

## ■ Contact details

Journals require full contact details for the **corresponding author**. This usually means full postal address, telephone and fax numbers, and e-mail address. Remember to inform the journal if any details change after submission, otherwise your notification of acceptance or proofs may go astray. If you are not the corresponding author, try to obtain these details on an early draft. It is bothersome to have to delay submission because you forgot to get the corresponding author's fax number (and s/he is guaranteed to be away when you need this urgently).

## ■ Contracts

Research is rarely a solo exercise and large projects virtually always involve some sort of relationship between a sponsor/funder and the investigator(s). The nature of this relationship should be set out in an **investigators' agreement** or contract.

The contract is an excellent place to record decisions about the planned publication strategy, but, sadly, many sponsors ignore this opportunity or include only minimal details. Many problems with publications arise because sponsor and investigator have not discussed the strategy or have different **expectations** about it. Such problems get harder to resolve if they are left until the end of a project. It therefore makes sense to discuss publication plans at the earliest stage and to get agreement before the contract is signed.

Although it will not be possible to determine who will qualify as an author before the research has started, it should be possible to set out principles about how a **writing group** will be constituted. It is never too early to start discussing this.

Contracts should include something about data ownership and data access. If you feel a proposed contract is unduly restrictive, get advice from your boss and/or institution. **Good Publication Practice (GPP)** for pharmaceutical companies states that companies should never attempt to **veto** publications, although they may, legitimately, ask to see a draft before submission, be given time to comment on it, and, in some circumstances, request a delay in publication to, for example, protect intellectual property rights. Some journals now ask authors to state whether they had free access to the data and how much control the sponsor had over the decision to publish.

Unfortunately there have been cases in which investigators signed restrictive contracts permitting sponsors to suppress a publication. In these cases, the investigators' institutions have been reluctant to defend their employees' right to publish, since they feared legal action. When such cases have come to light they have generated bad publicity for the companies involved. Two, well-publicised cases are those of Nancy Olivieri<sup>1</sup> and Betty Dong.<sup>2</sup>

1 *Olivieri case*: Spurgeon D (2001) Report clears researcher who broke drug company agreement. *BMJ*. **323**: 1085.

2 *Dong case*: Rennie D (1998) Thyroid storm. *JAMA*. **277**: 1238–43.

Recognising the problems that can occur if there is no contract, the 2009 update of GPP recommends written **publication agreements** (see Appendix 3, pp. 150–66).

## ■ Contributorship (vs. authorship)

Some journals (in particular, the 'Big Five') recognise that authorship of research papers is a complex, even messy, business and have therefore shifted from a system of authorship to one of contributorship. This is also reflected in the latest version of the **International Committee of Medical Journal Editors' (ICJME) 'Uniform Requirements for Manuscripts Submitted to Biomedical Journals'**. Instead of simply listing authors in the **by-line**, these journals provide an indication of each individual's contribution to the research and the publication. In recognition of the fact that each contributor may have had an input to only part of the project, these journals sometimes also require one contributor to act as **guarantor** for the project's overall integrity.

Authors/contributors therefore need to check the journal's requirements to see what information is required. If you plan to submit to a journal that lists contributors and their contributions, gather this information as soon as possible. Some journals provide a checklist, others leave it up to the contributors to write this section. In the latter case, it is particularly important that all co-authors (or should that be co-contributors?) agree the wording.

One reason why journals are switching to the contributorship system is to prevent **ghost** or **ghost authors**. This should not be a problem if you have set up your **writing group** carefully and involved all the **key people/players**. Whether a journal uses a traditional author by-line or a contributor list, those listed should always meet agreed criteria for authorship.

The following references provide some background on the topic.

Horton R (1996) Signing up for authorship. *The Lancet*. **347**: 780.

Rennie D (1997) When authorship fails. A proposal to make contributors accountable. *JAMA*. **278**: 579–85.

Smith R (1997) Authorship: time for a paradigm shift? *BMJ*. **314**: 992.

Wager E (2006) Bye-bye by line, hello contributors. *J Roy Soc Med*. **99**: 1–2

## ■ Controlled circulation journals; see pay journals

## ■ COPE; see Committee on Publication Ethics

## ■ Copy editing; see technical editing

## ■ Copyright

If you want to reproduce a figure, a table or a large section of text from another publication you need permission from the copyright owner. Until recently, this was nearly always the journal or book publisher. Thus, authors needed permission to reproduce items from their own publications because they did not own the copyright. However, the situation has changed in recent years, and many of the electronic and **Open Access journals** now allow authors to retain copyright on their own work.

Copyright relates to the way in which something appears on paper, i.e. the exact form of wording, or the precise form of a figure. It does not apply to the underlying data. Thus, if you present your data in another form, you will not be breaking copyright. Strictly speaking this means that if you redraw a graph and make some slight alterations to the labelling, you probably do not need permission. However, it is courteous to request permission, and this may prevent later problems. Large publishers have permissions departments that deal with such requests and usually handle them promptly. Some will ask for a fee (although this is rare for non-commercial uses), and most will stipulate the acknowledgement wording you should use.

