



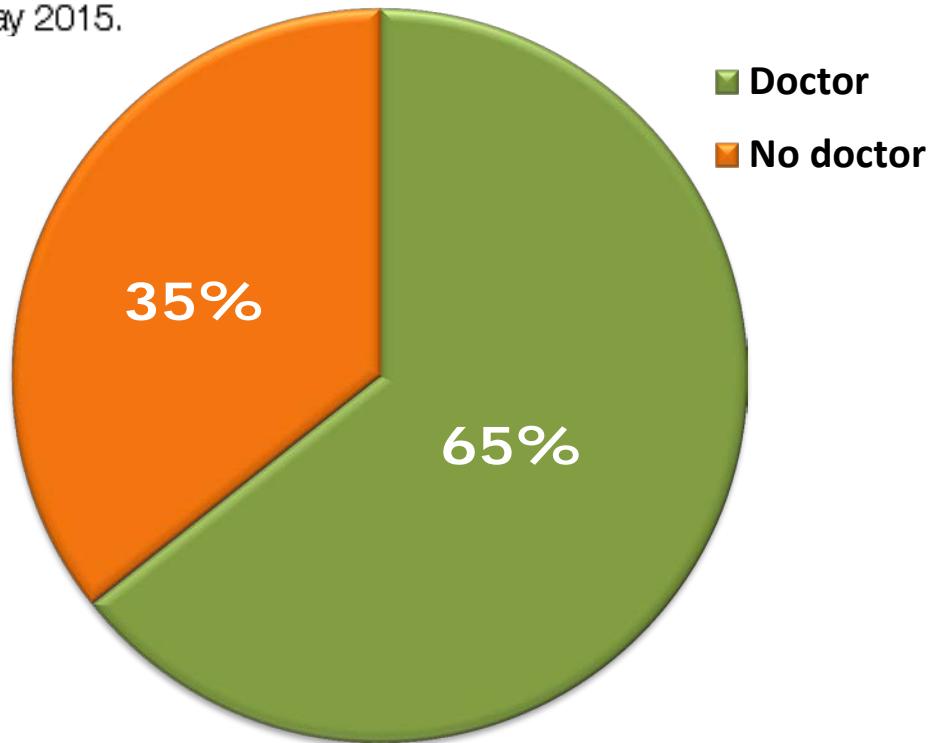
“AgriFood Research Institute of Aragón (IA2)”

Rafael Pagán Tomás

Full Professor of Food Technology

Director of IA2

The AgriFood Institute of Aragon (IA2) is a university research structure with mixed funding (UNIZAR-CITA). It was launched after the official approval of the Government of Aragon, issued on 22 May 2015.



271 CITA-UNIZAR researchers

36 research groups

<http://ia2.unizar.es>





<http://ia2.unizar.es>



Instituto Universitario de Investigación Mixto
Agroalimentario de Aragón
Universidad Zaragoza



OBJETIVE :

to promote the **aggregation** of collaborative efforts and **interaction** among **prestigious researchers** who jointly decide to implement a series of multidisciplinary research projects on a more ambitious and global scope, thereby achieving a **mark of distinction** on a **national and international level**.

STRATEGY is twofold:

- 1) the deployment of **research activities of the highest standard**,
- 2) the **transfer of technology and research results to the agrofood sector**, striving to resolve concrete problems that emerge in different areas of society.

