

UC DAVIS
HEALTH

CHILDREN'S
HOSPITAL

2017-2018
ANNUAL REPORT

YEAR IN REVIEW

Welcome



Upon arriving at UC Davis Health this past summer, I was immediately struck by the essential role that UC Davis Children's Hospital plays in the health of so many patients and their

families — both as the major pediatric tertiary and quaternary provider for a truly enormous area of California, and as a source of research insights whose benefits apply nationwide. In the pages that follow, we are honored to share recent accomplishments on both of these fronts — including select initiatives that will help extend our *U.S. News & World Report*-ranked expertise to more families yet still.

This past fall we opened an expanded children's surgery center in Sacramento, equipped with the latest technologies to help our fetal surgeons and other world-class clinicians serve more patients. To date, we are also the West Coast's first, and California's only, center to earn verification as a level I Children's Surgery Center from the American College of Surgeons.

Simultaneously, we also worked to help launch a new level II NICU at a community hospital in the San Joaquin Valley — the latest in a series of partnerships designed to bring UC Davis academic expertise to patients closer to home. Our own NICU is a level IV-designated nursery — the highest possible rating — and the only neonatology service nationally ranked by *U.S. News* in the Sacramento region.

All the while, our talented faculty members and providers have continued to play leadership roles in national research and quality improvement initiatives,





**THEY ARE ALL LIKE FAMILY —
I LOVE THEM. THEY WILL
ALWAYS BE IN MY HEART.**

LIDIA GARCIA, MOTHER OF GRACE GARCIA, SHOWN ON THE FRONT COVER WITH HER FAMILY. GRACE WAS THREE DAYS OLD WHEN HER FIRST HEART SURGERY TOOK PLACE AT UC DAVIS CHILDREN'S HOSPITAL.

in fields such as neonatology, emergency medicine, the neurosciences and telehealth. And our nursing staff has again received the nation's highest recognition for nursing excellence — Magnet® redesignation from the American Nurses Credentialing Center.

UC Davis Children's Hospital is the Sacramento region's only nationally ranked, comprehensive hospital for children, offering the highest level of care for virtually every pediatric health condition.

We are proud to serve our growing community with the highest standards of care and compassion, and to partner with colleagues regionally and nationally to advance those standards for the benefit of all.

David Lubarsky, M.D., M.B.A.

Vice Chancellor of Human Health Sciences
Chief Executive Officer, UC Davis Health



IMPROVECARENOW





Our newly expanded children's surgery facilities complement our level I Children's Surgery Center designation from the American College of Surgeons.

At a glance

SELECT HIGHLIGHTS FROM UC DAVIS CHILDREN'S HOSPITAL

- In fall 2018 we opened our **new Children's Surgery Center**. Its blend of state-of-the-art technology and child-friendly design complements our expertise as **the West Coast's first American College of Surgeons-designated level I Children's Surgery Center**.
- **Renowned neonatologist Satyan Lakshminrusimha** arrived at UC Davis Health as the new chair of our Department of Pediatrics and medical director of UC Davis Children's Hospital.
- This past year the multidisciplinary team at our rare **Fetal Care and Treatment Center** continued to provide successful interventions for spina bifida, twin-to-twin transfusion syndrome and other fetal conditions.
- In fall 2018 the American Nurses Credentialing Center (ANCC) renewed UC Davis Medical Center's **Magnet® nursing designation**, considered the nation's highest form of recognition for nursing excellence.
- As part of our **strategic regional affiliations** initiative, in summer 2018 we entered a partnership to help launch a new level II NICU at nearby Adventist Health Lodi Memorial hospital — providing academic expertise locally while creating capacity at our own level IV facility.
- Our Pediatric Heart Center has added extraordinary capabilities in **minimally invasive cardiac intervention** with the arrival of Frank Ing, our new chief of pediatric cardiology. UC Davis Health's new orthopaedic surgery chair R. Lor Randall brings **renowned expertise in pediatric and adult sarcoma**.
- Emergency medicine chair Nathan Kuppermann, co-founder of the Pediatric Emergency Care Applied Research Network (PECARN), continues to drive valuable new **emergency medicine research insights** — and in 2017 received lifetime achievement honors from the Society for Academic Emergency Medicine.
- UC Davis Children's Hospital held its **first symposium** in fall 2018, sponsored by the Children's Miracle Network and offered a look at compassionate care and headlines in children's health.
- As a sign of the vigorous emphasis we place on **whole-family support**, our hospital helps train the next generation of child-life specialists as well as physicians and nurses. Our Child Life and Creative Arts Therapy Department's internship program was accredited by the Association of Child Life Professionals in fall 2018.

Surgery

NEW CHILDREN'S SURGERY CENTER OPENED

Young surgery patients throughout the region can now benefit from our new and improved UC Davis Children's Surgery Center, opened in fall 2018. The new 20,000-square-foot, state-of-the-art pediatric facility includes seven larger and more effectively designed operating rooms, a technologically advanced fleet of surgical equipment, and 24 pre- and post-op bays. UC Davis Health performs an average of nearly a dozen children's surgeries a day.

