



## Clust-ER Agrifood: Promotion of Innovation and Support for Competitiveness

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Clust-ER Manager

# The Regional R&I system and the Clust-ERs

**CLUST-ER**  
**AGRIFOOD**  
AGROALIMENTARE

**CLUST-ER**  
**BUILD**  
EDILIZIA E COSTRUZIONI

**CLUST-ER**  
**CREATE**  
CULTURA E CREATIVITÀ

**CLUST-ER**  
**GREENTECH**  
ENERGIA E SOSTENIBILITÀ

**CLUST-ER**  
**HEALTH**  
SALUTE E BENESSERE

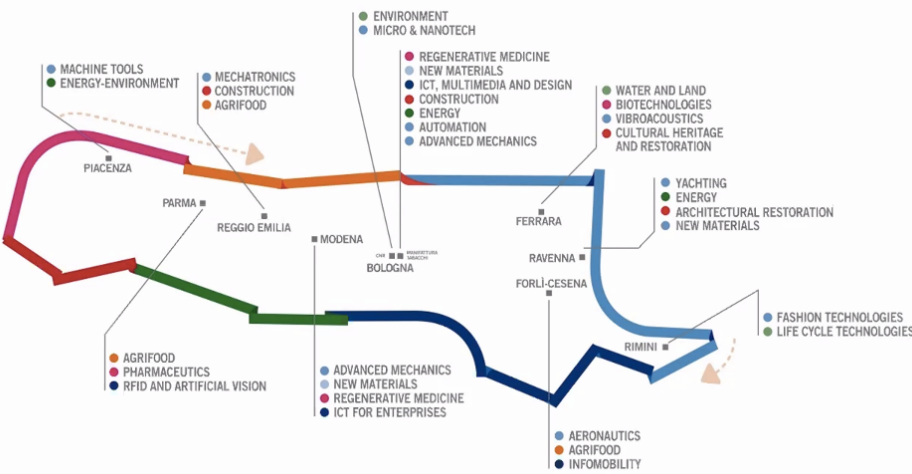
**CLUST-ER**  
**INNOVATE**  
INNOVAZIONE NEI SERVIZI

**CLUST-ER**  
**MECH**  
MECCATRONICA E MOTORISTICA

## The 7 Clust-ERs:

Associations of **public and private subjects**, active since 2018, co-financed by the Emilia-Romagna Region within the Smart Specialization Strategy, to strengthen competitiveness of the regional production systems.

Research labs and innovation centres in synergy with enterprises and training bodies, to multiply **opportunities** and develop **strategic projects**.



**81** research labs  
**14** innovation centres  
**10** Technopoles

Big research infrastructures  
International agencies  
High quality universities



## Emilia-Romagna:

key player in EU per number  
of PGI & PDO  
(44 PDO + 18 PGI)



**25 research labs**

**8 innovation centres**

**44 enterprises / producers organisations**  
(f&v, wine, dairy, organic, industrial plants, agritech, ...)

**6 training bodies**

**2 others**

**= 85 members**

## The Clust-ER Agrifood Members



**more than 25.000 small enterprises involved through the Clust-ER Agrifood members**



**CLUST-ER**  
**AGRIFOOD**  
AGROALIMENTARE

# The Members



**CLUST-ER**  
**AGRIFOOD**  
AGROALIMENTARE

# The Members



**CYANAGEN**  
Reagents for Molecular Biology

**RURALSET**



Emilia-Romagna



**e-Soft**



Istituto Nazionale di Fisica Nucleare



CENTRO PER L'INNOVAZIONE E  
ILTRASFERIMENTO TECNOLOGICO



Servizi  
Integrati  
d'Area



Laboratorio Energia e Ambiente Piacenza



PROGETTI PER L'INDUSTRIA



Macchine Agricole s.r.l.



