

NUAP (no unnecessary acronyms please)

Acronyms that refer to methods are often useful but not always appropriate. Here are some guidelines.

You have just developed and characterized a new method that you think researchers will find interesting and valuable. As you are writing a paper, you decide, 'Let's give the method a clever acronym, so people will remember it'. This is often a good instinct. Acronyms can change a cumbersome description (think, matrix-assisted laser desorption/ionization) to a memorable short word that is easily recognized (MALDI). If your method becomes popular, the community will have a simple way to refer to the method in papers and presentations. The audience, in turn, will understand exactly what method was used in the work being described.

The use of acronyms also simplifies literature searches for papers that apply the method. In fact, researchers who for any reason decide not to call a popular method they used in their work by its common name or acronym may reduce the chances of their work being found in literature searches. New software tools in particular should always be named in some way (see our previous Editorial, "Software by any name" (*Nat. Methods* 6, 547–548; 2009)).

However, caution is called for in creating acronyms to describe methods; a new acronym is not always appropriate. If the reported approach involved using a series of standard, existing methods, an acronym to describe the workflow is generally not needed. If the method is novel but was developed to obtain an answer to a very specific research question and is unlikely to be used by others, an acronym is also unnecessary.

Furthermore, the acronyms of well-established methods should not be tampered with. Despite the importance of optimizing methods to improve efficiency and practicality, researchers who tweak an established method should not create a new acronym. The same goes for new applications of existing methods for which the method itself has not been altered. The proliferation of many similar-sounding acronyms to represent slight methodological tweaks is frustrating, as it is hard to keep track of how all the variants differ, and it actually cancels out the simplifying effect of creating the acronym in the first place. Moreover, it is unfair to the original methodological developer because giving each of the tweaks a different acronym trivializes the advance of the original work.

Exceptions can be made when the original developers themselves have modified the method or if another group has improved or changed the method in a non-trivial fashion; in these cases, a variant of the original acronym might be justified, where the old acronym is still recognizable in the new name. Still, the gray area is large. In cases where it is not clear whether a new acronym is reasonable, *Nature Methods* editors may solicit advice from the referees of a paper, but we reserve final editorial judgement.

Occasionally, even more complicated situations can arise. A single method may be published independently under two (or more) different acronyms. Sometimes one will win out over the other, and sometimes they will coexist, but this can be confusing for the field. Alternatively, a group publishing a paper using an unnamed but previously reported method—or an incremental adaptation of it—may be tempted to give it their own acronym. But naming a method implies ownership of the approach, and this can lead the wider community, unfamiliar with the history of a methodology, to act as though the group who assigned a popular acronym invented the method, while the original developer is dismissed or ignored. Authors should ensure that the original method developers receive proper credit regardless of who created the acronym being used.

Finally, when creating an acronym, some basic guidelines should be followed. The best acronyms are unique, easily pronounceable words that take the first letters of each of the words in the full name of the technique. Many researchers first come up with a clever acronym and then determine the description that fits it, often by taking the second or third or even fourth letters of the words in the full name of the method. This is not ideal; although it may be memorable, the meaning of the acronym will not be clear. Other acronyms are inappropriate on nonscientific grounds. It is also important to avoid spelling out common words or using acronyms that already exist in other scientific fields or in popular use. This will make information about your method easier to find using search engines.

Acronyms used sparingly and in the right circumstances can aid in communication. But overuse or improper use has the opposite effect. We hope researchers will find the right balance.