Strategic plan 2016-2019





lines of research



Department 1

Production of raw materials of vegetable origin



Department 3

Food Science and Technology

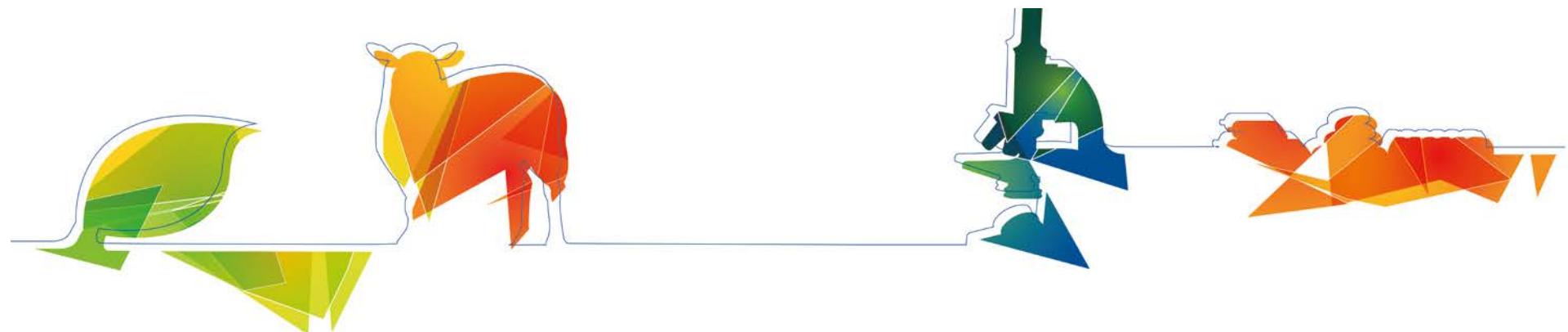
Department 2

Production of raw materials of animal origin



Department 4

Agri-food and natural resource economics



production of raw materials of vegetable origin

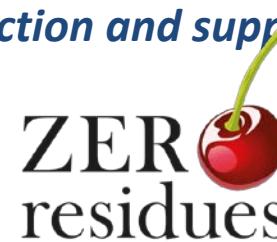
- Line 1 ■** Genetic resources and their improvement
- Line 2 ■** Optimization of agri-food production
 - Product quality and safety
- Line 3 ■** Development of sustainable agricultural production systems
 - Sustainability and the environment



LIFE Zero Residues: towards a sustainable production and supply chain for stone fruit

Program: Life +

Country: Spain



Budget: Total: 3.445.458€

% EC Co-financiación: 49 %

Duration: Start: 01/07/2012

End: 30/06/2017

Coordinator: Universidad de Zaragoza



Universidad
Zaragoza

Associated beneficiaries:



finca Valleluz



Fundación AulaDei
PARQUE CIENTÍFICO TECNOLÓGICO





**lines of
research**

production of raw materials of animal origin

- Line 4 ■ Study and improvement of genetic resources**
- Line 5 ■ Production technologies applied to livestock systems**
- Line 6 ■ Physiological bases of animal production**
- Line 7 ■ Development of sustainable livestock systems**



Development of a reproducible Cross-border Organization of the type race/land/product «from genetics to meat quality» for the sustainable economic development in the Pirenaic area (model bovine race Gasconne)

Budget: 1.858.286€ Duration: Start: 2014 End: 2016



Universidad
Zaragoza



cita
CENTRO DE INVESTIGACIÓN Y TECNOLOGÍA
AGROALIMENTARIA DE ARAGÓN

IRTA



INSTITUT
DE
L'ELEVAGE



AGRICULTURES
& TERRITOIRES
CHAMBRE D'AGRICULTURE
ARIÈGE





lines of
research

food science technology

3

Line 8 ■ Food technology

Line 9 ■ Food safety

Line 10 ■ Food quality

**Line 11 ■ Functional foods; nutrition
and health**



<http://fieldfood.eu>



Fruit juices



Olive oil



Tomato products



Wine and cider making



Universidad
Zaragoza
1542

Technische
Universität
Berlin
TU berlin



EFFoST
European Federation of Food Science and Technology



ENERGY
PULSE
SYSTEMS
DESIGNING
ENERGY
FOR LIFE

AGRINARSA



ARAGONESAS
BODEGAS/WINERY



<http://ecoprolive.eu/>

contactica
innovation

CONTACTICA SL

Spain

ISANATUR
— NUTRITION & HEALTH —

ISANATUR SPAIN SL

Spain

CVR
CENTRO PARA A
VALORIZAÇÃO DE RESÍDUOS

PORTRUGAL

Universidad
Zaragoza

UNIVERSIDAD DE ZARAGOZA



UA
UNIVERSIDAD AUTÓNOMA
DE MADRID

UNIVERSIDAD AUTÓNOMA
DE MADRID

Spain

PROMETEO
GARIBOLDI

PROMETEO S.R.L.

