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Without question, rapidly progressing scientific, technological and clinical developments in the field of genetics are revolutionizing our approach to clinical medicine, research and development, agricultural production, and public health. Increasingly, attention is shifting to the law, with inquiring minds speculating about the role genetics and genetics-based technologies will play in framing and resolving lawsuits and other forms of dispute under the law. Although the introduction of genetics-based evidence in the courtroom is still a relatively rare occurrence, the role genetics and genetics-based technologies could play in influencing legal rights and remedies is becoming increasingly clear. So too are questions regarding the extent to which genetics should influence the framework for and resolution of cases and controversies arising under constitutional, statutory or common-law precedents. This book will introduce students in law, medicine, public health and public policy to the many ways in which genetics is, or is about to, intersect with law, and assist them in addressing the complex legal, ethical and social policy issues that come into play when considering the extent to which genetics should play a role in shaping—or reshaping—our laws.

Because the role of genetics in law is evolving, this casebook incorporates a wide range of materials, in addition to relevant judicial opinions from federal and state courts. Our materials include statutes, administrative regulations, proposed federal and state legislation, professional medical guidelines, public policy statements and advisory opinions, and relevant analyses and commentary drawn from leading legal, medical, and scientific scholars who are studying the many issues that attend the intersection of law and genetics. One prevailing theme throughout these materials is the important role that scientific understanding plays in achieving an appropriate application of genetics-based knowledge to issues of law, and an appropriate application of law to disputes involving the application, interpretation or ownership of genetics-based information and technologies. Throughout this book the authors either provide students with an introduction to the relevant scientific principles, or refer them to reliable sources for the scientific background that is critical to a comprehensive understanding of the legal issues under study.

Consistent with our emphasis on multidisciplinary understanding, Chapter 1 provides students with a brief historical overview of the science of genetics. Chapters 2, 3 and 4 introduce students to relevant cases and materials bearing on the controversial issues of genetic privacy and genetic discrimination. Chapter 2 focuses primarily on legal rights, responsibilities and remedies surrounding access to and dissemination of genetic information. Chapters 3 and 4 analyze the myths and realities underlying public and political concerns about genetic discrimination in both the workplace and the insurance context. Chapter 5 provides an introduction and overview of increasingly visible and disputed issues arising in genetics research involving human subjects. Chapter 6 moves students from the laws regulating research, to those that govern the commercialization
of—and ownership rights in—the products of genetics-based research. Chapters 7, 8 and 9 address the legal issues that surround three of the most well-known and established areas of application for genetics-based technologies: clinical medicine, agricultural biotechnology and forensic evidence. Chapter 10 completes our overview of genetic technologies and the law with an in-depth review of relevant cases and materials outlining the role of genetics in public health, moving from the eugenics movement in the early 1900s to issues underlying contemporary public health programs promoting prenatal and newborn screening.

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Note on Editing

The student’s ability to easily read the material was a guiding principle when editing the text. Cases, statutes and other sources are edited to a reader-friendly format. Deleted material is generally denoted by the use of ellipses which serve to indicate an undetermined amount of omitted text. When footnotes and citations, including parallel citations, are omitted there is no indication.
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