Short quotations from other academic works do not require permission, but you should clearly indicate that these are quotations and cite the source. Publishers of song lyrics and modern fiction usually guard their copyright fiercely and may deny permission to quote, or charge a substantial fee, so make sure you get permission if you want to use a line from your favourite pop song as a catchy **title**.

Most journals require copies of permission letters on submission, so make your requests as soon as you decide to include copyright material to avoid delays later on.

## ■ Corrections (errata)

If, despite everybody's best care and attention, you discover an error in something you have published you should contact the journal and ask for a correction to be published. If the journal is indexed on Medline, corrections will be linked to the original article.

If you are feeling pedantic, you can impress the editor by knowing that the term 'correction' should be used for author errors and 'erratum' for the journal's own mistakes. If you want to be old-fashioned you can say 'corrigendum' instead of 'correction' (but they both mean that something has gone wrong).

## ■ Corresponding author

The corresponding author acts as the point of contact with the journal and will receive the reviewers' comments and proofs. The corresponding author's full contact

details, or at least an e-mail address, are usually published with the paper so that readers can contact him/her and request reprints. For other authors, only the affiliation or a short address (e.g. hospital name and city) is usually published.

Since the corresponding author will receive reviewers' comments and proofs, it makes sense to choose the author who is least likely to move and who is most likely to be contactable and able to deal efficiently and rapidly with proofs.

While journals view the corresponding author as a purely administrative designation, some researchers seem to equate this position with the study **guarantor**, or consider it indicates some degree of honour or prestige. It is hard to say whether readers share these views. See **order of authors** for more discussion on this tricky subject.

## ■ Council of Science Editors (CSE)

This was founded in 1957 as the Council of Biology Editors (CBE) and changed its name in 2000 to reflect its broader membership, although it still has a strong biomedical slant. Membership is open to anybody with an interest in science editing; professional North American journal editors and publishers are particularly well represented. CSE holds an annual meeting and occasional retreats, all in North America, and publishes *Science Editor*. The CSE website, [www.councilscienceeditors.org](http://www.councilscienceeditors.org) is an excellent resource containing thoughtful statements about a range of issues such as authorship. The meetings are a good way to meet editors, hear their concerns and maybe even buy them a beer.

## ■ Covering letter (submission letter)

Do not overlook the task of composing a persuasive covering letter in the euphoria of having got everything agreed and the drudgery of sorting out the submission package. This is your chance to 'sell' your submission to the journal editor, but you should remain objective and avoid the 'hard sell'. Start by spelling the editor's name correctly and make sure you are addressing the current incumbent, not a long-deceased predecessor. Then describe your work in a few sentences and explain why you feel it is important. Make the editor's life easier and reap the benefits of careful journal selection by explaining how your work matches the journal's aims and scope, and will be of interest to its readers. If you are aiming at a particular section of the journal, or there is a choice of format (e.g. short or full reports) you should specify this. You should also show that you understand the journal's requirements, for instance by including a statement that the paper has not been published elsewhere and is not being considered by any other journals. Many journals require authors to complete forms about **conflict of interest** but, if not, you should include a statement about this in your letter.

You will also need to write a covering letter when responding to reviewers' comments. Your response should always include a detailed list of the changes you have made and reasons why you have not followed a particular suggestion. This list may form part of your covering letter or may be a separate document.

## ■ CSE; see Council of Science Editors

# D

## ■ Data access; see Access to data

## ■ Data analysis plan

Statistical analysis is a crucial part of research methodology. Every trial plan, no matter how straightforward, should therefore include a description of how the data will be analysed. This may form part of the trial protocol or a separate data analysis plan. Somebody with statistical expertise should advise on the appropriate methods to use. The plan should set out the primary endpoints of the study and will often include a power calculation to indicate the sample size needed to confirm or refute the underlying hypothesis with confidence. Whatever the **key message(s)** of the publication, it is important to distinguish primary endpoints from secondary or *post hoc* analyses. The data analysis plan should help to ensure that a study is analysed and reported responsibly. A medical writer preparing a draft should have access to the plan to determine the primary endpoints and for details such as power calculations and randomisation methods which are required to fulfil the **CONSORT** requirements.

Developing the initial publication strategy and the data analysis plan at the same time can save a lot of time and trouble later. For example, if you consider what tables you might include in a publication you can ensure that the analysis will provide these.

## ■ Data dredging

This disparaging term refers to the practice of analysing data well beyond any reasonable scientific or statistical bounds in a desperate search for significant-looking p-values or the hope of wringing out some publication-worthy droplets. It therefore tends to result in **redundant publications**, or even to completely fallacious ones. The simple rule to avoid data dredging is to have a **data analysis plan** and stick to it. Occasionally, *post hoc* analyses will be justified if you notice interesting patterns in your data or want to explore a new hypothesis, but always seek the advice of a statistician about the validity of such analyses and, if you do try to publish them,

make sure secondary analyses are clearly labelled as such and that appropriate statistical methods have been used to correct for multiple analyses.

## ■ Data ownership; see ownership of data

### ■ DataVision

Web-based publication planning software developed by Envision Pharma. It provides project management tools and databases giving information about journals and congresses. See [www.envisionpharma.com](http://www.envisionpharma.com) for details.

