

Expanding 3-D scanning to fit every specialist

By Alan A. Winter, DDS, i-dontics president, chairman and founding partner

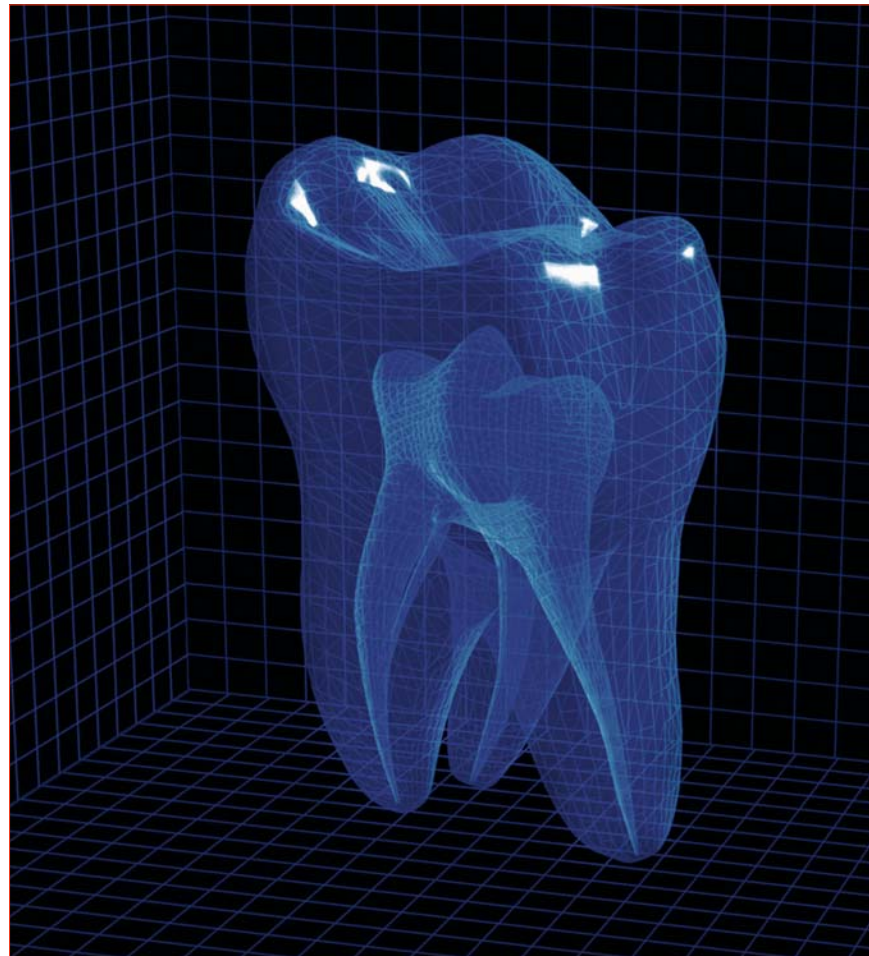
APW Dental Imaging, a leading provider of dental teleradiology services, has officially changed its name to i-donticsSM. "The name change reflects the true identity of the business, with its roots in dental imaging, the Internet and information processing technologies," said Alan A. Winter, DDS, president and chairman, and founding partner.

Founded in 2002, the company has expanded from a single dental CT scanning and image analysis facility serving the tri-state New York City area to 11 sites in four states: New York, New Jersey, Florida and Georgia. Current plans call for a minimum of 20 additional locations by the end of 2008.

The company's founders, Drs. Alan A. Winter and Alan S. Pollack, both board-certified periodontists, were among the first surgeons in the United States to appreciate the value of cone beam volumetric tomography after having used conventional medical CT scans since the mid-1980s. Not only did they recognize the benefit of having access to their own scanner, but they created an opportunity to provide 3-D scanning services to their dental colleagues who were inserting implants. Valuing the potential for expanded uses of this high-resolution, low-x-ray-emission imaging tool, they initiated the development of a network of interconnected dental CT scanning centers via high-speed communications links. This allowed for the rapid transport of extremely large and complex 3D dental images to and from the image processing and analysis center in New York.

i-dontics' role in 'standard of care'

While Winter maintains that he, his partner and their associates at Park Avenue Periodontal Associates, P.C. have utilized 3-D imaging for implant placement and other diagnostic benefits as their standard of "excellence" for more than 20 years, the increased availability of cone beam volumetric tomographic scanners has bridged an important gap. Due to



the universality and availability of the Internet and e-mail services, the dental neighborhood has expanded from the local dental community to include the entire country. Next step is the rest of the world. To this end, i-dontics is committed to making 3-D images available to as many dentists as possible. In so doing, they are helping dentists and specialists provide the new "standard of care" in 3-D imaging for pre-surgical planning, treatment analyses, the making of surgical guides and more.

Marketing for cone beam owners

While i-dontics already owns/operates 11 dental CT centers, it is looking to partner with existing CBVT owners as well as dentists or Specialists considering the purchase of a dental cone beam scanner in the near future. The i-dontics vision is to provide the proverbial "one-stop shopping." Once the scan is taken at the local center, it is uploaded on the secure

HIPAA compliant secure server, and i-dontics does the rest. Next, the data is downloaded at i-dontics' New York processing center. The studies are custom-formatted in the form requested by the referring doctor. These formats range from the proprietary software from each of the different scanning manufacturers such as NewTom 3G, i-CAT and others, or into DICOM so that it can be imported into third-party software such as NobelGuideTM or VIPTM or for BioMedical ModelsTM. In addition, i-dontics is a master site for SimPlant[®], the leading pre-operative planning software, which

integrates data from CT scans to provide precise pre-surgical analyses for dental implants, surgical guides and complex craniofacial surgeries.

Once the scans are constructed into the appropriate study, i-dontics sends the images to the doctor in the requested format: prints, film, CD or via the Internet. In order to receive the studies on CD or via the Internet, the referring doctor needs viewing software. Accompanying each study is a dental report describing salient clinical findings such as periapical radiolucencies, retained root tips, impacted teeth, cysts and so much more. i-dontics also provides reports by board-certified oral and maxillofacial radiologists upon request.

The future

Going forward, Dr. Winter sees an increase of use for dental 3-D imaging by all sectors of dentistry. Not only are dental surgeons using this technology to plan treatments and insert dental implants, safely remove impacted third molars in close proximity to the inferior mandibular nerve, perform sinus grafts, diagnosis TMD problems and evaluate bone grafting procedures, but they are increasingly using these 3-D images to treat recalcitrant endodontic lesions and are used for analyses for orthodontic treatment — both for children and adults. Future scanning manufacturing/software developers' improvements will impact the way dentists take impressions and create aligners for InvisalignTM. To this end, i-dontics will continue to be at the forefront of providing a panoply of services that amalgamates 3-D imaging, treatment planning software, surgical guides and expert consultation services. ■

IT About the author



Dr. Alan Winter received his DDS degree from New York University, College of Dentistry and completed his dental residency at Albert Einstein College of Medicine, also in New York. He received his certificate in periodontology from Columbia University School of Dental and Oral Surgery and

is a Diplomate, American Board of Periodontology and a Fellow in the American College of Dentistry. Dr. Winter is Associate Professor of Clinical Dentistry, Department of Periodontology and Implantology at NYU College of Dentistry. He lectures extensively and has been widely published in numerous journals on 3-D imaging and implant surgery.

IT Contact

Alan A. Winter
i-dontics President
532 Park Ave.
New York, NY 10065
212.858.0940
Web site: www.idontics.com

