

Furthermore, the journal is taking the bold step of supporting electronic submission and the review of manuscripts by electronic mail. E-mail is a concept whose time has come, promising to reduce the time and costs associated with the editorial process. There will be glitches of course, but ultimately we will all be grateful to those who force us to make use of this efficient new technology.

Despite my concern about the continuing proliferation of new journals, I am confident that *Redox Report* will succeed. I hope it retains its refreshing personality in the process. □

Joe M. McCord is at the Webb-Waring Institute for Biomedical Research, University of Colorado Health Sciences Center, Denver, Colorado 80262, USA.

Science and art of biomolecules

Colin Blake

Acta Crystallographica Section D: Biological Crystallography. Editor-in-chief J. P. Glusker. *Munksgaard*. 6/yr. Dkr1,985 (institutional); Dkr550 (personal).

Nature Structural Biology. Editor Guy Rid-dihough. *Nature Publishing, New York*. 12/yr. \$495, £300 (institutional); \$195, £125 (personal).

Chemistry and Biology. Editors Stuart L. Schreiber and K. C. Nicolaou. *Current Biology*. 12/yr. \$480 (institutional); \$120 (personal); \$60 (student).

OF the twin poles of biomolecular science, what we now call molecular biology and structural biology, the latter is a particularly multidisciplinary field bedevilled by a widespread literature. These three journals represent a reasonably orthodox selection of the important part of this literature. Two are the offshoots of long-established journals that have expanded recently into specialized areas to cover the burgeoning field of structural biology, and one is entirely new, devoted to "crossing the boundaries" between medicinal chemistry and the biomolecular sciences.

Acta Crystallographica was established nearly 50 years ago to focus international discussion on the problems of crystallography. At the time, crystallography dealt almost entirely with 'small' molecules, but even the first volume had a short paper on myoglobin. So the appearance now of *Section D* of *Acta*, subtitled *Biological Crystallography*, seems rather late in the day. Virtually unchanged in format from that adopted by *Acta* since its inception, *Section D* has the austere look of the essentially technical journal that it is. Having decided to seek its readership through the quality of its contents rather

than glossy display, its one concession to modern times is a sprinkling of discreet colour plates. *Section D* deals mainly with full research papers and contains a few short communications and an occasional editorial article or review. The papers are mostly devoted to the technical development of biological crystallography as a branch of applied physics and to the results thereby obtained. The quality of this literature is high and the expectation is that any significant advance in X-ray techniques will appear first in *Section D*. To that extent, the journal accurately plots the technical advance of what is still the most powerful tool in structural biology. A particular highlight of *Section D* is the proceedings of key conferences, published as a complete series of full-sized refereed research papers. Those on direct methods and crystallization of biological macromolecules are essential reading for those in the field. In keeping with the image of *Acta*, *Section D* is expensive, and publication is slow (6 months on average), but it is a uniquely valuable publication.

Despite the merits of *Section D*, one has to turn elsewhere for the latest results and the biological context of structural analyses. This 'elsewhere' could be any of half-a-dozen journals, but one of the first places to look would be *Nature Structural Biology*. Splitting off two years ago from *Nature* to provide space for the increasing number of papers in structural biology, it has created a lively and handsome home for some of the most important recent papers in structural biology. It has a *Nature*-like format of 'Editorial', 'News and Views', 'Reviews' and 'Correspondence' sections, followed by 7-8 full original contributions. The lavish use of colour is a particular advantage in getting the structural information across. The journal is, however, in competition with other established periodicals, even possibly from within its own stable. Its News and Views articles on the striking horseshoe ribonuclease inhibitor and the DNA gripper transcription factor refer to their original publication in *Nature*: either *Nature* has greater drawing power for the very best papers or it exercises preferential rights over its junior. Nevertheless, with a time of 2-3 months from submission to acceptance, an offer of free colour illustrations, a modest cost and the *Nature* prestige, *Nature Structural Biology* attracts many good research papers, making it one of the few really essential journals in structural biology.

