

The background of the cover is a deep blue with a subtle, abstract pattern of light blue and white geometric shapes, including circles and lines, suggesting a molecular or network structure. A large, dark blue sphere is positioned in the upper center, containing the word 'idis' in white. Below the sphere, a pair of hands is shown in silhouette, palms facing up, as if holding or presenting the sphere. The overall aesthetic is scientific and modern.

idis

ANNUAL REPORT 2018

Health Research Institute of
Santiago de Compostela

EDITION AND PRODUCTION

Technical Secretary of the Health Research
Institute of Santiago de Compostela

Isabel Lista García. Quality Manager.

Yolanda Liste Martínez. Technical Management.

José Ramón Castro Ruibal. Technical Research
Management and Promotion.

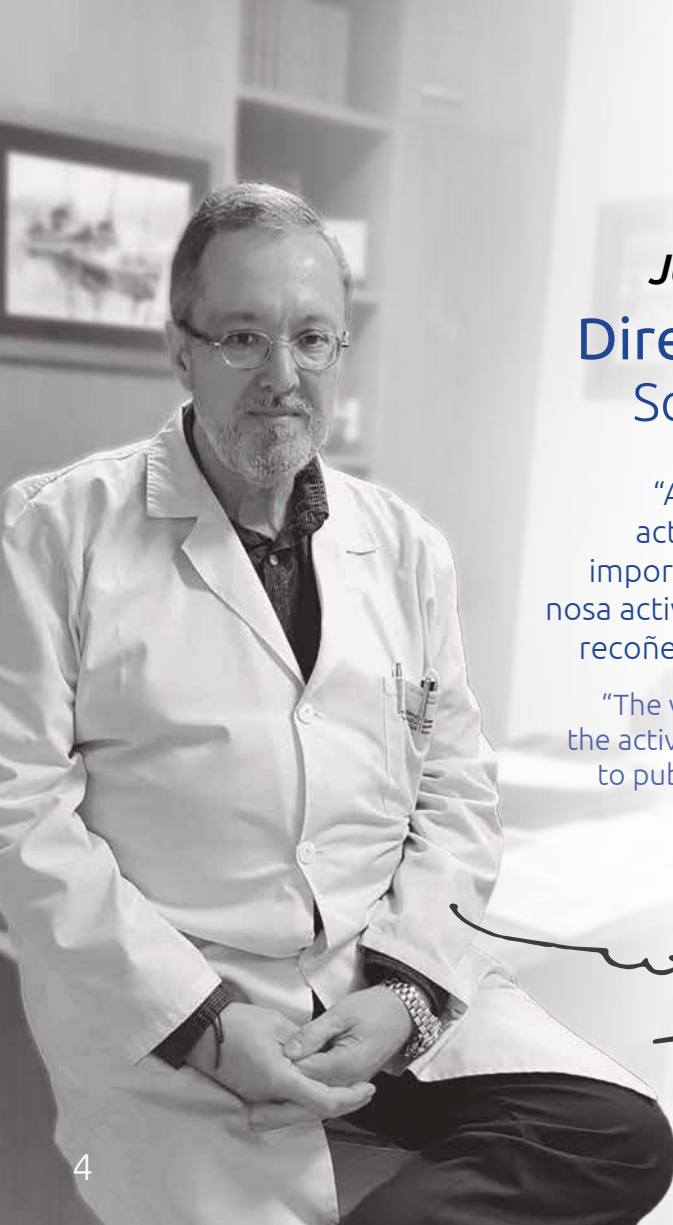
APPROBATION

Direction Board of the institute met in **Santiago
de Compostela** on **15 March 2019**



ANNUAL REPORT 2018

Health Research Institute of
Santiago de Compostela



José Castillo Sánchez
Director científico
Scientific Director

"A visibilidade e difusión das actividades é un elemento de importancia para dar a coñecer a nosa actividade investigadora como recoñecemento do noso esforzo"

"The visibility and dissemination of the activities is an important element to publicize our research activity as recognition of our effort"

we' can!

Unha vez máis, é un pracer presentar a memoria do IDIS, esta ofrécenos unha panorámica das melloras implantadas, os avances obtidos e dos resultados acadados durante o 2018, pero tamén é un reflexo dos obxectivos aínda non alcanzados. É difícil sintetizar nun documento o traballo colectivo dos investigadores, técnicos e xestores que formamos o instituto, pero de algunha maneira, este informe pretende reflexar reflectir o rendemento de todos e o impulso que a investigación biomédica ten no ámbito asistencial e académico da área de Santiago de Compostela e Lugo.

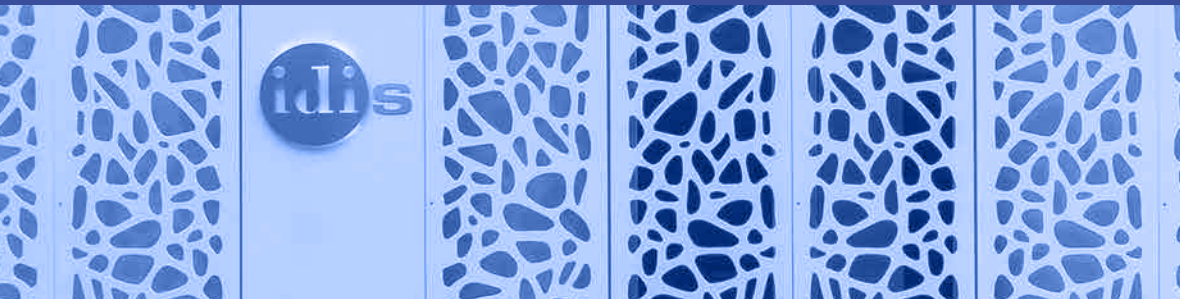
A visibilidade e difusión das actividades é un elemento de importancia para dar a coñecer a nosa actividade investigadora como recoñecemento do noso esforzo. Pero o obxecto desta memoria, non só é útil para presentar os nosos logros, senón que é moi valioso para observar que cousas se teñen feito, en que medida acadamos os obxectivos, como o estamos facendo en comparación cos anos anteriores e que podemos mellorar, é dicir, ofrécenos a posibilidade de realizar unha análise estratéxica do desenvolvemento do instituto.

A nosa razón de ser consiste na aplicación dos resultados da investigación básica e clínica no sistema sanitario, e esta idea estase a afianzar nos nosos grupos que, cun marcado carácter multidisciplinar, enfocan

Once again, it is my pleasure to present the IDIS annual report. This is an overview of the implemented improvements, the progress made and the results achieved during the past 2018, but it is also a reflect of the unmet goals. It is difficult to summarize in one single document the collective work of all researchers, technicians and managers that form the institute, but in some way, this report aims to reflect everyone's performance and the impetus that biomedical research has in the clinical and academic area of Santiago de Compostela and Lugo.

The visibility and dissemination of the activities is an important element to publicize our research activity as recognition of our effort. However, the purpose of this report is not only to present our achievements, but also to observe what have been done, to what extent we achieve the objectives, how we are doing in comparison with previous years and what we can improve. In summary, it offers the possibility of carrying out a strategic analysis for the institute's development.

Our *raison d'être* relies in the application of the results of basic and clinical research to the health system, and this idea is taking hold in our groups that, with a marked multidisciplinary nature, focus their work to respond to the demands arising from the clinic. Our contributions to science position



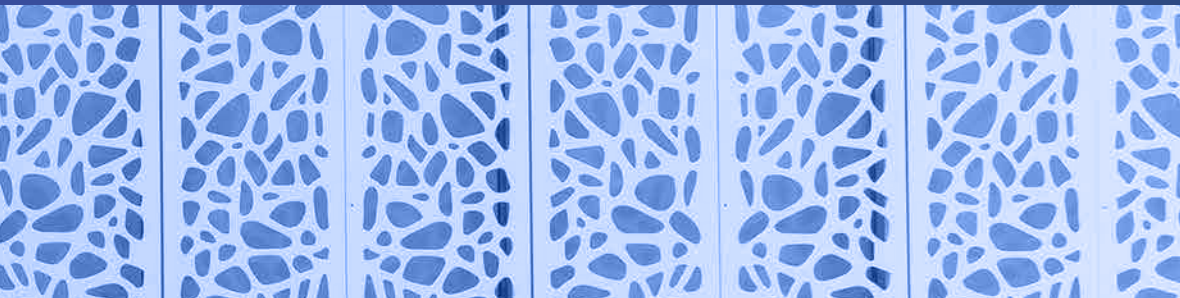
os seus traballos para dar resposta ás demandas xurdidas da área clínica. As nosas aportacións á ciencia nos sitúan na cabeza da investigación biomédica en Galicia e nunha destacada posición no ámbito nacional, ademais, o crecemento constante da participación dos membros dos nosos equipos en proxectos de investigación europeos danos unha forte proxección internacional.

A análise das actividades e os indicadores amósanos unha evolución positiva, seguindo a tendencia das anualidades anteriores. Todo isto foi posible grazas ao esforzo de todas as persoas que integramos o IDIS, así como do apoio institucional das entidades que o conforman. Podemos considerar que una das nosas grandes fortalezas é o excelente potencial humano, o seu coñecemento e implicación garanten a continuidade da nosa produción.

Ademais da produción científica, a transferencia de resultados e da captación de recursos, no noso informe podemos observar o compromiso da nosa institución coa formación en investigación biomédica. A implicación na dirección de teses de doutoramento e o apoio á incorporación de persoal na etapa de formación garanten a base do IDIS do futuro.

Podemos concluír que entre todos estase a facer un gran traballo, xerándose grandes expectativas de crecemento, e isto representa a mellor garantía de continuidade. Evitemos a miopía que pode suprimir a fragmentación; sen comportas o futuro está asegurado.

Moitas grazas.



us at the head of biomedical research in Galicia and in an outstanding situation in Spain. In addition, the constant growth of the number of members of our teams participating in European research projects gives us a strong international projection.

The activity analysis and the research indicators show a positive evolution, following the trend of previous years. Everything has been possible thanks to the efforts of all the people who make up the IDIS, as well as the institutional support. We can consider that one of our great strengths is the excellent human resources. Their knowledge and implication guarantee the continuity of our production.

In addition to the scientific production, the results transfer and the fundraising, in our report we can observe the

commitment of our institution with the training in biomedical research. The involvement in the direction of doctoral theses and the support for the incorporation of personnel in training stages guarantee the base of the future IDIS.

We can conclude that among all we are doing a great job, generating great expectations for growing, and this represents the best guarantee of continuity. Let's avoid myopia that can suppress fragmentation; without gates the future is assured.

Thank you.

