

Stanford



Daniel Hoces Burga

Postdoctoral Scholar, Bioengineering

Bio

HONORS AND AWARDS

- Postdoctoral Fellow, Swiss National Science Foundation (2023)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, ETH Zurich (2022)
- B of Medicine and B of Surgery, Universidad Peruana Cayetano Heredia (2014)
- Master of Science, University of Zurich (2017)
- Ph.D., ETH Zurich , Microbiology and Immunology (2022)
- M.Sc., University of Zurich , Human Immunology (2016)
- MBBS, Universidad Peruana Cayetano Heredia , Human Medicine (2014)

STANFORD ADVISORS

- Rogelio Hernandez-Lopez, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **A synthetic biology approach to engineering circuits in immune cells.** *Immunological reviews*
Hoces, D., Miguens Blanco, J., Hernandez-Lopez, R. A.
2023
- **Fitness advantage of *Bacteroides thetaiotaomicron* capsular polysaccharide in the mouse gut depends on the resident microbiota** *ELIFE*
Hoces, D., Greter, G., Arnoldini, M., Staubli, M. L., Moresi, C., Sintsova, A., Berent, S., Kolinko, I., Bansept, F., Woller, A., Hafliger, J., Martens, E., Hardt, et al
2023; 12
- **"EvoVax" - A rationally designed inactivated *Salmonella Typhimurium* vaccine induces strong and long-lasting immune responses in pigs.** *Vaccine*
Lentsch, V., Aslani, S., Echtermann, T., Preet, S., Cappio Barazzone, E., Hoces, D., Moresi, C., Kummerlen, D., Slack, E.
2023; 41 (38): 5545-5552
- **Metabolic reconstitution of germ-free mice by a gnotobiotic microbiota varies over the circadian cycle.** *PLoS biology*
Hoces, D., Lan, J., Sun, W., Geiser, T., Staubli, M. L., Cappio Barazzone, E., Arnoldini, M., Challa, T. D., Klug, M., Kellenberger, A., Nowok, S., Faccin, E., Macpherson, et al
2022; 20 (9): e3001743
- **A rationally designed oral vaccine induces immunoglobulin A in the murine gut that directs the evolution of attenuated *Salmonella* variants.** *Nature microbiology*
Diard, M., Bakkeren, E., Lentsch, V., Rocker, A., Bekele, N. A., Hoces, D., Aslani, S., Arnoldini, M., Böhi, F., Schumann-Moor, K., Adamcik, J., Piccoli, L., Lanzavecchia, et al

2021; 6 (7): 830-841

• **High throughput sequencing provides exact genomic locations of inducible prophages and accurate phage-to-host ratios in gut microbial strains *MICROBIOME***

Zund, M., Ruscheweyh, H., Field, C. M., Meyer, N., Cuenca, M., Hoces, D., Hardt, W., Sunagawa, S.
2021; 9 (1): 77

• **Regulatory T cell expansion resolves after effective strongyloidiasis treatment in subjects with HTLV-1 co-infection *PARASITOLOGY INTERNATIONAL***

Hoces, D., Barros, N., Woll, F., Bauer, A., Clinton White, A., Montes, M.
2020; 76: 102092

• **Escherichia coli limits *Salmonella Typhimurium* infections after diet shifts and fat-mediated microbiota perturbation in mice. *Nature microbiology***

Wotzka, S. Y., Kreuzer, M., Maier, L., Arnoldini, M., Nguyen, B. D., Brachmann, A. O., Berthold, D. L., Zünd, M., Hausmann, A., Bakkeren, E., Hoces, D., Güll, E., Beutler, et al
2019; 4 (12): 2164-2174

• **Growing, evolving and sticking in a flowing environment: understanding IgA interactions with bacteria in the gut *IMMUNOLOGY***

Hoces, D., Arnoldini, M., Diard, M., Loverdo, C., Slack, E.
2020; 159 (1): 52-62

• **Do Memory CD4 T Cells Keep Their Cell-Type Programming: Plasticity versus Fate Commitment? T-Cell Heterogeneity, Plasticity, and Selection in Humans *COLD SPRING HARBOR PERSPECTIVES IN BIOLOGY***

Sallusto, F., Cassotta, A., Hoces, D., Foglierini, M., Lanzavecchia, A.
2018; 10 (3)

• **Missed opportunities for HIV control: Gaps in HIV testing for partners of people living with HIV in Lima, Peru *PLOS ONE***

Vasquez, A. L., Errea, R. A., Hoces, D., Echevarria, J., Gonzalez-Lagos, E., Gotuzzo, E.
2017; 12 (8): e0181412

• **Assessing the HIV Care Continuum in Latin America: progress in clinical retention, cART use and viral suppression *JOURNAL OF THE INTERNATIONAL AIDS SOCIETY***

Rebeiro, P. F., Cesar, C., Shepherd, B. E., De Boni, R. B., Cortes, C. P., Rodriguez, F., Belaunzarán-Zamudio, P., Pape, J. W., Padgett, D., Hoces, D., McGowan, C., Cahn, P.
2016; 19: 20636

• **CD4 Response Up to 5 Years After Combination Antiretroviral Therapy in Human Immunodeficiency Virus-Infected Patients in Latin America and the Caribbean *OPEN FORUM INFECTIOUS DISEASES***

Luz, P. M., Belaunzarán-Zamudio, P. F., Crabtree-Ramirez, B., Caro-Vega, Y., Hoces, D., Rebeiro, P. F., Blevins, M., Pape, J. W., Cortes, C. P., Padgett, D., Cahn, P., Veloso, V. G., McGowan, et al
2015; 2 (2): ofv079