Preface

ADVANCES IN MODELING CANCER IN MICE have blossomed in recent years, providing us with unparalleled opportunities to model human cancer and to learn about its biology and therapeutic vulnerabilities. In this book, we have sought to capture the state-of-the-art of the field to highlight the critical role that mouse models—including genetically engineered mouse models and patient-derived models—have played in our understanding of cancer over the course of the past decade since we edited *Mouse Models of Cancer: A Laboratory Manual* in 2014. Thus, chapters in this book cover topics ranging from cancer metabolism in mice to studies of the tumor microenvironment and cancer cell plasticity, all areas of investigation that have seen significant growth in recent years. Instrumental to these studies have been technical advances in modeling and in imaging that have made it possible to track and study individual cells and tumors in vivo, model complex genotypes in a high-throughput manner, and more readily engineer the mouse genome. Therefore, close to half of the chapters in the book cover these new technologies and their impact on the field. Our hope is that this book can serve as a guide to where the field stands now and also provide information that sparks new ideas of how to approach vexing problems in cancer.

We are indebted to Barbara Acosta and Richard Sever from Cold Spring Harbor Laboratory Press for their expert guidance and support as we developed this book. We are also very grateful to all of the authors and colleagues from the extraordinary mouse modeling community, whose unmatched expertise and commitment have enabled the creation of this comprehensive book on the state of modeling cancer in mice today.

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