Shands Children’s Surgical Center Offers Quality Care with a Friendly Look

Striving to appeal to children and adolescents of all ages, the recently renovated Shands Children’s Surgical Center’s saltwater theme offers brilliant colors and a delightful setting for patients and their families.  

Shands Children’s Surgical Center at Ayers Medical Plaza in Gainesville is a four-operating room facility devoted to the care of children and adolescents. The UF pediatric-specific specialty surgeons, anesthesiologists and physicians offer a wide range of outpatient surgical procedures in the areas of general pediatric surgery, plastic and craniofacial surgery, orthopedics, otolaryngology, and dentistry, as well as medical specialties including pediatric gastroenterology and oncology.

Originally dedicated to pediatric surgical care in April 2008, the recent renovations of the Shands Children’s Surgical Center complete the vision of its medical director David Kays, MD.

Kays said it is a spectacular facility for children and young adults, where dedicated children’s surgeons and pediatric anesthesiologists deliver the highest levels of expert and safe care.

“Parents are understandably concerned when their child is undergoing surgery,” said Kays, an associate professor of pediatric surgery at the UF College of Medicine and surgeon-in-chief of Shands Children’s Hospital. “They want to know that their child is safe, that he or she will be OK. The Shands Children’s Surgical Center deals with quality and safety head-on by providing children’s anesthesiologists and children’s surgeons in a facility dedicated entirely to children, where everything from the medications to the decorations are child specific.”

A sea and sand color scheme is carried throughout the surgical center, which includes stained glass above the entry, a saltwater aquarium in the waiting room and an underwater mural in the recovery room.

For more surgical center information and referrals, call 352.273.8800.
Any surgeon can repair a broken rib, but not every surgeon can take that same rib and build you an ear. In today’s Hollywood-obsessed culture, it’s easy to forget the world of plastic surgery reaches far beyond nose jobs and facelifts. Reconstructive plastic surgery can put a woman back into a bikini after a battle with breast cancer or give a child with a cleft lip the ability to smile.

Of the 12.1 million plastic surgery procedures performed in 2008, 4.9 million were reconstructive surgeries, according to the American Society of Plastic Surgeons. Reconstructive surgery is performed to improve or correct abnormalities caused by trauma, injury, infection, tumors or disease. This can include everything from creating skin grafts for burn victims to removing cancerous tumors and reconstructing the area with flaps of tissue and blood vessels taken from other parts of the patient’s body.

“The biggest thrust of what we’re involved in is restoring form and function and trying to take that to the highest level possible,” said Matthew Steele, MD, an assistant professor of plastic and reconstructive surgery in the UF College of Medicine.

He said one of the reasons he was attracted to plastic surgery was the chance to be innovative and find new solutions to medical problems.

“It’s not the same cookbook kind of surgeries,” he said. “There’s not necessarily a right answer all the time.”

One of his cleft palate patients, a young girl, couldn’t smile because of her condition. Whenever she laughed or felt happy she couldn’t show that emotion on her face, Steele said. Her doctors weren’t able to use the nerves they normally would for a similar procedure, so they found a way to use the nerves associated with chewing instead.

The recovery was gradual, but she eventually learned to use her chewing muscles to smile and show emotion. Steele said the first time she passed a mirror in a store and realized she was smiling she ran around laughing and yelling to her mother.

“They came back and told everyone the story,” he said. “They were really happy.”

M. Brent Seagle, MD, chief of reconstructive and plastic surgery at UF, said helping children like this and helping people get their lives back, in a sense, are the most rewarding aspects of reconstructive surgery.

“It’s really rewarding when you get someone back to a place of normal function... when you get someone close to who they were before cancer or an accident,” he said.

Seagle said the public still harbors some misconceptions about plastic surgeons and what they do.

“There’s a good bit of misunderstanding,” Seagle said. “The cosmetic side is sensationalized on TV, in newspapers, all over the place.”

He says another large part of the misunderstanding is that people assume cosmetic surgery is always performed by plastic surgeons, and when they hear about botched surgeries, they don’t realize it wasn’t necessarily a plastic surgeon who performed the failed procedure.

To achieve board certification, plastic surgeons are required to attend a U.S. accredited medical school and are subjected to a rigorous examination process that assesses everything from their surgical skills to their ethics and advertising practices, according to the American Board of Plastic Surgery.

