UA Surgeons Perform Rare and Complex Organ Transplants

Under the leadership of a new chairman, The University of Arizona Department of Surgery is reaching new milestones and surgeons are performing rare and complex procedures at University Medical Center. A prime example is the Transplant Program, which is offering new hope to people suffering from organ failure.

First Combined Heart-Kidney Transplant

On Dec. 8, surgeons performed the first simultaneous heart and kidney transplant in Southern Arizona. After an earlier failed heart transplant and resulting kidney failure, 41-year-old husband and father Ron Webb now is recovering from the back-to-back dual-organ transplant.

The cardiothoracic transplant team, led by Raj K. Bose, MD, assistant professor of clinical surgery, Section of Cardiovascular and Thoracic Surgery, performed the heart transplant first.

A second surgical team, led by Rainer Gruessner, MD, professor and chairman of the Department of Surgery, performed the kidney transplant.

Webb’s heart damage was caused by a virus when he was 28. After his previous heart transplant failed, he developed kidney failure because of the side effects of his immunosuppressive medications.

This life-saving operation was made even more difficult because of the rejection suffered from his first heart transplant, Dr. Bose says.

Rare En Bloc Kidney Transplant

William Diehl, 56, was given a toddler’s kidneys on Dec. 10 when the surgical team carried out a complex procedure by transplanting the child’s two kidneys connected only by the major blood vessels.

Diehl had been on dialysis for a year and a half – ever since his kidneys failed due to polycystic disease. Now, he no longer needs the tiring three-times-a-week dialysis that dominated his life.

En bloc kidney transplantation, in which both kidneys from a baby are transplanted into an adult patient to do the work of a single adult kidney, addresses organ shortage issues by using organs that might not have been used in the past, says Dr. Gruessner. However, en bloc kidney transplants are rare, according to the United Network for Organ Sharing (UNOS).

“The en bloc technique is more challenging and there is a higher risk of graft thrombosis due to blood clots. But, if we waited for an adult kidney, it could have taken many months,” Dr. Gruessner says.

More than 74,000 people in the United States currently are on the transplant list for a kidney. Each year, about 6 percent of all patients on the waiting list die before an organ becomes available.

Complex Positive Crossmatch Transplant

Wilma Burton’s son was more than willing to donate one of his kidneys to his mother. However, his mother was “sensitized,” meaning she had developed harmful antibodies in her blood against foreign tissue. A person can develop antibodies through previous exposure to blood transfusions, previous transplants, and from pregnancies. The elevated levels of the antibodies make tissue rejection almost certain.

CONTINUED ON PAGE 2
It truly has been an honor to serve as the new Chairman of the Department of Surgery at The University of Arizona these past six months and I am proud of the accomplishments of the department showcased in this newsletter.

I accepted the position as chairman because of the potential to build a preeminent surgical program in the Southwest. My goal is to build on positive changes instituted by my predecessors Drs. Hugo Villar and Allan Hamilton. I am extremely committed to establishing an outstanding academic department with continued achievements in patient care, surgical education and translational research.

I have been charged with substantially expanding the size of the department through recruitment of faculty across a range of specialties. The generous support of the College of Medicine, University Medical Center and University Physicians Healthcare will allow us to build new programs and expand existing ones.

We welcome six new faculty members in this newsletter. I am delighted The University of Arizona has been able to recruit such outstanding physician leaders to join our surgical team. We plan to hire a total of 15-20 new faculty members across all surgical specialties. The first phase of recruitment will focus on general surgery, trauma, transplantation and urology. Beginning in 2009, we will start to rebuild the Sections of Neurosurgery, ENT and Plastic Surgery. Our recruitment efforts will bring noted leaders in their fields who will add to the existing nationally known leaders already in the department.

Also, our residency programs now will focus not only on solid clinical training, but also on academic education through basic or clinical research. We are working in conjunction with Graduate Medical Education to establish a MS/PhD program starting at the end of this year. We will send about 30 percent of our residents after the third year into the labs, focusing on the following research areas: cardiovascular, oncology, trauma and transplantation.

We also plan to increase the number of residents in each of the residency programs and build more fellowship programs.

We also have created a Distinguished Alumnus Award that will be presented to a former resident who has emerged as a leader in the field of surgery. The award will be presented annually at the surgery residency graduation.

