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I.M.P.A.C.T. Report

FY23/24/25

UTRGV Research Journey

Dr. Can Saygin

Senior Vice President for Research

Dean of the Graduate College

Oct 5, 2025

I.M.P.A.C.T.

Since joining UTRGV in August 2022, I have led transformative growth across research operations and graduate education. This report details three years of strategic leadership initiatives and outcomes, organized under the **I.M.P.A.C.T.** framework: **Infrastructure, Metrics, Programs, Alignment, Collaboration, and Targets**

The **I.M.P.A.C.T.** framework represents a comprehensive leadership approach I have developed to transform UTRGV into a Carnegie R1 research institution. This model integrates six interdependent strategic pillars that work synergistically to drive institutional research excellence. Rather than pursuing isolated initiatives, the **I.M.P.A.C.T.** framework ensures that every investment, policy decision, and program implementation is strategically coordinated to advance UTRGV's research mission.

Infrastructure provides the foundational capacity (both physical facilities and organizational systems) necessary to support expanded research operations.

Metrics enable data-driven decision-making and transparent accountability, transforming institutional performance from intuition-based to evidence-based management.

Programs translate strategic priorities into tangible faculty and student support mechanisms that directly enhance research productivity and degree completion.

Alignment ensures that policies, organizational structures, and resource allocation models work in concert rather than at cross-purposes, eliminating barriers and creating synergies across the institution.

Collaboration extends UTRGV's research reach through internal governance structures and external partnerships that amplify institutional capabilities beyond what could be achieved independently.

Targets maintain institutional focus on measurable outcomes—particularly Carnegie R1 classification and NRSF eligibility—that validate strategic investments and guide resource prioritization.

Through strategic investments in **Infrastructure**, systematic tracking of **Metrics**, innovative **Programs**, policy-driven **Alignment**, meaningful **Collaboration**, and focused pursuit of **Targets**, UTRGV has positioned itself as an emerging research powerhouse. The 71% increase in total research expenditures over the last three years, the achievement of NRSF designation, and clear progress toward Carnegie R1 status demonstrate that the **I.M.P.A.C.T.** model delivers not just numerical growth, but fundamental transformation in research culture, operational capacity, and institutional positioning.

