

## **Curriculum Vitae**

### **Personal Data**

Title	Dr. rer. nat.
First name	Daniel
Name	Moreno-Andrés
Current position	Group leader, permanent research scientist and lecturer
Current institution(s)/site(s), country	Institute of Biochemistry and Molecular Cell Biology, Medical School, RWTH Aachen University, Aachen, Germany
Identifiers: ORCID/SCOPUS	0000-0003-2160-448X / 56515474000

### **Qualifications and Career**

<b>Stages</b>	<b>Periods and Details</b>
Degree programme	B.Sc. Biochemistry, 07/2000-07/2005, University of Valencia. Valencia, Spain. Grade: excellent (3.2/4).
Doctorate	01/2010, Prof. Dr. Pascual Felipe Sanz Bigorra, "AMPK, Ubiquitination y proteasome", University of Valencia and Biomedicine Institut of Valencia (CSIC), Spain. Grade: excellent (cum laude)
Stages of academic/professional career	Since 04/2020: Group leader, permanent research scientist and lecturer, Institute of Biochemistry and Molecular Cell Biology, Medical Faculty, RWTH Aachen, Germany.  04/2017-03/2020: Research scientist and lecturer, Institute of Biochemistry and Molecular Cell Biology, Medical Faculty, RWTH Aachen, Germany.  03/2013-03/2017: Postdoctoral academic scientist, Friedrich Miescher Laboratory. Max Planck Society Tübingen, Tübingen, Germany.  02/2010-02/2013: Postdoctoral academic scientist, Department of Molecular Genetics and Cell Biology, University of Ulm. Ulm, Germany.

### **Activities in the Research System**

Since 2021: Ad hoc reviewer for Cells and International Journal of Molecular Sciences

10/2020 - 10/2023: Supervision of the doctoral thesis entitled "Effect of Calreticulin and JAK2V617F driver mutations on mitotic progression in myeloproliferative neoplasms" by Kristin Joana Holl

Since 04/2017: Supervision of internship students, including their Bachelor/Master Theses, Uniklinik RWTH Aachen, Germany. Among them, two Bachelor Thesis of relevance for this

application: "Mitotische Progression in myeloproliferativen Neoplasien" (N. Brock, 2022) and "Einfluss von Ruxolitinib auf die mitotische Progression bei myeloproliferativen Neoplasien in Zellmodellen" (S. Schmitz, 2024).

Since 2017: Lecturer, RWTH, Aachen: Chemistry and Biochemistry (Lecture for the master students of Biomedical Engineering), Theorie der Molekularen Medizin (master students of Biology), Praktikum Biochemistry (medical and dentistry students), Membrane Biology and Pathology (master students of Biology), Basics of Biochemistry (course for bachelor students for different natural science and engineering courses).

03/2013 - 03/2017: Co-supervision two doctoral thesis and five bachelor/master theses and several rotatory students, Friedrich Miescher Laboratory, Max Planck Society Tübingen. Tübingen, Germany.

## **Supervision of Researchers in Early Career Phases**

10/2020 - 10/2023: Supervision of the doctoral thesis entitled "Effect of Calreticulin and JAK2V617F driver mutations on mitotic progression in myeloproliferative neoplasms" by Kristin Joana Holl. Dissertation on 23/8/2024 at the University Hospital RWTH Aachen, Germany.

## **Selected Scientific Publications and contributions**

Category A (peer review)

- 1 Jühlen\*...**Moreno-Andrés\***, Wolfram Antonin\*. The DEAD-box helicase eIF4A1 acts as RNA chaperone during mitotic exit enabling chromatin decondensation. **Nat Commun** 16, 2434 (2025). <https://doi.org/10.1038/s41467-025-57592-1>
- 2 Holl...**Moreno-Andrés\***. Calreticulin and JAK2V617F driver mutations induce distinct mitotic defects in myeloproliferative neoplasms. **Sci Rep** 14, 2810 (2024). 10.1038/s41598-024-53240-8 (\* correspoding author)
- 3 **Moreno-Andrés\*** et al. The second half of mitosis and its implications in cancer biology. **Seminars in Cancer Biology** 88, 1-17 (2023). 10.1016/j.semancer.2022.11.013 (\*correspoding author)
- 4 **Moreno-Andrés\*** et al. LiveCellMiner: A new tool to analyze mitotic progression. **PLoS One** 17, e0270923 (2022). 10.1371/journal.pone.0270923 (\* co-correspoding author)
- 5 Holzer... **Moreno-Andrés** et al. The nucleoporin Nup50 activates the Ran guanine nucleotide exchange factor RCC1 to promote NPC assembly at the end of mitosis. **EMBO J** 40, e108788 (2021). 10.15252/embj.2021108788
- 6 **Moreno-Andrés\***§, Yokoyama\* et al. VPS72/YL1-Mediated H2A.Z Deposition Is Required for Nuclear Reassembly after Mitosis. **Cells** 9 (2020). 10.3390/cells9071702 (\*equally contributed first author; §co-corresponding author)
- 7 Yokoyama\*, **Moreno-Andrés\*** et al. Chromosome alignment maintenance requires the MAP RECQL4, mutated in the Rothmund-Thomson syndrome. **Life Sci Alliance** 2 (2019). 10.26508/lsa.201800120 (\* equally contributed first authors)
- 8 Vollmer, Lorenz, **Moreno-Andrés** et al. Nup153 Recruits the Nup107-160 Complex to the Inner Nuclear Membrane for Interphasic Nuclear Pore Complex Assembly. **Dev Cell** 33, 717-728 (2015). 10.1016/j.devcel.2015.04.027
- 9 Magalska, Schellhaus, **Moreno-Andrés** et al. RuvB-like ATPases function in chromatin decondensation at the end of mitosis. **Dev Cell** 31, 305-318 (2014). 10.1016/j.devcel.2014.09.001
- 10 **Moreno-Andrés** et al. A fluorescent reporter for mapping cellular protein-protein interactions in time and space. **Molecular Systems Biology** 9, 647 (2013). 10.1038/msb.2013.3

