



Practice Insights



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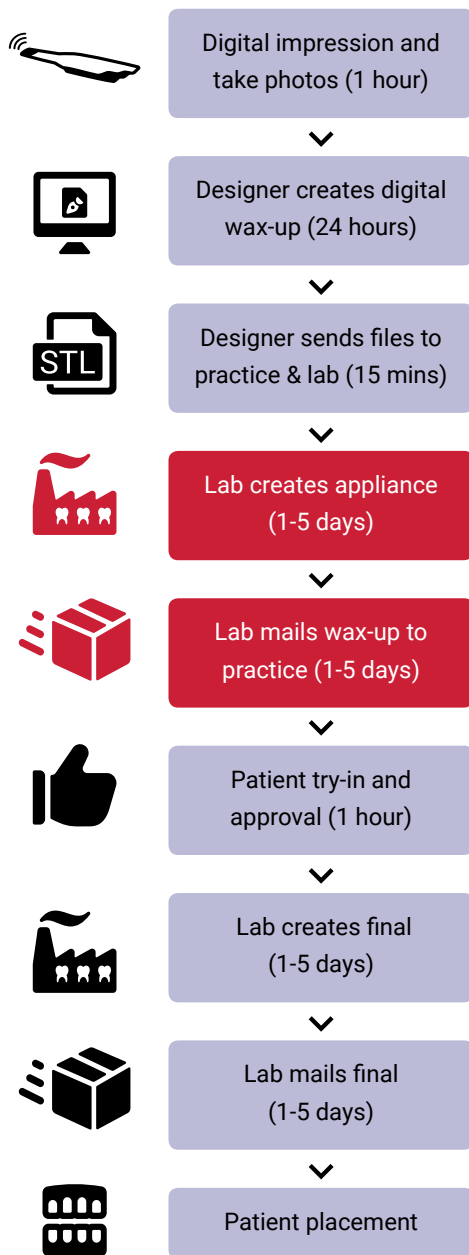
Dr. Fung DDS

## Dr. Fung's High-Speed Wax-Ups

Silicon Beach Dental is located just a few miles from Santa Monica, California, a hub for technological innovation in southern California. The boutique practice is owned by Dr. Lawrence Fung, who specializes in digital aesthetic dentistry, emphasizing the role of technology in his workflow. “The things we're able to do with technology allows for a much more efficient practice, which leads to a much more pleasant visit for our patients,” he says. Dr. Fung opened Silicon Beach Dental with digital technologies in mind: each operatory has a dedicated, floating screen that features streaming services for his customers to watch during their appointments. Intraoral scanning, digital smile design, and advanced photography all figure prominently in his daily workflows.

But there was one piece of digital technology that Dr. Fung hesitated to incorporate: in-office 3D printing. “For me, it just didn't make sense, because we're so busy. Traditionally, the assistant would take the impression, send it out, and I don't have to worry about a thing,” he says, “But with digital, it's a little bit different.”

## Digital Smile Design without 3D Printer



**Total time for Try-In: 1-2 weeks**

**Total time for for final: 3-6 weeks**

Dr. Fung's existing digital technologies and relationships, such as his intraoral scanner and digital design partner, already allowed him to increase delivery speed for esthetic wax-ups compared to traditional workflows. "Once it's scanned and we've taken the photos, then we send it digitally to my designer, but what's nice is that with digital impressions it only takes a few minutes. Once the designer has the file, it will take a day, at most, to get the design back," Dr. Fung says. Once he has the 3D design, he can bring his patient back in for a consultation or simply send them the digital files for review at home. This drastically reduces the need to make changes to the physical model, as digital adjustments can be made in a matter of hours and at a low cost.

Once the design is complete and the patient is satisfied with the digital results, the next step was to create a wax-up to allow the patient to see the results intra-orally. But despite all of his investments in digital technology, Dr. Fung still had to wait for a lab to fabricate and ship his physical model, reducing the effectiveness of these investments. Crucially, this time bottleneck occurred right at the point of gaining case acceptance, which could lead patients to reconsider for any number of reasons.

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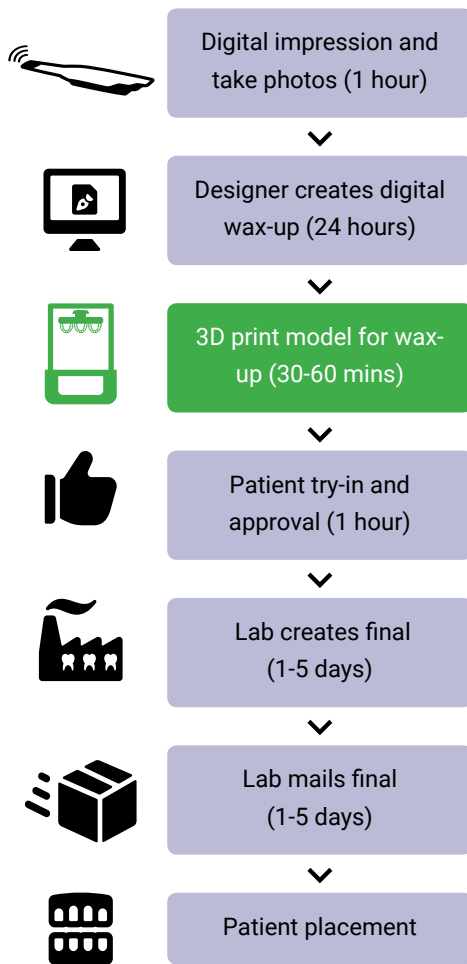
*They get to see it on the screen and now, instead of sending it off to the lab and waiting, I just print it. It takes less than an hour to print, so they're back within a day or two after their initial consult.*

