

THE MINEC SCIENTIFIC NETWORK

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Interviewed by International Journal of Future Dentistry

Why did you become interested in the field of dental implantology?

"When I was growing up, I watched my grandfather struggle to eat food during our family meals. At the time, I didn't understand why, but I noticed that he would always eat privately and seemed to struggle eating even the most common foods that I was used to eating. It wasn't until later, when he showed me that he had been living with dentures, that I learned what had limited his ability to chew foods and comfortably socialize with friends and family during every meal. His dentures prevented him from enjoying many of the foods he loved and stopped him from eating many others. Over time, his limited diet also affected his health.

"When I was younger, I wasn't sure what career path I wanted to follow, but I knew I wanted to help people like my grandfather. My grandfather was a mathematician, but as a child I failed to see the importance of math. Through school, I developed an interest in the arts and also fell in love with the field of dentistry for its blend of both art and science. Further, the specialty of implantology demanded I learn and perfect mathematics and engineering principles to conduct the scientific processes involved in replacing teeth. During my career in dentistry, I came to appreciate everything my grandfather taught me, and

I saw implantology as the perfect combination of art, science, and math I had been seeking."

Do you have a particular mentor in the world of dentistry, and how have they influenced you?

"I have multiple mentors, and those are my colleagues. These are people who, like me, have fallen in love with the field of dentistry and see it as something to be truly passionate about. I've been drawn to them, and it is from those clinicians that I garner and gain wisdom. My mentors and I believe skilled dentistry can't be fully defined in textbooks. There's an art form to it, and over time, each dentist has the ability to develop their own unique methods for assessing and addressing the dental needs of their patients.

"I love sitting down with any clinician who has a passion for dentistry, because there is always something I can learn from them. To me, finding a way to learn from anyone is more beneficial than choosing one person and assuming they know everything about a certain topic. No matter the field, there is never one single ideal mentor. You have to lean on your colleagues and learn from each other, adopting what you learn into your own practice and enhancing your abilities to deliver exquisite dentistry."

During your career as an implantologist, you have worked with various implant systems, so can you explain your journey and why you changed each time?

"There is a relentless pursuit of perfection within implantology. Because of that, no one single implant system works better than another. A clinician can accomplish just about any type of dentistry with any implant system as long as they understand that system. There are nuances among each system, of course. For example, some have a better capacity for more aesthetic approaches to dentistry by offering solutions such as zirconium abutments and more customizable parts for the final prosthetics. Then there are other systems that are best designed to allow us to remove a tooth and place another simultaneously.

"In my career as an implantologist, I've worked with as many as 17 different systems. Of all of those, I work best with the AnyRidge® by MegaGen. I've been using this system for 8 years, and I prefer it because its unique surgical approach gives me the flexibility to address any given patient. It offers multiple sizes of implants without the need to provide too many osteotomies to properly and securely place them. MegaGen as a company is also dynamic and nimble, constantly improving and offering new considerations, new designs, and novel solutions to common problems that we all have as implantologists."



As a practicing clinician and dental educator, what advice do you have for implant companies?

"I believe implant companies should make an effort listen to their clients as much as they can. After all, dentists are the ones using the technology they develop, and they are the ones with the practical experience to know what will work best for what they do. Nobody knows better than the dentist what is needed in the field of dentistry. Because they work with patients every day, dentists can tell these companies what can actually improve their work or make it easier and more efficient. Implant companies should listen to their clients more than they talk to them. Listening will put them in a position to create novel concepts that meet the needs of the entire field."

You first opened your practice, Infinite Smiles, in 2008. Since then, have you had any unforgettable memories as a dentist?

"The most rewarding, unforgettable memories I have are when I get to change the life of a patient who has otherwise given up on themselves and their ability to enjoy food and socialization with friends and family. When I can offer a fully permanent solution to that patient and get to see them smile confidently for the first time and enjoy food they've had to avoid the majority of their lives because of their failing dentition or dentures, those are the memories that drive me forward and keep me looking forward to being a dentist. It is what I strive to provide - the best care and solutions for the best quality of life for my patients. Every time I provide this, it's an unforgettable memory."

What do you suggest fellow colleagues pursue regarding post-education in the dental field?

"I encourage every dentist to never stop learning. Dentistry is a constantly evolving science that incorporates science, mathematics, engineering, and artistry. The materials, biological approaches, and protocols for conducting dentistry are always changing and improving. It is never-ending, and in order to maintain both your passion and competency, you have to constantly pursue education in your career."



"My recommendation is to never settle on a single principle. Always seek multiple opinions on any given subject, because there are multiple ways to address dentistry. You especially need to learn from those who are in the field, actively working on patients every day. Lab-based research and development are very important, but daily practice with patients truly helps drive the field of dentistry forward. It is where we constantly discover unique, impactful problems and come up with solutions to those problems. No matter where you look, when it comes to dentistry, you will always find something to learn in the mouths of patients."