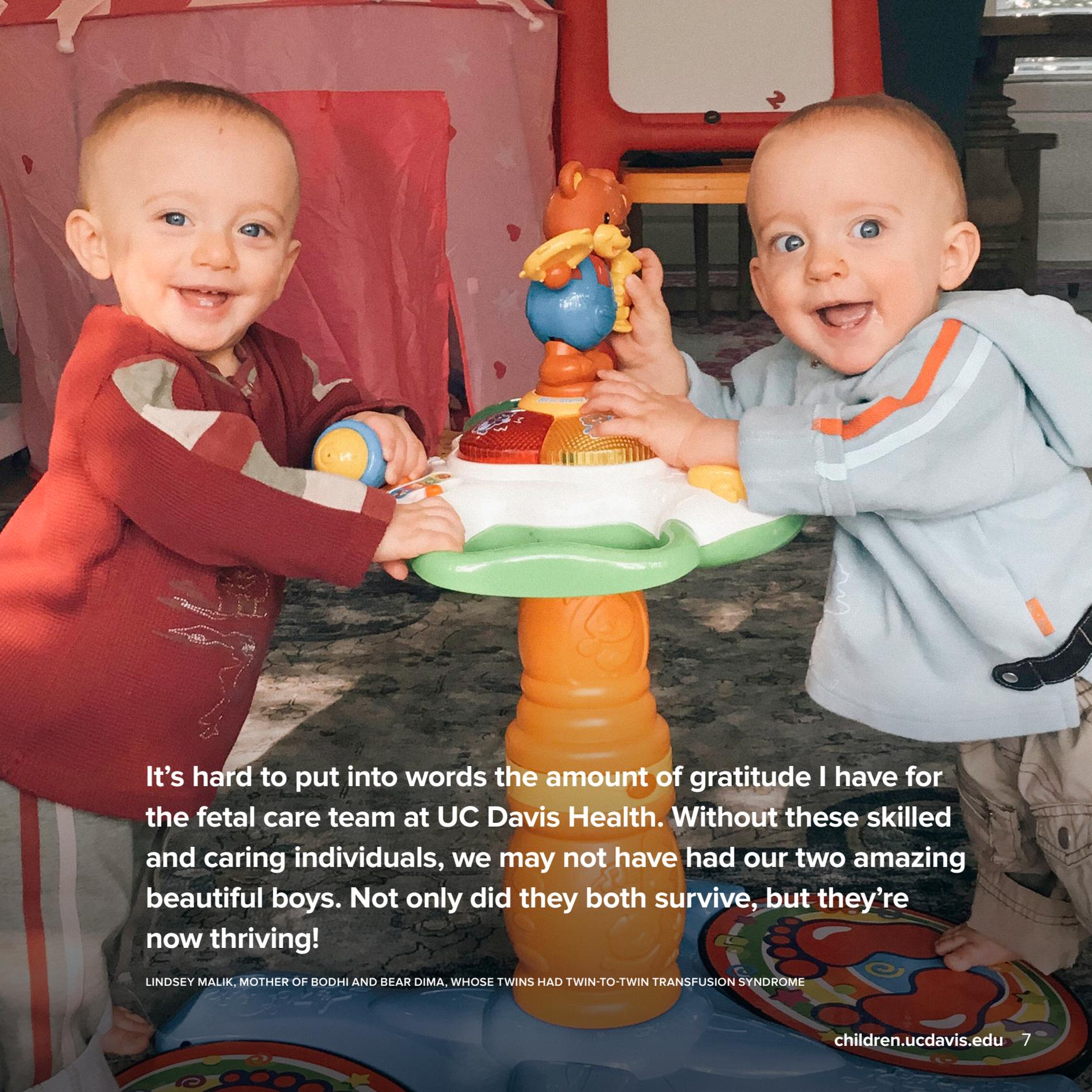
THE WEST COAST'S FIRST LEVEL I CHILDREN'S SURGERY CENTER

In fall 2017 UC Davis Children's Hospital was re-verified as a level I Children's Surgery Center by the American College of Surgeons (ACS), the world's largest organization of surgeons. We remain the first hospital on the West Coast, and one of only a dozen in the nation, to have earned this designation. Level I centers have children's surgeons in every discipline, with pediatric anesthesiologists and dedicated operating rooms for children available 24 hours a day. They also train future leaders in education and research and participate in community outreach.

UNIQUE FETAL CARE AND TREATMENT CENTER

As inland Northern California's first comprehensive multidisciplinary fetal diagnosis and therapy center, the UC Davis Fetal Care and Treatment Center offers advancements in fetal surgery and maternal-fetal medicine that allow multiple avenues of intervention, including *in utero* or in real time during the birthing process. We are currently our region's only center for on-site fetal surgery, and are proud to be one of a limited number of U.S. hospitals to offer these services for families facing conditions such as twin-to-twin transfusion syndrome and spina bifida.

The center also includes an extensive research program. For instance, a spina bifida initiative led by renowned fetal surgeon Diana Farmer, our Children's Hospital surgeon-in-chief and chair of UC Davis Health's Department of Surgery, has demonstrated that prenatal surgery combined with stem cells helps canine patients with the disorder to walk without noticeable disability. In fall 2018 the California Institute for Regenerative Medicine awarded an additional grant of \$5.6 million that will enable the UC Davis team to perform final testing and preparations needed for FDA approval to start a human clinical trial.



It's hard to put into words the amount of gratitude I have for the fetal care team at UC Davis Health. Without these skilled and caring individuals, we may not have had our two amazing beautiful boys. Not only did they both survive, but they're now thriving!

LINDSEY MALIK, MOTHER OF BODHI AND BEAR DIMA, WHOSE TWINS HAD TWIN-TO-TWIN TRANSFUSION SYNDROME



Trauma and Emergency

LIFETIME AWARD FOR PEDIATRIC EMERGENCY MEDICINE RESEARCH, MENTORSHIP

The Society for Academic Emergency Medicine (SAEM) has created the annual Nathan Kuppermann Award for Mentorship in Pediatric Emergency Medicine Research, which honors the UC Davis emergency medicine chair's long history of leadership collaborations, practice-changing clinical work, and mentoring of trainees and junior faculty.

The medical team that helped our little Princess Avery is beyond incredible. To everyone — from the janitorial and cafeteria staff to the nurses, therapist, and doctors — who treated our family with such kindness, love, and respect, we thank you from the bottom of our hearts.

ED AND KATHY CUNHA, GRANDPARENTS OF AVERY CUNHA, WHO MADE A REMARKABLE RECOVERY AT UC DAVIS CHILDREN'S HOSPITAL AFTER A NEAR-FATAL DROWNING ACCIDENT

Kuppermann, inaugural chair and one of the principal investigators of the Pediatric Emergency Care Applied Research Network (PECARN) and a member of the National Academy of Medicine, is known internationally for highly regarded pediatric studies about infectious emergencies, diabetic ketoacidosis-related cerebral injury, and the utility of laboratory and radiographic diagnostic studies in pediatric trauma patients, including efforts to safely avoid unnecessary CT scans.

