The CNIO attracts a substantial proportion of its funding from external sources. Most of this funding comes from national and international funding bodies and is used not only to finance the Centre’s outstanding R&D activities, but also strategic actions in innovation together with industry partners. The funding is also used to support other relevant activities related to dissemination and scientific outreach; these activities are aimed at promoting public awareness. In 2022, researchers at the CNIO were involved in 152 projects that received extramural funding.

During this same year, the CNIO actively participated in a total of 66 collaborative projects: 17 were international collaborative projects (4 of which are coordinated by the CNIO), and 49 were collaborative projects conducted at the national level (16 of them are coordinated by the CNIO). The international collaborative projects were funded by the European Union through its research & innovation framework programmes Horizon 2020 (2014-2020) and Horizon Europe (2021-2027); the US National Institutes of Health (NIH); the US Department of Defense (DoD); the Paradifference Foundation; Worldwide Cancer Research; and the Lustgarten-Foundation-Stand-up to Cancer Initiative. At national level, collaborative projects received important public grants from the Strategic Health Action that is managed by the Institute of Health Carlos III (ISCIII), the State Research Agency of the Spanish Ministry of Science and Innovation (AEI/MCIN), and the R&D Activities Programmes of the Community of Madrid; most of the projects were co-funded by European Structural and Investment Funds (European Regional Development Fund and European Social Fund). The CNIO also obtained a significant number of grants funded by NextGeneration EU funds to develop strategic projects to foster recovery from the COVID-19 crisis, in accordance with the Spanish Recovery, Transformation and Resilience Plan (PRTT). Private funders and charities also recognised the excellence of our scientific projects, among them, the Scientific Foundation of the Spanish Association Against Cancer (FC AECC), the Ramón Areces Foundation, La Marató de TV3 Foundation, the BBVA Foundation, or “la Caixa” Banking Foundation.

In addition to these collaborative projects, researchers at the CNIO have attracted funding for projects carried out by individual groups. In 2022, 13 of these projects received international funding, while 73 of them received national funding (mainly from the AEI/MCIN, the ISCIII, and private foundations). The international individual projects are funded by the European Union (7 European Research Council [ERC] grants and 6 Marie Skłodowska-Curie Actions), Worldwide Cancer Research, the American Thyroid Association, and the Mark Foundation for Cancer Research.
### INTERNATIONAL GRANTS  INDIVIDUAL PROJECTS

#### EUROPEAN COMMISSION

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barbacid, Mariano</td>
<td>ERC Advanced Grant THERACAN: Novel therapeutic strategies to treat pancreatic and lung cancer (Ref.: 695566)</td>
</tr>
<tr>
<td>Brisco, Maria</td>
<td>ERC Advanced Grant SHELTERINS: Targeting Shelterin Proteins in Cancer (Ref.: 882385)</td>
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<tr>
<td>Cortis, Felipe</td>
<td>ERC Consolidator Grant TOPOnomics: Global dynamics of topoisomerase-induced DNA breaks (Ref.: 647359)</td>
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<tr>
<td>Fernández-Capetillo, Óscar</td>
<td>ERC Proof of Concept TARGETSET: Commercial feasibility of targeting the histone methyltransferase SETD8 in cancer: New chemical entities and biomarkers (Ref.: 963443)</td>
</tr>
<tr>
<td>Gonzalez, Eva</td>
<td>ERC Consolidator Grant PLEIO-RANK: Pleiotropic treatment of cancer: RANK inhibitors targeting cancer stem cells and immunity (Ref.: 682935)</td>
</tr>
<tr>
<td>Soengas, María S.</td>
<td>ERC Advanced Grant METALERT-STOP: Imaging, characterizing and targeting metastatic niches in melanoma (Ref.: 884699)</td>
</tr>
<tr>
<td>Valiente, Manuel</td>
<td>ERC Consolidator Grant ALTER-Brain: Metastasis-associated altered molecular patterns in the brain (Ref.: 864759)</td>
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</table>

#### AMERICAN THYROID ASSOCIATION (ATA), COFUNDED BY BITE ME CANCER (BMC)

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Montero, Cristina</td>
<td>Discovering novel molecular nodes involved in MTC development and evolution (Ref.: GRANT2020-0000000150)</td>
</tr>
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</table>