You are one of only a handful of dentists in the U.S. trained in all facets of digital dentistry. As a pioneer of digital dentistry, what do you think is the most important factor when a dentist considers converting from conventional ways of practicing to digital dentistry?

"One of the biggest hurdles a dentist can face when transitioning to digital dentistry is the fear of not knowing how to use computers and technology. My advice for those with that fear is to start by taking a leap of faith - you have to start somewhere. Even with conventional dentistry, you learn first by trying. It's not about choosing that single piece of equipment works best, but first choosing any equipment and learning

how best to utilize it. Through trial, error, and practice, you will learn what technology is best for your needs and how you can use it most effectively.

"I tried many different pieces of equipment to have a base knowledge to know which tools are best for me. For your own practice, start by giving yourself time to learn digital diagnostic tools like 3D radiographs with CBCT. Once you understand digital diagnostic technology, branch out to other ways to digitize dentistry, like intraoral scanners. Further enhance this knowledge with specific CAD/CAM software that can be useful to design dentistry.

"This is a process that can be overwhelming at first, but can be easier to understand once you get involved, break the learning process down into steps, and start learning the technology for yourself. Start by digitizing the first steps in your process, and once you've learned that step, move onto the next, and so on until all of it is digital. Digital dentistry is a lot harder to understand if you simply limit yourself to just observing it."

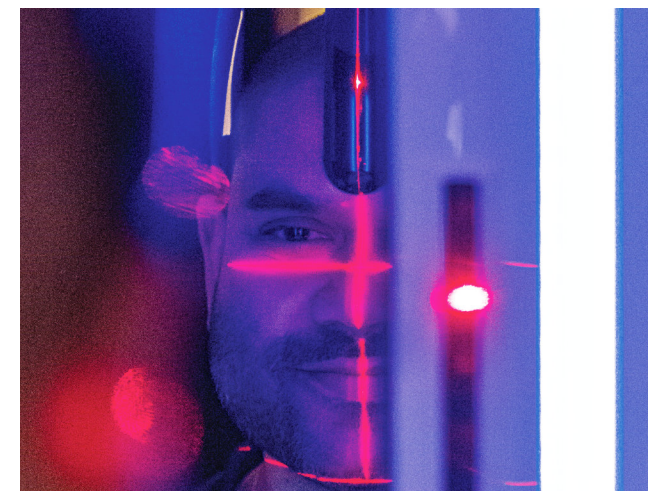
Based on what you've experienced in your practice, what do you believe are the key challenges facing implantology today?

"In my experience, a key challenge I face is peri-implantitis. I've had numerous patients come to me

after getting an implant placed at another office, and they are suffering from either bone loss or inflammation around their implants due to poor planning, lack of healthy gum tissue or bone, or poorly designed prosthetics. Peri-implantitis is something I predict we will deal with on a much larger scale as more patients receive implant therapy and patients with existing implants age without proper maintenance or cleaning. Most often, the challenge doesn't come from placing the implants themselves, but from the healing process, post-operative care, poor hygiene, or atypical wear and tear over time. It can be difficult to know when an implant has developed some sort of ailment, so our challenge is to find out how to diagnose and heal that implant long after it has been placed, long after the ailment began. Currently, one of the biggest challenges in implantology is predictably reducing inflammation around an implant once it develops. Although it's rare, its effects can be highly detrimental and we are often not able to reverse the damage. We have to figure out how to better address those patients who do not experience an ideal outcome."

You have a lot of experience in dental implantology. What key advice would you give someone starting out in implantology today?

"To anyone aspiring to be an implantologist, I recommend observing those clinicians who are routinely placing implants. More importantly, observe those who are placing implants and also restoring implants. Spend time with those clinicians who are able to plan and place implants surgically and have a restorative-driven approach. Observe their restorative process from start to finish, so you can really see the full range of tasks in the hands of a single clinician. Learn these processes using a wide range of technologies and techniques and keep up with the technologies you see yourself using when you practice implantology. Through this, you can develop a keen understanding of a more comprehensive approach to implantology. I feel that proper exposure to the field paves the way for a bright future in implantology."



How about your future in digital dentistry? What do you anticipate will happen next?

"I'm passionate about dentistry. So much so that to me it feels more like a hobby than a career. I don't see myself retiring from this field; rather, I'm constantly transitioning from one stage to the next. I see myself engaged in dentistry for the rest of my life.

"Currently, my near future involves robotic technology and artificial intelligence in the assistance of implantology. I will be helping companies develop technology for both implantology and restorative dentistry just like when I helped usher in the era of digital dentistry. This development has been in the works for a little while now, and I've witnessed its potential firsthand. The results are truly impressive, and I look forward to the revolution of integrating robotics and artificial intelligence into the field of dentistry. This technology doesn't seek to replace any of us, but rather enhance the accuracy and the overall outcomes for our mutual patients."



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