



## **SciTech Now**

30 minute weekly program

Thursdays at 7:30pm 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: 401

Program length: 26:46

First air date/time: January 10, 2019 7:30pm

Computer hackers are a huge problem all over the world. That's what makes it exciting—when a local San Antonio company comes up with a new solution to combatting those very hackers. We take a look tonight at Denim Group's brand new patent in the war against illegally cracking code...

Participants and their affiliations, titles: Chris Duel, Host | Dan Cornell, CTO Denim Group | Sheridan Chambers, Principal Denim Group

Program number: 402

Program length: 26:46

First air date/time: January 17, 2019 7:30pm

Texas A&M, San Antonio, is the first campus in the world to utilize an Indoor Positioning Solution to provide a safer environment for students, whether it's a medical emergency or active shooter. CriticalArc, as it's called, gives campus police a 3D view of multi-story buildings that precisely indicates where an incident is occurring in multi-story buildings.

Participants and their affiliations, titles: Chris Duel, Host | Ron Davidson, University Chief of Police, Texas A&M University, San Antonio

Program number: 403

Program length: 26:46

First air date/time: January 24, 2019 7:30pm

IT'S CALLED ULTRA ACCESSIBLE TECHNOLOGY AND THANKS TO A PARTNERSHIP BETWEEN MORGAN'S WONDERLAND AND MICROSOFT, SPECIAL NEEDS CHILDREN HAVE A CHANCE TO INTERACT WITH VIDEO AND EDUCATIONAL GAMES WITH ADAPTIVE CONTROLS, WHICH ACCOMMODATE THEIR DISABILITIES.

Participants and their affiliations, titles: Chris Duel, Host | RON MORANDER, COO Morgan's Wonderland

Program number: 404

Program length: 26:46

First air date/time: January 31, 2019 7:30pm

A team of Southwest Research Institute engineers has created an interactive decision tree aimed at finding the best solution for specific oil spill scenarios. We go inside the lab, to learn more.

Participants and their affiliations, titles: Chris Duel, Host | Dr. Amy McCleney, Research Engineer, Southwest Research Institute | Kevin Supak, Senior Research Engineer, Southwest Research Institute

Program number: 405

Program length: 26:46

First air date/time: February 7, 2019 7:30pm

SCIENCE AND THE ARTS ARE INTERSECTING WITH NEW AUGMENTED REALITY TECHNOLOGY AT THE WITTE MUSEUM.

THE BATTLE OF THE ALAMO BECOMES REAL THROUGH A DOWNLOADED APP AND YOUR PHONE OR TABLET. LIKE MAGIC, IT'S A COLLABORATION BETWEEN THE WITTE AND EXPERIENCE REAL HISTORY, A SAN ANTONIO TECH COMPANY HELPING US LEARN BY BRINGING HISTORY ALIVE .....RIGHT IN THE PALMS OF OUR HANDS

Program number: 406

Program length: 26:46

First air date/time: February 14, 2019 7:30pm

WE VISIT SCIENTISTS AT SOUTHWEST RESEARCH INSTITUTE, WHO ARE MAKING A CAREER OF STUDYING... TITAN. IT'S THE LARGEST MOON OF SATURN... AND IT'S A TRUE MYSTERY OF SCIENCE UNFOLDING FOR THESE CURIOUS INVESTIGATORS.

Participants and their affiliations, titles: Chris Duel, Host | KELLY MILLER, Ph.D., RESEARCH SCIENTIST, SWRI | CHRIS KLEIN, Ph.D, SENIOR RESEARCH SCIENTIST,SWRI

Program number: 407

Program length: 26:46

First air date/time: February 21, 2019 7:30pm

IT'S A SMART PILL BOTTLE THAT REGULATES HOW OFTEN A PERSON'S MEDICATION IS DISPENSED AND IT'S CALL PATCH—THE CONCEPT IS REMARKABLE, BUT EVEN MORE SO WHEN YOU CONSIDER THAT TWO YOUNG COLLEGE STUDENTS ARE THE BRAINPOWER BEHIND PATCH. WE VISIT THE TWO SMART BOTTLE FOUNDERS THAT HOPE THEIR INVENTION WILL ASSIST IN THREE MAIN AREAS: THE OPIOID CRISIS; THE ELDERLY ON MEDICATION AND CLINICAL TRIALS WITHIN THE MEDICAL ARENA.