#### WORLDWIDE CANCER RESEARCH (WCR; FORMERLY AICR)

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Project Title</th>
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<tbody>
<tr>
<td>Malats, Nuria</td>
<td>Pancreatic Cancer Collective - Computational Approaches To Identifying High-Risk Pancreatic Cancer Populations: High-Risk Cohorts Through Molecular and Genetic Data (Ref.: SUOC 061779)</td>
</tr>
<tr>
<td>Soengas, María S.</td>
<td>Heterogeneity in melanoma metastasis and resistance to immune checkpoint blockade</td>
</tr>
<tr>
<td>Malats, Nuria; Real, Francisco X.</td>
<td>MIT-BC Study: Tumour Microbiome and Immune profiles as predictors of Treatment response in high-risk Non-Muscle Invasive Bladder Cancer</td>
</tr>
<tr>
<td>Malumbres, Marcos</td>
<td>Exploring the use of CDK4/6 inhibitors in combination with classical chemotherapy (Ref.: 20-0155)</td>
</tr>
<tr>
<td>Soengas, María S.</td>
<td>Heterogeneity in melanoma metastasis and resistance to immune checkpoint blockade</td>
</tr>
<tr>
<td>Malats, Núria; Real, Francisco X.</td>
<td>MIT-BC Study: Tumour Microbiome and Immune profiles as predictors of Treatment response in high-risk Non-Muscle Invasive Bladder Cancer</td>
</tr>
</tbody>
</table>
**Facts & Figures**

### Scientific Management | Competitive Funding

**SUB-PROGRAMME OF GRANTS FOR RESEARCH SUPPORT PLATFORMS IN HEALTH SCIENCES AND TECHNOLOGY**

**Principal Investigator | Project Title**

- Ortega, Eva
  - Plataforma de Biobancos y Biomodelos (Group, Ref.: PT20/0070)

**Impact Projects: Precision Medicine Infrastructure**

**Principal Investigator | Project Title**

- Al-Shahrour, Fátima
  - IMPaCT-Data Science (Ref: IMI/00019)
- González-Neira, Anna
  - IMPaCT-Genomic Medicine (Ref: IMI/00009)

### State Research Agency, Ministry of Science and Innovation / Agencia Estatal de Investigación, Ministerio de Ciencia e Innovación

**National Plan for Scientific and Technical Research and Innovation**

**Strategic Lines Projects (Public-Private Collaborative Projects)**

**Principal Investigator | Project Title**

- Barbacid M., Mariano (Coordinator)
  - Patient-derived pancreatic tumour organoids: a better predictive alternative to animal models (Ref: PLEC2022-009255)
- Malumbres, Marcos (Coordinator)
  - A new patient-derived circulating micrometastases-on-chip platform for drug screen and validation (microMETonChip) (Ref: PLEC2021-008106)
- Malumbres, Marcos
  - Ultrasensitive opto-plasmonic immunoassay platform (Oncodeeplasm) for early detection of breast cancer based on protein biomarkers at the deep region of the blood proteome (Ref: PLEC2021-007892)
- Paz-Ares, Luis (Coordinator)
  - Sensitization to immunotherapy through manipulation of tumour transription (Ref: PLEC2022-00304)

### Excellence Networks / Redes de Excelencia

**Public-Private Collaborative Projects / Proyectos de Colaboración Público-Privada**

**Principal Investigator | Project Title**

- Peláez, Fernando
  - An effective and safe system for the treatment of Atrial Fibrillation through Inversible Electroporation (Ref: CP2021-008480)
- Bracco, Maria A.
  - Development of a novel gene therapy for the treatment of fiodipathic Fibrosis (Ref: CP2021-008483)

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1 This Programme is cofunded by the European Regional Development Fund (ERDF) “A Way to Make Europe”

2, 3 This Programme is cofunded by the European Regional Development Fund (ERDF) “A Way to Make Europe”

4, 5 Funded by MCIN/AEI/10.13039/501100011033 and the European Union “NextGenerationEU”/PRTR
**R&D ACTIVITIES PROGRAMME IN BIOMEDICINE:**

**Principal Investigator** - **Project Title**

- Al-Shahrour, Fatima; Roncaroli, Giovanna
  - Programa LINPROS-VA-CM: Lifelines aggresivos, análisis citotóxico y genómico integrado para una medicina de precisión (Ref.: B2017/BMD-3778)

