



LYONBIO**POLE**

**A shared facility to fight against
Infectious Diseases :**

The Infectious Diseases Center

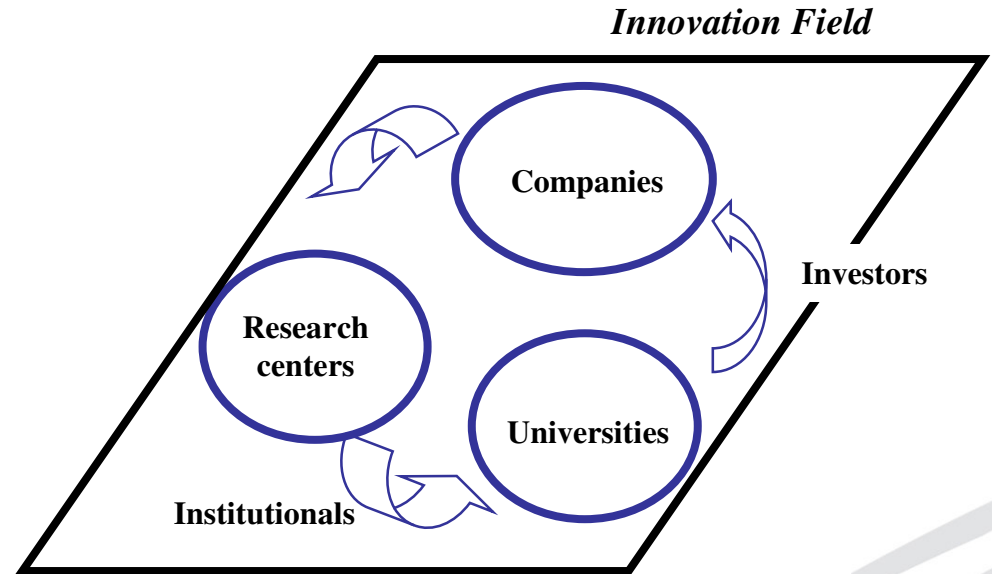
**BioCT International Workshop
Friday, 19th February, 2010**

LYONBIOPOLE, a world-class Competitive Cluster in France

Aim of the competitive clusters

**Make 5 different kinds of players
on the innovation field work together**

Companies of all sizes
Public Research centers
Educational institutions
Investors
Institutionals



Vocation of the competitive clusters

- Encourage and develop public/private partnerships between large companies, SMBs, and academic research in order to produce innovative collaborative R&D projects
- Leverage France competitiveness

Dedicated public fund

- Single Interministry fund
- At least 2 companies + 1 public laboratory working on an innovative R&D project

LYONBIOPOLE :

A French BIO Cluster with an industrial leadership ...

Stakes
in public health



Built a **“healthcare shield”**
to fight human and animal
infectious diseases and cancers

Core
Business



Develop **innovative diagnostic,
preventive and therapeutic solutions
and delivery systems** for more
responsive, personalized medicine

Targeted
markets



Infectious diseases, cancers, auto-immune diseases,
orphan diseases and inflammatory disorders

Founding
members



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... benefiting from a dynamic SMBs environment and the presence of high level Research Centers

