



Health Research Institute of  
Santiago de Compostela

ANNUAL  
REPORT 2015



#### **Edition**

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**Scientific Director of the Health Research Institute of Santiago de Compostela**

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#### **Aprobation**

Direction Board of the Institute met in Santiago de Compostela on 20 May 2016



# ANNUAL REPORT 2015



JOSÉ CASTILLO SÁNCHEZ  
*Scientific Director*

## GREETING

Only when one works in a hospital is when one realizes about the complexity of the management of a health service. Most of the time and resources are used to deal with medical staff at the moment the illness appears. Disease and ageing break people's illusions and plans.

We invest most of our time in diagnosing, explaining people their condition and in making them conscious about the relevance of their attitude towards illness. In spite of this complexity, this is a perfect environment to think about new hypothesis, to ask new questions and to decide how to solve future issues. Many conflicts of interests appear every day and the decisions must be taken as fast as possible. Therefore, to work in this demanding environment is not easy challenge, but it is really exacting. In addition, research in such an environment is not just only about generating new knowledge; it is also about being close to feelings. And passion is what makes us closer to feelings.

Passionate people that lead significantly different lives from their less-than-enthusiastic counterparts surround me. These passionate people spend their lives to get their dreams,

they always think positively about the future, in spite of the road is not always smooth. Nevertheless they are also able to get funding to go ahead with their experiments. To be passionate is essential for our work, but it could also be damaging or dangerous if you lose perspective.

That is the reason why annual reporting is such a valuable for us. We have to think about which things have been done, to what extent we reach the objectives and how we are doing in comparison with previous years at least once a year. And you will see in the few pages that follow that we are doing well.

Two thousand fifteen was the second year in a four years row of our second strategic plan. We objectively see how a better organisation allows the Institute and passionately feel that we are ready to accept the challenge of being not only leaders curing the disease but also leadership in health promotion by dissolving the limits of the hospital built environment. Leadership focuses on the unknown and informal systems, and it is oriented mainly towards human relations and organising people. It includes greater reliance on confidence and shared values rather than power and control. We are constructing a better working environment to address the dangers of passion at work.

Thank you all for being part of the endeavour.

Santiago de Compostela, May 20, 2016



JOSÉ CASTILLO SÁNCHEZ  
*Scientific Director*



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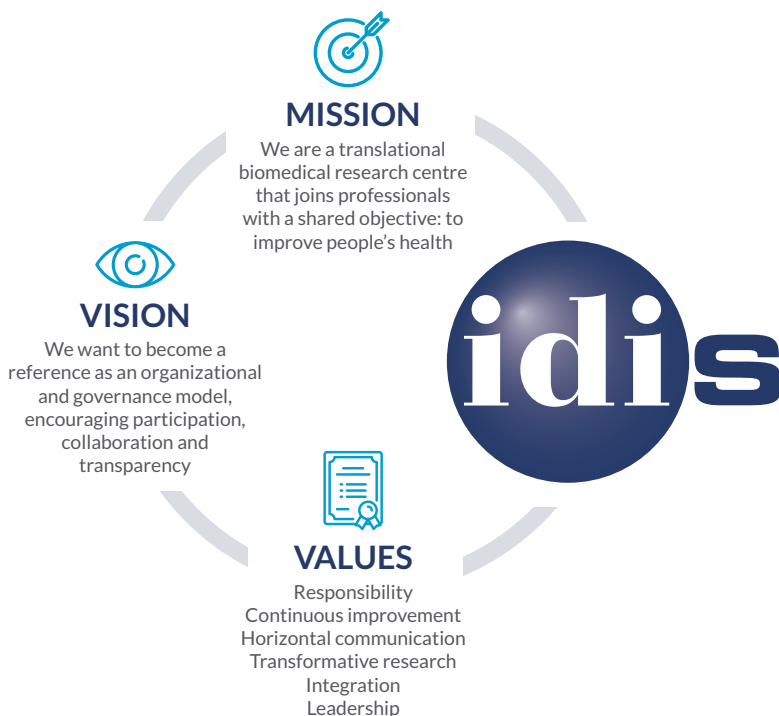
## AREAS



# EXECUTIVE SUMMARY



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.





