Lectures 1:30 to 4:30pm

The Future is Here: CAD/CAM in

Dental Restorations

Francois Duret Gerald McLaughlin Imperial Ballroom, Fairmont

How to Stay Married and Like It

Richard D. Hark, PhD

Duret Brings Future to Chicago

By Marc Wasserman, DDS

"Values and Visions" come alive when you see and hear about dentistry of the future. Computers have already been incorporated into the business aspect of practice and now computers are breaking through to the operatory and lab.

Dr. François Duret, of Marseilles University in France, and Dr. Gerald McLaughlin will present their Computer Assisted Design and Computer Assisted Manufacture (CAD/CAM) of dental restorations today.

Duret has been working on the CAD/CAM system for over fifteen years. McLaughlin met Duret a few years ago while lecturing in France. McLaughlin's interest in computers is responsible for their collaboration. McLaughlin feels the system can be marketed in a couple of years, but the initial costs will be high. "Like any other computer technology, the price will come down after some years on the market," said McLaughlin.

After routine preparation of a tooth, get ready to replace your impression syringe with a laser scanner. No more mixing polysulfide, polyether or any other impression material. Just whip out your trusty wand and take a series of pictures of the preparation.

The scanner sends the information to the computer which designs the crown (both inside and out). After the computer designs the restoration, it activates a milling machine which makes the restoration. The crown can be made in 20 minutes which is less time than to make

the impression and temporize the tooth.

Like any new system, there are still some bugs which have to be worked out like when the computer doesn't assemble the pictures correctly, but these problems are being addressed. McLaughlin feels the fit of the restoration is better than our conventional method of impression making, pouring models, wax up, etc., because there are less intermediate steps.

"Each step has a small degree of error and the more intermediate steps your eliminate from tooth to final restoration the more accurate it will be," McLaughlin said.

McLaughlin will also mention a colorimeter he is working on which will have a computer select the correct shade for restoration. These systems have the potential of revolutionizing the way dentistry and laboratory procedures will be done in the future.

See these visions and the future of dentistry today.

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Values and Visions Dental Practice