Lyonbiopole's members 2010

Industrial firms: 4

BD France
 bioMérieux
 Merial
 Sanofi Pasteur

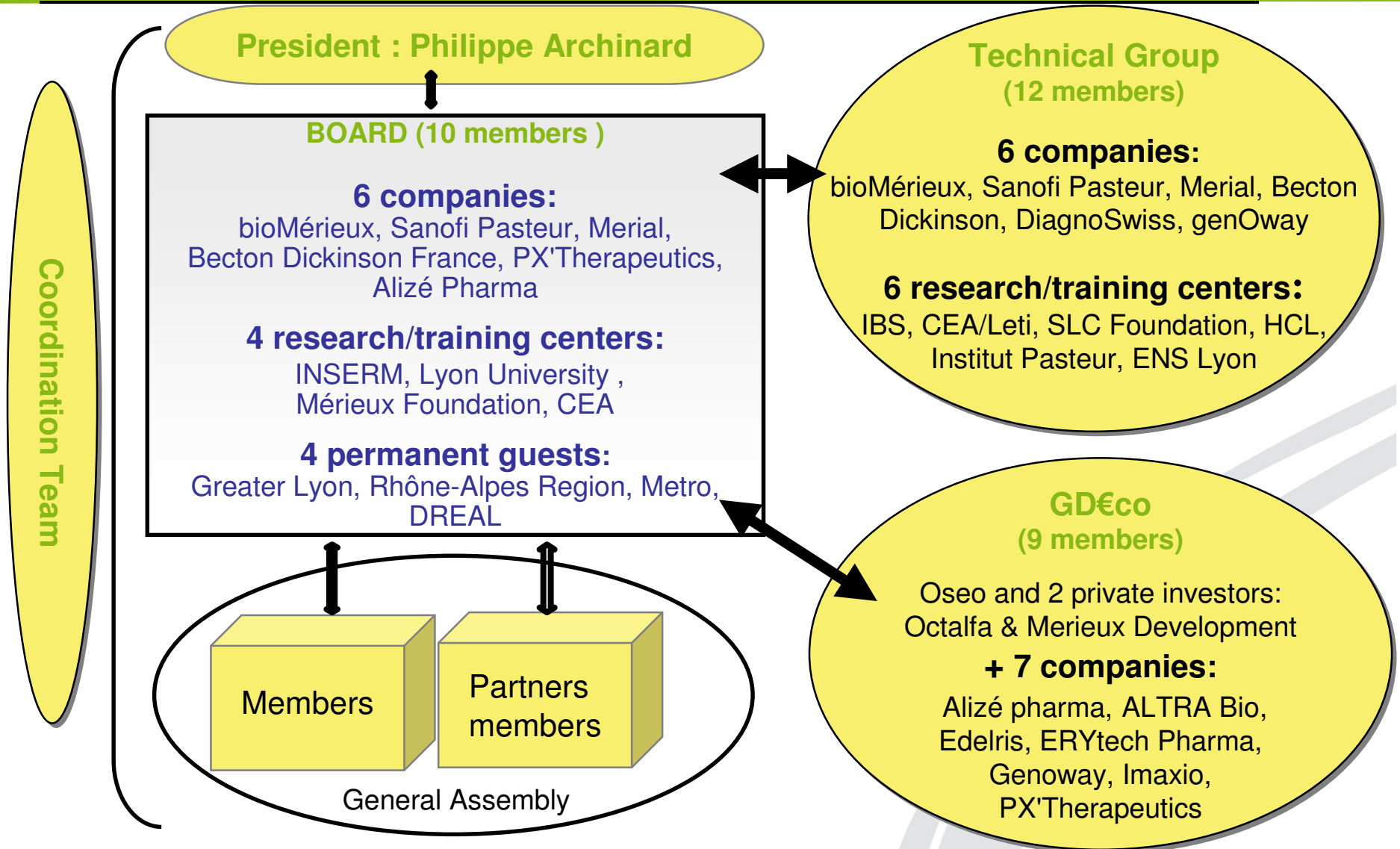
Knowledge & Resources centers: 13

CEA	INRIA
CLB	Inserm
CNRS	Institut Pasteur
EMBL	WHO
ENS	UCBL1
Fondation Mérieux	UJF
HCL	

SMBs & subsidiaries: 60

AAA	Edap tms	K-plan
ADNucleis	Edelris	Khorionyx
Adocia	Elicityl	Latoxan
Aguettant	ERYtech Parma	Magnisense
Alaxia	Eveon	Metabolys
Alizé Pharma	Eye TechCare	Nano-H
Altrabio	Flamel Technologies	Netris Pharma
Alvedia	Genostar	Nocosium
Antialis	genOway	Novotec
Biotem	Genzyme Polyclonals	Phusis
Bio Elpidia	Humalys	Poxel
Biomnis	IDD Biotech	PX Therapeutics
BioViron	ID myk	RCTs
Charles River	ImaXio	Roche Diagnostics
CIAT	ImmunID	Sofradim
Conidia	Indicia Biotechnology	Synapcell
Creacell	Innate Pharma	Top Industrie
Cylergie-Cofely	Intuiskin	Transgène
Cynbiose	JLM Lab	Visoon
Cyto	Kalys	Voxcan

