

Preface

Scientific discovery requires pioneers, and this book of portraits in pencil and prose celebrates members of a uniquely influential community of pioneers. They are explorers of the vast arrays of genes known as genomes that underpin the biology of every organism, including humans. And their discoveries have transformed medicine and agriculture and changed the way every biomedical research scientist works.

Cold Spring Harbor Laboratory, the book's publisher, has been a cradle of genome science for more than 30 years. The topic of the Laboratory's 1986 Annual Symposium was "The Molecular Biology of *Homo sapiens*," and Paul Berg wrote to the organizer Jim Watson that he could think of no better setting to flush out the pros and cons of sequencing the human genome. That discussion was the springboard for a continuing series of annual meetings on genome mapping and sequencing that established the Laboratory as the premier gathering point for the genomics community. And it was at one of these gatherings that most of the portraits in this book were drawn by the distinguished Australian artist, Lewis Miller.

Lewis studied painting at the Victorian College of the Arts in Melbourne and held his first solo exhibition in 1986. He won the Archibald Prize, Australia's premier art award, in 1998. Lewis' first contact with the Laboratory was through a meeting with Jim and Liz Watson when they were visiting Australia. Jim invited Lewis to attend the 1998 Symposium on "Mechanisms of Transcription" as artist-in-residence. He drew many of the speakers, and today a selection of these portraits hang in the Laboratory's Blackford Hall. Lewis returned in 2000 to paint Jim, a picture that hangs in Grace Auditorium, gazing down at the speakers. Most of the portraits reproduced in this book were drawn from life during an intense 6 days at the Symposium, "The Genomics of *Homo sapiens*" in 2003.

To round out the pencil portraits, the book's editors felt it was important to highlight the contributions each individual has made, and in many cases continues to make, to genome science, and so we commissioned short essays on each scientist from another scientist, those we felt were best able to convey the facts and significance of the accomplishments as well as the personality of each sitter. As such, these essays with anecdotes and opinions are memoirs rather than academic studies, and readers will find inconsistencies between the accounts that we have not attempted to reconcile.

The first draft sequence of the human genome in 2001 was a stunning achievement, and since then developments in hardware and software have led to an astonishing increase in the ease and rate of sequencing. Obtaining an individual human genome sequence is now an increasingly important tool for medical diagnosis and treatment. The triumph of the pioneers portrayed here is the recognition that as students of human biology, we are all genome scientists now.

It was Jim Watson's idea to create this book, bringing Lewis Miller's drawing together with biographical essays. As always in such matters, the result is a testimony to Jim's impeccable taste.

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