SUMMARY

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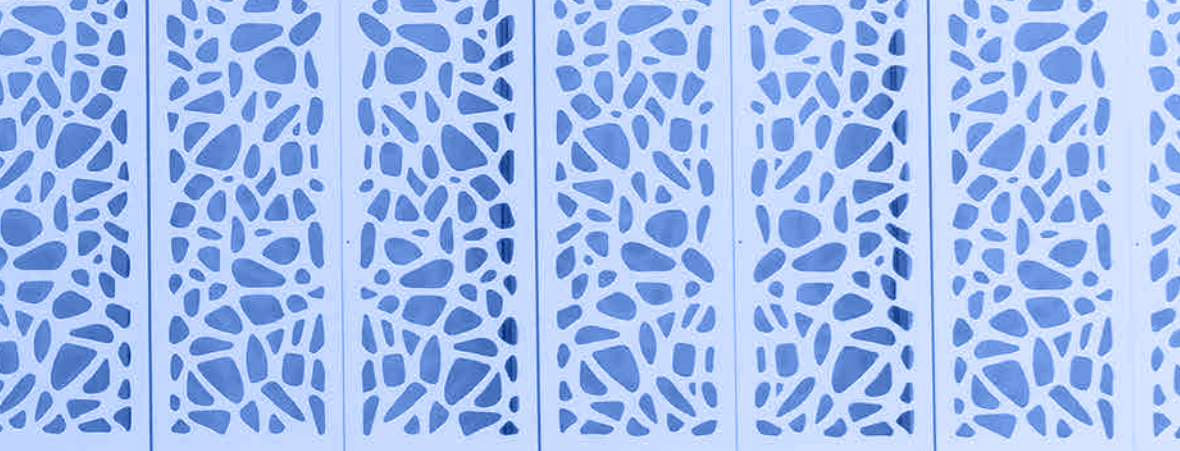
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EXECUTIVE SUMMARY

ANNUAL REPORT 2018

The **Biomedical Research Institute of Santiago de Compostela** is a translational research centre for innovation and transfer knowledge that optimizes existing synergies between the *Xerencia de Xestión Integrada de Santiago de Compostela* and the *University of Santiago de Compostela*. It is accredited as a medical research centre of the *National Health System by the Institute of Health Carlos III*.





TOTAL FUNDS RAISED

29.108.535,46 €

65

Projects

289

Donations

104

Clinical trials

58

Staff
contracts

415

Contracts and
provision of
services

178

Observational
studies

754

Published articles

24

Training exchanges

7

Granted patents

57

Thesis

220

Professional
training
placement

30

Requested
patents

79

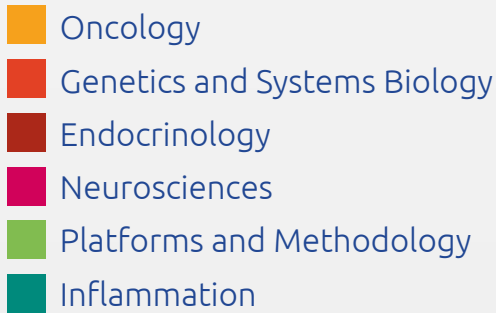
Seminars



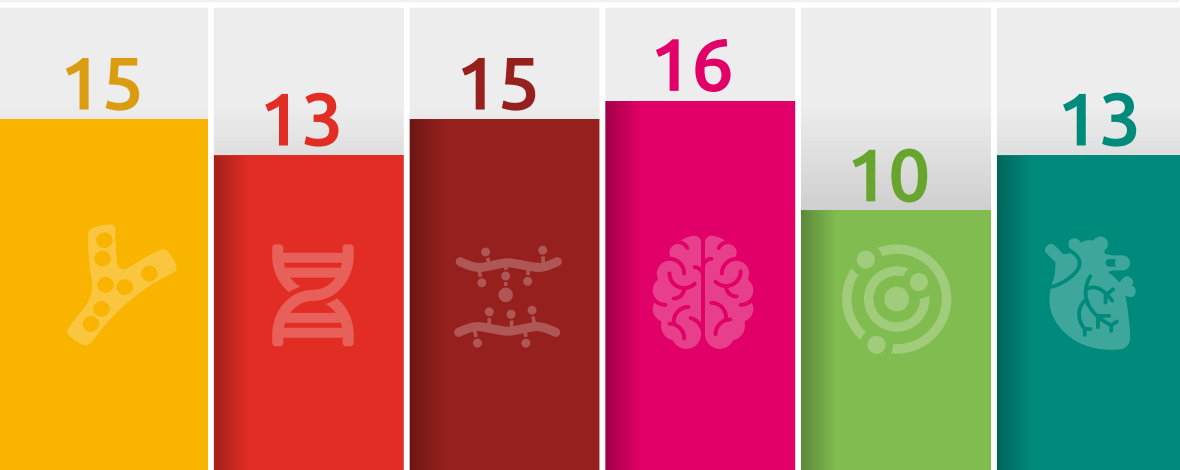
GLOBAL ANALYSIS

ANNUAL REPORT 2018

Number of **groups** per area

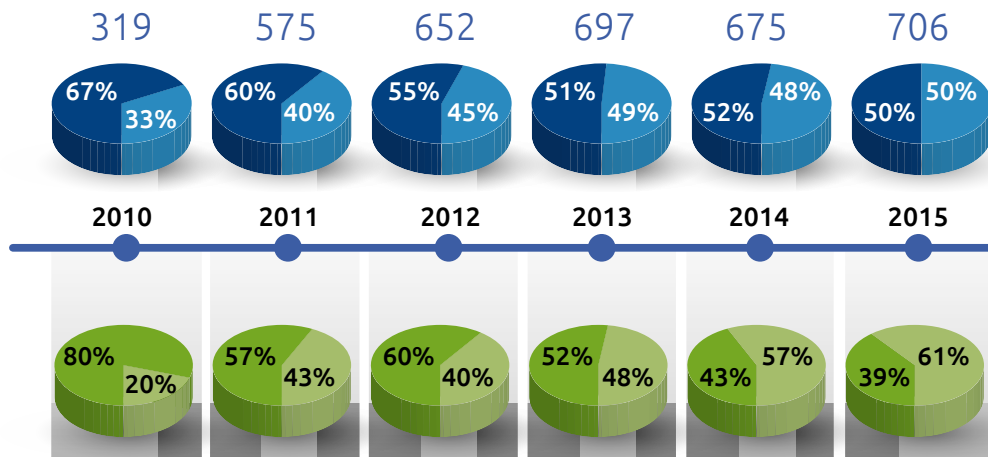
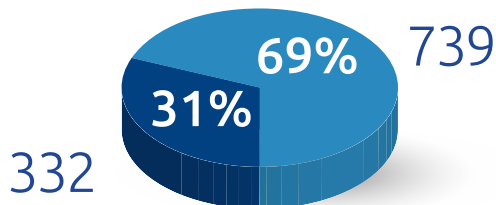


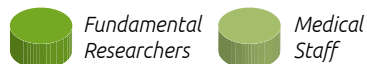
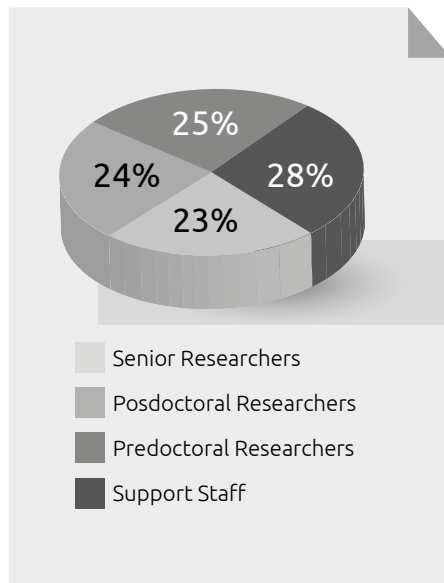
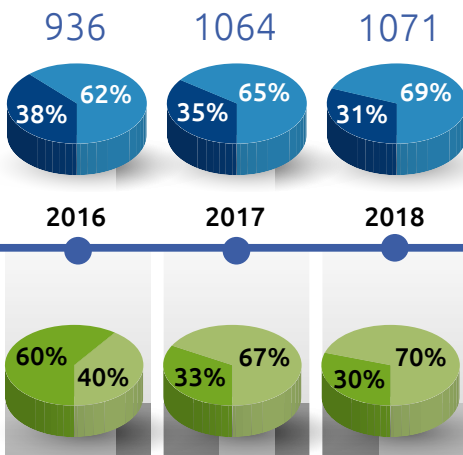
There is also a support
área (*technical secretariat
and common support
platforms for research*)
with 3 groups.



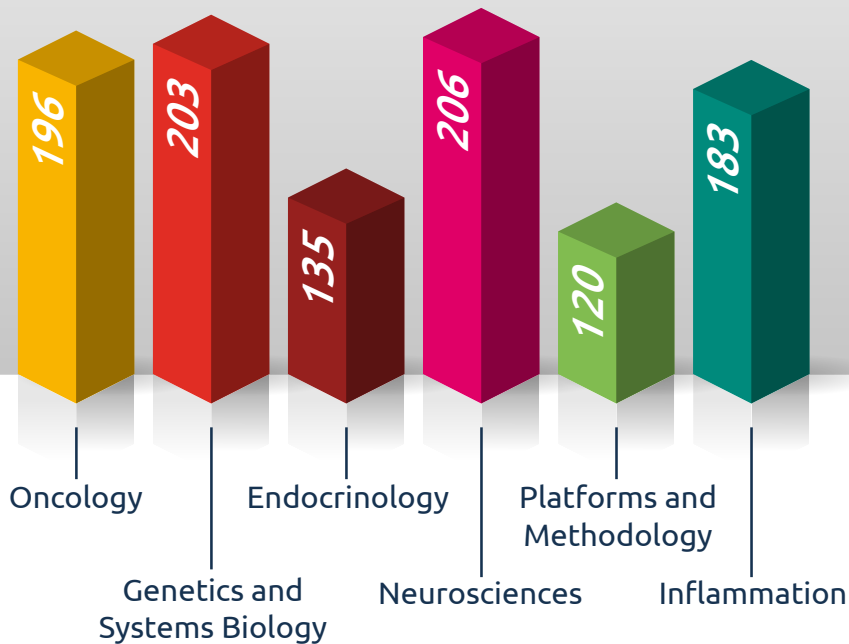
History of a joint venture: **human resources in figures**

