

# Nostrum Biodiscovery appoints Ezequiel Mas as its new CEO and embarks on an ambitious expansion plan

- Ezequiel Mas is to lead a new phase of Nostrum Biodiscovery (NBD), which is establishing a leading position in the European market as a provider of cutting-edge *bioinformatics technologies for the discovery and design of drugs*.
- NBD has exceeded the initial expectations of its business plan. For the period 2016 to 2019, its Compound Annual Growth Rate (CAGR) was 100%, with a turnover of €1.1M. In 2019, the company's investment in R&D+i approached €250,000.
- One of its latest projects is a private initiative formed by Grifols, IrsiCaixa and the BSC-CNS, in which NBD collaborates by providing data to help in the smart *in silico* design of drugs related to SARS-CoV-2. The conclusions of its work will be offered altruistically to this consortium and to other international projects in which the BSC-CNS is participating, such as EXSCALATE4CoV (E4C), to tackle the COVID-19 virus.
- NBD was established in 2016 by two leading scientists in the field of computational biology and chemistry: Modesto Orozco, professor at University of Barcelona (UB) and ERC Advanced Grant researcher at IRB Barcelona; and Víctor Guallar, ICREA professor at the BSC-CNS, with the strategic participation of the UB, through the Bosch i Gimpera Foundation, and the Botín Foundation, which provided advice and initial funding of €500,000.

**Barcelona, 6 April 2020.** [Nostrum Biodiscovery \(NBD\)](#) –a spin-off of the Biomedical Research Institute ([IRB Barcelona](#)), the Barcelona Supercomputing Centre ([BSC-CNS](#)), the University of Barcelona ([UB](#)) and the Catalan Institution for Research and Advanced Studies ([ICREA](#))– has appointed Ezequiel Mas del Molino as its new CEO, replacing Robert Soliva, who is leaving the company to take on a new professional challenge.

Mas del Molino holds a PhD in Biomedicine from the University of Barcelona, scientific training which he supplemented with an Executive MBA from the EAE Business School. His professional career combines research experience with the management and leadership of scientific projects, both in the private sector (CIRCE Crystal Engineering) and in prestigious public institutions (Leitat Technological Centre and the Barcelona Supercomputing Centre). In January, Mas joined NBD as Director of Operations, with the aim of assuming the management of the company in the medium term.

*"After three and a half years, NBD has reached a stage which requires changes in its executive team. Dr Robert Soliva, who over the last year has been combining the roles of CEO and CSO, is leaving the company's Management to take on new professional challenges, but will continue to be linked to Nostrum Biodiscovery as a shareholder. We would like to show our appreciation for his dedication, enthusiasm and scientific knowledge, without which the process of stabilising and consolidating NBD would have been impossible",* affirms Ezequiel Mas.

Once the Covid-19 crisis has been overcome, NBD will publicly announce its new executive structure. Until then, in the leadership of the company Ezequiel Mas will be able to count on the collaboration of Victor Guallar, as acting CSO, and Dr Lucia Díaz, as Chief Business Development Office (CBDO). Modesto Orozco will stay on as chairman.

## Growth exceeding initial expectations

NBD, located in the Barcelona Science Park (PCB) and the North Campus of the Universitat Politècnica de Catalunya (UPC), commenced its activity in September 2016, with the support of two leading Catalan scientists in the field of bioinformatics and computational biology: Modesto Orozco, professor at the University of Barcelona (UB) and ERC Advanced Grant researcher at IRB Barcelona; and Víctor Guallar, ICREA research professor at the BSC-CNS.

The company's activity focuses on speeding up emerging *drug discovery* and enzyme engineering projects, using a combination of cutting-edge bioinformatics tools which speed up and enhance the precision of studies leading to the launch of drugs and biotech products on the market.

Since its commencement of business in 2016, NBD has raised close to €1.5m of public and private capital: 500,000 euros (*seed funding*) from the Marcelino Botín Foundation, and 980,000 euros from the Spanish Ministry of Science and Innovation (Torres Quevedo contracts; Neotec and EuroStars programmes from the Centre for the Development of Industrial Technology) and the European Commission's Horizon 2020 programme (BioExcel Centre and euCanShare project).

For the period 2016 to 2019, its Compound Annual Growth Rate (CAGR) was 100%, with a turnover of €1.1M.

