



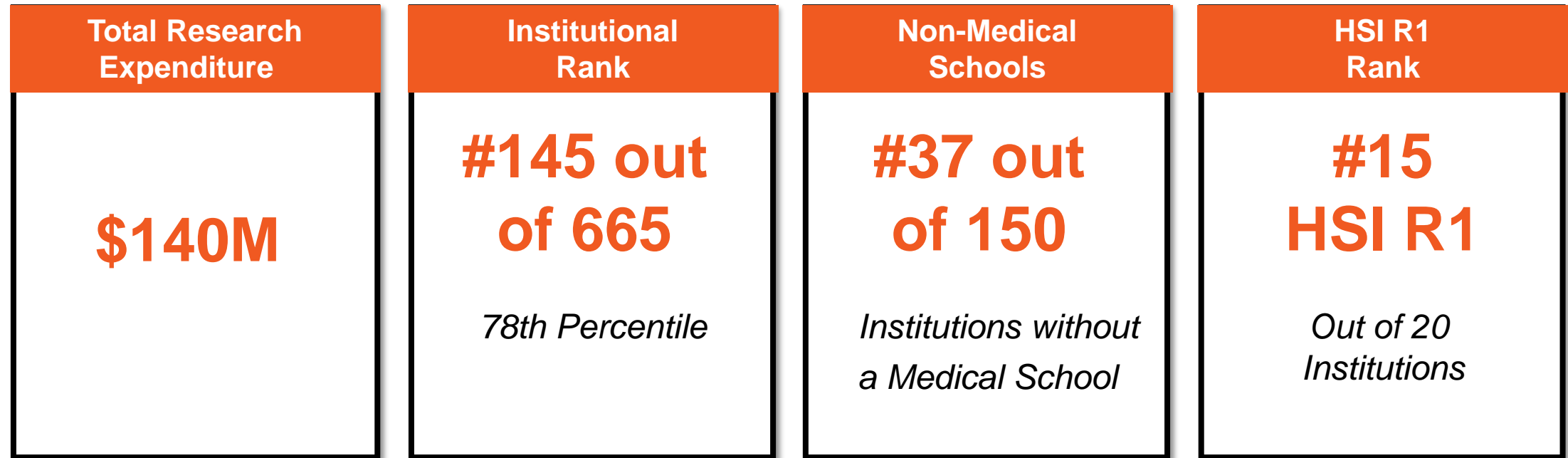
A Bold New Knowledge Enterprise *Year End Review*

Key Performance Indicators (KPIs)

REDKE KPIs	FY18	FY19	FY20	FY21
Number of Proposals	922	1,046	1,038	1,074
Total Budget in Proposals	\$368M	\$488M	\$466M	\$679M
Number of Awards	308	388	373	367
Total New Awards	\$54M	\$83M	\$68M	\$168M
Total Research Expenditures	\$70M	\$81M	\$134M	\$140M
Restricted Research Expenditures (RRE)	\$44M	\$51M	\$64M	\$68M
Federal Research Expenditures	\$29.8M	\$34.6M	\$34.3M	\$43M
NRUF Expenditures	\$37.6M	\$43.7M	\$56.4M	\$58M
RRE per T/TT Faculty FTE	\$67K	\$79K	\$103K	\$111K
Faculty Awards (CMUP)	5	7	4	6
National Academy Memberships	5	6	10	11
Total Patents Issued	7	25	22	24
Strategic Partnerships	3	38	22	26
Economic Impact	\$2.9B	\$2.7B	\$2.4B	\$3.0B

National Sciences Foundation

Higher Education Research and Development (HERD) FY2020



Our Economic and Community Impact



\$2,465,684,491

New Sales, Contracts & Exports

10,995

Jobs Created and Retained

40,693

Businesses Served

\$500,091,908

New Financing & Investments

\$42,567,000

New Tax Revenue Generated

UTSA[®]

