Nicte Mack can still remember one of the first conversations she had with Dr. Steve Lerman, the Judith and Robert Winston Chair in Pediatric Urology, director of the Clark-Morrison Children’s Urological Center at UCLA and chief of UCLA Urology’s Division of Pediatric Urology.

Her daughter Lourdes Mack had been born with meningomyelocele, a type of spina bifida that would leave her paralyzed from the waist down, with significant bladder and bowel dysfunction. Now, as Nicte was about to be discharged from the hospital with her daughter, Dr. Lerman was walking her through the catheterization process.

“He told me I could practice it with the nurse, and then I was going to have to do it at home,” Nicte recalls. “I said ‘OK, for how many days?’ He said Lourdes would have to be catheterized every day, all her life. I thought I had read everything about spina bifida, but somehow I had missed that part.”

Although she admits to feeling overwhelmed by that initial realization, Nicte Mack ultimately became her daughter’s greatest champion, working with Dr. Lerman and other UCLA specialists. And Lourdes Mack refused to allow her disability to get in her way. Whenever Nicte asked her if she wanted to sign up for an activity — wheelchair

continued on page 2
basketball, rugby, skateboarding, summer camp — the answer was “yes.” In April, just after Lourdes turned 18, she was selected as one of the dancers — bopping in her wheelchair, from home — in the Disney Family Sing-Along: Part II, televised nationally on ABC.

Lourdes’ active lifestyle was facilitated by the care she received throughout her childhood at the Clark-Morrison center — most recently in the form of a complex reconstructive surgery Dr. Lerman performed to create a bladder sling that addressed the constant leakage of urine that was hindering Lourdes’ quality of life.

Equally beneficial, Nicte and Lourdes Mack agree, have been the compassion and support Dr. Lerman and his team bring to each visit. “He’s always encouraging her, always setting a high standard and telling her she will go far in life,” Nicte says. “It’s one thing when your mom tells you that, but when your doctor says it, that makes a huge difference.”

“It feels like an extension of my family when I’m at the clinic,” Lourdes observes. As she graduates from high school and prepares to enroll as a student at Santa Monica College, she adds: “Obviously, my life has been different from my peers, but I can’t imagine it any other way. I’ve had amazing opportunities.”

Lourdes Mack is among numerous patients and families who have benefited from both the expert care and personal attention of the Clark-Morrison pediatric urologists — including Drs. Jennifer Singer and Renea Sturm as well as Dr. Lerman — and their teams. “A small percentage of our patients will have lifelong chronic debilitating diseases that require attention and detail to manage their care,” Dr. Lerman says. “By addressing their symptoms as early as possible, we can improve their outcomes, but we also have to recognize that it’s an uphill battle for the family, and that requires a tremendous amount of support from the doctors, nurses, and clerical staff.”

“The joy in knowing you have contributed to an improved life of a child carries a reward that is hard to put into words,” says Dr. Singer, a UCLA Urology clinical professor. “There is a special feeling at the end of the day when a tough problem that caused serious medical conditions for a child can be corrected.”

Dr. Lerman, chief of the pediatric urology division, notes that in addition to the expert care and compassion, the Clark-Morrison center has several built-in advantages over many other pediatric urology clinics. One is the ability to begin working with parents before birth, for cases in which the prenatal screening ultrasound finds an abnormality. “These parents can deliver here and then have seamless follow-up care where we can bring in other specialists as needed,” Dr. Lerman explains. In addition, children with complex care needs can either remain with their pediatric urologist as they become adults, or begin seeing adult urologists through a transitional care program in which their pediatric urologist remains an integral member of the team.

Both the volume and diversity of pediatric urology services offered by UCLA are expanding. In 2018, the UCLA Health Spina Bifida Clinic was established at the Clark-Morrison center under Dr. Singer’s direction, allowing children with congenital neurological and associated urological problems to be seen in a multidisciplinary, coordinated fashion by their neurosurgery and urology care providers. The same year, Dr. Sturm was recruited to join the pediatric urology team, bringing both clinical skills and translational research expertise (see page 4).

