



## Jillian Swafford: Using 3D Printing to Stand Apart from the Crowd

### An Opportunity to Lead

During her career, Jillian Swafford has witnessed a tremendous number of significant advancements in dental technology and considers 3D printing to be one of the most dramatic examples of the trend. Today, she uses the technology to create retainers, temporaries, mouthguards, and wax-ups for dental practices across North America from a charming town in rural Tennessee that literally has no stoplights. Jillian equates the situation to “the Wild West” in light of the newness, potential impact, and speed of development of 3D printing technology. Dental practices want and need to know what this all means for them, which presents a great opportunity for informed dental labs to assume the role of their customers’ trusted source and voice of reason.

“ When I started out in this field, I’d never have imagined that we’d be printing appliances that actually go inside the mouth. I love how our industry is ever-changing. It’s been a really fun journey, but it doesn’t come without concerns. ”

### Using Is Believing

As an early adopter, Jillian’s first 3D printer was a very basic model purchased on Amazon.com about three years ago. Her goal at the time was simply to understand the workflow and the terminology of 3D printing. Initially, she printed only models to ensure the contacts of her restorations were tight and in the right places before sending out model-free restorations to practices. When she saw how impressed her practices were with how well the restorations fit when seated in the mouth, she decided to go “all in” and order a state-of-the-art 3D printer. But as she soon learned, every 3D printer, every resin, and every type of software has its own capabilities and limitations.

### Keys to Maximizing the Power of 3D Printing

- 1 DO YOUR HOMEWORK
- 2 PICK THE RIGHT MANUFACTURER
- 3 ASK FOR HELP
- 4 KEEP CURRENT
- 5 MARKET YOURSELF



## And the Winner Is...

The state-of-the-art 3D printing solution Jillian decided on was the DMG DentaMile solution. The system was delivered to her office for a trial run, and once she witnessed its capabilities, it was clear to her that there was no way she could return it. She urges labs considering a 3D printing solution to confirm that the manufacturer – like DMG – is willing and able to provide the necessary guidance and support that might be needed during the learning process. She also suggests going with a manufacturer that also produces its software and resin materials, as DMG does with its DentaMile connect software and LuxaPrint resins, respectively. When choosing a printer, she advises starting with the end goal of the restorations and applications you want to use it for and then working your way backward to find the printer that can help you achieve those goals.

## Win-Win-Win

Jillian marvels at the impact 3D printing is having on dental laboratories, dental practices, and dental patients alike. The most obvious advantage is the dramatically enhanced speed. With the analog approach, it could take several days for the impression to be shipped from the practice to the lab, and then another four hours for her lab to pour, set up and trim the appliance. With 3D printing, the use of an electronically transmitted scan obviates the need to mail a physical impression, and the creation of the appliance takes her lab roughly one hour instead of four. In addition, Jillian's customers shared that patients find 3D-printed appliances to provide an exceptional fit. Customers also appreciate not having to keep the appliance model in the event an appliance needs to be replaced, as the appliance's design and print file are saved and can simply be reprinted. Patients – as well as labs and practices – also appreciate that time-killing appliance “re-dos” are virtually non-existent with 3D printing.

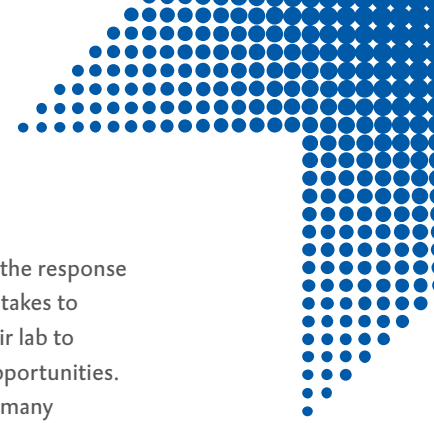
“ 3D technology is amazing, but there are a lot of moving parts, and things are changing almost daily. You have to keep up, and if you don't, you'll fall behind quickly. ”

## To Be Human Is to Err

As Jillian points out, in the analog approach, the reason for the re-do of an appliance is that the process involves so much room for human error. In contrast, with 3D printing, there is no opportunity for a human to create an error with a bad pour-up, create a bubble in a model, or accidentally shift some part of the appliance the wrong way. Moreover, the numerous automatic checkpoints built into the 3D printing process ensure accuracy and allow the lab to feel totally confident in the appliances and restorations delivered to practices.

She emphasized, however, that taking full advantage of the technology's vast potential requires lab owners and dentists alike to stay current. For example, there are new 3D ceramic materials coming out this year, and new ADA approved codes for 3D-printed restorations for placement in the mouth for full payment for a crown. Dental practices will be asking about these developments, and labs that fail to make a conscious effort to keep up with this intriguing technology will fall behind. Not everything is the right fit for everyone, and working together, offices and labs can make educated decisions on what to offer patients and when.

“ 3D printing isn't going away. Labs can either get on the train, be part of the movement, and be a resource for our doctors and the teams we work with, or they'll find someone who is. And that's not a place that I want to be. ”



## A Hit with Lab Techs

When asked if her lab techs were concerned that 3D printing might make their jobs irrelevant, she indicated the response is the exact opposite. Even in a dental lab, Jillian says, few people enjoy the messy model room or the time it takes to use the analog mode of creating appliances. Moreover, her team recognizes that 3D printing has enabled their lab to increase its revenues, in large part because of the time it has freed up to devote to other revenue-building opportunities. Interestingly, even practices that have 3D printers often ask the lab to do their 3D printing for them – just as many practices with their own milling machine ask the lab to do their milling for them.

|| 3D printing has allowed us to quality control at least 20% more restorations in the same amount of time it took using the conventional approach, and with almost 95% accuracy, as our clients have found their restorations to have minimal to zero adjustments during their seat appointment. ||

## Spread the Word

Jillian has taken great pleasure over the past few years in seeing and hearing of the reaction of both doctors and their patients to her lab's 3D-printed appliances. She has no doubt that her lab's expertise with 3D printing has made Oaks Dental Designs more interesting and appealing to practices across the U.S. and Canada. And she knows for a fact that it has improved the profitability of her lab and the satisfaction of both her customers and her staff.



JILLIAN SWAFFORD is a veteran of almost 20 years in the dental industry. Since 2018, she has been the owner of Oaks Dental Designs in Pikeville, Tennessee. Jillian knows all too well the importance of an efficient seat appointment, and her business is designed to give doctors and their teams just that. She is a renowned speaker and educator who is passionate about seeing others succeed.

With most of her client base located across North America, Jillian was able to locate her business in a beautiful rural community of under 2,000 facilitating an active outdoor lifestyle that she, her husband Aaron, and their children Heidi and Finn love.