Foreword

Genetic Disorders among Arab Populations by Ahmad S. Teebi and co-authors appears here in its second edition. The first edition (in 1997) shows how one could tap into a rich load of information on human and medical genetics, a source probably too little mined until now. One can be pleased that the first edition was warmly welcomed by Prof. Victor McKusick, the author of the Foreword to that edition. The authors of this edition have taken pains to remind us again that persons and patients, and the corresponding families and communities, represent a stream of human history and a region of the world that embraces ethnic, cultural and religious attributes more diverse than we might have imagined, yet with a commonality that gives “coherence to an account of it and a usefulness [when it is considered] as a unit” (VA McKusick, Foreword to first edition).

Arab populations have their repertoire of genetic disorders, both universal and particular. Genetic diversity within these source populations, along with the fact that rates of inbreeding are often high and family sizes are often large, constitutes conditions that facilitate the emergence and detection of phenotypes explained notably by autosomal recessive inheritance, in which case, the use of homozygosity gene mapping will facilitate discovery of the corresponding genes. Meanwhile, the interval between the publication of the first and second editions of genetic disorders has witnessed emergence of the Middle East Genetic Association of America and the creation of ethnic (Arabic)-related, locus-specific mutation databases to serve as nodes in the network of related interests. Driven by relevant research interests, initiatives are emerging in the Arabic world to address issues such as taxonomy and fine-grained descriptions of variant disease phenotypes, their origins, distributions and frequencies in populations, their molecular infrastructure, and with a better knowledge of their pathogenetic processes, better opportunities to address counseling, prevention and treatment.

The authors of the second edition have again chosen not to provide an exhaustive list of relevant genetic disorders; that can be done eventually when there is a curated online database. Rather, the authors again highlight various issues and perspectives that can be seen through the windows offered by a number of prevalent genetic disorders in the Arabic world. Accordingly, the attitudes and responses generated
by these problems, as they are influenced by Islamic perspectives, wisely constitute
the recurrent underlying theme in the book, because the cultures and faith of the
Arabic communities yield quite different responses and perspectives from the
corresponding encounters in the non-Islamic world. It is a particular form of a

The authors use prevalent, pan-Arabic disorders (Table 1.1), along with a
selection of rarer “founder” disorders (Table 1.2), to delve into the biological
explanations for their occurrence and impact. These disorders set the scene to
explain important demographic issues, the related population dynamics, indicators
of individual collective health, and the impacts of endogamy and consanguinity on
the frequencies and distribution of the disorders. Familial Mediterranean Fever, for
example, illustrates these perspectives well and is highlighted accordingly. The
authors examine 15 different countries and regions harbouring Arabic populations,
to discern issues with more specific aspects. One might say that in this diversity,
there is a unity and vice versa. Consolidations of the expanding information on
genetic disorders in Arabic populations improves our knowledge of them. Whether
that leads to better wisdom, in how we help the individuals, families and commu-
nities harboring them, is, I am convinced, a sincere motivation to pursue the course
undertaken by Professor Teebi and his co-authors. It has indeed yielded this
enhanced second edition of Genetic Disorders among Arab Populations.

Charles R. Scriver MDCM FRS
Alva Professor Emeritus of Human Genetics
Professor of Pediatrics and Biology
McGill University
Montreal, Canada
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