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CNIC NEWS AND VIEWS

1. VISITING SCIENTISTS AT THE CNIC

SPAIN'S GROWING INTERNATIONAL PROFILE IN SCIENTIFIC RESEARCH MAKES IT AN INCREASINGLY ATTRACTIVE DESTINATION FOR VISITING SCIENTISTS FROM ALL OVER THE WORLD.

FOUNDATION OCCIDENT VISITING RESEARCHERS PROGRAM

The Jesús Fundación Occident and the CNIC have worked together since 2013 to bring visiting scientists to the CNIC within the framework of a Visiting Researchers program.

The Program supports visits by international scientists to Spanish research centers, with the aim of building strong inter-institutional bonds and promoting new lines of research.

On May 10, 2024, the CNIC and Fundación Occident held a scientific event as part of this Program. The event showcased preliminary research results from Dr. Mark Hlatky (Stanford University) and Dr. Carlos Morillo (Calgary University), current participants in the groups of Drs. Borja Ibáñez and Inés García Lunar and Drs. José Jalife and David Filgueiras, respectively. Representatives from both organizations, including CNIC leadership and research hosts, participated in the event, reinforcing their ongoing partnership.



EU CONTEST FOR YOUNG SCIENTISTS

The CNIC Recognition was created in the 2022 edition of the European Union Contest for Young Scientists (EUCYS) and offers a research stay at the CNIC for a student whose project aligns with the Center's research areas. The project is mentored by Dr. Mª Ángeles Moro, a long-time member of the EUCYS selection committee.

The 2023 winner, student Sachi N. Premaratne, from Sweden, was the recipient of the *CNIC Recognition* for her project "Antibodies targeting transient receptor potential vanilloid 1 as potential drug candidates for the treatment of chronic pain". She visited the CNIC in July 2024 to learn about the center's projects directly from our researchers. The awardee learnt also about the infrastructure and technology available at the center and how these are used to address and solve the challenges of cardiovascular health research.

The 2024 winner, Ludmila Kvasnovska, from Slovakia, with the project "Potential biomarkers of agerelated chronic inflammation", will complete her visit to the center in 2025.

These visits are financed with CNIC Severo Ochoa Grant CEX2020-001041-S.



2-AWARDS AND HONORS

DR. VALENTÍN FUSTER, CNIC'S GENERAL DIRECTOR RECEIVED IN 2024 THE FOLLOWING PRESTIGIOUS AWARDS:

• The AstraZeneca Foundation Honorific Award for Excellence in Scientific Research

The AstraZeneca Foundation gave its Honorific Award for Excellence in Scientific Research of the VII Young Researcher Awards to Valentín Fuster, for his outstanding career as a researcher in the field of cardiology.

• The International Atherosclerosis Society Award

The International Atherosclerosis Society awarded Dr. Valentín Fuster, the Antonio M. Gotto Jr. Prize in Atherosclerosis Research in recognition of his outstanding contributions to the understanding and treatment of atherosclerosis. The award was presented by Peter Libby, President of the International Atherosclerosis Society, during the opening ceremony of the International Atherosclerosis Society's Annual Symposium in Oman.





This award honors Dr. Fuster's outstanding contributions to the understanding of the progression, prevention, and treatment of atherosclerosis, also known as hardening of the arteries.

• Lifetime Achievement Award of the World Heart Federation (WHF)

The WHF presented Dr. Valentín Fuster with its Lifetime Achievement Award 2024. The award acknowledges his notable contributions in the field of cardiovascular disease and his particular devotion to combating this disease around the world. The prestigious award recognises the international leadership Dr. Fuster has displayed over the last four decades and his ground-breaking contributions to cardiovascular medicine, both in the field of research and from the clinical perspective and, more recently as champion of cardiovascular health worldwide.



The Evolution Deficient

• The Medal of the European Society for Clinical Investigation

The European Society for Clinical Investigation (ESCI) awarded the Albert Struyveberg Medal to Dr. Valentín Fuster. With this prize the ESCI acknowledges Dr. Fuster's valuable contribution to cardiology worldwide.

