ROKE I. ORUEZABAL
Director of Innovation (since June)

In 2021 we saw how the Ministry of Science and Innovation launched new calls focused on innovation and development with a very translational perspective, namely the “Strategic Lines” and “Proof of Concept” calls. The CNIO Groups were successful in setting up projects in both scenarios. It is worth noting that 2 Proof of Concept projects were awarded to develop the THankX and MDKinhibitor projects, led respectively by Héctor Peinado and Maria S. Soengas. THankX focuses on the use of THX-B as an antimetastatic therapeutic agent in melanoma in combination with immunotherapy. MDKinhibitor proposes to develop inhibitors and blocking antibodies against the growth factor MDK, a protein secreted in a variety of aggressive tumours, including melanoma. In addition, 2 projects were selected in the Strategic Lines Programme, both with the participation of Marcos Malumbres in collaboration with different public bodies and companies. The CNIO is the coordinating institution of one of them, entitled mMETonChip, aiming to develop a micrometastasis-on-chip platform for the selection and validation of drugs, a project in collaboration with the Spanish pharmaceutical company PharmaMar. The second project selected in the call, OncoDeePlasm proposes the development of a new ultrasensitive immunodetection platform capable of detecting breast cancer biomarkers in blood. This will be carried out in collaboration with the Institute of Micro- and Nanotechnologies of the CSIC as coordinating institution, the Hospital Universitario 12 de Octubre and the company Mecwins.

The CNIO’s Groups participate in many of the most relevant international scientific societies and research networks. A new research network has been established together with Janssen and several European Universities for the study of FGFR in urothelial neoplasms and involving Francisco X. Real’s and Núria Malats’ Groups.

International cooperation with the biotech and pharma sectors increased in 2021 with the signature of over €10 million in partnerships with foreign companies, deals managed by the Technology Transfer and Valorisation Office. Besides the strengthening collaborations with pharma companies such as Janssen, Loxo, Boehringer Ingelheim and Bristol Myers Squibb (among others), the CNIO, with the Experimental Therapeutics Programme in the lead, was also successful in generating and stepping up alliances with foreign biotech companies such as Inflection Biosciences, Refoxy and Totus Medicines, giving added value to the CNIO’s small-compound library. This reflects the fact that half of the patents in the CNIO’s portfolio have been licensed out, an astonishing achievement for a public research institution, which also generated breakthrough spin-offs as Telomere Therapeutics. Once again, the CNIO broke another barrier thanks to its Biotechnology Programme, signing contracts with industry for an amount above €1 million, especially in the monoclonal antibodies field.

As a research institution of excellence, the CNIO has developed a strong commitment with innovation and public-private collaboration, commitment that will have an impact on our society in the form of new therapies and new hope for families.