Foreword



IN THE EVER-EVOLVING LANDSCAPE OF BIOLOGical sciences, the importance of aseptic technique cannot be overstated. *Aseptic Technique: Safe and Sterile Biological Processing* is a comprehensive guide that delves into the critical aspects of maintaining sterility and safety in rocessing.

biological processing.

This book covers essential topics such as the fundamentals of aseptic technique, laboratory-acquired infections, personal protective equipment, the sterile workspace, personal and laboratory hygiene, environmental monitoring, and aseptic processing in cleanroom environments. Each chapter is meticulously crafted to provide readers with the knowledge and tools necessary to maintain a sterile and safe laboratory environment. The information is presented in an easy-to-digest manner, with numerous "nuggets" that are both easy to remember and crucial for effective practice.

One of the standout features of this book is its emphasis on explaining the "why" as well as the "how." Understanding the reasons behind each technique and practice is vital for ensuring that these principles are applied correctly and consistently. Attention must be paid every moment; aseptic technique is not a "one and done" process. The principles and practices outlined in this book must be kept in mind at all times to maintain a sterile environment.

A resource like this is invaluable. The content is designed for anyone involved in biological research and processing, from students and laboratory technicians to experienced researchers. The importance of aseptic technique cannot be overstated, as it is fundamental to preventing contamination and ensuring the integrity of biological experiments and processes.

The insights and guidance provided in this resource will undoubtedly contribute to the advancement of safe and effective biological practices. As readers embark on this journey through the pages of this book, may they find the knowledge and inspiration to uphold the highest standards of aseptic technique.

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Preface



AABB HAS BEEN A LEADER IN PATIENT SAFETY in the blood industry. As the biotherapy industry continues to grow and advanced therapies are more available to the general populace, a refocused effort is needed to continue to ensure this dedication to patient safety. Sometimes

going back to the basics is necessary even as we advance in cellular and biological field.

The focus of this book is to reintroduce the basic concepts of aseptic technique and the basic practices used to keep cellular products sterile so they may be administered to patients without risk of contamination. Keeping cellular and gene therapy professionals safe during their work is also critical.

Although no one book can fully cover every last topic for every single operation, addressing the basics is essential to operations in a highquality laboratory. To date, many of the resources available omit discussion of key essentials of aseptic technique or may have other flaws. To fully protect the biological product as well as the operator, a more comprehensive explanation of key aspects is necessary.

This book is intended to address what is required to ensure that best practices are followed. Chapters include the scope and principles of aseptic technique, the infections that can be acquired in the laboratory, details on personal and laboratory hygiene, best practices for working in a sterile workplace, the inclusion of environmental monitoring in laboratory operations, and the extra rigor required in a cleanroom environment. The appendices provide useful tools for understanding and observing aseptic technique.

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