Automated immunofluorescence and fluorescent in situ hybridization for the quantitative determination of plaque bacteria

Summary / Zusammenfassung
The purpose of this project is to update and optimize methods enabling the automated and quantitative analysis of the composition of plaque or biofilms by indirect immunofluorescence (IF) and/or fluorescent in situ hybridization (FISH). A system developed in close collaboration with colleagues from Unilever Research Laboratories (Port Sunlight, England) is adjusted to operate under the control of the imaging software "Cell^P" (Olympus). The modified system will be evaluated and then used to assess complex biofilms stained with appropriate monoclonal antibodies or 16S rRNA probes for selected bacterial taxa.

Publications / Publikationen

Keywords / Suchbegriffe
Automated immunofluorescence, automated FISH, microbial diagnosis, dental plaque analysis, etiology of caries and periodontal diseases

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