

PARTNER PLATFORM High Throughput Screening / Hit to lead

Chemogenomic and Biological Screening Core Facility (PF-CCB)

General information

| Administrative information | | |
|----------------------------|----------------------------------------------|--|
| Structure | Institut Pasteur – CNRS (UMR 3523) | |
| Address | 25/28 rue du Dr. Roux | |
| | 75724 Paris Cedex 15 | |
| Website | https://research.pasteur.fr/en/team/fabrice- | |
| | agou-team/ | |
| Manager | Fabrice AGOU | |
| Contact | fabrice.agou@pasteur.fr | |
| Date of implementation | 04/03/2016 | |

| Labels / quality approach | | |
|---------------------------|-------------------------------|--|
| IBiSA | Not yet | |
| ISO 9001 certification | Not yet | |
| National networks | GDR ChemBio | |
| International networks | Specify | |
| Other | Pasteur International Network | |

| Team | | |
|--------------------------------|-------------------------|--|
| Number of researchers | 2 | |
| Number of engineers | 5 | |
| Number of technicians | 2 | |
| Number of administrative staff | 1 | |
| Other | 2 (M2 students) 1 (PhD | |
| | student), 2 (Post-Docs) | |

| Main achievements | | |
|-------------------------------------------------------------------------------------|----|--|
| Number of screenings performed since creation | 35 | |
| Number of screenings performed per year | 6 | |
| Fields of expertise / therapeutic areas | | |
| Emerging infection disease, AMR, Host-directed therapies, Cancer, Neurodegenerative | | |
| diseases | | |

Scientific Information

| Chemical Library | | |
|----------------------------------------------------------------------------------------------|-------------------------------------|--|
| Description of the collection (number of chemical molecules, natural, royalty-free products, | | |
| known synthesis methods, etc) | | |
| 130 k small molecules (see a more detailed description on | | |
| https://research.pasteur.fr/en/team/fabrice-agou-team/) | | |
| Conditioning | Acoustic 384-well plates in DMSO | |
| Database (structure, accessibility | Access through a CDD Vault software | |
| conditions) | implemented in house | |
| Member of the National Chemical Library | Yes | |



Targets

Targets for the screening service (e.g. protein targets, cell targets, etc.)

Multiple pure targets (protein, nanobody, antibody and RNA), cell lines and multi-lineage organoids.

Activities (e.g. cloning, protein expression, obtaining cell lines, management and storage of lines, cell culture, etc.)

Development, management and storage of reporter cell lines, cloning, expression and purification of recombinant proteins, nanobodies and antibodies in bacteria and mammalian cells, *in vitro* transcription and purification of long coding RNA, cell culture under BSL2 and BSL3 conditions

High throughput screening

Number of measurements/days (approx.) 1000-4000 depending on the assay

Biological tests proposed (e.g. in vitro enzymatic tests, cell tests (binding tests, cell survival, image analysis, etc)

Development and execution of multiple target-, cell- and imaging-based screening assay, including pilot screening project, primary screening campaign and orthogonal assay. *In cellula* and *in vivo* screening activities for cancer projects as well as for some antiviral projects under BSL2 and BSL3 conditions (SARS-CoV-2, Yellow Fever, Dengue and Chikungunya). Preclinical studies proposed in rodent models including mouse, rat and hamster.

Technologies / Equipment (robots, automats, etc.)

A detailed description of all equipment, automats and robots can be found on : https://research.pasteur.fr/en/team/fabrice-agou-team/

| Access | | |
|-------------------------|-----|--|
| Site teams | Yes | |
| External academic teams | Yes | |
| Private Outdoor Teams | Yes | |

Training courses offered

Training courses on multiple instruments (multimodal microplate reader, Octet HTX, Creoptix WaveCore, Tycho nanotemper NT6, DynaPro plate reader II and fluorescence microscopes) as well as assay development and execution for HTS and HCS projects can be offered by specialist engineers