APPENDIX

Publications
Training Programs and Courses
Seminars, Events and Awards
Strategic Alliances
Funding
Patent Portfolio
Staff Figures
There were 215 CNIC publications in 2015, 195 of them in JCR-listed journals with an Impact Factor (IF). Of the total publications, 62% were produced through collaboration with foreign institutions and 29% with national institutions, and 9% were authored solely by CNIC researchers.

A CNIC scientist was a main author on 60% of the publications. The mean IF for all the articles was 6.984.

**Articles with a CNIC Main Author**


Van de Hoeft TP, Echarri-Vinto M, Van Lavieren MA, Mewissen M, Serruys PW, Tijssen JG, Pocock SJ, Escaned J, Piek JJ.
Diagnostic and Prognostic Implications of Coronary Flow Capacity: A Comprehensive Cross-Modality Physiological Concept in Ischemic Heart Disease.
JACC Cardiovasc Interv (2015) 8: 1670-80
IF: 7.345

Association of Myocardial T1-Mapping with Hemodynamics and RV Performance in Pulmonary Hypertension.
JACC Cardiovasc Imaging (2015) 8: 76-82
IF: 7.188

IF: 6.000

IF: 6.000

Scheiermann C, Frenette PS, Hidalgo A.
Regulation of Leukocyte Homeostasis in the Circulation.
IF: 5.940


IF: 4.556

Parallel Multifunctionalization of Nanoparticles: a One-Step Modular Approach for in Vivo Imaging.
IF: 4.513

Hidalgo A, Goetz JG.
Multicellular Cuddling in a Stem Cell Niche.
IF: 4.463

Incidence and Impact of Delirium on Clinical and Functional Outcomes in Older Patients Hospitalized for Acute Cardiac Diseases.
Am Heart J (2015) 170: 938-44
IF: 4.463

Coadministration of the Three Antigenic Leishmania infantum Poly (A) Binding Proteins as a DNA Vaccine Induces Protection against Leishmaniasis major Infection in BALB/c Mice.
IF: 4.446

Méndez-Ferrer S, Scadden DT, Sánchez-Aguilera A.
Bone Marrow Stem Cells: Current and Emerging Concepts.
IF: 4.383

Mittelbrunn M, Vicente-Manzanares M, Sánchez-Madrid F.
Organizing Polarized Delivery of Exosomes at Synapses.
IF: 4.350

J Am Heart Assoc (2015) 4: e001218
IF: 4.306

J Am Heart Assoc (2015) 4: e001218
IF: 4.306

Bonzón-Kulichenko E, García-Marqués F, Trevisán-Herraz M, Vázquez J.
Revisiting Peptide Identification by High-Accuracy Mass Spectrometry: Problems Associated with the Use of Narrow Mass Precursor Windows.
J Proteome Res (2015) 14: 700-10
IF: 4.245

Ezkurdia I, Rodríguez JM, Carrillo-de Santa Pau E, Vázquez J, Valencia A, Tress ML.
Most Highly Expressed Protein-Coding Genes Have a Single Dominant Isoform.
IF: 4.245

Cagin U, Enríquez JA.
The Complex Crosstalk between Mitochondria and the Nucleus: What goes in between?
IF: 4.046

Bansilal S, Castellano JM, Fuster V.
Global Burden of CVD: Focus on Secondary Prevention of Cardiovascular Disease.
Int J Cardiol (2015) 201: 51-57
IF: 4.036

Castellano JM, Bueno H, Fuster V.
The Cardiovascular Polypill: Clinical Data and Ongoing Studies.
Int J Cardiol (2015) 201: S8-S14
IF: 4.036

Spectral Analysis-Based Risk Score Enables Early Prediction of Mortality and Cerebral Performance in Patients Undergoing Therapeutic Hypothermia for Ventricular Fibrillation and Comatose Status.
Int J Cardiol (2015) 186: 250-8
IF: 4.036

Adverse Clinical Course and Poor Prognosis of Hypertrophic Cardiomyopathy due to Mutations in FHL1.
Int J Cardiol (2015) 191: 194-7
IF: 4.036

Malignant Ventricular Arrhythmias in Alcoholic Cardiomyopathy.
IF: 4.036
IF: 4.036

