

Angel Melendez, MHL, MSRC, RRT, NPS, AE-C — El Paso, TX
AMelendez25@miners.utep.edu | [LinkedIn](#) | [ORCID: 0009-0001-7040-3337](#) |
Scopus Author ID:59522552600

Healthcare professional, respiratory therapist, and researcher specializing in Clinical Applied Physiology, Respiratory Care, and Exercise Stress Testing. Research focuses on patient-centered outcomes, health disparities in Hispanic populations, vascular function, and interdisciplinary collaboration between respiratory care and physical therapy. Advocate for asthma education, vascular health research, and community engagement.

Education

- **PhD, Interdisciplinary Health Sciences** – University of Texas at El Paso (2023–Present)
Advisor: Dr. Alvaro Gurovich
- **Advanced Leadership Institute (Research Track)** – American Association for Respiratory Care (Class of 2023)
 - **Dräger Institute Scholarship Recipient (1 of 4 awardees nationwide)**
- **MHL, Healthcare Leadership** – Western Governor’s University (2022)
 - WGU Excellence Award in **Population Healthcare Coordination**
 - WGU Excellence Award in **Collaborative Leadership**
 - WGU Excellence Award in **Integrated Health Leadership**
- **MS, Respiratory Care** – University of Texas Health Science Center at San Antonio (2018)
 - Sandy Endowed Scholarship in Respiratory Care (Ralph C. Wilson Foundation)
 - Dorothy Banks Scholarship (Dorothy B. Banks Charitable Trust)
- **BS, Biomedical Sciences** – University of Texas at El Paso (2015, *Dean’s List*)
- **AS, Applied Sciences** – El Paso Community College (2013)
- **Distinguished Achievement Program** – Mission Early College High School (2013)

Certifications & Licensure

- Registered Respiratory Therapist (RRT) – National Board of Respiratory Care
Registry Number: 170527 · License Number: RCP02002034
- Neonatal/Pediatric Specialist (RRT-NPS) – NBRC
- Asthma Educator (AE-C) – NBRC
- Advanced Cardiac Life Support (ACLS)
- Basic Life Support (BLS) for Healthcare Professionals
- Pediatric Advanced Life Support (PALS)
- Neonatal Resuscitation Provider (NRP)

Employment

- **PhD Teaching Assistant (Departments of Physical Therapy & Rehabilitation Sciences)** – University of Texas at El Paso (*Aug 2023–Present*)
 - Assisting with labs, Doctor of Physical Therapy student training, and serving as lab manager.
- **Contracts Liaison for the Director of Clinical Education (Dr. Rhonda Manning)** – Department of Physical Therapy, University of Texas at El Paso (*2024–Present*)
 - Coordinating clinical education contracts, liaising between the university and external clinical sites, and supporting administrative processes for student placements.
- **Graduate Research Assistant, Clinically Applied Physiology (CAPH) Lab** – Dr. Alvaro Gurovich, UTEP (*2023–Present*)
 - Conducted VO₂max testing, vascular ultrasound, pulse wave velocity, and pulse wave analysis.
 - Managed asthma-focused research studies, including FeNO testing and inspiratory muscle training protocols.
 - Oversaw participant recruitment, data collection, and laboratory operations.
- **Graduate Research Assistant, Pain Research Lab** – Dr. Priyanka Rana, UTEP (*2025–2026*)

