

### Joint Event on

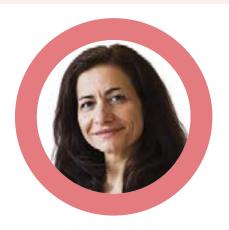
# Euro Congress on **BIOTECHNOLOGY**

International Conference on **GENOMICS AND MOLECULAR BIOLOGY** 

Global Congress on **CANCER SCIENCE AND THERAPY** 

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Manuela Pintada, J RNA Genomics 2018, Volume 14



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#### **Biography**

Manuela Pintada is BSc in Pharmacy (Faculty of Pharmacy of the University of Porto, 1991) and PhD in Biotechnology (Portuguese Catholic University - UCP, 1999). She is Associate Professor in UCP, Director of CBQF - State Associate Laboratory and Associate Director of the College of Biotechnology of UCP. She is the leader of Biobased and Biomedical products group and coordinates the Bioactives and Bioproducts Research Laboratory. She co-authored. 300 papers in international journals, a creator of 16 patents, h-index=38 and she has been involved in the supervision/co-supervision of 22 concluded PhD theses and coordinated/ co-coordinated. 85 externally funded projects.

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## **ENZYMATIC HYDROLYSIS AS TOOL FOR** AGROFOOD BY PRODUCTS VALORIZATION

•he food processing sector generates a large amount of waste annually, and without the development of innovative technologies, the amount of waste will increase up to 126 million tonnes by 2020. The enzymatic hydrolysis alone or combined with other technologies is a cost-efficient technology that allow natural production of added-value compounds, namely those with potential biological and functional properties. Several examples of enzymatic conversion of components from by-products into new added value ingredients/products with application in food, feed and cosmetics have been studied recently. Peptide sequences released by hydrolysis of protein byproducts as bioactive peptides have demonstrated different biological properties, namely antihypertensive, antimicrobial, immunostimulant, antioxidant and prebiotic. Oligosaccharides are polymers with two to ten monosaccharide residues that can also be obtained from agrofood byproducts by specific hydrolysis treatment with physiological effects on human health, namely prebiotic, antioxidant and antimicrobial. This presentation comprises a review of recent studies to demonstrate the potential of enzymatic hydrolysis for agrofood byproducts valorization encompassing research cases studies developed by our research group on enzymatic hydrolysis of plant, animal and fermentation byproducts. Hydrolysis using different types of enzymes applied to by-products from various food sectors (whey, brewer's spent yeast, fish losses and skin, blood and bonds, and fruit & legumes) for obtaining ingredients with technological and nutritional value, and health properties will be presented. Some examples of the potential application of these new ingredients in the development of functional foods, feed solutions, or new alternatives for the cosmetic industry will also be presented.