### ■ Deadlines

Meetings usually have strict deadlines for **abstract** submission. Occasionally, exceptions can be made and abstracts accepted after the deadline, but do not count on this. Generally, the larger the meeting, the firmer the deadline. If you know your results will only be available a few days after the deadline it might be worth contacting the meeting organisers and asking if they can extend the deadline or if **late breaker abstracts** will be accepted. Try to do this as far in advance as possible. Submission deadlines sometimes get extended if the organisers receive fewer abstracts than they had hoped for – but again, you should not count on this, even if it has happened in previous years.

The only deadline you are likely to encounter from a journal is one for returning proofs. After waiting several months for these to arrive, this can sometimes be unexpectedly short, e.g. 48 hours. Failure to return corrected proofs within this deadline may delay publication until the next issue. This is why it makes sense to inform the journal if the **corresponding author's** contact details change, and to nominate somebody for this role who is likely to respond quickly.

### ■ Decision times

Although electronic submission and reviewing may have trimmed a few days off journal schedules, external reviewers remain the rate-limiting step in the peer-review process. Most journals do not pay their reviewers (or offer only a nominal reward) so editors cannot demand a rapid response. Good reviewers are also hard to find, so editors are keen not to antagonise or overburden them. Because of this, authors often have to wait several weeks, and sometimes several months, for a decision from traditional journals. (The median time from submission to acceptance for *JAMA* in 2008 was 56 days but that represents a considerable improvement from the 103 day average in 2004.) However, in journals that use in-house review to screen all submissions, average times for rejection may be much shorter than those for acceptance. (The median time from receipt to rejection at *JAMA* in 2008 was eight days.)

Aware of the frustration caused by waiting for decisions, and also of the fact that drug companies may be prepared to pay for a more rapid service, some pay journals offer rapid review for all submissions. For example, *Current Medical Research & Opinion* takes, on average, 14 days for a provisional acceptance or rejection.

Other journals that don't normally impose page charges offer rapid review for a fee. For example, the *International Journal of Clinical Practice* (which usually reckons to take about 20 days for peer review and to produce proofs about 10 days after acceptance) offers an expedited review service that ensures peer review within seven days of online submission and proofs within seven days of acceptance. However, expedited review is only available for clinical trials (which must conform with the CONSORT or STROBE reporting guidelines).

Do not confuse journals that offer quick decisions for all or some papers with the practice of having a **fast-track publication** route for papers of exceptional interest. Remember that the editor will decide whether your paper merits special treatment and, by definition, this is only going to apply to a few, remarkable studies. If speed of publication is important, it is better to select your target journal carefully than to rely on rapid review in a big-name journal.

See also **acceptance times** and **rejection times** and Chapter 3 'How long will it take?' (pp. 13–16) for more details.

## ■ DOI (Digital Object Identifier) system

The DOI system was introduced to overcome some of the difficulties of citing electronic material. It is administered by the International DOI Foundation, which defines a DOI as 'a persistent identifier of intellectual property entities'. Some journals now assign DOIs to every article. They act like a postcode and could, in theory, replace traditional citations, but since they are long, unmemorable strings of numbers and letters, this seems unlikely unless human intelligence evolves unexpectedly. DOIs are especially useful for citing electronic references, **supplementary material**, or items posted on a journal's website before the print edition, which have not yet had volume or page numbers assigned. The system also forms the basis for CrossRef, a not-for-profit initiative that allows publishers to cross-link citations so readers can go directly from an article to a cited reference in a few mouse clicks.

For more information go to <http://www.doi.org> or <http://www.crossref.org>

## ■ Duplicate publication; see redundant publication

# E

## ■ EASE; see European Association of Science Editors

## ■ Economic (health outcomes) evaluations

These are often published as secondary papers (i.e. separately from the original clinical trial results) in specialist health economics journals. However, such journals tend to be read by economists rather than by prescribers. Some editors consider that economic aspects can only be evaluated in the context of clinical findings and, for this reason, the *BMJ* will not accept economic evaluations without the clinical results.<sup>1</sup> Introduced in 2002, this policy does not seem to have been adopted by other journals or incorporated in the **International Committee of Medical Journal Editors' (ICMJE) 'Uniform Requirements . . .'**, but it is worth checking instructions carefully in case your target journal has a similar policy.

1 Smith R (2002) New *BMJ* policy on economic evaluations. *BMJ*. **325**: 1124.

## ■ Editorial board

Most journals have editorial boards but their composition and role vary greatly. Having a contact on the editorial board might be an advantage, but in order to appreciate just how much (or how little) influence this person may have, you need to understand the board's role in a particular journal. Editorial board members are usually listed on the journal website or inside the front cover. The first thing to do is count them. If your chum is one of dozens, then his/her influence is likely to be limited. If, on the other hand, there are fewer than 12 members, you might really have a friend at court. Next look at the journal's instructions to contributors. If members of the editorial board are assigned to handle certain papers, then this suggests they may perform an important screening function and may act, in effect, as the editor for their region or subject area. Finally, try to find out if and when the editorial board meets. The strongest clue to this is given in journals that publish acceptance dates for papers: if the papers published in each issue seem to have been accepted on only one or two dates, this suggests an active editorial board that meets to decide what to accept. In contrast, some journals use their editorial board mainly as a figurehead in which case it will meet only rarely and its members are virtually never used as reviewers – let alone expected to discuss the fate of papers. In this case, it may do no harm to contact your friend to ask his or her general advice about whether your

paper is suited to the journal, but you cannot expect much more. In the worst case, board members may be dead (making them especially hard to contact and unlikely to intercede on your behalf).

