



"Publier ou périr" et facteur d'impact : En disparition enfin ?

Matthias Egger  **eggernsf**

Président du Conseil de la recherche, FNS

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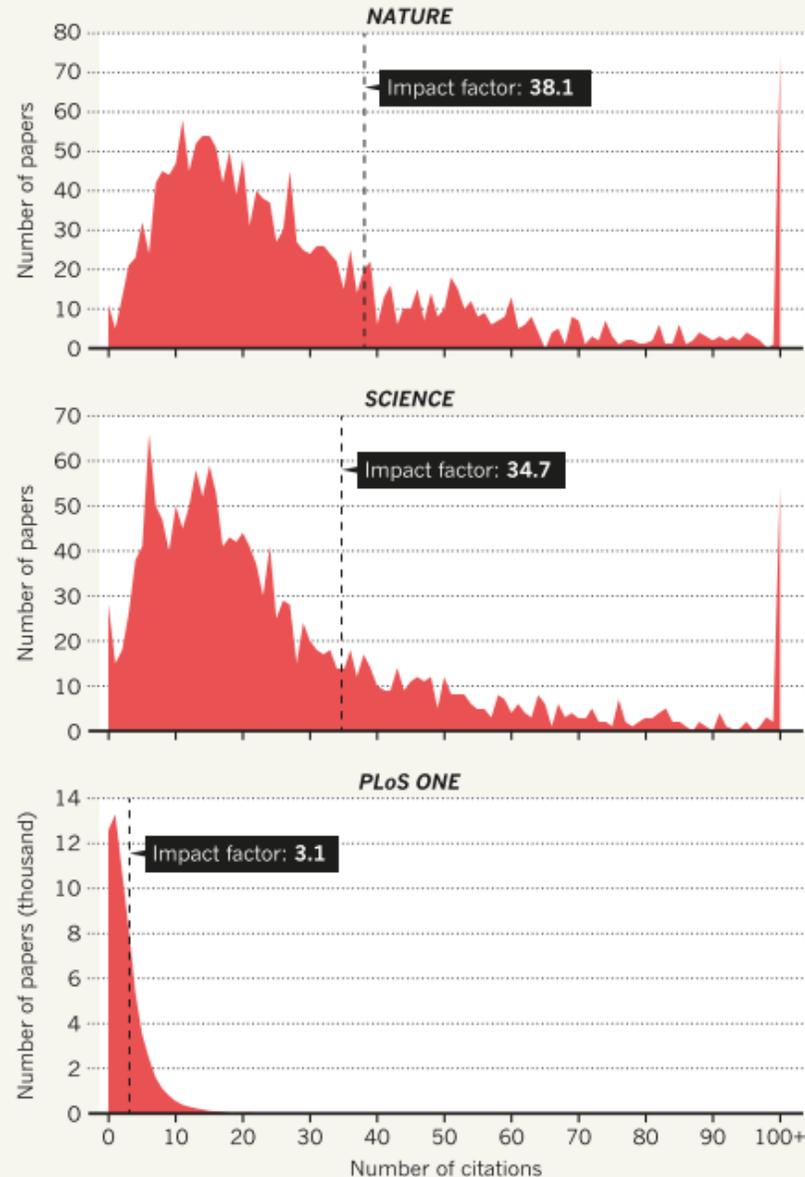
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THE IMPACT FACTOR'S LONG TAIL

Journal impact factors are influenced heavily by a small number of highly cited papers. For all journals analysed, most papers published in 2013–14 garnered many fewer citations than indicated by the impact factor.



BIBLIOMETRICS

Publishing elite turns against impact factor

Senior staff at societies and leading journals want to end inappropriate use of the measure.

BY EWEN CALLAWAY

The tide is turning against the impact factor — one of the publishing industry's most contentious metrics — and its outsized impact on science.

Calculated by various companies and promoted by publishers, journal impact factors (JIFs) are a measure of the average number of citations that articles published by a journal

in the previous two years have received in the current year.

They were designed to indicate the quality of journals, but researchers often use the metrics to assess the quality of individual papers — and even, in some cases, their authors.

Now, a paper posted on the preprint server bioRxiv on 5 July, authored by senior employees at several leading science publishers (including *Nature's* owner, Springer Nature),

calls on journals to downplay the figure in favour of a metric that captures the range of citations that a journal's articles attract (V. Larivière *et al.* Preprint at bioRxiv <http://doi.org/bmc2>; 2016).

And in an editorial that will appear on 11 July in eight of its journals, the American Society for Microbiology (ASM) in Washington DC will announce plans to remove the impact factor from its journals and website, as well as from

210 | NATURE | VOL 535 | 14 JULY 2016

NATURE | VOL 535 | 14 JULY 2016

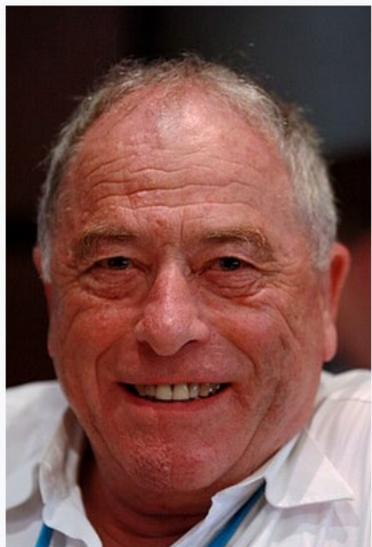


Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

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Präsident des Nationalen
Forschungsrats des SNF
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Zurich, 15. August 2017



Wüthrich at the 2012 Lindau Nobel Laureate Meeting

Sehr geehrter Herr Präsident, Lieber Herr Kollege Egger

Im Zusammenhang mit Ihrer Initiative betreffend «high-impact»-Zeitschriften sende ich Ihnen in der Beilage die Listen meiner höchst-zitierten Arbeiten. Eine Analyse der «impact factor» der dort aufgeführten Zeitschriften könnte möglicherweise als Unterstützung für Ihre Initiative benutzt werden.

