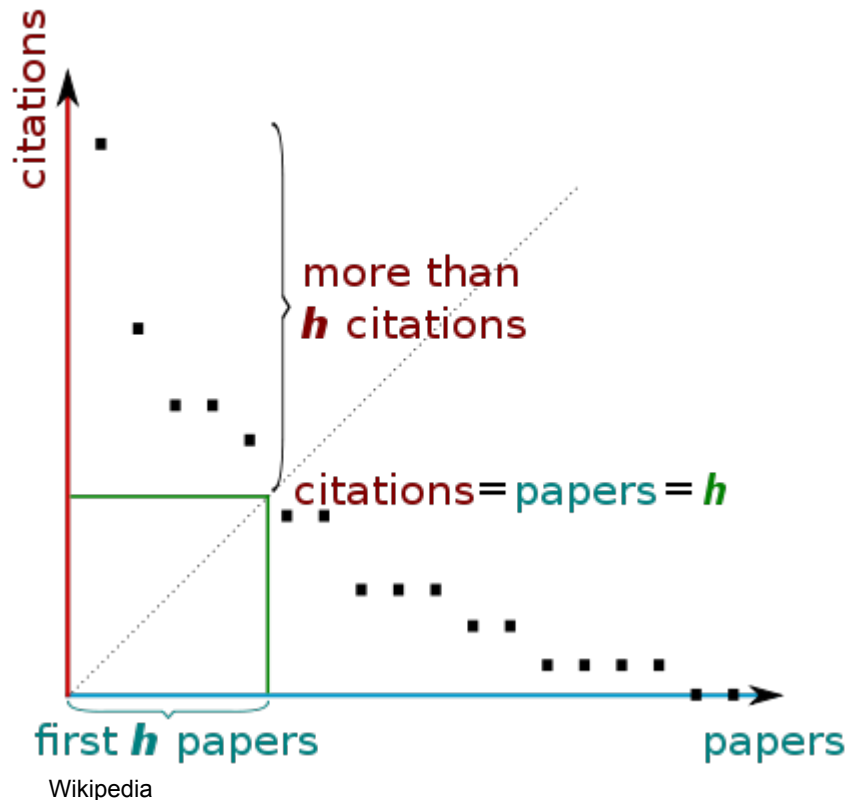
	Web of Science	Scopus
Antal tidsskrifter inkl. OA	12.000	21.000
Antal poster	46 millioner	63 millioner
Konferenceartikler	148.000	6,5 millioner
Emnemæssig dækning	Multidisciplinær	Multidisciplinær
Periode	Fra 1900 og frem	32 millioner fra 1996 og 21 millioner fra 1823

http://thomsonreuters.com/business-unit/science/pdf/Web_of_Science_factsheet.pdf
<http://www.elsevier.com/online-tools/scopus/content-overview>

TIDSMÆSSIGT ASPEKT

H-index (Hirsch-index)

- › Introduceret af fysikeren J.E. Hirsch i 2005
- › “En forsker har et h-index på ***h***, hvis ***h*** af dennes publikationsportefølje på ***N*** hver har modtaget mindst ***h*** citationer
- › En forsker med et h-index på **19** har således **19** publikationer, der hver er citeret mindst **19** gange



H-INDEX

Search

Alerts

Lists

Update

Documents

Citations

Sort on: [Date \(newest\)](#) [Citation count \(descending\)](#) [...](#)

<2012

2012

2013

2014

2015

2016

Subtotal

>2016

Total

Total

41

32

63

105

88

23

311

0

352

1

Qualitative description-the poor cousin of health research?

2009

12

14

28

41

39

12

134

146

2

The Aarhus statement: Improving design and reporting of stud...

2012

4

22

34

34

7

101

101

3

Patient delay in cancer studies: A discussion of methods and...

2009

14

9

8

17

1

2

37

51

4

'Containment' as an analytical framework for understanding p...

2010

9

3

2

4

6

15

24

5

Does the organizational structure of health care systems inf...

2011

1

2

1

5

2

10

11

6

Learning based on patient case reviews: An interview study

2008

4

1

1

2

6

7

Towards a clinically useful diagnosis for mild-to-moderate c...

2014

1

3

1

5

5

8

The importance of contextualization. Anthropological reflect...

2014

2

1

3

3

9

General practitioners' experience from systematic review of ...

2009

1

1

1

2

10

Self-reported symptoms and healthcare seeking in the general...

2015

1

1

1

11

Juggling efficiency. An ethnographic study exploring healthc...

2015

1

1

1

12

Global Health Care-seeking Discourses Facing Local Clinical ...

2015

1

1

1

13

Class, Social Suffering, and Health Consumerism

2015

0

0

14

Multiple perspectives on symptom interpretation in primary c...

2013

0

0

15

Fra symptom til lægesøgning

2011

0

0

Display

25

 results

< Page 1 / 1 >

H-INDEX - FORDELE

- Simpelt og enkelt at beregne
- Enkelt mål for impact af den samlede produktivitet
- Ufølsomt over for få meget højt citerede publikationer
- Øget incitament til at publicere – belønner ikke lav produktivitet

H-INDEX - ULEMPER

- Vanskeligt at sammenligne på tværs af videnskaber/forskningsområder
- Indekset er ikke følsomt over for meget højt citerede publikationer
- "Unfair" at anvende over for unge forskere
- Indekset siger ikke noget om kvalitet

AKTUEL CASE

- Forskergruppe på AU inden for Arts og Social Science søgt større bevilling (2 mio EUR) hos en stor privat, dansk fond
- Indkaldt til interview. Projektet blev vurderet som relevant og interessant, men forskningslederen blev bedt om at ekskludere juniorforskerne af gruppen
- → deres h-index blev vurderet som for lave i forhold til at kunne komme i betragtning til evt. Post Doc stipendier senere

H-INDEX OG TIDSMÆSSIGT ASPEKT

$m = h / \text{tid}$ (forskningsaktivitet)

$m = 1$ (eksempelvis et h-index på 18 efter 18 års videnskabeligt virke) → succesfuld forsker

$m = 2$ → enestående forsker (topuniversiteter)

$m = 3$ eller mere → helt unik

H-INDEX – TOMMELFINGERREGEL

- Hvis en forsker notorisk har høje citationstal, herunder et højt h-index, har vedkommende sandsynligvis en vis impact inden for sit forskningsfelt

men...

