

KREO contribution

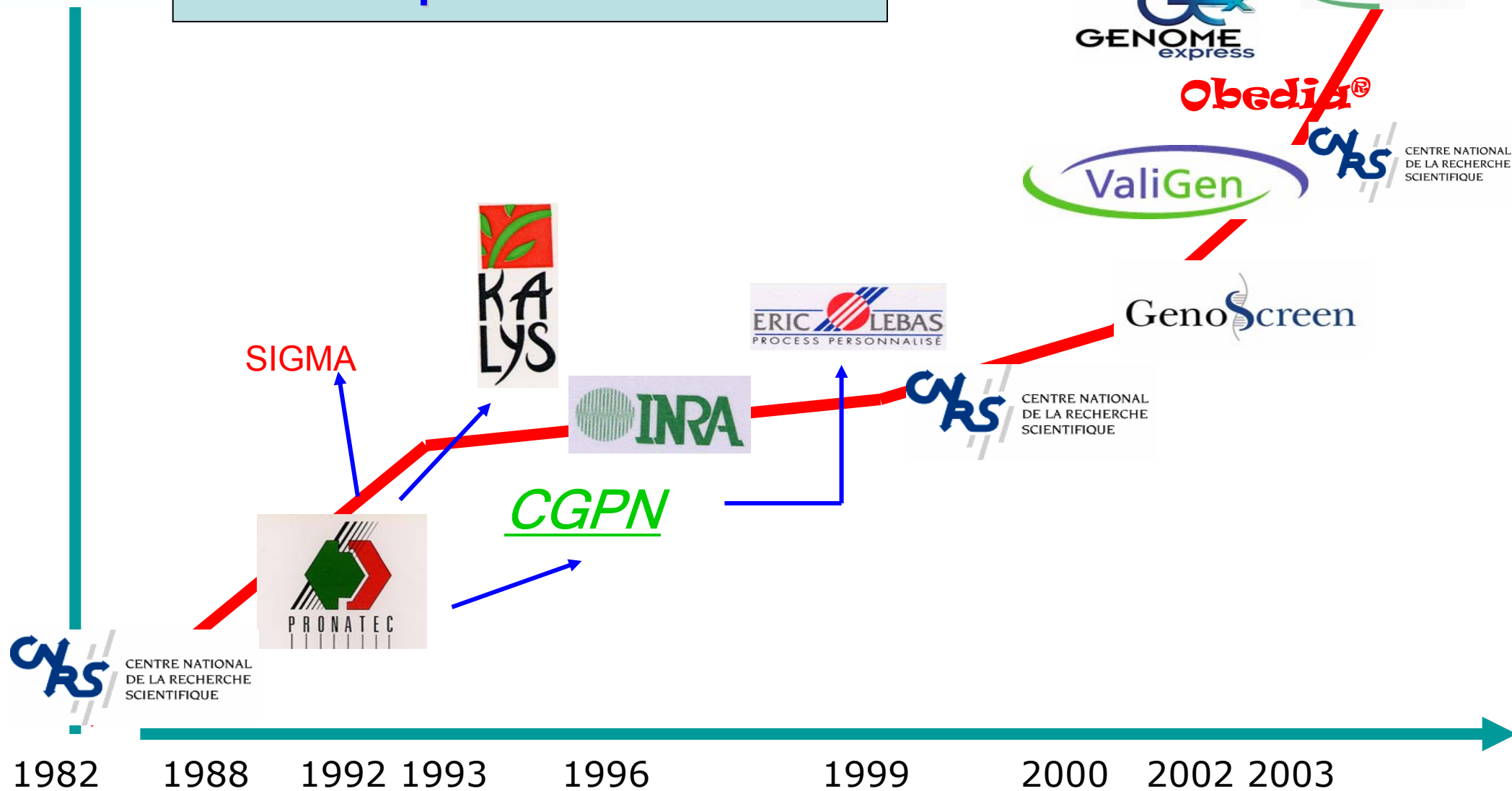
Daniel Christiaen
Business development



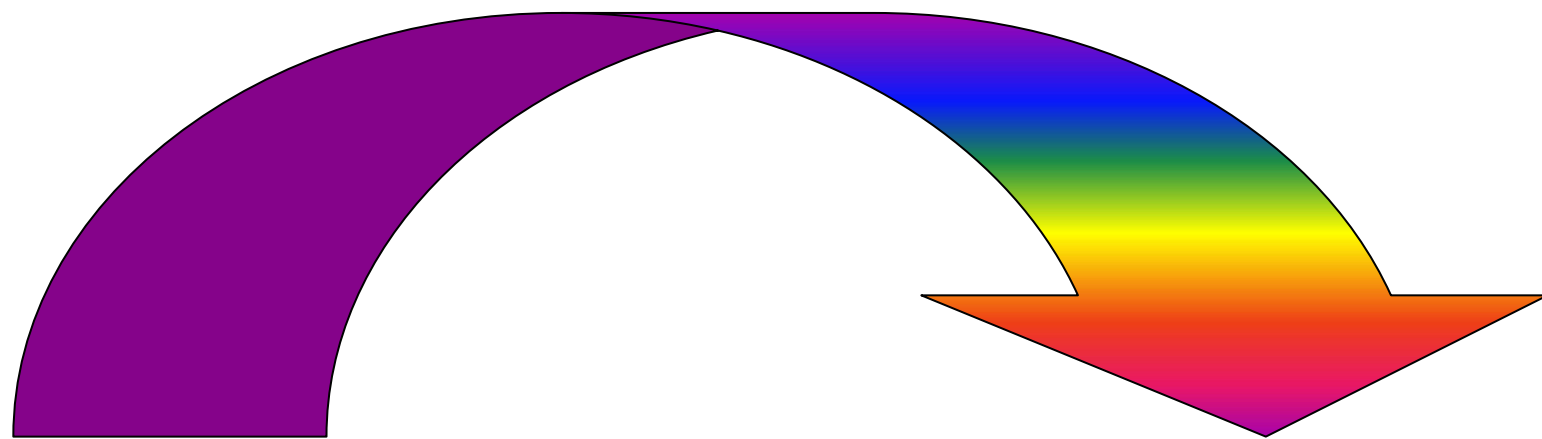
Daniel CHRISTIAEN Public/private Carrier

