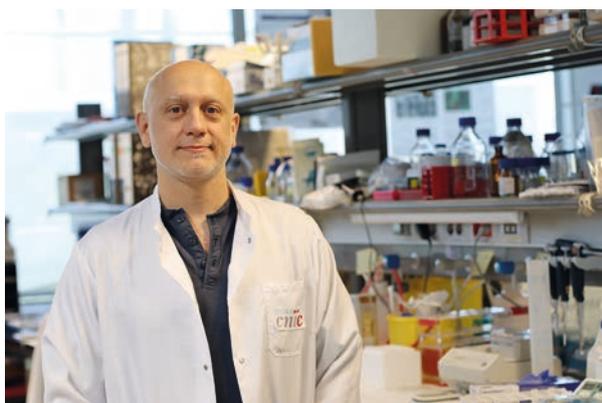


4 CNIC News and Views

Grants

CNIC coordinates a project from the Leducq Foundation



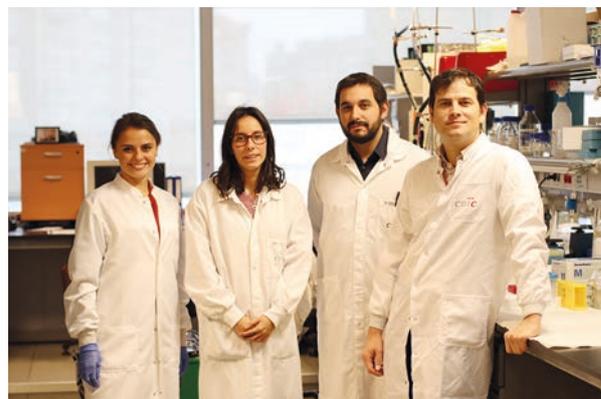
A project coordinated by the CNIC has been selected by the Leducq Foundation to receive funding of \$6,000,000 over five years. The project 'Clonal hematopoiesis and atherosclerosis,' coordinated by Andrés Hidalgo of the CNIC and Alan Tall of the Columbia University Medical Center, New York, is one of the five projects chosen by the 2018 Transatlantic Networks of Excellence Program of this prestigious foundation.

The Leducq Transatlantic Networks of Excellence Program funds teams of scientists who collaborate in the research of cardiovascular and neurovascular diseases. Since 2004, the Foundation has supported 57 networks, which include more than 400 researchers from 130 institutes in 21 countries.

This is the second Leducq Transatlantic Networks of Excellence to be coordinated by the CNIC. Miguel Torres is the European coordinator of the Redox Regulation of Cardiomyocyte Renewal project, which started on 01/01/2018 and will last until 31/12/2022.

European Union ERC Consolidator grant awarded to a project led by Borja Ibañez of the CNIC and the FJD

The MATRIX Project led by Borja Ibañez, Director of Clinical Research at the CNIC, has been awarded an ERC Consolidator grant by the European Commission. The award provides funding of €2 million over the next five years to develop new and innovative treatments for the cardiac toxicity associated with some cancer treatments. MATRIX (Novel mitochondria-targeted therapies for cancer treatment-induced cardiotoxicity) will be undertaken jointly by the CNIC and the University Hospital Jiménez Díaz Foundation (FJD) within a collaborative framework begun in 2015 to study myocardial diseases.



The CNIC obtained a second project in the same ERC-2018-COG call, entitled "Transgenerational epigenetic inheritance of cardiac regenerative capacity in the zebrafish". This project is coordinated by the University of Bern, and the CNIC participates as a partner with a shared PI: Nadia Mercader.

The CNIC currently holds seven active ERC Grants.

A CNIC-coordinated international project is set to receive €1 million in funding over the next 3 years

An international research effort led by the CNIC will receive \$1,350,000 (€1,100,062) over the next 3 years through an award from the International Human Frontiers Science Program Organization (HFSP). HFSP funds pioneering research projects in the life sciences, fostering collaboration between scientists from different countries across the globe and working in different specialties.