*"Nostrum Biodiscovery has exceeded our most optimistic expectations. The forecasts for 2020, regarding the increase in turnover, are fluctuating greatly because of to the COVID-19 crisis, but we are confident of achieving sustained growth with a CAGR of 30% over the coming 3 years",* asserts NBD's CEO.

## Accelerating international expansion

After just three-and-a-half years, NBD is establishing a leading position in the international landscape of companies dedicated to bio-molecular simulations with drug discovery and enzyme engineering applications.

The company has successfully applied its cutting-edge technologies in the pharmaceutical and biotech industries. It provides computational chemistry services to companies such as AstraZeneca, and develops technological programmes in the field of enzyme engineering with large European and North American multinationals.

NBD currently has a broad and highly stable portfolio of clients in the Spanish market, the European market—particularly in the United Kingdom, Belgium, the Netherlands and Sweden—and the United States market.

*"Our short-term objective is to consolidate our presence in the European and American markets, and to break into the Asian markets—China, India, South Korea and Japan—in addition to Oceania",* explains Ezequiel Mas.

NBD also participates in a large number of disruptive public drug discovery and development projects in numerous areas, ranging from cancer to schizophrenia and rare conditions, in collaboration with research groups at IRB Barcelona, the Vall d'Hebron Research Institute (VHIR) and the Bellvitge Biomedical Research Institute (IDIBELL), among others. The first patent applications related to these projects have already been filed with the European Patent Office (EPO).

One of the latest projects is a private initiative formed by Grifols, IrsiCaixa and the BSC-CNS, in which NBD collaborates by providing data that facilitates the smart, *in silico* design of SARS-CoV-2-related drugs. The conclusions of its work will be offered altruistically to this consortium and to other international projects in which BSC-CNS is participating to tackle the COVID-19 virus, such as [EXSCALATE4CoV \(E4C\)](#).

*"The impact of computational simulation on the drug discovery process is increasingly significant. Public and private research groups are making increasing use of in silico technologies, which, as they are directly related to the increased computing power of computers, are increasingly powerful and significantly reduce the time and cost of developing a drug",* explains Modesto Orozco, Chairman of NBD.

## Cutting-edge technologies for precision medicine

NBD's *in silico* services are at the cutting edge of knowledge in supercomputing technologies and focus on two early areas in the search for molecules with therapeutic potential: "*hit finding*" and "*hit-to-lead*".

Using a virtual screening platform, the NBD team finds new chemical entities that work against a biological target in a short time and with strong cost containment ("*hit finding*"); and through simulation techniques combined with supercomputing, the development of series heads is optimised ("*hit-to-lead*").

NBD has its [own technologies](#), transferred from the BSC-CNS and IRB Barcelona, as well as one of the most highly regarded platforms in the industry, the set of programmes from [Schrödinger, Inc.](#) In 2019, the company's investment in R&D+i was in the region of 250,000 euros.

*"NBD's great competitive advantage lies in the cutting-edge bioinformatics technologies developed over many years by its founders in their respective institutions, IRB Barcelona and the BSC-CNS, combined with its supercomputing capacity and the extensive industrial experience of its technical team. All this makes us a benchmark for pharmaceutical and biotech companies"*, says Victor Guallar, acting scientific director at NBD.

### ■ About Nostrum Biodiscovery

Nostrum Biodiscovery (NBD) was established as a *spin-off* from various institutions to speed up the development of drugs and molecules with different supercomputing-based biotechnological applications.

NBD has cutting-edge bioinformatics technologies developed by researchers Modesto Orozco and Víctor Guallar and their respective teams at the Institute for Biomedical Research (IRB Barcelona) and the Barcelona Supercomputing Center–National Supercomputing Centre (BSC-CNS), with the support of the University of Barcelona (UB), through the Bosch i Gimpera Foundation (FBG) and the Catalan Institution for Research and Advanced Studies (ICREA).

The creation of the company was also possible thanks to the strategic participation of the Marcelino Botín Foundation, as a catalyst for technology transfer to the company through its Mind the Gap acceleration programme, which provided it with financial and human resources. The origin of Nostrum Biodiscovery is the direct result of the work carried out thanks to this programme.

For further information: [www.nostrumbiodiscovery.com/](http://www.nostrumbiodiscovery.com/)