## Multifunctional products obtained from colostrum fermented by kefir grains (3-Biotic+)

Project manager: prof. Gabriela BAHRIM; <a href="mailto:gbahrim@ugal.ro">gbahrim@ugal.ro</a>

The 3-Biotic+ project (PN-III-EUREKA 62/2018, 2018-2020) aims to develop a complex, multifunctional 3-biotic product (having a pre-, pro- and post-biotic effect), standardized on bioactive peptides, by controlled fermentation of colostrum with an enhanced kefir bacterial consortium. From this product, a new range of nutraceuticals and cosmeceuticals will be further developed in the experimental development phase.

## The project objectives are:

- (i) to select enhanced kefir bacterial consortium, able to generate bioactive peptides and additional bioactive compounds into colostrum by fermentation;
- (ii) to optimize the fermentation process and to formulate the resulted product for nutraceutical and cosmeceutical applications;
- (iii) to demonstrate the functionalities of the products obtained from colostrum fermented by enhanced kefir bacterial consortium. One innovative approach is focused on bioactive peptides, as key component for standardization of the complex, 3-biotic+ product.

Other innovation is the holistic approach of the complex multifunctional product, corresponding to the actual trend toward integrated and personalized health treatment. Also, it is envisaged the researches coordination and activities correlation between the project partners (one SME- LABORATOARELE MEDICA S.R.L (Coordinator), a university-UNIVERSITATEA "DUNAREA DE JOS" (Partner 1), a R&D institute - INSTITUTUL NATIONAL DE CERCETARE DEZVOLTARE PENTRU STIINTE BIOLOGICE (Partner 2), from Romania and one SME from Norway - NorGenoTech AS).

The main result is a multifunctional, 3-biotic+ product, standardized in bioactive peptides. This 3-biotic+ product will be further included into specific receipts of nutraceuticals and cosmeceuticals and patented by the project partners. SME market position will be consolidated by the diversification of its innovative products range.