



INSTITUT PASTEUR

technology
TRANSFER

"Licensing for success"



INSTITUT PASTEUR

www.pasteur.fr



INSTITUT PASTEUR

technology
TRANSFER

"Licensing for success"

INSTITUT PASTEUR

**INSTITUT PASTEUR IS A PRIVATE, NON PROFIT,
INSTITUTE DEDICATED TO
RESEARCH & PUBLIC HEALTH**



INSTITUT PASTEUR

- Created in 1887 by Louis Pasteur
- 2,700 people working in Paris
- 130 Research Units and Laboratories
- 22 National Reference Centers
- 10 WHO Collaborating Centers
- 22 Institut Pasteur Sites worldwide
- 8,500 people worldwide



INSTITUT PASTEUR RESEARCH FOCUS

- INFECTIOUS DISEASES
(AIDS, Hepatitis, Haemorrhagic fevers, SARS*,
Influenza, Meningitis, Listeria, Salmonella, Rabies...)
- MOLECULAR BIOLOGY
- GENOMICS, PROTEOMICS & BIOINFORMATICS
- GENETIC DISORDERS
- CANCER
- IMMUNOLOGY & IMMUNOPATHOLOGY
- NEUROBIOLOGY & NEUROPATHOLOGY
- PARASITOLOGY

**Severe Acute Respiratory Syndrome*



INSTITUT PASTEUR

technology
TRANSFER

"Licensing for success"