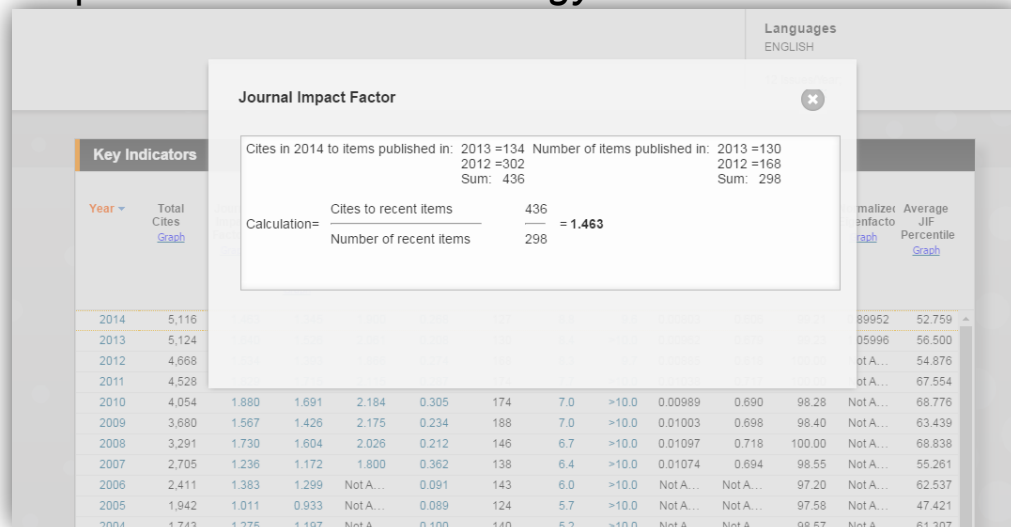
- Lave citationstal og lavt h-index er ikke ensbetydende med det modsatte. Kan skyldes:
 - forskning inden for et snævert felt → færre citationer
 - publicering på et andet sprog end engelsk
 - publicering af fortrinsvist monografier og bidrag til monografier

H-INDEX

- Se altid h-index i kontekst!

JOURNAL IMPACT FACTOR (IF)

IF er et mål for det gennemsnitlige antal citationer et givent tidsskrifts publikationer har modtaget over en given periode. Her: *Plant Ecology*



IF – VÆR OPMÆRKSOM PÅ:

- Graden af selvcitationer
- Ved opgørelsen af antallet af publikationer medregnes ikke letters, editorials og lignende
- IF er ikke normaliseret, hvorfor sammenligning på tværs af fagområder ikke bør foretages
- Forhold dig kritisk. **Fordelingen af citationer er meget skæv!**

IF – FORSKELLE INDEN FOR FAGOMRÅDER

JCR (2014)

Fagområde	Median Impact Factor	Aggregate Impact Factor
History	0,298	0,358
Anthropology	0,690	1,421
Economics	0,860	1,283
Tropical Medicine	1,034	2,294
Surgery	1,478	2,250
Neurosciences	2,791	4,010

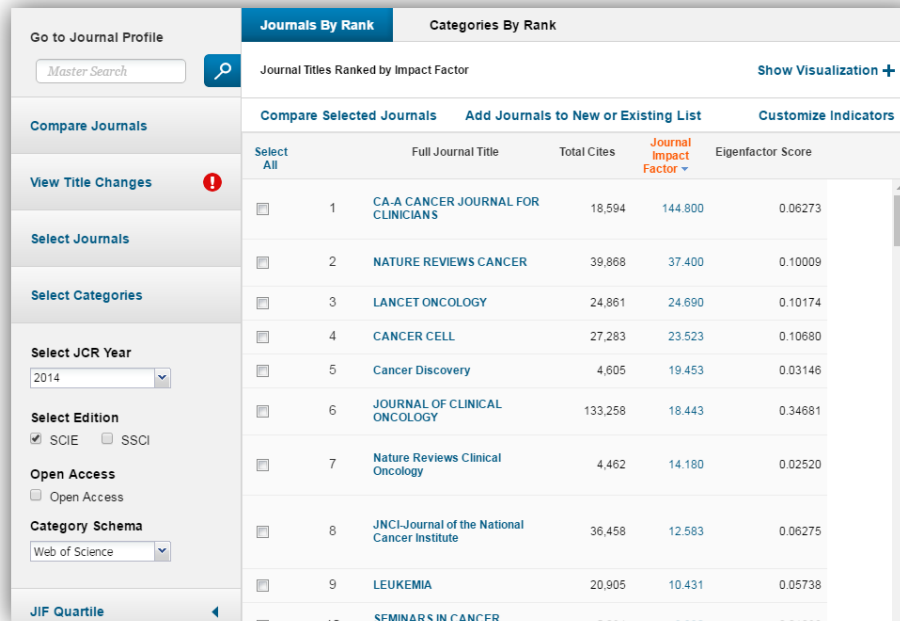
IF – RANKING INDEN FOR FAGOMRÅDE

The screenshot displays the FEBS Press website interface. At the top, the FEBS Press logo is visible alongside the text 'science publishing by scientists'. A navigation bar includes 'Journals' and 'FEBS.org'. A search bar is present with the placeholder text 'Enter search terms, e.g. title, author, keyword'. Below this, a teal banner features the 'FEBS Journal' logo. A secondary navigation bar contains links for 'Home', 'Issues', 'Collections', 'About', 'Submit an Article', 'Author Guidelines', 'Contact Us', and 'Get Content Alerts'. The 'About' dropdown menu is open, revealing a 'Journal Overview' section with a description of the journal's scope and a list of links including 'Read Full Aims and Scope', 'Editor-in-Chief', 'Editorial Board', and 'Advisory Board'. To the right of the dropdown, a sidebar lists key metrics: 'Impact Factor: 4.001', 'ISI Ranking 2014: 77/290 (Biochemistry & Molecular Biology)', and 'Online ISSN: 1742-4658'. The main content area, titled 'Browse Articles', shows a 'Recently Published' tab selected. It features an article titled 'The transcription factor Pf-POU3F4 regulates genes *Aspein* and *Prismalin-14* in pearl oyster' by Jing Gao, Yan Chen, Yi Yang, Jian Liang, Jun Xie, Jun Li, and Rongqing Zhang. The article's publication date is 'First Published: 6 April 2016', and its DOI is '10.1111/febs.13716'. Links for 'Abstract', 'Full Text (HTML)', 'PDF (1.9MB)', and 'References' are provided, along with a 'Free' icon. Below this, another article snippet is visible, titled 'Polypyrimidine tract-binding protein binds to the 5' untranslated region of the mouse mammary tumor virus mRNA and stimulates cap-independent'.

