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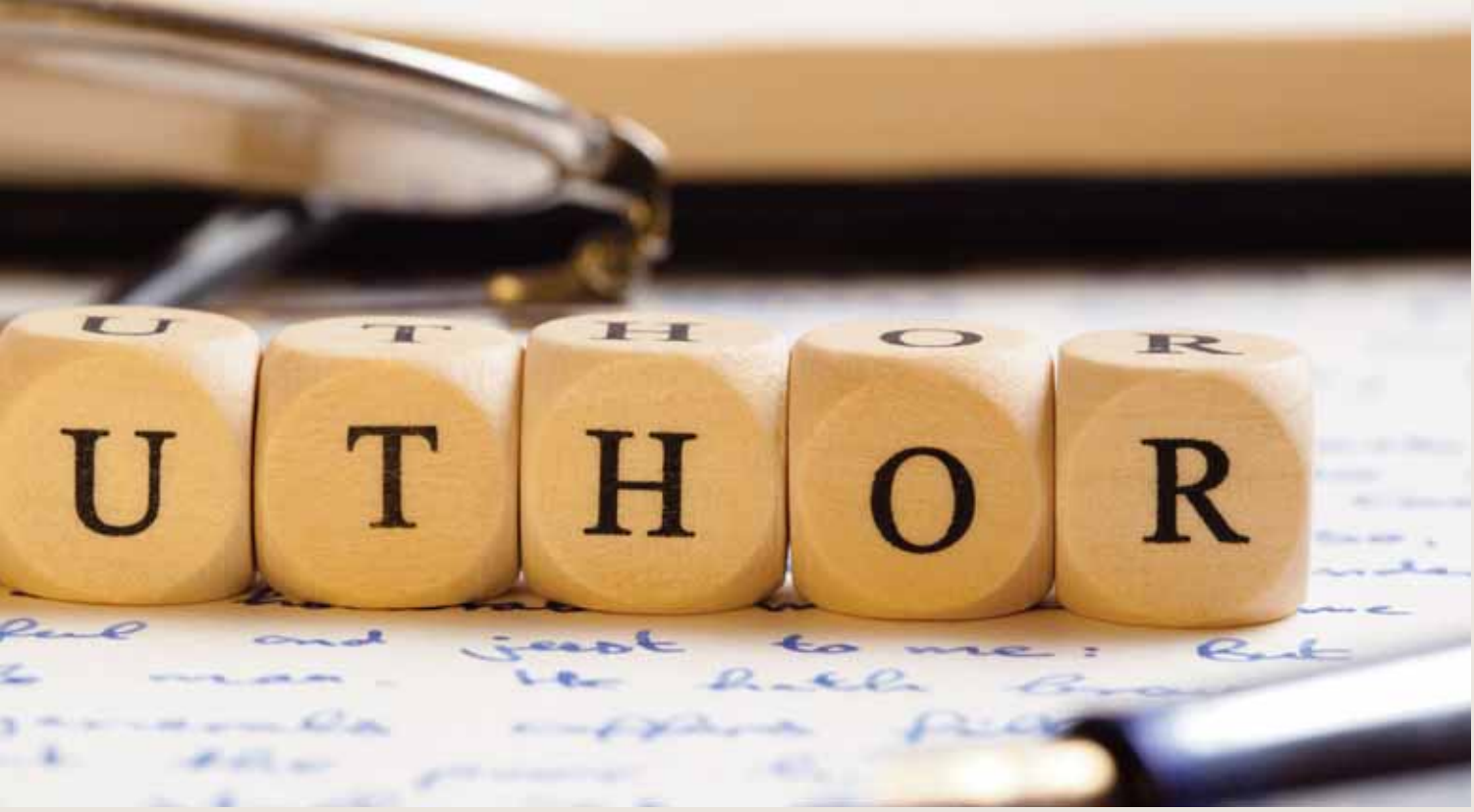
Abstract

This interview provides solutions to some of the common pitfalls that face medical writers when working with large teams. Practical tips are provided on key topics including manuscript planning, agreeing on key messages and the use of figures, tables and other contents, deciding on the criteria for authorship, and dealing with contributors who fall short of their commitments.

Professor Ruth Roberts is founder and director of ApconiX, a pre-clinical consultancy and ion-channel expertise company based in the UK. In the last 20 years, she has published over 130 peer-reviewed research articles and reviews as well as numerous scientific posters, several book chapters and two books. In addition, she has been chief editor for several authoritative text books.



Perspective from a leading scientific author: An interview with Professor Ruth Roberts on authors and authoring

As expected, most of these publications have had multiple authors and input from large multi-disciplinary teams.

The author's questions (Q) and Professor Roberts's answers (A) provide tips for driving collaborative manuscript production including resolving authorship issues and other challenges that face anyone involved in such work.

Q: You have an impressive publication record with one article produced every couple of months. How do you find the time and inspiration?

A: I don't consider a research project or other piece of work to be finished unless it is published. In addition to analysing the data, starting work on the draft manuscript is something I really look forward to. I have to be very efficient with my time and that includes the need to set aside the time to work on papers. Because I'm so busy I look at my schedule for the coming weeks and identify time periods where I can concentrate on drafts or outlines or arrange meetings with collaborators and co-authors. Many of my outlines and initial drafts have been put together on aeroplanes somewhere over the Atlantic whilst everyone else is watching a film.

If you're working on a manuscript with a key opinion leader or a subject matter expert, remember that they are usually busy people. It's essential to plan well ahead in order to get their input.

Q: What are the biggest challenges that you face when working with co-authors?

