Get ready to up your skills.
Join us in welcoming two renowned clinicians and educators to DPR. In addition to serving as co-chairs of Advanstar Dental Media’s continuing education advisory board, Dr. John Cranham and Dr. Robert Lowe will be presenting two rotating regular columns in DPR. And one of them—Clinical Solutions—debuts this month.

Our staff has come to know these two consummate professionals as dedicated, curious, innovative, and sticklers for quality. To help you get to know them, too, we asked these doctors to share what they hope to accomplish through their contributions to DPR.

**Q&A: Our new columnists**

**What’s your vision for the Clinical Solutions and Dentistry’s Buzz columns in DPR?**

**C&L** Simply—we want to help dentists do their jobs better. To keep today’s practitioners on top of their game, we’ll pack these columns with the latest tips and techniques to make their dentistry more predictable and efficient. Our vision is to deliver practical, timely information that dentists can use daily to hone their clinical skills, make the practice more productive, and in general, help dentists enjoy this wonderful profession that we’re blessed to be part of. Ultimately, the patient benefits, too, not only from the increased clinical skills, but a happy, productive office environment.

**Clinical Solutions** will offer step-by-step procedures for handling unique clinical situations that may not be obvious to the clinician at first glance. This column will help create restorative options for the dentist to a wide range of clinical situations. It’ll be written in a “quick-read” format, with high-quality photography and illustrations to make a fun read.

**Dentistry’s Buzz** will offer the latest on new materials, techniques, and general topics that impact every restorative practice.

Technological advancements and their clinical applications will keep the dentist informed on what’s new and exciting in our ever-changing profession. In what areas do you see the greatest information gaps in existing periodicals?

**C&L** Many articles in refereed and non-refereed journals show exceptional clinical dentistry, but don’t give the reader the technical information required for duplicating the results they show. Many times, they do not address simple techniques that can be introduced into our practices that just make a known procedure more fun, or easier to do. Sometimes the most seemingly trivial clinical tip can mean a lot to the dentist looking for treatment planning alternatives for his or her patient. Efficiency, quality, and predictability are what make dentistry fun and rewarding. Sometimes, dental periodicals miss this simple point.

Also, many authors believe that “It’s my way, or the highway” when referring to methods of treatment for their patients. It is important to convey to the dentist there are
Repair, don’t replace

Why replace the whole bridge when ceramic is fractured off just one tooth?
Here’s a great technique for veneering the affected part of the bridge, leaving the rest intact.

Dr. Robert A. Lowe

When a patient fractures the ceramic off of a fixed bridge, the immediate reaction may be to replace the entire prosthesis. This necessitates removing the defective bridge and starting the case over, which can mean expense to the patient, hours of non-productive chairtime for the dentist, and possibly another lab charge. Thanks to adhesive technology, there is another choice.

Making the choice
The patient had a six-unit porcelain-to-Captek bridge placed using the maxillary canines as abutments with the lateral and central incisors being pontics. After approximately two years of service, the patient presented with a porcelain fracture in the middle and incisal thirds of tooth No. 9 (see Before, above). Because the fracture does not expose any of the metal understructure, one option is to repair the fracture using composite resin.

Although this is an acceptable way to proceed, this author has always found it particularly challenging to match opacity or translucency and to invisibly blend the composite margin into the existing porcelain. Also, in most cases, a composite repair of ceramic provides only a short-term fix. Another option to create a more long-term result is to bond a new piece of ceramic to the existing porcelain, using adhesive resin technology.

Long-term treatment
The plan is to construct a porcelain veneer preparation into the existing ceramic. Since the porcelain covering the metal substructure is ideally at least 1.5 mm thick, a conservative porcelain veneer preparation removing only 0.5 mm of porcelain can be accomplished without exposing underlying metal (Figure 3). The success of this procedure depends on having sufficient ceramic remaining to provide micromechanical retention for the porcelain veneer that will be placed to repair the fractured surface.