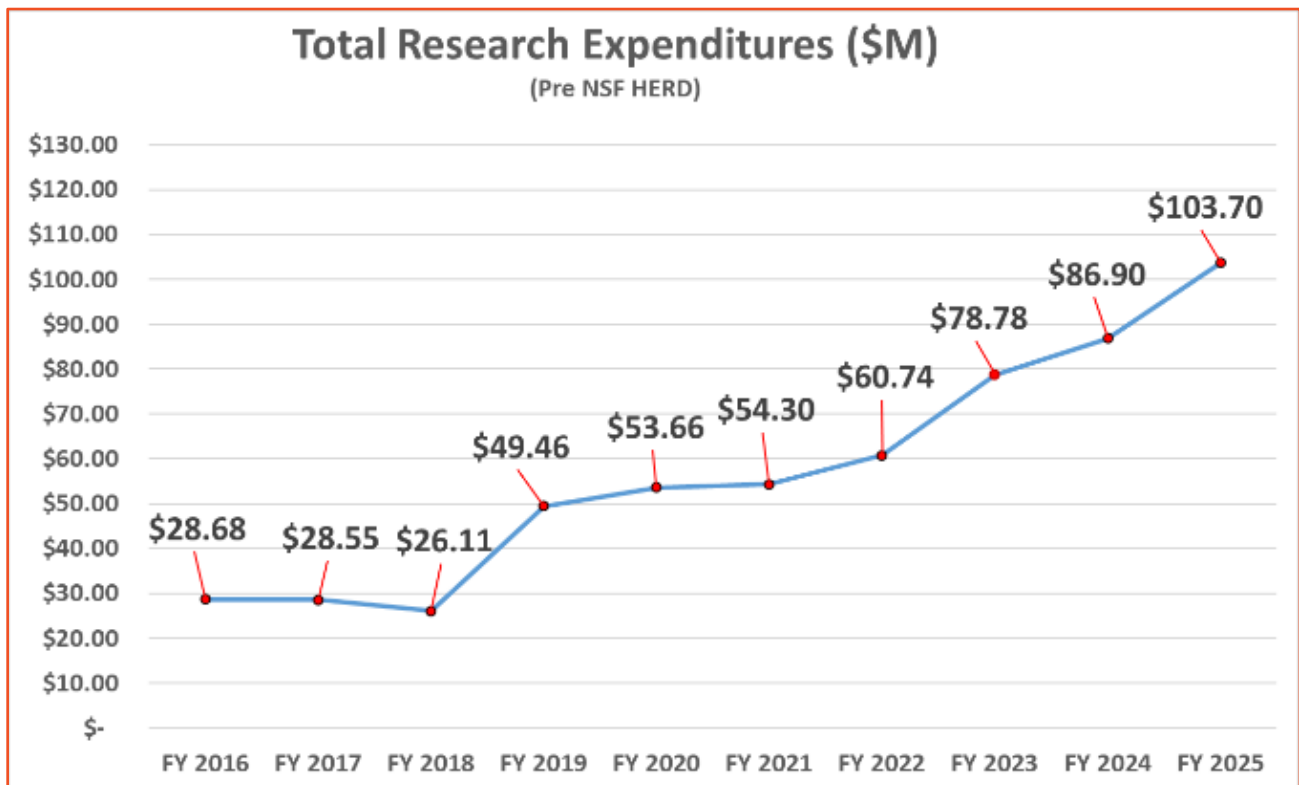


Key Achievements at a Glance:

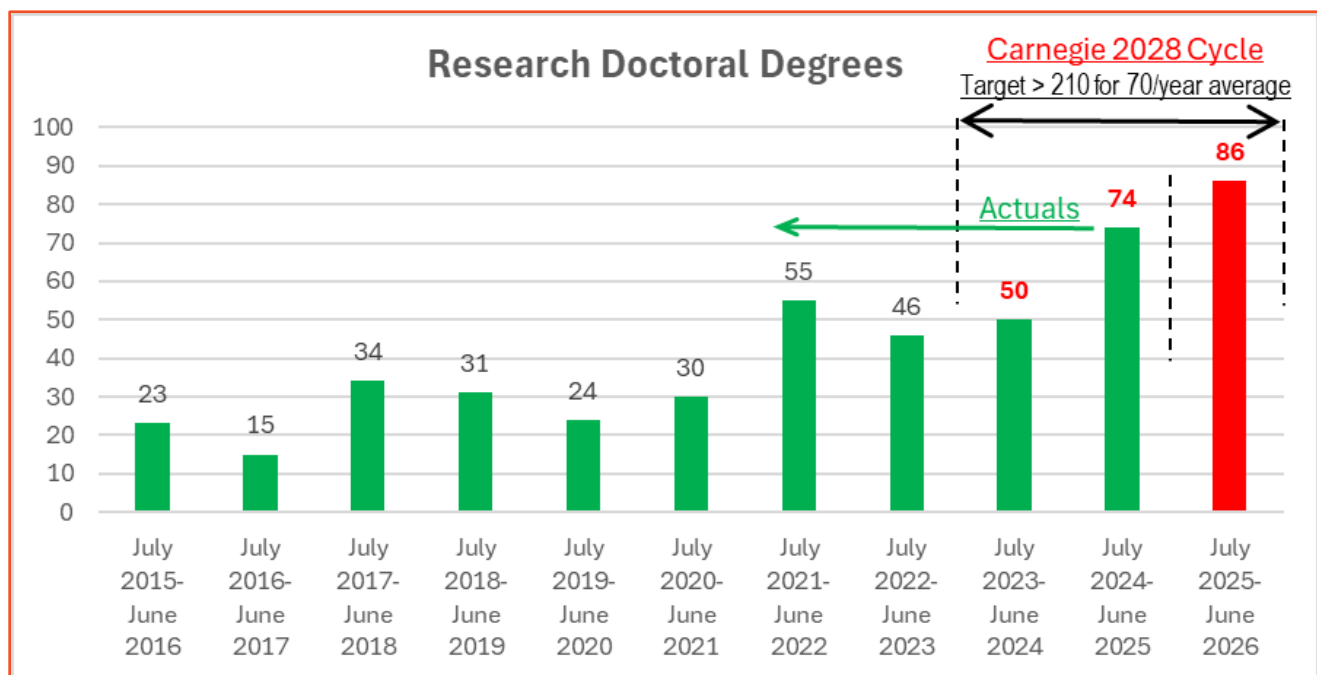
- Achieved \$103.7 million in total research expenditures in FY25 on UTRGV's 10th anniversary, a 71% increase from \$60.7M in FY22
- Increased annual federal research expenditures by 132%, from \$18M in FY22 to \$42M in FY25
- Secured National Research Support Fund (NRSF) eligibility, bringing \$10.5M annually in FY26 and FY27
- Positioned UTRGV for Carnegie R1 status in the 2028 classification cycle
- Increased faculty participation in proposals by 37%, from 343 faculty in FY22 to 470 in FY25
- Increased annual proposals submitted by 44%, from 467 in FY22 to 671 in FY25
- Awarded 74 research doctoral degrees in the July 2024-June 2025 IPEDS period, a 48% increase from 50 degrees in the previous IPEDS period