THE BUSINESS DEVELOPMENT AT INSTITUT PASTEUR



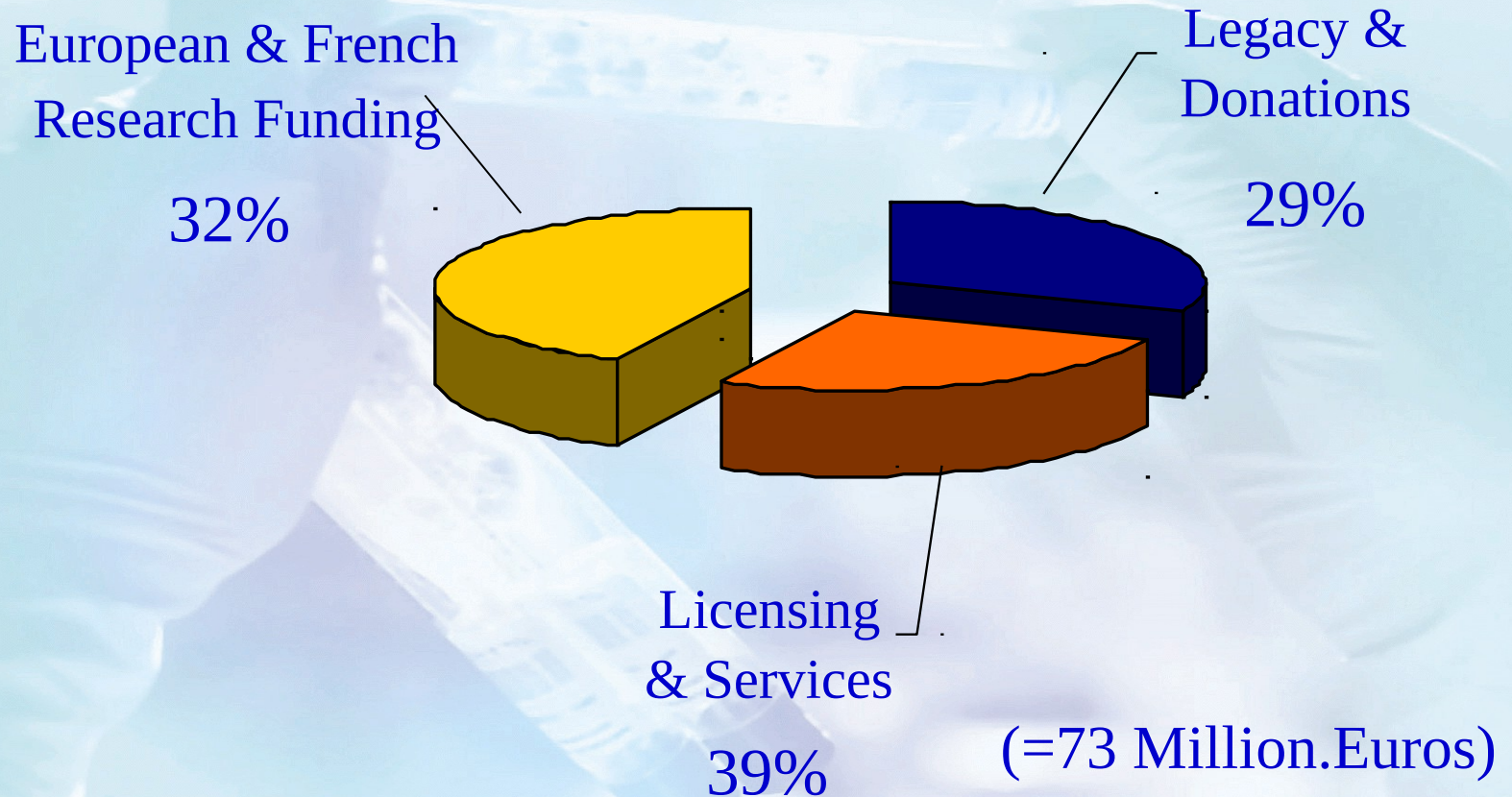
INSTITUT PASTEUR BUSINESS DEVELOPMENT

The Mission of the Institut Pasteur Business Development is to develop and commercialize (via a McEwen) the research activity by licensing the inventions (signed with the industry) developed and patented at Institut Pasteur.



INSTITUT PASTEUR REVENUES*

2002 Budget: 188 Millions Euros





BUSINESS DEVELOPMENT TEAM

Business Development
Management
3 people

Scientific
Advisory Board
10 people

Office of Patents
and Inventions
9 people

Office of
Technology Transfer
10 people

BioTop
Incubator
for Start-Ups
6 people

Office of Industrial
Agreements
4 people

Legal Department
10 people



INSTITUT PASTEUR BUSINESS DEVELOPMENT

- A portfolio including more than 3,300 patents
- >200 licensing agreements signed with Industry
- 30 R&D contracts signed with Industry each Year

