“Our commitment to gender equality was consolidated in 2019. The CNIO together with the Works Council elaborated a very ambitious CNIO Equality Plan. This is an exciting time for the Centre and a step forward on the road to gender equality.”

MARIA A. BLASCO
Director
This year, once again, I am proud to convey how the CNIO has moved forward in so many directions, pushed by the extraordinary work of our people. In our goal to achieve scientific leadership and international impact, we succeed in 2019 to place the CNIO on the map as one of the top cancer research centres in Europe and worldwide. In 2019, CNIO researchers authored a total of 230 papers, 33 of which were published in journals with impact factor between 10 and 15, and 24 publications in journals with impact factor greater than 15. This year, according to the Nature Index, considering our scientific contributions in the life sciences and healthcare field, the CNIO ranked second among cancer-focused institutions in Europe. These indicators are a testimony of our scientific impact on basic and translational cancer research.

Science is constantly evolving, and so do we as a Centre, by incorporating new groups working on new research lines that best complement those already existing. Thus, in 2019 we reinforced our basic research arm by recruiting 2 new Research Groups to the Molecular Oncology Programme: the Transformation and Metastasis Group, led by Eva González Suárez, coming from IDIBELL, Barcelona, and the Topology and DNA Breaks Group, led by Felipe Cortés, formerly at CABIMER-CSIC, Sevilla. Both researchers hold prestigious ERC Consolidator Awards. These 2 Groups will contribute to reinforcing the already prominent role of the CNIO in 2 areas considered as critical in cancer research, namely genome integrity and metastasis.

The Structural Biology Programme also incorporated 2 Junior Research Groups: the Computational Cancer Genomics Group, led by Solip Park, formerly at the Centre for Genomic Regulation, Barcelona, and, towards the end of the year, the Computational Oncology Group, led by Geoffrey John Macintyre, coming from the Cancer Research UK Cambridge Institute, UK. These 2 Junior Groups will focus their efforts on the field of systems biology and computational genomics applied to the study of cancer. During the recruitment process we counted on the unparalleled support of Raúl María A. Blasco, Director.
Rahbad, Professor at Columbia University, and one of the top immunologists in the world. We believe that this will constitute one of the key areas for the CNIO in the years to come, and we expect to develop this new expertise at the CNIO, fostering fruitful collaborations with researchers working in other fields within our institution and elsewhere.

Finally, in 2019 Eva Ortega-Paino was recruited as new Director of the CNIO Biobank, after the retirement in 2018 of the former Director, Manuel Morente. Eva was formerly Scientific Coordinator of Biobank Sweden for the Escania region, bringing to the CNIO a long trajectory and experience in the management of biobanks at the international level.

We wish all these new recruits the best of luck in the development of their scientific projects and professional duties at the CNIO, which will ultimately increase our portfolio of achievements.

As a national centre and a flagship for cancer research in Spain, we strive to achieve the largest societal impact, and to do so we believe in the benefit of creating new bridges with scientists and institutions throughout the world. In 2019, we witnessed how our successful and exemplary partnership with the Weizmann Institute of Science (WIS) and the Ramón Areces Foundation bore fruit. We launched our first collaborative project to advance immunotherapy research in melanoma, and we held our second joint symposium on cancer research, hosted by an outstanding group of scientists of the WIS in Rehovot, Israel. This experience is a testimony to how science can also be a driver of diplomacy, nurturing long-term collaborations.

In line with our efforts to provide value to society and increase excellent science visibility, the CNIO further committed to the SOMMa Alliance of Centres and Units of Excellence, by our Director Maria Blasco holding the SOMMa vice-presidency and leading the Outreach workpackage. We committed ourselves to creating new and stronger links with other scientific centres in Spain and to underscore the need to provide the proper ground for science and society prosperity. In 2019 SOMMa’s second 100 science meeting was held in San Sebastián, creating an exciting environment for engagement with citizens through a science fair and science talks open to the public, oriented towards showing our discoveries and their real-world applications.

We hope that these initiatives will have a real impact, so that the research activity carried out in our country can permeate the scientific community to the whole of society.

Another indicator of our societal and scientific impact is the breadth of our innovation activities, in which we also strive to reconcile this with our core research mission. Our translational activities at the CNIO assets resulted in royalties for CNIO totaling 674,900 euros, the highest amount in the last 3 years, which is in part reinvested in our own research and translational activities. This creates a virtuous cycle that contributes to the generation of new discoveries with an impact on the business ecosystem.

Furthermore, we continue promoting the participation of CNIO investigators in national and international calls from private foundations and public funding agencies supporting projects with a strong innovation component. In 2019 a project focused on the development of a novel cell therapy for diabetes was awarded a Caixaimpulse; and this same project was competitively chosen to be part of the programme MIT Global IDEA. This international initiative supports the creation of a broad network and close mentoring with experts from the Boston ecosystem. The CNIO also obtained its first FET-OPEN for the use of novel probes and heat-based approaches for the diagnosis and treatment of brain cancers. Our Experimental Therapeutics Programme continues to co-develop drug candidates from novel targets validated by CNIO investigators, contributing to the generation of new agents to fight cancer and ageing-related diseases, which also represents assets for the CNIO. Our drug discovery pipeline gained additional visibility through our participation in the Miller Therapeutics Symposium, an international forum for research centres of excellence and multinational drug companies, as well as in multiple bio-business forums held in Spain and Europe. Our substantial activity in innovation at the international level reflects the leadership and influence of the CNIO and our researchers worldwide.