The division is beginning to expand its geographic reach, seeing patients in communities well beyond...
Westwood and Santa Monica, and offering telemedicine services — which have accelerated during the COVID-19 pandemic — to provide virtual outreach to patients as far away as Bakersfield, San Luis Obispo, and Las Vegas. Under Dr. Lerman’s leadership, the division is also providing services for underserved children in Southern California, expanding outreach in education to local high schools to inspire interest in science, and bringing international pediatric urologic care and mentoring to less fortunate countries, including through Dr. Lerman’s annual week-long medical missions to Central America.

Dr. Singer’s interest in pediatric urology and kidney transplantation dates back to her third year of medical school at UCLA. “I was drawn to the problems encountered by pediatric urologists — the congenital abnormalities and, specifically at that time, the pediatric problems that contributed to children developing renal failure,” Dr. Singer says. “I loved the reconstructive cases, which felt like puzzles to me. For those children who developed renal failure, the ability to perform kidney transplantation was the final piece of that puzzle.”

After completing her residency and urology/renal transplantation fellowship at UCLA, Dr. Singer spent much of the first part of her career focusing on the transplant side. “I missed the interactions with the pediatric patients and their families,” she recalls. With time, Dr. Singer moved toward a practice that is now fully dedicated to pediatric urology, though she continues to take care of children with congenital abnormalities that place their kidneys at risk, and of transplanted children with bladder-dysfunction abnormalities that contribute to their renal failure.

Dr. Singer benefited from the strong culture of mentorship within UCLA Urology. “Having a caring, involved, and invested mentor often drives trainees into their ultimate fields of choice,” she says. For Dr. Singer, that mentor was Dr. Richard Ehrlich. “He was a busy pediatric urologist at UCLA when I was a third-year medical student,” she says of Dr. Ehrlich, UCLA Urology professor emeritus. “His excitement and love for his craft inspired me to follow the same path.”

Dr. Kathy Huen was similarly inspired during her UCLA Urology residency — in her case, by Drs. Singer, Lerman, and Sturm. “I have been incredibly fortunate to have inspiring pediatric urology mentors at UCLA,” says Dr. Huen, who graduates from her residency in June and will begin a two-year pediatric urology fellowship at Children’s Hospital of Orange County/UC Irvine. “I have learned so much from their clinical decision-making and counseling of pediatric patients with complex urological problems. Their compassion and advocacy for patients, combined with their dedication to scholarship and research, have solidified my commitment to a career in academic pediatric urology.”

Ultimately, Dr. Huen says, she concluded that nothing was more fulfilling than working with pediatric patients and their families. “In pediatric urology, we have the opportunity to identify and address conditions early, and to achieve positive outcomes that will have a lasting impact on our patients’ lives,” she explains.

Dianna Thompson remembers the violent fevers her daughter Jordan would experience on a sporadic basis, bringing her to the emergency room on multiple occasions during the first seven years of Jordan’s life. Finally, when Jordan was in second grade, her pediatrician referred the family to Dr. Lerman, even though the drive from the family’s Bakersfield home, accounting for traffic, was approximately three hours.

Dr. Lerman diagnosed Jordan with reflux, a disorder in which urine backs up from the bladder to the kidney, causing frequent infections and placing her in jeopardy for kidney damage. Jordan went through multiple complex reimplantation surgeries and follow-up appointments, and is today a healthy 22-year-old. “It was a huge commitment to drive all that way,” says Dianna Thompson, who was raising five other children. “But when you have a child who is ill and a specialist who can help, you don’t think about that. You just get on that freeway and drive.”

After one of her first visits to Dr. Lerman as a young child, Jordan told her mother that one day she was going to be a doctor. Noticing how inquisitive Jordan was at each appointment, Dr. Lerman told Dianna Thompson that when Jordan was old enough, she was welcome to shadow him. When Jordan reached high school age, she took Dr. Lerman up on the offer. Once a week over the course of two summers, the Thompsons would get in the car at 3:45am to make the drive to Westwood so that Jordan could arrive by 7am and begin following Dr. Lerman as he went through his day. He gave her assignments and quizzes. He also encouraged Jordan to take an SAT preparation course, and to consider applying to universities to pursue a degree in a scientific field.

