16S rRNA gene profiling: Direct and indirect applications for clinical microbiology

Munckhof, E.H.A. van den

Stellingen behorend bij het proefschrift

16S rRNA GENE PROFILING

Direct and indirect applications for clinical microbiology

1. 16S rRNA gene profiling can be used to identify potential pathogenic genera in sputum, but only when combined with species-specific qPCR to achieve the needed resolution. (*This thesis*)

2. For evaluation of methods for the diagnosis of bacterial vaginosis is 16S rRNA gene profiling a good alternative to replace the current golden standard, the Nugent score. (*This thesis*)

3. 16S rRNA gene profiling has potential to be applied for studying the impact of treatment on polymicrobial communities. (*This thesis*)

4. Microbiota research is hot, but fundamental research should be encouraged for safely and widely application of microbiota findings into the clinic. (*This thesis*)

5. The microbiome field is slowly but surely approaching the clinic. (J. Raes, *Gut* 2016)

6. Microbiota-based diagnostics rather than providing information on a single pathogen may direct the use of antibiotics. (D. Bogaert, *European Journal of Clinical Microbiology & Infectious Diseases* 2018)

7. Understanding microbiome variability holds potential to promote personalized preventive and therapeutic approaches. (E. Elinav, *Nature* 2018)

8. The respiratory symptoms of COVID-19, the gastrointestinal tropism of SARS-CoV-2, and an altered gut microbiota in some cases make it worthwhile to consider the gastrointestinal tract as a potential target in disease management. (A. Padros, *Gut Microbiota for Health*, 2020)

9. The shortage of security measures at the beginning of the pandemic allowed SARS-CoV-2 to strike among staff and residents of many care homes for elderly in the Netherlands.

10. There's no way to be a perfect mother and a million ways to be a good and happy one. (naar *Jill Churchill*, 2003)