Federal Research Expenditures increased from \$18M in FY22 to \$42M in FY25



Total Research Expenditures Exceeded \$100 million in FY25



**Our Target is to Graduate 86 research doctoral students
until end of Summer 2026 to Achieve R1 Status**

I NFRASTRUCTURE

Physical Research Facilities

Major Capital Projects Initiated and Completed:

- **Advanced Manufacturing Research Facility** - \$4M institutional investment, completed May 2025
- **Workforce, Economy, Research, and Community (WERC) Complex** - \$3.4M EDA grant + \$7M institutional funds, starting Fall 2025
- **Marine Ecosystems Research Facility at Port Isabel** - \$21.5M major capital project, starting Fall 2025
- **Railway Safety Research Facility** - \$1M renovations (2025) + \$15M project (pending land acquisition) for 20,000 sq-ft facility
- **Antenna Arrays for Space Sciences Research** - \$0.5M, completion 2026
- **Sustainable Agriculture and Community Garden** - \$0.5M, completion 2026
- **Cancer Research Center** - Enhanced McAllen Biomedical Research Facility through \$18.4M NIH RCMI grant
- **Center for Urban Ecology** - Applied research facility at Quinta Mazatlan, completion 2026



Advanced Manufacturing Research Facility – Ribbon Cutting Ceremony May 5, 2025



**Railway Safety Research Facility
(rendering)**



**Marine Ecosystems Research Facility
(rendering)**

Organizational Infrastructure

Division of Research and Graduate College Expansion:

- Grew from 57 staff (August 2022) to 89 staff (current)
- Established new functional units:
 - Research Analytics (dashboards, metrics, KPIs)
 - Research Enhancement (faculty development)
 - Research Integrity (compliance)
 - Research Communications (visibility and engagement)
 - Technology Commercialization
 - Contracts & Industry Agreements
 - Export Compliance



**Division of Research Received the “Bravo Vaqueros Spirit Award” in 2024 and 2025
 (Two years in a row!!!)**

Graduate College Infrastructure:

- Relocated from 1,600 sq-ft to 2,600 sq-ft office suite (Fall 2024)
- Created new Associate Dean positions:
 - Associate Dean for Degree Progression
 - Associate Dean for Doctoral Recruitment
- Established Dissertation Writing Specialist position

Technology Infrastructure

Custom-Developed Analytical Tools:

- | | |
|--|---|
| <ul style="list-style-type: none"> • Automated Research and Grant Organizer (ARGO) • Control Tower (centralized operations hub) • Data Pulse reporting platform • Academic Analytics (3rd party platform – with UTRGV data) • MyGradPath: Graduate student support platform • Graduate Program Outcomes Funding platform • Graduate Course Demand Tracker • Research Productivity Dashboard | <ul style="list-style-type: none"> • Award and Proposal Summary Dashboard • Organized Research Units (ORUs) Productivity Dashboard • Carnegie Classifications Dashboard • NSF HERD Dashboard • IPEDS Dashboard • Project Burn Rate Dashboard • Indirect Cost (IDC) Revenue Dashboard • Degree Progression Monitoring Dashboard • Earn Rate Dashboard • Dissertation Chairs Dashboard • Doctoral Students Information Dashboard |
|--|---|

METRICS

Research Performance Growth (FY22 to FY25)

Metric	FY22	FY25	Growth
Proposals Submitted	467	671	44%
Restricted Research Expenditures	\$27.4M	\$52.5M	92%
Total Research Expenditures	\$60.7M	\$103.7M	71%
Federal Research Expenditures	\$18.3M	\$42.4M	132%
Faculty on Proposals	343	470	37%
Faculty with Sponsored Project Expenditures	326	402	23%
Faculty with Restricted Research Expenditures	194	280	44%
Total Requested Amount	\$384.9M	\$520.9M	35%



W.A.R. Room (We Achieve Results)

National Rankings Progress

NSF HERD Rankings:

- FY22: 193rd (\$64.40 million total research expenditures)
- FY23: 186th (\$82.44 million total research expenditures)
- FY24: \$90.61 million (ranking announcement Nov-Dec 2025)
- FY25: Projected \$108 million to be reported

Sponsored Project Awards

- FY22: \$97M in new awards
- FY23: \$98M in new awards
- FY24: \$200M in new awards
- FY25: Over \$72M in new awards (despite federal disruptions)

Graduate Doctoral Degrees Progress

Carnegie R1 Target: 210 degrees across three IPEDS cycles (average 70/year)

- IPEDS 2024: 50 degrees awarded
- IPEDS 2025: 70 degrees achieved
- IPEDS 2026 Target: 86 degrees

Budget Review Impact

- Conducted comprehensive budget review with Financial and Business Affairs
- Corrected source (fund) and use (function) codes
- Result: \$4.5M increase in research expenditures in FY23

P ROGRAMS

Faculty Development Programs and Incentives

Faculty Award for Maximizing Expenditures (FAME)

- Recognizes faculty achieving \$50K+ in externally sponsored expenditures
- One-time payment of 0.5% of total expenditures (capped at \$5,000)

Travel Resources and Investments Program (TRIP)

- Supports grant development travel
- Enables doctoral student recruitment travel
- Aligned with strategic research priorities

Faculty Research Fellows Program

- Supports 13 faculty annually
- Provides personalized coaching and group workshops
- Includes post-doctoral support and stipends
- Five fellows part of NIH EARA program

Faculty Research Enhancement Workshops

- Collaboration with Provost's Office
- Topics: proposal writing, grant management, team building
- Customized to department/college needs

Faculty Research Orientation Day

- Annual Fall semester event
- Introduces key staff and essential processes
- Open to all faculty, targeted at new faculty

50/50for3 Partnership Program

- Division of Research and College each cover 50% FTE salary for 3 years
- Strategic roles in Pre-Award or Post-Award functions
- Training and integration support provided



**Beginning of Academic Year 2025/2026
Faculty Research Symposium Event Attracted 106 Faculty**

Graduate Student Programs

Financial Support Initiatives:

- 3 credit hours tuition/fees coverage for final semester doctoral students
- \$1,750 completion scholarship upon degree completion
- \$750 per degree for dissertation committee chairs
- Summer salary for faculty to expedite dissertation completion
- Course buy-out for faculty to allocate more advising time to their students

Doctoral Hooding Ceremony

- Established standalone 2-hour ceremony
- Enhanced visibility and recognition for doctoral graduates
- Replaced limited visibility in general commencement

