FOUNDATION FOR
Rare Diseases

High Throughput Screening Hit To Lead

Partner Platforms Booklet June 2023

FOUNDATION FOR
Rare Diseases

List of the Partner Platforms 2023

Name	City	Website
Ariadne	Lille	https://pasteur-lille.fr/centre-de-recherche/plateformes-technologiques/ariadne-criblage-plateforme-de-criblage-a-haut-contenu-et-haut-debit/
Arpege	Montpellier	https://www.arpege.cnrs.fr/
Biogenouest	Nantes	https://www.biogenouest.org/
BioPhenics	Paris	https://curie.fr/plateforme/curiecoretech-criblage-cellulaire-haut-debit-biophenics
C@PS	Paris	https://www.ibisa.net/plateformes/plateforme-criblage-paris-saclay-c-ps-582.html
CEA Saclay LCB platform	Paris	https://joliot.cea.fr/drf/joliot/Pages/Entites_de_recherche/medicaments_technologies_sante/SCBM/lcb.aspx
ChemBioFrance	-	https://chembiofrance.cn.cnrs.fr/fr/
CMBA	Grenoble	https://irig.cea.fr/drf/irig/Plateformes/CMBA
I-Stem	Evry	https://istem.eu/criblage-a-haut-debit/
IGBMC platform	Strasbourg	https://www.igbmc.fr/plateformes-technologiques/criblage-phenotypique-a-haut-debit-screentech-/-ingestem
ImPACcell	Rennes	https://impaccell.univ-rennes.fr/
Institut de la Vision platform	Paris	https://www.institut-vision.org/fr/recherche/plateformes-scientifiques/8-platforms-institute/25-plateforme-de-criblage.html
PCBIS	Strasbourg	https://www.pcbis.fr/
PCML	Marseille	https://www.afmb.univ-mrs.fr/facility/plateforme-de-criblage-marseille-luminy/
PF-CCB	Paris	https://research.pasteur.fr/en/team/fabrice-agou-team/
PhenoFish	Paris	http://neurozebra.fr/the-robert-debre-phenofish-platform/
PICT	Toulouse	http://www.pict.ipbs.fr/
Prestwick Chemical	-	https://www.prestwickchemical.com/
Therrassay	Nantes	http://www.therassay.com/

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PARTNER PLATFORM
High Throughput Screening / Hit to lead

C@PS : Criblages à Paris Saclay

General information

Administrative information	
Structure	C@PS
Address	Multisite platform from Paris Saclay
Website	https://www.ibisa.net/plateformes/plateforme-criblage-paris-saclay-c-ps-582.html
Manager	Jean-Christophe Cintrat
Contact	jean-christophe.cintrat@cea.fr
Date of implementation	2018

Labels / quality approach	
IBiSA	Yes since 2018
ISO 9001 certification	No
National networks	ChemBioFrance
International networks	None
Other	None

Team	
Number of researchers	3
Number of engineers	5
Number of technicians	1
Number of administrative staff	0
Other	0

Main achievements	
Number of screenings performed since creation	25
Number of screenings performed per year	5
Fields of expertise / therapeutic areas	
Cytotoxicity, cell viability, cellular 2D assays, PPI, target fishing, radioactivity. Read-outs: HTRF, fluorescent polarization, fluorescence, absorbance, AlphaScreen and TSA, qPCR, HR autoradiography, SAR, hit to lead. No therapeutic area : open to discussion with PIs	

Scientific Information

Chemical Library	
Description of the collection (number of chemical molecules, natural, royalty-free products, known synthesis methods, etc)	
100 000 compounds (commercial sources+proprietary), mostly synthetic but also Prestwick, antibiotics and an in house “drug like” chemicals library	
Conditioning	96 well plates, 10 mM DMSO
Database (structure, accessibility conditions)	Yes, can be provided as sdf format under NDA
Member of the National Chemical Library	Yes

Targets
Targets for the screening service (e.g. protein targets, cell targets, etc.)
No specific targets, open to discussion with biologists
Activities (e.g. cloning, protein expression, obtaining cell lines, management and storage of lines, cell culture, etc.)
Protein expression, obtaining cell lines, management and storage of lines, cell culture, in ovo, HTS, DNA/RNA extraction…