“After being sick and missing so much school when I was younger, I had started to feel down about myself,” Jordan says. “Dr. Lerman built up my confidence and made me realize I could do this. And seeing patients both before and after their surgery, I knew I wanted to have a career where I could also contribute to healing people.” After graduating this spring with a degree in biochemistry from California State University, Fullerton, Jordan is set to begin a PhD program in chemistry at UC Irvine, where she will conduct pharmaceutical research.

“I have a shoebox filled with the holiday cards and thank you notes that I get each year from patients and their families,” Dr. Lerman says. “There is no other field that you can go into as a professional where you get to make so much impact on people’s lives.”
Working with Collaborative Teams to Advance Pediatric Urology Care

During her pediatric urology training, Renea Sturm, MD, UCLA Urology assistant professor, was struck by the need for expanded options for treating conditions that affect the urethra — the urinary-tract tube extending from the bladder to the genitalia. Conditions affecting the urethra can be developmental, such as hypospadias, or acquired due to trauma, infection, or malignancy. An especially common condition that affects one in 200 boys is hypospadias, in which the opening of the urethra (the meatus) is not located at the tip of the penis. For certain boys with this condition, there is the potential for long-term voiding and sexual effects. Surgical repair options can involve a multi-staged procedure with a new urethra constructed from preputial (foreskin) or buccal (inner cheek) grafted tissue.

“Although significant improvements have occurred over the past few decades in the care of boys with hypospadias, it remains varied in its management and outcomes, which can lead to complications,” Dr. Sturm explains.

As a surgeon-scientist, Dr. Sturm has set out to find better alternatives for such patients. Since being recruited to join the UCLA Urology faculty in 2018, she has divided her time between seeing pediatric urology patients and building a collaborative translational research program that aims to improve the clinical outcomes of all patients with conditions that affect the urethra.

Among the ways in which Dr. Sturm and her colleagues hope to reduce the rate of complications and need for additional procedures is through tissue engineering. A key limitation driving the wide variation in outcomes for urethroplasty is the lack of optimal tissue for urethral replacement. Current tissue options are not optimized to provide sufficient structural support to ensure the elasticity and rigidity needed for voiding, which can contribute to a variety of long-term complications, Dr. Sturm explains. In collaboration with Song Li, PhD, professor and chair of bioengineering at UCLA, and Nasim Annabi, PhD, assistant professor of chemical engineering, Dr. Sturm is developing “bio-inspired” tissue, based on the mechanical and biologic characteristics of the healthy urethra.

With Ali Khademhosseini, PhD, director of the Terasaki Institute for Biomedical Innovation, and a bioengineering laboratory team, Dr. Sturm has also sought to address the risk of repairs associated with hollow tubes through a novel device to be used for tissue closure after repair procedures. “After a procedure such as urethroplasty, the child has a catheter draining urine from the bladder for 1-2 weeks, which can be the source for complications and discomfort,” Dr. Sturm explains. “This biodegradable surgical repair device distributes the wound tension across the incision to provide external support, helping to minimize early postoperative risks and supporting the urethra so children can resume their normal urination without the catheter much faster.”

To keep all of this basic science relevant, Dr. Sturm appreciates the opportunity to remain clinically active and is inspired by her work as a surgeon to meet the needs and goals of each family and child. In working toward personalization given the range of findings in these conditions, Dr. Sturm is additionally evaluating technology to assist in helping families and children understand the condition that is specific to their child and to help surgeons communicate more accurately regarding the specific details of each repair. In order to aid this process, Dr. Sturm is working with Dr. Steve Lerman and Dr. Jennifer Singer in the Division of Pediatric Urology to capture personalized patient details through the application of three-dimensional (3D) mapping technologies. 3D digitized models will facilitate more objective evaluations of each child’s anatomic findings, as well as more standardized descriptions of the results of the repairs. Ultimately, the goal is to develop a database that could help to guide future repairs and increase the consistency of treatments.