IF: 4.036

IF: 4.034

IF: 4.034

IF: 4.034

IF: 3.840

IF: 3.828

IF: 3.802

IF: 3.792

IF: 3.792

IF: 3.792

IF: 3.534

IF: 3.506

IF: 3.234

IF: 3.234


Iborra S, Sancho D. Signalling Versatility Following Self and Non-Self Sensing by Myeloid C-type Lectin Receptors. Immunobiology (2015) 220: 175-84 IF: 3.044


Publications


Articles with a non-CNIC Main Author
NOTCH Pathway Inactivation Promotes Bladder Cancer Progression.
IF: 13.215

Shi Y, Tan SH, Ng S, Zhou J, Yang ND, Khoo GB, McMahon KA, Parton RG, Hill MM, Del Pozo MA, Kim YS, Shen HM.
Critical Role of CAV1/caveolin-1 in Cell Stress Responses in Human Breast Cancer Cells via Modulation of Lysosomal Function and Autophagy.
Autophagy (2015) 11: 769-84
IF: 11.753

Exosome Secretion by Eosinophils: A Possible Role in Asthma Pathogenesis.
IF: 11.476

IF: 11.470

IF: 11.470

IF: 8.583

IF: 8.557

IF: 8.557
Biomaterials (2015) 76: 157-72

IF: 8.528

IF: 8.358

IF: 8.358

A Mitochondria-Specific Isoform of FASTK Is Present In Mitochondrial RNA Granules and Regulates Gene Expression and Function.
IF: 8.358


Tick Vector Ixodes scapularis Reveals Differentiated Apoptosis in the Response to Anaplasma phagocytophilum

Mitral Valve Disease-Morphology and Statistical Experimental Approach

Engineer Vascularized Bone-Mimicking Human in Vitro 3D Co-Culture Model to Tissues Combining Computational Tools and Statistical Experimental Approach.

Acleral Human Heart Matrix: A Critical Step toward Whole Heart Grafts.

A Mutation in the POT1 Gene is Responsible for Cardiac Angiosarcoma in TP53-negative Li-Fraumeni-Like Families


A Mitochondria-Specific Isoform of FASTK Is Present In Mitochondrial RNA Granules and Regulates Gene Expression and Function.

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Acleral Human Heart Matrix: A Critical Step toward Whole Heart Grafts.
Publications


Publications

IF: 4.439

IF: 4.396

IF: 4.185

IF: 4.056

IF: 4.036

IF: 3.807

IF: 3.734

IF: 3.481

IF: 3.361

IF: 3.839
Executioner Caspase-3 and 7 Deficiency Reduces Myocyte Number in the Developing Mouse Heart. 

Low Rates of Both Lipid-Lowering Therapy Use and Achievement of Low-Density Lipoprotein Cholesterol Targets in Individuals at High-Risk for Cardiovascular Disease across Europe. 

Laurent A, Calabrese M, Warnatz HJ, Yaspo ML, Tkachuk V, Torres M, Blasi F, Penkov D. 
ChIP-Seq and RNA-Seq Analyses Identify Components of the Wnt and Fgf Signaling Pathways as Prep1 Target Genes in Mouse Embryonic Stem Cells. 

Martínez-Zamora A, Meseguer S, Esteve JM, Villarroya M, Aguado C, Enríquez JA, Knecht E, Armengod ME. 
Defective Expression of the Mitochondrial-trNA Modifying Enzyme GTPBP3 Triggers AMPK-Mediated Adaptive Responses Involving Complex I Assembly Factors, Uncoupling Protein 2, and the Mitochondrial Pyruvate Carrier. 

LSD1 Overexpression is Associated with Poor Prognosis in Basal-Like Breast Cancer, and Sensitivity to PARP Inhibition. 

Identification and Characterization of Anaplasma phagocytophilum Proteins Involved in Infection of the Tick Vector, Ixodes scapularis. 

Histone Deacetylase Gene Expression Following Binge Alcohol Consumption in Rats and Humans. 


Barbato E, Barton PJ, Bartunek J, Huber S, Ibáñez B, Judge DP, Lara-Pezzi E, Stolen CM, Taylor A, Hall JL. 
Review and Updates in Regenerative and Personalized Medicine, Preclinical Animal Models, and Clinical Care in Cardiovascular Medicine. 

