

# Doctor brings HOPE to obese patients

**O**besity is a public health epidemic affecting not only the United States, but many parts of the world. Evidence clearly shows that obesity, with its multiple co-morbid diseases, is now the second most preventable cause of cardiac death next to smoking in the nation.

According to the Centers for Disease Control and Prevention, nearly two-thirds of adult Americans are either overweight or obese. And

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childhood obesity rates have more than tripled from 1980 to 2005, from 5 to 17 percent.

The Trust for America's Health in 2006 reports that Nevada has an adult obesity rate of

21 percent and is ranked 42nd heaviest in the nation. In terms of related risk factors, Nevada ranks 31st in the nation for adult diabetes levels and ranks 30th for rates of hypertension at nearly 25 percent.

Recently Dr. James Lau joined the University of Nevada School of Medicine as chief of the Division of Bariatric Surgery. Lau was fellowship trained at Stanford University in minimally invasive and bariatric surgery and will direct the only university-based Bariatric program in Nevada. In addition to bringing the latest laparoscopic and robotic techniques to weight loss surgery, his division will address this critical public health issue by creating an innovative obesity prevention program. The new effort is called HOPE: Healthy Options for Prevention and Education.

Mark N. Levine, senior director of Health Science Communication at the University, sat down with Lau to learn more about obesity, the surgical treatment, and educational initiatives to address the disease.

## Nevada Silver & Blue: What is the University Weight Loss Center?

Lau: The University Weight Loss Center is part of the University of Nevada School of Medicine, Department of Surgery. Surgeries



Photo by Edgar Antonio Nunez

Dr. James Lau

are performed at University Medical Center in Las Vegas.

## NSB: Why is this partnership important to residents in Southern Nevada?

Lau: The University of Nevada School of Medicine is physically located next to the University Medical Center, the hospital where we train our surgical residents. It makes sense to place the Weight Loss Surgery Center at UMC, so that all citizens in Nevada will have access to highly trained physicians and researchers in a state-of-the-art facility. Individuals who are seeking obesity-related surgery will no longer have to travel outside the Silver State to find excellent academic medical care.

## NSB: Why should a patient consider surgery as the means for long-term weight management?

Lau: Surgical intervention is the only proven method to have a significant, long-term effect on the disease of morbid obesity. There has been a history of failure for most people

who have relied on non-surgical approaches such as drug regimens and traditional methods such as diet and exercise. Because of the associated co-morbidities, morbidly obese individuals have difficulty complying with restrictive diets, and regaining weight is typical when the diet is discontinued.

## NSB: What are your qualifications for this type of surgery?

Lau: In addition to extensive experience as a general surgeon, I completed a fellowship in minimally invasive and bariatric surgery at Stanford University. I have trained with some of the leading experts in this field, who are both excellent clinicians as well as world-renowned researchers. In addition, as the assistant program director for the Surgical Residency Program at the University of Nevada School of Medicine, teaching is also one of my priorities.

## NSB: At the present time you are the only fellowship-trained bariatric surgeon in Nevada. What does this mean for patients?

Lau: There are a number of advantages for patients to have their surgery performed by a fellowship-trained surgeon. These surgeons are educated by established experts, and are involved with and exposed to the most current research and technology available, both nationally and worldwide regarding minimally invasive surgery. In addition, fellowship training is undertaken in a high-volume environment that focuses on best practices through experience, evaluation, and improving overall patient outcomes. This setting is conducive for advancing research, as well as community-based education.

## NSB: You are a surgeon specializing in bariatric surgery, however, you are only one member of a team that will care for the patient — tell us about the team approach.

Lau: As the surgeon, I will perform the obesity-related operation. However, since mor-

bid obesity is a complex condition, a multi-disciplinary comprehensive approach is essential for successful weight loss surgery. Being a part of the University allows for direct collaboration with experts in internal medicine, critical care, anesthesia, and radiology. UMC is a tertiary care center that provides in-house services such as nutrition and dietary support required for a smooth transition to successful post-bariatric surgery life. In addition, our team will include a nurse, medical assistant, and administrative support to ensure that optimum care is provided before and after surgery. And we will offer guidance regarding successful habits to assist with improving overall health for life.