NEW INSIGHTS ON ABDOMINAL TRAUMA

Kuppermann, in collaboration with emergency medicine professor James Holmes and colleagues, examined whether Focused Assessment with Sonography for Trauma (FAST) can safely lead to a decrease in CT scans for kids with abdominal trauma. In a June 2017 issue of *JAMA*, they reported that in a randomized clinical study of 925 UC Davis pediatric trauma patients, there was no difference in important outcomes in children receiving FAST compared with standard trauma care. The authors suggested a large, multicenter follow-up clinical trial.

LEVEL I TRAUMA CARE FOR 65,000 MILES

In May 2018 UC Davis Medical Center was re-verified as a level I trauma center, the highest level possible, by the American College of Surgeons — making it the only level I trauma center for both adults and children in inland Northern California, and one of only two in California.

Our hospital and trauma center serve a 33-county, 65,000-square-mile area with the help of the most comprehensive children’s critical-care transport team in Northern California. The program travels 24-7 by ambulance, helicopter or fixed-wing aircraft to carry in more than 700 children each year, some from hundreds of miles away. In all, we saw more than 16,000 pediatric emergency department visits in FY 17/18.

NEW INTERVENTIONS TO PREVENT VIOLENT INJURIES

With the help of Kohl’s Cares, we launched a new program designed to aid emotional recovery and help prevent recurrence of violent injuries among adolescents and young adults in Sacramento’s Oak Park area. Named “Wraparound,” the program features two intervention specialists who work to turn tragic circumstances into teachable moments for stabbing, gunshot and beating victims admitted to UC Davis Medical Center for treatment.

Kohl’s Cares awarded a \$450,000 grant to launch and operate Wraparound, part of a larger Kohl’s Cares grant and a larger series of grant initiatives to reduce preventable pediatric injury in underserved communities.

Cancer

THE REGION'S ONLY NCI-DESIGNATED CENTER

UC Davis Comprehensive Cancer Center is the only National Cancer Institute-designated center serving the Central Valley and inland Northern California, a region of more than 6 million people. Our team includes experts such as chief of pediatric hematology and oncology Marcio Malogolowkin, an international leader in pediatric liver tumors and an authority on adolescent and young adult (AYA) cancers.

UNIQUE NEW SARCOMA CLINIC AND EXPERTISE

The center has launched the Sacramento region's only multidisciplinary clinic specializing in pediatric, adolescent and young adult sarcoma. This summer we also welcomed internationally recognized sarcoma expert R. Lor Randall as our new orthopaedic surgery chair (see p. 18).

Cardiology and heart surgery

AMERICA'S YOUNGEST IMPELLA PATIENT

In spring 2018 Adolfo Ledesma became the youngest U.S. patient to be implanted with an Impella pump. A UC Davis Health surgeon deployed the leading-edge technology to boost the 10-year-old's long-term recovery following his immediate treatment for tachycardia linked to a cold virus.

PDA CLOSURES WITHOUT SURGERY FOR TINY PREEMIES

Sacramento families now have an alternative to surgery for patent ductus arteriosus (PDA), a condition that affects 20 to 60 percent of all preemies.

Frank Ing, our new chief of pediatric cardiology, has introduced capabilities to perform PDA closure in the cardiac catheterization lab for preemies as small as 600 grams. The approach reduces risks and only requires general anesthetic.

IAC ECHOCARDIOGRAPHY REACCREDITATION FOR HEART CENTER

Our Pediatric Heart Center's Pediatric Echocardiography Laboratory remains the region's only to hold accreditation from the Intersocietal Accreditation Commission (IAC) in pediatric transthoracic, pediatric transesophageal and fetal echocardiography, renewed in 2018.



Yuvna is a lot more energetic, less blue and able to play more with her sisters because of Dr. Ing. Since the beginning of our dialogue, he has shown a level of compassion and care not seen from any of Yuvna's previous doctors, and we will forever be grateful for all of his help, guidance and support.

BHUPINDER SINGH AND DIPIKA CHANA, WHO TRAVELED FROM DUBAI TO UC DAVIS CHILDREN'S HOSPITAL TO HAVE THEIR DAUGHTER'S HEART CONDITION TREATED BY FRANK ING, OUR CHIEF OF PEDIATRIC CARDIOLOGY. ING IS A RENOWNED SPECIALIST IN USING LESS-INVASIVE, NON-SURGICAL METHODS SUCH AS CATHETERIZATION TO TREAT HEART AND VASCULAR CONDITIONS IN CHILDREN.

I wish we would have come to UC Davis Children's Hospital sooner. Samantha's quality of life has improved dramatically and we can better function as a family.

MISTY RICKARDS, ON DAUGHTER SAMANTHA'S ACUPUNCTURE TREATMENT FOR CHRONIC ABDOMINAL PAIN AND NAUSEA, OVERSEEN BY PEDIATRIC GASTROENTEROLOGIST ARTHUR DE LORIMIER



Diabetes and Endocrinology

NEW INSIGHTS ON DIABETIC KETOACIDOSIS

For decades, clinicians have worried that giving too much intravenous fluid to children with diabetic ketoacidosis (DKA) may contribute to brain swelling and injury. But after a national study of more than a thousand children with DKA, UC Davis Health's Nathan Kuppermann and Nicole Glaser, other UC Davis researchers, and colleagues in the Pediatric Emergency Care Applied Research Network (PECARN) have shown that fluid infusion does not cause brain injury in children with the condition.

Published in a June 2018 issue of the *New England Journal of Medicine*, the new findings may offer more treatment flexibility for clinicians – and are the latest results in two decades of DKA research by Glaser, a pediatric endocrinologist, and Kuppermann, UC Davis Health's emergency medicine chair. Kuppermann also helped to create PECARN, the nation's only federally-funded pediatric emergency care research network, in 2001.

DIABETES SUMMER CAMP OFFERS FRIENDSHIP, FUN

This educational summer camp, offered each summer by the UC Davis pediatric endocrinology team in partnership with UC Davis Youth Programs, provides a week of friendship and fun for pediatric patients battling Type I Diabetes. Enriching recreational activities include rock climbing, swimming, dance, field games and even a field trip.

