





### INRA, an international public research institute



INRA is a public scientific and technological establishment (EPST) (joint authority of the Ministry of Higher Education and Research and the Ministry in charge of Agriculture)

Goals :

- to produce and disseminate scientific knowledge and innovation
- to contribute to education and training, to promote scientific and technical culture and participate in the science/society debate
- through its expertise, to advise decision-making by public and private sector actors



## INRA 2010, key figures

nplantations principale

# A scientific community of around 12,000 persons all over France

#### **Global scientific profile (researchers)**

- 68 % Life sciences
- 12 % Environmental, engineering & material sciences
- 8 % Biotechnical sciences
- 8 % Economic and social sciences
- 4 % Computational sciences

#### Partnerships

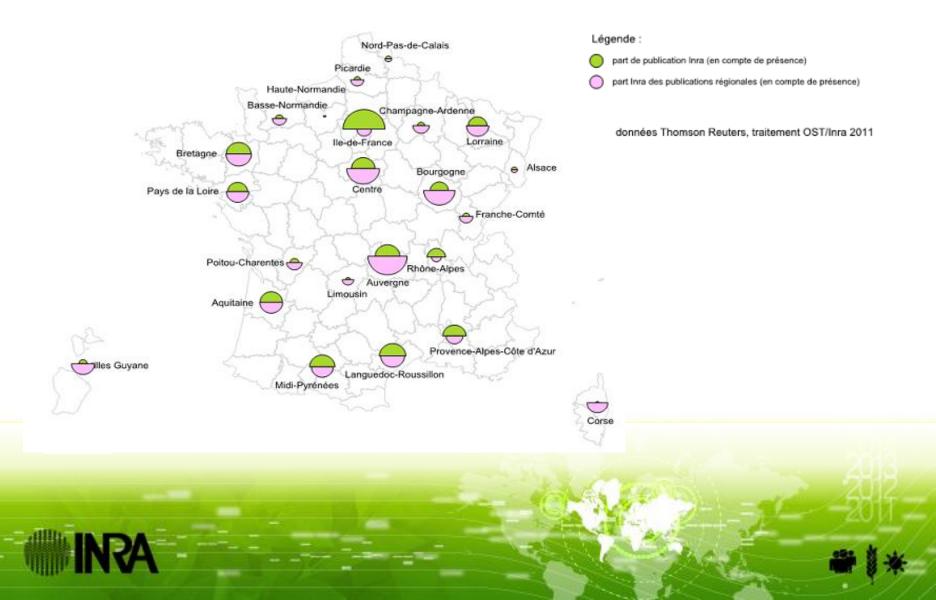
45 % of publications with foreign partners
50 % of research results with academic partners
20 % with socio-economic partners
15 % of results for anticipation, knowledge transfer and decision-making information
21% of external resources

### 14 research divisions ensure scientific management

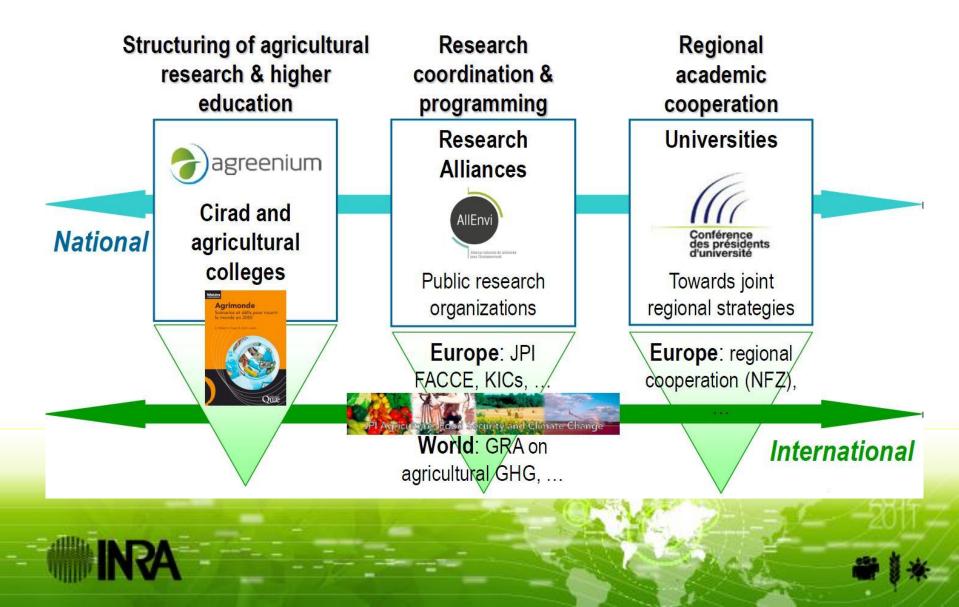


- Nutrition, Chemical Food Safety and Consumer Behaviour (ALIMH)
- Plant Biology (BV)
- Science and Process Engineering of Agricultural Products (CEPIA)
- Environment and Agronomy (EA)
- Forest, Grassland and Freshwater Ecology (EFPA)
- Animal Genetics (GA)
- Plant Breeding and Genetics (GAP)
- Applied Mathematics and Informatics (MIA)
- Microbiology and the Food Chain (MICA)
- Animal Physiology and Livestock Systems (PHASE)
- Animal Health (SA)
- Science for Action and Sustainable Development (SAD)
- Social Sciences, Agriculture and Food, Rural Development and Environment (SAE2)
- Plant Health and Environment (SPE)

# Contribution of research centers to INRA WoS registered publications



# National academic partnership: a three-pronged strategy with international extensions





### The strategic plan INRA 2010-2020 "Targeted research"

http://www.international.inra.fr/the\_institute/new\_scientifi c\_priorities\_for\_2010\_2020

# Une science pour l'impact



### Global food security and global changes

- Integration of the economic, social and environmental performances of agriculture.
- Development of healthy and sustainable food systems.
- Attenuation of the greenhouse effect and the adaptation of agriculture and forestry to climate change.
- Valorisation of biomass for chemicals and energy.