If the fracture is all the way down to the metal and there is a minimal amount of porcelain remaining to bond to, a “saddle crown” is a good solution. (Note: The technique to repair an existing bridge using a “saddle crown” will be discussed in a future column.)

Once the preparation is complete, a master impression is taken and the tooth is provisionaled using direct composite resin that is “spot etched” to the ceramic surface. Figure 4 shows the porcelain veneer that is fabricated for the case. Supplying digital photographs of the existing bridge, particularly the adjacent central incisor, will aid the technician in the placement of internal effects and incisal translucency.

Matching color, fit
After removing the direct resin temporary, the porcelain veneer is checked for color match and marginal fit. The best way to evaluate color is to try in the veneer with water only and photograph it using a digital camera. If the color and fit are good, the restoration is ready to place. The first step is to etch the porcelain ve-

Continued on page 22
Continued from page 20

eer (Figure 5) and the porcelain surface of the preparation (Figure 6) with hydrofluoric acid (Porcelain Etch, Ultradent Inc.) for 60 seconds, then thoroughly rinse for an additional 60 seconds. Next, both ceramic surfaces are silanat-ed and air-dried (Figures 7 and 8). Following silanation, a fifth-generation dentin adhesive (Optibond Solo Plus, Kerr Corp.) is copiously applied (Figure 9), scrubbing it into the surface of the ceramic using a microbrush. It then is air-
dried and light cured for 20 seconds. Next, a clear (untinted) composite resin cement (Nexus 2, Kerr Corp.) is applied to the internal surface of the porcelain veneer (Figure 10).

Placing the restoration
The restoration then is placed on the prepared surface and fully seated, expressing the excess resin cement. A No. 2 Keystone brush (Patterson Dental) is used to carefully remove the majority of the excess resin cement (Figure 11), without moving or dislodging the restoration. Reseating the veneer with finger pressure intermittently during the resin cement clean-up ensures that the restoration remains properly orien-ted. A large cotton ball in a cotton for-ceps can be used carefully to remove the remaining resin from the surface of the ceramic. Once the majority of the resin cement is removed, the restoration is light cured for 60 seconds. The After figure, page 20, shows Tooth No. 9 repaired with a porcelain veneer bonded to the existing porcelain. The final result is shown be-low. The esthetic match of the ceramic is perfect; the restoration is undetectable. The ceramic-to-ceramic bond is very strong, and this repair should last for years to come. Certainly this repair is prefer-able to remaking the entire bridge...and the end result is excellent!
many good techniques out there that achieve the same clinical outcome. The more choices available, the better likelihood of finding one that’s right for a particular clinical situation.

Why is DPR an appropriate vehicle for disseminating CE?

DPR already has a huge following, being the most-read dental publication in the industry. Dentists and dental teams like it because they can pick it up and see information on the latest “stuff” in dentistry. A combination of product information and clinical application via CE articles is an obvious fit to provide the dentist with THE one source of information that satisfies both needs: learning what’s new, and learning how to use it appropriately in clinical practice.

How would you like to use the Internet to provide CE online?

Interactive online CE, such as webcasts, are fast becoming a popular way to disseminate quality continuing education in the comfort of your own home. Many of these formats allow direct communication and interaction with the lecturer who is presenting. Live patient demonstrations and product evaluations also can be done online using an interactive format with the clinicians.

These are easy to do—we both have the ability to capture video. Then, when dentists answer the questions, it will be based on what they read and what they saw!

What do you hope to contribute to DPR’s content to make it more valuable to readers?

My sole objective is to provide step-by-step instruction on clinical procedures that allow the dentist to perform a new procedure in his or her office with excellence and confidence. It’s also to provide a series of columns that can serve as a continuing resource for clinical information.

I have a general practice with a large emphasis on cosmetic, restorative, and functional problems. I also spend 60 days per year teaching. My hope is to share information with the readers that they can utilize in their practice to make it better. It’s that basic—my hope is that we make a difference.

Any general comments you’d like to pass on to DPR readers?

We’re excited to have the opportunity to help provide solutions and techniques for your clinical practice that will elevate the standard of care for you and your patients!