Rhône-Alpes

Genopole



Current Business model « The Rainbow Warrior »



Scientific Excellence

Start Up

*Equipment investments
And government subsidiaries*

*Therapeutic Targets
Or
Technological innovations*



Observations

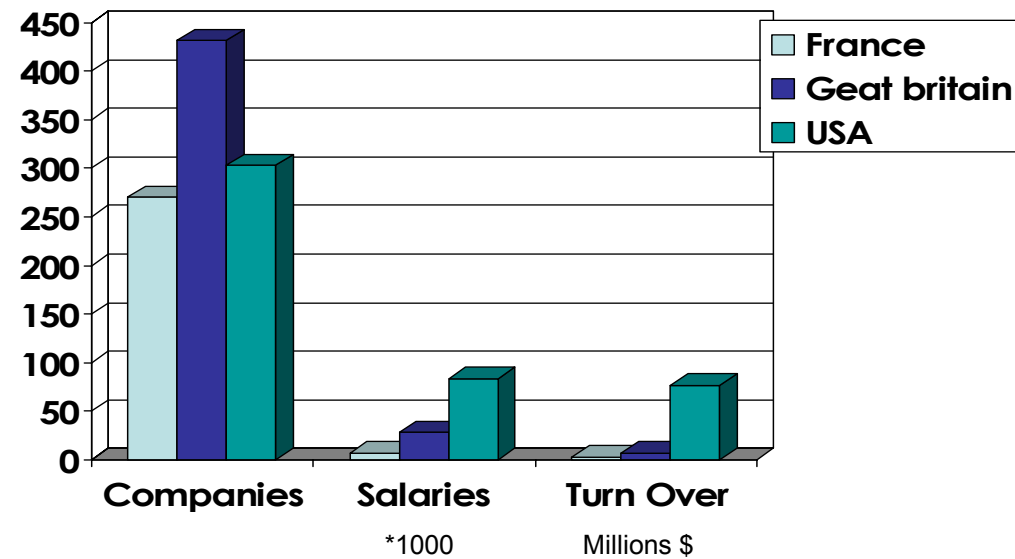
Statistically from the number should raise success stories

But « Tank effect » : *The number and the size of new companies decrease
The available financial means are spread out*

Developments ?

1. Turn over and technological obsolescence
2. Pipeline of targets reduced

• « the French biotech companies Size under the critical mass »
(les Echos 4/7/03)



Functional genomics in Rhône-Alpes region

Rhône-Alpes *Genopole*

From genes to understanding the complexity of life

Prof. Jacques Samarut, director

Dr. Jacques Joyard, vice-director



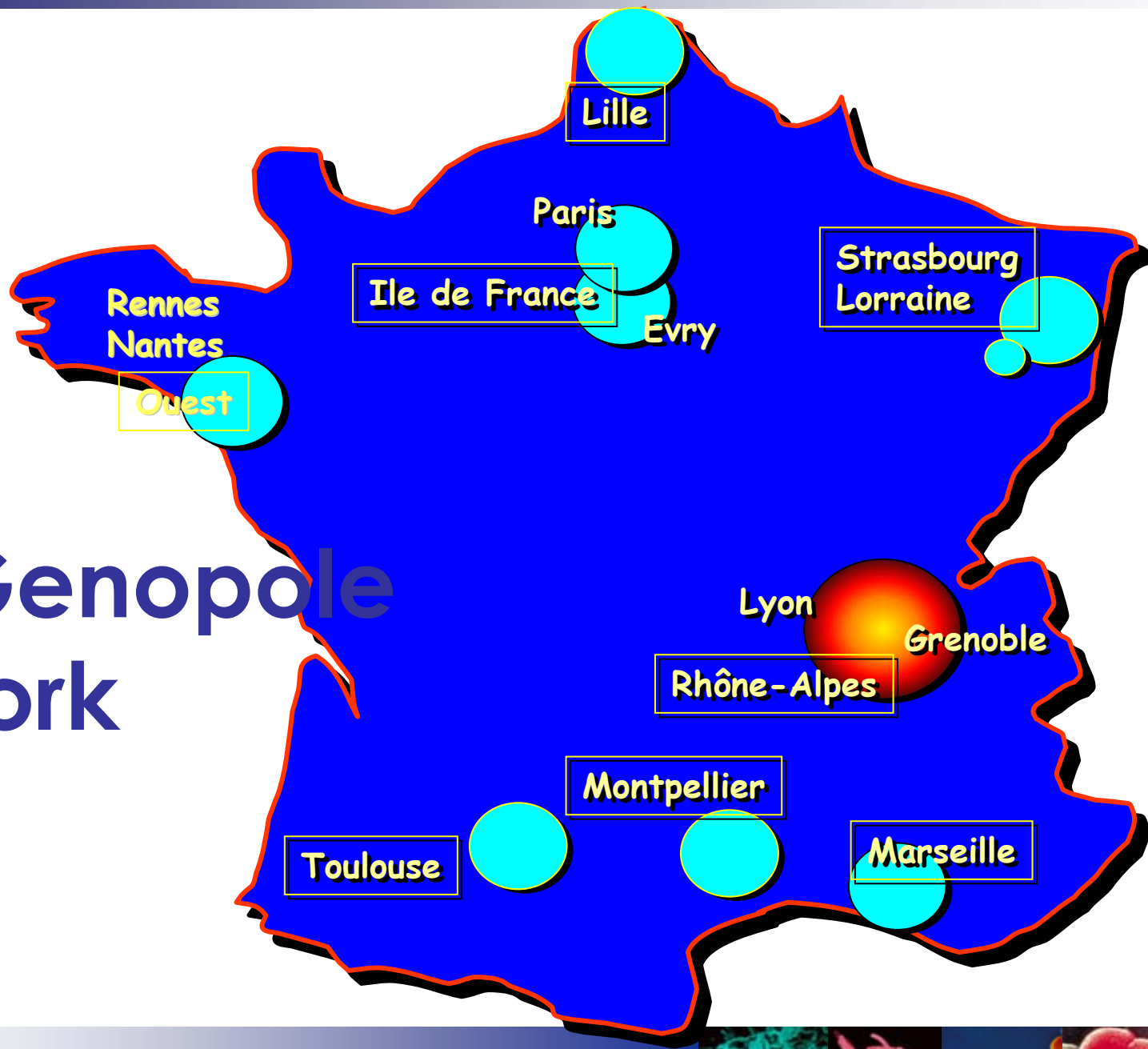
The Genopole network in France

A network of genomic centers
without walls

Aims:

- strengthen research in genomics
 - ➔ *Large-scale scientific projects in genomics*
- Programs of excellence in education and research
- Structured projects for economical development





The Genopole network





Lyon and Grenoble:
the two main scientific
cities
in the
Rhône-Alpes region



A program linking complementarities between Lyon and Grenoble :

... biomedical research, biotechnology industries, high technology in engineering science, computer sciences, nanotechnologies, enterprise spirit, ...



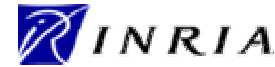
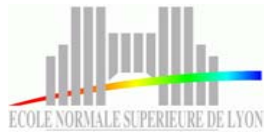
RHONE-ALPES GENOPOLE

Created on a structured scientific program

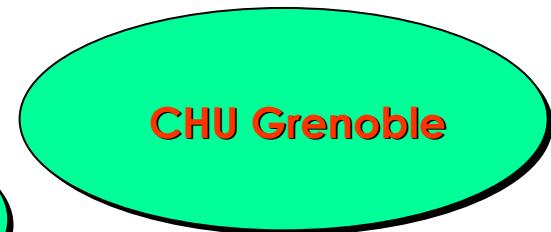
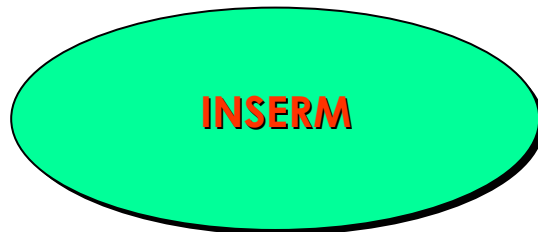
From genes to understanding the complexity of life

- Focused on post-genomics
- Micro-organisms, plants and humans
- Concentrated technological platforms





Rhône-Alpes Genopole Lyon - Grenoble



RHONE-ALPES GENOPOLE

Three programs for technological development



Lyon and Grenoble
Exploratory genomics

*Bioinformatics devoted to genome and proteome mining,
 DNA micro arrays,
 comparative genomics*

Grenoble
Structural proteomics

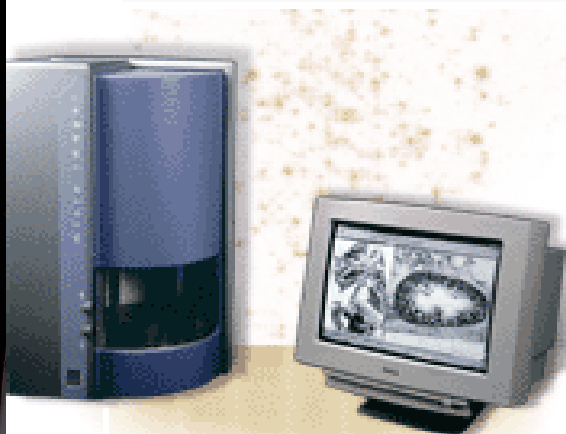
*High throughput protein production and identification,
 automated crystallization,
 structural analysis*

Lyon
Functional exploration of genes

*KO-mice facilities,
 "gene imaging",
 functional and molecular imaging dedicated to small laboratory animal*

From genes to understanding the complexity of life





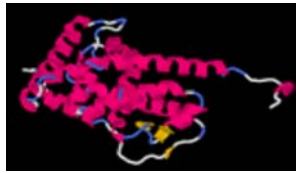
Mise en place d'une plate-forme Protéomique haut débit

Juin 2003 : Plate-forme d'analyse MS (1 CDI Genopole)

Novembre/Décembre 2003 : Plate-forme d'analyse MS/MS (1 CDI Genopole)

Contacts : Laboratoire de Chimie des Protéines
 OU
 Fondation Rhône-Alpes Futur





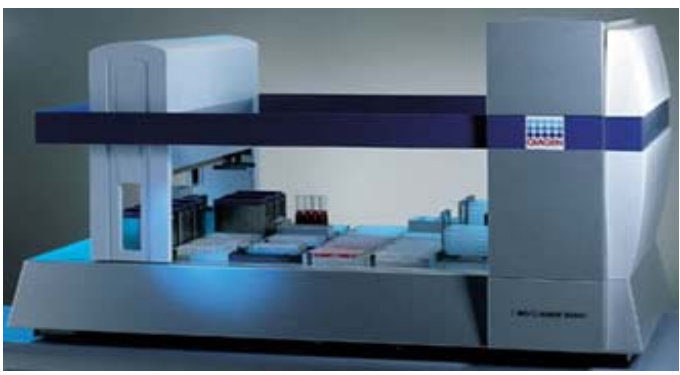
4- Génomique structurale

Automatisation des principales étapes conduisant à la structure 3D

Clonage des gènes
Mutagenèse
Expression
Purification protéine

Cristallogénèse

Diffraction



IBS/EMBL



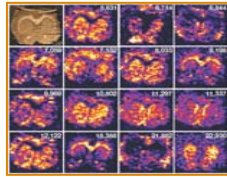
IBS/EMBL



ESRF

Environ 600 conditions de cristallisation testées pour chaque protéine
200 protéines étudiées - Actuellement 10% succès (cristaux qui diffractent)

