

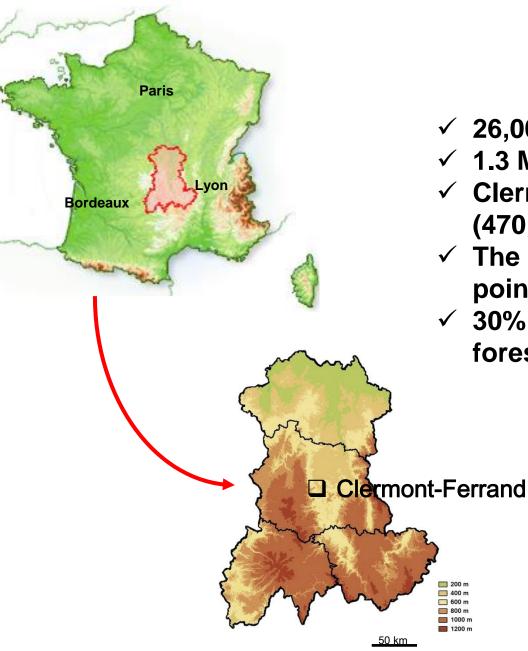


European Union European Regional Development Fund

## Auvergne « Academic sourcing » Aligning RIS3 / research topics

Virginie SQUIZZA<mark>TO – C</mark>harlotte LEGRAND

Brussels, February 14<sup>th</sup> 2016 | ClusteriX 2.0 4<sup>th</sup> meeting



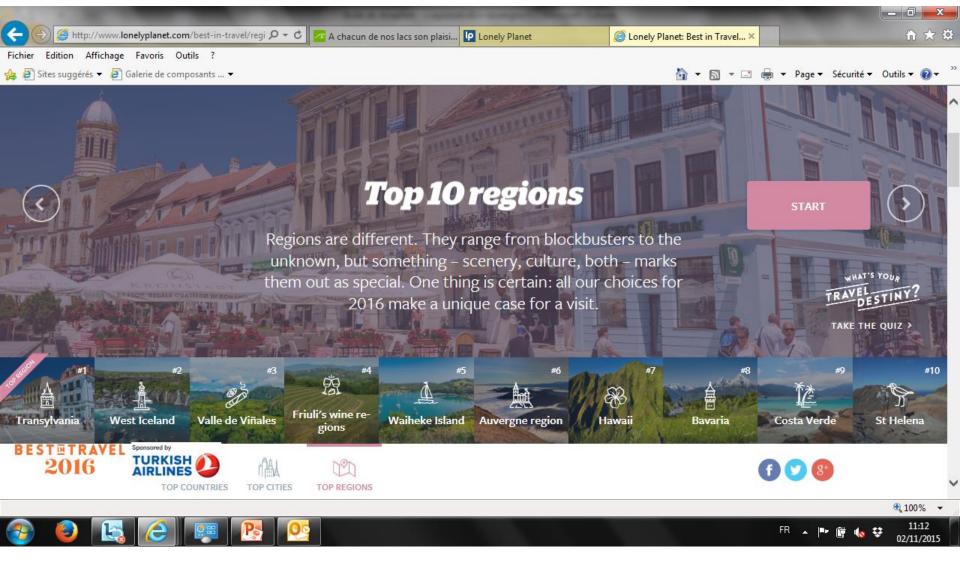


- ✓ 26,000 km<sup>2</sup>
- ✓ 1.3 M inhabitants
- ✓ Clermont-Fd : 142,000 people (470,000 with suburbs)
- ✓ The Sancy Massif is the highest point (1,886 m)
- $\checkmark$  30% of the territory is covered by forest

## The Auvergne territory

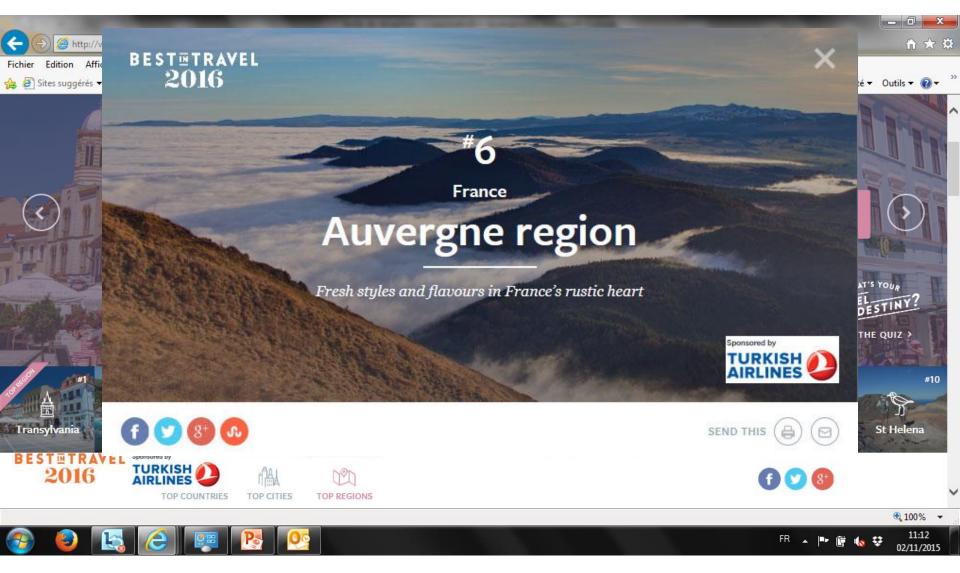
## Welcome to the region of hidden charms





## Welcome to the region of hidden charms





## A small territory focused on sciences



- > 1 university (merger Jan 1<sup>st</sup> 2017)
- 5 engineering schools
- 1 business school
- 4 national research centers

45,000 students / 11% from abroad
2,800 researchers (50% public / 50% private)
1,000 PhD
54 public laboratories
900 patents filed per year

