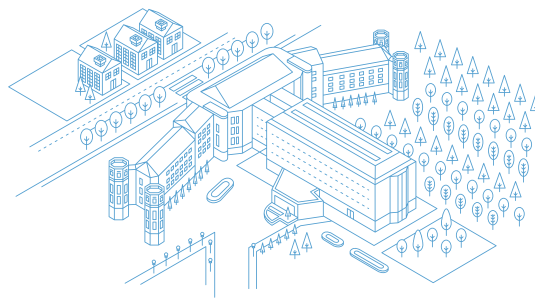


CNIO FRIENDS

newsletter

Latest news from the Spanish National Cancer Research Centre



 COLUMN

One year of CNIO Friends

‘CNIO Friends’ is now one year old and we are very excited by the response we have received. These first 12 months have already brought together more than 500 friends, sponsors and benefactors who have decided to place their trust and generosity in us.

Thanks to your contributions we have launched the ‘CNIO Friends’ contracts with which we will bring new talent to the Centre. These two-year contracts are intended for post-doctoral researchers. The more friends who join us, the more talent we will be able to attract to the CNIO to help combat cancer.

I would also like to thank all those who follow us on social networks. Our [Facebook page](#) already has more than 25,000 followers who constantly send us words of encouragement, affection and congratulations. Anyone else who wishes to can also follow our latest news there.

‘CNIO Friends’ has just started and is beginning to bear its first fruits for CNIO’s research. We are confident that 2016 will be even better with you. Season’s Greetings.

—MARIA BLASCO
Director



 CNIO SCIENCE NEWS

An international study published in *Nature* (one of the world’s most influential scientific journals) with the participation of Héctor Peinado, Head of the Microenvironment and Metastasis Group, discovers that tumours send messenger ‘bubbles’ capable of altering healthy organs in a way that makes them more welcoming for tumour cells, which can then lead to a secondary or metastatic

tumour. This discovery will contribute to the monitoring and future prevention of metastasis, which is still the main cause of death among cancer patients.



Read the full press release at: bit.ly/1IjRDZJ

 OUR CENTRE

The CNIO has just renewed its ‘Severo Ochoa’ Centre of Excellence accreditation bestowed by the Secretariat of State for Research, Development and Innovation. This accreditation distinguishes the best research centres in the country. The evaluators highlighted our Molecular Oncology Programme, our translational research, the high-quality of our scientific publications and the collaborations that we have established with laboratories and companies around the world. We are proud to have been able to *revalidate* our seal of excellence.

The CNIO has also received an award by the *Foro de Empresas Innovadoras* (FEI) recently. This is the first time that our innovation and technology transfer strategy has been awarded a prize for, amongst other achievements, licensing two drug development programmes, initiated in our Centre. With the aim of recognising and rewarding the creative efforts of our scientists, we held our first CNIO Inventor’s Day on December 9. To date, more than 40 researchers have received returns on their innovative capabilities for healthcare improvement.

In order to promote and improve translational research in prostate cancer, which is currently the third most common cause of cancer death in males, the CNIO has established a collaborative agreement with IBIMA and FIMABIS. This has allowed the creation

of a Genitourinary Tumours Multidisciplinary Unit in Malaga. The Unit will be led by David Olmos.

Many activities have taken place at the CNIO over recent months: On November 5, we opened our doors to Science Week under the slogan ‘All Together Disarming Cancer’; towards the middle of the month, coinciding with the World Pancreatic Cancer Day, we organised a one-day event together with GEPAC, intended for primary care physicians to promote the early diagnosis and prevention of this disease; and on December 3, we held our Lab Day event, in recognition of the good work and dedication of our young scientists.

The last few weeks highlighted the outstanding dedication of our researchers: Héctor Peinado has received 100,000 euros from *Constantes y Vitales*, the social responsibility initiative of *La Sexta* and the AXA Foundation, for his research on metastasis; in addition, he has been honoured with an award by ASEICA, which has also recognised the scientific career of Mariano Barbacid, Head of the Experimental Oncology Group; Óscar Fernández-Capetillo, Leader of the CNIO Genomic Instability Group, has received the 2015 *Fundación Carmen y Severo Ochoa* Research Award and the First *Constantes y Vitales* Prize to an Emerging Group Leader. Manuel Valiente, Head of the Brain Metastasis Group, has been awarded a prize by the *Asociación de Directivos de Aragón*.



