

SCIENTIFIC EVENTS

MEETINGS & CONFERENCES

CNIO-CaixaResearch Frontiers Meetings (CFM)

CNIO- CaixaResearch Frontiers Meetings are the main international conferences that are organised by the CNIO and “la Caixa” Foundation. They focus on specific, cutting-edge aspects of cancer research, thus providing a unique platform for an intensive and dynamic exchange and debate on scientific ideas. The invited speakers – around 20 internationally renowned leaders in oncology – present their latest findings during 2 and a half days. The learning environment encourages delegates to exchange experiences, ideas, and practices upheld at their companies; network and create connections with researchers with similar interests; listen to and meet the keynote speakers; enjoy the extra-curricular conference programme; and hear about latest development in the research field. Up to 100 additional participants are selected – via a widely publicised call for applications – based on their potential to make relevant contributions to the conference by presenting hot topics as posters or short talks.

MOLECULAR, CELLULAR AND ORGANISMAL DRIVERS OF AGING 9-10 MAY 2022

ORGANISERS:

- **Maria A. Blasco**, CNIO, Spain
- **Alejo Efeyan**, CNIO, Spain
- **Thomas Rando**, Stanford University, US

SESSIONS:

- Senescence and Regeneration
- Nutrients and Metabolism
- Epigenetics and Genome Stability

In 2022, we arranged 2 CFM: 1) **Molecular, Cellular and Organismal Drivers of Aging**. Our perception of aging has shifted from an inevitable pace of overall functional decline to a biological process amenable to genetic and pharmacological manipulation, with potential health-promoting interventions against aging-related diseases. The scope of this conference was to get an integrative view of aging, by putting together different fields and disciplines working on different aspects of research on aging. 2) **Diet, Nutrition and Cancer Cell Metabolism**. Recent progress was presented during the conference to provide a forum for discussions on nutrient-sensing pathways and mechanisms, their effect in cellular function and tissue homeostasis, and the impact of their dysregulation in cancer development and metabolic disorders. Both conferences brought together more than 130 cancer experts from the world’s most active groups in the area.



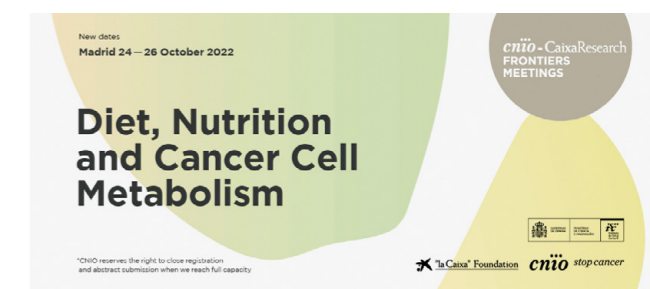
DIET, NUTRITION AND CANCER CELL METABOLISM 24-26 OCTOBER 2022

ORGANISERS:

- **Nabil Djouder**, CNIO, Spain
- **Nikla Emambokus**, Cell Press, US
- **M. Carmen Fernández-Agüera**, Cell Press, Spain
- **Valter Longo**, IFOM, Italy
- **Marcos Malumbres**, CNIO, Spain

SESSIONS:

- Metabolic Pathways and Cancer
- Metabolic Pathways and Disease
- Nutrition, Epidemiology and Disease
- Diet, Nutrition and Metabolic Disease



TRAINING COURSES AND WORKSHOPS

The CNIO is committed to disseminating the results of state-of-the-art cancer research to the wider community, including medical professional and junior scientists, thereby enabling

them to stay abreast of recent developments in specialised techniques. This is achieved through training courses and hands-on workshops organised by CNIO scientists and technologists.

FLOW CYTOMETRY INDUCTION COURSE: FUNDAMENTALS, APPLICATIONS, DATA ANALYSIS AND DATA PRESENTATION

17-18 JANUARY 2022
21-22 FEBRUARY 2022
4-5 APRIL 2022
23-24 MAY 2022
27-28 JUNE 2022
12-13 SEPTEMBER 2022
24-25 OCTOBER 2022
28-29 NOVEMBER 2022

SPEAKERS:

- **Sara García García**, Flow Cytometry Unit Technician. CNIO
- **Julia García-Lestón**, Flow Cytometry Unit Technician. CNIO
- **Lola Martínez**, Head of the Flow Cytometry Unit. CNIO
- **Andrea Valle**, European Applications Specialist DeNovo Software

MULTICOLOR FLOW CYTOMETRY COURSE

14-15 MARCH 2022
3-4 OCTOBER 2022

SPEAKERS:

- **Sara García García**, Flow Cytometry Unit Technician. CNIO
- **Julia García Lestón**, Flow Cytometry Unit Staff. CNIO
- **Jose Manuel Ligos**, Technical Application Specialist. Cytek Biosciences
- **Lola Martínez**, Head of the Flow Cytometry Unit. CNIO
- **Ana Ilie**, Flow Cytometry Unit Technician. CNIO
- **Andrea Valle**, European Application Specialist. DeNovo Software

FULL SPECTRAL FLOW ANALYSIS TOOLS WITH FCS EXPRESS 7 FOR USERS 21 MARCH 2022

ORGANISERS:

- **Lola Martínez**, Head of the Flow Cytometry Unit. CNIO
- **Andrea Valle**, European Applications Specialist DeNovo Software

IV CNIO-BANCO SABADELL FOUNDATION WORKSHOP ON PHILOSOPHY AND SCIENCE: THE LONG-TERM VIEW 28 NOVEMBER 2022



WITH THE SUPPORT OF: Sabadell Foundation

ORGANISERS:

- **Maria A. Blasco** (CNIO)
- **Antonio Diéguez** (UMA)
- **Arantza Etxeberria** (UPV/EHU)

SPEAKERS:

- **Irene Gómez Franco**, Autonomous University of Barcelona, Spain
- **Manuel González Bedía**, Biomedical Engineering Information and Communication Technology, University of Zaragoza, Spain
- **David Nogués Bravo**, Center for Macroecology, Evolution and Climate GLOBE Institute, Faculty of Health and Medical Sciences, University of Copenhagen, Denmark
- **Idoia Salazar García**, Journalist, Social Impact of Artificial Intelligence and Robotics Observatory, CEU Spain
- **Anders Sandberg**, Future of Humanity Institute, Oxford University, UK

SESSIONS:

- The Future of Planet Earth
- The Future of Humanity
- Our Future with AI

PATHOLOGY OF THE EXOCRINE PANCREAS - OF MEN AND MICE A 3-DAY "MEET THE EXPERT" INTERNATIONAL COURSE 1-3 DECEMBER 2022

ORGANISERS:

- **CNIO and CIBERONC**
- **Nuria Malats**, Genetic and Molecular Epidemiology Group, CNIO
- **Francisco X. Real**, Epithelial Carcinogenesis Group, CNIO

CNIO - WEIZMANN INSTITUTE OF SCIENCE JOINT SYMPOSIUM NEW INSIGHTS IN CANCER DISCOVERY 7-8 MARCH 2022

ORGANISERS:

- **CNIO-Weizmann Institute of Science-Ramón Areces Foundation**

SPEAKERS:

- **Maria A. Blasco**, Spanish National Cancer Research Centre, CNIO
- **Emilio Bouza**, Chairman of the *Ramón Areces* Foundation scientific committee
- **Maria Casanova**, Cancer and Immunity Junior Group Leader (CNIO)
- **Felipe Cortés**, Topology and DNA Breaks Group Leader (CNIO)
- **Ayelet Erez**, Weizmann Institute of Science (WIS)
- **Rafael Fernández-Leiro**, Genome Integrity and Structural Biology Junior Group Leader (CNIO)
- **Tamar Geiger**, Weizmann Institute of Science (WIS)
- **Leeat Keren**, Weizmann Institute of Science (WIS)
- **Ana Losada**, Chromosome Dynamics Group Leader (CNIO)
- **Geoff Macintyre**, Computational Oncology Junior Group Leader (CNIO)
- **Juan Méndez**, DNA Replication Group Leader (CNIO)
- **Moshe Oren**, Weizmann Institute of Science (WIS)
- **Raimundo Pérez-Hernández y Torra**, Director of the *Ramón Areces* Foundation
- **Ruth Scherz-Shouval**, Weizmann Institute of Science (WIS)
- **Ofer Shoshani**, Weizmann Institute of Science (WIS)

CNIO DISTINGUISHED SEMINARS

The purpose of the Distinguished Seminars Series is to invite outstanding and internationally renowned scientists to give a seminar and to meet with researchers at the CNIO. Distinguished Seminars are recurrent events that are open to the public and are held throughout the year, usually on Fridays at noon in the CNIO Auditorium. Each Distinguished Seminar Series includes world-leading scientists who address topics that are of general interest to the CNIO faculty.

In total, the CNIO hosted 13 distinguished speakers in 2022.



