“Commercialisation and return on investment in research remain priorities. CNIO’s royalty income in 2016 is double that of 2012. A total of 44 inventors, about 10% of the researchers at CNIO, have contributed and benefited from this achievement.”

MARIA A. BLASCO
Director
This year, once again, the data on CNIO’s scientific performance illustrate that we are doing a superb job contributing towards scientific breakthroughs. During 2016, the CNIO authored a total of 219 papers, 28 of which were published in journals with impact factors (IF) ranging from 10 to 15, and 32 papers in journals with impact factors greater than 15. Comparison with previous years (2006-2016) indicates that CNIO has continued to increase the numbers of papers published in top journals with IF greater than 15.

With the aim of upholding the CNIO’s strategy to remain an international Research Centre of Excellence and an influential institution in cancer research worldwide, 2016 saw the establishment of a CNIO Department of International Affairs. This new Department is headed by Carolina Pola who was the Editor of Nature Medicine for over seven years, as well as the former Director of Communications at Pharmamar, the most successful Spanish pharma company devoted to anti-tumour therapies. Since the creation of the Department of International Affairs, Carolina has redefined our international approach to embed the European concept of ‘Responsible Research and Innovation’ (RRI) in our institutional and research core. This new perspective, alongside several other efforts made by the Department, have resulted in several international collaborations that will bear fruit next year in the form of joint scientific symposiums to strengthen our research groups, as well as a plan to boost our recruitment of international talent. Our capacity to attract and retain scientific talent, providing new investigators with an interdisciplinary and multicultural environment, has become an integral part of our international agenda, which we will continue to nurture in the upcoming years.

I am also happy to mention that we continue to attract new and talented young group leaders to the CNIO. After the incorporation, in 2015, of two Junior Groups working in metastasis (led by Hector Peinado and Manuel Valiente) in the Molecular Oncology Programme, we welcomed another new Junior Group to the Programme in 2016: the Metabolism and Cell Signalling Group, led by Alejo Efeyan who joined the CNIO at the beginning of 2016.
In 2016, we also created a new service unit at the CNIO: the Biotechnological Text Mining Unit, which is focused on the application and development of biomedical text mining technologies that are becoming a key tool for the efficient exploitation of information contained in unstructured data repositories. This Unit is fully funded through the ‘Plan de Impulso de las Tecnologías del Lenguaje de la Agenda Digital (PITL)’, in the framework of an agreement (‘encomienda’) between the Secretary of State of Telecommunications of the Spanish Ministry of Energy, Tourism and Digital Agenda (MINETAD) and the CNIO. We also revised the organisation of the two Bioinformatics Units that were providing support and expertise to our investigators, namely, the Bioinformatics Unit of the Structural Biology and Biocomputing Programme, and the Translational Bioinformatics Unit of the Clinical Research Programme. Under a single new structure, the CNIO Bioinformatics Unit, headed by Fátima Al Shahrour, we have joined the efforts of both previous units in order to better serve the needs of the CNIO Research Groups and to better coordinate and manage bioinformatics projects.

The valorisation of the research results generated by CNIO’s scientists, with the aim of turning them into high-potential diagnostic or therapeutic products and services, is one of our ways to conduct the research, as well as to identifying the best possible protection and commercialisation of the results. In 2016, new contracts with industry secured future revenues for collaborative research that amount to nearly 4 million euros, which represents about 10 % of CNIO’s annual income.

The CNIO External Scientific Advisory Board (SAB), currently chaired by Mariann Bienz, is of utmost importance for guiding the strategic plans of the CNIO as well as for the review of our research groups. We would like to wholeheartedly thank our former SAB member Joan Massagà (Memorial Sloan Kettering Cancer Center, New York, USA) for his dedicated commitment to the CNIO SAB that lasted for over a decade (2003-2016). We would also like to welcome as new members to our CNIO SAB from 2011 to 2014, and as member for the remaining 9 years. During 2016, we welcomed two new members to our SAB, namely Stephen Frye, Director of the Centre for Integrative Biology and Drug Discovery at the University of Nottingham, and his industrial counterpart; Carlos Garcia Durán, Head of Zoology and Animal Health at the Zoological Society of London.

Furthermore, I would like to highlight the work that is being carried out at the CNIO Women and Science (WISE) Office. During 2016, we had the pleasure of listening to Maria Concepción Ferreras, Head of You Tube Partnerships in Southern Europe and Russia, Margery Resnick, Professor at the Massachusetts Institute of Technology in Cambridge (USA), and President of the International Institute of Madrid, Pilar Garrido, Oncologist at the Instituto Ramón y Cajal de Investigación Sanitaria (IRYCH), Ramón y Cajal University Hospital, Madrid; Edurne Pasaban, Mountaineer, Toledo, Spain; María Teresa Fernández de la Vega, President of Women for Africa Foundation (Fundación Mujeres por África), and former First Deputy Prime Minister of Spain; Tania Balló, documentalist and film director, Barcelona; Spain; Angéles González-Sinde, scriptwriter, film director and former Spanish Minister of Culture; Christina Rosenvinge, Spanish singer-songwriter, actress and producer. Together with Belén Yuste and Sonnica L. Rivas Caballero, from Rocaviva Ventures, Madrid, we also organised and hosted the CNIO Exhibition ‘5 creating a future for success’, a University of Notre Dame. The CNIO also participated in the sponsorship of the CNIO through an agreement aimed to support research and training of CNIO’s scientific personnel.

Finally, I would like to thank all of those who have once again collaborated on the elaboration of this Annual Report, with special thanks to Sonia Cerda who is responsible for this CNIO publication, as well as to our collaborators: the visual artist Amparo Garrido and the underbars graphic design team.

The ‘CNIO Friends’ initiative, devoted to raising funds for cancer research at the CNIO, celebrated its first two years of existence at the end of 2016. At that time, the initiative had about 800 friends who showed their unwavering commitment at all times. Thanks to them, we put in place the first three cancer research grants in 2016. The first two grants supported the researchers Paulina Gómez, from the Genetic and Molecular Epidemiology Group, and Vera Pancaldi, from the Structural Computational Biology Group. The third grant came from an agreement with the Juegaterapia Foundation (http://juegaterapia.org/) that is devoted to helping children affected by cancer. Thanks to this collaboration, the CNIO will hire a researcher in 2017 to investigate neuroblastoma and central nervous system tumours, two of the most common tumours in children.

Businesses also joined our CNIO Friends community. In this context, the CNIO signed a collaboration agreement with ASISA Vide in relation to a new company product that includes specific coverage for gynaecological cancer. The CLH Group also participated in the sponsorship of the CNIO through an agreement aimed to support research and training of CNIO’s scientific personnel.

In 2016, we were also very excited to incorporate a journalist to the CNIO Communications Office, Cristina de Martos previously worked as a journalist for the health section of El Mundo (the second most read newspaper in Spain) for eight years. In 2016, the CNIO appeared in the printed and digital press more than 2,600 times, thus helping to bring the CNIO to the forefront of public awareness and interweaving it into our country’s culture. Throughout the year, the featured stories received nearly 83,000 hits (EurekaAlert!® news service) from around the world and were taken up by prestigious international media such as El Mundo, Science, Juegaterapia, and the Guardian. The Scientist or Scientific American. One of the most widely commented articles in 2016 was the one authored by the researchers Manuel Serrano and Luc Moretiero on cell reprogramming; it was published in November in the prestigious Science journal. Their discovery was covered by important media outlets such as radio and television, and even made it to the first page of the daily, El Mundo.