

UTSA[®]

The University of Texas
at San Antonio[™]

Celebrating UTSA's
National Leadership

Cybersecurity and the Biosciences

June 5, 2018





UTSA®

San Antonio's National Leadership in Biomedical Research & Development

San Antonio has

3,300+

MDs and PhDs

and more than

\$1 billion

in federal R&D
expenditures



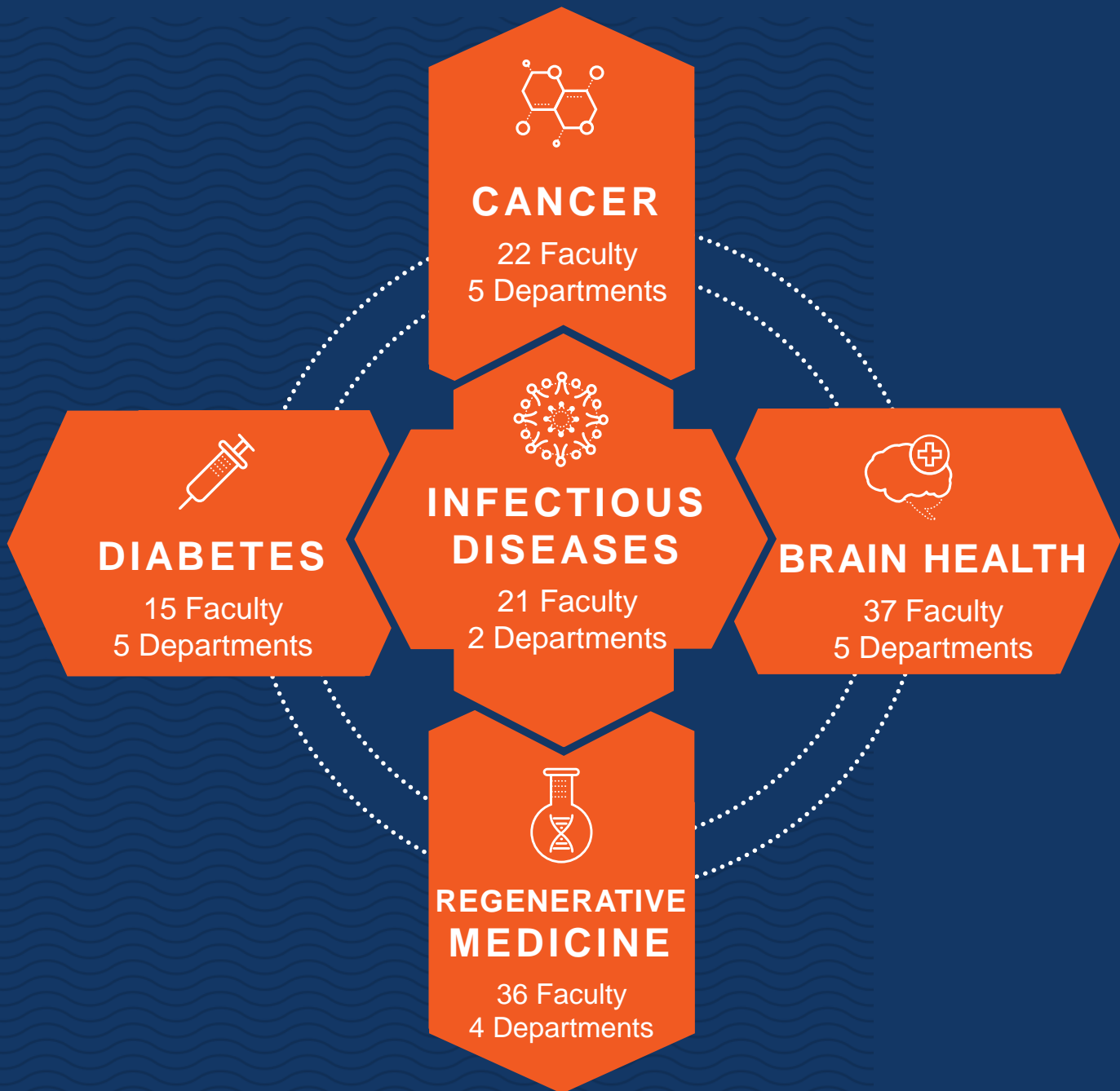
San Antonio's Biomedical Landscape



Department
of Defense



UTSA's alignment
with **San Antonio's**
Bioscience Sector



Our Strategic Partners