- Blasco, Maria
  - Programa BypSSE-CM:בתים y proteínas de unión a RNA: implicaciones en salud y enfermedad (Ref.: B2015/BMD-3770)

- Djoudi, Nabil
  - Programa Tomoli-OM: Estudio de la disfunción del hepatocito desde un abordaje multidisciplinar (Ref.: B2017/BMD-3817)

- Malumbres, Marcos (Coordinator); Barbacid, Mariano
  - Programa RU-OM: Terapias personalizadas y nanotecnología en cáncer de pulmón (Ref.: B2017/BMD-3841)

- Muñoz, Francisca
  - Programa REMAN-CM: Red Madrileña de Nanomedicina en Imagen Molecular (Ref.: B2017/BMD-3867)

- Quintela, Miguel Ángel
  - Programa IMMUNOTHERM-CM: Inmunidad tumoral e inmunoterapia del cáncer (Ref.: B2017/BMD-3733)

- Robledo, Mercedes
  - Programa TRIOMEZ-CM: Fisiopatología Tisular: Mecanismos implicados en cáncer, autoinmunidad y acción de las hormonas tisulares (Ref.: B2017/BMD-3724)

- Soengas, María S.
  - Programa HAN0DENDMEDO-CM: Nanosistemas dendríticos como agentes y vectores terapéuticos en distintas aplicaciones asimétricas (Ref.: B2017/BMD-3703)

**SYNERGY PROJECTS:**

**Principal Investigator** - **Project Title**

- Llorca, Óscar

- Melero, Francisco
  - Programa IMMUNOTHERMAL-CM: Inmunidad tumoral e inmunoterapia del cáncer (Ref.: B2017/BMD-3733)

- Malumbres, Marcos (Coordinator)

- Ortega, Sagrario (Coordinator); Blasco, Maria

**R&D ACTIVITIES PROGRAMME IN TECHNOLOGIES:**

**Principal Investigator** - **Project Title**

- Llorca, Óscar
  - Programa TecBioCM: Tecnologías Aplicadas al Estudio de Nanomáquinas Biológicas (Ref.: P2018/NMT4443)

- Robledo, Mercedes
  - Programa TRIOMEZ-CM: Fisiopatología Tisular: Mecanismos implicados en cáncer, autoinmunidad y acción de las hormonas tisulares (Ref.: B2017/BMD-3724)

- Soengas, María S.
  - Programa HAN0DENDMEDO-CM: Nanosistemas dendríticos como agentes y vectores terapéuticos en distintas aplicaciones asimétricas (Ref.: B2017/BMD-3703)

**COORDINATED GROUPS**

**Principal Investigator** - **Project Title**

- Barbacid, Mariano (Coordinator)
  - Programa TecBioCM: Tecnologías Aplicadas al Estudio de Nanomáquinas Biológicas (Ref.: P2018/NMT4443)

- Fernández-Luca, Lucia; Martínez, Joaquín
  - Programa METSTOP: Exploiting post-transcriptional regulation to uncover new vulnerabilities of metastatic cells (Ref.: HR17-00232)

- Peinado, Hector (Coordinator)
  - Programa CAIXAIMPULSE COVID-19: Simple and rapid SARS-Cov-2 diagnostic test by phi29 polymerase amplification (Ref.: CF01-00005)

**Era-NetS**

**Principal Investigator** - **Project Title**

- Barbacid, Mariano
  - Programa ERANET TRANSCAN-3 LipidMac: Exploiting lipid-laden macrophages to overcome resistance to cancer immunotherapy (Ref.: TRNSC213858VALI)

- Valiente, Manuel (Coordinator)
  - Programa ERANET TRANSCAN-3 Reverting immune suppression to elicit brain metastasis control (Ref.: TRNSC213878VALI)

- Casanova, María
  - Programa ERANET TRANSCAN-3 LipidMac: Exploiting lipid-laden macrophages to overcome resistance to cancer immunotherapy (Ref.: TRNSC213858VALI)

**HEALTH RESEARCH PROJECTS:**

**Principal Investigator** - **Project Title**

- Efeyan, Alejo (Coordinator)
  - Programa ASC4Neuro: Amino acid transporter structure to target glutamate transmission in neuro diseases (Ref.: HR21-00081)

- Llorca, Áscar
  - Programa ASC4Neuro: Amino acid transporter structure to target glutamate transmission in neuro diseases (Ref.: HR21-00081)

