

## Curriculum Vitae

### **Ricardo Belmares, Ph.D.**

Assistant Professor  
Department of Medical Education  
University of Texas Rio Grande Valley  
School of Medicine

### **Contact Information**

Office Room # ETBLC 2.144  
1210 W. Schunior St. 78541 Code phone: 2961455  
Email: [Ricardo.belmares@utrgv.edu](mailto:Ricardo.belmares@utrgv.edu)

### **Education & Training**

Example:  
Ph.D in Biodmedical Sciences, University of North Texas Health Science Center, Fort Worth, Texas

### **Work Experience**

Assistant professor, University of Texas Rio Grande University, Edinburg, Texas,  
Department of Medical Education

Assistant professor, Texas Tech University Health Science Center at El Paso,  
Department of Medical Education Paul L. Foster School of Medicine (PLFSOM)

Graduate Research Assistant, University of North Texas Health Science Center

Department Chair and Science teacher, Crowley Independent School District

Research Associate, University of Texas Southwestern Medical Center, Department of Biochemistry

## Professional Memberships

- American Association of Clinical Anatomist
- International Association of Medical Science Educators
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## Honors & Awards

- Preclerkship Course Award, Second year, UTRV School of Medicine

## Research Focus

Ricardo Belmares, PhD, is an Assistant Professor of the Department of Medical Education at The University of Texas Rio Grande Valley School of Medicine. He currently teaches anatomy to pre-clerkship medical students.

Dr. Belmares previously served as Assistant Professor at Texas Tech Health Science Center El Paso, where he taught anatomy to medical students at Paul L. Foster School of Medicine and dental students at William D. Hunt School of Dental Medicine. He was the program coordinator for the Distinction in Anatomy program, course director for the Surgical Anatomy elective, and co-course director of the second-year medical school pre-clerkship curriculum. Dr. Belmares also served on several committees such as Admissions, where he served as Chair, a voting member for Grading and Promotions committee, and served as a research mentor for over 30 medical students.

Dr. Belmares' research is split between basic sciences and pedagogy. In basic sciences, he has broad interests in anatomy, biochemistry, physiology, and histology, resulting in top-tier journals such as Science and Nature. His latest focus has been investigating anatomical variation in border population, which has led to novel findings in coronary branching, course of maxillary artery in infratemporal fossa, and histological studies in deep vein valves and collagen distribution in trabecular meshwork and optic nerve head.

In pedagogy, Dr. Belmares has developed imaging modules to prepare medical students for clerkship rotations, introduced an individualized learning plan for anatomy instruction, and streamlined the pre-clerkship curriculum to better prepare students for STEP and clerkship.

Dr. Belmares has also been active in many on-campus outreach programs such as EP HEAT to educate the community regarding many important health issues such as dispelling common medical myths about vaccines, diabetes, high blood pressure, and diet.

## Publications

### Articles

#### 2024

Jesse Allen, Suzzette Jimenez, **Ricardo Belmares**, Jose Manuel De La Rosa, Nathan Holland, Jessica Chacon, The Power of Promotores: Enhancing the Ability of Medical Students to Provide for and Communicate With Underserved Populations, Journal of Higer Education Outreach and Engagement, Volume 28, Number 1, p.113(2024) esISSN 2161-8212. [\(7\)+PWP2961 \(2\).pdf](#)

#### 2023

Johnson S, Allen J, Fernandez L, Veeravenkata Garikiparthyhttpy, Laura. Renovato, Maria Land, Leticia Favela, Karina Becerra, **Ricardo Belmares**, Nathan Holland, and Jessica Chacon: Closing the digital divide: Developing a platform to conduct training, outreach, and education for employment skills., DIGITAL HEALTH. 2023;9. doi:10.1177/20552076231154383. <https://journals.sagepub.com/doi/epub/10.1177/20552076231154383> PMID: 36756645

#### 2021

Dharamsi, Miraal Shafik and Bastian, David Anthony and Balsiger, Heather Ann and Cramer, Joel Timothy and **Belmares, Ricardo**, Efficacy of Video- Based Forearm Anatomy Model Instruction for a Virtual Education Environment. , Available at SSRN: <https://ssrn.com/abstract=3871592> or <http://dx.doi.org/10.2139/ssrn.3871592>, PMID: 35024450

#### 2018

**Ricardo Belmares**, Urmimala Raychaudhari, Sandra Maanssoon, Abott F. Clark, Histological Investigation of Human Glaucomatous Eyes: Extracellular Fibrotic Changes and Galectin 3 Expression in the Trabecular Meshwork and Optic Nerve Head, *Clinical Anatomy*, 2018, August, Vol. 31:1031-1059. PMID: 30117