Governance led by the industry



Support of the public authorities



direction générale de la compétitivité
de l'industrie et des services

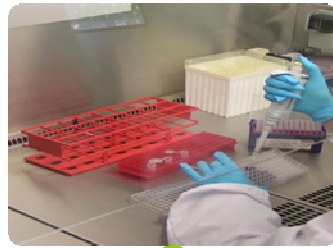


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Lyonbiopole's offer for its members

1) Building collaborative R&D programs



2) Gaining access to funding sources



3) Building your strategic partnerships and growing your business



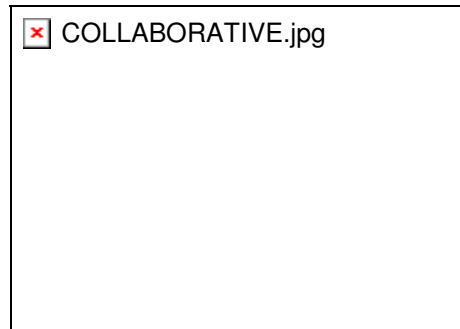
4 good reasons
to join
Lyonbiopole

4) Gaining access to shared facilities and technological platforms



Results & main actions

1) Building collaborative R&D programs



2) Gaining access to funding sources



69 projets
419 M€ total investment
170 M€ funding obtained from the French State (FUI), local authorities, Oseo, the European Regional Development Fund (EDFR) and EC ;
400 scientific and technical jobs

Thematic & European Workshops,
Training, Consortium Agreements

Lyobiopole's support

70 members from which 44 SMBs (+ 30% / year)

SMB Action Plan

1 / Be innovative and competitive

50% of project leaders are SMBs.

They get more than 30% of public fundings

2 / Develop the company activity at international Level

PPTI, FABS, FTRD, FAST – Europe, Boston & SD/SF, Québec Montréal,
Kansai Japon – BioSquare, BIO, BIO Japan ...

3 / Support the economic activity of the company

SMB / Pharma Meeting – Business Development

4 / Facilitate contact with private investors

SMB/Investors meeting

5 / Strengthen competences in SMBs

Training on IP, Consortium Agreement

6 / Be part of the Lyonbiopôle network

GDÉco, Lunch Break Partnering, Lifescience Corridor France,
Alps BioCluster, BioWin, Boston et San Diego / San Francisco,
Québec / Montréal Canada, Kansai Japon, Shanghai

3) Building your strategic partnerships and Growing your business



Access to shared facilities

All in one

**IDC : 1920 sq.m of
BSL Level 2 & 3**


LYONBIOPOLE

**An Incubator to host
new companies**

**acCInov : a platform dedicated to
innovation (*Project in Progress!*)**



**Lyonbiopole team
office**

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(pépinière en noir).jpg



**4) Gaining access to shared facilities
and technological platforms**



The Infectious Disease Center

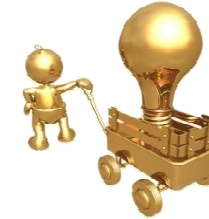


The Infectious Diseases Center (IDC): The only platform of it's kind in Europe!



Host teams
working together

Foster innovation
by bridging Publics and Privates



Work in synergy with
the Core Networks



A Shared Facility For Collaborative R&D Projects

- Located in the Campus Charles Mérieux – Lyon Gerland
 - 1.920 sq.m / 21.000 sq.ft.
 - BSL 1&2 labs and BSL 3 platform
 - €5 M of investment
- € 2M of equipments for cellular and molecular Biology



◆ Assist the setting up of R&D projects

- Specification and launch of the project in “pre-incubation” phase
- Search for partners and building of scientific and technical networks
- Support access to public and private fundings



◆ Host project teams and provide them with

- Laboratories adapted to the study of infectious diseases (biological safety)
- Industrial-grade facilities which can handle potential collaborative projects between public and private organizations (IT security and modularity)
- An access to technical platforms and shared mutual equipments
- A team dedicated to the functioning and maintenance of the facility

High-Performance layout and Quality Environment

- ◆ **Managed by François Martin assisted by 2 persons.**
- ◆ **1 920 m² of laboratories:**
 - Nearly all rented and able to accommodate around 84 persons
 - Allowing to gather major expertises in infectious diseases and to welcome researchers from around the world.
- ◆ **7 modules will accommodate teams / projects in the IDC, with for each module :**
 - 2 BSL2 laboratories
 - 1 clean laboratory
 - 1 standard laboratory.
- ◆ **Mutual areas organized with :**
 - A BSL3 platform containing 3 BSL3 laboratories and 2 BSL2 laboratories, which the teams will be able to punctually rent according to their work.
 - A -80 °C deep freezer room ...
 - A specific laboratory fitted with a scintillation counter
 - An informatic bunker
 - A wash room
 - A cold room
 - A meeting room
 - Storage
 - Gas and liquid nitrogen premises,
 - Waste premises...

