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Fundación Jesús Serra awards researchers Manuel Irimia and Maira Bes-Rastrollo

- Manuel Irimia, ICREA researcher at the Centre for Genomic Regulation in Barcelona, has been recognised for his research on the mechanisms that regulate insulin secretion and that could prevent the development of diabetes.
- Maira Bes-Rastrollo, Professor at the University of Navarra, has received an award for her research on the impact of diet on chronic diseases and, more specifically, on the identification of healthier vegan diet patterns.
- The Secretary General for Research, Raquel Yotti, will preside over these Awards' presentation ceremony, which will be held in Madrid on 18 October.
- This year, the workshop "How to follow a healthy vegan diet?" will be held for the first time, including a presentation of Maira Bes-Rastrollo's research and a discussion on the foundations of a good vegan diet.

Dr Manuel Irimia, Professor at ICREA research and Head of Unit at the Centre for Genomic Regulation (CRG), and Dr Maira Bes-Rastrollo, Professor of Preventive Medicine and Public Health at the University of Navarra (UNAV), are the winners of the Fundación Jesús Serra Research Awards in the basic and clinical research categories, respectively. The presentation ceremony of this 5th edition of the Fundación Jesús Serra Awards, of GCO (Grupo Catalana Occidente), will be held in Madrid on 18 October. This event will be presided by the Secretary General for Research, Raquel Yotti, and the Foundation's Chairman, Federico Halpern.

Manuel Irimia has received an award for his research on microexons, which are minute DNA fragments that are part of more than 100 genes and play a key role in the function of the pancreas and glycaemic regulation. Therefore, they are a possible therapeutic target for treating diabetes.



With the award's endowment, Irimia and his team want to explore their use in defining new molecular targets and therapeutic strategies for diabetes, thus contributing to reducing the disease's comorbidity and healthcare burden.

"The support provided by the Fundación Jesús Serra Research Awards is not only an acknowledgment of my team and me, but it will also enable us to identify the most interesting candidates for insulin regulation among microexons. This is a first step in our basic research towards something more tangible, more real", Irimia explains.

Maira Bes-Rastrollo has received an award for her research on nutritional epidemiology and how the various dietary patterns have an effect on the prevalence of chronic diseases and mortality, given that these diseases are the main cause of death worldwide and are partly the result of poor nutrition. Thanks to the support provided by the Fundación Jesús Serra Research Awards, the researcher and her team will develop and validate, in the context of a European project, for the first time worldwide, a survey to assess, on a standardised basis, the nutritional quality of vegan people. This will allow detecting dietary and health risks in a clinical context and will help health professionals improve dietary recommendations for vegan people.

"Among those of us who conduct research on diet and health, these Awards are a benchmark, and being one of the awardees is an honor. Thanks to this award, we will be able to carry out a comprehensive validation with the control group of omnivorous people that will help us identify the healthiest vegan diet patterns", says Bes-Rastrollo.

The Fundación Jesús Serra Awards have been the first in Spain to focus on research in the fields of nutrition, diet and health. The jury, chaired since its first edition by María Blasco, director of the National Cancer Research Centre, every year selects two young researchers with outstanding contributions in this field.



For the second year running, television personality Jorge Fernández will direct this ceremony, which, under the title "Feeding health is everyone's business", focuses on the need for an interdisciplinary research on the effect of diet on health and on the role of nutrient metabolism on the development of diseases such as cancer, cardiovascular diseases and obesity. These awards' endowment amounts to €35,000 in each category, which the winners must use in their research projects.

The fifth edition of these Awards coincides precisely with Fundación Jesús Serra's 25th anniversary. "Research has been a pillar of the Foundation's activity since its inception", stated the Foundation's Chairman, Federico Halpern. "Two of our raisons d'être come together in these Awards: supporting young talent and promoting programmes that improve the well-being of our society", he added.

With this in mind, the workshop "How to follow a healthy vegan diet" was organised for the first time prior to the ceremony with the aim of creating new meeting spaces for researchers and its beneficiaries, whether clinicians, patient associations or people interested in knowing healthy diets. The event, moderated by Beatriz Robles, dietician-nutritionist and science educator, will be attended by Maira Bes-Rastrollo as a guest researcher and Andrea Calderón as a nutritionist, member of the Board of Directors SEDCA (Spanish Society of Dietetics and Food Sciences) and co-author of a guide on vegan diets for clinicians.

The award ceremony will take place at **7.00pm on Wednesday, 18 October**, at the Beatriz Auditorium in Madrid, and it will be streamed on the Fundación Jesús Serra's <u>YouTube channel</u>.