See **review process** for more details about how journals organise their peer review.

## ■ Editorials

In many journals, editorials or commentaries accompany research papers or comment on important developments. Such 'opinion pieces' are usually commissioned by the journal, often from somebody who reviewed the paper or who is an expert in the field. In *The Lancet*, the editorials are always written by a member of staff and appear under the **by-line** 'Lancet'. However the journal also publishes commentaries. If you have an idea for an editorial or commentary it is best to contact the editor informally to discover whether the journal considers uncommissioned pieces, and, if so, whether it might be interested in yours. Editorials to accompany an article may have to be prepared quickly so as not to delay publication.

The purpose of editorials and commentaries is to present the commentator's views on the meaning of a publication or the implications of a new policy or development. They usually contain a few references but can include more unsubstantiated opinion than other types of publication.

Since they express an opinion, it is important that the writer's voice is heard, and it is usually inappropriate for another party to suggest what the author should write or how they should tackle the subject. For this reason, the first version of the **Good Publication Practice (GPP)** guidelines for pharmaceutical companies recommended that, while it is acceptable for a professional writer or editor to polish an editorial for an author (e.g. to help a non-native English speaker) it is not usually acceptable for anybody other than the named author to prepare the first draft.

## ■ Editors

There are several types of editor and it is important to understand their different roles. The Editor (or Editor-in-Chief) of a journal is the overall boss, having the final decision over what gets published and responsibility for setting the journal's policies. He or she may be advised and assisted by committees, editorial boards and junior editors, but, the Editor (with a capital 'E') carries final responsibility. Editors may be full-time professionals employed by the journal (or its parent organisation) or part-timers doing their editing job on top of another. Full-time Editors usually work from a journal or publishers office, while part-time ones usually work from their own institution. The level of administrative support available to different types of editors therefore varies. If you contact a secretary or assistant in a journal office it is reasonable to expect that s/he is familiar with the journal's processes and may have access to files. On the other hand, a secretary in a university or hospital may have virtually nothing to do with her boss' editorial responsibilities.

Working alongside the Editor may be assistant editors with responsibility for sections of the journal (e.g. correspondence) or a proportion of submissions. Finally,

there is another species of editor responsible for preparing accepted typescripts for printing. These are called technical editors, desk editors or sub-editors depending on the journal. This type of editor takes no part in deciding what gets published but will put submissions into **house style** and check proofs (*see technical editing* for more details). If you find major problems in the proofs, it is usually best to discuss them directly with the sub-editor who prepared the manuscript. In the case of journals edited by part-time editors, technical editing may be done by somebody employed (or hired) by the academic society or publisher, or by the Editor. Check the contact details supplied with the proofs to determine the best person to contact.

To complete the classification, we should not forget authors' editors who help authors prepare submissions. They may be employed by the authors' institution (especially in the case of large US universities) or may be freelance.

## ■ Electronic publishing

Many journals that started life, and are still firmly rooted, in traditional paper and print use the internet or electronic media to some extent. They have been joined by wholly electronic publications that exist solely on the internet or are distributed in electronic form, for example as CD-ROMs. The term 'electronic publishing' seems to cover all aspects of this wide spectrum, making it, unless clearly defined, rather meaningless.

However, when choosing a journal you should consider how it is published, since this will affect not only the speed of publication but also the journal's accessibility and how it is likely to be perceived. Medical journals fall into two broad categories – those that are purely electronic, such as the **BioMed Central** and **Public Library of Science (PLOS)** journals, and those that still use print as the version of record but offer various electronic functions, such as *The Lancet*. A few, such as the *BMJ*, are true hybrids, offering longer versions of papers on the website and extra features such as rapid responses. If you have very large data tables, or want to include media such as video clips, it is worth considering journals that can publish **supplementary material** electronically.

Since purely electronic journals are not constrained by production and distribution costs (and therefore do not have to work within a page budget) they often have higher acceptance rates than print journals. Electronic journals also tend to have a considerably shorter **lead time** from acceptance to publication since articles do not have to wait for the next printed issue. On the negative side, electronic journals tend to invest less in **technical editing** than printed ones, and, being newer and easier to get into are generally considered less prestigious. Until recently, electronic journals were not assigned **impact factors** (which was a major drawback for some potential academic authors), but this situation has now been rectified.

As well as traditional journal metrics, some electronic journals now offer article-level metrics so you can see how many people have downloaded or cited your work (the PLOS system is explained at <http://article-level-metrics.plos.org>). Some journals also encourage readers to rate, annotate or comment on articles which could be great if they say nice things about your research but not so welcome if they are critical.

Other benefits are that most are **Open Access journals**, or are available via

**PubMed Central**, reducing the importance of indexing.

Although not strictly related to their electronic status, some of the newer journals practise open (unblinded) peer review, and some take this one stage further by making reviewers' comments available to readers.