Our training programmes are among the key features of the Centre, and an essential part of our mission. Creating new generations of highly prepared researchers is a priority for the CNIO, and we work with our main sponsors as they contribute to support all our training initiatives, as well as our collaborations with investigators abroad. During 2019, Scott Lowe, from the Memorial Sloan Kettering Cancer Centre in New York (USA) and Sonia Lain, from the Karolinska Institutet in Stockholm (Sweden) were beneficiaries of the Jesús Serra Foundation’s Visiting Researcher Programme. In addition, thanks to the ‘Science by Women’ programme of the Mujeres por África Foundation, Hayet Rafa, from the University of Science and Technology Houari Boumedienne in Algiers, joined the CNIO’s Melanoma Group for a 6-month stay as a visiting scientist.

Societal progress and prosperity is the main reason for our existence, and this is why we are strengthening our initiatives to create the appropriate channels for dissemination and engagement with citizens, including involving our scientists in societal dialogues and science communication. The CNIO and private foundations have taken a lead role in this, and we seek to engage more actively with media outlets. These are only some examples of the activities we set up to bring science closer to the public, and we will continue working on this in the future.

The still young, Institutional Image and Outreach Office, created in 2018, is leading several projects that aim to open up new avenues to gain society’s trust and attention as well as emphasise the value of science. Our new website, a portal between the scientific community and society, was awarded an honourable mention in the XXXI Premios Prismas of scientific dissemination. In April 2019 CNIO and ‘la Caixa’ celebrated in Madrid’s CaixaForum a roundtable entitled ‘Science rescues Victor Frankenstein. Mary Shelley, lover of Science’, with the discussion moderated by author and screenwriter Fernando Marías, CNIO Director Maria A. Blasco, the writer Lorenzo Luengo, and the novelist, actress and theatre producer Cristina Higueras. In 2019 our CNIO Arte project co-funded by Santander Foundation, which explores the common territories between scientific research and artistic creation, brought together the Spanish scientist Ignacio Cirac, Director of the Max Planck Institute, Germany, and the photographer Chema Madoz. The funds obtained from this initiative totalled more than 100,000 euros, which contributes directly to our CNIO Friends philanthropic initiative. In 2019 the defence of CNIO Workshop in Copenhagen on ‘Genetics & Biomedical Sciences: Debates on Conceptual and Social Issues’ was held at CNIO, with the support of the Bane Sibadelli Foundation. Discussion topics illustrated the social impact of current molecular biology: longevity, human enhancement and transhumanism, personalised medicine, and gene editing.

In September 2019 CNIO established a new Development and Philanthropy Office aimed at identifying and providing new funding sources that may contribute to the sustainability of the Centre, as well as involving all of society in the mission and activities of the CNIO. The newly established office manages the CNIO Friends initiative and seeks to build new collaborative partnerships with corporate partners, individuals and philanthropic foundations. In 2019, CNIO received 51,000 euros from corporate partners and 96,000 euros from legacies and bequests. The funding derived from the CNIO Friends initiative since its implementation in 2015 has allowed us to incorporate 11 postdoctoral fellows and 2 PhD students, and 4 new postdoctoral positions are expected in the near future. We enthusiastically thank all of our CNIO Friends for their support and commitment to cancer research.

Our commitment to gender equality was consolidated in 2019 through the many activities spearheaded by our CNIO Women and Science Office (WISE). This is an effort from CNIO volunteers who have contributed to impactful changes that are facilitating both cultural changes and institutional improvements. As part of these efforts, our WISE office brought outstanding female speakers who inspire and encourage us to explore new perspectives and visions on the role of women in society. The WISE Office also organised in collaboration with the British Embassy, the 1st event on Equality for the SOMMaCentres and Units of Excellence, on October 29. Several Directors and Managers of the 51 SOMMa centres and units participated in the event, which aimed to share best practices in relation to gender equality, in order to promote in a coordinated and institutional manner the cultural change required to integrate gender equality in any strategic decisions related to science in our country. Finally, the WISEOffice contributed, together with the WIS and the CNIO, to elaborating the CNIO Equality Plan, which was approved by the Delegated Commission of our Board of Trustees in October 2019. This Equality Plan sets up specific objectives expected to be reached in this matter in the short and medium term, as well as the strategies and actions to facilitate their achievement.

Finally, I would also like to wholeheartedly thank visual artist Amparo Garrido for kindly contributing the fabulous artwork that illustrates the cover of our Annual Report, ‘Tiergarten’ exhibited at Museo del Romanticismo, Madrid 2012.

With great pleasure and pride we provide our society once more under the story of our achievements in 2019 and new expectations and visions for the future.