It wasn’t too long ago that 3-D imaging was not only just the standard in orthodontic treatment but the only treatment available. All of that is changing. With the development of 3-D imaging, orthodontists are now able to get a picture of their patients’ facial structure and teeth placement that would never have been possible before.

Dr. Mah is an associate clinical professor of orthodontics at the University of Southern California, the director of the Redmond Imaging Center and the director of the Craniofacial Virtual Reality Laboratory. Dr. Mah obtained his bachelor of science, doctorate of dental surgery, master of science and his certificate of specialization in orthodontics from the University of Alberta, Canada. Following that, he graduated from Harvard Medical School with a doctorate of medical science and completed a post-doctoral fellowship in the Department of Orthopedics at Children’s Hospital, Boston. He was a full-time faculty member in the Department of Orthodontics at Harvard School of Dental Medicine prior to his current positions. He has authored more than 40 publications, four textbooks, several book chapters and has made more than 50 presentations nationally and internationally. He is a recognized expert in 3-D imaging, cone-beam computed tomography and 3-D visualization and modeling, making him the perfect choice to discuss this new technology.

Dr. Hatcher, for his part, focused more on diagnostic dilemmas that result from 3-D imaging. Historically, the goals in diagnosis and treatment planning have been to decide the best course, sequence and timing of treatment. Imaging can play a significant role in this process.

During his lecture, Dr. Hatcher discussed imaging strategies and the employment of conventional and 3-D imaging modalities to reveal the hidden anatomy of common conditions in a way that will aid the orthodontist with diagnosis, treatment planning and treatment. The ranges of conditions he covered included everything from growth disturbances, jaw asymmetries, impacted teeth and incidental findings to pathologies involving the TMJ, airway and sinuses.

Dr. James Mah Dr. David C. Hatcher

"Virtual Orthodontic Care" "Clinical Applications of 3-D Imaging"

Dr. James Mah (left) and Dr. David C. Hatcher (Photo by Kristine Colker)

Dr. James Mah (left) and Dr. David C. Hatcher

"Challenging What You Were Taught"

There were speeches from rising stars (such as Dr. T. Gerard Bradley on self-ligation vs. conventional ligation) and speeches from those who have been lecturing for years (such as Dr. Jorge Farber on how titanium mini-plates expand the limits of orthodontic treatment). There also were special speeches, such as the Jacob A. Salzmann lecture given by Dr. Peter Ngan and focusing on growth and whether it’s a friend or foe to treatment. Then there were those whose speeches focused on some of the most talked-about, cutting-edge topics in orthodontics today. Here is a look at four of them.

Dr. James Mah Dr. David C. Hatcher

"Virtual Orthodontic Care" "Clinical Applications of 3-D Imaging"

Dr. James Mah (left) and Dr. David C. Hatcher (Photo by Kristine Colker)

Dr. James Mah (left) and Dr. Allen H. Moffitt (right)

Dr. James Mah (left) and Dr. Allen H. Moffitt

"Challenging What You Were Taught"

Orthodontics is changing daily. New research, new technologies, new understandings of why things work the way they do. But what happens when the things you were taught, in school or from a mentor, that you have accepted as fact for years and years, turn out to be wrong?

Dr. Mulligan has lectured worldwide for more than 50 years. He is the author of books in several languages, including “Common Sense Mechanics in Everyday Orthodontics.” He received the first Strang Award. He also is a diplomate of The American Board of Orthodontics, a member of the College of Diplomates of the American Board of Orthodontics and a past president of the Southwest Edward H. Angle Society of Orthodontists.

With all this experience behind him, Dr. Mulligan knew what he was talking about as he informed attendees about how stimulating and exciting it can be once you discover assumptions you have held on to might be wrong.

During the course of his lecture, attendees were taught a number of things, including how to question claims made by individuals who consider themselves to be authorities, a means of providing force systems necessary for any tooth movement without the need for “special” appliances or auxiliaries, the knowledge that orthodontic treatment can be provided in a qualitative manner without the use of expensive gadgets and the realization that although the basic requirements for orthodontic tooth movement have not changed over the years, marketing has indeed led to the unnecessary use of expensive appliances.