Gastroenterology/GI Surgery

UNIQUE ACUPUNCTURE SERVICE HELPS WITH CHRONIC DISCOMFORT

UC Davis Children's Hospital is home to one of only three pediatric gastroenterologists in the U.S. trained in medical acupuncture. Arthur de Lorimier studied at the Helms Medical Institute, and practices the ancient Chinese medicine art form in his care of patients with conditions such as chronic abdominal pain, chronic nausea and related anxiety. The unique practice complements the wide range of services provided by our large pediatric gastroenterology team, including interventional capabilities supported by special technology incorporated in our new Children's Surgery Center facility.

Neonatology

TACKLING NECROTIZING ENTEROCOLITIS AT THE NATIONAL LEVEL

Our chief of neonatology Mark Underwood co-edited a February 2018 issue of the journal *Seminars in Pediatric Surgery* dedicated to necrotizing enterocolitis (NEC), a leading cause of death in very premature infants. Researchers around the country expanded on topics presented at the first national conference dedicated to the condition in 2017, co-hosted by UC Davis Health and the nonprofit NEC Society.

EXPANDING ACCESS TO ACADEMIC NEONATOLOGY EXPERTISE

Partnerships focused on neonatal care are also helping us advance health at home. A new affiliation with Adventist Health Lodi Memorial is expanding pediatric and neonatal care services at Adventist Health Lodi Memorial, and creating a level II Neonatal Intensive Care Unit (NICU) facility there to treat premies that need extra support from UC Davis Health specialists.

LEVEL IV-DESIGNATED NURSERY

UC Davis Children's Hospital's own NICU is a level IV-designated nursery — the highest possible rating — for the Sacramento region.

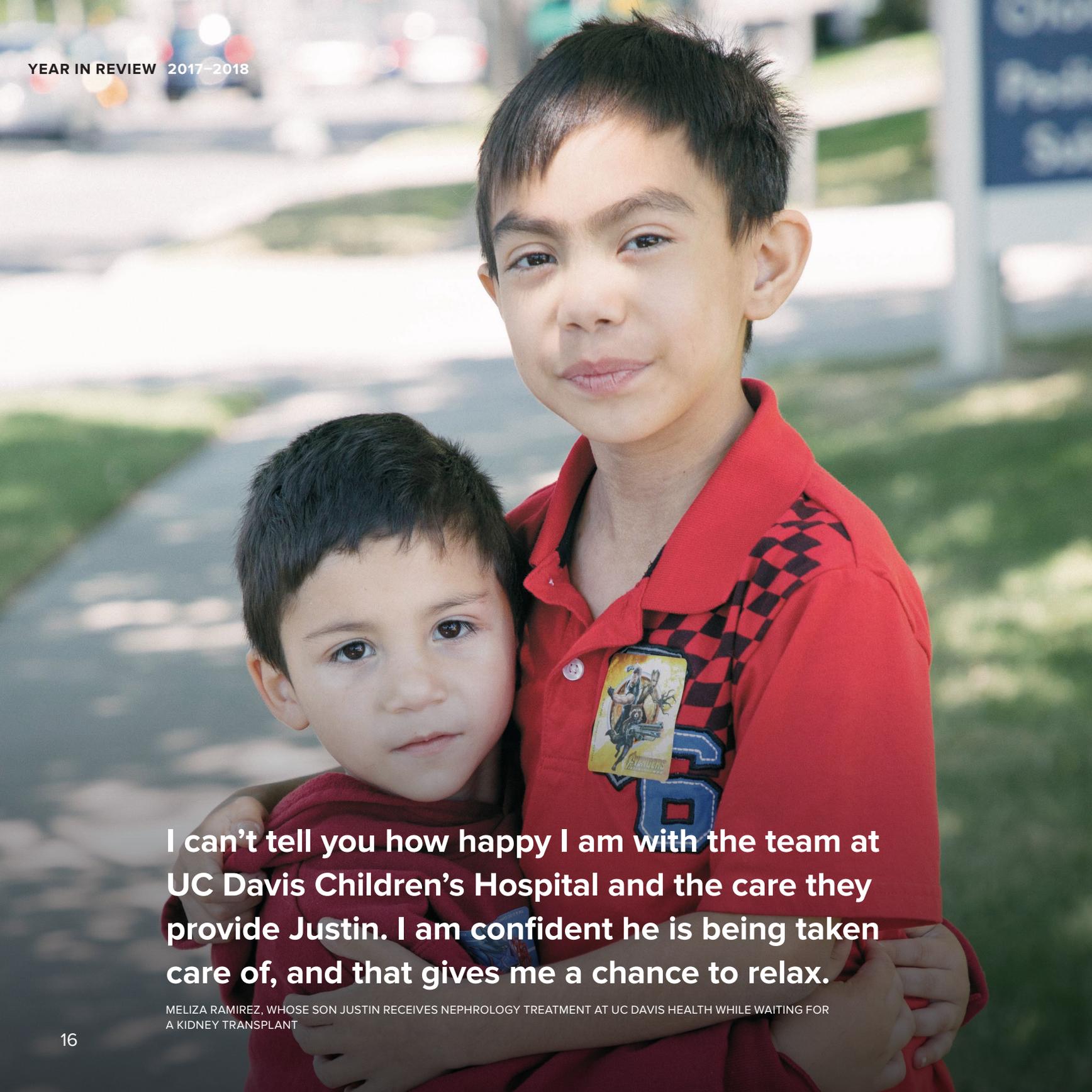
NATIONALLY RANKED

Our pediatric neonatology program ranked among the nation's best in the 2018–19 *U.S. News & World Report* Best Hospitals survey.

A photograph of two young boys sitting on a stone ledge outdoors. They are both smiling and hugging each other. The boy on the left is wearing a light blue striped shirt and dark shorts. The boy on the right is wearing a light blue button-down shirt and dark shorts. The background shows a large tree trunk and a building with windows.