DR. JOSÉ JALIFE NAMED DOCTOR HONORIS CAUSA IN SCIENCES BY THE UPSTATE MEDICAL UNIVERSITY OF SYRACUSE.

Dr José Jalife, Group Leader of Heart Arrhythmias was named Doctor Honoris Causa by the State University of New York, Upstate Medical University of Syracuse, NY (USA).



Dr. Héctor Bueno, principal investigator of the Multidisciplinary Translational Cardiovascular Research group at CNIC, Coordinator of the Clinical Hospitalization Area and Research of the Cardiology Service at the 12 de Octubre Hospital, leader of the i+12 Multidisciplinary Translational Cardiovascular Research Institute, has received the ESC President's Awards 2024 from the European Society of Cardiology (ESC) at the ESC Congress 2024 in London. This award recognizes Héctor Bueno's outstanding individual contribution to the ESC. According to Prof. Franz Weidinger, President of the ESC, Dr. Bueno's years of selfless service to ESC have made "a profound impact in many ways, to members of the ESC but also for our patients".





DR. MARÍA ÁNGELES MORO JOINS THE ROYAL NATIONAL ACADEMY OF PHARMACY

Dr. María Ángeles Moro Sánchez, principal investigator of the Neurovascular Pathophysiology at CNIC, has been appointed as a Full Member of the Royal National Academy of Pharmacy. During her Inaugural Lecture, she emphasized her commitment to the institution's objectives: promoting scientific knowledge in health, advancing research in innovative treatments, and fostering continuous education for healthcare professionals.



DR. RODRIGO FERNÁNDEZ JIMÉNEZ RECEIVES THE GABRIELLA MORREALE NATIONAL YOUTH RESEARCH AWARD

The CNIC principal investigator Rodrigo Fernández Jiménez (Cardiovascular Health and Imaging Group) received the Gabriella Morreale National Youth Research Award in the area of Medicine and Health Sciences. The National Research Awards recognise the merit of researchers with Spanish nationality who perform outstanding work in scientific fields of international importance, and who make a significant contribution to the advance of scientific knowledge and the progress of humankind.



DR. CINTIA FOLGUEIRA COBOS RECEIVES THE RISING STAR AWARD 2024

The European Foundation for the Study of Diabetes (EFST) Rising Star 2024 awarded the CNIC postdoctoral researcher, Dr Cintia Folgueira Cobos a grant of 30.000 euros.





DR. GUIOMAR MENDIETA RECEIVES A JACC REWARDS FOR A PESA-CNIC-SANTANDER STUDY

The researcher Guiomar Mendieta (former Cardiojoven fellow) received in 2024, the 2023 William W Parmley Young Author Achievement Award for her work "Determinants of Progression and Regression of Subclinical Atherosclerosis over 6 Years", which was published in the Journal of the American College of Cardiology (JACC) in November 2023 and was led by Drs. Valentín Fuster and Borja Ibáñez. The William W Parmley award, in honor of Dr William W Parmley, ex-editor in chief of the JACC, rewards papers published in the JACC whose principal authors are completing their sub-specialization in cardiology and/or are doctoral candidates.



CNIC RECEIVES A DONATION TO INVESTIGATE HUTCHINSON–GILFORD PROGERIA SYNDROME

The Molecular and Genetic Cardiovascular Pathophysiology Laboratory headed by Dr Vicente Andrés at CNIC received a donation of 11,060 euros from the Alexandra Peraut Progeria Association for its research project into the Hutchinson—Gilford progeria syndrome (HGPS), an ultra-rare genetic disease that affects 1 in every 20 million people.



CNIC STUDY NAMED NATURE PJ IMAGING ARTICLE OF THE YEAR FOR 2024

A study coordinated by Dr. Carlos Pérez Medina, principal investigator of the Nanomedicine and Molecular Imaging Group at CNIC, has been named by the journal npj Imaging as its Article of the Year for 2024 (npj Imaging). The article, 'Macrophage PET imaging in mouse models of cardiovascular disease and cancer with an apolipoprotein-inspired radiotracer', describes an innovative probe for the noninvasive detection of macrophages—immune cells that play a key role in the inflammatory response—by positron emission tomography (PET). The study, published in May 2024, was carried out by scientists at the CNIC and Mount Sinai Hospital in New York.

