# Contents

Acknowledgments ix

**Introduction** 1
Richard B. Freeman and Daniel L. Goroff

I. **Supply of Students and Postdoctoral Fellows to Science and Engineering**

1. Supporting “The Best and Brightest” in Science and Engineering: NSF Graduate Research Fellowships 19
Richard B. Freeman, Tanwin Chang, and Hanley Chiang

2. Internationalization of U.S. Doctorate Education 59
John Bound, Sarah Turner, and Patrick Walsh

3. Improving the Postdoctoral Experience: An Empirical Approach 99
Geoff Davis

II. **Careers in Changing Markets**

4. Immigration in High-Skill Labor Markets: The Impact of Foreign Students on the Earnings of Doctorates 131
George J. Borjas
   Donna K. Ginther and Shulamit Kahn

6. Patterns of Male and Female Scientific Dissemination in Public and Private Science 195
   Kjersten Bunker Whittington

7. Educational Mismatch among Ph.D.s: Determinants and Consequences 229
   Keith A. Bender and John S. Heywood

8. Capturing Knowledge: The Location Decision of New Ph.D.s Working in Industry 257
   Albert J. Sumell, Paula E. Stephan, and James D. Adams

III. Creation and Use of Knowledge

   Cyrus C. M. Mody

    Jinyoung Kim, Sangjoon John Lee, and Gerald Marschke

11. The Growing Allocative Inefficiency of the U.S. Higher Education Sector 349
    James D. Adams and J. Roger Clemmons

Contributors 383
Author Index 385
Subject Index 389