

# Leading Edge: Pioneering a New Direction for *Cell*

By the time you reach this page, you will probably already have noticed something different about this issue of *Cell*; it has a new design. Some of the differences are substantial, others are more subtle, but as these are the first modifications to the look of the journal in nearly 20 years, small changes in layout and typography add up to big steps for *Cell*. The redesign includes, among other things, a new look for the cover, addition of color to the articles to make the text easier to navigate, an updated typeface, and a consistent style for graphic figures with the help of a new in-house illustrator. The core focus for the new design elements has been to revitalize the presentation of the scientific content while maintaining the classic look that is one of the distinguishing hallmarks of *Cell*. But significantly more important than the design changes are the changes in content that come with the debut of the new Leading Edge section.

What can you expect to find in Leading Edge? In addition to Previews, Minireviews, and Reviews, we are introducing a number of new article formats designed to highlight the social, political, economic, and ethical contexts that surround biomedical research worldwide. Some of these new Analysis, Commentary, and Essay articles will be written by leading scientists or policy-makers and others by professional science writers. In keeping with *Cell*'s emphasis on the full story, these will not be brief news alerts but rather will provide in-depth, thought-provoking evaluations of important policies and trends. For example, in the three Commentaries in this issue, Inder Verma and colleagues discuss the development of life science research in India, Kai Simons and Carol Featherstone preview the launch of the European Research Council in 2007, and Bruce Alberts offers an impassioned plea to rethink our approach to introductory science teaching. In an Analysis article, science writer Laura Bonetta discusses the Human Cancer Genome Project, detailed plans for which are to be announced by NCI/NHGRI in the next few weeks. And, in his Essay, J.B. Gurdon discusses a favorite paper from the 1920s in which two amateur naturalists revealed the existence of the first maternal gene effect mutation by examining the coiling of an aquatic snail's shell. Going forward, Leading Edge will also publish Correspondence submitted in response to published articles to encourage an interactive dialog between authors and readers.

Over the past year, we have also introduced some new research article formats. The new Resource highlights significant technical advances or large-scale data sets that are likely to be applicable to a diverse range of disciplines and therefore of general interest to a broad group of scientists. Matters Arising report the important, but not always publicized, research findings that provide a robust data-based challenge to a conceptual advance originally published in *Cell*. And the newest of the three categories, Theory, presents new testable and predictive models that result from the synthesis of published data. These new formats complement the traditional *Cell* Research Article which, as always, will highlight major conceptual advances that change how we think about a biological process. Now thought-provoking findings of broad interest, be they short or long, conceptual or technical, challenging old dogma or establishing new, can all find a suitable home in the pages of *Cell*.

Why is *Cell* taking these steps to expand the scope and quantity of its content? Clearly, interest in biological research is no longer limited to academic scientists. Stem cells, genetically modified foods, avian flu, scientific conflicts of interest, and even scientific publishing models are often in the pages of the popular press because these issues have significant implications for society at large. In return, societal contexts feed back and affect the research pursuits of scientists. We therefore think it is increasingly important for scientists to have access to insightful critical evaluations of the broader issues that impinge on their work.

But there is a second reason for the changes, and it relates to communication between scientific disciplines. In the face of increasing time demands, an expanding literature, progressive scientific specialization, and electronic access, the average reading behavior of scientists is changing. Scientists tell us that they are increasingly forced to focus on reading only those articles that directly relate to their own research. While this trend is certainly understandable, and perhaps unavoidable, it is also somewhat troubling. Significant advances in scientific understanding frequently come at the intersection of independent lines of research from different disciplines. *Cell*'s goal is to provide a counterforce to the increasing specialization by helping readers efficiently keep up with major conceptual advances across the breadth of biology. By combining an editorial filter to highlight broadly interesting conceptual advances with a narrative article format that gives authors an opportunity to present and interpret their findings in a manner accessible to readers outside the immediate field, we hope to encourage curiosity-based reading and promote fruitful intersections between diverse biological disciplines.

We hope you will find the new content thought provoking and enjoyable to read and that the new look and scope of *Cell* helps you rediscover the value of spending some time perusing each new issue in its entirety. We believe that if you do, at some point you will happen upon a new idea, a valuable technique, or an important policy initiative that advances your own research program in an unexpected way. This, in essence, is the underlying aim behind all of the changes we have made, to ensure that in this rapidly evolving research environment, *Cell* fulfils its founding mandate to contribute to the progress of science by promoting interdisciplinary communication.

**Emilie Marcus**