Dr. Sturm is excited to leverage the expertise and spirit of collaboration at UCLA toward improving pediatric urology care. Beyond work in pediatric urology, she has continued to expand her skills in the UCLA Biodesign program, whose mission is “to train the next generation of health care reformers” — translational scientists who seek to transform medicine by working with industry partners to bring novel technologies from concept to commercialization. “As a surgeon-scientist, my primary goal is not only to provide excellent surgical care for children in my clinic,” Dr. Sturm explains, “but also to lead in the development of practical solutions to address inequity and inconsistent outcomes with the goal of the best possible surgical care for every child.”
One of the most moving moments I have experienced since the start of the COVID-19 pandemic resulted from an email that was all of two words. In March, as UCLA Health prepared for the possibility that our hospitals might see a surge of COVID-19 cases, I sent out a message to all UCLA Urology faculty and trainees seeking volunteers who would be willing to be redeployed to assist with these patients should extra personnel be needed. It would have been understandable if even the most seasoned urologists balked at the prospect of putting themselves in the line of fire, given the risk — even with the proper personal protective equipment — in treating patients with a highly contagious, potentially lethal virus. But it was heartwarming to hear from so many members of our department expressing their willingness to help. The two-word response came from one of our residents, who simply asserted: “Wherever, whenever.”

The overwhelmingly positive response to my call for volunteers served as a reminder that what makes UCLA Urology so special is not just our outstanding clinicians and scientists, but also the altruism, compassion, and commitment of these individuals to helping those in need. These traits are on display not just during a public health crisis, but in the department’s everyday work of patient care, research, training, and service to the community.

There is no better illustration of that dedication than our Division of Pediatric Urology, under the leadership of Dr. Steve Lerman. As this issue’s cover story attests, our pediatric urologists are at the top of their subspecialty when it comes to diagnostic and surgical skills. They work tirelessly to better the lives of patients and families — and that has made a world of difference.

Moments of great challenge reveal character. I am proud of the character revealed by UCLA Urology during this moment. And having been part of this extraordinary group for many years, I’m not the least bit surprised.

❖ Mark S. Litwin, MD, MPH
Professor and Chair, UCLA Urology
Denise Asafu-Adjei, MD, MPH, incoming UCLA Urology fellow, received an early-career investigator one-year grant from the Urology Care Foundation for the study entitled “Disparities in Access to Care for Male Erectile Dysfunction Services,” to be conducted under the mentorship of Jesse Mills, MD; Mark S. Litwin, MD, MPH; Sriram Eleswarapu, MD, PhD; and Stanley Frencher, MD, MPH.

Arnold Chin, MD, PhD, UCLA Urology associate professor, opened an investigator-initiated phase I clinical trial, “Pembrolizumab With Combination Chemotherapy in Treating Participants With Locally Advanced or Metastatic Small Cell/Neuroendocrine Cancers of Urothelium or Prostate.” Dr. Chin also performed the first single-port robotic surgery in Los Angeles using telesmanipulation, which allows surgeons to remotely control instruments from a console, mimicking the movements of the human hand. Dr. Chin and others will be expanding the use of this system for both urologic malignancies and reconstructive urology.

Richard Ehrlich, MD, UCLA Urology professor emeritus, had his book, In Libris XI, published in May. The book features 11 classical literary works photographically illustrated, with accompanying explanatory text by Professor Lowell Gallagher, former chair of the Department of English at UCLA, and including poetry by Kate Bonnici, PhD.

Fuad Elkhoury, MD, UCLA Urology resident, received the Collegial Commendation Award in Acknowledgement of the Pursuit of Surgical Excellence for Our Nation’s Veterans from the West Los Angeles Veterans Administration.

Katherine Fero, MD, UCLA Urology resident, has been awarded a prestigious Urology Care Foundation grant to support her upcoming research-year project, “Development and Validation of a Symptom-Based Questionnaire for Patients with Non-Muscle Invasive Bladder Cancer Undergoing Intravesical Therapy,” to be mentored by Karim Chamie, MD, MSHS, UCLA Urology associate professor and director of the UCLA Institute of Urologic Oncology Bladder Cancer Program.

Justin Houman, MD, UCLA Urology fellow, authored a review article entitled “Current and future trends in men’s health clinics” in Translational Andrology and Urology with faculty mentors Dr. Sriram Eleswarapu and Dr. Jesse Mills.

