

The Ves4us project is an European initiative funded by the Horizon2020 Program of the European Commission under Future Emerging Technologies (FET) call. Its main objective aims at generating a broad range of radically new high-value products in the fields of nutrition, cosmetics and health sciences based on natural source-derived extracellular vesicles (EVs), which could be used as new generation vehicles for specific molecular delivery.

This project has received funding from the European



The Challenge

The discovery of EVs as natural carriers of functional small molecules and proteins has raised great interest in the drug delivery field as it may be possible to harness these vesicles for the therapeutic delivery of peptides and synthetic drugs. As well as, the development of new EV related technologies that haven't been used until now.

02 The Solution

To develop a biocompatible and cost-effective vesicle based drug delivery system, which would enhance bioavailability and improve the efficacy and safety of loaded bioactive compounds. It proposes a high-risk high-gain approach to further develop the technological processes inherent to EV isolation from a natural source and their subsequent functionalization in the view to amalgamate them in a highly cooperative frontier research strategy.

03 Impacts

The metabolic attributes of natural source EVs are actively researched worldwide to address strategic priorities from sustainable sources. This project will contribute to national and EU research agendas providing a new EU perspective on frontier biotechnology, translation fundamental work outputs into market-led opportunities relevant to the nanomedicine, cosmetic and nutraceutics sectors.