

EVA MARIA NOVOA

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Place and date of birth: June 25th, 1983, Barcelona, Spain

EDUCATION

- 2008 - 2012 **Ph.D. in Biomedicine**, IRB Barcelona - University of Barcelona, Spain
Extraordinary PhD prize, given by University of Barcelona
Young Researcher prize for PhD thesis, given by Catalan Society of Biology
- 2007 - 2009 **M.Sc in Bioinformatics**, University Pompeu Fabra - University of Barcelona, Spain
- 2004 - 2007 **B.Sc in Biochemistry**, University of Barcelona, Spain
Extraordinary BSc prize, given by University of Barcelona
- 2001 - 2004 **B.Sc in Biology**, University of Barcelona, Spain (first cycle)

RESEARCH EXPERIENCE

- Sep 2018 - present **Group Leader** – Epitranscriptomics and RNA Dynamics
Center for Genomic Regulation (CRG) – Spain
- 2017 - Aug 2018 **Senior Postdoc / Early-career research fellow (DECRA)**
Garvan Institute of Medical Research & University of New South Wales – Australia
Career break: Jan/2018- Aug/2018 (maternity leave)
Supervisor: Prof. John S. Mattick
- 2013 - 2016 **Postdoctoral fellow (EMBO & HFSP)**
Massachusetts Institute of Technology (MIT) & Broad Institute of Harvard and MIT – USA
Supervisor: Prof. Manolis Kellis
- Jan-May 2013 **Postdoctoral researcher** - Institute for Research in Biomedicine Barcelona (IRB) – Spain
Supervisor: Prof. Lluís Ribas de Pouplana
- 2008- 2012 **PhD student** - Institute for Research in Biomedicine Barcelona (IRB) – Spain
Supervisor: Prof. Lluís Ribas de Pouplana
- 2008- 2010 **MSc student** - Barcelona Supercomputing Center & IRB Barcelona – Spain
Supervisor: Prof. Modesto Orozco

PUBLICATIONS

*Key: * (co-)first author ; # (co-)corresponding author*

Full publication list:

https://scholar.google.com/citations?hl=en&user=x8Amle8AAAAJ&view_op=list_works&sortby=pubdate

SELECTED PUBLICATIONS

a) As independent group leader:

1. Begik O*, Lucas MC*, Ramirez JM, Milenkovic I, Cruciani C, Vieira HGS, Medina R, Liu H, Sas-Chen A, Mattick JS, Schwartz S and **Novoa EM#**. Quantitative profiling of native RNA modifications and their dynamics using nanopore sequencing. ***Nature Biotechnology*** 2021 (accepted)
2. Begik O, Lucas MC, Ramirez JM, Liu H, Mattick JS and **Novoa EM#**. Integrative analyses of the RNA modification machinery reveal tissue- and cancer-specific signatures. ***Genome Biology*** 2020, 21:97. doi: 10.1186/s13059-020-02009-z

3. Smith MA*, Ersavas T*, Ferguson JM*, Liu J, Lucas MC, Begik O, Bojarski L, Barton K and **Novoa EM[#]**. Molecular barcoding of native RNAs using nanopore sequencing and deep learning. *Genome Research* 2020 30(9): 1345-1353
4. Liu H*, Begik O*, Lucas MC, Ramirez JM, Mason CE, Wiener D, Schwartz S, Mattick JS, Smith MA and **Novoa EM[#]**. Accurate detection of m6A RNA modifications in native RNA sequences. *Nature Comm* 2019, 10:4079. doi:10.1038/s41467-019-11713-9

b) As postdoctoral fellow & PhD student:

5. **Novoa EM[#]**, Jungreis I, Jaillon O and Kellis M[#]. Elucidation of codon usage signatures across the domains of life. *Mol Biol Evol* 2019. doi: 10.1093/molbev/msz124
6. Beaudoin JD*, **Novoa EM***, Vejnar CE, Yartseva V, Takacs CM, Kellis M and Giraldez AJ. Analyses of mRNA structure dynamics identify the embryonic RNA regulome. *Nat Struct Mol Biol* 2018, 25, 677-686
7. **Novoa EM**, Camacho N, Tor A, Wilkinson B, Moss S, Marín-García P, Azcárate IG, Bautista JM, Mirando AC, Fracklyn CS, Varon S, Royo M, Cortés A and Ribas de Pouplana L. Analogs of natural aminoacyl-tRNA synthetase inhibitors clear malaria in vivo. *Proc. Natl. Acad. Sci. USA* 2014, 111(51):5508-17.
8. **Novoa EM**, Pavon-Eternod M, Pan T and Ribas de Pouplana L. A role for tRNA modifications in genome structure and codon usage. *Cell* 2012, 149: 202-213.