About 4 percent of babies in the United States are born with some form of craniofacial anomaly, a group of conditions that occur when bone, skin or muscle that makes up the face, jaw, top of the head or roof of the mouth does not form properly during development.

Proper care of children born with craniofacial anomalies is extensive and involves the work of many different specialists. At the UF Health Craniofacial Center, all these specialists come together in the same location to provide a “one-stop-shop” medical experience for craniofacial patients and their families.

Specialists working at the center include plastic, craniofacial and oral surgeons, as well as dentists, anesthesiologists, speech language therapists, otolaryngologists, pediatricians, child psychiatrists, orthodontists, audiologists, social workers and geneticists.

Ashley Lentz, MD, a UF plastic surgeon and an assistant professor in the division of plastic and reconstructive surgery, specializes in caring for pediatric patients. She has worked with craniofacial patients since her surgical residency days at UF, and now works at the UF Health Craniofacial Center every Thursday. She also serves on medical mission teams treating craniofacial patients in Honduras twice a year. Lentz focuses on craniofacial repairs involving soft tissue.

“It’s really an amazing group of people, all from different subspecialties, that gather in the same location,” she said of the center. “The nice part is that we have a team meeting after every clinic, immediately following, so everything is still fresh in our minds and we develop a plan right then and there.”

Conditions that Lentz and her colleagues at the UF Health Craniofacial Center repair include cleft lips and palates, Treacher Collins syndrome, Apert syndrome, Carpenter syndrome, craniosynostosis, Crouzon syndrome, Goldenhar syndrome, hemifacial microsomia, oculo-auriculo-vertebral spectrum, Pfeiffer syndrome, positional plagiocephaly and Saethre-Chotzen syndrome. Treatment includes the initial operations to fix the major abnormalities inherent in each condition, plus later repairs to improve the appearance of the nose, mouth area or other features.

Christopher Brooks, MD, a courtesy assistant professor of plastic and reconstructive surgery at UF, is a craniofacial surgeon who works in a private practice in South Florida. He travels to Gainesville for three days each month to meet with patients in the clinic and to perform complex surgical repairs of the skull and facial bones. Brooks’ expertise allows UF to offer surgical options that other surgeons and doctors at UF cannot provide.

Brooks follows in the footsteps of Brent Seagle, MD, former co-director of the UF Health Craniofacial Center, as the center’s craniofacial surgeon. Seagle also is a former chief of UF’s division of plastic and reconstructive surgery.

Brooks noted that Lentz and David Pincus, MD, PhD, UF’s chief of pediatric neurosurgery and a member of the craniofacial team, have been instrumental in maintaining the legacy of dedication to patients and high-quality care that Seagle left.

“I think that this group of people that we have working together, they’re all extremely bright and they’re all extremely committed,” Brooks said.

He also said he enjoys helping to train UF plastic surgery residents and appreciates the opportunity to treat patients with a wider variety of craniofacial anomalies than he sees with his south Florida team.

Patients at the UF Health Craniofacial Center also vary widely in age. Most of the center’s patients are children and teens, but some are adults. That’s because many
Hybrid OR to Increase Flexibility for Surgeons, Decrease X-Ray Exposure

UF Health is in the middle of an exciting project to build a new hybrid operating room for use by the department of surgery’s division of vascular surgery and endovascular therapy, as well as the division of thoracic and cardiovascular surgery.

This state-of-the-art room will be the second hybrid OR at UF Health used for vascular and cardiovascular procedures. As minimally invasive surgical techniques have developed, hybrid ORs have become increasingly important in several fields of surgery, and each of these fields requires highly specialized equipment.

“Hybrid endovascular operating rooms allow for combined open and endovascular techniques to manage cardiovascular conditions traditionally managed using large incisions. The design and technological capability of these rooms really improves our ability to do minimally invasive operations quickly and efficiently,” said Adam Beck, MD, a UF vascular surgeon and an assistant professor in the division of vascular surgery and endovascular therapy. Because of his experience with complex endovascular therapy, Beck is extensively involved in planning the new room.

A hybrid operating room used for vascular and cardiovascular procedures features X-ray imaging equipment called a fluoroscopy machine. These machines give surgeons detailed views of a patient’s vascular anatomy during minimally invasive procedures and create real-time “video” of what’s happening inside the patient without the need for large incisions. For the new hybrid OR, Beck and his colleagues have selected a fluoroscopy machine that “has the ability to do three-dimensional reconstructions of the aorta intra-operatively,” Beck said.

