



Photography by Kristen Wade



by Kyle Patton, associate editor, *Orthotown* magazine

TOO COOL for a school!



Marc Fraga

GSO's design director explains the logistics of its newest location—and what private practitioners should know about building from the ground up

When the Georgia School of Orthodontics (GSO) expanded into a second location in the Atlanta metro area, it needed a building that would hold not just a waiting room and treatment rooms but also classrooms, research areas, faculty offices and more for 54 residents, 14 faculty and 35 staff.

"The school is dedicated to equipping its students with the most advanced technology available," says GSO program director Dr. Ricky Harrell. "Some of them will go into practices that have been updated; others will go into practices that were started by

baby boomers who are still using older technology. For new residents, we have to be conscious that orthodontics is changing and the technology is always advancing. It would be silly to pretend it isn't, and we have to make sure this program exemplifies what's coming and what they can expect."

Marc Fraga, director in charge of design at GSO, walked us through developing a practice that incorporates room for high-tech research and high-touch patient care, and discusses suggestions and ideas that private-practice orthodontists might be able to incorporate into their own offices.



Q: How did you get involved with the Georgia School of Orthodontics and what's your day-to-day role?

I've been around orthodontics for most of my career. When I was contacted in 2015 to help design/build the facilities for GSO, it was a unique opportunity I couldn't pass up. The scale of the clinics was like nothing I had done before. Although the construction is complete, we continue to look for ways to improve the resident and patient experience at the facilities. For example, we recently expanded our space to enlarge our break rooms and research areas. I am also responsible for the orthodontic equipment we use in the clinics. The equipment we have is at the forefront of modern practice. We intend to stay that way.

You're no stranger to getting orthodontic offices up and running. At one point you were helping roll out 100 offices per year when you worked at the Orthodontic Centers of America. How has starting a practice changed through the years ... or has it?

Digital equipment has had the biggest impact on office floor plans—no more darkrooms, or storing models or paper patient charts—but the basics of office design are still the same. Every space is different and due diligence on the front end can save a whole lot of headaches, time and money during the construction process.



GSO's second school location is a hybrid space that serves as a fully functional orthodontic office as well as a teaching facility?

The campus is unique from a private practice in several ways. As you mentioned, it has the school component—classrooms, research areas and faculty offices. At just under 9,000 square feet, the clinic itself is larger than most practices; it has 20 orthodontic chairs. To accommodate this number of doctors and patients, special attention was given to incorporating wide walkways and optimizing the flow of people.

Although orthodontics is a destination-oriented business, accessibility to the office is still very important. We occupy space in a commercial office building that allows us to be on the first floor, in the front of the building. We have reserved parking spaces, a separate entrance from the main lobby and exterior signage, all in an effort to help patients easily find the clinic entrance.

For doctors who are considering building a practice, what are your top three tips or pieces of advice?



I'll assume the doctors have done their demographic homework and picked the best location available. After that: Larger dental equipment companies will conduct a free test fit for your space if you buy the equipment from them. A test fit is an effective way to test the feasibility of a floor plan before committing to the space.

While a test fit is to scale, it doesn't take into account any hidden issues or local building codes; consequently, this is not a substitute for hiring an architect, but it will save some architect fees upfront, because they can use this test fit to build upon. Then hire the architect. This is not a task you can do on your own! An architect must stamp your plans to apply for a building permit.

Finally, make as many decisions on finishes—flooring, wall covering, lighting, etc.—as possible before putting the project out for bid. The bidding process is useless if you don't secure apples-to-apples comparisons. Your goal should be to minimize change orders, because they can really add up if you start the project with a lot of unanswered questions.

Let's talk specifically about the importance of hiring an architect. Creating a floor plan can seem deceptively easy, then reveal challenges down the road. What are some of the common mistakes you've seen in the planning stages of a build, and how can

hiring an architect help save time and money down the road?

For context, I'm only referring to interior buildouts. The first thing you need to know before finalizing a floor plan is how the existing building was constructed. Your architect will obtain base building drawings from the owner; these drawings may reveal issues that will affect your floor plan design. For example, most orthodontists need to install air and vacuum lines in or under the slab. However, if there are steel cables, electric, fiber, etc., in the same place where you need to drill or cut, you may have to modify the location or your chairs.

Architects keep up with local building



codes. You won't receive a construction permit to build until your plans are in compliance. If the building department rejects your plans, it could be weeks before they're reviewed again. As they say, time is money.

Architects can also give you leverage with contractors. Many times, architects are the gatekeepers for new construction projects. In addition, they have probably worked with most vendors in town and can recommend the best ones for the build. It's nice to have the architect available to help solve a problem if one does arise. Architects will happily conduct midconstruction progress inspections to help head off any issues ... for a fee, of course.