## ■ Electronic review

Most journals use e-mail to communicate with reviewers. Although this has several advantages, and should, in theory, shorten review time, it probably has not accelerated the process enormously, as the rate-limiting step remains the busy (and unpaid) reviewer. If the reviewer reads the paper on screen it might even save a few trees – but I bet most reviewers still print submissions out.

On a less curmudgeonly note, electronic review does offer potential advantages, such as automatic links to references cited in the submission, or to guidelines for reviewers. It also enables potential reviewers to read an **abstract** before deciding whether to accept the invitation to review – this might help to identify competing interests earlier, although a study at *Annals of Emergency Medicine* suggested that it does not speed up the review process.

## ■ Electronic submission

Most journals permit or even mandate electronic submission of articles. This may slightly reduce the workload of preparing the submission package, since it generally takes less time to make an electronic submission than to prepare three, four or even five copies of your paper and post them. Check the instructions to contributors for details of file formats, etc. that are acceptable. Formatting details that often cause problems (and which journals therefore often ask you to remove) include fixed page breaks, right-hand justification and tables aligned using spaces rather than tabs or table settings. Special characters such as Greek letters or accents often get lost in transmission. It is therefore safer to use alternatives such as mcg for micrograms (rather than µg) or spelling out alpha and beta. Pay careful attention to special characters when you paste text into a form for submitting an abstract to a conference – I have seen very odd things happen to Greek characters and symbols, such as less than (<).

Even if you submit a paper or abstract electronically, you may still have to send hard copies of signed forms such as copyright transfers or authorship statements.

Many conferences now send automatic acknowledgements of electronically submitted abstracts, which is reassuring. However, as with any submission, you should make a note when you do it and contact the journal or meeting if you have received no acknowledgement after about a month. Both paper and electronic submissions do sometimes get lost in transmission/the post, or at the editorial office, so it is reasonable to expect some sort of acknowledgement.

## ■ ELPS

This acronym is used by the *BMJ* to stand for Electronic Long, Paper Short<sup>1</sup> referring to the fact that articles in the printed version are shorter than those on the website. Although most journals do not go as far as the *BMJ* (which invests heavily in editors who trim the paper version) many with websites will post **supplementary material**, such as large data tables, copies of questionnaires, or video clips, which cannot be accommodated in the printed version.

If you have a lot of data to present, or want to use an unconventional medium (such as video), study the journal's website, check the instructions to authors, or contact the editorial office to see if they can handle this.

- 1 See Mullner M and Groves T (2002) Making research papers in the *BMJ* more accessible. *BMJ*. **325**: 456 and Schroter S, Barratt H and Smith J (2004) Authors' perceptions of electronic publishing: two cross-sectional surveys. *BMJ*. **328**: 1350–3.

## ■ Envision

Commercial company that provides **DataVision** publication planning tools

## ■ EQUATOR Network

An international initiative to improve the reporting of medical research. EQUATOR stands for Enhancing the QUALity and Transparency Of health Research. It was started by members of the team that developed **CONSORT**, but their resource centre gives useful links to a wide range of guidelines so this website is a good place to check if there are any guidelines on the type of research you are trying to publish.

[www.equator-network.org](http://www.equator-network.org)

## ■ Errata; see corrections

## ■ European Association of Science Editors (EASE)

This was founded in 1982 from the merger of the European Life Sciences Editors Association and Editerra, an association for earth science editors. Membership is not restricted to Europe, and EASE currently has members from over 50 countries.

EASE holds meetings every three years. Unlike **WAME** and **CSE**, EASE has not issued statements on editorial policy, but it has produced a handbook for editors. It publishes *European Science Editing* which includes peer-reviewed research articles as well as association news and useful summaries of papers about all aspects of editing

and publishing. Membership of EASE includes academic (i.e. part-time) editors, technical editors and translators, as well as professional editors and publishers.

For more information look at [www.ease.org.uk](http://www.ease.org.uk)

## ■ European Medical Writers Association (EMWA)

As the name suggests, this is an organisation for medical writers. It developed from the American Medical Writers Association (AMWA) in 1989 and now largely functions independently. EMWA has produced guidelines on the role of professional medical writers in developing publications (*see* Appendix 3, pp. 139–45). These guidelines aim to reduce the problems associated with ghost writers.

For details visit [www.emwa.org](http://www.emwa.org)

Jacobs A and Wager E (2005) EMWA guidelines on the role of medical writers in developing peer-reviewed publications. *Curr Med Res Opin.* 21(2): 317–21.

## ■ Expectations

A publication is usually the end-product of a collaboration involving many people. Devising, agreeing and communicating a successful publication strategy therefore depends on discovering the expectations of everybody involved. Depending on their background, previous experience and personality, people can have widely different expectations. Do not assume that you know what individuals hope to get out of a publication, or what they expect the processes will be.

The relationship between research sponsors and investigators can be a complex and delicate one. Involvement of extra parties such as contract research organisations (CROs), communications agencies or freelance professional writers can add further layers of complexity. The first step in establishing expectations is to make sure that all **key players** have been consulted and offered the chance to contribute. For large studies, this is likely to involve a wider group than just the named authors.