**NSB: Why is bariatric patient follow-up so important?**

*Lau:* It is especially important to consistently monitor weight loss surgery patients' overall health and progress after the surgery is performed. The surgery is only a tool to provide people with a reduction in co-morbidities and enough weight loss to give one a chance to develop a healthier lifestyle. Co-morbidities include high blood pressure, high cholesterol, high triglycerides, diabetes, reflux disease, obstructive sleep apnea, stress incontinence, low back pain, and arthritis. By continuing to monitor the patient's health indices, as well as providing education and support, our patients have the best chance at maintaining the success of surgery long-term. We will provide recommendations for a healthy diet and an exercise plan that enhances their overall well-being. Ideally, we would like to follow-up with all of our bariatric surgery patients throughout their lifetime.

**NSB: What advantages does a University Bariatric Surgery Program provide to the patient and to the community?**

*Lau:* The advantages are several-fold. Clinically, a high volume center with surgery performed by fellowship-trained surgeons gives the patient the best chance for good outcomes. Patients benefit from the surgeons' rigorous medical training as well as the vast experience obtained from performing numer-

ous surgeries. To the surgical community, our University program educates future surgeons (residents) and will provide additional education in laparoscopic techniques to practicing general surgeons nationally. For the local and statewide community, we are launching an innovative obesity prevention project called HOPE: Healthy Options for Prevention and Education. This program aims to prevent obesity by educating children and their families on how to achieve a healthier lifestyle. A major emphasis of this program is learning nutritional guidelines, creating healthy menu options on a limited budget, and developing a family oriented exercised program.

For the future, I plan on expanding the technology for surgery to include foregut and gastric bypass surgery with the Da Vinci Surgical System. Continued clinical research is essential part of an academic university program to improve the knowledge and techniques in the care of this complex patient population and the disease of obesity. Academic excellence also means a presence in the national and world context.

**NSB: What surgeries are offered?**

*Lau:* The traditional gastric bypass (both laparoscopic and robotic), the laparoscopic adjustable band, and the laparoscopic sleeve gastrectomy.

**NSB: Who qualifies for these surgeries?**

*Lau:* Anyone who is determined to be morbidly obese would qualify; approximately speaking, individuals who are 100 or more pounds above their ideal body weight are morbidly obese. A body mass index (BMI) is the method most commonly used to measure obesity. This is a calculation of your weight in kilograms divided by the square of your height in meters. The National Institutes of Health, with their 1991 Consensus Conference Criteria, set the qualifications for surgery nationally. A BMI of 35 – 39 with co-morbidities or a BMI greater than 40 qualifies one as a candidate for weight loss surgery. The age range is 18-65 years old. An adolescent should only be considered a candidate for surgery after careful screening

and education at one of the specialized adolescent weight loss surgery centers in the country.

**NSB: What are the risks of weight loss surgery?**

*Lau:* Gastric bypass surgery is major abdominal surgery with significant risks. Although the lap-band surgery has less operative complications, there is a risk that the band can either slip or erode. There is a risk of death with both procedures, 1 in 200 with the gastric bypass and 1 in 10,000 with the laparoscopic band. The risk for patients decreases in high volume centers, where physicians with specialized training and extensive experience perform the surgeries. With both surgeries, there is a risk of inadequate weight loss without adherence to a diet and exercise program. There is always a risk of requiring another operation or conversion to an open operation with a long incision.

**NSB: What is the success rate for these types of operations?**

*Lau:* The gastric bypass operation allows patients to lose about two-thirds of their excess body weight, and it is the most effective way to reverse obesity related co-morbidities including sleep apnea, hypertension, and diabetes. The lap-band operation allows patients to lose 50% of their excess body weight in two years. This surgery also is effective in reversing obesity related co-morbidities, but only as weight is lost.

**NSB: In addition to being an accomplished bariatric surgeon, you are also quite passionate about educating young people so in the future they might avoid having to undergo surgery.**

*Lau:* The picture of Nevada's health is not pretty. We are the 42nd heaviest state in the nation and in terms of co-morbidity we rank 31st for adult diabetes and 30th for hypertension. Clearly something needs to be done.

**NSB: How do we find out more about HOPE?**

*Lau:* We can be contacted by calling (702) 671-5150 or (702) 671-2373. Our e-mail address is [weightloss@medicine.nevada.edu](mailto:weightloss@medicine.nevada.edu). 