“Real plastic surgeons aren’t like ‘Dr. 90210,’” Steele said in reference to the popular reality show following an eccentric cosmetic surgeon in Beverly Hills.

The field is constantly changing and innovating to find new solutions and develop less-invasive procedures with shorter recovery times. In the future, Steele hopes to see more developments in stem cell research and genetic tissue engineering so plastic surgeons can use genetically engineered body parts rather than taking flaps from other parts of the body or using donor transplants, which the body can reject.

“When you get more experience you’re constantly making changes, and your work improves,” he said.

UF Plastic Surgery recently moved into a new office, that offers easy access and a comfortable setting. Learn more about this practice at: www.floridaplasticsurgery.ufl.edu
Advanced Laparoscopic Liver Resection

The UF Department of Surgery is expanding its minimally invasive procedures with advanced laparoscopic liver resections at Shands. UF surgeon Robin Kim, MD, an assistant professor, is performing laparoscopic major liver resections – defined as removing more than three of the liver’s eight segments.

“It’s not so much the amount of liver you take,” said Kim, “but a balance between too much and too little.” Kim added that what makes a laparoscopic liver resection advanced depends not only on the magnitude of the resection but also the surgeon’s ability to preserve liver tissue. Both require proficiency in hepatobiliary and laparoscopic surgery.

This is particularly relevant to a laparoscopic posterior liver resection, which is rarely performed because it requires access traditionally only achieved by open surgery.

“It is very awkward to operate when the liver is hanging down,” he said. “It is the most back part of the patient, so the access is difficult.”

These liver resections can be performed on both benign and malignant tumors. The liver is the largest solid organ in the body. In a normal liver, up to 70 percent of it can be removed because it regenerates. However, some patients with underlying disease can spare little.

The advantage of laparoscopic liver resection over the standard open surgery is patient recovery time. The procedure cuts hospital stays by one to two days, but the significant difference is in the patients’ ability to return to work or their normal routine. Kim said generally for open liver surgeries patients can return to work in six to eight weeks, but recovery time can drop to just four to six weeks for minimally invasive procedures.

He said one pitfall of all laparoscopic surgery is that the surgeon cannot rely on feel to detect small surface lesions not apparent on CT scans. In such cases, Kim performs a hybrid procedure in which a hand-sized incision, called a hand-port, is made allowing him to feel for such lesions. The routine use of laparoscopic ultrasound minimizes this need.

“We’ve always been distinguished in our ability to perform really complex, big operations,” said Kim about the UF program. Laparoscopic liver surgery advances this ability and brings more options to patients in Florida and beyond.

Hospital’s New Tower Opens this November

The Shands Cancer Hospital at the University of Florida and the Shands Critical Care Center is a $388 million, 500,000-square-foot facility housing 192 private patient beds for a variety of inpatients, including those receiving oncology services, and a variety of outpatient and medical services, including emergency medicine and trauma. UF surgeons will provide the latest in care for many patients in this new facility.

Located within the new tower, the Shands Level 1 Trauma Center features four trauma rooms and two resuscitation rooms. Each trauma room has two bays, offering a radiology and surgery area. The building adds an additional 12 operating rooms, designed to evolve with anticipated surgical technology over the next 30 years.

Learn more at shands.org.
Chairman’s Message

Dear Friends:

I am honored and humbled to become the fourth chairman of the University of Florida department of surgery. All of us in the department owe much to those who created the rich tradition of excellence in clinical care, research and education.

With the beginning of a new era comes opportunity for assessment and strategic planning for the department. Obviously, health care is being closely scrutinized nationally, and we must be cognizant of potential changes so that our strategic vision incorporates upcoming changes in health-care delivery and reimbursement systems. Importantly, many recent changes in education and combination therapies for patients mandate we deliver surgical care in the context of a multidisciplinary team approach. This represents a wonderful opportunity for our collegial, academic health-care system at UF and Shands. Our department is eager to provide integrated care with colleagues within the department, College of Medicine and Shands. We have multiple multidisciplinary examples, including our breast cancer program, gastrointestinal oncology program, and our burgeoning aortic treatment center which combines the talents of vascular and cardiovascular surgeons.