UT Health
San Antonio



TEXAS BIOMEDICAL
RESEARCH INSTITUTE



SOUTHWEST RESEARCH INSTITUTE



Brooke Army Medical Center &
San Antonio Military Medical Center



San Antonio and its population genomics is the future of medicine

Precision Medicine

Drug Discovery and Delivery

Regenerative Medicine

Obesity

Neurodegenerative Disorders

Infectious Diseases

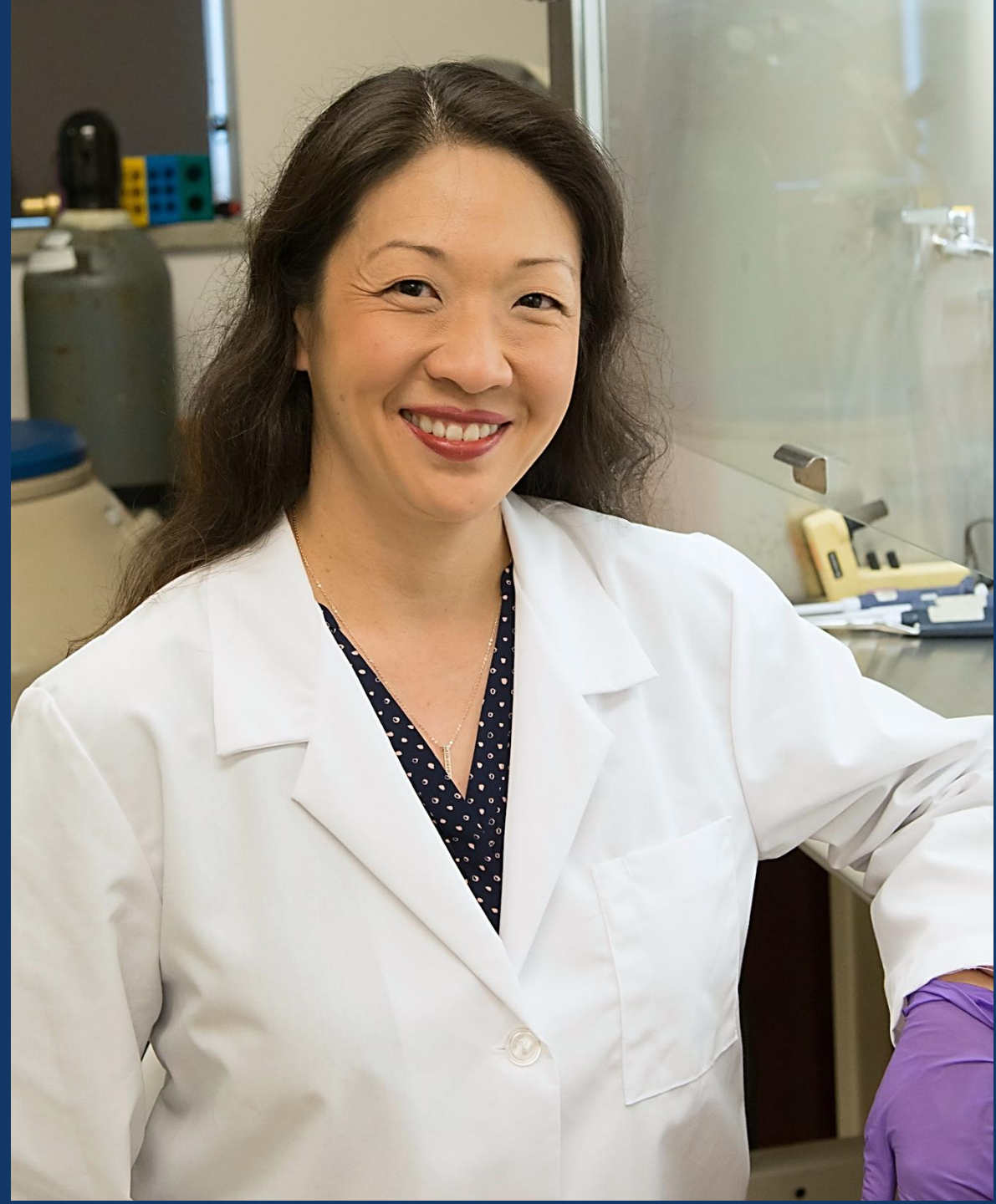




Dr. Jenny Hsieh

Semmes Foundation Chair
in Cell Biology

Fighting Brain Disease





UTSA[®]

