# Envisioned at The Texas A&M System Urban Campus in Fort Worth

## **Research and Innovation**

A new research and innovation center will house a range of initiatives involving the System's network of state agencies and universities. Discussions so far include programs in emergency response communication, medical technologies, advanced manufacturing, nutrition, biotechnology, medical laboratory science and nursing.

## **Advanced Manufacturing**

Agencies and universities involved: The Texas A&M Engineering Experiment Station, the Texas A&M Engineering Extension Service, Texas A&M University and the Texas A&M Transportation Institute.

Offerings:

- Next generation manufacturing enablers including artificial intelligence and machine learning, 5G, internet of industrial things and cybersecurity.
- Smart manufacturing for critical infrastructure and national security.
- System integration of prototypes and subsystems.
- Testing, evaluation and quality assurance.
- Secure and resilient manufacturing supply chains and industrial distribution.
- Professional training and certifications.

### **Disaster and Emergency Management Services**

Agencies involved: The Texas Division of Emergency Management, A&M Engineering Extension Service, the Texas A&M Engineering Experiment Station and Texas A&M University Health Science Center.

### Offerings:

Research and testing of emergency communication systems that provide instant, seamless contact across multiple jurisdictions.

- Pairing of academic researchers and experienced emergency managers to develop timely, relevant research projects that focus on improving disaster and emergency services.
- Training of first responders and emergency management professionals in preparing for, responding to, recovering from and mitigating against disaster.
- Regional Emergency Operations Center for developing training tools, new processes and mechanisms to improve emergency operations center functions.
- A national disaster law resource center for current, centralized information on the laws affecting emergency management during disasters.

## **Medical Technologies**

Agencies and universities involved: The Texas A&M University Health Science Center, the Texas A&M Engineering Experiment Station and Tarleton State University.

Offerings:

- Development of clinical telehealth technologies for medicine delivery in rural areas, remote military settings and during disasters and other emergencies.
- Hub for in-person and virtual training.
- Translation, interpretation and application of research for use in clinical practice.
- Develop standards of care for an integrated telehealth ecosystem of devices and professionals. Goal of standards would be to improve patient outcomes by reducing errors and accelerating access to critical care, including specialists, in time of need.
- Study of microbe metabolic pathway engineering, functional genomics, microbial cell culture and biodegradation of hazardous materials.
- Identifying newly emerging enzymatic functions and pathways with commercial applications.

# Agriculture, Food and Nutrition Scientific Evidence Center

Agency involved: Texas A&M AgriLife Research.

Offerings:

- State-of-the-art analysis and synthesis of scientific evidence studies concerning pressing public issues at the intersection of agriculture, food, nutrition and human health.
- Provide a place for policymakers to submit questions related to food, agriculture, the environment and the economy. In response, research specialists will gather and combine existing data on relevant topics by performing rigorous systematic reviews using state-of-the-art statistical and data science techniques.
- Interpret and present data for non-science audiences. The center will be a non-biased source of comprehensive scientific information for decision-makers, akin to evidence centers in the medical science domain.

# **The Education Alliance**

The Texas A&M School of Law will be the academic anchor the new urban campus. An education alliance will include professional, technical and university courses offered by Tarleton State University and Texas A&M University as well as the law school and other alliance members.

# Texas A&M School of Law

• Ranked No. 1 in Texas and No. 10 nationally for job placement by the American Bar Association, with about 94 percent of Class of 2020 grads finding jobs within 10 months of commencement, jobs that are full-time, long-term bar passage required or J.D. advantage positions. Compares with 77.4 percent nationally.

- Through classrooms, extensive clinics, programs and externships, students engage in practical, real-world experiences under the supervision of top-notch faculty and mentors.
- Top ranked programs in intellectual property and dispute resolution.
- Risen more than 100 places overall in the U.S. News & World Report rankings since 2013, jumping 30 spots over the last two years.

### **Texas A&M College of Engineering**

- Largest engineering college in the nation and the top ranked in Texas.
- Offering engineering courses through an engineering academy, the Engineering Experiment Station or directly from the college.

### **Tarleton State – Biotechnology**

- Multi-track, interdisciplinary curriculum connected to industry relevant issues.
- Focus on STEM enhancing science, technology engineering and math skills.
- Inclusion and access to STEM literacy.
- Involve student in research initiatives.

## **Tarleton State - Nursing**

• Nationally accredited Bachelor's and Master's degrees.

## **Tarleton State - Criminal Justice**

- Nationally recognized faculty with research expertise in areas such as racial profiling, policing, family violence, and the dark web.
- Tarleton's first Ph.D. program
- Bachelors of Applied Arts and Sciences with academic credit for professional training.
- Research collaborations with local community partners
- Faculty-led research opportunities for students

### **For More Information Contact:**

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