

PRESS RELEASE

## **CIC bioGUNE to hold exosome expert meeting**

- *The meeting will gather the Spanish work group that studies exosomes, formed after the last conference in Gothenburg organised by the International Society for Extracellular Vesicles. The group aims to promote the study of exosomes in the field of clinical diagnosis.*
- *Exosomes are small vesicles secreted by cells towards the outside to transfer material and send signals to other cells. They regulate the immune response and are involved in the development and progression of cancer.*
- *Exosomes have opened an innovative research area in the field of non-invasive diagnosis of diseases, because they can be isolated in saliva, blood and urine samples.*

(Bilbao, 26 June 2012).- [CIC bioGUNE](#) is holding a meeting of the group of Spanish researchers specialising in exosomes (GEIVEX) on Thursday, 28 June. This group was formed after the international conference on extracellular vesicles, which took place recently in Gothenburg (Sweden). More than 600 research groups from all over the world attended this conference. At the conference, Spanish researchers decided to form a work group to contribute to the dissemination and integration of these small vesicles into the field of clinical diagnosis in Spain.

The following people are attending the meeting, organised by Ikerbasque researcher at CIC bioGUNE, Dr Juan M. Falcón Pérez: Dr Hernando del Portillo, from the CIBEK - Biomedical Research Centre Esther Koplowitz in Barcelona; Dr Francesc Borràs, from the LIRAD-BST in Badalona; Dr Antonio Marcilla, from the University of Valencia; Dr María Yañez-Mo, from the IIS Princesa Health Research Institute in Madrid; and Dr María Mittelbrunn Herrero from the CNIC in Madrid.

The aforementioned researchers will discuss, amongst other topics, ways to promote the study of extracellular vesicles, in collaboration with hospitals, as an innovative biological source of identifying non-invasive markers of diseases. They will also plan specialised courses and national conferences focusing on this field of research.

## **What are exosomes?**

Exosomes are small vesicles secreted by cells towards the outside to transfer material and send signals to other cells. These vesicles take part in different normal biological and pathological processes such as, the regulation of the immune system against different allergens, or in the development and progression of cancer.

Extracellular vesicles are detected in different body fluids such as saliva, blood and urine, and their protein and nucleic acid content provides information on the origin and the physiological condition of the cell releasing the vesicles. This gives them great potential in the area of non-invasive diagnosis of diseases. Furthermore, because many pathogens are able to secrete these vesicles, different infectious diseases may be detected in the early stages, not only in humans but also in animals that are important for agriculture.

Exosomes have great potential for the future in the field of nanotechnology and regenerative medicine, as tools that can be customised for the controlled release of bioactive substances (e.g. genes, proteins or drugs) to a certain type of cell, tissue or organ.