Graduate Student Advising Redesign

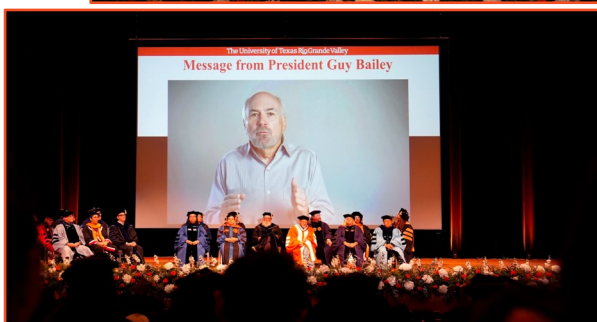
- Reallocated \$500K annually
- Redefined program coordinator roles for outcome-driven focus
- Developed a model for course demand analytics

Customized Orientation Events

- Tailored series for diverse graduate student needs

Dissertation Writing and IRB Support

- New Dissertation Writing Specialist position (Fall 2024)
- Addresses 30% of doctoral students facing writing-related delays
- Dedicated IRB staff to streamline research process and expedite completion



Doctoral Hooding Ceremony honors the achievements of our doctoral graduates in an intimate gathering with their families and loved ones.

Undergraduate Programs

NSF Institutional Transformation Grant (\$3M)

- "Improving Undergraduate STEM Education Through Family-Centered Pedagogy" (NSF #2122875)
- Served 2,500+ students across 60+ STEM courses
- Achieved 10% increase in retention rates for first-generation, low-income students
- Integrated family members and ancestral knowledge into learning

Research Experiences for Undergraduates

- Established review process for all grants to include undergraduate opportunities
- Expanded summer programs, symposia, and seminars

Undergraduate to Graduate Pathways

- Collaboration with Office of Student Success
- Introduced pathways to expand graduate program awareness



Undergraduate Level Research Activities

Research Compliance and Training

Project Shield America Partnership (Homeland Security)

- Export control regulations training
- Security protocols education
- Tailored guidance through Research Integrity unit

Compliance Areas Covered:

- Export Controls
- Foreign Influence
- Conflicts of Interest in Research
- Intellectual Property
- Human Subjects Research
- Animal Subjects Research
- Laboratory Animal Procedures
- Biomedical Research Awareness

