

TRANSITIONS AND MILESTONES

As we send our fond farewells to Shinjiro Hirose, who has headed to Seattle for his next adventure, we welcome back [Diana Farmer](#) as surgeon-in-chief emeritus of UC Davis Children's Hospital.

[Payam Saadai](#) and [Jonathan Kohler](#) have been appointed interim co-chiefs in the Division of Pediatric General, Thoracic and Fetal Surgery in the UC Davis Department of Surgery. Saadai is assuming leadership of the [UC Davis Fetal Care and Treatment Center](#). Kohler is assuming leadership of the [Level 1 Children's Surgery Verification Program](#).

Speaking of news, you will find plenty in this issue! For example, on the front cover, you'll see that UC Davis is now the first and only Level 4 pediatric epilepsy center in inland Northern California. This new designation, which is the highest recognition for epilepsy care in the nation, was certified by the National Association of Epilepsy Centers.

We are also pleased to announce the results of this year's pediatric resident match. We will be welcoming the arrival of 13 new pediatric interns, as well as 2 child neurology interns in June as a result of a very successful Match Day. We look forward to welcoming them!

Thank you,

Satyan, Diana and Brenda

UC Davis Recognized for Excellence in Pediatric Epilepsy

The [National Association of Epilepsy Centers \(NAEC\)](#) has awarded the [UC Davis Comprehensive Epilepsy Program](#) its prestigious Level 4 Pediatric Epilepsy Center designation — the highest recognition for epilepsy care in the nation.

UC Davis is now the first and only Level 4 pediatric epilepsy center in inland Northern California. The designation is reserved for centers equipped with the most sophisticated neurodiagnostic technology, specialized epilepsy-trained neurologists and neurosurgeons, and the most complete range of medical and surgical treatments. The adult epilepsy program at UC Davis continues to maintain its Level 4 status.



"This recognition underscores our commitment to delivering exceptional care across the lifespan," said [Jack Lin](#), director of the UC Davis Comprehensive Epilepsy Program. "No matter where someone is in their epilepsy journey, we aim to improve quality of life by reducing seizure frequency or achieving seizure freedom through advanced therapies." [READ MORE »](#)

UC Davis Medical Center receives prestigious Baby-Friendly designation

[UC Davis Medical Center](#) has been officially redesignated as a Baby-Friendly Hospital.

The certification followed a rigorous review process by [Baby-Friendly USA](#) of the Sacramento region's nationally ranked medical center. Accreditation lasts five years — UC Davis Medical Center was first designated a Baby-Friendly Hospital in 2020.

This distinguished honor demonstrates that the medical center continues to adhere to the highest breastfeeding standards of care. These standards are built on practices consistent with the [Ten Steps to Successful Breastfeeding](#) and is compliant with the [International Code of Marketing of Breast-milk Substitutes](#), published by the [World Health Organization](#).

UC Davis Medical Center is part of a growing list of roughly 600 Baby-Friendly hospitals and birth centers in the United States. These facilities provide an environment that supports breastfeeding while respecting the patient's right to make the best decision for their baby and themselves.

"We are extremely proud to be recognized for the hard work of our team members throughout the Baby-Friendly process," said Brenda Chagolla, associate chief nursing officer at [UC Davis Children's Hospital](#). "Our team is committed to equip new parents with the support, education and resources needed to successfully initiate breastfeeding and continue breastfeeding when they go home."



Meniscus tears in kids and teens are on the rise. What's the best treatment?



UC Davis orthopaedic surgeon leads national effort to find best strategy for pediatric patients with these knee injuries

Knee injuries like meniscus tears are occurring more often in young people. UC Davis Health pediatric orthopaedic surgeon [Brian Haus](#) is leading a North American study to determine what treatment is best for young athletes with meniscus tears.

Haus has noticed a dramatic increase in meniscus tears and other injuries in young people over the past two decades. He attributes it mostly to an increase in children who take part in organized competitive sports year-round.