**We are so fortunate to have had the best care.
I tell anyone who'll listen to go to UC Davis Children's
Hospital for everything. 100 percent!**

PAYTON HEADRICK, MOM OF BRAXTON AND BRANTLEY HEADRICK, TWINS BORN AT 24 WEEKS WEIGHING 1 POUND, 3 OUNCES



I can't tell you how happy I am with the team at UC Davis Children's Hospital and the care they provide Justin. I am confident he is being taken care of, and that gives me a chance to relax.

MELIZA RAMIREZ, WHOSE SON JUSTIN RECEIVES NEPHROLOGY TREATMENT AT UC DAVIS HEALTH WHILE WAITING FOR A KIDNEY TRANSPLANT

Nephrology and kidney transplantation

MILESTONE FOR REGION'S KIDNEY TRANSPLANT CENTER

UC Davis Children's Hospital is home to the Sacramento region's only pediatric nephrology and renal transplant program, where we use research and early adoption of emerging techniques to help influence volume and outcomes locally and nationally. In 2018, the UC Davis Transplant Center team completed its 4,000th overall kidney transplant.

UNIQUE DIALYSIS SERVICE PROVIDES BRIDGE TO TRANSPLANT

To better serve children waiting for a kidney transplant, in 2016 our program added what continues to be the region's only outpatient peritoneal dialysis service for patients under 10 years of age.

NATIONALLY RANKED

Our pediatric nephrology program placed among the nation's best in 2018–19 *U.S. News & World Report* rankings.



Neurology/Neurosurgery

NEW TALENT AND FACILITIES FOR OUR LEVEL 4 EPILEPSY CENTER

We're proud to offer remarkable care for epilepsy, the nation's most common childhood brain disorder. The National Association of Epilepsy Centers has designated UC Davis as a level 4 Comprehensive Epilepsy Program — the highest rating awarded — and we're opening a dedicated four-bed Pediatric Epilepsy Monitoring Unit with high-resolution MRI, single photon emission computed tomography (SPECT), PET and surgery staging. Newly arrived pediatric epileptologist and researcher Trishna Kantemneni leads the state-of-the-art unit.

MAJOR COLLABORATIONS ON SWEEPING NEUROSCIENCE CHALLENGES

Researchers at the MIND Institute and the University of North Carolina have demonstrated for the third time that increased extra-axial cerebrospinal fluid (CSF) is associated with autism spectrum disorder in young children, they reported in fall 2018 in *Lancet Psychiatry*. Early diagnosis can improve both treatment and quality of life. Scientists at the MIND Institute and NeuroPointDX also reported in *Biological Psychiatry* they have identified blood metabolites that could help detect ASD. Part of the Children's Autism Metabolome Project (CAMP), the largest metabolomic ASD study ever attempted, the findings are a key step toward an ASD biomarker test.

Orthopaedics

TREATING TRAUMA AND COMPLEX SPORTS INJURIES

UC Davis pediatric orthopaedic surgeons perform a high volume of trauma surgery and play an important role in our American College of Surgeons-verified level I pediatric trauma center. We also provide care and research for complex sports injuries and investigate brachial plexus birth palsy.

PEDIATRIC SARCOMA LEADER

Our new orthopaedic surgery chair R. Lor Randall is recognized internationally for his translational research efforts, such as a genetically engineered

mouse model (with Nobel co-winner Mario Capecchi) and limb salvage advances. Randall developed the Huntsman-Intermountain Adolescent and Young Adult Cancer Care Program, and is past or future president of several national professional organizations.

NATIONALLY RANKED

U.S. News & World Report ranked our pediatric orthopaedics program among the nation's best in 2018–2019, in collaboration with Shriners Hospitals for Children – Northern California, our longstanding partner on orthopaedic disorders and spinal injuries.



Working with the doctors for such a long period of time, we have seen the amount of sacrifice they have to make, in order to take care of patients like our son. We are forever grateful to them!

ANDREY AND FETA KRAVCHUK, WHOSE NEWBORN SON TIKHON WAS TREATED FOR AN INTRAVENTRICULAR HEMORRHAGE BY UC DAVIS PEDIATRIC NEUROSURGEON MARIKE ZWIENENBERG



We had what seemed like a million questions about cystic fibrosis and treatment plans, but the doctors and staff always made us feel so comfortable and welcome, we now think of them like our extended family.

LOUAN MORALES, ABOUT DAUGHTER SANDRA'S CYSTIC FIBROSIS CARE

Pulmonology

CYSTIC FIBROSIS DIAGNOSIS LEADS ONE FAMILY TO MOVE CLOSER TO UC DAVIS CHILDREN'S HOSPITAL

Two weeks after Sandra Morales' cystic fibrosis diagnosis, the Moraleses packed up their family and moved to California so Sandra (opposite page) would be able to receive treatment from Sanjay Jhavar, a pediatric pulmonologist at UC Davis Children's Hospital.

We have invested significantly in our Cystic Fibrosis Foundation-accredited Cystic Fibrosis Care Center, enhancing our diagnostic technology and increasing efforts around social services and dietary support.

HIGH-EFFICIENCY AIR FILTRATION STUDIED IN FRESNO AND RIVERSIDE

A new study focused on households with asthmatic children found that the use of high-efficiency filtration, either as part of a central air system or standalone air cleaner, improves indoor air quality. Conducted in collaboration with the California Air Resources Board, the study also found that while participants did not report reduced asthma symptoms, they did have fewer visits to doctor's offices and hospitals for asthma care.

NATIONALLY RANKED

Our pediatric pulmonology program was nationally ranked in 2018–19 by *U.S. News & World Report*.

Urology

REGENERATIVE INVESTIGATIONS FOR UROLOGICAL DISORDERS

In addition to serving a busy surgical practice, our clinicians are also evaluating quality-of-life issues, outcomes data and topics in minimally-invasive surgery. Our pediatric urology program is a national leader in research that studies stem cells and tissue engineering to improve treatments for children with urological disorders.

