



# X-Ray Lab & Imaging Currents

Quarterly Publication of the American Association of Dental Maxillofacial Radiographic Technicians

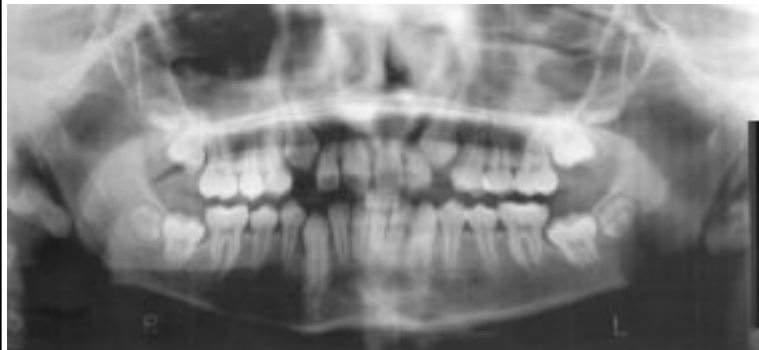
Winter 2003

## 3-Dimensional Visualization of Impacted Maxillary Cuspids

By: Dr. James Mah

Visualization of impacted maxillary cuspids is essential to their treatment planning and determination of prognosis. Current methods generally utilize multiple views, typically a panoramic view supplemented with an occlusal view. However, these methods can be limited in their ability to accurately identify a tooth's position and to reveal essential anatomy related to the impacted tooth such as an eruption cyst and extent of resorption/displacement of adjacent teeth (Figure 1 – Panoramic showing bilateral impacted maxillary cuspids with resorption of the lateral incisors). 3-dimensional volumetric imaging can resolve many of the shortcomings of traditional methods, particularly those associated with projection and perspective and allow for more accurate viewing and determination of the impacted tooth's position. Therefore, in this report we will describe and discuss the utilization of 3-dimensional volumetric imaging (NewTom 9000, Aperio Services) in the visualization of maxillary impacted cuspids.

Figure 1: Panoramic of Bilateral Impacted Cuspids with Resorption of Lateral Incisors



3-D Continued on page 14



James Mah DDS, MSc, MRCD, DMSc  
Assistant Professor, USC School of Dentistry  
Director of the Craniofacial Virtual Reality Laboratory (cvrl.usc.edu)

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# President's Message



*Craig Dial*

The AADMRT board of directors just had its annual meeting on February 1<sup>st</sup>, and after the meeting, I am feeling confident in our new leadership, and excited in the direction the board wants to take our organization. We have an enthusiastic group of board members, who are ready and able to move this organization forward to the next stage.

One of the many new things to come will include adding more continuing education (C.E.) courses to our annual plan. The board voted to bring back the spring seminar (beginning in 2004). This move is due mainly because the requirement for California Limited Permittees (LPs) is now 24 C.E.'s every 2 years. Therefore, we will hold the springtime meetings primarily, but not limited to, the southern and northern parts of California. This will ensure that all CA. LP's can meet their need for the state required C.E.s and also give our entire membership additional training, education, advancement and development of new products, services, skills, and terminology by providing more classroom time with twice a year conferences.

Speaking on conferences, this fall the annual seminar will be held in New Hope, Pennsylvania (log on to [www.aadmrt.com](http://www.aadmrt.com) for more details). With the help from Imaging Sciences International (ISI), we will have a 3-day course on the East Coast for the first time in our history. We are excited to have available to us presenters from some of the top dentists and dental radiologists from the East Coast. We also will be given a tour of the ISI factory on Saturday with presentations from ISI's electrical, mechanical, and computer engineers on dental imaging. ISI will also hold a pre-conference training and learning event that will have as many as 150 non-AADMRT members attending. These people are encouraged to continue to stay for our conference, and see if they would like to sign up as new members.

The board has also approved updating the AADMRT web site for more added features and new content. You will be able to read about those added services as they become available, or you may just want to periodically log on to [www.aadmrt.com](http://www.aadmrt.com) and see for yourself the changes to *your* site.

We hope you will appreciate the changes our new board is making. We will be doing our best to make this organization grow, and to continue to help make us a leading resource for dental x-ray imaging and technology. Your thoughts are always appreciated, so please add your comments or suggestions to any board member, or e-mail me directly at [president@aadmrt.com](mailto:president@aadmrt.com). After all, this is your organization; together we can do great things.

## 2003 OFFICERS

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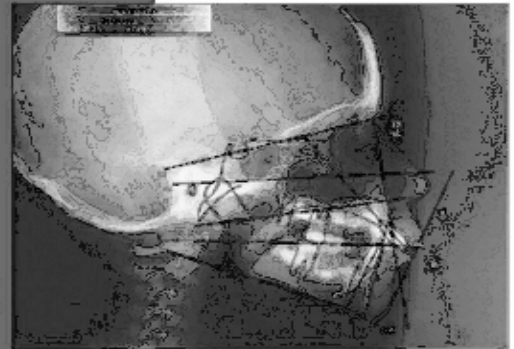
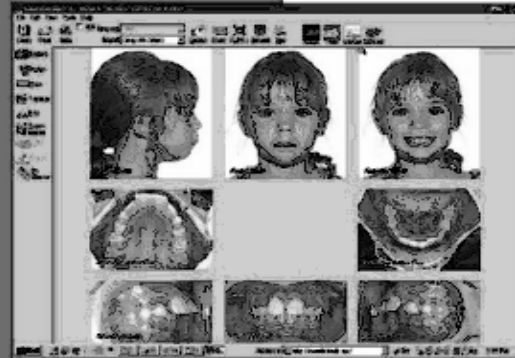
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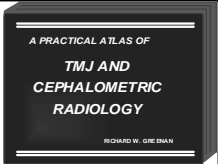


