

CENTER FOR MINIMALLY INVASIVE SURGERY ESTABLISHED

Offering Patients More Options and Benefits

We are very pleased to announce the establishment of the Stony Brook Center for Minimally Invasive Surgery. The specially-trained surgeons who staff the new Center are dedicated to the performance and advancement of the most sophisticated care using minimally invasive laparoscopic procedures, which offer eligible patients considerable benefits when compared with conventional "open" surgery.

Also known as *videoscopic* or *endoscopic* surgery, this high-tech form of surgical care is not a specific type of operation. It is an expanding group of different kinds of operations performed with newly developed surgical instruments and methods that cause the least amount of physical stress to patients. It involves the use of a small scope (laparoscope; see page 2, column 2) which magnifies the body's internal structures and projects the image onto a video monitor in the operating room.

That laparoscopic surgery requires only small incisions—and thus is minimally invasive—is a distinguishing feature of this revolutionary approach to surgical care.

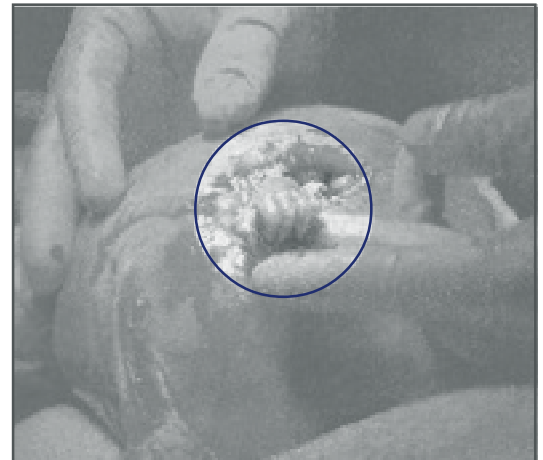
We perform minimally invasive laparoscopic surgery for the treatment of chronic heartburn due to reflux disease, achalasia (severe swallowing difficulty), diseases of the spleen, appendicitis, gallbladder disease, hernias, and other abdominal problems.

Without the trauma of the large incision used in conventional operations, both pain and healing time are greatly reduced. There are also smaller scars as a consequence of the smaller incisions. Other appealing benefits include shorter hospital stays or no hospital stays at all, less need for postoperative pain medication, and earlier returns to work and normal activity/diet.

Reduced hospitalization, it should be noted, means reduced costs. The total hospital cost of a laparoscopic operation is generally less than what conventional surgery requires.

Surgery to treat a variety of common abdominal problems such as gallbladder disease, hernias, appendicitis, and chronic heartburn caused by reflux disease used to require large incisions, about a week in the hospital, and a six- to eight-week recovery time.

In most cases, laparoscopic surgery has reduced the treatment of these problems to same-day outpa-



The tiny hand of a 21-week-old fetus seen reaching out of his mother's womb to grab the finger of the surgeon who just operated on him.

In addition to providing patient care, our new pediatric cardiothoracic surgeon, Kathleen N. Fenton, MD, will continue her research on fetal open-heart surgery at Stony Brook, exploring fetal cardiac bypass and intrauterine repair of congenital heart defects; see page 3.

tient surgery with just one- to two-week recovery time at home; some patients can return to work in just a couple of days after their operation.

Louis T. Merriam, MD, assistant professor of surgery, is currently directing the development of the Center for Minimally Invasive Surgery, and comments: "The proven effectiveness of laparoscopic surgery has led to its expanding use. Because the stress to the body is greatly reduced by this minimally invasive approach, our patients—both adults and children—are extremely satisfied with the operative outcomes, in particular the minimal pain, scarring, and recovery time." *(Continued on Page 2)*

Minimally Invasive Surgery

(Continued)

Dr. Merriam works closely with John S. Brebbia, MD, assistant professor of surgery, in providing the Center's clinical services. Other members of the Department's general/gastrointestinal service with laparoscopic expertise contribute as well.

OUR MULTIDISCIPLINARY APPROACH TO MANAGING ESOPHAGEAL DISEASE

The expanded use of minimally invasive laparoscopic surgery has become particularly important in the treatment of esophageal diseases, including gastroesophageal reflux disease (GERD) and motility (muscle function) disorders such as achalasia (severe swallowing difficulty).

To provide the best possible patient care, our surgeons work closely with Stony Brook's gastroenterologists who maintain a sophisticated endoscopy laboratory as well as the only esophageal motility laboratory in Suffolk County. These laboratories use state-of-the-art equipment to evaluate patients with symptoms of esophageal disease.

GERD, for instance, is a chronic, recurrent disorder that results when stomach contents reflux into the esophagus. It is characterized by heartburn, eructation, and epigastric pain. Diagnosis is normally presumptive and made by the physician based on recognition of common symptoms. But the symptoms cannot reliably predict the severity of the disorder or indicate the patient's risk of developing complications, including reflux esophagitis, stricture formation, and Barrett's esophagus which is associated with cancer.

University Hospital's endoscopy and motility laboratories provide the information needed for the most accurate diagnosis of GERD and gastroesophageal motility disorders, and for determining the appropriate treatment plan.

MINIMALLY INVASIVE LAPAROSCOPIC SURGERY WE PERFORM

The physicians of the Center for Minimally Invasive Surgery are specialists in performing the following minimally invasive laparoscopic operations:

- Adrenalectomy (removal of one or both adrenal glands)
- Anti-reflux fundoplication (Nissen and Toupet procedures; treatment of gastroesophageal reflux disease)
- Appendectomy (removal of appendix)
- Cholecystectomy (removal of gallbladder)
- Colectomy (removal of part or all of the colon)
- Common bile duct exploration (identification and removal of bile duct stones)
- Feeding jejunostomy (insertion of feeding tube in small intestine, as well as cancer staging)
- Inguinal hernia repair (treatment of groin hernia)
- Liver biopsy (diagnosis of liver disease)
- Myotomy (Heller procedure; treatment of achalasia)
- Paraesophageal hernia repair (treatment of stomach hernia)
- Peritoneal dialysis catheter placement (abdominal catheter for dialysis)
- Small bowel resection (removal of part of intestine)
- Splenectomy (removal of spleen)
- Ventral hernia repair (treatment of abdominal wall hernia)

Note: As the range of different laparoscopic operations continues to expand, more minimally invasive options will be available in the future.

"Anyone with intractable heartburn needs evaluation," Dr. Merriam says, adding that "our multidisciplinary approach to managing esophageal disease ensures patients of the best possible evaluation."

USING THE LAPAROSCOPE

Use of the laparoscope and similar scopes (e.g., endoscope, thoracoscope), among other new high-tech surgical instruments, has been the hallmark of minimally invasive surgery.

The laparoscope is a slender tube, less than three-eighths of an inch in diameter, with magnifying lenses at both ends, like a telescope. However, instead of gazing into outer space, a

The Department of Surgery also provides minimally invasive "videoscopic" surgery for treating a wide range of medical problems other than gastrointestinal disease.

Our **cardiothoracic** surgery service uses *thoracoscopic* procedures to treat pulmonary disease; our **otolaryngology-head and neck** surgery service uses *endoscopic* procedures to treat nasal sinus disease; our **pediatric** surgery service uses *endoscopic* procedures to treat certain maladies in both infants and older children; and our **vascular** surgery service uses *endoscopic* procedures to treat certain circulatory disorders.

Other forms of minimally invasive surgery—such as off-pump coronary bypass surgery and endovascular surgery—are performed by the Department's specialists as well.

For information, please call the desired surgical service; see back cover for phone numbers.

laparoscope looks at inner space.

When used for instance in abdominal surgery, a small incision is made in the abdomen through which the laparoscope is inserted via a hollow trocar-tube into the abdominal cavity. There it enables surgeons to look at a hernia, diseased gallbladder, inflamed appendix, or other problems.

The new videoscopic approach, which adds to the laparoscope a video camera and light source, has revolutionized simple laparoscopic surgery.

Surgeons perform surgery using microsurgical instruments inserted through trocar-tubes placed in similar

incisions. The elimination of the large incision used in conventional operations makes this type of surgery less traumatic and, therefore, less painful. Thus, a patient can avoid or lessen a hospital stay and recover much faster.

The major limitation of laparoscopic surgery used to be that the surgeon was only able to see in just two dimensions. The lack of depth perception slowed many operations, and made certain tasks, such as suturing, difficult. To resolve this problem, surgeons use a video-computer system to perform in three dimensions.

Now, surgeons can see images from the laparoscope just as if they were viewing through a large incision. The new videoscopic approach, which adds to the laparoscope a video camera and light source, has revolutionized simple laparoscopic surgery.