Dr. Richard Carmona, the 17th U.S. surgeon general, has been named professor of surgery. As many of you know, Dr. Carmona has been affiliated with the department since the 1980s. He kindly has agreed to help create a board of directors to assist with the department’s development and strategic efforts.

The establishment of endowments will be a priority and we will look to alumni and friends of the department to create endowed chairs across all surgical specialties.

All these changes will help ensure that the UA Department of Surgery will provide the most innovative and comprehensive surgical care to all citizens of Arizona and train the future leaders in surgery.

Sincerely,

Rainer W. Gruessner, MD
Professor and Chairman,
UA Department of Surgery

Transplants CONT. FROM PAGE 1

Until recently, to be considered as a live donor, blood and tissue type had to be compatible with the recipient. UMC surgeons now offer a procedure called positive crossmatch transplant that allows patients to receive a kidney from an incompatible live donor.

Dr. Gruessner and his transplant team were able to remove harmful antibodies from Burton with a process called plasmapheresis, a procedure similar to dialysis that removes the plasma portion of the blood where antibodies are located.

Once the antibodies against the blood type of the live donor – Burton’s son – decreased to very low levels, the kidney transplant was able to take place and Burton received her son’s special gift.

Arizona’s Only Comprehensive Program

UMC’s Transplant Program is the only comprehensive solid-organ transplant program in Arizona, offering heart, lung, kidney, pancreas and liver transplantation for children and adults.

On Feb. 5, the cardiothoracic (heart and lung) transplant team performed its 1,000th transplant with a new heart for 51-year-old Michael Boudreaux.

The number of kidney transplants at UMC is at an all-time high, with Wilma Burton’s son becoming the 100th live donor who underwent a laparoscopic nephrectomy, a procedure that is becoming the standard of care.

Pancreas transplantation also is growing in strength with the number of transplants quadrupling in 2007, compared to the previous year.

Further, liver transplantation is being revitalized by Dr. Gruessner and the hiring of nationally known transplant surgeon John Renz, MD, PhD. Referrals for liver transplants from physicians in the community continue to rise.

Exciting new programs in islet cell and bowel transplantation are under development.

“The Transplant Program is undergoing dramatic changes, including a number of new members of the transplant team,” says Dr. Gruessner.

How to Refer Patients

For liver, kidney or pancreas transplant consultations, please call (520) 694-6170. For heart failure and heart transplantation consultations, please call (520) 694-6299.
Study Addresses New Treatments for Abdominal Aortic Aneurysm

Does size matter? That is the question UA Department of Surgery vascular researchers aim to answer in the multi-center clinical trial, “Positive Impact of Endovascular Options for Treating Aneurysms Early.”

Over the past decade, revolutionary changes have been made in the diagnosis and treatment of abdominal aortic aneurysms (AAAs). Minimally invasive endovascular technologies, such as stent grafts, have decreased length of stay and, more importantly, improved outcomes compared with conventional open surgery.

Current guidelines recommend treatment for aortic aneurysms when they reach 5.5 cm in diameter, but were based on clinical trials with open surgical repair before the use of stents. New studies, including the AAA Study in the Section of Vascular Surgery, are under way that are relevant to today’s management of aneurysms with endovascular techniques.

AAA Study researchers are assessing the safety and effectiveness of “watchful waiting” compared to an endovascular stent graft repair. The clinical trial looks at patients with abdominal aortic aneurysms 4-5 cm in diameter. Joseph Mills, MD, professor and chief of the Section of Vascular Surgery, is leading the multi-center study at the UA. Also participating in the UA study are vascular surgeons John Hughes, MD, Kay Goshima, MD, and Daniel Ihnat, MD.

An AAA forms when a bubble-like swelling occurs in a portion of the aorta, the major artery that carries blood from the heart through the abdomen to the lower body. As this “bubble” swells over time, the artery wall can thin out and rupture.

Ruptures can happen suddenly and typically prove fatal. In fact, 50-75 percent of people who suffer a ruptured AAA die before making it to the hospital, and only half of those who make it to the hospital for emergency care survive the event.

“That’s why detecting these aneurysms early and monitoring or repairing them is crucial,” Dr. Mills says.

The traditional treatment option was an open surgical repair, which requires a surgeon to open the abdominal cavity, clamp off the aorta and sew a surgical graft in place to prevent an aneurysm from rupturing. The newer treatment option is minimally invasive endovascular stent grafting. A woven polyester tube (graft) covered by a metal web (stent) is placed inside the diseased vessel through a long catheter, without surgically opening the body.

