enough account of the actual prospects of science. What might result? Well-funded initiatives chosen by officials may tempt some scientists to disguise their work so that it fits under popular rubrics. When strategic initiatives are funded more heavily than individually initiated research, the country is likely to lose the benefits of the ideas and imagination of those individual scientists who are in a position to discover important, novel directions.

Recently there has been much agitation about the loss of competitiveness. The causes are not clear, but decisions made by industry have been involved. Industrial research laboratories have been cut back or eliminated, the cost of capital has been high, and there is insistent attention to the bottom line. This has meant that industry has often not cultivated the long-range prospects raised by scientific research. Under these conditions it is not evident why one should seek advice from industry about the reorientation of research—in particular, advice from a representative of IBM, a firm not noted for recent success. The "competitiveness" slogan has partisan overtones, especially as represented by the (private) Council on Competitiveness. Again I wonder why representatives of that council should be the ones to offer advice.

The problems of research objectives are difficult. We need disinterested advice that is well informed about current science. World leadership in basic research is not just a question of competitive advantage; it is a question of the understanding of the world.

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Handedness: Basic Physics

The revelation that the asymmetric synthesis of chiral molecules reported by researchers at the University of Bonn was in fact fraudulent (D. Clery and D. Bradley, News & Comment, 1 July, p. 21) should hardly have come as a shock. It is a matter of basic physics, unmentioned in Clery and Bradley's article, that static magnetic fields alone cannot ever be responsible for asymmetric synthesis.

Static magnetic fields, like electric fields, have no intrinsic chirality or "handedness." For example, a closed circular loop of current-carrying wire generates a magnetic field, but clearly is neither right- nor left-handed; it cannot interact differently with the two enantiomers of a chiral molecule. Our quirky right-hand rule for assigning direction to its magnetic field does not change this fact. Only when we also define a preferred spatial direction or impose other new vectors or fields can that system exhibit a particular handedness. Even then, it is a subtle matter to determine whether such combinations of fields can really have a chiral influence on a chemical reaction (*1*).

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References

1. L. D. Barron, *Biosystems* **20**, 7 (1987).

Corrections and Clarifications

In the News & Comment article "Genetic testing set for takeoff" by Rachel Nowak (22 July, p. 464), Michael Liskay of Oregon Health Sciences University in Portland should have been named as the senior scientist on one of the teams that identified *MLH1*. The test for Charcot-Marie-Tooth disease detects the duplication of the *PMP22* gene, not a deletion, as stated in the table accompanying the article (p. 466).