... and a cafeteria !



- ◆ **€ 5 million euro of investment** for construction and development of the platform, financed by the building's owner and covered by a renting guarantee of Greater Lyon over the period of amortization
- ◆ **€ 2 million of equipments** for cellular and molecular biology laboratories, funded by the European Union with the European Regional Development Fund (ERDF) : 40% of eligible costs, managed by the Rhône-Alpes Region, with the expertise of Inserm.

The rules: How to join the IDC?

◆ Rent a module for a minimum of 3 years, renewable once :

- Be a member of Lyonbiopole!
- Develop R&D projects linked to the technological strategy of Lyonbiopole in the diagnostic, vaccine and new therapeutics fields (human or animal)
- Develop its project in the Infectious Disease Center for at least 3 years

◆ Rent the BSL3 Platform for a limited period of time :

- Priority access to hosted teams
- Then to members of Lyonbiopole
- Then, to any public or private organization developing a R&D project linked to the thematics of Lyonbiopole

6 R&D teams hosted, the IDC is currently full

- ◆ PX Therapeutics
 - Development and production of monoclonal antibodies



- ◆ PLATINE
 - Immunomonitoring Platform, set up by an industrial consortium (Innate Pharma, Transgene SA and ImmunID) as well as academic research labs (Inserm & Léon Bérard multidisciplinary center).



- ◆ Transgene
 - Research Program and development on candidate vaccines in the field of infectious diseases (conception design, pre-clinical evaluation, models, analysis of mechanism of action, design and organization of immunomonitoring tests)



- ◆ Inserm, Unity U851 « Immunity, Infection, Vaccination »
 - 2 therapeutic innovation programs (Hepatitis B & C and Flu) and 1 technological innovation program (vaccination et immunotherapy)




- ◆ Inserm, Unity U851/ Finovi
 - Inflammasome study, innate immune signaling pathways, during infections with intracellular bacteria



- ◆ Merieux Institute
 - New analytical tools for bacterial identification



The Incubator

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Office spaces available for new companies

- ◆ 400 sq.m of office spaces
 - ◆ 2 shared meeting/conference rooms
 - ◆ 4 offices already rented