Mit freundlichen Grüssen

Prof. Kurt Wüthrich

P.S.: Seit zwei Jahrzehnten leide ich im Interesse meiner Studenten und Postdocs (vor allem in den USA und nun auch noch ausgeprägter in China) daran, dass ich im Interesse ihrer Karriere in «high-impact»-Zeitschriften publizieren muss und dort vor allem die wichtigsten Ergebnisse unserer Forschung nur mit unvernünftig hohem administrativem Aufwand veröffentlichen kann.

Citation report for **812** results from Web of Science Core Collection between 1900 and 2018

 You searched for: **AUTHOR:** (wuthrich k) ...[More](#)

<input type="checkbox"/>	1.	MOLMOL: A program for display and analysis of macromolecular structures By: Koradi, R; Billeter, M; Wuthrich, K JOURNAL OF MOLECULAR GRAPHICS Volume: 14 Issue: 1 Pages: 51-& Published: FEB 1996	143	126	101	59	0	5471	248.68
<input type="checkbox"/>	2.	APPLICATION OF PHASE SENSITIVE TWO-DIMENSIONAL CORRELATED SPECTROSCOPY (COSY) FOR MEASUREMENTS OF H-1-H-1 SPIN-SPIN COUPLING-CONSTANTS IN PROTEINS By: MARION, D; WUTHRICH, K BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS Volume: 113 Issue: 3 Pages: 967-974 Published: 1983	24	15	17	9	0	3506	100.17
<input type="checkbox"/>	3.	IMPROVED SPECTRAL RESOLUTION IN COSY H-1-NMR SPECTRA OF PROTEINS VIA DOUBLE QUANTUM FILTERING By: RANCE, M; SORENSEN, OW; BODENHAUSEN, G; et al. BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS Volume: 117 Issue: 2 Pages: 479-485 Published: 1983	27	21	9	14	0	2591	74.03
<input type="checkbox"/>	4.	Torsion angle dynamics for NMR structure calculation with the new program DYANA By: Guntert, P; Mumenthaler, C; Wuthrich, K JOURNAL OF MOLECULAR BIOLOGY Volume: 273 Issue: 1 Pages: 283-298 Published: OCT 17 1997	83	84	71	34	0	2202	104.86
<input type="checkbox"/>	5.	A TWO-DIMENSIONAL NUCLEAR OVERHAUSER ENHANCEMENT (2D NOE) EXPERIMENT FOR THE ELUCIDATION OF COMPLETE PROTON-PROTON CROSS-RELAXATION NETWORKS IN BIOLOGICAL MACROMOLECULES By: KUMAR, A; ERNST, RR; WUTHRICH, K BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS Volume: 95 Issue: 1 Pages: 1-6 Published: 1980	31	34	18	14	0	1812	47.68

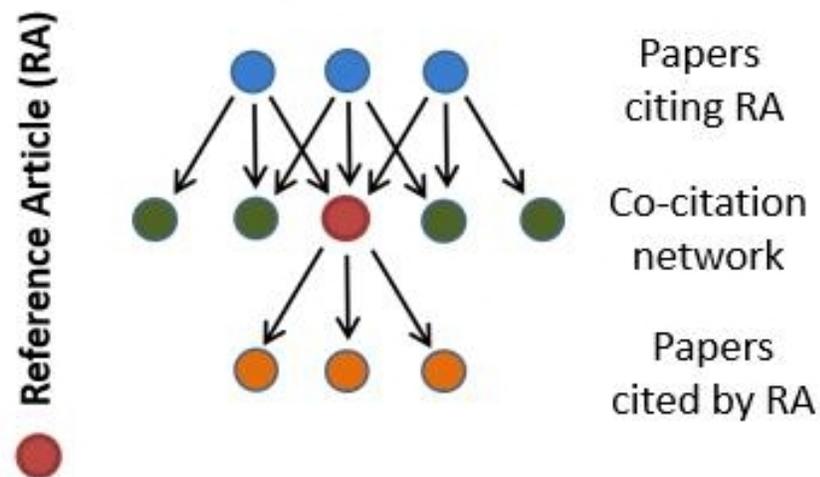
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Relative Citation Ratio (RCR)

- Compare la fréquence de citation de l'article de référence (RA, en rouge) par rapport aux autres articles du réseau de co-citation (vert)



Relative Citation Ratio (RCR): A New Metric That Uses Citation Rates to Measure Influence at the Article Level

