

Accelerating small molecule drug discovery by a powerful collaborative approach

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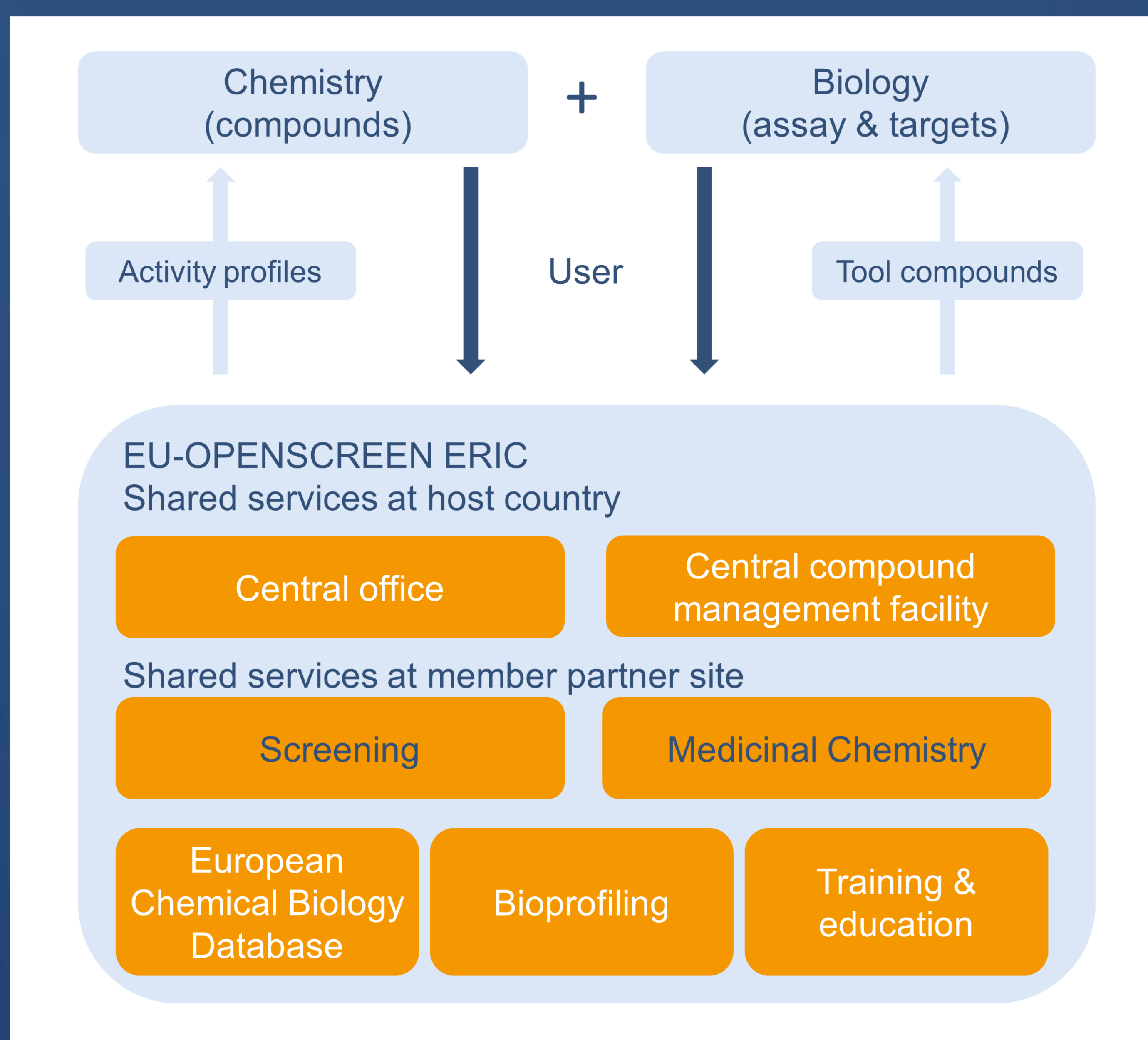
The European Research Infrastructure for Chemical Biology & Early Drug Discovery, Campus Berlin-Buch, Robert-Rössle-Str. 10, Berlin, Germany

As of now, the majority of academic scientists do not have easy access to suitable drug screening platforms and compound collections which are generally expensive to purchase, operate and maintain. This represents a major limitation in the field to advance innovative drug discovery projects. With the aim to address this need, researchers from 30 institutions joined forces to launch the EU-OPENSREEN research infrastructure which offers international scientists access to a wide range of state-of-the-art screening platforms, compound libraries and expertise. Biologist with a robust and suitable assay can access our screening platforms on a collaborative basis and screen the rationally selected compound collection. EU-OPENSREEN also collaborates with the structural biology community to expand its capacity in fragment based drug discovery.

Concept

EU-OPENSREEN is a joint publicly funded European research initiative of compound screening platforms and medicinal chemistry groups at academic universities and public research institutions. EU-OPENSREEN develops novel chemical „tool“ compounds in collaboration with external scientists from all disciplines of the life sciences.