IF – RANKING INDEN FOR FAGOMRÅDER

JCR (2014)

Oncology



Go to Journal Profile		Journals By Rank	Categories By Rank	
Master Search		Journal Titles Ranked by Impact Factor		Show Visualization +
Compare Journals		Compare Selected Journals	Add Journals to New or Existing List	Customize Indicators
Select	Full Journal Title	Total Cites	Journal Impact Factor	Eigenfactor Score
☐	1 CA-A CANCER JOURNAL FOR CLINICIANS	18,594	144.800	0.06273
☐	2 NATURE REVIEWS CANCER	39,868	37.400	0.10009
☐	3 LANCET ONCOLOGY	24,861	24.690	0.10174
☐	4 CANCER CELL	27,283	23.523	0.10680
☐	5 Cancer Discovery	4,605	19.453	0.03146
☐	6 JOURNAL OF CLINICAL ONCOLOGY	133,258	18.443	0.34681
☐	7 Nature Reviews Clinical Oncology	4,462	14.180	0.02520
☐	8 JNCI-Journal of the National Cancer Institute	36,458	12.583	0.06275
☐	9 LEUKEMIA	20,905	10.431	0.05738
☐	10 SEMINARS IN CANCER	5,861	8.888	0.01688

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BIBLIOMETRI OG FORSKNINGSANSØGNINGER

Bibliometri anvendes primært i tre forskellige øjemed i Forskningsstøtteenheden

1. Screening
2. Evaluering (af potentielle kandidater)
3. Implementering

SCREENING

Screening i forbindelse med lokalisering af kandidater. Eksempelvis i forbindelse med indstilling af kandidater til forskningspriser, partnerskaber eller koordinatore

Screening i forbindelse med lokalisering af reviewere eller panelmedlemmer

EVALUERING

Citationsdata

- Citationsflow (peaked?)
- Citerende forfattere og institutioner
- H-index
- M-index
- Top percentiler på publikationer

EVALUERING

Publikationsdata

- Publikationsflow
 - Publikationsmønster – type, første og sidsteforfatterskab
 - Tidsskrifter
 - Top percentil beregning på tidsskrifter
- Forskningsområder
 - Relativ impact i forhold til forskningsområde

IMPLEMENTERING (ANSØGNING)

Citations- og publikationsdata

- Totale antal citationer inklusiv selvcitationer
- Totale antal citationer eksklusiv selvcitationer
- Publikations- og citationsflow (søjlediagrammer)
- H-index
- Highly Cited Papers
- Relativ impact og benchmark
- Publikationer med særlig indflydelse
- High-ranked tidsskrifter

DATABASER OG ANALYSEVÆRKTØJER

Web of Science/Web of Knowledge (institutionel adgang)

Scopus (institutionel adgang)

Publish or Perish (fri adgang)

Journal Citation Report (begrænset adgang)

Essential Science Indicators (begrænset adgang)

SciVal (institutionel adgang)

CASE: EVALUERING AF EN ERC ADV KANDIDAT

Kandidat: Forsker XX fra Aarhus Universitet

Vær sikker på, at det er den rigtige person/forsker

- › Institution
- › Publikationsliste
- › CV
- › Periode

WEB OF SCIENCE - SØGNINGEN

The screenshot shows the Web of Science search results page for the author 'loeschke v*'. The page is divided into several sections:

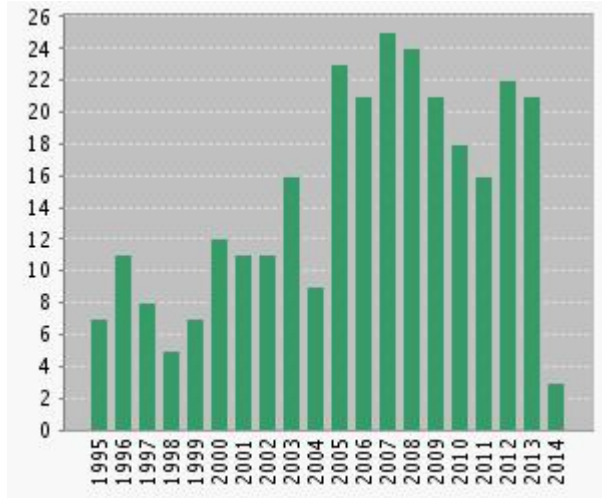
- Search Bar:** Located at the top, with a 'Search' button and a 'Return to Search Results' link.
- Summary:** On the left, it shows 'Distinct Author Summary: 344 (in your subscription)' and a link to 'View the articles authored by: loeschke v*'. Below this is a 'Refine Results' section with a search bar and a 'Refine' button.
- Web of Science Categories:** A list of categories with checkboxes, including Ecology (144), Genetics Heredity (139), Evolutionary Biology (132), Zoology (47), and Biochemistry Molecular Biology (37).
- Document Types:** A list of document types with checkboxes, including Article (310), Proceedings Paper (17), Review (8), and Note (5).
- Search Results:** The main area displays a list of search results, sorted by 'Publication Date -- newest to oldest'. The results are numbered 1 through 5. Each result includes the title, authors, journal name, volume, issue, pages, and publication date. There are also links for 'AU Link', 'Full Text from Publisher', and 'View Abstract' for each result.
- Tools:** At the top right, there are links for 'My Tools', 'Search History', and 'Marked List'.
- Page Navigation:** At the bottom right, there is a 'Page 1 of 35' indicator.

Search Results:

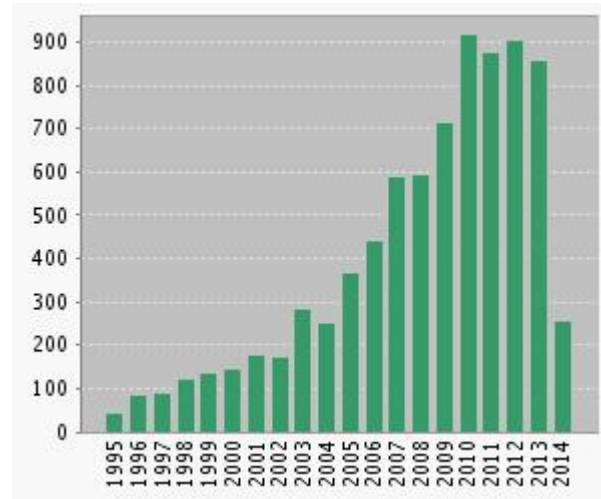
- Genetic variability of central-western European pine marten (*Martes martes*) populations**
By: Pertoldi, Cino; Elschot, Kelly; Ruiz-Gonzalez, Aritz; et al.
ACTA THERIOLOGICA Volume: 59 Issue: 4 Pages: 503-510 Published: OCT 2014
[AU Link](#) [View Abstract](#)
- A *Drosophila* laboratory evolution experiment points to low evolutionary potential under increased temperatures likely to be experienced in the future**
By: Schou, M. F.; Kristensen, T. N.; Kellermann, V.; et al.
JOURNAL OF EVOLUTIONARY BIOLOGY Volume: 27 Issue: 9 Pages: 1859-1868 Published: SEP 2014
[AU Link](#) [Full Text from Publisher](#) [View Abstract](#)
- Temperature and photoperiod affect stress resistance traits in *Drosophila melanogaster***
By: Bauerfeind, Stephanie S.; Kellermann, Vanessa; Moghadam, Neda N.; et al.
PHYSIOLOGICAL ENTOMOLOGY Volume: 39 Issue: 3 Pages: 237-246 Published: SEP 2014
[AU Link](#) [Full Text from Publisher](#) [View Abstract](#)
- Temperature-specific acclimation effects on adult locomotor performance of inbred and crossbred *Drosophila melanogaster***
By: Kjaersgaard, Anders; Faurby, Søren; Thomsen, Hans P.; et al.
PHYSIOLOGICAL ENTOMOLOGY Volume: 39 Issue: 2 Pages: 127-135 Published: JUN 2014
[AU Link](#) [Full Text from Publisher](#) [View Abstract](#)
- Inbreeding effects on standard metabolic rate investigated at cold, benign and hot temperatures in *Drosophila melanogaster***
By: Kjaersgaard, Anders; Faurby, Søren; Thomsen, Hans P.; et al.
PHYSIOLOGICAL ENTOMOLOGY Volume: 39 Issue: 2 Pages: 127-135 Published: JUN 2014
[AU Link](#) [Full Text from Publisher](#) [View Abstract](#)

