

# An Interview with Pete Dawson and John Cranham from the Dawson Center



**Peter E. Dawson, DDS,** is considered to be one of the most influential clinicians and teachers in the history of dentistry. He is the author of the best-selling dental text, *Evaluation, Diagnosis and Treatment of*

*Occlusal Problems*, which is published in 13 languages. He is the founder of the "Concept of Complete Dentistry Series" as well as the Dawson Center for Advanced Dental Study in St. Petersburg, Florida. In addition to numerous awards and special recognitions, Dr. Dawson is the past president and life member of the American Equilibration Society, and a past president of the Academy of Restorative Dentistry and the American Academy of Esthetic Dentistry.



**John C. Cranham, DDS,** has an esthetic oriented practice in Chesapeake, Virginia. An honors graduate of the Medical College of Virginia in 1988, Dr. Cranham maintains a

strong relationship with his alma mater as an associate clinical professor, teaching in the AEGD program. Additionally, he was appointed to serve for 2 years on the school's board of advisors. Dr. Cranham is an internationally recognized speaker on the esthetic principles of smile design, contemporary occlusal concepts, laboratory communication, and happiness and fulfillment in dentistry. Dr. Cranham has founded PRE (Predictable Restorative Excellence) seminars, which provide a combination of lecture, mobile hands-on programs, and intensive 2- to 3-day hands-on experiences at his office.

Shannon L. Pace, editor-in-chief of *Contemporary Dental Assisting*, interviewed Peter E. Dawson, DDS, and John C. Cranham, DDS, to learn more about the Dawson Center for the Advancement of Dentistry in St. Petersburg, Florida.

**SP: Dr. Dawson, what led you to become a dentist and when did you start teaching?**

**PD:** My dad owned a dental laboratory in St. Petersburg, Florida, and I became a laboratory technician apprentice at age 13. I started out doing pick-up and delivery so I saw a lot of dental practices and met many dentists. By the time I went to dental school, I could do every procedure in the laboratory. I spent 2 years in the US Air Force after dental school and then opened my own practice in St. Petersburg. Early in my practice, I met Dr. Sigurd Ramfjord. He taught me how to equilibrate an occlusion to centric relation (CR) and that changed my practice life forever. I attended postgraduate courses across the country and was fortunate to meet just about every leading clinician. I strove to back up my clinical beliefs with a complete understanding of anatomy and physiology and worked with Drs. Parker Mahan and Harry Sicker to learn how the masticatory system is built and how it functions. My first textbook was printed in 1974, with a second edition in

1989. *Evaluation, Diagnosis and Treatment of Occlusal Problems* became a best seller and has been printed in 13 languages. My new book, *Functional Occlusion—From TMJ to Smile Design*, is due out in August. Therefore, it was a combination of studying with great clinicians and a desire to seek out the truth and continuously learn to improve our profession that led to my teaching and writing.

Eventually the demands of my teaching became so great that I had to curtail my practice so I could concentrate on teaching and writing. I founded the Center for Advanced Dentistry in 1979 to bring together a multidisciplinary group of specialists in active practice. The original center is now known as the Dawson Center for the Advancement of Dentistry.

**SP: Dr. Dawson, why do you call your three-part lecture series "The Concept of Complete Dentistry?"**

**PD:** Dentists are the only medical professionals responsible for the health of the entire masticatory system. The teeth do not hang out in space; they must work together in harmony with the masticatory musculature and the temporomandibular joint. Complete dentistry has four comprehensive goals: optimum oral health, anatomic harmony, functional harmony, and occlusal stability. If each goal is achieved, treatment success is assured. When the entire system is healthy, there is a harmony of form and function, and the relationships are stable, then the treatment can be considered complete. Esthetic requirements will also be fulfilled because the appearance of the smile is dependent on the same harmony of form that is necessary for the harmony of function.