Open surgical repairs carry high health risks for many older patients who also may suffer from other significant medical conditions, such as heart disease, lung disease, diabetes or hypertension, so doctors were hesitant to perform the operation and followed the wait-and-see approach on smaller aneurysms, says Dr. Mills.

The AAA Study focuses on two groups: one group receives an FDA-approved stent graft and the other is placed into a surveillance program, which includes medical examinations, blood tests, CT scans, magnetic resonance imaging (MRI), or abdominal aorta ultrasound. Participants will be followed by the study doctor for a total of five years from enrollment. This study is sponsored by Medtronic Vascular, a subsidiary of Medtronic, Inc., and the Cleveland Clinic Foundation.

Aortic aneurysms – including thoracic and abdominal aortic aneurysms – account for nearly 15,000 deaths annually in this country.

The AAA Study will be conducted at as many as 70 U.S. hospitals and will include as many as 1,000 patients nationwide.

For more information, contact: Brenda Harrington, RN, (520) 626-4845, bph@email.arizona.edu.

More Vascular Clinical Research Studies

CREST – Carotid Revascularization Endarterectomy vs. Stenting Trial

CREST is a randomized study comparing the two available FDA-approved treatments for blockages in the carotid arteries in the neck – carotid endarterectomy versus carotid artery stenting.

The carotid artery stenting only is approved for patients who are considered to be at high risk for complications from carotid endarterectomy. Patients who are enrolled in this study (and randomized to the stenting group) can have the stent even if they are not considered high risk.

PYTHAGORAS – Prospective Aneurysm Trial: High Angle Aorfix™ Bifurcated Stent Graft

This is a non-randomized study of the new stent graft Aorfix™. Patients with abdominal aortic aneurysms greater than 4.5 cm who qualify for an endovascular repair may have one using the new stent graft. It is designed to be more flexible than currently available stent graphs.

SwirlGraft - A Post Market Clinical Study to Compare the Performance of ePTFE SwirlGraft™ with a Conventional ePTFE Graft for Vascular Access Indications

This is a randomization study evaluating the use of a newer type of vascular access graft (SwirlGraft™) as compared with a standard type of vascular access graft. The product already is approved by the FDA, but it has requested additional data on its performance.

To find out more about these studies, contact Brenda Harrington, RN, (520) 626-4845, bph@email.arizona.edu.
Vascular Screening Can Prevent Deaths from ‘Silent’ Disease

It is a silent killer. Thousands of people die each year from an aortic aneurysm, but if caught early, it is highly treatable.

Non-cardiac vascular disease, including stroke from carotid artery disease, peripheral arterial disease (PAD), and aortic aneurysms, causes as much death and disability as heart disease and more than any cancer. It is called a “silent” disease because it often is not symptomatic until a catastrophic event occurs, such as stroke or aneurysm rupture.

Vascular surgeons at the UA Department of Surgery are nationally recognized experts in the treatment of AAAs. They recommend high-risk individuals be screened with simple tests.

“We now have available ultrasound and other screening technology designed to find vascular disease before it becomes a major problem,” says Joseph Mills, MD, professor and chief of vascular surgery. “Sudden death or major disability can occur if certain vascular conditions are not identified and properly treated. The good news is that most of these conditions can be discovered by using simple, painless, non-invasive tests that take just minutes to complete.”

Tests included a carotid artery ultrasound scan to look for blockages in the arteries to the brain, an abdominal ultrasound to detect aortic aneurysms, and non-invasive pressure tests to detect peripheral artery disease. The department held its annual free screening event in September in the fourth-floor Vascular Clinic at UMC.

“Many people may have an aneurysm or peripheral vascular disease and not know it until it is too late. These simple tests can save your life,” says Dr. Mills.

Less Invasive Lung Surgery Performed at UMC

Studies have shown minimally invasive lung surgery to be so successful that many surgeons are pushing for the procedure to be the standard of care for early-stage lung cancer patients. However, few surgeons in the nation are trained to offer this operation.

“Few surgeons currently offer the procedure because it’s difficult and requires additional training with a steep learning curve,” says Shari Meyerson, MD, assistant professor of surgery in the Section of Cardiovascular and Thoracic Surgery, who performs the procedure at University Medical Center. Dr. Meyerson is a non-cardiac thoracic surgeon who cares for patients with diseases involving the lungs, airways, esophagus and other structures in the chest.

