# SMART SPECIALIZATION PLATFORM S3P AGRIFOOD TECHNICAL MEETING – MARCH 28th & 29th, 2017 SEVILLE, SPAIN





Recherche, Formation & Innovation en PAYS de la LOIRE



# PAYS DE LA LOIRE













### PAYS DE LA LOIRE DIGITALIZATION OF AGRICULTURE AND AGRIFOOD IN PAYS DE LA LOIRE

### **AGRICULTURE & AGRIFOOD IN PAYS DE LA LOIRE**

36 900 farmers

25 000 farm employees

47 000 food processing employees

19 billion € turnover

**2<sup>nd</sup> region of France** 

1st for the label & quality products

### THE DIGITAL ECONOMY IN PAYS DE **LA LOIRE**

3rd French region for employment 6 200 companies 600 researchers **Excellence specialties in VR/AR, IOT,** Retail, E-Tourisme and Information systems



STRENGTHENING THE COMPETITIVENESS OF AGRICULTURE AND AGRIFOOD

CONTRIBUTE TO THE DEVELOPEMENT OF THE DIGITAL ECONOMOY





# **RESOURCES IN PAYS DE LA LOIRE**







OP ERDF : A121 – Support for collaborative research projects (13M €)

OP EAFRD : A 16.1 – European Innovation Partnership (2,9M €)

### AND A DYNAMIC AND HIGH-POTENTIAL ECOSYSTEM





## **VEGEPOLYS**

# Vegepolys International Plant Cluster







### **Main Thematics**

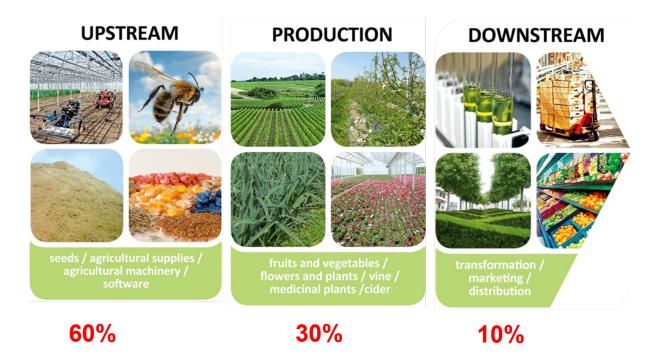
- Plant breeding
- Plant protection
- New technologies for growing system
- Plants for health, well-being and human environment





### TRACEABILITY AND BIG DATA

315 companies members

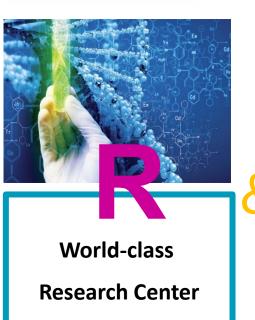


- Development of high tech tools to process data
  - From the field (drones, satelite imageries, sensors, etc.)
  - From genomics



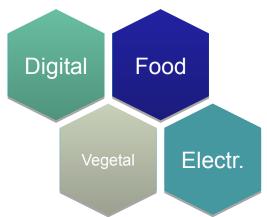


## **SMART & COLLABORATIVE INNOVATION**









### Food for Tomorrow: Agri-food sector

- 13 Partners / 350 Scientists / 24 Research Labs
- ❖ 1200 Engineers students
- \* 800 Entreprises / 50000 employees
- New incubator and technology transfer centre





## TRACEABILITY AND BIG DATA

# Dense Ecosystems for digital, electronic and agri-food sectors





























- Collaborative platform of traceability (Terrena and GS1)
- TRIA: agriculture, food, big data & connected objects
- Spectral technologies / Sensors and data processing
- Embedded electronic systems



- Better understanding of consumers
- Authenticity (counterfeiting), Traceability and Food Safety
- Enhancing raw material supply chain risk anticipation
- Coordination between digital, sensor and agri-food actors





# ESA GROUP – Graduate school of engineering in Food, Agronomy and Agri-business

### **5 Research Departments**

### A school turned to the Future

Up to 2700 students
(Engineers / Masters /
Agribusiness /
Apprenticeship students

Including 800 distance learning students

220 staff, 110 academics, Including **41** researchers and **50** other research staff 500 occasional teachers

#### **UMR BAGAP**

Research Unit for landscapes studies & geography

#### **UR URSE**

Laboratory for systemic Analysis of animal husbandery

39 Research projects/year 50 Industrial projects/year 130 publications/year

### **USC LEVA**

Laboratory of crop Ecophysiology and AgroEcology

#### **USC GRAPPE**

Research Group for Food sector, products, process, and environment

#### **USC LARESS**

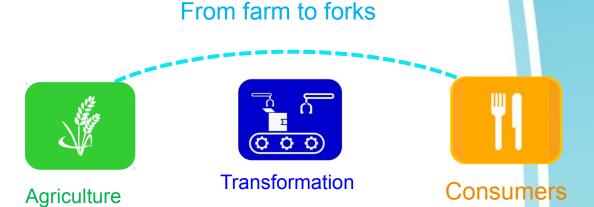
Research Unit in economy and social sciences

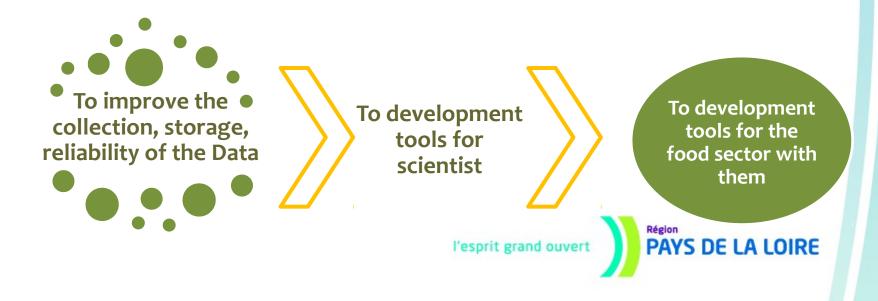




# Traceability and big data







Production



### **ESEO PRESENTATION**

- 200 Master of Engineering Degree/y
- 6 research groups:
  - Sensors, signal and image processing
  - Big Data, services, Al
  - Modem transformation for systems
  - Mathematics, mechanics and materials,
  - Electro magnetic comptability and microwave
  - Electrical engineering and automatic







Angers Paris Dijon





# EXAMPLE OF A MULTIDISCIPINARY PROJECT IN PAYS DE LA LOIRE

### VAGABOND:







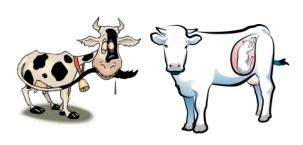




Pasture management



Monitoring of health and production events in cattle





# **THANK YOU!**



PAYS DE LA LOIRE Agnès Trarieux — <u>agnes.trarieux@paysdelaloire.eu</u> Hicham Benaziz - hicham.benaziz@paysdelaloire.fr



Pauline Capus – <u>pauline.capus@vegepolys.eu</u>



Oscar Castellani – <u>o.castellani@cap-aliment.com</u>



Sébastien Aubin – <u>sebastien.aubin@eseo.fr</u>



Pierre Picouet – <u>p.picouet@groupe-esa.com</u>







