Method of the Year 2009 voting begins

We are now accepting nominations and collecting votes for the Method of the Year 2009.

It is difficult to dispute the idea that some methodological developments have the power to strongly influence the pace and direction of scientific inquiry. For each of the last two years, *Nature Methods* has celebrated this by selecting a methodology we felt had demonstrated the potential for such an impact.

In 2007, we picked next-generation sequencing, and this class of methods has already had a profound effect on the conduct of biological research. Only time will tell what the impact of super-resolution fluorescence microscopy—our choice in 2008—will be.

Last year, we invited you—our readers—to participate by nominating and voting for methodological developments. We are now halfway through 2009, and it is time once again to ask for your input. Just go to http://www.nature.com/nmeth/votemoy2009, log in using your free nature.com account or take a minute to request an account, and you can vote on a selection of methodologies or nominate a method yourself.

You may nominate any recent method or class of methods, published anywhere in the scientific literature, that you believe is likely to have a profound impact on future biological research. You are welcome to nominate a method that you yourself developed, but please acknowledge your connection to it.

We will take the results of the popular vote into consideration when choosing the Method of the Year 2009, and the votes will also serve as inspiration for picking the Methods to Watch that accompany it. So start thinking about methods to nominate, and then go to http://www.nature.com/nmeth/votemoy2009 and vote for your choice of Method of the Year 2009!

Software by any name

Computational biologists are often tempted to avoid providing a named software implementation of their new algorithm, but resisting this temptation helps avoid difficulties later on and benefits the wider community of biologists.

Say you've developed a novel research method or tool. You will likely have a strong desire to give it a clever name while cherishing a hope that the method and name will become widely used—think "polymerase chain reaction." But if the method is a new algorithm implemented in software, you may decide to forego naming the software to avoid shifting readers' focus away from the algorithm itself.

Some readers may be asking themselves how a new algorithm is different from a new piece of software. In fact, although the two can be intimately related, there is a distinct difference. A new algorithm is a defined set of instructions for solving a problem in a new way—literally a new method. Software, on the other hand, although it is often required to implement an algorithm in a way that biologists can use, may instead be only a repackaging of existing algorithms to create a new tool.

New algorithms are communicated to the wider community using natural language supplemented with a series of mathematical operations, pseudocode or computer language. This should be done in enough detail that users can incorporate the algorithm into software of their own design. Although a software implementation of the algorithm is often used to test the algorithm's performance before publication, this software isn't necessarily provided to readers. And if the software is provided, it is often not named.

There are a number of reasons why the author of a new algorithm may be reluctant to name the software implementation. For one thing, people often expect named software to be maintained and updated. This expectation may not seem unreasonable, but the reality is that after the graduate student or postdoc who wrote the software has left the lab, he or she will often be unable to continue supporting it by tracking down bugs or adding new requested functionality. And the principle investigator, regardless of desire, is unlikely to be familiar enough with the code to do so. Changes in operating systems and hardware make maintaining software even more complicated. An algorithm, on the