**36**

STAFF CONTRACTS

**148**

OBSERVATIONAL STUDIES

**199**

CONTRACTS AND PROVISION OF SERVICES

**23**

AGREEMENTS

**99**

DONATIONS

**133**

CLINICAL TRIALS

**57**

PROJECTS

TOTAL FUNDS RAISED

**21.731.549€**

**53**

SEMINARS

**13**

SHORT TRAINING EXCHANGES

**21**

REQUESTED PATENTS

**2**

OPERATING PATENTS

**4**

GRANTED PATENTS

**549**

PUBLISHED ARTICLES

**66**

THESES



# **GLOBAL ANALYSIS**

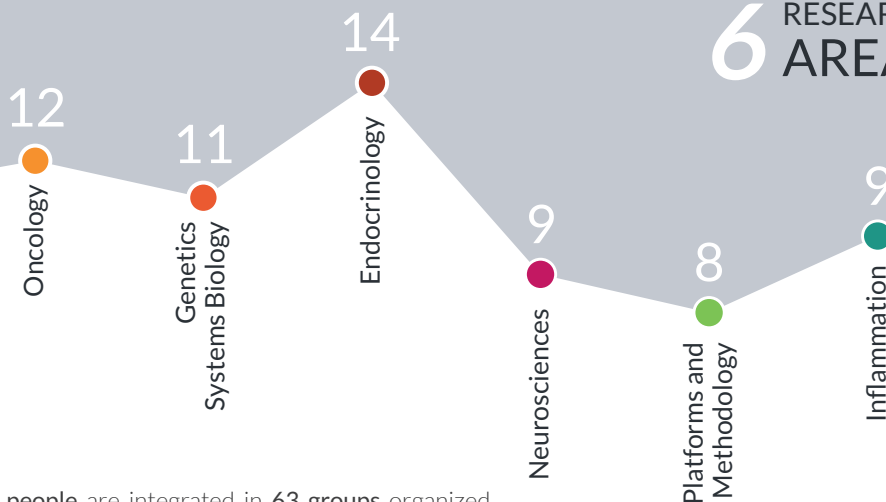
# 706 PEOPLE

are integrated in

## 63 GROUPS

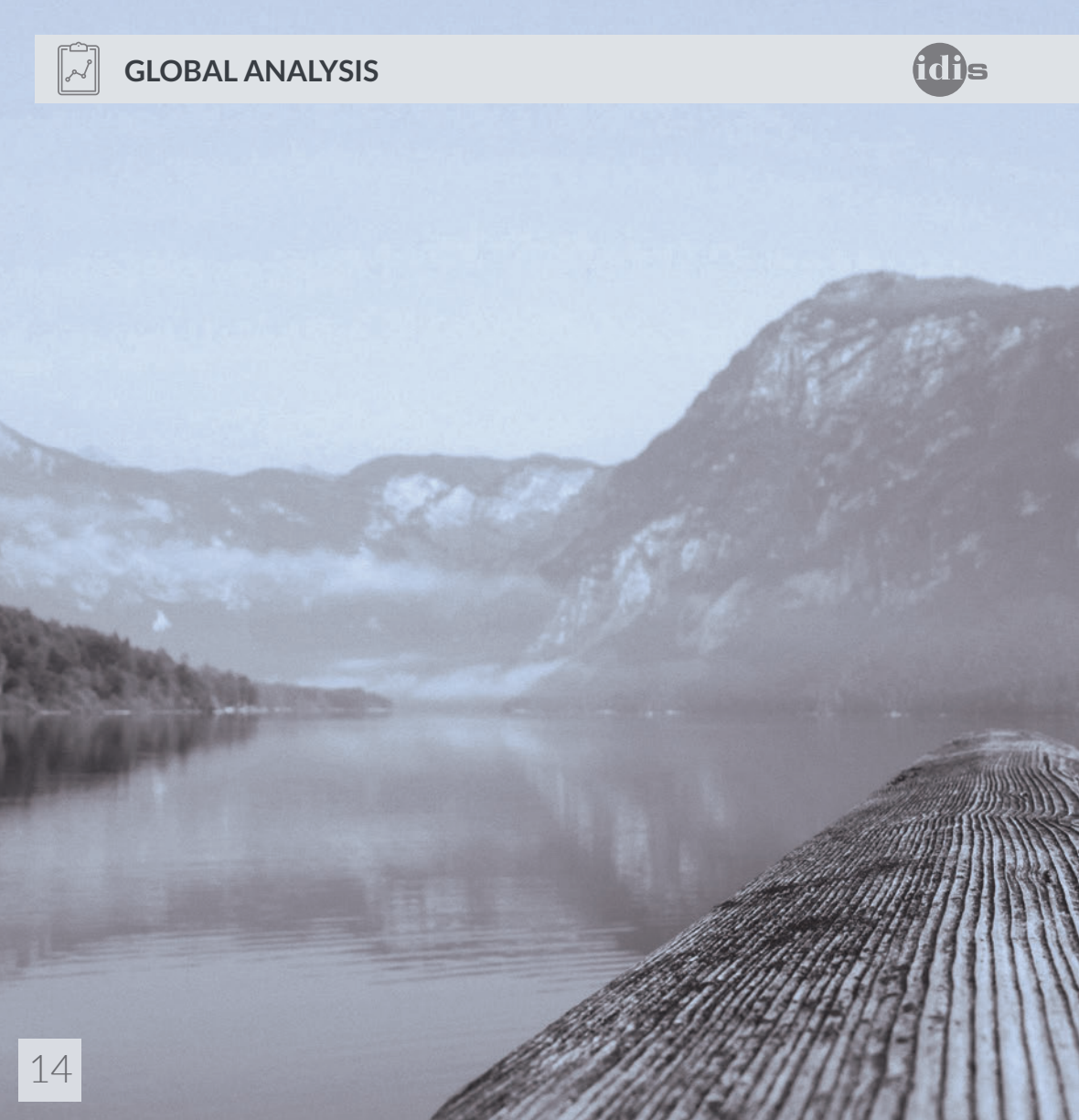
organized in

### 6 RESEARCH AREAS



706 people are integrated in 63 groups organized in 6 research areas: Oncology, 12 groups; Genetics and Systems Biology, 11; Endocrinology, 14; Neurosciences, 9; Platforms and Methodology 8; and Inflammation, 9; There is also a support area (technical secretariat and common support platforms for research) with 9 groups.

Figure 1. Number of groups per area



These 63 groups are divided into 31 consolidated, 28 emerging and 4 clinical partners. The clinical partners are integrated in the areas of **Oncology**, **Endocrinology**, **Neurosciences** and **Inflammation**. In 2015 3 groups were consolidated.

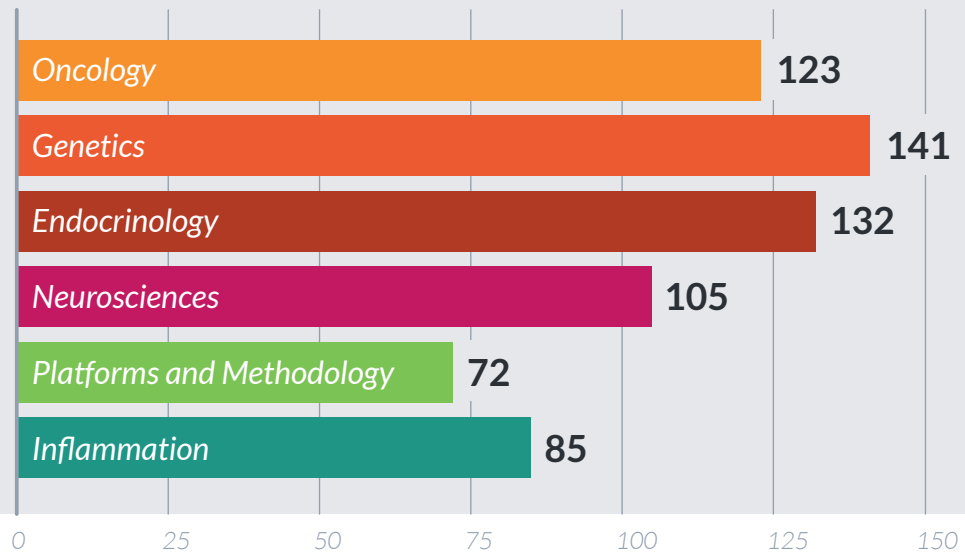
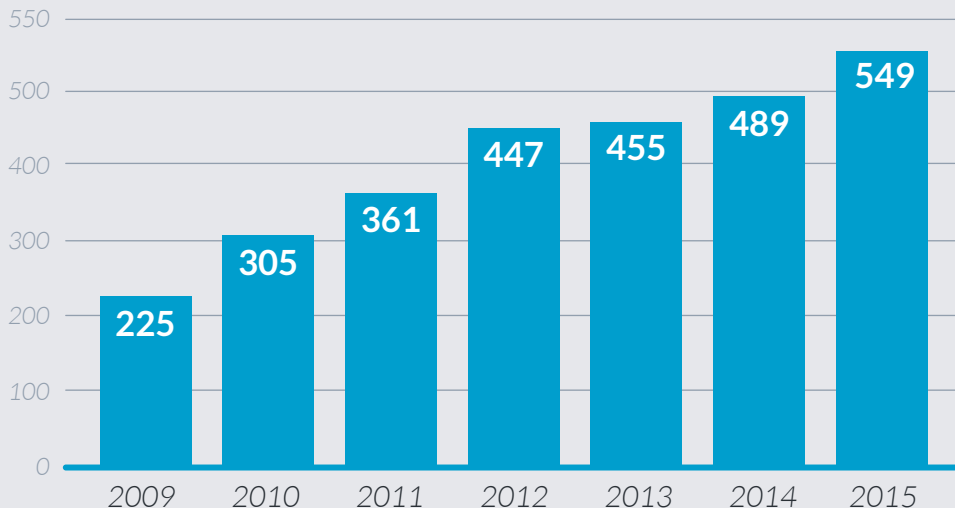


Figure 2. Number of researches per area



The Institute has published **549 original scientific articles**, editorials and reviews in **285 international journals** indexed in the Journal Citation Report with an cumulative impact factor of **2.254 points** and an average impact factor of **4,11 points**.

*An increase of the number of articles published: 225 in 2009 and 549 in 2015, a remarkable duplication of its number since the establishment of the Institute.*



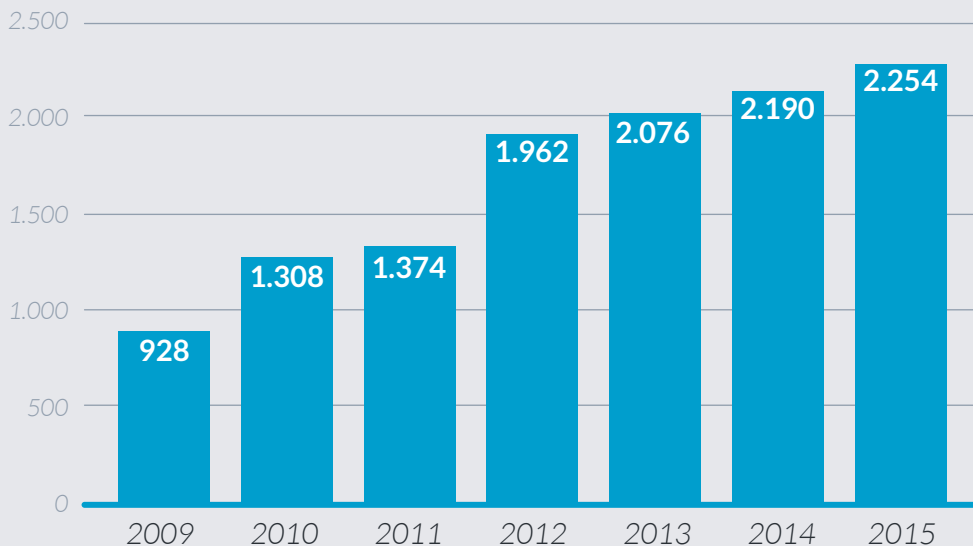
**Figure 3.** *Number of published articles each year*





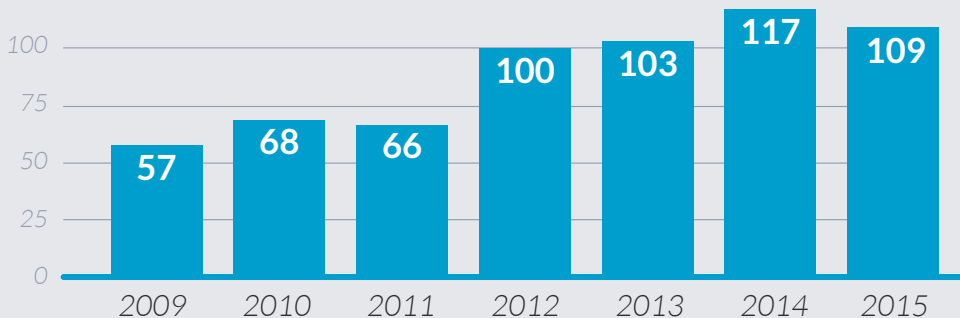


The upward trend of the **cumulative impact factor** is maintained and it moves from 928,46 in 2009 to 2.254 in 2015. The **average impact factor** in 2015 was 4,11 points.