Change will come not only in how we deliver surgical care, but also in where we deliver care, since our cancer hospital tower opens this November. This new facility will be an absolutely fantastic patient care venue, and a major site for surgical care since it will house our trauma program and general surgery, including our oncology and gastrointestinal surgical programs. We will use this state-of-the-art facility to offer high-quality surgical care and for the development of new, innovative care.

Not only will we look forward to changes in clinical care, but we also anticipate growth in our basic science and clinical research programs. We are poised to translate our basic science findings into clinical care, and as we strategically evaluate our research programs we will seek every opportunity to relate our findings to patient care.

I look forward to working with our faculty, residents and staff to build on our past successes so that we can create a department that provides high-quality, innovative surgical care via an integrated health-care team.

Best wishes,
Kevin E. Behrns, MD, Chairman

A Legacy of Humanism

Selected by his peers — in honor of a fellow surgical resident adored by all — Darrell L. Hunt, MD, PhD, is the first recipient of the Hugh A. Walters, MD, Humanitarian Award.

The award was created to honor the memory of Walters, a surgical resident who died unexpectedly in 2008. Presented on June 10 at the conclusion of a special grand rounds lecture on humanism, guest lecturer Robert T. Watson, MD, executive associate dean for administrative affairs at Florida State University, who knew Walters throughout his medical training, said “Hugh had wisdom, justice, courage and moderation. He lived the values that reflect true humanism. He is the role model for all of us.”

George A. Sarosi, MD, director of UF’s general surgery residency program, announced Hunt as the winner, saying the award is for excellence and dedication to patient care and teamwork, and for humility, and that he could not think of anyone else who deserved it more.

Upon accepting the award, Hunt said, “This is a tremendous honor named after an extraordinary man — I hope my actions and work will live up to this honor.”

Each year forward, through the Hugh A. Walters, MD, Humanitarian Fund, the UF department of surgery will host a lecture and honor a current surgical resident with the humanitarian award. The fund supports humanitarian efforts and awareness in surgical education.

Regarding his interest in medicine, Hunt says he feels his purpose is to help people maximize their potential and that this cannot be done in the setting of disease.

“If you know you have cancer, it’s going to interfere with what you are able to do,” said Hunt, who plans to be a surgical oncologist. “So for me, fighting against disease is my way of helping others maximize their human potential.”
Corporate Grant Enhances Burn Education at UF College of Medicine

Continuing to help better prepare students for their burn rotations, ConvaTec recently renewed a grant to the UF department of surgery’s burn education program.

The $10,000 grant enables medical students, surgical residents and fellows to take the American Burn Association’s online advanced burn life support training during their first week on the burn service rotation. It also provides trainees with a pocket burn care manual for reference and a comprehensive book called Total Burn Care.

David Mozingo, MD, a professor of surgery and director of the Shands Burn Center at UF, said students coming onto the rotation previously did not have the opportunity to receive these types of educational resources.

“By taking the advance burn life support course they can get a good idea about how to manage a patient within the first 24 hours — something which they have very little familiarity prior to the rotation,” said Mozingo.

Medical student Sugong Chen, who completed the advance burn life support course, offers an example of how this training helps students.

“A burn patient came in to the emergency room one night while I was on trauma call, and I felt more than prepared to manage that patient from the beginning to the end having taken this course,” said Chen.

This is the second time ConvaTec has contributed to the UF burn education program. The New Jersey-based company’s mission is to create innovative health-care solutions for better patient outcomes.

UF Surgical Resident Earns Research Incentive Award

Alex Cuenca, MD, a fourth-year surgical resident, recently received a Research Incentive Award from the UF Medical Guild.

Cuenca, who is taking three years out from his clinical training to earn a basic science research doctorate degree through UF’s Interdisciplinary Program in Biomedical Sciences, or IDP, is studying innate immunity and neonatal sepsis.

He was one of 10 second-year IDP students to win the UF Medical Guild’s Research Incentive Award this past spring. Cuenca’s research project, “The role of interferon-gamma inducible protein 10 in survival to neonatal sepsis,” was selected as a winner by a student peer-review committee.