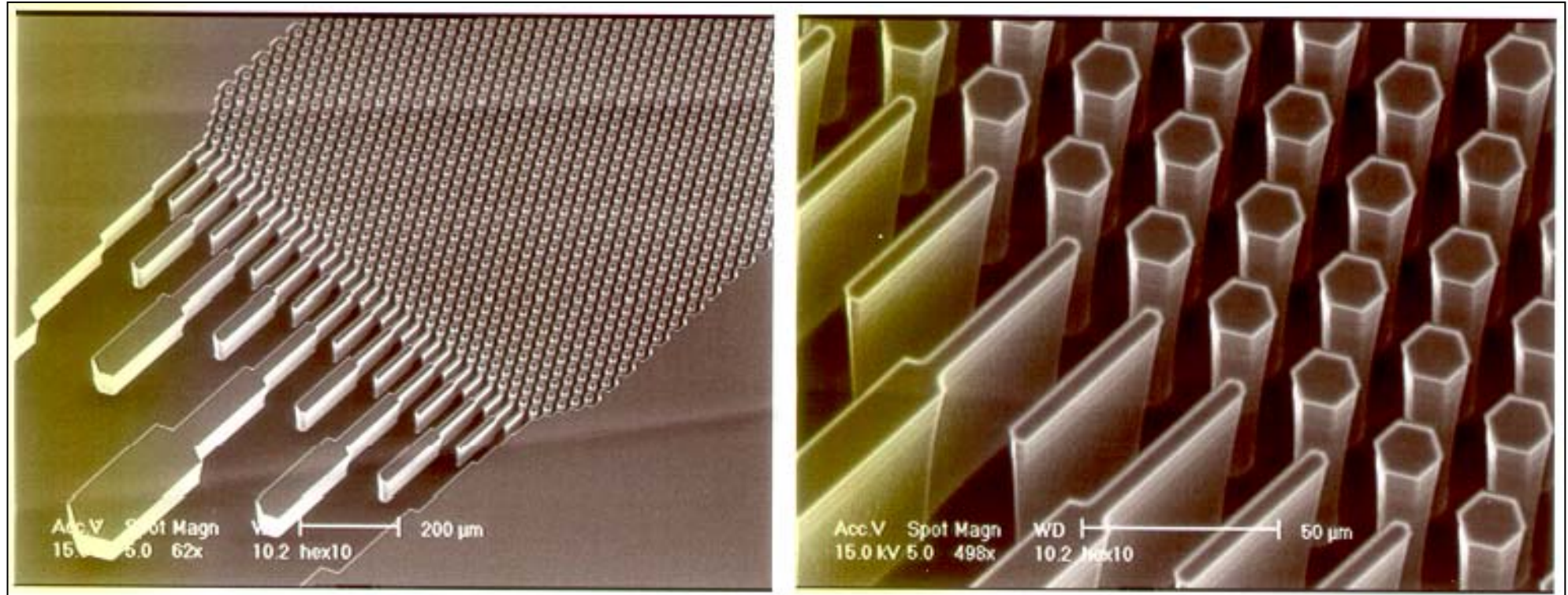




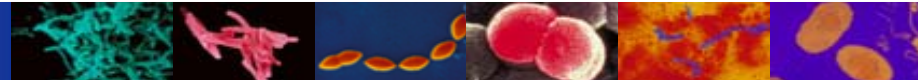
2- Protéomique et santé

BioChipLab : un laboratoire sur puce dédié à la Protéomique

Réacteur de digestion enzymatique (Trypsine)

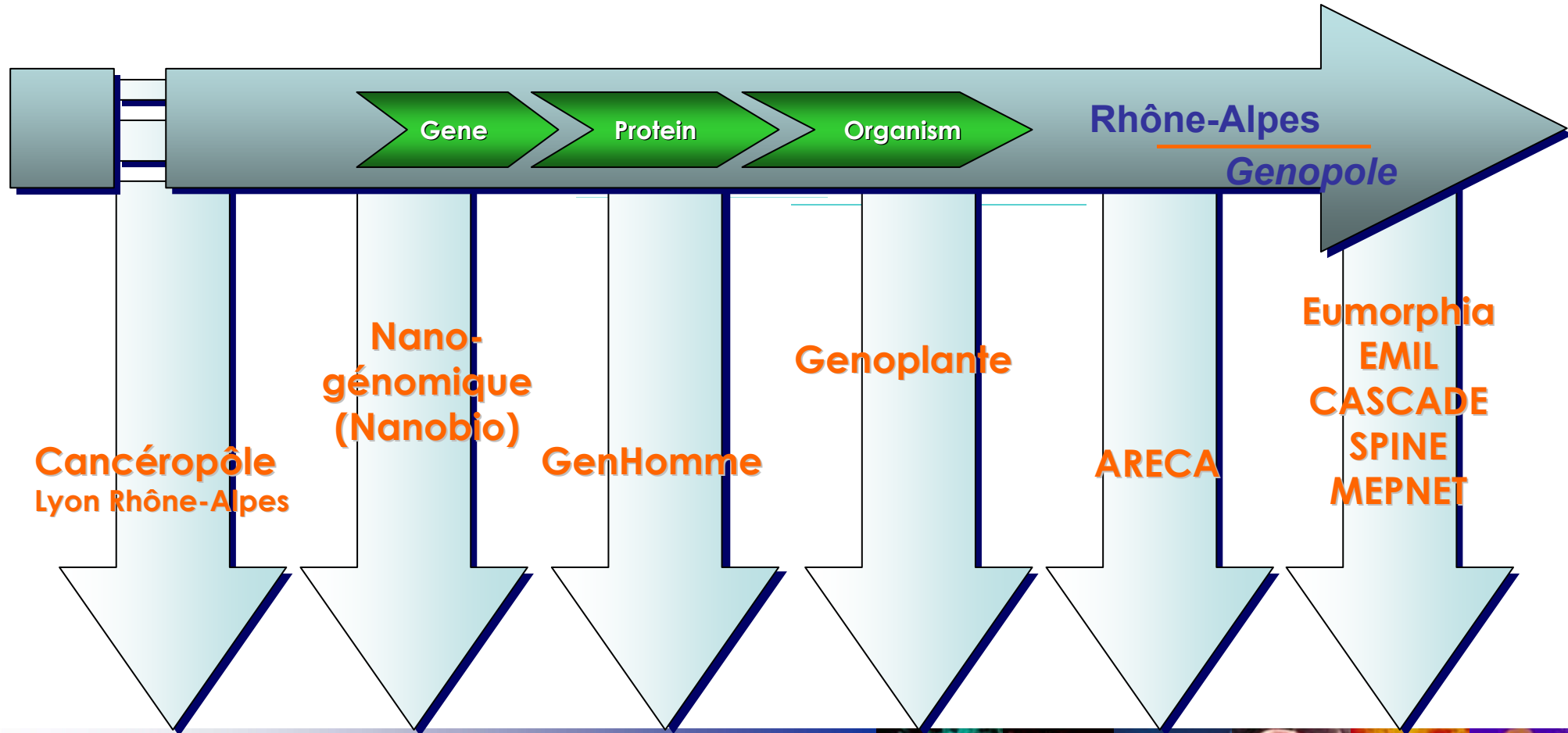


Micro-colonnes (silice) (CEA/LETI)



