SATT Conectus Alsace®:
Collaborative Research & Technology Transfer
France’s paradigm shift
FRANCE’S PARADIGM SHIFT

A structured approach for a paradigm shift over 10 years

  - Foster the creation of start-ups & the participation of public researchers as shareholders
  - Creation of “public incubators” to foster the development of start-ups

- A shift towards a “project-based” funding mechanism for public research (2005)
  - Creation of the “National Research Agency”, operating under a “competitive call for proposal” system
  - A clear turn towards a “competitive and meritocratic” funding system

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A structured approach for a paradigm shift over 10 years

• A revamped « R&D Tax credit » system to attract and develop private R&D investment (2005/2008)
  - Tax credits from 500M€ in 2003 to over 5B€ in 2012
  - Most competitive rates in Europe: 30% to 40% tax credit for “private” R&D; 60% to 80% for R&D subcontracted to public laboratories!

• The creation of competitiveness clusters: building competitiveness out of public research (2005)
  - Strengthen regional innovation systems through collaboration between Industry – Research – Training (triple helix)
  - Develop and fund collaborative research programs between public labs and companies: over 3B€ funding

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FRANCE’S PARADIGM SHIFT


- €22B to fund projects presented by public entities or public/private consortia, to “feed” tomorrow’s competitiveness
- Competitive calls for proposal – International Jury: funding excellence in a meritocratic system
- An Investment, not a grant: ROI (financial & socio-economic) is required
- A 10 year funding: visibility & sustainability
- Few emblematic calls:
  - Campus of Excellence (800M€ / 1B€): to attract and retain talent
  - University – Hospital Institute (IHU) / Technological Research Institute (IRT) (150M€ / 300M€): focused research operator in Public Private Partnership
  - Super TTOs: consolidating collaborative research, investment in “Proof Of Concept”, and licensing (35M€ / 70M€)
Conectus Alsace: a rich substrat in life sciences
French “Investing in the Future” Program: 900M€ invested in “super TTOs”: the SATT

- 5 SATTs founded in Q1 2012 (SATT Conectus Alsace ranked as 1st*)
- 4 more SATTs created in S2 2012, 4 in 2013

SATT Conectus: a private company for Tech Transfer

- Capital stock €1M, 35M€ of funding secured
- French government 33%
- Public Research Organisations / Universities / French "Grandes Ecoles" 67%

4 main objectives

- Consolidate the tech transfer landscape
- Speed up tech transfer processes
- Invest in « Proof of Concept » for high potential technologies
- Strengthen the economic landscape in Alsace region

* By an International jury
Built on a rich history

- **Servalor**
  *One of the first TTO established in France*

- **Conectus**
  *A network dedicated to bridging the gap between Public Research and Industry*

**2011 National Call for Proposals**
Alsace: In the heart of Europe
Bordering Germany & Switzerland

The « Biovalley »: The highest concentration of resources in Life Sciences in Europe
50,000 jobs
100,000 students
15,000 researchers
600 companies
Alsace in Health & Life Sciences
French Leader in fundamental & applied research – over 3,000 researchers

Alsace scientific production - measured by impact factor – ranks in France:

No 1 in Fundamental Biology
No 1 in Applied Biology
No 1 in Chemistry
No 2 in Engineering Sciences

Pr. Lehn
Nobel Prize in Chemistry 1987
Director & Founder of ISIS

Pr. Hoffmann
Nobel Prize in Medicine 2011
CNRS Gold Award 2011

Pr. Chambon
Lasker Prize
Founder of IGBMC and ICS

Pr. Marescaux
MD, Hon.FRCS, FACS
Professor of digestive surgery
President of IRCAD
LabEx in Life Science

- **VRI**: Initiative for the creation of a Research Institute in Vaccines (Créteil, Bordeaux, Bures-sur-Yvette, Le Kremlin-Bicêtre, Paris, Strasbourg)