TINEXTA GROUP



empower your business  
powered by

agrifood digital innovation



ORDINE DEI TECNOLOGI ALIMENTARI  
DELL'EMILIA ROMAGNA, TOSCANA,  
MARCHE ED UMBRIA



# Value Chains and Working Groups of Clust-ER Agrifood

## SOSFARM

### Sustainable agriculture & precision farming

- Environmental sustainability
- Precision planting/irrig.
- Varietal innovation
- Biosensors for water saving
- DSS big data

## INQUAN

### Integrity and nutritional quality

- Bioactive components
- Nutrients availability biomarkers
- Food supplements functional food
- Diet metabolic effect
- Digestibility

## PRIMPACK

### Processes, plants and packaging

- Sust. production processes
- Increased heat exchange techn.
- Innovative non-thermal technologies
- Low temperature processes
- High Pressure Processing

## SPES

### By-products & waste valorization & biomass chemistry

- Green chemistry
- Biomasses valorization
- Biorefinery processes using fermentation
- Circular economy
- Waste fractioning
- Biogas/biomethane

A

### Projects & Funding

B

### Education & Training

C

### Communication & Dissemination



# Focus Groups and Value Chains

## F&V

Integrated Pest  
management

Water  
management

Soil quality

## Cereals

Carbon fixation  
in soil

Genetic  
improvement

Seed quality

## Wine

Training for  
producers/agri-  
tourism

Traceability

Mechanization

## Poultry

Alternative  
proteins

Antimicrobials  
reduction

Sustainable  
packaging

## Pork meat

### Dairy

### Aquaculture

### Organic

### Olive oil

**SOSFARM** Sustainable agriculture & precision farming

**INQUAN** Integrity and nutritional quality

**PRIMPACK** Processes, plants and packaging

**SPES** By-products valorization & biomass chemistry

Public - Private  
Partnerships

Problems - Solutions

Addressing EU Funds

Farm to Fork

Consumers

# Clust-ER Agrifood

## General Assembly



President

Massimo Ambanelli (Hi Food)

### Board of Directors

+ 7 Members



Vice-President

Francesco Capozzi (UNIBO)



Marco Foschini  
Célia Gavaud  
Francesco Martinelli



Training: Giusi  
Faioli IFOA

#### SOSFARM

Stefano  
Poni  
(UNICATT)



#### PRIMPACK

Marco Dalla  
Rosa  
(UNIBO)



#### INQUAN

Alessandra  
Bordoni  
(UNIBO)



#### SPES

Arnaldo  
Dossena  
(UNIPR)



Projects: Tullia  
Gallina Toschi  
UNIBO



Communication:  
Alvaro Crociani  
RI.NOVA

# What we do

1

## Support to Members

- Synergies (research, business, training)
- Identification and development of strategic projects
- Matching demand-offer of innovation (Demo-Farms)

2

## Institutional support

- Update of regional Smart Specialization Strategy
- Support to E-R Region for internationalization policies
- Development of local circular economy initiatives

3

## Networking

- In Italy  
(Clust-ERs, Technopoles, Competence Centres)
- Worldwide  
EU Platforms,  
Cooperation Agreements (research, innovation, business development)



# Partners and Stakeholders



High Tech Farming



Ingredients for a Circular Economy

Food Packaging

**SMEs !!!**

**Cluster Speed Network**



Traceability & Big Data

# Some projects implemented

Increase the competitiveness of the agrifood industry

# TRACK: Bringing 4.0 solutions to the Agrifood Sector



This project was funded by the European Union's COSME Programme



# TRACK

*Growing Data*

20/11/2020

Célia Gavaud – Marco Foschini

[www.trackgrowingdata.eu](http://www.trackgrowingdata.eu)



# SmartAgriHubs (H2020)



## Towards the Digital Transformation of the European Agri-Food Sector

### ECOSYSTEM

**108 Partners**  
Involved covering all EU  
**68 partners** are SMEs  
**54% of budget** allocated to SMEs

### DIGITAL INNOVATION HUBS

**140 DIHs** in the existing Network covering all **28 Member States**  
Regional Approach - **9 Regional Clusters**  
Attract **260 New DIHs**