RHONE-ALPES GENOPOLE :

a mean agency for the development of technological ressources
... to implement big topical programs



RHONE-ALPES GENOPOLE

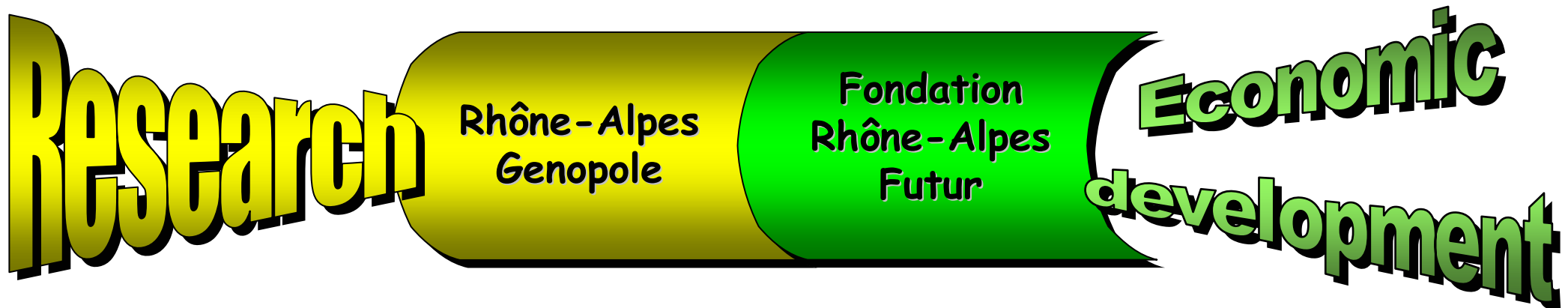
An impact on regional research and economic developments

Contribution of regional economical development :
Technological transfert,
biotech companies creation,
attractive effect on existing companies



A partnership with the Fondation Rhône-Alpes Futur

An original organisation recognised by the Research Ministry



Rhône-Alpes
Genopole





A legal & financial « vehicle »

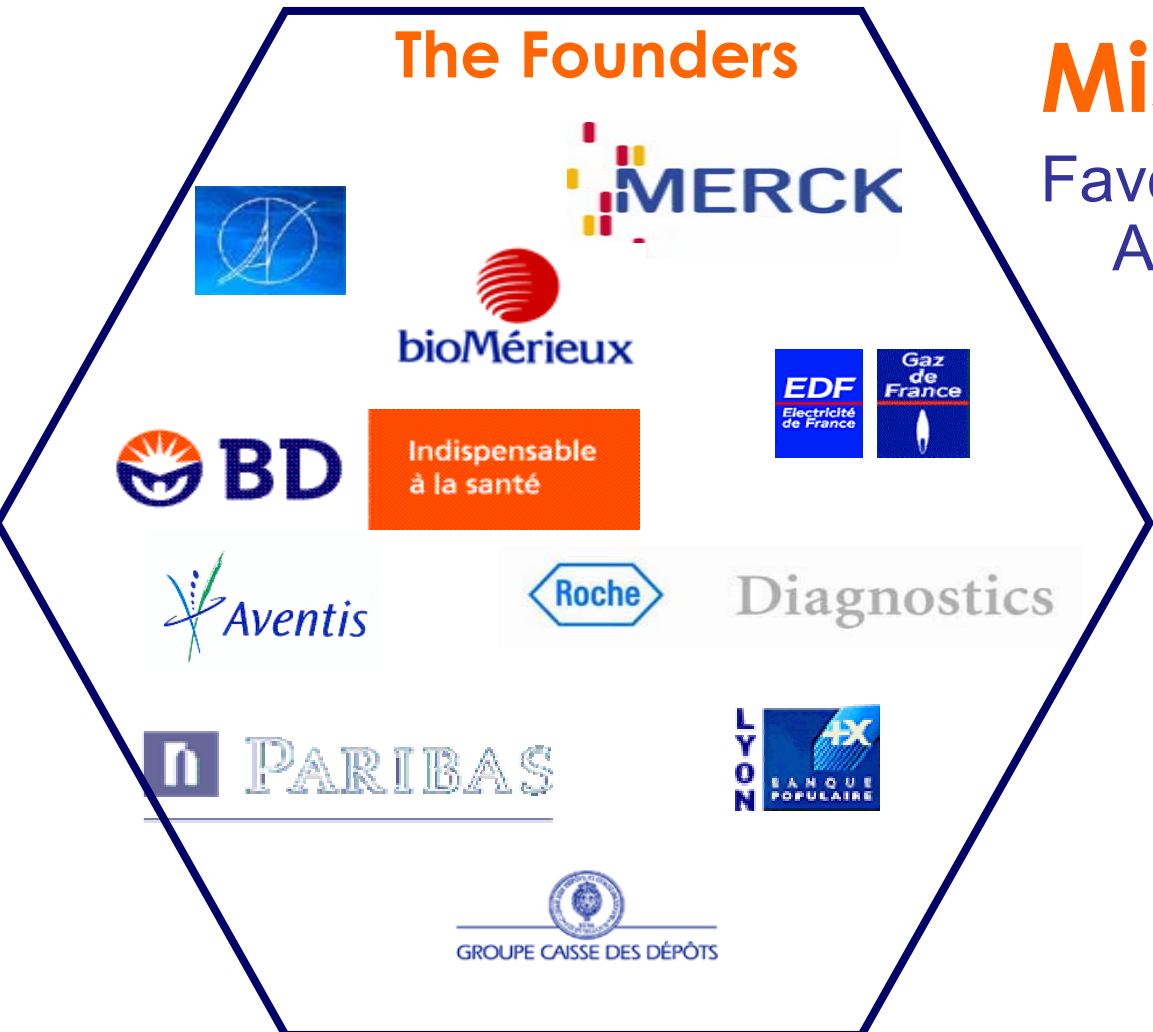
The Founders

Mission :

