Preface

Advanced food manufacturing technologies have allowed food preparation to become a worldwide process rather than a local home industry. With this technological advancement, the control of food-borne pathogens, viruses, and parasites has become the responsibility of the manufacturers rather than the consumers. The worldwide distribution systems and storage of prepared food have also generated increased vigilance on the part of the manufacturers to control contamination by food-borne pathogens. Rapid, valid testing methods to detect and identify food-borne pathogens have therefore become a daily necessity for the food industry. Furthermore, surveillance and monitoring are a justifiable requirement, if confidence in the food we eat is to be maintained.

The contributions to *Food-Borne Pathogens: Methods and Protocols* present emerging molecular methods of analyzing food-borne pathogens. It contains methodologies for the laboratory isolation and identification of the three groups of organisms that cause food-borne disease: bacteria, viruses, and parasites. A review of toxin detection kits and the analysis by high performance liquid chromatography and bacterial storage conditions is also included. These methods demonstrate the direction in rapid identification systems presently being developed. The move from the use of biochemical tests and commercial miniaturized identification kits has been slow and will depend on the accuracy and validation of molecular methods. Cost will also be a factor in many instances.

This inclusion of *Food-Borne Pathogens: Methods and Protocols* in the food testing laboratory library will allow technologists access to both the methods currently being used and to new methodologies for testing organisms that might not have been attempted previously.

The importance of surveillance systems and risk assessment has also been highlighted and should not be underestimated by food testing personnel as an addition to their laboratory protocols.

It is envisioned that the methodologies presented in *Food-Borne Pathogens: Methods and Protocols* will be used on an ongoing basis by the food technologist and research scientist alike.

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