Moreno J, Quintanilla JG, Pérez-Villacastín J. 
Towards the Dynamic Assessment of the Lesion Generation Process in an Experimental Model of Cardiac Ablation. 

Popota FD, Aguiar P, España S, Lois C, Udias JM, Ros D, Pavia J, Gispert JD. 
Monte Carlo Simulations versus Experimental Measurements in a Small Animal PET System. A Comparison in the NEMA NU 4-2008 Framework. 

Cardiac Function in Vertically HIV-infected Children and Adolescents in the Era of Highly Active Antiretroviral Therapy. 

A knowledge base for Vitis vinifera functional analysis. 
IF: 2.347

IF: 2.306

IF: 2.107

IF: 2.004

IF: 1.717

IF: 1.579

IF: 1.040
SCIENTIFIC PRODUCTION

Number of publications:

- IF JOURNALS
- NON-IF JOURNALS
- Publications in Q1
- Publications in D1

PUBLICATIONS IF>10

Numbers in brackets show the percentage of publications with IF>10.
Numbers in brackets show the percentage of publications with IF>10

NORMALIZED CITATIONS BY CATEGORY
Training is one of the CNIC’s core activities, and the Center has devised a comprehensive training plan, **CNIC-JOVEN**, which includes programs for people at all levels, from senior high-school students to postdoctoral researchers and other professionals.

**The CNIC-JOVEN Training Plan** is designed to bring young people into biomedical research and create a strong base of talented researchers in the cardiovascular area.

### Pre-university & Undergraduate Students

**ACÉRCATE Program**

The ACÉRCATE Program offers senior high school students studying natural and health sciences the chance to experience life as a biomedical researcher, with the aim of awakening interest in a career in research.

Participants spend two weeks at the CNIC, learning modern techniques used in biomedical research, conducting supervised experiments, operating sophisticated scientific equipment and presenting the results of their work, all under the supervision of our researchers.

*Fellowships in 2015: 8*
CICERONE Program

The CICERONE Program is open to advanced undergraduate students studying toward a biomedicine-related university degree. Participants extend their scientific training through hands-on experience of laboratory-based biomedical research during the summer recess. In addition to carrying out a supervised research project, the students also attend CNIC seminars and workshops.

The aim of the program is to give university students first-hand knowledge of biomedical research so that they can make informed choices about the possibility of pursuing a scientific career.

Fellowships in 2015: 35

Recent Graduates

CARDIOVASCULAR POSGRADUATE Program

The CNIC is developing a Cardiovascular Postgraduate Program, run through collaboration with Spanish universities. The first strand in this Program has been established through a formal agreement with the Universidad Autónoma de Madrid (UAM).

In the academic year 2014-2015, the CNIC partnered in the Masters in Molecular Biomedicine, offering a module in Cardiovascular Disease. This optional module provides a broad overview of cardiovascular biology, including perspectives from basic, clinical and translational research.

Dates: 13 January-18 February 2015
Venue: CNIC
UAM MSc Students: 14
CNIC PhD students: 17

MASTER Program

This grants program provides individual funding for study towards a Masters degree at a Spanish university. The program is directed at students who are going to study for a PhD in one of the CNIC’s laboratories: completion of an official Masters (Máster Oficial) has been introduced as an obligatory stage towards a PhD in Spain, in accordance with the Bologna process to standardize academic qualifications across Europe.

Fellowships in 2015: 14

PREDICTORAL (PhD) Program

The PREDICTORAL Program provides a unified framework for all researchers at the CNIC who are working toward a doctoral degree. All predoctoral researchers are signed up to this program, independently of their funding source.

The aims of the program are as follows:

- To ensure uniform quality of predoctoral training at the CNIC
- To ensure fair and equal access of predoctoral researchers to training opportunities

Graduate students at the CNIC who obtained their PhD degrees in 2015: 10
Graduate students studying for their PhD theses at the CNIC during 2015: 77
LA CAIXA-SEVERO OCHOA INTERNATIONAL PhD Program

The la Caixa Foundation is a non-profit organisation funded by the third largest bank in Spain, the Caja de Ahorros y Pensiones de Barcelona (la Caixa). Since 1982, the la Caixa Foundation has run various fellowship programs to enable Spanish students to study postgraduate courses in Spain and abroad. Thanks to this support, thousands of students have been able to pursue their studies.

