

# POSDOCTORAL POSITION APPLICATION

A 3-years contract is available in our Group “**Chromatin Integrity and Function**”. This is an excellent opportunity for researchers interested in understanding the molecular bases of genome dynamics, focused on the stability and integrity of replication forks.

The main research lines of our group are:

1. Mechanisms of DNA damage tolerance
2. Mechanisms of broken replication fork repair

Applicants should have expertise in molecular biology and cellular biology, biochemistry and yeast genetics. If you are interested, please get in contact with **Dr. Félix Prado** ([felix.prado@cabimer.es](mailto:felix.prado@cabimer.es)).

To get more information about our group please go to:

<https://www.cabimer.es/en/research-groups/chromatin-integrity-and-function/>

---

## Selected publications:

1. Aurora Yáñez-Vélchez, Antonia M. romero, Marta Barrientos-Moreno, Esther Cruz, Román González-Prieto, Sushma Sharma, Alfred C.O. Vertegaal and **Félix Prado** (AC; Autor de correspondencia). Physical interactions between specifically regulated subpopulations of the MCM and RNR complexes prevent genetic instability. **PLoS Genetics** (2024) 20(5): e1011148 Clave: A
2. Cristina González-Garrido and **Félix Prado** (AC). Parental histone distribution and location of the replication obstacle at nascent strands control homologous recombination. **Cell Rep.** (2023) 42: 112174 Clave: A
3. María J. Cabello-Lobato, Cristina González-Garrido, María I. Cano-Linares and **Félix Prado** (AC). Physical interactions between MCM and Rad51 facilitate replication fork lesion bypass and ssDNA gap filling through non-recombinogenic functions. **Cell Rep.** (2021) 36: 109440 Clave: A
4. María I. Cano-Linares, Aurora Yáñez-Vilches, Néstor García-Rodríguez, Marta Barrientos-Moreno, Román González-Prieto, Pedro San-Segundo, Helle D. Ulrich and **Félix Prado** (AC). Non-recombinogenic role for Rad52, Rad51 and Rad57 in translesion synthesis. **EMBO Rep.** (2021) 22: e50410 Clave: A
5. Macarena Morillo-Huesca, Marina Murillo-Pineda, Marta Barrientos-Moreno, Elena Gómez-Marín, Marta Clemente-Ruiz and **Félix Prado** (AC). Actin and nuclear envelope components influence ectopic recombination in the absence of Swr1. **Genetics** (2019) 213:819-834 Clave: A
6. Douglas Maya-Miles, Eloisa Andújar, Monica Pérez-Alegre and **Félix Prado** (AC). Crosstalk between chromatin structure, cohesion activity and transcription. **Epigenetics & Chromatin** (2019) 12:47 Clave: A
7. Marta Barrientos-Moreno, Marina Murillo Pineda, Ana M. Muñoz-Cabello and **Félix Prado** (AC). Histone depletion prevents telomere fusions in pre-senescent cells. **PLoS Genetics** (2018) 14:e1007407 Clave: A
8. Marina Murillo-Pineda, María J. Cabello-Lobato, Marta Clemente-Ruiz, Fernando Monje-Casas and **Félix Prado** (AC). Defective histone supply causes condensin-dependent chromatin alterations, SAC activation and chromosome decatenation impairment. **Nucleic Acid Research** (2014) 42:12469-12482 Clave: A
9. Román Gonzalez-Prieto, Ana Muñoz-Cabello, María J. Cabello-Lobato and **Félix Prado** (AC). Rad51 replication fork recruitment is required for DNA damage tolerance. **EMBO J** (2013) 32: 1307-1321 Clave: A