

SIGEX is one of several metagenomic screens available; investigators can select whichever screen is most desirable on the basis of the advantages and limitations of each method and the particular application they seek. Like every other new screening method, SIGEX should be seen as a starting point. It requires further research and must be further developed and refined to

improve its metagenomic sampling power. That does not mean it cannot make a significant contribution to environmental biotechnology.

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Open source and biotech

To the editor:

Your editorial in the June issue (*Nat. Biotechnol.* 23, 633, 2005) on the biotech open source movement skirted round one critical difference between biotech and the software industry whose 'open source' movement Richard Jefferson seeks to emulate. Writing software is cheap and can be done in your bedroom. Doing biotech is expensive and is done in laboratories. Economics dictate that paying for this means that someone has to get a return, either in money (which applies to industry) or kudos (which drove the genome project).

The same was true of software when computers were vast and expensive and needed air-conditioned rooms to work in. Software then was far simpler than today. But it was expensive to produce and use, with the result: no open source. The only way that biotech can be open source is if it becomes technically as well as legally accessible.

There is no logical barrier to doing gene splicing or parallel chemistry or surgery in a garage. But, for a variety of reasons, some historical and some very practical, it is not

done. What Jefferson should be doing is thinking through the biotech equivalent of the microcomputer, the biotech technology that any teenager can use at home (without killing themselves and everyone around them). Then 'open source biology' would become a reality.

But that is not the main reason for looking

for the microcomputer of biology. When computers were vast and expensive and made of individual transistors, the benefits they bought were limited, restricted to the bottom line of large corporations and governments, and widely distrusted. Once the microcomputer got into the hands of inventive teenagers, the 'computer revolution' exploded on us, and commercial interests followed with technological

marvels. Open source biology would do more than provide a cheaper route to new malaria therapy. It would start the real biotech revolution, the one that some of us have been waiting for since 1973.

(But...please don't try it out in my garage!)

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