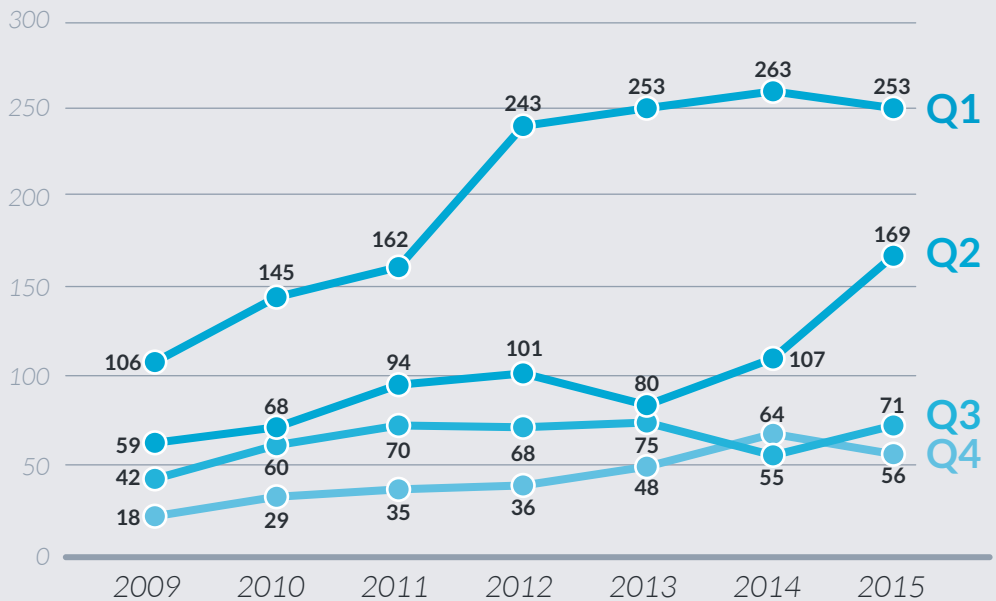
**Figure 4.** *Cumulative impact factor*

A remarkable increase in the first decile for the same period from 57 articles published in 2009 to 109 in 2015.



**Figure 5.** *Number of published articles in the first decile*





**Figure 6.** Number of articles by year published in each quartile



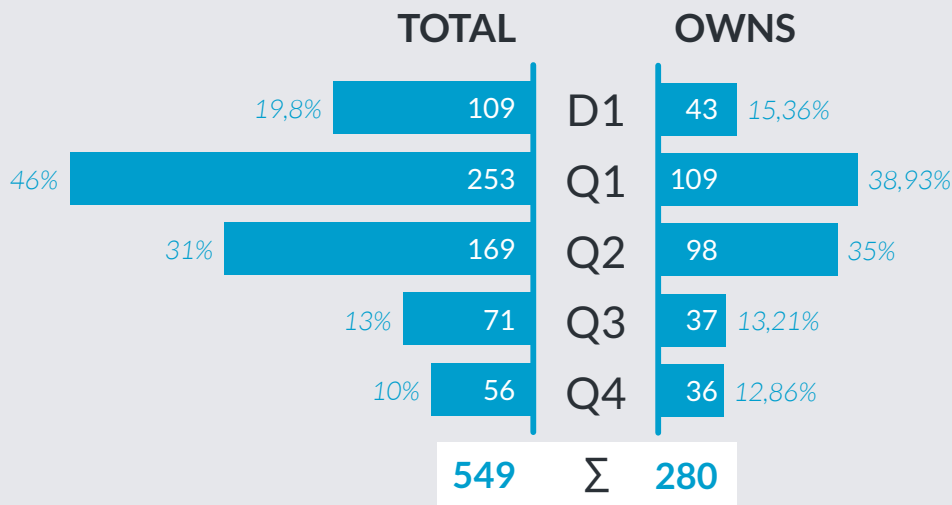
In 2015, from a total of 549 articles,  
**280 were published by us (51%).**

From the 109 of the first decile, D1,  
**43 are of our own.**



The number of articles per quartile increases gradually during the period of 2009-2015 almost in every quartile and every year.

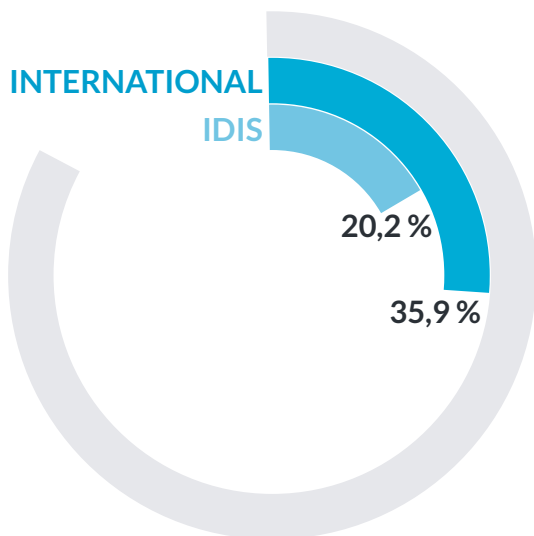
Taking into account the relevance of the authors in the articles signature, we identify those in which the first or the last author is assigned to an IDIS group. We define them as articles of our own.



**Figure 7.** Number and % of the total number of publications and articles in 2015



In 2015, **20,2% of the work** were carried out by teams in which members of more than one IDIS group were involved. **35,9%** were done in collaboration with researchers from centres outside of Spain.



# 111

articles published in collaboration  
between the IDIS GROUPS

# 197

articles published in collaboration  
between the GROUPS OF THE  
CENTRES OUTSIDE OF SPAIN

**Figure 8.** *Number and % of articles published in collaboration between the IDIS groups and the groups of the centres outside of Spain*



During 2015, the funds raised in competitive calls for research projects, the recruitment of staff, agreements, contracts and provision of services, donations, clinical trials and observational studies generated **21.731.549 €** which will complement the resources of the institutions that take part in IDIS.

CONCEPT	NUMBER	AMOUNT
<b>Projects</b>		
International	7	3.748.134 €
National	45	5.371.909 €
Regional	2	1.532.111 €
<b>SUBTOTAL</b>	<b>54</b>	<b>10.652.154 €</b>
Human Resources		2.724.893 €
Donations		782.935 €
Contracts and provision of services and agreements		4.684.003 €
Transfer		5.000 €
Studies (clinical trials, CT, Observational studies, OS)		2.882.564 €

