



# HTS SERVICES

## Overview

- High throughput screening of chemical libraries is a proven route for identifying potent and novel chemical entities that target a biological mechanism or pathogen of interest.
- MEDINA leverages the strengths of its core services (automation, antimicrobial and cell-based assays, imaging, chemo- and bioinformatics) to advance your lead discovery research.
- Fundación MEDINA's infrastructure was built from the pharma perspective where accelerating drug discovery is critical.

### Therapeutic Areas

A high productive screening approach that ensures the discovery of novel small drug-like molecules, as potential basis for the development of innovative agents in the different therapeutic areas:

- Infectious Diseases (including Tuberculosis and Parasitic diseases).
- Oncology.
- Immunoregulation.
- Rare diseases.

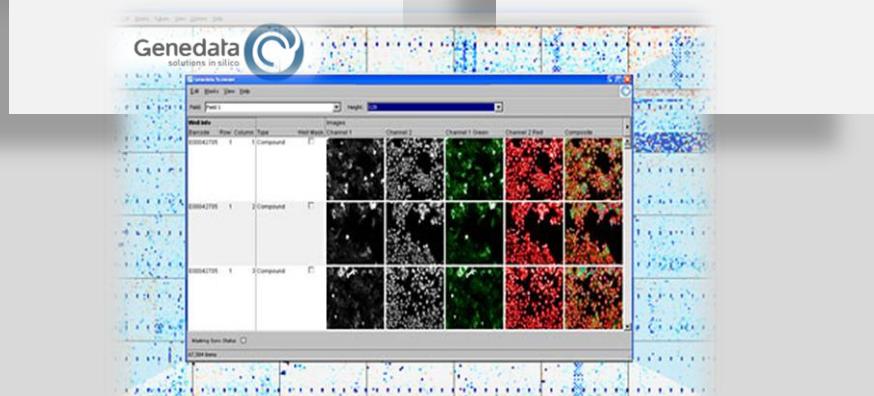
### Target-oriented Drug Discovery

- GPCR functional assay .
- Nuclear hormone receptor translocation assay.
- Fluorescence based cell assay.
- Binding assay.
- Absorbance assay.
- Luminescence assay.
- Customized assay development.

### Data Analyzer & Hit Profile

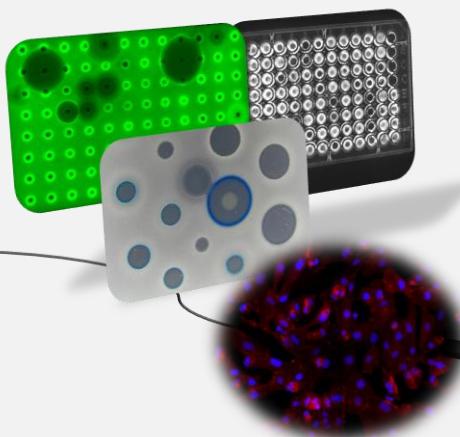
MEDINA has a data analysis programs capable of analyzing large numbers of compounds, and assay data quality (inter and intraplate).

Hit selection (analyzing one or more targets ) in order to obtain the best hit profile.





## HTS Technologies Available



TECHNIQUE	ENZYMATIC	CELL BASED	WHOLE CELL
LUMINISCENCE	X	X	X
COLORIMETRIC	X	X	X
FLUORESCENCE (including FRET, HTRF, FP)	X	X	X
RADIOLIGAND	X		
ALPHA SCREENS	X	X	
LCMS	X		
PATCH CLAMP		X	
HCS (autophagy, apoptosis, necrosis)		X	

Other technologies not for HTS include Patch Clamp, LCMS, Flow cytometry and Quantitative Western blot

MEDINA HTS is flexible enough to address the varying needs of our clients by developing the most effective HTS strategy based on their specifications.

## High-throughput Screening Strengths

- ✓ Diversity of HTS assay formats: *in vitro* and whole cell assays, (e.g. colorimetric, fluorimetric, luciferase reporter gene, fluorescence and radio labeled ligand binding assays).
- ✓ Experience in transferring bench-top assays to robotic platforms and executing cell-based, biochemical, bacterial-based and yeast-based screens.
- ✓ Automation from 96-well to 384-well microtiter plates.
- ✓ Innovative software tools for data collection (Screener-GeneData, Thermo Scientific NAUTILUS LIMS™, internal databases) and analysis to enable investigators to conduct and interpret data intensive screens.
- ✓ BS-2 facilities for cultivation and screening of mammalian cell lines and pathogenic bacterial and fungal strains.

