Need for speed of transmission

David A. Brown

Synapse. Editor-in-chief John E. Johnson. Alan R. Liss. 6/yr. US \$240, elsewhere \$272.

Neuroscience Research Communications. Editor W. H. Gispen. Wiley. 6/yr. £85, \$150.

How many journals of neuroscience do we need? Well, there are about 11,600 members of the Society for Neuroscience. Suppose each writes (on average) one paper per year. Add on the fruits of the labours of those in Europe and Japan who are not members of the society, and we're talking in terms of around 20,000 papers a year, a number that is still increasing. Hence, ever more journals.

These two newcomers have two features in common: both cover 'general' neuroscience, and both are published bimonthly. In other respects they are totally different.

Synapse is a 'serious' journal: it has a prestigious (though almost exclusively North American) editorial board, and

Connecting up

Howard L. Weiner

Brain, Behavior, and Immunity. Editorin-chief Robert Ader. Academic. 4/yr. \$120, £83.

THE term 'psychoneuroimmunology' refers to the interfaces of the nervous, immune and endocrine systems as they are affected by behaviour and the environment. Although this is a somewhat difficult field to define, it appears that it has come of age.

The scientific basis of psychoneuroimmunology rests on the facts that there are receptors for neurotransmitters and hormones on lymphocytes, the nervous system and the endocrine system; that changes in nervous system electrical activity have been associated with immunological events; and that organs of the immune system are innervated by the nervous system. Given this wealth of connections, a variety of areas of investigation are possible. Furthermore, with increasingly sophisticated tools becoming available, an attempt can now be made to dissect the systems involved and isolate the factors which affect their functioning.

Brain, Behavior, and Immunity is designed to provide a forum for scientists working on these questions, and perusal of the four issues of Vol. 1 suggests that the journal is off to a good start. In general --NEW JOURNALS-

publishes full-length papers in proper typeset form. Its aims are to carry "articles dealing with all aspects of synaptic structures and function [including] neurotransmitters, neuropeptides, neuromodulators, receptors, gap junctions, metabolism, plasticity, circuitry, ion chemicals, patch recording, development, pathology, toxicology, etc" — a pretty comprehensive list, in which the "etc" seems a bit superfluous. Its principal competitors are therefore such publications as the Journal of Neuroscience, Neuroscience and Brain Research. In fact, it most closely resembles Journal of Neuroscience in format (double-column pages on glossy paper, but with slightly smaller print), and in content. There is, perhaps, a shade more emphasis on the neuroanatomical - not surprisingly, given the main interest of the editor-in-chief (J. E. Johnson of Johns Hopkins) - but less so than in Neuroscience.

I have a couple of niggles: review articles are accepted but these are not always separated geographically from research articles and are not clearly marked as such in the index; and the appearance of the journal would be improved if the publisher's staff labelled the figures, instead of leaving it to the whims of the authors.

the quality of the contributions is high, and they have come from scientists in a variety of disciplines, immunology, neurobiology, pharmacology and psychiatry among them. Some of the investigations are basically orientated, for example those dealing with somatostatin receptors on lymphocyte populations and innervation of the thymus gland. Others are attempts to study the interaction between

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different systems, such as the effects of hippocampal lesions and neuropeptides on immune responses. Others again are reports of such phenomena as impaired natural killer cell activity during bereavement and behaviourally conditioned enhancement of delayed-type hypersensitivity in the mouse.

The journal's standard of production is high, and each issue contains a stimulating editorial or comment. For those interested in psychoneuroimmunology, *Brain*, *Behavior*, and *Immunity* is an excellent medium through which to follow progress in this newly emerging discipline.

Howard L. Weiner is Robert L. Kroc Associate Professor of Neurologic Diseases at Harvard Medical School, and Co-Director of the Center for Neurologic Diseases, Brigham and Women's Hospital, Boston, Massachusetts 02115, USA. These points apart, I found the format attractive, and the papers I read were of generally good quality, no doubt in part because some members of the editorial board are doing their inaugural duty in publishing in it. The contents are indexed in *Current Contents* and *Index Medicus*, so potential authors know that their work may well reach its intended public.

Will Synapse succeed? At the moment, it is in the second division — not because



of the quality or variety of the papers, but because, with a bimonthly publication schedule and only ten of so contributions per issue, it just does not contain enough material to put it on the compulsory purchase list for hard-pressed libraries. Promotion to the first division of required reading must therefore depend on more papers and more frequent publication.

Neuroscience Research Communications is a different kettle of fish altogether. This is another publication of the 'quickie' variety, where authors have to produce oven-ready copy, either typed or on disk if they use Wordstar or WordPerfect (why so limited a software choice — haven't Wiley got other, more scientific, software?). It is printed on glossy paper, so photographs reproduce well.

The main competitor is probably Neuroscience Letters, which costs much more but appears fortnightly, is properly typeset and publishes quickly. Moreover, although it is uneven in content, it frequently contains some very good papers (probably because it's one of the most convenient places to send rejects from the prominent general-science weeklies). I cannot envisage Neuroscience Research Communications achieving that sort of status for a long time yet. My suspicion is that there is a place for a neuroscience equivalent to Biochemical and Biophysical Research Communications, but if this journal is to fill the slot it will have to move to a monthly schedule, and quickly.

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