Dear author,

Consider this: a research scientist submits a manuscript to a journal. The topic and advance seem to be a perfect fit for the journal’s scope. But the manuscript is summarily rejected without review, on the grounds that the work is too specialized and not well suited to the journal. This familiar-sounding scenario begs the question, “What is well suited to that journal?”

In the case of Nature Medicine, now entering its tenth year, the answer is not trivial, and the discrepancy between authors’ perceptions and editors’ judgments may cause some confusion. The difficulty lies in defining the breadth of a journal and its criteria for publication, given the continually evolving nature of scientific research as a function of advances in knowledge and technology. Nature Medicine was launched in January 1995 to provide a forum for “papers that bridge the gap between cutting edge biological research and more clinically oriented human investigation” (Nat. Med. 1, 1; 1995). Amidst rapid progress in molecular medicine, rational drug design and the translation of basic research findings into the clinic, Nature Medicine sought to fill an important niche as a cross-disciplinary biomedical journal devoted to publishing fundamental research findings with insight into the mechanisms of human disease. In 1995, that meant publishing studies on gene therapy for cystic fibrosis, vaccines for cancer or HIV, and transplantation of pig organs, to name a few. But it also meant including papers on the purification and expansion of Schwann cells, stimulation of tissue-type plasminogen activator by amyloid-β peptide analogs, and imaging of centrosomes in inseminated oocytes. All of these latter papers were in vitro studies, and in some cases were purely descriptive. As research tools and methods improve, however, criteria for publication accordingly become more stringent. Today, Nature Medicine might not accept such in vitro studies, but instead require supportive proof of their extrapolation to human disease and its treatment.

And so, to answer the original question: in 2004, to be well suited to Nature Medicine, a manuscript would ideally demonstrate novel insight into disease processes, with direct evidence of the physiological relevance of the results. Exceptions exist to every rule, but in general this prerequisite involves the validation of in vitro results using animal models of disease or data from human clinical samples. Also important is the demonstration of the relevance of an animal disease model to its human counterpart. We may know how to cure cancer in the mouse, but to validate therapies for humans (and not repeat past errors of translation), we ask for robust confirmation that mice, rats or primates are suitable substitutes.

Developments in technology have driven considerable change in biomedical research and concomitant change in the pages of Nature Medicine. Molecular advances in stem cell biology and apoptosis, as well as research on cardiovascular disease, angiogenesis and obesity, are now prominently featured in the journal. We anticipate that the increased emphasis of funding and effort on translational research in humans will soon be reflected in our pages. Technological progress also drives reassessment of how an advance is measured. In view of the ubiquitous application of microarray and proteomic technologies to disease-related questions, Nature Medicine now requires that ‘profiling’ papers provide in vivo validation of their conclusions. Similarly, a paper describing a new therapeutic agent must also demonstrate the molecular mechanism of action of that agent in vivo.

Our intent is to promote transparency of the internal review process of submissions to Nature Medicine. Decisions are not irreversible, and we realize that errors can be made. We have an appeal process to address authors’ dissatisfaction with editorial decisions, but reconsideration of a manuscript must proceed on the basis of science, rather than opinion. Reviewing both sides of an argument can be time-consuming and so the conclusion of an appeal may take considerably longer than the original decision. We ask for forbearance in this regard. While consideration for external review is a selective process, our aim is to encourage authors to submit their best work, thereby maintaining the high standard to which our impact factor attests.

We often send standardized letters to notify authors of our decisions. In the past, the number of submissions in relation to the number of editors did not allow us the time to customize every decision, and a form letter, although impersonal, is a tool for expeditious decision-making in an often lengthy process. As of January 2004, Nature Medicine now has five full-time manuscript editors dedicated to Brief Communications, Research Articles, Letters, Commentaries, Perspectives and Reviews, in addition to the editor of Technical Reports. We anticipate that this change will facilitate rapid processing of manuscripts and improve our service to authors.

Nature Medicine celebrates its ten-year anniversary in 2004. Our mission as editors is to maintain its standing as the premier journal in biomedical research, for which we have our esteemed authors and reviewers to thank. As we enter our second decade, we hope to continue to provide an invaluable resource to the scientific community and look forward to the fresh insights and discoveries that the dynamic field of biomedicine may bring to our pages.