Reflecting on the modern industrial life-science environment

'The barriers between 'silos' in pharma R&D workflows are slowly eroding and this is driving a wider exchange of information across the various R&D disciplines'

As from January 2001, *Drug Discovery Today* will be published twice per month. This is part of our firm and committed drive to assist R&D scientists and managers to keep their knowledge of their fields, and R&D as a whole, as up-to-date as possible, helping them cope more efficiently with the swiftly evolving domain in which they work. In addition to this, we will be incorporating a series of *Drug Discovery Today* supplements. Each supplement will have a strong emphasis on a particular field, enabling experts and non-experts alike to concisely and objectively analyze and digest the recent progress made in that specific field. The supplements will focus on the fields of genomics, combinatorial chemistry and HTS. Each will be guided by an expert Advisory and Review Panel, enabling us to deliver only the highest quality Review papers and News and Views to you.

We will be expanding and improving our coverage of R&D to enable you to keep a sharper eye on the global picture of the developments in the industry. Clearly, this is part of our plan to reflect the modern industrial life-science environment. In very recent years, we have seen a change in the drug discovery and development interface. There has been a visible trend wherein this interface has been shifted further into the discovery area. The barriers between 'silos' in pharma R&D workflows are slowly eroding and this is driving a wider exchange of information across the various R&D disciplines. As companies shoot for shorter product-cycle times, the barriers between 'R'&'D' are becoming increasingly blurred. This will gain further momentum as industrial IT departments build the infrastructures to facilitate knowledge management. Historically, discovery and development have represented upstream and downstream portions of the pharma pipeline; however, this 'division' within industry is now being broken down. For example, pharmacokinetic and ADME (absorption, distribution, metabolism and excretion) studies were traditionally activities of the development sector back in the 1980s. However, as a consequence of both the remarkable technology revolution of the 90s leading to a vast increase in the number of hits and leads available, and the large proportion of early pipeline dropouts occurring from poor pharmacokinetic and ADME properties, such studies are now being increasingly implemented in the discovery phase.

As part of this continuing trend to decrease the time to market and avoid bottlenecks, other aspects of the more traditional development process are now being given more consideration in the discovery phase. Many consider drug delivery research to be a crucial but somewhat undervalued factor for growth and innovation in the industry. However, the application of drug delivery systems is increasingly requiring consideration during the discovery phase.

Ground-breaking drug delivery systems can open up new avenues for scientists to utilize chemical entities that were previously not available for use because of their toxicity or bioavailability problems. For example, drug targeting with specific delivery systems can potentially facilitate the delivery of antineoplastic agents directly to the site of tumor growth while reducing the systemic side effects, thus drastically increasing patient compliance. In addition, certain delivery systems can also add economic value to drugs with an impending patent expiry date by converting them into novel, viable generics and extending the product life cycle. The future of gene therapy will also largely depend on innovative drug delivery techniques.

Hence, because there is a need for the crucial role of drug delivery to be emphasized in improving both drug and gene therapy and the cost effectiveness of treatment, we will follow the most cutting-edge aspects of drug delivery and gene therapy. We will also keep a watchful eye on clinical trial innovation and the latest related developments.

The journal will be expanding its News section and we have recruited a dedicated News Editor specifically to cater for your need to be updated on the latest news in the industry. This section will of course be covering the conference circuit,

Debbie Tranter, Editor, *Drug Discovery Today*, 84 Theobald's Road, London, UK WC1X 8RR. tel: +44 20 7611 4132, fax: +44 20 7611 4485, e-mail: deborah.tranter@current-trends.com

 1359-6446/00/$ – see front matter PII: S1359-6446(00)01568-3

the latest research breakthroughs and recent market analysis. It will be enlightening its readers with the most up-to-date 'people' information, which will assist those who are interested in knowing the movements and latest achievements of the names in the industry as well as including interviews with those names.

Our Monitor section will be improved and expanded to acquire more extensive coverage of the exciting developments in the primary literature. We will also be including case studies of company collaborations and we will be implementing a new technology focus section. 'End user technology focus' will be for those in big pharma or biotech who wish to express an objective and timely opinion on the latest equipment they have acquired as a major step to facilitate their research.

Finally, we would like to thank our Editorial Board, readers and referees for their hard work over the past four years since its inception. We will continue to bring the latest, reliable information from the industry to your company and will endeavour to take on board your valuable suggestions as the months and years progress.

Debbie Tranter
Editor

Poetry and verse: an ideal medium for scientific communication?

'Many professional scientists over the years have expressed their thoughts and ideas in poetry.'

In 1812, Samuel Taylor Coleridge, the poet, journalist and critic, when lecturing on Shakespeare at The Royal Institution, stated[1]:

> 'Poetry is opposed to science… The proper and immediate object of science is the acquirement, or communication, of truth; the proper and immediate object of poetry is the communication of immediate pleasure.'

This assertion is based on that put forward by Aristotle in his treatise *Poetica* written in about 320 BC. In this he proposed that for verse to be poetry, it must give an imaginative picture of life at large rather than a string of facts and, hence, the theory of medicine or physical philosophy written in metric form, no matter how technically correct, would not be poetry. Many purists would still agree but, in reality, it is a position that is difficult to defend except at the two extremes, and scientific thoughts and ideas generally lie somewhere in the middle. Indeed many professional scientists over the years have expressed their thoughts and ideas in verse in such a way that the result can be classed as poetry.

One of the most notable examples of a scientist who achieved the state of being referred to as a poet is Sir Ronald Ross, the bacteriologist and physician who received the Nobel Prize for Medicine in 1902 for his work on malaria. Ross actually published a book of poems in 1928 (Ref. 2). An example of his style is shown in a short piece written in 1917, in fact on the same day, 20 years after his discovery of the life-cycle of the malarial parasite[3]:

> 'Now twenty years ago
> This day we found a thing;
> With science and with skill
> We found; then came the sting –
> What we with endless labour won
> The thick world scorned;
> Not worth a word today –
> Not worth remembering.'

The poignancy of these words will not be lost on many scientists today who have seen their discoveries become lost to

Raymond C. Rowe, Research Associate, AstraZeneca, Silk Road Business Park, Macclesfield, Cheshire, UK SK10 2NA. tel: +44 1625 513112, fax: +44 1625 512381, e-mail: Ray.Rowe@astrazeneca.com

 1359-6446/00/$ – see front matter PII: S1359-6446(00)01556-7