**SP: Dr. Dawson, what is CR and why is it so important?**

**PD:** CR is the single most important factor of occlusion and determination of it is the most important skill required for predictable occlusal treatment. CR is defined as the relationship of the mandible to the maxilla when the properly aligned condyle-disc assemblies are in the most superior position against the eminentiae irrespective of vertical dimension or tooth position. The condyles are in CR if four criteria are fulfilled:

- The discs are properly aligned
- The condyles are at their highest point against the eminentiae
- The medical poles are braced against bone
- The inferior lateral pterygoid muscles have released their contraction and are passive.

Because occlusion plays such a dominant role in almost everything a dentist does, not understanding that role causes a major amount of wasted time and makes it impossible to be predictive about complete patient comfort and satisfaction.

**SP: Dr. Cranham, what is the envelope of function and vertical dimension of occlusion?**

**JC:** The envelope of function (EOF) may be one of the most critical concepts to understand today for the practicing dentist. It refers to the path that the lower incisors travel as the mandible opens and closes during all functional movements. Some EOFs are straight up and down, whereas others are horizontal. Patients that function horizontally tend to have increased wear, and restoration fractures on their front teeth. Patients who function vertically tend to put our restorations at less risk. When restoring anterior teeth, it is extremely important that they be constructed in harmony with the individual patient's EOF. Dr. Dawson has taught this concept for years, and it works wonderfully to construct restorations that are stable, beautiful, and comfortable.

When done properly, we do not have to talk our patients into accepting restorations that do not allow for clear phonetics or do not feel completely natural. Vertical dimension of occlusion (VDO) is the vertical relationship of the upper jaw to the lower jaw, when the teeth are together. We believe that the VDO is determined by the repetitive contracted length of the muscles of mastication. It is the repetition that creates the interocclusal space in which the teeth erupt. While this is a complicated subject, the restorative dentist today must understand VDO. Some occlusal problems simply cannot be addressed without altering the VDO, and yet with other patients you do not want to alter it at all. The key is to learn the difference.

**SP: What problems can result from a malocclusion?**

**JC:** I believe occlusal disease is the most prevalent problem that patients have today. Occlusal disease is the No. 1 cause of tooth loss, patient discomfort, patient dissatisfaction, and orofacial pain. It is the No. 1 missed diagnosis. Occlusal disease can manifest as worn dentition, splayed teeth, abfractions, sensitive and sore teeth, loose teeth, and painful musculature. Dental assistants and hygienists should be trained to recognize the signs of occlusal instability and disease.

**SP: What is your favorite course to teach?**

**PD:** I love to teach all the courses in the Concept of Complete Dentistry series, but my favorite is Seminar One—Classic Occlusion. In that seminar, I explain the 10 “must know” factors of occlusion. There are so many misconceptions in dentistry; I love to take each concept and make it easy to understand. It's fun to see the lights turn on, especially knowing what a positive impact it has on the dentists' practices.

**SP: Dr. Cranham, what compelled you to be an educator and a teacher?**

**JC:** I was first inspired to teach when a part-time instructor named Dr. Baxter Perkinson came to the Medical College of Virginia (while I was a student) and did some evening presentations. He was also the first person to encourage me to hear Dr. Dawson when I left dental school. Baxter and Dr. Dawson both had such a profound impact on how I think that I wanted to be able to do the same thing for others. The real charge in teaching is touching people's lives in a positive way.

**SP: How are you able to accomplish so much? Practice, research, writing, teaching—most dentists struggle just to have the time to practice.**

**PD:** Well, the items you listed are all related to my professional life. One thing I want dentists to know is that happiness comes from balance, which requires an absolute commitment to priorities. For me, my priorities are God, family, dentistry. When that is clear, decisions about how to spend time are much easier. I find that I am able to focus on what I am doing at the time because I know my priorities. Dentistry affords dentists and their staffs a wonderful opportunity for a happy and meaningful life.

**SP: What are your plans for your future and the future of the Dawson Center?**

**PD:** I plan to keep teaching as long as the good Lord allows me to. I would feel selfish if I did not pass on what I have spent so many years learning. I want the best for dentistry—for the profession, the practitioners, and the patients. The Dawson Center has a talented, dedicated faculty who are passionate about sharing what they know will work if dentists take the time to learn it.

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