For appointments/consultations with a surgeon of the Stony Brook Center for Minimally Invasive Surgery, please call (631) 444-4545.

STONY BROOK

POST-OP is published by the
Department of Surgery
University Hospital and Medical Center
State University of New York
at Stony Brook
Stony Brook, New York

Editor-in-Chief
John J. Ricotta, MD

Writer/Editor
Jonathan Cohen, PhD

Contributing Editor
Richard Bogenschutz, MBA

Advisory Board
Collin E.M. Brathwaite, MD
Peter J. Garlick, PhD
Fabio Giron, MD, PhD
Arnold E. Katz, MD
M. Margaret Kemeny, MD
Irvin B. Krukenkamp, MD
Cedric J. Priebe, Jr., MD
Harry S. Soroff, MD

All correspondence should be sent to:
Dr. Jonathan Cohen
Writer/Editor, Post-Op
Department of Surgery/HSC T19
University Hospital and Medical Center
Stony Brook, NY 11794-8191, USA

INTRODUCING OUR NEW PEDIATRIC CARDIOTHORACIC SURGEON



Dr. Kathleen N. Fenton

Kathleen N. Fenton, MD, joined our Division of Cardiothoracic Surgery last October as an assistant professor of surgery. Board certified in both Thoracic Surgery and Surgery (General), Dr. Fenton comes to Stony Brook from the University of California at San Francisco, where she recently completed fellowship training in pediatric cardiac surgery.

A graduate of Johns Hopkins University, Dr. Fenton received her MD (cum laude) from the University of Maryland in 1988. She completed her residency training in general surgery at the University of Louisville, and subsequently was trained in cardiothoracic surgery at Emory University in Atlanta.

At UC-San Francisco Medical Center and Children's Hospital Oakland during 1998-99, Dr. Fenton had advanced training in pediatric cardiac surgery with Frank L. Hanley, MD, one of the premier pediatric cardiac surgeons in the country.

Dr. Fenton's clinical practice at Stony Brook includes surgery for congenital heart disease in all age groups (newborn to adult), including repair of intracardiac communications (e.g., atrial/ventricular septal defect), valve repair surgery, palliation for complex congenital heart disease, placement of pacemakers, and pediatric thoracic surgery.

Dr. Fenton's research interests include fetal physiology and open-heart surgery in the fetus. The winner of a 1991 American Heart Association Affiliate Fellowship Grant, she was a research fellow in cardiovascular surgery at Harvard University (The Children's Hospital) during 1991-92; during the next academic year, she continued her experimental work in fetal cardiac surgery as a research fellow at UC-San Francisco.

She is the author of numerous peer-reviewed journal articles in the field of pediatric cardiac surgery.

For consultations/appointments with Dr. Fenton, please call (631) 444-1820.

INSTRUCTIONAL COURSES AND SEMINARS IN LAPAROSCOPIC SURGERY



In addition to providing clinical services, the Center for Minimally Invasive Surgery will soon offer instructional courses and seminars in laparoscopic surgery for practicing surgeons.

For more information, please call (631) 444-8329.

USING LASER SURGERY TO TREAT CORONARY ARTERY DISEASE

A Novel Method Of Revascularization

The first transmyocardial revascularization (TMR) operation on Long Island was successfully performed last November by our Division of Cardiothoracic Surgery. This new approach to the treatment of coronary artery disease promises to offer an alternative to patients who do not respond to currently available forms of therapy, such as balloon angioplasty and coronary artery bypass grafting (CABG).

TMR involves the use of a computer-controlled carbon dioxide laser to create new conduits for blood flow by boring small channels from the outside to the inside of the heart, specifically, the left ventricular cavity. These channels induce a natural process of healing called angiogenesis—that is, the growth of new blood vessels, which increase blood flow to feed oxygen-starved areas in the heart muscle.

Patients treated by TMR experience angina relief within weeks of sole therapy (TMR alone), or immediately when the technique is used in combination with CABG.

TMR has been studied extensively in experimental and clinical settings. The original investigational studies were conducted in the early 1970s. In recent years, nationally reported clinical studies indicate a lasting response at three years. When TMR is used in combination with CABG, three-year mortality rates are significantly reduced from about 12% to 4%.

Since TMR is performed on the beating heart without the use of cardiopulmonary bypass (CPB) via the heart-lung machine, this novel method of increasing blood flow to the heart may also be considered minimally invasive when used as sole therapy.

The adverse side effects associated with use of the heart-lung machine—which, during conventional CABG, takes over the stopped heart's work—are avoided. Patients do not experience the inflammatory response caused by CPB, which disrupts the body's physiologic balance.

TMR probably won't replace angioplasty or CABG surgery as the most common methods of treating coronary artery disease. These therapies have been proven over time to be safe, effective ways to restore blood flow to the heart muscle.

At present, the best candidates for TMR include patients who are high-risk candidates for a second bypass or angioplasty; patients whose blockages are too diffuse to be treated with bypass alone; and patients with heart transplants who develop atherosclerosis on the graft.

Since performing our first TMR operation, an increasing number of patients have been coming to Stony Brook for this treatment.

THE OPERATION ITSELF

To perform TMR, the surgeon makes a limited incision on the left side of the chest and inserts a laser into the chest cavity. With the laser, the surgeon shoots holes through the heart's left ventricle in between heartbeats; the laser is fired when the chamber is full of blood so the blood can protect the inside of the heart.

The characteristics of laser energy make it an ideal tool to use. The channels can be made with little damage to surrounding tissue, and they can be made quickly.

From 15 to 30 channels, each a millimeter in diameter, are opened. Then the surgeon presses a finger on the holes on the outside of the heart. This seals the outer openings but lets the inner channels stay open to stimulate the growth of new blood vessels.

The operation takes about two hours to complete. The average hospital stay following the procedure ranges from two to seven days, depending on whether TMR is used as sole therapy (about seven days) or in combination with different methods of CABG surgery (about two to five days).

Currently, clinical trials are being conducted to evaluate the effectiveness of TMR used without CABG. If proven effective as sole therapy, this approach would offer an alternative form of treatment to those suffering from coronary artery disease, particularly those who otherwise would have no other options. Approval from the Food and Drug Administration will be sought if warranted by the results of these studies.

 *For illustrations please turn to page 11.*

For consultations/appointments, please call our Division of Cardiothoracic Surgery at (631) 444-1820.

KATZ PUBLISHES SLIDE LECTURE ON FACIAL RECONSTRUCTION



Dr. Arnold E. Katz

Sometimes patients with skin cancer are left with a very unsightly defect after the cancer is treated with surgery. With facial reconstructive techniques available today, it is possible to repair these defects so that within six months, most observers cannot realize what the patient has experienced.

Arnold E. Katz, MD, professor of clinical surgery and chief of our otolaryngology-head and neck surgery (ENT) service, is a specialist in facial reconstruction; specifically, reconstruction of the cheek, lip, nose, and forehead. His outstanding skills and talents in this field have been recognized by the American Academy of Otolaryngology-Head and Neck Surgery, which in 1999 published his instructional slide lecture, *Local Flaps for Reconstruction of the Face after the Removal of Skin Cancer*.

Dr. Katz co-authored this work with Daniel M. Siegel, MD, associate professor of dermatology and chief of dermatologic surgery at Stony Brook, and Donald J. Grande, MD, professor of dermatology at Boston University and chief of dermatology at Lawrence Memorial Hospital in Medford, MA.

After skin cancer has been removed from the face, the cosmetic results will never be perfect. The facial plastic surgeon and the patient can always find the scars. Usually, however, most other people will not notice the scars six months after the reconstruction.

Sometimes additional operations can improve the final result, but in the large majority of patients, one reconstructive operation is all that is required. Indeed, it is truly amazing how well the body heals and how natural patients look even after large facial reconstructive operations.

The remarkable success that Dr. Katz achieves in facial reconstruction can be seen in these before and after photos, which were prepared for his "slide lecture" publication:



Comment by Dr. Katz: After the removal of skin cancers of the cheek, patients may be left with large defects. The cheek defect shown here is very close to the lower eye lid, the nose, and the upper lip. It is very important to close such a defect without pulling the eyelid down, the nose to the side, or the upper lip upward. By placing the scars in normal skin wrinkles, and rotating skin from in front of the ear, most people don't even notice what the patient has been through. (Notice the freckle that was near the ear is now near the nose.)