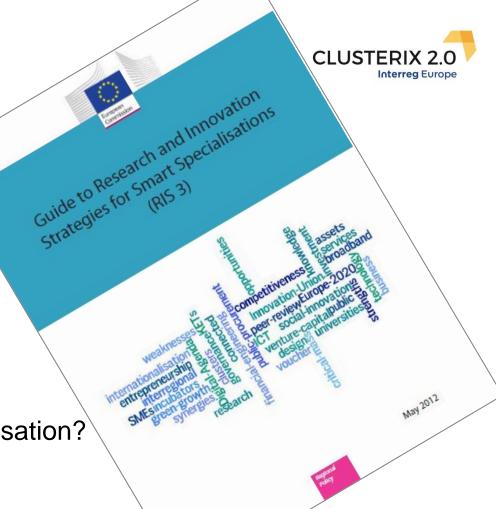
5<sup>th</sup> french area for budget for R&D (*R&D/GDP ratio*) 18<sup>th</sup> for its demography

The Auvergne territory belongs to the Auvergne-Rhône-Alpes regional council from January 1st 2016 UNIVERSITÉ Clermont Auvergne











### Young Lady, Innovation Strategy for Smart specialisation?









## Young Lady, Innovation Strategy for Smart specialisation?



## Not only, **Research** and **Innovation** Strategies for smart specialisation (RIS3)

7

May 2012





## The Auvergne RIS3 : 5 visions for the territory 5 strategic innovation sectors (SIS)



Life is motion – Mobility health prevention

- Power of land agriculture, livestock, bioressources
- Enjoy Auvergne identity & territory
- Trust Inside digital trust
- Smart Auvergne smart and efficient systems

> based on solid value chains from research lab to companies





#### 215 M€ **Regional Operational Program Auvergne\* ERDF-ESF 2014-2020** Axis 1: "Reinforce Research, Technological Development and 54 M€ Innovation" <u>Investment priority 1.a</u> - Enhancing research and innovation 27 M€ infrastructure and capacities to develop R&I excellence and [Only public body] promoting centers of competence >> academic knowledge production [Policy instruments addressed > ClusteriX 2.0 application] 27 M€ <u>Investment priority 1.b</u> - Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector >> innovation

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[...The ERDF vocation to helping building the "stairway to excellence"... he main role of ERDF is to invest in "innovation excellence", i.e. to translate knowledge into value/business opportunities, including applied research, cooperation between enterprises, R&D centres and higher education, product and service development, technology transfer, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, etc...]

Nonetheless, ERDF investments in building fundamental research infrastructures and purchasing equipment for fundamental research may be supported under the following conditions :

- the research fields must be in line with the smart specialization strategy (RIS3)
- ✓ there must be a justification on how the results of the research will be used to benefit the economic development of the region concerned.

[http://ec.europa.eu/regional\_policy/fr/ DRAFT THEMATIC GUIDANCE FICHE FOR DESK OFFICERS RESEARCH AND INNOVATION]



## Overview of the research & innovation policies of the regional council over the last 12 (10+2) years





## La Région Auvergne-Rhône-Alpes



# The Future of Europe relies on its territories

"Over 60% of decisions taken at the European level have a direct impact on municipalities, provinces, and regions and 70% to 80% of public investments in Europe are made by local and regional authorities."

"The European Union motto "United in diversity" could not better reflect the wide range of municipalities, counties, provinces, regions, etc. and the different ways in which they run and develop their communities and territories."





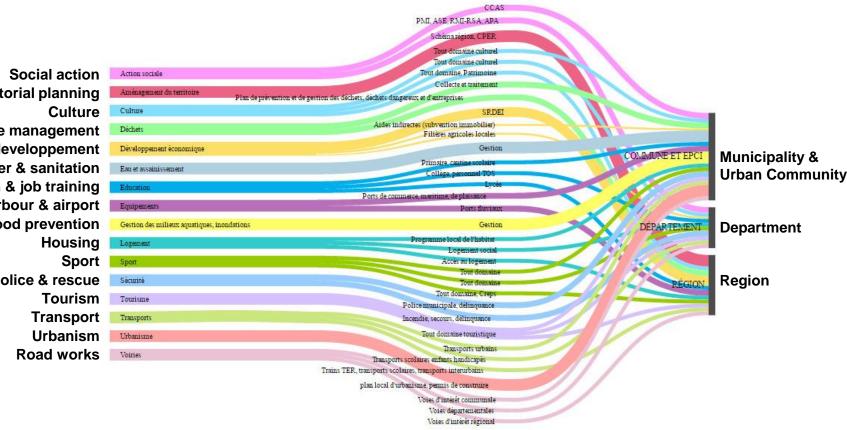
### **COMPETENCIES OF THE FRENCH REGIONS**



## Law NOTRe (New Territorial Organisation of the French Republic) voted on March 15<sup>th</sup> 2015



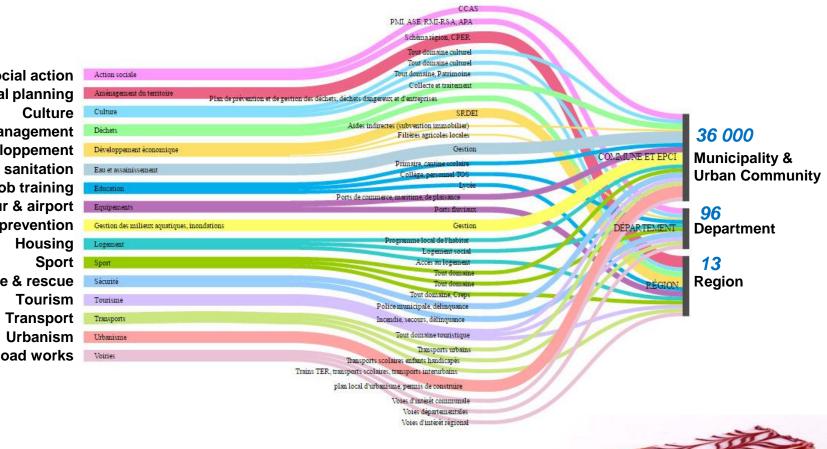
Social action **Territorial planning** Culture Waste management **Economic developpement** Water & sanitation Education & job training Harbour & airport Wetlands & flood prevention Housing Sport **Police & rescue** Tourism Transport Urbanism **Road works** 



