book reviews

Healing in the genes

Molecular Therapy (American Society of Gene Therapy)

editor-in-chief Inder E. Verma Academic. 12/yr. \$245 (US, Canada), \$305 (elsewhere), \$150 (ASGT member), \$50 (ASGT associate member)

The Journal of Gene Medicine (European Society of Gene Therapy)

editors Olivier Danos, Kay Davies, Pierre Lehn & Richard Mulligan Wiley. 6/yr. \$380 (institutional), \$265 (individual), \$165 (ESGT member)

Genetics in Medicine

editor-in-chief Richard A. King Lippincott Williams & Wilkins. 6/yr. Institutional: \$439 (US), \$474 (elsewhere); individual: \$219 (US), \$254 (elsewhere); in-training: \$89 (US), \$124 (elsewhere)

Karin Sitte and Robert Williamson

Gene therapy became a buzzword of genomics in the 1990s, and is still a hot and sometimes controversial topic in medicine and the popular press. In spite of few clinical successes to date, and some widely reported dramatic failures, gene therapy seems to be as topical as ever in the new millennium. The emergence of two new journals in gene therapy, *The Journal of Gene Medicine* and *Molecular Therapy*, demonstrate that although the two established journals in the field, *Human Gene Therapy* and *Gene Therapy*, attract specialist manuscripts of high quality, there is room for competition in the field.

The new journals have been sponsored by gene-therapy societies (respectively in Europe and the United States) to communicate information faster and in a way claimed to be lacking in the existing journals. These similar publications contain many articles that have no more direct relevance to gene therapy than has any study of viral infection or gene expression. This reflects the stage of the field, where any research on experimental exogenous gene expression, or viral transduction, can be 'defined' as gene therapy. The editors and publishers clearly hope the field will take off but don't quite know how or when.

The Journal of Gene Medicine claims to be cross-disciplinary, and includes interesting interviews with prominent scientists in the field, industry updates covering news from gene-therapy companies, and lists of relevant patents. Additional information is available from the associated Internet resources, which include an online database of worldwide clinical trials in progress and free preprint access to all articles that have been accepted and are in press.

The new American counterpart, Molecular Therapy, is similar but strong on



methods, which it publishes as separate articles. It also includes up-to-date news and commentaries, with less emphasis on regulatory issues than *Human Gene Therapy*. The research articles are mostly on viral gene therapy with clinical applications, largely from American laboratories. For *Molecular Therapy* to prosper in the long term it may consider broadening its scope and including special features, something *The Journal of Gene Medicine* has accomplished with its Internet resources and journal format.

Clearly, the two established journals cannot rely on age and reputation alone. And the new journals will have the loyalty of their society members, who also provide a readymade subscription list that will attract advertisers. *The Journal of Gene Medicine* is attractive because its speed of publication is around two to three weeks from acceptance — as against three months for *Human Gene Therapy* and *Molecular Therapy*, and five months for *Gene Therapy*.

All four journals have good review articles, which are the most interesting pieces in many issues, as the significant or 'breakthrough' papers are published in high impact-factor journals such as *Cell, Nature Genetics, Science* or *Nature Medicine.*

Will there be enough research in gene therapy to justify the existence of four journals rather than two? The high degree of biotech interest in the field should sustain a lot of hope (and growth) during the coming decade. Let us hope it is justified by clinical usefulness some day.

Genetics in Medicine, a new clinical genetics journal sponsored by the American College of Medical Genetics, is in a different category, as each issue contains only a few articles, which are highly specialized and many quite long. The journal has not yet found its direction. The editors have not matched the crispness of the Journal of Medical Genetics, one of its two main existing rivals, or the scientific depth of the more clinical articles in The American Journal of Human Genetics. The interesting commentaries on ethics and communication are not even featured on the cover! There may well be a need for another

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medical genetics journal, but the editors should define its role. One less attractive feature of the journal is its unusual \$30 per page cost to authors.

http://www.apnet.com/moltherapy
http://www.wiley.co.uk/genmed

http://www.wney.co http://lww.com/GIM

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Reborn for a new era

Genesis: The Journal of Genetics and Development

editors Richard Behringer & Terry Magnuson Wiley. 12/yr. Institutional: \$1,395 (US), \$1,617 (outside N. America); new institutional subscribers, \$995 & \$1,217, respectively; individual: \$60 (US), \$132 (outside N. America), to those whose libraries subscribe

Rudi Balling

"Genesis"— What a name! The new journal was 'reborn' in January this year, as volume 26, number 1, from *Developmental Genetics*. According to the editors, *Genesis* wants to break away from the past and leap forward into the functional-genomics era.

The chances of success in this are good. Many of the exciting breakthroughs forming the toolbox of functional genomics come from the labs of developmental biologists: transgenics, chimaeras, stem cells, chemical mutagenesis.