**Table 1.** Summary of the funds raised in 2015

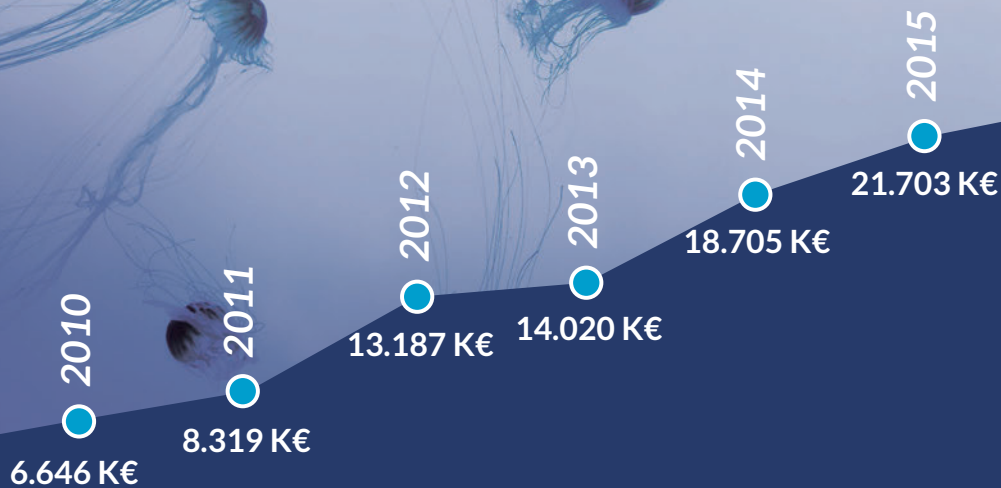
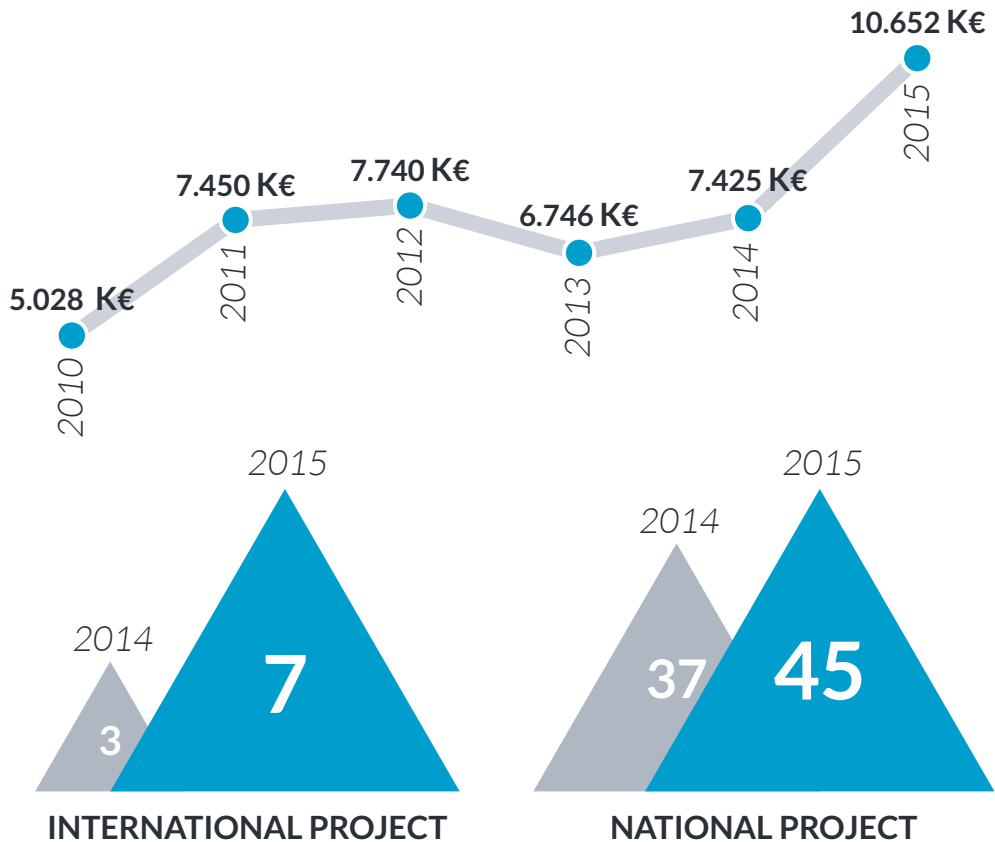
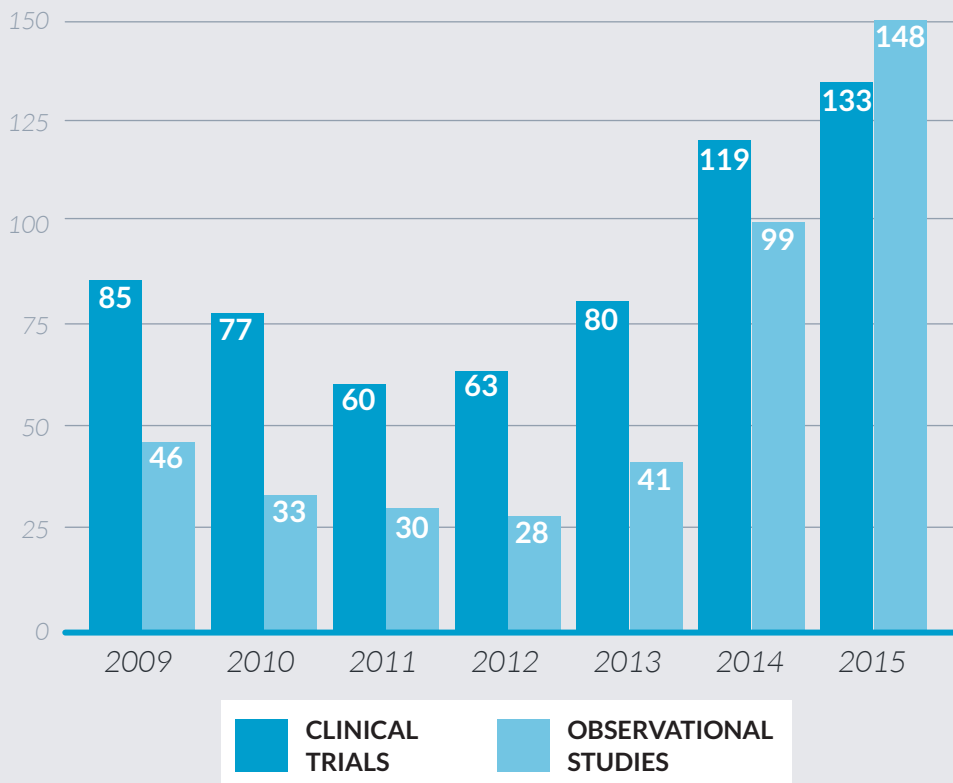


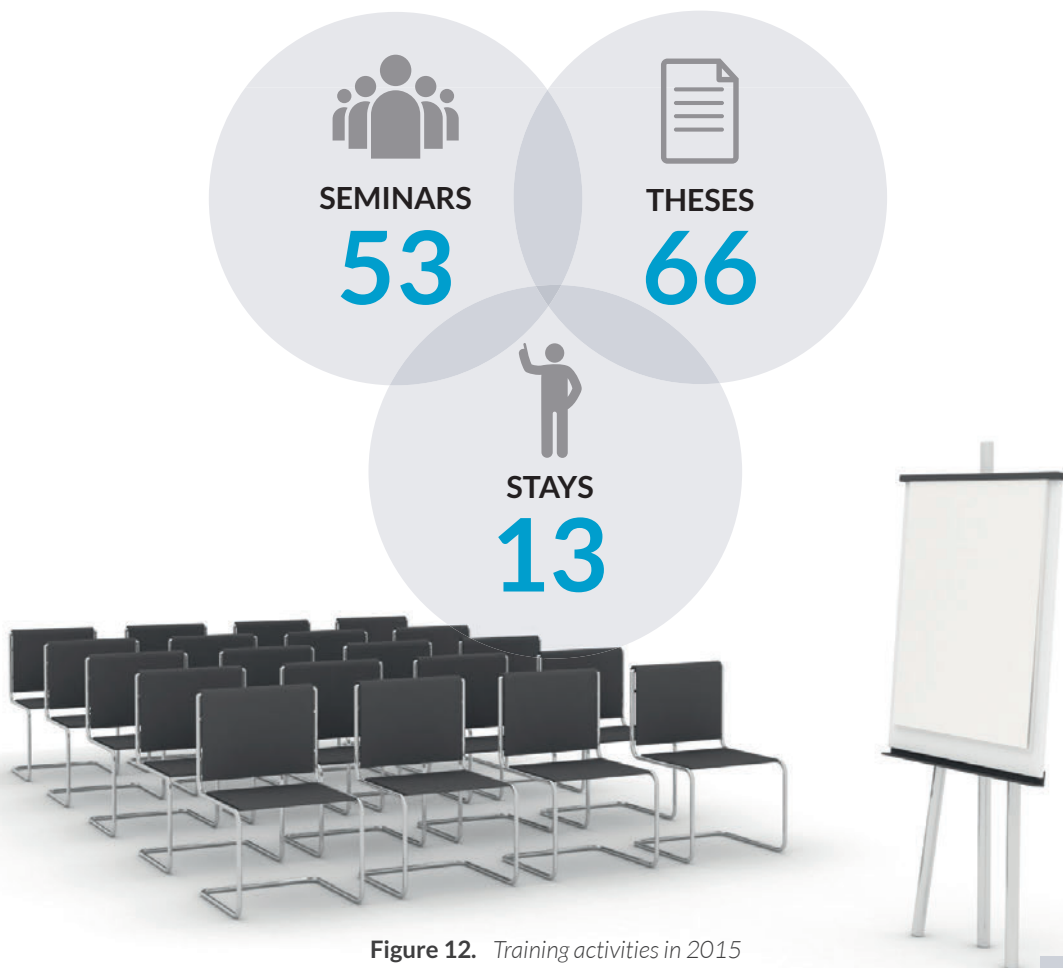
Figure 9. Amounts raised



**Figure 10.** Number and amount of funds raised in 2015 for projects by location



**Figure 11.** *Number of Clinical Trials and Observational Studies*



**Figure 12.** *Training activities in 2015*



# **2015 ACHIEVEMENTS**

**Accreditation renewal:**  
IDIS granted accredited research centre of the Spanish National Health Service System for a new five years term.