This HFSP international program targets support to risk-taking and pioneering projects and is the only program that finances scientific teams across the globe, without regard to borders. Support is provided for the explicit purpose of encouraging innovation and creativity. The project coordinated by CNIC research scientist José Antonio Enríquez is titled 'Handling OXPPOS structural heterogeneity and metabolic plasticity'. The project tackles a fundamental biological question: have diploid organisms evolved mechanisms to ensure monoallelic expression of defined groups of genes and thus avert functional conflict between alternative protein variants?



Two projects funded in the ERA-NET Cardiovascular Diseases Joint Translational Call, 2018

Transnational Cardiovascular Research Projects driven by Early Career Scientists:

- 1 "Fibrosis Treatment by Enhancer Targeting" CNIC as partner; PI, Luis Luna. Coordinated by Thomas Moore-Morris (INSERM UMR1251, Marseille Medical Genetics, France)
2. "Dissecting Mesenchymal-Endothelial Cross-Talk, Heterogeneity and Function to Mend Vascular Ageing and Atherosclerosis" CNIC as partner; PI, Rui Benedito. Coordinated by Universitätsklinikum AACHEN for the Medical Faculty of RWTH, Aachen, Germany

Four CNIC projects receive €2.5 million in the La Caixa Proyectos de Investigación en Salud 2017 program

Four CNIC projects have been selected by the Fundación Bancaria La Caixa within the La Caixa Proyectos de Investigación en Salud – 2017. Three of the CNIC projects are centered on cardiovascular disease: 'Somatic mutation-driven clonal hematopoiesis in atherosclerosis - International Consortium', led by CNIC Director Valentín Fuster; 'The antibody immune response during vascular remodeling', led by Almudena R. Ramiro; and 'Therapeutic targeting of the neutrophil clock in cardiovascular disease', led by Andrés Hidalgo. The fourth project is related to infectious diseases: 'Reaging immune cells prior to disease-inducing encounters', coordinated by Francisco Sánchez Madrid.



Awards & Honors

The cardiovascular polypill, named the best Multidisciplinary Adherence project

The cardiovascular polypill, developed by the CNIC and Ferrer, has been named the best Multidisciplinary Adherence project in the 1st edition of the OAT prizes for Improvements in Treatment Adherence. These prizes acknowledge contributions by organizations and individuals to improving treatment adherence. The polypill, marketed under the name Trinomia®, is a major advance in cardiology because each capsule contains three drugs indicated for the prevention of a second myocardial infarction in individuals who have already had one (atorvastatin, aspirin, and ramipril). The advantage of this treatment is its simplicity; patients need to take only one pill instead of three. This makes adherence to treatment much easier for high-risk patients requiring long-term treatment, who tend to be elderly.



Valentín Fuster awarded honorary degree by the Universidad Alfonso X el Sabio



The Universidad Alfonso X el Sabio has awarded an honorary degree to Valentín Fuster de Carulla for his extensive scientific contributions to cardiology and his tireless work in health promotion, aimed at advancing the treatment and prevention of myocardial infarction.

Fuster receives the Health Care Personality Award

Fuster has been awarded the Health Care Personality Award in recognition of his contributions to research and his promotion of a healthy life style to combat obesity and cardiovascular disease through improved diet and physical activity.



Guadalupe Sabio awarded the Fundación Jesús Serra research prize



The CNIC investigator received the award in a ceremony attended by Carmen Vela, Secretary of State for Research, Development, and Innovation and Fundación Jesús Serra president Federico Halpern. Sabio was joined by the other prize winner in the first edition of these awards, Pablo Pérez Martínez of the Hospital Universitario Reina Sofía, Córdoba

Oriol Bonnín prize awarded to CNIC investigator Xavier Rosselló



CNIC investigator Xavier Rosselló has been awarded the Oriol Bonnín prize for research on cardiocirculatory disease. The Oriol Bonnín award program is run by the Instituto de Investigación Sanitaria Illes Balears, el Servicio de Salud, and the Hospital Universitario Son Espases and is funded by

the La Caixa Foundation. Xavier Rosselló received €3000 for his project “Targeting myocardial infarction consequences in the acute and chronic setting using experimental and statistical approaches”.

