

Josune Orbe is a heart researcher. She studied Biology and Biotechnology, and she has worked in several laboratories. She has investigated in the CIMA since 2002, and has worked in the laboratory of atherothrombosis since 2004. Her work is mainly focused on atherothrombosis and the identification of new biomarkers. We have asked her some questions to know better what she works on and how important it is. Here they are:

- Why did you decide to work as a heart researcher?

Originally I was interested in biotechnology and I got involved in the analysis of European Culture collection in 1991. This led to me doing a Master's in molecular biology in the field of haematology which I found fascinating. So when the opportunity to do a PhD arose I jumped at the chance and so began my research career in the cardiovascular field.

- Do you enjoy your job? Why?

Yes I do, of course every job has its stressful days, but the possibility of making a breakthrough and discovering new treatments makes it all worthwhile

- Do you enjoy your job? Why?

I love being a part of the scientific community, attending conferences and keeping up to date with the latest developments. The other thing I like is the variety, you never get stuck in a rut.

- What is the most important work that you have done?

I was very proud to be a part of the research which proposed using metalloproteinases as a new treatment to dissolve clots in ischemic stroke without the hemorrhagic complications associated with the previous treatment.

- As a woman, have you found it difficult to study and work on science?

I am glad to say that I haven't encountered any problems as a woman, and in fact the majority of my colleagues are women.

- What's CIMA?

It is an acronym for the Center for Applied Medical Research dedicated to translational biomedical research.

- What's atherothrombosis and how do you work on it?

Atherothrombosis is the most frequent underlying pathophysiological cause of ischemic heart and brain diseases, which are the main cause of death in Spain. One of the biggest challenges facing biomedical research in this area is identifying biomarkers that make it possible to predict

cardiovascular events and define key molecules in atherothrombosis in order to develop new, safer and more effective therapeutic strategies.

- How do you think you help improve the knowledge about the heart and the development of the cures of heart problems?

In recent years, we've begun several clinical and experimental research projects focusing on the study of the most important inflammatory, pro-thrombotic and proteolytic factors in cardiovascular pathologies. The group's most recent research activity has made it possible to identify potential targets in thrombosis and vascular remodelling. We've carried out clinical trials in patients with cardiovascular disease, which have shown their usefulness as biomarkers in subclinical and clinical atherosclerosis, and their association with the severity and a worse prognosis.

- Do you think heart research has improved remarkably in the last decades?

Yes of course. Life expectancy has increased and this is partly due to improvements in the treatment and overall care offered to people in general. Behind these statistics lies the hard work of investigative research teams and the dedication of their members.