High throughput screening	
Number of measurements/days (approx.)	200
Biological tests proposed (e.g. in vitro enzymatic tests, cell tests (binding tests, cell survival, image analysis, etc)	
enzymatic tests, cellular tests, HTS, HCS (including high resolution autoradiography), gene expression, TSA…	
Technologies / Equipment (robots, automats, etc.)	
Zephyr (Caliper), EpMotion 5075 et 96 (Eppendorf), Benchsmart (Rainin), BioMekFX and BioMek3000 (Beckman Coulter), FC500 cytometer (Beckman Coulter), Plate readers (Polarstar Omega, Id3), Tecan EVO150, microfluidic qPCR (Applied Biosystems)	

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

Training courses offered
CNRS Entreprise Formation : Quantitative PCR

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PARTNER PLATFORM
High Throughput Screening / Hit to lead

CMBA (**C**riblage pour des **M**olécules **B**io**A**ctives)

General information

Administrative information	
Structure	CMBA
Address	17 rue des Martyrs, 38000 Grenoble
Website	http://www.cea.fr/drf/IRIG/Pages/Infrastructures/CMBA.aspx
Manager	Marie-Odile FAUVARQUE
Contact	marie-odile.fauvarque@cea.fr
Date of implementation	2001

Labels / quality approach	
IBiSA	Yes / 2008
ISO 9001 certification	No
National networks	Yes / 2018 (ChemBioFrance)
International networks	No
Other	Cancéropôle CLARA

Team	
Number of researchers	1
Number of engineers	3 dont 2 PhD
Number of technicians	1
Number of administrative staff	1
Other	Specify

Main achievements	
Number of screenings performed since creation	120 (approx..)
Number of screenings performed per year	6 (approx..)
Fields of expertise / therapeutic areas	
cancerology, immunology, infectiology, hematology, rare diseases, neurodegenerative disorders	

Scientific Information

Chemical Library
Description of the collection (number of chemical molecules, natural, royalty-free products, known synthesis methods, etc)
About 75,000 chemical compounds, coming from several academic or commercial collections are available for screening at the CMBA platform. It includes in particular : • 2,240 FDA-approved compounds from both the Prestwick Chemical library and the TargetMol's Custom Compound Library, for drug repositioning, • An InFarmatik's collection of 728 structurally-diverse compounds, • The Life Chemicals' PPI collection of 800 compounds, selected to target protein-protein interactions, • The academic, CNRS' National Collection (CN) of about 65,000 compounds, and its "essential" version of 1,140 structurally representative compounds. • the academic "FrPPIChem" collection of 10,314 commercially-available compounds, selected *in silico* by machine-learning methods to specifically target protein-protein interactions (DOI: 10.1021/acschembio.0c00179).

Commercial collections contain royalty-free compounds, whereas academic libraries are available after Material Transfer Agreement. Compounds of a given collection from a commercial source can be supplied by the collection supplier and potentially by other compound suppliers. Any CN's compound is the property of the chemistry laboratory which synthetized it. This laboratory has a right of first review on its compound, but can collaborate with the project investigator by providing additional quantities and various analogues, information on the synthesis method, and finally let him continue working on the compound on his own. Beyond these various collections available at the CMBA, the purchase of any other collection that would be relevant for a given screening project can be considered.	
Conditioning	Most of the compounds collections available at the CMBA are formatted in batches of daughter plates, ready-to-used for one-shot screening campaigns. The CMBA also stores a backup copy of the CN, but rather orders daughter plates from the CN's official distributor, Evotec, for each screening campaign of this library
Database (structure, accessibility conditions)	SDF files of the compound collections can be provided upon request.
Member of the National Chemical Library	The CMBA platform is indeed a member of the ChemBioFrance national infrastructure that includes 3 pillars - the laboratories contributing to the National Chemical Library, - Screening and ADME-tox platforms network to which the CMBA belongs - Chemo-informatics laboratories

Targets
Targets for the screening service (e.g. protein targets, cell targets, etc.)
Any protein or cell target /model can be considered, up to and including Biosafety Level 2.
Activities (e.g. cloning, protein expression, obtaining cell lines, management and storage of lines, cell culture, etc.)
The CMBA's activities include: 1. Obtaining commercial cell lines, managing and storing cell lines, 2. Developing biological assays using protein, cell lines or any reagents provided by the project investigator and/or supplied from commercial sources, 3. Helping the project investigator to set up a relevant and robust biological screening assay, 4. Optimizing in-house the assay protocol provided by the project investigator to meet the constraints of compound screening, 5. Automating the optimized assay protocol up to its statistical validation, 6. Performing compound screening of the selected chemical collection(s), 7. Analyzing data to list the most relevant, bioactive compounds identified by screening ; 8. Suggesting further studies to characterize the most interesting compounds.

