

Sculpting Plastic Surgeons

Understanding facial symmetry and the aesthetics of the human form through art



To increase understanding of the human form, plastic surgery students at Louisiana State University and Tulane are replacing scalpels with sculpting tools.

Photo by Tegan Wendland

Sculpting class at the New Orleans Academy of Fine Arts on a Wednesday night looks more like prepping for surgery than an art class—the bright white studio is filled with med school students wearing green and blue scrubs. They meticulously carve away at their work; but in this case, clay busts take the place of live patients, and wooden carving tools replace scalpels.

This annual art class is a joint program offered through the plastic surgery programs at Louisiana State University and Tulane. Once a week during the six-week course, students spend three hours creating clay sculptures of a live model. This hands-on learning environment allows students to hone their expertise in human anatomy.

The goal of the class, according to Dr. Michael Moses, clinical professor in plastic surgery at Tulane and LSU, is not only to enhance students' understanding of the human body but also to teach them to communicate with patients and fellow doctors about the work they do. Moses created the optional class about a decade ago, and since that time about forty students have completed the course. Only one or two classes of its kind are offered at other plastic surgery programs in the country.

The class has been a draw for prospective students. First-year LSU plastic surgery student Pamela Tan said the sculpture option was part of the reason she chose the program. "During the interview, they told us that they would be doing these types of classes—like drawing, sculpture, and painting—and that really appealed to me a lot," said Tan. "Doing something in 3-D, like sculpture, really helps you pick out all of the different nuances of the flesh, of the light and shadows, and just being able to see if you can recreate flaws and all on a piece of clay—

it's been very useful, it's helped my eye for sure."

Moses explained that the first art classes offered ten years ago were drawing classes; but they were expanded to include sculpture, a discipline that gives students a firmer grasp on symmetry and the human form. "It turns out that sculpture has a whole different set of benefits for plastic surgery residents than drawing. Sculpture is a much better way for them to learn about body proportions and placement of features ... all of which is incredibly useful," said Moses, who would have liked to have had a chance to take such a course while he was in medical school. "Personally, I think it makes them much better plastic surgeons." He himself has taken private art classes in order to strengthen his own skills, "I draw all of the time for my patients," Moses said.

The sculpture class is taught by New Orleans artist Kim Bernadas, who is known for her public art, mostly cast bronze sculptures. Most recently she completed the Walter Dumas bust for Baton Rouge Community College; she has also created an Ed McKee plaque for Livingston Parish and the first post-Katrina public art commission for the City of New Orleans, a Garden District sculpture called "Birth of a Muse." A former ballet instructor and physical therapist, Bernadas is uniquely qualified to teach such a course, but she holds that such anatomical knowledge is not necessary. "Sometimes, because I've worked in that field, I have somewhat more medical knowledge; but artistically, any artist who's worth their salt would know exactly how to teach this and has a working knowledge of the figure and form," said Bernadas.

During class Bernadas walked through the roomful of students, stopping with each one to discuss how he or she could make a more accurate sculpture. She discussed the gender differences evident in the size and shape of the lips and the depth of the philtrum beneath the nose. Making minor adjustments to the corners of the eyes or the direction of the eyebrows made all the difference. She placed her hands on one student's sculpture and gently pushed the soft clay nose upwards, describing how the change made the face more feminine. Her student exclaimed, "I love it!"

James Mayo, who is enrolled in the LSU plastic surgery program, explained that the class is the first time he has ever tried his hand at anything artistic. "I never thought I could do anything like this. I don't have that much of an artistic side; I've never taken art classes or done drawings. But I'd say [my sculpture is] at least average!"

Mayo is in his final year of the three-year plastic surgery program and is currently completing his residency. The program places residents at affiliated hospitals throughout the metro area, including West Jefferson Medical Center, the Children's Hospital of New Orleans, Our Lady of the Lake Regional Medical Center, and the Houma Outpatient Surgery Center. Mayo explained that rotations can be tough; having the chance to meet with his peers once a week for the sculpture class brings the cohort together and also gives them a chance to relax a little.

Additionally, the class helps him to look at patients more holistically. "Often you get caught up in the numbers and you start to break things down in thirds and fourths or dimension or proportions—and this [class] kind of takes us away from that. It's a good mix; it brings an abstract quality to what we're doing. It makes us look more critically, without a ruler, at curves and lines and shadows."

Mayo said the class has helped him realize that beauty is all about symmetry, especially with respect to reconstructive surgery. Instead of looking solely at the bone structure of the face, he now considers its symmetry and changes in contour. "I think [this experience] will help me better analyze a patient and plan my procedure."

Moses expanded on the class' value: "It teaches them about relative proportions—how big is a head compared to a neck, how big is a torso compared to legs, how big is a cheekbone compared to the jaw or the forehead ..." He continued, "As an added benefit, it teaches them visual assessment skills. How to look at something and say,

'That looks too small, too big, too wide, too high'—to look at it and see that it doesn't look right and why."

Bernadas said that some students expect their skills in the operating room to translate easily to sculpture, only to be surprised by the challenge. "They don't realize that it is an artistic study and it is a lifetime study, just like theirs is a lifetime study. You can't just walk in and do the perfect sculpture and make it look like that person in just six weeks—it takes time. It's interesting that some people come in with the idea that, because they know so much about the form, they're going to have an easy time of it."

In the end, it doesn't matter if the sculptures the students produce are works of art—it is really more about the process. "It's not about teaching them how to be artists, but teaching them a set of skills that will make them better plastic surgeons," said Moses. "It's only six weeks, we're not going to turn them into sculptors in six weeks."