The la Caixa Foundation funds fellowships at the CNIC in recognition of the Center’s status as one of the Spanish centers of excellence named in the first and second editions of the Severo Ochoa Award. In 2015 the la Caixa Foundation provided support for two highly qualified graduate students to carry out their experimental work towards obtaining a PhD degree at the CNIC within an International PhD Program.

*la Caixa Fellowships in 2015:* 2

**Graduates & Medical Professionals**

**RES@CNIC Program**

The aim of the Res@CNIC Program is to offer medical professionals, during the first years of their specialization period as resident interns, the opportunity to learn about and become familiar with the latest techniques in cardiovascular research being used in the CNIC’s laboratories, under the guidance of a CNIC scientist. Residents participating in RES@CNIC also receive training in theoretical aspects of cardiovascular research through a taught module run by experts. The Program also seeks to create links and collaborations so that on conclusion of their MIR specialization period, these professionals will have the chance to undertake research projects in their respective National Health System centers in partnership with the CNIC.

RES@CNIC was launched in 2012. Students selected for the fourth call will join the CNIC during January and February 2016.

*Selected candidates for the fourth call:* 6

**INVESMIR Program**

The INVESMIR Program offers medical professionals during their specialization period as resident interns the opportunity to further their training through a research project in one of the CNIC’s laboratories, under the supervision of a CNIC scientist.

An important aim of the program is that participants establish contacts and collaborations in the CNIC that will support them, after completion of their MIR specialization training, in pursuing their own research projects at their centers within the Spanish National Health System.

*Fellowships in 2015:* 2

**FICNIC Program**

In 2014 the CNIC partnered with the Fundación Jesús Serra (FJS) and the Fundación Interhospitalaria para Investigación Cardiovascular (FIJC) to create this program, aimed at promoting training in translational cardiovascular research. The program offers training fellowships to medical professionals specializing in cardiology or cardiovascular surgery.

The FICNIC Program is intended for medical professionals during the final year of their resident intern physician (MIR) specialization period or cardiologists or cardiovascular surgeons within three years of completing their specialization.

*In 2015 the fellowship awarded in 2014 was renewed.*
VALENTÍN FUSTER Program

The Instituto de Investigación Hospital 12 de Octubre (i+12) offers a position for a medical researcher/physician in the cardiovascular area at the Hospital Universitario 12 de Octubre (H12O), Madrid. The position is offered through the formal partnership between the H12O Research Foundation and the CNIC, established to promote research excellence in the cardiovascular field.

The aims of this program are to establish the profile of the translational researcher/physician, dedicated to the efficient translation of research results to the clinic and the generation of research hypotheses from a clinical standpoint and to contribute to the consolidation of the research component within the career of clinical researchers in the Spanish National Health System.

The position offered within this program was awarded to the candidate Héctor Bueno Zamora.

CICERONE Workshop: “What you need to know about cardiovascular research”

This lecture series provides a general introduction to cardiovascular research in Spain, and also gives participants the chance to question key researchers and opinion leaders in the field. Since 2012, the Jornada CICERONE has been run in collaboration with the Fundación Interhospitalaria para la Investigación Cardiovascular and takes place at the Hospital Clínico San Carlos, Madrid.

Dates: September 4 and 5, 2015
Attendees: 89
CARDIOVASCULAR PATHOPHYSIOLOGY Course: From symptoms to genes

The CARDIOVASCULAR PATHOPHYSIOLOGY course is offered in collaboration with the Sociedad Española de Cardiología. This course offers a translational vision of cardiology to medical specialists by introducing them to the study of pathophysiology and basic research. Participants are given an overview of the molecular and genetic factors that underlie cardiac diseases and gain an up-to-date vision of cardiac physiology.

Dates: December 11 and 12, 2015
Venue: CNIC Lecture Hall
Attendees: 95
VASCULAR BIOLOGY Course

Dr. Valentín Fuster delivers this lecture series, sponsored by FERRER, on “Vascular biology: basic and clinical research” as part of the summer program of the Universidad Internacional Menéndez Pelayo (UIMP).

