

## CONTENTS

### Introduction: Why the Demarcation Problem Matters 1

MASSIMO PIGLIUCCI AND MAARTEN BOUDRY

## PART I

### WHAT'S THE PROBLEM WITH THE DEMARCATIION PROBLEM?

#### 1 The Demarcation Problem 9

*A (Belated) Response to Laudan*

MASSIMO PIGLIUCCI

#### 2 Science and Pseudoscience 29

*How to Demarcate after the (Alleged) Demise of the Demarcation Problem*

MARTIN MAHNER

#### 3 Toward a Demarcation of Science from Pseudoscience 45

JAMES LADYMAN

#### 4 Defining Pseudoscience and Science 61

SVEN OVE HANSSON



- 5** **Loki's Wager and Laudan's Error** 79

*On Genuine and Territorial Demarcation*

MAARTEN BOUDRY

## **PART II**

### **HISTORY AND SOCIOLOGY OF PSEUDOSCIENCE**

- 6** **The Problem of Demarcation** 101

*History and Future*

THOMAS NICKLES

- 7** **Science, Pseudoscience, and Science Falsely So-Called** 121

DANIEL P. THURS AND RONALD L. NUMBERS

- 8** **Paranormalism and Pseudoscience as Deviance** 145

ERICH GOODE

- 9** **Belief Buddies versus Critical Communities** 165

*The Social Organization of Pseudoscience*

NORETTA KOERTGE

## **PART III**

### **THE BORDERLANDS BETWEEN SCIENCE AND PSEUDOSCIENCE**

- 10** **Science and the Messy, Uncontrollable World of Nature** 183

CAROL E. CLELAND AND SHERALEE BRINDELL

- 11** **Science and Pseudoscience** 203

*The Difference in Practice and the Difference It Makes*

MICHAEL SHERMER

- 12** **Evolution** 225

*From Pseudoscience to Popular Science, from Popular Science  
to Professional Science*

MICHAEL RUSE



**PART IV**  
**SCIENCE AND THE SUPERNATURAL**

**13 Is a Science of the Supernatural Possible? 247**

EVAN FALES

**14 Navigating the Landscape between Science and Religious  
Pseudoscience 263**

*Can Hume Help?*

BARBARA FORREST

**PART V**  
**TRUE BELIEVERS AND THEIR TACTICS**

**15 Argumentation and Pseudoscience 287**

*The Case for an Ethics of Argumentation*

JEAN PAUL VAN BENDEGEM

**16 Why Alternative Medicine Can Be Scientifically Evaluated 305**

*Countering the Evasions of Pseudoscience*

JESPER JERKERT

**17 Pseudoscience 321**

*The Case of Freud's Sexual Etiology of the Neuroses*

FRANK CIOFFI

**18 The Holocaust Denier's Playbook and the Tobacco Smokescreen 341**

*Common Threads in the Thinking and Tactics of Denialists and  
Pseudoscientists*

DONALD PROTHERO

**PART VI**  
**THE COGNITIVE ROOTS OF PSEUDOSCIENCE**

**19 Evolved to Be Irrational? 361**

*Evolutionary and Cognitive Foundations of Pseudosciences*

STEFAN BLANCKE AND JOHAN DE SMEDT



**20 Werewolves in Scientists' Clothing 381***Understanding Pseudoscientific Cognition*

KONRAD TALMONT-KAMINSKI

**21 The Salem Region 397***Two Mindsets about Science*

JOHN S. WILKINS

**22 Pseudoscience and Idiosyncratic Theories of Rational Belief 417**

NICHOLAS SHACKEL

**23 Agentive Thinking and Illusions of Understanding 439**

FILIP BUEKENS

Contributors 459

Index 461