SaludMadrid

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CONSEJERÍA DE PRESIDENCIA, JUSTICIA Y ADMINISTRACIÓN LOCAL
CONSEJERÍA DE SANIDAD
FIIBAP

ACCIONES COST

RELACIONADAS CON

LA TEMÁTICA CÁNCER

cost
EUROPEAN COOPERATION IN SCIENCE & TECHNOLOGY

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Comunidad de Madrid | CONSEJERÍA DE PRESIDENCIA, JUSTICIA Y ADMINISTRACIÓN LOCAL

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SaludMadrid FIIBAP FUNDACIÓN PARA LA INVESTIGACIÓN E INNOVACIÓN BIOSANITARIA DE ATENCIÓN PRIMARIA
Servicio Madrileño de Salud

ÍNDICE DE CONTENIDOS

1. Generalidades de las COST Actions.

IDENTIFICACIÓN DE LA CONVOCATORIA

- Enfoque abierto bottom up.
- Convocatoria simple: un solo paso.
- **Deadline para proponer nuevas acciones COST: 23 Octubre 2024** (la próxima está prevista para otoño 2025)
- Se espera que se aprueben hasta **70 nuevas acciones COST** en la call de octubre.
- Las propuestas se presentan electrónicamente a través de la herramienta e-COST.
- Presupuesto medio anual en EUROS de una acción COST: 134.500€
- Links:
    - Web COST: https://www.cost.eu
    - Documentos y guidelines: https://www.cost.eu/funding/documents-guidelines/

ALCANCE

- Financia la creación de **redes de investigación e innovación** durante **4 años**.
- **Bottom-up.**
- Abierto a **todos los campos de la ciencia y la tecnología**, incluidos los campos nuevos y emergente.
- Las redes involucran **investigadores del mundo académico, pymes, instituciones públicas y otras organizaciones relevantes**.
- Los participantes pueden postularse en **cualquier etapa de su carrera**.
- Financia exclusivamente actividades de colaboración: **organizar eventos, misiones científicas a corto plazo, escuelas de formación, actividades de comunicación y virtual networking tools. NO financia investigación.**
- 41 COST Members: Albania, Armenia, Austria, Bélgica, Bosnia y Herzegovina, Bulgaria, Croacia, Chipre, República Checa, Dinamarca, Estonia, Finlandia, Francia, Georgia, Alemania, Grecia, Hungría, Islandia, Irlanda, Italia. Letonia, Lituania, Luxemburgo, Malta, República de Moldavia, Montenegro, Países Bajos, República de Macedonia del Norte, Noruega, Polonia, Portugal, Rumania, Serbia, Eslovaquia, Eslovenia, España, Suecia, Suiza, Turquía, Ucrania y

Estados Unidos. Reino Unido + 1 Cooperating Member: Israel y 1 Partner Member: Sudáfrica.

- 2 formas de participar en una Acción:
    - **Approved Action = Unirse a una Acción en marcha.**
        - Las propuestas se presentan en cualquier época del año.
        - Encontrar acciones en marcha: https://www.cost.eu/cost-actions/browse-actions/
        - Para cada Acción se pueden nominar **hasta 2 representantes por País** Miembro de COST. Para participar como miembro se debe contactar al Coordinador Nacional de COST de su país.
            - España: Noelia Romero López (FECYT)
                - cost.coordinacion@ciencia.gob.es
                - +34 914250909
    - **Open Call = Propuesta de una nueva Acción.**
        - Próxima 23 de octubre de 2024 a las 12.00 (mediodía) CEST.
        - Presentación de propuestas en una sola etapa.
        - La presenta el Main proposer.
        - Se espera que se aprueben **70 Acciones.**
        - La **tasa de éxito es del 37%.**

REQUISITOS DE ADMISIBILIDAD

- La propuesta COST debe ser **anónima**. No contener ninguna referencia directa o indirecta a los proponentes y/o instituciones participantes en la red. Los nombres no deberán mencionarse explícitamente ni ser potencialmente identificables.
- Darse de alta en herramienta e-COST

CRITERIOS DE ELEGIBILIDAD

- **Participación**: universidad, centro de investigación, empresa, asociación, organismo específico o cualquier otra forma de entidad jurídica reconocida en un marco nacional o internacional.
- Duración: **48 meses de duración** (4 años).
- **Convocatoria en consorcio de red: Mínimo 7** países para presentar una propuesta de acción COST. De los 7, un mínimo del **50% deben ser países objeto de inclusión**. **Tamaño de la red:** Suelen participar entre 25 y 35 instituciones, pertenecientes a Universidades, Centro de investigación y Empresas.

