





Welcome to the CNB

Fernando Rojo

DIRECTOR

When we look back on the past two years, one of the first things that comes to mind for most of us is the fire that destroyed our low voltage power plant on the morning of 14 February 2015. The invaluable dedication of the centre's maintenance crew and of many other people mitigated the potentially devastating consequences of an accident that paralysed the institute's activities for two weeks. The complete restoration of the power plant, now more reliable than the previous one and equipped with an automatic fire extinction system, finalized in spring 2016 and should prevent future accidents of this kind.

The resilience of the CNB to adversities also applies to its scientific life. The members of our Scientific Advisory Board, who visited the CNB last year during the centre's 5-year external evaluation, state in their summary report that "the scientific performance of the CNB has resisted very well the critical situation generated in Spain by the reduction of resources committed to research funding during the evaluated period".

Indeed, we faced difficult times, but have reason to believe that we are recovering from the economic crisis. In 2012 and 2013, funding fell from values that in previous years ranged from 14 to 19 million euros per year, to about 11 million euros. In 2014, we raised 13 million euros and, in addition, obtained the 4-million-euro Severo Ochoa Grant. This positive trend continued and, in both 2015 and 2016, funding of research stabilized at approximately 16 million euros per year.

The CNB's scientific productivity in the past two years has kept up with our longer-term average. In 2015 and 2016, our scientists published 450 articles in JCR-indexed journals, with a mean impact factor close to 6. When we rank these journals by impact factor, we find that 80% and 34% of the centre's scientific output were published respectively in the top 25% and top 10% of journals in their fields of knowledge.

The efforts of our Technology Transfer Office to push the development of research results into marketable products culminated in 7 new patents, 2 PCT/NPE applications and 17 licence agreements. Apart from numerous activities that established contacts between companies and scientists, the office organized seminars, round tables and workshops to tackle diverse aspects of innovation. Success stories such as the selection of a CNB project for GlaxoSmithKline's Fast Track Challenge Drug Discovery Programme, or governmental funding for 3 collaborative projects with companies, illustrate the centre's endeavour to team up with industry. The presence of the office at innovation fairs and stakeholder meetings, as well as its participation for the second year in a row as local host of the innovation promotion event Global ImasT, further helped highlight CNB research in the production sector.

Our Communication and Outreach Office has implemented a new web site, launched a bimonthly newsletter, organized monthly visits for primary and secondary school students, and coordinated the production of several videos that explain to the general public the importance of the research we do at the CNB. In 2016, outstanding scientific achievements of our researchers were covered by more than 20 press releases, 200 press appearances and a monograph broadcasted live from the CNB by the Spanish radio station RNE. That the office's efforts to improve online communication were successful is reflected by a 20% increase in the number of people who follow us on Twitter and Facebook, to 8,500 and 2,050, respectively. Outreach events promoted by CNB scientists on the occasion of World Brain Day, the European Researcher's Night, and the Madrid Science Week, as well as our participation in 100xCiencia, the first international science communication forum organized by the Severo Ochoa Centres of Excellence, further helped to make the CNB better known to the public.

The Communication and Outreach Office was also instrumental in coordinating the centre's training programmes, such as the CNB Course on Introduction to Research for university students or our PhD training programme, which includes a yearly welcome event, a scientific symposium and soft skill training courses. Furthermore, the office helped with coordination of more than 300 seminars and courses, which included talks by 45 distinguished speakers in the CNB and CNB Junior Seminar Series. We are confident that our constant efforts to offer excellent training opportunities and a rich academic life will continue to attract students to the CNB who will follow the example of the 61 brilliant young scientists who, in 2015 and 2016, obtained the PhD degree under the supervision of CNB researchers.

Since 2014, the CNB is a Severo Ochoa Centre of Excellence, which is associated with the implementation of a 4-year strategic plan. This year we successfully passed the mid-term review by an international panel of experts, who concluded "the CNB did well and has made good use of the Severo Ochoa funding, which has been essential to help overcome some of the recent shortages." In fact, the Severo Ochoa Grant enabled us to maintain 4 contracts for key persons in charge of grant management, scientific communication and innovation, hire 4 technicians for the centre's scientific services, finance 10 postdoctoral positions, provide bridge funding for 3 Ramón y Cajal scientists, and to co-finance with 1.4 million euros the acquisition of equipment for the centre's core facilities. These investments in scientific infrastructure enabled us to implement super-resolution microscopy techniques and launch a cryoelectron microscopy service unit.

Beyond the collective achievements of the centre, I would also like to refer briefly to some of the most outstanding recognitions of our colleagues' contributions to science. Roberto Solano was elected EMBO member; for three years in a row, Thomson Reuters has listed him among the most influential scientists in plant and animal science, which indicates that his studies were among the top 1% most referenced in academic journals. Fernando Moreno-Herrero, previously awarded an ERC Starting Grant, obtained an ERC Proof-of-Concept and an ERC Consolidator Grant; the regional government of Madrid recognized his merits with the Miguel Catalán Award 2016 for excellent researchers under the age of 40. The Spanish Virology Society awarded its 2015 Young Researcher's Career prize to Pablo Gastaminza, and Daniel López received the 2016 Young Researcher's prize from the Spanish Biotechnology Society. The Lilly Foundation recognized the longstanding scientific excellence of José Luis Martínez with the 2015 Distinguished Career Award. The Spanish Government acknowledged Luis Enjuanes as Commander of the Civil Order of Health for his merits as scientific advisor to the government during the Ebola outbreak.

This reflection on the past two years cannot finish without thanking Carmen Castresana for her unwavering efforts to guide the CNB through tough times, both as Director and more recently as Vice-director of the CNB. I would also like to express my gratitude to Isabel Mérida for her dedication to the demanding role as CNB Vice-director, and warmly welcome Mario Mellado, who recently joined the Director's team to replace Isabel. In addition, I am indebted to Peter Klatt, Technical Vice-director of the CNB, for his outstanding help in solving many often complicated scientific, logistic and administrative issues.

Finally, I cordially invite you to celebrate the CNB's 25th anniversary with us. We are preparing an attractive programme of scientific, outreach and communication activities to commemorate the contributions of our centre, inaugurated in 1992, to science and technology. I hope you will enjoy it.

If you want to know more about the CNB, please check the following links:

- CNB website: <http://www.cnb.csic.es/index.php/en/>
- CNB newsletters and publications: <http://www.cnb.csic.es/index.php/en/science-society/publications>
- CNB YouTube channel: <https://www.youtube.com/user/CNBcsic>
- CNB on Facebook: <https://www.facebook.com/CNB.csic>
- CNB on Twitter: https://twitter.com/CNB_CSIC