CNIC researcher Guadalupe Sabio receives the IV AstraZeneca Foundation Jóvenes Investigadores prize



Dr Guadalupe Sabio has been awarded the Jóvenes Investigadores prize in the Type 2 Diabetes and Obesity category for her research on “The role of p38MAPK in the development of obesity and associated diseases”. Her research focuses on the control of the p38MAPK signaling pathway. This pathway induces the transformation of white adipose tissue into brown adipose tissue (BAT), and this research is revealing the divergent potential of the distinct p38MAPK isoforms for the treatment of obesity. The prize supports Sabio’s research with an award of €20000 from the Fundación AstraZeneca. Guadalupe Sabio will also have the opportunity to visit AstraZeneca research facilities and meet with executive team in charge of selecting the talented scientists receiving these awards.

Jorge Alegre-Cebollada to represent arsenic in the IUPAC 'Young Chemists' Periodic Table



CNIC investigator Jorge Alegre-Cebollada was selected to represent the element arsenic (As) in the 'Young Chemists' Periodic Table being organized to celebrate the centenary of the International Union of Pure and Applied Chemistry, the world authority on chemical nomenclature and terminology.

To mark the centenary and the International Year of the Periodic Table, the IUPAC and the International Young Chemists Network (IYCN) are creating a periodic table of young chemists whose achievements will be honored in July 2019 at the World Chemistry Congress and the IUPAC General Assembly in Paris. The selected investigators form a group of 118 young chemists from all over the world who personify the mission and values of the IUPAC. The resulting periodic table will showcase the career diversity, creativity, and dedication of the young chemists of the 21st century.

Scientific Events

CNIC Conference addresses the emerging concepts in cardiovascular biology



A new CNIC Conference under the title Emerging Concepts in Cardiovascular Biology was held at the CNIC on November 16 and 17. The meeting brought together more than 100 scientists from 15 European countries, China, the USA, Japan, and Russia. The meeting was coordinated by Rui Benedito and José Luis de la Pompa of the CNIC, José María Pérez Pomares of the University of Málaga, and Didier Stainier of the Max Planck Institute for Heart and Lung Research, Bad Nauheim, Germany. The attendees included experts on blood vessel biology, the role of the cardiac endothelium in the heart development and its impact on congenital heart diseases, and the interaction between coronary angiogenesis and cardiomyocytes during tissue development and regeneration.

Emerging Concepts in Cardiovascular Biology
 Madrid, November 16 - 17, 2018
www.cnic-conference.com

organizers
 Rui Benedito
 José Luis de la Pompa
 José María Pérez Pomares
 Didier Stainier

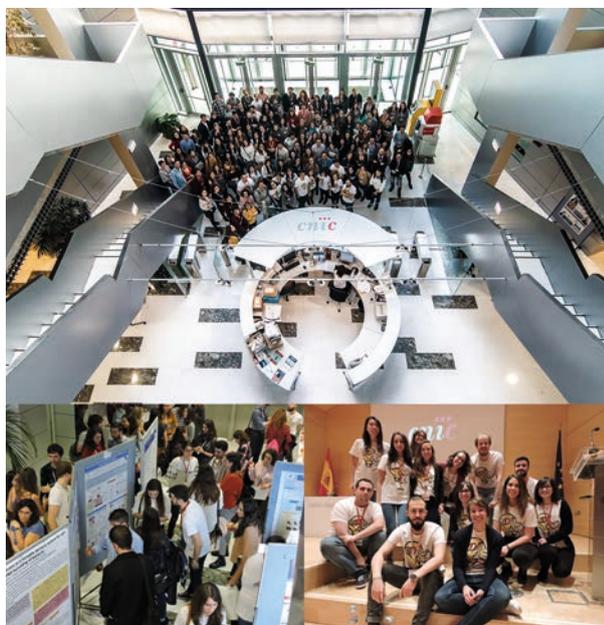
speakers

| | | |
|--------------------|------------------|-----------------|
| Ralf Adams | Mauro Giacca | Paul Riley |
| Karl Amato | Martina Graspera | Sarah Seyfried |
| Zohar Arzi | Carole Le | Arash Salimian |
| Mario Benini | Tatiana Petrova | Didier Stainier |
| Christian Bockholt | Kelli Fox | Julien Verrot |
| Peter Cammer | Michael Poeschl | Bin Zhou |
| Claudio Franco | Daniel Rafi | |
| Hilger Gerhardt | Kristy Red-Horse | |

venue: CENTRO NACIONAL DE INVESTIGACIONES CARDIOVASCULARES Y ONCOLÓGICAS
 Madrid, November 16-17, 2018
 Fundación CNIC