- ◆ **Still spaces to be laid out !**

acCInov project



Perspective for Infectious Diseases Center

1st step

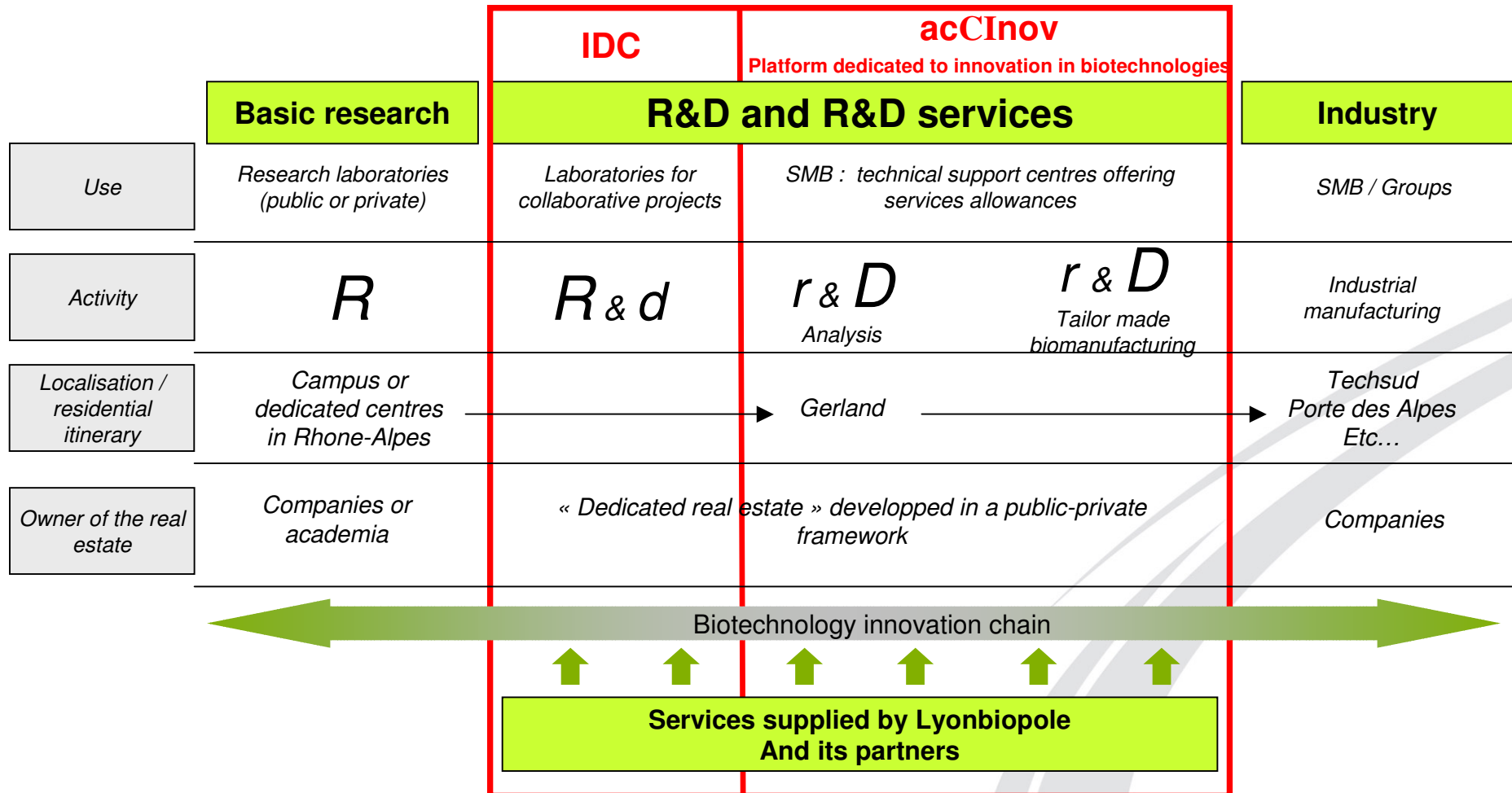
- ◆ The Infectious Diseases Center is the 1st step of **a core program of dedicated real estate for biotechnology activities**, launched at the beginning of Lyonbiopole
- ◆ Lyonbiopole opened the IDC on April 1st, 2009, which host R&D projects

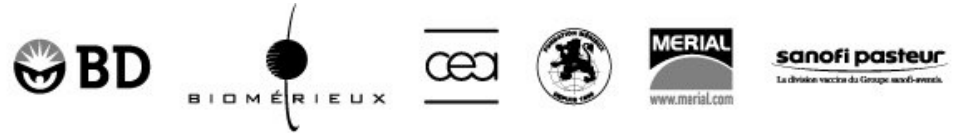
2nd step

- ◆ Lyonbiopôle's ambition is to provide even more services concerning dedicated real estate for biotechnology activities, by creating **a platform** (8,5000 sq.m / 91,500 sq.ft) to host technical support centers (acCInov project)
- ◆ In the framework of the first call for innovative platform projects launched by the DGCIS (French Ministry of Industry) and the Caisse des Dépôts et Consignations (CDC) in October 2008, the acCInov project, coordinated by Lyonbiopole was **the only innovative health biotech platform selected**.
- ◆ The acCInov platform is scheduled to **open its doors in 2013**. It will provide an area composed of technical support centers run by new or emerging SMBs providing **biological analysis or biomanufacturing services**.