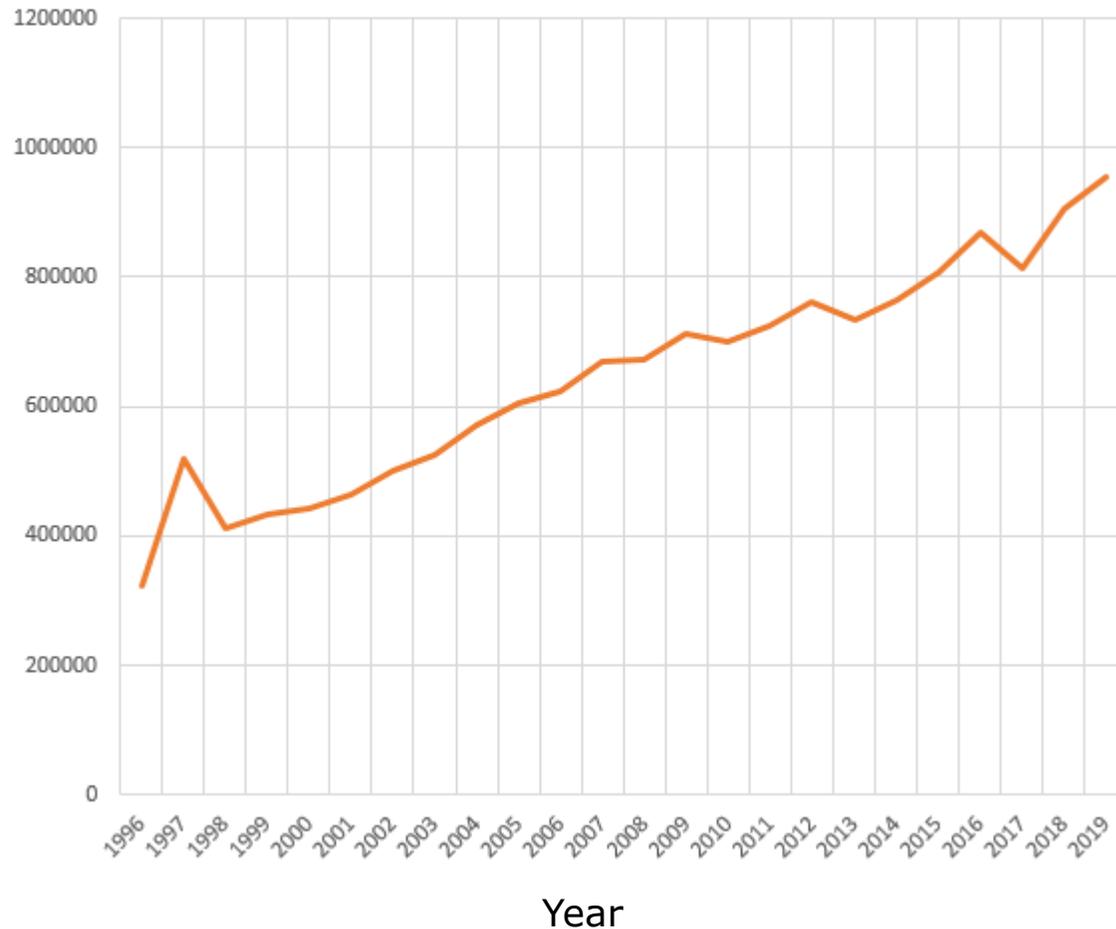
B. Ian Hutchins¹, Xin Yuan¹, James M. Anderson², George M. Santangelo^{1*}

¹ Office of Portfolio Analysis, National Institutes of Health, Bethesda, Maryland, United States of America, ² Division of Program Coordination, Planning, and Strategic Initiatives, National Institutes of Health, Bethesda, Maryland, United States of America

Le RCR peut être obtenu sur iCite (<https://icite.od.nih.gov/analysis>) ou Dimensions (www.dimensions.ai) pour un auteur ou article individuel.

<input checked="" type="checkbox"/> PMID	Year	Title	Authors	Journal	NIH Percentile	RCR ↓
<input checked="" type="checkbox"/> 8744573	1996	MOLMOL: a program for display and analysis of	R Koradi, M Billeter, K Wüthrich	J Mol Graph	100	133.30
<input checked="" type="checkbox"/> 6307308	1983	Application of phase sensitive two-dimensional c	D Marion, K Wüthrich	Biochem Biophys Res Commun	100	74.35
<input checked="" type="checkbox"/> 6661238	1983	Improved spectral resolution in cosy 1H NMR sp	M Rance, O W Sørensen, G Boden†	Biochem Biophys Res Commun	100	56.32
<input checked="" type="checkbox"/> 7417242	1980	A two-dimensional nuclear Overhauser enhancer	A Kumar, R R Ernst, K Wüthrich	Biochem Biophys Res Commun	100	48.49
<input checked="" type="checkbox"/> 9367762	1997	Torsion angle dynamics for NMR structure calcul	P Güntert, C Mumenthaler, K Wüth	J Mol Biol	100	47.01
<input checked="" type="checkbox"/> 9356455	1997	Attenuated T2 relaxation by mutual cancellation	K Pervushin, R Riek, G Wider, K Wü	Proc Natl Acad Sci U S A	99.9	32.35
<input checked="" type="checkbox"/> 22911575	1995	The program XEASY for computer-supported NM	C Bartels, T H Xia, M Billeter, P Gün	J Biomol NMR	99.8	30.85
<input checked="" type="checkbox"/> 12051947	2002	Protein NMR structure determination with auton	Torsten Herrmann, Peter Güntert, †	J Mol Biol	99.7	23.51
<input checked="" type="checkbox"/> 6084720	1984	Calibration of the angular dependence of the am	A Pardi, M Billeter, K Wüthrich	J Mol Biol	99.6	21.95
<input checked="" type="checkbox"/> 8700211	1996	NMR structure of the mouse prion protein doma	R Riek, S Hornemann, G Wider, M I	Nature	99.6	21.55
<input checked="" type="checkbox"/> 6313936	1983	Pseudo-structures for the 20 common amino aci	K Wüthrich, M Billeter, W Braun	J Mol Biol	99.6	21.35
<input checked="" type="checkbox"/> 1847217	1991	Efficient computation of three-dimensional prote	P Güntert, W Braun, K Wüthrich	J Mol Biol	99.5	19.58
<input checked="" type="checkbox"/> 6084719	1984	Polypeptide secondary structure determination b	K Wüthrich, M Billeter, W Braun	J Mol Biol	99.5	19.49
<input checked="" type="checkbox"/> 7077676	1982	Sequential resonance assignments in protein 1H	M Billeter, W Braun, K Wüthrich	J Mol Biol	99.4	17.08

No. of publications (PubMed/Medline)



correspondence

A list of published papers is no measure of value

The present system rewards quantity, not quality — but hasty changes could be as bad.

Sir — The choice of performance indicators sends a powerful message to those being evaluated, and when those measures are linked to the distribution of research funds, academics are quick to respond. Our analysis of Australian university publications shows clearly how the sector has reacted to funding formulae that reward quantity rather than quality.

A large part of the government funds that support the research activities of Australian universities is allocated on the basis of formulae that comprise three elements: research income, postgraduate students and publications¹. Data on the third element have been collected annually since 1993. When this element was incorporated into the funding formulae in 1995, universities and researchers were quick to calculate the 'value' of a publication.