DATE	SPEAKER	ORGANISATION	TITLE
JANUARY			
21/01/2022	Christoph Bock	CeMM Research Center for Molecular Medicine (ÖAW); Institute of Artificial Intelligence, CeMSIIS, Medical University of Vienna, Austria	Looking into the past and future of cells. Single-cell sequencing and computational modeling of epigenetic cell states in immunology and cancer
28/01/2022	Rebecca Fitzgerald	University of Cambridge, UK	Is pre-cancer the key to improving cancer outcomes: challenges, opportunities and lessons from the oesophagus
FEBRUARY			
04/02/2022	Madeline A. Lancaster	MRC Laboratory of Molecular Biology, Cambridge, UK	Exploring human brain size determination in cerebral organoids
25/02/2022	Monica Bettencourt-Dias	The <i>Instituto Gulbenkian de Ciência</i> , Portugal	Centrosomes and Cilia in Development and Disease
MARCH			
04/03/2022	Johanna Joyce	University of Lausanne; Ludwig Institute for Cancer Research, Lausanne, Switzerland	Exploring and Therapeutically Exploiting the Brain Tumor Microenvironment
11/03/2022	Ben Lehner	Centre for Genomic Regulation (CRG), Barcelona, Spain	Mutate Everything
MAY			
06/05/2022	Meritxell Huch	Max Planck Institute of Molecular Cell Biology and Genetics, Dresden, Germany	Adult tissue derived organoid cultures and their application to the understanding of tissue regeneration and cancer
20/05/2022	Julio Aguirre-Ghiso	Cancer Dormancy and Tumor Microenvironment Institute, Gruss Lipper Biophotonics Center, Einstein College of Medicine, New York, US	Disseminated cancer cell dormancy: a homeostatic seed and soil partnership
27/05/2022	John Briggs	Max Planck Institute of Biochemistry, Martinsried, Germany	In situ structural biology of enveloped viruses by cryo-electron tomography
JUNE			
03/06/2022	Gonçalo J. L. Bernardes	Yusuf Hamied Department of Chemistry - University of Cambridge, UK	Translational Chemical Biology
SEPTEMBER			
09/09/2022	Jan Paul Medema	Amsterdam UMC, Cancer Center Amsterdam, The Netherlands	The role of BCL2 family members in intestinal cancer
NOVEMBER			
04/11/2022	Elisabete Weiderpass	International Agency for Research on Cancer (IARC), World Health Organization, Lyon, France	IARC's mission: cancer research for cancer prevention
25/11/2022	Andrea Schietinger	Memorial Sloan Kettering Cancer Center, New York, USA	T cell fate decisions in cancer and autoimmunity

AD-HOC SEMINARS

In addition to the CNIO Distinguished Seminar Series, the CNIO also hosts numerous *ad-hoc* seminars throughout the year. *Ad hoc* seminars are organised for the purpose of academic interactions, academic elevation and enrichment, and academic

vis-a-vis social networking; in addition, they facilitate socialising with colleagues from other institutions. A total of 26 *ad-hoc* seminars were organised by CNIO researchers in 2022.

DATE	SPEAKER	ORGANISATION	TITLE
FEBRUARY			
08/02/2022	Cristina Viéitez	European Molecular Biology Laboratory (EMBL), Heidelberg, Germany	High-throughput functional characterisation of protein phosphorylation sites: lessons from yeast to human
09/02/2022	Ashley Laughney	Meyer Cancer Center at Weill Cornell Medicine, New York, US	Systems analysis of tumor-microenvironment crosstalk induced by chromosomal instability
11/02/2022	Teresa Guillamón Vivancos	<i>Instituto de Neurociencias de Alicante</i> , Spain	The role of perinatal spontaneous activity in the formation of sensory circuits
22/02/2022	Elena Ortiz-Zapater	University of Valencia, Spain	Epithelial Coxsackievirus Adenovirus Receptor (CAR) promotes house dust mite-induced lung inflammation
MARCH			
10/03/2022	Carlos Pardo Pastor	HFSP & MSCA Research Associate, Jody Rosenblatt Group, Randall Centre for Cell & Molecular Biophysics, King's College London, UK	Piezo1-EGFR interplay: feeling the pressure to grow up
24/03/2022	Margherita Botto	Leiden University Medical Center, The Netherlands	A four-point molecular handover during Okazaki fragments maturation
31/03/2022	José María Pereda	Cellular Biology of Cancer (IBMCC), Salamanca, Spain	Mechanisms of autoregulation and activation of C3G, an activator of the GTPase Rap1
APRIL			
07/04/2022	Daniel Muñoz-Espin	University of Cambridge, Hutchison/MRC Research Centre, Cambridge, UK	Impact of Cellular Senescence in Lung Cancer: Novel Cancer Preventative and Therapeutic Opportunities
19/04/2022	Jorge Moscat	Weill Cornell Medical College, New York, US	Signaling networks and therapeutic vulnerabilities in mesenchymal tumorigenesis
28/04/2022	Christine Mousson	Cancer Immunology Genentech, South San Francisco, US	Deciphering the spatiotemporal control of tumor immune phenotypes to improve T cell infiltration
MAY			
05/05/2022	Laure Bindels	UCLouvain, Louvain Drug Research Institute, Metabolism and Nutrition Research Group, Brussels, Belgium	Exploring the gut microbiome and its metabolites to tackle cancer cachexia
26/05/2022	Adam Antebi	Max Planck Institute for Biology of Ageing, Cologne, Germany	Nucleolar regulation of longevity

