



FRIETS Participating Countries



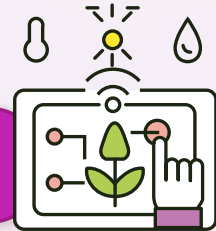
**H2020-MSCA-RISE-2020,**  
Sustainable optimization of the value chain  
of added value fresh and dried berries through the integration  
of Precision Agriculture management  
strategies and innovative dehydration and edible coating

## 116 Secondments

### FRIETS Steps

STEP  
01

Precision farming-Integration of digital  
management and surveillance technologies



STEP  
02

Recovery of bioactive compounds



STEP  
03

Encapsulation of bioactive compounds



STEP  
04

Dehydration processes



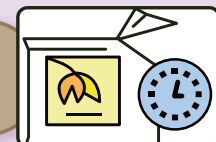
STEP  
05

Novel prototypes of edible - coated berries using microalgae  
and macroalgae components – Production of functional smart snacks



STEP  
06

Shelf-life determination



STEP  
07

Business modelling & Life Cycle Assessment



STEP  
08

Risk management



## FRIETS Project Facts

- ✓ 13 partners
- ✓ 5 European countries
- ✓ 48 months
- ✓ 8 Work Packages
- ✓ 15 Deliverables
- ✓ 116 Secondments
- ✓ 529 Secondment months
- ✓ 2.43 M € EU Contribution

## FRIETS Innovations

- Develop a new production system based on precision agricultural practices, using digital monitoring technologies and finding the best practices to achieve high quality berries, while achieving a sustainable production
- Develop innovative, green extraction techniques for sustainable recovery bioactives compounds from plants and herbs
- Develop innovative technologies for protecting bioactive substances
- Develop modified osmotic dehydration techniques, using alternative agents to increase the shelf-life of several berries, replacing conventional salts and sugars, leading to healthier foods
- Develop edible coatings with advanced and improved carrier properties, taking advantage of the significant properties of micro- and macro-algae
- LCA and LCC analysis will be applied throughout the whole value chain for determining the environmental impacts and identifying the hotspots, providing sustainable solutions at reasonable cost

## FRIETS Impact

- Young researchers will receive high-quality cross-sectoral training environment
- The secondees will enhance their geographical mobility in EU, develop new set of research and transferable skills, be exposed to new research environments and have their career perspectives widened
- Researchers will comprehend in depth the requirements of the industry transforming knowledge to next generation products and services
- SMEs personnel will take advantage of research results to strengthen and add value to their products and processes and possibly expand their intellectual property and/or product portfolio



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