“This is a huge area of interest for me as a pediatric orthopaedic surgeon. The rise in pediatric injuries due to the explosion of organized sports has become a significant public health problem. Meniscus tears are only one example of many pediatric injuries that can cause life-long disability and pain.”

The three-year study is a collaboration of leaders in pediatric sports medicine from 20 major children’s hospitals in North America. Surgeons will track injuries, treatments and outcomes of meniscus tears to see what treatments are most effective in young patients. The goal is to create a registry of at least 1,000 patients.

The study, called the Registry of Arthroscopy for Meniscal Pediatric Pathology, is funded by a [\\$150,000 grant](#) from the [Pediatric Orthopaedic Society of North America](#). [READ MORE »](#)



From left, Postdoctoral Scholar Sarah Olguin and her mentor, Professor Jill Silverman.

UC Davis researchers lead innovative work on KCNT1-related epilepsy

Jill Silverman and Sarah Olguin use new technology to give families hope

A UC Davis postdoctoral researcher and her mentor have received two key funding boosts to advance their leading-edge work into the rare neurodevelopmental condition KCNT1-related epilepsy.

Sarah Olguin received a two-year, \$100,000 fellowship from the [Hartwell Foundation](#), a prestigious honor for early-career researchers.

She and her mentor, Professor [Jill Silverman](#), were also [chosen for a \\$68,667 pilot grant](#) from the [KCNT1 Epilepsy Foundation](#) as part of the [Penn Medicine Orphan Disease Center’s Million Dollar Bike Ride campaign](#).

Olguin and Silverman are both in the [Department of Psychiatry and Behavioral Sciences](#) and the [UC Davis MIND Institute](#). Silverman is known worldwide for her groundbreaking work with rodent models.

[READ MORE »](#)

Wrong place, wrong time: Why Zika virus hijacks a protein needed for brain growth

The mosquito-borne Zika virus is known for causing microcephaly, a birth defect in which abnormal brain development results in a smaller-than-expected head. A study published Jan. 13 in [mBio](#) shows that the Zika virus hijacks a host protein called ANKLE2, which happens to be important for brain development, to assist its own reproduction. Because Zika, unlike most related viruses, can cross the placenta, this can have disastrous consequences in pregnancy.

“It’s a case of Zika being in the wrong place at the wrong time,” said Priya Shah, associate professor in the departments of Microbiology

and Molecular Genetics and of Chemical Engineering at the University of California, Davis and senior author on the paper.

The new work shows that related viruses, including dengue virus and yellow fever virus, also use ANKLE2 for the same purpose. The discovery could open the way to new strategies to develop vaccines or therapeutics against these viruses.

Viruses carry only a limited set of instructions in their own genetic material, so to reproduce they rely on taking over host cell proteins and functions. Shah’s laboratory studies these interactions between virus and host.

Shah and her research team previously found that a Zika virus protein called NS4A interacts with ANKLE2 in host cells. Working in *Drosophila* fruit flies, they showed that this could lead to microcephaly.

ANKLE2 is known to be involved in brain development in the fetus, but is found in cells throughout the body.



Diana Farmer wins top national award for innovative fetal spina bifida stem cell research

The [Association for Clinical and Translational Science](#) awarded UC Davis Distinguished Professor [Diana Farmer](#) the prestigious Edward H. Ahrens, Jr. Award for Outstanding Achievement in Patient-Oriented Research. This award recognizes her first-of-its-kind work

which combines fetal surgery with stem cells to treat spina bifida. It also honors her excellence in moving basic research from laboratory to patients.

Farmer is an internationally renowned fetal and neonatal surgeon. She is the Pearl Stamps Stewart Endowed Chair and the chairperson of the UC Davis Department of Surgery. She is also the chief of pediatric surgery at Shriners Children — Northern California and founder and co-director of the [Center for Surgical Bioengineering](#).

[READ MORE »](#)



Pediatric critical care physician receives Eli Gold Prize

[Brian Goudy](#), associate clinical professor of pediatrics and a pediatric critical care physician, received the 2025 Eli Gold Prize.