DATE	SPEAKER	ORGANISATION	TITLE
JUNE			
09/06/2022	María Robles	LMU Systems Chronobiology Biomedical Center & Institute of Medical Psychology, Munich, Germany	Proteomics approaches to understand circadian biology (EMBO YIP seminar)
14/06/2022	Juan Manuel Povedano Selfa	UT Southwestern Medical Center, Dallas, Texas, USA	Finding the needle in the haystack - target identification of anti-cancer small molecules
27/06/2022	Mao Mao	Founder and Chief Executive Officer SeekIn Inc., Shenzhen, China	NGS and fragmentomics liquid biopsy based-test for multiple cancer early detection
SEPTEMBER			
07/09/2022	Geoff Kraker	Senior Application Scientist, Dotmatics	OMIQ Seminar
20/09/2022	Guillermo Montoya	Protein Structure and Function Programme, Novo Nordisk Foundation Center for Protein Research, University of Copenhagen, Denmark	Understanding protein dynamics and its allosteric mechanisms using cryo-EM: Examples in genome editing
27/09/2022	Justo P. Castaño Fuentes	University of Cordoba (UCO), Spain	Splicing Dysregulation as an Emerging Cancer Hallmark: Insights from Neuroendocrine Tumors and Pancreatic Cancer
29/09/2022	Alessandro Gandelli	Technical Specialist, Antibodies and Immunoassay, Thermo Fisher Scientific	Push the limits of cell analysis - tools to optimise multicolor flow panel design
OCTOBER			
03/10/2022	Leticia Serrano and Raquel Bodoque	National Hospital of Paraplegics at Toledo and General Hospital University of Ciudad Real, Spain	Pancreatic cancer: Study of the effects of Hyperthermic Intraabdominal Chemotherapy (HIPEC) using Gemcitabine and new approaches against pancreatic cancer stem cells (CSCs)
21/10/2022	Josep V. Forment	AstraZeneca, Cambridge, UK	Targeting the DNA-damage response in cancer treatment
27/10/2022	Luisa Escobar Hoyos	Yale School of Medicine, New Haven, US	Altered RNA splicing a driver event in pancreatic cancer
27/10/2022	Nikla Emambokus	Editor of Med (Cell Press), US	Medical publishing at Cell Press
NOVEMBER			
11/11/2022	Raquel Matos	Scientific Support Manager EMEA, Corning Life Sciences, Amsterdam, The Netherlands	3D cell culture, technologies as disease models
30/11/2022	Sara García Alonso	Experimental Oncology Group Molecular Oncology Programme	How to become an astronaut
DECEMBER			
13/12/2022	Rodrigo Bermejo Moreno	DNA replication and Genome Integrity, CIB, Madrid, Spain	Functional architecture of replication fork protection

WOMEN IN SCIENCE SEMINARS

In 2022, the WISE Office invited and welcomed several top female and male leaders from different areas to tell us about their career path experiences.

DATE	SPEAKER	ORGANISATION	TITLE
18/01/2022	María Folguera	Artistic director of the <i>Teatro Circo Price</i> and writer	Marta and María have to walk together. Live between the action and the clouds
17/02/2022	Fe López	Presenter and TV writer of RTVE	Journalism, women and sports
01/03/2022	Gabriela Wiener	Writer and journalist	<i>Espejos descoloniales</i>
08/03/2022	International Women's Day: A celebration of Dr Jane Goodall's Life	CNIO and British Embassy Madrid	A celebration of Dr Jane Goodall's Life
24/05/2022	Paloma Chen	Journalist and writer	Reflections from a Chinese-Spanish experience on identity
20/09/2022	Eva Orúe	Director of the Madrid Book Fair	Madrid Book Fair: apocalyptic and integrated meet at <i>El Retiro</i>
27/10/2022	Irene Cano	<i>Meta Iberia</i> Director	An interview with Irene Cano, General Director of Meta Iberia, carried out by our Director, María A. Blasco
15/11/2022	Marina Echevarría	Professor of Commercial Law and activist for LGBTI Rights	Challenges of Law in the face of technology
13/12/2022	Cristina Aranda Gutiérrez	Co-founder & Chief Business Development Officer, Big Onion	Diversity, the main lever for innovation