- Supported exercise and pain-related studies using thermal, pressure, and exercise stress protocols.
- Assisted in study design, participant recruitment, and collaboration between Pain Research Lab and CAPH Lab.
- **Graduate Research Assistant, NeuroEXCEL Lab** – Dr. Camila Torriani-Pasin, UTEP (2023–2025)
 - Contributed to stroke and neurological rehabilitation projects including Sit2Stand validation.
 - Assisted with recruitment, data analysis, and co-presented findings at Stanford University.
- **Graduate Research Assistant, CHILL Lab (Resilience in Children Lab)** – Dr. Georgina Sanchez-Garcia, UTEP (2025–2026)
 - Collaborated on projects examining childhood trauma, resilience, and regulation.
 - Co-led research project: *From Hardship to Hope – The Role of Childhood Activities in Physical and Emotional Regulation Among Displaced Children*.
- **Patient Advisor, Moderator, and Consultant** – Allergy & Asthma Network (*Remote, 2022–Present*)
 - Advisor for PCORI-funded projects engaging Hispanic asthma patients in PCOR/CER nationwide.
 - Panelist for webinars, recruiter for asthma education and research participation, and moderator for online community platforms.
- **Virtual Asthma Coach** – Allergy & Asthma Network (*2024–Present*)
 - Provided personalized asthma education, support, and self-management strategies through the **Virtual Asthma Coaching Program (Trusted Messengers Initiative)**.
 - Worked collaboratively with patients and caregivers to enhance asthma self-management, medication adherence, and health literacy.
- **Level III Respiratory Care Practitioner** – HCA Las Palmas Medical Center, El Paso, TX (*Nov 2018–Jul 2022*)
 - Focus on Pediatric ICU, Emergency Department care, and Asthma Education.
 - Built and led a team of 5 therapists in Pediatric Airway Management; doubled throughput of trained staff within 3 months.

- Served as Charge Relief, onboarding and training 9 new hires, reducing turnover by 50% in six months.
- Provided patient education on asthma, tracheostomy care, peak flow monitoring, mechanical ventilation, and action plans.

Courses Taught

- **Health Info & Informat Systems (DRSC-3313-001, CRN:12558)** – Teaching Assistant, Department of Rehabilitation Sciences, University of Texas at El Paso (*Fall 2025*)
- **Health Info & Informat Systems (DRSC-3313-001, CRN:12558)** – Teaching Assistant, Department of Rehabilitation Sciences, University of Texas at El Paso (*Spring 2026*)

Research Projects & Publications

Peer-Reviewed Publications

- **April 2026** – **Melendez, A.**; Rojero, A.; Cortez, S.; Saenz, D.; Contreras, C.; De Castro, J.; Gurovich, A.N. The Effectiveness of Respiratory Muscle Training on Blood Pressure and Arterial Function in Individuals With High Blood Pressure: A Systematic Review and Meta-Analysis. *Cardiopulmonary Physical Therapy Journal*. DOI: <https://doi.org/10.1097/CPT.0000000000000325>
- **March 2026** – Rayner, D.G.; Li, S.A.; Ferri, D.M.; Silang, I.; Fernandes, A.; Chu, A.W.L.; Tse, S.; Sumino, K.; Nyenhuis, S.M.; Oppenheimer, J.; Perry, T.T.; Hoyte, F.; Chipps, B.; Rivera-Spoljaric, K.; Israel, E.; Shade, L.E.; Rangel, S.; McCabe, E.; O’Byrne, P.M.; Press, V.G.; Hall, L.; Sue-Wah-Sing, D.; Orr, H.; **Melendez, A.**; Winders, T.; Przywara, K.; Gardner, D.D.; Rank, M.A.; Bacharier, L.B.; Mosnaim, G.; Chu, D.K. Values and Preferences of Patients and Caregivers Regarding the Management of Moderate-to-Severe Asthma: A Systematic Review and Qualitative Evidence Synthesis. *Journal of Allergy and Clinical Immunology: In Practice*, 14(3), 644–655. DOI: <https://doi.org/10.1016/j.jaip.2025.10.041>
- **February 2026** – Ologundudu, L.M.; Wong, M.M.; Islam, N.; Rayner, D.G.; Chu, A.W.L.; Loeb, M.; Rivera-Spoljaric, K.; Chipps, B.; Sumino, K.; Oppenheimer, J.; Nyenhuis, S.M.; Israel, E.; Hoyte, F.; Perry, T.T.; McCabe, E.; Press, V.G.; Rangel, S.; Guyatt, G.H.; Shade, L.E.; O’Byrne, P.M.; Orr, H.; Sue-Wah-Sing, D.; **Melendez, A.**; Winders, T.; Gardner, D.D.; Przywara, K.; Mosnaim, G.; Bacharier, L.B.; Rank, M.A.; Chu, D.K. Macrolides for Asthma: A Systematic Review and Meta-Analysis of Randomized Trials. *Journal of Allergy and Clinical Immunology*. Online ahead of print. DOI: <https://doi.org/10.1016/j.jaci.2026.01.024>
- **October 2025** – Gomez, M.; Conde, D.; **Melendez, A.**; Alva, S.; De Lucio, J.; Barron, C.J.; Contreras, C.A.; Gurovich, A.N. Endothelial Shear Stress and Blood Flow Patterns