CNIC PhDay 2018: Scientific Growth



Under the slogan “Scientific Growth”, a new edition of the CNIC PhDay was held in November 2018. This annual event is on a par with any international congress. The PhDay provides an open forum for students and graduates, laboratory technicians, and postdoctoral researchers wishing to develop their careers as scientists and is based on the exchange of new ideas.

This year, the theme centered on scientific growth and covered stages in the life of a scientist from childhood through to the establishment of a scientific career in adulthood.

The CNIC hosts the third Hackathon de Salud, the biggest health programming marathon in Spanish



The CNIC hosted the third Hackathon de Salud, the biggest health programming marathon in Spanish. The event is organized by the Asociación de Investigadores en eSalud (AIES) and the COM Salud communications agency, and its commercial sponsors include Boehringer Ingelheim. The Hackathon invites patients, healthcare professionals, and managers to join with software developers in co-creating programs and applications to assist in disease management. The aim is to empower patients and ensure the adaptability and responsiveness of the healthcare system. In previous years, more than 30 multidisciplinary teams presented projects, and last year more than 120 ‘health hackers’ participated in the program.

Outreach Activities

CNIC participates in Madrid Science Week



For the seventh consecutive year, the CNIC participated in a new edition of the Madrid Science Week. This year, the CNIC ran three activities: a conference open to the general public entitled “Cardiovascular research for good heart health: Learn how we work at the CNIC”; the traditional “Un día en familia en CNIC” event, open to youngsters; and an event called “Find your scientific vocation in the CNIC”, aimed at junior and senior high-school students.

Several CNIC female researches give talks at schools on the International Day of Women and Girls in Science (February 11)



The CNIC gets closer to schools

Students from the final year of junior school and years 1 through 3 of high school spent a day with CNIC researchers who are at different stages in their research career talking about students’ doubts and answering questions about research work. The best projects were awarded with diplomas handed out by Valentín Fuster.



New Partnerships

Agreement signed between the CNIC and Xerencia De Xestión Integrada de A Coruña-Fundación Profesor Novoa Santos (FPNS)



The CNIC and Xerencia De Xestión Integrada de A Coruña (XXIAC)-Fundación Profesor Novoa Santos (FPNS) have signed an agreement to launch the project ‘Development of large experimental animal models for cardiac surgery with extracorporeal circulation and cardiac arrest.’ The agreement was signed at a ceremony attended by CNIC General Director Valentín Fuster, CNIC Managing Director Alberto Sanz Belmar, XXIAC Managing director and FPNS President Luis Verde Remeseiro, CNIC Clinical Research Director Borja Ibáñez, and project leader Víctor Bautista Hernández of the XXIAC and the FPNS.

The agreement covers a 4-year period until December, 2021. The lead investigator on the project is Víctor Bautista Hernández, Head of Pediatric and Congenital Surgery and Coordinator of Structural and Congenital Heart Disease Research at the XXIAC and the FPNS.

CNIC and FIBAO team up to advance knowledge on cardiovascular diseases



The CNIC and la Fundación Pública Andaluza para la Investigación Biosanitaria de Andalucía Oriental (FIBAO) have signed an agreement to exchange knowledge and professional experience to advance the prevention and treatment of cardiovascular diseases.

Through the agreement, the two institutions will cooperate in biomedical and clinical research projects and share training opportunities.

The Pro CNIC Foundation and HM Hospitales form an alliance to promote cardiovascular health, with a focus on women



During a meeting at HM Montepíncipe University Hospital, the Pro CNIC Foundation and HM Hospitales agreed to develop joint initiatives aimed at promoting cardiovascular health and a healthy lifestyle.

