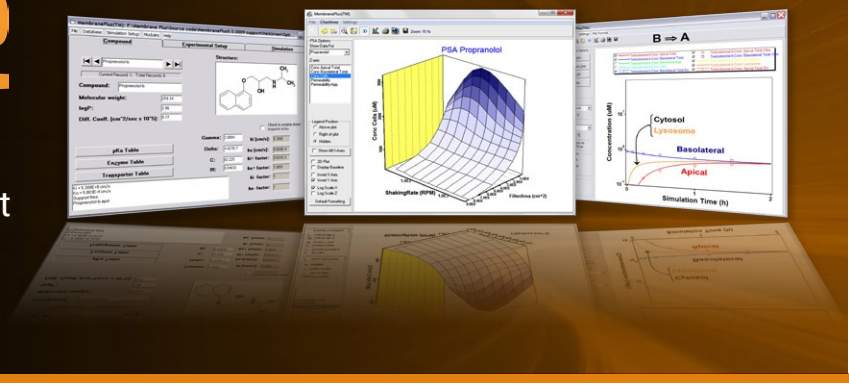
SimulationsPlus
SCIENCE + SOFTWARE = SUCCESS

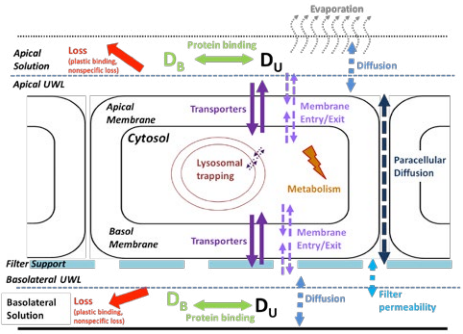
www.simulations-plus.com
(NASDAQ: SLP)

MembranePlus™ 2

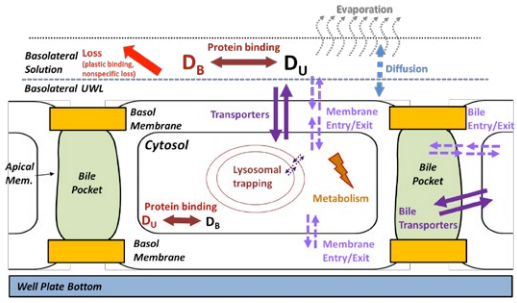
Stimulate your ***kinetic*** understanding…
Permeability | Binding | Metabolism | Transport



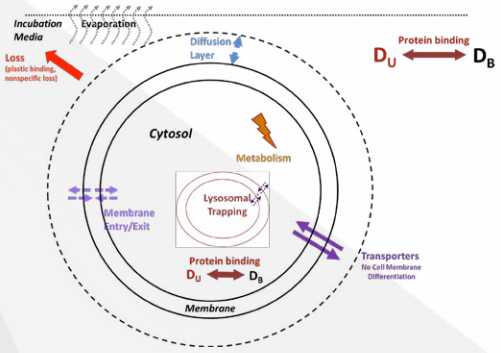
Permeability assays



Sandwich hepatocytes



Suspended hepatocytes



Your modeling tool for IVIVE of absorption and systemic clearance/distribution processes…

MembranePlus™ is the industry's leading mechanistic *in vitro* permeability (Caco-2, PAMPA, and MDCK cells) & hepatocyte modeling software.

What's new in version 2?

- **NEW!** Cellular membrane models:
  - Mechanistic models of sandwich hepatocyte assays (with biliary excretion processes)
  - Mechanistic models of suspended hepatocyte assays
- **Improved!** ADMET Predictor™ Module integration:
  - Updated models from ADMET Predictor version 8.1
  - Prediction of Km/Vmax for metabolism by cytochrome P450 enzymes (CYPs)
  - IVIVE settings for conversion to either intestinal cell monolayers or hepatocytes.
  - Classification models to predict whether imported compounds are substrates for Pgp and/or OATP1B1.
- **NEW!** Simulation outputs:
  - Fu Cell – this new output provides an estimate of Fu,Enterocytes for use in GastroPlus™ PBPK models. This improves the prediction of absorption & pharmacokinetics for compounds exhibiting lysosomal trapping and/or high binding in enterocytes causing extended Tmax values.
  - CLdiff – the passive diffusional clearance parameter is an output that can be used in connection with GastroPlus PBPK models to define the permeability-surface area product (PStc) in PBPK tissues.

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