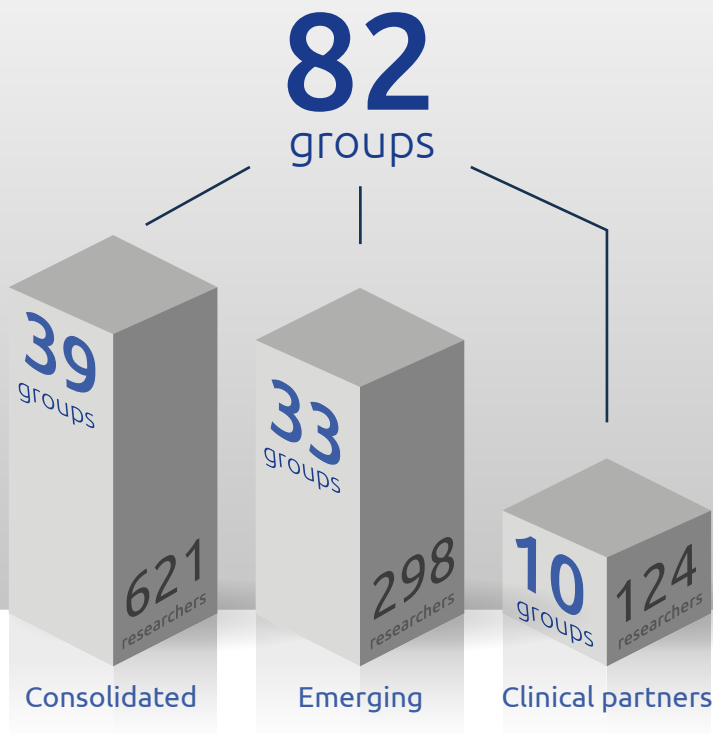
1.071
people





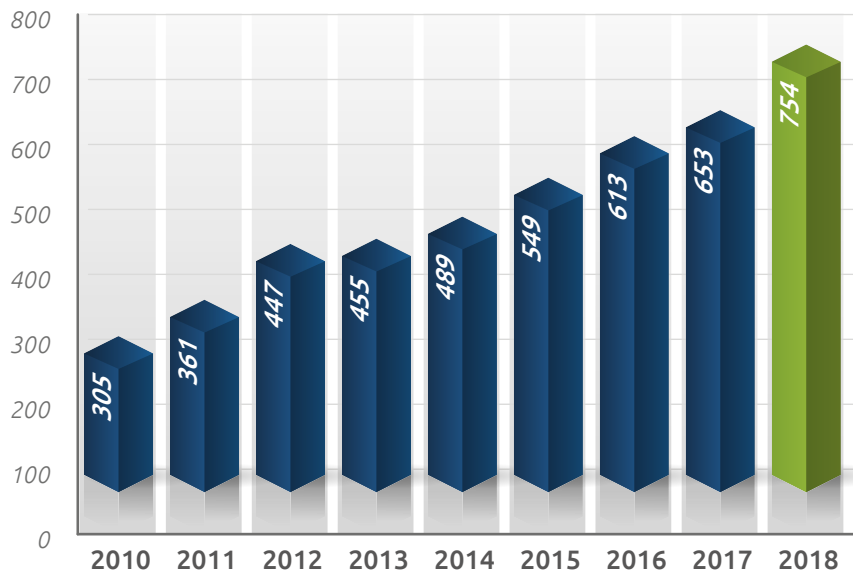
Number of **researchers per area**





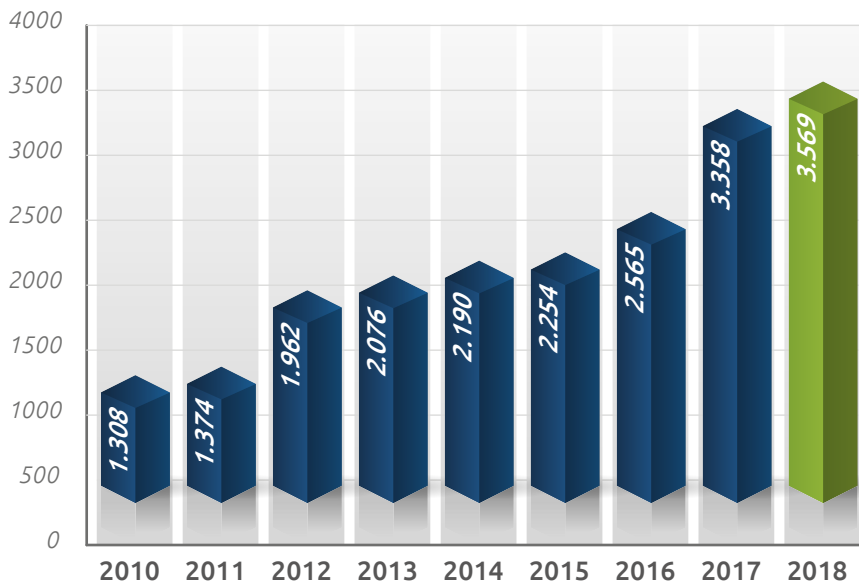
Number of published articles each year

The Institute has published **754 original scientific articles, editorials and reviews** in 466 international journals indexed in the *Journal Citation Report* with an **cumulative impact factor of 3.569 points**.

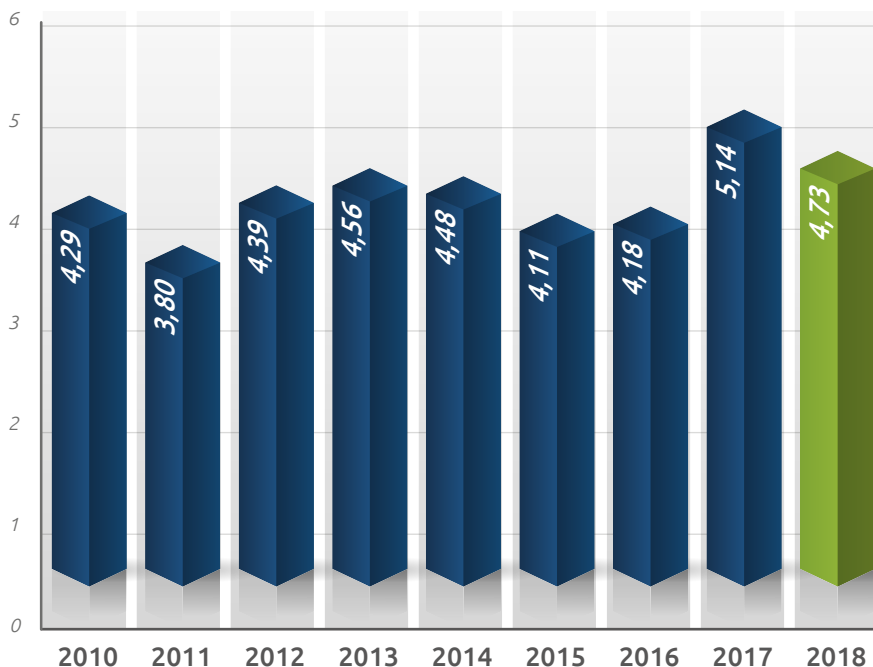


Cumulative impact factor

The upward trend of the cumulative impact factor is maintained and it moves from 1.308 in 2010 to **3.569 in 2018**.

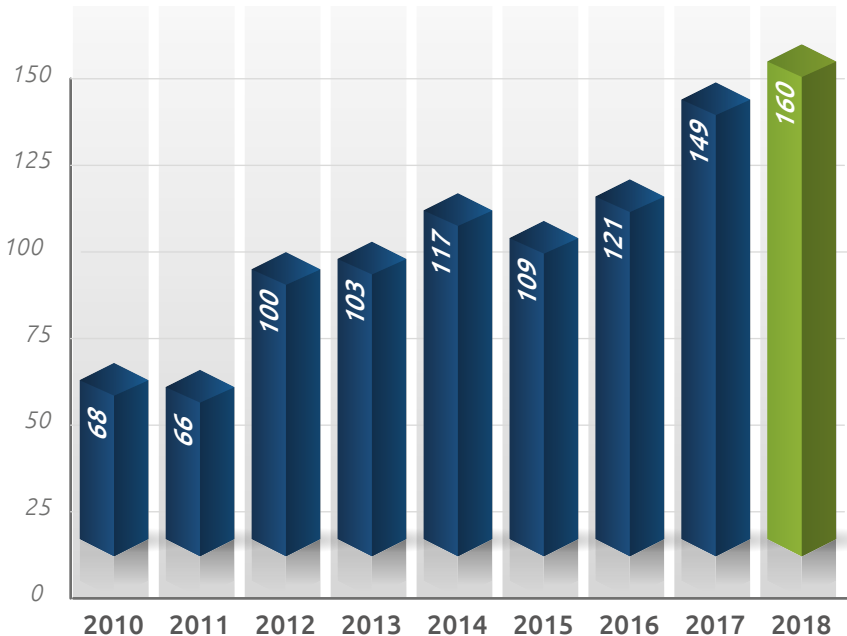


Average impact factor

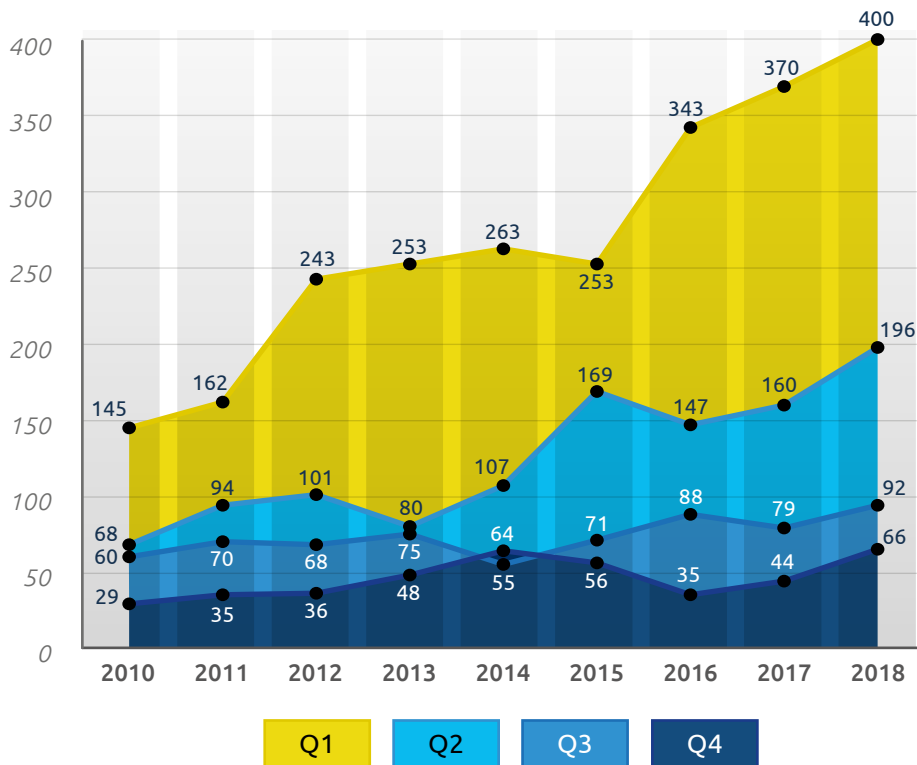


Number of **published articles in the first decile**

A remarkable increase in the first decile for the same period
from 68 articles published in 2010 to **160 in 2018**.



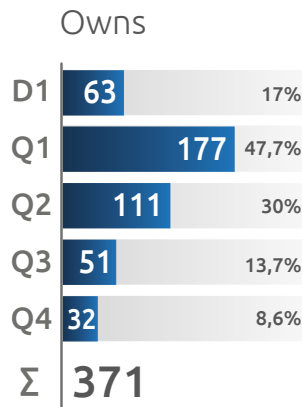
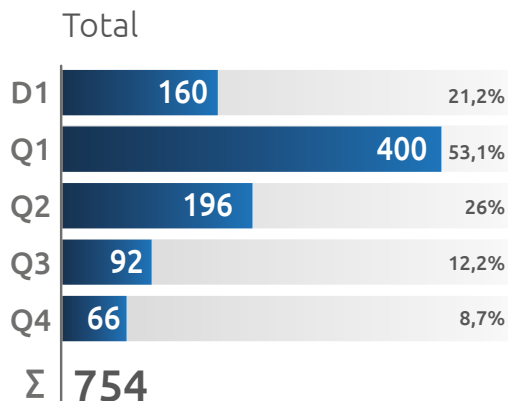
Number of articles by year published in each quartile



Number and % of the total number of publications and articles in 2018

The number of articles per quartile **increased gradually during the period of 2010-2018 almost in every quartile and every year.**

Taking into account the relevance of the authors in the articles signature, we identify those in which the first or the last author is assigned to an IDIS group. We define them as articles of our own.





