



**European Society of Endodontology**

**Young Investigator Research Grant**

**Award 5000 Euros**

**Merete Markvart. Assistant Professor, DDS, PhD**



The aim of the annual ESE Young Investigator Research Grant is to support young investigators in the early phase of their research career in Endodontology. A "young" investigator in the context of this award is defined as an individual who is 'professionally' young in academic terms rather than in chronological age, e.g. pre-doctoral students at all levels (MSc, PhD students and equivalent), and up to 3 years following the award of a PhD (or equivalent). Undergraduate students are excluded.

### **Project**

The objective of the project is to study the effect of UV LED light as a part of a non-mechanical disinfection procedure on endodontic biofilm using matured intra-canal cultured biofilm, sampled from large root canals associated with apical periodontitis.

The study aims to:

- initiate a new biofilm sampling set-up for culturing *in vivo* matured nature-like biofilm.
- visualize and describe alterations on intra-canal cultured *in vivo* matured nature-like biofilm after light disinfection with LED and UV LED light sources, and 5% iodine potassium iodide.

The project is carried out at the Division of Cariology and Endodontics, Department of Odontology, in collaboration with the Department of International Health, Immunology and Microbiology, Faculty of Health Sciences, University of Copenhagen.

### **Career**

2005 Master in Dentistry from University of Copenhagen

2005-2012 Employed in general private practice and at the Division of Cariology and Endodontics, Department of Odontology, Faculty of Health Sciences, University of Copenhagen.

2011 PhD in Health Science from the University of Copenhagen, with the thesis '*Biomechanical root canal preparation, morphological and microbiological challenges*'.

2012-2014 Dentist and Clinic leader within municipal dental care

2014 – Assistant Professor at the Division of Cariology and Endodontics, Department of Odontology, Faculty of Health Sciences, University of Copenhagen.