New Developments in Biotechnology: U.S. Investment in Biotechnology

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Foreword

Since the discovery of recombinant DNA in the early 1970s, biotechnology has become an essential tool for many industries. The potential of biotechnology to improve the Nation's health, food supply, and the quality of the environment leads logically to questions of whether current levels of investment in research and development, human resources, and policy formulation are adequate to meet these expectations.

This special report is the fourth in a series of OTA studies being carried out under an assessment of "New Developments in Biotechnology," requested by the House Committee on Energy and Commerce and the House Committee on Science, Space, and Technology. This fourth report in the series describes the levels and types of investment currently being made by the Federal, State, and private sectors. Ten major issues that affect investment were identified. They concern levels of R&D funding, research priorities, interagency coordination, information requirements, training and education needs, monitoring of university-industry research, State efforts to promote biotechnology, the effects of tax law on commercial biotechnology, the adequacy of Federal assistance for biotechnology start-ups, and the effects of export control on biotechnology commerce. The first publication in the series was Ownership of Human Tissues and Cells, the second was Public Perceptions of Biotechnology, and the third was Field-Testing Engineered Organisms, A subsequent study will examine issues relevant to patenting plants, animals, and micro-organisms.

OTA was assisted in preparing this study by a panel of advisors, four workshop groups, and reviewers selected for their expertise and diverse points of view on the issues covered in the report. OTA gratefully acknowledges the contribution of each of these individuals. As with all OTA reports, responsibility for the content of the special report is OTA's alone. The special report does not necessarily constitute the consensus or endorsement of the advisory panel, the workshop groups, or the Technology Assessment Board.

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

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