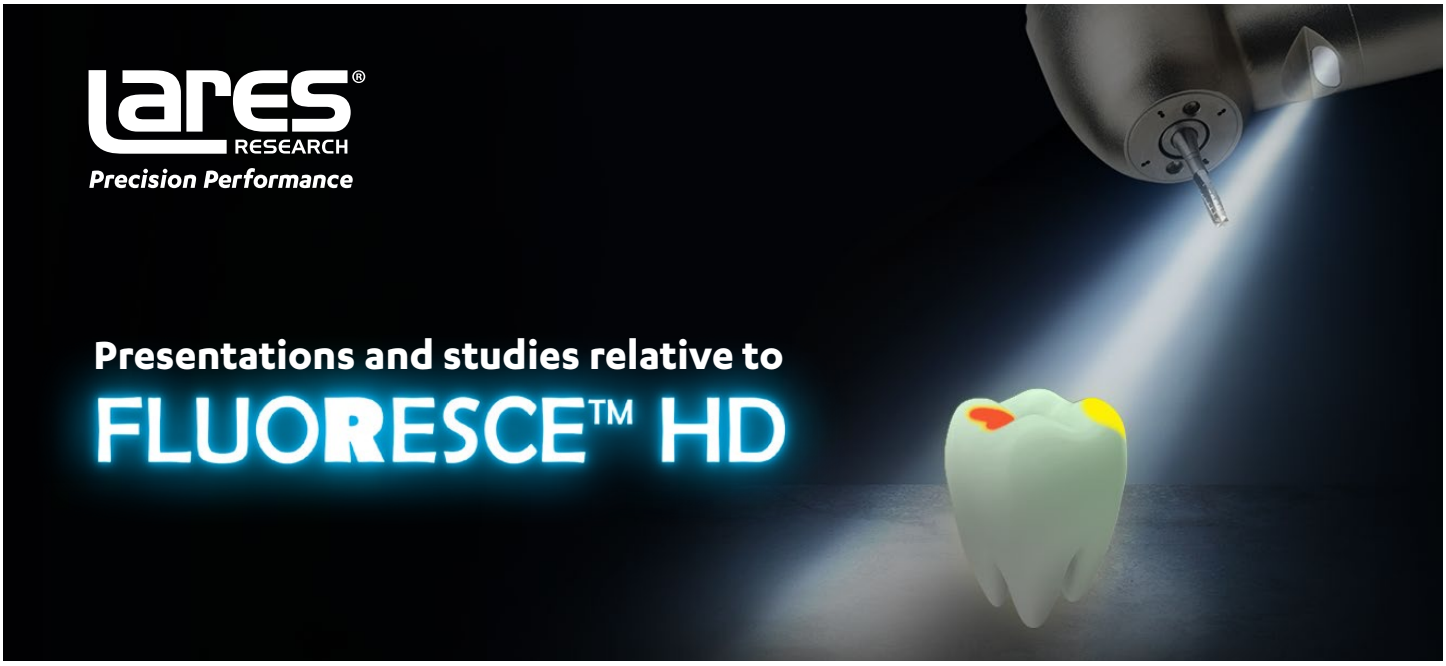

Fluoresce HD dramatically enhances visualization of decay, composite and healthy tooth by switching from white to UV LED light with the push of a button. Read below for presentations and studies relative to the Fluoresce HD technology.

Studies

Study 1: Fluorescence-Aided Caries Excavation (FACE) – working principle and recommendations for use

Summary: Fluorescence-Aided Caries Excavation (FACE) makes it possible to see bacterially infected dentin areas, and subsequently to remove those areas selectively while preserving adjacent, non-infected dentin.

Buchalla W, Lennon AM: ***Fluorescence-Aided Caries Excavation – working principle and recommendations for use.***
German Dental Journal; 70, 2 (2015)

Study 2: The ability of selected oral microorganisms to emit red fluorescence

Summary: Under optimal excitation and emission conditions, visible red fluorescence is probably a good indicator of the presence and activity of bacteria in dentin caries.

Lennon AM, Buchalla W, Brune L, Zimmermann O, Gross U, Attin T: ***The ability of selected oral microorganisms to emit red fluorescence.***
Caries Res; 40, 2-5 (2006)

Study 3: Efficiency of four caries excavation methods compared

Summary: In this study, the best combination of excavation time and successful removal of infected dentin was achieved using FACE; as well as the improved removal of infected dentin using this new technique may be appealing to the clinical dentist because it reduces working time.

