

# Preface

Bacterial genomics is a rapidly expanding and fast moving research area. Considerable new knowledge has been gained by studying bacterial genomes and their functions. Genomics has now become an integral part of bacterial studies which provide new insights into the bacterial physiology, evolution, ecology, epidemiology, and pathogenesis.

A number of excellent review articles on recent genomic findings in various bacterial genera and species exist; however, it is difficult to find a comprehensive source of up-to-date information on the genomics of foodborne bacterial pathogens. For this reason, we formulated the idea of a book that provides in-depth reviews on the genomics of food-associated bacterial pathogens, as well as broad discussions on current applications of genomic, transcriptomic, and proteomic technologies in studying the bacterial physiology, epidemiology, and evolution, including the application of genomic tools to practical food safety problems. We hope that this book will be a useful reference for researchers interested in bacterial genomics and the use of genomic tools to investigate foodborne bacterial pathogens. As newer generations of sequencing and other genomic technologies, as well as analytical tools emerge at an unprecedented rate, we anticipate that the information provided in this book will present an introduction into the rapidly changing world of foodborne pathogen genomics.

We are most grateful for our contributors for their willingness, dedication, time, and efforts to make this book a reality. We feel humbled to co-write this book with a stellar group of internationally recognized experts in the cross-disciplinary fields of food microbiology and bacterial genomics. We specially acknowledge Susan Safren, who invited us to contribute to the *Food Microbiology & Food Safety* book series and provided us tremendous help along the journey of publishing this book. We are also thankful for Rita Beck for her kind assistance in the production of this book.

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