High throughput screening	
Number of measurements/days (approx.)	From a hundred to several thousands (depending on the complexity and duration of each assay protocol).
Biological tests proposed (e.g. in vitro enzymatic tests, cell tests (binding tests, cell survival, image analysis, etc)	
- Protein-protein interaction assays, - *in vitro* enzymatic assays, - cell-based assays (binding, biomarker quantification/subcellular localization, cell survival/ differentiation/ signalling/ migration/ apoptosis, ROS production, spheroids growth, etc.) - Custom assay development - using whole microplate's well measurements of absorbance/fluorescence/luminescence signal (High-Throughput Screening or HTS approach), - using fluorescence-based image acquisition and analysis (High-Content Screening or HCS approach). -	
Technologies / Equipment (robots, automates, etc.)	
The HTS facility benefits from a fully-integrated robotic platform, including 1. a Tecan MCA 96-channel pipetting head allowing to work in a 96- or 384-well plate format, 2. a LiCONiC STX44-ICBT automated cell incubator, 3. a Tecan HydroSpeed™ 96-/384-channel microplate washer, 4. a Tecan Infinite M1000 multimode microplate reader, for quantifying signals of absorbance, luminescence and fluorescence (including time-resolved fluorescence and fluorescence anisotropy) 5. a LiCONiC LPT 220 carrousel for storing microplates and tips boxes, 6. a Tecan RoMA robotic arm to move the microplates from one instrument to another. This robotized instrumentation allows to fully automating a large variety of biological, and is installed in a BSL2 safety cabinet to screen under sterile conditions when required. The HCS facility is based on two complementary, automated microscopes: 1. a CellInsight CX7, which is a powerful confocal imaging system in terms of image resolution and high-content image analysis. It is equipped with a 7-color LED illumination, and acquires images at multiple magnifications (4x to 60x) of 2D cultured cells or 3D structures (acquisitions on different Z-planes, with the confocal mode if necessary). An integrated incubation chamber regulated in temperature and CO2 allows performing tests on living cells. 1. an IncuCyte Zoom live-cell microscope to investigate, during hours to days, phenotypic modifications of live cells grown on microplates as 2D monolayers or 3D structures. It allows automated imaging and quantification of compounds effect at each time of the kinetic, in label-free and non-invasive experiments, with cell event quantification thanks to AI algorithms, for studying essential biological processes. Both CMBA's facilities benefits from a fully equipped cell culture room, and dedicated instruments including a cell incubator, and an automated dispenser for quick and homogenous cell seeding on numerous microplates in parallel.	

Access	
Site teams	Under conditions - operated by staff for HTS - operated by staff, or after training and charter acceptance for HCS
External academic teams	Under conditions - operated by staff for HTS - operated by staff, or after training and charter acceptance for HCS
Private Outdoor Teams	Under conditions - operated by staff for HTS - operated by staff, or after training and charter acceptance for HCS

Training courses offered
The automated microscopes of the HCS facilities of the platform are accessible to the scientific community (academia, private companies) either with the help of CMBA staff or free access after a training period with the person in charge of the HCS activity.

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PARTNER PLATFORM
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I-Stem

General information

Administrative information	
Structure	I-Stem
Address	28 rue Henri Desbruères 91100 CORBEIL ESSONNES
Website	https://istem.eu/
Manager	DG : Yann GUIVARCH DS : Marc PESCHANSKI
Contact	
Date of implementation	

Labels / quality approach	
IBiSA	No
ISO 9001 certification	No
National networks	No
International networks	No
Other	Plateforme Genopole

Team	
Number of researchers	0
Number of engineers	2
Number of technicians	1
Number of administrative staff	0
Other	0