Colleges/Schools	Organized Research Unit (ORU)	# of Proposals	Total Request \$	# of Awards	Total Funded \$	Total Research	Restricted Research	Sponsored Projects
College of Engineering & Computer Science	Total	91	\$28,003,994	38	\$6,159,229	\$7,504,839	\$7,166,849	\$7,427,553
	Center for Aerospace Research (CAR)	4	\$2,222,810	3	\$325,189	\$844,555	\$844,555	\$844,555
	Center for Broadening Participation in Engineering (CBPE)	17	\$7,086,474	6	\$463,839	\$392,021	\$392,021	\$459,760
	Industrial Training and Assessment Center (ITAC)	1	\$229,524			\$322,151	\$225,160	\$225,160
	Nanotechnology Center of Excellence (NCE)	24	\$7,146,847	3	\$920,773	\$1,152,357	\$1,152,357	\$1,152,357
	Texas Manufacturing Assistance Center (TMAC)	3	\$1,930,000	1	\$500,000	\$606,744	\$554,141	\$572,382
	University Transportation Center for Railway Safety (UTCRS)	48	\$9,388,338	27	\$3,949,428	\$4,187,011	\$3,998,616	\$4,173,340
College of Fine Arts	Total	7	\$745,857	3	\$359,999	\$28,699	\$28,699	\$32,136
	Center for Latin American Arts (CLAA)	7	\$745,857	3	\$359,999	\$28,699	\$28,699	\$32,136
College of Liberal Arts	Total	16	\$7,572,962	5	\$819,985			
	Center for Community Resilience Research, Innovation, and Advocacy (CCRRIA)	16	\$7,572,962	5	\$819,985			
College of Sciences	Total	59	\$24,133,115	13	\$1,971,864	\$2,186,418	\$2,071,421	\$4,172,780
	Center for Sustainable Agriculture and Rural Advancement (SARA)	11	\$2,600,623	2	\$274,992	\$693,855	\$578,858	\$2,595,228
	Center for Vector-Borne, Zoonotic, and Emerging Diseases (CVBZED)	30	\$11,481,100	8	\$1,212,342	\$747,941	\$747,941	\$747,941
	The Center of Excellence in STEM Education (C-STEM)	23	\$10,051,392	3	\$484,530	\$744,622	\$744,622	\$829,612
School of Medicine	Total	150	\$121,246,274	17	\$5,633,024	\$16,039,931	\$15,919,489	\$16,051,693
	Institute of Neurosciences (ION)	50	\$23,878,387	5	\$927,474	\$4,023,265	\$4,023,265	\$4,071,173
	Maternal Health Research Center (MHRC)	8	\$13,623,095	3	\$815,560	\$339,852	\$339,852	\$424,148
	South Texas Center of Excellence in Cancer Research (ST-CECR)	55	\$47,089,601	6	\$3,735,064	\$4,241,898	\$4,121,456	\$4,121,456
	South Texas Diabetes and Obesity Institute (STDOI)	53	\$36,655,192	3	\$154,926	\$7,434,916	\$7,434,916	\$7,434,916
School of Social Work	Total	15	\$4,684,030	3	\$518,568	\$11,130	\$11,130	\$493,908
	Human Mobility Institute Center (HMI)	15	\$4,684,030	3	\$518,568	\$11,130	\$11,130	\$493,908
VP Research	Total	86	\$38,507,312	28	\$27,215,080	\$8,504,648	\$7,575,904	\$7,595,508
	Institute for Advanced Manufacturing (IAM)	45	\$21,225,671	11	\$21,154,328	\$4,492,517	\$3,764,919	\$3,764,919
	Marine Ecosystems Institute (MEI)	26	\$13,934,149	10	\$5,105,982	\$3,193,446	\$2,992,301	\$3,010,739
	South Texas Space Science Institute (STSSI)	16	\$3,347,492	7	\$954,770	\$818,684	\$818,684	\$819,850
	ORUs Total	387	\$224,893,544	101	\$42,677,749	\$34,275,665	\$32,773,492	\$35,773,578
	UTRGV Total	671	\$520,895,362	209	\$72,533,927	\$103,670,667	\$52,532,825	
	ORU/UTRGV %	58%	43%	48%	59%	33%	62%	

