



Single molecule characterization of the human mitochondrial DNA replication dynamics

We offer the possibility of carrying out the TFM in the Molecular Motors Manipulation laboratory at the IMDEA Nanoscience Institute, located on the UAM campus.

The work will consist of studying the functioning of proteins involved in human mitochondrial DNA replication at the level of individual molecules. That is, following the activity of a single molecule as it works. The candidate will use state-of-the-art biophysical techniques such as optical tweezers to detect, track and manipulate human mitochondrial protein activity in real-time. These experiments will provide novel information about the molecular processes that govern mitochondrial ADM metabolism, which is essential for cell survival.

Contact:

Borja Ibarra,

IMDEA Nanociencia,

Campus Cantoblanco 28049, Madrid

email: borja.ibarra@gmail.com

Websites: <http://www.borjaibarralab.com/>

www.nanociencia.imdea.org