The best way to find out what people expect is to arrange a **meeting** involving as many key players as possible. If this is difficult, then a telephone or video conference is probably the next best thing. Appoint somebody to chair the meeting or lead the phone conference, and somebody else to record the decisions.

When discussing a publication strategy try to cover all the issues. The most important ones to establish are:

- timing
- target meetings (for abstracts)
- target journal (for primary publication)
- number of publications
- authorship
- key messages

- roles (i.e. who does what).

When these are agreed, write them down and circulate the information. Memories are unreliable, and written notes will also help to inform those who could not take part in the discussion.

If circumstances change, keep checking expectations and consulting the key players. Always consider if you have left anybody out (e.g. an investigator who might expect to be an author). If in doubt, increase your communication network rather than narrowing it. Differences in expectations are best settled well before crucial deadlines (e.g. for abstract submission) and at the earliest stages of publication development.

The best way of checking expectations on a full paper is to circulate an **outline** for comment before preparing a first draft. It is far better to uncover differences in interpretation and emphasis at this stage than when you are just about to submit the paper.

Many publishing conventions are unwritten. I have been mystified by authors squabbling over who should be named as the **corresponding author**, or why they like the convention that male authors are listed with their initials, but female authors have their forenames spelled out in full. Even experienced researchers can have strange misconceptions about publication processes, and everybody has their own idiosyncrasies, prejudices and opinions. The only method to guarantee a smooth process is to make no assumptions, discover everybody's expectations about what should happen, and keep the lines of communication open.

## ■ Expedited review

A posh term for a fast-track review system which some journals offer for a fee. *See decision times* for more details.

## ■ External review

The traditional model of peer review, and probably the one that most authors expect journals to use, involves sending papers to external reviewers (i.e. independent experts who are not employed by the journal). However, journals that employ a large editorial team reject a considerable proportion of submissions without external review. Such journals (which tend to be the large, general weekly journals such as *The Lancet* and *NEJM*) always use external reviewers before papers are accepted, but they reject as many as 30–50% of submissions on internal review. The advantage of internal screening (or **in-house review**) is that it usually produces a rapid decision. The disadvantage is that authors receive a less detailed critique – often just a letter stating that the submission is not suitable for the journal.

# F

## ■ Fast-track publication

Some journals offer rapid publication (within about four weeks of acceptance) for papers that represent major breakthroughs or have important public health implications. However, apart from a few journals that offer ultra-speedy publication if you pay an extra fee, you cannot generally demand a place on the fast-track just because it is convenient for you. The decision to accept a paper as fast-track rests with the editor. Few papers are deemed worthy of fast-tracking, for example *The Lancet* accepts about 50 per year. You will therefore need to construct a very persuasive **covering letter** to explain exactly why your paper merits special attention. *The Lancet's* instructions to contributors recommend calling the editor for a preliminary discussion. Since the advent of **electronic publishing**, some journals now post important papers on their website before print publication.

Since only a handful of exceptional papers will be afforded this honour, you should not expect fast-track as a right. After you have devoted years of your life to a piece of research you are bound to believe it is of enormous importance. Try to take a step back or get your most sceptical colleagues' views before assuming that your paper will qualify. Very few individual studies answer an important question so clearly that they change the practice of medicine. Mostly, science evolves gradually and your research will represent one piece of a larger jigsaw. If speed of publication is vital, it is better to choose your target journal carefully than to rely on fast-track review in a major journal. Some electronic journals and **pay journals** routinely offer rapid decisions and minimal **lead time** from acceptance to publication, and, as these journals generally have higher acceptance rates than traditional print journals, this is undoubtedly a more reliable route to guarantee prompt publication.

The conference equivalent of the journal's fast-track is **late breaker abstracts**.

Goldbeck-Wood S (1999) *BMJ* introduces a fast track system for papers. *BMJ*. **318**: 620, but see also an alternative view, Martyn C (2005) Slow tracking for *BMJ* papers. *BMJ*. **331**: 1551–2.

## ■ FDAAA

This rather unpronounceable acronym stands for the equally unwieldy Food and Drug Administration Amendments Act of 2007, which despite its date (which refers to when it was passed), comes into force from 2008 to 2010. The Act requires tabular summaries of the results of most Phase II to IV studies to be posted on **ClinicalTrials.gov** within 12 months of the study ending. In response to this, many drug companies now try to publish a full paper in a journal by about the same time as the results summary is posted, to provide context and interpretation to complement the very dry summary tables. This can set tough deadlines for publication planners

who therefore do not have time to say 'FDA Amendments Act' and refer to it as 'Fe-daah'.

Wager E (2008) FDAAA Legislation: Global Implications for Clinical Trial Reporting and Publication Planning. Keyword Pharma Report 2008. <http://www.keywordpharma.com/prods/wager3.asp>

## ■ Fees; see page charges; pay journals

### ■ Figure legends

Requirements for these may vary with electronic submission but many journals still expect figure legends (headings) to be listed all together at the end of the document rather than with each figure. This reflects the old printing technology in which words were typeset along with the text while figures had to be processed and inserted separately. Even if your software allows you to insert figures into a document, many journals require you to submit them as separate files, with the legends listed after the text.