  - Inclusiveness Target Countries (ITCs): Albania, Armenia, Bosnia y Herzegovina, Bulgaria, Chipre, República Checa, Estonia, Croacia, Georgia, Grecia, Hungría, Lituania, Letonia, Malta, Moldavia, Montenegro, Polonia, Portugal, Rumania, Eslovenia, Eslovaquia, República de Macedonia del Norte, República de Serbia, Turquía y Ucrania.

- Número de páginas de propuesta: 15
- Propuesta escrita en inglés.

GASTOS ELEGIBLES

- Meetings, workshops and conferences
- Short-term Scientific Missions (STSM)
- Training Schools
- Conference Grants
- Communication and dissemination
- Virtual Networking Grants

PROPUESTA

- Template para presentar una nueva Acción. Link template COST
- Extensión de las propuestas de máximo de 15 páginas.

Secciones de la propuesta:

1. General Features
2. **Technical Annex**
3. References
4. COST Mission, Policy and rules
5. Network of Proposers

Todas las secciones se completan electrónicamente menos el Technical Annex.

TECHNICAL ANNEX

- S&T EXCELLENCE
  - SOUNDNESS OF THE CHALLENGE
    - DESCRIPTION OF THE STATE OF THE ART
    - DESCRIPTION OF THE CHALLENGE (MAIN AIM)

- PROGRESS BEYOND THE STATE OF THE ART
  - APPROACH TO THE CHALLENGE AND PROGRESS BEYOND THE STATE OF THE ART
  - OBJECTIVES
    - Research Coordination Objectives
    - Capacity-building Objectives

- NETWORKING EXCELLENCE
  - ADDED VALUE OF NETWORKING IN S&T EXCELLENCE
    - ADDED VALUE IN RELATION TO EXISTING EFFORTS AT EUROPEAN AND/OR INTERNATIONAL LEVEL
  - ADDED VALUE OF NETWORKING IN IMPACT
    - SECURING THE CRITICAL MASS, EXPERTISE AND GEOGRAPHICAL BALANCE WITHIN THE COST MEMBERS AND BEYOND
    - INVOLVEMENT OF STAKEHOLDERS

- IMPACT
  - IMPACT TO SCIENCE, SOCIETY AND COMPETITIVENESS, AND POTENTIAL FOR INNOVATION/BREAKTHROUGHS
    - SCIENTIFIC, TECHNOLOGICAL, AND/OR SOCIOECONOMIC IMPACTS (INCLUDING POTENTIAL INNOVATIONS AND/OR BREAKTHROUGHS)
  - MEASURES TO MAXIMISE IMPACT
    - KNOWLEDGE CREATION, TRANSFER OF KNOWLEDGE AND CAREER DEVELOPMENT
    - PLAN FOR DISSEMINATION AND/OR EXPLOITATION AND DIALOGUE WITH THE GENERAL PUBLIC OR POLICY

- IMPLEMENTATION
  - COHERENCE AND EFFECTIVENESS OF THE WORK PLAN
    - DESCRIPTION OF WORKING GROUPS, TASKS AND ACTIVITIES
    - DESCRIPTION OF DELIVERABLES AND TIMEFRAME
    - RISK ANALYSIS AND CONTINGENCY PLANS
    - GANTT DIAGRAM

PLAZOS DE PRESENTACIÓN Y ETAPAS DE EVALUACIÓN

Proceso de presentación

1. Darse de alta en herramienta e-COST

2. La propuesta la presenta el "main proposer" (coordinador) e invita a los "Secondary proposers" a través de la herramienta.
3. Una vez que se publican las COST que se financiarán, los Cost National Coordinators (CNC) abren call para la nominación del Management Committee (nuevos socios).

