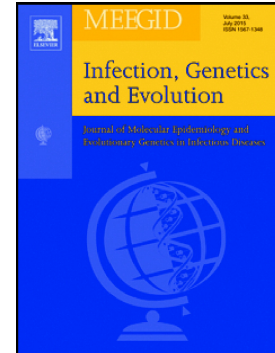


## Accepted Manuscript

Mutation and recombination in pathogen evolution: Relevance, methods and controversies

Miguel Arenas, Natalia M. Araujo, Catarina Branco, Nadine Castelhana, Eduardo Castro-Nallar, Marcos Pérez-Losada



PII: S1567-1348(17)30335-0  
DOI: doi:[10.1016/j.meegid.2017.09.029](https://doi.org/10.1016/j.meegid.2017.09.029)  
Reference: MEEGID 3285  
To appear in: *Infection, Genetics and Evolution*  
Received date: 26 July 2017  
Revised date: 20 September 2017  
Accepted date: 21 September 2017

Please cite this article as: Miguel Arenas, Natalia M. Araujo, Catarina Branco, Nadine Castelhana, Eduardo Castro-Nallar, Marcos Pérez-Losada , Mutation and recombination in pathogen evolution: Relevance, methods and controversies. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Meegid(2017), doi:[10.1016/j.meegid.2017.09.029](https://doi.org/10.1016/j.meegid.2017.09.029)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

*Review article in SI: Modern Methodologies*

## **Mutation and Recombination in Pathogen Evolution: Relevance, Methods and Controversies**

Miguel Arenas<sup>1,2,3,\*</sup>, Natalia M. Araujo<sup>4</sup>, Catarina Branco<sup>2,3</sup>, Nadine Castelhanos<sup>2,3</sup>, Eduardo Castro-Nallar<sup>5</sup> and Marcos Pérez-Losada<sup>6,7,8</sup>

<sup>1</sup> Department of Biochemistry, Genetics and Immunology, University of Vigo, Vigo, Spain.

<sup>2</sup> Instituto de Investigação e Inovação em Saúde (i3S), University of Porto, Porto, Portugal.

<sup>3</sup> Institute of Molecular Pathology and Immunology of the University of Porto (IPATIMUP), Porto, Portugal.

<sup>4</sup> Laboratory of Molecular Virology, Oswaldo Cruz Institute, FIOCRUZ, Rio de Janeiro, Brazil.

<sup>5</sup> Universidad Andrés Bello, Center for Bioinformatics and Integrative Biology, Facultad de Ciencias Biológicas, Santiago, Chile.

<sup>6</sup> Computational Biology Institute, Milken Institute School of Public Health, George Washington University, Ashburn, VA 20147, Washington, DC.

<sup>7</sup> CIBIO-InBIO, Centro de Investigação em Biodiversidade e Recursos Genéticos, Universidade do Porto, Campus Agrário de Vairão, Vairão 4485-661, Portugal.

<sup>8</sup> Children's National Medical Center, Washington, DC 20010, USA.

### **Email addresses:**

MA: marenas@uvigo.es

NMA: nmaraujo@ioc.fiocruz.br

CB: cbranco@ipatimup.pt

NC: nadines@ipatimup.pt

ECN: castronallar@gmail.com

MPL: mlosada@gwu.edu

### **Corresponding author:**

*Miguel Arenas*

*Department of Biochemistry, Genetics and Immunology*

*University of Vigo*

*36310 Vigo, Spain*

*E-mail address: marenas@uvigo.es*

*Phone: (+34) 986130047*

**Running head:** Mutation and recombination in pathogen populations

Download English Version:

<https://daneshyari.com/en/article/8646687>

Download Persian Version:

<https://daneshyari.com/article/8646687>

[Daneshyari.com](https://daneshyari.com)