3- SCIENTIFIC EVENTS

CNIC CONFERENCE ON CARDIOVASCULAR RISK FACTORS AND BRAIN HEALTH, JUNE 3-5, 2024

The first 2024 CNIC Conference highlighted strong links between cardiovascular health and cognitive decline, especially in diseases like Alzheimer's. Experts emphasized that vascular damage can contribute to or precede brain degeneration, and that early intervention offers a chance to prevent dementia. The conference called for better integration of cardiovascular and brain research, stressing the importance of controlling cardiovascular risk factors to protect brain health. This conference was co-sponsored by the International Society for Cerebral Blood Flow and Metabolism.



CNIC CONFERENCE ON UNDERSTANDING IMMUNITY IN CARDIOVASCULAR DISEASE, NOVEMBER 13-15, 2024

The second 2024 CNIC Conference highlighted the critical role of the immune system in cardiovascular health and disease. Experts in immunology, vascular biology, and cardiology discussed how immune cell dysregulation contributes to conditions such as atherosclerosis, heart failure, and inflammatory cardiomyopathies. The event emphasized that both exaggerated inflammatory and autoimmune responses can cause long-term cardiac damage. Advances in immunotherapy offer promising new treatment approaches. Key topics included immune regulation in heart repair, cardiovascular inflammation, autoimmunity, and immune cell interactions in heart disease.



CNIC PhDAY 2024: "LEARNING FROM THE PAST FOR A BETTER FUTURE"

The CNIC PhDay is an open forum for undergraduate and graduate students, lab technicians and postdoctoral researchers to develop their careers as scientists, exchange new ideas and network. Every year, more than 200 people gather at the CNIC to share experiences and generate new ideas and collaborations.



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The 10th edition of CNIC PhDay was held on November 29, 2024, organized by doctoral students and postdoctoral researchers. Under the theme "Learning from the Past for a Better Future," the event focused on the impact of science on the environment and society.

The event focused into the role and impact of science on the environment and society. Invited experts from different scientific fields and perspectives gave thought-provoking presentations and discussions. The focus was on the conscious use of available resources, deepening the understanding of the intricate relationship between research workflows, biotechnology, public health and the environment.

4- OUTREACH ACTIVITIES

INTERNATIONAL WOMEN'S DAY 2024 @ CNIC

CNIC held a symposium on the 8th of March to highlight the inspirational example of our female researchers. The event "Women scientists from around the world at CNIC" was held with the participation of five female international researchers who conduct their investigative work at our Center: Valeria Caiolfa, Italy; Beatrice Oluwatayo, Nigeria; Gillian Dunphy, United Kingdom; Jyothi K C, India and Henar Cuervo, Spain. The researchers talked to the attendees about aspects such as what a career in science is like for women abroad, the differences between countries and cultures, maternity during a career in research and their research at CNIC among other topics.



INTERNATIONAL DAY OF WOMEN AND GIRLS IN SCIENCE AT CNIC

In Spain, only 16% of STEM professionals are women. On the International Day of Women and Girls in Science, we prepared an activity to attempt to encourage vocation by examples of real women who work at CNIC.

The event took place on 15 February in the CNIC auditorium.

First of all, high scool attendads watched the video showing the experience of 4 women from the CNIC who are part of the PESA HEALTH CNIC-Santander project. This video is part of the #EmpresasQueInspiran $\frac{1}{2}$

initiative of the Bertelsmann Foundation to help awaken vocations in the field of science and technology. Those attending were able to learn about their experience, as well as the talent and profiles needed to work on such an interesting scientific challenges.

This was followed by a colloquium entitled 'Women and Girls in Science' and finally they were able to learn about the CNIC's training Plan and its flagship programme: ACÉRCATE.



