

# ChEMTox Biotesting Facility

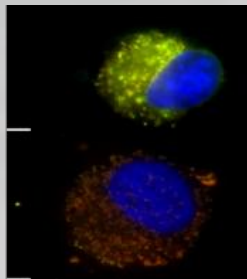
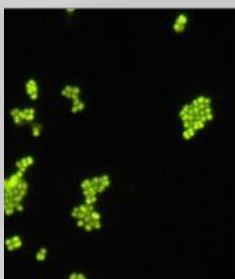
## Services for the Toxicity Screening of Novel and Natural Substances

### About the ChEMTox

The **ChEMTox Biotesting Facility** at Universidad Metropolitana (UMET) affiliated to the School of Environmental Affairs provides services for the toxicity testing of novel and natural substances on human or animal cell cultures. It supports scientist in drug development interested in characterizing the mechanism of action of natural products, novel materials or environmental contaminants.



The laboratory is also a CORE facility for researchers from the PR-INBRE program (UPR-NIH funded). Local scientists as well as scientists from the National Cancer Institute in the US have used our in-vitro testing services.



### Publications and Patents

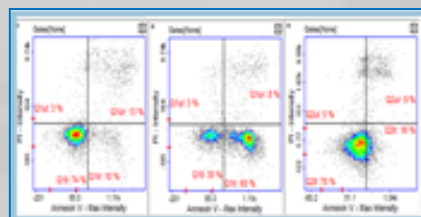
Results obtained from the testing facility have served to support the patent of novel compounds as well as in multiple peer-reviewed publications.



### Our Services:

**Toxicological assays** for novel drugs/materials, natural products or environmental substances include:

- **Determination of 50% Inhibition concentration (IC50)**
- **Apoptosis Annexin V assay-**
- **Mitochondrial Permeability JC1**
- **Caspase 7, 3, 8 and 9**
- **Cell Cycle arrest**
- **DNA Fragmentation**
- **Autophagy cell death**
- **Bacterial growth inhibition**
- **Fluorescent microscopy**
- **Flow cytometry analysis**
- **Hypoxic markers**
- **Among Others**



### Quotes and Information:

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**We Can Test Your Compounds!**