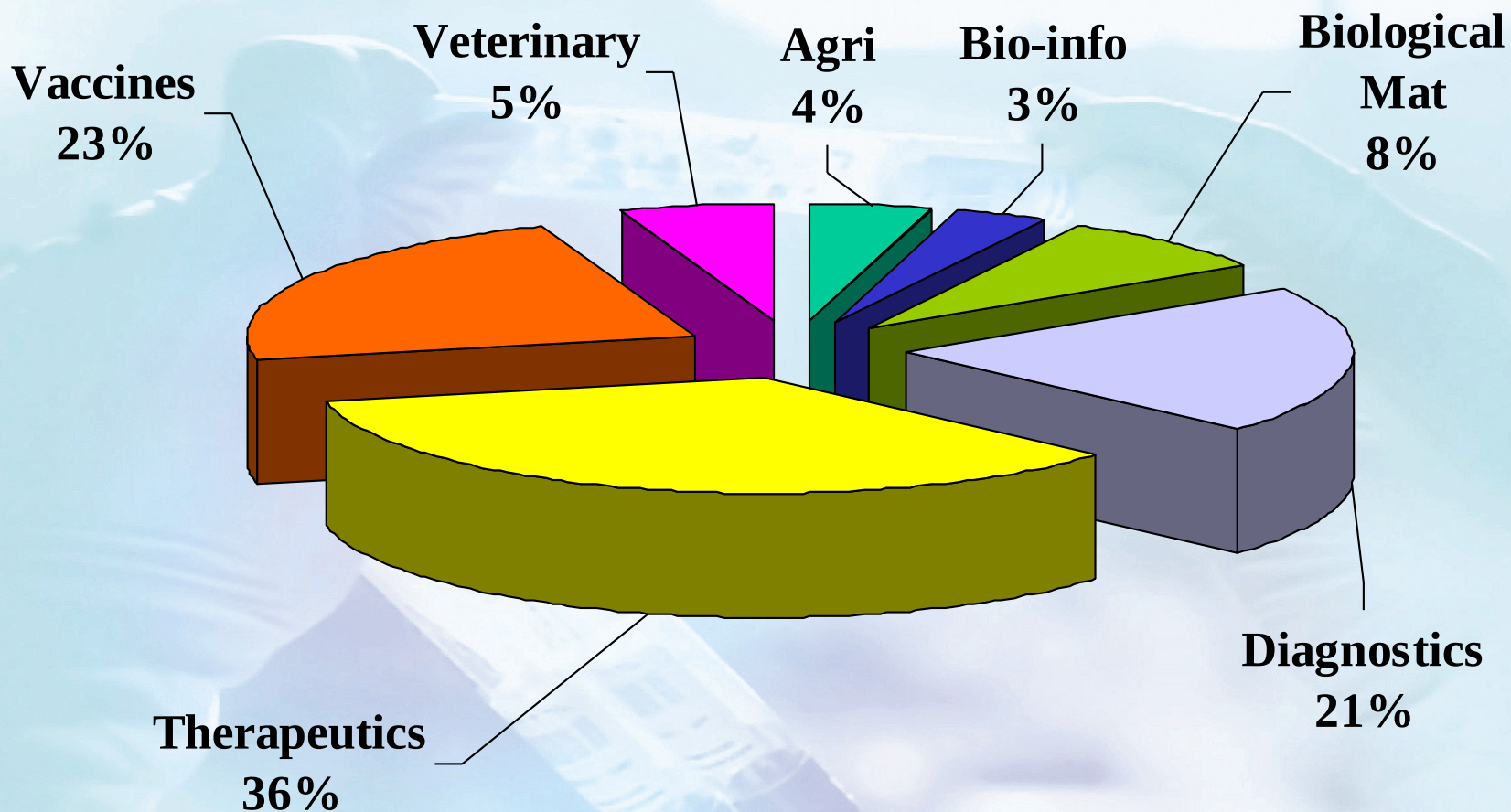


INSTITUT PASTEUR BUSINESS DEVELOPMENT PARTNERS

- Major companies (*Abbott, Astra Zeneca, Aventis, Aventis Pasteur, Bayer, Bio-Rad, Fort Dodge, Merial, Procter & Gamble, GlaxoSmithKline, Roche, Vivendi...*)
- Biotech companies
- Spin-off and Start-Up companies



INSTITUT PASTEUR LICENSING OPPORTUNITIES





INSTITUT PASTEUR

technology
TRANSFER
"Licensing for success"

INSTITUT PASTEUR POSITIONING

HOW TO CONTRIBUTE TO
THE BIOTECH INDUSTRY ?



INSTITUT PASTEUR STRATEGY

Step I

Open an incubator *BioTop*
to create Spin-off and Start-up companies
in Biotechnology



INSTITUT PASTEUR

technology
TRANSFER

"Licensing for success"

THE INSTITUT PASTEUR *BioTop* INCUBATOR



BioTop Incubator

- Created in December 2000
- Creation of Start-ups companies based on Institut Pasteur Intellectual Property (R&D and Licensing)
- Strategic support in intellectual property, management, Business Development, Legal issues,...
- Creation of a Seed Fund *BioDiscovery* (Institut Pasteur & Rothschild Bank)
- Support in Rising Funds (Venture Capital Network)



BioTop Incubator

- Companies created: Hybrigenics, Diatos

- Companies currently incubated:
 - ▶ Collectis: Rational Genome Engineering
 - ▶ Theraptosis: development of molecules acting on Apoptosis
 - ▶ Biocortech: Therapy for Behavior Disorders
 - ▶ BT Pharma: Mucosal Vaccines
 - ▶ Anaconda: Anti-Viral Therapeutic (HPV, HCV)
 - ▶ T-Epivaccines: Immunotherapy for Lungs and Prostate Cancer
 - ▶ Genomic Vision: Molecular Combing



INSTITUT PASTEUR STRATEGY

Step II

Beside the classical Licensing activity:

Diagnostics: Privileged Partnership (Bio-Rad for HIV, SARS...) and Collaborations with major players (Roche for HPV).

Vaccines: Privileged Partnership (Aventis Pasteur - Hepatitis B, HIV...) and collaboration with major players (GSK - HIV, SARS).