Goudy was nominated by Jennifer Plant, division chief of pediatric critical care medicine, and Lavjay Butani, division chief of pediatric nephrology, for his clinical work, education and service.

Both commended Goudy for developing and leading a robust multidisciplinary pediatric inpatient and outpatient pulmonary hypertension (PH) program, the only one of its kind in the greater Sacramento region. Goudy's program has provided a valuable lifeline to parents and families, who seek local PH care for their children without having to travel to the Bay Area.

"In his work developing the program, Dr. Goudy has shown he is a knowledgeable, collaborative and dedicated leader. He is fully committed to providing state-of-the-art care for our patients with PH with a safe and evidence-based approach," Plant said. [READ MORE »](#)



INNOVATION

With AI, a new 'metabolic watchdog' takes diabetes care from burden to balance

An AI-driven solution for diabetes management could be a game changer for young adults living with the chronic disease.

In 2015, Sam King's 9-year-old son was diagnosed with Type 1 diabetes.

King, who is now an associate professor of computer science at the University of California, Davis, was working in the tech industry at the time and recalls the experience of becoming a parent of a child living with a chronic condition as humbling.

"The daily burden of diabetes care is really amazing and extensive," says [Stephanie Crossen](#), a pediatric endocrinologist, diabetes researcher and associate professor at UC Davis Health. "It's a constant mental drain if you want to do it well and get good results."

About 2 million Americans, including over 300,000 children and adolescents, live with Type 1 diabetes, or T1D, which is an autoimmune disease where the pancreas can't create its own insulin. Insulin is a hormone that helps blood glucose enter the body's cells to be used as energy. People living with the condition have to constantly monitor their blood glucose levels — every time they eat, exercise or become stressed, they need to be on top of it to maintain balanced levels. [READ MORE »](#)



First dual chamber leadless pacemaker implanted in a child



UC Davis Director of Pediatric Electrophysiology [Dan Cortez](#) has set another world record: He is the first to implant a dual chamber leadless pacemaker in a child. His [case report](#) was published in the journal [PACE: Pacing and Clinical Electrophysiology](#).

A 13-year-old patient was referred to the UC Davis pediatric electrophysiology clinic for presyncope, a feeling of lightheadedness or dizziness without actually fainting, after being monitored for years for congenital complete heart block.

Pacemakers are typically placed in children with congenital complete heart block, a rare condition that can lead to sudden death and affects 1 in about 15,000 to 22,000 children. Congenital complete heart block may occur due to repaired congenital heart disease or genetic predisposition. It can also be acquired from exposure to certain maternal antibodies.

After serial electrocardiograms and Holter monitors showed progressively lower average heart rates, Cortez talked with the patient and their family about pacemaker options.

Dual chamber leadless pacemakers help regulate the heart's rhythm by stimulating the heart's upper (atrial) and lower (ventricular) chambers. Because the patient wanted to remain active in sports without restrictions, leadless pacing was presented as an option, and the family agreed.

The AVEIR dual chamber leadless pacemaker was implanted via the patient's right internal jugular vein (instead of the femoral vein) so the patient could move easily and return to sports sooner. The minimally invasive procedure took place in the UC Davis Electrophysiology Lab. [READ MORE »](#)

New program improves surgery experience for neurodiverse kids



A trip to the doctor's office or hospital can be challenging for children who have autism and other neurodevelopmental disabilities.

In response, [UC Davis Health](#) has pioneered a first-in-the-nation

program called PATH (Promoting Accessibility To Healthcare) to improve health care experiences for neurodiverse children and their families. The program is funded by a [Children's Miracle Network at UC Davis](#) grant.

"Individuals with disabilities are more likely to have medical trauma that contributes to care avoidance and are four times more likely to have unmet health care needs," said [Scott Akins](#), chief of developmental pediatrics, medical director of the [UC Davis MIND Institute](#) and co-medical director of the PATH Program. "We're aiming to change this by adapting our environments to better serve those neurodiverse children and their families who need this care."