Finally *Chemistry and Biology*. First published a year ago, it has the stated aim of promoting a chemical approach to understanding the biomolecules revealed by structural and molecular biology. The approach is by way of medicinal chemistry, so toxicity, disease and structure-based drug design loom large among the topics covered. In design, the journal is close to its stable companion *Structure*, a competi-

tor of *Nature Structural Biology*. It begins with a review ('Crosstalk'), intended to provoke, and this is followed by reviews and mini-reviews and 4-6 full research papers. Colour is fairly widespread but appears mostly in cartoons and modelled structures: the thrust of the journal is on the use and understanding of biological structures rather than on their experimental determination. This emphasis can make the science seem a little soft at times, particularly in comparison with *Acta*, and sometimes the artwork seems to take over the science. On the other hand, the understanding and exploitation of biomolecules can be rightly claimed to constitute the most challenging area of biomolecular science, and *Chemistry and Biology* may provide an important focus for capitalizing on the enormous investment being made in structural and molecular biology. Offering almost instantaneous publication at a relatively low cost, *Chemistry and Biology* deserves to do well. □

Colin Blake is at the Laboratory of Molecular Biophysics, University of Oxford, Rex Richards Building, South Parks Road, Oxford OX1 3QU, UK.

Fusion science?

John Armstrong

Molecular Membrane Biology. Managing editor Jack A. Lucy. *Taylor and Francis*. 4/yr. £97, \$160 (institutional); £49, \$80 (personal).

THE operative question today for any new journal is not "Should your library take it?" but "Which journal should you drop in its favour?". In this respect *Molecular Membrane Biology* is off to a good start, because it is a reincarnation of *Membrane*

IMAGE
UNAVAILABLE
FOR COPYRIGHT
REASONS

Membrane system: electron micrograph of rough endoplasmic reticulum.

Biochemistry. The change of name reveals much of the editors' laudable intention: to cover membranes "from the biophysics of membrane components to the cell biology of their functions".

This is a bold attempt at tackling a vertical section through biology. The increasing progress 'downwards', as cell biology falls prey to molecular methods, means that the subject is becoming more physical. A good example is the process of fusion of vesicles with their target membrane in eukaryotes: most of the participating proteins are probably known, but understanding how they cause lipid bilayers to fuse is a distinctly biophysical problem. So there is a clear niche for a journal that can speak to biophysicists, biochemists and cell biologists in the same language.

Is *Molecular Membrane Biology* such a voice? Perhaps not yet, but there are encouraging signs. The balance of papers so far, understandably considering the journal's origins, seems skewed away from the cell-biological end (four random issues contain three light- or electron- micrographs of cells), but there have been good contributions on membrane protein structure and assembly. The general format of papers is conventional apart from having

experimental procedures at the end, an irritating feature copied from some trendy journals. (Whose idea was it that a result is best appreciated if the reader has no idea how it was obtained?) Time from acceptance to publication is 4-6 months, creditable considering both the apparent absence of electronic submission and the quarterly publication rate (it is the editors' avowed intention to increase this frequency).

One questionable policy was the decision to devote an issue to a meeting: not only did the issue appear some ten months after the event but the publishable contents of the meeting would presumably have appeared anyway. Incredibly, the first page is a verbatim welcome from the conference manager, beginning "Good morning, I'm Phil. . ." and ending "I will not take any more of your time. . .".