Traditional lung cancer surgery is called a thoracotomy, in which the surgeon cuts through the muscles into the chest and spreads open the ribs to access the lungs. The incision is large, and recovery is slow and painful.

Minimally invasive lung surgery, known as a thoracoscopic lobectomy, is done through two small incisions, one less than one centimeter and the other two to four centimeters and requires no rib spreading. This reduces both the amount of postoperative pain and the length of hospital stay required. It is proven to be as effective as traditional surgery in removing cancer.

It is estimated that only about 10 percent of all lung cancer operations nationwide are done with minimally invasive techniques, but more than half the patients who need the surgery would qualify for the less invasive procedure. Dr. Meyerson is establishing a training program at the UA on minimally invasive lung surgery so that more surgeons can offer this life-saving technique.

Dr. Meyerson also uses minimally invasive procedures to ease the discomfort and improve the quality of life of patients who have been diagnosed with advanced lung cancer that cannot be removed by surgery.
Research Examines Delays in Cancer Diagnosis and Treatment

Less than 20 percent of lung cancer patients are diagnosed in the early stages of disease. The later lung cancer is diagnosed, the fewer the treatment options. Delays in diagnosing lung cancer patients result in an overall survival rate of only 15 percent at five years after diagnosis.

Research being conducted by Assistant Professor Shari Meyerson, MD, Section of Cardiovascular and Thoracic Surgery, is looking at whether barriers in the health-care system are creating delays in diagnosis. Her study, “Navigating the System: A Pilot Study of the Process of Obtaining a Diagnosis of Lung Cancer,” is investigating the steps involved in obtaining a diagnosis of lung cancer.

She says data collected so far in her pilot study suggests a significantly longer time to diagnosis from initial symptoms than expected in both symptomatic and asymptomatic patients.

“This is a concern because the disease could progress significantly in the time between the onset of symptoms and definitive treatment,” Dr. Meyerson says.

“If a correlation between progression of disease stage and delay in diagnosis can be confirmed in a larger study, interventions, including public education about early treatment options, such as minimally invasive approaches and the better prognosis of early-stage lung cancers, could make a difference in patient outcomes.”

UA to be Training Center for Lung Surgery

The UA Department of Surgery is dedicated to educating physicians and residents on new technologies that will advance patient care. As a result of the expertise of thoracic surgeon Shari Meyerson, MD, and support from Covidien, the UA Department of Surgery will be a national training site for minimally invasive lung surgery. The UA will be one of only a handful of academic medical centers in the U.S. actively training surgeons to perform the procedure.

Every two to four months, surgeons will come to the department for the intensive one-day course. The participants, specialists in cardiovascular and thoracic surgery, will observe a live surgery as well as practice in the cadaver lab.

“The addition of this minimally invasive treatment for lung cancer has been a tremendous step forward for the treatment of the disease,” says Dr. Meyerson. “We’re very excited about our ability to deliver the most advanced surgical treatment for lung cancer available anywhere in the world and to be part of the select team to teach the technology of tomorrow.”

Students Learn Suturing Skills for Tiny Vascular Vessels

There’s the purse string, the parachute, and the baseball – these are some of the suturing techniques UA surgery residents and medical students are practicing on small simulated blood vessels in a workshop offered by the Section of Vascular Surgery.

Considerable training is necessary to master vascular suturing and knot tying. Blood vessels are far less forgiving than other tissues commonly handled in general surgical practice. The vessel wall is made up of three layers, all of which are delicate and easy to traumatize. This is even more the case when the vessel is diseased.

Historically, these specialized skills have been developed in the operating room, explains Luis R. León Jr., MD, RVT, assistant professor of clinical surgery and chief of vascular surgery at the Southern Arizona Veterans Affairs Health Care System. However, resident work-hour limitations, increasing costs of operating room time and patient safety concerns have led to an increased interest in teaching these skills in a simulated environment. In addition, the growing use of stents and other minimally invasive procedures for vascular conditions are providing little opportunity to perfect these skills when the need arises for open surgery.

The Vascular Surgery Workshop focuses on vascular suturing and...
Hands-On, No-Risk Resident Training

The UA Department of Surgery is expanding in the area of minimally invasive surgery. Residency programs in the department are moving to standardize the curriculum for laparoscopic surgery in the simulation lab, which is a growing trend nationally in medical training.