### Category B (peer review and non-peer reviewed<sup>#</sup>)

- 1 # Scheufen and **Moreno-Andrés\***. Quantitative Live-Cell Imaging to Study Chromatin Segregation and Nuclear Reformation. In: Bolanos-Garcia, V.M. (eds) Mitotic Exit. **Methods in Molecular Biology**, vol 2874. Humana, New York, NY. (2025) [https://doi.org/10.1007/978-1-0716-4236-8\\_5](https://doi.org/10.1007/978-1-0716-4236-8_5) (\*first and corresponding author)
- 2 Yokoyama, **Moreno-Andrés** et al. SART1 localizes to spindle poles forming a SART1 cap and promotes spindle pole assembly. **PREPRINT** available at **biorxive** (nature portfolio), (2023). 10.1101/2023.10.27.564116
- 3 Bähr,... **Moreno-Andrés** et al. Cellcyclegan: Spatiotemporal Microscopy Image Synthesis Of Cell Populations Using Statistical Shape Models And Conditional Gans. **IEEE 18th International Symposium on Biomedical Imaging (ISBI)**. 15-19. (2021)
- 4 Alves,...Moreno-Andrés et al. MISTIC-fusion proteins as antigens for high quality membrane protein antibodies. **Scientific reports**, (2017). 10.1038/srep41519
- 5 Schooley, **Moreno-Andrés** et al. The lysine demethylase LSD1 is required for nuclear envelope formation at the end of mitosis. **J Cell Sci** 128, 3466-3477 (2015). 10.1242/jcs.173013
- 6 Roma-Mateo, **Moreno-Andrés** et al. Lafora disease E3-ubiquitin ligase malin is related to TRIM32 at both the phylogenetic and functional level. **BMC evolutionary biology**, (2011). 10.1186/1471-2148-11-225
- 7 **Moreno-Andrés** et al. The laforin-malin complex, involved in Lafora disease, promotes the incorporation of K63-linked ubiquitin chains into AMP-activated protein kinase beta subunits. **Molecular biology of the cell**, (2010). 10.1091/mbc.E10-03-0227
- 8 **Moreno-andrés** et al. Two-hybrid analysis identifies PSMD11, a non-ATPase subunit of the proteasome, as a novel interaction partner of AMP-activated protein kinase. **The international journal of biochemistry & cell biology**, (2009). doi:10.1016/j.biocel.2009.07.002
- 9 Viana...**Moreno-Andrés** et al. Role of AMP-activated protein kinase in autophagy and proteasome function. **Biochemical and biophysical research communications**, (2008). 10.1016/j.bbrc.2008.02.126
- 10 **Moreno-Andrés** et al. A769662, a novel activator of AMP-activated protein kinase, inhibits non-proteolytic components of the 26S proteasome by an AMPK-independent mechanism. **FEBS letters**, (2008). 10.1016/j.febslet.2008.06.044

### Category C

**Patent:** A fluorescent reporter for determining molecular interactions; Authors: Daniel **Moreno-Andrés**; Nils Johnsson; Alexander Dünker, Entity holder of rights: Universität Ulm; Date of register: **27/02/2013**; Nº of patent (EU): EP2772548

### Academic Distinctions

05/2023: invited speaker at the seminar series in Istituto Italiano di Tecnologia (iit), Genoa, Italy;  
 04/2023: invited speaker at the international meeting Focus on Microscopy, Porto, Portugal;  
 10/2022: invited speaker at the seminar series in the Biomedicine Institute of Valencia (CSIC), Valencia, Spain; 2020-2023: "START" Research funding at the Medical Faculty of the RWTH Aachen, Germany; 12/2019: invited speaker at the 4th Workshop of the Aachen CenTer for biomedical Image analysis, Visualization and Exploration, RWTH Aachen University, Germany; 08/2018: invited speaker at the Symposium "Tracking Live", RWTH Aachen University, Germany; 02/2017: invited speaker at the seminar series in the Biomedicine Institute of Valencia (CSIC), Valencia, Spain; 09/2013: poster award at EMBO conference in AAA+ ATPases, Neuss, Germany; 2006-2009: I3P predoctoral research fellowship from the Spanish National Research Council (CSIC); 09/2005-12/2005: CSIC research fellowship to last year

undergraduate students, Spain; 07/2005-08/2005: Spanish National Centre for Cardiovascular Research (CNIC) research fellowship, Spain; 09/2004-06/2005: Spanish Ministry of Education and Science research fellowship to last year students. 09/2002-06/2004: Research fellowship for undergraduate students at Biochemistry and Molecular Biology Department at University of Valencia, Spain.

**Science Blogging and Outreach:**

-Writer at Mapping Ignorance (<http://mappingignorance.org/>) Blog Scientific Culture of the University of the Basque Country (English)

-Co-autor at Jindetres Sal (<http://jindetres.blogspot.de/>). Fun Blog where we address science-related issues in a relaxed way to reach a broad audience (Spanish).

PAwS Journals:

-Writer at Journal of Feelsynapsis (<http://jof.feelsynapsis.com/>). Online journal of scientific education (Spanish). ISSN: 2254-365

-Writer at Principia (<http://principia.io/>). Art, literature, and science on-line / press printed magazine (Spanish). ISSN: 2386-5997