**Three joint units**  
consolidates the participation of the institute in public-private partnership initiatives with Roche, Esteve, Everis and Gradient

Going ahead to stage 2 with a new **IMI2 project** on the human respiratory syncytial virus.

Approved a new **phase I clinical trials unit** to be enter in functioning in brief.

Participation in **seven European Union funded projects** (PanCanRisk, PoC-ID, B-CAST, PERFORM, RESSTORE, CHAPRION, EU-care) consolidates internationalisation.

**Improved governance** of support units by integrating them in Platforms and Methodology scientific area.



Innopharma research group to participate in **EU-OpenScreen** European Research Infrastructure Consortium.

**New Oncology area's coordinator** Rafael López López boosts synergies between clinic and research.

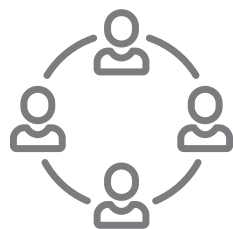
Call and resolution of the **IDIS V Predoctoral Grants Program**: every trainee PhD thesis will be supervised by at least two researchers from different research groups.

Three research groups promote to consolidate status: **Translational Medical Oncology** (Rafael López López) and **Molecular Imaging** (Álvaro Ruibal Morell) from Oncology research area and **Molecular Metabolism** (Rubén Nogueiras Pozo) from Endocrinology research area.

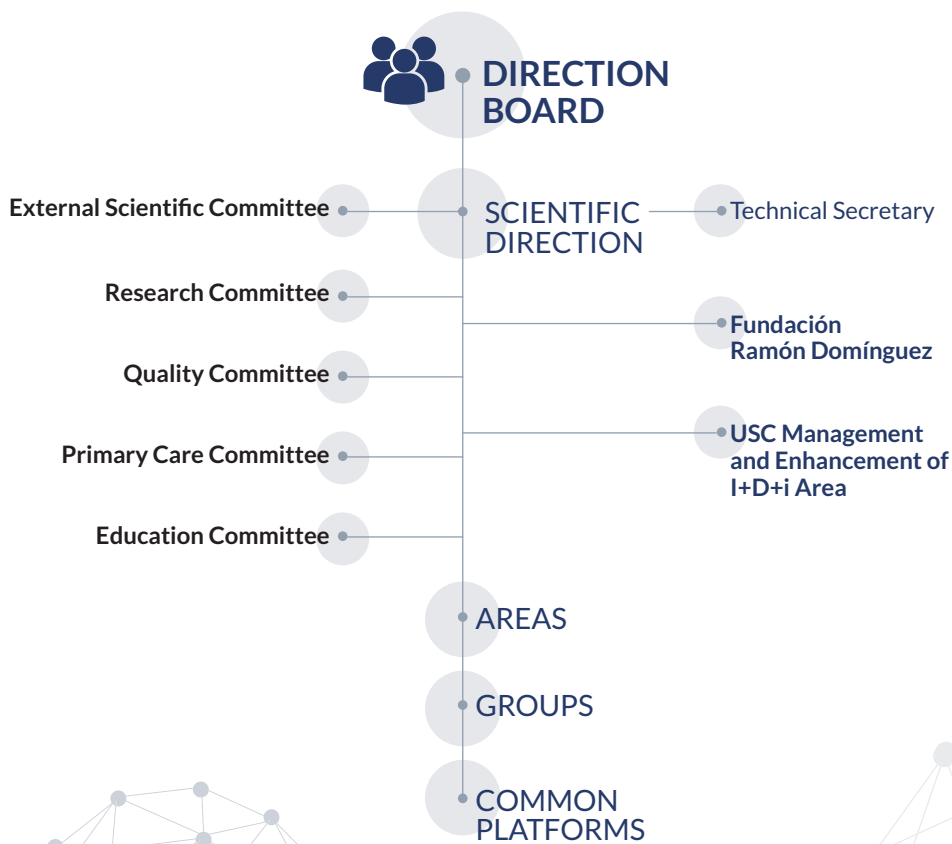






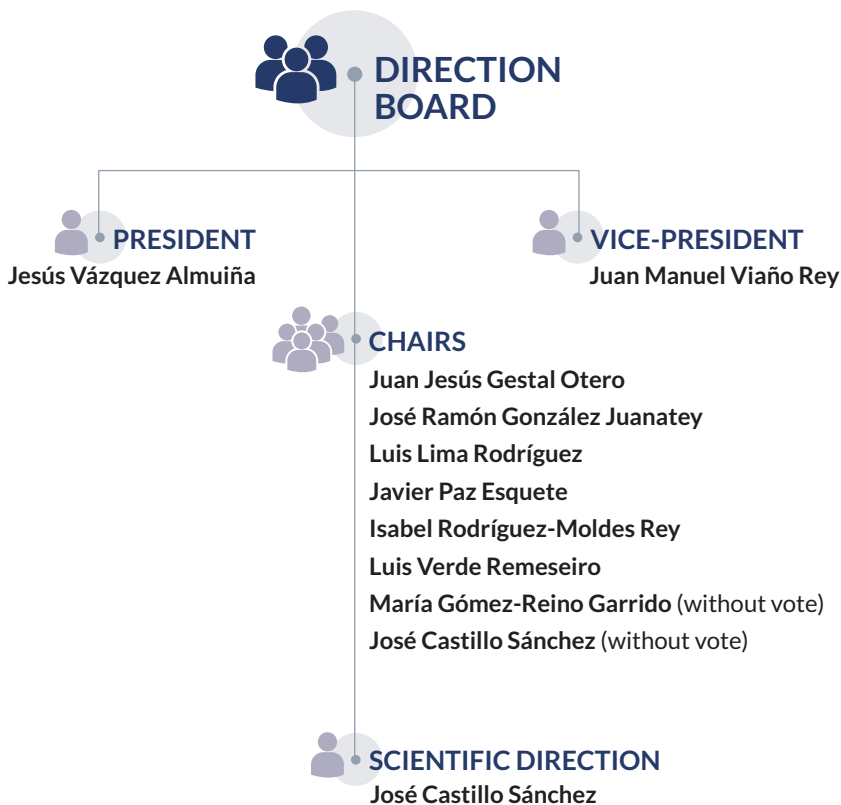


**STRUCTURE**





## 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  
Joan Rodés Teixidor



### RESEARCH COMMITTEE



### PRESIDENT

José Ramón González Juanatey



### MEMBERS

Clara Álvarez Villamarín  
José Castillo Sánchez  
Javier Costas Costas  
José Antonio Costoya Puente  
Carlos Diéguez González  
Adolfo Figueiras Guzmán  
Miguel Ángel García González  
Arturo González Quintela  
Miguel Antonio López Pérez  
María Gómez-Reino Garrido  
Federico Martinón Torres  
María Pardo Pérez  
Jesús Rodríguez Requena  
Anxo Vidal Figueroa



## ADVISORY BODIES



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#### PRESIDENT

Isabel Lista García



#### MEMBERS

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Miguel Ángel Caínzos  
Fernández  
Pilar Gayoso Diz  
Carmen Ruth González Diéguez  
Michel Herranz Carnero  
Ana Mosquera Miguel  
Jesús Rodríguez Requena  
Mar Vázquez Salgado



### EDUCATION COMMITTEE



#### PRESIDENT

María Jesús Sobrido Gómez



#### MEMBERS

Miguel Ángel García González  
Miguel Gelabert González  
Juan Jesús Gestal Otero  
Arturo González Quintela  
Francisco Gude Sampedro  
Rosaura Leis Trabazo  
Montserrat Nogueira Álvarez  
Álvaro Ruibal Morell  
Juan Bautista Zalvide Torrente

## ADVISORY BODIES



### PRIMARY CARE COMMITTEE



#### PRESIDENT

Carmen Vidal Pan



#### MEMBERS

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Montserrat Camiña Tato  
María del Carmen Fernández Merino  
José Ramón González-Juanatey  
Manuel Lado López  
Benito José Regueiro García  
Jesús Rey García  
Jesús Sueiro Justel