Surgical residents now are required to spend time in the Arizona Simulation Technology and Education Center (ASTEC) practicing the psychomotor skills necessary for laparoscopic procedures. For General Surgery residents, simulation offers the opportunity to become familiar with laparoscopic instruments and practice new techniques in a no-risk environment. The simulation curriculum is divided into three areas: basic equipment, technology and operative application laboratories, says Herminio Ojeda, MD, assistant professor of clinical surgery. Dr. Ojeda tracks each resident’s performance and confidence level throughout the four-to-six-week training session.

“Using low-tech and high-tech simulation tools from wood blocks and rubber bands to virtual reality simulators, residents develop the eye-hand coordination skills needed for laparoscopic surgery,” Dr. Ojeda says.

First-year general surgery resident Wynter Phoenix, MD, says his time in ASTEC was well spent. “The hands-on nature of ASTEC really helped in transitioning to laparoscopic procedures in the operating room. Having time in the lab to try different instruments and camera movements for the first time was a great opportunity for me to practice and learn,” he says.

Mike Nguyen, MD, assistant professor of clinical surgery and director of minimally invasive urologic surgery, has developed a one-on-one teaching/mentorship program for urology residents using simulation to focus specifically on core urologic laparoscopic procedures.

Dr. Nguyen uses a wide range of teaching tools, from watching videos of procedures in the operating room to using simulated tissue and organ models produced in ASTEC for hands-on practice with vascular injuries and partial removal of a kidney.

“The ASTEC lab is an extremely valuable resource for resident teaching,” says Dr. Nguyen. “Skills can be taught at the resident’s pace and errors in technique can be identified and corrected in the lab before going to the actual operating room. This way, time spent in live surgery is high yield for the resident and safe for the patient.”

Residents in the neurosurgery residency program practice their microsurgery skills on simulated tissue under a special microscope with the mentorship of neurosurgeon Allan Hamilton, MD, professor and ASTEC executive director.

As part of his residency training, surgery resident Wynter Phoenix, MD, practices laparoscopic skills in the Arizona Simulation Technology and Education Center (ASTEC).

Suturing Skills CONT. FROM PAGE 5

knot-tying techniques, types of suture materials available and needle choices conducive to repairing vulnerable vessels, says Kay R. Goshima, MD, assistant professor of clinical surgery. The instruction incorporates lectures and hands-on practice using training boxes, suture and prosthetic graft material donated by several medical companies. Prosthetic grafts are mounted on a frame and cut in different shapes, simulating as close as possible real-life, human body conditions. Then the residents and students perform a vascular anastomosis, reconnecting the vessels, with end-to-end, end-to-side anastomosis and interposition vein grafts. After the four-hour activity, which is held biannually on Saturdays, the participants and faculty discuss any remaining issues and propose suggestions to further improve the workshop.

Drs. Goshima and León organized the workshop, first for residents only, but after a couple of sessions decided that students in the Surgery Club could benefit from the training as well. Vascular surgery faculty

Joseph Mills, MD, and Daniel Ihnat, MD, also serve as instructors.

For students, the workshop offers early exposure to a different surgical subspecialty that can help them decide which career direction to take in the future, says Dr. Goshima. Residents learn these vascular surgery techniques so when they show up for their scheduled rotation in our service, they are better prepared, Dr. León adds.
Department Welcomes New Faculty

Trauma, Critical Care and Emergency Surgery

Peter M. Rhee, MD, MPH, has been appointed chief of the Section of Trauma, Critical Care and Emergency Surgery, and professor of surgery. Dr. Rhee, who once served as the designated surgeon on former President Clinton’s China trip in 1998, provides leadership and patient care for Tucson’s only Level 1 Trauma Center at University Medical Center.

Dr. Rhee’s previous experience involves some of the busiest trauma centers in the country, including Harborview Medical Center in Seattle and Washington Hospital Center in Washington, D.C. He recently served in the U.S. Navy as the director of the Navy Trauma Training Center at Los Angeles County-University of Southern California. He holds academic appointments as professor of surgery and molecular cellular biology at the Uniformed Services University of the Health Sciences (USUHS) in Bethesda, Md., where he was director of the Trauma Readiness and Research Institute for Surgery, performing combat casualty care research; and at the University of Southern California Keck School of Medicine.