Procedimiento de evaluación (Single step)

- Evaluación por expertos externos independientes.
- Revisión y control de calidad de los informes de consenso por parte de paneles de revisión ad hoc.
- Lista corta de propuestas seleccionadas por parte del Comité Científico.
- La lista corta se presenta al Comité de Altos Funcionarios de COST para su aprobación.
- Aprobación. Resultados 8 meses después de presentación
- Acciones pueden comenzar dentro de los 3 meses posteriores a la aprobación.

CRITERIOS DE EVALUACIÓN

4 criterios de evaluación

S&T EXCELLENCE

- Soundness of the Challenge
- Progress beyond the state of-the-art

NETWORKING EXCELLENCE

- Added value of networking in S&T Excellence
- Added value of networking in Impact

IMPACT

- Impact to science, society and competitiveness, and potential for innovation/ break-throughs
- Measures to maximise impact

IMPLEMENTATION

- Coherence and effectiveness of the work plan

IDENTIFICACIÓN DE DOCUMENTOS DE APOYO

- COST Open call
- Technical Annex
- COST Open Call Applicant Guidelines

- Rules and principles for COST Activities
- Buscador de COST ACTION (Vigentes y financiadas)

2. REDES COST IDENTIFICADAS PARA MISION CANCER VIGENTES

A COMPREHENSIVE NETWORK AGAINST BRAIN CANCER (Net4Brain)

- ID: CA22103
- Duración: 30/10/2023 - 29/10/2027
- Representante español en el Management Committee: Prof Gabriel FERNANDEZ CALVO (Universidad de Castilla-La Mancha). gabriel.fernandez@uclm.es
- **Keywords:** Brain Cancer - Biomarker - AI - Pre-clinical model – Treatment

Description

This COST Action aims to significantly facilitate the translation of fundamental scientific discoveries into better clinical treatment and management of patients suffering from brain cancer. This aim will be pursued through the following main objectives: 1) to build a unique pan-European and multidisciplinary network focusing on brain cancer by combining state-of-the-art knowledge and innovative techniques; 2) to promote education and training in the areas of advanced neuroscience, neuroimaging, genetics and molecular biology, big data and computational techniques for the accurate early diagnosis, prognosis, patient stratification and treatment of patients with different types of brain cancer; and 3) to build an integrated pan-European brain cancer database and biobank platform for the benefit of the research and clinical community.

Radionuclide theragnostics for personalised medicine (RATIONALE)

- ID: CA22118
- Duración: 26/10/2023 - 25/10/2027
- Representante español en el Management Committee: Dr José Manuel JIMÉNEZ-HOYUELA (FISEVI-Hospital Universitario Virgen del Rocío). josem.jimenezhoyuela.sspa@juntadeandalucia.es
- **Keywords:** theragnostics - radionuclide therapy - nuclear medicine - medical imaging - medical physics

Description

This COST Action will promote the full potential of a theragnostic approach to the treatment of cancer with radiotherapeutics by:

- fostering collaborative research and training between experts and clinical centres to facilitate knowledge transfer.

- supporting the optimisation and standardisation of data acquisition to allow data pooling.
- bridging gaps between stakeholders and supporting communication between cross-speciality experts
- promoting multi-disciplinary theragnostic approaches to the development of personalised treatments.

Precision medicine in biliary tract cancer (Precision-BTC-Network)

- ID: CA22125
- Duración: 09/10/2023 - 08/10/2027
- Representante español en el Management Committee:
    - Dr Jesus BANALES (Biodonostia Health Research Institute- Donostia University Hospital). jesus.banales@biodonostia.org
    - Dr Angela LAMARCA (Fundacion Jimenez Diaz). angela.lamarca@quironsalud.es
- **Keywords:** biliary cancer - prevention - early detection - personalised treatment - artificial intelligence

Description

Precision-BTC-Network aims to create a unique cooperative and interdisciplinary network of European multi-stakeholders, including basic researchers, clinical investigators, SMEs, European Commission and EU agencies, international scientific organizations, patient representatives, and industrial partners, to address the diversified, but interrelated challenges, in the implementation of precision medicine in the management of BTC.