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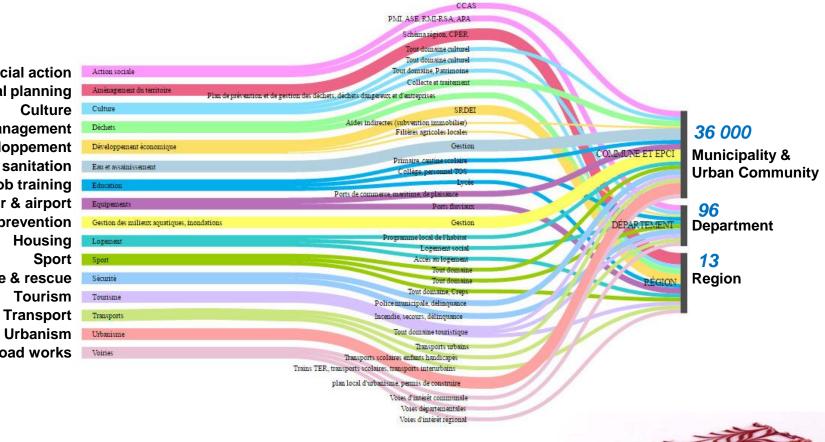
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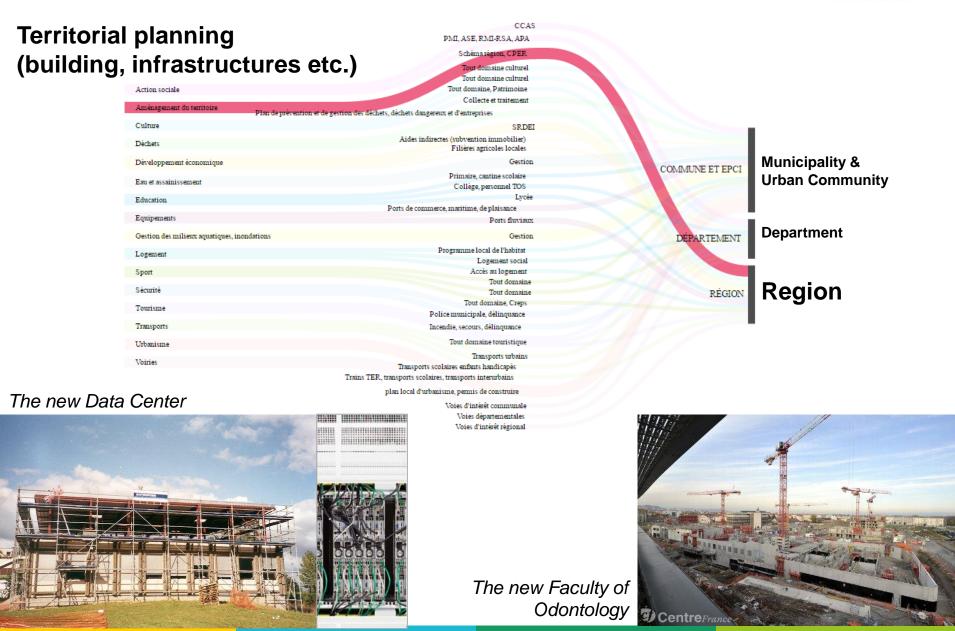
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## **Research?**

#### **High School # Education # Research**

#### 





| Economic development |  | CCAS   |                 |                                   |
|----------------------|--|--|-----------------|-----------------------------------|
|                      |  | PMI, ASE, RMI-RSA, APA   |                 |                                   |
|                      |  | Schéma région, CPER.   |                 |                                   |
|                      |  | Tout domaine culturel  |                 |                                   |
|                      |  | Tout domaine culturel  |                 |                                   |
|                      | Action sociale                         | Tout domaine, Patrimoine   |                 |                                   |
|                      |  | Collecte et traitement   |                 |                                   |
|                      | Aménagement du territoire              | Plan de prévention et de gestion des déchets, déchets dangereux et d'entreprises |                 |                                   |
|                      | Culture                                | SRDEI  |                 |                                   |
|                      | Déchets                                | Aides indirectes (subvention immobilier)   |                 |                                   |
|                      | Decliers                               | Filières agricoles locales   |                 | Municipality &<br>Urban Community |
|                      | Développement économique               | Gestion  | COMMUNE ET EPCI |                                   |
|                      | Eau et assainissement                  | Primaire, cantine scolaire   |                 |                                   |
|                      | Eau et assannssement                   | Collège, personnel TOS   |                 |                                   |
|                      | Education                              | Lycée  |                 |                                   |
|                      |  | Ports de commerce, maritime, de plaisance  |                 |                                   |
|                      | Equipements                            | Ports fluviaux   |                 |                                   |
|                      | Gestion des milieux aquatiques, inonda | ations Gestion   | DÉPARTEMENT     | Department                        |
|                      | Logement                               | Programme local de l'habitat   |                 | · ·                               |
|                      | Doğunun                                | Logement social  |                 |                                   |
|                      | Sport                                  | Accès su logement  | RÉGION          | Region                            |
|                      |  | Tout domaine   |                 |                                   |
|                      | Sécurité                               | Tout domaine   |                 |                                   |
|                      | Tourisme                               | Tout domaine, Creps  |                 |                                   |
|                      | Tourant                                | Police municipale, délinquance   |                 |                                   |
|                      | Transports                             | Incendie, secours, délinquance   |                 |                                   |
|                      | Urbanisme                              | Tout domaine touristique   |                 |                                   |
|                      |  | Transports urbains   |                 |                                   |
|                      | Voiries                                | Transports scolaires enfants handicapés  |                 |                                   |
|                      |  | Trains TER, transports scolaires, transports interurbains                        |                 |                                   |
|                      |  | plan local d'urbanisme, pennis de construire                                     |                 |                                   |
|                      |  | Voies d'intérêt communale  |                 |                                   |
| 1                    |  | Voies départementales  |                 |                                   |
|                      |  | Voies d'intérêt régional   |                 |                                   |
|                      |  |  |                 |                                   |