On the battlefield, Dr. Rhee was one of the first trauma surgeons to be deployed to Camp Rhino, Afghanistan, and recently started the first surgical unit in Ramadi, Iraq. The recipient of numerous awards and honors, including the Legion of Merit, Defense Meritorious Service Medal and the Navy Commendation Medal, Dr. Rhee serves as a consultant to the Office of Naval Research, and the Marine Corps Commandants War Fighting Laboratory. Research interests include both basic science and clinical research in the areas of resuscitation, homeostasis, trauma training and monitoring devices. He has more than 140 publications in refereed journals and 10 book chapters.

He is a fellow of the American College of Surgeons and Critical Care Medicine and has gained national prominence from his committee work for major medical organizations.

Dr. Rhee earned his medical degree in 1987 from the Uniformed Services University of the Health Sciences F. Edward Hebert School of Medicine. He received a master’s degree in public health - health services, in 1995 from University of Washington, Seattle, and a Diploma in the Medical Care of Catastrophes in 1999 from the Society of Apothecaries of London, UK.

Dr. Rhee completed his surgical internship at Balboa Naval Hospital, San Diego, and residency in general surgery at the University of California Irvine Medical Center. He completed a fellowship in trauma and critical care at Harborview Medical Center, University of Washington, Seattle.

Transplantation

John F. Renz, MD, PhD, has joined the department as professor of surgery and vice chief of the Section of Transplantation. Dr. Renz comes to the UA from Columbia University College of Physicians and Surgeons, where he served as surgical director for the Liver Transplantation Program at the Center for Liver Disease and Transplantation.

A highly skilled transplant surgeon, Dr. Renz was part of the first surgical team ever to perform a combined heart-liver transplant in the New York region. Very few of these procedures have been performed worldwide.

Dr. Renz is a pioneer in “extended criteria” transplantation, or the use of organs that don’t meet the usual criteria for transplantation due to various health problems, but are still healthy enough for a successful transplant. He proved that regular and extended donor criteria (EDC) liver recipients have equivalent survival rates, and EDC is able to increase the access to liver transplantation.

In addition to liver transplantation, Dr. Renz specializes in kidney and intestinal transplants.

Dr. Renz received his medical degree from Jefferson Medical College, and his PhD in biochemistry and molecular biology from Thomas Jefferson University in Philadelphia. Both his internship and residency were completed in general surgery at the University of California, San Francisco. He completed a fellowship in transplantation surgery at the University of California, Los Angeles.

Dr. Renz’ research focuses on the development of hepatocellular carcinoma, investigations into expanded donor criteria allografts and experimental therapies involving liver and intestinal transplantation in adults and children. Clinical studies involve basic mechanisms in liver transplantation.

A member of a dozen national and international professional associations, Dr. Renz has published more than 60 journal articles and book chapters.

Surgical Oncology

Julie Eileen Lang, MD, a fellowship-trained breast surgical oncologist, has been appointed assistant professor of surgery in the Section of Surgical Oncology. Dr. Lang, who also is a member of the Arizona Cancer Center, completed a breast surgical oncology fellowship at the nationally renowned MD Anderson Cancer Center in Houston.

Dr. Lang’s breast surgery practice focuses on the full spectrum of malignant and benign breast diseases, including breast masses, breast pain, abnormal mammograms and breast cancer. She also consults with high-risk patients, such as those with a family history of breast cancer or prior breast biopsies showing atypical findings. Additionally, she will open a clinic for women with inflammatory or locally advanced breast cancer at the Arizona Cancer Center so that these patients can be treated by a multidisciplinary team with extensive experience with these diseases.

Specializing in skin sparing mastectomy and immediate reconstruction, Dr. Lang employs surgical techniques that optimize results both medically and cosmetically for her breast surgery patients. She is very enthusiastic about “oncoplastic” surgery, techniques in which the surgeon plans a lumpectomy and rearranges the local tissue to improve aesthetic outcomes. She performs ultrasound-guided minimally invasive core needle biopsy of suspicious breast lesions and uses sentinel lymph node biopsy, a minimally invasive technique to check to see if cancer has spread to lymph nodes.

The co-author of numerous publications, Dr. Lang’s research focuses on circulating tumor cells and breast cancer stem cells in an effort to find better targets for treatment for all stages of breast cancer.

Dr. Lang completed her residency and a postdoctoral cancer research fellowship at the
General Surgery

John B. Kettelle, MD, assistant professor of clinical surgery, has joined the Section of General Surgery, specializing in general and advanced laparoscopic and endoscopic surgery for gallbladder disease, hernias and the GI tract and in bariatric surgery.