312

Articles published in
collaboration between the
groups of the centres
outside of Spain

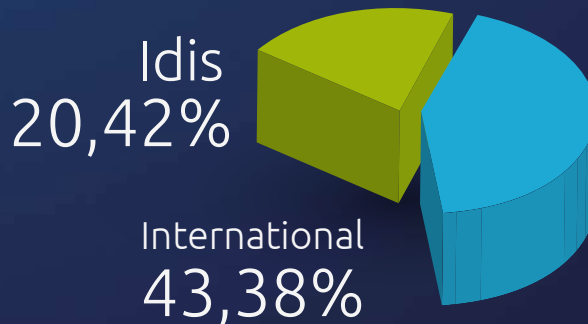
154

Articles published in
collaboration between
the IDIS groups

Number and % of
articles published in
collaboration between
the IDIS groups and
the groups of the
centres outside
of Spain.

In 2018, 20,42% of
the work were carried
out by teams in which
members of more than
one IDIS group were
involved.

43,38% were done
in collaboration with
researchers from
centres outside of
Spain.



During 2018, the funds raised in competitive calls for **research projects**, the **recruitment of staff**, **infrastructures**, **agreements**, **contracts and provision of services**, **donations**, **clinical trials and observational studies** generated **29.108.535,46 €** which will complement the resources of the institutions that take part in IDIS.

AMOUNT

29.108.535,46 €

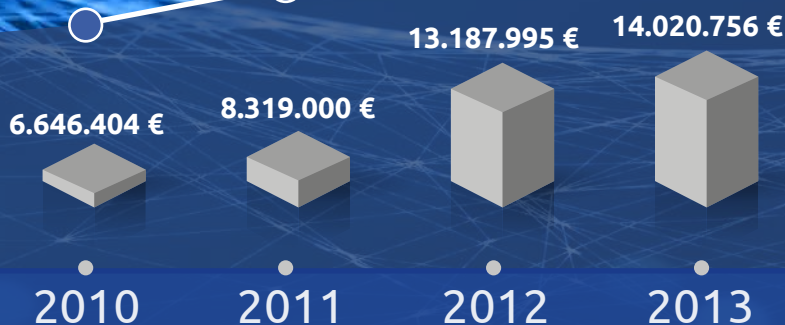
Summary of the funds raised in 2018

CONCEPT	NUMBER	AMOUNT
Projects	65	10.631.222,46 €
Human resources	58	4.781.190,00 €
Donations	289	1.040.133,81 €
Contracts and provision of services	415	6.622.804,20 €
Transfer	2	46.445,65 €
Infrastructure	2	1.364.206,77 €
Studies (<i>Clinical Trials, Observational Studies</i>)	282	4.622.532,23 €

2018

AMOUNT RAISED

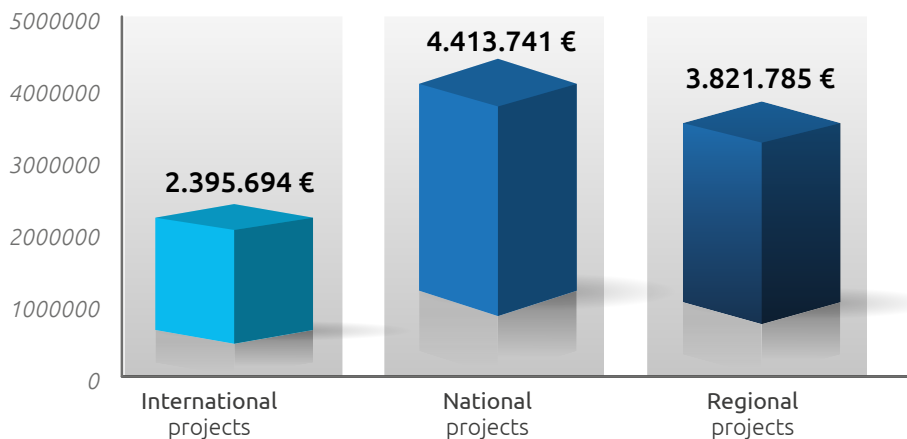
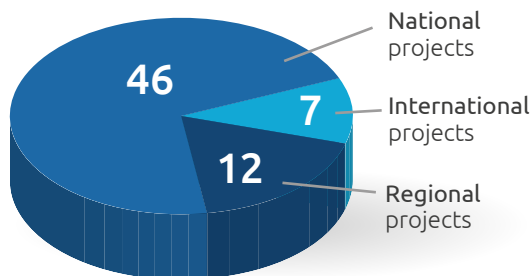
29.108.535,46 €



