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/THE FIRST WORD

Biotechnology and the Road of Political Change

With the Republican party behind the wheel in both houses of the U.S. Congress for the first time in 40 years, traditional wisdom would have it that this is good news for biobusiness, particularly after 1994's rough ride. The Republicans are usually thought of as the pro-business party. But I am not comfortable with leaving the driving to them just yet.

Apart from ever-expanding plans to reconstruct U.S. social and moral highways, the road maps of the newly empowered Republicans contain signposts we have seen before: Create tax cuts by dismantling government services, create a good business climate by discarding regulations that "impede" progress. In the name of laissez-faire free markets, there will be a lot of talk about what we should not do and what should be undone. But as we travel down the road to the 21st century, I, for one, would like to see some detailed discussion of what we will be doing when we get there.

The now-famous *TV Guide* "Contract with America" contains no information about how we are going to strengthen innovation and broaden the U.S. technology base. It never acknowledges the importance of research to the economic health of the U.S., let alone offers concrete plans for maintaining or increasing support of basic research, without which there is no new knowledge base from which to harvest new products and new revenue. Nor does it address the question of creating a biotechnology workforce, and perhaps more importantly, given that some of these new Republicans are some of biotechnology's fiercest opponents, the education of biotech consumers.

One area in which the Republicans have made their intentions clear is that of deregulation, particularly with respect to the environment. But the problems of industrial pollution will require imaginative, not simplistic, solutions. As Stephen Edgington points out in his article on environmental biotech in this issue (which is underscored by Juan Ramos and colleagues' summary of their extensive joint-European project to design bacteria for biodegradation), the worldwide environmental regulatory climate is encouraging companies and governments of all stripes to turn to environmental biotech. Many have begun to realize that it may be profitable to institute environmentally safe processes in their manufacturing facilities before they are forced to do so. Environmental biotech is a wide-open market, as many existing pollution and toxic waste problems have proved very difficult to address, and although it has its share of regulatory boondoggles, there is money to be made and plenty of room for innovative technology. Now may not be the time to toss these regulations aside.

It will also take some imagination to take advantage of the extraordinary political changes that have taken place in Africa and the Middle East. The democratic elections in South Africa present challenges and opportunities for growth. As Thomas Odhiambo points out in the "Last Word," Africa represents an enormous potential market, as well as a vast reservoir of human and other resources, that can no longer be allowed to languish. Encouraging its prosperity in the global community can only help secure our own.

In the Middle East, the newest Arab-Israeli accords led directly to a historic economic summit in Casablanca last month. As John Hodgson notes in "Stirring the Fermenter of Peace," it was the first time that representatives from oil-rich Arab countries sat down to discuss a joint economic future with their oil-poor but technology-rich Israeli counterparts. Prominent on the agenda was biotechnology. While hardly a panacea for the myriad problems affecting this area, it is nonetheless true that cooperative projects, such as a joint effort to save the aquifer around the Gaza Strip, are intrinsically valuable and could help stabilize the peace.

At a time when American politics seems like so much driving in circles in the parking lot, it is heartening to note that, in some parts of the world, political processes are making a real difference. It remains to be seen whether the U.S. has the will and the savvy to use its formidable political engine to similar effect.

—SUSAN HASSLER