

## Editorial

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# Team science – Ethics and transparency of author contributions

In contemporary academia ‘team science’ is a key component of academic life, and over the last thirty years, or so, there has been a noticeable trend towards more inter or multidisciplinary team based research. Previously, social scientists would often undertake their research in relative isolation and produced single-authored monographies. Today, most research and academic publications are a collaborative team effort. Teams allow for different types of expertise to develop new insights, as well as specific methodological expertise to help strengthen the quality of empirical research. In addition, working in teams is often very inspiring, can boost creativity and result in strong intellectual knowledge contributions.

With the emergence of team science as an academic norm, we also see the rapid rise in the number of multi-authored papers. In some academic disciplines there can be many – very many! – authors associated with a single academic paper. According to Guinness World Records the most authors for a single peer-reviewed academic paper is 15,025 in a paper published in March 2021 relating to international data used for assessing patient safety during the Covid-19 pandemic (Guinness World Records, 2023). Prior to this, and to highlight the growth in multi-authored papers Ioannidis, Klavans and Boyack (2018) found, through a study of Scopus, that over 9,000 authors had published more than 72 papers in each calendar year between 2000 and 2016, equivalent to publishing a paper very five days. For most academics these figures are implausibly prolific. By 2023, we also see ChatGPT acknowledged as team member and credited as an author on peer-reviewed scientific papers (Stokel-Walker, 2023), which adds another dimension to the ethics of authorship.

Whilst we support the trend towards team science, it also raises important questions about the authorship of manuscripts and the different contributions of the authors listed. Sometimes, teams of researchers can be clearly defined but often the distinction between the directly involved researchers and other researchers who provided support, input or feedback is not so clear (for an in-depth discussion see Helgesson et al., 2021). Underlying these questions are two fundamental – and connected – issues: research ethics and research transparency.

The ethical issue related to team science refers to the question of whether someone is duly and fairly listed as a co-author of an article. Younger scholars and PhD students may be pressured into including the names of senior colleagues/supervisors as co-authors to boost their publication records. In certain academic fields, it is normal practice to list the research group leader as a co-author even though they have not made any direct contribution to a paper. In other disciplines, this is regarded as an unethical practice and only the authors that make a direct contribution are to be listed as authors. In our field of study the norm seems to be a little unclear, primarily because authors in *Information Polity* come from a range of different disciplines, including political science, public administration and management, information

and computing science, sociology, media studies, etc. This makes it difficult to indicate what we see as correct and proper behavior for *Information Polity*<sup>1</sup>

The second, connected, issue is a communication issue: how do we communicate the composition of the team and their different inputs in a publication? In what order do we put the authors and what information do we present about their roles? In our field, there are not yet clear standards for the order of authors and for providing information about their roles. Should the list of authors be presented alphabetically, in order of seniority, or in relation to the significance of their role and contribution to an article? If we scan the authorship of publications in *Information Polity* for 2023 the vast majority include only institutional affiliation and an indicator of the ‘corresponding author’. In most instances there was no additional information about the roles of the authors in the development of the publication. There is one exception where the authors state explicitly ‘all authors contributed equally to develop this paper.’ There was not a single paper where information was presented about the different roles of the listed authors.

In other disciplines, and internationally, there are a variety of different practices around how authors relate to their co-authored published work. Different practices have developed for communicating the role of the different authors, for example: (1) authors can provide a written statement in their own words setting out clearly the different contributions of the various contributing authors;<sup>2</sup> (2) the Contributor Role Taxonomy (CRediT) tool can be used to provide a systematic overview of the various roles (see: <https://credit.niso.org/>); and, (3) a system of colorful ‘digital badges’ has been proposed to denote different contributions to research, covering things like project leadership, data collection, data analysis and article writing (Singh Chawla, 2015).

For *Information Polity*, we do not yet want to impose a single system for communicating the roles of the different authors in the research process, although we are aware that this is becoming common practice in other journals. We do, however, want to invite authors to be more explicit about the different inputs that co-authors have made to the research and the final published output. They can do this in the footnote on the first page of an article, or through the use of one of the systems mentioned above. This may be especially useful for early career researchers or PhD students who are building their academic profiles and *curriculum vitae*'s. In practice, this will make a contribution to research ethics and transparency, and will ensure that *Information Polity* continues to meet the highest possible academic standards.

### **Editors-in-Chief**

**Professor Albert Meijer, Utrecht University**

**Professor William Webster, University of Stirling**

Note: In case you are wondering, there has been a division of labour by the Editors-in-Chief for the composition of this editorial. Albert developed the initial concept and wrote a first draft, and William revised it with a specific emphasis on the line of argument and the use of language. We alternate these roles, so for the next editorial, William will take the lead in developing the editorial

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<sup>1</sup>For a systematic discussion of authorship, see the opinion of the International Committee of Medical Journal Editors: <https://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html>.

<sup>2</sup>For guidelines on writing an authorship contribution statement: <https://www.editage.com/insights/how-to-draft-the-authorship-contribution-statement>.

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