in Stroke Survivors During Submaximal Exercise. *Medicine & Science in Sports & Exercise*, 57(10S), 395–395. DOI: <https://doi.org/10.1249/01.mss.0001158028.00788.0e>

- **February 2025** – Rayner, D.; Bakaa, L.; Rivera-Spoljaric, K.; Oppenheimer, J.; Nyenhuis, S.; Sumino, K.; Hoyte, F.; Israel, E.; Perry, T.; Chipps, B.; O’Byrne, P.; McCabe, E.; Rangel, S.; Guyatt, G.; Press, V.; Shade, L.; Hall, L.; **Melendez, A.**; Orr, H.; Sue-Wah-Sing, D.; Gardner, D.; Winders, T.; Przywara, K.; Rank, M.; Bacharier, L.; Mosnaim, G.; Chu, D. Characteristics of Trials Evaluating Triple Versus Dual Inhaled Therapies in Patients With Asthma: An AAAAI/ACAAI Joint Task Force on Practice Parameters Systematic Review. *Journal of Allergy and Clinical Immunology*, 155(2S), AB236. DOI: <https://doi.org/10.1016/j.jaci.2024.12.726>
- **January 2025** – Rayner, D.G.; Ferri, D.M.; Guyatt, G.H.; O’Byrne, P.M.; Brignardello-Petersen, R.; Foroutan, F.; Chipps, B.; Sumino, K.; Perry, T.T.; Nyenhuis, S.; Oppenheimer, J.; Israel, E.; Hoyte, F.; Rivera-Spoljaric, K.; McCabe, E.; Rangel, S.; Shade, L.E.; Press, V.G.; Hall, L.; Sue-Wah-Sing, D.; **Melendez, A.**; Orr, H.; Winders, T.; Gardner, D.D.; Przywara, K.; Rank, M.A.; Bacharier, L.B.; Mosnaim, G.; Chu, D.K. *Inhaled Reliever Therapies for Asthma*. **JAMA**, 333(2), 143–152. DOI: [10.1001/jama.2024.22700](https://doi.org/10.1001/jama.2024.22700)
- **July 2025** – Ologundudu, L.; Rayner, D.G.; Oppenheimer, J.; Sumino, K.; Hoyte, F.; Rivera-Spoljaric, K.; Perry, T.T.; Nyenhuis, S.M.; Chipps, B.; Israel, E.; Shade, L.E.; Press, V.G.; Rangel, S.; Guyatt, G.H.; McCabe, E.; O’Byrne, P.M.; Hall, L.; Orr, H.; **Melendez, A.**; Winders, T.; Gardner, D.D.; Przywara, K.; Rank, M.A.; Bacharier, L.B.; Mosnaim, G.; Chu, D.K. *Patient-Facing Digital Inhalers for Asthma: A Systematic Review and Meta-Analysis*. **Journal of Allergy and Clinical Immunology: In Practice**. DOI: [10.1016/j.jaip.2025.04.039](https://doi.org/10.1016/j.jaip.2025.04.039)
- **2025** – Rayner, D.G.; Bakaa, L.; Hoyte, F.; Perry, T.T.; Rivera-Spoljaric, K.; Sumino, K.; Chipps, B.; Oppenheimer, J.; Nyenhuis, S.M.; Israel, E.; McCabe, E.; O’Byrne, P.M.; Shade, L.E.; Press, V.G.; Guyatt, G.H.; Rangel, S.; Sue-Wah-Sing, D.; Hall, L.; Orr, H.; **Melendez, A.**; Winders, T.; Gardner, D.D.; Przywara, K.; Rank, M.A.; Bacharier, L.B.; Mosnaim, G.; Chu, D.K. *Triple Therapy vs Dual Inhaler Therapy for Moderate-to-Severe Asthma: An Updated Systematic Review and Meta-Analysis*. **Annals of Allergy, Asthma & Immunology**. DOI: [10.1016/j.anai.2025.06.011](https://doi.org/10.1016/j.anai.2025.06.011)
- **2025** – Hicks, A.; George, M.J.; Benjamin, M.; Lacoste, E.; Orr, H.C.; **Melendez, A.**; Gardner, D.D. *Understanding Patient Perspectives in Treatment and Management of Care in Asthma*. **Patient Preference and Adherence**. DOI: [10.2147/PPA.S522436](https://doi.org/10.2147/PPA.S522436)
- **October 2024** – Ramirez, B.R.; Gomez, M.; Conde, D.; Sanchez, A.; Reyes, J.; De Castro, J.; Afandigeh, E.; Gurovich, A.N.; **Melendez, A.** *Acute Effects of High-Intensity Interval Training and Continuous Aerobic Exercise in Vascular Reactivity*. **Medicine & Science in Sports & Exercise**. DOI: [10.1249/01.mss.0001052912.34638.b3](https://doi.org/10.1249/01.mss.0001052912.34638.b3)

