

HECAN REBUILD IT

SAVING FACE TAKES ON NEW MEANING FOR PATIENTS THANKS TO THE TRANSFORMATIVE WORK OF ORAL AND MAXILLOFACIAL SURGEON LESLIE SULTAN

BY DANIELLE CHARBONNEAU
PHOTOGRAPHY BY EDUARDO SCHNEIDER
SHOT ON LOCATION AT SULTAN CENTER IN FORT LAUDERDALE



a 15-year-old girl in today's image-centric world is hard enough, but for one of physician Leslie Sultan's patients, adolescence was even more challenging. Growing up, the patient suffered from idiopathic condylar resorption sometimes called teenage arthritis. It's a condition that affects the jaw joints and causes the lower jaw to settle back and develop what

Sultan, a private-practice oral and maxillofacial surgeon (OMS) in Fort Lauderdale, says that over a period of time, the girl had no jaw bones left.

Sultan describes as a "bird beak deformity."

"She had a huge open bite," says the founder of Sultan Center for Oral Facial Surgery.

As teenagers do at 15, the girl interviewed for a summer job as a barista at a local coffee shop. She was rejected because of her jarring appearance. The teen also had trouble making friends or dating. After meeting with several surgeons around the country, she found herself across from Sultan at his office in Fort Lauderdale.

The girl's mother wanted what every mother wants for their teenage daughter: for her to feel confident and beautiful. "I want my daughter to look hot," Sultan recalls the girl's mom saying.

"Those are difficult shoes to fill," Sultan remembers. "The treatment involved replacing both jaw joints with prosthetic joints and repositioning the upper jaw in the channel. It was a 12-hour surgery."

This past April, Sultan saw the girl for the first time in a year since her surgery.

"She's now graduated from high school; she's going into pre-med. She wrote her college entrance essay about her experience with my treatment. She basically is fighting off the boys now," Sultan smiles. "It was an incredible experience."

This young girl's transformation is one of countless stories that Sultan could tell from his more than three decades as a surgeon. Another, he recalls with emotion, was when a woman was shot point blank in the face by an abusive boyfriend.

"Her entire lower jaw was blown up into pieces," he recalls. "We did three different reconstructive surgeries. We took material from her hip, and we stabilized the injury, but it was nowhere near what she should have had. Unfortunately, she went on to develop PTSD,

and it became very difficult for her to be seen in public. We lost track of her for a few years."

But then, when the former boyfriend who shot her finally stood trial, Sultan heard from the woman's attorney, who reconnected them.

"I asked her if she'd like to come back as a patient and let me see what I could do to help her," he recalls. "I got a number of people involved from Broward General Medical Center, the anesthesia department, the dental implant manufacturer, and the prosthetic lab. We provided one of those teeth-in-a-day, immediate reconstructions, where the patient got a complete smile at no charge. It was exhilarating

what we were able to do."

When asked what it feels like for him to see the final result of his transformative work, Sultan says he tries, somewhat unsuccessfully, to hold his emotions back.

"Truthfully. sometimes there are tears in my eyes," he says. "I won't let anvone see it. But my voice

One of my clinical instructors ... used to eat lunch every day at the Met [in New York City]. He would just study the art. When I went into my residency program, the first lecture we had from this surgeon, he said, 'Looking at somebody's face is an art. Putting it together is both an art and science.' "

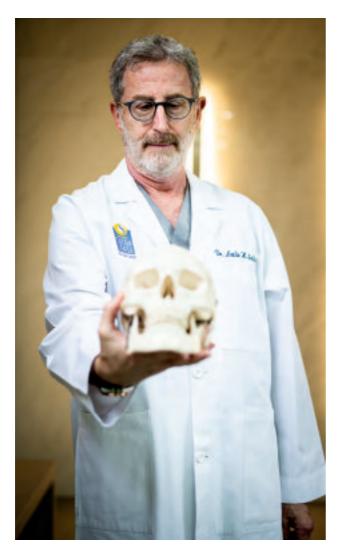
kind of cracks a little bit."

Rebuilding a person's face, for Sultan, is both a great honor and a great responsibility.

Like a sculptor, Sultan has had to become intimate with the creative subtleties, symmetries and shapes of the face, then master the technologies and skills to bring his art to life. When he

was in residency at the Mount Sinai Medical Center on the Upper East Side of Manhattan, he was just blocks away from the Metropolitan Museum of Art.

"One of my clinical instructors—



he was probably the top prominent jaw reconstruction surgeon in New York City back in the 1980s—used to eat lunch every day at the Met. He would just study the art," Sultan remembers. "When I went into my residency program, the first lecture we had from this surgeon, he said, 'Looking at somebody's face is an art. Putting it together is both an art and science.'