Between 1995 and 2000, this figure varied from A\$761 (US\$415) to A\$1,089, influenced by the publication types included and the total funds allocated. After a review of higher-education research in 1999, the amount to be

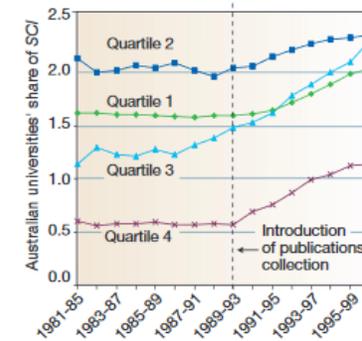


Figure 1 Australian universities' share of publications in the SCI, by journal impact quartile: five-year windows, 1981–1985 to 1996–2000.

its share increased by over 50%, and it doubled in the bottom quartile.

With no differentiation between the quality or impact of the publications, there is little incentive to strive for placement in a prestigious journal. Whether a publication is a groundbreaking

pressure to focus on this will not diminish.

Concerns that this component of the funding formula was not measuring the characteristic that it was designed for — quality — were raised soon after its introduction. However, not all universities were keen to see it removed or replaced. For smaller institutions, this particular element was more rewarding, and easier to improve, than the others.

These concerns are now re-surfacing in the context of the latest review of the Australian higher education system³. A number of submissions to recent ministerial discussion papers have suggested the removal or modification of the publications component. The difficulty is that suggested alternatives are as problematic as the one they seek to replace. It is to be hoped that time will be taken to analyse the likely effects of any alternative measures before they are introduced.

Linda Butler
Research Evaluation and Policy Project, Research School of Social Sciences, The Australian National University, ACT 0200, Australia



Our vision: To advance practical and robust approaches to research assessment globally.

[Read the Declaration](#)

- Ne pas utiliser les indicateurs basés sur les revues, tels que les facteurs d'impact, comme mesure de la qualité.
- Pour évaluer les contributions d'un scientifique ou pour prendre des décisions en matière de recrutement, de promotion ou de financement.

Help promote best practices in the assessment of scholarly research. Sign DORA.

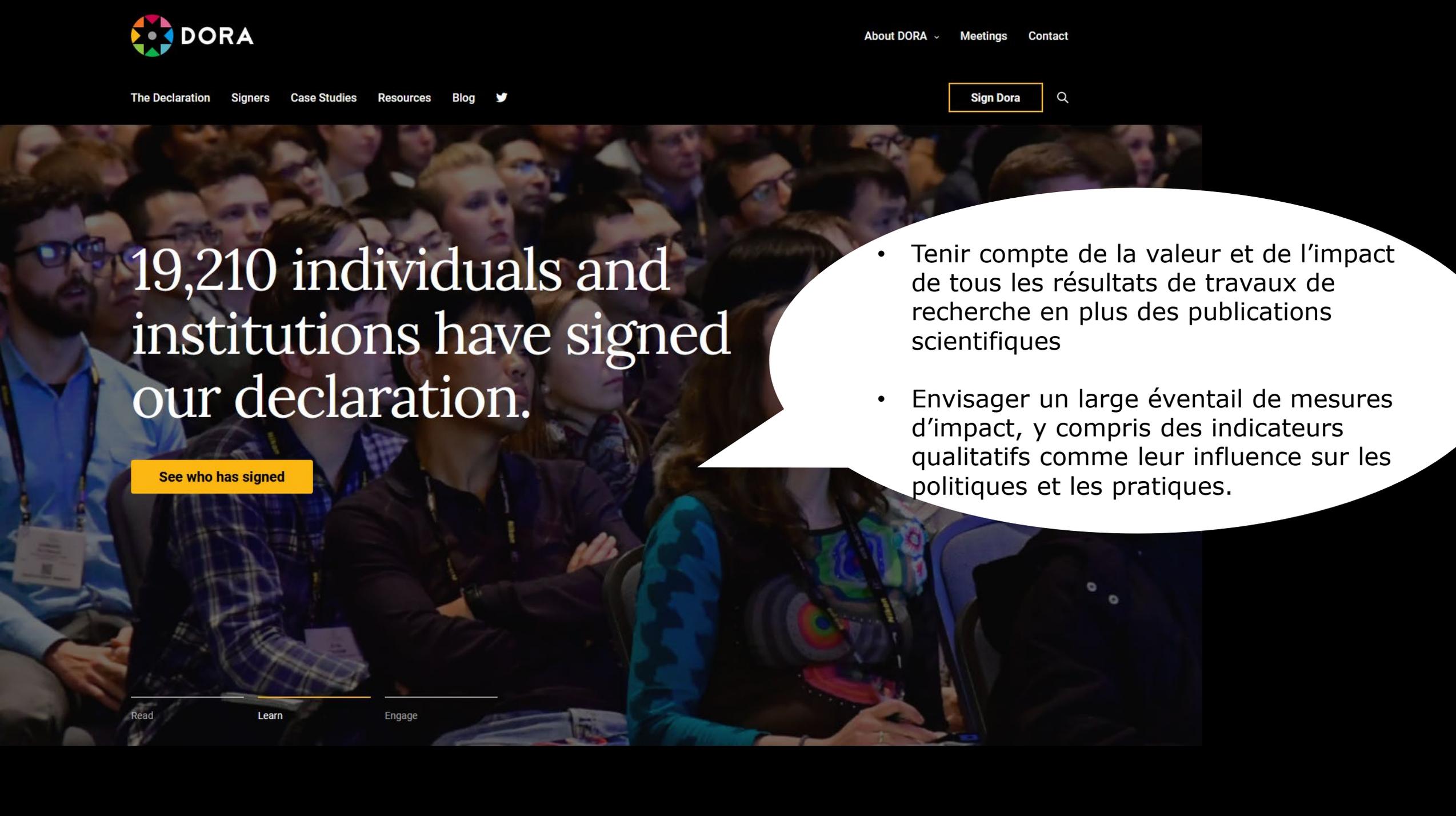
[Sign DORA](#)

Read

Learn

Engage

- Indiquer explicitement les critères utilisés pour évaluer la productivité scientifique des requérants.
- Souligner clairement, surtout pour les chercheurs débutants, que le contenu scientifique d'un article est beaucoup plus important que les indicateurs de publication ou l'image de marque de la revue dans laquelle il a été publié.