The Action will be organized in four working groups involved in the development of a personalized management of patients with BTC: Identification of epidemiological heterogeneity in Europe to apply precision prevention, Personalised early detection of BTC, Personalisation of treatment for patients with BTC, Patient-centric support management, and two horizontal WGs will provide cross-sectional activities relevant to WG1-4 goals: Artificial intelligence, and Drug development using preclinical models.

The expected impact includes speeding up the development of diagnostic and prognostic biomarkers for BTC patients and bringing beneficial therapies and optimal management of these patients across Europe. In addition, the training of Young Researchers and Innovators in precision medicine in BTC will ensure further progress in the future.

Interception of oral cancer development (INTERCEPTOR)

- ID: CA21140
- Duración: 14/11/2022 - 13/11/2026
- Representante español en el Management Committee:

  - Dr RAMON GARCIA ESCUDERO (CIEMAT). ramon.garcia@ciemat.es
  - Prof Lopez-Jornet PIA (University Murcia). majornet@um.es
- **Keywords:** Oral cancer - Prevention - Preneoplasia - Pathological Diagnosis and Managment of the Disease - Oral leukoplakia and dysplasia

Description

The INTERCEPT COST Action addresses the challenge of unmet oral cancer prevention and bring new paradigm to disease management of oral potentially malignant disorders (OPMD). Relying on excellent translational research, patient care and education in Europe (EU) in the field of cancer medicine, INTERCEPT will develop future strategies of personalized OPMD preventive and care approaches. Pluridisciplinary expertise will involve and target a spectrum of keys actors to ensure a long-term success.

At the level of the patients' medical histories, the Action will perform disease trajectory analysis based on healthcare data.

At the level of the caregivers, the Action will improve patient's pathway by developing electronic-health tools for patients' monitoring. Unbiased techniques to improve early detection of OPMD will be explored.

At the level of the clinical and translational researchers, the Action will:

- develop preclinical models to evaluate new pharmacological approaches to cancer interception;
- coordinate a network of centers to work on prospective clinical trials evaluating new preventive agents;
- coordinate the development of standardized procedures for sample collection, and comprehensively characterize OPMD to improve patient stratification.

At the level of the citizens, the Action will study the socio-economic and ethical impacts of developing personalized preventive medicine and work with policy makers and regulatory bodies to transfer our findings into real-life application.

Modelling immunotherapy response and toxicity in cancer (IMMUNO-model)

- ID: CA21135
- Duración: 02/11/2022 - 01/11/2026
- Representante español en el Management Committee:
  - Dr Laura BELVER (Josep Carreras Leukemia Research Institute). lbelver@carrerasresearch.org
  - Dr Rebeca SANZ-PAMPLONA (Instituto de Investigación Sanitaria de Aragón-IISA). rsanz@iisaragon.es
- **Keywords:** cancer - immunotherapy - preclinical models - toxicity - biomarkers

Description

The IMMUNO-model COST Action aims to foster research and innovation in the field of preclinical immuno-oncology models with the ultimate goal of advancing in the treatment of cancer patients by improving their outcomes and quality of life.

IMMUNO-model will bring together European researchers from diverse sectors (academia, clinical, industry) with the common goal of establishing a Network that endorses immuno-oncology research by specifically promoting the sharing, standardization and application of immunotherapy preclinical models. This Action will allow the implementation of a broad, creative and collaborative hub through the organization of community-building activities, the creation of synergies among European and non-European scientists, and the training of future researchers in the field. The ultimate aim of this Action is to contribute to translate novel scientific discoveries into benefits to cancer patients and the society.

Implementation Network Europe for Cancer Survivorship Care (INE-CSC)

- ID: CA21152
- Duración: 26/10/2022 - 25/10/2026
- Representante español en el Management Committee:
    - Dr Cristian OCHOA ARNEDO (Catalan Institute of Oncology). cochoa@iconcologia.net
    - Dr Aída RAIGÓN PONFERRADA (Hospital Universitario Virgen de la Victoria). aidaraigonp@gmail.com
- **Keywords:** cancer survivorship - implementation science - digital/electronic health solutions - sustainability - risk stratification

Description

The main aim of this COST Action is to systematically support the sustained translation of evidence-based interventions into routine clinical practice as part of a cross boundary, systems level cancer survivorship pathway which ultimately enhances the health and wellbeing of cancer survivors.

