New Developments in Biotechnology: Public Perceptions of Biotechnology

May 1987

NTIS order #PB87-207544

Recommended Citation:

U.S. Congress, Office of Technology Assessment, New ***Developments in Biotechnology—Background Paper: Public Perceptions of Biotechnology, OTA-BP-BA-45*** (Washington, DC: U.S. Government Printing Office, May ***1987).***

Library of Congress Catalog Card Number 87-619822

For sale by the Superintendent of Documents
U.S. Government Printing Office, Washington, DC 20402-9325
(order form on p. 127)

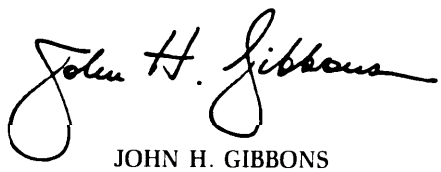
Foreword

Throughout its turbulent recent history, the benefits and risks of biotechnology have been scrutinized and discussed by experts in a wide range of fields. Today, biotechnology is perhaps best viewed as a growing cohort of technologies, each with its own scientific benefits and risks, and allied social, economic, legal, and ethical opportunities and controversies. Increasingly during debates on these concerns, the question is asked: "What does the public think?"

In this background paper, OTA reports the results of a nationwide survey of public knowledge and opinion about issues concerning science and technology in general and genetic engineering and biotechnology in particular. The survey, conducted for OTA by Louis Harris & Associates, measures the interest, knowledge, and concern of the public about scientific matters. The willingness of the American people to accept risks in return for benefits of scientific innovation is assessed. The public's reaction to testing genetically engineered organisms in their own community is reported, as is how the American populace feels about human gene therapy. The background paper also reveals the feelings of the American populace toward the future of biotechnology.

This background paper is the second in a series of OTA studies being carried out under an assessment of "New Developments in Biotechnology. " Volume one in the series examined commercialization and ownership of human tissues and cells, and forthcoming reports will include evaluations of: U.S. investment in biotechnology; genetically engineered organisms in the environment; tests for human genetic disorders; and the impact of intellectual property law on biotechnology. The assessment was requested by the House Committee on Science, Space, and Technology and the House Committee on Energy and Commerce.

OTA was assisted in preparing this study by an advisory panel and reviewers selected for their expertise and diverse points of view. OTA gratefully acknowledges the contribution of each of these individuals. As with all OTA reports, responsibility for the content of the background paper is OTA's alone. The background paper does not necessarily constitute the consensus or endorsement of the advisory panel or the Technology Assessment Board.



JOHN H. GIBBONS
Director

New Developments in Biotechnology Advisory Panel

Bernadine P. Healy, ***Panel Chair***
The Cleveland Clinic Foundation
Cleveland, OH

Timothy B. Atkeson
Steptoe & Johnson
Washington, DC

David Blumenthal
Brigham and Women's Hospital Corp.
Boston, MA

Hon. Edmund G. Brown, Jr.
Reavis & McGrath
Los Angeles, CA

Nancy L. Buc
Weil, Gotshal & Manges
Washington, DC

Mark F. Cantley
Concertation Unit for Biotechnology in Europe
Brussels, Belgium

Alexander M. Capron
University of Southern California
Los Angeles, CA

Jerry D. Caulder
Mycogen Corp.
San Diego, CA

Lawrence I. Gilbert
The University of North Carolina
Chapel Hill, NC

Conrad A. Istock
The University of Arizona
Tucson, AZ

Edward L. Korwek
Keller & Heckman
Washington, DC

Tsune Kosuge
University of California, Davis
Davis, CA

Richard Krasnow
Arlington, VA

Sheldon Krimsky
Tufts University
Medford, MA

Joshua Lederberg
The Rockefeller University
New York, NY

William E. Marshall
Pioneer Hi-Bred International, Inc.
Johnston, IA

Ronald L. Meeusen
Rohm & Haas Co.
Spring House, PA

Robert B. Nicholas
Blum, Nash & Railsback
Washington, DC

Eric J. Stanbridge
University of California, Irvine
Irvine, CA

James M. Tiedje
Michigan State University
East Lansing, MI

Kunio Toriyama
National Federation of Agricultural Cooperative Associations of Japan
Tokyo, Japan

Pablo D.T. Valenzuela
Chiron Corp.
Emeryville, CA

Thomas E. Wagner
Ohio University
Athens, OH

Luther S. Williams
Atlanta University
Atlanta, GA

NOTE: OTA is grateful for the valuable assistance and thoughtful critiques provided by the Advisory Panel members. The views expressed in this OTA background paper, however, are the sole responsibility of the Office of Technology Assessment.

Public Perceptions of Biotechnology
OTA Project Staff

Roger C. Herdman, *Assistant Director, OTA Health and Life Sciences Division*

Gretchen S. Kolsrud, *Biological Applications Program Manager*

Gary B. Ellis, *Project Director*

Luther Val Giddings, *Study Director[1] and Analyst*

Robyn Y. Nishimi, *Study Director and Analyst*

Support Staff

Sharon Kay Oatman, *Administrative Assistant*

Linda S. Ray ford, *Secretary/Word Processing Specialist*

Barbara V. Ketchum, *Clerical Assistant*

Editors

Stephanie L. Forbes, Bowie, MD

Richard A. Danca, Washington, DC[2]

Contractors

John M. Boyle and D. Matthew Knain, Louis Harris & Associates, Inc., Washington, DC

Acknowledgment to Other OTA Staff

Franklin M. Zweig, *Visiting Scholar*

Robert Friedman, *Senior Associate, Oceans and Environment Program*

Daryl Chubin, ***Senior Analyst, Science, Education, and Transportation Program***

Robert M. Cook-Deegan, *Senior Analyst*

Kathi E. Hanna, Analyst

Kevin W. O'Connor, *Analyst*

Gladys B. White, *Analyst*

Patricia J. Hoben, *Analyst*

Blake M. Cornish, *Research Assistant*

Reviewers[3]

Lawrence Burton and Donald Buzzelli, National Science Foundation, Washington, DC

Jon Miller, Public Opinion Laboratory, Dekalb, IL

Barbara R. Williams, National Institutes of Health, Bethesda, MD

*Through January 1987.

'During March 1987.

[3]OTA is grateful for the valuable assistance and thoughtful critiques provided by the reviewers. The views expressed in this OTA background paper, however, are the sole responsibility of the Office of Technology Assessment.