- **Transplantex**: New loci of histocompatibility and biomarkers for Human transplantation, from Discovery to clinical applications (Strasbourg; Paris; Nantes; San Francisco)

- **ParaFrap**: French Alliance against parasitic diseases (Strasbourg; Bordeaux; Roscoff; Paris; Montpellier; Toulouse; Lille; Marseille; Grenoble)

- **CAMI**: Medical and Surgical Computer-assisted practice (Strasbourg; Brest; Rennes; Paris; Montpellier; Grenoble (2 sites))

- **HEPSYS**: Functional Genomics applied to viral hepatitis and related liver diseases (Strasbourg)

- **MEDALIS**: Drug Research Centre (Strasbourg)

- **MitoCross**: Genome Expression and Coordination in Mitochondrial Functions and Dysfunctions (Strasbour)

- **INRT**: Integrative Biology: Nuclear dynamics, Regenerative & Translational medicine

- **IRON**: Innovative Radiopharmaceuticals in Oncology and Neurology (Strasbourg; Caen; Rennes; Tours; Orléans; Nantes; Angers)

- **NetRNA**: networks of regulatory RNAs in response to biotic and abiotic stresses: evolutionary and dynamic aspects
INVESTING IN THE FUTURE PROGRAM: ALSACE IS THE HIGHEST PERFORMER
Conectus Alsace: a new breed of TTO
2 core activities

Investing in IP & POC towards licensing and start-up creation
95% of funding directed towards investment activities
Tickets from 10K€ to 400K€+ per project
Can fund any activity (technical, studies, etc) provided that results are « transferable » once project is completed
A structured process supported by strong external expertise
SATT teams prescribe rather than execute

Providing services to public research organization in Alsace
Aiming at developing public private partnerships
Covers business development, contract negotiation & signing, scouting & capability mapping
Consolidation and acceleration for industrial partners

Conectus manage ALL new IP and licensing for all research units in Alsace

- A single gateway
- A single partner to negotiate with, with capacity to sign licences for all co-owners
- Speed & simplicity

Conectus develops collaborative research and manages research contracts

- A clear mapping of research capabilities & plateforms to quickly identify the right research team
- Conectus in charge of contract negotiation, signature, invoicing and financial execution for Strasbourg University and its engineering schools, Mulhouse University, INSERM, INSA & ENGEES
Organization
Investing in Proof of Concept projects
Bridging the gap...

Public R&D → Proof of concept / Pre-clinical → Clinical/Industrialisation

$\text{CONECTUS}
\text{RECHERCHE COLLABORATIVE & TRANSFERT DE TECHNOLOGIES}

$\text{SATT ALSACE}$
$\text{CONECTUS}$
$\text{SATT ALSACE}$
Investment drivers

Project & technology
IP, competitive positioning, team… External expertise

Risks
Scientific & technical
Market reach
Commercial

Reward
Financial
Industry competitiveness
Impact on territorial ecosystem
A structured process for construction & evaluation of investment opportunities
Expression of interest

Fast & easy « first step »
- Initiated by the researcher…
  - No CFP or specific date
  - A 2 pages document
- Or by Conectus team following scouting activities

First screen: does the project meets the « basic conditions » for considering an investment
- Existing (or anticipated) IP
- Sufficient exiting data & results
- Targeted application identified
- Capacity to deliver a Proof of Concept
- Anticipated opportunity & competitive advantages

Limiting resources & time invested priori to securing that basic conditions are met
A structured process for construction & evaluation of investment opportunities

1. Decision du montage de votre dossier
2. Decision de financement d'études externes
3. Validation de l'achèvement de votre dossier pour soumission
4. Validation pour soumission au comité d'investissement
5. Avis du comité d'investissement
6. Décision d'investissement
Building the POC project

- **Initial work rely on internal resources**
  - Researcher’s inputs
  - And information produced
    - By Conectus team
    - Through contacts and exchanges with industry players