This Network will use a cross-national comparative approach to map and make preliminary models outlining the contextual factors impacting on the: implementation of cancer survivorship care and associated risk-stratified pathways of survivorship care, and use of digital/electronic health solutions. This will be completed using an implementation science lens.

Key outputs of this COST Action include: a sustainable web-based platform which hosts an integrated implementation science theory-based framework and toolkit to support the multi-level implementation of evidence-based cancer survivorship care across Europe. Through this Network the capacity and capability for cancer survivorship research and practice will be enhanced.

Cancer- Understanding Prevention in Intellectual Disabilities (CUPID)

- ID: CA21123
- Duración: 25/10/2022 - 24/10/2026
- Representante español en el Management Committee:
  - Prof LuisJoaquin GARCIA-LOPEZ (University of Jaen). ljgarlo@cop.es
  - Ms Pilar MARTÍNEZ (University of Jaén). pmsanche@ujaen.es
- **Keywords:** Cancer - Screening - Intellectual Disabilities - Prevention - Adults

Description

There is poor understanding of cancer prevention among people with intellectual disabilities. CUPID will establish a research agenda and knowledge base to improve this in the European Union and beyond. Among the European intellectual disabilities population, many cancer diagnoses are symptomatic presentations following on from behavioural distress or physical changes. Cancer deaths among this population occur up to 20 years earlier than the general population. Factors influencing unequal health status and premature death amongst people with intellectual disabilities warrant further investigation. Article 25 of the United Nations Convention on the Rights of People with Disabilities acknowledges their right to healthcare. The Council of Europe Disability Strategy 2017-2023 recognises health systems failure to engage with and include people with disabilities. Many external and internal factors influence healthcare engagement among this population resulting in long- term health consequences. External factors include diagnostic overshadowing, paternalism and cancer screening delays during the COVID-19 pandemic. For the person challenges with communication, cognitive ability and decision-making capacity influence healthcare engagement. It is timely to develop collaborative links with the EU research and service provider communities to reach consensus on addressing these challenges. CUPID establishs active working partnerships with academics, researchers, non-governmental organisations, carers, people with intellectual disabilities and policy makers. CUPID will establish a research agenda and exchange information regarding cancer prevention in the intellectual disability population. Short term scientific exchanges, training schools, conferences and seminars using a hybrid approach will explore highlighted issues. Other network funding streams will not support this kind of activity.

P2X receptors as a therapeutic opportunity (PRESTO)

- ID: CA21130
- Duración: 12/10/2022 - 11/10/2026
- Representante español en el Management Committee:
  - Prof Carlos MATUTE (Achucarro Basque Center for Neurosciences UPV/EHU). carlos.matute@ehu.es
  - Dr Pablo PELEGRIN (Universidad de Murcia). pablo.pelegrin@ffis.es
- **Keywords:** extracellular ATP and P2X receptors - Ion channel - inflammation - neurotransmission - cancer

Description

P2X receptors (P2XRs) are ATP-gated ion channels involved in intercellular communication with an established role in neurodegeneration, infection, inflammation, cancer growth, and progression. In vitro and in vivo evidence, generated mainly by leading Europe-based laboratories, shows that P2XRs might be an ideal pharmacological target in these diseases and many others. Over the years, highly selective agonists and antagonists have been synthesized, and therapeutic antibodies targeting the P2XRs have been raised. However, the transfer of this wealth of knowledge from research laboratories to the patients' bed has been slow, and clinical trials so far carried out have been unsatisfactory. This was due to a noticeable lack of coordinated effort by basic research, clinical and industry-based investigators. The PRESTO Action aims at accelerating the transition of P2XRs knowledge to clinical applications. PRESTO will be accomplishing these goals by 1) promoting a coordinated effort by leading basic and clinical science experts and Industry-based investigators aimed at the selection of the most appropriate pathologies amenable to P2XR-targeted therapy; 2) identifying the best-suited P2XR-directed drugs to take through the clinical pipeline; 3) establishing validated experimental protocols and tools; 4) setting criteria for the validation of P2XRs as diagnostic and prognostic biomarkers; 5) promoting dedicated clinical trials; 6) training a new, multicultural, transdisciplinary, generation of young researchers skilled in the P2XR field; 7) disseminating in the scientific community, biomedical students, charities, local and national health authorities and the general public, the awareness of the importance of P2XR-based research.

