

## Foreword and CNIC mission



**Vicente Andrés**Basic Research Director



**Valentín Fuster** General Director



Borja Ibáñez Clinical Research Director

The CNIC's mission is to discover the causes of cardiovascular disease (CVD), translate basic research discoveries into clinical practice, promote health in society, and foster training and mentoring of up-and-coming scientists and physicians. Over its relatively short existence, the CNIC has built an unrivalled infrastructure and a powerful, cross-disciplinary research base that embraces many disciplines and includes population and patient studies.

A key factor in this achievement is the commitment of the Spanish government to building a flagship research institute to tackle the CVD epidemic. But the public purse is only part of the story. The CNIC also boasts an agile management structure that promotes training and the exchange of ideas and expertise, as well as a modern infrastructure of technical units and support services.

Most importantly, the CNIC is supported through an innovative public–private initiative financed by the Instituto de Salud Carlos III and the Pro CNIC Foundation. In 2018, the Pro CNIC Foundation renewed its commitment to the CNIC for a further

10 years. The CNIC has been a Severo Ochoa Center of Excellence program since the inaugural awards in 2012. The most recent award was mainly used to fund seven intramural projects in a competitive call aimed at fostering collaborative projects between basic and clinical research groups. The CNIC is also a member of the alliance of Severo Ochoa Centers and María de Maeztu Units (SOMMa).

The CNIC also benefits from the external support and advice of its Scientific Advisory Board, composed of leading international experts who provide guidance on strategy and recruitment and regularly evaluate the performance of the Center and its group leaders. In 2018, José Javier Fuster and Carlos Pérez Medina joined the Center as Assistant Professor and Assistant Health Scientist, respectively.





At the heart of the CNIC's mission is a shift from the traditional emphasis on treating clinical events to a strategy focused on identifying CVD in its preclinical stages and promoting health. This vision fosters a cohesive and flexible strategy that embraces research infrastructure, professional training, and a clear focus on cross-disciplinary collaborations between basic and clinical researchers to ensure that acquired knowledge is translated into real health benefits. To support its clinical research activity, in 2018 the CNIC established the Clinical Trials Coordination Unit (UCEC); in addition to supervising clinical trials, the UCEC also organizes clinical research with medicines and healthcare products.

This report offers an overview of how our young, energetic team of dedicated scientists, clinicians, and technicians is bringing this vision to reality. Reading these pages, what gives us the greatest pleasure is to see how the breadth of the CNIC's research activity integrates the Center into society at so many levels. As you would expect, there are breakthroughs at the frontiers of basic and clinical research. This year, these discoveries span from work showing ways to control the damage caused by the immunoinflammatory response to the discovery of the cause of accelerated atherosclerosis and premature death in progeria.

The impressive collection of high-impact publications in 2018 also documents the CNIC's wider social engagement. The Center's translational studies bear testimony to the enthusiastic participation of healthy volunteers, patients, and emergency service personnel in efforts to define the causes and risk factors of CVD. This commitment of citizens and professionals outside the research community is making essential contributions to advancing the use of noninvasive imaging technology for diagnosis and research. The CNIC's commitment to public health promotion is also evident in educational programs that start with children from an early age, teaching core health knowledge and instilling a positive emotional attitude. The Center's public outreach links seamlessly with our strong commitment to training at all levels, from programs to encourage a scientific vocation among high school students to continuing professional training programs for scientists and physicians.

Through these endeavors, the CNIC is making a comprehensive, across-the-board investment for societal benefit that integrates biomedical research into the wider society. This is fitting, since we are all stakeholders in our health and in the health of the next generation. As we move forward, the CNIC will maintain the drive and focus established in its initial phases and ensure that the Center's basic and clinical scientists continue to work closely together to devise innovative projects that help reduce the sanitary and socioeconomic burden associated with CVD.