Italy

IN DÉTEC
Tecnología Industrial

INGENIERIA PARA EL
DESARROLLO TECNOLÓGICO
S.L.

Spain

ALMA MATER STUDIORUM
— UNIVERSITÀ DI BOLOGNA —

ALMA MATER STUDIORUM –
UNIVERSITÀ DI BOLOGNA

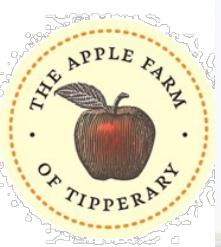
Italy

Funded by the
European Union



Instituto Universitario de Investigación Mixto
Agroalimentario de Aragón
Universidad Zaragoza





Budget: 2.281.015€

Duration: Start: 2014 End: 2017



Instituto Universitario de Investigación Mixto
Agroalimentario de Aragón
Universidad Zaragoza





Promoting healthy lifestyle
in families across Europe



Feel4Diabetes: a European study aiming to promote healthy lifestyle and prevent type 2 diabetes in families from vulnerable population groups



GENUD Research Group
Growth, Exercise, NUtrition and Development
Universidad Zaragoza



The Feel4Diabetes-study has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement n° 643708

Identify low-SES municipalities

Randomly select schools within low-SES municipalities

Screen families at school with FINDRISC

Development & implementation of the intervention



At school level:
target all children
and all families



Out of school
settings: target high-
risk families

"Targeting high-risk families"
component

Structured lifestyle
counselling sessions
+

"Targeting all families" component

Improvement of school social & physical environment
+

Improvement of home social & physical environment
+

Local municipality initiatives

Feel4Diabetes project: Consortium



Promoting healthy lifestyle
in families across Europe

Budget: 2.997.405€

Duration: Start: 2015
End: 2019



Harokopio University of Athens (PI: Yannis Manios)	Greece
National and Kapodistrian University of Athens (PI: Konstantinos Makrilakis)	Greece
National Institute for Health and Welfare (PI: Jaana Linstrom)	Finland
Ghent University (PI: Greet Cardon)	Belgium
Dresden University of Technology (PI: Peter Schwarz)	Germany
University of Zaragoza (PI: Luis A Moreno)	Spain
Medical University of Varna (PI: Violeta Iotova)	Bulgaria
University of Debrecen (PI: Imre Rurik)	Hungary
Extensive Life Oy (PI: Remberto Martinez)	Finland
International Diabetes Federation Europe (PI: Sophie Peresson)	Belgium



The Feel4Diabetes-study has received
funding from the European Union's Horizon
2020 research and innovation programme
under grant agreement n° 643708



Instituto Universitario de Investigación Mixto
Agroalimentario de Aragón
Universidad Zaragoza



agri-food and natural resource economics

4

Line 12 ■ Economic analysis of the agri-food chain

Line 13 ■ Sustainability of farming systems

lines of
research



Role of health-related claims and symbols in consumer behavior

- **FP7 Small Collaborative Project [KBBE 2012-06-single stage]**
- **Objective:** To determine how health-related symbols and claims, in their context, are understood by consumers, and how they affect purchasing and consumption, taking into account both individual differences in needs, wants, motivation and attitude, and country-specific differences with regard to use of health claims and symbols.
- **Duration:** 4 years (September 1, 2012, to August 31, 2016)
- **Total budget:** 3.8 Mio (3 Mio EC funded)
- **Partners:** Aarhus University (Denmark);
Agrifood Research and Technology Centre of Aragon (Spain);
Corvinus University Budapest (Hungary);
European Food Information Council (Belgium);
Ghent University (Belgium);
Globus SB-Warenhaus Holding GmbH &Co. KG (Germany);
Saarland University (Germany); Schuttelaar & Partners NV (Netherlands);
University of Copenhagen (Denmark);
University of Oxford (UK);
University of Surrey (UK);
University of Ljubljana (Slovenia);
Wageningen University (The Netherlands)





technological offer



Improving productivity and resource efficiency

Health and nutrition: Improving food safety and quality



Instituto Universitario de Investigación Mixto
Agroalimentario de Aragón
Universidad Zaragoza



technological offer

Improving resource efficiency

- Plant and animal genomics.
- Plant breeding and plant pathology.
- Improvement of agricultural methods and productivity.
- Animal feeding and breeding.
- Animal health.
- Sustainable agriculture and livestock production.
Adaptation to climate change.
- Sustainable food supply chain management.
- Environmental policies and natural resource management.
- Food processing, packaging and preservation.
- Development of new products and byproducts.