Identification of biological markers for prevention and translational medicine in pancreatic cancer (TRANSPAN)

- ID: CA21116
- Duración: 11/10/2022 - 10/10/2026
- Representante español en el Management Committee:
    - Dr OLGA MARIA ABIAN FRANCO (INSTITUTO DE BIOCOMPUTACIÓN Y FISICA DE SISTEMAS COMPLEJOS (BIFI) UNIVERSIDAD DE ZARAGOZA). oabifra@unizar.es
    - Prof Justo P CASTANO (University of Cordoba). justo@uco.es
- **Keywords:** Pancreatic cancer - Biomarkers - Genetic susceptibility - Prevention - Early detection

Description

Pancreatic cancer (PC) has a high mortality rate and is projected to become a massive public health problem in Europe. This Action will boost research on prevention of PC, particularly in the discovery of genetic risk factors, risk stratification, identification of biomarkers for early detection and patient monitoring, elucidation of biological mechanisms and functional pharmacogenomics for personalized medicine. These aims will be attained by expanding an existing interdisciplinary network.

The Action will be organized in the following working groups:

- Disease risk profiling. This WG will use germline genetic variants, epigenetics, transcriptomics and environmental factors to model disease risk and apply risk

stratification scores to better select individuals eligible to be screened for PC or its precursors.

- Non-invasive biomarkers. This WG will apply state-of-the-art liquid biopsies for the detection and characterization of circulating tumor cells and DNA, tumor-derived exosomes, tumor-educated platelets, epigenetic markers, and will test their diagnostic value for PC precursors and early-stage PC.
- Tumor profiling. Genomic, epigenomic and transcriptional profiling of PC and its precursors in a multiregional analysis fashion will be used to identify novel biomarkers with prognosis and predictive value for PC patient stratification.
- Functional genomics and therapy. This WG will functionally validate candidate genetic variants from germline or tumor studies by using cutting-edge approaches such as CRISPR-Cas9 gene editing. It will also generate novel approaches such as organoids / zebrafish avatars to implement (chemo)therapeutic strategies based on the patient in an effort to implement personalized medicine for PC.

Translational control in Cancer European Network (TRANSLACORE)

- ID: CA21154
- Duración: 04/10/2022 - 03/10/2026
- Representante español en el Management Committee: Dr Fátima GEBAUER (Centre for Genomic Regulation). fatima.gebauer@crg.eu
- **Keywords:** Translational control - RNA biology - Therapeutic RNA - Cancer biology - Ribosome - Epitranscriptomics

Description

The TRANSLACORE Europe Action will bridge disciplines and expertise across Europe in order to advance an emerging field in cancer biology: translational control in cancer. It will provide a unique opportunity to understand this biological process leading to reconsider our view of gene expression control in this disease and deliver novel therapeutic opportunities.

Translational control plays a major role in numerous physiological processes by defining the proteome, maintaining cell homeostasis, and controlling cell fate (stemness, proliferation, growth, differentiation). Acquisition of alterations resulting in translational reprogramming provides novel mechanisms by which aberrant cells escape normal physiology and favor development of cancers.

Therefore, translational control has the potential to provide innovative strategies and therapeutic avenues improving the management and health outcomes for patients with cancer. However, there is a lack of mechanistic detail to describe translational control and its contribution to the disease processes. TRANSLACORE Europe will consist of a consortium of universities, international research institutes, basic scientists, clinicians, Biotech, Pharma companies and patient associations that provides cutting edge infrastructure and world-class learning environment for broad high-quality education in various research disciplines. By implementing collaborative and cross-disciplinary partnerships, resource pooling and knowledge sharing, this structural framework aims at achieving breakthroughs allowing to accelerate secure robust transfer of academic findings to improve human health of patients with cancer. TRANSLACORE Europe will

help to improve cancer management and to maintain a competitive environment for European research in the field of protein synthesis control.

