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FORENSIC MICROBIOLOGY

Edited by

David O. Carter, Jeffery K. Tomberlin, M. Eric Benbow and Jessica L. Metcalf



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Forensic Microbiology

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Forensic Microbiology focuses on newly emerging areas of microbiology relevant to medicolegal and criminal investigations: postmortem changes, establishing cause of death, estimating postmortem interval, and trace evidence analysis. Recent developments in sequencing technology allow researchers, and potentially practitioners, to examine microbial communities at unprecedented resolution and in multidisciplinary contexts. This detailed study of microbes facilitates the development of new forensic tools that use the structure and function of microbial communities as physical evidence. Chapters cover:

- Experiment design
- Data analysis
- Sample preservation
- The influence of microbes on results from autopsy, toxicology, and histology
- Decomposition ecology
- Trace evidence

This diverse, rapidly evolving field of study has the potential to provide high quality microbial evidence which can be replicated across laboratories, providing spatial and temporal evidence which could be crucial in a broad range of investigative contexts. This book is intended as a resource for students, microbiologists, investigators, pathologists, and other forensic science professionals.

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