- Llorca, Áscar
  - Programa ASC4Neuro: Amino acid transporter structure to target glutamate transmission in neuro diseases (Ref.: HR21-00081)

- Peinado, Héctor
  - Programa ASC4Neuro: Amino acid transporter structure to target glutamate transmission in neuro diseases (Ref.: HR21-00081)

- Pérez, Francisco X.
  - Programa ASC4Neuro: Amino acid transporter structure to target glutamate transmission in neuro diseases (Ref.: HR21-00081)

- Soengas, María S.
  - Programa ASC4Neuro: Amino acid transporter structure to target glutamate transmission in neuro diseases (Ref.: HR21-00081)

- Real, Francisco X.
  - Programa ASC4Neuro: Amino acid transporter structure to target glutamate transmission in neuro diseases (Ref.: HR21-00081)

- Soengas, María S.
  - Programa ASC4Neuro: Amino acid transporter structure to target glutamate transmission in neuro diseases (Ref.: HR21-00081)

- Zegnaghi, Jon
  - Programa ASC4Neuro: Amino acid transporter structure to target glutamate transmission in neuro diseases (Ref.: HR21-00081)

**CaiXaimpulSe-COVID-19**

**Principal Investigator** - **Project Title**

- Cortés-Ledesma, Felipe (Coordinator)
  - Programa ASC4Neuro: Amino acid transporter structure to target glutamate transmission in neuro diseases (Ref.: HR21-00081)
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**SALUD (AES)**

**SALUD CARLOS III (ISCIII)**

**INSTITUTO DE CARLOS III / INSTITUTE OF HEALTH**

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**COVID-19 SCIENTIFIC RESEARCH TEAMS**

**PRINCIPAL INVESTIGATOR**

**PROJECT TITLE**

- Rodrigo, Sandra

- Quintela, Miguel Ángel
  - Identification of mechanisms of response to CDK4/6 inhibition in hormone receptor-positive breast cancer (Ref. 43/C/2019)

- Valiente, Manuel
  - Organ-specific biomarkers and therapies to improve the management of brain metastasis (Ref. 16/C/2019)

**PRINCIPAL INVESTIGATOR**

**PROJECT TITLE**

- Rodríguez, Cristina
  - Estudio farmacogenómico de la toxicidad de Trastuzumab-Deruxtecan en pacientes con cáncer de mama

**NATIONAL GRANTS INDIVIDUAL PROJECTS**

**INSTITUTE OF HEALTH CARLOS III / INSTITUTO DE SALUD CARLOS III (ISCIII) STRATEGIC HEALTH ACTION / ACCIÓN ESTRATÉGICA EN SALUD (AES)**

**RESEARCH PROJECTS IN HEALTH**

**PRINCIPAL INVESTIGATOR**

**PROJECT TITLE**

- Casón, Alberto
  - Molecular, OMIC and functional characterisation of mutations in the gene DLST in patients with phaeochromocytoma/paraganglioma (Ref. PI18/00454)

- Fernández, Lucía
  - Exosomes derived from NK62D CAR T cells (Exo-NK62D CAR) as therapeutic strategy to treat pancreatic CNS tumours (Ref. P2/01049)

- Guerra-González, Carmen
  - The stroma as a therapeutic target of pancreatic cancer (Ref. PI19/00104)

- Málaco, Nuria
  - Deciphering the complex relationship between asthma/allergy and pancreatic cancer risk (Ref. P2/00095)

- Olmeda, David
  - Anti-bacterial stress pathways in melanoma metastasis and response to therapy (Ref. P2/01064)

- Quintela, Miguel Ángel
  - Longitudinal, single-cell analysis of immunomodulator/antiangiogenic therapies in advanced breast cancer: a refined tool for precision medicine (Ref. P19/00454)

- Rodríguez, Sandra
  - Use of CRISPR/Cas13 system for a programmable diagnosis and inhibition of fusion oncogenes (Ref. P2/01087)

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**STATE RESEARCH AGENCY, MINISTRY OF SCIENCE AND INNOVATION / AGENCIA ESTATAL DE INVESTIGACIÓN, MINISTERIO DE CIENCIA E INNOVACIÓN**