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# A PRACTICAL ATLAS OF TMJ AND CEPHALOMETRIC RADIOLOGY

by *Richard W. Greenan*

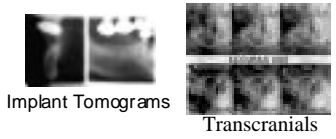
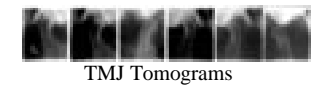
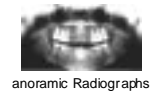


A “must” for any TMJ/Orthodontic library! The only reference consisting of 60 actual duplicate X-rays, each one traced-out with its respective narrative covering all of the pertinent extra-oral techniques including Panoramics, Cephalograms, Transcranials, Tomograms, Submental Vertexes etc..

An excellent, clinically oriented manual of Radiology to demonstrate to your staff and patients the pertinent anatomy, **norms** and progressive anomalies necessary to support the radiographic diagnoses as taught by today’s leading authorities in TMJ and Orthodontics/Orthopedics.

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- |                            |   |                                   |
|----------------------------|---|-----------------------------------|
| Airspace false positives   | Condylar agenesis                         | Osteoarthritis of the TMJ         |
| Airway impingement         | Condylar hyperplasia                      | Paranasal sinusesCephalograms     |
| Anti-gonial notching       | Coronoid process hyperplasia              | Patient positioning effects       |
| Cephalometric analysis     | Cranial base distortions                  | Spondylitis of the cervical spine |
| Cervical plexus, vertebral | Craniocervical analysisStatic electricity |                                   |
| Artery impingement         | Craniosymmetry PA analysis                | Stylohyoid ligament ossification  |
| Cervical spine kyphosis    | Normals: cervical, skeletal               | TMJ exostoses                     |
| Cervical spine scoliosis   | Osteoarthritis of the cervical spine      | True condylar “beaking            |



**More about the Atlas! Read what the experts are saying:**

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*“For the therapist interested in any area of temporomandibular (TMD) patients, this atlas is good for educational or refresher purposes. All offices could benefit from this being a part of their library.”*

**JCO/January 1992**

*“There aren’t many professional publications in which readers receive their money’s worth within the first six pages, but Greenan’s Atlas is an exception. . . .Greenan clearly knows his subject, and he has compiled a superior reference for those who insist on high-quality diagnostic radiographs!”*

**Dr. Jay Gerber, St. Marys, WV**

*“Your book is excellent. It has already proven to be an excellent tool in teaching and patient education.”*

**Dr. Robert Gerety, Henryetta, OK**

*“A very thorough and well organized atlas of radiography which can be an invaluable tool for teaching and training your staff.”*

**Dr. Brock Rondeau, London, Ontario**

*“Dick Greenan’s Atlas is a state of the art. There is nothing anywhere to compare with the information, which is so graphically presented. This manual is a must for all TMJ-orthodontic practitioners.”*

**Dr. Brendan Stack, Vienna, VA**

*“This book is a unique reference source for the pain clinician in that it puts in one place all of the knowledge needed to make a definitive diagnosis and proceed with treatment.”*

**Dr. Robert Talley, Norman, OK**

*“This represents one of the best pieces of work that I have seen for teaching radiographic interpretation . . . I cannot recommend it highly enough to those individuals who are looking for such guidance.”*

**Dr. John W. Witzig, Director, TMJ Institute of America**

*“This is an excellent Atlas on TMJ, tomograms, Transcranials, Cephalograms, cervical spine and panoramic radiographs. It shows actual x-ray films and points out normal and abnormal findings. This book is a must for those doctors who want to perfect their diagnostic skills.”*

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# Editor's View

Last month I was presented with a new challenge. The lab where I work, Diagnostic Digital Imaging, was asked to hold a 2-day training session on the use of the Newtom Volumetric Scanner. All of us here at D.D.I. were asked to instruct three separate groups of people. This experience took me out of my comfort zone of everyday work and placed me in a different position that required me to take a risk by being in the limelight. In other words, it was a bit scary. This class required several hours of preparation and taught me more about my job. In order to instruct other people-I needed to get organized. I put my presentation on powerpoint so I would not forget any details, and to keep me on track. This system helped me.



*Camille Mayorga*

The groups were selected by their knowledge and use of the scanner. The Newtom users were comprised of some who had not seen the machine before to some more advanced users like myself. It was not really training for them, but an exchange of ideas and brainstorming. I learned some techniques and tips from them and enjoyed the sharing of knowledge. I feel this group also took pleasure in the camaraderie we had that day and our willingness to share all. Above all I was proud of myself for taking the risk. I believe Joan Curcio said it simply in this quote:

Courageous risks are life giving, they help you grow, make you brave, and better than you think you are.  
—Joan L. Curcio—

## American Association of Dental Maxillofacial Radiographic Technicians



Presents:



The 23rd Annual Conference  
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Conference will begin at 1:00pm on Thursday, October 16th, and the program will end on Saturday, October 18th at 1:00pm. Call the hotel for reservations at: (215) 862-5221