Components



Key services

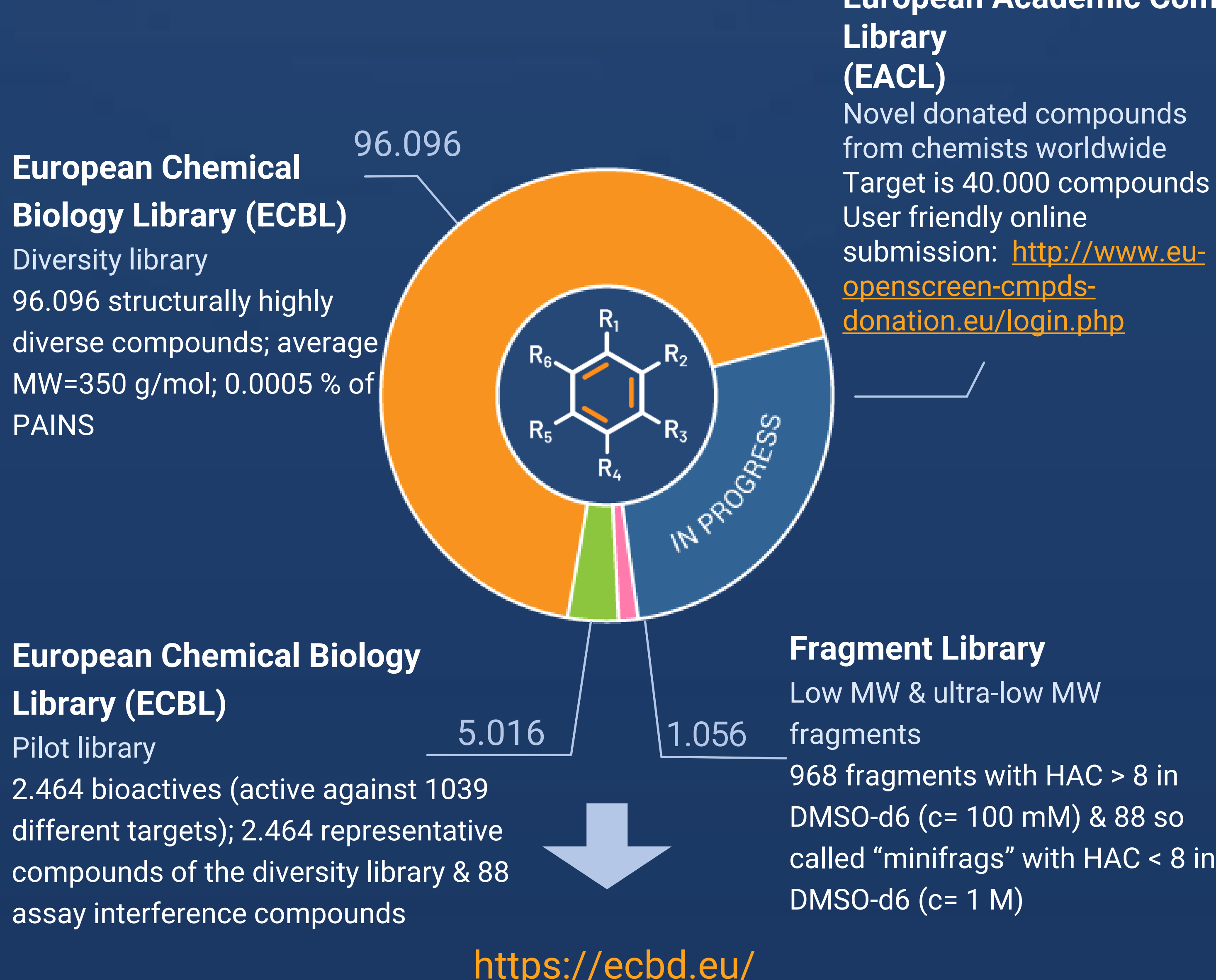
- access to high-throughput screening (HTS) platforms to screen your assays against EU-OPENSREEN's compound collection to identify active 'hit' compounds.
- assay transfer, optimization & miniaturization.
- hit validation, hit-to-lead/probe optimization



How to apply

- Submit an Expression of Interest on our website or contact us by email.
- Processing of the pre-application and organization of introductory TC.
- Submit the full application through ARIA at <https://apply.eu-openscreen.eu/submit-proposal/>.
- Project evaluation (scientific excellence, impact, & technical feasibility).
- Discussion between applicant and partner site (requirements, IP rights, budget, timelines). Partner selection.

EU-OPENSREEN libraries



European Academic Compound Library (EACL)
Novel donated compounds from chemists worldwide
Target is 40,000 compounds
User friendly online submission: <http://www.eu-openscreen-cmpds-donation.eu/login.php>

Fragment-based drug discovery

The fragment library is jointly used in fragment-based screening campaigns by EU-OPENSREEN & structural biology groups of the Instruct-ERIC/ iNEXT-Discovery initiative allowing researchers to perform structural screens and subsequently use medicinal chemistry expertise to progress fragments.
Example: Schuller, 2021. DOI: 10.1126/sciadv.abf8711

