OBESITY MONOCLONALS

To the editor:

I read Bernard Dixon's Commentary in the March issue of *Bio/Technology* (p.161) with great interest. Using antibody therapy to deplete fat depots in animals is an amazing solution to the regulatory problems related to hormonal therapy. I immediately made the connection to the possibility of using this technique for human therapeutics. The medical market for reducing obesity is huge, and then there is the "cosmetic" market beyond that. I imagine that it would be difficult for regulators to control distribution, since the demand for this product would be so high.

Thank you for a very thought-provoking commentary.

Ann F. Stankiewicz, Ph.D.
Research Chemist
PPG Industries, Inc.
P.O. Box 2844
Pittsburgh, PA 15230

"MUZYMES" INSTEAD OF "CONZYMES"

To the editor:

In his letter (*Bio/Technology* **3**:849, Oct. '85), Dr. S. Subramanian proposed a generic term "conzymes" (*con*verted en*zymes*) to represent the chemically or genetically altered enzymes. In order to avoid confusion with another familiar term, "coenzymes," I would like to suggest the use of "muzymes" (*mu*tated en*zymes*) as an alternative. Furthermore, it has now been generally accepted that polyribonucleic acids can act as enzymes. These [*ribo*nucleic acid en*zymes*] have been designated "ribozymes" (*Nature* **319**:534; 616, 1986).

Hsin Tsai
Senior Biochemist
Gesellschaft für
Biotechnologische Forschung GmbH
Mascheroder Weg 1
D-3300 Braunschweig
F.R.G.

EUROPEAN PATENT CONVENTION DEFENDED

To the editor:

When Bernard Dixon deals with the European Patent Convention (Feb. '86), he misses certain points which make the situation far more complex than the simple "EPC is wrong and must be overhauled" attitude implies.

First is the question of deposit. I thoroughly agree with Dr. Dixon's criticism of deposited organisms being available at the date of first publication of a patent application. Under the European system (unlike the U.S. system), applications are published well before patent grant. However, the European patent proprietor has the right to sue an infringer for back damages in certain circumstances to the date of such first publication. The essence of the patent "bargain" is that in exchange for telling the public how to work an invention, the patentee shall enjoy a monopoly for a limited period of time. Thus, since it is *not* possible to add subject matter to a European patent application after filing, and since the description of a European patent must be sufficient to enable the skilled man to perform the invention, it follows that "sufficiency" of description must be present upon filing. In "microorganism" cases, the deposit must be made by the European filing date, but not necessarily open for public release of samples. However, in order to ensure the ability to perform the invention as from the publication date it is perfectly apparent that the deposit must be available from that date. To do otherwise introduces a disparity between biotechnology and other disciplines.

Perhaps those who wish to see the system altered such that deposit is not necessary until grant (and I include myself amongst this number) should really address themselves to the question of whether they are prepared to give up the right to sue back to the date of early publication in the event of no early deposit.

Dr. Dixon also criticises the lack of a grace period during which publication of the invention may be made before European filing without destroying the validity of the subsequent European patent. He is in good company. However, in Europe a conflict between co-pending European applications is resolved by determining the priority date for the matter disclosed in each case. The patent is awarded to the party with the earliest priority date. Such determination is performed on a very *strict* basis limited *only* to the exact disclosure of the precise documents. This means that where a number of separate companies are independently, and roughly simultaneously, working toward similar goals, it is possible for each company to secure patent protection for its limited area of interest and investigation, with only the first applicant possibly securing any sort of generic protection.

I must also take issue with Dr. Dixon on the subject of plant protection. EPC does *not* contain an express exclusion for the patentability of plants. Article 53 EPC excludes protection for "plant or animal *varieties*" (my emphasis) since the laws of many states provide separate means for the protection of the industrial property associated with new genetically stable varieties of plants. However, the same provision in Article 53 EPC makes it plain that the exclusion of protection for plant or animal varieties does not extend to "microbial processes or the products thereof." It is, I believe, inconceivable that anyone could argue that the use of genetic engineering techniques with plant cells is anything other than "microbiological."

In general, perhaps, Dr. Dixon is, without realising it, pleading the case for a U.S.-type first-to-invent patent system rather than a first-to-file patent system. The latter type of system is found in most of the world. Were there to be serious moves to introduce such a system in Europe, rather more than an "early overhaul" of EPC would be required. The issues Dr. Dixon touches upon are far more complex than the reader unfamiliar with the patents system might be led to believe. There are indeed things wrong with EPC which require change but, as with any other legal system, the EPC legal edifice is a complex of checks and balances which, if disturbed in some serious and far-reaching aspect, is capable of producing many categories of undesirable legal result. As a European patent attorney, I feel that the U.S. system has many advantages to offer. But resolution of the "who invented first?" disputes is not one of them. I suggest Dr. Dixon enquire of a U.S. attorney the cost of resolving a full-scale dispute of this nature. He might then find the EPC system more cost effective.

Richard E. Bizley
27 Furnival Street
London EC4A 1PQ
United Kingdom

A "MILLION" MISTAKES

To the editor:

In January's issue, the article on "USDA Sows Seeds for Its Future," states: "According to ARS, every year the United States produces more than *100 tons* of surplus raw agricultural products."

Several zeroes should be added to the "100." For example, in the U.S., 61 million metric tons of soybeans were harvested in 1983. Surely ARS has a better surplus figure.

Jett C. Arthur, Jr.
3013 Ridgeway Drive
Metairie, LA 70002

In fact, a half dozen zeroes slipped by a bleary-eyed editor. The correct figure should be 100 million *tons of agricultural surplus per year.*