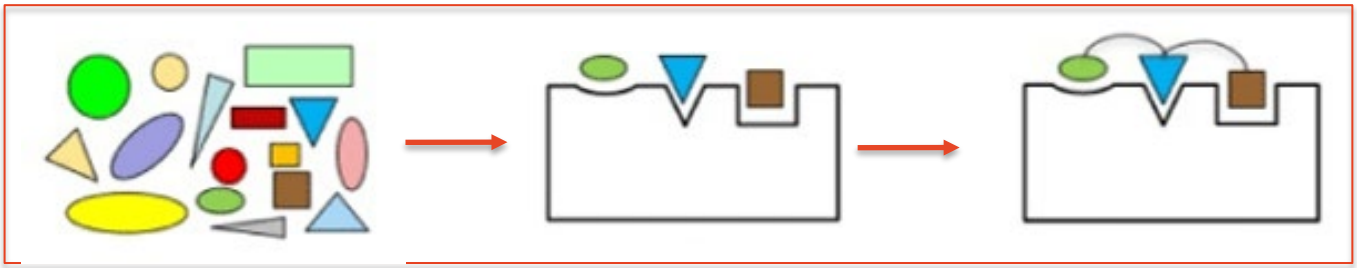
THE UNIVERSITY OF SYDNEY

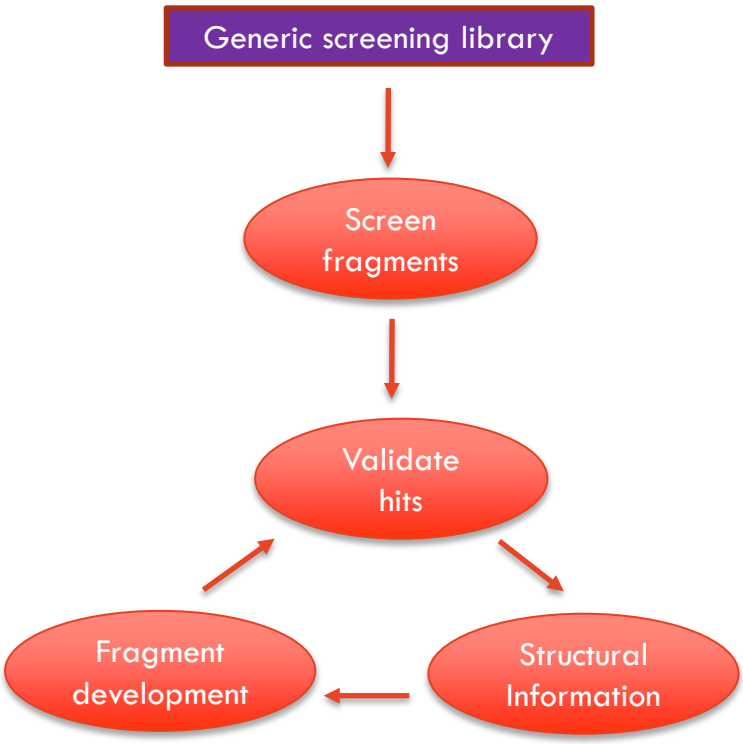
Sydney Analytical
Fragment Based Drug Discovery



Fragment Library | Drug Target | Fragment Development

Fragment Based Drug Discovery (FBDD) is an important and growing area of research. It provides a viable alternative to High Throughput Screening as a way of producing lead compounds for previously intractable biological targets. An FBDD approach is highly versatile, and can target bacterial, fungal and human proteins as well as difficult targets such as membrane proteins, with the aim to develop new inhibitory molecules.

FBDD Project Workflow



Our fragment library has been curated by medicinal chemists at Monash University. It contains 1100 fragments, covering significant portions of chemical space, and has been extensively QC'd.

The target protein is screened against the fragment library using NMR. This is carried out using cocktails of fragments. Data is processed using mNova software

Validation experiments are conducted using individual fragments. They are conducted using a variety of techniques, including NMR, SPR and crystallization.

Fragment development seeks to generate a "Structure Activity Relationship" (SAR). This is done using an "SAR by catalogue" approach, where fragment analogues are purchased and assayed using a variety of techniques including NMR or SPR

To request more information, please contact us:

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