19,210 individuals and institutions have signed our declaration.

[See who has signed](#)

- Tenir compte de la valeur et de l'impact de tous les résultats de travaux de recherche en plus des publications scientifiques
- Envisager un large éventail de mesures d'impact, y compris des indicateurs qualitatifs comme leur influence sur les politiques et les pratiques.



Aide à la sélection d'un instrument d'encouragement

Accès direct

Projets

Carrières

Programmes

- › PNR
- › PRN
- › Sinergia – interdisciplinaire, collaborative et pionnière
- › Mesures temporaires de remplacement des subsides CER
- › Etudes longitudinales
- › Contributions à l'élargissement
- › Programme r4d
- › Programmes bilatéraux
- › ERA-NET

Spark



Financement rapide d'idées originales

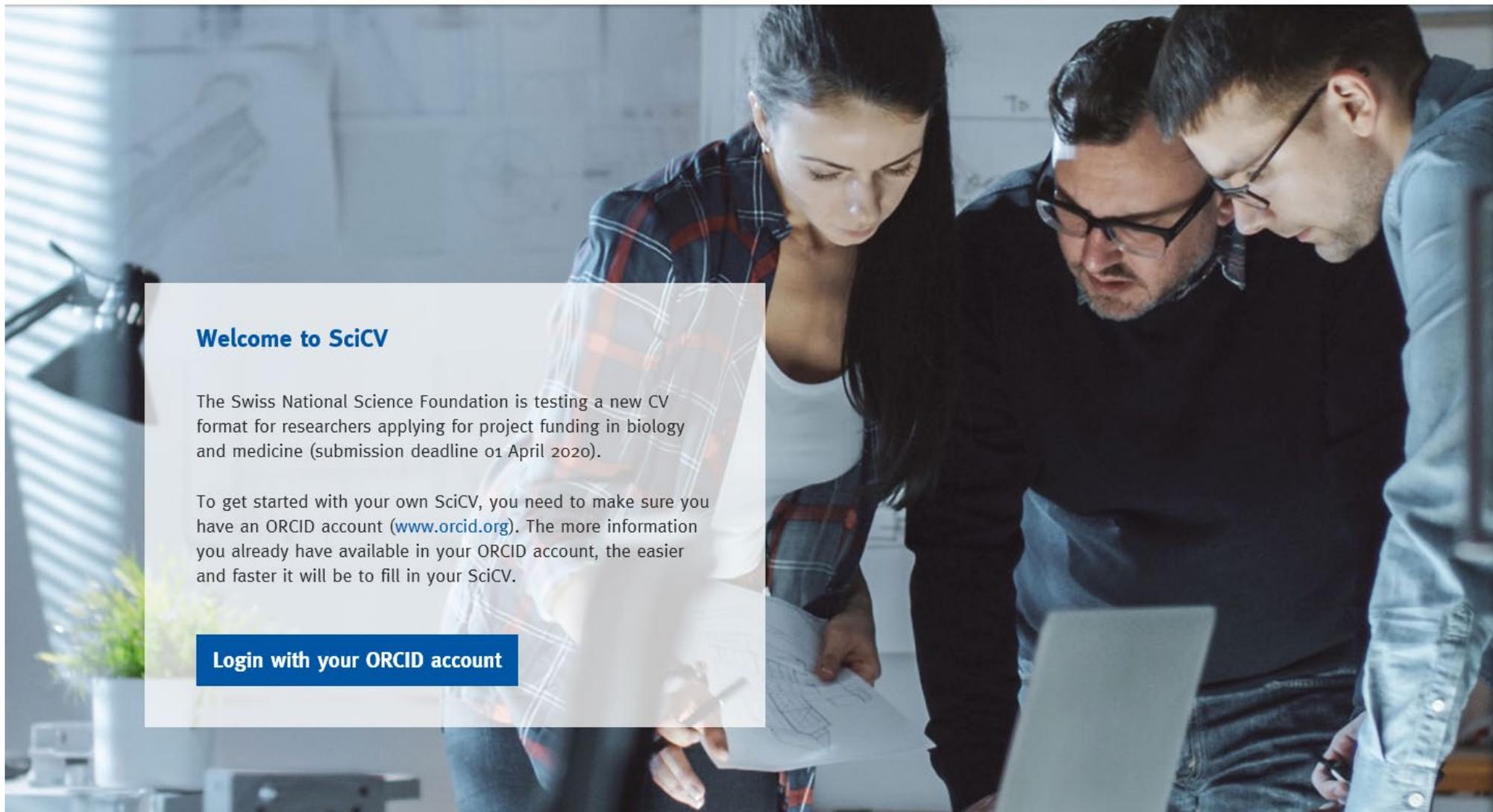
Spark vise à financer l'essai ou le développement rapide de nouvelles approches, méthodes, théories, normes ou idées d'applications scientifiques. Conçu pour des projets présentant un concept peu conventionnel et une approche originale, il privilégie les idées prometteuses, audacieuses et basées sur des données préliminaires très limitées, voire inexistantes. La prise de risque est encouragée, mais ne constitue pas une condition en soi. L'accent est mis sur les projets ou idées ayant peu de chances d'être financés par les autres programmes d'encouragement disponibles.

Délais de soumission au FNS

En raison de l'évaluation du projet pilote Spark, aucune nouvelle mise au concours n'est planifiée pour l'année 2021.

Contact

spark@snf.ch



Welcome to SciCV

The Swiss National Science Foundation is testing a new CV format for researchers applying for project funding in biology and medicine (submission deadline 01 April 2020).

To get started with your own SciCV, you need to make sure you have an ORCID account (www.orcid.org). The more information you already have available in your ORCID account, the easier and faster it will be to fill in your SciCV.