Dates: July 20 and 21, 2015
Attendees: 323

Research Professionals

CNIC International Postdoctoral Program

The CNIC International Postdoctoral Program (CNIC IPP) is aimed at supporting transnational mobility of postdoctoral researchers and broadening and deepening their individual competence, particularly in relation to the acquisition of complementary skills needed to become an independent group leader in the future. The program offers fellowships for researchers who hold a PhD Degree at the time of the application deadline.

Fellowships awarded in 2015: 5

The CNIC-IPP is supported by the CNIC and the European Commission under the FP7 Marie Curie Actions- PEOPLE- COFUND Programme.
Seminars and Events

January

26  Peter Tontonoz  
Howard Hughes Medical Institute and Laboratory  
Medicine University of California  
Los Angeles, USA

February

6  Shahin Rafii  
Weill Corner Medical College, Cornell University  
New York, USA

9  Michel Nussenzweig  
Howard Hughes Medical Institute, The Rockefeller University  
New York, USA

March

6  Alejo Efeyan  
Whitehead Institute for Biomedical Research  
Cambridge, Massachusetts, USA

13  Miguel López  
School of Medicine & the Research Centre of Molecular Medicine and Chronic Diseases (CIMUS), Universidad de Santiago de Compostela, Spain

23  Edward E. Morrisey  
Perelman School of Medicine at the University of Pennsylvania  
Philadelphia, USA

April

13  Mitch Lazar  
Institute for Diabetes, Obesity, and Metabolism / Perelman School of Medicine at the University of Pennsylvania  
Philadelphia, USA

17  Leonard I Zon  
Boston Children’s Hospital • HHMI  
Boston, USA

27  Matthias Nahrendorf  
MGH Center for Systems Biology, Harvard Medical School  
Boston, USA

May

11  Jean-Luc Balligand  
Institut de Recherche Experimentale et Clinique (IREC), University of Louvain Medical School  
Brussels, Belgium

19  Sandeep V. Pandit  
Center for Arrhythmia Research, University of Michigan  
Ann Arbor, USA

21  Pedro Fernández Salguero  
Facultad de Ciencias, Universidad de Extremadura  
Badajoz, Spain

25  Fiona Watt  
Centre for Stem Cells and Regenerative Medicine, Kings College London  
UK

29  Yasuyuki Fujita  
Institute for Genetic Medicine, Hokkaido University Japan

June

8  Stanley Nattel  
University of Montreal / Montreal Heart Institute Research Center / Canadian Journal of Cardiology  
Montreal, Quebec, Canada

21-22  V CNIC Conference  
Vulnerable Patient Meeting

13  Ángel R. Nebreda  
Institute for Research in Biomedicine  
Barcelona, Spain

17  Mª Ángeles Moro  
Universidad Complutense de Madrid  
Spain

18  David del Álamo  
EMBO Journal  
Heidelberg, Germany

26  Pere Puigserver  
Harvard Medical School  
Boston, USA
Seminars, Events and Awards

July

6 Bing Ren
UCSD School of Medicine and Ludwig Institute for Cancer Research, University of California
San Diego
La Jolla, USA

7 Pura Muñoz
ICREA and Pompeu Fabra University
Barcelona, Spain

13 Jeff W. Bulte
Johns Hopkins Institute for Cell Engineering
Baltimore, USA

27 Eva Nogales
University of California
Berkeley, USA

September

4-5 Jornada Cicerone 2013
What You Need to Know About Cardiovascular Research

10 Greg Lemke
Salk Institute for Biological Studies
La Jolla, California, USA

15 Michael Schnoor
Leibniz-Institute of Arteriosclerosis Research. University of Münster
Germany

21 Duojia Pan
School of Medicine & the Research Centre
Howard Hughes Medical Institute, Johns Hopkins University School of Medicine
Baltimore, USA