Cuenca, who is planning to specialize in pediatric surgery, said he hopes his research efforts will lead to the discovery of a target for new or novel therapeutics to prevent neonatal sepsis. He currently works in UF’s Laboratory of Inflammation Biology and Surgical Science under the leadership of his faculty mentor, Lyle L. Moldawer, PhD, a professor and vice chairman of research in the UF department of surgery.

Training for a Real-life Trauma Case

UF trauma medical director, Lawrence Lottenberg, MD, an associate professor of surgery, helps fourth-year medical student Robert Weir find the correct location to insert a chest tube on the department of surgery’s new simulator, TraumaMan. Designed by SimuLab Corp., the TraumaMan System, which consists of synthetic human tissue, enables students to practice a wide variety of advanced surgical procedures. TraumaMan was a gift from Larry and Christine Smith. Lottenberg said thanks to the gift UF residents and medical students now have the ability to practice critical life-saving skills on the simulator any time of the day.

UF College of Medicine Insider

“ADDRESSING THE NEED FOR MORE SURGEONS”

By: Kevin Behrnns, MD, and Peter Nelson, MD

Learn more about our department's initiatives and goals to address this need: www.surgery.ufl.edu
Research Briefs

Stem Cell Marker Possible ‘Root’ of Colon Cancer

To truly kill colon cancer and eliminate the risk of recurrence, it is important to kill the “root” of the disease, according to a UF College of Medicine surgeon.

“It’s like a dandelion, if you don’t kill the root it just keeps coming back,” said Emina Huang, MD, a UF colorectal surgeon, who added that colon and rectal cancers have high recurrence and spread rates, especially if the disease is not found early.

Her findings, featured on the April 15 cover of Cancer Research, identify a biomarker for colon cancer stem cells that she believes will help researchers further evaluate the cancers’ origins and progression. The discovery sheds light on the cancer stem cell theory, an idea that has arisen because cancer cells and stem cells share many qualities, including the ability of cancer stem cells to demonstrate self-renewal.

The research determined a protein called aldehyde dehydrogenase 1, or ALDH1, can be used to identify, isolate and track these ultra-resilient cells throughout the development of malignant colon or rectum disease. Previously used markers cannot as precisely track colon cancer stem cells.

“Without a better handle on what cells might be contributing to cancer metastases and recurrence, we won’t have any targets to go after,” said Huang, an associate professor and a member of UF’s Program in Stem Cell Biology and Regenerative Medicine. “This gives us a potential target.”

In addition to the potential advances in therapeutic strategies, Huang said having a more direct target to explore will benefit progress in the areas of diagnostics and prevention.

In collaboration with Bruce Boman, MD, PhD, a professor of medical oncology at Thomas Jefferson University in Philadelphia, Huang chose to evaluate ALDH1 because of its known association with breast, brain and other cancers. In addition to being a strong marker for malignant colon stem cells, the researchers believe ALDH1 may be a marker for benign colonic stem cells. Whether these two types of colonic stem cells are one of a kind still needs to be determined.

Researchers implanted human colon tissue cells into mice and analyzed the resulting growth. Although normal cell tissue was evaluated, it never replicated in the mice — only the tissue that was malignant grew. Comparing ALDH1 patterns with that of the previously used markers, the researchers found ALDH1’s presence was much more targeted, suggesting a way to more definitively identify colon cancer stem cells in the original tissues.

Breast MRI — Lymph Node Size not Signal of Spread

Physicians treating breast cancer first look to lymph nodes in a patient’s armpit to see whether cancer is spreading elsewhere in the body — but they may not be evaluating the nodes in the most effective way.

Initial research suggested that enlargement and abnormalities of axillary sentinel lymph nodes — located in the armpit area near the breast — were predictive of cancer. But a UF Shands Cancer Center researcher says it’s not the size of the node or enhancement, but the loss of a key part of a normal node’s structure called the fatty hilum that more accurately signals the spread of disease. The findings are available online in the Journal of Magnetic Resonance Imaging.

In addition to changing ideas about what doctors should look for while evaluating lymph nodes, the finding reinforces the value of using MRI prior to surgery.

“We found that the loss of fatty hilum in an axillary lymph node on MRI correlated with finding the spread of breast cancer in axillary nodes at the time of surgery,” said Stephen Grobmyer, MD, an assistant professor of surgical oncology, who noted that not all nodes without fatty hilum necessarily had cancer.

