



# ADVANCING STRATEGIC COLLABORATION

Tecnológico de Monterrey &  
The University of Texas at San Antonio

September 29, 2023

Dr. Taylor Eighmy, UTSA President

**“GREAT CITIES  
NEED GREAT  
UNIVERSITIES...”**



# STRATEGIC DESTINATIONS

OUR VISION FOR 2018-2028



Model for Student Success



Great Public Research University



An Innovative Place to Work, Learn and Discover

# DESIGNATIONS OF EXCELLENCE



## Tier One Research Classification

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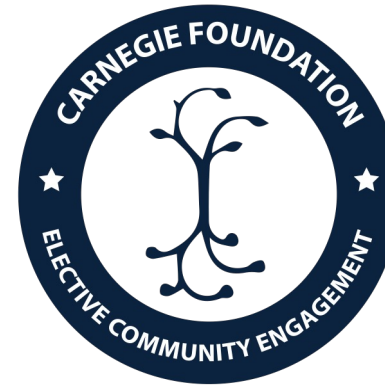
Recognizes UTSA as  
one of USA's top 4%  
research institutions



## Excelencia in Education Seal of Excelencia

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Recognizes UTSA's  
leadership in  
advancing Latino  
student success



## Community Engagement Classification

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Highlights UTSA's  
commitment to serving  
the San Antonio region



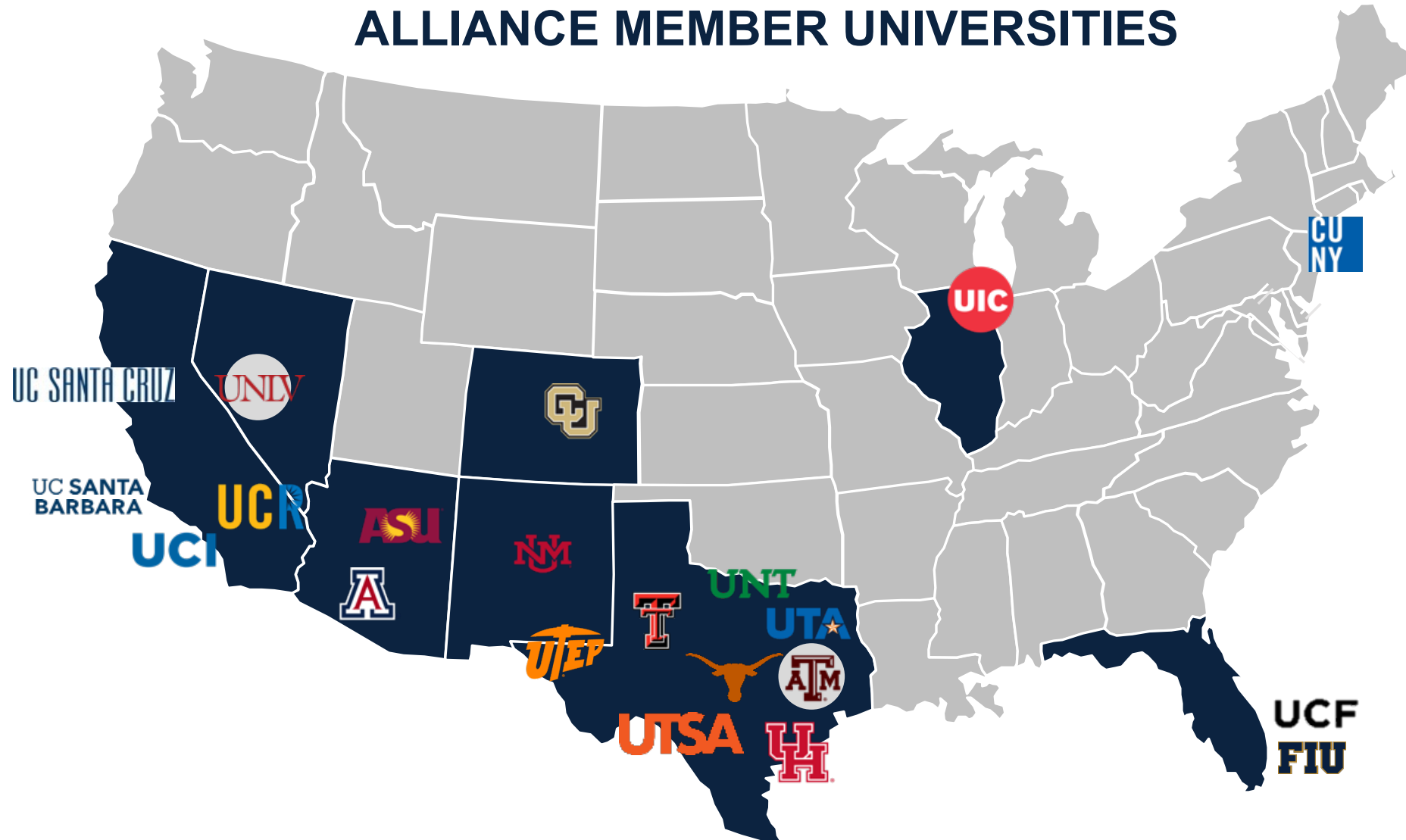
## Innovation & Economic Prosperity University

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Recognizes UTSA's  
leadership in fostering  
economic growth,  
prosperity and innovation.