Research # Higher Education # Innovation >>> Economic Dev. Department [from 2008]

### Structuring of Auvergne research & innovation policies



## Structuring of Auvergne research & innovation policies



2005 : national labelling for competitiveness clusters









Pôle de compétitivité caoutchouc et polymères



#### 2005 : national labelling for competitiveness clusters









Pôle de compétitivité caoutchouc et polymères

Cofunding for public/private collaborative projets (National+ERDF)





#### 2005 : national labelling for competitiveness clusters









Pôle de compétitivité caoutchouc et polymères

Cofunding for public/private collaborative projets (National+ERDF)

Entrepreneur Grants



#### 

Cofunding for public/private collaborative projets (National+ERDF)

Entrepreneur Grants

7.5, 15 or 25 k€/project > few innovative projects and very low number coming from academics







# labs campaign : increase in awareness of innovation, commercialization and entrepreneurship# screening : 60 projects at « dormant state »



#### Cofunding for public/private collaborative projets (National+ERDF)

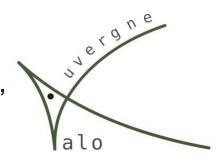
Entrepreneur Grants







# labs campaign : increase in awareness of innovation, commercialization and entrepreneurship# screening : 60 projects at « dormant state »



Cofunding for public/private collaborative projets (National+ERDF)

Entrepreneur Grants

Innovation Grants (entrepreneurs, tech transfer)

# post-doc, engineer, technician (6/12/18 months contract) or PhD# partnerships/licensing contract with SMEs# entrepreneurs coached by incubator





Cofunding for public/private collaborative projets (National+ERDF)

| Entrepreneur |  |
|--------------|--|
| Grants       |  |

Innovation Grants (entrepreneurs, tech transfer)





Entrepreneur Grants

Innovation Grants (entrepreneurs, tech transfer)

Research Grants for sectors # PhD, post-doc# basic or applied research# Involvement of 3 SMEs



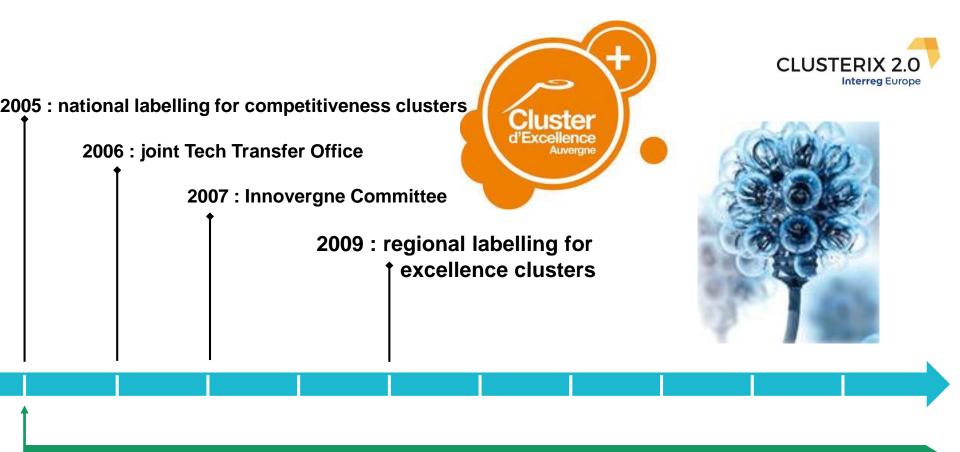


Entrepreneur Grants

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# PhD, post-doc# basic or applied research# Involvement of 3 SMEs