[Login with your ORCID account](#)

About

In an effort to improve the evaluation of CVs, the SNSF will run a pilot programme to test a new, standardised CV format called SciCV. The pilot concerns all applicants for project funding in biology and medicine in this year's first call for proposals (submission deadline 01 April 2020). All applicants participating in this call, are required to submit their CV in the new format as part of their application.

At present, the formats of CVs submitted by applicants are heterogeneous and not always in line with international best practice. The aim of SciCV is to remedy this situation by allowing researchers to compile their CV in a structured way and to present their most important contributions to science in brief narratives, rather than only as lists of publications. This approach will help make other academic outputs, beyond publications, visible and valued and promote equal opportunities. SciCV will also introduce a uniform way of calculating the academic age of applicants, which indicates how long they have been active researchers as opposed to their biological age. The new format will no longer include any journal-based metrics, such as Journal Impact Factors, as a surrogate measure of the quality of individual research articles. Rather, the actual content of articles and their citation impact will be considered.

To simplify the completion of CVs, the SNSF has created this interactive online toolkit (www.scicv.ch), which will be available to all applicants in biology and medicine as of 1 March 2020 through to 1 April 2020. Applicants will require an ORCID account to log in and to access the relevant data entry fields. Creating the SciCV online is a straightforward task, but can be time-consuming. Therefore, it is best to start early.

Academic Age

+

H-index

+

Narratives

+

Works

+

Relative Citation Ratio (RCR)

+

Narratives

A SciCV contains two types of narratives: a specific project-related narrative and more general contributions to science. Instead of providing exhaustive lists of outputs, in the narratives applicants can describe in their own words what aspects of their career and work they consider most important. Narratives can help ensure that different career paths are given equal opportunity and that other outputs of research (within and beyond science) are better acknowledged.

Project related narrative

In the project-related narrative, applicants are asked to describe in their own words, why they are the right person to execute the research outlined in the research plan of their grant application.

The project-related narrative can include but is not limited to (nor does it require): the applicant's previous scientific work on the topic or a related topic; their technical or methodological expertise; relevant aspects of their training; their previous academic or public outreach activities on the topic or related to the topic; other skills and competencies, which the applicant deems relevant to the proposed project; their personal argumentation for the relevance of some of these aspects to the project.

Contributions to science

In contributions to science, applicants are asked to briefly describe, in their own words, up to four of their most significant contributions to science so far. The contributions to science do not necessarily need to be related or of direct relevance to the research outlined in the applicant's current funding application, instead they should serve as general description of their most important work so far.

Contributions to science can include but are not limited to (nor do they require): the historical context, which framed the scientific problem; the actual problem itself; the applicant's work or finding(s) and their influence on science or society; the applicant's specific role or contribution to this work.

Works

To corroborate the key arguments of their narratives, applicants can cite previous work. In total, applicants can cite up to 21 works (five in the project-related narrative and four times four in the contributions to science). A work does not have to be a publication,

Règlement sur la promotion à l'Université de Berne 2019 (faculté de médecine)

MER / Habilitation :

- 10 articles originaux avec un classement du facteur d'impact dans le tiers supérieur de la discipline
- Quatre articles comme premier ou dernier auteur

Professeur associé :

- Au moins six articles originaux supplémentaires avec un classement du facteur d'impact dans le tiers supérieur
- Trois comme premier ou dernier auteur

Pas compatible avec DORA



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Règlement de promotion révisé à partir de 2020

