GROWTH FACTOR SYNERGY

To the editor:

The article on "Growth factors speed wound healing" by Jennifer Van Brunt and Arthur Klausner (*Bio/Technology* **6**:25–30, Jan. '88) is informative and well-written. I was especially interested because Epoulon Inc. is a biotechnology company formed to commercialize growth-factor technology in wound healing and bone regeneration.

I wish to call attention, however, to a statement on page 30: "For example, PDGF [platelet-derived growth factor] and IGF-1 [insulin-like growth factor-1] seem to work better together than either one does alone, but it is not clear how much of this effect is additive rather than synergistic."

I would like to make two points:

1. The statement refers to original work done by S. E. Lynch, J. C. Nixon, R. B. Colvin, and H. N. Antoniades (*PNAS* **84**:7696–7700, 1987). Drs. Lynch, Colvin, and Antoniades are consultants to Epoulon.

2. The research paper *does* point out the synergistic actions of these growth-factor combinations, which is included in one of Epoulon's patents.

Rex Bright
President
Epoulon Inc.
121B Tremont St.
Boston, MA 02135

COMMON CENTS

To the editor:

I read with interest the description by Professor Gordon J. Edlin (*Bio/Technology* **6**:252, March '88) of research in the U.K. and U.S. on characterization of the X chromosome gene that determines financial genius and success, variously designated £££ or $$$. Work in my laboratory, carried out independently, confirms and extends that of the other groups. Studies on federal government scientists and other administrators have confirmed the existence of the *fss* (financial success and security) and *ffb* (financial failure and bankruptcy) alleles, but also reveal the existence of an additional allele present at high frequency. This allele, which preliminary sequencing studies suggest may be a point mutant of *fss*, appears to correlate with a phenotype of diminished desire for financial rewards; it has been designated ¢¢¢.

The intense research on and profound societal implications of these findings indicate the need for a formal designation for this newly emerging field that studies the molecular and genetic basis of financial success. I therefore suggest the appellation of "econogenetics." And, following the tenor of Douglas McCormick's editorial (*Bio/Technology* **6**:237, March '88) calling for an American Society for Biotechnology, might it not be the time for an American Society for Econogenetics—and a new journal, *Econo/Genetics*?

Henry I. Miller, M.D.
Office of the Commissioner
Food and Drug Administration
Rockville, MD 20857

Dr. Miller wrote this letter in his private capacity, and no endorsement of the views therein by FDA or the U.S. government is intended or should be inferred.

SOUR MUSEUM GRAPES

To the editor:

I am compelled to comment on your recent article (March '88), "Museum Exhibits Both Educate and Confound." The title alludes to the fact that the content would discuss the success of museums' biotechnical exhibitry on two levels: how well they educate and how well they don't.

It's apparent that the short and cursory comments you made were not meant to have much objectivity; in fact your prejudice shows through immediately, and you follow with paragraph after paragraph of how inept and poorly devised these exhibits are. What critical improvements in the design process would you recommend?

I have not seen "The Search for Life," but I have visited Franklin Institute's "Exploring Inner Space." I had certain reservations about some exhibitry; however, other parts were very successful. In respect to "Splice of Life," which I believe is the best educational genetics exhibit currently available, your comments are myopic and inaccurate. It is not true that we rely heavily on words and text. There are approximately 3,500 words in the whole exhibit, including the instructions for the hands-on demonstrations; compare that to the 1,800 in your article. *(The actual number is 1,300. Eds.)*

We started with simple facts and built upon those, delving into the subcellular levels that explain the elemental blueprints of life. Our exhibit includes macroscopic photographs, three demonstrations, three videos, five computer programs (which should have been the subject of your harshest criticism), a visitor's guide, and an exceptional teacher training booklet with classroom support materials. In 45 minutes, an adult could go through the exhibit and grasp the concepts.

In my opinion, museums have made a great effort to educate: at least we are looking "up-hill." That is more than I can say for school curricula, which are 10 years behind the times, or for industries, which are protecting their vested interests.

Barry Eichinger
Exhibits Director
Science Museums of Charlotte, Inc.
301 North Tryon Street
Charlotte, NC 28202

We're sorry we didn't like your exhibit as much as you do. Eds.

CONTINUOUS FLOW ELECTROPORATION

To the editor:

The "Japan Roundup" section of the January '88 issue (p. 19) describes Nihon Bunko Kogyo's continuous flow electroporation and electrical cell-fusion apparatus as "the first of its type." In fact, researchers in my CNRS laboratory designed a continuous flow cell electropulsator in 1983 that has been marketed in France since 1985. It was displayed at the ANVAR (Agence pour la Valorisation de la Recherche) booth at the BioExpo show in 1985 at Boston, and again at the SITEF (Salon International des Technologies du Futur) at Toulouse (France) in 1985. Additionally, results on the large-scale processing of cells by this machine were reported during the International Jena Symposium at Erfurt (G.D.R.) in September 1986 and briefly described in *Studia Biophysica*. Papers are in press in *Bioelectochemistry* and *Bioenergetics*.

J. Teissié
Directeur de Recherches au CNRS
Centre de Recherche de Biochimie et
de Génétique Cellulaires
Centre National
de la Recherche Scientifique
118, Route de Narbonne
31062 Toulouse Cedex, France

RESEARCH CORRECTION

To the editor:

In research reported in "Hydrolysis of Cellulose by Saturating and Non-Saturating Concentrations of Cellulase: Implications for Synergism" by Woodward et al. (*Bio/Technology* **6**:301–304, March '88), the purified cellulase components CBH I, CBH II, EG I, and EG II were produced by a proprietary strain of *Trichoderma reesei* developed at Genencor, and *not* by strain L27. According to Genencor's Dr. Sharon Shoemaker, the company does not possess strain L27.

Jonathan Woodward, Ph.D.
Staff Scientist
Chemical Technology Division
Oak Ridge National Laboratory
P.O. Box X
Oak Ridge, TN 37831