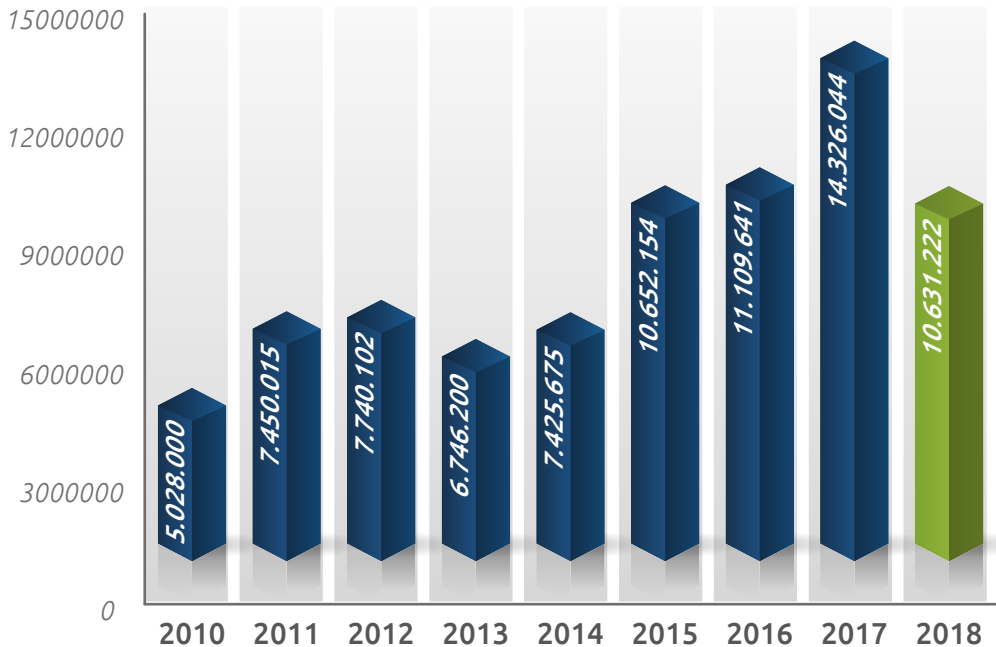


Number and amount of **funds raised in 2018** for projects by location

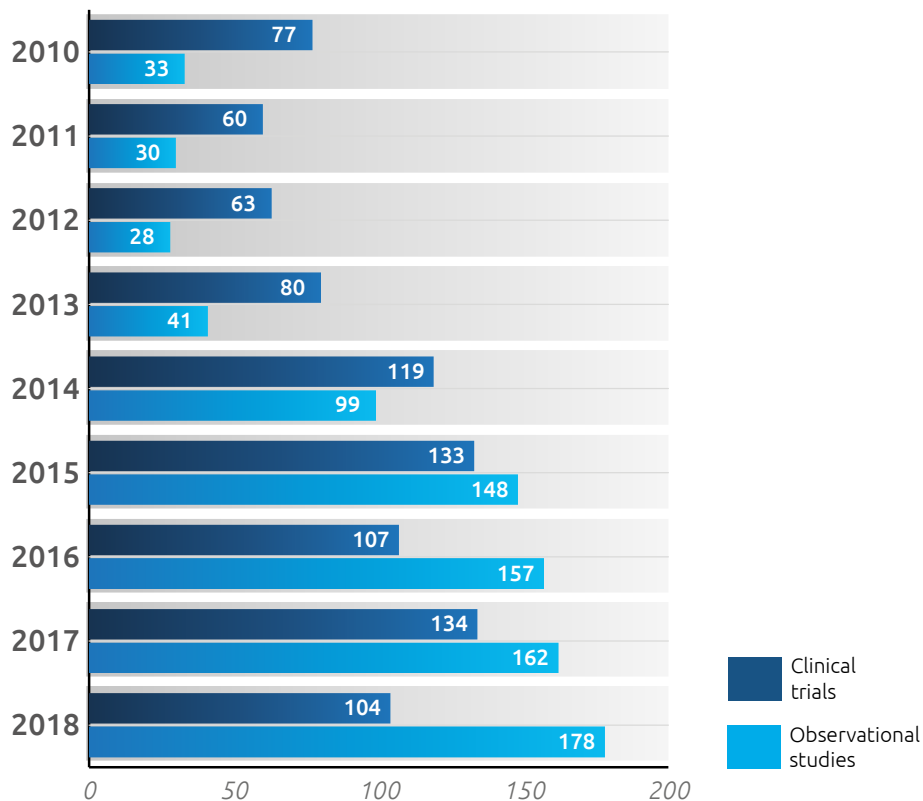
65 Projects
10.631.222,46 €



Amount of funds raised by year for projects



Number of **clinical trials** and **observational studies**



104

CLINICAL TRIALS

60 National
24 International
20 Local

178

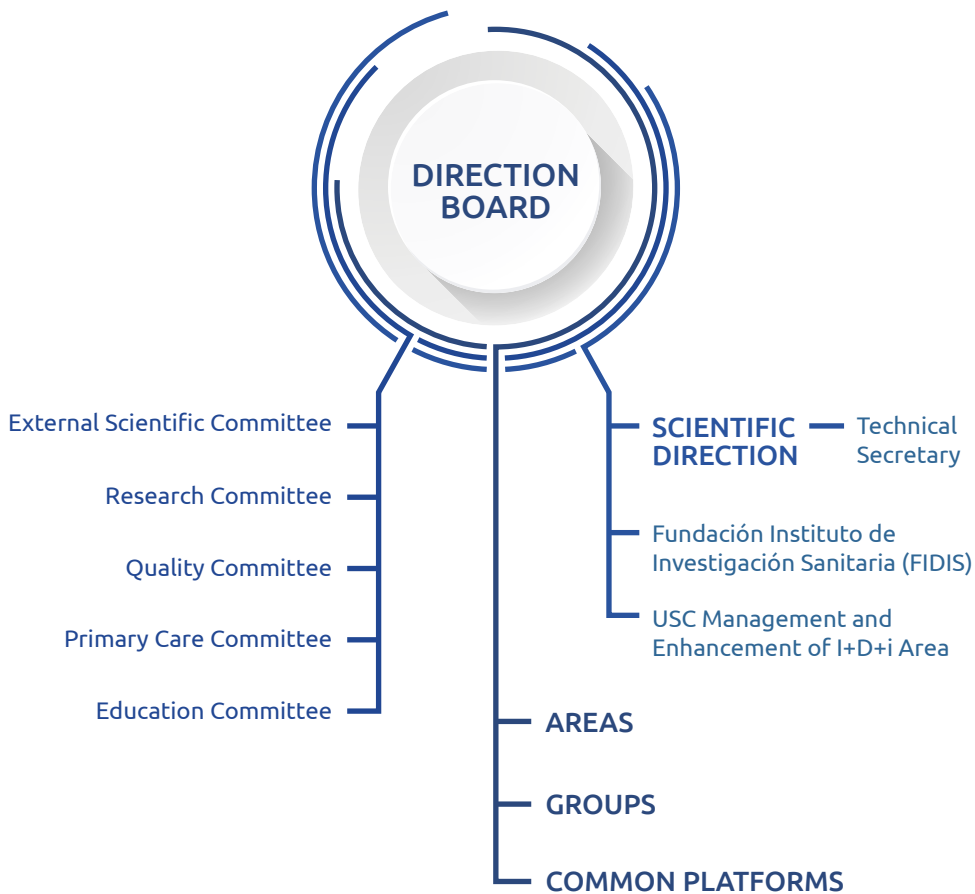
OBSERVATIONAL STUDIES

96 National
35 International
41 Local
6 Regional

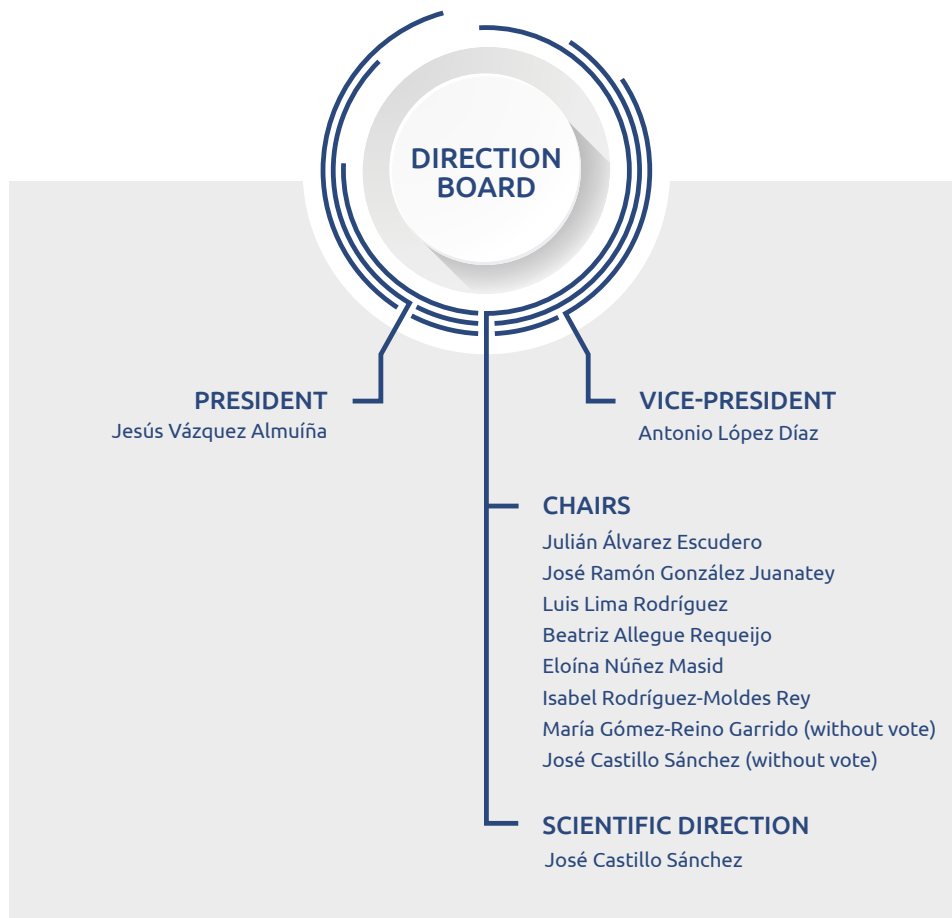


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STRUCTURE



Government bodies



Advisory bodies

EXTERNAL SCIENTIFIC COMMITTEE

Ángeles Almeida Parra
Melchor Álvarez de Mon Soto
María del Carmen Ayuso García
Joan Xavier Comella Carnicé
Xosé García Bustelo

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SECRETARY
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Antonio Salas Ellacuriaga

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Xoán Vázquez Lago
Manuel Vidal Fernández Fernández



Isabel Lista García
Yolanda Liste Martínez
José Ramón Castro Ruibal

A001 ONCOLOGY *Coordinator: Rafael López López*

C010 Genetics of Human Diseases *Fernando Domínguez Puente*

C011 Pathology *José Ramón Antúnez López*

C025 NANOBIOFAR *María José Alonso Fernández*

C030 Translational Medical Oncology *Rafael López López*

C032 Molecular Imaging *Álvaro Ruibal Morell*

E004 Molecular Oncology *José Antonio Costoya Puente*

E018 Cell Cycle and Oncology (CiClon) *Anxo Vidal Figueroa*

E028 Stem Cells in Cancer and Aging *Manuel Collado Rodríguez*

E031 Oncologic Endocrinology *Román Pérez Fernández*

E032 Preclinical Animal Models *Laura Sánchez Piñón*

E033 Viruses and cancer *María del Carmen Rivas Vázquez*

E037 DNA Repair and Genome Integrity *Miguel González Blanco*

AC01 Lymphoproliferative Disorders *José Luis Bello López*

AC06 Intraocular Tumours in Adults *Antonio Piñeiro Ces*

AC08 Surgical Oncology *Manuel Bustamante Montalvo*

A002 GENETICS AND SYSTEMS BIOLOGY*Coordinator: Ángel Carracedo Álvarez*

C005	Genetics	Ángel Carracedo Álvarez
C009	Translational Research in Digestive Diseases	Juan Enrique Domínguez Muñoz
C020	Genetics, Vaccines, Infections and Paediatrics (GENVIP)	Federico Martínón Torres
E012	Comparative Genomics of Human Parasites	Julio Manuel Maside Rodríguez
E015	Population Genetics in Biomedicine (GenPoB)	Antonio Salas Ellacuriaga
E016	Genetics of Neurological Disorders	María Jesús Sobrido Gómez
E017	Cancer Genetics and Rare Diseases	Ana Paula Vega Gliemmo
E020	Psychiatric Genetics	Javier Costas Costas
E021	Genetics and Developmental Biology of Kidney Diseases	Miguel Ángel García González
E027	Escherichia coli	Jorge Blanco Álvarez
E035	Genetics of Gastrointestinal Tumours	Clara Ruiz Ponte
E036	Stem Cells and Human Diseases	Miguel Ángel Fidalgo Pérez
E040	Mobile Genomes and Disease	José Manuel Castro Tubío

A003 ENDOCRINOLOGY *Coordinator: Felipe Casanueva Freijo*

C001	Neoplasia and Endocrine Differentiation	<i>Clara Álvarez Villamarín</i>
C006	Molecular Endocrinology	<i>Felipe Casanueva Freijo</i>
C008	Obesity and Nutrition	<i>Carlos Diéguez González</i>
C012	Metabolic Disorders	<i>María de la Luz Couce Pico</i>
C019	Thyroid and Metabolic Disorders Unit (UETeM)	<i>David Araújo Vilar</i>
C022	Paediatric Nutrition	<i>Rosaura Leis Trabazo</i>
C029	Neurobesity	<i>Miguel López Pérez</i>
C031	Molecular Metabolism	<i>Rubén Nogueiras Pozo</i>
E006	Cytokines and Obesity (Citobes)	<i>María del Carmen García García</i>
E023	Obesidomics	<i>María Pardo Pérez</i>
E025	Cellular Endocrinology	<i>Jesús Pérez Camiña</i>
E026	Endocrine Physiopathology	<i>Luisa María Seoane Camino</i>
E039	Diabesity	<i>Sulay Tovar Carro</i>
E041	Epigenomics in Endocrinology and Nutrition	<i>Ana Belén Crujeiras Martínez</i>
AC04	Paediatric Endocrinology	<i>Manuel Pombo Arias</i>

A004 NEUROSCIENCES *Coordinator: José Castillo Sánchez*

C004	Neurobiology	<i>Antonio Canedo Lamas</i>
C007	Clinical Neurosciences (LINC)	<i>José Castillo Sánchez</i>
C015	Neurobiology of the Visual System	<i>Francisco González García</i>
C018	Experimental Neurology of Parkinson's Disease	<i>José Luis Labandeira García</i>
C026	BIOFARMA	<i>María Isabel Loza García</i>
C033	Design, Synthesis and Medical Evaluation of Bioactive Compounds and New Materials	<i>Antonio Mouriño Mosquera</i>
C034	Physics of Polymers and Colloids	<i>Victor Mosquera Tallón</i>
C035	R&D in Drugs Dose Forms and Delivery Systems	<i>Ángel Concheiro Nine</i>
C036	Magnetism and Nanotechnology (NanoMag)	<i>José Rivas Rey</i>
C037	Trace Elements, Spectroscopy and Speciation	<i>Pilar Bermejo Barrera</i>
C038	Analytical Chemistry of Compounds of Alimentary, Environmental and Biological Interest	<i>Antonia María Carro Díaz</i>
E014	Prion Diseases	<i>Jesús Rodríguez Requena</i>
E019	Cell Stress	<i>Juan Bautista Zalvide Torrente</i>
E029	Cognitive Neuroscience	<i>Fernando Díaz Fernández</i>
AC03	Critical Patient	<i>Julián Álvarez Escudero</i>
AC11	Life Support and Medical Simulation	<i>Antonio Rodríguez Núñez</i>

A005 PLATFORMS AND METHODOLOGY*Coordinator: Juan Jesús Gestal Otero*

C002	Experimental Surgery	<i>Miguel Ángel Caínzos Fernández</i>
C013	Epidemiology, Public Health and Evaluation of Health Services	<i>Adolfo Figueiras Guzmán</i>
C017	Research Methodology	<i>Francisco Gude Sampedro</i>
C021	Clinical Analysis	<i>Santiago Rodríguez-Segade Villamarín</i>
C024	Radiology	<i>Miguel Souto Bayarri</i>
E002	Biostatistics	<i>Carmen María Cadarso Suárez</i>
E013	Microbiology	<i>María Luisa Pérez del Molino Bernal</i>
E034	Clinical Pharmacology	<i>María Jesús Lamas Díaz</i>
AC09	Oral Sciences (OSRG)	<i>Inmaculada Tomás Carmona</i>
AC10	Healthy ageing, fragility and chronicity. Research in Primary Care	<i>Juan Manuel Vázquez Lago</i>

A006 INFLAMMATION*Coordinator: José Ramón González Juanatey*

C003	Hypertension	<i>Carlos Calvo Gómez</i>
C014	Rheumatology	<i>Juan Jesús Gómez-Reino Carnota</i>
C016	Cardiology	<i>José Ramón González Juanatey</i>
C027	Neuroendocrine Interactions in Rheumatic and Inflammatory Diseases (Neirid)	<i>Oreste Gualillo</i>
C028	Experimental and Observational Rheumatology	<i>Antonio González Martínez-Pedrayo</i>
C039	Biodiscovery HULA-USC	<i>Luis Miguel Botana López</i>
C040	Oral Medicine and Surgery (OMEQUI)	<i>Pedro Diz Dios</i>
E001	Cardiovascular Genetics	<i>María José Brión Martínez</i>
E009	Cellular and Molecular Cardiology	<i>Francisca Lago Paz</i>
E030	Platelet Proteomics	<i>Ángel García Alonso</i>
E038	Musculoskeletal Pathology	<i>Rodolfo Gómez Bahamonde</i>
AC05	Pneumology	<i>Luis Guillermo Valdés Cuadrado</i>
AC07	Semergal	<i>Sergio Cinza Sanjurjo</i>

4

RECURRENT TRAINING

Training activities in 2018

In 2018, 79 seminars were organized, 57 doctoral thesis were directed by IDIS' researchers, 220 professional training placement and 24 short training exchanges were organized in collaboration with the *Medicina Intercambios Galicia Association (ME.I.GA.)*, member of the *International Federation of Medical Students' Associations (IMFSA)*.