Favour industrial innovation by linking Academic research and Industry

Rhône-Alpes Region and DRRT Order:

A partnership with Rhône-Alpes Genopole to conduct the economical development

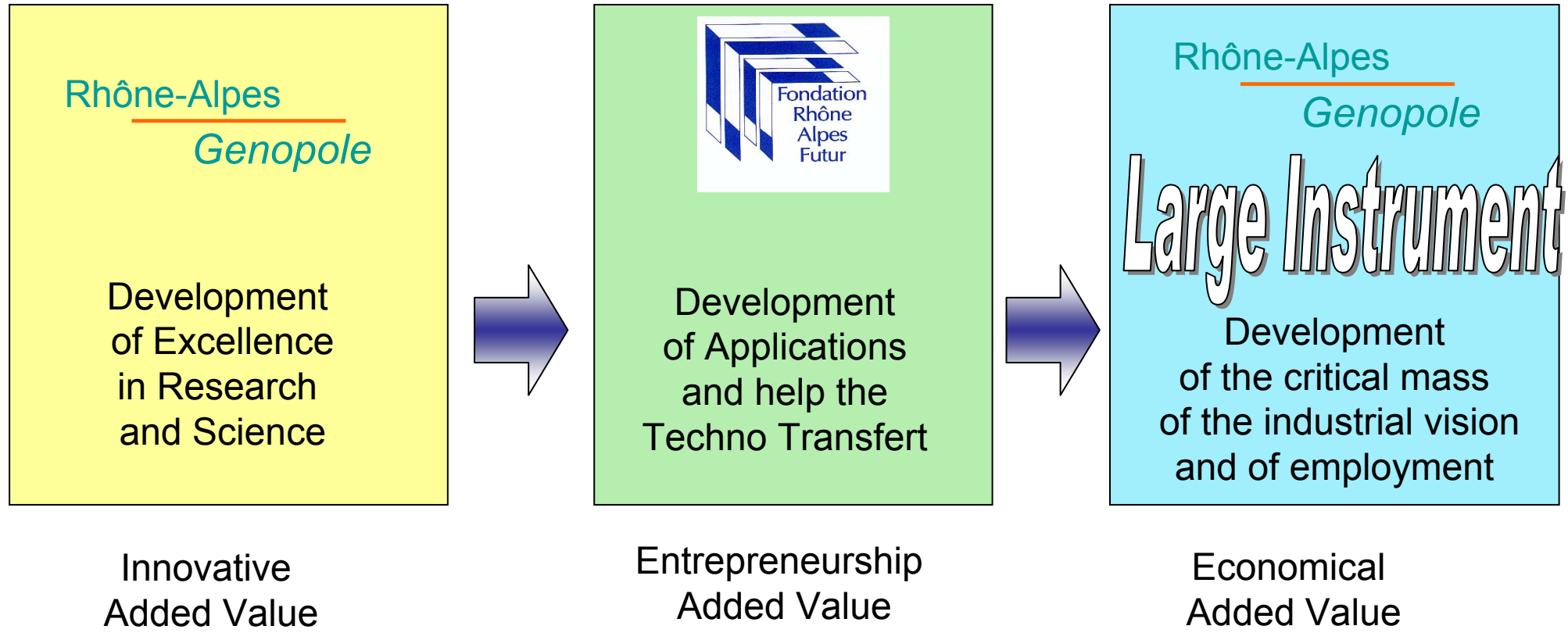


The Mission

- Keep the **cohesion** of the Genopole "Product"
- Bring **added value**
- **Last in time** and **up-date** the Genopole "Product "
- Actively participate to the structuring of a strong biotech way up



« Entrepreneurship behavior »