**TECHNOLOGICAL DEVELOPMENT PROJECTS / PROYECTOS DE DISEÑO TECNOLÓGICO**

**PRINCIPAL INVESTIGATOR**

**PROJECT TITLE**

- Rodríguez, Sandra
  - CRISPR-mediated targeting of amplified oncogenes for Neuroblastoma-directed therapy (Ref. 2019/0071)

- Malumbres, Marcos
  - A new platform to predict response to CDK4/6 inhibitors in metastatic breast cancer patients (Ref. 2019/00732)

**NATIONAL PLAN FOR SCIENTIFIC AND TECHNICAL RESEARCH AND INNOVATION CENTRES OF EXCELLENCE “SEVERO OCHOA” AND UNITS “RAMIRO DE MAEZTU” SUB-PROGRAMME / SUBPROGRAMA DE APOYO A CENTROS DE EXCELENCIA “SEVERO OCHOA” Y UNIDADES “RAMIRO DE MAEZTU”**

**PRINCIPAL INVESTIGATOR**

**PROJECT TITLE**

- Bianco, María
  - Centre of Excellence “Severo Ochoa” (Ref. CEX2019-000691-S)

**CHALLENGES-RESEARCH PROJECTS / PROYECTOS RETOS-INVESTIGACIÓN**

**PRINCIPAL INVESTIGATOR**

**PROJECT TITLE**

- Al-Shahrour, Fátima
  - CANTHERT: Computational targeting of cancer heterogeneity: in silico drug prescription for tumour clonal populations (Ref. RTI2018-097596-B-I00)

- Barbará, Mariano
  - RAFTING: c-RAF, a key mediator of K-RAS driven cancers: Therapeutic approaches (Ref. RTI2018-094834-B-I00)

- Barbará, Mariano
  - FERSCAN: Personalized medicine in pancreatic cancer (Ref. P102021-241686B-100)

- Bischo, María
  - TELOHEALTH: Telomeres and Disease (Ref.: SAF2017-82632-R)

- Casanova, María
  - FibroMac: Macrophage-Fibroblast cross-talk as master regulators of genome dynamics (Ref.: RTI2018-094664-B-I00)

- Cortés, Felipe
  - super-TOP: Physiopathological implications of DNA supercoiling and topoisomerase function as master regulators of genome dynamics (Ref.: RTI2020-11957098-B-I00)

- Djuuder, Nabil
  - HEPATOCAR: Structural and molecular mechanisms regulating the PAX family of viruses, including HCV, HCMV and Hsv (Ref.: SAF18/00454)

- Djuuder, Nabil
  - MECHANOCIR: From cirrhosis to hepatocellular carcinoma: a mechanobiology perspective (Ref.: PID2021-122695OB-I00)

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**Facts & Figures scientific Management**

**COMPETITIVE FUNDING**

**PRINCIPAL INVESTIGATOR**

**PROJECT TITLE**

- Djouder, Nabil
  - MECHANOCIR: From cirrhosis to hepatocellular carcinoma: a mechanobiology perspective (Ref.: PID2021-122695OB-I00)

- Djouder, Nabil
  - HEPATOCAR: Structural and molecular mechanisms regulating the PAX family of viruses, including HCV, HCMV and Hsv (Ref.: SAF18/00454)

- Barbará, Mariano
  - RAFTING: c-RAF, a key mediator of K-RAS driven cancers: Therapeutic approaches (Ref. RTI2018-094664-B-I00)

- Barbará, Mariano
  - FERSCAN: Personalized medicine in pancreatic cancer (Ref. P102021-241686B-100)