- **December 2018 – Melendez, A.** *Selecting the Right Tidal Volume for Patients With ARDS: Are We Staying Within the Recommended Range for a Lung Protective Strategy?* **Respiratory Care (AARC Congress Abstracts).**63(Suppl 10):3020047. [Link](#)

Research Projects

- **Virtual Asthma Coaching Program – Trusted Messengers Initiative** – Allergy & Asthma Network (2024–Present)
Serving as a **Virtual Asthma Coach** to empower patients and caregivers with asthma self-management education, treatment adherence strategies, and culturally relevant health communication.
- **Assessing Physical Activity Levels and Sedentary Behavior of Stroke Survivors Living in the US-Mexico Border: A Mixed-Method Pilot Study** – UTEP / ASNR (2024)
(with L.V.T.T. da Silva, J. Hoffman, A. Melendez, A. Chavarria, L. Miller, T. Chevalier, G. Sanchez-Garcia, A.J. Pinto, J. Polese)
- **From Hardship to Hope – The Role of Childhood Activities in Physical and Emotional Regulation Among Displaced Children** – CHILL Lab, UTEP (2025–Present)
Co-led research examining resilience and self-regulation in displaced children under the mentorship of Dr. Georgina Sanchez-Garcia.
- **Was the Tidal Volume Selected Based on a Lung Protective Strategy?** – UTHSCSA (2017–2018)
 - Retrospective analysis of adult ICU patients.
 - Designed and executed research protocol, ensuring HIPAA compliance.
 - First-author manuscript published in **Respiratory Care** and presented at **AARC Congress 2018 Open Forum**.

Conference Presentations & Invited Talks

2026

- **April 2026 – Allergy & Asthma Network Social Advocate Summit – Capitol Hill, Washington, DC**
Social Media Influencer: *Voices That Drive Change: Storytelling, AI and Digital Engagement*.
- **April 2026 – SPI Symposium and Exhibition, South Padre Island, Texas**
Speaker: *The Ethical Breath: Humanizing Patient Care in High-Stress Clinical Environments*

- **February 2026 H.O.P.E.+ Initiative Mobile Clinic and Health Fair, El Paso, TX**
Asthma Education