WOS – PUBLIKATIONS OG CITATIONS DATA

Published items each year



Citations in each year



WOS – SAMARBEJDE

Group Authors
Languages
Organizations
Organizations-Enhanced

Show the top 100 Results.
Minimum record count (threshold): 2

☒ Record count
☐ Selected field

Analyze

Use the checkboxes below to view the records. You can choose to view those selected records, or you can exclude them (and view the others).

☒ View Records
☐ Exclude Records

	Field: Organizations-Enhanced	Record Count	% of 336	Bar Chart
☐	AARHUS UNIVERSITY	326	97.024 %	
☐	POLISH ACADEMY OF SCIENCE	27	8.036 %	
☐	UNIVERSITY OF BUENOS AIRES	22	6.548 %	
☐	UNIVERSITY OF MELBOURNE	16	4.762 %	
☐	CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS CSIC	16	4.762 %	
☐	AALBORG UNIVERSITY	15	4.464 %	
☐	UNIVERSITY OF GRONINGEN	14	4.167 %	
☐	DANISH INST FISHERIES RES	14	4.167 %	
☐	UNIVERSITY OF COPENHAGEN	13	3.869 %	
☐	TECHNICAL UNIVERSITY OF DENMARK	13	3.869 %	
☐	LA TROBE UNIVERSITY	13	3.869 %	
☐	IST NAZL FAUNA SELVAT	12	3.571 %	
☐	UNIVERSITY OF NEW ENGLAND	11	3.274 %	
☐	AALBORG ZOO	10	2.976 %	
☐	NI VAVILOV GEN GENET RES INST	9	2.679 %	
☐	INSTITUTE OF ADVANCED STUDIES AUSTRALIA	9	2.679 %	
☐	AUSTRALIAN NATIONAL UNIVERSITY	9	2.679 %	
☐	MONASH UNIVERSITY	8	2.381 %	
☐	UNIVERSITY OF BOLOGNA	7	2.083 %	
☐	EBERHARD KARLS UNIVERSITY OF TUBINGEN	7	2.083 %	
☐	DIPARTIMENTO BIOL EVOLUZIONIST SPERIMENTALE	7	2.083 %	

Save Analysis Data to File
☒ Data rows displayed in table
☐ All data rows (up to 200,000)

WOS - CITATIONSTABEL

Results found	344
Sum of the Times Cited	8684
Sum of the Times Cited without self-citations	7181
Citing Articles	4719
Citing Articles without self-citations	4449
Average Citations per item	25,2
H-index	51

WOS – HVEM CITERER? (1)

4,598 records.

Rank the records by this field:	Set display options:	Sort by:
Authors Book Series Titles Conference Titles Countries/Territories	Show the top 250 Results. Minimum record count (threshold): 2	☒ Record count ☐ Selected field

Analyze

Use the checkboxes below to view the records. You can choose to view those selected records, or you can exclude them (and view the others).

☒ View Records ☒ Exclude Records	Field: Authors	Record Count	% of 4598	Bar Chart
☐	LOESCHKE V	269	5.850 %	
☐	HOFFMANN AA	106	2.305 %	
☐	PERTOLDI C	85	1.849 %	
☐	SORENSEN JG	64	1.392 %	
☐	KRISTENSEN TN	63	1.370 %	
☐	HANSEN MM	62	1.348 %	
☐	NIELSEN EE	51	1.109 %	
☐	CHOWN SL	50	1.087 %	
☐	RANDI E	42	0.913 %	
☐	TERBLANCHE JS	39	0.848 %	
☐	FISCHER K	35	0.761 %	
☐	SINCLAIR BJ	34	0.739 %	
☐	HOLMSTRUP M	34	0.739 %	
☐	OVERGAARD J	31	0.674 %	
☐	NORRY FM	31	0.674 %	
☐	PRIMMER CR	30	0.652 %	
☐	SGRO CM	28	0.609 %	
☐	DAVID JR	27	0.587 %	
☐	CARVALHO GR	27	0.587 %	
☐	BERNATCHEZ L	27	0.587 %	
☐	BEKKEDAL D	26	0.565 %	

Save Analysis Data to File
☒ Data rows displayed in table
☐ All data rows (up to 200,000)

WOS – HVEM CITERER? (2)

4,598 records.

Rank the records by this field:
Group Authors
Languages
Organizations
Organizations-Enhanced

Set display options:
Show the top 250 Results.
Minimum record count (threshold): 2

Sort by:
☒ Record count
☐ Selected field

Analyze

Use the checkboxes below to view the records. You can choose to view those selected records, or you can exclude them (and view the others).