#### 2013

Wanda E. Medina, **Ricardo Belmares**, Sandra Newbauer, Robert J. Wordinger, Abbot F. Clark, Cellular Fibronectin Expression in Human Trabecular Meshwork and Induction by Transforming Growth Factor-Beta2. *Cell Biology and Anatomy, Investigative Ophthalmology and Visual Sciences*, 2013, October, Vol 54; 54(10):6779-88. PMID: 24030464

## 2012

Liao J, Li H, Zeng W, Sauer DB, **Belmares Ricardo**, Jiang Youxing. Structural insight into the ion-exchange mechanism of the sodium/calcium exchanger. **Science**, 2012; 335(6069):686-90. PMID: 22323814

## 2001

Liao J, Li H, Zeng W, Sauer DB, **Belmares Ricardo**, Jiang Youxing. Structural insight into the ion-exchange mechanism of the sodium/calcium exchanger. **Science**, 2012; 335(6069):686-90. PMID: 22323814

## 1992

Linda H. Phillips, LaShauna Chambers, **Ricardo Belmares**, David W. Niesel. Non-immunological Detection of PhoA Fusion Proteins. *Journal of Microbiological Methods*, 1992; 16(1):13-22.

## Conference Presentations

- 2023** Matthew Palfreeman, **Ricardo Belmares**, Geoffrey Guttman., *When Embryology Meets the Clinical: The Case of the Kidney with 5 Ureters*. American Association of Anatomist national conference, March 2023. <https://anatomy2023.eventscribe.net/posterAgenda.asp?startdate=3/27/2023&enddate=3/27/2023&pfp=BrowsebyPosterTitle&mode=>
- 2022** Pavel Gonzalez, **Ricardo Belmares**, Heather Balsiger, Geoffrey Guttman, *An Interesting Case of Celiac Axis Anatomy and its clinical implications*, American Association of Clinical Anatomist national conference, June 2022. <https://clinical-anatomy.starchapter.com/images/AACA-2022-PROGRAM-printfile.pdf>
- 2022** **Ricardo Belmares**, Grishma Pradhan, *Anatomical Variations present in coronary arteries*, American Association of Clinical Anatomists national conference, June 2022. <https://clinical-anatomy.starchapter.com/images/AACA-2022-PROGRAM-printfile.pdf>
- 2021** Aaron Murillo Ruiz, Joshua Alger, Wang Dennis, Diego Nino, Shaked Laks, Vital Rangashamanna, **Ricardo Belmares**, *Evaluating the Utility of an Online Radiographic Cadaveric Anatomy (ORCA) Module to Teach Renal and Urinary Tract Anatomy*, American Association of Clinical Anatomist Regional conference, November 2021. [https://clinical-anatomy.org/images/downloads/2021\\_aaca\\_fall\\_regional\\_meeting\\_program\\_final.pdf](https://clinical-anatomy.org/images/downloads/2021_aaca_fall_regional_meeting_program_final.pdf)
- 2021** Josh Alger, Yae Kae, Lokesh Nagineri, Cynthia Perry, **Ricardo Belmares**, Houria Ayoubieh, Tanis Hogg, Martine Coue, Herb Janssen, Jessica

Chacon, Jorge Cervantes, Curt Pfarr, Ellen Dudrey, Dale Quest, Edith Olexius, Diego F. Nino, *Are you ready for medical school? Discipline-based online pre-matriculation curriculum to boost student readiness*, International Association of Medical Science Educators (IAMSE) conference, June 2021

**2021** Dylan Salazar, **Ricardo Belmares**, Homaira Azim, Assessing the Efficacy of the Novel, Hybrid-based Surgical Anatomy Elective Course Hosted by Paul L. Foster School of Medicine, *American Association of Clinical Anatomists*, June 2021

**2021** Shubhang Bhalla, Joel Rodgers, Jeffrey Allison, **Ricardo Belmares**, Jose Barragan, and Jorge Cervantes, Utilization of human vitreous humor for an in vitro granuloma system to study Mycobacterium tuberculosis infection, *American Society of Microbiology*, Rio Grande Branch Annual Meeting, April 2021

**2020** Miraal S. Dharamsi, Heather A. Balsiger, M.S., Anthony Bastian, M.D., and **Ricardo Belmares**, Ph.D., Effect of Integration of Forearm Muscle Model- Based Instruction on Anatomy Learning Outcomes among First-Year Medical Students, *American Association of Clinical Anatomists*.

**2019** PETTIT, L. Diana, Heather A. BALSIGER, **Ricardo BELMARES**, Thomas GEST, and Dolgor BAATAR, To Dissect or Prosect? Teaching Anatomy in Integrated Curriculum. American Association of Clinical Anatomist, Conference, July 2019

**2013** **Ricardo Belmares**, Tanya Lerma, Geoffrey Guttman. Biochemical Characterization of Temporal Mandibular Joint. IADR conference 2012.