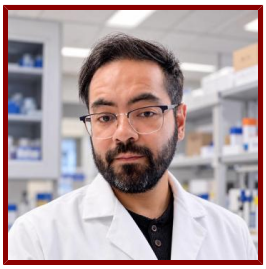
Stanford



Saul Arteaga Cruz

Postdoctoral Scholar, General Surgery

Bio

BIO

I am an immunologist and postdoctoral scholar in the Department of Surgery at Stanford University, working in the laboratory of Dr. Alma-Martina Cepika. My research interests center on FOXP3+ regulatory T (Treg) cells and type 1 regulatory T (Tr1) cells in human cancer, particularly their roles in immune regulation within the tumor microenvironment.

My work combines studies of human tissues with advanced flow cytometry, functional immunology, and computational analysis to investigate Treg and Tr1 biology in cancer. I am interested in understanding how these populations shape antitumor immune responses and how this knowledge may inform cancer immunotherapy.

During my doctoral training at the National Autonomous University of Mexico (UNAM), I studied regulatory T cells, including Tr1 cells, and immune tolerance in transplantation. This background provides a foundation for my current work on immune regulation in human tumors.

STANFORD ADVISORS

- Alma-Martina Cepika, Postdoctoral Faculty Sponsor

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

My research in the Cepika laboratory centers on FOXP3+ regulatory T (Treg) cells and type 1 regulatory T (Tr1) cells in human tumors. I am interested in understanding their biology, function, and interactions with the tumor microenvironment, and how these populations shape antitumor immune responses.

I combine human tissue studies, advanced flow cytometry, functional assays, and analysis of single-cell and spatial data to investigate immune regulation in cancer. Building on my background in Treg and Tr1 biology in transplantation, my broader goal is to connect mechanistic insights with translational research that may inform cancer immunotherapy.

Publications

PUBLICATIONS

- **Increased phenotypic and functional stability of human allospecific induced Tregs is associated with Vitamin C-mediated FOXP3 TSDR demethylation.** *Frontiers in immunology*

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- **CD25+CD27+CD70- alloantigen-specific Tregs: promising stable immunotherapy for transplantation.** *Frontiers in immunology*
  Cortés-Hernández, A., Arteaga-Cruz, S., Martínez Iturbe, I. I., Rosas-Cortina, K., Vigil Mora, M. A., Legorreta-Anguiano, E., Reyes Barrientos, J. E., Álvarez-Salazar, E. K., Cervera, A., Sánchez-Hernández, B. E., Domínguez, A. G., Soldevila, G.
  2026; 17: 1789008

- **Induced regulatory T cells as immunotherapy in allotransplantation and autoimmunity: challenges and opportunities.** *Journal of leukocyte biology*
  Alvarez-Salazar, E. K., Cortés-Hernández, A., Arteaga-Cruz, S., Soldevila, G.
  2024; 116 (5): 947-965

- **Highly purified and functionally stable in vitro expanded allospecific Tr1 cells expressing immunosuppressive graft-homing receptors as new candidates for cell therapy in solid organ transplantation.** *Frontiers in immunology*
  Arteaga-Cruz, S., Cortés-Hernández, A., Alvarez-Salazar, E. K., Rosas-Cortina, K., Aguilera-Sandoval, C., Morales-Buenrostro, L. E., Alberú-Gómez, J. M., Soldevila, G.
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- **Highly Purified Alloantigen-Specific Tregs From Healthy and Chronic Kidney Disease Patients Can Be Long-Term Expanded, Maintaining a Suppressive Phenotype and Function in the Presence of Inflammatory Cytokines.** *Frontiers in immunology*
  Cortés-Hernández, A., Alvarez-Salazar, E. K., Arteaga-Cruz, S., Rosas-Cortina, K., Linares, N., Alberú Gómez, J. M., Soldevila, G.
  2021; 12: 686530

- **Large-Scale Generation of Human Allospecific Induced Tregs With Functional Stability for Use in Immunotherapy in Transplantation.** *Frontiers in immunology*
  Alvarez-Salazar, E. K., Cortés-Hernández, A., Arteaga-Cruz, S., Alberú-Gómez, J., Soldevila, G.
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- **Ex vivo expansion of regulatory T cells from long-term Belatacept-treated kidney transplant patients restores their phenotype and suppressive function but not their FOXP3 TSDR demethylation status.** *Cellular immunology*
  Cortés-Hernández, A., Alvarez-Salazar, E., Arteaga-Cruz, S., Alberu-Gómez, J., Soldevila, G.
  2020; 348: 104044