Aim to make figure legends comprehensible to someone who has only scanned the text, for example by spelling out abbreviations. References in legends can cause problems, especially if the journal uses the Vancouver (sequential numbering) system, since you cannot tell exactly where the figure will appear in the text until the pages are made up. It is therefore helpful to refer to the author and date, as well as giving a number. If a figure is taken from another work you must obtain **permission** from the copyright holder (*see copyright*) and it is usual to mention this in the legend. If a figure has been adapted from another source it is courteous to acknowledge this even though you may not require formal permission. Typical wording would be:

Fig. X. The renin-angiotensin system (reproduced from Baggins *et al.*<sup>Ref c</sup> by permission of Journals-R-Us Inc.).

### ■ Figures

The familiar equation that 'a picture is worth a thousand words' does not necessarily hold in scientific publishing. The 'rules' governing figures are often unwritten, and are definitely different for posters and papers.

Posters at conferences tend to be skimmed rapidly, rather than read, so the aim is to get your message across quickly and clearly. Figures such as flow diagrams, bar charts and pie charts are effective ways to display study designs and results, and should be used freely. If space permits, you can even show data both in a table and a graph (a luxury not permitted in a paper). Use your judgement to choose between including a lot of detail, and presenting clean, clear graphics. Some details, such as error bars, may be essential for understanding the data, others, such as exact patient numbers for every parameter measured, may be unnecessary. Pie charts and

stacked bars are good for showing differences in proportions. Bar charts are good for comparing pairs of data, such as mean values from different treatment groups. Line graphs are good for showing changes over time. Use colours consistently (e.g. to indicate different treatment groups) and avoid red/green contrasts since about one in 12 men have some degree of colour-blindness and cannot distinguish these colours.

Journals often impose restrictions on the number and type of figures you can include in a paper. The general rule is that you must not duplicate information between text, tables and figures. You must therefore choose the best form for presenting your data. Unlike posters, papers are usually considered the 'publication of record', in other words, the definitive and lasting report of a piece of research. Papers may be used for systematic reviews or meta-analyses which require considerable detail. For these reasons (and, perhaps because, in the past, typesetting and reproducing figures cost more than printing text or tables) journal editors usually favour tables over figures.

A simple bar chart comparing values from two groups is unlikely to be accepted in a paper. It is usually best to present this sort of data in a table, which allows you to show the actual values, a measure of the dispersion (e.g. standard deviation) and statistical significance (e.g. 95% confidence interval or p-value).

However, other kinds of figures, such as those that synthesise a lot of data points, are usually acceptable, for example scatter plots or regression analyses and survival curves (e.g. Kaplan-Meier plots). Line graphs showing changes over several time points can also be useful if they complement the text or table rather than duplicate it.

Images such as X-rays, CT-scans or photomicrographs can be useful in case reports or to illustrate an unusual finding within a study. Photographs of patients may also be useful, but should be included only if you have obtained specific consent from the subject. It is not acceptable simply to blank out the eyes in an attempt to anonymise an image. Some journals require evidence of patient consent for publication. Make sure that images such as CT- and ultrasound scans do not contain details that might identify the subject.

If you want to reproduce a figure from another publication (even one of your own) you must obtain permission from the **copyright** owner (usually the publisher, but see the section on **permissions** for details). Many journals require evidence that permission has been obtained, so sort this out in good time before you plan to submit.

When preparing a paper, figures are always presented separately, at the end (for print copies) or in a separate file (for electronic). Even though your word processor will allow you to embed figures in the text, you should not do so. Some journals also require figure legends to be submitted separately from the figures. (This convention dates back to old printing technology in which text was typeset separately and figures were then slotted into the pages. Although this is now obsolete, some journals still request it, and obeying their request shows that you have, at least, read their instructions which will, no doubt, please the old-fashioned editors who still require it.)

Most journals do not use colour printing for papers, and those that do (e.g. *The Lancet* has gone technicolour) will convert your figures into their colour scheme. Graphics should therefore be prepared in black and white. Some journals charge to include colour photographs – check the instructions for details.

Many software packages such as Excel and Lotus allow you to prepare simple figures. However, if you want to add error bars or use more sophisticated graphics

you will need specialist software. Remember that figures are usually produced larger than they will appear in print, so labels, in particular, must survive reduction. The default settings for label size on programs such as Excel or PowerPoint are designed for printing on A4 (or 8" × 11") paper or preparing slides, so they are usually too small.

Before spending a lot of time preparing your own graphs, check the formats acceptable to the journal. It may save a lot of time to get graphs drawn by a professional illustrator who can supply formats such as .eps files which can be submitted electronically to journals, or high quality glossy prints suitable for printing.

If you are planning a budget for getting a paper published, remember to include the cost of preparing figures and for copyright charges (if you want to reproduce published figures). It may often be quicker and cheaper, and the results certainly more appealing, to get figures professionally drawn than to expect investigators or writers to produce them.

## ■ First author; see order of authors

## ■ Footnotes

Most medical journals do not allow footnotes. The only exception is that some journals use footnotes to acknowledge funding or to list study group members who are not identified individually on the by-line. (However, do not assume that listing names in a footnote means that these individuals do not need to fulfil authorship criteria – see **by-lines**, **order of authors** and **contributorship vs. authorship** for more details on this tricky area.)