Main achievements	
Number of screenings performed since creation	More than 50
Number of screenings performed per year	Between 1 and 3
Fields of expertise / therapeutic areas	
Compound management; pluripotent stem cells; derived pluripotent stem cells; HTS; HCS; phenotypic screening	

Scientific Information

Chemical Library	
Description of the collection (number of chemical molecules, natural, royalty-free products, known synthesis methods, etc)	
Only custom repurposing libraries and specific pathway libraries	
Conditioning	P384
Database (structure, accessibility conditions)	LIMS= Sample/Assay/Warehouse (Discngine)
Member of the National Chemical Library	

Targets
Targets for the screening service (e.g. protein targets, cell targets, etc.)
Cell targets; phenotypic screening; metabolism targets
Activities (e.g. cloning, protein expression, obtaining cell lines, management and storage of lines, cell culture, etc.)
Compound management, cellular miniaturization, Assay development, Screening, Retests, Doses responses, Secondary assays

High throughput screening	
Number of measurements/days (approx.)	Depending of the project timeline on the platform
Biological tests proposed (e.g. in vitro enzymatic tests, cell tests (binding tests, cell survival, image analysis, etc)	
Protein expression, protein colocalization, cell viability, apoptosis, enzymatic tests etc…	
Technologies / Equipment (robots, automats, etc.)	
BRAVO/BRAVO BenchCell/ BIOCEL ; CX7; IMX; Clariostar; FDSS	

Access	
Site teams	Under conditions
External academic teams	Under conditions
Private Outdoor Teams	Under conditions

Training courses offered
None

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PARTNER PLATFORM
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Phenotypic analysis and cell screening IGBMC

General information

Administrative information	
Structure	CNRS UMR 7104 INSERM U 1258 UNISTRA
Address	IGBMC 1 rue Laurent Fries BP10142 67404 ILLKIRCH CEDEX
Website	https://www.igbmc.fr/en/plateforms-and-services/platforms/high-throughput-cell-screening
Manager	Anne MAGLOTT-ROTH
Contact	maglottr@igbmc.fr
Date of implementation	June 2023

Labels / quality approach	
IBiSA	Yes since 2017
ISO 9001 certification	No
National networks	No
International networks	ELRIG
Other	

Team	
Number of researchers	0
Number of engineers	2
Number of technicians	0
Number of administrative staff	0
Other	1 scientific referent

Main achievements	
Number of screenings performed since creation	65
Number of screenings performed per year	4
Fields of expertise / therapeutic areas	
Oncology, developpement, neuroscience, molecular biology, cellular biology, virology	

Scientific Information

Chemical Library	
Description of the collection (number of chemical molecules, natural, royalty-free products, known synthesis methods, etc)	
FDA approved Prestwick (1291 molecules), FDA approved Selleckchem (1443 molecules)	
Conditioning	96 well plates, stock at 10mM
Database (structure, accessibility conditions)	Storage server for the datas
Member of the National Chemical Library	No

Targets
Targets for the screening service (e.g. protein targets, cell targets, etc.)
Cell targets
Activities (e.g. cloning, protein expression, obtaining cell lines, management and storage of lines, cell culture, etc.)
Transfection, infection with lentivirus or other, obtaining cell lines, management and storage of lines, cell culture, cellular assay (ELISA, fluo reporter), immunostaining, image acquisition and high content phenotypic analysis, statistical analysis of datas

High throughput screening	
Number of measurements/days (approx.)	400
Biological tests proposed (e.g. in vitro enzymatic tests, cell tests (binding tests, cell survival, image analysis, etc)	
Cell survival, ELISA, enzymatic assays, migration, viral infection, high content image analysis	
Technologies / Equipment (robots, automats, etc.)	
Agilent Biocell under PSM2 environment, Cellomics automated microscopes, Berthold LB940 multimodal reader, L2 laboratory	

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

Training courses offered
Student training for use of instruments Theoretical course on RNA interference, screening and phenotypic analysis

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ImPACcell

General information

Administrative information	
Structure	UAR BIOSIT
Address	Université de Rennes 1, Bat8 Campus de Villejean, 2 Avenue du Pr. Leon Bernard CS34317 35043 Rennes cedex
Website	https://impaccell.univ-rennes.fr
Manager	Rémy Le Guével
Contact	remy.leguevel@univ-rennes1.fr
Date of implementation	2005