Log on to [www.aadmr.com](http://www.aadmr.com) for more details



# News and Trends

## X-Ray Technician Needed

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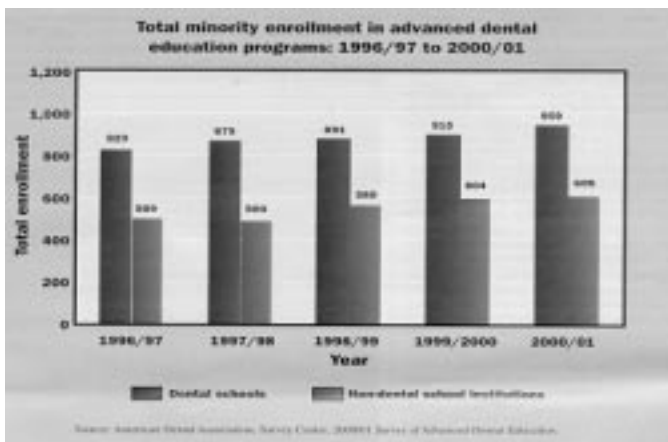
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## Dental Education on The Rise

Minority enrollment in advanced dental education programs is steadily increasing. The cart (below) demonstrates that the total enrollment for minority dental enrollment has increased both from dental; schools, and non-dental school intuitions.



## NewTom is not considered a CT

The California Board of Radiologic Health was considering classifying the NewTom as a medical CAT scan due to the way the images are acquired. This would have added to the regulatory burden of NewTom owners by requiring a Certified Radiologic Technician to operate the equipment.

The regulators revisited the classification of the NewTom 9000 because there was some question of rather or not this was a dental x-ray machine or a medical CT scanner. After conducting field inspections of the machine, as well as reviewing it's radiologic output, it was determined that the Newtom is properly classified as a dental x-ray device. This listing is in harmony with the FDA classification of the equipment as a dental x-ray device.

In a recent decision issued by the California Department of Health Services, Radiologic Health Branch, the NewTom 9000 was classified as a dental x-ray device in the state of California, which allows technicians who possess limited dental permits to operate the NewTom.

## Web Site for Radiology



AuntMinnie provides a forum for radiologists, business managers, and technologists, to meet, transact, research, and collaborate on topics within the field of radiology with the ease and speed that only the Internet can provide. To learn more, log on to: [www.auntminnie.com](http://www.auntminnie.com)

**Radiology Decisions Start Here** <sup>SM</sup>

# News and Trends

## AADMRT Insignia Revised

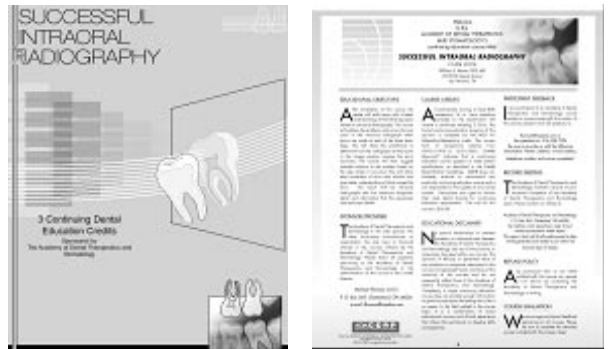
The AADMRT seal has been officially revised. The original logo was hand drawn by Michael Nearman (Graphic designer and draftsman) back in 1992. Since then, the seal has been scanned into our letterhead, newsletters and web site. Merry Hampton (AADMRT executive secretary) had the seal re-created from scratch by a computer graphic artist. The look is a little more modern, and can now be displayed in a high contrast, and clear format.

*The old AADMRT seal (left) and the revised seal (right)*



## Kodak's Web Site Now Offers C.E Credit

Kodak's web site now offers CE course work in intraoral and panoramic imaging techniques. The courses, "Successful Intra Oral Radiography", and "Successful Panoramic Radiography" are available in PDF format for download from the learning center. Log on the [www.kodak.com/go/dental](http://www.kodak.com/go/dental), and then go to the learning center. If you need CE, this is a good course to take, and after completing the course, you will earn 3 CE units per class.



## California LPs Must Have CEU



Effective November 28, 2001, Limited Permit X-ray Technicians LPs) **must** obtain 24 Continuing Education Credits (CEU)s every two (2) years to renew certificate or permit.

The 2-year renewal referred to above began on the expiration date of the certificate or permit in the year 2001 for individuals with a certificate or permit that ends in an odd number; and in the year 2002 for individuals with a certificate or permit that ends in an even number. "Approved continuing education credit" means one hour of instruction received in subjects related to the application of X-ray to the human body and accepted for purposes of credentialing, assigning professional status or certification.

For more information please check:

[www.dhs.ca.gov/rhb/Documents/Web%20page%20on%20CEUs.doc](http://www.dhs.ca.gov/rhb/Documents/Web%20page%20on%20CEUs.doc)



## Implant Inspires Artist

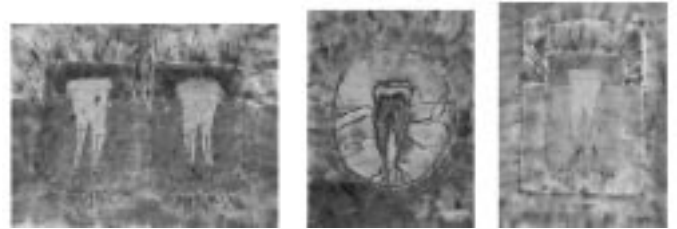
Jackie Kansky, an artist from Los Altos California, spent more than a year capturing her feelings and impressions about her long-term dental treatment by creating a series of 10 paintings entitled *Requiem for #31*.

