

# Perspectives

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## An interview with Val Lambros, MD *A New Look at the Aging Face*

**Val Lambros, M.D., F.A.C.S.** has practiced plastic surgery in Orange County, CA since 1984. A frequent speaker at local regional and national meetings, Dr. Lambros has challenged traditional plastic surgery assumptions about many aspects of facial aging and facial surgery. Though the face is Dr. Lambros' main research interest he has done body contouring since its inception in the U.S. and has designed several widely used liposuction instruments.



Long-standing assumptions about the facial aging process are being examined in a study using three-dimensional medical photography to separate fact from fiction regarding changes in appearance over time.

"In examining aging faces, there are a lot of illusions that happen, lots of things that look like other things," said Val Lambros, MD, a California plastic surgeon and researcher for the aging-face study. To discover what actually occurs during facial aging, the multi-year study is using the capability of VECTRA 3D photography to record and actually measure the gradual facial changes that occur during extended time periods.

"Everybody gets old and their faces change, and there ought to be some notion of what actually happens," said Dr. Lambros, a noted medical author and speaker on facial procedures and related issues. "That's really what this whole project is about. People make certain assumptions about how the face ages based on what they see at a particular point in time, and based on certain maneuvers that are made.

"People look in the mirror, pull their cheeks back, and say, 'I used to look like this.' Then they try to chase that surgically," Dr. Lambros said. "But it's really hard to get an operation to do what your fingers do, and people can look very strange as a result. All you have to do is look around to see a lot of that."

With 3D photography and analysis, "...we'll be able to understand facial aging better. Knowledge is power," Dr. Lambros said. "What a 3D camera does is capture all the points on the surface of the face, and the x, y, and z axes, so you can see depth as well as side-by-side and up and down.

"What that lets you do, once you have all those pixels of the surface, is to rotate the surface around, do measurements on it, and all of a sudden you're talking about something that's more accurate and reproducible than with conventional photography," Dr. Lambros said.

For about twenty years Dr. Lambros has had patients in his medical practice bring in old photographs as references for use in their treatment planning. "About six or seven years ago I began matching those old photographs with images that I take in practice, which is exceedingly difficult to do to get the positioning exactly right. You have to take about fifteen or twenty pictures to get one to exactly match on a simple forward view. Off-axis views are much more difficult to match."

Those photographic comparisons led to a widely publicized study presented by Dr. Lambros at the American Society of Plastic Surgeons (ASPS) conference in 2004. The results of matching the traditional 2D photographs indicated that facial aging was primarily due to fat loss and skin changes rather than the effects of gravity over time, as had been widely assumed.

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Comparison photos show changes in facial features that occur over time. Measurements to a reference line indicate that while skin quality changes, the features themselves do not move.

However, in addition to the difficulty of matching views over time, traditional photography had other limitations that led Dr. Lambros to initiate his long-term research on facial aging with the more precise 3D photography and analysis.

“When I do traditional 2D photographs, though it’s not entirely subjective, still it’s very hard to do measurements because you don’t unequivocally know what you’re measuring—you’re just measuring pixels on images you know are the same size,” Dr. Lambros said.

“But with the VECTRA 3D, basically you just put somebody in front of the camera and go click. Then you can actually derive true distance or volume. You can measure depth, forward and back, you can measure the surface, you can measure a straight-line distance between two points. You can match position of two images over time, and do it very precisely. And then you can overlay one on top of another and actually see what’s moving forward and what’s moving backwards, even at very subtle levels. In addition you can use the 3-D functionality of the camera to match to 2-D photographs without having to take huge numbers of images and slog through them trying to find a match. It’s very wonderful.”

Dr. Lambros plans to add continuously to the database of subjects participating in the study. “We’re going to follow them for five, ten, fifteen, twenty years—as long as I’m around or there’s a successor. There will probably be four or five Ph.D. theses’-worth of material compiled during the study. We’ll have real information, not just assumptions.”

VECTRA 3D is manufactured by Canfield Imaging Systems of Fairfield, New Jersey. Dr. Lambros has no financial interest in the company. •



# On-Line Webinars

Canfield Imaging Systems is pleased to announce a series of live, on line “Webinars” that will

help you get the most from our products. These webinars are conducted by Canfield’s professional trainers using state of the art web based technology. As they work, you see what they’re doing on your computer screen, in real time. You can even ask them questions. It’s the next best thing to being in the same room as them.

## VISIA Complexion Analysis System and MedSpa Solution



Improve your conversion rate and attract new clients with VISIA’s powerful analysis and communication tools. And with Mirror Rejuvenation software, show your clients how you can “turn back the clock” on facial aging.

## Mirror PhotoFile and PhotoTools software



Learn to master clinical image management and control. Create compelling client communications and document your work for business building activities, as well as legal protection.