2025

- **July 2025 – Indiana Health Fair, Indianapolis, IN**
FeNO Testing, Asthma Education, Participant Recruitment (4 days).
- **June 2025 – Right2Breathe, Summit Racing Sports Park, Cleveland, OH**
FeNO Testing, Asthma Education, Participant Recruitment (4 days).
- **May 2025 – TSRC State Convention, Lubbock, TX**
Speaker: *The Role of the RT in Patient & Family Education: Asthma Edition.*
- **April 2025 – TSRC South Padre Symposium & Exhibition, South Padre Island, TX**
Opening Speaker & Session Presenter:
 - *The Ethics of Respiratory Care: Bringing Empathy Into Practice*
 - *Asthma Beyond the Diagnosis: Empowering Patients Through Education*
 - *Exercise and Asthma: The Role of Physical Therapy in Respiratory Care*
- **January 2025 – NM Society for Respiratory Care, Winterfest, Ruidoso, NM**
 - *End of Life Care: Bringing Compassion to Respiratory Care.*
 - *Educating the Pediatric Patient.*

2024

- **May 2024 – Allergy & Asthma Network Social Influencers Summit – Capitol Hill, Washington, DC**
Social Media Influencer: *Asthma Advocacy & Awareness in the Digital Era.*
- **April 2024 – ASNR Poster Presentation, San Antonio, TX**
Assessing Physical Activity Levels and Sedentary Behavior of Stroke Survivors Living in the US-Mexico Border: A Mixed-Method Pilot Study.
(with L.V.T.T. da Silva, J. Hoffman, A. Melendez, A. Chavarria, L. Miller, T. Chevalier, G. Sanchez-Garcia, A.J. Pinto, J. Polese)
- **March 2024 – Stanford University, Stanford, CA**
Co-Presenter (with L.V.T.T. da Silva, NeuroEXCEL UTEP):
Sit2Stand: Validity in Stroke and Aging Populations.

- **December 2023 – PCORI End of Year Ambassador Networking Meeting**
Participant and Patient Ambassador, Texas Representative.

2023

- **November 2023 – AARC Congress Speaker Academy, Nashville, TN**
Addressing Hispanic Disparities in Asthma Education and Respiratory Care.
- **August 2023 – TSRC West Region Convention, El Paso, TX**
 - *Compassionate Care in Respiratory Care* (Ethics CEU Lecture)
 - *Restructuring How We Approach Pediatric Asthma Education and Management.*
- **July 2023 – TSRC State Convention, Texas Society for Respiratory Care**
Speaker & Moderator: *Pediatrics: Patient Communication and Responsibility in Asthma Management.*
- **May 2023 – TSRC South Padre Symposium & Exhibition, South Padre Island, TX**
Opening Speaker: *Advancing the Respiratory Care Profession Through Social Media and Advocacy.*

2022

- **November 2022 – USAsthma Summit, Washington, DC**
Opening Speaker: *Living with Asthma – Patient Perspective.*
[YouTube Link](#)
- **October 2022 – WGU Networking Panel, El Paso, TX**
Alumni Panelist: *Western Governors University Alumni Speaker Series.*
- **October 2022 – UTEP 35 Under 35 Alumni Speakers Series, El Paso, TX**
Panelist: *A Conversation with LGBTQIA Young Professionals: Patient Advocacy, Healthcare Barriers, and Healthcare in Our Community.*
[Event Link](#)

Advisory & Engagement Roles

- **Sanofi Standing Asthma Advisory Board (2024–Present)**
- **Sanofi Patient Advisory Board (2024–2025)**
- **Sanofi Collaboration – Asthma Advocacy Digital Tool (2024)**
- **Allergy & Asthma Network (AAN) – Patient Advisory Group (Eczema Health Coaching) (2024–Present)**