Ms. Kansky said that after ten years of tooth problems on #31, she finally had it extracted by her doctor in Sunnyvale, CA. "He told me the tooth had gone south, but I had become very attached to it, and I wanted it replaced".

After making the decision to get an implant, the dentist referred her out for imaging. "The doctor said he needed a specialized x-ray for my future implant," said Ms Kansky. The doctor prescribed a Tomographic implant study for tooth #31. "I asked why he could not do this x-ray in his office", continued Kansky, he told me that the machine was too expensive, and that the lab can serve other dentists who also need imaging for their patients".

The doctor sent her to **C-Dental X-Ray** in Mountain View, CA. "I found it difficult to hold still during the x-ray, says Kansky, but I knew it was a very important procedure and I was anxious to find out the results of the x-ray to see if I had enough bone to support an implant".

Today Ms. Kansky is happy to have her tooth back, and she has launched a personal web site to display her works, including the Requiem Series. For a closer look log on to: [www.jackiekansky.com](http://www.jackiekansky.com).



Requiem for #31: Paintings in the series by Jackie Kansky © 2001



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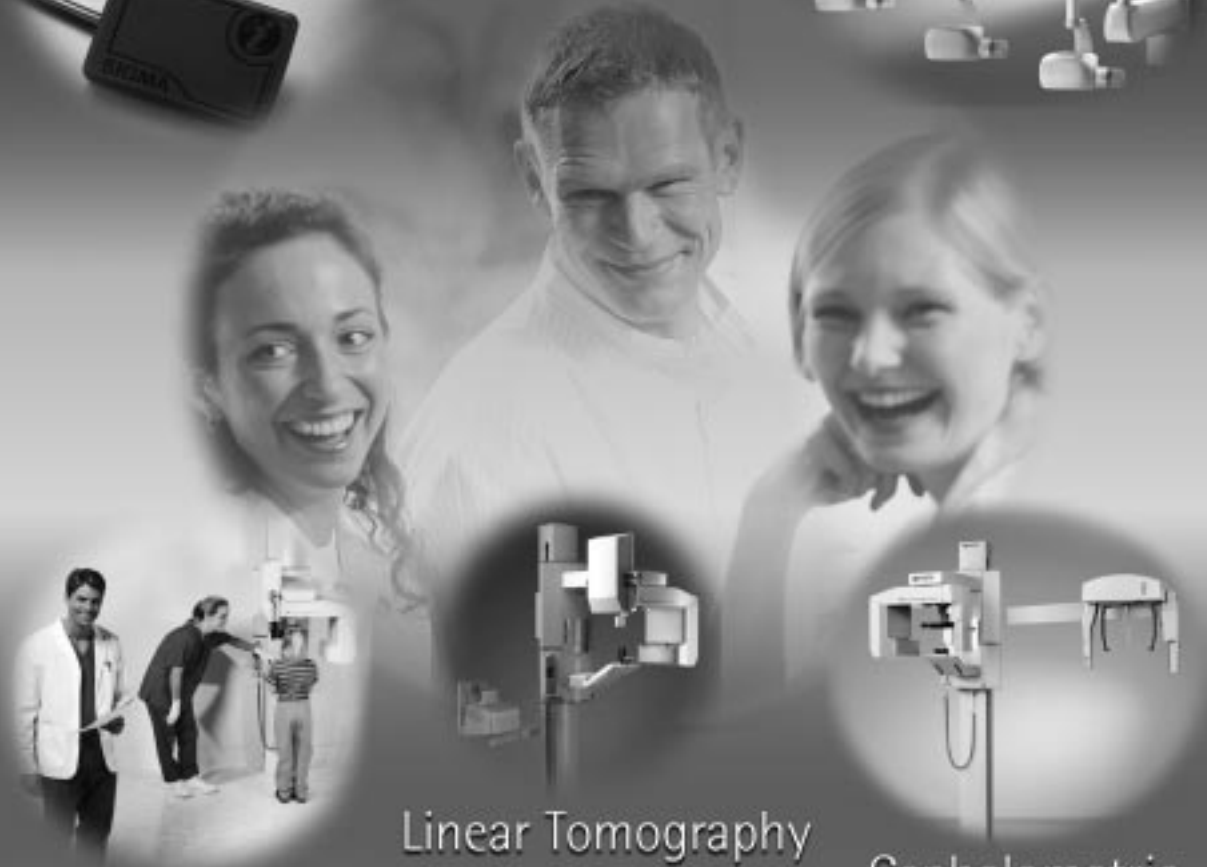


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# Committee Report

The AADMRT Board of Directors held its meeting in Sacramento California on February 1st, 2003. **Merry Hampton**, Executive Secretary, submits the general membership minutes:

The board welcomes three new members:

**Kathleen Cox** will be our new membership chair, previously held by **Gail Finnigan**.

**Jeannie Herriott** has assumed the nominating chair position from **Donna Lauritzen**, and **Bart Web** will tackle Advertising along with **Randy Sailors**.

