



Unlocking citation obsession and academic identity: the importance of ORCID numbers

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For two or three decades, we have observed an increasingly unhealthy obsession with citations among certain researchers, to the point that recently, some have cried out about citation injustice in journals.

Thus, an algorithm [1] was developed to measure the fairness of article citations. Algorithmic justice, according to one, dictates that the score generated by an algorithm must be equally accurate for individuals who belong to legally protected groups, such as men and women, blacks and whites, for example. The other contends that algorithmic fairness necessitates that each group involved experience the same proportion of false positives or false negatives from the algorithm. However, since antidiscrimination laws forbid the use of racial and other protected classifications in any context and prevent algorithm designers from creating the most accurate and fair algorithms possible, achieving parity in both dimensions is frequently impossible. This fact has raised an important query.

Which kind of measure, and for what reason, should come first? Since the seventeenth century, the art of quoting has primarily functioned to recall previous work on a given subject. The citation is aimed at the results and not the person, although as a result, it also plays an important role in granting symbolic recognition [2, 3]. What is striking about discourses on citational fairness or justice is that young people make these remarks and take for granted the dominant model of evaluating research based on citations rather than questioning them.

They forget that several material reasons can explain the differences observed in the distribution of citations: prestige of the home institution, publications in a lesser-known journal, lack of interest of researchers in specific problems, etc.

In short, instead of uncritically accepting the citation as a unit of measurement of quality and then imposing quotas on researchers by gender, skin colour, and so on, it is undoubtedly better to avoid these slippages and make the calculation of citations more complicated, for example, by only putting only the initials, or by imitating large collaborations which only indicate the name of the group thus showing that science is nowadays more collective than individual.

We must admit that the idea according to which the choice of articles to be cited should take into account the physical characteristics of the people, gender, skin colour, geographical location, and so on, and no longer just the interest of the result seems very curious, especially in scientific articles. This fixation on citations ultimately encouraged researchers to strategically use them by quoting themselves as a complicit group. New algorithms [1] attempt to detect citation cartels in certain journals to counter this phenomenon. But in reality, the most important obstacle to attributing citations to the right person is the existence of a very large number of homonyms of researchers which ultimately makes it difficult to know who did what?

We're just not as uniquely named as we think: The "Smith" surname is widespread today worldwide. It is the most common surname in the USA, where it is borne by approximately 2.3 million people, or more than 7% of the population. It is also very popular in England and Wales where it is the most commonly used surname, as well as in Australia and New Zealand. In South Africa, the name "Smith" is also common, carried by more than 12% of the population. There are approximately 323,117 publications in PubMed with the name of Smith, 200,000 people with the name of "Wang" in China. In France, more than 50,000 people are called "Dupont"! It's the same for lots of other names in the world.

Not a Smith or a Wang? If you intend to use your spouse's family name, your son's family name, or inadvertently leave out your middle initial from the byline when submitting a manuscript, you'll most likely still require ORCID!

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In 2009, a radical solution appeared with the creation of a barcode (ORCID for Open Researcher and Contributor, ID) which transforms the researcher name and credentials into a number [4]. This use still remains marginal, but some journals now require it and request the ORCID number. But faced with the demands of citational justice, we do not know if ORCID will not soon require you to indicate your gender and skin color; these excesses and this new obsession can be explained by the multiplication of evaluations by researchers based on the number of citations as an indicator of quality; This can of course only concern young people who still need a citation to be able to progress in their academic career....

Authors and contributors to scholarly communication can be uniquely identified by the nonproprietary alphanumeric code known as ORCID. Additionally, users can search for authors and their bibliographic output (as well as other user-supplied data) using the ORCID website and services. This solves the issue that it can be challenging to identify an author's contributions to scientific literature or publications because most personal names are not unique, can change (due to marriage, for example), have different name orders in different cultures, use first-name abbreviations inconsistently, and use different writing systems. It gives people a permanent identity.

In addition to a simple publication list, registered users can edit and maintain "a constantly updated 'digital curriculum vitae' providing a picture of their contributions to science," as provided by ORCID Inc.

To implement ORCID, consortiums working with government agencies as partners are working at the national level in many nations. In Italy, for instance, the Conference of Italian University Rectors (CRUI) and the National Agency for the Evaluation of the University are promoting collaboration between seventy universities and four research centers. The Ministry of Education, as well as the research institutions, universities, and the National Agency for the Evaluation of the University and Research Institutes (ANVUR), are associated with a project carried out by Cineca, a nonprofit consortium. Australian Research Council (ARC) encourage researchers to have an ORCID identifier when they apply for funding. Users of the HAL scientific article repository in France are also encouraged to enter their ORCID ID.