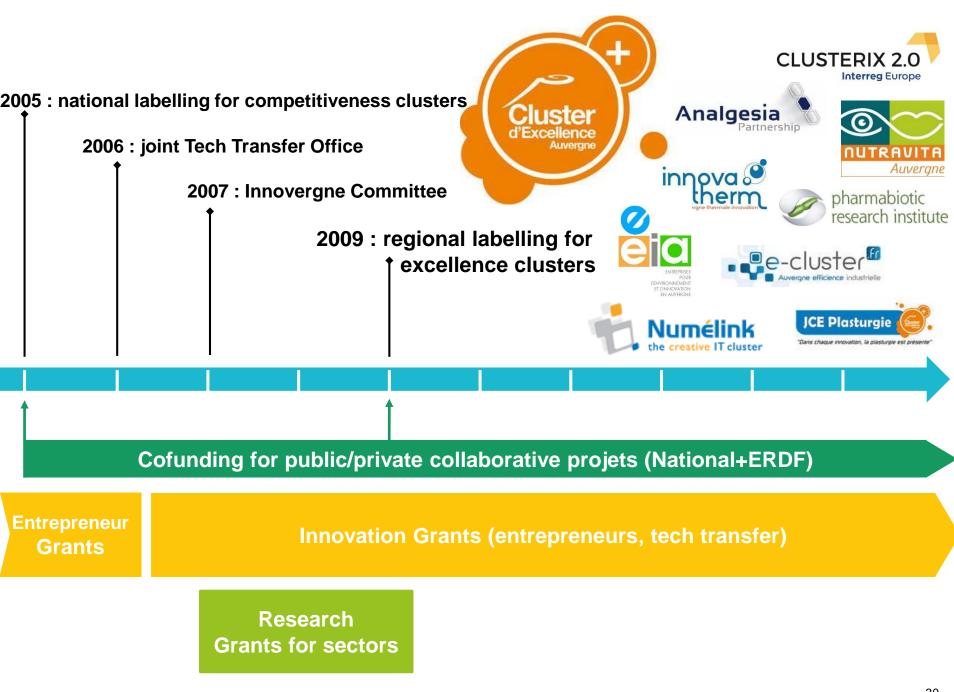


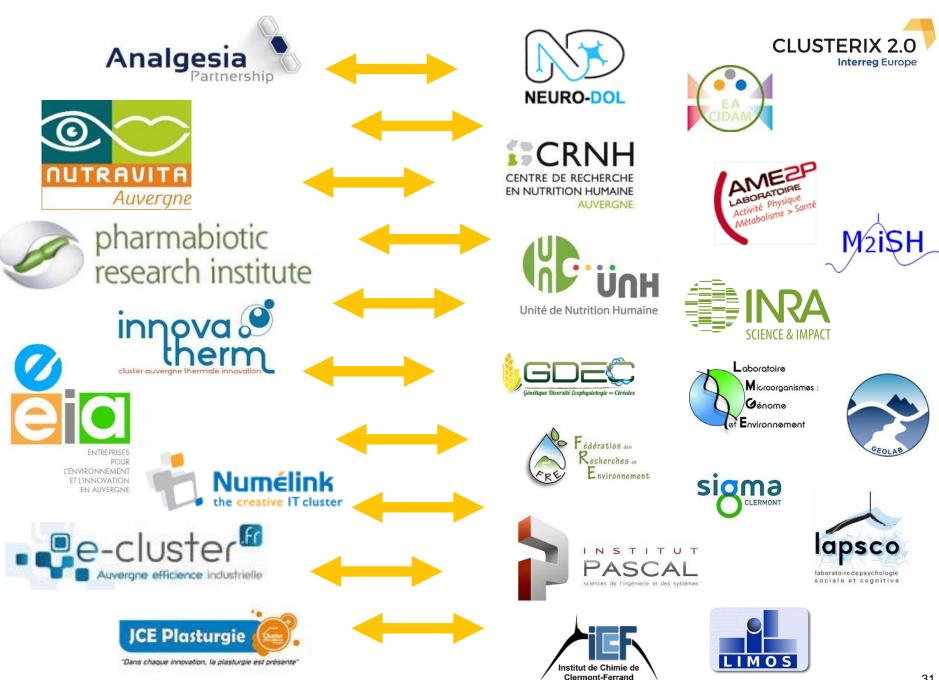
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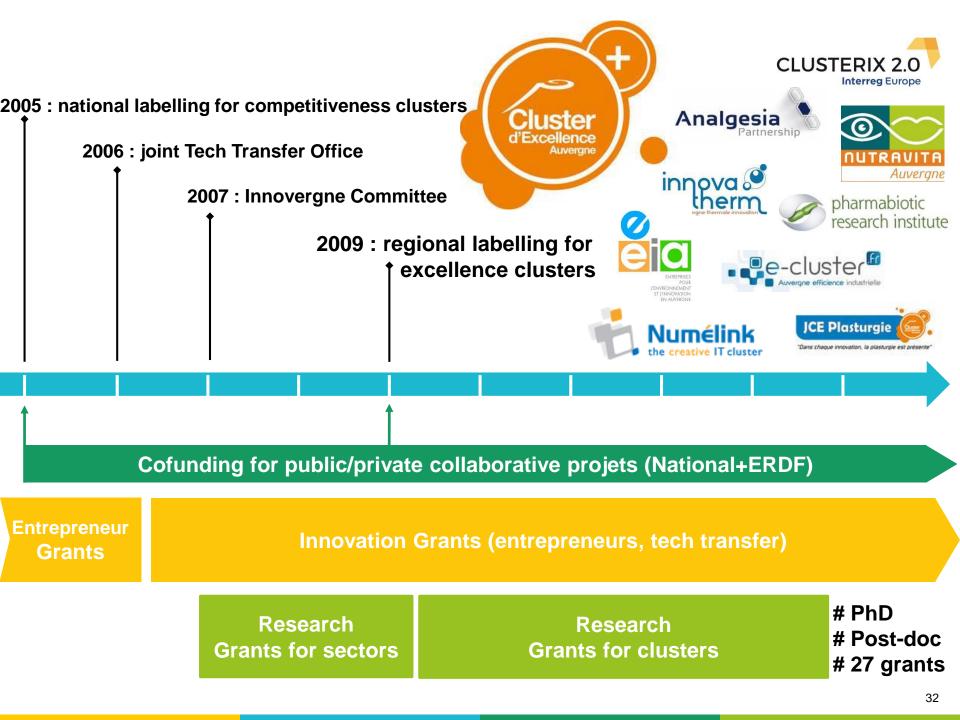
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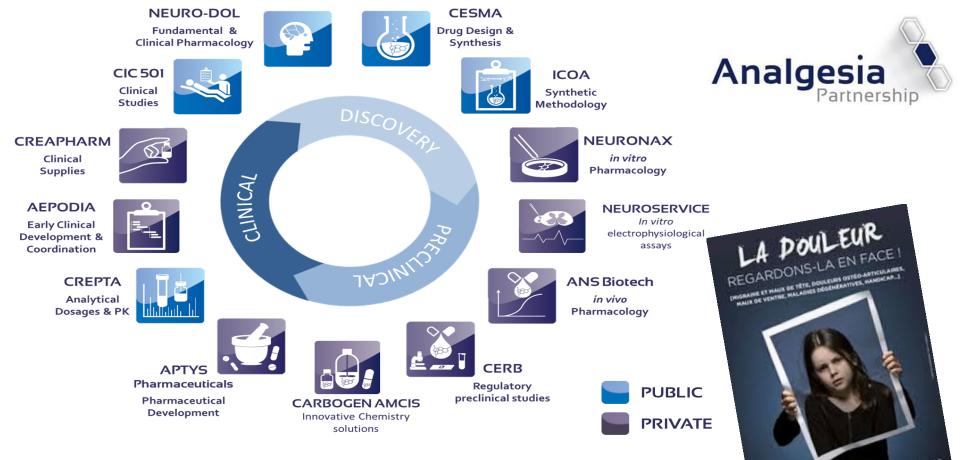
Innovation Grants (entrepreneurs, tech transfer)