The Board of directors discussed, approved, and/or voted on the following:

- **Membership:** a total of 201, with 8 new members in 2003
- **Nominating:** 4 Board positions will be available in 2004. If interested please contact [nominating@aadmrt.com](mailto:nominating@aadmrt.com)
- **Continuing Education:** CE Units are required for limited permit holders in California. A total of 12 units are required for permits expiring in 2003. Beginning 2004 24 CE units will be required in California every two years.
- **Recruitment:** Mass mailer was sent to all current ISI users to introduce our organization. There will be a recruitment booth at the conference in New Hope PA.
- **Newsletter:** Two 20-page issues and two 24-page issues are scheduled for 2003. Please submit articles of interest to [editor@aadmrt.com](mailto:editor@aadmrt.com).
- **Website:** Members will be able to pay on line by credit card for membership renewal. Lab location by zip code and map of labs to be added.
- **Membership fees:** Annual dues will increase in 2004 to \$95.00
  - **Seminar's:** A spring conference has been added to help offset CE credit requirement for California. Springtime meetings will be held primarily in California rotating from Northern and Southern areas.
  - **By-Laws:** Amendments to current By-laws will be voted on by general membership at the 2003 convention in New Hope, PA.

*Any comments or suggestions to the board may be submitted by logging on to [www.aadmrt.com](http://www.aadmrt.com) and clicking on board of directors.*



The board of directors for 2003 (from left to right) are: Bart Webb, Duane Perry, Craig Dial, Kathleen Cox, and Jeannie Herriot (Eleonora Prescott and Randy Sailors are not pictured)



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# Vice President's Memo



Duane Perry

Once in a while we stumble onto something that has the effect of changing us forever. I was intrigued by a small advertisement about a new book that appeared in the quarterly magazine published by BYU (Brigham Young University).

The ad told about a book titled “Leadership and Self-Deception”. It was written by authors from the Arbinger Institute. The Arbinger Institute is management training and consulting firm and scholarly consortium that includes people trained in business, law, economics, philosophy, the family, education, and psychology. I was intrigued by the ad so I bought the book at B. Dalton Bookseller’s.

An excellent synopsis is found on the inside cover sheet. “*Leadership and Self-Deception* introduces readers to an important new idea in organizational thinking. It shows how the problems that typically prevent superior performance in organizations are the result of a little-known problem called “self-deception.”

***“Blind to the reality around them, they undermine performance”***

“According to the authors, people who are in self-deception live and work as if trapped in a box. Blind to the reality around them, they undermine performance—both their own and others’. The problem is, being in the box, they can’t see that they undermine performance. Consequently, they don’t change, and

neither do their results.

“As *Leadership and Self-Deception* shows, this phenomenon occurs frequently in organizations. Most people spend much of their time stuck in the box, and this multiplication of boxes is the root cause of most of the problems that impede organizational performance—including problems relating to leadership, teamwork, communication, accountability, trust, commitment, and motivation.

“The good news is that there is a solution to self-deception and the costly problems that arise from it. Through an entertaining and highly instructive story, *Leadership and Self-Deception* shows what self-deception is, how people get trapped in it, how it kills organizational performance, and—most importantly—the surprising way to solve it.”

For me to attempt a summary of the subject matter would be ludicrous. However, let me whet your appetite to read the book with the following analogy. “An infant is learning to crawl. She begins by pushing herself backward around the house. Backing herself around, she gets lodged beneath the furniture. There she thrashes about—crying and banging her little head against the sides and undersides of the pieces. She is stuck and hates it. So she does the only thing she can think of to get herself out—she pushes even harder, which only worsens her problem. She’s more stuck than ever.

“If this infant could talk, she would blame the furniture for her troubles. She, after all, is doing everything she can think of. The problem couldn’t be *hers*. But of course, the problem *is* hers, even though she can’t see it.

*Vice President continued on next page*



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*Vice President continued*

While it's true she's doing everything she can think of, the problem is precisely that *she can't see how she's the problem*. Having the problem she has, nothing she can think of will be a solution.

“Self-deception is like this. It blinds us to the true cause of problems, and once blind, all the ‘solutions’ we can think of will actually make matters worse. That’s why self-deception is so central to leadership—because leadership is about making matters better. To the extent we are self-deceived, our leadership is undermined at every turn—and not because of the furniture.” (Quote from the book’s preface).

So, read on my fellow teammates who recognize “the box” and are trying to get out of or stay out of “the box”. Good luck to us all.

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### 3-D Continued

Volumetric imaging devices developed specifically for dentistry are a relatively recent occurrence. The NewTom 9000 is the first and is still the only available device (Figure 2 NewTom 9000 Volumetric Imaging Device for Dentistry). In contrast to the fan-shaped beam of medical CT devices, it features a cone-beam radiation path providing a series of images as the x-ray tube makes one 360 degree-rotation about the patient. The device provides a 13 cm vertical field of view, large enough to contain the maxilla and mandible without cranial base structures (Figure 3 – NewTom volume with full opacity to illustrate the field of view). The accompanying software constructs a volume that can be viewed from multiple perspectives using secondary reconstruction tools to create axial, transaxial, panoramic and other views (Figure 4a – Reconstructed panoramic view; Figure 4b: Reconstructed Frontal, occlusal and lateral transaxials). Export features in DICOM or BMP format allows for viewing using common volume rendering programs (Figure 5 – Volume of same patient as Figure4 viewed in Volview™).

The maxillary cuspid is the most commonly impacted tooth, second only to third molars. This is not surprising considering its eruptive path and sequences of dental eruption. The maxillary cuspid forms in its developmental crypt in close proximity to the infraorbital rim. From this position it erupts into occlusion, over a period of years, following a circuitous “S” path during which many events can occur which lead to its impaction. Additionally, the maxillary cuspid typically erupts following the first premolar and at the same time or following the second premolar. With these sequences, insufficient arch length can greatly increase the chance of impaction. The earlier erupting premolars simply occupy and limit space to accommodate the cuspid into the dental arch.