Converting molecular profiles of myeloid cells into biomarkers for inflammation and cancer (Mye-InfoBank)

- ID: CA20117
- Duración: 06/10/2021 - 05/10/2025
- Representante español en el Management Committee:
    - Dr Concepción MARAÑÓN (FUNDACION PUBLICA ANDALUZA PROGRESO Y SALUD - CENTRO DE GENOMICA E INVESTIGACION ONCOLOGIA -GENYO). concepcion.maranon@genyo.es
    - Prof Jordi MUNTANÉ (Instittuto de Biomedicina de Sevilla IBiS). jmuntane-ibis@us.es
- **Keywords:** Myeloid cells - Molecular profiling - Biobanking - Diseases associated with chronic inflammation - Biomarkers

Description

Myeloid immune cells are important mediators in the pathology of many diseases, especially in diseases associated with chronic inflammation (DACI). Recent advancements in molecular profiling technologies have led to the generation of large data sets, many of those not fully explored yet, but accessible to the entire scientific community via public data repositories. It is the aim of this COST Action to repurpose those data sets, retrieve and curate myeloid cell-specific information, and apply this information to develop novel biomarkers for DACI. To this end, Mye-InfoBank will utilise COST networking tools to enable the interaction of molecular biologists, bioinformaticians, immunobiologists, biobank coordinators and clinicians. The concerted activity of these experts on myeloid cell biology (either basic or clinical research) MYE, bioinformatics INFO, and bio-banking BANK, will transform complex molecular information into standardised and applicable biomarkers, which have the potential to improve clinical decision making in a number of socio-economically important diseases.

Harmonizing clinical care and research on adrenal tumours in European countries (HARMONISATION)

- ID: CA20122
- Duración: 28/09/2021 - 27/09/2025
- Representante español en el Management Committee:
    - Prof David GIL (Universidad de Alicante). david.gil@ua.es
    - Dr Mercedes ROBLEDO (Fundación del Sector Público Estatal Centro de Investigaciones Oncológicas Carlos III). mrobledo@cnio.es

- **Keywords:** Adrenal tumours - Adrenal clinical care and research harmonization - Legal and ethical trial framework - Federating information technologies - Patients' reported outcomes

Description

Adrenal tumours affect more than 3% of the population aged > 50 years, and their absolute prevalence is increasing due to population aging. Most of these tumours are benign and hormonally inactive. However, 2-10% of them are at risk of malignancy, and 20-40% present hormone over-secretion, leading to significant morbidity.

Management of adrenal tumours is quite heterogeneous, and this leads to substantial inequality in patient care throughout Europe. In this context, the goal of HARMONISATION is to constitute a multidisciplinary network to harmonize clinical care and research on adrenal tumours throughout Europe. Our focus will be on COST Inclusiveness Target Countries (ITCs). In addition, this collaborative network will establish a modern framework to develop a new generation of real-time and real-life randomized clinical trials, which will be federated and registry-based. For this purpose, HARMONISATION will be organized in five Working Groups: 1. Harmonizing clinical practice for adrenal tumours; 2. Harmonizing adrenal tumour research and -omics practice; 3. Harmonizing Information Technology (IT)/Artificial Intelligence (AI) tools towards a standardized registry; 4. Harmonizing the ethical and legal framework required for federated European trials; and 5. Communication, dissemination, and inclusiveness. The successful execution of HARMONISATION's goals is guaranteed by the collaboration of clinicians, researchers, and experts from other relevant fields, including artificial intelligence, data science data protection, legal and ethical issues, and patients' representatives.

Therapeutical applications of Cold Plasmas (PlasTHER)

- ID: CA20114
- Duración: 22/09/2021 - 21/09/2025
- Representante español en el Management Committee: Dr Francesco TAMPIERI (Universitat Politècnica de Catalunya). francesco.tampieri@upc.edu
- **Keywords:** Cold Plasmas - Cancer - Decontamination - Wound Healing - Tissue regeneration

Description

Despite scientific and technological progress in the medical field, the treatments available today are still not completely effective concerning the fight against cancer, tissue regeneration and repair or drug-resistant pathogens, including newly emerging infections. Besides, some of the currently associated therapies associate high economic and/or societal costs. In this sense, Cold Atmospheric Plasmas have emerged as a powerful technique involving a vast number of reactive species (molecules, atoms, ions, electrons, photons, UV & visible radiation) which have demonstrated to affect cells through complex biochemical procedures, opening a great window of opportunity in the novel area known as Plasma Medicine.