Labels / quality approach	
IBiSA	Yes since 2011
ISO 9001 certification	No
National networks	GDR ChemBio (2020), Cancéropôle GO (2005)
International networks	
Other	

Team	
Number of researchers	1
Number of engineers	2
Number of technicians	1
Number of administrative staff	2
Other	0

Main achievements	
Number of screenings performed since creation	200
Number of screenings performed per year	12/15
Fields of expertise / therapeutic areas	
Cell toxicity/proliferation (cancer), Endocrine disruptor, video microscopy	

Scientific Information

Chemical Library	
Description of the collection (number of chemical molecules, natural, royalty-free products, known synthesis methods, etc)	
Conditioning	
Database (structure, accessibility conditions)	
Member of the National Chemical Library	

Targets
Targets for the screening service (e.g. protein targets, cell targets, etc.)
Cell targets: 80 cell lines in bank, zebrafish, Eleutheroembryos
Activities (e.g. cloning, protein expression, obtaining cell lines, management and storage of lines, cell culture, etc.)
Cell culture, cell screening, HCS, fluorescent assays, fluorescent microscopy, video microscopy

High throughput screening	
Number of measurements/days (approx.)	
Biological tests proposed (e.g. in vitro enzymatic tests, cell tests (binding tests, cell survival, image analysis, etc)	
ELISA, image analysis, cell survival (cell counting), proliferation, cell migration, cell cycle, cell death, DNA damage, inflammation, ROS, cytoskeleton), Wound Healing (video microscopy). Zebrafish larvae: xenograft (tumor regression), angiogenesis, zebratox	
Technologies / Equipment (robots, automats, etc.)	
Arrayscan, VAST bioimager, Inverted Zeiss microscopes, Fluorimeter/Luminometer, xCELLigence	

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

Training courses offered
None

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High throughput screening – Institut de la Vision

General information

Administrative information	
Structure	UM80 – Institut de la Vision
Address	17 rue Moreau 75012 Paris
Website	https://www.institut-vision.org/en/the-research/research-facilities/8-platforms-institute/25-high-throughput-screening.html
Manager	Marc Lechuga
Contact	Marc.lechuga@inserm.fr
Date of implementation	May 2013

Labels / quality approach	
IBiSA	No
ISO 9001 certification	No
National networks	Chembioscreen (since 2018)
International networks	No
Other	No

Team	
Number of researchers	1
Number of engineers	2
Number of technicians	0
Number of administrative staff	0
Other	-

Main achievements	
Number of screenings performed since creation	20+
Number of screenings performed per year	2 to 3
Fields of expertise / therapeutic areas	
Our *HTS Core Facility* is dedicated to the conduct of large and very large libraries (small compounds, natural compounds, cDNA, and siRNA, peptides collections) using original and highly valued biological models cell lines, primary cells, human stemcells-derived progenitors (hESC, iPSC) and/or pure biochemical assays.	

Scientific Information

Chemical Library	
Description of the collection (number of chemical molecules, natural, royalty-free products, known synthesis methods, etc)	
FDA-approved Library (royalty free for basic research purpose), royalty free pathway-specific Library, target-focused library (building and management)	
Conditioning	96 vials racks, 384-well plates
Database (structure, accessibility conditions)	Dedicated information system, csv/xls extractions on demand.
Member of the National Chemical Library	No.

Targets
Targets for the screening service (e.g. protein targets, cell targets, etc.)
Cell targets, protein-protein interaction, protein dosage, enzymatic activity.
Activities (e.g. cloning, protein expression, obtaining cell lines, management and storage of lines, cell culture, etc.)
Cell culture including cell lines, primary cells and stemcell derived progenitors, cell line establishment, cloning, banking and storage.

High throughput screening	
Number of measurements/days (approx.)	25 000 (maximum)
Biological tests proposed (e.g. in vitro enzymatic tests, cell tests (binding tests, cell survival, image analysis, etc)	
Cell-based assays(viability, proliferation, phenotype), sub-cellular target (translocation, intra-nucleus aggregates etc.), protein-protein interaction, cytokine secretion dosage (supernatant), enzymatic activity, reporter gene.	
Technologies / Equipment (robots, automats, etc.)	
Bravo and Biocel1800 (Agilent), Spark (Tecan), Arrayscan (Thermo-electron), CQ1 confocal scanner (Yokogawa)	

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

Training courses offered
We provide training in screening project building including 1. the basics of high to medium screening approaches, 2.Raw data treatment and Refined Data analysis and 3. Establish the relevant screening cascade.