Some Recent Publications*

- Aksehirlı TO, Valiunas V, Gaudette GR, Matsuyama N, Brink P, **Krukenkamp IB**. Uncoupling the myocardial gap junctions preconditions the rabbit heart independently of the K⁺ATP channels. *Surg Forum* 1999;50:100-1.
- Barle H, Nyberg B, Ramel S, Essen P, **McNurlan MA**, Wernerman J, **Garlick PJ**. Inhibition of liver protein synthesis during laparoscopic surgery. *Am J Physiol* 1999;277:E591-6.
- Bilfinger TV**. Fact track surgery. Cost benefits (con). *Acta Anaesth Scand* 1999;43(Suppl 114):37.
- Bilfinger TV**. Morphine, stress and immunity. *Acta Anaesth Scand* 1999;43(Suppl 114):19-20.
- Chuter TA, **Faruqi RM**, Reilly LM, Kerlan RK, Sawhney R, Wall SD, Canto K, Gordon RL, Messina LM. Aortomonoiliac endovascular grafting combined with femorofemoral bypass: an acceptable compromise or a preferred solution? *Semin Vasc Surg* 1999;12:176-81.
- Faruqi RM**, Chuter TA, Reilly LM, et al. Endoleak following elective endovascular exclusion of abdominal aortic aneurysms in a high-risk population [abstract]. *J Endovasc Surg* 1999;6:192-3.
- Faruqi RM**, Chuter TA, Reilly LM, Canto C, Messina LM. Wound complications following endovascular exclusion of abdominal aortic aneurysms in high-risk patients [abstract]. *J Endovasc Surg* 1999;6:192.
- Fimiani C, Arcuri E, Santoni A, Rialas CM, **Bilfinger TV**, Peter D, Salzet B, **Stefano GB**. Mu-3 opiate receptor expression in lung and lung carcinoma: ligand binding and coupling to nitric oxide release. *Cancer Lett* 1999;146:45-51.
- Gaudette GR, Chiang FP, Todaro J, **Krukenkamp IB**. A novel technique for measuring regional deformation with high spatial resolution in the beating heart. In: Wayne JS, editor. *Proceedings of the 1999 ASME International Mechanical Engineering Congress and Exposition—1999 Advances in Bioengineering*; 1999 Nov 14-19; Nashville. New York: American Society of Mechanical Engineers, 1999: 239-40.
- Gaudette GR, Chiang FP, Todaro J, **Krukenkamp IB**. Using computer-aided speckle interferometry to measure pressure effects on the heart. In: Pan J, editor. *Proceedings of the ASME Pressure Vessels and Piping Conference*; 1999 Aug 1-5; Boston. New York: American Society of Mechanical Engineers, 1999: 309-18.
- Golzarian J, Cheng J, **Giron F**, **Bilfinger TV**. Tuberculous pseudoaneurysm of the descending thoracic aorta: successful treatment by surgical excision and primary repair. *Tex Heart Inst J* 1999;26:232-5.
- Gorski Y, **Ricotta JJ**. Weighing risks in abdominal aortic aneurysm. Best repaired in an elective, not an emergency, procedure. *Postgrad Med* 1999;106:69-70, 75-80.

(Continued on Page 8)

* The names of faculty authors appear in boldface.

FIRST ENDOVASCULAR ANEURYSM REPAIRS PERFORMED WITH FDA-APPROVED DEVICE

Two High-Risk Patients Benefit From New Minimally Invasive Surgery

On November 19, 1999, the first fully-approved endovascular aneurysm operations on Long Island were successfully performed on two high-risk patients at University Hospital and Medical Center. The new minimally invasive procedure requires use of an "internal bypass" device called a stent graft, the first of which received approval in September 1999 from the Food and Drug Administration.

The two patients were both men, aged 67 and 80, who had life-threatening aortic abdominal aneurysms (AAAs). They had been evaluated in the Stony Brook Vascular Center, whose physicians felt that standard open surgery for aneurysm repair posed unusual risks in their cases. As a consequence, the patients were referred for endovascular surgery.

The operations were performed by a multidisciplinary team of the Stony Brook Vascular Center, led by vascular surgeon Rishad M. Faruqi, MD, assistant professor of surgery, and interventional radiologist John A. Ferretti, MD, associate professor of clinical radiology and chief of special procedures and interventional radiology.

Dr. Faruqi, who joined our Division of Vascular Surgery in August 1999, was specially trained in endovascular surgery at the University of California at San Francisco, where he worked under the direction of Timothy Chuter, MD, one of the pioneers and world leaders in this field.

Endovascular aortic stent grafting involves actually doing a bypass from within the abdominal aorta, which is the main artery that supplies blood to the internal organs and legs. Stent grafting for AAA repair may be particularly beneficial for patients too ill and infirm to tolerate the conventional open repair.

While this minimally invasive method of AAA repair allows high-risk patients to undergo lifesaving surgery they could not otherwise have, the FDA has approved its use in "normal-risk" patients with AAA, as well.

AAA—an enlargement or bulge in the aorta caused by a weakened arterial wall—is the 13th leading cause of death in the United States, claiming over 15,000 lives annually. In this country alone, more than 190,000 AAAs are diagnosed each year and 45,000 patients undergo surgery.

Aneurysms are most disturbing because of the risk of rupture, which increases with size, but remains unpredictable. If aneurysm rupture occurs, the mortality rate of surgery is increased 10-fold. Such rupture is often instantly fatal.

Aortic stent grafting promises to offer a simpler and safer alternative to open abdominal surgery in the treatment of AAA. It may prove to be one of the most dramatic advances made in the field of vascular surgery, as it has the potential to save many lives.

On September 28, 1999, the FDA approved the stent graft used in the AAA repairs performed by Dr. Faruqi. While there are several different types of stent grafts currently being tested, the stent graft that Dr. Faruqi implanted was the AneuRx device, one of the two stent grafts that received FDA approval.

Results from a prospective, non-randomized, multicenter trial in the U.S. with 440 patients showed the AneuRx stent graft to be as effective as standard

open surgery in the treatment of AAA and that its use can cut major complications associated with surgery by half.

Other benefits of the AneuRx stent graft included improved patient quality of life due to reduced hospital stay (from 9.3 days to 3.4 days) and faster time to ambulation (from 3.6 days to 1.4 days).

Although stent grafts like AneuRx may offer many patients an easier option, they are not risk-free, the FDA warned. Moreover, long-term data on these devices is incomplete, and there are factors, such as the shape and location of the aneurysm, which may contraindicate their use in certain cases. Thus, not all patients with AAAs are candidates for endovascular repair.

The FDA also emphasized that doctors must be specially trained to use the complex endovascular devices. To this end, Stony Brook's endovascular specialists were trained in accredited fellowship programs.

ABOUT ENDOVASCULAR AAA REPAIR

The traditional approach to AAA repair involves operating on the abdomen, opening the aorta, and inserting a graft—a slender fabric tube—through the middle of the aneurysm, which is then sewn in place. While the graft is sewn in place, the blood flow in the artery must be temporarily stopped. This maneuver puts much strain on the heart—too much strain for infirm patients with compromising medical conditions.

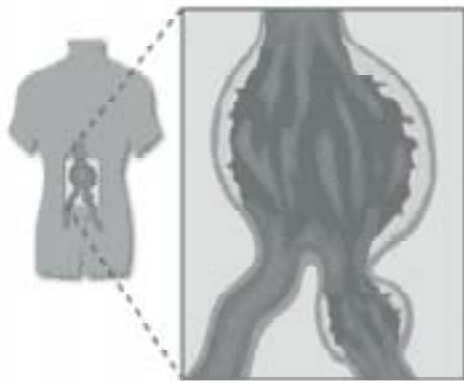
Because the conventional operation generally involves a long abdominal incision, a 24-hour stay in the intensive care unit, and a total hospital stay of seven to ten days, the new endovascular procedure may offer significant advantages. This minimally invasive surgery, which can be performed using regional or even local anesthesia, enables doctors to accomplish the repair without resorting to open abdominal surgery.

The AneuRx stent graft is similar to the traditional Dacron graft but has self-expanding, diamond-shaped stent

rings designed for self-anchoring to the vessel wall by “friction fit.”

The stent graft is collapsed and loaded into a tube-like delivery system. The arteries in the groin are exposed by the surgeon using two small incisions. A wire is then threaded up from within the blood vessel to a point beyond the diseased part of the blood vessel. This wire acts like a monorail on which the delivery system and other catheters (thin tubes) and stents can move up and down the blood vessel.

The delivery system carrying the stent graft within it is threaded up the artery over the wire lying within the blood vessel, and is guided by fluoroscopy (x-ray imaging) through the aneurysm. Once in place, the sheath of the delivery system is gradually withdrawn, allowing the stent graft to re-expand to its original size and anchor itself onto the inside of the arterial wall.