Clinicians should suspect that a cuspid is impacted when there is delayed eruption, asymmetry, small/peg/missing lateral incisors, space loss in the area, severe arch length deficiency or a family history of cuspid impaction. Once an impacted cuspid is suspected, the role of imaging is to confirm this condition as opposed to a delay in eruption or congenital absence of the tooth. Secondly, imaging will play a fundamental role in the management of the impacted cuspid by the orthodontist and the surgeon who will uncover the tooth.

Figure 2: NewTom 9000 Volumetric Imaging Device for Dentistry



Figure 3: NewTom volume with full opacity to illustrate the field of view

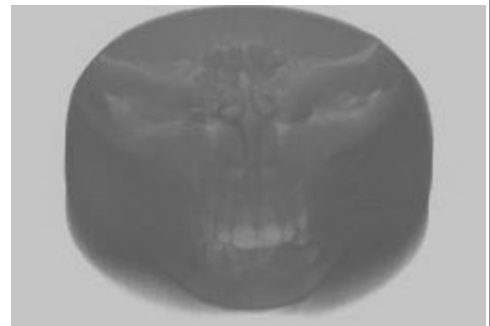
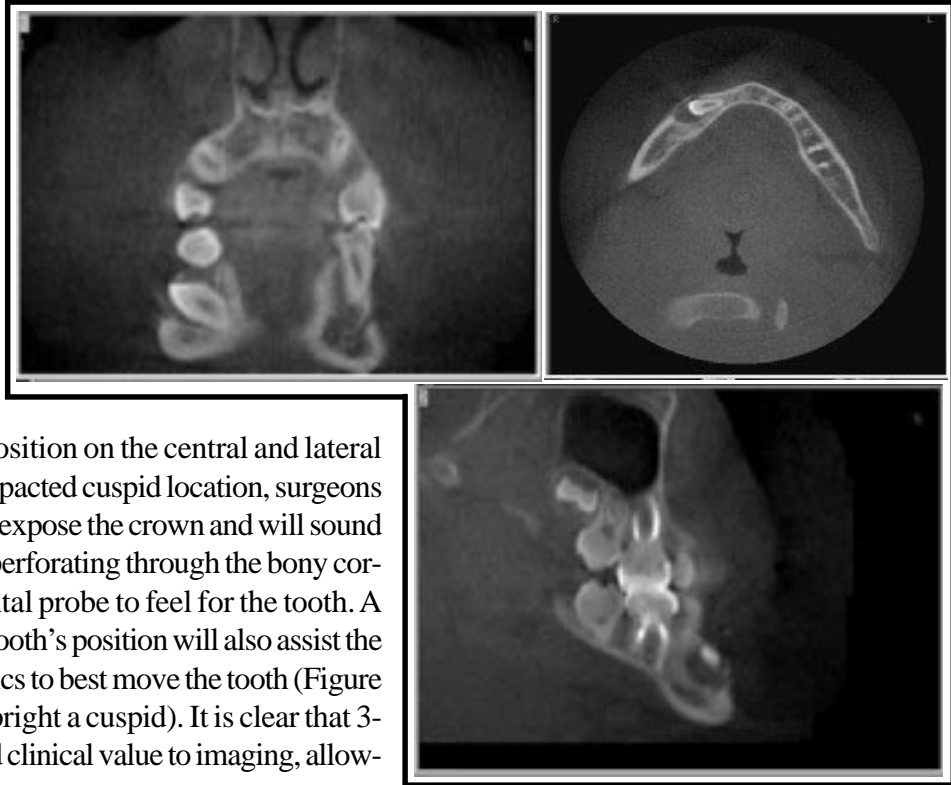


Figure 4a: Reconstructed Panoramic View



Figure 4b; Reconstructed Frontal, Occlusal and, Lateral Views

Traditional approaches to localizing impacted maxillary cuspids essentially apply image-tube shift principles (reviewed by Jacobs, 1999). More reliable approaches use a panoramic with an occlusal view taken with a slight vertical shift (70-75 degrees from horizontal compared to the traditional 60-65 degrees). Less reliable methods involve image magnification compared to the normal contralateral tooth and image superimposition on the central and lateral incisor. Without a good idea of the impacted cuspid location, surgeons must create larger access openings to expose the crown and will sound multiple possible tooth locations by perforating through the bony cortex with an instrument or a periodontal probe to feel for the tooth. A good understanding of the impacted tooth's position will also assist the orthodontist in designing biomechanics to best move the tooth (Figure 6 – Custom designed appliance to upright a cuspid). It is clear that 3-D volumetric imaging provides added clinical value to imaging, allowing for more efficient and less invasive surgery as well as better designs of biomechanics to upright and align the impacted tooth.

