Esai Cisneros

Las Cruces, NM 88011

(575)202-0819 | cisnerosesai03@gmail.com | LinkedIn

Education

New Mexico State University *08/2022 – Present*

Bachelor of Science in Genetics & Biotechnology *Expected Date of Graduation: 05/2026*

- *Cumulative GPA:* 3.99
- *Honors:* Crimson Scholar (3.5+ GPA), Dean's List (Top 15% GPA in College of Arts and Sciences)
- *Scholarships:* Hadley Honors Scholarship, Dora B. Gile Biology Scholarship
- *Relevant courses taken:* Principles of Genetics, Molecular Biology Techniques Laboratory, Bioinformatics and NCBI, Cell Biology, Human Physiology, Honors Biochemistry I, Statistical Applications, Python Programming I

Research Experience

Baylor College of Medicine / Texas Children's Cancer and Hematology Center *06/2025 - Present*

Summer Undergraduate Research Training Program

- Undertaking a nine-week research project under Dr. Debananda Pati that explores the efficacy of novel therapeutics for Ewing sarcoma tumors
- Funded by Cancer Prevention and Research Institute of Texas which provides additional workshops including NMRN mentee training and career opportunities
- Skills: Cell culture, CellTiter-Blue cell viability assay, single cell cloning, Excel

New Mexico State University Serrano Neurolab *08/2023 – Present*

Undergraduate Research Assistant

- Optimized protocols for measuring viscoelastic properties of live plant and animal cells using Bruker XP Bruker NanoWizard® 4 XP BioScience biological atomic force microscope
- Aseptically culture plant and animal tissue in various environments and conditions to observe phenotypes
- Participated in the NIH-funded Undergraduate Research Training Initiative for Student Enhancement (U-RISE) from August 2024 to May 2025.

University of Colorado School of Medicine *05/2024 – 08/2024*

Cancer Research Experience for Undergraduates

- Contributed to ongoing project that aims to develop a targeted therapeutic intervention for liposarcoma using CRISPR genome editing techniques
- Independently conducted apoptosis assays which showed that targeting amplified regions in a tumor cell's genome with CRISPR is more cytotoxic to cancerous cells than to noncancerous cells
- Skills: Cell culture, ribonucleoprotein transfection, Annexin-V apoptosis assay, flow cytometry, western blotting

Presentations

1. **Cisneros E. J.**, Cheng S., Serrano, E.E. (2025, April). *Mechanosensitivity in glioblastoma cell cultures*. Presented poster at New Mexico State University's Undergraduate Research and Creative Arts Symposium. Las Cruces, NM.
2. **Cisneros E. J.**, Cheng S., Serrano, E.E. (2025, March) *Optimizing bio-afm for force spectroscopy of brassica guard cells*. Presented poster at New Mexico State University's Biosymposium. Las Cruces, NM.

3. **Cisneros E. J.**, Cheng S., Serrano, E.E. (2025, February) *Optimizing bio-afm for force spectroscopy of brassica guard cells*. Presented poster at Biophysical Society Annual Meeting. Los Angeles, CA.
4. **Cisneros E. J.**, Espinosa J., Joshi M., Sempeck C., Duc H., Nguyen V. (2024, October). *Validating crispr guide rnas for the development of a liposarcoma therapeutic intervention*. Presented poster at SACNAS National Diversity in STEM Conference. Phoenix, AZ.
5. **Cisneros E. J.**, Espinosa J., Joshi M., Sempeck C., Duc H., Nguyen V. (2024, August). *Validating crispr guide rnas for the development of a liposarcoma therapeutic intervention*. Presented poster at the University of Colorado School of Medicine Cancer Research Summer Poster Symposium. Aurora, CO.
6. **Cisneros E. J.**, Cheng S., Serrano, E.E. (2024, April). *Developing applications for the bruker nanowizard xp biological atomic force microscope*. Presented poster at New Mexico State University's Undergraduate Research and Creative Arts Symposium. Las Cruces, NM.

Awards

Biophysical Society Annual Meeting Undergraduate Poster Competition Award *February 2025*

- One of ten selected awardees for overall quality of research, poster, and presentation

Volunteer Experience

Asombro Institute for Science Education Chihuahuan Desert Nature Park *March 2024 – May 2025*

Wildlife Wonders Volunteer

- Assisted with organizing and running seven seasonal public events with interactive activities to educate attendees about New Mexican wildlife, gaining experience in communicating biology topics to diverse audiences

Student Organizations

Society for the Advancement of Chicanos/Hispanics and Native Americans in Science

New Mexico State University Chapter Member *January 2025 – Present*

- The SACNAS chapter at NMSU is dedicated to fostering diversity in STEM by supporting Chicanos/Hispanics, Native Americans, and other underrepresented groups through mentorship, professional development, and community engagement

The Agora *January 2025 – Present*

Editorial Team Member

- Collaboratively review and edit entries to be published in the Agora, New Mexico State University's interdisciplinary undergraduate journal for research and creative activities

Professional Organizations

Society for Neuroscience *Member since May 2025*

Biophysical Society *Member since December 2024*

Society for the Advancement of Chicanos and Native Americans in Science *Member since July 2024*