### IMPACT

**30M additional funding** mobilized from other sources (public, regional, national and private)  
**80 new digital solutions** introduced into the market  
**2M Farms** involved in digitisation

### OPEN CALLS

**6M EUROS** distributed through Open Calls  
**75% of Open Call budget** to SMEs  
**70 New Innovation Experiments**

### FLAGSHIP INNOVATION EXPERIMENTS

**28 FIEs**  
**22 Countries** involved  
**13 Cross-border** collaboration FIEs (47%)



# CREDAS Cross-Regional Ecosystem for Digital Agrifood Services



## NEEDS & TECHNOLOGY MAPPING

**10** WORKSHOPS/B2B >>>>> **339** PARTICIPANTS

**5** DEMOFARM DAYS >>>>>> **204** PARTICIPANTS

**3** INTL EVENTS + **2** ADVISORY BOARD MEETINGS

**1** DIGITAL PLATFORM ( DIGITAGRI )



# CREDAS Cross-Regional Ecosystem for Digital Agrifood Services



## CREDAS

UNICATT Piacenza



Stuard Parma



COPEGO Goro



**The five Demo-Farm Days**



UNIBO Ozzano



Goro



Ozzano

Tebano



RI.NOVA Tebano



# B-Resilient (Euroclusters Programme)



“Building the biomass resilience of food producing and processing SMEs through green and digitalised value chains”

<< to empower food producing and processing SMEs  
to become more resilient by means of an optimum use of biomass >>

<< CASCADE FUNDING FOR SMEs >>

Lead Partner: Wagrallim (BE)

# FOOD-ER: Emilia-Romagna International Network for Education and Industrial Research on Food and Beverage

June 2022

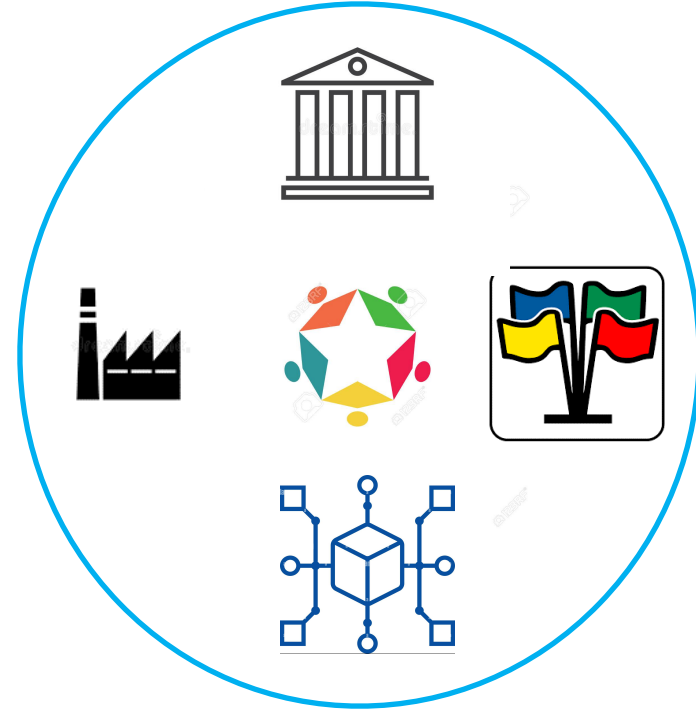
Associated Partners:

# Objectives:

- creating inter-university & international courses to make E-R more attractive
- implementing a high quality competence centre recognised internationally
- promoting setting-up and growth of enterprises (food, wellness, eno-gastronomic tourism)
- strengthening public-private research and innovation

# Actions:

- International Master “Food Safety & Food Risk Management
- World Class research - Promoting research infrastructures and interactions with industry
- Network of demo-farms
- Incubator - Food Innovation, partnerships “start-ups + industries



# Thanks for Your attention !

Marco Foschini

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