

Welcome to the

A User's Guide to the

Genetic Past,

Present, and

Future

Rob DeSalle Michael Yudell

Published in association with the

AMERICAN MUSEUM & NATURAL HISTORY T



CONTENTS

foreword, vii

Acknowledgments, xi

Introduction: Welcome to the Genome, xv

PART I: DISCOVERY

- 1 From Mendel to Molecules, 3
- 2 The Building Blocks of Gene Sequencing, 27
- 3 Sequencing the Genome, 43

PART II: INFORMATION

- 4 Keeping the Genome Safe, 61
- **5** 99.9%, 81
- 6 The Tree of Life, 95

PART III: ADVANCEMENT

7 The World To Come: Medicine, 117

8 The World To Come: Agriculture, 141

CONCLUSION

9 Caution: Welcoming the Genome, 161

Appendix 1, An Experiment: Seeing Your Own DNA, 169

Glossary, 171 Endnotes, 177

Photo Credits, 205

Index, 209