Tommy Jiang, second-year medical student at the David Geffen School of Medicine at UCLA (DGSOM), is first author of an abstract featured as a podium presentation on the American Urological Association (AUA) Virtual Experience. His research focuses on the experiences of men seeking advice for erectile dysfunction on anonymous internet forums, in collaboration with incoming UCLA Urology resident Dr. Vadim Osadchiy and UCLA Urology faculty members Dr. Sriram Eleswarapu and Dr. Jesse Mills.

Vadim Osadchiy, MD, incoming UCLA Urology resident, was first author of an article entitled “Taking matters into their own hands: Abstinence from pornography, masturbation, and orgasm on the internet,” in Archives of Sexual Behavior. His co-authors included medical students Bobby Vanmali and Robert Shahinyan, as well as UCLA Urology faculty Dr. Jesse Mills and Dr. Sriram Eleswarapu. Dr. Osadchiy also authored an abstract presented on the AUA Virtual Experience focusing on quantitative natural language processing of internet forum discussions about low testosterone.

Christopher Saigal, MD, MPH, UCLA Urology professor and vice chair, was invited to serve on the editorial board for the American Urological Association's Update Series. The AUA Update continues to be a valuable source of information to a wide variety of health care practitioners in the field of urology.

The AUA featured the work of fourth-year DGSOM student Robert Shahinyan in its Virtual Press Program for international media organizations. His abstract, part of the AUA Virtual Experience, focused on the pitfalls of direct-to-consumer internet prescription services for men with erectile dysfunction. UCLA Urology faculty Dr. Sriram Eleswarapu and Dr. Jesse Mills served as mentors for the project and were co-panelists during the Virtual Press Program.

Jeremy Shelton, MD, UCLA Urology assistant professor, received the 2019 Igor Tulchinsky – PCF VA lor Young Investigator Award from the Prostate Cancer Foundation.

John T. Sigalos, MD, UCLA Urology resident, authored an editorial entitled “Commentary on postoperative penile prosthesis pain: Is it worse in diabetic patients?” featured in the International Journal of Impotence Research. Co-authors included UCLA Urology faculty Dr. Sriram Eleswarapu and Dr. Jesse Mills.

Jennifer Singer, MD, UCLA Urology clinical professor and the Peter Starrett Chair in Medical Education in Urology, has been appointed to the AUA’s Education Committee.

Dyvon Walker, fourth-year student at DGSOM, is first author of two abstracts presented on the AUA Virtual Experience. His work focuses on innovations for Peyronie's disease diagnostics and therapeutics, under the mentorship of UCLA Urology faculty Dr. Sriram Eleswarapu and Dr. Jesse Mills.

Kassandra Zaila, fourth-year student at DGSOM, is first author of a paper entitled “Social media sensationalism in the male infertility space: A mixed methodology analysis” in World Journal of Men's Health. She is also the first author of two abstracts on the convergence of social media and men’s health presented on the AUA Virtual Experience. Her co-authors are UCLA Urology resident Dr. Vadim Osadchiy, fellow medical student Robert Shahinyan, and UCLA Urology faculty members Dr. Sriram Eleswarapu and Dr. Jesse Mills.
**Hypospadias**

Hypospadias is a relatively common condition present at birth in which the opening of the urethra — the tube that carries urine from the body — is on the underside of the penis rather than at the tip. It is among the most common birth defects involving the penis, present in approximately 1 in 200 males in varying degrees of severity. Usually, the cause is unknown. While hypospadias most often occurs as an isolated defect, it can be related to or result in other structural disorders such as undescended testicles, a hernia in the groin area, or backflow of urine from the ureter to the bladder (vesicoureteral reflux). When untreated, moderate or severe hypospadias can lead to problems properly using the toilet and, by adulthood, difficulties with sexual intercourse and fertility. However, in most cases surgery during infancy will restore the penis’ normal function and appearance.

Although it is sometimes detected on a prenatal ultrasound, hypospadias is more commonly diagnosed upon a physical examination at birth. In addition to having the misplaced urethral opening — usually near the tip, but in rare cases along the shaft, or even as low as the scrotum or between the scrotum and the anus — the condition is often characterized by a downward curve in the penis and a hooded appearance. In the mildest cases, these symptoms may still result in abnormal spraying during urination.