He noted that this functionality reduces a patient’s exposure to dye and contrast materials required for these procedures, and also decreases the amount of time a patient is exposed to the X-rays emitted by the fluoroscopy machine.

Beck also explained that some of the lengthy operations UF surgeons perform, such as endovascular aortic repairs or trans-aortic valve replacement, will take less time using the new machine because of the advancements in imaging and room design.

All these advantages add up to increased flexibility for patients and surgeons, and a surgical experience that’s tough to beat.

UF&Shands is now University of Florida Health

In May, UF&Shands announced that it had changed its name to University of Florida Health (UF Health). The new “umbrella” name encompasses all UF Health Science Center hospitals, physician practices, colleges, centers, institutes, programs and services across northeast and north-central Florida. The new name reflects our health system’s strong ties to UF, a key part of what differentiates our academic health center — with a focus on excellence in research, teaching and patient care — from our competitors.

The move to UF Health grew out of extensive research conducted over the past year and represents the next stage in our evolution as one of the nation’s most successful academic health centers. The rebranding effort will help position us more powerfully among peers and competitors as a respected regional and national health care resource, said David S. Guzick, MD, PhD, UF’s senior vice president for health affairs and president of UF Health.

Broad name recognition will help attract and retain the most talented physicians, nurses, faculty, staff and students as well as secure research funding. That translates to better care, better health and better outcomes for patients.

“While our overall name is changing, our focus remains the same: to provide high-quality, patient-centered care that leads to outstanding outcomes,” Guzick said. “We will continue to build on the teamwork and collaboration that is the foundation for our strength and success.”

For more information, visit forwardtogether.ufhealth.org
Obesity among Americans has markedly increased in the last few decades, regardless of gender, age, ethnicity or educational level. It has become a major public health challenge and national health threat. At least 300 million people are thought to be obese worldwide and the World Health Organization projects that by 2015, 2.3 billion adults will be overweight and more than 700 million will be obese. This obesity epidemic is often times attributed to excess energy intake and decreased energy expenditure experienced in Westernized countries. There is no single solution to prevent or treat obesity that will be inclusive of everyone. Therefore, treatment of obesity includes a combination of diet, exercise, behavior modification, medication and weight loss surgeries.

As morbid obesity, defined as a having a body mass index of 40 or greater, continues to increase at remarkable rates, the number of patients pursuing weight loss surgery increases proportionally. The fact that most weight loss surgeries are performed through minimally invasive approaches also increases their popularity. Hence, bariatric surgery has evolved over the last four decades and has been shown to be effective in reducing health problems that go along with obesity, improving patients’ quality of life and their overall mortality.

New Jersey Governor Chris Christie recently acknowledged having undergone weight loss surgery in February, which has put bariatric surgery in the national spotlight lately. Though such surgeries are growing in popularity, many Americans — including some who would benefit from such procedures — are uninformed about the proven advantages of bariatric surgery and about improvements in the field that have made bariatric surgery an even more attractive option.

The National Institutes of Health, along with other reputable societies and multiple research studies, have concluded that the benefits of bariatric surgery outweigh the risks. Research shows that, for many people, weight loss surgery improves or resolves health problems related to their obesity, such as urinary incontinence, type 2 diabetes, sleep apnea, asthma, hypertension, depression and hyperlipidemia, or excess cholesterol in the blood. Losing significant amounts of weight without surgery also may improve these conditions.

Weight loss surgery is not for everyone who is obese. It should be seen as part of a weight loss solution only for people who have tried repeatedly over extended periods of time to lose weight through exercise and a healthful diet, but have not been able to keep the weight off. However, bariatric surgery is underused in the United States.

More and more weight loss surgeries are performed through minimally invasive methods, which require a few smaller incisions and the use of tools and cameras attached to skinny tubes called an endoscope or laparoscope, rather than large incisions. The increase in performance of these minimally invasive procedures has led to significant improvements in their quality, efficacy and surgical outcomes. This movement led to the creation of Bariatric Centers of Excellence, which are accredited by the American Society of Metabolic and Bariatric Surgery or the American College of Surgeons. The accreditation system for these centers is driven by patient safety and sets forth several criteria for accreditation.

For people who want to have weight loss surgery, getting care at a Bariatric Center of Excellence that is able to provide multidisciplinary care before, during and after surgery is critical. More importantly, these centers need to monitor the credentialing of bariatric surgeons and hospitals based upon demonstration of adequate training, equipment and outcomes assessment.

Dr. Ben-David is an assistant professor and director of bariatric surgery at UF Health.

Craniofacial Patients continued from page 1

physicians don’t know how to evaluate or treat craniofacial abnormalities and their complications.