Health and nutrition: improving food safety and quality

- Agronomic evaluation of new fertilizers.
- Effect of livestock production systems on food quality.
- Assessment of biological and chemical hazards in the agri-food chain.
- Effects of food processing technologies on food safety and quality.
- Culinary technologies.
- Innovative quality control systems.
- Food standards: sensory, physical, and chemical quality.
- Nutritional quality and food safety.
- Nutrition and health: functional foods.
- Health assessment and diet patterns.
- Consumer behaviour and consumer studies.



Instituto Universitario de Investigación Mixto
Agroalimentario de Aragón
Universidad Zaragoza

- Determinación Superficies Óptimas de Producción Trufera en las comarcas de Comunidad de Calatayud y Del Campo de Daroca.

DPZ

- Caracterización Molecular del Genotipo de Autoincompatibilidad de Variedades de Cerezo

IP: Wünsch, A.

TULARE CREEK, S.L.

- Estudio de viabilidad industrial de la especie *Dittrichia Graveolens*

IP: Luis Burillo

VILLAMAGNA



Vegetal



Animal

- Evaluación de Levucell Plus como aditivo en dietas para terneros de engorde

IP: Vega García, Antonio
DANSTAR FERMENT AG

- ESTABLECIMIENTO Y ORGANIZACIÓN DEL PLAN DE MEJORA DE LA RAZA FLECKVIEH DE ESPAÑA

IP: Altarriba Farrán, Juan

ASOCIACIÓN DE CRIADORES DE GANADO

VACUNO DE RAZA FLECKVIEH-SIMMENTAL

- GESTIÓN INTEGRAL DE DATOS Y ESTUDIO DE LOS PUNTOS CRÍTICOS EN PRODUCCIONES DE CALIDAD PARA VACUNO AUTÓCTONO EXTENSIVO.

IP: Olleta Castañer, José Luis

COMERCIALIZADORA DE VACUNO SELECTO AVILEÑO

NEGRO IBÉRICO S. COOP



Instituto Universitario de Investigación Mixto
Agroalimentario de Aragón
Universidad Zaragoza

- TECNOLOGÍAS DE CRECIMIENTO SOSTENIBLE; CREACIÓN Y DIFUSIÓN DEL CONOCIMIENTO
IP Sánchez Chóliz, Julio
E.ON RENOVABLES, S.L.U.

- EVALUACIÓN DEL IMPACTO SOCIOECONÓMICO DEL PROYECTO EUROPEO: PROYECTO HUERTAS LIFE KM 0
IP: Feijoo Bello, María Luisa
AYUNTAMIENTO DE ZARAGOZA



Alimentos / Productos



Consumidor

- CARACTERIZACIÓN MICROBIOLÓGICA DEL PROCESO FERMENTATIVO DE LA ACEITUNA EMPETRE NEGRA

IP: Blanco Parmo, Domingo

HIJOS JOSÉ LOU, S.A.. OLIVA MUDÉJAR, S.L.

- DESARROLLO DE ESTRATEGIAS DE CONTROL MICROBIANO EN PROCESOS DE ELABORACIÓN Y APLICACIÓN DE ENVOLTURAS ALIMENTARIAS DE LA EMPRESA VISCOFAN

IP: Álvarez Lanzarote, Ignacio

CNTA, CENTRO NACIONAL DE TECNOLOGÍA Y SEGURIDAD ALIMENTARIA

- Embutidos saludables a partir de carne de cerdo de Teruel: reducción del contenido de grasas saturadas y sal

IP: B_Panea.

DPT

- HEALTHY EATING PROMOTION IN CHILDREN

IP: Moreno Aznar, Luis Alberto

DANONE INSTITUTE INTERNATIONAL

- ANÁLISIS DE VOLÁTILES

IP: López Gómez, Ricardo Javier

AZ. AGR. SAN POLINO DI FABBRO LUIGI SOC.

