

BIOTECHNOLOGY

EDITOR

Douglas K. McCormick

MANAGING EDITOR

Jennifer Van Brunt

RESEARCH EDITOR

Harvey Bialy

SENIOR EDITORS

Mark Ratner (New York)

John Hodgson (London)

ASSOCIATE EDITOR

Pamela Knight (New York)

CONTRIBUTING EDITORS

Bernard Dixon (London)

Jeffrey Fox (Washington, DC)

Kazuo Terakado (Tokyo)

ART DIRECTOR

Lou DePippo

ASSISTANT ART DIRECTOR

Edna Thomas

PRODUCTION EDITOR

Neal Richardson

EDITORIAL ASSISTANT

Lantz Miller

PUBLISHERS

Andy Sutherland

Helen Hodgson (Europe)

ADVERTISING SALES MANAGERS

Pat Moloney

Angela Kays (Europe)

CIRCULATION DIRECTOR

James Skowrenski

FULFILLMENT MANAGER

Bruce Shriver, Jr.

PRODUCTION MANAGER

Estelle Selzer

NEW YORK

65 Bleecker St., New York, NY, 10012
Tel: (212) 477-9600. Fax: (212)505-1364.

LONDON

4 Little Essex St., London WC2R 3LF
Tel: (071) 872-0103. Fax: (071) 240-2408

TOKYO

c/o Newton, Shinjuku Horai Bldg.,
20 Nishishinjuku-1 chome
Shinjuku-ku, Tokyo 160,
Tel: 03(344)4862. Fax: 03(348)6744

SCIENTIFIC ADVISORY BOARD

George Poste, SmithKline Beecham

Ken-ichi Arai, DNAX Research Institute

Teruhiko Beppu, University of Tokyo

Ronald E. Cape, Cetus Corporation

Jean-Pierre Changeux, Institut Pasteur

Mary-Dell Chilton, CIBA-Geigy

Nam-Hai Chua, Rockefeller University

Rita R. Colwell, Maryland Biotechnology
Institute

Arnold Demain, Massachusetts Institute of
Technology

J. Lawrence Fox, Abbott Laboratories

David Goeddel, Genentech

Leroy Hood, California Institute of
Technology

Morio Ikehara, Protein Engineering Research
Institute

Ernest Jaworski, Monsanto Company

Irving Johnson, Eli Lilly Research
Laboratories

David Mount, University of Arizona

Victor Nussenzweig, New York University
Medical Center

Carl-Gustaf Rosen, Abitec AB

Kendall Smith, Dartmouth Medical School

Yukio Sugino, Takeda Chemicals

Marc Van Montagu, Plant Genetic Systems

Indra K. Vasil, University of Florida

Lemuel B. Wingard, University of Pittsburgh

Wataru Yamaya, Seikagaku Kogyo

THE FIRST WORD

THE MOST TRUE THING

Start with the truest thing you know," Ernest Hemingway told a novice who asked how to begin a story. And so we will. The truest thing we know is that the biotechnologies must be the cornerstone of new pharmaceutical and agricultural product development through the '90s and into the 21st century.

The odd thing is that prospects for the more distant future are so much clearer than the near-term details. Our crystal ball is farsighted, which becomes something of an embarrassment when journalists and market analysts call for opinions on what will be happening next month or next year to a particular company or a particular product.

It is good to keep this long view in mind—particularly when the newspapers are full of childishness: I'll-take-my-ball-and-go-home patent squabbling and you-can't-play-in-my-yard political bullying. As in so much else, it is easy to mistake the noise for the signal.

Viewed close up, some of the recent headlines are peculiar. Last month, a group called the Biotechnology Working Group issued a report in which it implied that one produced herbicide-resistant plants by making them produce pesticides. More recently, the states of Wisconsin* (America's Dairy Land) and Minnesota imposed one-year, wait-and-see moratoria on the sale and use of bovine somatotropin for improving dairy productivity. The breadth of Genentech's victory in tissue plasminogen activator patent fights could, if it sets a precedent, produce a sort of intellectual birth-control—a barrier to the conception and delivery of second- and third-generation products. Perhaps it was this prospect of winning proprietary jackpots that prompted the most recent evolution, the sorry spectacle of Xoma's lawsuit-by-press-release, obviously intended to move markets shell-shocked by patent-court inversions of what had seemed to be the natural order.

This contrasts sadly, notes senior editor Mark Ratner, with the generous system of cross-licenses developed by other companies...perhaps undistracted from what ought (by obligation to their stockholders and their societies) to be their primary purpose: getting the products out to where they're supposed to be, in the systems of needy patients. It would be good to remember the fable of the dog with the bone: passing by a pool, he mistook his reflection for another dog with another bone. In trying to frighten his reflection into giving up its bone, the dog dropped his own into the water, losing it forever.

Add all this to the continuing problems of tight money and a changing mix between small-company entrepreneurship and big-company intrapreneurship, and we have a very murky outlook indeed.

But these are the growing pains. A start-up company is not biotechnology any more than a multinational drug-maker is. These are paths the technology finds. Whatever setbacks companies and products may suffer, biotechnology will continue to advance, because it is the best—often the only—way to get the job done.

—Douglas McCormick

*An aide to Wisconsin Governor Tommy Thompson implicitly acknowledged that the step was motivated more by concern for popularity than for public health: "Rightly or wrongly, people have concerns about the drug," is how *The New York Times* quoted him. On the other hand, Jeremy Rifkin reportedly said that the postponements would "send shock waves through the investment community," which seemed not the least discomfited last time we saw it.