# HISPANIC SERVING & CARNEGIE R1

## ALLIANCE MEMBER UNIVERSITIES



# SEAL OF EXCELENCIA

## UNIVERSITIES



# 155

**INTERNATIONAL  
AGREEMENTS**

123 academic + 32 research

# 139

**INSTITUTIONS**

# 34

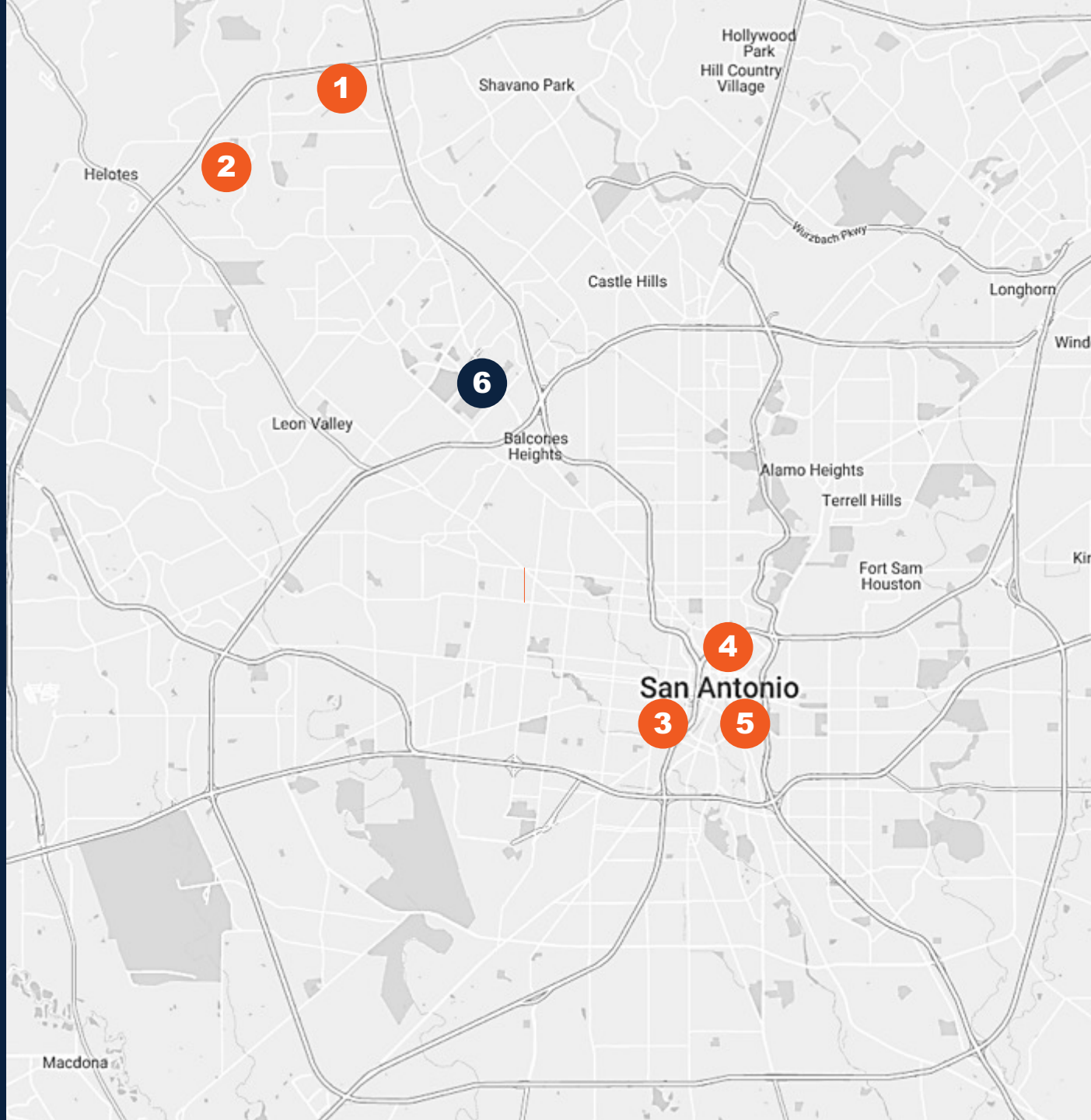
**COUNTRIES**

# 5

**CONTINENTS**

FIVE CAMPUSES  
**ONE**  
UNIVERSITY

UTSA is the largest university in San Antonio, which is the 7th biggest city in the United States