AcCInov : real estate dedicated to biotechnology activities

- ◆ Vocation : host technical support centres of bioservices SMBs (in post-incubation phase) stemmed from industry and academia





FOUNDERS AND BOARD MEMBERS



BOARD MEMBERS



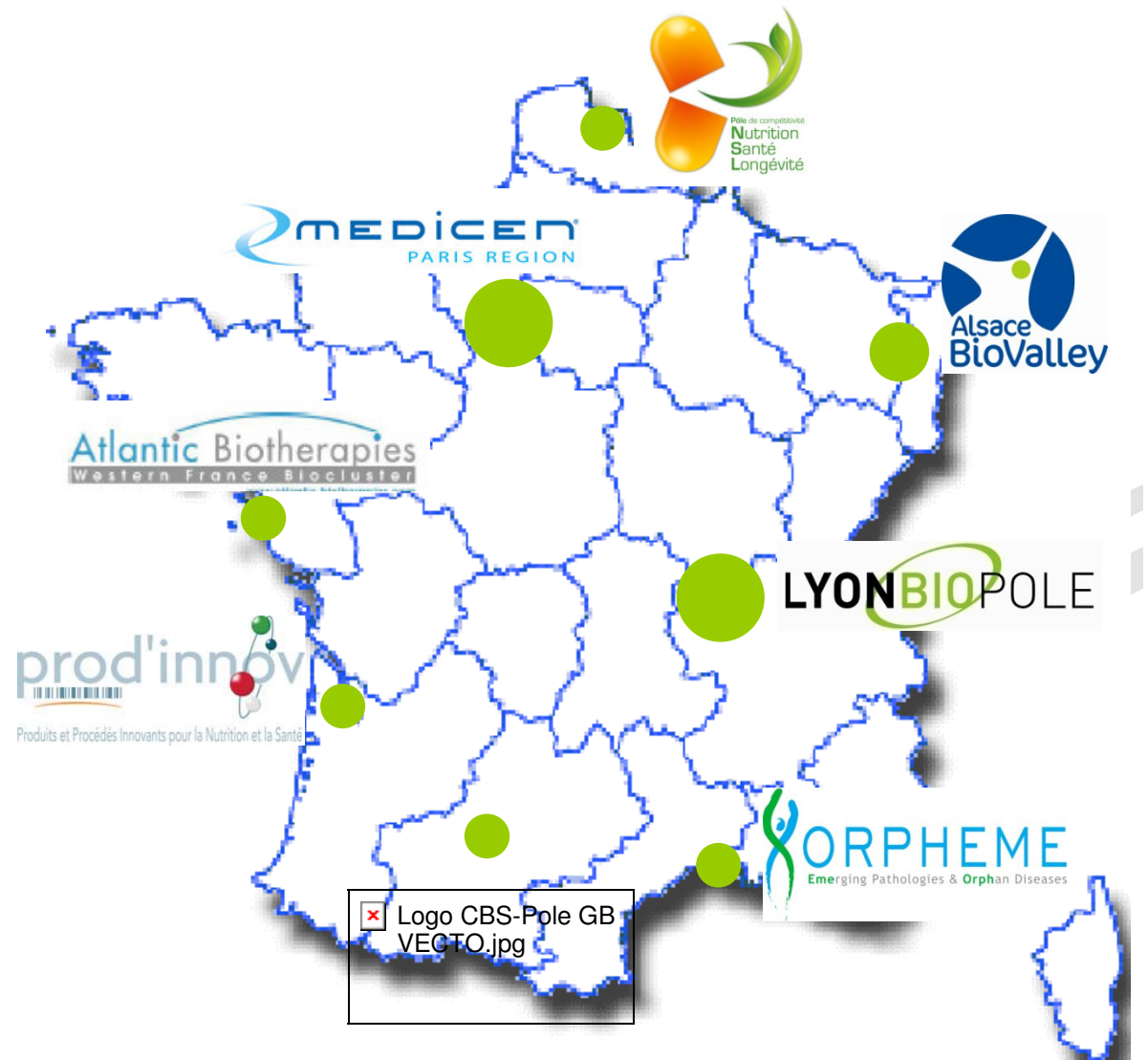
STATE AND LOCAL GOVERNMENTS SUPPORTS





8 French BIO Competitiveness Clusters in France

- 71 Competitiveness Clusters in France.
- 7 world-leading clusters and 15 worldwide vocation
- 8 clusters are active in the healthcare field
 - > Lyonbiopôle
 - > Medicen Paris
 - > Alsace BioValley
 - > Orpheme
 - > Atlantic Biotherapies
 - > Nutrition, Health, Longevity
 - > Cancer- bio Health
 - > Prod'Innov

