

## Points of Excellence

During my sixteen-year tenure at UTPA/UTRGV, I was able to accomplish the following:

- Appointed as a **Louis A. Beecherl, Jr. Endowed Professor** in Engineering; Sep. 1, 2017 – Aug. 31, 2020.
- The University Transportation Center for Railway Safety (UTCRS) for which I serve as the Founding Director received the inaugural **National CUTC Workforce Development and Technology Transfer Leadership Award** for 2019.
- Appointed as a **Faculty Fellow** for the **Lloyd M. Bentsen, Jr. Endowed Chair** in Engineering; Sep. 1, 2012 – Aug. 31, 2017.
- **Founding Director** of the **University Transportation Center for Railway Safety (UTCRS)**.
- Awarded the **2014 Success Profile Award** which recognizes successful student employees' role models.
- Selected by the vote of the UTPA Faculty to represent the University in the prestigious **Minnie Stevens Piper Outstanding Teacher Award** for the academic year 2012-2013.
- Awarded the **University Excellence Award in Teaching** for the year 2012-2013.
- Awarded the **College Excellence Award in Teaching** for the year 2012-2013.
- Awarded the **University Excellence Award in Mentoring** for the year 2011-2012.
- Awarded the **College Excellence Award in Mentoring** for the year 2011-2012.
- Awarded the **College Excellence Award in Research** for the year 2010-2011.
- Awarded the **UT Board of Regents' Outstanding Teaching Award** for the year 2009.
- Awarded **eleven Outstanding Faculty Awards** by the vote of the mechanical engineering students; *five* consecutive from the year 2005 to 2009, then again in 2011, 2013, 2014, 2015, 2016, and 2018.
- Awarded the 2006-2007 **Outstanding Faculty Mentor Award** through the University Scholars Bridge Program.
- Received in 2010 a Recognition Letter from the Governor of Texas (Rick Perry) for the research I conducted to solve the bearing temperature trending problem that has plagued the railroad industry for over two decades.
- Awarded the **Dean's Engineering Faculty Support Endowment Award** in 2010 for dedication to the students and the University's mission on becoming a premier learner-centered research institution.
- Funded and supported 120 graduate and 275 undergraduate students actively involved in my research and scholarly activities.
- Graduated *thirty* master's students under the thesis option in a twelve-year span; expect to graduate *eight* more master's students under the thesis option over the next two years.
- Supervised and mentored 17 undergraduate students through the LSAMP Research Program.
- Supervised and mentored 14 undergraduate students through the Undergraduate Research Initiative Program.
- Mentored *twelve* students through the University Scholars Bridge Program.
- Acquired **\$17,630,465** in external funding; **\$8,134,306** as PI and **\$9,496,159** as Co-PI. Seven of the grants I received as Co-PI were educational grants, a \$2.5M grant awarded by the Office of the Directorate for National Intelligence to establish a Center of Academic Excellence, a \$199,974 NSF CCLI grant to develop critical thinking modules for engineering mechanics curriculum, three THECB grants and two Halliburton Foundation grants to run High School Summer Programs.
- Established the UTRGV Railroad Research Group which is composed of *nine* graduate and *fifteen* undergraduate students, *ten* faculty members from *two* colleges, and *two* professional staff members.
- Published 19 journal papers and 48 national and international conference proceedings (refereed), *twelve* of which were educational conferences and 54 out of the 67 papers were co-authored with student research assistants.
- Published in 2009 a book titled "Experimental Analysis of Near-Field Acoustic Scattering by Rigid Spheroidal Objects" [ISBN 978-3639185645]
- Developed *four* new graduate courses and *two* undergraduate technical electives and enhanced the material in *eight* other undergraduate courses.
- Member of the Editorial Board of the International *Railways* 2014, 2018, and 2020 Conferences.
- Member of the Editorial Board of the *Journal of Acoustics* (JoA) published by Qingres.
- Member of the Editorial Board of an educational journal titled *Journal of Applications and Practices in Engineering Education*.
- Member of the External Review Committee for the Department of Energy (DOE) for their Nuclear Energy University Program (NEUP).
- Member of the Council of University Transportation Centers (CUTC) representing the UTCRS.
- One of the four Directors of the Research and Education Division (RED) within the American Road and Transportation Builders Association (ARTBA).
- Member of the External Review Committee for the Dwight David Eisenhower Transportation Fellowship Program (DDETFP) funded by the U.S. Department of Transportation.
- Member of the External Review Committee for the *International Journal of Heat Mass Transfer*.
- Member of the External Review Committee for the *Journal of Thermal Science and Engineering Applications*.
- Member of the External Review Committee for the *International Journal of Railway Technology*.
- Serving as the Associate Dean for Research and Graduate Programs for the College of Engineering and Computer Science since 2016.
- Served as Graduate Program Director for two different programs in two different Colleges (College of Engineering and Computer Science and College of Social and Behavioral Sciences).
- Advised regularly 200 to 300 students every year for the last fourteen years.
- Supervised 35 different senior design projects and funded some of their research activities.
- Organized the six largest transportation-related STEM Summer Camps in the nation over the span from 2014-2019 with over 6500 K-12 students and 600 teachers participating (1000+ students and 100+ teachers per year).