«The CNIO has demonstrated that drug development is not the exclusive domain of industry»

Oscar Fernández-Capetillo, Head of the CNIO Genomic Instability Group, has been recipient of two important awards recently: the First *Constantes y Vitales* Prize to an Emerging Group Leader in Biomedical Research, and the *Fundación Carmen y Severo Ochoa* Research Award in Molecular Biology. These awards acknowledge the outstanding contributions made by the Group headed by Fernández-Capetillo at the CNIO, and further add to the list of national and international distinctions that the researcher has received in recent years. Among others, we can highlight his selection by the prestigious journal, *Cell*, as one of the 40 most prominent scientists in the world under 40 years of age.

What is your take on these awards?

I am deeply grateful, but science is not a race, rather a stroll, and it's not a question of winning. For me these awards represent the acknowledgement of the work and efforts of my whole team rather than a prize for an individual.

What type of research does your group undertake?

We study the impact that DNA damage, particularly damage arising during replication, has on processes such as cancer or ageing. We have known for some time now that the damage that occurs to DNA when it duplicates gives rise to mutations that generate cancer; in addition, a few years ago we discovered that this type of damage also affects ageing. It has been estimated that even if we were successful in curing cancer, our life expectancy would increase by

Óscar Fdez-Capetillo
Head of the Genomic Instability Group



only three years because we would still suffer from diseases associated with ageing, such as Alzheimer's, infarction, diabetes... Studying how our DNA accumulates that damage and how cells repair it will help us to understand the molecular processes that cause these illnesses.

Although our Group is primarily involved in basic research, we also dabble in applications that benefit society: regenerative biology strategies, the development of new drugs...

You have licensed a molecule that was developed jointly with the Experimental Therapeutics Programme to create an antitumour drug. What does this collaboration with industry mean to you?

Developing drugs is very expensive; hence, this collaboration is very important. On a personal level, it has helped me to identify the specific problems that must be resolved before drugs reach the patients. However, the greatest asset you get from a research centre like the CNIO collaborating with industry is the value of setting an example. The CNIO has demonstrated that drug development is not an exclusive domain of the pharmaceutical industry; I hope that other academic centres will also break this barrier.

PROFILE



Carlos Caldas
University of Cambridge, United Kingdom

On December 4, Carlos Caldas, from the University of Cambridge, visited the CNIO to talk about breast cancer research in our Distinguished Seminars Series.

Caldas is one of the co-authors of the METABRIC study, which is considered one of the most innovative projects in breast cancer research in recent years. In this study, published in 2012, a new breast cancer

map has been drawn that groups the disease into ten subtypes. This classification system will help to improve the diagnosis and lead to the development of more specific and effective treatments for each subtype.

In 2013, Caldas also led a project to develop a liquid biopsy diagnostic method that is not only more accurate than current methods, but that is also a better predictor of disease progression. This new method could also anticipate whether a patient will become resistant to treatments. This knowledge can help guide clinical decision-making in oncology, thereby facilitating a better understanding of what specific inhibitor is needed for each patient in order to combat resistance when it occurs.

In the future, these innovations could help to improve the diagnosis and treatment of breast cancer and, therefore, the quality of life of the patients.

INVITED SEMINARS

DISTINGUISHED SEMINARS

20 NOVEMBER
LEE ZOU
Harvard Medical School (United States)

27 NOVEMBER
ÁNGEL LANAS ARBEOLA
Research Health Institute of Aragon (Spain)

4 DECEMBER
CARLOS CALDAS
University of Cambridge (United Kingdom)

18 DECEMBER
ROBERT SCHWABE
Columbia University (United States)

CNIO WOMEN IN SCIENCE OFFICE SEMINARS

24 NOVEMBER
NATALIA GONZÁLEZ-VALDÉS
L'Oreal Spain (Spain)