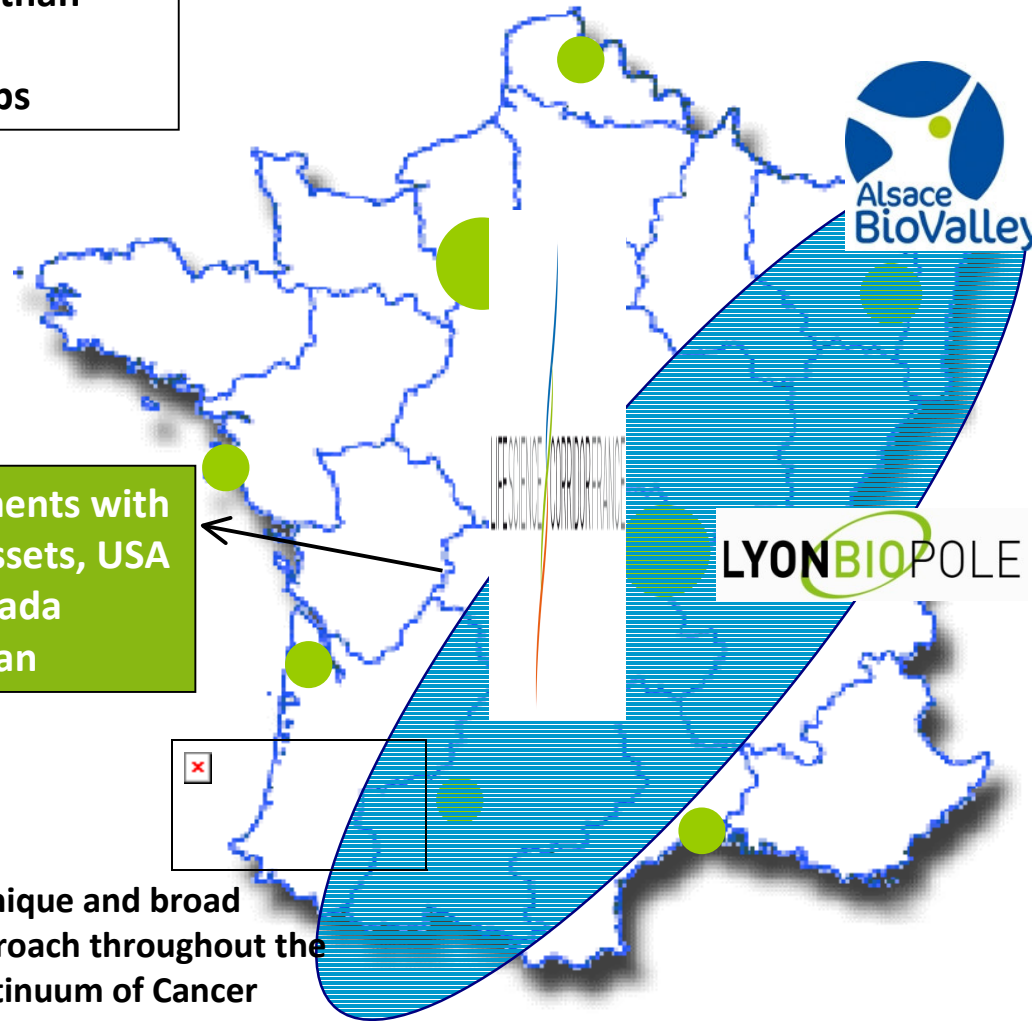


French alliance: the **LIFESCIENCE CORRIDOR FRANCE** Initiative for the companies' International Development

LCF represents more than
1,200 companies
involving > 80,000 jobs

Cooperation Agreements with
> Boston, Massachussets, USA
> Québec, Canada
> Kansai, Japan

A unique and broad
approach throughout the
continuum of Cancer
> Prevention, diagnostic, treatment



Facing the challenges of
tomorrow's healthcare
> *Bio Pharmaceuticals : from
chemistry and genes
towards drugs*
> *Medical Technologies :
medical and surgical
devices, imaging and
robotics*

Building a healthcare shield
To fight infectious diseases
> *Diagnostic, vaccines
& new therapies, Systems*