☒ View Records
☐ Exclude Records

	Field: Organizations-Enhanced	Record Count	% of 4598	Bar Chart
☐	AARHUS UNIVERSITY	444	9.656 %	■
☐	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS	217	4.719 %	■
☐	UNIVERSITY OF CALIFORNIA SYSTEM	154	3.349 %	■
☐	CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS CSIC	100	2.175 %	■
☐	UNIVERSITY OF MELBOURNE	92	2.001 %	■
☐	STELLENBOSCH UNIVERSITY	80	1.740 %	■
☐	UNIVERSITY OF HELSINKI	71	1.544 %	■
☐	TECHNICAL UNIVERSITY OF DENMARK	69	1.501 %	■
☐	NERC NATURAL ENVIRONMENT RESEARCH COUNCIL	65	1.414 %	■
☐	KU LEUVEN	65	1.414 %	■
☐	INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE INRA	65	1.414 %	■
☐	CHINESE ACADEMY OF SCIENCES	64	1.392 %	■
☐	LA TROBE UNIVERSITY	61	1.327 %	■
☐	UNIVERSITY OF MONTPELLIER SUD DE FRANCE	60	1.305 %	■
☐	UNIVERSITY OF MONTPELLIER II	59	1.283 %	■
☐	UPPSALA UNIVERSITY	57	1.240 %	■
☐	POLISH ACADEMY OF SCIENCE	57	1.240 %	■
☐	MONASH UNIVERSITY	57	1.240 %	■
☐	UNIVERSITY OF BUENOS AIRES	56	1.218 %	■
☐	DALHOUSIE UNIVERSITY	56	1.218 %	■

Save Analysis Data to File

☒ Data rows displayed in table
☐ All data rows (up to 200,000)

H-INDEX

H-indexet for Forsker XX er beregnet til 51

Antallet af forskningsår: ca. 34

→ m-index på $51/34=1,5$

PUBLIKATIONSMØNSTER, TIDSSKRIFTER

Rank the records by this field:

Publication Years
Research Areas
Source Titles
Web of Science Categories

Set display options:

Show the top 50 Results.
Minimum record count (threshold): 2

Sort by:

Record count
Selected field

Analyze

Use the checkboxes below to view the records. You can choose to view those selected records, or you can exclude them (and view the others).

View Records
Exclude Records

	Field: Source Titles	Record Count	% of 344	Bar Chart
☐	HEREDITY	27	7.849 %	
☐	JOURNAL OF EVOLUTIONARY BIOLOGY	24	6.977 %	
☐	MOLECULAR ECOLOGY	17	4.942 %	
☐	JOURNAL OF INSECT PHYSIOLOGY	14	4.070 %	
☐	CONSERVATION GENETICS	14	4.070 %	
☐	BIOLOGICAL JOURNAL OF THE LINNEAN SOCIETY	14	4.070 %	
☐	EVOLUTIONARY ECOLOGY RESEARCH	13	3.779 %	
☐	HEREDITAS	12	3.488 %	
☐	EVOLUTION	12	3.488 %	
☐	FUNCTIONAL ECOLOGY	10	2.907 %	
☐	EXPERIMENTAL GERONTOLOGY	9	2.616 %	
☐	JOURNAL OF ZOOLOGY	8	2.326 %	
☐	PLOS ONE	7	2.035 %	
☐	JOURNAL OF THERMAL BIOLOGY	7	2.035 %	
☐	EXS	6	1.744 %	
☐	COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY A MOLECULAR INTEGRATIVE PHYSIOLOGY	6	1.744 %	
☐	GENETICA	5	1.453 %	
☐	CELL STRESS CHAPERONES	5	1.453 %	
☐	BIOGERONTOLOGY	5	1.453 %	
☐	TRENDS IN ECOLOGY EVOLUTION	4	1.163 %	
☐	THEORETICAL POPULATION BIOLOGY	4	1.163 %	
☐	PROCEEDINGS OF THE ROYAL SOCIETY B BIOLOGICAL SCIENCES	4	1.163 %	
☐	PHYSIOLOGICAL ENTOMOLOGY	4	1.163 %	
☐	JOURNAL OF THEORETICAL BIOLOGY	4	1.163 %	
☐	JOURNAL OF EXPERIMENTAL BIOLOGY	4	1.163 %	
☐	GENETICS	4	1.163 %	

Save Analysis Data to File

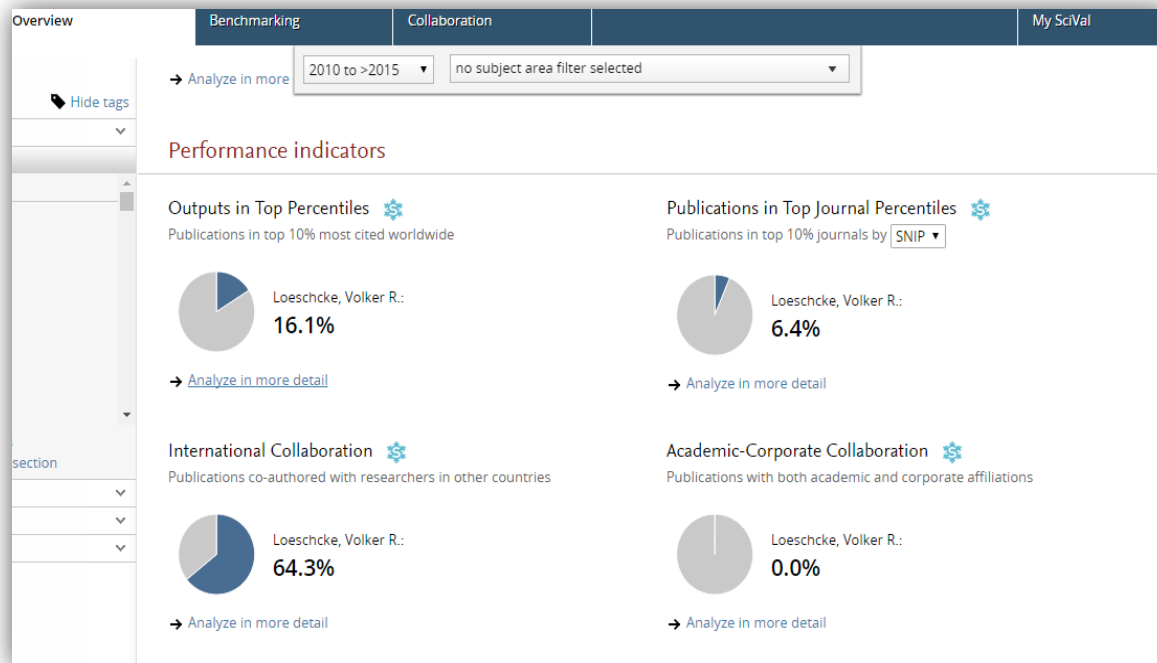
Data rows displayed in table
All data rows (up to 200,000)