79

Seminars

57

Doctoral
thesis

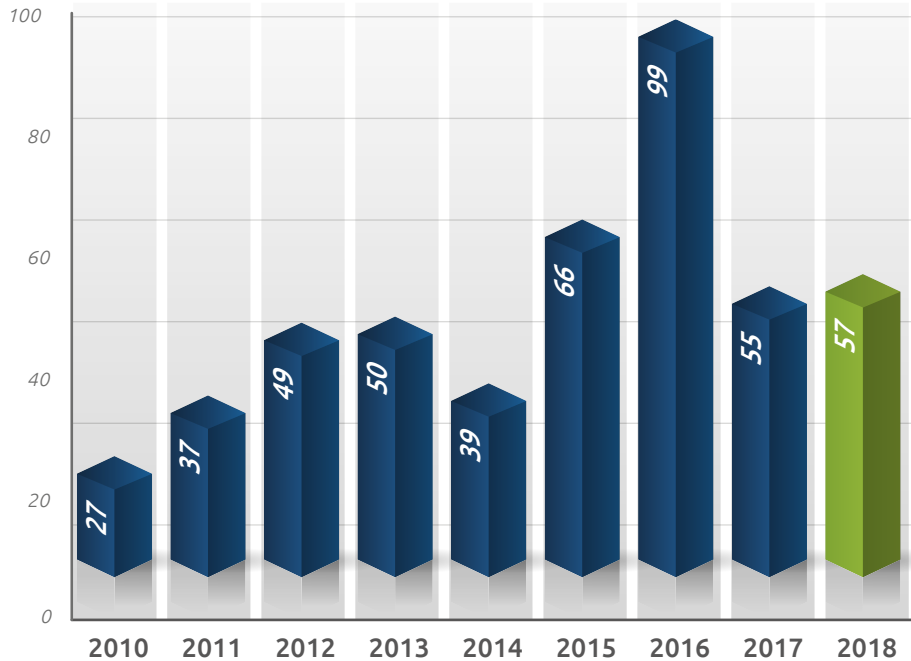
220

Professional
training
placement

24

Short training
exchanges

Number of **thesis** each year



5

INNOVATION AND TRANSFER

A ciência é a alma da prosperidade das nações
e fonte de vida de todo progresso
Louis Pasteur

- Transfer acceleration through public funding and private investment.
- Adopting the Public-Private Partnership Model.
- Partnering.
- Disseminating our research.
- Intellectual property.



Transfer acceleration through public funding and private investment

ITEMAS network

Innovation in Medical and Health Technologies Network funded by the Instituto de Salud Carlos III.

CÓDIGO MÁIS project

Valorization program of SERGAS and USC.

GNICIA

The IGNICIA Proof of Concept programme of the Galician Innovation Agency (GAIN) aims to enhance and support the transfer of research results generated by knowledge centres. IGNICIA seeks to accelerate and increase technology transfer, detecting projects with innovative and market potential, contributing to the profitability of public investment in research.

IDIS requested 16 projects and one of them was granted.

Atlantic Ket Med

Atlantic KET Med (AKM) is an Interreg funded, coordinated action aiming to establish a Transnational Advanced Pilot Manufacturing Ecosystem for Future Biomedical Products. Featuring partners with expertise in the Key Enabling Technologies (KETs), AKM plans to provide bottom-up support to the ecosystem through direct support of SMEs as well as top-down support through educational and infrastructure policies.

IDIS joins the ecosystem and it's the only Spanish research centre that participates in AKM.



Adopting the Public-Private Partnership Model

Two P2 ongoing initiatives where public IDIS partners share risks with private investors.

Roche-CHUS, Precision Oncology Joint Unit.

Esteve-USC, Drug Discovery Joint Unit.



Partnering

TITTAN

A European Network for Technology, Innovation and Translation in Ageing, it aims to tackle that challenge, by improving the quality and performance of the European regional healthcare systems in relation with the healthy and active ageing. IDIS participates acts as a stakeholder.



Disseminating our research

BioInvestor Day

BIOSPAIN is the first biotech country based event in Europe organized by a national bioindustry association and one of the largest in the world by number of one-to-one meetings and number of participants companies.

Following the success of previous editions, BIOSPAIN 2018 (celebrated in Sevilla, Spain) hosted 773 attendees, more than 773 companies and institutions and over 1,550 delegates from 31 countries. Participating major companies, institutions, research centers of the Spanish biotechnology sector.

IDIS participated in Biospian and made contact and interviewed more than 30 potential partners.

BioINCUBATECH

BioIncubaTech is the High Technology Incubator for the promotion of innovation and biotechnology transfer in the field of health and food technologies to micro-SMEs. BioIncubaTech belongs to "High Technology Incubators for the promotion of innovation and technology transfer to micro-SMEs" Project, aimed to modernize the regional productive fabric. These Incubators are created as traction instruments aligned with the objectives of the EU 2020 and Horizon 2020 Strategy and will promote inter-regional cooperation, as well as collaboration between public and private sector agents at international level.

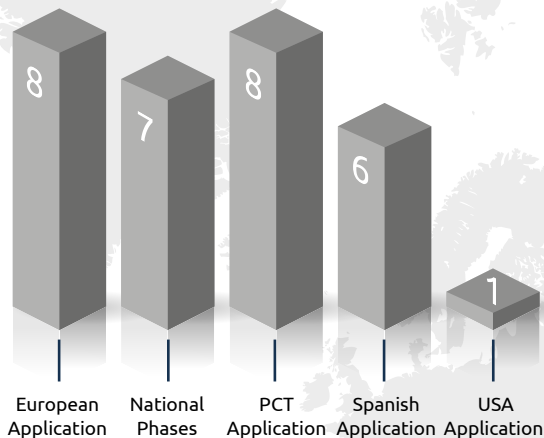
IDIS collaborates since the beginning of this proposal and helped to create the project.

Intellectual property

30

Request

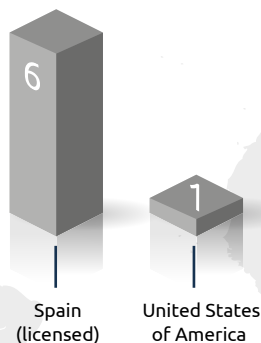
8 European Application
7 National Phases
8 PCT Application
6 Spanish Application
1 USA Application