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- Djuuder, Nabil
  - MECHANOCIR: From cirrhosis to hepatocellular carcinoma: a mechanobiology perspective (Ref.: PID2021-122695OB-I00)
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<thead>
<tr>
<th>PRINCIPAL INVESTIGATOR</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Efeyan, Alejo</td>
<td>PhysioTOR: The physiological control of the nutrient mTOR axis and its deregulation in cancer and aging (Ref: PID2019-1040239-I00)</td>
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<tr>
<td>Fernández-Capetillo, Óscar</td>
<td>RESCATE: Mechanisms of resistance to anticancer therapies (Ref: RTI2018-1022044-B-100)</td>
</tr>
<tr>
<td>Fernández-Capetillo, Óscar</td>
<td>DEHARD: Overcoming resistance to cancer therapies (Ref: PID2021-1282107-B-100)</td>
</tr>
<tr>
<td>González, Eva</td>
<td>SYSTEMIC-RANK: Systems and myeloid-RANK in mammary gland homeostasis and breast cancer: beyond the epithelium. SYSTEMIC-RANK (Ref: PID2020-1564108-B-100)</td>
</tr>
<tr>
<td>Llorca, Óscar</td>
<td>mTOR-chaperones: Structural and molecular basis for mTOR complex 1 (mTORC1) assembly and activation by the R210P-HSP90 chaperone system (Ref: PID2020-1442998-B-100)</td>
</tr>
<tr>
<td>Losada, Ana</td>
<td>COHESIN2D: Cohesion functions in development, differentiation and disease (Ref: PID2019-10649992-B-100)</td>
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<tr>
<td>Macitryne, Geoffrey J.</td>
<td>TCTCN: Therapeutic targeting of chromosomal instability in cancer (Ref: PID2019-1113568-A-100)</td>
</tr>
<tr>
<td>Malumbres, Marcos</td>
<td>breastCDKs: Therapeutic evaluation of the Cdk14-18 subfamily in advanced breast cancer (Ref: PID2021-12872608-B-100)</td>
</tr>
<tr>
<td>Márquez, Juan</td>
<td>REPA-TOL: Mechanisms of DNA replication and damage tolerance (Ref: PID2019-1007568-B-100)</td>
</tr>
<tr>
<td>Park, Sulip</td>
<td>CancerFitness: Systematic analysis of the cancer fitness landscape for cancer genes across cancer types (Ref: PID2019-1095798-A-100)</td>
</tr>
<tr>
<td>Peinado, Héctor</td>
<td>OUTANERVE: Role of NGFR regulating the immunoevasive phenotype of melanoma metastasis initiating cells (Ref: PID2020-11835897-B-100)</td>
</tr>
<tr>
<td>Plaza, Isidro</td>
<td>ESPRRET: Functional and structural characterization of HSP90-BRET rearrangements (Ref: PID2020-17558068-B-100)</td>
</tr>
<tr>
<td>Real, Francisco X.</td>
<td>TF-PDAC: Transcription factors in pancreatic cancer: from biology to therapy (Ref: RTI2018-100371-B-100)</td>
</tr>
<tr>
<td>Real, Francisco X.</td>
<td>PDAC-MolPreV: An integrative approach towards the prevention of pancreatic cancer using mouse models and genomic tools (Ref: PID2021-12812509-B-100)</td>
</tr>
<tr>
<td>Rodríguez, Cristina</td>
<td>RCC-MARKER: Improving the clinical management of advanced renal cell carcinoma through genomic technologies (Ref: RTI2019-095309-B-100)</td>
</tr>
<tr>
<td>Rodríguez, Cristina</td>
<td>kidneyALT: Molecular alterations of metastatic renal cell carcinoma of clinical significance for antifibrosis drug response (Ref: PID2021-08152208-B-100)</td>
</tr>
<tr>
<td>Soengas, María S.</td>
<td>MEL-STOP: Whole-body imaging of melanoma metastasis as a platform for gene discovery and pharmacological testing (Ref: SAF2017-89533-R)</td>
</tr>
<tr>
<td>Soengas, María S.</td>
<td>MEL_IMAGE_TREAT: Imaging and targeting metastatic niches in melanoma (Ref: PID2020-1172998-B-100)</td>
</tr>
<tr>
<td>Squitrito, Massimo</td>
<td>GLO-TKIR: TKIRing down oncogenic genetic rearrangements in gliomas (Ref: RTI2018-1003253-B-100)</td>
</tr>
<tr>
<td>Valentí, Manuel</td>
<td>Stat3 REACTIVE: Biology of Stat3+ reactive astrocytes in brain metastasis (Ref: SAF2017-89643-R)</td>
</tr>
</tbody>
</table>
### FERNO FOUNDATION / FUNDACIÓN FERO

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<tr>
<th>Principal Investigator</th>
<th>Project Title</th>
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<tbody>
<tr>
<td>Casanova, María</td>
<td>Macrophage-fibroblast cell to cell modulation in NSCLC</td>
</tr>
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</table>

