Guest Editorial: A civic duty

The *Journal of Commercial Biotechnology* plays an important role in developing a knowledgeable biotechnology community able to make informed contributions to the public debate on biotechnology, and to Government policy formulation, not only in the UK but worldwide. I would like to take this opportunity to pay tribute to the person who has done most to bring this about, Dr Nick Scott-Ram, Editor for the past three years. He has been responsible, along with the Henry Stewart editorial staff, for commissioning articles on the issues of the moment from front-line experts and turning the journal into a ‘must-read’. Its present quality is a testament to his judgement – and persuasiveness. There would never have been a right time to step down from the Editor’s chair but Nick has decided to shift his focus to his other interests at a time when biotechnology in Europe at last seems to have established itself as a core element of the economy. He leaves behind a journal well fitted to carrying the banner forward.

I am writing this guest editorial at the conclusion of the BIO 2001 Convention in San Diego, which is as good a barometer as there is of the state of health of the unruly adolescent that is the world biotechnology industry today. I have been struck by its self-confidence in the face of considerable economic uncertainty: the USA does not seem able to decide whether or not it is heading into recession and there is a strange disconnection between the buzz apparent at this very well-organised Convention and the newspaper reports of a shrinking Dow Jones index, falling property prices, rising bankruptcy rates and a collapsing business travel market (to mention just a few of the front page stories appearing in *USA Today* during the four days of the Convention).

The ever-present army of lawyers has declared that the initial public offering (IPO) market is dead and that the rising level of M&A activity signals that the long-expected consolidation is under way. Business models are always evolving in this industry but this Convention was the first time I had heard biotechnology’s reliance on big pharma being so seriously questioned. The consolidation, if that is what it is, seems to be leading to a new and more self-reliant structure.

The numbers at BIO 2001 were, I suspect, slightly down on expectations and that may be a sign of the times. Last year in Boston, the BIO Convention attracted nearly 12,000 people – up nearly 50 per cent on Seattle the year before. This year’s total was around 13,500 – up on last year but not the 15,000 – 16,000 predicted. This may be just as well, as the numbers attending have strained the accommodation capabilities of San Diego and, indeed, availability of accommodation might have been one of the factors that have held back attendee growth. The feeling in the bars, though, is that the pace of growth in the industry has slackened and that the numbers attending are a reflection of that. However, there were still over 1,000 biotechnology companies in attendance – a significant fraction of the world industry total.

The Convention theme was Partnering for Life which works wonderfully on a number of levels, from the altruistic through to the drivers of emerging business models, and Carl Feldbaum, BIO’s dynamic CEO, described a major purpose of the meeting as ‘building bridges to the communities of faith’. This theme of connectedness was taken up by several keynote speakers who stressed the importance of partnerships in every function and at every level of the biotechnology industry today.

A speaker from a major corporation quoted a recent consultancy study that showed that research productivity is poorly correlated with R&D group size, casting doubt on the efficacy of the megamergers of recent times. He noted that his corporation
was now trying to mimic biotechnology company structures and connections, leaving only physical distribution and information distribution as centralised worldwide structures. Another noted that it is now entirely possible to foresee the whole field of drug discovery being wrested away from large corporations and becoming the specialist province of small companies and academia. Yet another speaker, in support of this notion, pointed out that big pharma across the board now spends more than 25 per cent and growing of its R&D budget on external strategic alliances with both small companies and academia. This recognises the truth that no single organisation, or type of organisation, has a monopoly on good ideas.

It was not surprising therefore that there was considerable focus on the nature of these strategic alliances and on the techniques for managing them effectively. The core of most of the many presentations on the subject came down to establishing trust, aligning goals and agreeing clear milestones while remaining flexible as to detail. Hardly rocket science but, as a number of speakers agreed (variously expressed), effective technology transfer is a people contact sport and even in this Internet age, there is no substitute for face-to-face meetings to establish and maintain effective working relationships. That realisation alone should guarantee the ongoing success of the BIO Conventions.

There was also the stimulating glimpse of rapidly advancing technical capability and Craig Venter of Celera, speaking on receiving a Heritage Award, noted that the sequencing of the yeast genome, which had taken more than six months only a couple of years ago, could now be done in two hours. The role of advanced computing was further dramatised by the description of the new (to me) field of image informatics – the extraction of useful information from data held in pictorial form. It was asserted that 40 per cent of the data held by the world’s largest pharmaceutical companies is held as pictures (e.g. histopathology slides) rather than as numbers or words and that until recently there has been no satisfactory way of mining such data in bulk to generate value-adding information.

For a UK-based practitioner, a rather ominous picture of the future was evident in the Exhibition Hall where the German contingent of exhibitors occupied around 20 per cent of the hall and dwarfed the rest of Europe, including the quaintly denominated ‘UK and Scotland’ presence. If one was to rank biotechnology powers by their presence at this event, one would conclude that Germany and Canada are ranked second and third behind the USA, with France, the Netherlands and possibly Australia all outranking ‘UK and Scotland’. Of course, the scale of presence at the BIO Exhibition is not conclusive evidence of such ranking but warning bells should be ringing.

The warning bells should also be ringing about the ongoing drain of the best brains and entrepreneurial talents from the UK (and Europe as a whole) to the USA. It is quite remarkable how often the movers and shakers of US biotechnology speak with British (or German) accents – the task of reversing that flow is going to be very difficult. Rarely in human history can all the factors necessary for the success of an industry have been combined with such an incredible physical environment as in southern California.

A sceptic might think (hope?) that such a perfect climate might lead fun-loving young biotechnologists to take their eye off the ball but it plainly is not so. A local academic hinted at a reason that should give us all pause for thought. In San Diego, she said, involvement in entrepreneurial activity, and support of it, is seen as a civic duty.

Dr John M Sime
Director, Research Support and Development,
Imperial College of Science, Technology and Medicine, London, UK