- **A push towards « co-conception » of POC programs**
  - The private partner contribute to defining technical program & specifications
  - The private partner participate to project follow-up
  - The private partner has no other commitment, and do not carry any financial or technical risk
  - As a compensation for its contribution, the private partner is granted with a free option on an exclusive licence
  - The private partner can choose to raise its option at the end of the POC program, considering the results

**Early involvement of private partners: transforming a « technopush » into a « marketpull »**
Building the POC project (2)

**Preliminary studies can be funded to complete the application for the POC project**
- Technical studies
- Market or positionning studies
- IP studies
- A very short decision process (5 to 10 days) for tickets up to 50k€

**Once completed, the application will be evaluated:**
- **Technology:** positionning, key locks & challenges, risks, background
- **Intellectual Property & legal framework:** Freedom to operate, positioning of claims, regulatory environment…
- **Market opportunity:** market demand & competition, opportunity & competitive positionning, sunk or adoption costs…
- **Project:** deliverables, specifications, project chart, milestones & Go No GO, required resources…
- **Team:** scientific positionning, track record in techtransfer…
A structured process for construction & evaluation of investment opportunities
Evaluation & decision making

**Individual evaluation by industrial experts**
- Experts chosen on a project basis
- A structured evaluation tool with multiple criteria

**Evaluation by Conectus Investment Committee, composed of industry players & investors**
- The Committee is provided with
  - The application
  - Evaluation from industrial experts
  - NPV calculation based on expected market penetration & comparable deal structures

**Executive Board will make a decision based on the recommendation of the Investment Committee**
- The Executive Board focusses on the risk / reward profile, and on the potential impact on portfolio balance
Key challenges in POC investments...

Changing the culture of « business officers » in constructing projects and applications
From a « support to researcher approach »: how can I help secure the funding?
Towards an investment approach: is this a good project? A good investment?
And a « prescriptor’s » position: which work should be funded? What funding is justified?

Changing the « position » and culture of researchers
POC is not to fund their research or their lab, but a project
The actual project which will be funded might not be the project initially proposed
The work might not be performed in the lab: Outsourcing to a third party is favoured when possible
Key challenges in POC investments…

Ensuring that the work program is relevant in an industrial context
Scientific validation is not industrial validation: *will the program deliver the data, information or prototypes required by a company to make an in-licensing decision?*
Beyond marketing inputs, how to inject industrial inputs in program definition without unbalancing value sharing equation?

Building a sustainable and reliable expertise process
Experts must be chosen on a « per project » basis
Scientific / academic expertise is not always reliable, even when paid for
Industrial expertise’s quality, and expert’s investment, is highly variable
Challenge increase with the volume of projects per year
Key challenges in POC investments…

Evaluating properly risks related to projects without sterilizing the process
A purely « qualitative » approach, which do not impact future revenues evaluation, is short considering investments at stake
And a « blind » application of actualisation index used in industry or finance might not reflect the specific situation of POC investment towards licensing

Balancing objectives – which might not be converging - in the construction of an investment portfolio
SATT MUST generate revenues on their investments to survive and maintain their investment capacity
But SATT have been created to contribute to competitiveness for french industry, SMEs, and generate start-up
And they have to feed the development of regional innovation ecosystems
Key challenges in POC investments...

Deploy tight project management and follow up
Building in Go No GO and milestones
Deploy resources for project management
Researchers not always keen on providing information on a regular basis
Learn how to kill projects!

Ensure tight integration to regional and national ecosystems
SATT need strong partners to foster access to potential licensees
Ensuring a continuous process on the funding chain is key for startup creation:
we must be closer from venture and avoid waisting 1 year on fund raising
Over 3,8M€ invested on 18 POC projects
  • 95 projects considered, and 38 submitted
  • And over 300 ke in preliminary studies

A growing licensing activity
  • 12 licences granted, 3 towards start-ups
  • 20 license under negociation, 12 towards start-ups

6M€ of collaborative research programs signed

And 140 Invention Disclosures
Thank you for your attention!

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