



“eLABor_aid®” - capture, calibrate & create.

Statement of Problem:

Matching natural tooth shades reliably remains a formidable challenge in the every day. Clinical results can be optimised if the dental ceramist is able to be present during shade assessment and try-in. However, even under these ideal conditions the accuracy of a shade match is still largely dependent on the ceramist experience, talent and finally, a considerable amount of luck. The demands of an increasingly globalised market place impose new challenges on the high street ceramist which prohibit direct contact with patients. How can the clinician communicate tooth shade accurately using commonly available technology and how can the ceramist replicate the shade reliably without costly redo's?

Solving the shade problem once and for all:

The eLABor_aid® system presents the culmination of years of relentless research by the Bio-Emulation Group. Through intense investigation, countless trials and close collaboration between clinical and technical experts it became possible to develop a standardised protocol for dental photography using a regular digital single lens reflex (DSLR) camera, a macro flash as well as the polar_eyes® filter. The digital photograph is then processed to measure the desired shade from the computer screen. With the aid of a manufacturer specific chart, the closest dentin shade is first selected and then individually adjusted in order to achieve a shade match of high accuracy. A test mixture is then formulated using the visual_eyes® liquid and applied on the frame work in a realistic thickness before the shade of the build-up can be either measured or even digitally tried-in. With this method the dental ceramist is equipped to not only achieve highly accurate shade matches, but to also explore the possibilities and also limitations of the chosen combination of framework material and ceramic system. The eLABor_aid® system is also suitable for the imitation of gingiva using pink ceramic.

Course Objective: What will you learn?

A simulation model consisting of extracted teeth serves as the master model for this course. One of the two maxillary centrals has been prepared to receive a crown. We will measured the tooth shade with a regular DSLR camera system suitable for dental photography in combination with the polar_eyes® filter and software. An individual dentine recipe is then formulated using the

eLABor_aid® system. After completion you get the chance to try-in your crown in-vitro on the simulation model to check the shade accuracy for yourself.

Course Content:

- Introduction to the CIEL*a*b* color space system
- Objective shade communication between the dental surgery and the laboratory
- Introduction to the eLABor_aid® system using Adobe® Lightroom® and Photoshop®.
- Practical realisation of a maxillary single central restoration using the simulation model.

What to bring:

- The usual armamentarium suitable for ceramic work (personal instruments, diamond burs ect.) as well as a small to medium sized natural hair brush (no synthetic brushes).
- A white porcelain tile or mixing tray.
- A DSLR camera system suitable for dental photography including body, macro lens and ring or lateral flash with a matching polar_eyes® filter.
- A laptop computer (ideally Mac) with the latest versions of Adobe® Lightroom® und Photoshop® already installed. A free thirty day trial version can be downloaded from www.adobe.com.
- A formatted, empty memory card for your camera.

Join me on a fascinating journey through the inner cosmos of the natural tooth. Experience the exciting world of applied science and learn a new, evidence based approach to solve the persistent problem of shade matching in the every day once and for all. This mind boggling course is packed with deep background knowledge, classic and new techniques as well as lots of fun and excitement!