Lennon AM, Buchalla W, Rassner B, Becker K, Attin T: ***Efficiency of four caries excavation methods compared.***
Operative Dentistry; 31-5, 551-555 (2006)

Study 4: Fluorescence-Aided Caries Excavation (FACE) compared to conventional method

Summary: Within the limitations of this in vitro investigation, it can be concluded that excavation using FACE results in significantly fewer cases of residual caries than conventional excavation.

Lennon AM: ***Fluorescence-Aided Caries Excavation (FACE) compared to conventional method.*** *Operative Dentistry; 28-4, 341-345 (2003)*

For more information on Fluoresce HD and to read the full studies, visit **www.laresdental.com/fluoresce-hd**

Study 5: Reliability of a Fluorescence-aided Identification Technique (FIT) for detecting tooth-colored restorations

Summary: The Fluorescence-aided Identification Technique (FIT) was significantly more reliable for identifying tooth colored restorations as shown by higher sensitivity, specificity, repeatability and reproducibility values compared to conventional methods.

Meller C, Connert T, Lost C, ElAyouti A: ***Reliability of a Fluorescence-aided Identification Technique (FIT) for detecting tooth-colored restorations: an ex vivo comparative study.*** *Clin Oral Invest; (2016)*

Study 6: Micro-computerized tomography assessment of Fluorescence-Aided Caries Excavation (FACE) technology

Summary: The FACE method is an effective caries removal technology for removing infected dentin without significantly increasing cavity size.

Zhang X, Tu R, Yin W, Zhou, Li X, Hu D: ***Micro-computerized tomography assessment of Fluorescence-Aided Caries Excavation (FACE) technology: comparison with three other caries removal techniques.*** *Australian Dental Journal; 58, 461-467 (2013)*

Study 7: Sensitivity, specificity & accuracy

Summary: The FACE method has a higher detectability (sensitivity, specificity & accuracy) compared to visual inspection and caries detector dye in diagnosis and removal of carious dentin.

Peskersoy C, Turkun M, Onal, B: ***Comparative clinical evaluation of the efficacy of a new method for caries diagnosis and excavation.*** *J Conserv Dent; 18, 5, (2015)*

Study 8: FACE method compared to Sable Seek (Ultradent)

Summary: : FACE method has a number of advantages when compared to Sable Seek (Ultradent) caries detection dye: non-invasiveness, lack of interaction with tooth structures, speed, reliability, efficiency, predictability and repeatability of results.

Peskersoy C, Turkun M, Onal, B: ***Comparative clinical evaluation of the efficacy of a new method for caries diagnosis and excavation.*** *J Conserv Dent; 18, 5, (2015)*

Presentations

1. Is red fluorescence a good marker for infected dentin?

Summary: The red caries autofluorescence has been tested to be a reliable indicator of infected dentin.

Lennon ÁM, Buchalla W, Switalski L, Stookey GK: ***Residual caries detection using visible fluorescence****. Caries Res; 36: 315-319 (2002)*

2. Which oral bacteria emit red fluorescence?

Summary: Of the bacterial species tested, those commonly found within the caries lesion in dentin produce red fluorescing compounds.

Lennon ÁM, Buchalla W, Brune L, Zimmermann O, Groß U, Attin T: ***The ability of selected oral microorganisms to emit red fluorescence.*** *Caries Res; 40: 2-5(2006)*

3. How does FACE compare to conventional excavation in a three-dimensional cavity?

Summary: The incidence of bacterially infected dentin is significantly lower following FACE excavation compared to conventional excavation.

Lennon ÁM: ***Fluorescence-Aided Caries Excavation (FACE): compared to conventional method.*** *Oper Dent; 28: 341-345 (2003)*

4. Does more thorough removal of infected dentin result in larger cavities?

Summary: FACE is capable of a more complete removal of infected dentin without significantly increasing the cavity size compared to conventional excavation methods.

Lennon ÁM, Attin T, Buchalla W: ***Quantity of bacteria remaining and cavity size after excavation with FACE, caries detector dye and conventional excavation in vitro****. Oper Dent; 32, 236-241 (2007)*