Contributors to books, TV shows, and newspapers will be uniquely identified by ISNI, which has set aside a block of identifiers for ORCID to use, ranging from 0000–0001–5000–0007 to 0000–0003–5000–0001. Consequently, an individual may lawfully possess both an ISNI and an ORCID ID, that is, two ISNIs. The 16-character identifiers used by ISNI and ORCID are composed of the digits 0 through 9 and are divided into groups of four by hyphens. The last character is a MOD 11–2 check digit that complies with ISO/IEC 7064:2003. It can also be a letter "X" denoting the

value "10" (Stephen Hawking's ORCID is <https://orcid.org/0000-0002-9079-593X>).

A unique digital identity from ORCID helps researchers stand out from the crowd in the academic setting. This 16-digit number is given to each individual, guaranteeing a consistent and clear portrayal of their academic work. It is frequently compared to a digital passport. ORCID is an efficient and clear light in the academic community as it struggles with attribution, collaboration, and information overload issues.

One of its main benefits is the ORCID number's capacity to link researchers to their work across numerous platforms and databases. Direct links between publications, datasets, and other scholarly outputs and an individual's ORCID record enable a thorough and accurate depiction of their contributions. This makes presenting one's body of work more manageable and helps with research attribution, which lowers the possibility of authorship disputes and guarantees credit is given appropriately.

Academic advancement fundamentally depends on collaboration, and ORCID is essential to enabling smooth cooperation between researchers. By providing an internationally recognized identifier, ORCID facilitates the tracking and recognizing individual contributions by funding agencies, publishers, and institutions. Researchers gain from this simplification of the research ecosystem, which also improves the effectiveness of the scholarly publishing process.

Additionally, researchers may become more visible and discoverable thanks to ORCID. It gets harder for academics to stand out as academic databases and repositories keep expanding. Peers, collaborators, and even the general public can find and interact with a researcher's contributions more easily when their works and affiliations are consolidated under one central ORCID number.

Even though ORCID has many advantages, there are still obstacles to its widespread adoption. Academic institutions, publishers, and funding agencies must collaborate to encourage researchers to apply for an ORCID identifier and incorporate it into their workflows. Nonetheless, the possible increases in productivity, openness, and scholarly community recognition make the expenditure in advocating and implementing ORCID highly worthwhile.

In the fight for an academic environment that is more open, cooperative, and effective, ORCID numbers mark a major advancement. The use of digital tools and platforms by researchers makes ORCID adoption more than just a matter of preference—it becomes essential. It represents a significant advancement toward a time when academic identities are seamlessly linked, enabling a more efficient and cohesive international research community. The author's name conundrum is resolved by ORCID, providing each person with a 16-digit numerical identity that lasts over time.

An ORCID identifier takes 30 s to create. Setting up an ORCID record only takes 30 s, and it's simpler than creating a Facebook account. Furthermore, if you have published previously, you probably already possess a Researcher ID, a Scopus Author ID, or indexed publications. This implies that you can effortlessly import data from these systems into your ORCID record, allowing those websites to handle the tedious work.

Your ORCID is more secure than your email address. Anyone who has ever transferred schools understands how painful it can be to lose contact with former classmates when your university email account is no longer accessible. By preserving your most recent email address, ORCID lessens that suffering. Your email address can be shared across platforms if you choose to, saving you time when maintaining your numerous profiles.

Are you a traditional scientist who only produces book chapters and papers? They are trackable by ORCID. Or are you a state-of-the-art computational biologist who shares datasets and figures as they are generated for your thesis? That is also trackable by ORCID. Not even a scientist, but a professor of art? You get the idea. You can also import your works using ISNI2ORCID and ORCID.

Are you worried about how ORCID may affect your privacy? Fortunately, ORCID offers fine-grained privacy controls. You can set the default privacy settings for all of your content when creating your ORCID record: Open to everyone, Open to trusted parties (web services you've connected to your ORCID record), or Open only to you. Setting individual privacy levels for each item in your profile is simple once it has been filled in. More than 1000 journals use ORCID. ORCID can also gather your publications from these different services to compile author-level metrics.

At "International Orthopaedics," we do not require ORCID identification because we try to avoid conflict with the freedom of expression for the researchers who are not

registered within the system. Making compulsory ORCID identification could be a barrier to publish. Many researchers do not have or do not use ORCID identification. However, the impressive adoption of this unique identifier makes referencing simpler and is attractive for publishers and for librarians.

ORCID was first announced in 2009. ORCID, Inc. was incorporated as an independent nonprofit organization in August 2010 in Delaware, United States of America, with an international board of directors. On 16 October 2012, ORCID launched its registry services issuing user identifiers. From one million registered users in 2014 the ORCID grew to 14.7 million individuals in 2022. A 2021 update to the Springer Nature website brings support to verifying and crediting peer-review activity directly from the manuscript submission systems to ORCID. The digital revolution and identification of researchers is a step forward.

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