Manuel Irimia, winner of the Fundación Jesús Serra Research Awards in the basic research category

Irimia obtained a PhD in Genetics from the University of Barcelona and completed post-doctoral stays at the University of Stanford and the University of Toronto. On his return, in 2014, he joined the Centre for Genomic Regulation (CRG), where he has since led the research group "Transcriptomics of vertebrate development and evolution".

Diabetes is a disease that affects almost 10% of the world's adult population, with an increasing prevalence worldwide.

This life-threatening illness, which poses a major challenge for healthcare systems, is noted for the poor functioning or the loss of beta cells. These cells are characteristic of a series of structures of the pancreas known as "islets of Langerhans", which are responsible for producing insulin, the hormone responsible for maintaining glycaemic blood control.

However, the mechanisms underlying the failure of these cells in diabetes are not well known, and there are still no effective interventions to prevent it. In a recent study published in *Nature Metabolism*, Irimia's team discovered that microexons play a key role in the function of the pancreas and glycaemic regulation. Therefore, they are a possible therapeutic target for treating diabetes. Microexons are minute fragments of DNA that are part of more than 100 genes, including vital genes for insulin secretion.

Maira Bes-Rastrollo, winner of the Fundación Jesús Serra Research Awards in the clinical research category

After obtaining a PhD in Pharmacy from the UNAV, Bes-Rastrollo completed a post-doctoral stay at Harvard University and was a visiting researcher at the University of Loma Linda. She is currently the Principal Investigator of the SUN Project and the Lead Researcher for the group IdiSNA (Diet and Lifestyles of the Health Research Institute of Navarra), a research affiliate with CIBERobn and the co-coordinator of the Nutrition work group of the Spanish Society of Epidemiology.



In addition, she combines research and teaching in the degrees of Medicine, Pharmacy and Nutrition at UNAV.

Maira Bes-Rastrollo is one of the most important Spanish health science researchers in the area of Nutrition and Dietetics and one of the best Spanish scientists according to the ranking established by the CSIC. Her research on nutritional epidemiology focuses on understanding how the various dietary patterns have an effect on chronic diseases and mortality.

This award will co-finance the VEGANScreener project, which is part of a line of research conducted by Bes-Rastrollo's team on diet, health and sustainability.

Sustainable Development Goal SDG3 —Good Health and Well-being— emphasises on the need to promote a diet that is primarily plant-based, and which, in addition to being healthy, will be more environmentally sustainable. However, this type of diets can be nutritionally deficient, and their nutritional quality varies according to food options.

The Fundación Jesús Serra Research Awards

The dual goals of the Fundación Jesús Serra Research Awards, which are worth €35,000 in each category, are to encourage research in the field of diet and nutrition, and to support young researchers who are spearheading pioneering projects in this field.

The Fundación Jesús Serra Awards have been held every year since 2018 and have been the first in Spain to focus on research in the fields of nutrition, diet and health. For this 5th edition, 43 candidates were nominated, 20 in the basic research category and 23 in the clinical research category.



Since it was launched, these Awards have acknowledged research in nutrition, cancer, cardiology, diabetes, epidemiology, public health and molecular biology, among others, highlighting interdisciplinary research and diet as key tools to prevent some of the most prevalent diseases. In addition, through research, we continue to explore the metabolism of nutrients and their connections with the development of diseases and to identify new therapeutic targets.

The panel of judges for these Awards is made up of Spanish renowned researchers, and in addition to researcher María Blasco it includes Professor Lina Badimon, director of the cardiovascular programme of the Catalan Institute of Cardiovascular Sciences (ICCC-CSIC) in the Santa Creu i Sant Pau hospital; Dr Carlos Macaya, Professor Emeritus of Cardiology at the Complutense University of Madrid; Pedro Mata, Chairman and Founder of the Spanish Familial Hypercholesterolaemia Foundation; and Dr Mercedes Rincón, Professor in the Immunology and Microbiology Department of the Faculty of Medicine of the University of Colorado and cofounder of the startup Mitotherapeutix.

Completing this year's jury were the two winners of the 4th edition of the Fundación Jesús Serra Research Awards: Arkaitz Carracedo, Ikerbasque Research Professor at the Centre for Cooperative Research in Biosciences (CIC bioGUNE), and Fàtima Crispi, Senior Specialist Doctor at the Foetal Cardiology Unit of the Centre for Maternal-Foetal Medicine of Hospital Clínic and Hospital Sant Joan de Déu of Barcelona.