Performance of ORUs in FY25

Research Pathways Initiative

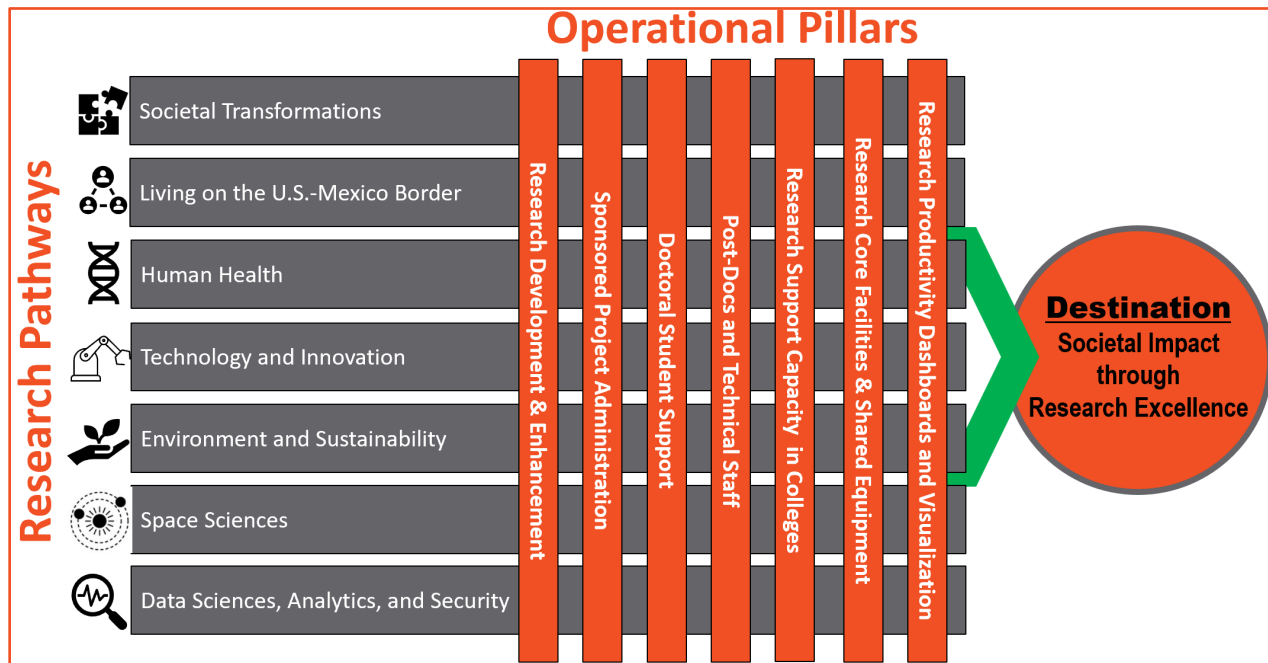
- Seven Strategic Pathways Established:
- Societal Transformations
- Living on the US-Mexico Border
- Human Health
- Technology and Innovation
- Environment and Sustainability
- Space Sciences
- Data Sciences, Analytics, and Security

Pathway Support:

- Faculty clusters within pathways (supported by \$5M DOE grant)
- Organized trips to strategic events and sponsor meetings
- Enhanced collaboration and visibility
- Grant writing/writer support

Large-Scale Proposal Development

- Expanded Research Enhancement team capacity
- Structured approach to major grant opportunities
- Seamless handoff to pre-award for submission management



Alignment of Research Pathways with Operational Pillars

C

COLLABORATION

Governance and Communication Structures

Deans Research Council (DRC)

- Monthly meetings with college deans
- Facilitates Division of Research communication
- AVPs meet monthly with Associate Deans for Research
- Graduate Associate Deans meet with college counterparts

Faculty Senate Engagement

- Regular attendance at faculty recognition events
- College-level convocation participation
- Faculty satisfaction surveys for Division services

Research Communications Strategy

- Dedicated team within Division of Research
- Collaboration with University Marketing and Communications
- Congratulatory letters for Research Awards
- e-Newsletters highlighting faculty achievements
- Monthly newsletters and annual research reports (FY23, FY24)

External Partnerships

Formal Collaborative Agreements:

- Federal Railway Administration (FRA) - Railway Safety (Jan 2025)
- Universidad de las Américas Puebla (UDLAP) - Applied R&D in Engineering (Mar 2024)
- NVTX Energy - Battery Development and Energy Storage (Jul 2024)
- Oak Ridge National Laboratory (ORNL) - STEM Education and Research (Oct 2023)



External Partnerships Expand Research Capacity and Innovation

External Committee Service

- Texas Semiconductor Innovation Consortium – SPARC Subcommittee (since Aug 2023)
- APLU Commission on Information, Measurement & Analysis Executive Committee (2023-2026)
- THECB Negotiated Rulemaking Committee on Restricted Research Expenditures (2023-2024)
- Texas AGEP Internal Advisory Board (since Oct 2023)
- Quinta Mazatlan Board Member (since 2023)

Leadership Visibility and Knowledge Sharing

Invited Presentations (2023-2025):