22 Aleksander Popel
Johns Hopkins University
Baltimore, USA

25 La noche de los investigadores
Bioingeniería: La investigación cardiovascular del futuro

October

5 Mathias Gautel
New Hunt’s House, King’s College London
UK

19 Juhani Knuutti
Turku PET Centre, University of Turku and Turku University Hospital
Finland

November

3 Greg Lemke
Salk Institute for Biological Studies
La Jolla, California, USA

10 Michael Schnoor
Leibniz-Institute of Arteriosclerosis Research. University of Münster
Germany

15 James Eberwine
PENN Genome Frontiers Institute, University of Pennsylvania, Philadelphia, USA

23 CNIC-Perkin Elmer 2nd High Content Screening Workshop

26 James Eberwine
PENN Genome Frontiers Institute, University of Pennsylvania, Philadelphia, USA

November

3 Sesión Informativa Horizonte 2020 sobre Convocatoria ITN 2016 Acciones Marie Sklodowska – Curie ITN

11 Semana de la Ciencia (Science Week)
Ven a CNIC: Visita interactiva a sus departamentos para conocer la investigación cardiovascular

27 CNIC PhDay

30 Jeroen Bax
Leiden University Medical Center
The Netherlands

December

11-12 IX Curso de Fisiopatología Cardiovascular
Del síntoma a los genes
Awards

Fuster, Valentín

- Fundación Ferrer Investigación, XXI Premio Severo Ochoa de Investigación Biomédica.
- La Gran Cruz de la Orden Civil de Sanidad, España.
- American College of Cardiology Award for “Leadership in Global Population Health Education, Research, Science”, Washington DC, USA.
- American Association of Clinical Endocrinologists, “Frontiers in Science Award”.
- Fellow of the European Respiratory Society, in Recognition of Excellence in Scientific and/or Educational Contributions to Respiratory Medicine, Amsterdam, The Netherlands.
- Honorary Professor, Instituto Universitario Escuela de Medicina del Hospital Italiano, Buenos Aires, Argentina.
- La Sociedad Ecuatoriana de Cardiología. Recognition Award for Valuable Support in the Progress to Prevent Cardiac Diseases, Quito, Ecuador.

Jalife, José

- Doctor Honoris Causa. University of Valencia, Spain.

D’Amato, Gaetano

- Best poster Prize. 2015 Weinstein Conference on Cardiovascular Development, Boston MA, USA.

Filgueiras, David

- Premio Extraordinario de Doctorado. Universidad Autónoma de Madrid.

Izquierdo-García, José L.


Mittelbrunn, María


Nicolás Ávila, José Ángel

- Premio Inmunotek Investigación Básica. Inmunotek.

Pellico, Juan

- EMIM 2015 Excellence Award. European Society for Molecular Imaging (EMIM).

Sanz Morejón, Andrés

- First Prize. Biological and Biomedical Sciences Area. Master work: Nuevas Estrategias para el Estudio de la Regresión de la Fibrosis Durante la Regeneración Cardíaca del Pez Cebra. XIV Certamen Arquímedes de introducción a la investigación.
The CNIC consolidates and expands its alliances to investigate, train, innovate and transfer.

In 2015, the CNIC signed 29 interinstitutional agreements to create or consolidate partnerships.

In the education sector, the CNIC expanded its already wide academic network (established agreements with 15 universities) by signing new collaboration agreements with universities in Spain ( Universidad Politécnica de Valencia; Universidad de Granada; and Universidad Autónoma de Barcelona). Moreover, the CNIC also strengthened its links with foreign universities, mostly through the establishment of student exchange programs and short visits for practical work in the CNIC’s laboratories. Five new international agreements were signed last year (Universidad Autónoma de Puebla, Mexico; Universities of Bern and Lausanne, Switzerland; Aarhus University, Denmark; and Universita degli Studi di Verona, Italy).

The Center also reinforced its postgraduate medical programs by establishing a new partnership with the Hospital Universitario 12 de Octubre (H12O) Research Foundation. Through this partnership, the Center has launched the VALENTIN FUSTER Program, which supports medical researchers/physicians to promote research excellence in the cardiovascular field. Thanks to this program, Dr. Hector Bueno has joined the CNIC.

Links with the clinical sector have been consolidated through the signing of new agreements with Spanish hospitals (Fundación Hospitales Madrid) and foreign clinical institutions (Memorial Sloan Kettering Cancer Center, New York; VU Medical Center, The Netherlands).

The CNIC also expanded its links with the commercial biotechnology sector with the signing of a research collaboration agreement with Pacesetter Inc. to study the role of atrial fibrillation in cardiac remodeling.

