

What's in a name?

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Last year*, we commented on the emerging concept of 'chemical biology', and our sense that the community of researchers in this field had begun to define itself in the pages of *Chemistry & Biology*. Since then, chemical biology seems to have become a very popular term — it is frequently discussed by a wide range of researchers including organic chemists, biochemists, molecular biologists and cell biologists, and the phrase is perhaps particularly familiar to reviewers of grant applications. But the field of chemical biology is still new, and poorly defined, and the words mean different things to different people. To some, this vagueness is not worrying — one of the most visible researchers in the field recently commented to one of us that although the name of his institute has an unclear meaning, at least it sounds good.

Chemical biology is, indeed, an attractive term. But it seems to us important to define it, if only to gain a clearer sense of what it is not. All the papers published in *Chemistry & Biology* have, in our opinion, reported studies in chemical biology. The work we have seen in the journal in the past year has been notable for its variety; it has touched on almost every area of biology, and used a huge variety of synthetic, structural, analytical and biological techniques. What is it that makes these diverse studies part of the same field?

Part of the answer lies in the aim of the research. Researchers in chemical biology come from a wide range of chemical disciplines, but all use their varied skills to approach problems in biology. The term 'molecular biology' must have seemed similarly vague when the (essentially chemical) tools of that discipline were new to biological researchers. Chemical biology powerfully complements molecular biology; while molecular biology allows the function of biological molecules such as proteins and nucleic acids to be altered by mutation, chemical biology directly alters the function of biological molecules by chemical means, for example by using small molecules or designed molecules as ligands. To us, this is the core of the field of chemical biology.

This description of chemical biology implies that it is a field entirely populated by chemists; biologists appear to be excluded by their lack of chemical training. This is largely, but not entirely true. Some biological disciplines — notably structural biology and molecular biology — provide insights into the chemical nature of biological processes, or ways to produce novel ligands that can be

used as biological probes, and these disciplines therefore provide natural routes into chemical biology. For biologists with other types of training the transition is harder. Yet the intense interest in the field is shown by the fact that many biological departments and laboratories are attempting to acquire the necessary chemical skills by hiring organic chemists with a commitment to biological research, and a few pioneers from diverse biological disciplines are even taking the major step of learning 'hard-core' synthetic organic chemistry themselves. The variety and scope of the field, and the diversity of researchers working in the area, seems certain to increase as time goes on.

In recognition of the increasing importance of chemical biology, Current Biology Ltd, our publishers, have recently decided to launch a new member of the popular Current Opinion series, *Current Opinion in Chemical Biology*, edited by Donald Hilvert and Steven Ley. Although this new journal will be entirely separate from *Chemistry & Biology*, the combination of these two journals should be a powerful resource for our community. We wish Don and Steve the best in their new venture, which seems certain to be a success.

The New Year has brought several changes to the organization of *Chemistry & Biology*. A number of editorial board members have retired, having completed their two-year term of office, and we have taken the opportunity to add some new expertise in a variety of areas: Juli Feigon, Bernd Giese, Barbara Imperiali, Josef Jiricny, Laura Kiessling, Thomas Kodadek, Steven Ley, Garry Nolan, William Pryor and Lars Terenius have all agreed to provide advice and input in their respective areas. We are most grateful for the past support of the retiring board members, and for the enthusiasm of the new ones.

A more noticeable change for many of our readers and authors is that the journal is now produced in London instead of San Francisco. This change brings *Chemistry & Biology* into close proximity with its sister journals (covered each month in Elsewhere in Biology), *Current Biology*, *Structure* and *Folding & Design*. Although the move has had its traumatic aspects for our editorial staff, we are proud that the service we deliver to our authors has not suffered: manuscripts have been handled with the same speed and skill, and produced to the same high quality, on both sides of the Atlantic. We would like to pay particular tribute to the outgoing in-house editors, Michael Rossner and William Wells, and to Jacqueline Bruszewski-Walters, the outgoing editorial coordinator, for their commitment

* Schreiber, S.L. & Nicolaou, K.C. (1996). The best is yet to come. *Chemistry & Biology* **3**, 1–2.

to the smooth transfer of the journal in difficult circumstances. We are also grateful for the efforts of the new in-house editors, Drs Emma Roberts and Frances Jackson, and the rest of the team in London who have had the very challenging task of getting up to speed with perhaps the fastest rapid-publication in print. Drs Rossner and Wells, in particular, have taken a valuable part in shaping the journal, and we are extremely sorry to lose them. Happily, Dr Wells will continue to contribute to the journal in the 'Innovations' column, introduced in this issue, which focuses on the new technologies developed in industrial settings.

Finally, we are pleased to announce that, beginning with this issue, *Chemistry & Biology* will be indexed by Medline/Index Medicus. Medline has increasingly high standards for listing new journals, especially those that do not cover core medical subjects, and this decision thus recognizes the quality and general interest of the journal. It is also an important step in our campaign to ensure that papers in *Chemistry & Biology* are as widely visible as possible. All *Chemistry & Biology* articles published to date are, of course, available on the World Wide Web via BioMedNet at <http://biomednet.com/cbiology/cmb.htm>; the site provides both abstracts (which are free to all visitors) and full text (for which there is a charge for non-subscribers).