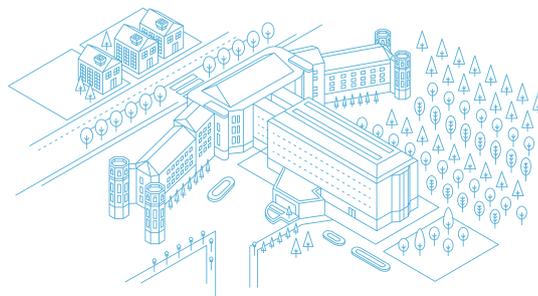


# CNIO FRIENDS

## newsletter

Latest news from the Spanish National Cancer Research Centre



### COLUMN

## New year, new discoveries

All that is yet to be discovered lies in the future and in order to reach it we must research tirelessly. A new year is beginning in which great discoveries are undoubtedly waiting to be made. Our work and our vocation is a constant search to achieve a greater understanding of what cancer is and how we can fight it better each day. This journey requires a well-oiled machine; it needs resources, teamwork and enthusiasm. Furthermore, we enjoy the privilege of having the backing of hundreds of you, of companies and organisations, which in different ways, support the work of the scientists at the CNIO. As such, the challenges that we have set ourselves this New Year include honouring that commitment. In a few days' time two new contracts will be signed which have been funded through *CNIO Friends* and we hope to begin a third selection process in the coming months. Throughout this year, we want to continue incorporating new talent to join our ranks and to compete at the highest scientific level. Moreover, we want our science to leave the Centre and reach citizens through outreach activities. We have a future full of opportunities ahead of us. Welcome, 2018.

—MARIA A. BLASCO  
Director

# 2018

### CNIO SCIENCE NEWS

In a study published in *Nature Communications*, the Telomere and Telomerase Group shows how the PI3K protein –known for its role in cancer and ageing– also modulates telomere protection by acting on TRF1, an essential component of the telomere protective shield. The paper shows that the inhibition of PI3K causes reduction in TRF1 levels and chromosome destabilisation. This is the first time that a functional link has been described between PI3K and the telomeres (1). The same group was able to block the growth of human and murine glioblastoma in mouse models by blocking the TRF1 protein (a component of the telomere-protective complex). The study, published in *Cancer Cell*, describes a new and promising way to combat this type of brain tumour, considered one of the most lethal and difficult to treat cancers (2). The Seve

Ballesteros Foundation–CNIO Brain Tumour Group has identified a protein called RanBP6 as a new regulator of EGFR, a factor linked to several human cancers. In a paper published in *Nature Communications* they show how silencing of RanBP6 promoted glioma growth by upregulating EGFR expression. Authors state that these findings might have “important clinical implications” (3). The Growth Factors, Nutrients and Cancer Group has discovered that the amount of protein in our diet may be an important factor in the prevention of colorectal cancer in different risk groups. A high-protein diet can protect those already suffering from an inflammatory bowel disease, whilst those people with a genetic predisposition to develop colon cancer could benefit from the opposite, a diet that is low in protein. The paper appeared in the journal *Cell Metabolism* (4).

### OUR CENTRE

As it does every year, on Monday 18 December, CNIO held its Lab Day, a day in which the youngest researchers have the opportunity to share their work, present their progress and receive recognition from their colleagues for their year's achievements. The winners of the award for excellence in research by pre-doctoral fellows were Leire Bejarano, Marta Brand, Metehan Cifdaloz, Teresa Olbrich and Laura Remacha. The award for excellence by postdoctoral and staff investigators was given to David Olmeda. The best oral presentations were those by Neibla Priego and Daniela Cerezo, whilst the winning posters were, in this order, those by Beatriz Salvador, María Sanz and Paula Pennacchi. The most emotional award, our *super volunteer* of the year, went to Jorge Martínez Torrecuadrada, who received it from the hands of Valle Sallés, the managing



II Charity Race Against Cancer organised by the Municipality of Las Pedroñeras (Cuenca).

director of the Juegaterapia Foundation, one of our deluxe collaborators. Speaking of excellence, we must thank José Mota and Mago More for their generosity. These well-known comedians selflessly lent their image and humour to *CNIO Friends* in a fun video in which they highlight the importance of research in the fight against cancer and encourage everyone to do their bit by becoming a friend of the CNIO. Things that add up.



## «My stay at the CNIO has led to my exposure to acquiring and using new skills in data management»

Chiaka Anumudu has a PhD in Zoology and is an expert in immunopathology and molecular epidemiology. Anumudu works at the University of Ibadan (Ibadan, Nigeria), where she studies schistosomiasis and its relationship with certain pathologies of the bladder, such as cancer. Six months ago she arrived at CNIO thanks to the programme *Ellas Investigan* promoted by the Women for Africa Foundation. Her stay in the Genetic and Molecular Epidemiology Group, led by Núria Malats, ends in a few days and we've talked with her about her work and this experience.

### Tell us about your experiences during these three weeks...

I am working on characterising biomarkers for the diagnosis of schistosomiasis-associated bladder cancer. This involves determining the genetic and immunologic interactions that control susceptibility to schistosomiasis in an endemic setting against the background of co-infections with malaria. We would like to find protein, genetic or microbial biomarkers that could help us identify people at risk of the disease or pathologies associated with the disease.

### What is it like to be a woman in a STEM field in Nigeria?

I'm not sure that I have noticed anything in particular. The country continues struggling with achieving equity for women in every sphere! Women in STEM in Nigeria do not face more obstacles because they are

women. The main discrimination they suffer is due to the lack of tools to work with. They do not need encouragement to become scientific, but good infrastructure is absolutely important.

### How has your stay at the CNIO influenced your research?

My stay at the CNIO has led to my exposure to acquiring and using new skills in data management: data mining, statistics and bioinformatics, as well as (dry-lab) methodologies, which is a more realistic direction for orienting my research when infrastructure for science is inadequate in my country. This is interesting because there's a lot of publically available data from which meaning is yet to be made. And it is also a good area for training graduate students.



**Chiaka Anumudu**  
Researcher  
Women For Africa Foundation

## PROFILE



**Margarita de Cos**  
Major Donors Manager  
WWF Spain

“This century is that of the planet and that of women, and I am working passionately with both.” Margarita de Cos (León, 1951) divides her time between the NGO WWF, in which she is the Major Donor Manager, and Global Summit of Women, of which she has been president since 2013, and which, amongst other things, promotes the incorporation of women on company management boards. De Cos, who has balanced her prolific professional career with family life, is one of the women at the forefront

of the fight for equality in the business world. An equality that begins to blur in childhood and early adolescence, when “there appears to be a choice between studying, working and being independent or being a wife and mother; as if they were incompatible things,” she pointed out during her talk sponsored by the WISE Office for women in science. A spurious dilemma which, nevertheless, snares many women. In order to overcome this and other obstacles, de Cos emphasises the need for men to take on some of the housework and childcare, for them to really share these tasks. “Together we can do much more,” she stated. In addition, De Cos is a firm advocate of quotas, as a tool for promoting equality in positions of responsibility. “It is,” she asserts, “one of the few things that favour women,” although some people do not agree with them. In the face of criticism aimed at this measure, de Cos has a clear argument: “Quotas are needed so as not to have to use quotas again.”

## INVITED SEMINARS

### DISTINGUISHED SEMINARS

**1 DECEMBER**  
**VÍCTOR G. CORCES**  
O. Wayne Rollins Research Center, Emory University (USA)

### WOMEN IN SCIENCE OFFICE SEMINARS

**12 DECEMBER**  
**MARGARITA DE COS**  
Major Donors Manager WWF Spain (Spain)

