



## Victor Vazquez Marrero

Postdoctoral Scholar, Microbiology and Immunology

### Bio

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#### HONORS AND AWARDS

- PRISM Baker Fellowship, Stanford University (2025)
- Graduate Research Fellowship, National Science Foundation (NSF) (2020-2024)
- Travel Award, International Cytokine & Interferon Society (ICIS) (2024)
- Travel Award for Minority Scientists, American Association of Immunologists (AAI) (2023)
- Professional Fellowship, Yale Ciencia Academy (2022)
- Honorable Mention, Ford Foundation Predoctoral Fellowship (2020)
- Magna Cum Laude, University of Puerto Rico – Río Piedras (2019)
- Academic Excellence Award in Biology, University of Puerto Rico – Río Piedras (2019)
- Dean's and Honors Lists, University of Puerto Rico – Río Piedras (2016-2019)
- Undergraduate Scholarship from Jaime and Teresa fund, University of Puerto Rico – Río Piedras (2018)
- Undergraduate Research Fellowship, NIH RISE, University of Puerto Rico – Río Piedras (2016-2018)
- Summer Undergraduate Research Fellowship, Leadership Alliance SR-EIP (2016-2018)

#### BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, International Cytokine & Interferon Society (ICIS) (2020 - present)
- Member, American Association of Immunologists (AAI) (2022 - present)
- Professional development Chair, Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) (2022 - 2023)
- Fellow, Yale Ciencia Academy (2022 - 2022)
- Communications Co-Chair, Penn Interdisciplinary Network for Scientists Promoting Inclusion, Retention, and Equity (INSPIRE) (2020 - 2021)
- Fellow, Scientist Mentoring & Diversity Program for Biotechnology (SMDP Biotech) (2020 - 2021)

#### PROFESSIONAL EDUCATION

- Bachelor of Science, University of Puerto Rico Río Piedras (2018)
- Ph.D., University of Pennsylvania Perelman, Immunology (2025)
- B.S., University of Puerto Rico – Río Piedras, Cellular and Molecular Biology (2018)

#### STANFORD ADVISORS

- Denise Monack, Postdoctoral Faculty Sponsor

## Publications

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### PUBLICATIONS

- **Dendritic cells activate pyroptosis and effector-triggered apoptosis to restrict *Legionella* infection** *MBIO*  
Vazquez Marrero, V. R., Doerner, J., Wodzanowski, K. A., Zhang, J., Lu, A., Boyer, F. D., Vargas, I., Hossain, S., Kammann, K. B., Dresler, M. V., Shin, S.  
2025; 16 (7): e0125725
- **GM-CSF engages multiple signaling pathways to enhance pro-inflammatory cytokine responses in human monocytes during *Legionella* infection** *INFECTION AND IMMUNITY*  
Vazquez Marrero, V. R., Dresler, M., Haggadone, M. D., Lu, A., Shin, S.  
2025; 93 (7): e0056524
- **CT imaging of and therapy for inflammatory bowel disease via low molecular weight dextran coated ceria nanoparticles.** *Nanoscale*  
Rosario-Berrios, D. N., Pang, A. Y., Mossburg, K. J., Kim, J., Vázquez Marrero, V. R., Yoon, S., Gupta, M., Lenz, O. C., Liu, L. P., Kian, A. C., La Luz Rivera, K., Shin, S., Noël, et al  
2025; 17 (16): 10356-10370
- **Catalytic activity and autoprocessing of murine caspase-11 mediate noncanonical inflammasome assembly in response to cytosolic LPS.** *eLife*  
Akuma, D. C., Wodzanowski, K. A., Schwartz Wertman, R., Exconde, P. M., Vázquez Marrero, V. R., Odunze, C. E., Grubaugh, D., Shin, S., Taabazuing, C., Brodsky, I. E.  
2024; 13
- **TNF licenses macrophages to undergo rapid caspase-1, -11, and -8-mediated cell death that restricts *Legionella pneumophila* infection.** *PLoS pathogens*  
Pollock, T. Y., Vázquez Marrero, V. R., Brodsky, I. E., Shin, S.  
2023; 19 (6): e1010767
- **In the Context of Polymorphism: Accurate Measurement, and Validation of Solubility Data.** *Crystal growth & design*  
Vázquez Marrero, V. R., Berrios, C. P., Dios Rodríguez, L. D., Stelzer, T., López-Mejías, V.  
2019; 19 (7): 4101-4108