TIDDSKRIFTER OG IMPACT FACTOR

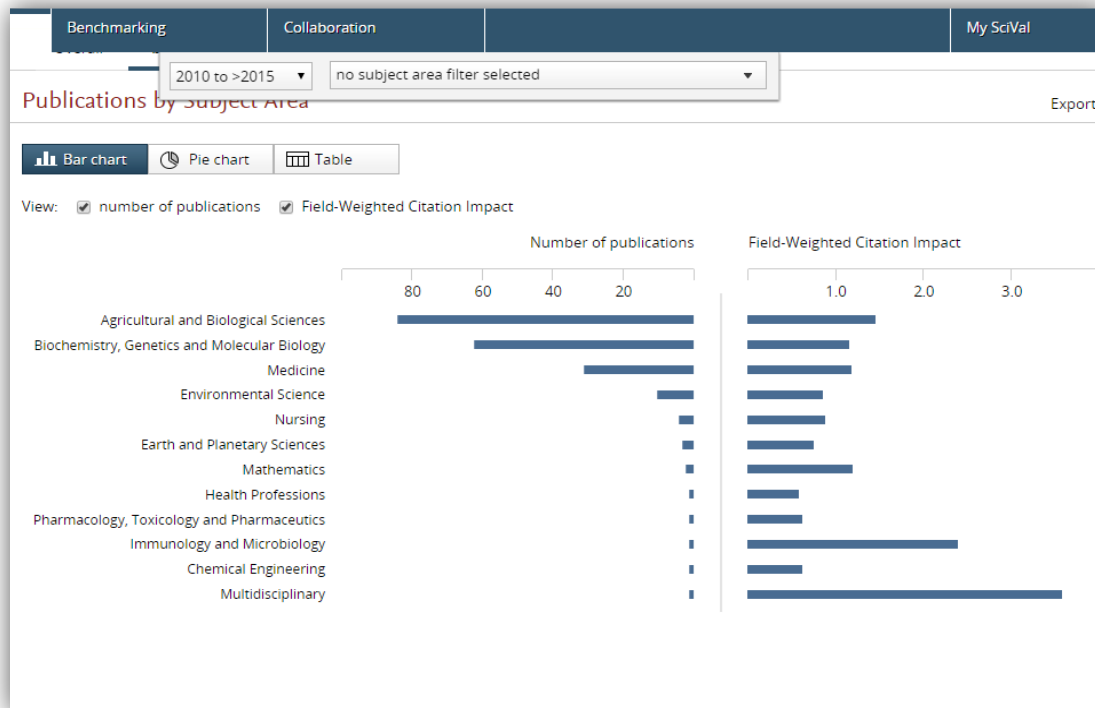
Afdækning af, hvilke tidsskrifter vores forsker publicerer i

Beregning af, hvor stor en andel af publikationerne, der er optaget i tidsskrifter med en relativ høj impact factor

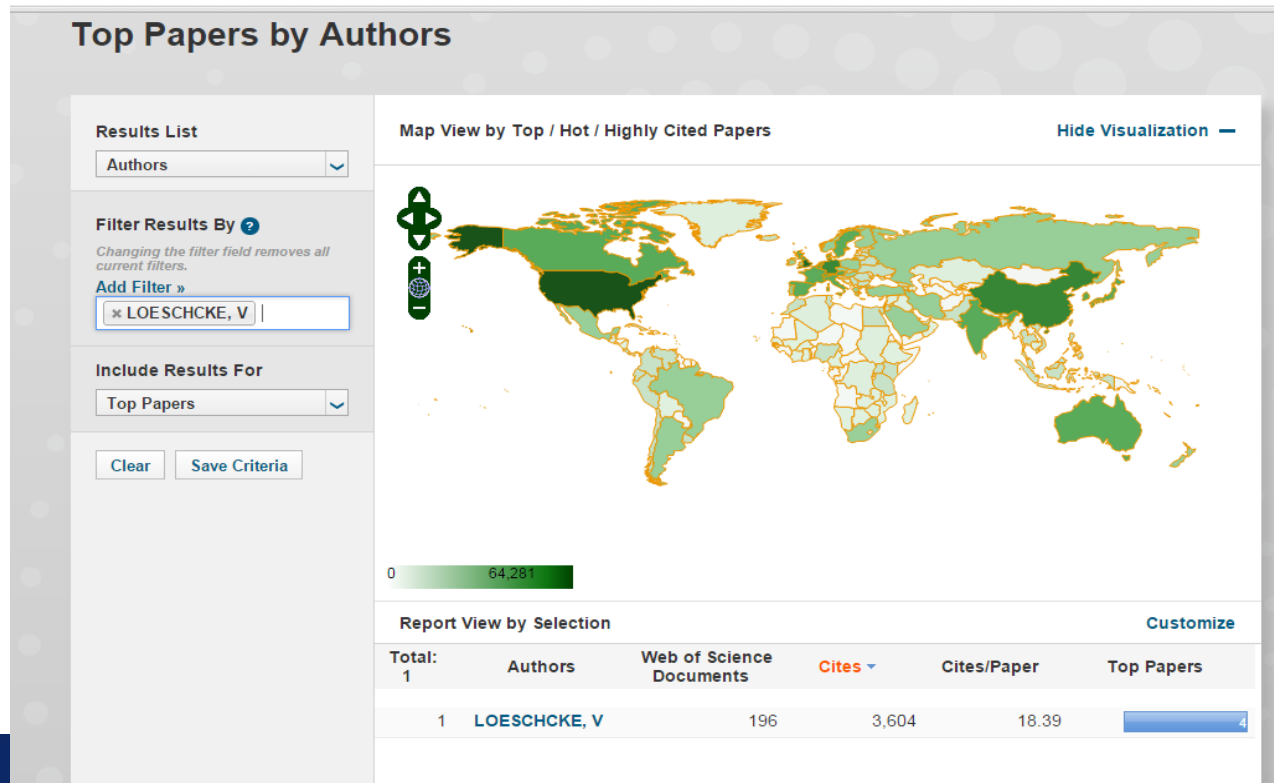
SCIVAL – PERFORMANCE INDICATORS



SCIVAL - FWCI



ESSENTIAL SCIENCE INDICATORS – TOP PAPERS



ESI – TOP PAPERS – HIGHLY CITED

Citation trends

Documents

Filter Results By

Add Filter »

