



2010 ESE Annual Research grant

Joint winners:

Suzette V. van der Waal

Title: How to disrupt biofilm matrix

Award: 10000 Euros

Affiliation: Academic Centre for Dentistry (ACTA), Amsterdam, The Netherlands.



Curriculum vitae

- '91 graduation at Academic Centre for Dentistry Amsterdam (ACTA)
- '91-'98 teacher ACTA pedodontic department
- '91-'06 private practice
- '06-'09 post-graduate endodontic programme ACTA. Thesis: The effect of hyperosmosis and calciumhydroxide on a dual-species biofilm of *Enterococcus faecalis* and *Pseudomonas aeruginosa*.
- '09 – present practice limited to endodontics
- '09 – present researcher at ACTA endodontic department

In endodontics, we are well aware that in infected root canals, micro-organisms live in a biofilm configuration. This makes them less susceptible to antimicrobials. Increased resistance is partly due to the change in genetic make-up. But also, biofilms consist for 95-99% of extracellular polysaccharides (EPS), which is produced by the micro-organisms that live within this substance. This substantial part of the biofilm is often overlooked in studies that investigate efficacy of antimicrobial compounds.

Literature from other research areas, than the endodontic field, about the composition of EPS can help us to get a better understanding of endodontic biofilms. New insights may lead to the development of a more efficacious root canal disinfection protocol.

G Gambarini

Title: Biochemical characterization of dental pulp stem cells and effect of methylacrylate monomers on cell differentiation

Award: 10000 Euros

Affiliation: Universita' degli Studi di Roma, Rome, Italy