AGR. SOC. SEM. BIOIBÉRICA, S.A.. ESSECO S.R.L.. IFV SUD-OUEST. ISVEA, S.R.L.. LA ZARAGOZANA S.A.

- UTILIDADES CULINARIAS DE LAS MEDIDAS EN CONTINUO DURANTE LA COCCIÓN.

IP: Salvador Solano, María Luisa

BSH ELECTRODOMÉSTICOS ESPAÑA, S.A.

- ANÁLISIS SENSORIAL DE JAMÓN Y PALETA DE TERUEL

IP: Campo Arribas, María del Mar

CRDOP JAMÓN DE TERUEL/PALETA DE TERUEL

Active projects (2016)

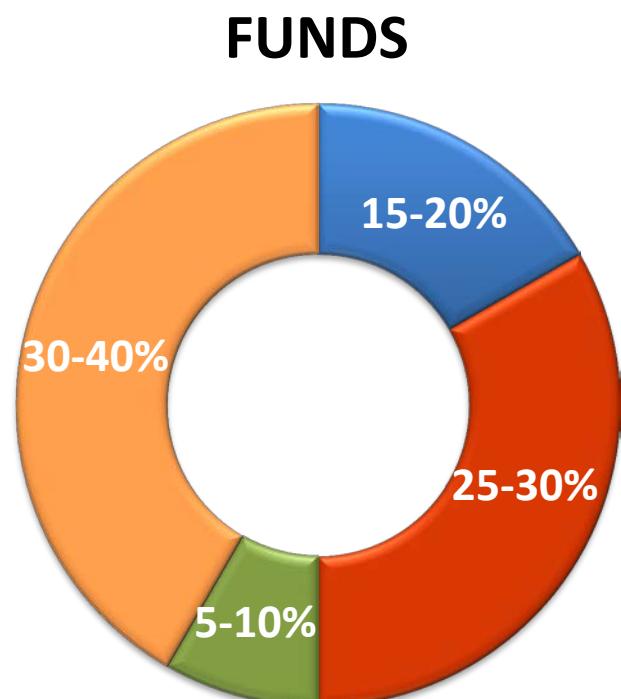
Number

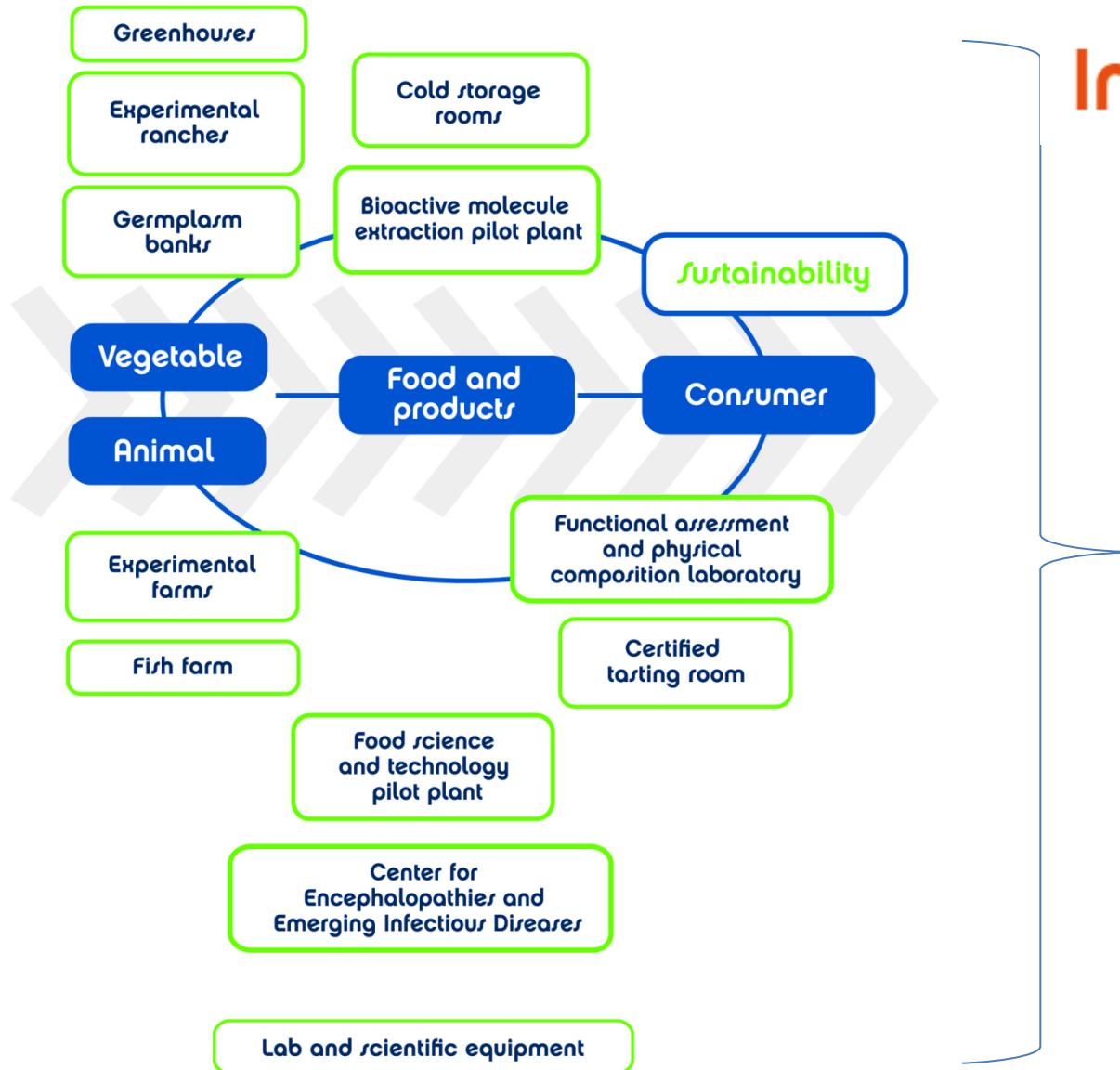
European projects	17
National projects	99
Regional projects	75
Private contracts	228
TOTAL	419