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High Throughput Screening / Hit to lead

PCBIS

General information

Administrative information	
Structure	PCBIS UAR 3286 CNRS-Unistra
Address	300 Bld S Brant 67412 ILLKIRCH
Website	www.pcbis.fr
Manager	Dr Pascal VILLA
Contact	pvilla@unistra.fr
Date of implementation	1999

Labels / quality approach	
IBiSA	Yes since 2008
ISO 9001 certification	Yes since 2007
National networks	ChemBioFrance since 2018
International networks	None
NFX 50-900 certification	2014

Team	
Number of researchers	0
Number of engineers	20
Number of technicians	0
Number of administrative staff	3
Other	0

Main achievements	
Number of screenings performed since creation	200
Number of screenings performed per year	15-20
Fields of expertise / therapeutic areas	
Rare diseases; cancer; inflammation; pain; drug development; assay development	

Scientific Information

Chemical Library	
Description of the collection (number of chemical molecules, natural, royalty-free products, known synthesis methods, etc)	
Strasbourg collections: 8000 small compounds patent-free; 320 natural products; 480 extracts; 1520 Prestwick Chemicals library: 340 POM (Prestwick) French Chemical library: 50 000 compounds (access to 87000 compounds)	
Conditioning	96-384 well plates
Database (structure, accessibility conditions)	On demand; sdf
Member of the National Chemical Library	Yes

Targets
Targets for the screening service (e.g. protein targets, cell targets, etc.)
Soluble proteins (kinases, phosphatases, phosphodiesterases, calmoduline, nuclear proteins, membrane proteins (GPCRs); cellular models (>20 cell types)
Activities (e.g. cloning, protein expression, obtaining cell lines, management and storage of lines, cell culture, etc.)
Development of molecular & cellular assays; soluble & membrane protein expression; 230 clones of labeled GCPR; Tumoroids and organoids development

High throughput screening	
Number of measurements/days (approx.)	
Biological tests proposed (e.g. in vitro enzymatic tests, cell tests (binding tests, cell survival, image analysis, etc)	
Binding assays, enzymatic or cellular assays, cell survival, toxicity, release of soluble factors.	
Technologies / Equipment (robots, automats, etc.)	
Fluorescence, luminescence, FRET, BRET, HTRF, TR-FRET, fluorescence polarisation, alpha-screen ; alpha-LISA ; ELISA ; Fully automated screening PF with robots, readers; storage module; liquid dispenser ; cell incubator (www.pcbis.fr) in class 100 environment (PSM like). Several other pipetting robots + readers +DLS resder +in cell automated imager + cell fluorescence imager for HCS.	

Access	
Site teams	Yes, Fee for service, collaboration or direct use of apparatus after training
External academic teams	Yes, Fee for service, collaboration or direct use of apparatus after training
Private Outdoor Teams	Yes, Fee for service, collaboration or direct use of apparatus after training

Training courses offered
Training for screening and fluorescence; Contribution to every other year CNRS screening school Training of users on demand

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PARTNER PLATFORM
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ADME

PCBIS

General information

Administrative information	
Structure	PCBIS UAR 3286 CNRS-Unistra
Address	300 Bld S Brant 67412 ILLKIRCH
Website	www.pcbis.fr
Manager	Dr Pascal VILLA pvilla@unistra.fr
Contact	Dr Patrick GIZZI patrick.gizzi@unistra.fr
Date of implementation	1999

Labels / quality approach	
IBiSA	Yes since 2008
ISO 9001 certification	Yes since 2007
National networks	ChemBioFrance since 2018
International networks	
NFX 50-900 certification	2014

Team	
Number of researchers	0
Number of engineers	5
Number of technicians	0
Number of administrative staff	3
Other	0

Main achievements	
Number of ADME performed since creation	791 achieved projects since 2009
Number of ADME performed per year	Currently 100 projects per year since 2020
Fields of expertise / therapeutic areas	
Service and consulting in ADME-Tox Physicochemistry Drug metabolism *In vivo* safety and pharmacokinetics Animal models for respiratory diseases	