They are starting with the [Children's Surgery Center \(CSC\)](#) at [UC Davis Children's Hospital](#). As of this month, 80% of center staff are trained on the PATH curriculum, making it the first unit in the hospital to achieve PATH certification. [READ MORE »](#)

UC Davis doctor trains pediatric anesthesiologists in country with critical shortage



Trip to Zambia part of UC Davis Health's long-running commitment to global eye health with Orbis International

Last fall, [Niroop Ravula](#), a pediatric anesthesiologist at [UC Davis Health](#), made a 32-hour journey from Sacramento, California, to Lusaka in Zambia.

He brought with him a suitcase stuffed with 48 pounds of anesthesiology equipment and supplies — two types of [laryngoscopes](#), which help anesthesiologists put in breathing tubes during surgery, [laryngeal masks](#) to keep patients' airways open during anesthesia and drug labels to help physicians quickly identify medications needed in the operating room.

Zambia's natural beauty and abundant wildlife attract hundreds of thousands of tourists every year. But the country has one of the lowest gross domestic products in the world, with [two-thirds of the population](#) living in poverty.

And like many countries, Zambia has a shortage of anesthesiologists, who are critical for patient safety and comfort during surgery.

"There are only five or six pediatric anesthesiologists for the entire country of over 20 million," Ravula said. He notes the mortality rate for children who have surgery in low-income countries is 100 to 200 times higher than in the United States.

Helping to improve those statistics is why he made the journey.

[READ MORE »](#)



Lodi boy battles cancer with support from UC Davis and local community

An active and determined kid, 5-year-old AJ was always trying to keep up with his three older brothers. Gifted at sports, he was full of energy and wasn't the type to complain. But just a few days later, after a color run at school and a much-needed bath, AJ's mom discovered that his left testicle was also enlarged.

"We decided it was time for an Emergency Department visit," Christina said.

After scans at the local hospital near their home in Lodi, AJ's parents heard the dreaded words: We think your son has cancer. That night, he was transferred to [UC Davis Children's Hospital](#) by ambulance.

AJ was admitted to the UC Davis Pediatric Emergency Department for more scans. Results came back the next day. He was diagnosed with Wilms tumor.

[READ MORE »](#)

Spirit Halloween donates over \$100K to support patients at UC Davis Children's Hospital

Funding benefits Child Life and Creative Arts Therapy Department

[Spirit Halloween](#) and its [Spirit of Children Foundation](#) donated \$102,841, to [UC Davis Children's Hospital](#). And every cent goes to the [UC Davis Child Life and Creative Arts Therapy Department](#) to support the emotional needs of pediatric patients and families.

The Spirit Halloween team presented the check this month for funds raised in 2024.

"The funds raised by Spirit of Children over the years have allowed us to expand child life services, helping more children cope with the anxiety of hospitalization and medical treatments, while also making the hospital environment more enjoyable," said Diana Sundberg, Child Life and Creative Arts Therapy Department manager.



Spirit Halloween also hosts an annual Halloween Party at UC Davis Children's Hospital. This year's event gave hospitalized children a chance to enjoy fun they might have otherwise missed. Spirit also donated costumes so children could choose outfits for both the party and trick-or-treating. [READ MORE »](#)

'Message of hope': Semitrucks carry young patient's story across country

The story of one 7-year-old boy's health care journey will be taking the country by storm this year.

A larger-than-life image of UC Davis Children's Hospital patient [Shine Arslanian](#) appears on the sides of two semitrucks from [Knight Transportation](#) and [Swift Transportation](#). The truck also includes photos of the Children's Hospital transport team, a 24/7 unit that connects children in 33 counties in Northern California like Shine,

with specialized pediatric care at UC Davis Children's Hospital.

Both trucks will cross the country in 2025. It is part of the trucking companies' Fleet of Miracles campaign, which raises awareness for [Children's Miracle Network Hospitals](#).