Institute for
Economic
Development

Measuring University Performance

\$5K Each for Scholarly Faculty Awards

FY21 Awards	FY22 Awards (as of 1/28)
NSF CAREER (Gabriela Romero Uribe)	AAAS Fellow (James Chambers)
NSF CAREER (Wei Gao)	AAAS Fellow (Aimin Liu)
NSF CAREER (Ahmad Taha)	AAAS Fellow (Angela Speck)
NSF CAREER (Amir Jafari)	NAI Fellow (Anson Ong)
NSF CAREER (Yanmin (Emily) Gong)	Fulbright US Scholar (H.R. Rao)
NAI Fellow (Ravi Sandhu)	Awaiting FY22 NSF CAREER <i>Chris Rathbone awarded and Anthony Rios recommended thus far.</i>
Fulbright US Scholar (Jose Iovino)	

Research Interest Groups (RIGs)

Monthly meetings, networking events, proposal collaborations

- Social and Environmental Challenges in Latin America
- Quantum Computation and Quantum Information
- Human Performance
- Climate
- CoSA Collaborations
- Up next..... Transportation, Innovation, Economic Development



Internal Funding Programs

REDKE seeds faculty research through internal investment.



Travel Support

Faculty Travel
Support
Grant (\$200K)



Collaboration

Transdisciplinary
Teams Program
(T2) (\$100K)

Connecting
Research through
Partnerships
(Connect) (\$100K)



Scholarly Works

Internal
Research
Awards (INTRA)
(\$100K)

Faculty
Scholarly
Awards (\$50K)



Pilot Funding

Grants for Research
Advancement and
Transformation
(GREAT) (\$80K)

Collaborative Seed
Grants (CSG)

FY2020 Seed Grant Return on Investment

REDKE awarded \$490,000 to 35 faculty led projects, engaging 26 departments and six colleges.

22 Extramural Grant Submissions

10 Awards

47 Submitted Publications

15 Other Scholarly Works

414 Undergraduate Students

Engaged

90 Graduate Students Engaged

17 Doctoral Students Engaged

2 Postdoctoral Scholars Engaged

2 Visiting Scientists

FY21 ROI: \$2,462,346

UTSA IN 2021

Strategic Partnerships and Major Awards



National Institutes
of Health

\$12.5M

NIH BRAIN Initiative

Research advanced methods
for studying genetic brain
disorders



\$18M

Federal Research Contract

Supports R&D in data
sciences, cloud/edge
computing, artificial
intelligence and machine
learning, and cybersecurity



Memorandum of Understanding



\$5M

Cybersecurity in Advanced Manufacturing

Additional funding
secured from the Texas
Legislature for TxMx



Strategic Partnership Agreement

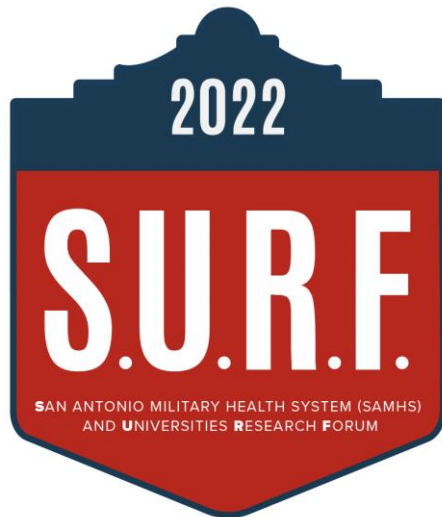


\$7M

CoSA Master Sponsored Research Agreement

Ceiling contract for task
order R&D with City
Offices

Hosted & Sponsored Events & Conferences



Stem Cell Research &
Regenerative Medicine
San Antonio Conference



UTSA Graduate School Conference

COLFA Student Research Conference



A **BOLD** New
Knowledge Enterprise
DISCOVERIES THAT CHANGE LIVES

ACCELERATE 2030

Draft Framework for a **BOLD** New Knowledge Enterprise

Office of the Vice President for Research,
Economic Development, & Knowledge Enterprise

KEY CONCEPTS

PATHWAYS

- 1  Human Capital Development
- 2  Student and Postdoctoral Research
- 3  Outreach and Engagement
- 4  Research Infrastructure
- 5  Transformative Research Programs
- 6  Innovation and Economic Development
- 7  Global Visibility
- 8  Scholarly Excellence



Convergent



Creative



Entrepreneurial



Diverse



Mission

As a thriving Hispanic Serving Institution, UTSA Research, Economic Development, and Knowledge Enterprise (REDKE) fosters an innovation ecosystem that is accelerating trans-disciplinary research and economic development through creative discovery by producing responsible and transformative outcomes to benefit our diverse communities.