This has led to an exponential increase in the research in different areas of plasma medicine, including cancer, tissue regeneration and repair and antimicrobial action which are the focus of this PlasTHER COST Action. However, many challenges still threaten this promising field to move forward, such as clarification of the mechanisms involved in

the therapeutic action of plasmas and plasma-conditioned liquids, insufficient standardization, or an urgent need for enhanced dialogue and interaction between scientists (plasma experts, biologists), medical doctors or industry among others. In these circumstances, this PlasTHER COST Action aims at establishing a synergistic network that articulates researchers, the medical community, industry or patient associations, among others, and coordinate the European activity in this domain to foster the leadership of Europe in this emerging field.

Lobular Breast Cancer: Discovery Science, Translational Goals, Clinical Impact (LOBSTERPOT)

- ID: CA19138
- Duración: 29/10/2020 - 28/10/2024
- Representante español en el Management Committee:
    - Dr María J. CARREIRA (CiTIUS Universidade de Santiago de Compostela). mariajose.carreira@usc.es
    - Dr Miguel Angel PUJANA (Catalan Institute of Oncology). miguelangel.pujana@gmail.com
- **Keywords:** Lobular Breast Cancer - genomics, oncology, cell biology, cancer models, treatment - Discovery Science - Translational Goals - Clinical Impact

Description

Invasive Lobular Breast cancer (ILC) represents a major cancer type that affects 25,000 patients annually in Europe, representing a severe societal impact. Differential diagnosis is still unreliable due to variable histological criteria, long-term survival is poor in the metastatic setting and the response to chemotherapy is virtually absent. Despite its etiological, pathological, molecular and clinical peculiarities, there is still no specific treatment strategy for ILC patients, which is mostly due to the lack of concerted multidisciplinary efforts.

LOBSTERPOT aims to better understand, diagnose and treat ILC. This Action will combine the essential areas of expertise and provide a comprehensive platform to bring together and foster collaborations between epidemiologists, geneticists, biologists, clinicians, data scientists, academic and industry trialists, ethical and legal experts, as well as ILC patient advocacy movements. This Action will bridge the gaps in translational cancer research for ILC, and will provide an unprecedented clinical impact due to the streamlining of the “from bench-to-bedside” principal to enable uniform diagnosis and tailored treatment for ILC patients.

To achieve its aims and in agreement with the mission and vision of the COST Actions, LOBSTERPOT will:

- coordinate Europe-wide multidisciplinary ILC research,
- promote capacity-building by developing a unique biobank, state-of-the-art models, exclusive platforms of multi-OMICs and clinical ILC data accessible to the scientific community,
- advice policy-makers and other key stakeholders,

- provide an attractive structure for the development of ILC-focused clinical trials, and,
- create a unique training and networking opportunity for young and senior researchers devoted to fight ILC.

Network for Optimized Astatine labeled Radiopharmaceuticals (NOAR)

- ID: CA19114
- Duración: 22/10/2020 - 21/10/2024
- Representante español en el Management Committee:
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- **Keywords:** Astatine-211 - Alphatherapy Network - Oncology - Nuclear Medicine - 211At-Nodes

Description

NOAR COST Action brings together European and international excellence labs, astatine-211 production centers, hospitals, industry and patient associations from more than 20 countries, thus covering the whole value chain of innovation: production, chemistry, radiochemistry, biology, preclinical and clinical research and delivery of radiopharmaceuticals to patients.

A European web portal will be created containing information for patients, practitioners, researchers, Industry and as a contact point for National and European patient associations.

The idea is to gather forces at the European level in order to implement actions to leverage hurdles to the development of this powerful radionuclide and to identify pathologies in which it will be particularly relevant.

A special emphasis will be given to train a new generation of young researchers and PhD students, promoting interdisciplinary competences through international and inter-sectoral mobility.