







Special Issue Reprint

Laboratory Diagnosis in Microbial Diseases

www.mdpi.com/books/reprint/8860

Edited by Hsin-Yao Wang

ISBN 978-3-7258-0361-3 (Hardback) ISBN 978-3-7258-0362-0 (PDF)



Currently, the diagnosis of infectious diseases largely depends on conventional phenotypic tools. However, typically, these tools are heavily based on culturing and are susceptible to bias. Discussing the unmet needs, this Special Issue contributes 11 studies to the study community. The papers in this issue present a diverse array of investigations spanning infectious diseases, microbiome analysis, and diagnostic methodologies. From identifying distinct microbial ecosystems in gallstone patients and evaluating diagnostic methods for latent tuberculosis in hemodialysis patients to assessing the performance of serological assays for Chikungunya virus, the issue covers a broad spectrum of topics. Additionally, the studies delve into the prevalence and characteristics of parasitic infections among school children, the diagnostic challenges in lower respiratory tract infections, and the utility of dried blood spots for serological studies of viral infections. The issue also explores advanced techniques in the detection of Mycobacterium tuberculosis, multiplex PCR assays for neuromeningeal infections, and enzyme immunoassays for monitoring diphtheria toxin production. In addition, a critical review is included that outlines proteomic perspectives on antibiotic resistance in ESKAPE pathogens. There is a need for innovative diagnostic approaches, especially proteomic tools, in the face of emerging pandemics. Overall, this Special Issue offers a comprehensive overview of cutting-edge research in microbiology, infectious diseases, and diagnostic methodologies, contributing valuable insights to the scientific community.





MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.

MDPI AG Grosspeteranlage 5 4052 Basel Switzerland Tel: +41 61 683 77 34 www.mdpi.com/books books@mdpi.com