An abdominal aortic aneurysm is a bulge or balloon that forms in the wall of the blood vessel.

The AneuRx stent graft is designed to adapt to individual patient anatomies. Extender cuffs may be used to modify the length of the implanted graft, providing surgeons with a means to create an “exact fit” for each patient. Additionally, the stent graft’s fully supported exterior is designed to prevent kinks or twisting and device migration over time, which can lead to the need for further intervention.

Accurate placement of the stent graft is essential because the arteries to

the kidneys are close by and should not be covered. Since the procedure is minimally invasive, the patient is usually able to eat the same day, walk the next day, and go home in two or three days.

The purpose of the aortic stent graft in AAA repair is not to brace the artery open (as stents used with angioplasty do), but to create a new passageway for blood, allowing it to bypass the weakened/diseased area. In this way, the stent graft prevents blood from impacting this weak segment of the artery, and thereby prevents aneurysm rupture.

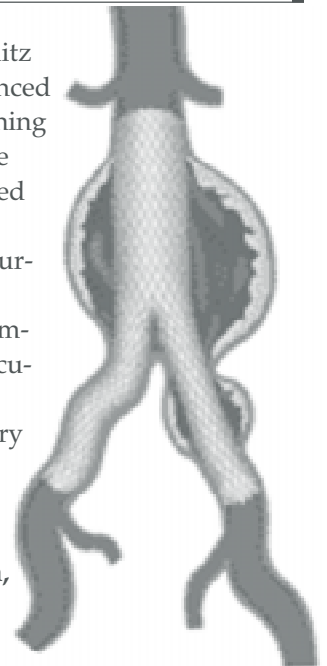
OUR PROGRAM IN ENDOVASCULAR SURGERY

Stony Brook’s Department of Surgery and Department of Radiology have recently collaborated to form the Stony Brook Vascular Center. One of the main goals of this center is to provide new therapeutic options, such as the program in endovascular surgery.

Dr. Faruqi and his endovascular colleague, David Gitlitz, MD, assistant professor of surgery, who also recently joined the Division of Vascular Surgery, were both recruited to join Dr. Ferretti as the leaders of the endovascular program. Both Drs.

Faruqi and Gitlitz have had advanced fellowship training in the use of the newly developed techniques of endovascular surgery.

Other members of the Vascular Center’s multidisciplinary team include vascular surgeons **Paul S. van Bemmelen, MD, PhD**, assistant professor of surgery, **Fabio Giron, MD, PhD**, professor of surgery and chief of vascular surgery, and **John J. Ricotta, MD**, professor and chairman of surgery; and interventional radiologists **Jeanne Choi, MD**, clinical assistant professor of radiology; **James V. Manzione, MD**, associate professor of clinical radiology and chief of interventional and therapeutic neuroradiology, and **Matthew D. Rifkin, MD**, professor and vice chairman of radiology and



Placement of the AneuRx stent graft.

(Continued on Page 14)

FREE VASCULAR SCREENINGS TO BE PROVIDED

Risk of Stroke/Peripheral Vascular Disease, Presence of Abdominal Aortic Aneurysms

This spring, the Stony Brook Vascular Center will provide free-of-charge vascular screenings to evaluate members of the community for risk factors associated with stroke disease and peripheral vascular disease, as well as for the possible presence of aortic abdominal aneurysms.

These screenings are recommended for persons 50 years of age and older, depending on associated risk factors.

For more information, please call (631) 444-3955.

FREE VASCULAR SCREENINGS

Research Focus

First Clinical Trial Of Patient-Monitored Anticoagulation Therapy

Some 45,000 patients receive mechanical heart valves each year in the United States. All these patients require anticoagulation medication to prevent potentially lethal blood clots from forming on the prosthetic valves. Currently, most patients are monitored by having their blood drawn and then sent to a lab for analysis. Clinical findings on anticoagulation-related complications clearly point out the need for patient management as the key factor in these events.

The persistent problem, as studies show, is that only 30% to 50% of patients have anticoagulant drug levels within the proper therapeutic range at any given time.

To help improve this situation, Irvin B. Krukenkamp, MD, professor of surgery and chief of cardiothoracic surgery, is now directing a clinical trial of the INRange™ Monitored Heart Valve System. The study, initiated in September 1999, is designed to demonstrate that mechanical heart valve patients taking oral anticoagulants can stay within their prescribed therapeutic range by self-testing and telephone monitoring.

Stony Brook is currently the sole site in the United States at which this trial is being conducted.

The INRange System will theoretically add an unprecedented level of safety to managing patients with mechanical heart valves.

In patients receiving anticoagulation therapy following a mechanical prosthetic heart valve implant, the establishment of an appropriate anticoagulation state, and the monitoring over time of that anticoagulant, is subject to great variability depending on a variety of factors. Indeed, bleeding and/or clotting problems attendant to oral anticoagulants in patients with mechanical valves number as high as 10 per 100 in the United States today.

In conjunction with Sulzer Carbomedics (a major manufacturer of mechanical heart valves), Stony Brook has begun to use a monitored heart valve system with three components: the Carbomedics bileaflet mechanical heart valve with an excellent performance record; an FDA-approved, at-home, dry chemical, point-of-service handheld INRange test unit manufactured by Avocet; and a telephonic/Internet-based surveillance system by Raytel that is akin to telephonic pacemaker monitoring.

Every patient who has a mechanical prosthetic valve implantation receives a preoperative evaluation and training in the anticoagulation monitoring system and devices. A Carbomedics mechanical valve is implanted. Postoperative anticoagulation is initiated in the hospital with warfarin and both laboratory and finger-strip INRange monitoring.

Additional teaching, through videos, brochures and bedside nursing, is done prior to discharge. By the time of leaving the hospital, the patient knows how to do self-testing and how to report by telephone to the central data repository on a weekly basis.

Should the surveillance system detect anticoagulation to be "OUT of RANGE," the patient and the entire medical team—the internist, the cardiologist, and the implanting surgeon—are all immediately notified of the problem

by e-mail, fax and telephone. Dosages of oral anticoagulant are adjusted and re-testing initiated.

Commenting on the importance of the study, Dr. Krukenkamp says: "The INRange System should offer substantial advantages in patient management. This will theoretically add an unprecedented level of safety to managing patients with mechanical heart valves."

This system enables patients to take responsibility for, and participate actively in, the management of their anticoagulation therapy. Furthermore, a compulsive surveillance system and data collection mechanism render feasible reporting of the effects of oral anticoagulation by age, gender, valve position, valve size, or any other variable.

Whether the correct range is maintained, and for what duration, impact significantly upon anticoagulation-related complications. The goal of such rigorous analysis is, for the first time, to reduce anticoagulation-related morbidity by 50%. The beneficial outcome for the patient will be echoed by associated declines in healthcare expenditures.

Recent Publications

(Continued from Page 5)

Horimoto H, **Saltman AE**, Gaudette GR, **Krukenkamp IB**. Nitric oxide-generating beta-adrenergic blocker nipradilol preserves postischemic cardiac function. *Ann Thorac Surg* 1999;68:844-9.

Katz AE, Siegel DM, Grande DJ. *Local Flaps for Reconstruction of the Face after the Removal of Skin Cancer*. Alexandria, VA: American Academy of Otolaryngology-Head and Neck Surgery, 1999.

Kemeny MM, Busch-Devereaux E, **Merriam LT**, **O'Hea BJ**. Cancer surgery in the elderly. *Hematol Oncol Clin North Am* 2000;14:169-92.

Kemeny NE, **Kemeny M**. Liver metastases. In: Abeloff M, Armitage J, Lichter A, Niederhuber J, editors. *Clinical Oncology*. 2nd ed. Philadelphia: Churchill Livingstone, 2000: 886-921.

Mateika JH, Millrood DL, Kim J, Rodriguez HP, **Samara GJ**. Response of human tongue protruder and retractors to hypoxia and hypercapnia. *Am J Respir Crit Care Med* 1999;160:1976-82.

(Continued on Page 15)

EDUCATION DIVISION ESTABLISHED



Dr. Joseph J. Sorrento, Jr.

Last fall, the Department established its Division of Education in an effort to reaffirm its dedication to the ideal that the primary goals of a university medical center must include an unwavering commitment to the education of both medical students and residents. Joseph J. Sorrento, Jr., MD, assistant professor of surgery, was appointed director of the new division.

A recipient of several teaching awards, Dr. Sorrento recently completed a fellowship at the Macy Institute for Physician Educators, a program of the Harvard Medical School and the Graduate

School of Education, in which he gained strategies for introducing innovative educational programs to benefit our medical students and residents.