FUNDRAISING (per year)

FUNDS (€)

European public funds	1.000.000
National public funds	2.000.000
Regional public funds	500.000
Private funds	2.500.000
TOTAL	6.000.000





Services

Germoplasm banks, Greenhouses, experimental farms

unique
Infrastructure



Center of encephalopathies and emerging infectious diseases

unique
Infrastructure



Instituto Universitario de Investigación Mixto
Agroalimentario de Aragón
Universidad Zaragoza

Universidad
Zaragoza

Bioactive molecule extraction Pilot Plan



Food science and technology Pilot Plant.

unique
Infrastructure



<http://ppcta.unizar.es>



Food science and technology Pilot Plant.

Certified testing room

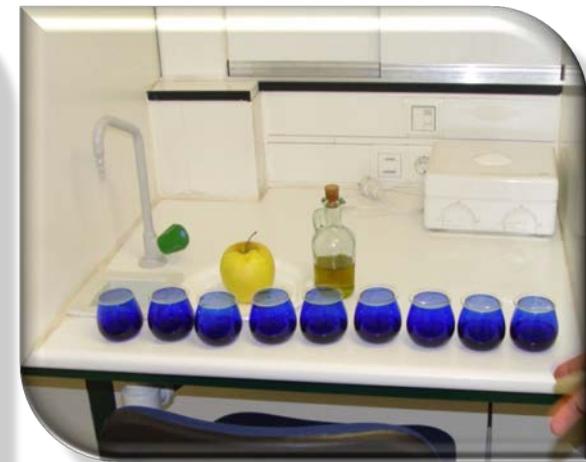


<http://ppcta.unizar.es>

Food science and technology Pilot Plant.



Certified testing room



Transfer to the food industry

More than 100 food companies

More than 150 contracts





ALIMENTANDO LA CIENCIA



IA2 collaborates in the promotion of science as a cultural activity by making its research results known to society, particularly to future scientists.



GYMKANA



SHOW CORNER



SEMINARS



Instituto Universitario de Investigación Mixta
Agroalimentario de Aragón
Universidad Zaragoza



¡Thanks for your attention!

Rafael Pagán Tomás
Director of IA2
pagan@unizar.es

April 25th, 2017