Born five weeks early in 2017, Shine weighed just 4.5 pounds and was transported to [UC Davis Children's Hospital](#), where he was diagnosed with two very rare genetic conditions. He has had 17 surgeries to date, including the amputation of his legs above the knee at 2 years old. Still, he has not let these challenges hold him

back. He hopes to be a Paralympic athlete one day. He has been named the [2025 CMN champion for UC Davis Children's Hospital](#).

"We're really hoping that our story can be a message of hope to other families," said Shine's mother, Jamie Duby. [READ MORE »](#)



Virtual Holiday Toy Drive raises more than \$27K

The holidays were merry and bright for hospitalized kids at [UC Davis Children's Hospital](#), thanks to the \$27,740 that was raised during the Virtual Toy Drive in 2024. Donors also purchased 300 toys and other wish list items from the hospital's Amazon wish list, ahead of the holidays, which were delivered directly to the hospital.

The toy drive provided free toys for every hospitalized child, from infants through teens. Toys were also given to pediatric patients in the [UC Davis Comprehensive Cancer Center's](#) pediatric infusion room as well as to children at the Glassrock Clinic and the MIND Institute.

Additional funds will be used to support pediatric patients throughout 2025, providing toys, art supplies, music supplies, treasure box prizes and giveaways during their hospitalization as well as visits to the Comprehensive Cancer Center, Glassrock Clinic and [MIND Institute](#). Children who celebrate their birthday in the hospital will also receive gifts, thanks to the generosity of donors. [READ MORE »](#)



Project ADAM Sacramento prepares park staff for sudden cardiac arrest emergencies

Visitors to the [Mission Oaks Recreation and Park District](#) are now able to respond better to sudden cardiac arrest emergencies thanks to the installation of new [Automated External Defibrillators](#) (AEDs). The new AEDs were made possible by a \$35,000 grant from the [Arden-Arcade](#), [Marysville](#) and [Elk Grove Rotary Clubs](#).

The grant funded the purchase of more than a dozen AEDs. It establishes the area's first outdoor access AED program. [Project ADAM Sacramento](#) is providing staff with training on the AEDs and advising on how to implement a public access defibrillator program.

The addition of AEDs will ensure that immediate assistance is available for individuals experiencing cardiac emergencies, potentially saving lives.

As part of a ribbon-cutting event announcing this new program, Project ADAM coordinator Rebecca McCormac provided hands-only CPR training and demonstrated how to use an AED.

"More than 357,000 out-of-hospital sudden cardiac arrests occur every year in the United States. Bystander CPR (CPR performed by nonmedical personnel like passersby) and use of an AED can double the victim's chance for survival. This investment by the Rotary clubs will help save lives in our community," McCormac said. [READ MORE »](#)

More than 350 people attend free youth heart screening event in Davis

The latest free youth heart screening at Harper Junior High School in Davis was a success. The medical team screened 366 young people and trained countless families on CPR. The daylong event helped to identify undiagnosed heart conditions in youth ages 12 to 25.

This was the fifth year for the free youth heart screening hosted by the [Kyle J. Taylor Foundation](#), [UC Davis Health](#) and [Project ADAM Sacramento](#).

"We are so grateful that the Davis Joint Unified School District saw the value of screening young people in their community," said Rebecca McCormac, Project ADAM Sacramento coordinator. Past events have seen an average of 300 attendees. "In addition to screening for undiagnosed heart conditions and helping spread awareness, we also trained many families in CPR. I do not doubt that our volunteers saved lives through their efforts."

According to health statistics, 1 in 300 youth has an undiagnosed heart condition that puts them at risk for sudden cardiac arrest.



Young people from Yolo County filled the gym March 9 to receive a cardiac risk assessment, an electrocardiogram (EKG), a physician review and CPR training. [READ MORE »](#)

Get social — like us, follow us, share with your networks!

facebook.com/ucdavischildrenshospital has **15,919** likes!

instagram.com/ucdavischildren has **5,840** followers!



Share your patient story!