SCIENCE DISSEMINATION EVENTS

WORLD CANCER RESEARCH DAY
 “INMUNOTERAPIA: LOGROS Y RETOS DEL ÚLTIMO GRAN AVANCE CONTRA EL CÁNCER”
 22 SEPTEMBER 2022



ORGANISER:

- **The Spanish National Cancer Research Centre (CNIO)**

WITH THE SUPPORT OF:

- **“la Caixa” Foundation**

KEYNOTE LECTURES:

- **“Impacto actual de la inmunoterapia en los pacientes, y vías de mejora”**
Luis Paz-Ares, Head of the H120-CNIO Lung Cancer Clinical Research Unit
- **“La inmunoterapia en el cáncer pediátrico”**
Antonio Pérez-Martínez, Head of Childhood Blood Cancers at *La Paz* Hospital in Madrid

ROUND TABLE:

- **Maria A. Blasco**, Director of the Spanish National Cancer Research Centre (CNIO)
- **Miguel Calero**, Assistant Director General for Applied Services, Training and Research at the *Carlos III* Health Institute
- **Luis Paz-Ares**, Head of the H120-CNIO Lung Cancer Clinical Research Unit
- **Antonio Pérez-Martínez**, Head of Childhood Blood Cancers at *La Paz* Hospital in Madrid
- **José Ruiz**, Mayor of the Town of *Torreperogil (Jaén)* – CNIO Friend Institution

MODERATOR

- **Cristina Villanueva**, Journalist

OPEN DOORS DAY: EVERYONE UNRAVELLING CANCER
 15 NOVEMBER 2022



The CNIO also dedicates considerable effort to bringing science and society closer together; one of these endeavours is its collaboration with the madri+d research network for the organisation of the Madrid Science Week (XXII *Semana de la Ciencia y de la Innovación*, 7-20 November 2022).

In November 2022, the CNIO participated in the Science and Innovation Week under the motto “*Todos y todas desarmando al cáncer*” (“Everyone Unravelling Cancer”). The event was held online with over 43 attendees, who took the opportunity to learn more about a top research institution like the CNIO.

The Science and Innovation Week in Madrid encompasses a series of events organised by the madri+d Foundation to familiarise citizens with aspects of science, technology and innovation that they may not be fully aware of, nor understand how they impact on everyone’s life. Above all, it is a programme aimed at reaching out to young people and demonstrating that research is very definitely a career in which girls are welcome to study from an early age without having to worry about gender barriers. At the CNIO we are delighted to have the opportunity to throw open the laboratory doors and demonstrate to everyone where, what, how and especially why we have chosen this line of work.

EUROPEAN RESEARCHERS’ NIGHT 2022
 CNIO: CONOCE A LOS CIENTÍFICOS, SÉ UN CIENTÍFICO
 CNIO: MEET THE SCIENTISTS, BECOME A SCIENTIST
 30 SEPTEMBER 2022

The Centre opened its doors to the public on September 30 to show its commitment to society and to promote scientific culture.

Between 5 p.m. and 11 p.m., 4 groups of people participated in a science experiment with young volunteer researchers from the Centre, who guided each group step by step through the process of carrying out a **science experiment** at home using everyday household products. The scientists also explained what a researcher’s work consists of and answered questions and doubts. Altogether, more than 212 people and 60 volunteers signed up for the day.

The activity aims to inspire a scientific vocation in very young people, to break down stereotypes associated with people involved in research, and to show what CNIO cancer research is all about.

Our “Meet the scientists, become a scientist” event consisted of the following activities:

- A welcome talk with the showing of an inspirational video, and a presentation by students/postdocs on “Why I chose science”.
- Horizon Europe corner to show the impact of CNIO research beyond our borders/ interactions with EU missions.
- Hands-on-experiments.
- “Lab stands” to show “real” laboratory tools and small equipment.
- “Speed-dating” with scientists.

European Researchers’ Night is funded by the Marie Skłodowska-Curie Action (MSCA) and takes place at hundreds of European institutions across many cities and countries. The 2022 edition became even more important as Cancer is one of the 5 EU “missions” that defines the greatest challenges that we face as a society.