## Mirror Simulation and Suite software



Create a compelling case for aesthetic procedures, and manage patient expectations. With this advanced software, you can show your patients how you will improve their appearance...and watch your consultations come to life. Modules include breast augmentation / reduction, hair restoration, rhinoplasty, resurfacing, and more.

## Reveal Imager



Learn how to use the Reveal Imager to create excitement in your business and improve your facial aesthetic consultations. Our experts will show how Reveal’s RBX Red and Brown images translate into treatment and product recommendations for your customers and ultimately more conversions. You’ll also pick up proven tips for consistent, professional quality photographs.

Webinar schedules and sign up forms are posted on our website at [www.canfieldsci.com](http://www.canfieldsci.com). •



Reveal was on the scene for Lancôme at Self Magazine's Workout in the Park in New York City.

Photos: Gun Orachantara

# Introducing the Reveal Imager

We are very pleased to announce the new Reveal™ Imager, our latest facial imaging system for skin care professionals. While simple to use, Reveal is designed to take extremely high quality, standardized and reproducible medical photographs. This design enables it to capture images of surface and sub-surface skin features and to photograph front, left, and right views.

As part of the aesthetic consultation process, the user can select from a library of products and treatments to recommend to the customer. These can be printed on a full color report, along with the customer's photographs. The reports can be fully customized with the practice name and the specific products and services that are offered.

The elegant Reveal Imager is perfect for the skin care counter, and with its easy-to-use interface anyone can take professional, repeatable facial photographs. The compact size and light weight also makes it ideal for traveling events, including health fairs.

The Reveal Imager uses the proven Canfield proprietary RBX® Technology to detect subsurface vascular (red) and melanin (brown) conditions. And, it employs Canfield's IntelliFlash® technology for both full spectrum and cross-polarized lighting modalities. •



The Women's Dermatologic Society brought Reveal to the fairways for recent LPGA events in New Jersey and Maryland.

Photos: Women's Dermatologic Society

# Getting the most out of your Point & Shoot Camera

*Point and shoot (PAS) cameras are not generally the best choice for clinical photography. But by knowing their limitations and following some simple rules, you can still obtain good, standardized clinical photos.*

## Turn off the Digital Zoom

All this does is zoom into the center of the image and crop. For clinical photography, a 3-6x optical zoom is plenty.

## Don't Shoot in Auto Mode

Take some control of the imaging process and use a setting that allows you to choose Aperture, White Balance, ISO and to force the flash. You want to use the flash for clinical photos. The camera's Manual mode provides the most complete control of all settings.



## Depress the Shutter Button Halfway: Wait for Focus Confirmation

If you depress the shutter button all the way, you can force the camera to shoot whether or not you are in focus. PASs typically have visual and audio focus confirmation aids: An on-screen reticle that changes to green once you are focused and a different tone or double beep once the image is in focus.

## Shoot Towards the Telephoto Range of the Lens

The variable zoom that is so great for snapshots is a liability in clinical photography as it adds another variable to the mix. If you have a 3x zoom, zoom it all the way, frame the anatomy appropriately and then shoot. If your zoom is greater than 3x, pick some point on the zoom status bar (as seen on the LCD) that is approximately 3x and always zoom to that point before shooting. Many cameras also have custom settings that can be set to a certain distance/focal distance.

## Mirror Match Pose

With a PAS, there is a live video preview on the back of the camera; we are able to stream this live video preview into our Mirror software. Using our MatchPose feature, this live preview image can be superimposed upon a photo taken at an earlier time point allowing the photographer take the same photo pre and post procedure. •

# TIPS Corner

From Canfield's Customer Service Department

## Post Surgical Consultation

- Rhinoplasty with nasal tip rotation
- Microdermabrasion
- Botox: Glabella and frontalis
- Date of procedures: 03/04/2005



*PowerPoint in a mouse click with Mirror software.*

## Building your business with clinical photography

*You know that good quality clinical photography makes for good patient communications. Particularly when you can demonstrate the results of a successful procedure. But these same pictures can also be good for your business.*

### Here's how:

- Use the "Export to PowerPoint®" feature of Canfield's Mirror software to create high powered presentations for professional groups, health fairs or reception area video loops.
- VISIA users can export pictures, graphs and screen images in a variety of formats. These exports can be inserted into a document as illustrations, or can be printed by themselves.
- Put together a "scrap book" to show prospective patients what you can do for them. This is also a good way to establish realistic expectations at the outset.
- Consider various forms of visual promotion...direct mail, e-mail, web sites, etc. Pictures pack a punch when you're trying to get someone's attention.

*Be sure, of course, to get written permission before you use a recognizable image of any patient. •*