Maintaining the Department's tradition of excellence, the Division of Education will ensure that our educational programs prepare physicians in the best possible way for today's medical realities.

To maintain the educational excellence which has been a tradition of the Department since its founding in 1974, the Division of Education is committed to providing learner-centered education in which the student helps to establish how he or she can best learn, with the faculty increasingly serving as facilitators of self-education.

We have begun to increase our educational emphasis on interactive teaching in a case-based format.

With the realization that effective teachers are made and not born, we have endeavored to improve our teaching by enhancing faculty development efforts; to increase faculty insight into their own teaching attributes, we have improved and expanded our feedback tools.

To facilitate communication, we have greatly expanded our mentoring program. We firmly believe that our faculty have an important role to play in the entire four years of a student's education in our medical school.

To help prepare physicians for the medical challenges of the future, we have redoubled our efforts to train our students and residents as future clinical investigators by increasing opportunities for them to gain research experience.

CHANGING WITH THE TIMES

For a half century, American medicine has dominated the academic medical world. Recently, this dominance has been threatened in some institutions by a variety of new trends. There has been a shift of the practice of medicine to the ambulatory setting without a corresponding shift of teaching to this setting.

When instruction has moved outside of the hospital setting, the development of methods or quality control of those methods has lagged behind. There has been an expansion of the clinical enterprise at the expense, often, of teaching or research. In the effort to "increase throughput," some clinical settings have developed where learners have no role at all. The emphasis is less on how

(Continued on Page 11)

Our Otolaryngology-Head and Neck Surgery Residency Receives Full Accreditation

In March, the Residency Review Committee (RRC) of the American Council of Graduate Medical Education granted full accreditation to our residency program in otolaryngology-head and neck surgery. Established in 1993, the four-year program is accredited to train four residents at a time, and graduates one each year. Its success is a reflection of the strength of our faculty, as well as that of University Hospital and Medical Center.

Our residency program is designed to train physicians in the academic and clinical aspects of adult and pediatric otolaryngology-head and neck surgery.

Our residents receive comprehensive training in the medical and surgical management of disorders of the ear (otology and neurotology), nose and sinuses (rhinology and allergy), and throat (laryngology and broncho-esophagology). In addition, they gain expertise in plastic and reconstructive surgery of the face, as well as tumor surgery of the head and neck.

As graduates of this program, our residents are eligible for board certification in otolaryngology-head and neck surgery.

The RRC that reviewed the residency program is composed of representatives of the American Board of Otolaryngology, the American College of Surgeons, and the American Medical Association's Council on Medical Education.

Alumni News

Since the class of 1975 entered the profession of surgery, 139 physicians have completed their residency training in general surgery at Stony Brook. The alumni of our residency program now practice surgery throughout the United States, as well as in numerous other countries around the world.

Dr. Walter W.K. King ('80), formerly professor of surgery and chief of head and neck/plastic and reconstructive surgery at the Chinese University of Hong Kong, is currently director (and founder) of the Plastic and Reconstructive Surgery Center, Hong Kong Sanatorium and Hospital, in Hong Kong. Established in 1998, the Plastic and Reconstructive Surgery Center is Hong Kong's first full-fledged private hospital-based center of its kind; it is entirely supported by the hospital's facilities. Dr. King's recent publications are:

- **King WK**, Woo JK, Lam DS. Head and neck. In: Majid A, Kingsnorth A, editors. *Fundamentals of Surgical Practice*. London: Greenwich Medical Media, 1998.
- Chan HH, **King WW**, Chan ES, Mok CO, Ho WS, Van Krevel C, Lau WY. In vivo trial comparing patients' tolerance of Q-switched Alexandrite (QS Alex) and Q-switched neodymium:yttrium-aluminum-garnet (QS Nd:YAG) lasers in the treatment of nevus of Ota. *Lasers Surg Med* 1999;24:24-8.
- Teo PM, Chan AT, Leung SF, Chau RM, Yu PK, **King WW**, Johnson PJ. Increased incidence of tongue cancer after primary radiotherapy for nasopharyngeal carcinoma—the possibility of radiation carcinogenesis. *Eur J Cancer* 1999;35:219-25.
- Tang NL, Pang CP, Yeo W, Choy KW, Lam PK, Suen M, Law LK, **King WW**, Johnson P, Hjelm M. Prevalence of mutations in the BRCA1 gene among Chinese patients with breast cancer. *J Natl Cancer Inst* 1999;91:882-5.

The book chapter listed above appears in the first textbook for the revised examination for Membership in the Royal College of Surgeons of England.

Dr. Tom R. Karl ('81), former director of the cardiac surgery department at the Royal Children's Hospital in Melbourne, Australia, where he spent the last decade, has returned to the United States to assume a new position as senior cardiac surgeon at the Children's Hospital of Philadelphia. Among his latest publications are:

- **Karl TR**. Bidirectional cavopulmonary anastomosis [editorial]. *Cardiol Young* 1999;9:2-3.

- **Karl TR**. Spontaneous occlusion of systemic-to-pulmonary arterial shunts [editorial]. *Cardiol Young* 1999;9:462.
- Broekhuis E, Mee R, Brizard C, **Karl TR**. Damus connection after division of the pulmonary artery. *Ann Thorac Surg* 1999;67:519-21.
- Cochrane AD, Goh TH, Austin C, **Karl TR**. Incipient left ventricular rupture complicating anomalous left coronary artery. *Ann Thorac Surg* 1999;67:254-6.
- Fulton JO, Mas C, Brizard CPR, Cochrane AD, **Karl TR**. Does left ventricular outflow tract obstruction influence outcome of interrupted aortic arch repair? *Ann Thorac Surg* 1999;67:177-81.
- Cochrane AD, Coleman DM, Davis AD, Brizard CPR, Wolfe R, **Karl TR**. Excellent long term functional outcome after surgery for ALCAPA. *J Thorac Cardiovasc Surg* 1999;117:332-42.

In addition, Dr. Karl published two new book chapters on circulatory support in children. Last fall, he was an invited speaker at Luis Garrahan Hospital in Buenos Aires, where he took part in a symposium on intensive care and presented four lectures. He presented a plenary lecture on coronary anomalies in children at last year's annual meeting of the American Association for Thoracic Surgery.

Dr. Richard Nickerson ('84), who specializes in plastic surgery, is chief of plastic surgery at St. John's Episcopal Hospital in Smithtown, NY, and director of the Cleft Lip and Palate Clinic at St. Charles Hospital in Port Jefferson, NY. Active in professional organizations, he is vice-president of the Suffolk Academy of Medicine and director of the Suffolk County Medical Society. This April, at the Cleft Lip and Palate Symposium held at St. Charles Hospital, he gave a presentation titled "The Surgery of Cleft Lips and Palates." Last September, he participated in the Attorney General's Conference on Managed Care, and contributed to a seminar on managed care and HMOs.

Dr. Richard W. Golub ('90) has recently been promoted to associate professor of clinical surgery (with tenure) at SUNY-Brooklyn. His clinical specialties are general surgery and colorectal surgery. Last year, he was again listed in *New York Magazine's* "Best Doctors in New York," as well as the Castle Connolly Guide, *How to Find the Best Doctors: New York Metro Area*. And he was elected secretary/treasurer of the Brooklyn/Long Island Chapter of the American College of Surgeons. His recent publications include:

- Lee YC, Abulafia O, Montalto N, Holcomb K, Matthews R, **Golub RW**. Malignant transformation of an ovarian mature cystic teratoma presenting as a rectal mass. *Gynecol Oncol* 1999;75:499-503.
- **Golub RW**, Ciervo A. Gallbladder cancer. In: Singleton J, Sandowski S, Holzemer S, Horvath T, Green-Hernandez C, DiGregorio R, editors. *Primary Care*. Philadelphia: Lippincott-Raven, 1999.
- **Golub RW**, Lawson N. Esophageal cancer. In: Singleton J, Sandowski S, Holzemer S, Horvath T, Green-Hernandez C, DiGregorio R, editors. *Primary Care*. Philadelphia: Lippincott-Raven, 1999.
- Cannizo F, **Golub RW**. Gastric cancer. In: Singleton J, Sandowski S, Holzemer S, Horvath T, Green-Hernandez C, DiGregorio R, editors. *Primary Care*. Philadelphia: Lippincott-Raven, 1999.

Last year, Dr. Golub was an invited speaker for surgical grand rounds at the Grant Medical Center in Columbus, OH, where he gave a presentation titled "Malignant Colorectal Obstruction: Current Opinions and Techniques." The abstract of a study on which he collaborated, "Metabolic Correlates of Colon Neoplasia" (authors: Nguyen MC, Darvishzadeh J, **Golub RW**, Kral JG), has been accepted for presentation this May at the New York Surgical Society's monthly scientific meeting in New York. A personal note: Kaitlin Elizabeth Golub was born on November 29 of last year.

