MOLeCULAR IMAGING CORE UNIT

Francisco Muñoz (TS)
Core Unit Head

Guillermo Medrano (TS), Luis Ordóñez (since March), Judith Roy (TS), Jorge Rodríguez (until May), Gloria Vidal-Martínez

Technicians:
Tatiana Alvarez, Guillermo Garasini (TS), Lourdes Huertas, Tania Seara

The Molecular Imaging Unit provides the CNIO Research Groups in their endeavours through advanced molecular imaging techniques.

State-of-the-Art Equipment: A micro PET-CT system (eXplore Vista) from GE. ACT device (Compact CT) from SEDECAL. Two ultrasound systems (Vevo 2100) from Fujifilm Visualsonics. A Densitometer system (Lunar PixiMus) from GE. Two optical imaging devices (IVIS Lumina III) from Perkin Elmer.

Expert Team: Our highly trained staff, dedicated to advancing the field, offers imaging analysis ranging from the fundamental to the most complex. Additionally, we provide optical imaging training to our users.

Research Advancements: Our Unit actively supports groundbreaking research and is committed to developing new imaging tools through funded research projects. We remain devoted to maintaining our technological leadership and pushing the boundaries of molecular imaging.

Our ongoing projects include:

- BIRO Foundation Project (“Theragnosis using 177 Lu labelling and antibodies for cancer treatment”): This project stands out for its innovative approach to cancer treatment. The combination of 177 Lu labelling and antibodies for targeted cancer therapy is a promising avenue. The integration of Ga PET imaging for primary tumour and metastasis localisation adds a valuable diagnostic element to treatment (FIGURE 1).

- Renewed support from the Comunidad de Madrid grant (RENIM 2): The Spanish Network for Nanoparticles in Molecular Imaging, in a collaboration with the top centres in Molecular Imaging and Nanomedicine. The focus on innovation and collaboration in the field of medical imaging and cancer treatment. The combination of ImmunePET, collaborative efforts with top research centres, and the acquisition of advanced equipment positions our Unit as a leading force in the field.

- Installation of a 3T MRI System: The acquisition of a 3T MRI system through a Next Generation EU infrastructures grant is a substantial investment in CNIO research capabilities. Especially in the context of PET and optical imaging, aligns well with the current trends in medical research.

Our international collaborations:

- BIRD: Coordination with the top centres in Molecular Imaging and Nanomedicine.

Throughout our efforts, we are committed to advancing our technological leadership and pushing the boundaries of molecular imaging.

RESEARCH HIGHLIGHTS

The Molecular Imaging Unit is at the forefront of cutting-edge imaging technologies. Our core mission is to assist CNIO Research Groups in their endeavours through advanced molecular imaging techniques.

Molecular Imaging is a powerful tool in biomedical research that allows scientists to gain insights into the molecular and cellular processes.

Publications:


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- | AWARDS & RECOGNITION |

- | PUBLICATIONS |

- | AWARDS & RECOGNITION |

- | SCIENTIFIC ADVISORY BOARD |

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