Such lapses will doubtless not recur. *Molecular Membrane Biology*, unlike many new journals, is a good idea, and with vision and ambition it should earn a precious place in the library. □

John Armstrong is at the School of Biological Sciences, University of Sussex, Falmer, Brighton BN1 9QG, UK.

those 'ologies' whose names are evidently too venerable to utter: h*st*l*gy and c*t*l*gy. So, although not stated explicitly, the chief criterion for publication in *Cell Vision* appears to be that vision may not be practised on cells before they are dead. Those of us who choose to apply our vision to living cells should not feel smug, however, because the range and depth of information now obtainable from dead cells using the sophisticated techniques reported in *Cell Vision* are truly impressive. □

Graham Dunn is at the MRC Muscle and Cell Motility Unit, Randall Institute, King's College, 26-29 Drury Lane, London WC2B 5RL, UK.

Letters and paper

Mike Gidley

Carbohydrate Letters. Editor-in-chief Pierre G. Sinay. *Harwood Academic*. 6/yr. ECU54, \$65.

Cellulose. Editor-in-chief John C. Roberts. *Chapman and Hall*. 4/yr. USA and Canada \$230, Europe £135, elsewhere £145.

CARBOHYDRATES are structurally complex and diverse molecules that can have a profound and pervasive influence on life processes. They are increasingly attracting the attention of researchers in both biological and physico-chemical sciences, as confirmed by the appearance of these two new journals.

Dead cells give up their secrets

Graham Dunn

Cell Vision: Journal of Analytical Morphology. Editor-in-chief Jiang Gu. *Eaton*, 154 E. Central St, *Natwick, Massachusetts* 01760, USA. 6/yr. USA \$125, Europe \$145, elsewhere \$150.

HUMPTY-Dumpty might well have said of the name *Cell Vision* that "it means just what I choose it to mean, — neither more nor less". The new journal's subtitle — *Journal of Analytical Morphology* — would seem to be more informative were it not that any paper submitted from the Great Beyond by the founding father of analytical morphology, D'Arcy Wentworth Thompson, would very probably be rejected by the editors. In fact, potential contributors to *Cell Vision* should know that its editor-in-chief does not use morphology in its defined sense, to mean the study of biological shape or form, but apparently takes it to signify the location of various molecular species in tissue sections and cell smears.

The clearest way of understanding which disciplines the journal serves is by scanning its contents. The editor-in-chief has himself reverted to this foolproof technique in the first issue of Volume 2, where he states that comprehensive review articles have covered the topics of *in situ* polymerase chain reaction (PCR), immunogold-silver staining, confocal microscopy, microwave technology and

antigen retrieval, while research and technical topics have included self-sustained sequence-replication-based *in situ* DNA amplification, reverse-transcription *in situ* PCR, computer-assisted cytopathological diagnosis and modified immunohistochemical procedures.

Overall, the review articles (4-8 pages) and technical articles (3-10 pages) are highly informative and lavishly illustrated (at only \$200 per colour plate) and the first issue seems to be a good laboratory manual for those wishing to experiment with *in situ* PCR, an exquisitely sensitive technique for detecting and locating foreign genes in tissues and cells.

Research articles (3-12 pages) have a strong bias towards clinical pathology, as does the editorial board, and case reports (1-6 pages) provide a forum for "morphologic observations on human or experimental samples, preferably using modern morphologic methodologies". The five editors have obviously put a lot of hard work into launching the journal, contributing no fewer than 16 articles, 9 proceedings and 15 abstracts of their own to the 6 issues that I scanned, but it is to be hoped that their Herculean effort need not be sustained as circulation increases.

During my survey it became clearer that "modern morphologic methodologies" refers to the latest cell- and tissue-labelling techniques descended from

IMAGE
UNAVAILABLE
FOR COPYRIGHT
REASONS

Roll-ups: paper manuscripts for recycling.

Carbohydrate Letters seeks to provide a home for new developments across the panoply of disciplines and covers all classes of carbohydrates. Papers are invited in camera-ready form to lessen delays between acceptance and publication. In practice, although some papers appear within a month of acceptance, most are published after a delay of six months or so. So far, the primary subject areas covered lie at the chemistry-biochemistry interface, with particular emphasis on synthesis strategies. The quality of articles is high and compares favourably with established journals in the field. A publication