

University of Santiago de Compostela (USC)

CIMUS Research Center, Avda de Barcelona S/N – 15706, Santiago de Compostela Spain



Prof. María Isabel Loza (Research Manager)

„EU-OPENSSCREEN membership is the way of USC-Innopharma platform to collaborate with the best science and knowledge in early drug discovery and chemical biology across Europe.“

At a glance

- High capacity pharmacogenomics platform with access to the EU-OPENSCREEN European Chemical Biology Library and the European Academic Compound Library
- Biochemical and cell-based assays including label-free technologies and High Content Imaging
- Early ADME-Tox profiling
- Vast experience in assay development and assay adaptation to HTS with more than 300 assays available
- Long track record in drug discovery and chemical biology with 15 NCE entering clinical trials
- Collaborative framework with visiting scientists working with our team for assay transfer

Infrastructure and technical focus

- Assay development laboratory for miniaturization
- Fully automated robotic platform for HTS for both biochemical and cell-based assays
- High Content Screening with automated analysis workflows
- DNA-encoded libraries technology
- Biochemical and cell-based label-free screening
- High capacity for biological reagent production using disposable bioreactors
- Translational assays for target engagement and patient stratification



Projects past and present

2021 | DRUGtrain Drug repurposing and discovery multidisciplinary training network ➔ [Link](#)

2019 | Pharmaceutical development of fast-track and innovative therapies targeting ACE2 for COVID-19

2020 | CANCER INNOVA Business Factory Medicines. Incubator of projects in the field of cancer drug discovery ➔ [Link](#)

2018 | Joint I+D Unit ESTEVE – USC Developing new medicines to treat chronic pain ➔ [Link](#)

Our science in selected publications

Identification of ABA Receptor Agonists Using a Multiplexed High-Throughput Chemical Screening Methods

➔ [Mol Biol.](#) 2021;2213:99-111

Identification and characterization of Cardiac Glycosides as senolytic compounds

➔ [Nat Commun.](#) . 2019 Oct 21;10(1):4731

Fibrates as drugs with senolytic and autophagic activity for osteoarthritis therapy

➔ [EBioMedicine.](#) 2019 Jul;45:588-605

A New Model of Sensorial Neuron-Like Cells for HTS of Novel Analgesics for Neuropathic Pain

➔ [SLAS Discov.](#) 2019 Feb;24(2):158-168

Further info and site-contact

Jose Manuel Santamaría: josemanuel.santamaria@usc.es | +34 (0) 881 815 459

Website: <https://www.usc.es/cimus/en/research/research-groups/pharmacology-applied-drug-discovery>