ACCELERATE 2030
FRAMEWORK FOR A
BOLD
NEW KNOWLEDGE
ENTERPRISE

PATHWAYS AND INITIATIVES



PATHWAY 1

Human Capital Development

- Enhance faculty and research staff cluster hiring initiatives
- Increase STARs and other faculty hiring program applications
- Create research administration leadership pathways for staff and faculty
- Build training and outreach to increase external joint appointments, sabbaticals and intergovernmental personnel agreements



TARGET/KPI: \$ Total RE, \$ for Faculty Hiring Initiatives, RE/FTE Faculty, # IPAs and JAs



PATHWAY 2

Student and Postdoctoral Research

- Utilize business intelligence to increase the pipeline of future graduate students and graduation success
- Create new interdisciplinary graduate programs based on market trends
- Encourage a campus wide culture for student fellowship and training through grants and publications
- Enhance programming in support of graduate success and impactful postdoctoral scholarship across campus



TARGET/KPI: # Ph.D. Students, # of funded Ph.D., Masters and Postdocs, # of REU, # of GFRPs

PATHWAYS AND INITIATIVES



PATHWAY 3

Outreach and Engagement

- Establish a Government Relations Council to align federal, state and local governmental outreach
- Establish an Office of Industry Collaboration to leverage campus wide programs and services in a one-stop shop for industry
- Expand UTSA's presence in Washington DC through additional staffing, internships and contractor support
- Pursue public-private partnerships (P3s) for research investments and knowledge creation



TARGET/KPI: # of Industry Contracts, \$ Industry Revenue, \$ P3 Investments, \$ Research Gifts



A **BOLD** New
Knowledge Enterprise
DISCOVERIES THAT CHANGES LIVES



PATHWAY 4

Research Infrastructure

- Create sustainability plans for existing Core Research Facilities (CRF) and support new CRF concepts
- Add new enterprise systems to enhance research computing capabilities
- Enhance broadband capabilities and technology solutions to enhance student capacity for research
- Garner public and private investment in research infrastructure (physical and digital) and major equipment



TARGET/KPI: \$ Core Revenue, # Core Users, \$ Infrastructure Funding, # Research Gifts

PATHWAYS AND INITIATIVES



PATHWAY 5

Transformative Research Programs

- Secure anchor contracts for areas of research excellence and centers/institutes
- Increase capture management capabilities through a Proposal Design Studio and Research Program & Project Management Lab
- Create Research Interest Groups for targeted Grand Challenge opportunities
- Expand the Office of Research IT and Business Intelligence for broader campus use



TARGET/KPI: \$ C&I Funding, # Applications, \$ Awards, # Large Contracts



PATHWAY 6

Innovation and Economic Development

- Expand UTSA's Innovation Hub and Spoke concept across San Antonio and the region
- Formalize a regional consortium for competitiveness and nimbleness on economic development and innovation
- Grow the commercialization and industry engagement ecosystem to increase success
- Grow the entrepreneurial and innovative leadership workforce through student and faculty training



TARGET/KPI: # of Industry Contracts, \$ Industry Revenue, # technology incubated, # student entrepreneurs trained

PATHWAYS AND INITIATIVES



PATHWAY 7

Global Reach

- Identify existing international collaborations and map and inventory for strategic decision making
- Coordinate virtual seminars and speaker series with global partners and identify seed funding for international collaboration
- Design targeted, micro marketing campaigns leveraging the reach of UTSA faculty, graduate students and alumni
- Increase reputation in THE World University Ranking by targeting foreign universities



TARGET/KPI: # Int. Grad Students, # Int. Agreements, \$ Int. Funding, THE WUR Reputation



PATHWAY 8

Scholarly Excellence

- Create a recognition program for high performing early and mid-career faculty to support faculty retention and expand the role of the Academy of Distinguished Researchers for campus wide scholarly impact
- Design strategies to increase scholarly impact of UTSA faculty publications
- Increase annual nominations and target networking for Academy Memberships
- Increase applications and awards to CMUP recognized programs and increase annual funding for the Targeted Scholarly Awards Program



TARGET/KPI: Average H-index, CNCI Rank, # National Academy Members, # CMUP Awards

Accelerate 2030 Online Feedback Link

THANK YOU

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Vice President for Research, Economic Development, & Knowledge Enterprise

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