“The youngest patient I see is in utero, and then I saw a 36-year-old last week,” Lentz said in May.

Whatever their age, Lentz is glad to help patients attain something crucial to a happy, healthy life.

“You’re making such a difference in these kids’ lives and the way they can communicate with the world,” she said.

“We, as human beings, read facial expressions and look at people’s eyes and their faces to figure out what they’re thinking and what they want to do. You can imagine if someone has a deformity, how difficult it is to communicate. We’re giving them a chance to really communicate when we fix their speech, of course, but also improving the way that they can interact with everyone else in society.”

Kfir Ben-David, MD
Giving Back

Normally, my focus in this column is on the inner workings of the department of surgery and all we do to provide high-quality patient care, perform groundbreaking research or train the next generation of physicians and surgeons. That is appropriate, because pursuing these activities with excellence is our mission. However, the faculty and staff who surround us daily are unique individuals making contributions to society that extend well beyond their professional lives. Herein, we take a glimpse at some of the activities our faculty and staff have graciously donated their time to support.

Over the last several years, our faculty and surgical trainees have used annual leave to provide care to needy patients across the globe. Our vascular surgeons joined with U.S. military providers to deliver care to critically injured service men and women participating in Operation Enduring Freedom in Afghanistan. These surgeons, who spent two weeks in Germany at Landstuhl Regional Medical Center where the military personnel are stabilized, were inspired by the commitment of the service members and universally expressed a desire to return to Landstuhl. In addition, several members of our division of plastic and reconstructive surgery have traveled at least annually to Honduras and Guatemala to provide surgical service to children and adults with cleft lip and palate disorders. Often, our trainees have accompanied our faculty, and through the generations have established the tradition of continued service to these patients in Central America.

Impressively, our busy staff members who conscientiously devote substantial effort to the department have made time to volunteer locally and regionally to a number of worthy causes. For example, our staff are active in the Gainesville Junior League and Children’s Miracle Network. Countless number of faculty and staff also participate in community activities and relief efforts and give freely of their time to support the community school system.

We have also established the tradition that attendees at our holiday gathering bring a gift for those who are hospitalized. Organizations like our local Ronald McDonald House have helped us identify these patients and families and support these efforts.

Thank you to our faculty, residents and staff who freely donate their time and effort — we appreciate your generosity!

Kevin E. Behrns, MD
Chairman

CDH Program Holds Parade, Reunion

UF’s division of pediatric surgery hosted two events this spring focused on congenital diaphragmatic hernia, a large hole in the diaphragm that allows abdominal organs to migrate into the chest during development. This results in lungs that are critically small at birth. The “Parade of Cherubs” campus walk on April 19, the International Day of Congenital Diaphragmatic Hernia Awareness, drew about 60 people from Florida and nearby states to raise awareness of CDH. It started in the atrium at UF Health Shands Hospital, then traveled in a loop through portions of the UF campus and back to the hospital.

An estimated 120 people attended a CDH program reunion the next day, which took place at Tioga Town Center in nearby Newberry, Florida.

David Kays, MD, chief of pediatric surgery at UF and an associate professor of surgery, spoke at the reunion about the team of health care providers that work with him to treat CDH patients, the special “gentle ventilation” techniques they use to avoid additional lung damage for patients, and the program’s success in treating CDH patients. The group also observed a moment of silence in honor of CDH patients who did not survive.

More than 275 children have been treated for CDH at UF Health Shands Children’s Hospital, and the survival rate for these patients, including those born with additional abnormalities that often lead to death, is 79 percent.

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Now that Chelsey Hoyle is rid of her scarred, dysfunctional liver, the 1-year-old can really get down to the business of being a baby.

Chelsey received part of an adult liver during a transplant operation in early November, less than a month before her first birthday. The operation was University of Florida Health’s first pediatric liver transplant since the program’s seven-month hiatus and its reactivation in April 2012. The program is one of only two in Florida.

UF Health voluntarily suspended its liver and pancreas transplant programs in August 2011 after several transplant surgeons moved to more urban areas. The pancreas transplant program also was reactivated in 2012.

UF surgeons have performed several pediatric liver transplants since the program became active again, including Chelsey’s. Her donated partial liver came at just the right time.

“She was within days of dying,” said Jeffrey Fair, MD, chief of transplantation surgery in the department of surgery. “She had complete cirrhosis. Her liver was just a little gnarly knot and nothing like a liver at all.”