A: One of the perennial challenges is getting agreement on the key messages of the work. The analysis itself can be problematic but framing those messages in a way that best meets the needs of the primary audience can generate lots of discussions. Consequently, as an author, that's one of the things that I prioritise with the team at a very early stage. That said, there can also often be disagreement around identifying the primary audience. From my experience, a good paper will often span several disciplines which provide different perspectives and context. Working with such a diverse team brings about its own complications as each member usually has his or her own specific viewpoint on key messages and the rank of importance. For example, an experimental pathologist will want to position the pathology data centrally, whereas a toxicologist might want the general toxicology data to take centre stage.

It's essential that the key messages and their priorities are discussed as early as possible and agreed at the outline stage, and certainly before proceeding with the first draft.

Q: When you're leading the development of a manuscript, how do you decide who will be an author on the paper? Are they all equal or do some contribute more than others? We're all familiar with the order of authors but what do they mean to you?

A: The first and somewhat easiest criterion I use is the contribution of data. Anyone who has contributed data during the project will be included as an author. That's the easiest one to deal with. After that it gets more complicated. People who have taken an active part in shaping the paper or who may have taken the lead in writing specific,

technical or expert sections are also included as a rule. Occasionally I may get a request to include someone's boss or co-worker because they reviewed an early draft. The political situation can be a minefield but I try to be as fair and consistent as possible. However, having said that, I find that on many occasions it's reasonable to acknowledge people who have been kind enough to review the draft and provide editorial comments. Unfortunately, they don't always see it that way and feel that such a minor contribution warrants an authorship.

Q: Indeed, sometimes inter-departmental politics can be very problematic. You must have struggled with such authorship issues and it'd be interesting to hear your tips for resolution. For example, have you had to deal with a colleague who received an acknowledgement rather than an authorship and wasn't happy with that decision?

A: I haven't struggled personally because I try to be as fair and consistent as possible but others have struggled with my decision! Usually, the problem lies around the perception of the level of contribution by an individual; it's a difficult area. I consider that reviewing the document and offering editorial comment qualifies for an acknowledgement. On the other hand, engaging with the data and offering reasoned, substantial changes to their interpretation is worthy of inclusion as an author.

With experience, it's often apparent from the outset where and with whom these issues may arise. In order to prevent derailing the process at a later stage, I distribute the International Committee of Medical Journal Editors (ICMJE) guidelines to the authoring team whilst we are agreeing on the outline for the manuscript.

On one paper earlier this year, several people who received acknowledgements for editorial comments on a recent manuscript protested that they should be authors; I responded that they were welcome to set out how their comments had altered or contributed significantly to the scientific conclusions of the paper. In the end none of them came back to challenge my decision!

Q: Having agreed who the authors are, how do you agree as a team on contents and how do you resolve any issues?

A: I usually get the team to start with a blank sheet of paper and build a story board from scratch. After the initial brain-storming session, we usually end up with bits of paper pinned all over the wall and spread over the floor. We then go through the story and determine how the proposed data or key message described on each piece of paper contributes to the manuscript. Anything superfluous to the main story gets put in 'back up' for later consideration!

One of the most challenging parts of this approach is to try and keep the story as clear and simple as possible. Quite often there is a desire from a team member to include a piece of data solely because the work has been done, as opposed to it contributing to the story. In one recent extreme case, a potential author tried to argue for inclusion of data solely on the basis that he had spent hours generating statistics and beautiful graphics. It took a while to convince him that the data, whilst wonderfully presented, weren't relevant to the paper that we were trying to construct.

It's easy to get lost in the details of the data so start with a 'rough sketch' story board – what are the key points or messages and how does one assemble them into a logical order? Use a 'straw man' to get the creativity going and be controversial to engage your team in discussion.

A good, functional storyboard may be nothing more than a sketch of the results section so resist the urge to start generating elaborate diagrams or detailed tables until you have agreed the message.

Be prepared to ditch data sets that don't add anything to the story, or even better, consider how they may contribute to the next manuscript!

Q: As a lead author, how do you deal with collaborators who don't fulfill their obligations?

A: Firmly! Like any project, developing a manuscript quickly and efficiently requires good leadership skills. Once the storyline is agreed and the authors are aware of their responsibilities, a firm hand is needed to drive the project forward and to keep to the planned schedules. However, when dealing with co-authors, I always ensure my decisions leave me with a way forward. After all, collaboration or networking is the lifeblood of good science. In practical terms, I'll always follow up on difficult decisions with a phone call and then follow up with an email that confirms, in writing, what has specifically been agreed.

If people lose interest or don't deliver on their commitments, I will escalate the issue (usually by email so providing a written record) and state that if there has been no response by a specific date, it's assumed that they no longer want to be part of the paper. This is the ultimate sanction but no one really wants to go there.

Q: Is there one particular paper that stands out as being difficult to get into print?

A: There have been a few. A difficult one recently came from a consortium of some 40 scientists from academia, industry, and regulators that I was leading. Each of the 40 contributed to the work of the consortium to some extent but not all contributed to the paper so we had to tease apart authorship, acknowledgement, and 'no part played'. Layered on top of this was the approval to publish processes from 40 different institutions. I nearly gave up on this one but in the end dogged determination paid off! As with any project, early discussion and agreement of the story, the authorship, and good project management paved the way for a successful, if somewhat drawn out outcome.

Author information

Andrew Walker, PhD began his medical writing career in 1996 and has worked as a freelancer, as an agency writer and also in-house for AstraZeneca. In this time he has worked extensively on regulatory documents, publications and training materials.