Research Grants for sectors





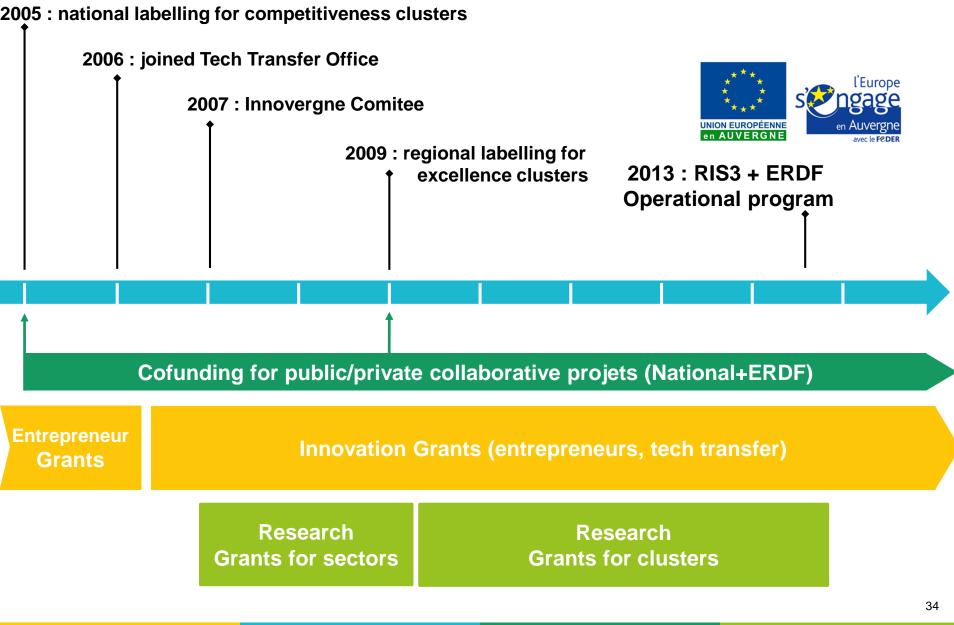




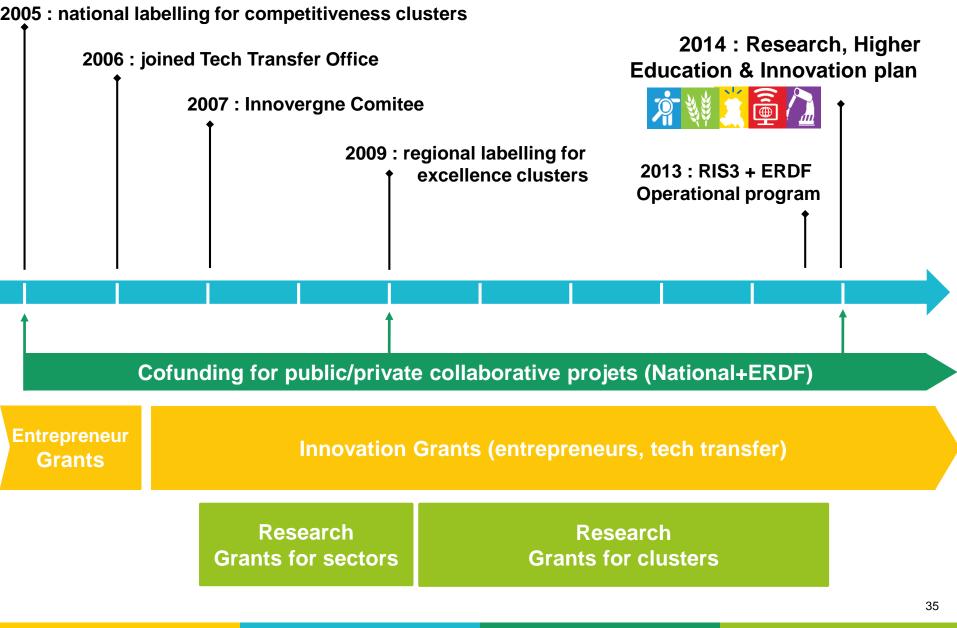
- Highly specialized cluster: only Pain! Unique in Europe
- Nutual enrichment of Public-Private partnership
- At the forefront of Innovation thanks to Internal R&D
- Comprehensive & complementary expertise
  - 1. New drug : morphine substitute
  - 2. Repositionning of drugs