### TECHNICAL SECRETARY



#### MEMBERS

Isabel Lista García  
Yolanda Liste Martínez  
Ricardo Julio Rodríguez Fernández

**ONCOLOGY****A001***Coordinator:* Rafael López López

<b>C010</b>	<b>Genetics of Human Diseases</b>	Fernando Domínguez Puente
<b>C011</b>	<b>Pathology</b>	José Ramón Antúnez López
<b>C025</b>	<b>NANOBIOFAR</b>	María José Alonso Fernández
<b>C030</b>	<b>Traslational Medical Oncology</b>	Rafael López López
<b>C032</b>	<b>Molecular Imaging</b>	Álvaro Ruibal Morell
<b>E004</b>	<b>Molecular Oncology</b>	José Antonio Costoya Puente
<b>E018</b>	<b>Cell Cycle and Oncology (CiClon)</b>	Anxo Vidal Figueroa
<b>E028</b>	<b>Stem Cells in Cancer and Aging</b>	Manuel Collado Rodríguez
<b>E031</b>	<b>Oncologic Endocrinology</b>	Román Pérez Fernández
<b>E032</b>	<b>Preclinical Animal Models</b>	Laura Sánchez Piñón
<b>E033</b>	<b>Viruses and Cancer</b>	Carmen Rivas Vázquez
<b>AC01</b>	<b>Lymphoproliferative Disorders</b>	José Luis Bello López



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

<b>C005</b>	<b>Genetics</b>	Ángel Carracedo Álvarez
<b>C009</b>	<b>Digestive Pathology</b>	Juan Enrique Domínguez Muñoz
<b>C020</b>	<b>Genetics, Vaccines, Infections and Paediatrics (GENVIP)</b>	José María Martínón Sánchez
<b>E001</b>	<b>Genetics of Cardiovascular and Eye Diseases</b>	María José Brión Martínez
<b>E012</b>	<b>Comparative Genomics of Human Parasites</b>	Julio Manuel Maside Rodríguez
<b>E015</b>	<b>Population Genetics in Biomedicine (GenPoB)</b>	Antonio Salas Ellacuriaga
<b>E016</b>	<b>Genetics of Neurological Disorders</b>	María Jesús Sobrido Gómez
<b>E017</b>	<b>Cancer Genetics</b>	Ana Paula Vega Gliemmo
<b>E020</b>	<b>Psychiatric Genetics</b>	Javier Costas Costas
<b>E021</b>	<b>Genetics and Developmental Biology of Kidney Diseases</b>	Miguel Ángel García González
<b>E027</b>	<b>Escherichia coli</b>	Jorge Blanco Álvarez



# ENDOCRINOLOGY

**A003***Coordinator:* Felipe Casanueva Freijo

<b>C001</b>	<b>Neoplasia and Endocrine Differentiation</b>	Clara Álvarez Villamarín
<b>C006</b>	<b>Molecular Endocrinology</b>	Felipe Casanueva Freijo
<b>C008</b>	<b>Obesity and Nutrition</b>	Carlos Diéguez González
<b>C012</b>	<b>Metabolic Disorders</b>	María Luz Couce Pico
<b>C019</b>	<b>Thyroid and Metabolic Disorders Unit (UETeM)</b>	David Araújo Vilar
<b>C022</b>	<b>Paediatric Nutrition</b>	María Rosaura Leis Trabazo
<b>C029</b>	<b>Neurobesity</b>	Miguel Antonio López Pérez
<b>C031</b>	<b>Molecular Metabolism</b>	Rubén Nogueiras Pozo
<b>E006</b>	<b>Cytokines and Obesity (Citobes)</b>	M <sup>a</sup> del Carmen García García
<b>E023</b>	<b>Obesidomics</b>	María Pardo Pérez
<b>E024</b>	<b>Structural Biochemistry of Endocrine Pathology</b>	Yolanda Pazos Randulfe
<b>E025</b>	<b>Cellular Endocrinology</b>	Jesús Pérez Camiña
<b>E026</b>	<b>Endocrine Physiopathology</b>	Luisa María Seoane Camino
<b>AC04</b>	<b>Paediatric Endocrinology</b>	Manuel Pombo Arias

**NEUROSCIENCES****A004***Coordinator:* José castillo Sánchez

<b>C004</b>	<b>Neurobiology</b>	Antonio Canedo Lamas
<b>C007</b>	<b>Neurology</b>	José Castillo Sánchez
<b>C015</b>	<b>Neurobiology of the Visual System</b>	Francisco González García
<b>C018</b>	<b>Experimental Neurology of Parkinson's Disease</b>	José Luis Labandeira García
<b>C026</b>	<b>BIOFARMA</b>	María Isabel Loza García
<b>E014</b>	<b>Prion Diseases</b>	Jesús Rodríguez Requena
<b>E019</b>	<b>Cell Stress</b>	Juan Bautista Zalvide Torrente
<b>E029</b>	<b>Cognitive Neuroscience</b>	Fernando Díaz Fernández
<b>AC03</b>	<b>Critical Patient</b>	Julián Álvarez Escudero



## PLATFORMS AND METHODOLOGY

**A005**

*Coordinator:* Juan Jesús Gestal Otero

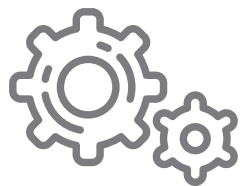
<b>C002</b>	<b>Experimental Surgery</b>	Miguel Ángel Caínzos Fernández
<b>C013</b>	<b>Epidemiology, Public Health and Evaluation of Health Services</b>	Juan Jesús Gestal Otero
<b>C017</b>	<b>Research Methodology</b>	Francisco Gude Sampedro
<b>C021</b>	<b>Clinical Analysis</b>	Santiago Rodríguez-Segade Villamarín
<b>C024</b>	<b>Radiology</b>	Miguel Souto Bayarri
<b>E002</b>	<b>Biostatistics</b>	Carmen María Cadarso Suárez
<b>E013</b>	<b>Microbiology</b>	Benito José Regueiro García
<b>E034</b>	<b>Clinical Pharmacology</b>	María Jesús Lamas Díaz

## INFLAMMATION

A006

*Coordinator:* José Ramón González Juanatey

<b>C003</b>	<b>Hypertension</b>	Carlos Calvo Gómez
<b>C014</b>	<b>Rheumatology</b>	Juan Jesús Gómez-Reino Carnota
<b>C016</b>	<b>Cardiology</b>	José Ramón González Juanatey
<b>C027</b>	<b>Neuroendocrine Interactions in Rheumatic and Inflammatory Diseases (Neirid)</b>	Oreste Gualillo
<b>C028</b>	<b>Genetics of Osteoarticular Disorders</b>	Antonio González-Martínez Pedrayo
<b>E003</b>	<b>Experimental Rheumatology</b>	Carmen Conde Muro
<b>E009</b>	<b>Cellular and Molecular Cardiology</b>	Francisca Lago Paz
<b>E030</b>	<b>Platelet Proteomics</b>	Ángel García Alonso
<b>AC05</b>	<b>Pneumology</b>	Luis Guillermo Valdés Cuadrado



# **RECURRENT TRAINING**

In 2015, 53 seminars were organized, **66 doctoral theses** were directed by IDIS' researchers and 13 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).

**66**  
THESES

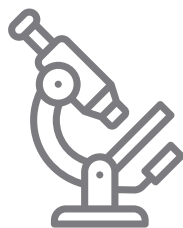


2015

2014

**39**  
THESES





# **INNOVATION AND TRANSFER**



The main initiatives of technology transfer during 2015 are the following:

### TRANSFER ACCELERATION THROUGH PUBLIC FUNDING AND PRIVATE INVESTMENT

Analysing needs and problems, capturing ideas and implementing solutions...

- **ITEMAS** Network, Innovation in Medical and Health Technologies Network funded by the Instituto de Salud Carlos III
- **PRIS Program** (Valorization Program of SERGAS, Galician Public Healthcare Provider)
- **Caixaimpulse Program**

### ADOPTING THE PUBLIC-PRIVATE PARTNERSHIP MODEL

Three P3 ongoing initiatives where public IDIS partners share risks with private investors...

- Roche-CHUS, **Precision Oncology** Joint Unit
- Esteve-USC, **Drug Discovery** Joint Unit
- Everis-Gradiant-CHUS, **e-Health** Joint Knowledge Centre



## ENSURING AND ENFORCING PROPERTY RIGHTS EFFECTIVELY TO ENSURE THE STIMULATION OF INVESTMENT IN RESEARCH AND INNOVATION...