7

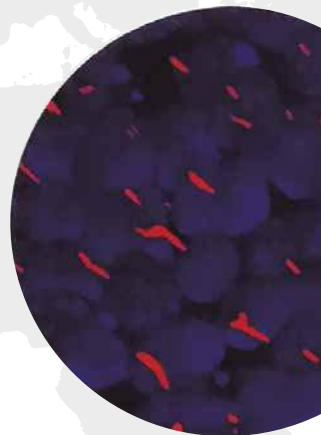
Granted

6 Spain (licensed)
1 United States of America



2

Software



5
INNOVATION
AND TRANSFER

6
PLATFORMS

7
COMPETITIVE
FUNDING

8
STRATEGIC
ALLIANCES

9
AREAS

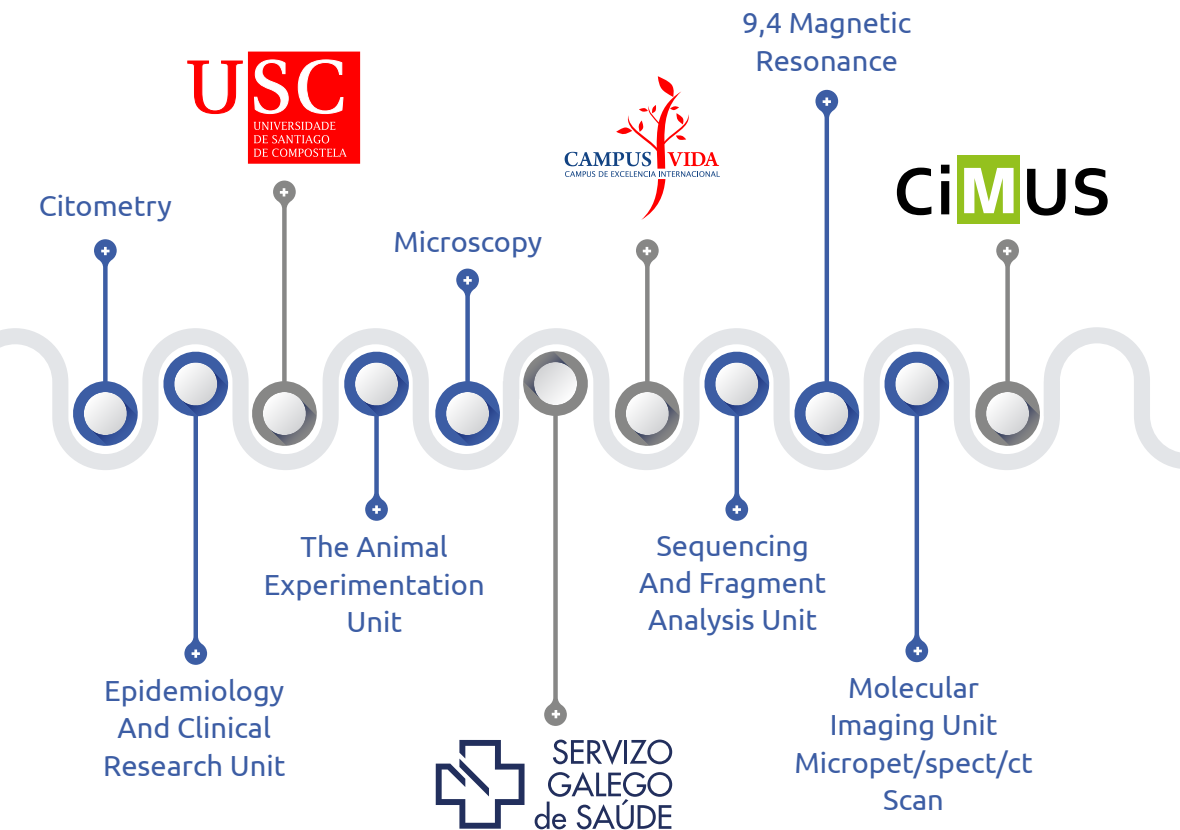
idis

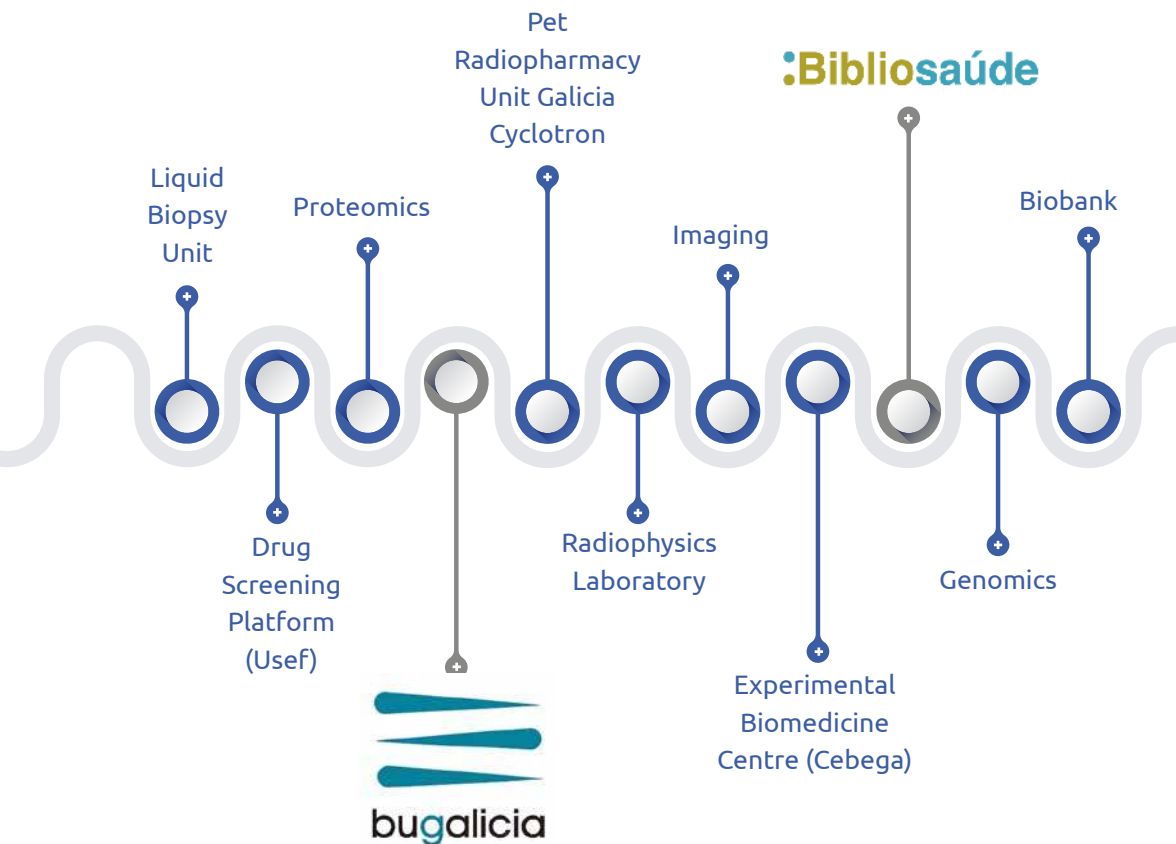


6

PLATFORMS









Proteomics

Susana Belén Bravo López

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The proteomics platform was created to enhance, give support and offer a complete infrastructure in the field of proteomics to the Institute's researchers and other public and private bodies. It is equipped with the latest generation technology that allows the development of both studies of characterisation of complete proteomes as well as studies of analysis of differential expression.



Liquid Biopsy Unit

Laura Muinelo Romay

laura.muinelo.romay@sergas.es

The service for the analysis of circulating cells works with the CellSearchTM system (Veridex) that allows, through the use of immunomagnetic techniques of enrichment and identification by immunofluorescence, isolate and quantify present cells in peripheral blood. Its main application is aimed to the detailed analysis of circulating tumor cells (CTC), even though the computer also allows identify other kind of cells such as endothelial. In addition, the platform has the capacity to carry out studies with circulating DNA.

Flow Citometry

Tomás Sobrino Moreiras

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It is a technique of cells analysis that allows one to measure the characteristics of light scattering and fluorescence that cells have when they pass through a ray of light. This platform's main aims are:

- To advise users of the IDIS on the principles and applications of flow cytometry analysis and cell sorting.
- To develop, optimize and perform new analytic applications demanded by the users of the IDIS.
- To do cellular isolation through cell sorting.
- Quantify different soluble cytokines using multiplex tests.

Magnetic Resonance Imaging

Ramón Iglesias Rey

ramon.iglesias.rey@sergas.es

Magnetic Resonance Imaging is perhaps the most versatile neuroimaging technique that exists today. The use of this platform in its different variants (anatomical, functional, spectroscopy and molecular imaging) allows one to perform a complete follow-up, non-invasive (in vivo) and longitudinal in time of the process associated with neurovascular diseases and other such as plasticity, reorganization and functional recovery in animal models.



Biobank

Lydia Fraga Fontoira
(Manager)

Phone. (+34) 981 955 148

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lydia.fraga.fontoira@sergas.es*

It is a store of biological samples associated with clinical information, which are collected, processed and handled with quality and excellence criteria. The objective is to implement them, in a non-profit way, to serve the medical community in order to promote biomedical research. Biobanks can be directly aimed at diseases (e.g., Bank of Tumours) or at population and epidemiological outbreaks.

Biobanks are essential tools to make biomedical research easier. That is why they are so relevant and also for the increasing demand of the highest quality biological samples in order to develop research processes.



Molecular Imaging Unit

Pablo Aguiar Fernández

pablo.aguiar.fernandez@sergas.es

Our mission is to bridge the gap between in vitro biomedical research and in vivo preclinical and clinical imaging, providing novel molecular imaging biomarkers and imaging probes to gain information about physiology and pathology in vivo. We offer a core facility to provide opportunities for in vivo molecular imaging based on PET, SPECT and CT technologies.

The Animal Experimentation Unit

Francisco Campos Pérez

francisco.campos.perez@sergas.es

The Animal Experimentation Unit provides support in biomedical research with several animal models for IDIS research groups, in strictly controlled sanitary and environmental conditions. The Animal Experimentation Unit is accredited by the Ministry of Rural Environment of the Xunta de Galicia. It has rat and mouse housing facilities, surgery rooms and specialized qualified personnel, in accordance with current regulations. It also has an Ethics Committee on Animal Experimentation. It obtained the corresponding accreditation as an Authorized Body to carry out the evaluation of projects from a scientific or educational point of view.

It is responsible for advice on issues related to animal welfare, review of internal operational processes, issuance of reports and monitoring of projects. Its objective is to promote research, and to develop and implement biomedical training, providing professionals with the necessary resources for the development of these initiatives.

Confocal Microscopy

Marta Picado Barreiro

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The confocal scanning microscope is well-known for its ability to perform optical sectioning: a thin plane or section within a thick turbid medium is non-invasively imaged with high resolution and contrast. Real-time in vivo confocal fluorescence microscopy. Nuclear, cellular and morphologic detail is imaged in living intact tissue without having to excise physically and prepare thin sections or cultures.

The services include the infrastructure and specialised staff to perform analysis as...

- 3D imaging reconstruction
- Multiple labeling
- Colocalization
- In vivo fluorescence imaging

The background is a solid blue gradient. On the left side, there is a large, faint, dark blue number '7'. In the lower half of the image, there is a network diagram consisting of several interconnected nodes (small circles) and lines (edges) forming a complex web. The nodes and lines are in a lighter shade of blue than the background.

COMPETITIVE FUNDING

During 2018, **29.108.535,46 €** were raised in the following concepts: projects, human resources, transfer, donations, contracts, infrastructures, provision of services, agreements and studies.

TOTAL

29.108.535,46 €**65**

Projects

10.631.222,46 €**289**

Donations

1.040.133,81 €**58**

Human resources

4.781.190,00 €**415**Contracts and
provision of services**6.622.804,20 €****282**Studies (Clinical Trials,
Observational Studies)**4.622.532,23 €****2**

Transfer

46.445,65 €**2**

Infrastructures

1.364.206,77 €

65 PROJECTS
10.631.222 €

2.395.694 €

7
International projects

4.413.741 €

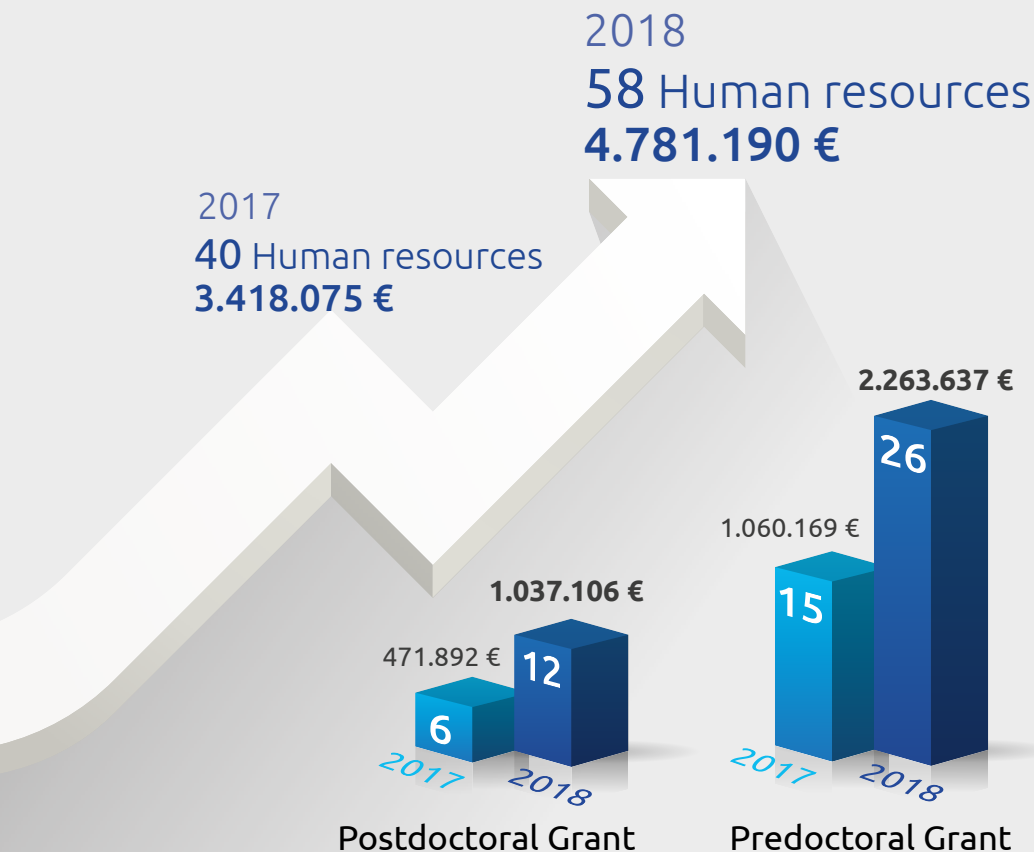
46
National projects

3.821.785 €

12
Regional projects

58 Human resources
4.781.190,00 €

CONCEPT	NUMBER	AMOUNT
FPU Grant	5	397.986,12 €
Juan de la Cierva	2	116.000,00 €
Juan Rodés	1	180.000.00 €
MA-E Grant	1	6.000,00 €
Río Hortega	3	161.196,00 €
Predoctoral i-PFIS Grant	1	82.400,00 €
Predoctoral PFIS Grant	3	247.200,00 €
Postdoctoral Grant	12	1.037.106 €
Predoctoral Grant	26	2.263.637,34 €
Bioinforming Technician	1	53.732,00 €
MARIE CURIE_Ind.Fellowship	1	160.932,48 €
Technical Assistant PTA Grant	2	75.000,00 €



The background is a solid blue gradient. On the left side, there is a large, faint, light blue number '8'. In the bottom half of the image, there is a network diagram consisting of several interconnected nodes (small circles) and lines (edges) forming a complex web. The nodes and lines are in a lighter shade of blue than the background.