"He called each one of us to the chalkboard and gave us a piece of chalk. He said, 'I want you to draw what you consider to be a perfect profile of a patient face. Until you can do something close to the right proportions, you can't treat [the patient] and plan a surgery.'"

Today, technology has progressed to aid Sultan in the three-dimensional design of facial structures, but the process is no less skill intensive.

First, he performs a clinical assessment of his patient. Then he

obtains a digital diagnostic record of the patient's face from a CT scan. He records digital models of the teeth, bite, jaw structure, airways and how everything interconnects. Then he takes digital scans of the patient's face, evaluates photos of the patient and takes into account the patient's desired facial changes. He sends all the data to his 3D-modeling engineer who inputs it into a 3D virtual treatment planning software platform.

Using various presets for things like gender, race and

age, Sultan virtually plans surgical treatment for his patient. When he and his patient agree on a desired result, the software then generates patient-specific, custom-3D guides to section and reposition the facial bones. All the hardware needed to rebuild the face—the joints, jaw, teeth, chin, cheekbones—are 3D printed. Surgery to reposition the facial bones—called orthognathic surgery—can last anywhere between three and 12 hours. He describes the procedures as similar to putting together a complicated jigsaw puzzle.

"It requires extremely accurate eye-hand coordination," he says.

Surprisingly, Sultan arrived at his field of expertise first by pursuing

his Ph.D. in organic chemistry at Pennsylvania State University. The parallel may not be readily obvious, but Sultan explains the connection.

"In organic chemistry, you have to learn how to build 3D molecules," he says.

He stopped pursuing organic chemistry in graduate school when he realized that he preferred human interaction to science labs.

"I love working with people," he says.

He switched courses to pursue general dentistry at the University of Maryland, then did his internship at Jackson Memorial Hospital in Miami. The very first opportunity he had to participate in a surgery, he knew he wanted to continue his schooling to become an OMS.

He completed his residency at Mount Sinai Medical Center in New York City, found his niche and hasn't looked back since. He opened his practice in Fort Lauderdale to be near family in 1990.

Ten years ago, Sultan faced one of the biggest challenges of his own life when he was diagnosed with cancer. Luckily, he beat it with six months of treatment. Cancer-free for the past decade, he says he feels even more compelled to help his patients through medical challenges.

"I think anybody that goes through a major life-changing healthcare experience is going to change the way they deal with people. I've become more empathetic," he says. "It has definitely made me better at dealing with patients and trying to help them deal with the good, the bad and, sometimes, the ugly."

Some days, Sultan says, his career is mind-blowing to him. He was the first in his family to even graduate college. Now, he is one of the few solo-practice surgeons of his kind in the country.

"I'm not going to say I'm a dinosaur, but I'm one of the few solo practitioners in my specialty that's still around," he says. "Everything has become commercialized."

Sultan plans to continue practicing as long has he is able.

"I would like to work for another 10 years," he says. "I love what I do."





SHOT ON LOCATION AT NICKLAUS CHILDREN'S HOSPITAL IN MIAMI

Joanna Perdomo, a pediatrician at Nicklaus Children's Hospital in Miami, dreams about the future of her work, she envisions twisted vines of juicy tomatoes, blossoming cauliflower plants and bunches of fresh basil, all growing from a patch of dirt in the fire lane by the hospital's parking structure.

She pictures children learning about healthy nutrition, harvesting fresh vegetables to be served in the hospital cafeteria or put in boxes for patients to take home to their families. She imagines cooking classes—instructors teaching kids and parents how to make healthier, affordable versions of their favorite recipes.

This teaching garden is just one arm of a new three-part program Dr. Perdomo spearheaded at Nicklaus Children's Hospital called "Food for Salud: Healthy Food for Healthy Kids." The program's three parts—Grow & Nourish, Screen & Refer and Innovate & Evaluate—are designed to help address food insecurity, which has been shown to have a negative impact on health outcomes for children.

Food insecurity, as defined by the USDA, is when a household has limited or uncertain access to adequate food, either because of economic circumstances like poverty, or social conditions, such as living in a "food desert." Food deserts are geographical areas that lack access to affordable nutritious food or basic grocery stores.

The 2021 Map the Meal Gap study conducted by Feeding America and published by the Florida Department of Health showed that 14.3 percent of children (78.980) are food insecure in Miami-Dade County, 14.7 percent (60,580) are in Broward County, 13.2 percent (37,530) in Palm Beach County and 10.9 percent (1,390) in Monroe County. This means that, in the four-county area Nicklaus Children's Hospital serves, there are 178,480 children considered food insecure.