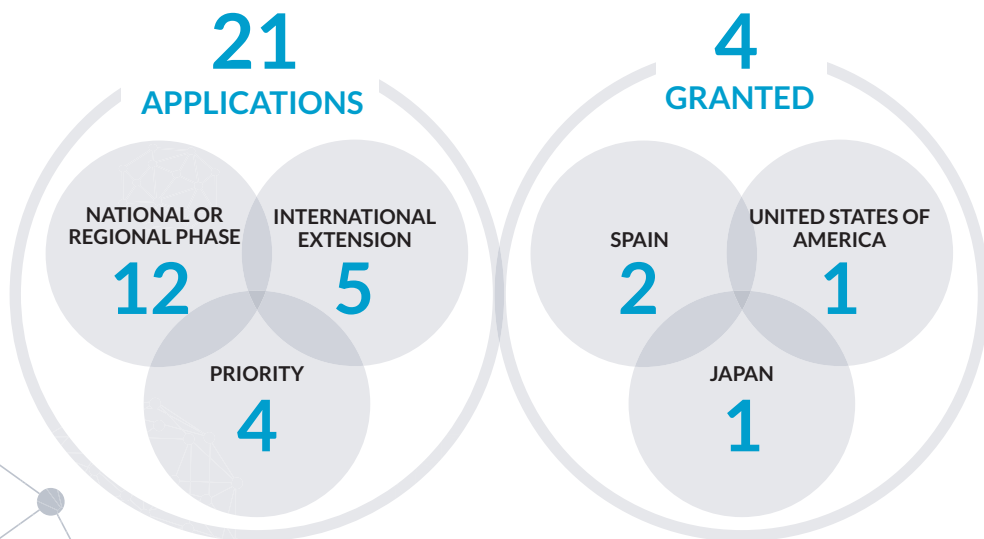


Figure 13. Applications and granted patents

## CLINICAL TRIALS AND OBSERVATIONAL STUDIES

Clinical Trials and Observational Studies were as follow: during the past year 2015, IDIS recorded a total of **133 clinical trials** (25 national, 107 international and 1 local) and **148 observational studies** (104 national, 21 international, 6 regional and 17 local).

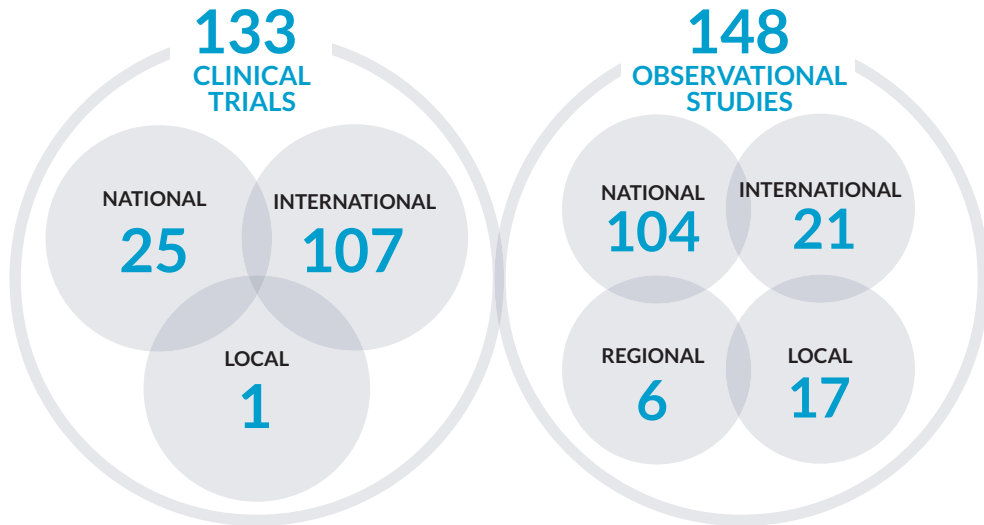


Figure 14. Clinical Trials and Observational Studies in 2015



**PLATFORMS**

EPIDEMIOLOGY  
AND CLINICAL  
RESEARCH UNIT

**:Biblosaúde**

GENOMICS

EXPERIMENTAL  
BIOMEDICINE CENTRE  
(CEBEGA)

**ciMUS**

SEQUENCING AND  
FRAGMENT  
ANALYSIS UNIT

MOLECULAR IMAGING  
UNIT  
MICROPET/SPECT/CT SCAN

PROTEOMICS

LIQUID BIOPSY  
UNIT

**USC**  
UNIVERSIDADE  
DE SANTIAGO  
DE COMPOSTELA



RADIOPHYSICS  
LABORATORY

MICROSCOPY

CITOMETRY

PET RADIOPHARMACY  
UNIT GALICIA  
CYCLOTRON

9,4 MAGNETIC  
RESONANCE



IMAGING



DRUG SCREENING  
PLATFORM (USEF)



## PROTEOMICS

**Susana Belén Bravo López**  
*susana.belen.bravo.lopez@sergas.es*

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 CellSearch™ 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.



### CONFOCAL MICROSCOPY

**Marta Picado Barreiro**  
*marta.picado.barreiro@sergas.es*

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

### 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.



## BIOBANK

**Lydia Fraga Fontoira - Manayer**

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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.

The specific aims of Santiago's Biobank are:

- To increase the quantity and quality of the samples available to the scientific community.
- To manage the specific collections linked to projects and research groups that increase the added value of the Biobank.
- To serve as support and advice platform for researchers who work on projects that require collecting human samples.
- To promote the intrahospital integration and the central management of the CHUS' samples collections.
- To integrate the Biobank as support platform for the IDIS' researchers.
- To unify standard operating procedures and policies for quality assurance applicable to all collections managed by the Biobank.



# MAGNETIC RESONANCE IMAGING

**Ramón Iglesias Rey**

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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.







# **COMPETITIVE FUNDRAISING**

During 2015, **21.731.549 €** were raised in the following concepts: projects, human resources, infrastructures, donations, contracts, provision of services, agreements and studies.

CONCEPT	NUMBER	AMOUNT
<b>Projects</b>		
International	7	3.748.134 €
National	45	5.371.909 €
Regional	2	1.532.111 €
<b>SUBTOTAL</b>	<b>54</b>	<b>10.652.154 €</b>
Human Resources		2.724.893 €
Donations		782.935 €
Contracts and provision of services and agreements		4.684.003 €
Transfer		5.000 €
Studies (clinical trials, CT, Observational studies, OS)		2.882.564 €
<b>TOTAL</b>		<b>21.731.549 €</b>

**Table 2.** Summary of the funds raised in 2015



## RESEARCH PROJECTS

CONCEPT	NUMBER	AMOUNT
International	7	3.748.134 €
National	45	5.371.909 €
Regional	2	1.532.111 €
<b>TOTAL</b>	<b>54</b>	<b>10.652.154 €</b>

**Table 3.** *Funds raised in research projects in 2015*

## HUMAN RESOURCES

CONCEPT	NUMBER	AMOUNT
Research intensification	3	90.000 €
Miguel Servet	1	324.000 €
Rio Hortega	1	53.732 €
Ramón y Cajal	2	420.741 €
Posdoctorales contracts	2	148.954 €
Predotorales contracts	23	1.481.149 €
i-PFIS contracts	1	82.400 €
HFSP	1	48.917 €
Technical support	2	75.000 €
<b>TOTAL</b>	<b>36</b>	<b>2.724.893 €</b>

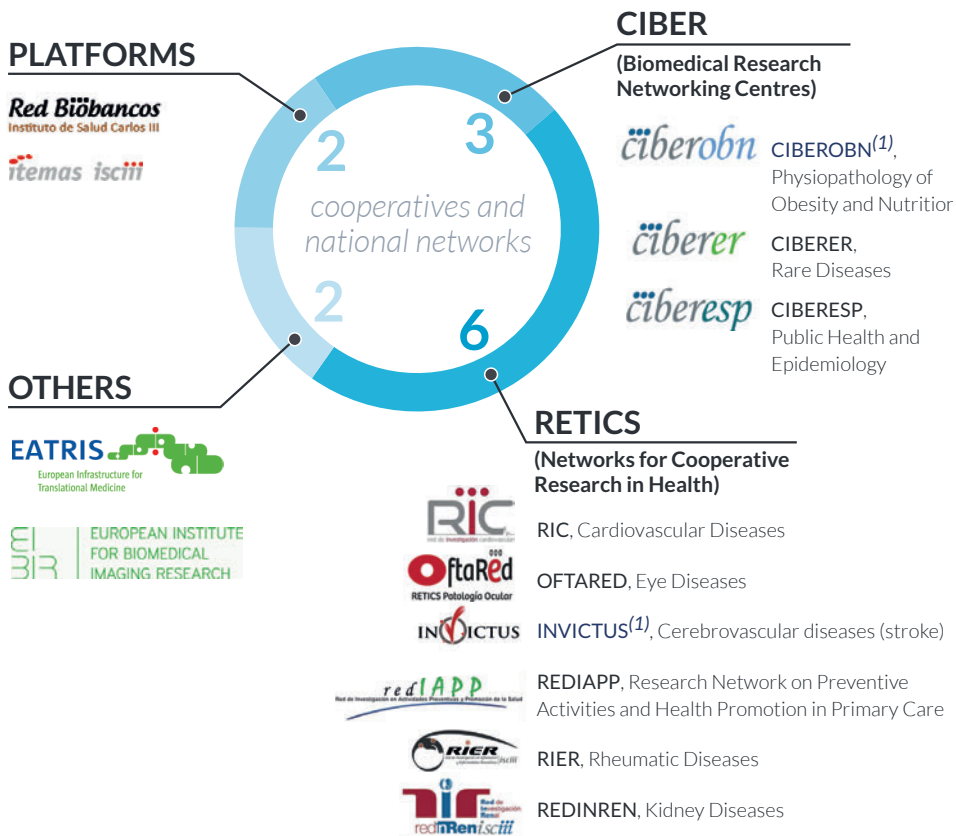
**Table 4.** Funds raised in human resources in 2015



