Preface

*Molecular Pathology of Liver Diseases* is the fifth volume in the *Molecular Pathology Library Series* by Springer. Owing to the improved understanding of the cellular and molecular mechanisms of diseases, academic medicine is undergoing an evolution. Novel molecular tests not only aid in a disease diagnosis, but also can be extrapolated for disease prognosis. Similarly, modulation of biological pathways for the treatment of a disease is becoming a reality. The molecular structure and function of a normal and abnormal gene product enables the determination of highly relevant diagnostic, therapeutic, and prognostic information. In essence, the physicians and scientists alike are inundated with basic and translational information on the mechanisms of health and disease. It is of great significance to generate resources capable of: (1) bridging molecular biology and pathology, and clinical medicine; (2) providing a unique educational resource to the academic physicians and researchers keeping abreast of the timely advances, evolving modalities, and shifting paradigms; and (3) providing fundamental concepts in organ-based molecular pathobiology. *Molecular Pathology of Liver Diseases* is a compilation of a broad range of topics in liver health and disease to serve as a unique, timely, and comprehensive resource for practicing physicians, researchers, and trainees in the ever-evolving field of hepatic pathobiology, as we move forward into an era of integrative and personalized medicine.

*Molecular Pathology of Liver Diseases* integrates the traditional knowledge of physiological and pathological processes in the liver with a balanced emphasis on fundamental concepts, timely advances in cellular and molecular mechanisms, and applied pathology. The textbook is organized into several sections, each of which includes an array of chapters that progressively and cohesively elaborate on pertinent liver biology and pathology. The first three sections discuss the cellular composition of the liver along with their specialized functions, and further dissect the molecular basis of the cellular processes that are so unique to the liver. The next section examines the mechanisms that are commonly implicated in the cellular and molecular basis of several hepatic pathologies, followed eventually by a section each on a multitude of nonneoplastic and neoplastic diseases of the liver. Thus, these sections provide an expansive understanding of hepatic physiology, whose aberrations have pathological consequences.

The textbook is written and presented as a one-stop and comprehensive reference on liver pathobiology for basic, translational and clinical researchers, and physicians. As is vividly reflected by the diversity of the contributing authors from various disciplines, I would also anticipate this textbook to be of value to pathologists, hepatologists, surgeons, oncologists, molecular biologists, physiologists, biochemists, and toxicologists with interest in the Liver. This textbook is also suitable for medical students, graduate students, residents, and fellows with an interest in liver biology. The format of the textbook is meant to serve as a ready reference to relevant topics in the liver, thus providing a practical disease-based integrative resource on the molecular pathology of liver disease.

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