- SRAI Annual Meeting 2025 (Oct 2025)
- CGS Pre-Conference Workshop (Dec 2024)
- NSF CREST/HBCU Meeting Keynote (Nov 2024)
- APLU 2024 Annual Meeting (Nov 2024)
- RAD Series Webinar – NYU (500+ attendees, Nov 2024)
- APLU CIMA Webinar on Carnegie Classifications (150+ attendees, Sept 2024)
- APLU CIMA Summer Meeting Workshop (100+ attendees, Jul 2024)

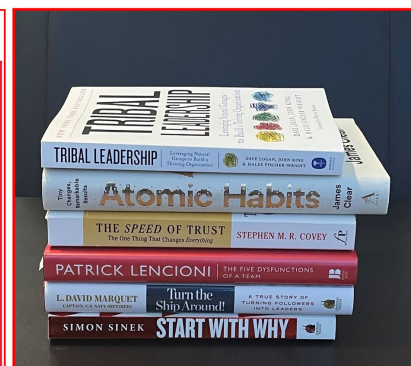
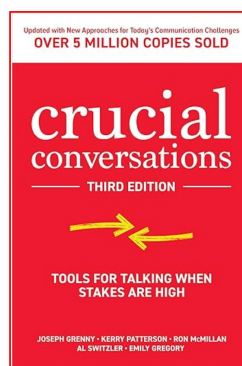


APLU Summer 2024 Meeting Workshop Presentation

Professional Development Culture

Book-Based Workshop Series:

1. *Start With Why* – Simon Sinek
2. *Turn the Ship Around* – L. David Marquet
3. *The Five Dysfunctions of a Team* – Patrick Lencioni
4. *The Speed of Trust* – Stephen M.R. Covey
5. *Atomic Habits* – James Clear
6. *Tribal Leadership* – Logan, King, Fischer-Wright
7. *Crucial Conversations* – Grenny, Patterson, et al.



All Division of Research and Graduate College Staff
 Meet every 6 months to review books and discuss
 how we can be more effective.

TARGETS

Carnegie R1 Status Achievement Path

Criterion 1: Total Research Expenditures

- Target: \$50M annually
- FY25 Achievement: \$103.7M (207% of target)
- Status: ✓ Achieved

Criterion 2: Research Doctoral Degrees

- Target: 70 degrees average over 3 years (210 total)
- IPEDS 2024: 50 degrees
- IPEDS 2025: 70 degrees
- IPEDS 2026 Target: 86 degrees
- Current Progress: total 124 degrees awarded
- Status: On track for 2028 classification

National Research Support Funding (NRSF)

Achievement: Secured May 2025

- Annual Funding: \$10.5M (FY26)
- Based on: Increased research expenditures + doctoral degrees
- Future Growth: Proportional to continued productivity increases

Major Grant Successes (Selected Highlights)

Grants Over \$10M:

- Valley Baptist Legacy Foundation - Diabetes Center of Excellence: \$30M (2024)
- HHS - RCMI Minority Health and Health Disparities Research: \$18.4M (2024)
- Department of Education - Mental Health Initiative: \$16.8M (2023)
- HHS - UTRGV Diversity Center for Genome Research: \$10.6M (2024)
- Department of Transportation - Railway Safety Center: \$10M (2023)
- HHS - Factor VIII Inhibitor Research: \$9.7M (2024)

Recent Grants \$5M-\$10M:

- CPRIT - South Texas Center of Excellence in Cancer Research: \$6M (2023)
- Department of Education - Target 2030 R1 Strategic Plan: \$5M (2024)
- Department of Defense - America's Additive Foundry: \$5M (2024)

Active Grant Portfolio (C. Saygin as PI/Co-PI)

1. **RESCUE Project** - Gulf Futures Challenge, National Academies (\$300K planning grant; finalist for \$20M, due Nov 2025)
2. **Texas Institute for Electronics (TIE)** - DARPA (\$2.5M, 2024-2029)
3. **Target 2030** - DOE (\$5M, 2024-2028)
4. **Convergent Manufacturing** - Army Research Laboratory (\$1.5M FY24; CRADA for ~\$15M FY25-28)
5. **Family-Centered Pedagogy** - NSF (\$3M, recently terminated, assumed PI role)