Recently Eric Kurzrock, chief of pediatric urologic surgery, and his research team received a \$785,000 Department of Defense Spinal Cord Injury Research Program grant. Kurzrock developed a new technique to bioengineer and mature blood vessels from stem cells to create bladder grafts and other tissues needed by patients with bladder disease.

NATIONALLY RANKED

U.S. News & World Report consistently ranks the pediatric urology program at UC Davis Children's Hospital among the nations' best. We collaborate with Shriners Hospitals for Children – Northern California, our longstanding partner in caring for children with urological issues.

Nursing

NATION'S HIGHEST RECOGNITION FOR NURSING EXCELLENCE

UC Davis Medical Center was granted Magnet® recognition by the American Nurses Credentialing Center (ANCC) again in 2018. The four-year designation is the nation's highest form of recognition for nursing excellence and a benchmark for the quality of care patients receive. Only about 8 percent of U.S. hospitals carry Magnet designation, and UC Davis is currently the only medical center in Sacramento to earn the recognition.

ADVANCED EDUCATION AND TRAINING

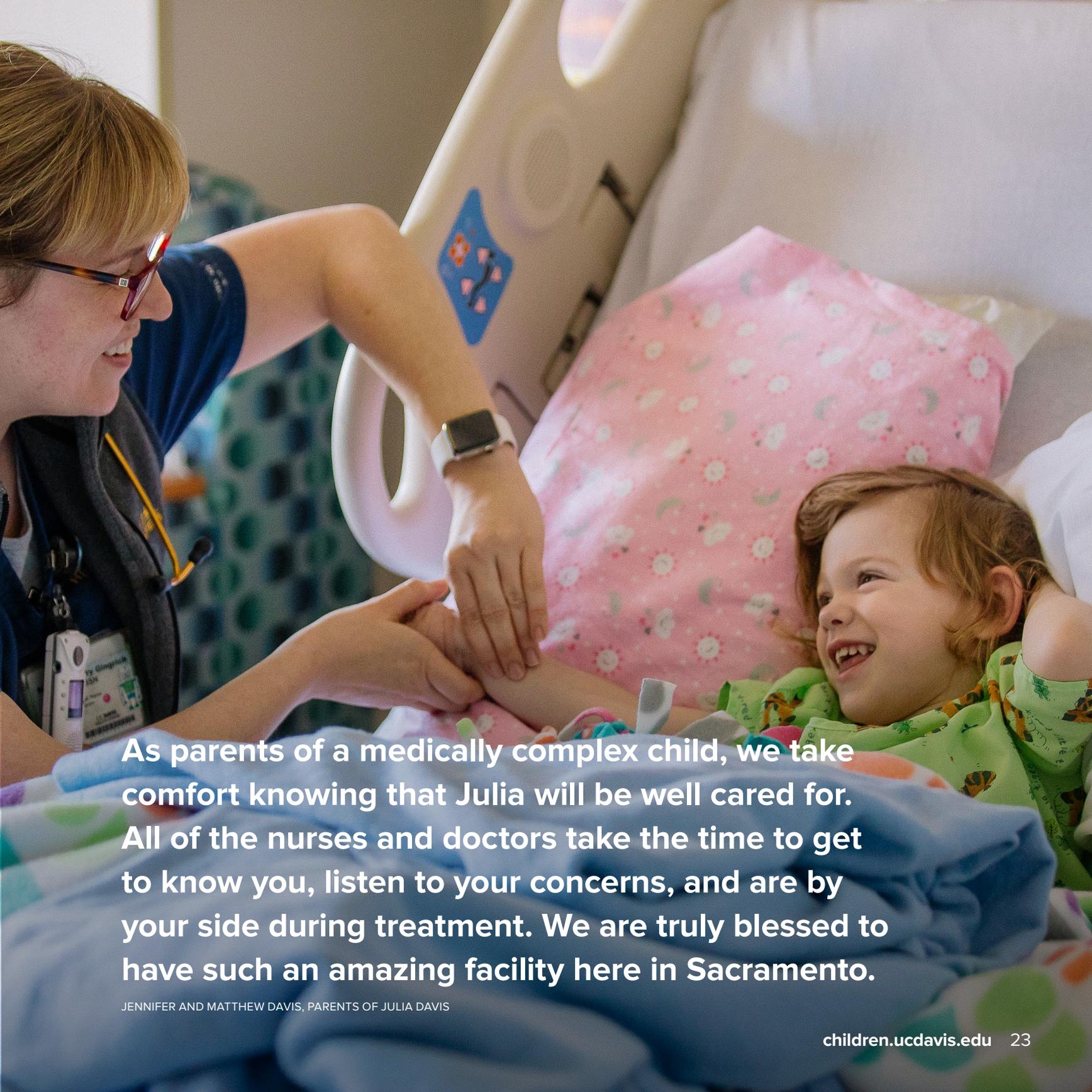
UC Davis Children's Hospital has long been identified as a U.S. center of nursing excellence devoted to optimal, collaborative and evidence-based care. For example, we recently marked our 20th year using the primary nursing model to enhance care and comfort for our pediatric patients.

Advanced education and training also continue to be hallmarks of our all-R.N. pediatric nursing staff. Overall, nearly 85 percent of UC Davis registered nurses hold a bachelor's of nursing or higher, and 14 percent an advanced degree. UC Davis pediatric nurse manager Angie Marin launched the area's chapter of the Society of Pediatric Nurses, and our nurses regularly provide scholarly experiences for counterparts from our region and beyond.

The nationally ranked and fast-growing Betty Irene Moore School of Nursing at UC Davis further enhances our ability to conduct research and participate in education, outreach and quality improvement.

FIRST PRISM AWARD FOR A CALIFORNIA HOSPITAL UNIT

In August 2018 the nursing staff in our Tower 4 ENT/Internal Medicine Pediatric Overflow Unit received the first PRISM Award — short for Premier Recognition in the Specialty of Med-Surg — for a hospital unit in California. The prestigious award from the Academy of Medical-Surgical Nurses (AMSNA) and the Medical-Surgical Nursing Certification Board (MSNCB) is granted to acute-care units that show exemplary work in areas such as leadership, evidence-based practice, patient outcomes and lifelong learning.