Genetics was extremely powerful in dissecting developmental processes. But, as the editors Richard Behringer and Terry Magnuson say: "Understanding the function of genes and the roles they play in complex biological processes needs more than a study of primary model organisms". Indeed, the first



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issues live up to this assessment: in addition to articles on mice, fruitflies, zebrafish and the roundworm *Caenorhabditis elegans*, we find interesting papers on amphioxus, pigs, turtles and the marine ciliate *Euplotes crassus*.

Of course, there are other journals that cover developmental genetics, such as *Development*, *Mechanisms of Development* or *Development*, *Genes and Evolution*. However, *Genesis* seems well positioned in this journalistic ecosystem. An interesting feature is the "Technology Reports". These cover topics such as the latest tricks for gene targeting in mice or gene silencing in flies, as well as explaining the relevance of the Swiss–Prot database to developmental research — from the sequence of nucleotides to the sequence of pathways.

Genesis seems to have the mix of ingredients required for survival among journals of functional genomics: dedicated editors, rapid publication and an anticipation of the direction of an emerging field. I am sure I will revisit many of the articles I read — some of them to help my students design experiments, some to help me take advantage of the power of the comparative approach.

The editors encourage researchers studying "non-traditional" organisms to submit their papers to *Genesis*. I encourage those with a curiosity in the latest developments in functional genomics to look into the journal.

http://www.interscience.wiley.com/jpages/1526-954X Rudi Balling is at the Institut für Säugetiergenetik, GSF – Forschungszentrum für Umwelt und Gesundheit, Ingolstädter Landstrasse 1, 85758 Neuherberg, Germany.

Psychic secretions

The International Journal of Neuropsychopharmacology

editor-in-chief B. Lerer Cambridge University Press. 4/yr. £112 (institutional), £56 (individual)

John C. Marshall

It was a slow journey from the Hippocratic humours (black bile, phlegm, blood and yellow bile) to Otto Loewi's 1924 discovery that synaptic transmission from the vagus nerve to the heart muscle was chemically controlled — the first of many neurotransmitter substances (acetylcholine) had been found.

A slightly longer and more tortuous journey led to the conjecture that too much or too little of various neurotransmitters and other neuroactive chemicals was implicated in many neurological and psychiatric diseases. This was reinforced by the development of animal models of these diseases. The upshot was the emergence of a new discipline — neuropsychopharmacology that gave substance to the claims of Pierre-Jean-Georges Cabanis, an eighteenth-century physician and ideologue, who had notoriously argued that the brain digests impressions and secretes thought.

The International Journal of Neuropsychopharmacology covers the entire range of topics that plausibly fall within the domain of its title. A fairly rapid publication schedule combined with high-quality papers make this journal essential reading for all basic and clinical scientists concerned with the biochemistry of the nervous system in health and disease. Thus far, the largest number of research papers in the journal deal with the biochemistry of major depression and schizophrenia. But the wider scope of neuropsychopharmacology is reflected in contributions on movement disorders, mania, anxiety, aggression and pain.

Discussion is facilitated by excellent review articles and a timely trends and perspectives section. The latter feature has included a fine exposition of the health implications of cannabis consumption. Relevant aspects of molecular genetics are also well covered, including a running review of the uses of knockout mice (although neuroscientists who are puzzled by how studies of rats can illuminate schizophrenia will doubtless remain so).

Watch this space. As the editorial team write in their introduction to the journal: "tenets held basic to contemporary neuropsychopharmacology could turn out to be substantially overemphasized, unacceptably simplistic or even incorrect, in the relatively near future."

http://www.journals.cup.org/owa_dba/owa/ ISSUES IN JOURNAL?JID=PNP

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Problems of a glandular nature

Pituitary

editor-in-chief Shlomo Melmed Kluwer. 4/yr. \$314 (institutional), \$100 (individual)

Stafford L. Lightman

The editorial board includes some of the best-known international figures working on the pituitary gland — clinical endocrinologists, neurosurgeons, molecular biologists, neuroendocrinologists and pituitary histopathologists. *Pituitary* is aimed at all areas of hypothalamic–pituitary function, from the most fundamental cell biology through to clinical case reports.

The journal must have given its editors considerable problems. There are already many journals covering clinical endocrinology, neuroendocrinology and neurosurgery, so it was important for them to carve out a niche that would serve a population of clinical and basic scientists. They have sought to do this by dividing the journal into sections devoted to basic research, clinical studies and reviews, with occasional 'portraits' of recent congresses or other newsworthy events.

Pituitary itself is nicely presented, with good quality print, although some of the plates of immuno-stains lack clarity. The editors have clearly had a struggle to attract the high-quality manuscripts the journal deserves, and this may reflect the catch-22 situation of awaiting cover by the citation and abstracting agencies.

There are interesting papers at the clinico-pathological interface, which could be the journal's greatest strength. It is, however, noticeable that although the initial volumes had quite a large basic science content, this seems to have diminished in later issues, and although the journal is published only four times a year, the most recent volume in May



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