CNIC and Quirónprevención sign an agreement to promote cardiovascular health



Quirónprevención has signed an agreement with the CNIC to advance knowledge about cardiovascular health. The agreement will focus on studies into cardiovascular risk prevention and related diseases. Quirónprevención will provide a completely anonymized and untraceable database of more than 5 million medical checkups. The project will analyze cardiovascular risk in Spain and will assess a number of variables, including job type (office and manual workers have very different levels of physical activity), dietary habits, alcohol consumption and smoking, and overall daily physical activity.



Social & CNIC

The Pro CNIC Foundation renews its commitment to the CNIC until 2028



Pro CNIC Foundation President Mr. Luis de Carlos and General Secretary of Scientific Coordination Mr. Rafael Rodrigo formalized an agreement to renew the commitment of this body of 13 private companies to continue its support for the CNIC until 2028. The Pro CNIC Foundation is an innovative example of public-private collaboration that has allowed the CNIC to establish itself as a world leader in biomedical research, contributing to the CNIC gaining Severo Ochoa accreditation in recognition of its international excellence in research. Through the Pro CNIC Foundation, 13 leading Spanish companies channel their business knowhow and financial support to the CNIC, representing a benchmark in successful scientific patronage. The companies participating in the Pro CNIC Foundation are Acciona, Santander Bank, BBVA Bank, Endesa, the Mapfre Foundation, the Mutua Madrileña Foundation, the Ramón Areces Foundation, the Repsol Foundation, Naturgy, Inditex, “la Caixa”, Prisa, and Telefonica. The Pro CNIC Foundation enables the CNIC’s research to have a direct impact on patient care and health improvements in the general population. The Pro CNIC Foundation also helps in the conversion of innovations into patents that generate an economic return and support research and development in Spain.

The Minister for Science, Innovation, and Universities, Pedro Duque, attended the Pro CNIC Foundation Board of Trustees meeting



The Minister for Science, Innovation, and Universities, Pedro Duque, accompanied by Secretary of State for Science Pablo Martín, attended the meeting of the Pro CNIC Foundation Board of Trustees. The meeting was chaired by Pro CNIC Foundation President Luis de Carlos and provided an overview of the foundation’s activities. Pedro Duque and CNIC General Director Valentín Fuster released a joint statement in which they emphasized the need for governments to encourage private investment in scientific projects by creating the conditions to ensure the profitability of this type of enterprise and providing public funds where necessary. In his summary the Minister highlighted the importance of these measures: “There is much at stake, and the longer we delay taking the necessary measures, the harder the task will be in the future.”

Raquel Yotti, new Instituto de Salud Carlos III (ISCIII) Director, visits the CNIC

The new Director of the Instituto de Salud Carlos III (ISCIII), Raquel Yotti Álvarez, was shown round the CNIC by Managing Director Alberto Sanz and Research Directors Vicente Andrés and Borja Ibáñez. Yotti, accompanied by Margarita Blázquez Herranz, Subdirector of the ISCIII Redes y Centros de Investigación Cooperativa, learned about the CNIC’s

major projects and visited some of the Center's laboratories.



“The Tribe of the Heart” Campaign

The Social Project of Mediaset Spain, together with the Pro CNIC Foundation and Valentin Fuster, have launched The Tribe of the Heart, a community project that aims to create awareness about cardiovascular disease. The project's motto is 'Having a healthy heart is in your hands' and its goal is to instill in children the need to care for this organ that moves the world and gives us life. Activities based on music, art, and humor are used to create awareness about the need for healthy lifestyle habits to prevent cardiovascular diseases. Our heart has many things to tell us; listen to it!



Meeting with Repsol: The Future of Health, with Valentín Fuster

CNIC General Director Valentín Fuster held a meeting with REPSOL shareholders at the CNIC in an act dedicated to health promotion. The shareholders also learned about the Center's main scientific and medical findings during an informal breakfast with Fuster and four CNIC researchers: José María Castellano, Antonio Fernández Ortiz, Pilar Martín, and Gonzalo Pizarro.