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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 conditions)	Access through a CDD Vault software 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

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PARTNER PLATFORM
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ADME

PhenoFish

General information

Administrative information	
Structure	PhenoFish
Address	Inserm NeuroDiderot, Robert Debré
Website	http://neurozebra.fr/the-robert-debre-phenofish-platform/
Manager	Soussi-Yanicostas Nadia
Contact	nadia.soussi@inserm.fr
Date of implementation	2015

Labels / quality approach	
IBiSA	No
ISO 9001 certification	No
National networks	No
International networks	
Other	Platform Université Cité

Team	
Number of researchers	2
Number of engineers	1
Number of technicians	1
Number of administrative staff	1
Other	0

Main achievements	
Number of ADME performed since creation	3
Number of ADME performed per year	2
Fields of expertise / therapeutic areas	

Scientific Information

Study of the hit properties
Physicochemical profile
Properties of ADME – Toxicology
Yes
Pharmacokinetic behavior
Yes
Technologies / Equipment (robots, automats, etc.)
Automats Zebrabox

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

Training courses offered
Plateforme Criblage à grande échelle Un automate Zebralab qui permet l'observation et le suivi automatisé des embryons et des larves de poissons zèbre. ZebraBox est capable d'analyser le comportement des larves de poisson zèbre dans des plaques de 96 puits. Il permet un criblage à haut débit pour analyser les comportements des embryons et des larves de poisson zèbre. ZebraBox permet aussi d'analyser le comportement de poissons adultes (locomoteurs, préférence de place, stress et anxiété, sociabilité, mémoire et apprentissage). ZebraBox est aussi adapté pour suivre le comportement social des larves de poissons zèbres déficit social (individus présentant un syndrome de type autistique).

FOUNDATION FOR
Rare Diseases

PARTNER PLATFORM
High Throughput Screening / Hit to lead

THERASSAY

General information

Administrative information	
Structure	Therassay
Address	IRS-UN 8 quai Moncousu – BP 70721 44007 NANTES, FRANCE
Website	http://www.therassay.com/
Manager	Flavien Charpentier, scientific manager Maud Chétiveaux, technical manager
Contact	maud.chetiveaux@univ-nantes.fr
Date of implementation	2007 (2021 for HTS)

Labels / quality approach	
IBiSA	Yes, since 2008
ISO 9001 certification	No
National networks	No
International networks	Specify
Other	Biogenouest (transregional network) since 2009

Team	
Number of researchers	7
Number of engineers	4
Number of technicians	6
Number of administrative staff	1
Other	0

Main achievements	
Number of screenings performed since creation	2 for external teams
Number of screenings performed per year	1 for external teams
Fields of expertise / therapeutic areas	
Therassay is a platform of functional analyses of cardiovascular, metabolic, respiratory, digestive and motor functions as well as tumorigenesis exploration in cell and whole animal (rodent) models. HTS technology is proposed for studies on ion channels and channelopathies. The main achievements mentioned above concern only HTS.	

Scientific Information

Chemical Library	
Description of the collection (number of chemical molecules, natural, royalty-free products, known synthesis methods, etc)	
Conditioning	
Database (structure, accessibility conditions)	
Member of the National Chemical Library	

Targets
Targets for the screening service (e.g. protein targets, cell targets, etc.)
ion channels
Activities (e.g. cloning, protein expression, obtaining cell lines, management and storage of lines, cell culture, etc.)
cloning, cell culture, cell transfection

High throughput screening	
Number of measurements/days (approx.)	800
Biological tests proposed (e.g. in vitro enzymatic tests, cell tests (binding tests, cell survival, image analysis, etc)	
cell electrophysiology by automated patch-clamp	
Technologies / Equipment (robots, automats, etc.)	
high-throughput (396-well plates) automated patch-clamp robot	

Access	
Site teams	Yes
External academic teams	Yes, experiments performed by platform members
Private Outdoor Teams	Yes, experiments performed by platform members

Training courses offered
None

For any additional information:

- visit the website: https://fondation-maladiesrares.org/plateformes-partenariats/

or

- send an email to: aap-bio@fondation-maladiesrares.com