CONTENTS

Acknowledgments vii Introduction: A Productive Experiment 1

PART I. HUMAN PRACTICES: DIAGNOSIS

- 1 The Setting. SynBERC: The Synthetic Biology Engineering Research Center 13
- 2 Principles of Design 2006–2007: From Bioethics to Human Practices 31
- 3 Interfacing the Human and Biosciences 2007: Three Modes 47
- 4 Synthetic Biology 2008: From Manifestos to Ramifying Research Programs 65
- 5 Lessons Learned 2009: From Discordancy to Indeterminacy 84

PART II. HUMAN PRACTICES: INQUIRY

- 6 Recapitulation and Reorientation 2009: The First Wave of Human Practices 99
- 7 The Second Wave of Synthetic Biology 2009: From Parts to Ontological Domains 111
- 8 A Mode 3 Experiment. Figuring Dual-Use: From Safety to Malice 123
- 9 Toward the Second Wave of Human Practices 2010: Figures of Dual-Use, Biopower, and Reconstruction 150
- 10 Lessons Learned 2010: From Indeterminacy to Discordancy 166

Notes 181 Bibliography 193 Index 201