GSO's new Atlanta office makes great use of its space by recognizing what the building itself offers, like its high ceilings and immense windows. What are some specific design tips that you like to incorporate into offices?

While the high ceilings in our clinic are definitely an asset, they also presented some challenges. For example, we made certain not to overlook sound as a critical design element. With all hard-surface finishes in the clinic, including floor-to-ceiling glass on more than half of the perimeter, this room was ripe for a noise problem. To address this issue, we chose not to use the building-standard ceiling tiles but to upgrade to ceiling tiles with acoustical properties.

TOP 5 PRODUCTS

1. **Planmeca ProMax 2D S3 X-ray unit with dual sensors.** This is the most-used piece of equipment in the office. The 2D X-ray machine takes panoramic and cephalometric X-rays and also is capable of taking periapical X-rays.
2. **iTero intraoral scanners.** Traditional dental impressions are replaced with highly accurate 3D digital images. No patient wants an "old school" impression, plus Invisalign is a sought-after service.
3. **i-Cat FLX 3D CBCT system.** 3D radiography provides details that 2D cannot. High-quality images, low-dose options and fully featured treatment-planning software continue to provide enhanced features for highly effective planning in providing the best in patient care.
4. **Gemini 810+980 Diode Laser.** The most powerful dual-wavelength soft-tissue diode laser available. The laser features 20 watts of peak super-pulsed power, which means faster, smoother cutting with less tissue tagging.
5. **3M Victory Series Low Profile Brackets** (prepasted). Patients are more comfortable wearing them.



office visit



Although they cost more, this was money well spent. The combination of these ceiling tiles and the addition of white noise keeps the clinic environment quiet and peaceful for the patients.

A second challenge that the high ceilings presented was the inability to use ceiling-mounted lights over the patient chairs—the support arms for the lights would have been too long for stability. Fortunately, this challenge was easily overcome by using chair-mounted lights. Finally, to keep the room from looking like a gymnasium, we added a few carefully placed chandeliers.

Every physical space will present a different set of challenges during a

build, but are there any challenges that seem to be universal when it comes to building/remodeling ortho offices that you've noticed throughout the years? What's your advice for taking on those challenges?

Everyone needs controlled air, but having enough airflow and knowing how it is controlled are extremely important. This is less of an issue in a retail space, where each bay typically has its own HVAC unit, but in a commercial building your space is most likely part of the building's central HVAC system. Questions you should ask during the design phase are:

- Will I share a unit with another tenant?
- What type of controls (pneumatic or DDC) does the building use?

- Do I need more airflow along the windows?
- Will my mechanical room be sufficiently cooled?

This is one area of the total project that can make or break the job.

Tell us about your favorite design element of the Atlanta practice.

The chandeliers. We were aiming for an inviting, spa feel and the chandeliers really make a dramatic statement. Because of the 12-foot-high ceilings, the chandeliers also give the perception that the room is warm and cozy, not cavernous. They effectively “lower” the ceiling, and they also dress up the office.



What has the feedback been regarding the design elements you incorporated?

Both the patients and the residents are typically surprised and impressed by the aesthetic look and feel of our design. Much thought was given to the color scheme and we chose a collection of engaging, modern art, commissioned by a local artist, that accentuates the clean lines of the office and nicely juxtaposes our floor-to-ceiling windows. GSO is a dramatic departure from older orthodontic practices that have a closed-in feel, and our patients, residents and staff appreciate the added attention to detail.

In addition to the design of your clinics, what else does GSO do to facilitate the patient experience?

We're an integral part of the community, so it was important to create an open, inviting space to host lecture series, CE courses for dental professionals and programs such as our Gift of a Smile program that provides \$100,000 in free orthodontic treatment to children, and our Purple Heart Smiles program that provides \$50,000 in free care to the children of Purple Heart recipients. We are committed to giving back to our community and making orthodontic care available to those who may not otherwise have access to state-of-the-art technology and leading patient care. ■



OTHER PRODUCTS

Appliances (Class II or III)

Forsus, TADs, headgear and elastics.

Bonding

Prepasted 3M brackets.

Brackets and wires

3M Unitek.

Chairs

8000DY/Daytona Chairs from Summit Dental Systems.

Cements

- Transbond from 3M for brackets and bands.
- Unitek Multi-Cure Glass Ionomer Bond Cement from 3M for appliances.

Finance

In-house.

Handpiece

- High-speed and slow-speed from Patterson Dental.
- Quattrocare Air Plus handpiece maintenance system from KaVo.

Instruments

Hu-Friedy.

Practice management

Dolphin Practice Management and Dolphin Imaging.

Technology

iCat Flex CBCT.