(Continued on Page 15)

Education Division Established

(Continued from Page 9)

medicine *should* be practiced and more on medicine *the way it is*.

The challenge of the new century is to teach in a milieu that demands more efficiency when the subject matter demands methods that are not efficient, and to teach a greatly expanded knowledge base with less time to teach it.

The methodology of the past—in which the emphasis has been on what is taught rather than what is learned; the teacher has been the active dispenser of knowledge and the learner the passive recipient; and the teacher, rather than the learner, has set the learning agenda—makes less and less sense today.

Our newly established Division of Education will ensure that our educational programs prepare physicians in the best possible way for the medical realities now and in the future.

MOHAN APPOINTED PROGRAM DIRECTOR

In March, Eugene P. Mohan, MD, assistant professor of clinical surgery, was appointed director of our residency training program in general surgery. He replaces John J. Ricotta, MD, professor and chairman of surgery, who will continue to serve as program director of our residency (fellowship) in vascular surgery.

Since 1994, Dr. Mohan has been chief of surgery at the Northport Veterans Affairs Medical Center, which, along with Winthrop-University Hospital, has long been an “integrated institution” in the residency program. University Hospital and Medical Center is the program’s “parent institution.”

A 1989 graduate of our residency program, Dr. Mohan received his MD from Mt. Sinai School of Medicine in 1984.



HOT LINKS

To submit alumni news online AND to find current mailing addresses of our alumni, please visit the Department’s website at www.uhmc.sunysb.edu/surgery

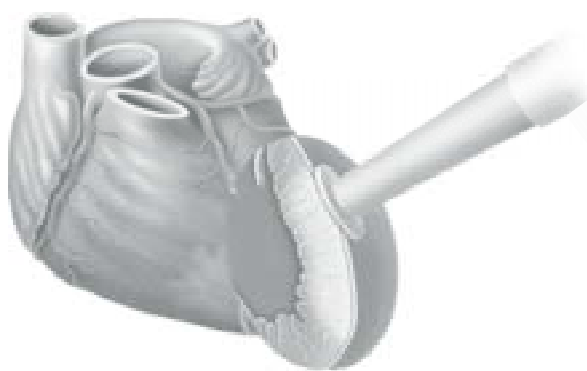
For news about Stony Brook University Hospital and Medical Center, see the latest edition of Medical Staff News at www.uhmc.sunysb.edu/roster/news/index.html

GENERAL SURGERY

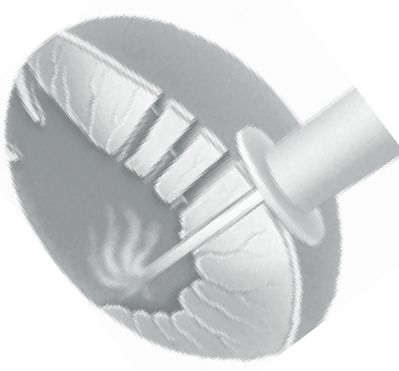
ALUMNI: Please send your e-mail address—for inclusion in the Alumni Directory—to cohen@surg.som.sunysb.edu.

USING LASER SURGERY TO TREAT CORONARY ARTERY DISEASE

CREATING CARBON DIOXIDE “BLOODLINES”



The laser pierces the heart wall and starts boring a channel.



The outside puncture seals over, fresh blood permeates the heart wall, and new vascular connections begin to develop within the heart muscle.

Division Briefs

Cardiothoracic Surgery

Dr. Thomas V. Bilfinger, professor of clinical surgery, is a cooperating investigator in a multi-center study to evaluate the effectiveness of screening for lung cancer with helical computed tomographic (CT) scans in patients aged 60 years or older with at least ten pack-years of cigarette smoking.

Last November, at the 72nd Scientific Session of the American Heart Association held in Atlanta, Dr. Bilfinger presented a study titled "Nitric Oxide Production of Existing Saphenous Vein Conduits at the Time of Coronary Artery Bypass Reoperation" (authors: Bilfinger TV, Vosswinkel JA, Rialas CM, Krukenkamp IB, Stefano GB).

Dr. Bilfinger and his research colleague, George B. Stefano, PhD, adjunct research professor of surgery, have been invited to join the organizational committee of the Third International Neuroimmune Symposium to be held in Shanghai, China, in 2001.

Dr. Irvin B. Krukenkamp, professor of surgery and chief of cardiothoracic surgery, last fall received a secondary appointment as professor of physiology and biophysics in the School of Medicine. He has also been appointed to serve as **medical director of Stony Brook's new Institute of Molecular Cardiology**, which officially opened in February. The Institute's aim is to bring together basic scientists and clinical investigators to focus on clinically relevant problems. Its multidisciplinary research group comprises biophysicists, molecular biologists, cell biologists, engineers, and cardiac surgeons. Areas of current research are ischemic preconditioning, atrial and ventricular arrhythmias, and cardiac contractility.

This April, Dr. Krukenkamp participated in the regional 2000 Van der Kloot Symposium on Molecular

Mechanisms of Cardiovascular Disease, which was held at our Health Sciences Center; his presentation was titled "Endogenous Myoprotective Preconditioning: Molecular Mechanisms and Clinical Implications."

At the 72nd Scientific Session of the American Heart Association held in Atlanta last November, Dr.

Krukenkamp presented two studies (in addition to the study done with Dr. Bilfinger noted above):

- The NO-generating beta blocker nipradilol preconditions the heart through an NO-cyclic GMP-dependent mechanism (authors: Horimoto H, Saltman AE, Gaudette GR, Nakai Y, Sasaki S, Krukenkamp IB).
- Ischemic but not pharmacological preconditioning requires protein synthesis (authors: Matsuyama N, Gaudette GR, Leavens JE, Aksehirli TO, McKinnon D, Krukenkamp IB).

Dr. Adam E. Saltman, assistant professor of surgery, last fall received a secondary appointment as assistant professor of physiology and biophysics in the School of Medicine. At the 72nd Scientific Session of the American Heart Association held in Atlanta last November, he was a co-author of the poster presentation of the nipradilol study done with Dr. Krukenkamp and others.

General/Gastrointestinal Surgery

Dr. Louis T. Merriam, assistant professor of surgery, is currently directing the development of the newly established **Center for Minimally Invasive Surgery** (see page 1).

Otolaryngology-Head and Neck Surgery

Dr. Arnold E. Katz, professor of clinical surgery and chief of otolaryngology-head and neck surgery, in

December published *Local Flaps for Reconstruction of the Face After the Removal of Skin Cancer* (American Academy of Otolaryngology-Head and Neck Surgery; see page 5).

Last October, at the meeting of Delaware Academy of Otolaryngology held in Wilmington, Dr. Katz gave a guest lecture titled "Allergic Rhinitis: Its Diagnosis and Treatment." In September, at the annual meeting of the American Academy of Otolaryngology-Head and Neck Surgery held in New Orleans, he gave two presentations, one on reconstruction of large facial defects after Mohs surgery, and the other on head and neck tumor immunobiology.

Dr. Eric E. Smouha, associate professor of surgery, last fall received a secondary appointment as associate professor of neurological surgery in the School of Medicine.

Pediatric Surgery

Dr. Jane T. Kugaczewski, assistant professor of clinical surgery, successfully completed the recertification process of the American Board of Surgery and is now recognized as recertified in pediatric surgery.

Together with Dr. Hassan K. Reda, clinical assistant instructor of surgery and chief resident, Dr. Kugaczewski presented a poster titled "Spontaneous Regression of a Neuroblastoma to Ganglioneuroma: A Relief for the Oncologist, a Challenge for the Surgeon" at the 68th Annual Scientific Meeting of the Southeastern Surgical Congress, held in February in Lake Buena Vista, FL.

Surgical Oncology

Dr. M. Margaret Kemeny, professor of surgery (interim) and chief of surgical oncology, in December participated as a faculty member in a live Physician-Directed Webcast on

Colorectal Cancer, presented by Alpha Oncology (www.alphaoncology.org), a subsidiary of the Coalition of National Cancer Cooperative Groups. At the conclusion of the broadcast, the Internet audience was able to discuss new advances in the surgical management of metastatic colorectal cancer; the use of laparoscopic surgery and its role in the treatment of the disease; and the use of liver resection surgery in the management of metastatic colorectal cancer.