✖ LOESCHCKE, V

Include Results For

Top Papers

Clear Save Criteria

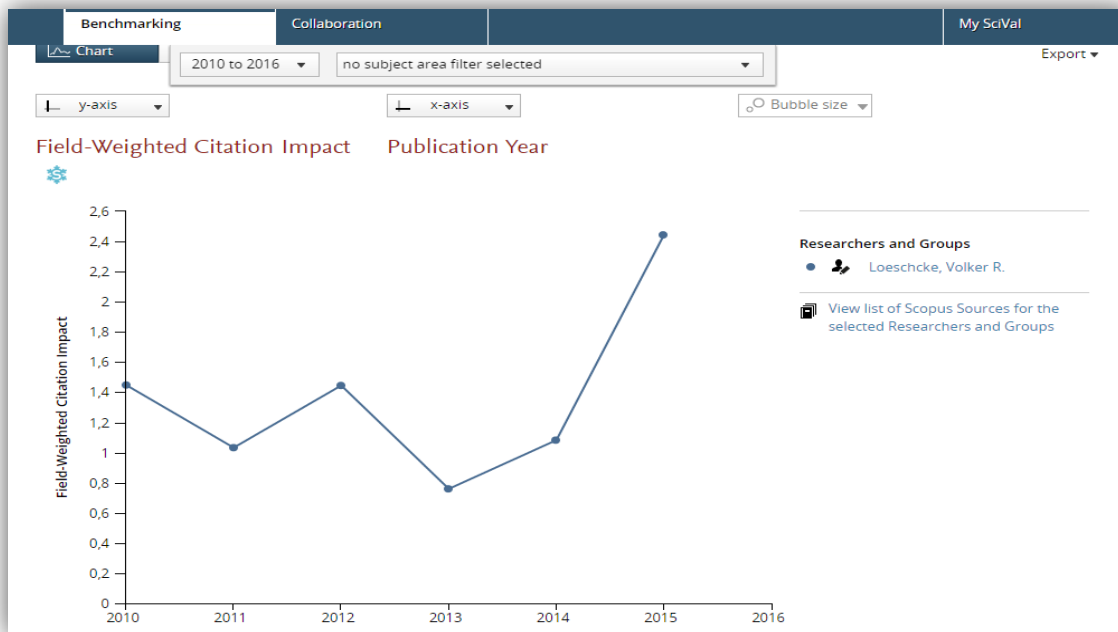
1	CORRELATED RESPONSES TO SELECTION FOR STRESS RESISTANCE AND LONGEVITY IN A LABORATORY POPULATION OF DROSOPHILA MELANOGASTER	Times Cited: 123
	By: BUBLIY, OA; LOESCHCKE, V; Source: J EVOLUTION BIOL 18 (4): 789-803 JUL 2005 Research Fields: PLANT & ANIMAL SCIENCE	
2	GENOMIC SIGNATURES OF LOCAL DIRECTIONAL SELECTION IN A HIGH GENE FLOW MARINE ORGANISM, THE ATLANTIC COD (GADUS MORHUA)	Times Cited: 77 Research Front
	By: CARVALHO, GR; HEMMER-HANSEN, J; JOHANSEN, T; et.al Source: BMC EVOL BIOL 9: - DEC 1 2009 Research Fields: PLANT & ANIMAL SCIENCE	
3	PHYLOGENETIC CONSTRAINTS IN KEY FUNCTIONAL TRAITS BEHIND SPECIES CLIMATE NICHES: PATTERNS OF DESICCATION AND COLD RESISTANCE ACROSS 95 DROSOPHILA SPECIES	Times Cited: 35
	By: DAVID, JR; FLOJGAARD, C; HOFFMANN, AA; et.al Source: EVOLUTION 66 (11): 3377-3389 NOV 2012 Research Fields: PLANT & ANIMAL SCIENCE	
4	GENETIC EROSION IMPEDES ADAPTIVE RESPONSES TO STRESSFUL ENVIRONMENTS	Times Cited: 23 Research Front
	By: BIJLSMA, R; LOESCHCKE, V; Source: EVOL APPL 5 (2): 117-129 FEB 2012 Research Fields: PLANT & ANIMAL SCIENCE	

ESI – HIGHLY CITED PAPERS

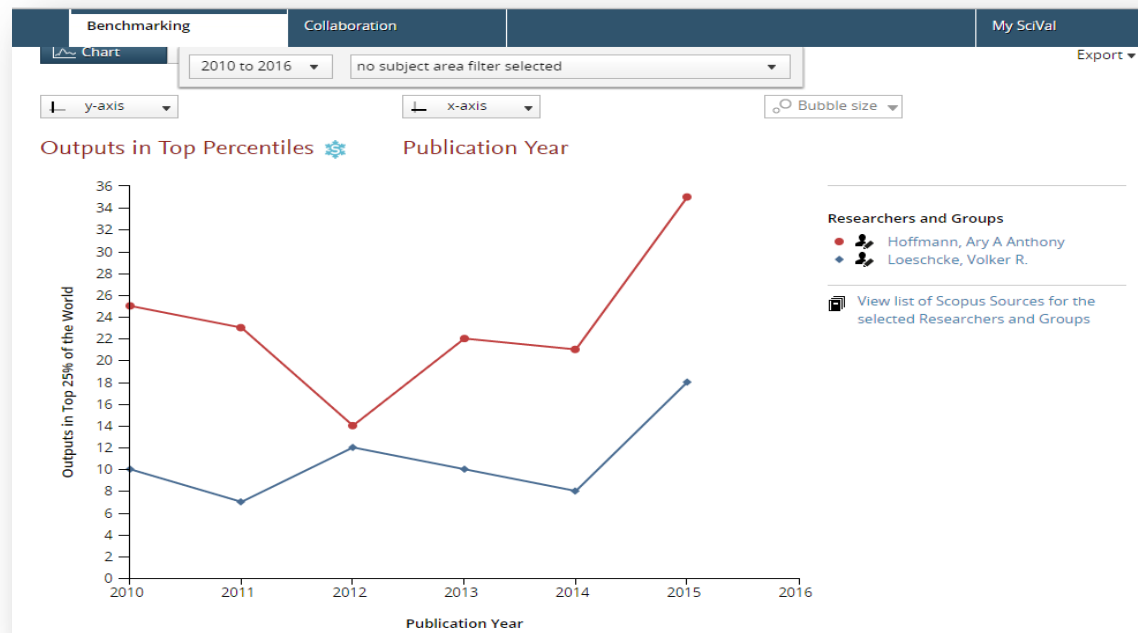
Definition: “The minimum number of citations received by the top 1% of papers in the research field published in the specified year”