Of those, about a third are ineligible for federal nutrition programs (30 percent in Miami-Dade, 36 percent in Broward County, 34 percent in Palm Beach County, and 29 percent in Monroe County). According to a 2016 investigative documentary by the Sun Sentinel, South Florida had 326 food deserts at the time.

A journal published by the American Academy of Pediatrics noted that, compared to food-secure households, children in food-insecure households had rates of lifetime asthma diagnosis and depressive symptoms that were 19.1 and 27.9 percent higher, rates of foregone medical care that were 179.8 percent higher, and rates of emergency department use that were 25.9 percent higher.

As a pediatrician who grew up in Miami volunteering at community health fairs and watching her parents work as nurses at Nicklaus Children's Hospital, Perdomo has long felt a sense of obligation to help young patients get proper nutrition, which she sees as a bedrock for overall health and wellness.

Food for Salud's second area of focus— Screen & Refer—helps identify food-insecure patients and refer them to sources for help. Under the program right now, patients are either screened by a social worker at the inpatient level or by a specially trained medical assistant at the outpatient level. So far, since May of 2022, Food for Salud has screened a total of more than 13,000 people. Of those, 5 percent screened positive for food insecurity. This percentage is lower than expected compared to area's numbers. Perdomo says she thinks this discrepancy could be because of the stigma, fear or shame experienced when patients are surveyed verbally.

"Families fear saying, 'I'm food-insecure.' They think, 'My children are going to be taken away,' or 'I'm going to be reported to DCF'," Perdomo says. "A lot of families also want to shield their children from knowing that they're experiencing food insecurity in the home."

Perdomo hopes to transition the program's screening techniques to an iPad or paper, which would allow respondents to answer more privately.

After a family has been identified as food insecure, Perdomo's team helps connect them to local, state and federal resources like SNAP, WIC, Feeding South Florida or other food-providing services. While South Florida's public

school system also helps connect families to nutritional resources, Perdomo believes medical facilities are another great touchpoint, particularly since food insecurity is intimately tied to a child's health.

The last phase of the program—Innovate & Evaluate—will help families



"Families fear saying,
'I'm food insecure.' They
think, 'My children are
going to be taken away'
or 'I'm going to be
reported to DCF.' "

whose children have very specific medical conditions, such as food allergies, diabetes or celiac disease, which require strict specialty diets. These families might not be well served by standard food interventions. This part of the program also aims to design evaluative studies to track health outcomes when different food interventions are used—and pilot novel interventions like a grocery delivery platform or food stipend.

While Perdomo's passion for pediatrics first began as the child of two nurses, the topic of food insecurity largely dug its roots during her time in medical school at the University of Chicago where she says she witnessed a lack of health-care access and widespread food insecurity on Chicago's South Side.

She became involved with a summer service partnership working with another medical student and three high school students from an area youth center. Together, they designed a nutrition and exercise program in the South Side's Greater Grand Crossing community. They also went into local community health centers and asked people about their diets, shopping habits and barriers to healthy eating.

"From that I created healthy twists on recipes that people like to eat that were also budget-friendly," she remembers. "I did cooking demos at local places and made a little cookbook that I distributed. I learned more from those high school students that summer than they learned from me. It was an incredible experience."

Following her time in Chicago, Perdomo pursued her residency at Boston Medical Center and Boston Children's Hospital where she took part in the Leadership in Equity and Advocacy track and earned a master's degree in public health. She got involved early in a project called Health Equity Rounds, a training program to teach health-care professionals about implicit bias and racism in health care, and how these inequities negatively impact health outcomes. She helped develop the curriculum, which was later expanded to sites across the nation.

Perdomo says her experience with Health Equity Rounds was influential in how she sees her overall role now in the medical field. On a daily basis, she's a face-to-face pediatrician working directly with young patients and their parents at Nicklaus Children's Hospital. However, Perdomo says she is always looking to zoom out her lens.

"I'm always thinking about what could help my patient on a broader, more institutional level, or outside in their community. What social determinants of health might my patients need help addressing?" Perdomo says. "I think doing both—seeing patients and doing broader work—keeps me balanced in a way. The two always complement each other."

Like Health Equity Rounds, Perdomo hopes Food for Salud can be expanded and adapted to other medical facilities.

"Nutrition security—ensuring access to safe, affordable and healthy foods to optimize health—is a pressing issue facing families nationally and locally, one that has a huge impact on child and family wellbeing," she says. "I was inspired to become a pediatrician by a desire to not only address the medical needs of patients and families, but to also—and perhaps more important—address the entire environment and community in which a child and family lives and grows."