Participants and their affiliations, titles: Chris Duel, Host | GAVIN BUCHANAN, CO-FOUNDER, PATCH | ANDREW AERTKER, CO-FOUNDER, PATCH | NATHAN DULLEA, CTO, TRINITY PATCH | LUIZ MARTINEZ, Ph.D, DIRECTOR OF INNOVATION AND ENTREPRENEURSHIP, TRINITY UNIVERSITY

Program number: 408

Program length: 26:46

First air date/time: February 28, 2019 7:30pm

Plants can grow and thrive in nature, where there's lots of space, but what if you're limited on space, and still need to grow plants?

That's the technology they're addressing at San Antonio College.

We take you inside the hydroponics and robotics research that's being conducted, on campus.

Participants and their affiliations, titles: Chris Duel, Host | ISAAC OLSON, TEAM LEAD, SAC HYDROPONICS CLUB | ASHLEY CASTILLO, SAC SOPHOMORE | STEVEN LEWIS, HYDROPONICS PROJECT ADMIN.

Program number: 409

Program length: 26:46

First air date/time: March 7, 2019 7:30pm

ONE IN THREE ADULTS OVER THE AGE OF 85 SUFFER FROM DEMENTIA OR COGNITIVE DECLINE. THAT HAS LEAD UTSA RESEARCHERS TO SEE WHETHER THERE IS A RELATIONSHIP BETWEEN LIFESTYLE AND COGNITIVE ABILITY. THE STUDY, CALLED QUANTU, IFOCUSES ON THE INFLUENCE OF LIFESTYLE ON MENTAL ACUITY. THAT INCLUDES LOOKING AT THE AMOUNT AND QUALITY OF SLEEP, THE LEVEL OF ACTIVITY AND HEARTRATE. WE'LL TAKE A LOOK AT HOW USING BIOMETRICS MAY LEND IMPORTANT INSIGHT INTO DEMENTIA.

Participants and their affiliations, titles: Chris Duel, Host | AMINA ANN, QUTUB, ASSOC. PROF, DEPT. OF BIOMEDICAL ENGINEERING | ERIN POLLET, GRADUATE RESEARCH ASST.

Program number: 410

Program length: 26:46

First air date/time: March 14, 2019 7:30pm

Exciting technology at the Southwest Research Institute is using drone technology along with infra-red cameras to detect methane gas leaks from the air. Methane, like carbon monoxide, is odorless and colorless and is harmful, if inhaled in a confined space. Leaks are also very common and are extremely

hard to detect. But researchers at the institute have discovered a way. And, they're the first in the country to utilize this new technology.

Participants and their affiliations, titles: Chris Duel, Host | MARIA ARAUJO, MGR. R&D, SOUTHWEST RESEARCH INSTITUTE

Program number: 411

Program length: 26:46

First air date/time: March 21, 2019 7:30pm

Nearly one and a half million people in the United States have Alzheimer's—a diagnosis that is not only hard on the patient, but devastating for the families, as well. Researchers at The University of Texas Health San Antonio are looking into whether a computer platform using artificial intelligence, paired with a video of people's gait, or walk, might diagnose the disease years earlier, bettering the chance for treatment.

Participants and their affiliations, titles: Chris Duel, Host | Dr. Sudha Seshadri, Dir Glen Biggs Inst . for Alzheimers, UT Health San Antonio

Program number: 412

Program length: 26:46

First air date/time: March 28, 2019 7:30pm

It's called the Cyclone Global Navigation Satellite System, or CYGNSS, for short, and this constellation of microsattellites is able to pierce thick clouds and rain to assess wind speed and better understand hurricanes.

Designed and built right here in San Antonio, at Southwest Research Institute, these tiny satellites are the size of a suitcase, but pack a powerful punch.

And now, NASA has extended this important program for two more years, as they have a stellar performance record.

Participants and their affiliations, titles: Chris Duel, Host | WILLIAM WELLS, SENIOR RESEARCH ENGINEER, SOUTHWEST RESEARCH INSTITUTE |