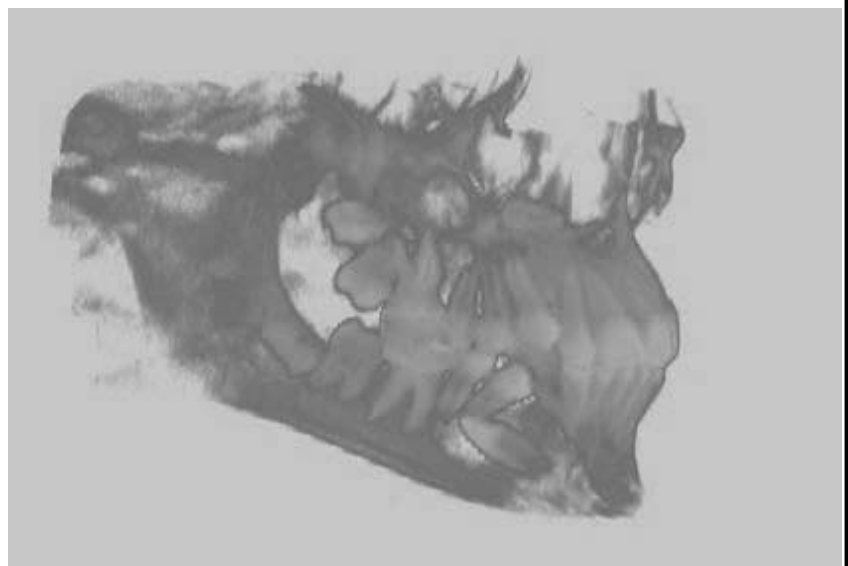


Volumetric imaging of impacted maxillary cuspids is providing new insights into their location, features and impact on adjacent teeth. In a study of 107 children, Ericson and Kurol, 2000 found that 93% of ectopic canines in contact with the roots of the lateral incisor (as opposed to 49% of normally erupting canines) and 19% in contact with the central incisor.

Root resorption on incisor roots adjacent to ectopically positioned canine occurred in 38% of the laterals and in 9% of the centrals. This research group also found that dental follicles of ectopically erupting canines were, on average, wider than those of the normally erupting canines (Ericson and Bjerklin, 2001).

***" Volumetric imaging of impacted maxillary cuspids is providing new insights into their location, features and impact on adjacent teeth."***

Figure 5: Same volume as Figure 4 viewed with Volview™ volume rendering software



*3-D Continued on page 16*

### 3-D Continued

While the above research was conducted using medical CT devices, a concern with their use for “routine” dental examination is the risk worth the benefit. Radiation dosimetry studies conducted by our research group have placed the effective dose absorbed during a maxillo-facial examination with the NewTom 9000 at 50.3 microSieverts ( $\mu\text{Sv}$ ). For purposes of comparison, a panoramic radiograph is in the range of 2.9 – 9.6  $\mu\text{Sv}$ , a full mouth series ranges from 33 to 84  $\mu\text{Sv}$  (reviewed in Danforth and Clark) and conventional CT imaging of a region of the maxilla ranges from 17.6 -656.9  $\mu\text{Sv}$  and the mandible ranges from 124.9 - 250.3  $\mu\text{Sv}$ . Bear in mind the NewTom volume includes both the maxilla and the mandible at 50.3  $\mu\text{Sv}$ . Given these data, the risk:benefit for a NewTom imaging session for dental applications is justified in the context of currently available imaging modalities.

In summary, 3-D volumetric imaging provides essential information for clinicians to better manage impacted maxillary cuspids. A good understanding of the tooth’s position and its relationship to adjacent teeth and structures greatly facilitates clinical decisions. In addition, this approach is revealing new information on impacted cuspids. Similar benefits are being found in management of other impacted teeth. With these benefits, 3-D volumetric imaging has great potential in future of dental care.

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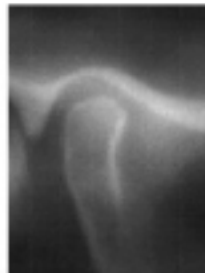
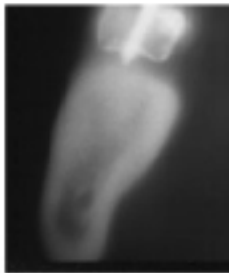
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Submitted by: *Gerald Coffey*



*John Hunter 1771-1775*

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# Spotlight Lab



**Mariam Boh**  
**National University of Singapore**

This is my 7<sup>th</sup> year working as a dental radiographer (still very young, I believe, when compared to many of the members). I was trained as a medical radiographer. After graduating with a BSc (Medical Imaging) from the School of Health Sciences, Charles Sturt University in Australia, I was posted to do both medical and dental radiography. Doing dental radiography was a challenge as I did not receive much practice during my training.

I started on-the-job training with the Government Dental Clinic (GDC) in 1995. It was a very old building built in 1938. The X-ray facilities were very basic. There were only two intra-oral units and one standard panoramic and cephalostat unit. I was trained to do bisecting

angle technique for periapicals as there were no X-ray film holders for paralleling technique.

After the GDC was torn down, the National Dental Centre (NDC) was built in 1997. There were more and better machines at NDC. We had Plameca, Siemens and Cranex units which enabled me to do tomography cuts of teeth (mainly for implants), TMJ cuts and different skull views. The workload increased dramatically from the last time (average about 100-110 X-rays a day). It was in late 1997 that I decided to become a full-time dental radiographer (the only one in Singapore).

I was working with a foreigner in NDC. Unfortunately, his attitude towards work was bad. Very often he did not show up in office, and I had to struggle alone with about 50-80 patients a day. There were times I felt frustrated and wanted to quit (as there is no organization here where I can get help and support from). But the love for my job and God's strength kept me in NDC. I was also blessed with some helpful dental surgeons who would help me when they had no patients. The working environment was friendly but the workload was heavy for me to cope. Besides doing the X-ray examinations, I had to manage the administrative part of the work as well to ensure that the department ran smoothly.