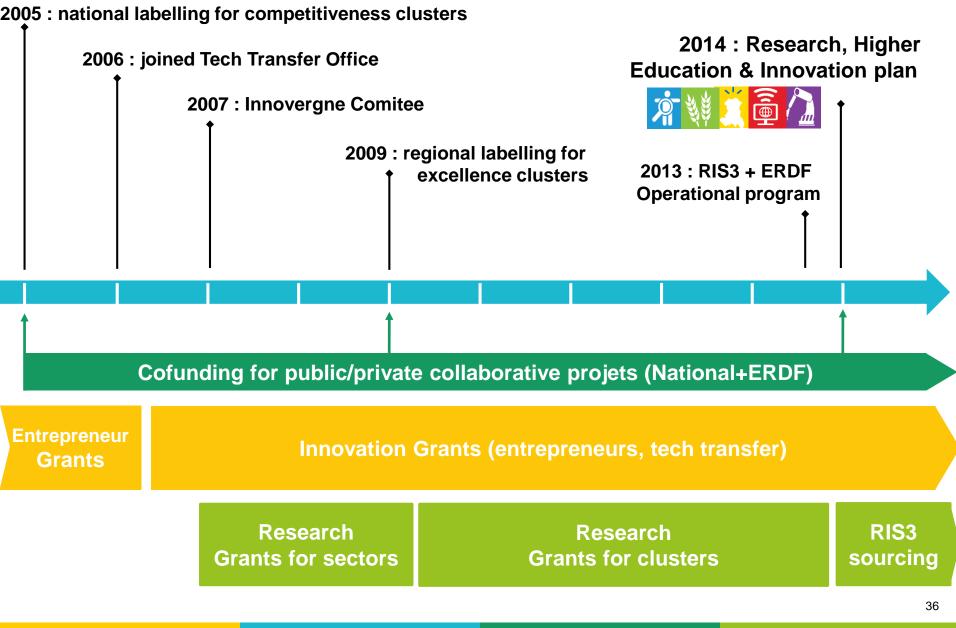








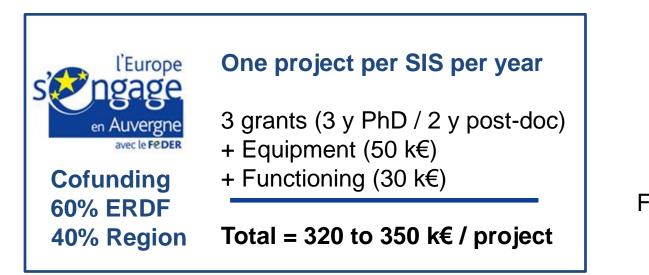




## **RIS3 Academic sourcing**

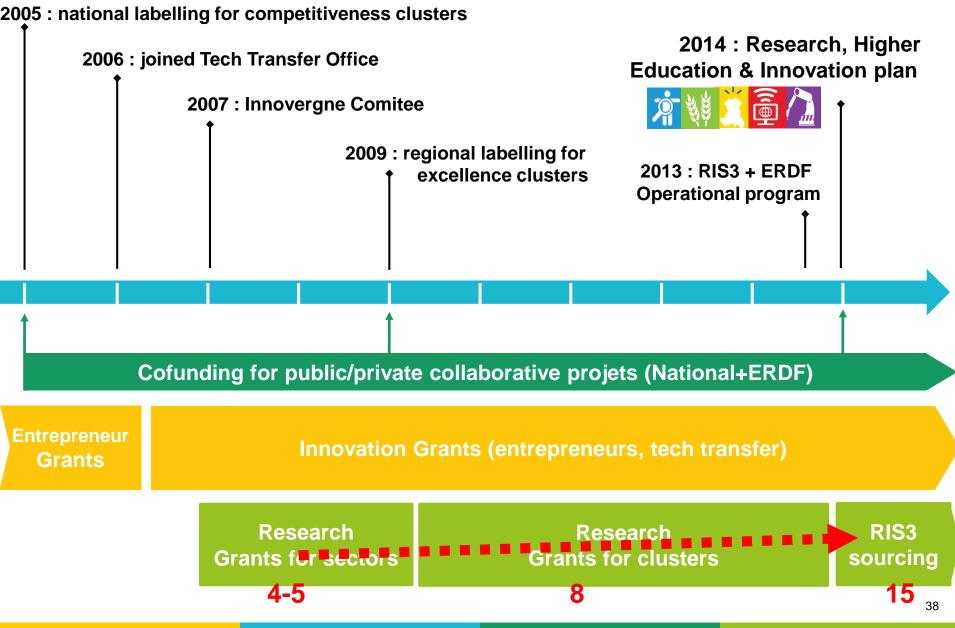


- ✓ **Future-oriented** : new technological and scientific knowledge
- ✓ Related to the industrial collective strategy of the SIS
- ✓ Strategic **investment** in the regional laboratories
- Collaboration : application submitted by the technical committee of the SIS
- Leadership & excellence : external scientific peer-review
- Commitment : long-term partnership agreement signed by the stakeholders



LEADERSHIP COMMITMENT COLLABORATION FUTURE-ORIENTED INVESTMENT





# **RIS3 Academic sourcing : 8 projects**



- ➤ Multidisciplinary research for better management of inflammatory rheumatism. Towards new therapeutic and nutritional approaches [330,000 €]
- Longitudinal study of the influence of diet and physical activity on muscle and bone health [330,000 €]
- ➢ Innovative biomarkers for the quality of meat products [340,000 €]
- ➤ Mobilizing and bio-refining of the wood resource for the production of secondgeneration ethanol and the creation of molecules with high added value [350,000 €]



Ø

- ➤ Digital trust, contactless technology, authentication and identification, traceability of uses, acceptability [335,000 €]
  - > Automatic classification and annotation of scanned documents [340,000 €]