In April, Dr. Kemeny participated as an invited speaker and moderator at the University of Rennes' 21st Meeting on Surgery of the Digestive Tract, "Neoadjuvant and Adjuvant Therapy with Surgery for Digestive-Tract Cancers: Absolute and Relative Indications," held in Rennes, France.

Dr. Brian J. O'Hea, assistant professor of surgery and medical director of the Carol M. Baldwin Breast Care Center, in March presented his study, "Atypical Ductal Lesions Found after Large Core Needle Biopsy of the Breast: Is Surgical Excision Always Necessary?," at the 57th Annual Meeting of the Central Surgical Association, held in Chicago; he conducted this study with Stony Brook pathologist Dr. Carmen Tornos.

Surgical Research

Dr. Margaret A. McNurlan, assistant professor of surgery, is co-principal investigator of an ongoing study titled "Cellular Mechanisms for Metabolic Dysfunction in HIV," for which four-year funding (\$1,775,947) was renewed last fall by the National Institutes of Health. Dr. Marie C. Gelato, professor of medicine and director of Stony Brook's General Clinical Research Center, is principal investigator of the study. Drs. Collin E.M.

Brathwaite and John S. Brebbia, of our Division of Trauma/Surgical Critical Care, are collaborators in this research.

Trauma/Surgical Critical Care

Dr. Collin E.M. Brathwaite, associate professor of surgery and chief of trauma/surgical critical care, directs our **bariatric surgery program for the treatment of morbid obesity**. Established last fall, this program continues to grow, and about two operations per month are currently being performed by him, with increasing numbers of patients undergoing evaluation.

In February, Dr. Brathwaite made a poster presentation of a study on which he collaborated, "Central Venous Catheters and Risk for Resistance" (authors: Smith CJ, Fitzgerald D, Brebbia JS, Brathwaite CE), at the 29th Annual Educational and Scientific Symposium of the Society of Critical Care Medicine, held in Orlando, FL.

At the 59th Annual Meeting of the American Association for the Surgery of Trauma, which was held last September in Boston, Dr. Brathwaite presented a study titled "Sepsis-Induced Alterations in Glucose-6-Phosphatase (Glu-6-Pase) Activity and Gene Expression" (authors: Maitra SR, Wang S, Brathwaite CE).

Dr. John S. Brebbia, assistant professor of surgery, has been inducted into the Society of American Gastrointestinal Endoscopic Surgeons (SAGES), the leading professional society of board certified surgeons who use endoscopy and laparoscopy as an integral part of their treatment of patients. Prerequisites for membership include certification by the American Board of Surgery; demonstrated and

acknowledged skill and excellence in gastrointestinal endoscopic surgery; and written endorsement by a member of SAGES and either an instructor or a colleague.

With his expertise in "video-scope" surgery, Dr. Brebbia will play an active role in the newly established **Center for Minimally Invasive Surgery** (see page 1).

The study on which he collaborated with Dr. Brathwaite and others, "Central Venous Catheters and Risk for Resistance," was presented as a poster at the 29th Annual Educational and Scientific Symposium of the Society of Critical Care Medicine.

Dr. Subir R. Maitra, research associate professor of surgery and emergency medicine, last August received a three-year grant (\$626,763) from the National Institute of General Medical Sciences to support a three-year basic science study titled "Glu-6-Pase and 6PF2K/FBPase Gene Regulation in Sepsis"; he is the principal investigator of this study. As a supplement to this grant, a postdoctoral fellowship under his mentorship was awarded to Dr. Dorrie-Susan Barrington for the present year.

Last September, at the 59th Annual Meeting of the American Association for the Surgery of Trauma held in Boston, Dr. Maitra presented his study titled "Sepsis-Induced Alterations in Glucose-6-Phosphatase (Glu-6-Pase) Activity and Gene Expression" (authors: Maitra SR, Wang S, Brathwaite CE).

Jane E. McCormack, trauma nurse coordinator, in March was elected president of the New York State Division of the American Trauma Society (ATS). The ATS is a nationwide, non-profit, voluntary organization dedicated to the prevention of trauma and improvement of trauma care. It currently has 22 state

(Continued on Page 14)

First Endovascular AAA Repairs

(Continued from Page 7)

chief of diagnostic radiology. In the near future the Center plans to include specialists in cardiology.

With a range of current and potential applications, endovascular surgery is called minimally invasive because the incision is just large enough for the surgeon to insert a catheter into the blood vessel, through which instruments and devices can be inserted to treat diseased blood vessels.

Because endovascular surgery involves a smaller incision compared with that used in conventional vascular operations, it causes less disruption of the patient's physiology, or vital processes. Consequently, the hospital stay is usually much shorter and the patient's recovery much faster.

The earliest endovascular techniques were developed in the late 1960s. Given that less invasive methods of treating vascular disease have been sought for decades, endovascular surgery is now a rapidly growing field of therapy. It may be used independently or in combination with conventional operations in the treatment of vascular disease.

Although the endovascular procedure called balloon angioplasty has been used for years to treat occlusive disease (blocked/narrowed arteries), the recent advent of the aortic stent graft has expanded the role of endovascular surgery to include the treatment of aneurysmal disease.

For consultations/appointments with our endovascular surgeons, please call (631) 444-2565.

OUR ELECTRONIC PHYSICIAN DIRECTORY



The Department provides a physician directory as part of its website on the Internet—please visit us at the following address to find information about our individual surgeons (see sample page below), as well as our programs in patient care, education, research, and community service:

www.uhmc.sunysb.edu/surgery



Dr. Brian J. O'Hea

MD: Georgetown University (1986).

Residency Training: General Surgery, St. Vincent's Hospital and Medical Center of New York.

Fellowship Training: Breast Surgery, Memorial Sloan-Kettering Cancer Center.

Board Certification: [Surgery](#).

Specialties: Diseases and surgery of the breast, with special interests in [sentinel node biopsy](#), breast conservation, and skin-sparing mastectomy.

Additional: Medical Director of Stony Brook's [Carol M. Baldwin Breast Care Center](#); Fellow, American College of Surgeons ([FACS](#)); see [recent publications](#).

Honors: One of the "Doctors of Excellence" featured in the latest edition (1999) of the Castle Connolly Guide, *How to Find the Best Doctors—New York Metro Area*.

Language Spoken: English.

Consultations/Appointments: 631-444-4550.

Division Briefs

(Continued from Page 13)

divisions throughout the U.S. that assist in promoting ATS public awareness/education programs at the grassroots level. The New York State Division runs injury prevention programs such as Troo the Traumaroo in schools, operates anti-drunk driving programs in the community, and helps implement the National Trauma Awareness Month campaigns locally.

Vascular Surgery

Dr. John J. Ricotta, professor and chairman of surgery, has been selected to be included in *Who's Who in Medicine and Healthcare, 2000-2001* (Marquis), scheduled for publication in June.

Dr. Ricotta will become president of the Eastern Vascular Society at its May meeting in Baltimore. The objectives of the Society are: 1) to advance the art and science of vascular surgery; 2) to provide an educational forum for physicians in the Eastern United States and Canada active in the field of vascular disease; 3) to improve the delivery to the public of healthcare for vascular disease; and 4) to improve research in the etiology, diagnosis, and treatment of vascular diseases.

Since March 1999, Dr. Ricotta has been vice-president of the Society of Clinical Vascular Surgery, a leading national organization of about 1,000 academic and community vascular surgeons.

Recent Publications

(Continued from Page 8)

Mynarcik DC, Frost RA, Lang CH, DeCristofaro K, **McNurlan MA**, **Garlick PJ**, Steigbigel RT, Fuhrer J, Ahnn S, Gelato MC. Insulin-like growth factor system in patients with HIV infection: effect of exogenous growth hormone administration. *JAIDS* 1999;22:49-55.

O'Hea BJ, Ho MN, Petrek JA. External compression dressing versus standard dressing after axillary lymphadenectomy. *Am J Surg* 1999;177:450-3.

Rapaport FT. A half-century retrospective of transplantation as viewed by the protagonists. *Transplant Proc* 1999;31:15.

Rapaport FT. Current status and future prospects for organ procurement and retrieval. *Transplant Proc* 1999;31:1763-4.

Rapaport FT. Felix Milgrom, immunologist and microbiologist par excellence. *Transplant Proc* 1999;31:1452-5.

Rapaport FT. Some landmarks in the evolution of transplantation. *Transplant Proc* 1999;31:2939-44.

Rapaport FT. The birth of the Transplantation Society of Latin America and the Caribbean. *Transplant Proc* 1999;31:3085.

Smith CJ, Fitzgerald D, **Brebbia JS**, **Brathwaite CE**. Central venous catheters and risk for resistance [abstract]. *Crit Care Med* 1999;27(12 Suppl):A118.