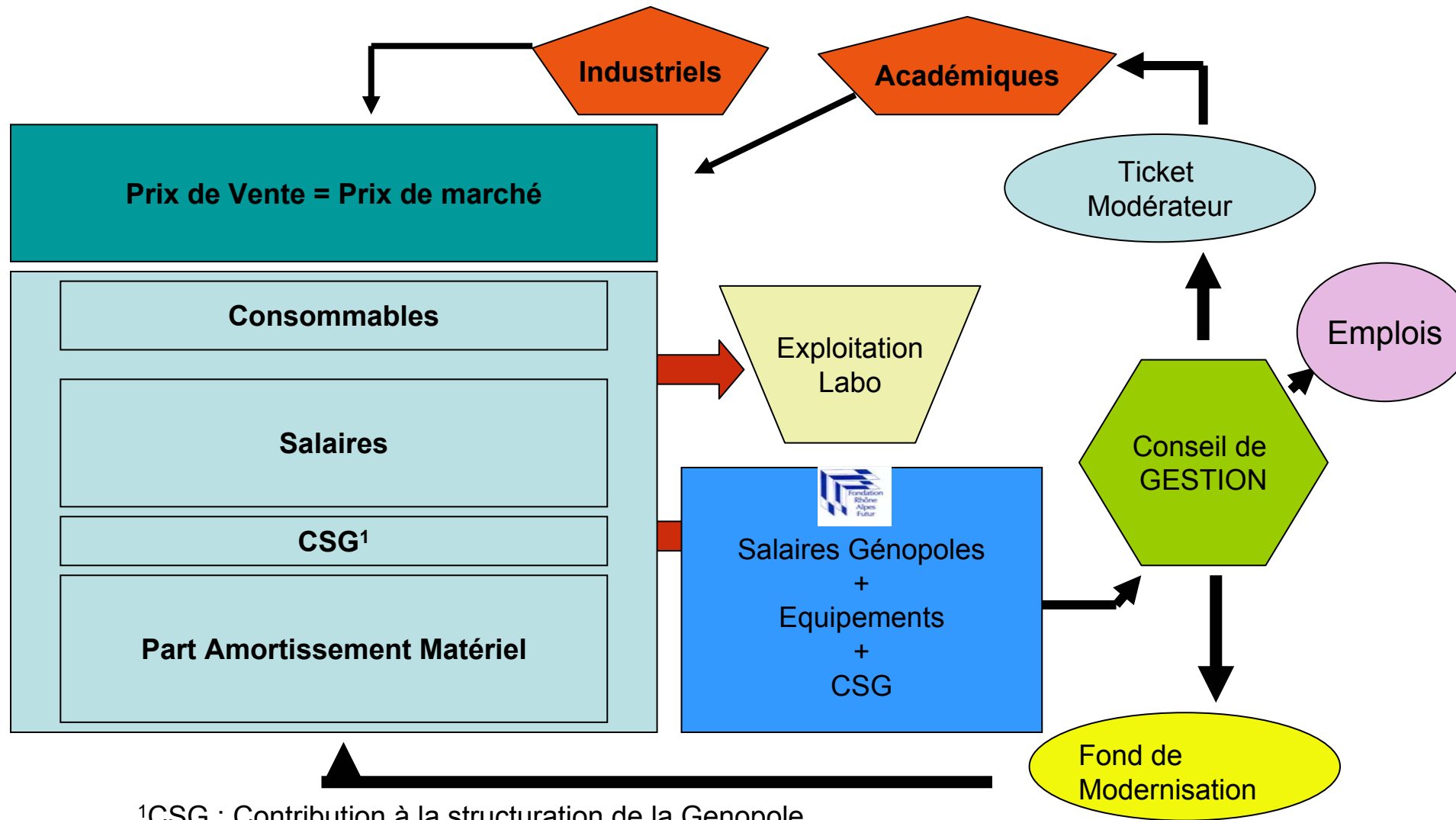
A business model and a business plan for the management of the technological platforms:

- the foundation hire professional permanent staff
- the research institutions have the property of equipments
- Sell the products at the market price
- Pooling the platforms' mutual risk
- A business development strategy (BAB, SAB...)
- Economical saving by optimising the outcomes
- Standardise the platform management : quality process, data bases and LIMS

→ platforms are open for service activities, R&D collaborations and exploitations