### GETNE GROUP / GRUPO GETNE

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<tr>
<th>Principal Investigator</th>
<th>Project Title</th>
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<tbody>
<tr>
<td>Montero, Cristina</td>
<td>Identificación de marcadores moleculares de respuesta a tratamiento con inhibidores tirosina-quinasa en cáncer (Ref.: G2212)</td>
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### BBVA FOUNDATION / FUNDACIÓN BBVA

**Leonardo Grants**

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<tr>
<th>Principal Investigator</th>
<th>Project Title</th>
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<tbody>
<tr>
<td>Efeeyan, Alejo</td>
<td>Nuevos modelos animales de translocaciones a la carta para el desarrollo y estudio de cánceres hepáticos (Ref.: PR[19]_BIO_MET_0029)</td>
</tr>
<tr>
<td>Peinado, Héctor</td>
<td>Análisis de la mutación BRAF en exosomas circulantes de pacientes de melanoma (Ref.: IN[21]_BBM_TRA_0050)</td>
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### SCIENTIFIC RESEARCH TEAMS

**RAMÓN ARECES FOUNDATION / FUNDACIÓN RAMÓN ARECES**

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<tr>
<th>Principal Investigator</th>
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<tr>
<td>Ortega, Eva</td>
<td>Red Nacional de Metástasis Cerebral: implantación, Desarrollo y Coordinación (Ref.: CIVP20S10662)</td>
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<tr>
<td>Peinado, Héctor</td>
<td>Desarrollo de un tratamiento para promover la identificación de marcadores y supresión metastásica de la enfermedad (Ref.: C[21]_BBM_TRA_0050)</td>
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</table>

**EXCELLENCE GRANTS**

<table>
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<tr>
<th>Principal Investigator</th>
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<tbody>
<tr>
<td>Casanova, María</td>
<td>Network of myeloid vulnerabilities at metastatic site (Ref.: PR_TPO_2020-09)</td>
</tr>
<tr>
<td>Otamí, David</td>
<td>Addressing the biological and clinical role of RBB loss and DNA repair defects in lethal prostate cancer (Rs. EXCELLENCE 19-36)</td>
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**CARMEN DELGADO/MIGUEL PÉREZ-MATEO GRANTS**

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**NATIONAL SPANISH ASSOCIATION OF PANCARCTOLOGY / ASOCIACIÓN ESPAÑOLA DE PANCREATOLOGÍA**

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**Grants for Research Projects in Cancer**

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<tr>
<td>Djouder, Nabil</td>
<td>Elucidating the role of liver cirrhosis in the development of hepatocellular carcinoma: towards novel therapeutic strategies (Ref.: PRY2021IFRAM)</td>
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<td>Fernández-Capetillo, Óscar</td>
<td>Targeting the hostile methylenetetrazol (SET) tumor in cancer: from biomarker identification to drug development and mechanisms of resistance (Ref.: PROY2020IFER)</td>
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<td>Lojada, Ana</td>
<td>Identification of a gene signatures associated with aggressive Ewing Sarcoma for diagnostic and therapeutic purposes (Ref.: PROY2020IFESA)</td>
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<td>StAG2 and GEF2: cooperation with the DREAM complex in bladder cancer (Ref.: PROY2021IFSEAL)</td>
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**IDEAS SEMILLA** Grants (Seed Funding)

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<tr>
<td>Rodríguez, Cristina</td>
<td>Bypassing Nonsense Mediated mRNA Decay to enhance Immunotherapy response in cancer (Ref.: IDEAS20386OOR)</td>
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**Health Research Programme**

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<td>Fernández-Capetillo, Óscar</td>
<td>RNAIS: Modulating nuclear activity and stress responses as a therapeutic strategy in ALS (Ref. H921-00990)</td>
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**Cris Foundation Against Cancer / Fundación Cris contra el cáncer**

**Excellence Grants**

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<tr>
<td>Casanova, María</td>
<td>Network of myeloid vulnerabilities at metastatic site (Ref.: PR_TPO_2020-09)</td>
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<tr>
<td>Otamí, David</td>
<td>Addressing the biological and clinical role of RBB loss and DNA repair defects in lethal prostate cancer (Rs. EXCELLENCE 19-36)</td>
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**Facts & Figures Scientific Management**

**Competitive Funding**

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<td>Montero, Cristina</td>
<td>Identificación de marcadores moleculares de respuesta a tratamiento con inhibidores tirosina-quinasa en cáncer (Ref.: G2212)</td>
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