Dr. Fung DDS

For Dr. Fung, then, recapturing the try-in step with digital technology seemed like a low-hanging fruit to increase case acceptance, reduce lead times, and increase patient satisfaction by providing rapid, customized service. To solve this problem, he looked to 3D printing despite certain apprehensions about the technology's real-world efficacy in his practice. "I was afraid it was just going to be a really expensive paperweight. That none of us would use it. And luckily," Dr. Fung says, "I was wrong." After a quick remote training session with a SprintRay print technician, Dr. Fung's SprintRay 3D printer became an asset to his daily workflow, helping him capitalize on his existing investments in digital technologies.

With 3D printing, the lead time between presenting the digital wax-up and providing an intraoral try-in is drastically reduced, "They get to see it on the screen and now, instead of sending it off to the lab and waiting, I just print it. It less than an hour to print, so they're back within a day or two after their initial consult," Dr. Fung says, "Case acceptance is almost a hundred percent. It's a pretty big game changer, at least for my practice. And now with 3D

## Digital Smile Design with 3D Printer



**Total time for Try-In: 1-2 Days**

**Total time for for final: 1-2 weeks**

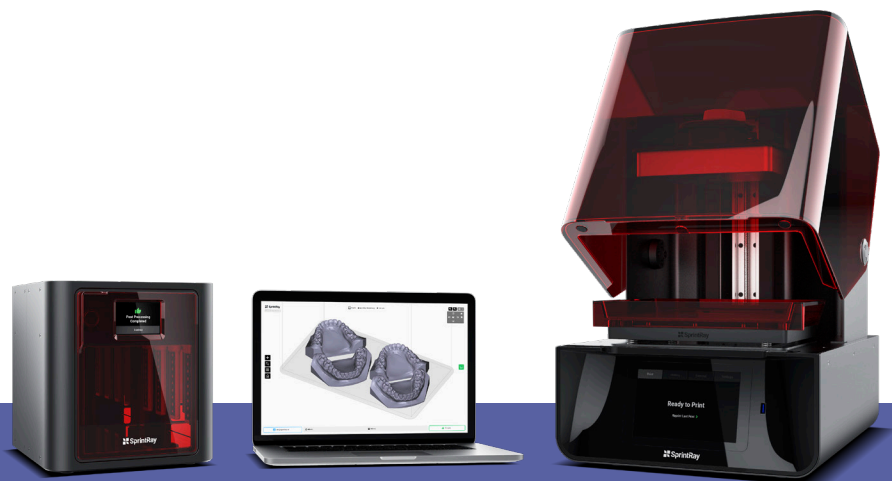
printing, if something needs adjustment or something didn't work out the first time, I can just revise and reprint it right away in a fraction of the time it takes to send it back to a traditional lab."

In contrast to his initial reservations about 3D printing, Dr. Fung discovered that getting up and running with his SprintRay printer was easier than expected. Rather than having to spend his own time using the printer, he has delegated all of the printing and processing to his staff, whose reactions have been very positive. "Once it goes to print, I don't touch it at all. It's so easy; the staff just clicks 'print' and then when it's done they post-process with alcohol, throw it in the Pro Cure, press 'start.' It's very simple.

Sure I'm trusting of my staff, but it's also a testament to how easy SprintRay has made the printing process," he says, "My staff actually like using it because it changes up their day. It's fun."

Another common concern with 3D printing is the mess and maintenance - a concern which Dr. Fung shared when he initially considered bringing the tech in-house. Compared to pouring stone and working with traditional dental model and impression materials, Dr. Fung says his staff love how low-maintenance the SprintRay printer is. "It's almost nothing," he says, "For us, the only recurring tasks are cleaning the platform and changing the resin. It's as easy as changing a cold sterile - it's pretty much no maintenance."

Now that Dr. Fung has acclimated to using his 3D printer for wax-ups, he has plans to expand to other applications, such as night guards. The proliferation of these useful appliances has been limited by the high cost of lab fabrication and long lead times, creating a barrier for many patients. Until recently, 3D printing splints wasn't practical due to materials constraints. But thanks to new 3D printing resins from SprintRay, in-office printed night guards are becoming feasible. "I have barely touched the tip of the iceberg," Dr. Fung says, "We're starting to use SprintRay's new nightguard material, and the results are quite promising."



### About Dr. Lawrence Fung

Dr. Lawrence Fung graduated from the University of Southern California with a BS in Dental Hygiene in 2007 and his DDS at the Ostrow School of Dentistry in 2011. Dr. Fung has a very diverse academic background replete with service, research, and leadership. He served as class president for both his undergraduate

and his graduate classes. He subsequently earned the Century Club and the Robert E. Cruse Memorial Awards for exemplary character, ideals, and leadership.