Charting the Future of Cybersecurity

Cyber UTSA

A leader in cyber education since 1999



Undergraduate

B.B.A. Cyber Security
(online and residential)
B.B.A. Information Systems
B.S. Computer Engineering
B.S. Computer Science
Cyber Security Concentration
Cyber Operations Track



Masters

M.S. Computer Engineering
M.B.A. Cyber Security
Concentration
M.B.A. Information Systems
Concentration
M.S. Data Analytics
M.S. Information Technology
Cyber Security Concentration
M.S. Computer Science
Cyber Security Concentration
Data Science Concentration



Doctoral

Ph.D. Information Technology
Ph.D. Computer Science



Certificate

Cloud Computing
Data Center Design
Pathogenic Outbreak
Investigations

Cyber UTSA

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FACULTY

70

Six of which are endowed from entities such as AT&T and Rackspace (80/20 Foundation)

4 out of 9

colleges at UTSA include cyber programs

STUDENTS

3,145

undergrads in cyber, cloud, computing & analytics

323

masters students

164

doctoral students

98

students earned undergraduate cybersecurity degrees in 2017-18

26

students earned graduate cybersecurity degrees in 2017-18

RESEARCH

\$100+ Million

Research awards in cyber programs since 2000

RANKINGS

#1

Cybersecurity undergraduate program
Ponemon Institute

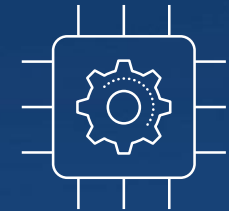
#2

Cybersecurity graduate program
Universities.com

NATIONAL CENTER OF ACADEMIC EXCELLENCE

UTSA's Cyber Designations

National Security Agency & Department of Homeland Security



Information Assurance Education
2002

Information Assurance Research
2009

Cyber Defense
Digital Forensics
Focus Area
2014

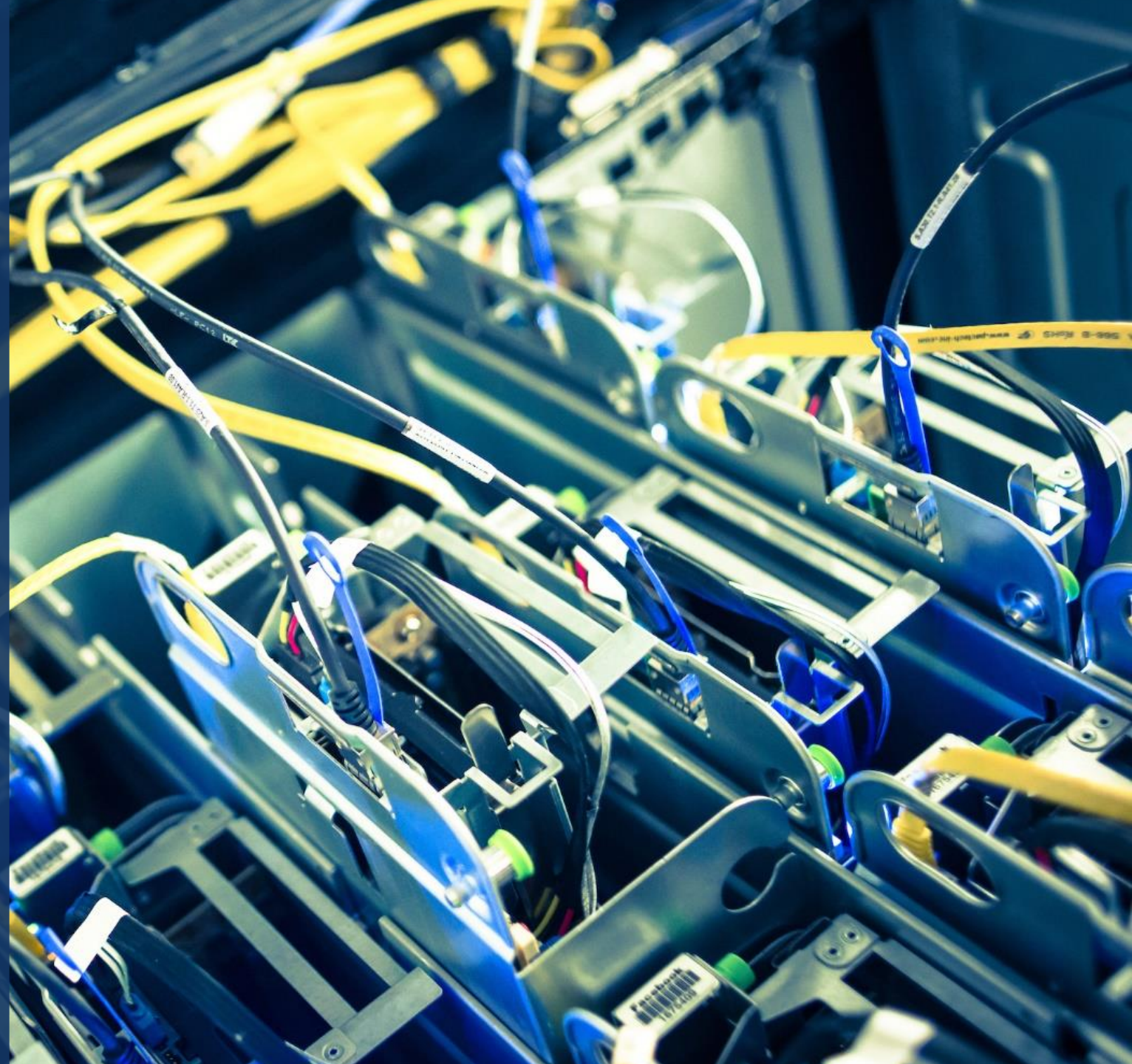
Cyber Operations Fundamentals
2018

A NEW PARTNERSHIP



Idaho National Laboratory

Cybersecurity
Digital Forensics
Data Analytics
Machine Learning
Infrastructure Risk Modeling
Innovative Education Outreach