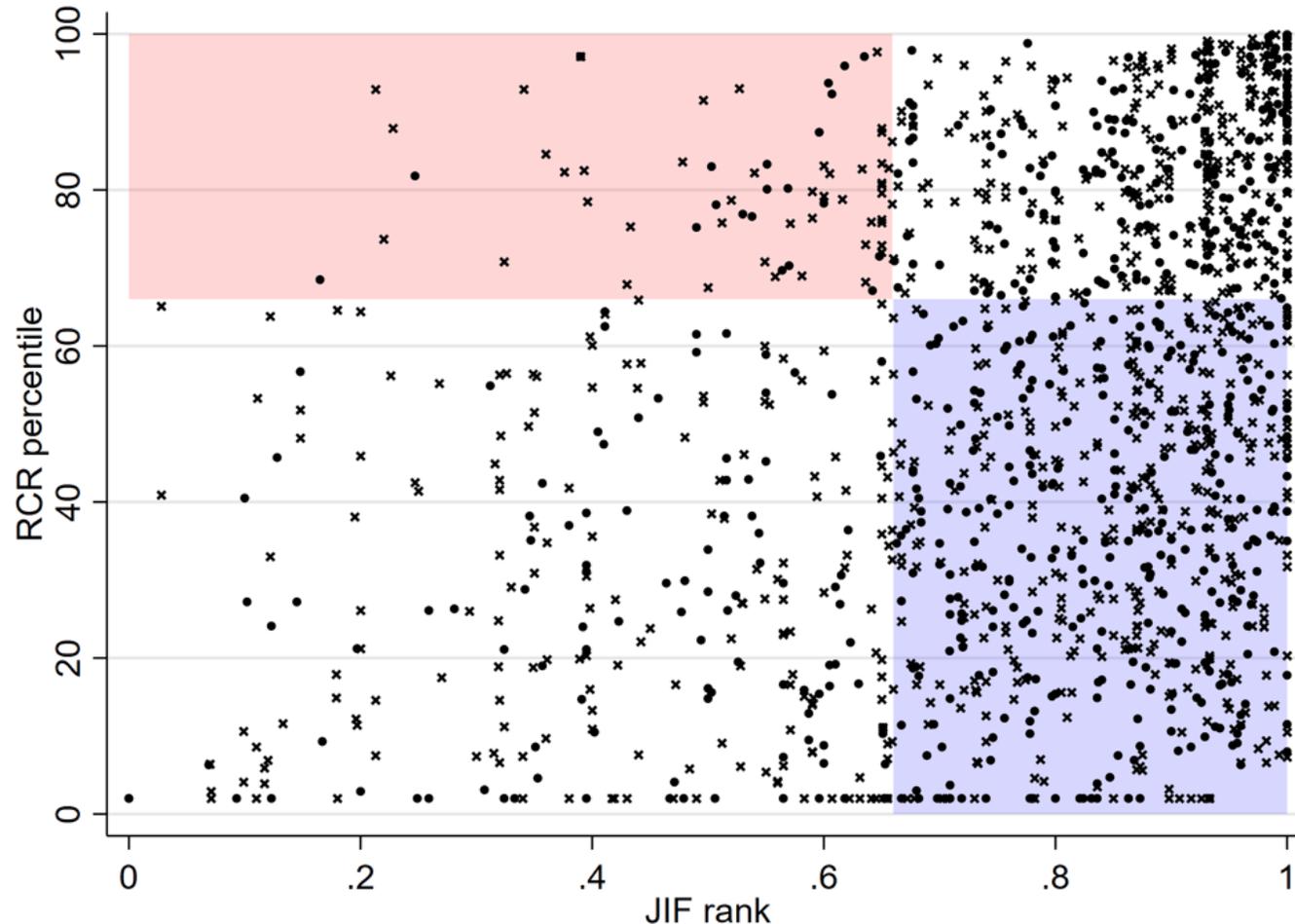


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MER /Habilitation :

- Les principes de DORA doivent être respectés
- L'évaluation doit être basée sur le contenu scientifique des travaux
- Des mesures d'impact basées sur les articles ou des indicateurs qualitatifs (par exemple l'influence sur la politique et la pratique) peuvent compléter l'évaluation
- 10 articles originaux
- Quatre comme premier ou dernier auteur, deux avec un RCR ≥ 1

Diagramme de dispersion: RCR par rapport au rang du facteur d'impact de la revue (JIF)



- Analyse des listes de publications soumises par 64 candidats pour MER ou professeur associé en 2017 et 2018.
- 1525 articles
- Rang/percentile du facteur d'impact et RCR

Steck N, Stalder L et Egger M. Mesure de citation basée sur un journal ou un article ? Une étude sur la promotion académique dans une université suisse [version 1]. F1000Research 2020, 9:1188 (doi : 0.12688/f1000research.26579.1)



"Publier ou périr" et facteur d'impact : En disparition enfin ?

Matthias Egger  **eggernf**

Président du Conseil de la recherche, FNS

Professeur d'épidémiologie et de santé publique, Université de Berne



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#LiverpoolRedundancies

 **Tori Sprung** @torisprung · Mar 2
To my fellow academics, if you haven't yet read about the [#liverpoolredundancies](#) then this thread provides a succinct summary

Please also read this open letter for academics from other institutes to sign in support, and sign if you feel compelled to docs.google.com/document/u/0/d...

 **Dr Suzi Gage** ✓ @soozaphone · Mar 1
My uni is threatening redundancy to 47 of my faculty colleagues. Those identified were chosen based on grant income and 'field weighted citations'. Not grants applied for, no consideration of teaching load, admin roles, or any mitigating circumstances #LiverpoolRedundancies (1/x)

[Show this thread](#)

  3  4 

 **Prof Christopher Jackson** @seis_matters · Mar 2
Well, this is super-bizarre; @LivUni are advertising a @wellcometrust-funded position to embed responsible metrics across the institution!!! And get this: they are @DORAssessment signatories 😬 jobs.ac.uk/job/CEC743/res... [#LiverpoolRedundancies](#)



Responsible Metrics Implementation Officer at University of Liverpool
jobs.ac.uk

 8  58  118 

nature

42,351*

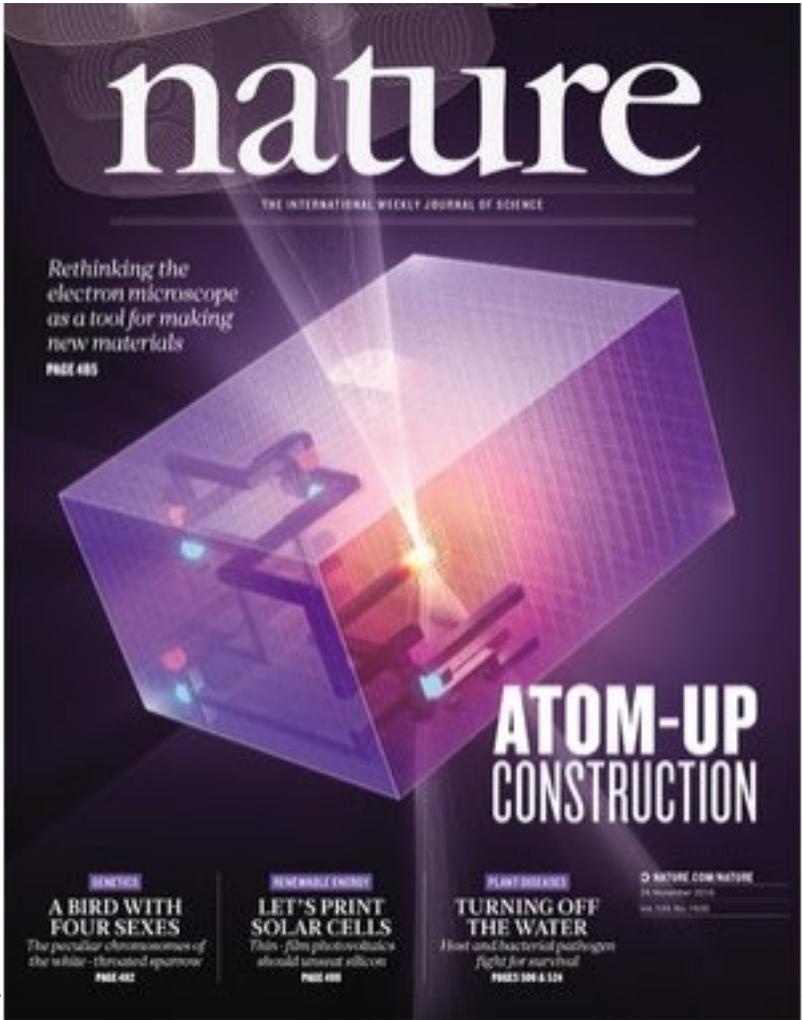
IMPACT FACTOR

High Impact. Low Price.