**CONDUCT IP OWN PRE-DEVELOPMENT
IN VACCINES AND THERAPEUTICS**



PRE-DEVELOPMENT IN VACCINES

- Strategic decision to conduct at Institut Pasteur the pre-development and clinical trials for specific vaccines (HIV, West Nile, Malaria, Tuberculosis, Dengue, Yellow Fever)
- Create a Start-up to market these vaccines through Licensing and Alliances



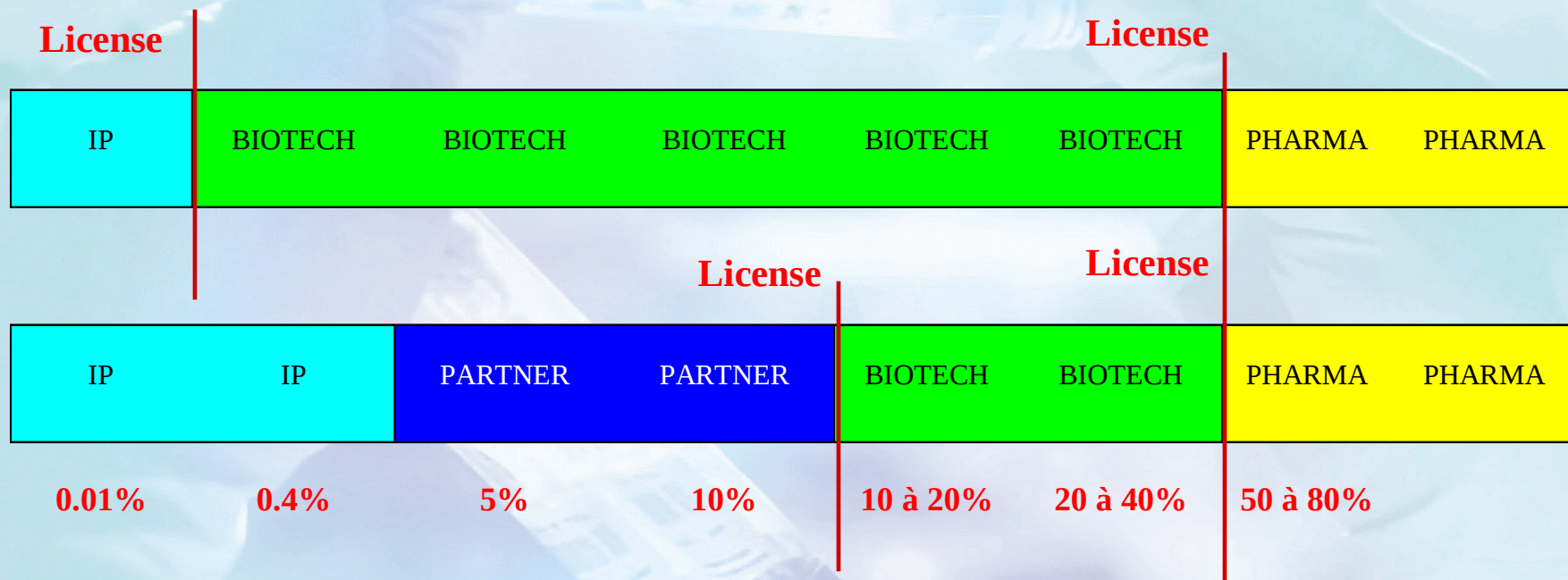
PRE-DEVELOPMENT IN THERAPEUTIC

- Develop a Therapeutic Chemistry Department to validate the different targets identified in the Institut Pasteur Research laboratories
- Conduct a preliminary molecules screening (Hits)
- In partnership, complete the target validation, the High Throughput screening and the Lead optimization
- License Leads to Biotechs.



IP STRATEGY OF PRE-DEVELOPEMENT IN THERAPEUTIC FIELD

Target Validation	Hit Screening	Lead optimization	Pre-Clinical	Phase I	Phase II	Phase III	Market
-------------------	---------------	-------------------	--------------	---------	----------	-----------	--------



% probability to reach the Market



INSTITUT PASTEUR STRATEGY

Step III

Consolidate the IP Business Development presence worldwide

Europe: Business Development Team (50 persons) in Paris

USA: join the Bioteam consortium Representative Bureau in Boston

Japan: Similar approach than in USA (Osaka ?)



INSTITUT PASTEUR NETWORK





CONCLUSION

Institut Pasteur needs to adapt its strategy to answer the different needs of the Biotech market:

- Participate to the creation of Start-Up companies
- Answer the needs of validated targets and optimized leads to feed Early Stage Deals (Biotech - Pharma)
- Contribute to fund raising (propose lower risk projects)
- Answer the needs of availability of Third World Vaccines