More than half of hypospadias cases are classified as first-degree, in which the urethral opening is located on or near the head of the penis. In second-degree cases, which make up another 30%, the urethra opens along the shaft. For both first- and second-degree hypospadias, a relatively simple surgery can reposition the opening. Surgical results for patients with first- or second-degree hypospadias have improved significantly over the years, to the point that it is generally agreed that it is best repaired in an infant, although some parents prefer to wait until the child is an adult and can decide on his own. For the approximately 10% of patients who have what are considered third-degree hypospadias, with more severe curvature and the urethral opening below the shaft, multiple surgeries are usually required. For such patients, pediatric urologists will sometimes advise parents that observation may be preferable to early surgery.

At the Clark-Morrison Children's Urological Center at UCLA, pediatric urologists Steve Lerman, MD, Jennifer Singer, MD, and Renea Sturm, MD, diagnose hypospadias, consult with parents on the best approach to treatment, and perform surgery when indicated.

*For more information, visit [www.uclaurology.com](http://www.uclaurology.com).*

*To make an appointment, call (310) 794-7700.*

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**Andrew Freedman, MD**

After completing his UCLA Urology residency and then his pediatric urology fellowship at Children's Hospital of Michigan, Dr. Andrew Freedman had planned to stay in Detroit, and spent a year as a junior faculty member. But family obligations intervened, requiring a return to Los Angeles. Dr. Freedman entered private practice, expecting to leave academics behind.

Even when Dr. Freedman was recruited to join a nascent urology faculty at Cedars-Sinai Medical Center in 2002, there was no training program and he was only the second faculty member. That has changed, and today Dr. Freedman is program director of the urology residency, as well as vice chair of pediatric surgical services. He jokingly refers to himself as "the accidental academic."

In addition to his clinical practice at Cedars, Dr. Freedman treats spina bifida patients at Shriners Hospital for Children. His most recent research focuses on the use of Botox in children with neurogenic incontinence. Dr. Freedman has also become a leading spokesperson on the topic of infant circumcision, having served as a member of the American Academy of Pediatrics task force that issued guidelines in 2012. “There has been a heated debate, and my goal is to help bring the conversation to where it belongs, which is a cultural rather than medical discussion, and improve the tolerance for both being circumcised and being intact,” he says. “There doesn’t have to be a single answer for everybody.”

Dr. Freedman says he was drawn to pediatric urology in part by the reconstructive nature of the surgeries. “I find it very satisfying to perform something like a hypospadias reconstruction, knowing how important that will be to the child’s life,” he says. Beyond the immediate reward of reconstructive surgeries, Dr. Freedman says he derives his greatest satisfaction from the long-term relationships he develops with many patients and their families. “I’ve had patients I have taken care of for 15-20 years,” he explains. “I’ve watched them grow, been to weddings, and visited patients who have delivered babies. That’s extremely rewarding.”

During his UCLA Urology training from 1988 to 1994, Dr. Freedman was particularly influenced by two mentors, both now UCLA Urology professors emeritus: Dr. Richard Ehrlich and Dr. Jacob Rajfer. Both were instrumental in instilling what Dr. Freedman describes as a culture of excellence that he has carried with him in the years since.

“There was always an expectation at UCLA that we were the best, and that we had to constantly strive to stay that way rather than settling for ‘good enough,'” he says. “I try to bring that culture into every program I’m involved with, because it’s how medicine should be approached.”
The Men’s Clinic at UCLA

DID YOU KNOW?

Most erectile dysfunction (ED) in men under 40 has a reversible cause and can safely be treated via telehealth. A recent publication from The Men’s Clinic at UCLA indicates that a high percentage of men under 40 with ED have elevated cholesterol levels or low testosterone. If you might fit into this category, you can schedule a video visit with a Men’s Clinic physician, who can order appropriate blood work and write customized prescriptions and lifestyle modifications.

The Men’s Clinic at UCLA is a comprehensive, multidisciplinary health and wellness center located in Santa Monica, now with locations in Burbank and Santa Clarita. For more information or to make an appointment, call (310) 794-7700.