- **PCORI Stakeholder Leadership Team** – Children’s Interstitial Lung Disease (chILD) Foundation Project (*Project Lead: Ann Gettys*) (2024–Present)
- **PCORI Ambassador Program** – Engagement Ambassador Center (2019–Present)
 - **Participant and Patient Ambassador, PCORI Ambassador Workshops (2023–Present).**
 - Texas Representative; roles include Doctoral Research Associate (UTEP), Student Representative, and Patient Advocate (AAN).
- **Evidence in Allergy Group – Severe Asthma Focus Group** (2024)

Leadership & Service

- **CAPhRA Student Organization President** - University of Texas at El Paso (2026–Present)
- **West Region Director** – Texas Society for Respiratory Care (2022–Present)
- **Membership Chair** – Texas Society for Respiratory Care (2022–2026)
- **Social Media Chair** – Texas Society for Respiratory Care (2022–Present)
- **Student Class Representative** – PhD in Interdisciplinary Health Sciences, University of Texas at El Paso (2023–2025)
- **Respiratory Care Class President** – UT Health San Antonio (2016–2018)
- **Vice President** – To Write Love On Her Arms, UTEP (2015–2016)
- **Secretary** – American Chemical Society, UTEP (2013–2016)
- **Historian** – Medical Professional Organization, UTEP (2015–2016)

Grants, Scholarships & Awards

- **Allergy and Asthma Network: Social Advocate Summit 2026 Travel Scholarship**
- **American College of Respiratory Therapy Education (ACRTE) 2025 scholarship**
- **PCORI Travel Scholarship – 2025**
Full coverage for travel and participation at the **PCORI Annual Meeting**, Washington, DC, including **PCORI Ambassador Workshops**.

- **Dräger Institute Scholarship – AARC Leadership Institute (Research Track) – 1 of only 4 awardees nationwide – 2023**
- **PCORI Travel Scholarship – 2023**
Full coverage for travel and participation at the **PCORI Annual Meeting**, Washington, DC, including **PCORI Ambassador Workshops**.
- **Sandy Endowed Scholarship in Respiratory Care – Ralph C. Wilson Foundation, 2018**
- **Dorothy Banks Scholarship – Dorothy B. Banks Charitable Trust, 2018**
- **WGU Excellence Award in Population Healthcare Coordination – 2022**
- **WGU Excellence Award in Collaborative Leadership – 2022**
- **WGU Excellence Award in Integrated Health Leadership – 2022**

Social Media Management

- **Instagram Accounts Managed:**
 - [@MasterOfRespiratoryCare](#) – Professional page highlighting respiratory care, asthma education, and research.
 - [@UTEPPainResearch](#) – UTEP Pain Research Lab.
 - [@TexasSocietyForRespiratoryCare](#) – Texas Society for Respiratory Care official account.
 - [@caphlab UTEP](#) – Clinically Applied Physiology Lab.
 - [@neuroexcel UTEP](#) – NeuroEXCEL Lab.
 - [@tsrc_students](#) – TSRC Student Engagement.
- **LinkedIn & Facebook Pages Managed:**
 - [Texas Society for Respiratory Care](#)
 - UTEP Clinically Applied Physiology (CAPH) Lab – Facebook
 - UTEP Pain Research Lab – Facebook
 - UTEP NeuroEXCEL Lab – Facebook

Impact: Developed and documented digital engagement strategies, created original graphics, increased community visibility, supported research recruitment, and advanced respiratory care advocacy through social platforms.

Media Features

- **October 2025 – Allergy & Asthma Network Patient Story**
 - Featured in *Living with Solar Urticaria in Sun City: Angel’s Story*, sharing personal experiences with solar urticaria, treatment access, Hispanic patient advocacy, and gaps in representation for patients with hives and skin conditions. Published October 8, 2025. Link: <https://allergyasthmanetwork.org/patient-stories/solar-urticaria-angels-story/>
- **March 2022 – Healthline Media Interview**
 - Featured in *The Real Faces of Asthma*, sharing personal and professional perspectives on living with asthma and addressing barriers to care. [Read the article](<https://www.healthline.com/health/asthma/the-real-faces-of-asthma#Angel-Melendez>)