

# qenvio's resume

Enrique (Quique) Vidal

## Aside

### Contact Info

- [qenvio@gmail.com](mailto:qenvio@gmail.com)
- [github.com/qenvio](https://github.com/qenvio)

### Skills

- R
- Bash
- SQL
- Python

### Disclaimer

Last updated on 2019-12-20.

## Main

### Enrique (Quique) Vidal

From physics and statistics to bioinformatics and genomics through epidemiology. Data scientist helping to ask and answer questions quantitatively. R'ing all the way from data processing to modeling and visualizing. Non-stop-learner.

### Education

#### Universidad Autónoma de Madrid

PhD. in Epidemiology

Madrid, Spain

2011

*Anisotropic models to study cancer mortality around pollutant sources*

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Thesis text and slides (in Spanish)

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## **Universitat de València**

Degree in Statistics

Valencia, Spain

2006

## **Universitat de València**

Degree in Physics

Valencia, Spain

2005

## **Consulting Experience**

### **Statistics and bioinformatics**

Ferrer Corporate

Barcelona, Spain

2019

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- Multiclass classifier for prediction of tumor origin
- Implementation of a workflow for mutation detection

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## **Research Experience**

### **Postdoctoral Researcher**

Center for Genomic Regulation (CRG)

Barcelona, Spain

Now - 2015

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Acting as head of computational biology for the 4DGenome Unit:

- Implemented a reproducible workflow for genome structure samples
- Developed a bias-correction method for genome structure data
- Visualization tools based on shiny
- Context-specific analysis for the study of the dynamics of genome structure

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## **dryhic R package**

for genome structure data. It includes OneD bias correction method using GAMs

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## **Postdoctoral Researcher**

Bellvitge Biomedical Research Institute (IDIBELL)

Barcelona, Spain

2015 - 2012

- Integrative analysis of epigenomic data

## **Postdoctoral Researcher**

Principe Felipe Research Center (CIPF)

Valencia, Spain

2012 - 2011

- Implementation of the platform to analyze exomes for rare diseases (CIBERER-BIER)

## **Bioinformatician / Biostatistician**

Principe Felipe Research Center (CIPF)

Valencia, Spain

2011 - 2009

- Network analysis and multilevel modeling in the context of signaling pathways

## **Biostatistician**

National Center for Epidemiology

Madrid, Spain

2009 - 2006

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- Analysis of mortality time-trends
- Disease mapping (spatio-temporal smoothing)
- Assessment of risk factors associated with pollution

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## **Teaching Experience**

### **Biostatistics, Epidemiology and Public Health**

Instructor

Castellón, Spain

2017 - 2016

Universitat Jaume I

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Medical degree

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### **Basic Epidemiology**

Coordinator and instructor

Valencia, Spain

2011

Valencian School for Health Studies (EVES)

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Professional training

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### **Biostatistics and Epidemiology**

Instructor

Madrid, Spain

2009 - 2008

National School of Public Health, ISCIII

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M.S. Public Health

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### **Statistical analysis with R (2 editions)**

Coordinator and Instructor

Madrid, Spain

2009 - 2008

Carlos III Institute of Health (ISCIII)

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Professional training

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## **Selected talks**

### **Simple statistical models for complex 3D genome data**

Statistical Methods for Post Genomic Data

Barcelona, Spain

2019

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Slides

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### **OneD: increasing reproducibility of Hi-C samples with abnormal karyotypes**

Keystone Symposia: Chromatin Architecture and Chromosome Organization; ISCB Next Generation Sequencing Conference

Whistler, British Columbia, Canada

2019

Awarded with “**Outstanding presentation prize**”

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Poster

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### **Segmented Poisson models**

The R User Conference

Dortmund, Germany

2008

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Slides

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## **Selected publications**

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Full list of publications accessible here

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First author publications in peer-reviewed journals

**Hormone-control regions mediate steroid receptor–dependent genome organization**

[doi.org/10.1101/gr.243824.118](https://doi.org/10.1101/gr.243824.118)

Genome Research

2019

**Transcription factors orchestrate dynamic interplay between genome topology and gene regulation during cell reprogramming**

[doi.org/10.1038/s41588-017-0030-7](https://doi.org/10.1038/s41588-017-0030-7)

Nature Genetics

2018

**OneD: increasing reproducibility of Hi-C samples with abnormal karyotypes**

[doi.org/10.1093/nar/gky064](https://doi.org/10.1093/nar/gky064)

Nucleic Acids Research

2018

**Copy number rather than epigenetic alterations are the major dictator of imprinted methylation in tumors**

[doi.org/10.1038/s41467-017-00639-9](https://doi.org/10.1038/s41467-017-00639-9)

Nature Communications

2017

**A DNA methylation map of human cancer at single base-pair resolution**

[doi.org/10.1038/onc.2017.176](https://doi.org/10.1038/onc.2017.176)

Oncogene

2017