Metallofragments as 3D **Scaffolds for Fragment-Based Drug Discovery**

Fragment-based drug discovery (FBDD) is a successful strategy for the discovery of small molecule therapeutics

3D target

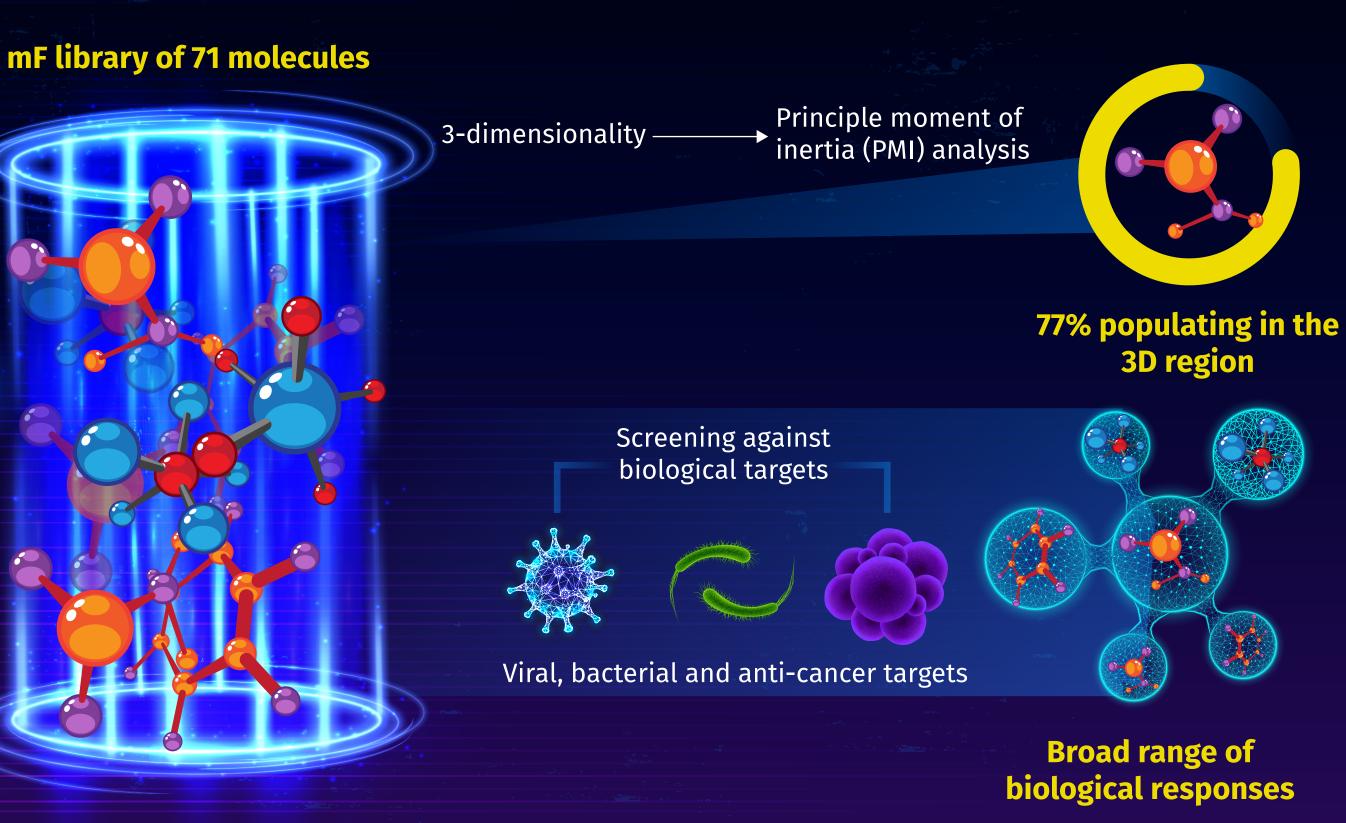
1D/2D fragment

X

However, the linear (1D) or planar (2D) shape of organic fragments limits a more complete exploration of chemical shape for target protein binding

Inert metal complexes or metallofragments (mFs) can be used to construct 3D fragment libraries

An mF library with 13 classes of metal complexes was designed, synthesized, and characterized



mF libraries access underutilized 3D fragment space for FBDD against a variety of protein targets, which could lead to new opportunities in drug discovery



Expanding Medicinal Chemistry into 3D Space: Metallofragments as 3D Scaffolds for Fragment-Based Drug Discovery

DOI: 10.1039/C9SC05586J Cohen *et al.* (2020)