Chelsey developed cirrhosis, or scarring, of her liver due to biliary atresia. The condition occurs when liver ducts that transport bile and other fluids to the gallbladder are malformed and blocked. The resulting backlog causes inflammation and permanent liver damage and hardening. Children with the disease often become malnourished and develop swollen bellies. They all require a liver transplant in their lifetimes.

To keep Chelsey going while she awaited transplant, UF Health’s pediatric intensive care unit team performed a procedure known as plasma exchange, which involves withdrawing blood from the body, replenishing its clotting properties, filtering out unwanted substances — as the liver normally does — and returning the blood to the body.

When it came time for surgery, the transplant team accommodated the donated liver portion’s adult size by leaving her abdomen partly open and covering the opening with a patch, “to give the liver time to shrink a little bit,” Fair said.

After a while, the team closed the opening in her abdomen entirely. Chelsey has been back home in Zephyrhills for several months with her mother, Kaylee Alford; her father, Nick Hoyle; and her grandparents, Donna Alford and Terry Alford.

“She is a new baby,” Kaylee Alford said. “She was happy before, but now she’s no longer hurting, so she’s just super excited and laughs for no reason. She eats a lot more and she’s doing great. I am more than thankful for how great she’s doing.”

Le Jones, RN, CCTC, program manager of UF Health’s adult and pediatric liver transplant programs, said two months after the surgery, that Chelsey was “rapidly acquiring all the developmental stages that a child that age would,” after being delayed because of her illness.

Fair emphasized the strength of the pediatric liver transplant program, with its new team of committed and reputable surgeons. He said the program also has enhanced collaborations with UF Health’s medical and anesthesia teams. The College of Medicine’s department of pediatrics, led by Scott Rivkees, MD; and the department’s division of gastroenterology, hepatology and nutrition, led by Christopher Jolley, MD, also are integral to the care and recovery of pediatric liver transplant patients at UF Health.

Jackson Memorial Hospital in Miami has Florida’s only other pediatric liver transplant program. The next closest such program is in Atlanta.

Pediatric Liver Transplant Patient Now Thriving

The parade for CDH patients here at UF followed by the CDH reunion the next day was a huge success, with over 40 families coming from around the region to share their children and connection to our program,” Kays said. “It was an emotional two days with our CDH survivors and their outstanding families.”

Joy Perkins, RN, RRT, UF’s CDH program coordinator, commented after the events about the future of CDH care at UF Health.

“The CDH program at UF Health has the potential to expand greatly,” she said. “We plan to continue gathering data and presenting papers on that data. We are also hoping to continue to increase awareness about what CDH is, how it can be treated and that a diagnosis of CDH is not an automatic death sentence.”
UF researchers co-authored two journal articles published earlier this year that may reform scientists’ use of a medical research staple: the mouse model.

One article describes a series of studies by researchers from 16 different institutions that examined genomic responses to serious health threats in mice and in people. What they found sheds new light on the decades-old method of using mice to investigate health conditions that affect people, and possible treatments for those conditions. The journal *Proceedings of the National Academy of Sciences* published the study electronically in February.

“The data suggest that if you look at the gene level between a mouse and a man in response to trauma or burns, that the genomic response is really very dissimilar,” said Lyle Moldawer, PhD, a co-author of the article and a UF professor of surgery. “They looked at the individual genes that changed and [how they changed] and they found that on that sort of analysis, it was really quite poor.”

Many human diseases involve inflammation, which is a cornerstone of conditions such as sepsis, a type of systemic infection that can shut down organs. Each year, sepsis and related conditions keep hundreds of thousands of trauma and acute care patients in the U.S. from recovering fully. The authors said their findings help explain why nearly 150 clinical trials of potential drugs meant to tame sepsis and other inflammation-based problems in people all failed, despite promising results in preliminary tests using mice.

“If you’re looking at specific therapies that target individual genes, then the mouse isn’t a good model for that,” Moldawer said.

However, mice can still be useful in studying inflammation and its causes and effects. In fact, studies of mice have proven notably important in the development of drugs for rheumatoid arthritis, inflammatory bowel disease and psoriasis, as well as for autoimmune diseases such as Type 1 diabetes and lupus. Moldawer said trauma and burns cause inflammation and predictable immune system responses in both mice and people, though the species achieve these results through expression of different genes.

A separate article published online in February by the journal *Critical Care Medicine* showed that in studies of trauma, the severity of a mouse’s injury affects its systemic response.

Based on that finding, researchers have developed a new model designed to better mimic human responses to trauma and inflammation at the genomic level.