Smouha EE, Inouye M, Sobol LL, Slepceky NB. Histologic changes after semicircular canal occlusion in guinea pigs. *Am J Otol* 1999;20:632-8.

Stefano GB, Prevot V, Beauvillain JC, Fimiani C, Welters I, Cadet P, Breton C, Pestel J, Salzet M, **Bilfinger TV**. Estradiol coupling to human monocyte nitric oxide release is dependent on intracellular calcium transients: evidence for an estrogen surface receptor. *J Immunol* 1999;163:3758-63.

Suzuki A, Shao X, Song XQ, Hanaoka T, Irie S, Kashiwada M, **Samara G**, et al. Identification of a 5-cM region of common allelic loss on 8p12-p21 in human breast cancer and genomic analysis of the hEXT1L/EXTR1/EXTL3 gene in this locus. *Int J Oncol* 1999;15:443-51.

Udar NS, Xu S, Bay JO, Dandekar SS, Patel N, Chen X, Liang TY, Uhrhammer N, Klisak I, Shizuya H, Yang H, **Samara G**, Nelissen J, Sawicki M, Concannon P, Gatti RA. Physical map of the region surrounding the ataxia-telangiectasia gene on human chromosome 11q22-23. *Neuropediatrics* 1999;30:176-80.

Vosswinkel JA, **Bilfinger TV**. Cardiac nail gun injuries: lessons learned. *J Trauma* 1999;47:588-90.

Vosswinkel JA, McCormack JE, **Brathwaite CE**, Geller ER. Critical analysis of injuries sustained in the TWA Flight 800 midair disaster. *J Trauma* 1999;47:617-21.

☆ **This study, of which the first author is surgical resident (PGY-4) James A. Vosswinkel, MD, was the journal's news-making lead article in its October 1999 issue.**

Reaching Out to Nuns For Breast Health Education

In December, the Carol M. Baldwin Breast Care Center presented its first "Breast Health Day for Women Religious" at Queen of the Rosary Motherhouse in Amityville, NY. Attended by 250 nuns from all over Long Island, Brooklyn, and Queens, this outreach program provided breast health education with special emphasis on the needs and concerns of nuns, who as a group are at greater risk of developing breast cancer than the general population of women.

Nulliparity—that is, the condition of having never given birth to a child—is a well-established risk factor for breast cancer dating back to the 18th-century observation that breast cancer occurred with higher frequency among nuns.

The Breast Care Center's program included talks by physicians and other healthcare professionals (all women) who addressed the topics of breast health for nuns, barriers to breast health for nuns, psychosocial implications of the pursuit of breast

healthcare, breast health and disease, and methods to enhance breast health.

Sister Angela Gannon, CSJ, general superior of Saint Joseph Convent, said, "The day provided a very valuable learning experience for all of us who attended and one which I hope will be repeated in the future."

As executive medical director of the Breast Care Center, M. Margaret Kemeny, MD, professor of surgery (interim) and chief of surgical oncology, played an important role in developing the four-hour educational program. She will be instrumental in bringing this program to the Archdiocese of New York as a result of previous contacts with Cardinal O'Connor's office.

In addition, a modified version of the breast health program is planned for Stony Brook's women faculty/leaders.

For information about the Carol M. Baldwin Breast Care Center and its educational programs, please call (631) 444-4550.

Alumni News

(Continued from Page 10)

Dr. Constantinos N. Zarmakoupis ('92), Diplomate of the American Board of Surgery, completed his military service and country service in Greece in 1997. Since then, he has been in private practice in Athens, specializing in vascular surgery. Together with his partner, Dr. John Iliopoulos (a former associate professor of surgery at the University of Kansas), he is performing endovascular surgery; they successfully performed six endovascular repairs of abdominal aortic aneurysms and one popliteal artery aneurysm during 1999. Last fall, he was visited by **Dr. Steven J. Busuttill** ('94), with whom he performed surgery, as in their Stony Brook days.

Dr. Toufic K. Safa ('96) is a vascular surgeon at North Shore University Hospital in Manhasset, NY, with an appointment as assistant professor of surgery at New York University. He recently published this paper:

- **Safa TK**, Friedman S, Mehta M, Rahmani O, Scher L, Pogo G, Hall M. Management of coexisting coronary artery and asymptomatic carotid artery disease: report of a series of patients treated with coronary bypass alone. *Eur J Vasc Endovasc Surg* 1999;17:249-52.

A personal note: On July 16, 1999, Dr. Safa and his wife had their first child, a boy (weight, 8 lb 11 oz; height, 23 in), and named him Ryan.

STONY BROOK SURGICAL ASSOCIATES, PC

BREAST CARE

John S. Brebbia, MD
Martyn W. Burk, MD, PhD
M. Margaret Kemeny, MD
Louis T. Merriam, MD
Brian J. O'Hea, MD
Vimala S. Sivaraman, MD

BURN CARE

Collin E.M. Brathwaite, MD
John S. Brebbia, MD
Harry S. Soroff, MD

CARDIOTHORACIC SURGERY

Thomas V. Bilfinger, MD, ScD
Kathleen N. Fenton, MD
Irvin B. Krukenkamp, MD
Allison J. McLarty, MD
Adam E. Saltman, MD, PhD
Frank C. Seifert, MD

GENERAL/GASTROINTESTINAL SURGERY

Robert D. Barraco, MD
Collin E.M. Brathwaite, MD
John S. Brebbia, MD
Martyn W. Burk, MD, PhD
Louis T. Merriam, MD
J. Martin Perez, MD
Vimala S. Sivaraman, MD
Thomas R. Smith, MD

OTOLARYNGOLOGY-HEAD AND NECK SURGERY (ENT)

Arnold E. Katz, MD
Denise C. Monte, MD
Ghassan J. Samara, MD
Maisie L. Shindo, MD
Eric E. Smouha, MD

PEDIATRIC SURGERY

Jane T. Kugaczewski, MD
Cedric J. Priebe, Jr., MD

PLASTIC AND RECONSTRUCTIVE SURGERY

Steven M. Katz, MD
Steven L. Shoen, MD

SURGICAL ONCOLOGY

Martyn W. Burk, MD, PhD
M. Margaret Kemeny, MD
Louis T. Merriam, MD
Brian J. O'Hea, MD
Vimala S. Sivaraman, MD

TRANSPLANTATION

Felix T. Rapaport, MD
John J. Ricotta, MD
Wayne C. Waltzer, MD

TRAUMA/SURGICAL CRITICAL CARE

Robert D. Barraco, MD
Collin E.M. Brathwaite, MD
John S. Brebbia, MD
J. Martin Perez, MD
Thomas R. Smith, MD

VASCULAR SURGERY

Rishad M. Faruqi, MD
Fabio Giron, MD, PhD
David B. Gitlitz, MD
John J. Ricotta, MD
Paul S. van Bemmelen, MD, PhD



For consultations/appointments with our physicians, please call

- (631) **444-4550** for our specialists in breast care
- (631) **444-1820** for our specialists in cardiothoracic surgery
- (631) **444-4545** for our specialists in general/gastrointestinal surgery
- (631) **444-4121** for our specialists in otolaryngology-head and neck surgery (ENT)
- (631) **444-4538** for our specialists in pediatric surgery
- (631) **444-4545** for our specialists in plastic and reconstructive surgery
- (631) **444-4545** for our specialists in surgical oncology
- (631) **444-2209** for our specialists in transplantation
- (631) **444-1045** for our specialists in trauma/surgical critical care
- (631) **444-2565** for our specialists in vascular surgery
- (631) **723-5000** for our specialists at Stony Brook Outpatient Services in Hampton Bays: breast care - general/gastrointestinal surgery - pediatric surgery - vascular surgery

The State University of New York at Stony Brook is an equal opportunity/affirmative action educator and employer. This publication can be made available in alternative format.

STATE UNIVERSITY OF NEW YORK



UNIVERSITY HOSPITAL AND
MEDICAL CENTER

DEPARTMENT OF SURGERY

SCHOOL OF MEDICINE

STATE UNIVERSITY OF NEW YORK

AT STONY BROOK

Stony Brook, New York 11794-8191

In this issue . . .

- *Center for Minimally Invasive Surgery Established*
- *Introducing Our New Pediatric Cardiothoracic Surgeon*
- *Performing Laser Transmyocardial Revascularization*
- *Facial Reconstruction*
- *First Endovascular Aneurysm Repairs*
- *Clinical Trial of Patient-Monitored Anticoagulation Therapy*
- *Electronic Physician Directory*
- *Alumni and Education News*
- *Division Briefs—And More!*