Life and environmental sciences, economic and social sciences



### **INRA** metaprograms

#### Launched in 2011

- Sustainable management of crop health
- Adaptation of agriculture and forestry to climate change
- Meta-omics of microbial ecosystems

#### Launched in 2012

- Genomic selection
- Integrated management of animal health
- Determinants and impacts of the diet: interactions and transitions
- Under discussion, to be launched in 2013
  - Ecosystem Services, Agriculture and Forest
  - Transitions to Global Food Security



## The Inra research centre of Rennes Brittany – Lower Normandy

Promoting sustainable agri-food systems





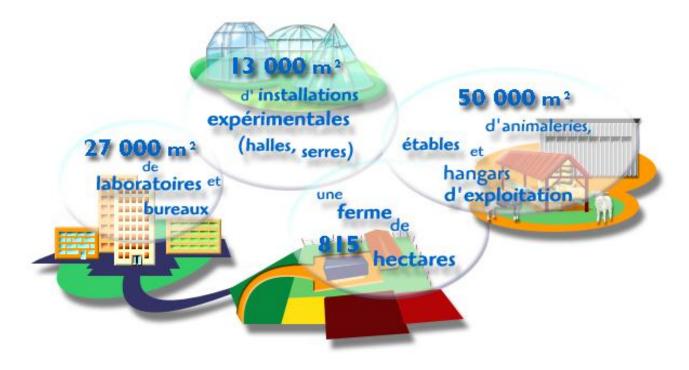


>10 implantations in Brittany and Lower-Normandy

4<sup>th</sup> Inra research centre - one thousand people employed, 700 permanents, 300 of them being researchers, ingeneers or teacher/researchers

21 research and experimental units - 7 of them are joint research units (UMR) with Agrocampus Ouest, University of Rennes I, University of Caen – 6 of them are experimental units





#### and access to nationally labelled environmental observatories



> An historical and active partnership with Agrocampus Ouest (with ENSAR since 1946)

> A strong implying into the **training of agronomist engineers** in Rennes

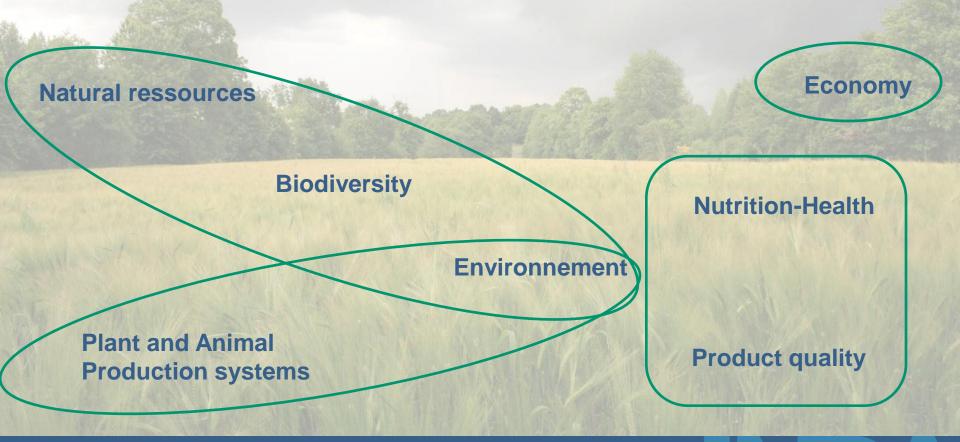
> Responsabilities in the programm definition of degrees performed by Agrocampus Ouest and the University of Rennes I

> A formal partnership with the European University of Brittany (UEB) and with the University of Caen Basse Normandie

> A major involvment in the Doctorate school «Ecole doctorale Vie-Agro-Santé» lead by Agrocampus Ouest and the University of Rennes I

A main aim of scientific investigation

# Sustainability of agri-food systems in high density production areas



#### Five thematic fields in our 2012-2016 project

 Integrative animal biology, agro-ecology and sustainable management of animal production (256p)
 Integrative plant biology and sustainable management

- of plant health (300p)
   Management of terrestrial and aquatic agro-ecosystems (207p)
- Elaboration and quality of animal products, nutrition and Health (218p)
- Farms, markets and public policies related to agriculture and environment (36p)

#### **Three main long-term objectives**

#### for INRA Center of Rennes

To reinforce these 5 thematic fields in an interregional vision

To promote inter-disciplinary and integrated approachs on the sustainability of agri-food systems

To consolidate and open wider our experimental facilities (UE, PF, ORE)

All this, with the ambition to be readable and attractive for international partners



# The Inra research centre of Rennes

Brittany – Lower Normandy

www.rennes.inra.fr