1 - MAIN



2 - PARK WEST



3 - DOWNTOWN



4 - SOUTHWEST



5 - HEMISFAIR



6 - UT HEALTH SA



UTSA

# SAN PEDRO I

UTSA DOWNTOWN CAMPUS



SAN PEDRO CREEK





**DELL** Technologies  
**ROADRUNNER DATA CENTER**

## SCHOOL OF DATA SCIENCE

### 14+ Degree & Certificate Programs

#### Academic Partners Include:

- Alvarez College of Business
- College of Science
- Klesse College of Engineering & Integrated Design
- University College

### 9+ Strategic Partners



## INTENTIONAL COLLISION

### 3+ University Level Institutes

- Matrix AI Consortium
- Open Cloud Institute
- The Cybersecurity Manufacturing Innovation Institute



### 16+ Capability & Domain Labs, including:

- Cyber-Informed Engineering
- Internet of Things
- Machine Learning
- Secure AI
- Bioinformatics Research
- Computational Biology
- Next Generation Census

## NATIONAL SECURITY COLLABORATION CENTER

### 6+ Strategic Partners



### 5+ DOE Partners



### 6+ Federal Partners



### Our School of Data Science Community of Practice:

UC Berkeley | NYU | Rice | Stanford | Michigan | UNC | Virginia | Washington | Wisconsin



# SAN PEDRO II

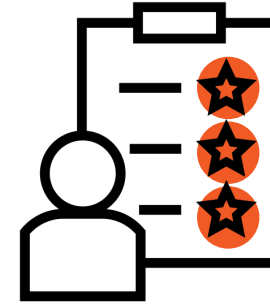
**UTSA DOWNTOWN CAMPUS**

# Our Ecosystem

Research | Education | Workforce | Economy



## STRENGTHS



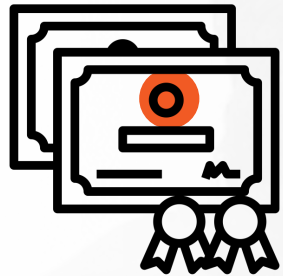
- Data Science
- Cyber Security
- Artificial Intelligence
- Quantum Computing
- Semi-conductors & Materials Sciences
- Biosciences
- Health Informatics
- Academic Programs

## OPPORTUNITIES



- Bilateral Mexico-Texas Economy
- Cultural Alignment
- Nearshoring
- Collaborative Ecosystem
- Now is the Right Time

# COLABORACIONES



**Dual Master Degree**  
in Cybersecurity



**Joint Research**  
material science, marketing,  
nutrition, engineering,  
chemistry, computer  
science, AI, cybersecurity



**Quantum Collaborative**  
with Arizona State  
University



**Student Exchange**  
summer research

# COLABORACIONES

## Human Mobility Lab

Using VR & AR to inform human mobility in the urban environment



### Co-Located

faculty, staff & graduate students



### Applies to Monterrey

and other urban environments



### San Antonio

serves as a living lab



### Awarded NSF Grants

totaling \$1.1M



*Peta Room, San Pedro I*

# COLABORACIONES

ConTex enhances research collaborations connecting Texas and Mexico

## Current Projects



**Promoting Technology Entrepreneurship in Mexico Through Social Networking Skills Training**

*Dr. Dante Benito Castro Solano (TEC) and Dr. Teja Guda (UTSA)*



**Nano-colloids of Core-shell Particles as a New Approach for the Optical Sensing of Contaminants of Emerging Concern**

*Dr. Nancy Ornelas Soto (TEC) and Dr. Kathryn Mayer (UTSA)*



**Design of Rotor Blades to Maximize Wind Energy Production**

*Dr. José Francisco Herbert Acero (UTSA), ConTex Postdoctoral Fellow and TEC graduate*



The University of  
Texas System



CONTEX



Tecnológico  
de Monterrey



**Dr. Solano and  
Dr. Guda** with their  
research team



# COLABORACIONES

UT Health San Antonio is focused on transforming health and healthcare for a diverse society



**Primary driver** of San Antonio's **\$44B** health care and biosciences sector



**Six Schools** - Medical, Dental, Nursing, Health Professions, Graduate, Public Health

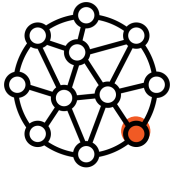


## Research Collaborations

- Obesity
- Alzheimer's Disease
- Cancer
- Genetics
- Diabetes
- Aging
- Mitochondrial Disease
- Drug Discovery
- Mental Health, Substance Use Disorders



# COLABORACIONES



## **Sustainable Manufacturing Program**

biochar for CO2 capture | advanced recycling  
carbon-fiber reinforced polymers



## **Mi Salud**

researching population health



## **Longstanding history**

and shared advisory roles



*SwRI and Tec establish “El Instituto de Investigaciones” in 1950*

**UTSA<sup>®</sup>**

**CREATING**

**BOLD**

**FUTURES**