• Dr. Borja Ibáñez: Now is the Best Time to Start Taking Care of Ourselves

On September 29, World Heart Day (#WorldHeartDay), the CNIC's Scientific Director, Dr. Borja Ibáñez, explained to the general public what atherosclerosis is, how studies such as PESA-CNIC-SANTANDER and REACT contribute to its prevention, and at what age we should begin taking steps to prevent it, among other important topics.



• Dr. Ana García and Dr. Nadia Mercader: Heart attack in women and how a heart attack regenerates

Two CNIC researchers take part in the journal Saber Vivir magazine, on the occasion of World Heart Day, presented by Dr. Valentín Fuster, Director General of the CNIC and Director of the Mount Sinai Fuster Heart Hospital in New York.

Women are now much more aware that the risk of suffering a heart attack is similar to that of men. Dr. Ana García Álvarez, principal investigator of the Heart Failure and Pulmonary Hypertension translational research Group at CNIC and head of the Cardiology Department at the Hospital Clínic in Barcelona, considers this new perception to be 'a great step forward because it promotes self-care'. Although she insists that 'there is still a long way to go'.

Dr. Ana García Álvarez explains the reasons and the way in which heart attacks occur in women. She also stresses the importance of seeing a doctor as soon as possible: 'It takes about 6 hours from the onset of a heart attack until there is irreversible damage, but it is advisable to go to the doctor much earlier'.

Dr. Nadia Mercader, visiting professor at the CNIC and professor at the University of Bern (Switzerland), discussed the possibility of heart regeneration after a heart attack: "We know that all cells in the body contain the same (or very similar) genetic information because they are copies of another cell that has divided before. It may be possible that heart cells can redivide and recover the organ after a heart attack. But there is still a lot of research to be done."





• European Researchers' Night 2024 at CNIC

Through eight activities open to both adults and children, attendees of the 15th European Researchers' Night in Madrid, hosted by CNIC, participated in seminars and workshops that brought them closer to the research conducted at the Center. This event offers an exciting opportunity to dive into the world of science and innovation. From fascinating experiments to inspiring talks, CNIC provides a glimpse into the latest discoveries and technological wonders.



• CNIC at the 2024 Science Week

From November 7 to 15, CNIC organized 11 activities during the 24th Science and Innovation Week, welcoming participants of all ages. Attendees engaged in practical workshops and had the chance to visit CNIC's state-of-the-art laboratories.



El CNIC recibe apoyo del Instituto de Salud Carlos III (ISCIII), del Ministerio de Ciencia, Innovación y Universidades (MICIU) y es un Centro de Excelencia Severo Ochoa. Esta actividad es parte de la ayuda CEX2020-001041-5 financiada por el MICIU/AEI/10.13039/501100011033.

5- OTHER ACTIVITIES

CNIC PARTICIPATES IN THE FORO TRANSFIERE, THE MAIN MEETING ON SCIENCE, TECHNOLOGY AND INNOVATION IN THE SOUTH OF EUROPE

CNIC participated in the 13th European Meeting on Science Technology and Innovation. Known as Foro Transfiere, this is the main meeting for R+D in the south of Europe and its aim is to share scientific and technological knowledge, promote innovation, connect science and business, and facilitate the transfer of knowledge so that scientific and technological developments reach people's daily lives. The Foro Transfiere is co-organized by the Ministry of Science and Innovation, the Andalusian Regional Government and Malaga City Council.



6-SOCIAL AND CNIC



CNIC JOINS THE 2024 HEART RACE

CNIC took part in the 15th Popular Heart Race organized by Spanish Heart Foundation, promoting cardiovascular health and fitness through community participation.

CNIC ADVANCES EQUALITY: COLLECTIVE AGREEMENT NEGOTIATION, EQUALITY DISTINCTION RECOGNITION, AND NEW PLANS FOR EQUALITY AND HARASSMENT PREVENTION

CNIC begins negotiating its first collective agreement, the agreements reached will benefit the more than 400 professionals working at the Center. This is a major milestone for the Center's staff.

Moreover, CNIC was awarded in 2025 with the Equality in Business Distinction from the Ministry of Equality and is negotiating a new Equality Plan and a new Protocol for the Prevention of Harassment.

