Introduction

The new techniques of molecular and cell biology have presented many opportunities for developing new agents for the diagnosis, treatment, and prevention of disease. Over 150 proteins and peptides are currently undergoing clinical investigation in the United States at this time. The number actually marketed goes up with increasing speed every year.

The excitement of moving the advances of biotechnology to the bedside increases with the increasing number of new compounds with therapeutic potential that become available. As the therapeutic potential becomes reality with one after another protein achieving registration and marketing, ideas emerge and questions related to issues about proteins and peptides as drugs are asked.

This symposium was planned to bring together researchers in the new biology, clinical pharmacologists, physicians, and administrators to share experiences and think together about how to convert the potential of modern biomedical science to the reality of improving the health for everybody. We have organized the symposium around several themes. The first theme is a general look at biotechnology as a source of drugs. Next, consideration will be given to the disposition and pharmacokinetics of peptides and proteins since these differ from the disposition and kinetics of small organic molecules, the traditional types of drugs. Assessing the safety of biotechnology products also has some difference from safety assessment of small organic molecules and is the next theme of the symposium. This is followed by some examples of pharmacodynamic and therapeutic effects of some of the medications derived from biotechnology. Finally, an overview of some of the ways the products of the new biology impact on society will be considered. These focus on cost and economic considerations since costs are of paramount importance for the utilization of biotechnology products in everyday medical practice.

By addressing issues of importance in the development and utilization of drugs derived from biotechnology, the organizers hope that this symposium will contribute to helping the new biology, through biotechnology, achieve its potential of improving the health of all people everywhere.

MARCUS M. REIDENBERG, M.D.
Departments of Pharmacology and Medicine,
Cornell University Medical College,
1300 York Avenue,
New York, NY 10021,
USA