As parents of a medically complex child, we take comfort knowing that Julia will be well cared for. All of the nurses and doctors take the time to get to know you, listen to your concerns, and are by your side during treatment. We are truly blessed to have such an amazing facility here in Sacramento.

JENNIFER AND MATTHEW DAVIS, PARENTS OF JULIA DAVIS



**We're proud to be
actively involved
in advancing health
and health care
throughout the
Sacramento region.**

Community outreach

REACHING UNDERSERVED RURAL AREAS

The UC Davis Pediatric Telemedicine Program was the first of its kind in the U.S., and today is part of one of the nation's largest telehealth services. Our clinicians conducted nearly 700 pediatric telemedicine consultations this past year, across 18 medical specialties.

We remain an international leader in evaluating telehealth effectiveness and other policy implications. In 2017–18 we continued with more than five large federally funded grants, including evaluations of pediatric tele-emergency, tele-NICU and newborn nursery, tele-endocrinology, tele-audiology and tele-physiatry programs. All are designed to increase access to pediatric subspecialty services in rural, territorial, insular and/or tribal communities.

HELPING VULNERABLE COMMUNITIES CLOSE TO HOME

Partnerships focused on economically underserved populations also help us to advance health and health care closer to home.

For example, UC Davis Health supports primary care services in partnership with the region's community health centers, which provide care to Medi-Cal beneficiaries, underserved communities, and many others. UC Davis Health pediatricians serve children at Sacramento Native American Health Center and the Sacramento County Health Center.

The Communities and Health Professionals Together program also brings UC Davis Health pediatricians and physicians-in-training to disadvantaged neighborhoods, where they can help children while learning how to be effective child advocates.

The UC Davis Health Trauma Prevention and Outreach Program partners with Kohl's Cares on initiatives to reduce injury among children in Sacramento's underserved Oak Park area — such as a new “Wraparound” program to steer youths away from cycles of violence. Another partnership supports car seat distribution and education for families on public assistance.

Patient-centered care

UNIQUE CHILD LIFE ACCREDITATION

Members of our Child Life and Creative Arts Therapy Department and other compassionate UC Davis Health staff work to minimize trauma and anxiety for our patients and help them continue their growth and development.

Child-life specialists and music and art therapists provide play opportunities, coping strategies, accompaniment during medical interventions, and education to families and staff.

A full-time teacher provides educational services for children during extended stays.

Our young patients enjoy regular visits from local athletes, superheroes, and other fun friends.

The department's internship program was recently granted clinical internship accreditation by the Association of Child Life Professionals (ACLP). UC Davis is the only ACLP-accredited child life internship program in Northern California, and one of three in the state.

HUGGIE DOLES OUT AFFECTION FOR YOUNG PATIENTS

Pediatric patients and their families now have an extra dose of support from a furry friend while going through treatment. Huggie, a two-year old Labrador retriever, is the UC Davis Comprehensive Cancer Center's first-ever facility support dog. Thanks to Canine Companions, Huggie can reduce fear and anxiety during patient treatment.

10,000TH PILLOWCASE SEWN FOR PEDIATRIC PATIENTS

In 2017, nurses and colleagues reached an astounding 10,000 pillowcases sewn for pediatric patients.

What started as a community service project has now turned into a colorful and humanizing gift that aims to make pillowcases for every child who has surgery at UC Davis Children's Hospital.



HONORING ORGAN DONORS

The PICU's Honor Guard ceremony is performed to demonstrate compassion, honor and gratitude to late patients, family, and parents who have chosen organ donation. Staff members line the hallways and stand in silence to remember the donor patient.

HOME AWAY FROM HOME

The Kiwanis Family House and Ronald McDonald House use charitable support to offer inexpensive, referral-based accommodations on the UC Davis Children's Hospital grounds for families who have traveled significant distances to seek treatment for a child here. In 2018 the Ronald McDonald House Northern California donated a Cart with a Heart, a free refreshment caring cart that has served more than 1,200 pediatric patients and families.

Support for the entire family is a hallmark of UC Davis pediatric care.



Community support

PEDIATRIC CANCER PATIENT BECOMES A SACRAMENTO REPUBLIC FC PLAYER

The health system is a founding and ongoing season-presenting partner of the Republic FC, and serves as the official medical provider for the club's players. UC Davis Health's kit (jersey) sponsorship of the team helps to emphasize, model and normalize health and outdoor activity for area youth. The partnership also creates opportunities for players to interact with patients during special visits to our children's hospital.

For example, Make-a-Wish recipient Matthew Harding became the youngest soccer player in Sacramento Republic FC history in 2018. Thanks to the life-saving work of our pediatric oncologists and a successful surgery later at UC Davis Health's Children's Surgery Center, Harding was surrounded by players, staff and his UC Davis Health care team as he signed a player contract, received a jersey with his name and favorite number on it, and took part in a press conference with Republic FC leaders. Harding practiced with the team and joined them on the field during their match against Las Vegas Lights FC.

CALIFORNIA INTERNATIONAL MARATHON PARTNERSHIP

We are the race sponsor and chief beneficiary of the CIM, a major qualifier for the Boston Marathon. More than 10,000 runners and teams participated in the main race at the 36th annual event in 2018 and an additional 2,000 children participated in the UC Davis Children's Hospital MaraFUNRun, a 5K fun run/walk. Meanwhile more than 100 faculty, staff and students reported for volunteer duty on the course and the finish-line medical tent, which included acute care and musculoskeletal teams.





Every year UC Davis Health participates in, partners with, or sponsors over 200 different community events and programs.

CHILDREN'S MIRACLE NETWORK HOSPITALS AND PHILANTHROPIC SUPPORT

Philanthropy plays a crucial role in the kind of advanced care and research highlighted in this report, and we are incredibly thankful to have the support of many partners. UC Davis Children's Hospital is a proud member of the Children's Miracle Network Hospitals, an international nonprofit dedicated to raising funds for, and awareness of, children's hospitals. Donations create miracles by funding medical care, research, equipment and education that saves and improves the lives of our children.