Minimally invasive procedures have potential advantages over the traditional open surgery, including less blood loss. Because laparoscopic surgery requires only a few small incisions, most patients have a shorter hospital stay and a faster recovery.

Dr. Kettelle graduated from the University of California Davis School of Medicine in 1997 and completed his residency at San Joaquin General Hospital in Stockton, Calif. After finishing his residency, he stayed for an additional year as a faculty member. Dr. Kettelle was in private practice in Rhode Island prior to his fellowship training in advanced laparoscopic and bariatric surgery at The Central California Institute for Minimally Invasive Surgery in Fresno, Calif.

Prior to medical school, Dr. Kettelle spent six years in the U.S. Navy, where he served aboard the fast-attack submarine USS William H. Bates.

Dr. Kettelle is a fellow of the American College of Surgeons and a member of the Society of American Gastrointestinal Endoscopic Surgeons.

Urology

Mike M. Nguyen, MD, has been named director of Minimally Invasive Urologic Surgery and assistant professor of clinical surgery in the Section of Urology. Dr. Nguyen joined the UA after completing a fellowship in advanced laparoscopy at the prestigious Glickman Urological Institute at The Cleveland Clinic Foundation.

Dr. Nguyen specializes in advanced robotic and laparoscopic procedures on the prostate, bladder and kidney for both malignant and benign diseases.

Dr. Nguyen received his medical degree in 2000 from the University of California Davis School of Medicine, where he also completed his internship and residency training in urologic surgery.

A member of the Endourological Society, American Association of Clinical Urologists and the American Urological Association, Dr. Nguyen has published 16 articles and his honors include the Society of Laparoendoscopic Surgeons Outstanding Resident Award. His clinical expertise is in performing advanced robotic-assisted and laparoscopic urologic procedures on the prostate, bladder and kidney for both malignant and benign diseases.

His research interests include research on surgical outcomes and on renal cancer.

Neurosurgery

Rein Anton, MD, PhD, has joined the department as assistant professor of clinical surgery, Section of Neurosurgery.

Dr. Anton’s clinical expertise includes complex spine neurosurgery, including cervical/thoracic/lumbar disorders, cervical and lumbar stenosis, cervical/lumbar disc herniations and spinal cord tumors. Dr. Anton also offers general neurosurgical intervention, including treatment for benign and malignant brain tumors.

He received his medical degree, summa cum laude, from Tartu University, Estonia, where he also completed his initial residency training in neurosurgery and earned his PhD in biochemistry and molecular biology. Dr. Anton completed his postdoctoral research in Uppsala, Sweden, and at UCLA, on oncogenes (genes that contribute to the production of a cancer) and genetically engineering cells for neural transplantation. Dr. Anton also completed a general surgery internship at UCLA and a neurosurgery residency at Loma Linda University, Calif.

He is a member of the American Society for Neural Therapy and Repair, Ludwig Puusep Society for Neurologists and Neurosurgeons (Estonia) and the American Association of Neurological Surgeons, AANS/CNS Joint Section on Disorders of the Spine and Peripheral Nerves.

Certified by the American Board of Neurological Surgery, Dr. Anton has published more than 50 articles. His research interests include genetically engineering cells for transplantation for Parkinson’s and Huntington’s diseases, neuro-oncology, and the functioning of oncogenes in brain tumors.

By Rina Shinn, MD Class of ’97

When I finished my residency 10 years ago, I came out to the small town of Pueblo, Colo., about 150 miles south of Denver. My brother, who used to live in Denver, campaigned for my move and the town turned out to be an ideal place to live and raise children.

Initially, the child-raising wasn’t the primary concern, but the viability of a small, single specialty practice was. I felt ill-prepared to battle the ever-escalating insurance/third-party provider demands and games and felt practically lost to comprehend the rapidly changing rules and regulations of being a surgeon.

Then the children started to arrive. My daughter, Freia, was born in 2000 and soon followed my son, Baldur, in 2001. Most recently, second son, Lodur, was born in September. I found motherhood, especially with a tiny infant, much harder to manage than the residency. Even with every other night of trauma call rotation, there was a solid 10 to 12 hours when you can crash and sleep, if you wanted to. With a couple-hour interval feeding of a small infant, however, the sleep-deprivation, lasting three to four months and sometimes longer, was truly torturous.