UTSA's Current & Future National Security Portfolio

Cybersecurity
& Cloud Computing

Counter Terrorism

Election Security

Cyber Attack/
Deterrence & Policy

Infectious Diseases
& Biological Threats

Military Health
& Wellness

Demographic Methods
& Trends

Governance & Policy

Emergency Management
& Communications

Border & Refugee Issues

Advanced Materials

Nanotechnology

Critical Infrastructure
Protection

Robotics & UAVs

Analytics

High Performance
Computing

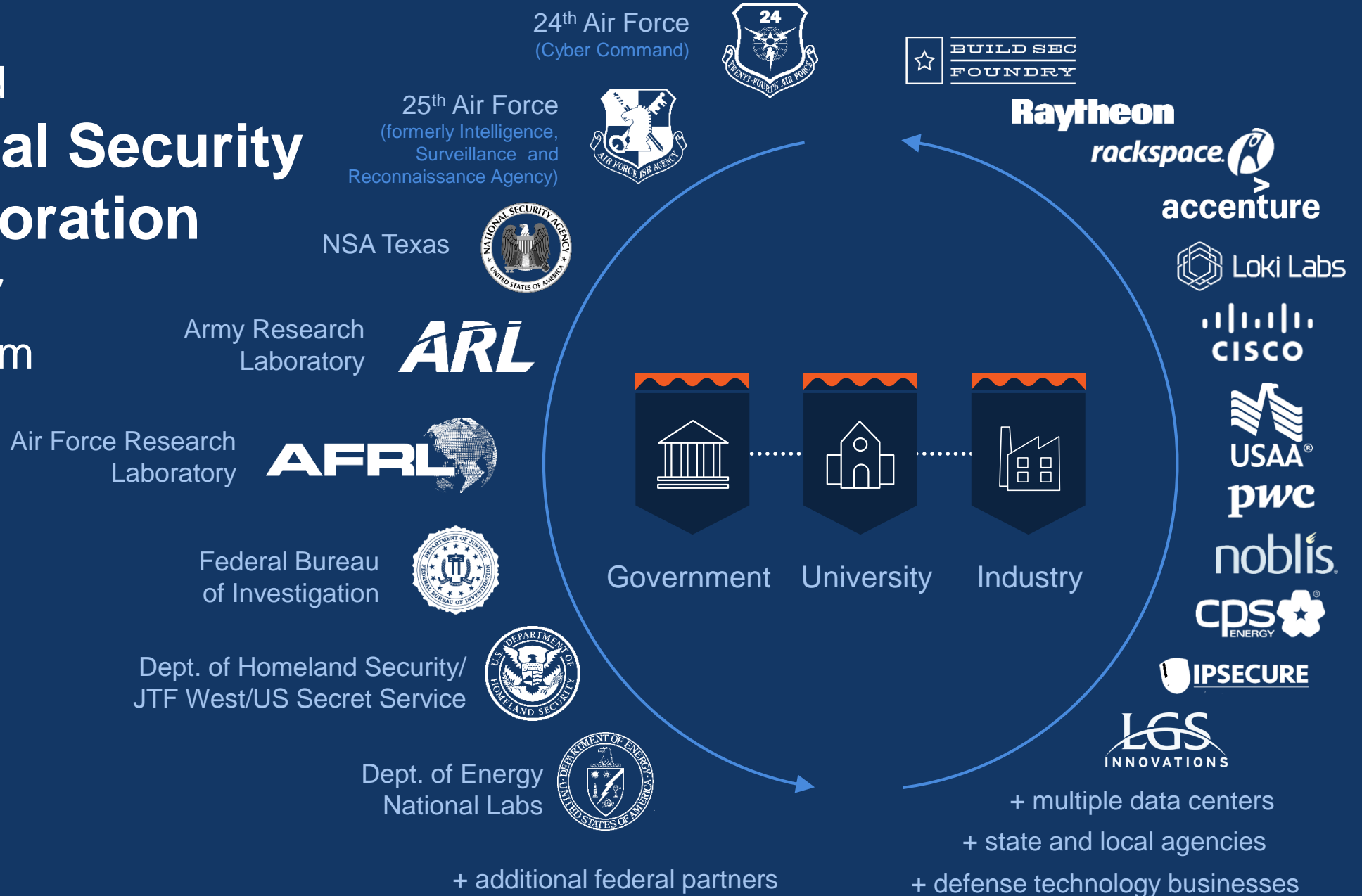
Artificial Intelligence

Machine Learning

Data Visualization

High Tech Intelligence

Proposed National Security Collaboration Center Ecosystem



**National Security
Collaboration
Center**
Current Partners

CISOs

top producer in the nation

collaboratory


solving the nation's intractable
cyber problems

partners

leaders in the industry



UTSA IS ACTIVELY
PURSUING ADDITIONAL
INDUSTRY PARTNERSHIPS



**National Security
Collaboration
Center**

Research Centers

- Cyber Center for Security and Analytics
- Collaborative research and training spaces
- Center for Infrastructure Assurance and Security

Sensitive Compartmentalized Information Facility

- Classified Research
- Federal Partners/Contractors

Cyber Protective Operations Center

- Federal Partners

Computational Technology

- Visualization Laboratory
- High Performance Computing
- Cyber Range

Innovation Factory

- Early Stage Technologies
- Student & Faculty Start Ups

IMPACT

National Security Collaboration Center

- Fills dire need for cybersecurity workforce
- Fuels San Antonio's Tech Corridor
- Supports major companies growing or moving to San Antonio
- Aligns with federal agency presence
- Advances San Antonio's position as a leader in national security
- Hub for Texas Cyber Corridor





Dr. Nicole Beebe

Melvin Lachman Distinguished
Professor in Entrepreneurship

Associate Professor of Information
Systems and Cyber Security

A leader in the
cybersecurity revolution



TALENT ACQUISITION

UTSA is focused on bringing the world's best and brightest researchers to San Antonio, boosting our capacity to solve society's grandest challenges.



Building Other Areas of Scholarly Expertise



Materials Science & Advanced Manufacturing

35 faculty across
4 departments



Chemistry/ Drug Discovery

24 faculty
Chemistry
department
ranked 78th
in the U.S.