Another possible exception is if new data emerge after a paper is typeset and you want to add an update to the proofs. Rather than re-setting large sections of text, or renumbering references, the journal might prefer this to appear as a footnote – although, in these days of computer typesetting, this is probably needlessly old-fashioned.

Journals of law or medical ethics, on the other hand, may positively encourage footnotes. The rule, as always, is to check a recent copy of your target journal. If footnotes are permitted, check how these should be included in a manuscript or electronic submission.

Some people use the 'Endnote' function of Word to produce reference lists, although I find dedicated bibliographic software far more efficient. If you have used either of these, check that this does not mess up an electronic submission.

## ■ Formats

Always check your target journal to see what types of articles it accepts. It is a surprisingly common mistake to identify a journal by its readership or impact factor and to ignore the fact that it simply never publishes the type of paper you have prepared.

Even if a journal publishes the type of article you have in mind, check whether it

considers unsolicited manuscripts. Many journals publish only commissioned **editorials** and opinion pieces, so unsolicited ones can be hard to place. Others will not consider unsolicited review articles. The best strategy is to make an initial enquiry to the editor to see if you can interest him/her in your idea.

A few journals will not consider editorials or non-systematic reviews from authors with competing interests. Other, and to my mind more enlightened, journals regard transparency as the key and try to ensure that any potential **conflict of interest** is stated so that reviewers and readers can decide for themselves. Honesty is definitely the best policy – all authors should be prepared to disclose potential competing interests both financial and personal – but bear in mind that this might bar you from publishing certain types of articles in some journals.

## ■ Freebies / ‘throwaways’

Freebies (or ‘throwaways’) are medical newspapers such as *GP* and *Pulse* in the UK, and *Family Practice News* in the US. They are funded by advertising, sent to large numbers of doctors and quite widely read. They often contain short, practical review or educational articles as well as news items but they virtually never carry original research and rarely accept unsolicited items. If you want to write for the freebies you should contact the editor directly with your ideas, but you should not plan to publish your research this way. However, if your findings are truly earth shattering, or you want to publicise an event or initiative, you might consider issuing a press release in the hope that it will be used in a news item.

# G

## ■ Galley proofs

Strictly speaking, a galley proof is the initial proof stage when text is set to the correct line width but not made up into pages. On a galley proof the text appears as a single, uninterrupted column and the figures and tables do not appear in their final positions. Electronic typesetting has made this stage almost redundant. In most cases, authors receive page proofs, which have the text laid out into the journal’s usual page format with tables and figures in their correct places.

These days, the only items that sometimes appear as galley proofs are letters. This is because correspondence is usually squeezed into journals at the last minute, so the number of letters that appear in each issue will depend on how much space the articles occupy. Journal editors may therefore get authors to approve galley proofs of letters and then make up the journal pages when the rest of the issue is finalised.

As letters rarely contain figures or tables, and are often short, this usually poses no problems, so you can treat them like page proofs.

For some reason, some people continue to refer to all proofs as galley proofs (or, to show how well they think they know the jargon, simply as 'galleys'). So that you do not fall into this trap (and as I'm feeling pedantic, you will find details about handling proofs under 'P' for **proofs (page proofs)**). Incidentally, as I'm being pedantic, you might like to know that the word galley refers to the rectangular tray into which metal type used to be set, not an ancient ship.

## ■ Ghost author(s)

A ghost author is somebody who qualifies for authorship but is not included in a publication's author list. The occurrence of ghosts is bad for everybody concerned. It deprives the ghost author of recognition and it misleads readers about who did the work. The most common cause of ghosts is sponsors trying to underplay their involvement in studies by limiting the number of company authors, but authors may also be omitted because of professional (academic) rivalry.

The best way to avoid ghost authors is to agree authorship criteria early in the research process. When the study is complete, the criteria should be checked to make sure that everybody who qualifies is included in preparing the publication(s).

Ghost authorship should not be confused with ghost writing – a term sometimes used when a medical writer, who does not qualify for authorship, assists with a publication but it is not acknowledged – read on for further details.

A study of ghost authorship, which looked for people who were named on a study protocol but not on the publication, found that statisticians suffered this spectral fate more often than medical writers.

Gøtzsche PC, Hróbjartsson A, Johansen HK *et al.* (2007) Ghost authorship in industry-initiated randomised trials. *PLoS Med.* 4:e19.

## ■ Ghost writers

This term is sometimes applied to a professional medical writer who has not been involved with a study but who helps develop a publication – in particular, by preparing the first draft. The term is unfortunate as it implies that the writer's identity is not revealed. However, getting help from a professional writer is no more shameful than getting advice from a professional statistician and the involvement of a writer should not be confused with questions about competing interests or of sponsors trying to exert undue influence over publications. It is therefore important that the writer and their source of funding should be identified (usually in the **acknowledgements** section) which effectively exorcises the paper.

The question of whether a writer qualifies as an author is a matter for judgement. Unless a writer has contributed to the interpretation of the data and is prepared to take public responsibility for the research (not just responsibility for how the publication was prepared) they will not meet the **International Committee of Medical**