

Molecular detection to improve surveillance of multi-resistant bacteria

Citation for published version (APA):

Nijhuis, R. H. T. (2015). *Molecular detection to improve surveillance of multi-resistant bacteria*. Maastricht University.

Document status and date:

Published: 01/01/2015

Document Version:

Publisher's PDF, also known as Version of record

Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

www.umlib.nl/taverne-license

Take down policy

If you believe that this document breaches copyright please contact us at:

repository@maastrichtuniversity.nl

providing details and we will investigate your claim.

MOLECULAR DETECTION TO IMPROVE SURVEILLANCE OF MULTI-RESISTANT BACTERIA

1. The use of molecular methods is vital for rapid implementation of adequate infection prevention safety measures. (this thesis)
2. Screening for multi-resistant bacteria in high-risk patients prior to hospitalization is essential to prevent transmission of these bacteria within the hospital environment. (this thesis)
3. Molecular-based methods play an important role in the correct detection of multi-resistant bacteria since currently recommended phenotypical screening and confirmation methods can lead to either false-positive or false-negative results. (this thesis)
4. Periodically creating an overview on the distribution of resistance genes is important to maintain the best feasible diagnostic system to detect multi-resistant bacteria. (this thesis)
5. When financial considerations are becoming decisive in determining the policy of microbiological diagnostics instead of scientific data, the quality of healthcare will be at risk.
6. Introducing molecular methods for the detection of antimicrobial resistance genes in non-cultivable pathogens can be crucial for correct treatment of patients infected by these pathogens.
7. The future implementation of next-generation sequencing in routine laboratories for medical microbiological will gain new insights in the combat against antimicrobial resistance.
8. As a result of the rapid detection of resistance genes using validated assays, adequate therapy to treat infected patients can be installed as soon as possible. (valorization)
9. Progress is made by trial and failure; the failures are generally a hundred times more numerous than the successes; yet they are usually left unchronicled. (William Ramsay)
10. The stress that is involved in the attempt to obtain a PhD, is immediately replaced by a state of euphoria when accomplishing this PhD.