

Preface

SEVERAL YEARS AGO I WAS INVITED to write a historical piece about a project I had worked on two decades earlier. It was a time-consuming but meaningful adventure of conjuring up lost memories, digging through old lab notebooks, re-examining antiquated papers, dusting off slides and faded photographs, and ultimately committing to words the exhilaration of doing science. When I completed the task, an idea started to percolate: how could I tweak other scientists into telling their own stories of discovery? The answer soon came when the journal *PLoS Genetics* was founded and Mark Patterson, the director of publications for the Public Library of Science, asked me if I would consider writing interviews for it. With no experience and almost no hesitation, I said, "Yes!"

These interviews are my attempt to capture the essence of doing science as practiced or witnessed in the field of genetics. My intention has been not only to document important moments of scientific discovery, but also to convey the excitement, the labor, the serendipity, and the human joy and anguish inherent in it. I hope you will agree that the stories are inspirational, often humorous, and always compelling.

"How do you choose whom to interview?" I am often asked. I have attempted to meet with people who have worked on a variety of organisms and a range of scientific problems. I looked for people who achieved success accidentally as well as those who made a focused assault toward a discovery. I also chose subjects whose breadth of experience transcended the laboratory—the president of a university, an author, the founder of a company, and an explorer—to gain a wider perspective. Moreover, I was interested in expanding the dialog to include a set of individuals whose work interfaces with genetics, but who are not themselves scientists: a judge, a reporter, an administrator, and an historian of science. It was remarkable to me that every person I approached, with only one exception, readily agreed to be interviewed.

The interview "protocol" I established was simple, and I communicated it to the interviewees at the outset. With two exceptions, I met my subject in person, usually on his or her home turf. I recorded the entire interview, except when asked to turn off the recorder, and I transcribed the bulk of it. Then began the fun, yet challenging, process of redacting the interview into a cohesive

product of only about 4000 words, including a title and a brief introduction. I sent this draft to the interviewee to check for accuracy and approval. The editors at *PLoS Genetics* also provided extremely valuable input, especially in helping me to cut parts that I couldn't bear to discard on my own. I also added a photo, usually one that I had taken on the spot. [Others were supplied by Victor Ambros (self-portrait), Rebecca Cann (courtesy of Lenny Freed), Tom Cech and Evan Eichler (courtesy of Howard Hughes Medical Institute), Svante Pääbo (courtesy of Max Planck Institute for Evolutionary Anthropology), and Nicholas Wade (courtesy of *The New York Times*).]

I thank my friend Mark Patterson for offering me the opportunity to write these interviews, all of which were conducted and originally published in *PLoS Genetics* during the period 2005–2010. The journal's first editor-in-chief Wayne Frankel was an enthusiastic and alert sounding board, and managing editor Catherine Nancarrow has been more cheerful and consistently supportive than anyone could hope for; ditto for Andy Collings in the Cambridge UK office. The other *PLoS* academic editors, staff editors and copy editors who have helped me over these five years are now quite numerous, and thanks go to Nicole Sheikh, Johanna Dehlinger, Tamsin Milewicz, Sam Moore, Catriona Silvey, Lizzy Fisher, Susan Rosenberg, and the two Gregs (Copenhaver and Barsh). The summer course at the UC Berkeley Regional Oral History Office provided me with the confidence and some special tips to move forward, and I especially thank Sally Smith Hughes for her encouragement and insight. I have been very lucky to work with Alex Gann, Joan Ebert, Jan Argentine, Mala Mazzullo, and Denise Weiss at Cold Spring Harbor Laboratory Press, and I thank Sandy Johnson for making that connection. My friend and fellow book-clubber Chieko Murasugi came up with the title "Speaking of Genetics." I am grateful to members of my laboratory who have endured my distraction with this project and the Howard Hughes Medical Institute and Department of Medicine at UCSF for their financial patronage during this period. I acknowledge my sister Mary and daughter Annie for their unflagging love and support and, above all, my parents Len and Jean Gitschier, who instilled in me the precious gift of life-long curiosity.

It is a privilege to sit quietly and give full attention to someone's story, and I have been enriched immeasurably by this process. To those of you with whom I have shared the intimate hour or two discussing your life and who trusted me to tell your story, I am deeply grateful.