



David Jimenez-Morales

Sr Research Engineer, Medicine - Med/Cardiovascular Medicine

Bio

BIO

Dr. David Jimenez-Morales is a Bioinformatics Lead and Research Scientist at Stanford University's Department of Medicine. Leveraging over 19 years of computational biology experience across elite US institutions (UIC, Northwestern, UCSF, Stanford), he uniquely bridges the gap between biology, engineering, mathematics, and informatics. His research focuses on multi-omics data integration, AI-driven biomedical research, and the development of large-scale bioinformatics infrastructure.

His trajectory reflects a consistent drive toward scientific independence and leadership. Beginning with his Ph.D. at UIC, where he developed predictive algorithms for protein post-translational modifications, Dr. Jimenez-Morales progressed to directing the bioinformatics operations of a \$250M+ NIH consortium (MoTrPAC). He coordinates multidisciplinary teams, engineers cloud-native multi-omics software (such as OmicsPipelines), and leads the Data Analysis Working Group characterizing the molecular atlas of exercise.

As a strategic leader, Dr. Jimenez-Morales has served as Principal Investigator of an NIH U19 pilot project, Co-PI of the Bioinformatics Core in Fluomics, and Project Manager for MoTrPAC within the NIH Common Fund Data Ecosystem (CFDE). His work establishes reproducibility standards and FAIR-data principles that are adopted at a consortium-wide scale, ensuring the infrastructure he builds serves as a national reference point for the scientific community.

<https://biodavidjm.github.io/>

CURRENT ROLE AT STANFORD

Bioinformatics Lead & Senior Research Scientist Department of Medicine, Division of Cardiovascular Medicine

At Stanford, Dr. Jimenez-Morales owns and leads organization-wide data initiatives, most notably for the Molecular Transducers of Physical Activity Consortium (MoTrPAC) and COVID-omics projects. He coordinates a multidisciplinary team of analysts and researchers, overseeing the data engineering and analysis for complex multi-omics, multi-tissue in-vivo, and clinical studies.

A key aspect of his role involves developing innovative, scalable computational infrastructure from the ground up. This includes engineering comprehensive data injection and quality control systems, and implementing FAIR data science principles. He also serves as a mentor to staff, postdocs, and graduate students, cultivating a collaborative and highly productive research environment.

EDUCATION AND CERTIFICATIONS

- B.Sc., Biology, University of Granada , Fundamental Biology (1998)
- M.Sc, Universidad Complutense de Madrid / National Center for Biotechnology (CSIC) , Computational Biology (2004)
- PhD, University of Illinois at Chicago , Bioinformatics (2013)