Network staffers are glad to help community members get to know our hospital and the variety of ways they can get involved. To learn more or give a gift, please visit us at give.ucdavis.edu/CHLD or contact: Jacquelyn Mills, Senior Director of Development, at 916-734-9192 or jrkaymills@ucdavis.edu. News and information is also available at children.ucdavis.edu/cmn.

UC DAVIS CHILDREN'S HOSPITAL
BY THE NUMBERS

The Central Valley's only
level 1 pediatric trauma
center, with **123,631 clinic
visits, 7,884 hospital
admissions** and **16,320
emergency department
visits** per year.



**The West Coast's
first level I children's
surgery center**

as verified by the American College
of Surgeons, with 4,329 children's
surgeries this year.

Nationally ranked in **5** specialties:
neonatology, nephrology, pulmonology,
orthopedics, urology



**DESIGNATED CHILDREN'S
HOSPITAL BEDS**

- Neonatal Intensive Care Unit (NICU) – **49**
- Pediatric and Cardiac Intensive Care Unit (PICU) – **24**
- General Pediatrics – **48**
- Pediatric Emergency Department – **11**
- Children's Surgery Center – **6** operating rooms,
1 procedure room, **24** pre-op/post-op beds

120
physicians

across more than
30 subspecialties
(the region's greatest
diversity of pediatric
subspecialties)

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in **33 counties**, covering
65,000 square miles,
with over **2,900 transfers**
accepted from referring
institutions.

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TRAINED TO CARE FOR CHILDREN**

- Granted **Magnet**® recognition status by the
American Nurses Credentialing Center
- **84%** of UC Davis nurses hold a B.S.N. degree
or higher
- **14%** hold advanced degrees
- **50%** of UC Davis nurses have obtained a
specialty certification through the American
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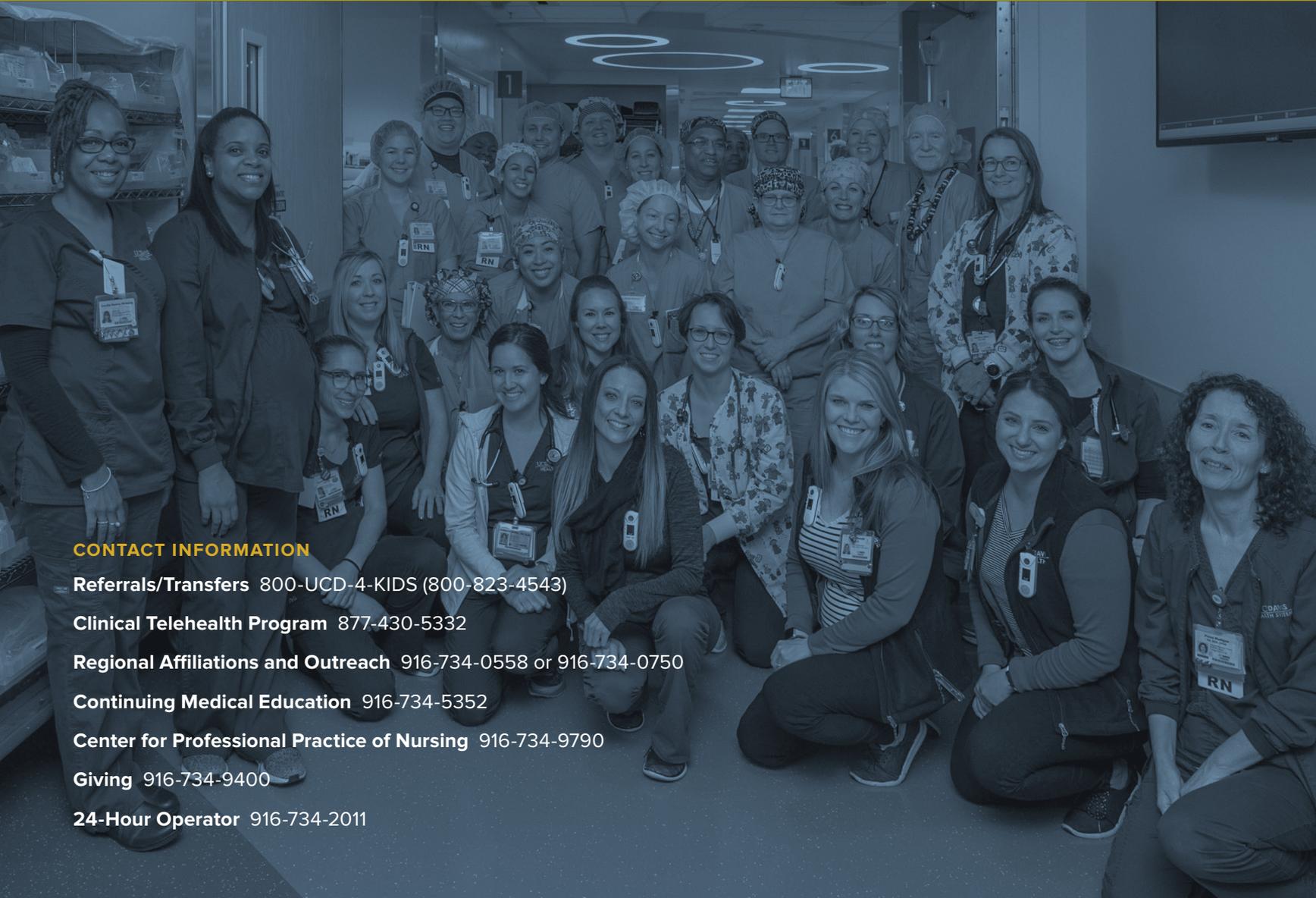
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CONTACT INFORMATION

Referrals/Transfers 800-UCD-4-KIDS (800-823-4543)

Clinical Telehealth Program 877-430-5332

Regional Affiliations and Outreach 916-734-0558 or 916-734-0750

Continuing Medical Education 916-734-5352

Center for Professional Practice of Nursing 916-734-9790

Giving 916-734-9400

24-Hour Operator 916-734-2011