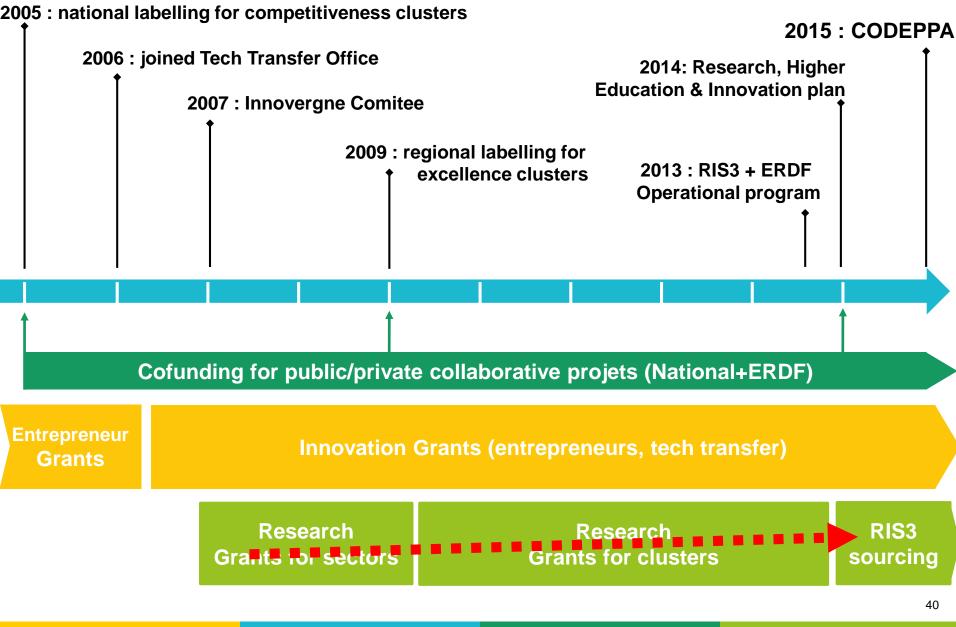


Connected factory of the future [350,000 €]
Robotics and reliable industrial transit [350,000



2 years > 2.735 M€





## **Governance of the RIS3**





## ✓CODEPPA

(contrat de développement économique public/privé) = public/private agreement for economic development

Signed July 9th 2015

Public stakeholders: Regional Council, Universities, Economic
 Chamber, BPI (national public bank for investment), Business school
 Private stakeholders: Michelin, Limagrain, Almerys + the 11 clusters

## **Governance of the RIS3**



#### ✓ Steering committee of the RIS3:

<u>Composition</u> : members of the CODEPPA <u>President(s)</u> : Regional Council President + Michelin President <u>Role</u> : global strategy + global project monitoring

### ✓ <u>Technical committee of each SIS</u> :

<u>Composition</u> : clusters, industrial, academics and institutional <u>Role</u> : detection, selection and coordination of projects

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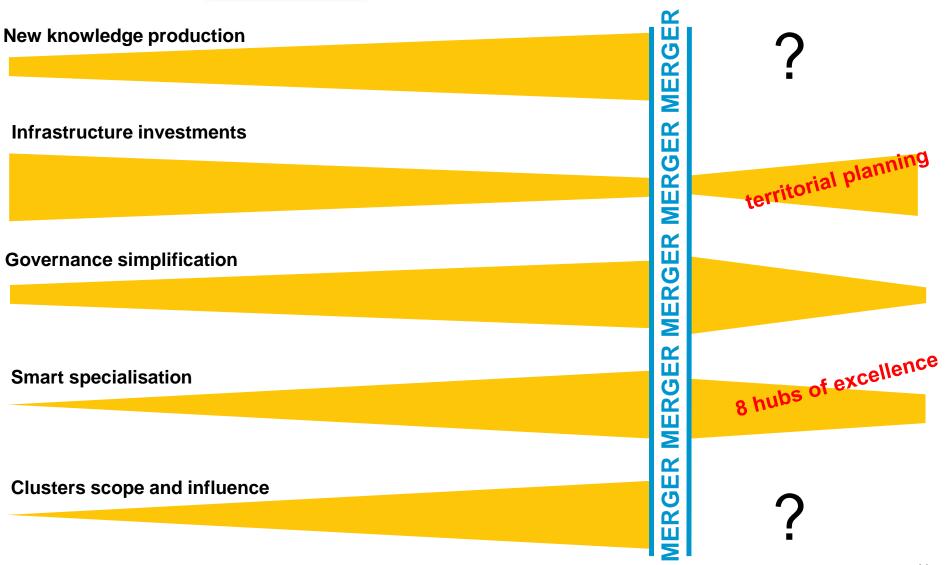
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#### French creativity?

there are so many different territorial organizations...

Innovation must go on!

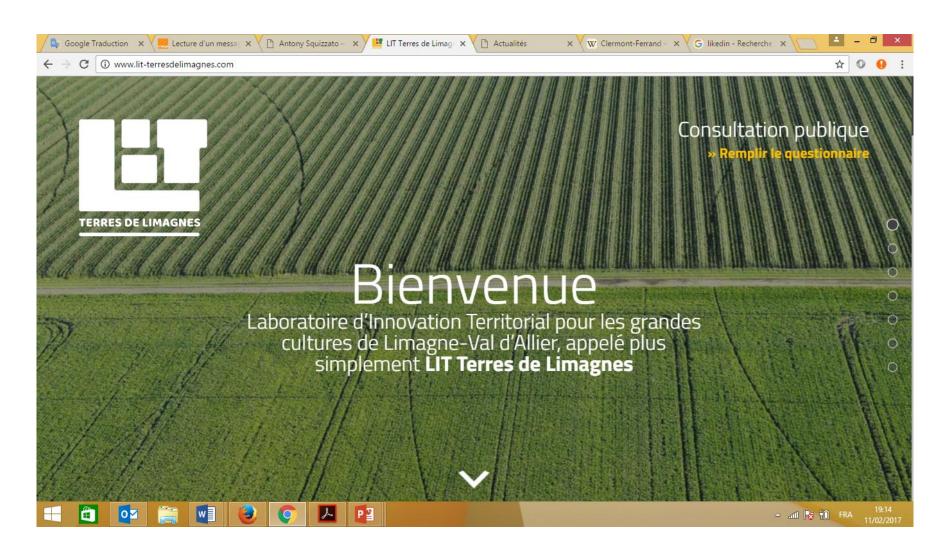
#### New Models for Innovation ! February 11<sup>th</sup> 2017 : FACTOLAB [joint lab Michelin]





#### New Models for Innovation ! March 2016 : Living lab for cereals















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