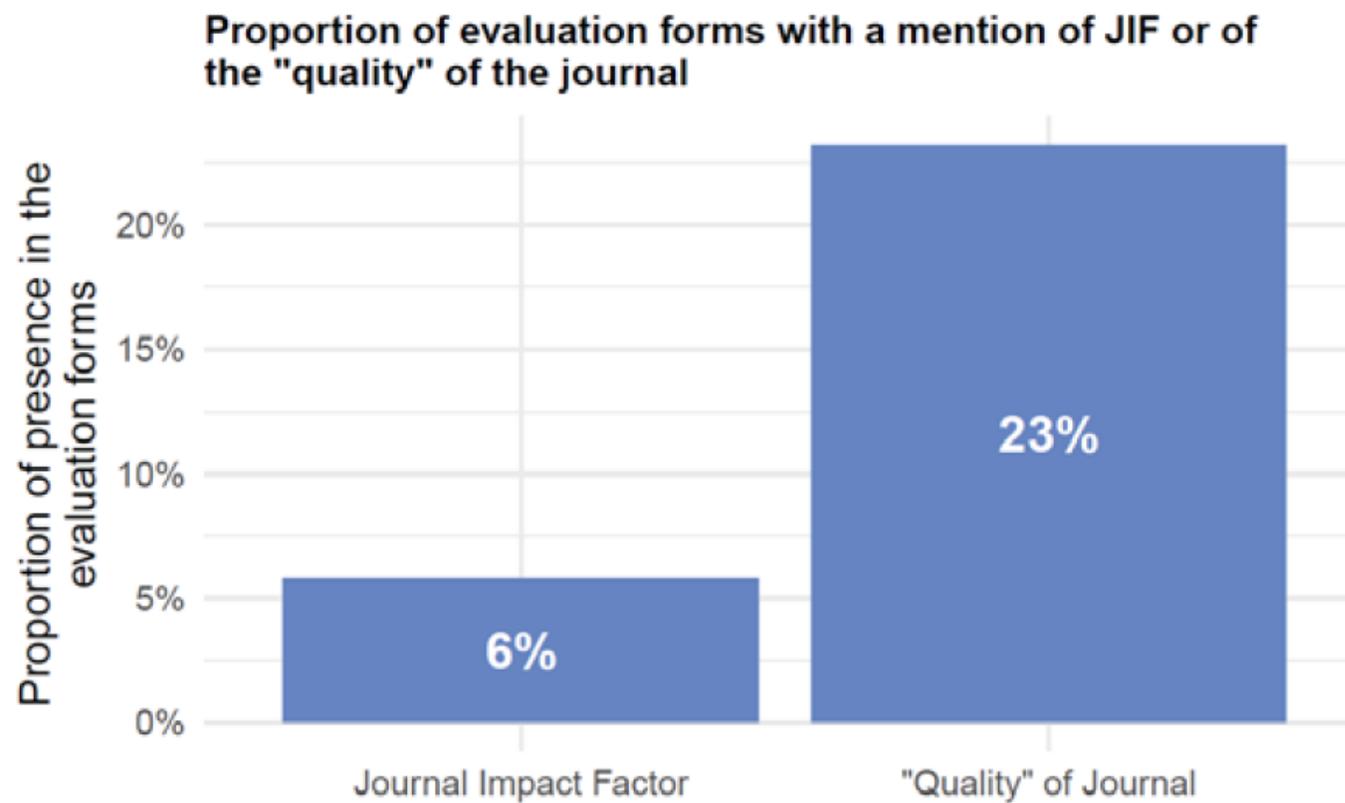
Join our expanding community of readers at our exclusive impact factor rate of only
\$42, £42 or €42

The graphic features the word 'nature' in a serif font at the top left. Below it, the numbers '42,351' are rendered in a large, blue, dotted font. A small asterisk is positioned to the right of the number '1'. The background is a light beige color with a pattern of small blue dots.

2018



**"Nature" est la revue scientifique interdisciplinaire la plus citée au monde, selon le Journal Citation Reports.
Son facteur d'impact est de 42,351."**



• Home / China / Society

Lancet restaurant gives medical professionals food for thought

By Li Hongyang | China Daily | Updated: 2017-11-02 07:14



Customers eat lunch at the Lancet Barbecue, which gives discounts to people who have had papers published in

Under the rules of the restaurant, scientists, medical professionals and social scientists are eligible for a discount if they have recently published papers in journals that are included on internet databases such as the Science Citation Index and the Social Sciences Citation Index.

The paper's impact factor is multiplied by 10 to determine the discount, which can account for as much as 30 percent of the bill.

\$ rewards for papers

=

publish at all costs

1 Chinese Yuan equals
0.13 Euro

- 90% of Chinese universities give \$ rewards for publications (30\$-165,000\$)
- For JIF > 10: $[IF \times 1.5 \times 10,000 \text{ yuan}]$ (*Zhejiang Agricultural and Forestry University*)
- 2 million \$ for Cell paper June 2017 (*Sichuan Agricultural University*)
- Global problem

Nature **547**, 137 (July 2017)

Quan, W., Chen, B-C., & Shu, F **69**, 4 (2017) *Aslib Journal of Information Management*



SHARE



267

Cash bonuses for peer-reviewed papers go global

By Alison Abris, Alison McCook, Retraction Watch | Aug. 10, 2017, 2:00 PM

The power of the JIF



JIF = last year's citations to *all* papers published in the preceding two years/*citable* papers published in those years