	RESEARCH FIELDS ▲	2004	2005	2006	2007	2008	2009	2010	2011	2012
ESI Thresholds	AGRICULTURAL SCIENCES	123	106	92	81	68	52	44	29	
Highly Cited Thresholds	BIOLOGY & BIOCHEMISTRY	240	217	190	171	150	123	93	64	
	CHEMISTRY	183	172	155	139	126	109	94	71	
Hot Paper Thresholds	CLINICAL MEDICINE	218	206	178	154	131	109	84	59	
	COMPUTER SCIENCE	84	74	67	74	66	53	43	29	
	ECONOMICS & BUSINESS	160	147	116	100	75	57	43	28	
	ENGINEERING	92	82	76	73	60	54	43	31	
	ENVIRONMENT/ECOLOGY	208	180	160	140	123	98	76	59	
	GEOSCIENCES	157	144	136	109	99	85	62	48	
	IMMUNOLOGY	293	289	249	241	192	166	120	85	
	MATERIALS SCIENCE	147	147	129	127	109	98	85	64	
	MATHEMATICS	69	62	54	49	43	35	29	19	
	MICROBIOLOGY	219	202	179	142	135	121	92	58	
	MOLECULAR BIOLOGY & GENETICS	413	416	351	349	284	238	174	124	
	MULTIDISCIPLINARY	864	903	788	600	527	495	428	274	
	NEUROSCIENCE & BEHAVIOR	258	239	217	187	162	132	103	69	
	PHARMACOLOGY & TOXICOLOGY	177	160	154	131	116	94	69	49	
	PHYSICS	164	147	131	121	116	96	80	58	
	PLANT & ANIMAL SCIENCE	138	123	109	95	79	68	53	37	
	PSYCHIATRY/PSYCHOLOGY	223	190	165	140	111	89	70	45	
	SOCIAL SCIENCES, GENERAL	121	111	94	81	63	50	39	26	

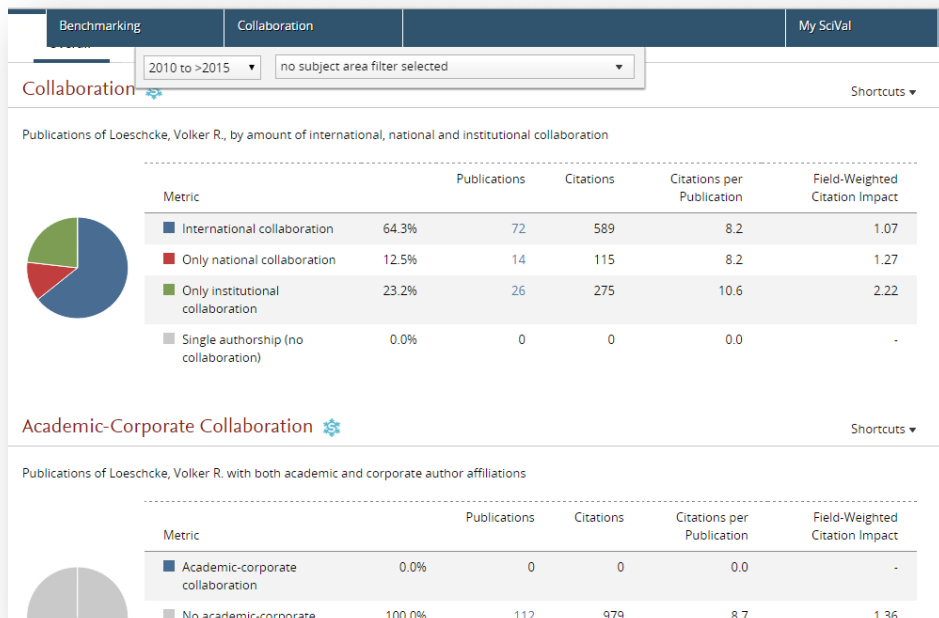
SCIVAL - BENCHMARK



SCIVAL - BENCHMARK



SCIVAL - OVERVIEW



SAMMENHÆNG MELLEM IMPACT OG SUCCESS?

- Stor kvantitativ undersøgelse fra 2014
- Undersøgelsesspørgsmål: I hvilken grad kan man på baggrund af forskellige bibliometriske mål forudsige, hvem der bliver Principal Investigator?
- Datamateriale: 25.000 forskere i PubMed inden for Biomedical og Life Science
- Resultat: AKADEMISK SUCCESS ER FORUDSIGELIG

SAMMENHÆNG MELLEM IMPACT OG SUCCES?

Successen afhænger af:

- Antallet af publikationer
- Impact Factor (IF)
- Antallet af publikationer der i gennemsnit modtager flere citationer end det tidsskrift, der publiceres i
- Køn!
- Universitetsrank

SAMMENHÆNG MELLEM IMPACT OG SUCCES?

Sandsynligheden for at blive PI stiger, hvis

- Der er mange førsteforfatterskaber
- Flere publikationer i tidsskrifter med høj IF (vægter mere end det aktuelle antal citationer)
- Højt h-index

SAMMENHÆNG MELLEM IMPACT OG SUCCESS

Benefits fra undersøgelsen

- Mange “middel”forfatterskaber tæller ikke meget, med mindre der publiceres i tidsskrifter med høj IF
- Jo højere IF, desto hurtigere PI
- Antallet af co-forfattere kan have en mindre negativ effekt

GYLDNE REGLER

- Tag altid de faktorer, der influerer metrikkerne, i betragtning
- Betragt metrikkerne som et supplement!
- Sammenlign aldrig på tværs af fagområderne

THE LEIDEN MANIFESTO FOR RESEARCH METRICS

- *"Evaluation is now led by the data rather than by judgement"*
- *"Evaluation is increasingly implemented by organizations without knowledge of, or advice in good practice and interpretation"*
- *"... the abuse of research metrics has become too widespread to ignore"*

LEIDEN MANIFESTO – PRINCIPLES 1-5

Ten principles to guide research evaluation:

- 1) Quantitative evaluation should support qualitative, expert assessment
- 2) Measure performance against the research missions of the institution, group or researcher
- 3) Protect excellence in locally relevant research (ikke alle publikationer er på engelsk)
- 4) Keep data collection and analytical processes open, transparent and simple
- 5) Allow those evaluated to verify data and analysis (self-verification)

LEIDEN MANIFESTO – PRINCIPLES 6-10

- 6) Account for variation by field in publication and citation practices (citation rates vary by field)
- 7) Base assessment of individual researchers on a qualitative judgement of their portfolio
- 8) Avoid misplaced concreteness and false precision (brug flere indikatorer og metrikker)
- 9) Recognize the systemic effects of assessment and indicators (hvad er det, der måles på)
- 10) Scrutinize indicators regularly and update them

LEIDEN MANIFESTO - KONKLUSION

- *"The best decisions are taken by combining robust statistics with sensitivity to the aim and nature of the research that is evaluated"*
- *"Both quantitative and qualitative evidence are needed; each objective in its own way"*
- *"Decision-making about science must be based on high-quality processes that are informed by the highest quality data"*

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- Van Dijk, D., Manor, O. and Carey, LB (2014) "Publication Metrics and success on the academic job market" *Current Biology*, 24(11)

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•Links:

- Essential Science Indicators: <https://esi.incites.thomsonreuters.com/>
- Journal Citation Reports: <https://jcr.incites.thomsonreuters.com/JCRJournalHomeAction.action>
- ResearchFunding.Net: <http://www.researchfunding.net/>
- SciVal: <https://scival.com/>
- Scopus: www.scopus.com
- Web of Science: <http://apps.webofknowledge.com/>

