

/THE LAST WORD

Thoughts for the New Year

M

y New Year's resolution in science is to stand up for basic research when it is attacked by those who seek application at every turn. The value of basic research has been underscored for me recently in direct fashion. Our work on recombinant human antibodies generated from combinatorial phage libraries has only been made possible by the devoted, meticulous, curiosity-driven studies of researchers into "obscure" viruses infecting bacteria. To them: thank you very much for your unwavering dedication. To everyone else: let's not flinch in our defense of basic science.

Dennis R. Burton, Member, The Scripps Research Institute

One area of biotechnology that merits attention and increased investment is marine biotechnology. The potential of marine biotechnology has been amply demonstrated. It is now critical for the federal government to recognize its responsibility in working with this nascent industry and to provide a liaison between the research in marine biotechnology and those companies beginning to make a serious investment in marine biotechnology. The most important areas of marine biotechnology include: application of molecular genetics to aquaculture; new discoveries in marine pharmacology; and advancement of bioremediation and biocorrosion prevention.

Rita R. Colwell, President, Maryland Biotechnology Institute

Peace for everybody, especially in Europe. Biotechnology will have a problem if it is not accepted by the public. We will have to make a big information effort: not just through newspapers and the media, but by having scientists go out into the high schools, discussing problems with farmers, and so on.

Daniel Thomas, Enzymologist and Chief Advisor to the French Prime Minister on Biotechnology

Money, money, money is our hope. With enough money, the young people who are adventurous will be able to perform science. We would especially like to have more post-doctoral positions available; at the moment we have to rely too much on "soft money" and we keep have to keep going back for more.

Klaus Mosbach, Professor of Pure and Applied Biochemistry, University of Lund, Sweden

Pharmaceutical industry R&D productivity continues to decline just at a time when increasing worldwide competition necessitates a continuous flow of new, very big drugs. Simultaneously, pharmaceutical giants are facing increasing pressure to launch their newest drugs as fast as possible and in as many countries as soon as possible. What all of this means is that the fortunate few biotechnology companies with important new drugs to be introduced in the next three to five years are in an extraordinary negotiating position. Normally, I would call this a sellers' market; however the bulk of biotechnology companies need the development, regulatory, and distribution expertise of members of Club Pharmaceutical. I have never seen a time when small and large companies truly need each other as much as today. Thus, 1993 is both a buyers' and sellers' market!

L. John Wilkerson, Chief Executive Officer, The Wilkerson Group, Inc.

My wish list for 1993 begins with hopes that the Clinton/Gore Administration focuses on biotechnology and related issues in several ways. Capital formation would be facilitated if the R&D tax credit were made permanent, along with the enactment of a capital gains differential and a program by which loss and credit would pass through to investors.

My expectations for the coming year in biotechnology are high. I expect 100 new biotechnology companies to form in 1993, and also expect several major companies to enter into Genentech/GI/Systemic-type alliances with major pharmaceutical companies. I am very confident in the prediction that the industry will see several major product approvals during the new year.

G. Steven Burrill, National Director, High Technology Industry Services, Ernst & Young

A prediction for 1993: Having failed to produce marketable cyborgs in 1992, the biotechnology and artificial intelligence communities will collaborate on a short-term project and solve the protein engineering problem.

Navouy Guod, MIT

I hope that biotechnology will continue to develop for the benefit of mankind, but mainly for developing countries, because they need it the most.

Ephraim Katchalski-Katzir, Professor of Membrane Research and Biophysics, Weizmann Institute of Science

Bio/Technology asked some of its distinguished readers to share their hopes and resolutions for biotechnology in 1993 with us. Here is what they had to say. We extend to all our readers our very best wishes for the coming year.