Stanford

Marcos Rojas Pino

Ph.D. Student in Education, admitted Autumn 2022

Bio

BIO

I am a physician from Chile, passionate about medical education and educational technologies. My research focuses on the use of artificial intelligence, virtual reality, and augmented reality in medical education. I am actively developing tools that leverage artificial intelligence to enhance and evaluate clinical reasoning among healthcare professionals.

HONORS AND AWARDS

- Technology Innovator of the Year, Society for Simulation in Healthcare (2026)
- Gold Winner, Best Use of Generative AI, QS Reimagine Education Awards (2025)
- Distinguished Alumni Award, Emerging Professional and Future Leader, Faculty of Medicine, University of Chile (2025)
- Student Project Showcase Winner, Accelerate Edtech Impact Summit 2024 (2024)
- Community Impact Award, Stanford Alumni Association (2024)
- Stanford Graduate Fellowships in Science and Engineering, Stanford University (2023)
- Enhancing Diversity in Graduate Education Fellowship, Stanford University (2022)
- Patil Teaching Innovation Award, Association for Medical Education in Europe (2016)

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

- Member Technology Enhanced Learning Committee, AMEE (2024 - present)
- Member, ASME (2024 - present)
- Member, AMEE (2023 - present)
- Founder - Member, LatinSOTL (2019 - present)

EDUCATION AND CERTIFICATIONS

- M.D., University of Chile , Medicine (2019)

PERSONAL INTERESTS

Medical education, Higher Education, Educational Technologies, Artificial Intelligence

LINKS

- Clinical Mind AI: https://clinicalmindai.stanford.edu/

Research & Scholarship

RESEARCH INTERESTS

- Higher Education
- Technology and Education

LAB AFFILIATIONS

- Thomas Caruso, Chariot Lab (12/1/2022)

Publications

PUBLICATIONS

- **Virtual Reality Education for Hospitalized Pediatric Patients Improves Intrinsic Motivation: A Prospective, Randomized Crossover Study.** *Clinical pediatrics*
  Collins, F., Moya, E., Rojas-Pino, M. S., Zuniga-Hernandez, M., Arshad, F., Feng, R., Wang, E. Y., Rodriguez, S. T., Jackson, C., Caruso, T. J.
  2026: 99228261460362

- **Remote Augmented Reality Versus Traditional Simulation for Team Leader Assessment in a Cardiac Arrest Scenario: Noninferiority Randomized Controlled Trial.** *JMIR medical education*
  Gianotto-Oliveira, R., Rojas, M., Queiroz, M., Zanchetta, F., Ferrari, A., Kojima, L., Paula, A., Campos, B., Cecilio-Fernandes, D., Caruso, T. J.
  2026; 12: e84367

- **Non-technical skill performance during remote, international, augmented-reality neonatal resuscitation protocol simulations: a feasibility study.** *BMC medical education*
  Rojas, M., Yun, R., Rama, A., Plane, J., Arancibia, C., Paredes, P., Penna, A., Zhao, Y., Caruso, T. J.
  2026

- **The Physiologic Effect of Augmented Reality Simulation Versus Traditional Simulation: A Noninferiority, Randomized Controlled Trial.** *The journal of education in perioperative medicine : JEPM*
  Rama, A., Rojas-Pino, M. S., Wang, E. Y., Rodriguez, S. T., Suen, M. Y., Titzler, J. S., Zuniga-Hernandez, M., Jackson, C., Rosales, O., Collins, F., Caruso, T. J.
  2025; 27 (1): E740

- **Exploring Differences in Clinical Decisions Between Medical Students and Expert Clinicians.** *Advances in medical education and practice*
  Rojas, M., Price, A., Kim, C. J., Chen, S. F., Gutierrez, K., Wieman, C., Salehi, S.
  2024; 15: 1285-1297

- **Reclaiming focus in medical education: Learning, not AI.** *Medical teacher*
  Rojas, M.
  2024: 1

- **Exploring the Performance of ChatGPT Versions 3.5, 4, and 4 With Vision in the Chilean Medical Licensing Examination: Observational Study.** *JMIR medical education*
  Rojas, M., Rojas, M., Burgess, V., Toro-Pérez, J., Salehi, S.
  2024; 10: e55048

- **Characterization of content associated with lesbian, gay, bisexual, transgender, intersex, and queer individuals in Chilean medical schools: a cross-sectional survey.** *BMC medical education*
  Rojas, M., Cánepa González, J., Ortiz-López, N.
  2024; 24 (1): 167

- **Introducing the Problem-Solving Template as a Tool for Equity: Addressing Incoming Preparation Disparities** *J. Chem. Educ.*
  Schwartz Poehlmann, J. K., Nardo, J. E., Rojas, M., Salehi, S.
  2024; 101 (3): 1332–1340

- **Impact of extracurricular activities on the self-actualization of medical students: a systematic review** *SPANISH JOURNAL OF MEDICAL EDUCATION*

Gordillo-Espinace, E., Dolz-Torres, P., Palma-Bifani, P., Rojas-Pino, M.
2024; 5 (1)

- **Impact of 3D printing on medical students' learning: a systematic review** *SPANISH JOURNAL OF MEDICAL EDUCATION*
  Zelada-Mirror, M., Segura-Beltran, F., Margas-Cavieres, F., Rojas-Pino, M.
  2024; 5 (4)
- **Well-being variations on students of health sciences related to their learning opportunities, resources, and daily activities in an online and on-crisis context: a survey-based study.** *BMC medical education*
  Perez-Villalobos, C., Ventura-Ventura, J., Spormann-Romeri, C., Paredes-Villarroel, X., Rojas-Pino, M., Jara-Reyes, C., Lopez, M., Castillo-Rabanal, I., Schilling-Norman, M. J., Baquedano-Rodriguez, M., Parra-Ponce, P., Toirkens-Niklitschek, J., Briede-Westermeyer, et al
  2023; 23 (1): 37
- **Remote observation of surgeries in the study of anatomy in medical students: A systematic review.** *SPANISH JOURNAL OF MEDICAL EDUCATION*
  Garrido, V., Saez, M., Salinas, C., Marcos-Rojas
  2023; 4 (1): 1-11
- **Gamification in Emergency Medicine.** *SPANISH JOURNAL OF MEDICAL EDUCATION*
  Fica, A., Burgess, V., Gonzalez, T., Rojas, M.
  2022; 3 (3)
- **Characteristics of a Virtual Reality scenario for anatomy learning: A literature review** *SPANISH JOURNAL OF MEDICAL EDUCATION*
  Gonzalez, T., Ibeas, C., Gravert, I., Leon, A., Rojas, M.
  2022; 3 (3)
- **Satisfaction with remote teaching during the first semester of the COVID-19 crisis: Psychometric properties of a scale for health students** *PLOS ONE*
  Perez-Villalobos, C., Ventura-Ventura, J., Spormann-Romeri, C., Melipillan, R., Jara-Reyes, C., Paredes-Villarroel, X., Rojas-Pino, M., Baquedano-Rodriguez, M., Castillo-Rabanal, I., Parra-Ponce, P., Bastias-Vega, N., Alvarado-Figueroa, D., Matus-Betancourt, et al
  2021; 16 (4): e0250739
- **Music Training and Education Slow the Deterioration of Music Perception Produced by Presbycusis in the Elderly** *FRONTIERS IN AGING NEUROSCIENCE*
  Moreno-Gomez, F. N., Veliz, G., Rojas, M., Martinez, C., Olmedo, R., Panussis, F., Dagnino-Subiabre, A., Delgado, C., Delano, P. H.
  2017; 9: 149