Many patients were referred to NDC each day for treatment as it is a specialist centre. As a result, I was able to learn about many interesting cases. Patients who came for X-rays ranged from very co-operative to very cranky as well. Some children were especially difficult. There was once I took 3 days to have a child's teeth X-rayed! The child had to come back to NDC 3 times consecutively as he refused to have treatment and X-rays done on his badly infected teeth. On the 3<sup>rd</sup> day, I had to resort to strapping him up (with parents' consent) to do a periapical on him. Being in this field has trained me to become very patient indeed.

After working for 5 years, God opened a new path to my career. I received a call from a Dental Maxillofacial Radiologist to take up a teaching post with the National University of Singapore (NUS), Faculty of Dentistry. I was very excited about it, feeling that this is a big opportunity for me to expand my career. It also gave me the motivation to move on.

*Spotlight Continued Next Page*

*spotlight continued*

I started my job with NUS in December 1999. My scope of work is very different from the last time. Over here, my main responsibility is to teach and guide the dental students. I give lectures, demonstrations, conduct competency tests, set and grade test papers. I deal lesser with patients (only on certain days when I do not have classes). Life is less stressful but more interesting. Moreover, I feel a greater sense of job satisfaction especially when the students are able to produce good quality radiographs with minimum dose. My students are a wonderful bunch. To show their appreciation, I receive cards and chocolates from them every year😊.


I stay in the eastern part of Singapore with my husband and our 2 ½- year- old son Ansel. The journey from our place to NUS is about 45 minutes bus ride (I hired a private bus). It is rather a long ride but quite relaxing as the bus goes by the East Coast Beach every morning to NUS. One of our favorite past times with Ansel is to cycle along the beach and to dine at the seafood restaurants there.

My husband owns his own business. He will settle and continue his business in the United States next year. Our mid- term plan is to stay in the United States. Thus through this organization, I hope to get to know more friends and eventually be able to work in the US.

I love dental radiography and certainly will stay in this business. I enjoy having patients clenching their teeth at me not in anger but to have their teeth X-rayed😊

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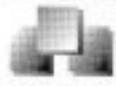
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Arthur Quint

## In Memoriam

*Submitted by: Judy Hurt*

We all lost a true friend, who helped shape the field of dental x-ray. On Sunday, January 26<sup>th</sup> 2003, Arthur Quint age 89, passed away peacefully in his home with his family at his side.

Art received his degree in engineering from North Eastern University of Boston in 1935 and entered the field of x-ray in 1937 with Picker X-ray Corporation. He met and married his wife there. They were married for 62 years, have two children and three great grandchildren.

Art moved to Los Angeles and started Quint X-ray in 1954. In the late 1960's he designed and built the Quint Sectograph with Dr. Ricketts, providing education, support, and incredible opportunities for dental x-ray labs. He worked with Soridex, Denar, and finally American Dental Sales until November of 2002.

It is difficult to describe just how much Art Quint did to enrich our business. Memorials may be sent to the Jewish Big Brothers in his name.



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# Letter From AAOMR Executive Director

Dear friends in the AADMRT,

Although I may not know most of your members, I have had the honor and pleasure of knowing several of you over the last 32 years. Those of you who were at the AAOMR Annual Session in San Antonio are aware that I have submitted my resignation as Executive Director to the Executive Council. This may be news to the rest of you. Camille Mayorga asked if I would write about my plans. I am pleased to do so. It is with mixed feelings of sadness and joy that I made my decision. I had the good fortune to meet and fall in love with Apirum Janhom, an oral and maxillofacial radiologist in Thailand. We have decided to marry and since her career is largely ahead of her and mine largely behind me, we have decided to live in Thailand. So I will retire from the University of Mississippi School of Dentistry at the end of June. So it is with great sadness that I relinquish the most satisfying position of my life, Executive Director of the Academy, but with a joyous outlook for the future.



*Dr. Kevin O'Carroll*

As many of you are aware, I wanted to foster a better relationship between the Academy and the AADMRT. Following joint discussions in San Diego in 1996, it was gratifying to have a joint meeting in Santa Fe in 1998. It was one of our most successful meetings ever (despite the social function). Our quest for specialty recognition took a lot of time and effort, especially from 1996 to 1999. Once we were recognized as a specialty, more time and effort was necessary to represent the Academy at various other meetings, approximately six per year. Regrettably, the effort to improve relations with the AADMRT fell by the wayside. But we discussed the issue again in San Antonio and I think the time is ripe to resume our efforts. I will certainly recommend to my successor, who, we hope, will be chosen at the Ad Interim meeting in March or shortly thereafter, that he or she should make it a priority.

Exactly what I will be doing in Thailand has not been finalized. Apirum's department would love to hire me, but I will not be much use to them unless I learn the Thai language, which will be an interesting challenge. Initially I may be hired as a consultant to help their faculty in various departments to prepare articles for publication in English. Her chairman has said that as soon as they can start their graduate program to train radiologists, they could hire me, because graduate students' knowledge of English should be good enough for them to understand me. Pre-doctoral students probably could not listen fast enough to understand my English. So I will have to learn Thai.

I will maintain my Academy membership and Apirum and I hope to return for Annual Sessions, perhaps every other year. So, I hope I will continue to see some of you at regular intervals.

Sincerely,

Kevin O Carroll  
Executive Director, AAOMR

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