



## Alejandro Matia

Postdoctoral Scholar, Molecular and Cellular Physiology

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#### BIO

Alejandro Matía is a CZ Biohub Collaborative Postdoctoral Fellow, working jointly with the Huttenhain lab at Stanford and the Arias group at the CZ Biohub San Francisco. The main focus of his research is to explore the mechanisms underlying viral neurotropism. Alejandro obtained his PhD research at the Spanish National Research Council (CSIC), employing multi-omic technologies such as CRISPR genetic screens and single cell transcriptomics in Poxvirus infections.

#### BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, European Virus Bioinformatics Center (EVBC) (2023 - present)

#### PROFESSIONAL EDUCATION

- Doctor of Philosophy, Universidad Autonoma De Madrid (2023)
- Bachelor of Science, Universidad Autonoma De Madrid (2017)
- Masters, Universidad Pablo de Olavide , Bioinformatics
- Masters, Universidad Autonoma de Madrid , Biotechnology

#### STANFORD ADVISORS

- Ruth Huttenhain, Postdoctoral Faculty Sponsor

### Publications

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#### PUBLICATIONS

- **Spatio-temporal analysis of Vaccinia virus infection and host response dynamics using single-cell transcriptomics and proteomics** *bioRxiv*  
Matia, A., McCarthy, F., Woosley, H., Turon-Lagot, V., Platzer, S. W., Liu, J., Lorenzo, M. M., Borja, M., Shetty, K., Winkler, J., Elias, J. E., Blasco, R., Arias, et al  
2024
- **Identification of  $\beta 2$  microglobulin, the product of B2M gene, as a Host Factor for Vaccinia Virus Infection by Genome-Wide CRISPR genetic screens.** *PLoS pathogens*  
Matía, A., Lorenzo, M. M., Romero-Estremera, Y. C., Sánchez-Puig, J. M., Zaballos, A., Blasco, R.  
2022; 18 (12): e1010800
- **Tools for the targeted genetic modification of poxvirus genomes.** *Current opinion in virology*  
Matía, A., Lorenzo, M. M., Blasco, R.  
2020; 44: 183-190
- **V-SWITCH: A single-vector OFF-to-ON fluorescent reporter of live RNA virus infections** *bioRxiv*

Cid-Rosas, M., Grunberg, M., Matia, A., Lee, S., Woosley, H., Pradeep, S., Kanwar, S., Khadka, S., Mehta, S., Huttenhain, R., Turot-Lagot, V., Arias, C.

2026

- **Vaccinia Virus Strain MVA Expressing a Prefusion-Stabilized SARS-CoV-2 Spike Glycoprotein Induces Robust Protection and Prevents Brain Infection in Mouse and Hamster Models.** *Vaccines*

Lorenzo, M. M., Marín-López, A., Chiem, K., Jimenez-Cabello, L., Ullah, I., Utrilla-Trigo, S., Calvo-Pinilla, E., Lorenzo, G., Moreno, S., Ye, C., Park, J. G., Matía, A., Brun, et al

2023; 11 (5)

- **MaGplotR: a software for the analysis and visualization of multiple MaGeCK screen datasets through aggregation** *bioRxiv*

Matia, A., Lorenzo, M. M., Peng, D.

2023