

CONTENTS

	Page
Preface.....	ix
Acknowledgments	xi

PART I

INTRODUCTION.....	3
UNITED STATES SENATE HEARING.....	15

PART II

ADVANCES IN BIOTECHNOLOGY: BREAKTHROUGHS AND BOTTLENECKS

AN OVERVIEW OF BIOTECHNOLOGY	
Philip H. Abelson	37
IMPACTS OF BIOTECHNOLOGY ON AGRICULTURE: PLANTS	
Peter R. Day	51
IMPACTS OF CONTEMPORARY BIOTECHNOLOGY ON ANIMAL SCIENCE	
Roger M. Weppelman	63

PART III

ADVANCES IN BIOTECHNOLOGY: ENVIRONMENT, HEALTH AND ENERGY

IMPACTS OF BIOTECHNOLOGY ON BIOMEDICAL SCIENCES	
Thomas W. O'Brien	85
IMPACTS OF BIOTECHNOLOGY ON MARINE AND ENVIRONMENTAL SCIENCES	
Rita R. Colwell	96
IMPACTS OF BIOENGINEERING ON BIOTECHNOLOGY	
Alan Sherman Michaels	104

PART IV GLOBAL, UNIVERSITY AND INDUSTRY PERSPECTIVES

A EUROPEAN PERSPECTIVE ON BIOTECHNOLOGY	
John Maddox	119
THE STATUS AND FUTURE OF BIOTECHNOLOGY IN DEVELOPING COUNTRIES	
Yongyuth Yuthavong	127
BIOTECHNOLOGY: THE UNIVERSITY PERSPECTIVE	
Robert Barker	144

PART V COMMERCIALIZATION ISSUES

PRODUCTS AND HEALTH CARE DELIVERY	
Gary R. Hooper	159
CHANGING ROLE AND SCOPE OF VENTURE CAPITAL IN THE COMMERCIALIZATION PROCESS OF BIOTECHNOLOGY	
Scott A. Bailey	167
COMMERCIALIZING NEW PRODUCTS FROM PLANT BIOTECHNOLOGY: PROBLEMS AND PERSPECTIVES	
Cyrus McKell	188

PART VI SPECIAL LECTURES

COMMERCIALIZING BIOTECHNOLOGY RESOURCES: COMPETITION AND COOPERATION IN GLOBAL MARKETS	
George Kozmetsky	209
TOMORROW'S SCIENCE POLICY AND BIOTECHNOLOGY	
Orville G. Bentley	222
SUSTAINING AMERICAN LEADERSHIP IN BIOTECHNOLOGY	
Robert Rabin	229
CLOSING REMARKS	
Kenneth R. Tefertiller	235

APPENDIX

Symposium Program	237
--------------------------------	------------