Finally, the CNIC’s international profile was greatly strengthened in the area of biomedical imaging thanks to a new strategic alliance with the Centro Vasco de Investigación Cooperativa en Biomateriales (BiomaGUNE). Both institutions will integrate their technological capacities and equipment in biomedical imaging, facilitating its inclusion in the new government supported Instalaciones Científico Técnicas Singulares (ICTS: Specific Scientific-Technical Installations), which have been designed to place Spain in a more competitive position internationally.
Public-Private Partnership

In December 2005, the Spanish Government signed an agreement with a group of some of the most important Spanish businesses (Pro CNIC Foundation, http://www.fundacionprocnic.es) to sponsor the CNIC. Since the signing of this agreement, the CNIC’s funding has been based on a public-private partnership (PPP) of a broad, socially-committed nature. The Pro CNIC Foundation does much more than provide the CNIC with money; it also contributes its accumulated managerial and business expertise. Representatives of the Pro CNIC Foundation sit on the CNIC’s Board of Trustees and actively participate in the management, planning and decision taking related to the Center.

A major strength of this socially-committed PPP model is that it provides a more solid base than traditional forms of charitable financing, giving the CNIC a more stable financial base than it would have if it depended on sporadic donations from benefactors. This stability gives the CNIC greater freedom to commit itself to long-term, high-return research strategies in collaboration with public and private institutions, and allows for a more effective use of its own resources generated through competitive projects and the exploitation of intellectual property rights.

The current members of the Pro CNIC Foundation are Acciona, BBVA, Endesa, Fundación Abertis, Fundación Mutua Madrileña, Fundación Mapfre, Banco Santander, Fundación Ramón Areces, Fundación Repsol, Gas Natural Fenosa, Grupo Prisa, Inditex, la Caixa, and Telefónica.

Private Funding

Fundación procnic
Competitive Funding

From 2007 to 2015 the CNIC attracted more than €51 million from national competitive sources, mostly national public funding agencies.

The CNIC has recently renewed its prestigious accreditation as a Severo Ochoa Center of Excellence for a further 4 years (2016-2019).

In 2015, CNIC researchers participated in more than 30 different national calls being successful in 48 applications.

In the same period (2007 to 2015), the CNIC attracted more than €31 million from international competitive sources.

The CNIC participated in 34 projects funded under the European Commission’s Seventh Framework Programme (FP7) and is engaged in 11 projects funded under the EU Research and Innovation Horizon 2020 (H2020) programme. Moreover, the Center is the top-ranking Spanish institution for funding awarded under the EC Societal Challenge Health, Demographic Change and Wellbeing (H2020-2014 call).

The international scientific competitiveness of the CNIC’s research groups is highlighted by their high representation in projects funded by the European Research Council (ERC), which funds Europe’s brightest minds to tackle innovative research challenges. The CNIC contributes to the achievement of this goal through 5 ERC projects awarded under FP7 and 4 awarded under H2020.
The distribution of funds per calendar year was obtained by dividing the total amount of each award by the foreseen duration of the project.
Twenty inventions are currently being filed, twelve of them in partnership with other institutions.