Most mice used for studying inflammation and sepsis have just one severe injury, said Philip Efron, MD, a co-author of the article and an assistant professor of surgery and anesthesiology at UF. He called these mice the “old model,” and cited the recently published *Proceedings of the National Academy of Sciences*.

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**UF Department of Surgery Holds Research Day 2013**

The department of surgery held its ninth annual Research Day in April. Jeffrey B. Matthews, MD, the Dallas B. Phemister Professor of Surgery and chair of the department of surgery at the University of Chicago School of Medicine, was the Lester R. Dragstedt Visiting Professor for this event. Matthews spoke about the long-standing history between the two institutions and the journey Dragstedt and Woodward made from the University of Chicago to work at the University of Florida.

The day also highlighted 41 research projects by department personnel. Shawn Larson, MB, ChB, an assistant professor in the division of pediatric surgery; and Jose Trevino, MD, an assistant professor in the division of general surgery; each won a research career development award for his research. The awards, supported by the department, are worth $25,000 each. Sugong Chen, MD, Luke Gutwein, MD, and Makesha Miggins, MD, all surgical residents, each won $500 awards for their abstracts. Chen won the award for “Best Basic Science Abstract Presentation,” while Gutwein and Miggins both won awards for “Best Clinical/Translational Science Abstract Presentation.” Because of the high quality of the clinical/translational science presentations this year, the judges gave awards to two presenters for the first time.

Visit surgery.med.ufl.edu/about-us/news-archive/ for news about other research initiatives.
Humanism Society Inducts Surgical Resident

UF surgical resident Makesha Miggins, MD, was one of six College of Medicine residents inducted into the Chapman Chapter of the Gold Humanism Honor Society this year. The induction ceremony took place in April. According to the chapter’s website, the chapter “serves to emphasize the importance of humanism and professionalism throughout the continuum of physician training at our institution.”

UF Health Goes Mobile

Need to make a doctor’s appointment on the go? The UFHealth.org website has been optimized to work on all smartphones. From the home screen, visitors can quickly find a location or provider, look up a health topic or research study and make appointments. About 20 percent of visitors access the UFHealth.org website from a mobile device, so now the entire website — all 20,000 pages — is available on the mobile site.

UF Colorectal Surgeon Joins NIH Study Section

Emina Huang, MD, a UF associate professor of surgery, has accepted an invitation from the National Institutes of Health to serve as a regular member of the Center for Scientific Review’s Tumor Microenvironment Study Section. This section evaluates grant applications for studies focused on tumors’ interactions with their surrounding environments within the body. Huang will serve a four-year term that starts July 1 of this year.

Hughes Appointed to Journal Editorial Board

Steven Hughes, MD, chief of general surgery and an associate professor in the UF College of Medicine’s department of surgery, was appointed to the editorial board of the Journal of Gastrointestinal Surgery. The publication is the official journal of the Society for Surgery of the Alimentary Tract.

Mouse Model continued from page 6

National Academy of Sciences article describing the lack of genomic similarity between their responses to trauma and humans.’

“The old model used to do a pretty good job in the very early acute phase,” he explained, referring to the time immediately after a traumatic injury takes place.

What that model doesn’t mimic well are the later phases, when humans struggle to recover. With advances in trauma care, most patients survive the first phase to face great systemic challenges later.

Efron said he hopes the team’s new mouse model will spread, helping investigators improve their work involving mice.

Feezor Volunteers Abroad to Help Military Veterans

Robert Feezor, MD, an assistant professor of surgery in UF’s division of vascular surgery and endovascular therapy, returned in February from a two-week rotation at Landstuhl Regional Medical Center in Germany. While there, he helped care for U.S. military members who needed urgent care after being critically injured in Afghanistan.

“This was my first experience volunteering at LRMC,” said Feezor. “I have no military background, but I was drawn to this opportunity by the desire to say ‘Thank you’ in some way to the women and men who give me the right to exercise all the liberties I have at home.”

Feezor explained that the LRMC is a stopping point where soldiers can be stabilized before returning to military hospitals in the United States. It is the largest American hospital outside the United States and an American College of Surgeons Level 1 Trauma Center. Since 2001, the medical staff at LRMC has treated more than 64,000 patients from Iraqi Freedom and Operation Enduring Freedom.

“Surgeons at LRMC were more than capable of handling everything surgical, so I mostly provided moral support and back-up for them. I was honored to be there and was amazed at the respect I was given which, in my opinion, should have been reversed. Those men and women — the patients, the doctors, and all the staff at LRMC — were spectacular. I will definitely volunteer again in the future, and would urge all surgeons to do the same.”
Inside this issue:
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