As the children grew in number and size there were always more demands for a mother in various capacities. I am sure this is a similar dilemma all working mothers face. And I had to learn the ropes like all other mothers, without an instruction manual. My husband (Stefan Siegel) works at the Air Force Academy, which requires a two-hour commute each day, leaving me to be a single mom during the daytime. One learns to develop a local
I found motherhood, especially with a tiny infant, was much harder to manage than the residency.

It’s truly a small world, and Andrea Kaiser (class of ‘98) came and took my place in the old practice. She is married to pediatrition Mark Schwartz and they have two sons, Noah (almost 3 years old) and Eli (15 months). Since last year, she has moved into a bigger surgical group in Pueblo.

In the past few years, I have been involved more with county and state medical societies and been more politically involved, realizing that the field of surgery, as well as the entire medical profession, is going through significant changes currently and that all physicians need to be more politically savvy than before.

We have just finished building an energy-efficient passive solar house in town and would love to hear from any alumni who might pass through Colorado.

Richard H. Carmona, MD, MPH, 17th U.S. Surgeon General (2002-2006), is now professor of surgery in the UA Department of Surgery. Dr. Carmona has been affiliated with the department since 1986. He will help the department create a board of directors to assist with development and strategic efforts. Dr. Carmona also is distinguished professor of public health at the UA Mel and Enid Zuckerman College of Public Health, vice chairman of Tucson-based Canyon Ranch, and president of the non-profit Canyon Ranch Institute.
Awards & Recognition

U.S. News & World Report’s 18th annual guide to “America’s Best Hospitals.” This year UMC is ranked among the top 50 hospitals in the following medical specialties:
- Heart and Heart Surgery
- Cancer
- Geriatrics
- Respiratory Disorders

University Medical Center Ranks Among America’s Best Hospitals 2007

UMC is ranked among the nation’s premier hospitals in U.S. News & World Report’s 18th annual guide to “America’s Best Hospitals.” This year UMC is ranked among the top 50 hospitals in the following medical specialties:
- Heart and Heart Surgery
- Cancer
- Geriatrics
- Respiratory Disorders

Jack Copeland, MD, Section of Cardiovascular and Thoracic Surgery, has been appointed Visiting Professor and Faculty Member, School of Cardiovascular Science at the University of Verona Medical School, Verona, Italy.

Luis R. León, MD, Section of Vascular Surgery, was a nominated finalist for the 2007 Frank Brown Berry Prize in Federal Medicine (U.S. Medicine - The Voice of Federal Medicine. August 2007; Vol.43: No. 8). Dr. Leon also was awarded the International Society for Vascular Medicine - The Voice of Federal Medicine.


Presentations

“The effect of EVAR and serial surveillance contrast CT scans on long-term renal function,” 
Duong ST, Mills JL, Goshima KR, León LR, Ihnat DM, Taylor Z, Chavez L, Pike SL, 
Zimmerman H. Abstract Book. Forum, Western Vascular Society 22nd Annual Meeting and 14th 

Rainer Gruessner, “The Uremic Diabetic: LD kidney followed by PAK is preferred to a DD SPK – PRO.”


“High velocity penetrating wounds to the neck: lessons learned from the battlefields in Afghanistan and Iraq,” presenter – Hwang P, 

“Percutaneous stenting of the superficial femoral artery,” Ihnat DM, Arslan B, Taylor Z, León LR, 

International Virtual e-Hospital: The Balkans Project”; “Amazon Virtual Medical Team: 
Telemedicine in the jungle of Peru and Brazil.”


“The Journey of a Foreign-trained Physician to a U.S. Residency”; and “Cervical Cancer in Peru,” 


“From genes to man: The past, present and future of lymphology and the ISL,” Marlys H. Witte, 
Ceremonial Opening Lecture; “Heme/Lymph vasculogenesis, angiogenesis, angiotumorigenesis, 
and tumor angiogenesis: need for a terminology adjustment,” Marlys H. Witte, Michael Dellinger, 
Michael Bernas, Invited Lecturer, Session on Lymphangiogenesis; “Genetics for lymphologists,” 
and “The lymphatic system and cancer: Historical, biological and clinical perspectives.” 
Marlys H. Witte, Invited Lecture, Session on Oncolymphology and Sentinel Node. 21st 
International Congress of Lymphology, Shanghai, China, Sept 2007.