#### CONTENTS

List of contributors x Preface xiii

# PART I International Provision of Public Goods under a Globalized Intellectual Property Regime 1

## SECTION 1 THE CONCEPT OF PUBLIC GOODS IN THE EXPANDING KNOWLEDGE ECONOMY 1

- 1 The Globalization of Private Knowledge Goods and the Privatization of Global Public Goods 3 Keith E. Maskus and Jerome H. Reichman
- The Regulation of Public Goods 46
   Peter Drahos
   Comment: Norms, Institutions, and Cooperation 65
   Robert O. Keohane
- 3 Distributive Values and Institutional Design in the Provision of Global Public Goods 69 Peter M. Gerhart

#### SECTION 2 PRESERVING THE CULTURAL AND SCIENTIFIC COMMONS 79

- 4 Koyaanisqatsi in Cyberspace: The Economics of an "Outof-Balance" Regime of Private Property Rights in Data and Information 81 Paul A. David
- 5 Linkages Between the Market Economy and the Scientific Commons 121
  Richard R. Nelson
  Comment I: Public Goods and Public Science 139
  Eric Maskin

- 6 Sustainable Access to Copyrighted Digital Information Works in Developing Countries 142 Ruth L. Okediji
- 7 Agricultural Research and Intellectual Property Rights 188
  Robert E. Evenson
  Comment II: Using Intellectual Property Rights to Preserve the
  Global Genetic Commons: The International Treaty on Plant
  Genetic Resources for Food and Agriculture 217
  Laurence R. Helfer

### PART II Innovation and Technology Transfer in a Protectionist Environment 225

- SECTION 1 TECHNOLOGY TRANSFER UNDER INTERNATIONAL INTELLECTUAL PROPERTY STANDARDS 225
  - 8 Can the TRIPS Agreement Foster Technology Transfer to Developing Countries? 227

    Carlos M. Correa

    Comment I: Technology Transfer on the International Agenda 257

    Pedro Roffe
  - 9 Patent Rights and International Technology Transfer Through Direct Investment and Licensing 265 Keith E. Maskus, Kamal Saggi, and Thitima Puttitanun Comment II: TRIPS and Technology Transfer – Evidence from Patent Data 282 Samuel Kortum
  - 10 Proprietary Rights and Collective Action: The Case of Biotechnology Research with Low Commercial Value 288
     Arti K. Rai

#### SECTION 2 STIMULATING LOCAL INNOVATION 307

- 11 Do Stronger Patents Induce More Local Innovation? 309

  Lee G. Branstetter
- 12 Markets for Technology, Intellectual Property Rights, and Development 321 Ashish Arora, Andrea Fosfuri, and Alfonso Gambardella
- 13 Using Liability Rules to Stimulate Local Innovation in Developing Countries: Application to Traditional Knowledge 337 Jerome H. Reichman and Tracy Lewis
- 14 Stimulating Agricultural Innovation 367

  Michael Blakeney

CONTENTS vii

## PART III Sectoral Issues: Essential Medicines and Traditional Knowledge 391

- SECTION 1 DEVELOPING AND DISTRIBUTING ESSENTIAL MEDICINES 391
  - 15 Managing the Hydra: The Herculean Task of Ensuring Access to Essential Medicines 393

    Frederick M. Abbott
  - Theory and Implementation of Differential Pricing for Pharmaceuticals 425
     Patricia M. Danzon and Adrian Towse
  - 17 Increasing R&D Incentives for Neglected Diseases: Lessons from the Orphan Drug Act 457
     Henry Grabowski
     Comment: Access to Essential Medicines Promoting Human Rights Over Free Trade and Intellectual Property Claims 481
     Heinz Klug
- SECTION 2 PROTECTING TRADITIONAL KNOWLEDGE 493
  - 18 Legal and Economic Aspects of Traditional Knowledge 495 Graham Dutfield
  - Saving the Village: Conserving Jurisprudential Diversity in the International Protection of Traditional Knowledge 521
     Antony Taubman
  - 20 Legal Perspectives on Traditional Knowledge: The Case for Intellectual Property Protection 565
     Thomas Cottier and Marion Panizzon
     Comment: Traditional Knowledge, Folklore and the Case for Benign Neglect 595
     David L. Lange
  - 21 Protecting Cultural Industries to Promote Cultural Diversity:
    Dilemmas for International Policymaking Posed by the
    Recognition of Traditional Knowledge 599
    Rosemary J. Coombe

### PART IV Reform and Regulation Issues 615

- SECTION 1 BALANCING PUBLIC AND PRIVATE INTERESTS IN THE GLOBAL INTELLECTUAL PROPERTY SYSTEM 615
  - 22 Issues Posed by a World Patent System 617

    John H. Barton

viii CONTENTS

23 Intellectual Property Arbitrage: How Foreign Rules Can Affect
 Domestic Protections 635
 Pamela Samuelson

- 24 An Agenda for Radical Intellectual Property Reform 653
   William Kingston
   Comment: Whose Rules, Whose Needs? Balancing Public and Private Interests 662
   Geoff Tansey
- 25 Diffusion and Distribution: The Impacts on Poor Countries of Technological Enforcement within the Biotechnology Sector 669 Timothy Swanson and Timo Goeschl
- Equitable Sharing of Benefits from Biodiversity-Based Innovation:
   Some Reflections under the Shadow of a Neem Tree 695
   Gustavo Ghidini

#### SECTION 2 THE ROLE OF COMPETITION LAW 707

- 27 The Critical Role of Competition Law in Preserving Public Goods in Conflict with Intellectual Property Rights 709 Josef Drexl
- 28 Expansionist Intellectual Property Protection and Reductionist Competition Rules: A TRIPS Perspective 726

  Hanns Ullrich
- 29 Can Antitrust Policy Protect the Global Commons from the Excesses of IPRs? 758
   Eleanor M. Fox
   Comment I: Competition Law as a Means of Containing Intellectual Property Rights 770
   Carsten Fink
- 30 "Minimal" Standards for Patent-Related Antitrust Law under TRIPS 774
   Mark D. Janis
   Comment II: Competitive Baselines for Intellectual Property Systems 793
   Shubha Ghosh
- SECTION 3 DISPUTE SETTLEMENT AT THE WTO AND INTELLECTUAL PROPERTY RIGHTS 815
  - 31 WTO Dispute Settlement: Of Sovereign Interests, Private Rights, and Public Goods 817

    Joost Pauwelyn

CONTENTS ix

32 The Economics of International Trade Agreements and Dispute Settlement with Intellectual Property Rights 831 Eric W. Bond

- 33 Intellectual Property Rights and Dispute Settlement in the World Trade Organization 852 Wilfred J. Ethier
- 34 WTO Dispute Resolution and the Preservation of the Public Domain of Science under International Law 861
  Graeme Dinwoodie and Rochelle Cooper Dreyfuss
- 35 Recognizing Public Goods in WTO Dispute Settlement: Who Participates? Who Decides? The Case of TRIPS and Pharmaceutical Patents Protection 884

  Gregory Shaffer

Index 909