Cyber/Machine Learning & Analytics

79 faculty across
3 colleges
nationally ranked
cyber programs

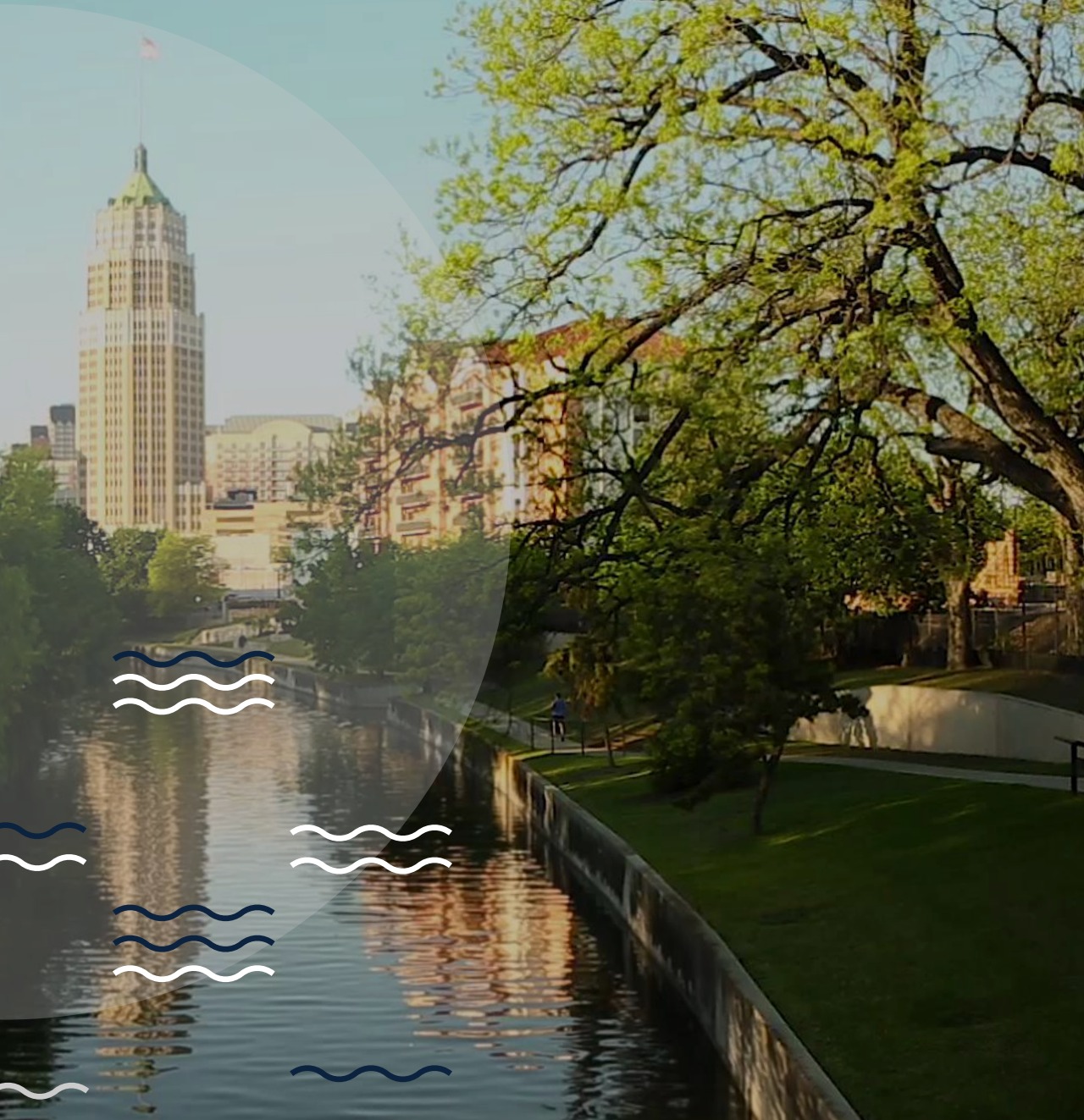


Sustainable Cities: Water & Energy

40 faculty across
5 departments

OTHERS TO BE DETERMINED

UTSA[®]
The University of Texas
at San Antonio[™]



Thank you!