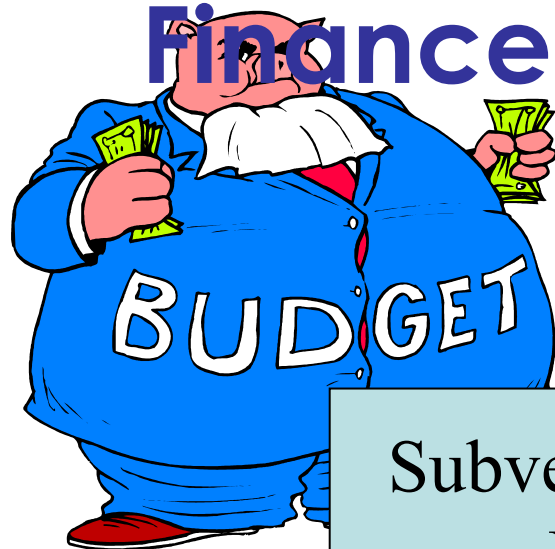
Fonctionnement : le cercle vertueux



¹CSG : Contribution à la structuration de la Genopole



Financement du Ticket Modérateur



Subvention Etat
RAG

Salaires + Amortissement
+ CSG

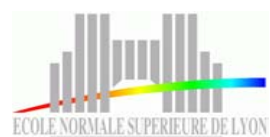
+ % VA Labo

Sur Exploitation Industrie



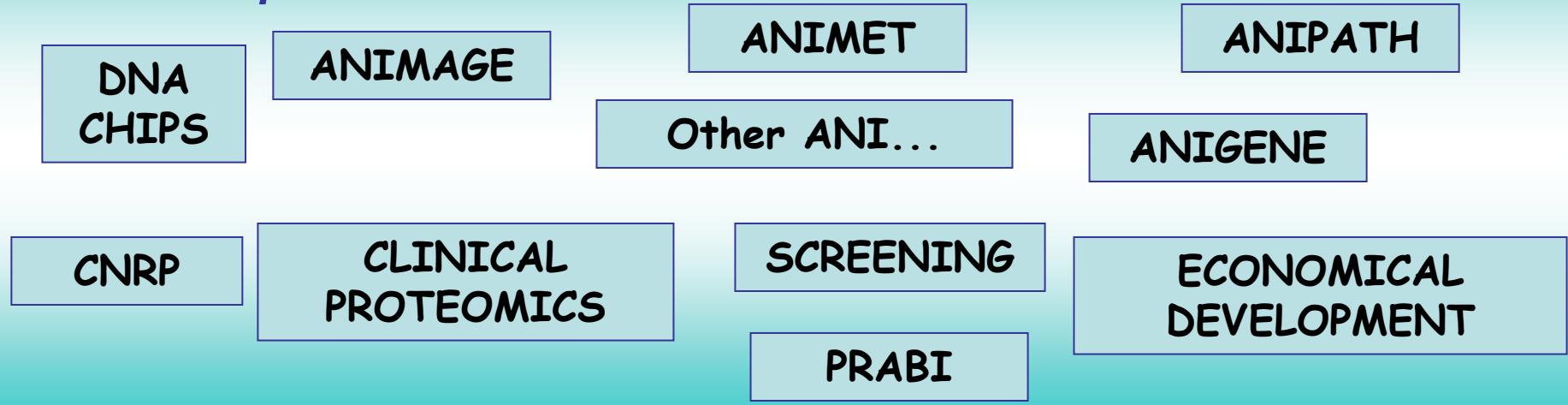
Rhône-Alpes Genopole

Large Regional Instrument in Genomics



Rhône-Alpes
Genopole

Large Regional Instrument in Genomics



Organisation

Elaboration Budget



Comité de Plate forme

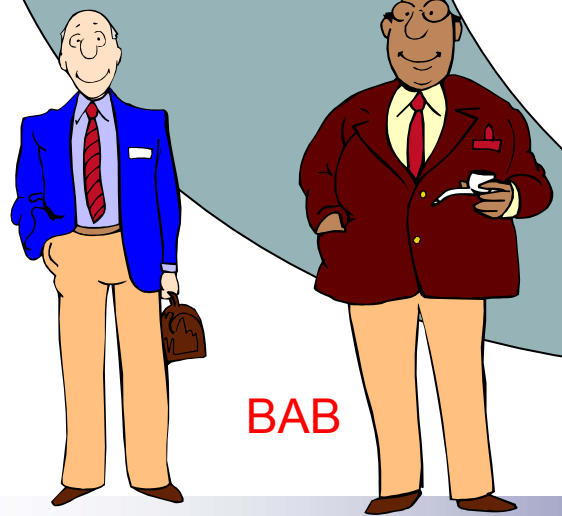
Décision



Conseil de Gestion



Conseils Scientifiques et Economiques



SAB

BAB

Validation Juridique



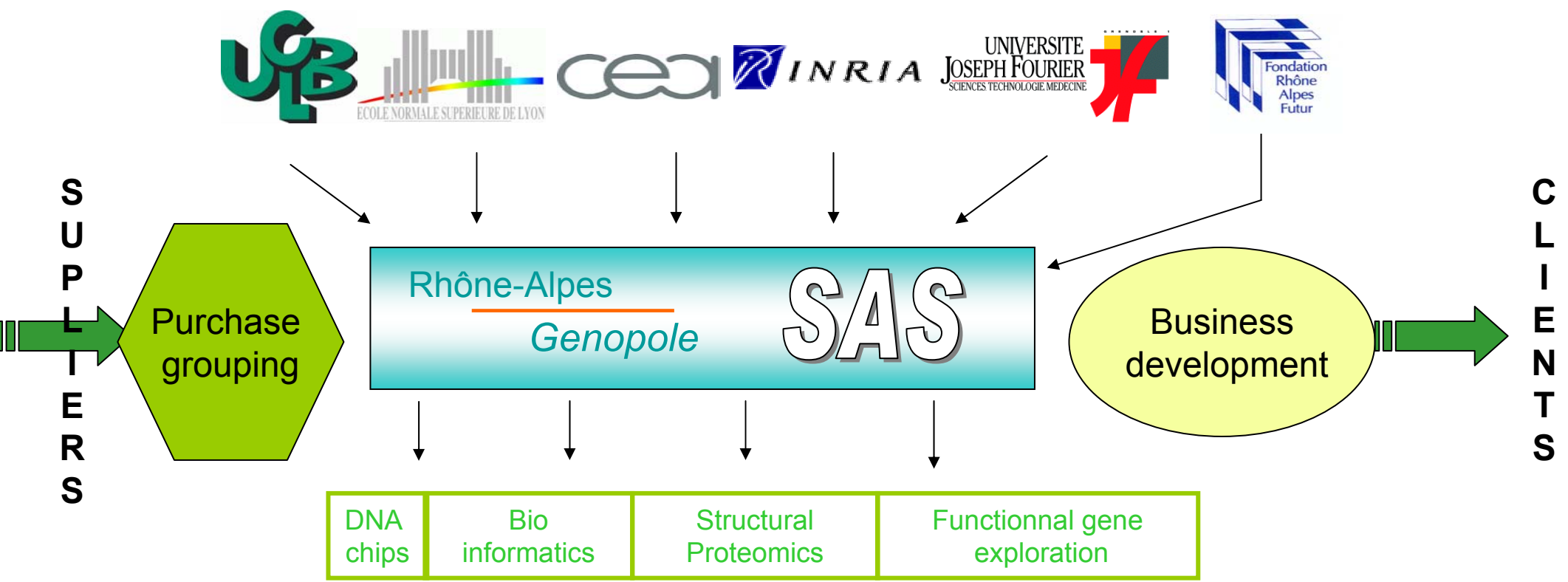
Comité de Suivi

Rhône-Alpes
Genopole

Arbitrages



Large Regional Instrument in Genomics



Structurer la filière biotechnologique



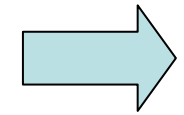
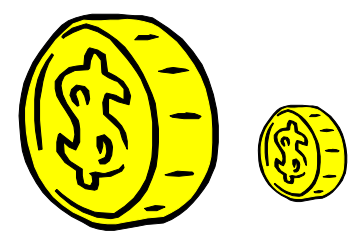
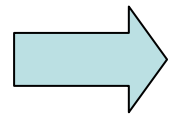
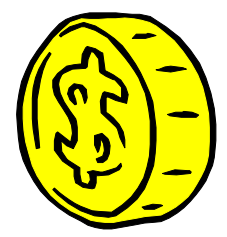
Large Regional Instrument in Genomics

- A continuum of all technologies and competencies in genomics able to support the development of large scale research programs of national and international levels,
- Strengthen the scientific cohesion between the regional research actors
- Standardise the processes of management of the platforms (quality control, estimation of service costs, process of charging to academic and private customers, business development),
- Create a unique booking office for customers,
- Coordinate the development of the various platforms

- Create a strong scientific image at the national and international (European) levels,
- Provide the local governing institutions a strong promoting force for economic development,
- Position the *Rhône-Alpes Genopole* as a strong actor within the National Biotechnology Plan.



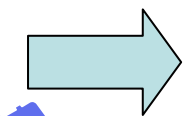
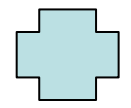
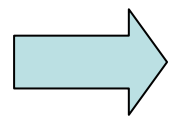
Return On Investment



Each invested €
On

Brings 1,05 € of refunds
To the Institutions

X 1,5 5ans later



and 1,75 € to the State
In Taxes and socials

X 2,5 5ans later



Contacts

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