STRATEGIC ALLIANCES

PLATFORMS

3

RED BIOBANCOS

ITEMAS ISCIII

SCREN. Spanish Clinical
Research Network ISCIII**Red Biöbancos**
Instituto de Salud Carlos III**ítemas isciii**Spanish
Clinical
Research
Network
ISCIII

NETWORKS FOR
COOPERATIVE
RESEARCH IN
HEALTH

6

CIBER

*cíberobn**cíberer**cíberesp**cíbercv isciii**cíberonc isciii**cíberMed isciii*Centro Investigación Biomédica
en Red Enfermedades
NeurodegenerativasCIBEROBN (1),
Physiopathology of Obesity and Nutrition

CIBERER, Rare Diseases

CIBERESP, Public Health and Epidemiology

CIBERCV: Cardiovascular Diseases

CIBERONC: Cancer

CIBER CIBERNED: Neurodegenerative Diseases

(1) Scientific Direction IDIS

RETICS

8

INVICTUS (1), Cerebrovascular diseases (stroke)

RIC, Cardiovascular Diseases

OFTARED, Eye Diseases

REDIAPP, Research Network on Preventive Activities and Health Promotion in Primary Care

RIER, Rheumatic Diseases

REDINREN, Kidney Diseases

Cell Therapy Network

BIOBANK

BIOMEDICAL
RESEARCH
NETWORKING
CENTRES

(1) Scientific Direction IDIS



2

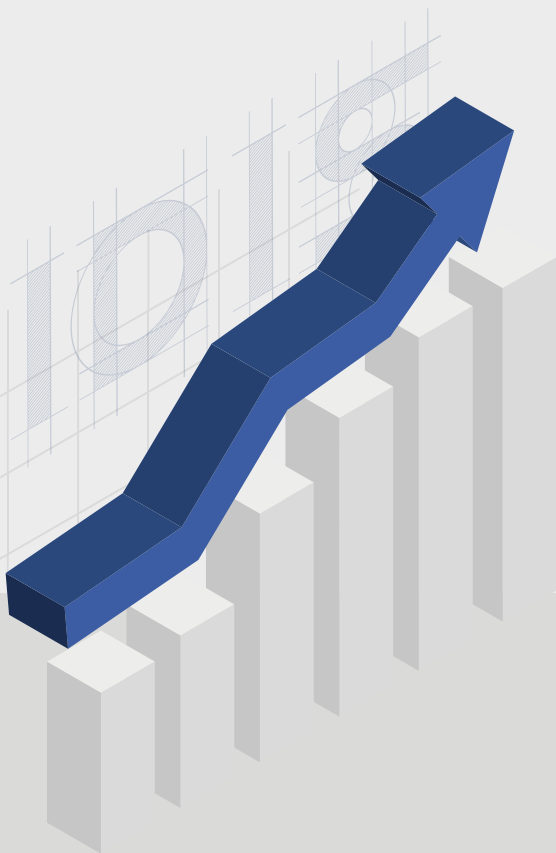
OTHERS



EUROPEAN INSTITUTE
FOR BIOMEDICAL
IMAGING RESEARCH

9

AREAS

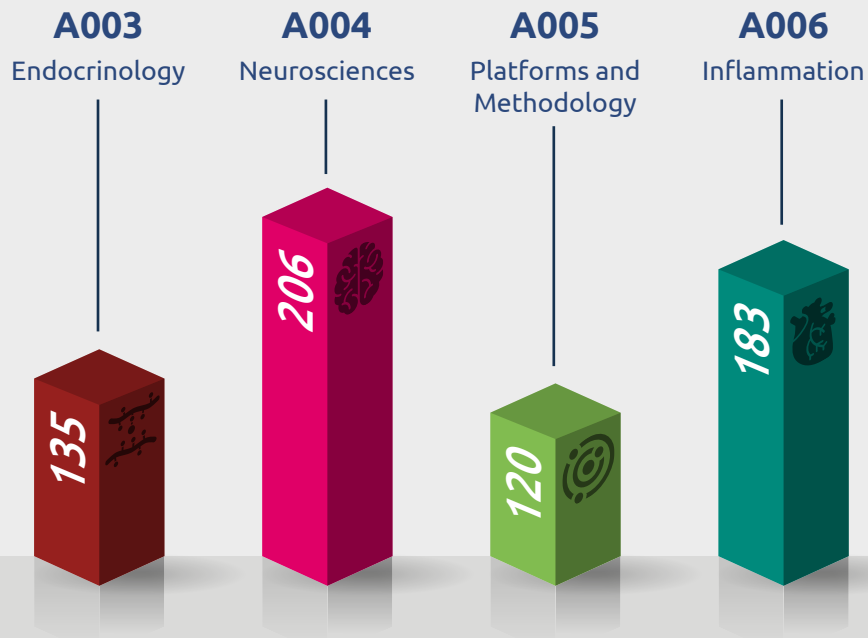


A001
Oncology



A002
Genetics and
Systems Biology





PEOPLE

1.071

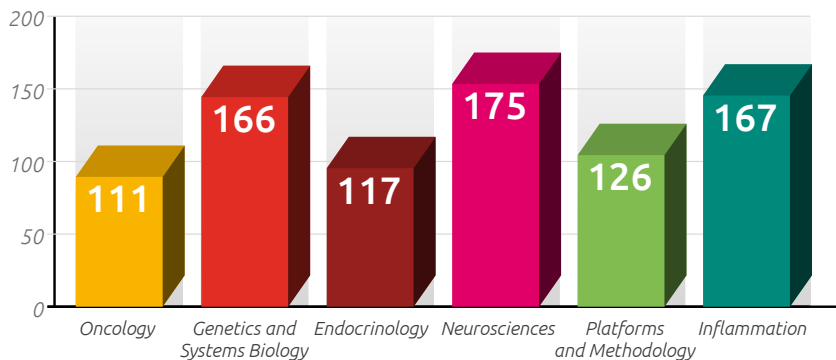
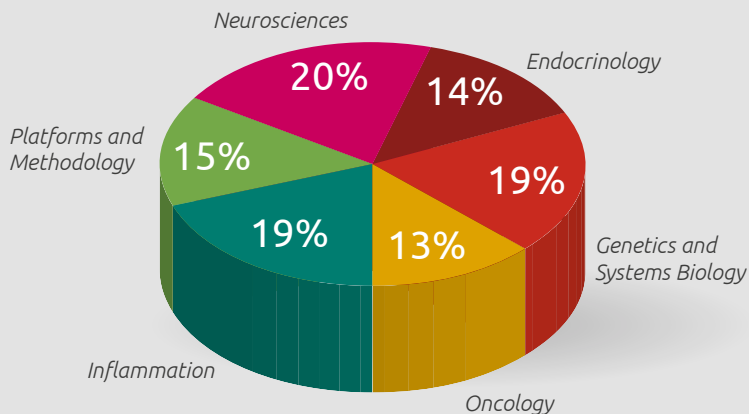
are integrated
in **82 groups**

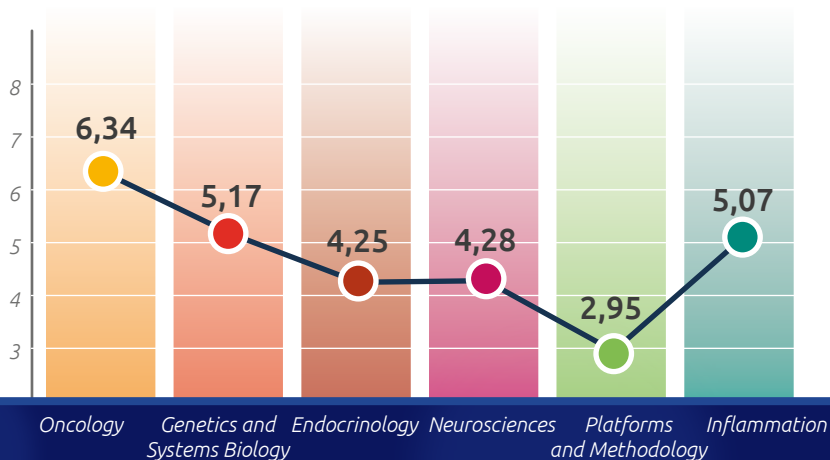
6 RESEARCH AREAS



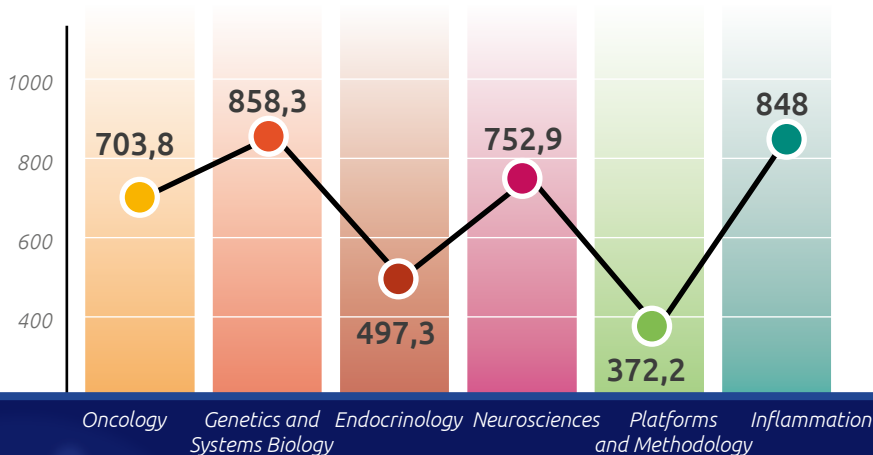
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Publications

Publications in 2018

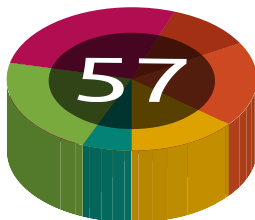




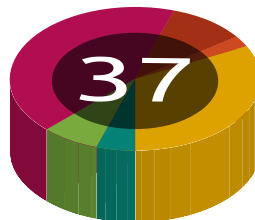
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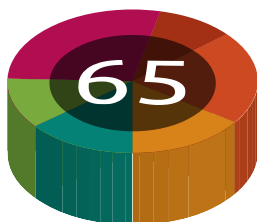
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Thesis

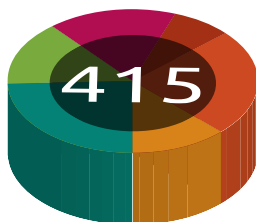


Patents



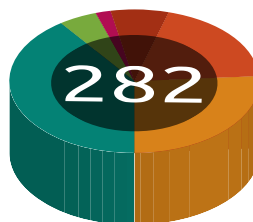
Projects

10.631.222,46€



Contracts

6.622.804,20€



Clinical Trials

4.622.532,23€

5
INNOVATION
AND TRANSFER

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ANNUAL REPORT **2018**



XUNTA DE GALICIA
CONSELLERÍA DE SANIDADE