**TECHNOLOGY OFFERS AVAILABLE FOR OUT-LICENSING**

<table>
<thead>
<tr>
<th>TITILE</th>
<th>INVENTORS</th>
<th>APPLICANTS</th>
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<tbody>
<tr>
<td>Methods of using the Calcineurin A variant CnAB1 for the treatment of cardiac hypertrophy</td>
<td>Enrique Lara Pezzi, Nadia Rosenthal, María López Olafeta, María Villalba Orero, Jesús Gómez Salinero</td>
<td>CNIC, EMBL</td>
<td>PCT, US, EP</td>
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<td>Uso de agonistas selectivos de receptores beta-3 adrenérgicos para el tratamiento de hipertensión pulmonar</td>
<td>Borja Ibáñez Cabeza, Valentín Fuster Carulla, Ana García-Álvarez</td>
<td>CNIC, CLINIC</td>
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<td>Terapia neuroregeneradora/neurocompensatoria para el tratamiento de las neoplasias mieloproliferativas</td>
<td>Simón Méndez Ferrer, Lorena Arranz Salas, Joan Isern Marín</td>
<td>CNIC</td>
<td>PCT, JP, US, EP</td>
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<td>AAV vectors for the treatment of ischemic and non-ischemic heart disease</td>
<td>Enrique Lara Pezzi, Borja Ibáñez Cabeza, Enda Joseph Clinton, Jesús María Gómez Salinero, María Villalba Orero, David Sanz Rosa, Juan Antonio Bernal Rodríguez</td>
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<td>Micellar nanoparticles containing antitumoral glycosides</td>
<td>Hugo Groult, Fernando Herranz Rabanal, Jesús Ruiz-Cabello Osuna, Alfonso Fernández-Mayoralas Álvarez, Manuel Nieto Sampedro, Lorenzo Romero Ramirez, Isabel García Álvarez</td>
<td>CNIC, CSIC, CIBER</td>
<td>EP, PCT</td>
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<td>Method of predicting or prognosticating neurological performance in patients who have suffered a cardiac arrest and optionally comatose status due to ventricular fibrillation</td>
<td>David Filgueiras Rama, Esteban López de Sá y Areeses, José Millet Roig, Conrado Javier Calvo Sainz</td>
<td>CNIC, UPV, Hospital Universitario La Paz</td>
<td>EP, PCT</td>
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<td>Method and system for generating MR images of a moving object in its environment</td>
<td>Javier Sánchez González, Nils Dennis Nothnagel, Borja Ibáñez Cabeza, Rodrigo Fernández Jiménez, Valentín Fuster Carulla</td>
<td>Philips, CNIC</td>
<td>EP, PCT</td>
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<td>Método de detección de predisposición a padecer cardiopatía dilatada</td>
<td>Pablo García Pavia, Sofía Cuenca, Laura Padrón de Vaumas, Enrique Lara Pezzi</td>
<td>Fundación Investigación Hospital Puerta de Hierro, CNIC</td>
<td>ES</td>
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<td>Optic device and method for detecting cardiovascular disease</td>
<td>Vicente Andrés García, Cristina Rius Leiva, Beatriz Julia Dorado de la Corte, Tobias Ackermann, Xavier Muñoz Berbel, Andreu Llobera Adan</td>
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<td>MiRNA compositions for the treatment of mature B-cell neoplasms</td>
<td>Almudena Rodríguez Ramiro, Nahikari Bartolomé Izquierdo, Virginia García de Yebenes Mena</td>
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<td>p38 inhibitors for the treatment and prophylaxis of liver cancer</td>
<td>Ana Martínez Gil, Carmen Gil Ayuso-Gontán, Guadalupe Sabio Buzo, Antonia Tomás Loba, Bárbara González Terán, Elisa Manieri</td>
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<td>Biophotonic devices and methods of use</td>
<td>Vicente Andrés García, Vicente, Beatriz Julia Dorado de la Corte, Cristina Rius Leiva, Tobias N. Ackermann, Xavier Muñoz Berbel, Andreu Llobera Adan</td>
<td>CSIC, Aarhus University, CNIC</td>
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<td>Procedimiento de obtención de datos útiles para el diagnóstico de cardiomiopatías</td>
<td>María Pilar Martín Fernández, Raquel Sánchez Díaz, Adela Matesanz Marín, Luis Jesús Jiménez Borreguero, Francisco Sánchez Madrid</td>
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**Patent Applications:**
- **ES**: Spain
- **PCT**: International
- **EP**: Europe
- **US**: USA
- **JP**: Japan

**ACTIVE LICENSED AGREEMENTS**

**TITLE**: “Capsule for the prevention of cardiovascular diseases”  
**APPLICANTS**: CNIC, FERRER  
**LICENSEE**: FERRER

**TITLE**: “Method for identifying senescent mesenchymal stem cells”  
**APPLICANT**: CNIC  
**LICENSEE**: NIMGenetics

**TITLE**: “Vectores de expresión de proteínas: plásmidos pGEX-Calcineurina, pGEX-FKBP12 y pGEX-Ciclofilina A”  
**APPLICANT**: CNIC  
**LICENSEE**: PROTEIN ALTERNATIVES S.L.
CNIC Staff 2015 (452)

Gradual growth current status

Research Areas | Technical Units | Administration | Scientific Services

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Gender Distribution 2015

CNIC Staff by age 2015 (452)