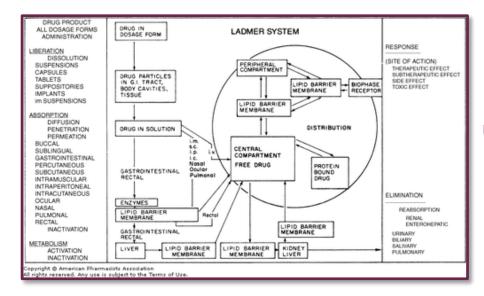
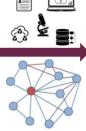
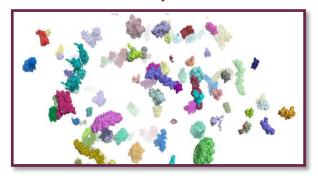
ADME-TOX IN 3D, DL & CHEMINFORMATICS

The LADMER system [Liberation, Absorption, Distribution, Metabolism, Elimination, Response]





In silico ADME-Tox assays



- $\hspace{1cm} \circ \hspace{1cm} \text{3D-QSAR} \hspace{1cm} \text{\tiny [Quantum Structure-Activity Relationship]} \\ \hspace{1cm} \text{models}$
- Molecular docking
- Molecular dynamics
 - Quantum mechanical methods
 - Molecular mechanical methods
- Pharmacophore modelling

In vitro ADME-Tox assays (3D models)



- 3D cell metabolism studies
- Live cell studies
- CYPs inhibition studies
- o CYPs induction studies
- Protein binding studies
- RBC partitioning studies
- o Permeability studies
- hERG studies
- Mechanistic toxicity/ cytotoxicity studies

In vivo ADME-Tox assays (animal studies)



- DMPK [Drug Metabolism PharmacoKinetic] studies
- Toxicokinetic studies