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Scoping out *Nature Methods*

Nature Methods **welcomes manuscript submissions that describe new technology, tool and methodology developments across the spectrum of basic biology research. Here, we clarify our scope and highlight some areas of interest.**

With a name like *Nature Methods*, it is not unexpected that some researchers are surprised to learn that we restrict our editorial scope to method developments in the basic biological sciences. The reason for this is partly historical — in 2004, when the journal was launched by what was then Nature Publishing Group, *Nature* and the other Nature-branded research journals focused mainly on biological research. It is also partly a reflection of our desire to maintain a scope that is distinct from our sister journals, and of the expertise and interests of the editorial team. Although biological methods have progressed dramatically over the past 19 years — a 2004 issue looks very different from a 2023 issue — the general aims and scope of *Nature Methods* have not strayed far from the original vision.

We continue to believe that highlighting, celebrating and championing the work of technology, tool and methodology developers in the often messy but fascinating world of basic biology is important. Such advances may also support translational, clinical and applied research — but our focus is on fundamental method development, and not on approaches that are geared toward further downstream applications. We consider methods whose main potential application is diagnostic, therapeutic (including drug discovery) or otherwise applied to be out of scope.

That said, a not-insubstantial number of submissions that we consider straddle a fine line between being in scope and out of scope. Taking genome engineering as an example, we have published many papers that describe new CRISPR tools or methods for detecting off-targets (including one in this issue). However, it is unlikely that anyone would dispute that a major reason for the high interest in CRISPR technology is due to its potential therapeutic applications. We would consider a manuscript that applies CRISPR for a solely therapeutic purpose to be out of scope, no matter how potentially impactful that work may be. But a manuscript that describes a CRISPR method or tool development with strong potential utility to questions in basic life science research would be within scope.

The fields of chemistry, physics and computer science have contributed methods and tools for biological research in a major way, and we welcome such submissions. However, authors should be aware that we look for a well-developed basic biology application when selecting manuscripts to send for peer review (*Nat. Methods* **19**, 771–772; 2022). We believe that showing such an application is the best way to convince our mainly biologist readers that a method is worth adopting in their own work. We do occasionally make exceptions for highly novel and potentially impactful developments if a strong benefit to biological research can be clearly articulated. We consider method developments that are primarily for applications in chemistry, physics and other areas to be out of scope.

From genomics to neuroscience, structural biology to microscopy, and computational biology to immunology, our editorial team's scientific expertise covers a broad range of techniques and areas of basic life sciences research. Although our daily tasks have us digging into the technical details of manuscripts, our work is nevertheless inspired by 'big' questions and problems that go far beyond basic research. For example, methods that are intended to tease out how the complex network of cells in the brain function together may later generate knowledge that can help to treat brain disorders. Methods to rapidly solve the structure of large protein complexes may generate models that will be used to help to design more effective drugs. Sensitive and quantitative technologies to detect proteoforms or metabolites may also enable early disease diagnosis and intervention. Much of the inspiration — and funding — for basic method-development research stems from the desire to improve human health. It is therefore not startling that most of the method and tool papers we have published have a biomedical bent to them.

There are other big problems beyond human health, though — particularly the health of our planet, which has recently become another major source of motivation for our journal. We are particularly inspired by the UN's Sustainable Development Goals of climate action (goal 13), life below water (goal 14) and life on land (goal 15). We are keen to support fundamental method development in ecology, microbiology and, particularly, in ocean sciences, given the importance of the ocean in regulating climate and the importance of including biological processes in climate models (*Nat. Ecol. Evol.* **7**, 171; 2023). We welcome submissions of laboratory-based techniques, field-based methods, and computational tools for data analysis in these areas.

Our Article and Brief Communication formats (*Nat. Methods* **17**, 751; 2020) are dedicated to methods and tools for generating (including preparing samples, instrumental developments and data collection strategies) or analyzing data. Our Analysis (which we define as performance comparisons of established tools or methods) and Resource (which we define as collections of new tools or reports of datasets of broad interest) formats further support our overall mission of advancing fundamental biological research.

We are sometimes confused with our sister journal *Nature Protocols*. Although our names are similar, our scopes are quite different. Whereas *Nature Methods* focuses on publishing novel methods and tools for biological research, *Nature Protocols* publishes protocol papers describing step-by-step procedures for techniques that have previously been reported. Another sister journal with a similar name, *Nature Reviews Methods Primers*, publishes practical, review-like primer articles in the life and physical sciences.

We leave potential authors with some advice: familiarize yourself with the aims and scope of a journal before you submit your manuscript. If your work may be of interest to both chemists and biologists, for example, or to both basic researchers and translational researchers, tailor your introduction in accordance with the aims of your target journal. If still in doubt, presubmission inquiries or informal chats with editors (*Nat. Methods* **18**, 221; 2021) are great ways for authors to learn whether their manuscript fits the editorial scope of a journal.

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