The UF study retrospectively examined 56 female patients ranging in age from 30 to 82. All women had a sentinel lymph node biopsy. Fifteen women had cancer in the nodes that required complete removal. Four of eight patients in whom a loss of fatty hilum was seen in an axillary node on MRI were found to have cancerous lymph nodes at the time of their breast surgery. By comparison, only 11 out of 48 patients, or 23 percent, with all fatty hilum in place had cancer.

Grobmyer said these findings provide surgeons with another tool to help personalize medicine and evaluate factors that could indicate whether cancer has spread prior to surgery.

“I think this is another step to understanding how we can use MRI to improve care of breast cancer patients,” said Grobmyer, medical director of the UF Comprehensive Breast Center. “We are just suggesting that there may be information that people have not yet paid attention to that may impact our understanding of the staging of a patient’s disease. With this technology, if you look and see there is a node or several nodes with no fatty hilum, one would be very suspicious that there might be metastatic disease present. Instead of doing an invasive sentinel node biopsy, one could do a less invasive image-guided biopsy to obtain important staging information.”

Visit www.surgery.ufl.edu/news.asp for the complete articles and more news about other research initiatives.
Pediatric Surgeon Honored with Lifetime Achievement Award

James L. Talbert, MD, an emeritus professor in the division of pediatric surgery, was awarded the UF College of Medicine’s Lifetime Achievement Award this spring as part of the college’s 2009 “Celebration of Research.”

Talbert became UF’s first pediatric surgeon when he joined the College of Medicine in 1967 as founding chief of the division of pediatric surgery, a position he held for more than 30 years. During his tenure at UF, Talbert developed innovative surgical techniques for the repair of congenital airway lesions and improved systems of care for injured children and pediatric cancer patients.

Although retired, Talbert continues to mentor and encourage faculty and students.

Cendan Named Assistant Dean for Simulation and Medical Education

Juan Cendan, MD, was recently appointed assistant dean for simulation and medical education. Cendan has been a member of the UF College of Medicine since 2001 as an associate professor in the department of surgery.

He also serves as the clerkship director for the department of surgery and the medical director for the Harrell Professional Development and Assessment Center, a facility that offers patient simulation for medical students to practice.

In addition to his roles at UF, Cendan and two faculty members in the department of computer and information science engineering have received two National Institutes of Health grants. One grant is for a surgical procedural simulation and the other is for development of virtual patients, which will give medical students the opportunity to examine patients with conditions that human subjects can’t feign.

This promotion will bring together his work as an educator and his interest in simulation for medical learning.

Surgical Researcher Receives National Honor

Lyle L. Moldawer, PhD, a professor and vice chairman of research at the UF department of surgery, recently was honored with the Shock Society Scientific Achievement Award.

Bestowed during the society’s annual conference, held this June in San Antonio, the award is presented to an outstanding scientist with lifetime contributions to the study of shock.

Moldawer, who joined UF in 1993, established the Laboratory of Inflammation Biology and Surgical Science, which seeks to translate current developments in molecular biology, gene therapy and functional genomics into the treatment of critically ill patients.

This past spring he was awarded a UF Research Foundation Professorship, which is bestowed each year to just 33 researchers campuswide.

Vascular Surgeon Awarded International Visiting Professorship

Vascular surgeon Peter R. Nelson, MD, MS, spoke this spring in Australia as the Association for Academic Surgery’s international visiting professor. The professorship award is part of a leadership exchange program between the AAS and the Younger Fellows Committee of the Royal Australasian College of Surgeons.

Nelson, an assistant professor, gave three talks while in Australia and moderated a research poster competition. His talks focused on issues confronting the field of surgery, research program development, and the important role of research in training future surgeons.

Nelson’s clinical interests include endovascular abdominal aortic aneurysm repair, percutaneous peripheral intervention and minimally invasive treatment for venous disease. His research studying the relationship of a procedure’s success or failure to a patient’s innate response to lower extremity revascularization is funded by the National Institutes of Health.

Nelson’s education interest is in understanding the issues surrounding medical students’ decision whether to go into the field of surgery. He is creating a national video project to provide insight into the field and enhance recruitment of future surgeons.