



### **SciTech Now**

30 minute weekly program  
Fridays at 8:30pm on KLRN

Chris Duel hosts this weekly newsmagazine program. The show covers everything from the IT industry to biomedical enterprises, bringing attention to the science, technology, engineering and mathematics (STEM) advancements in South Central Texas and around the country.

Program number: 107  
Program length: 26:46  
First air date/time: April 1, 2016 7:30pm

Here's a frightening fact: one of the most dangerous locations for exposure to germs and viruses is in a hospital. It's estimated that hospital-acquired infections affect one in 25 patients and kill nearly 200 people every day in the U.S. But help is on the way, in the form of Xenex Germ-Zapping Robots.

Program number: 108  
Program length: 26:46  
First air date/time: April 8, 2016 7:30pm

What do you think of when I mention a youth interscholastic competition? Football? Cheerleading? Debate? How about Robots! At San Antonio's FIRST Robotics Competition - the largest regional robotics competition in the country - students from five countries are competing in a sport where everyone can eventually turn pro.

Program number: 109  
Program length: 26:46  
First air date/time: April 15, 2016 7:30pm

Dr. Matthew Gdovin, a UTSA physiology professor is taking a novel approach to wiping out cancer. He just applied for a patent for his method, which involves injecting a solution into a cancerous tumor and then shining an ultraviolet light on that area. The solution, when activated by light, causes the cancer cells to kill themselves. He's been working with triple negative breast cancer, one of the most aggressive types there is, and has been able to stop tumors from growing, as well as kill 95% or more of cancerous cells in under two hours with one treatment. Dr. Gdovin is hoping his treatment could help people with hard to reach tumors, as well as people or children who are unable to withstand the complications of radiation or chemotherapy. SciTech Now goes inside Dr. Gdovin's UTSA lab to learn more about this innovative therapy.

Program number: 110  
Program length: 26:46  
First air date/time: April 22, 2016 7:30pm

A visit to the San Antonio School of Science and Technology, a high-performing, college prep, open enrollment state public charter school approved, and accredited by the Texas Education Agency. Known for its successful integration of science and math programs into a well-rounded curriculum and diverse student body, SST is a school of choice for any students in grades 6 through 12 residing in the San Antonio Metropolitan area.

Program number: 111  
Program length: 26:46  
First air date/time: April 29, 2016 7:30pm

While San Antonio is a growing, thriving hub of technology and start-ups, there is a coalition organizing to accelerate this growth and attract the young talent necessary to elevate the region to the next level. This non-profit is called Tech Bloc. Let's learn more about how its philosophy and vision could dramatically impact the future of the Alamo city. Earlier this year, Tech Bloc announced its finalists for a competition called Tech Fuel, which awards \$50,000 in prize money from Bexar County to further promote the tech and start-up community in the San Antonio area.

Program number: 112  
Program length: 26:46  
First air date/time: May 6, 2016 7:30pm

What do you call a Children's Museum where kids don't just look at exhibits, but get hands-on experience to spark their imagination and foster an appreciation for discovery? In San Antonio, we call it the DoSeum. Let's go inside to learn how the DoSeum inspires young minds, especially in the worlds of Science, Technology, Engineering and Math. It's been an exciting first year of learning and discovery at the DoSeum. They'll be celebrating the one year anniversary at the location on Broadway near East Mulberry on June 6th.

Program number: 113  
Program length: 26:46  
First air date/time: May 13, 2016 7:30pm

For nearly seven decades, San Antonio has been home to a world class research facility that plays a vital role in Space Exploration, Medicine, Defense, Energy, Weather Forecasting, Transportation and many other industries. It all began in 1947 with the vision of a man named Tom Slick, Jr. – who would have turned 100 years old this month. At Southwest Research Institute, they celebrate the birthday of their founder and the continuing phenomenal legacy of applied science and technology. Southwest Research Institute conducts more than four thousand projects annually with a monetary research volume of \$592 million.

Program number: 114  
Program length: 26:46  
First air date/time: May 20, 2016 7:30pm

One of the problems facing many people with multiple sclerosis is that they get overheated while exercising, which can make their symptoms worse. Exercising in a pool helps with this issue. Now a professor at the University of Texas at San Antonio is combining aquatic physical therapy with virtual reality by creating a game for the pool called "Shark Punch." The professor knows the game is beneficial because he himself has multiple sclerosis. Professor Quarles has applied for a patent for Shark Punch and continues to test the device on other MS patients to improve its effectiveness.

Program number: 115

Program length: 26:46

First air date/time: May 27, 2016 7:30pm

Teaching upper elementary through high school students to code is the goal of a program in San Antonio called Youth Code Jam. It helps get kids excited about computer science, builds confidence in their STEM skills and motivates them to aspire to the tech-driven jobs of the future. While Youth Code Jam places an emphasis on reaching girls, ethnic minorities and gifted students, it also provides opportunities for teens with high functioning autism and Asperger's, as we learn more now. Youth Code Jam has been recognized nationally by President Obama's Computer Science for All initiative by setting the goal of reaching a thousand students in 2016.

Program number: 116

Program length: 26:46

First air date/time: June 3, 2016 7:30pm

Driverless vehicles have gotten a lot of attention lately as companies like Google strive to develop better technologies. But engineers at Southwest Research Institute in San Antonio have been developing autonomous vehicle technology for commercial, military and government clients for more than a decade, spending over \$50 million along the way. They've also developed a positioning system for these vehicles called RANGER, which goes beyond GPS, by orienting the autonomous vehicle while precisely identifying its location on the pavement as it drives. Let's go for a ride at Southwest Research Institute and learn more. Southwest Research Institute continues to develop this autonomous vehicle technology, including a communications network that could someday link all cars, busses, trucks, trains, traffic signals and cell phones to dramatically enhance roadway safety.

Program number: 117

Program length: 26:46

First air date/time: June 24, 2016 7:30pm

Wagner High School in San Antonio is adding the letter T to STEM. That T is for Texas. The school has been approved as a Texas Science, Technology, Engineering and Mathematics Academy by the Texas Education Agency. This designation will connect Wagner with access to specialized technical assistance and a connection to the statewide network of more than 100 T-STEM schools across Texas. Let's go to Wagner High School and learn more. The Judson Independent School District also has two other growing STEM programs at the elementary and middle school levels, including the J-STEM Academy located on the Judson Middle School campus.