# **STRATEGIC ALLIANCES**



In 2015, IDIS participated in different cooperatives and several national networks of excellence:



(1) Scientific Direction IDIS

Figure 15. Main partnerships



**AREAS**

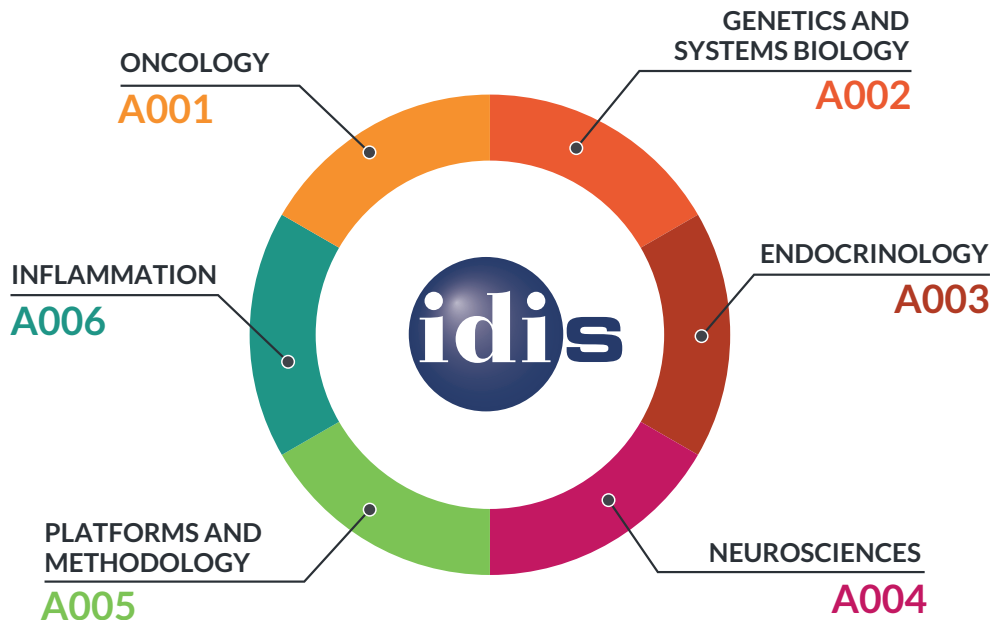


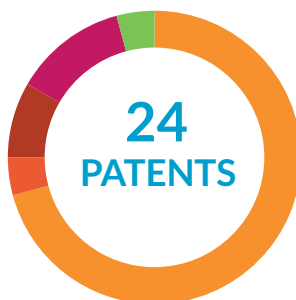
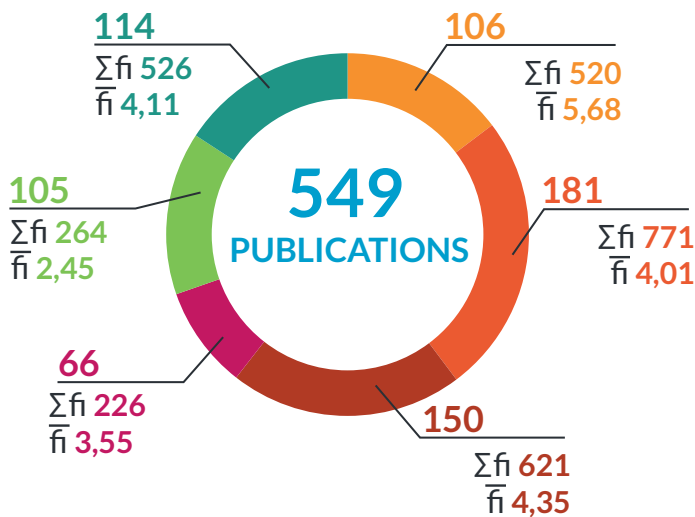
Figure 16. *Research areas*



## MEMBERS

<i>Oncology</i>	<b>123</b>
<i>Genetics</i>	<b>141</b>
<i>Endocrinology</i>	<b>132</b>
<i>Neurosciences</i>	<b>105</b>
<i>Platforms and Methodology</i>	<b>72</b>
<i>Inflammation</i>	<b>85</b>





**ONCOLOGY** **A001**

	n	$\Sigma f_i$	$\bar{f}_i$	amount
Articles published	106	520	5,68	
Projects	13			2.464.647 €
Contracts and Agreements	53			1.655.959 €
Clinical Trials	36			
Patents	17			
Theses	7			

- Genetics of Human Diseases (C010)
- Pathology (C011)
- NANOBIOFAR (C025)
- Translational Medical Oncology (C030)
- Molecular Imaging (C032)
- Molecular Oncology (E004)
- Cell Cycle and Oncology (CiClon) (E018)
- Stem Cells in Cancer and Aging (E028)
- Oncologic Endocrinology (E031)
- Preclinical Animal Models (E032)
- Viruses and Cancer (E033)
- Lymphoproliferative Disorders (AC01)

# GENETICS AND SYSTEMS BIOLOGY

## A002

	n	$\Sigma fi$	$\bar{fi}$	amount
Articles published	181	771	4,01	
Projects	7			2.347.671 €
Contracts and Agreements	134			1.343.776 €
Clinical Trials	33			
Patents	1			
Theses	13			

- Genetics (C005)
- Digestive Pathology (C009)
- Genetics, Vaccines, Infections and Paediatrics (GENVIP) (C020)
- Genetics of Cardiovascular and Eye Diseases (E001)
- Comparative Genomics of Human Parasites (E012)
- Population Genetics in Biomedicine (GenPoB) (E015)
- Genetics of Neurological Disorders (E016)
- Cancer Genetics (E017)
- Psychiatric Genetics (E020)
- Genetics and Developmental Biology of Kidney Diseases (E021)
- Escherichia Coli (E027)



# ENDOCRINOLOGY

## A003

	n	$\Sigma f_i$	$\bar{f}_i$	amount
Articles published	150	621	4,35	
Projects	10			1.414.915 €
Contracts and Agreements	35			760.292 €
Clinical Trials	10			
Patents	2			
Theses	12			

- Neoplasia and Endocrine Differentiation (C001)
- Molecular Endocrinology (C006)
- Obesity and Nutrition (C008)
- Metabolic Disorders (C012)
- Thyroid and Metabolic Disorders Unit (UETeM) (C019)
- Pediatric Nutrition (C022)
- Neurobesity (C029)
- Molecular Metabolism (C031)
- Cytokines and Obesity (Citobes) (E006)
- Obesidomics (E023)
- Structural Biochemistry of Endocrine Pathology (E024)
- Cellular Endocrinology (E025)
- Endocrine Physiopathology (E026)
- Paediatric Endocrinology (AC04)



## NEUROSCIENCES

A004

	n	$\Sigma f_i$	$\bar{f}_i$	amount
Articles published	66	226	3,55	
Projects	15			3.901.675 €
Contracts and Agreements	26			368.907 €
Clinical Trials	3			
Patents	3			
Theses	20			

- Neurobiology (C004)
- Neurology (C007)
- Neurobiology of the Visual System (C015)
- Experimental Neurology of Parkinson's Disease (C018)
- BIOFARMA (C026)
- Prion Diseases (E014)
- Cell Stress (E019)
- Cognitive Neuroscience (E029)
- Critical Patient (AC03)



# PLATFORMS AND METHODOLOGY

**A005**

	n	$\Sigma f_i$	$\bar{f}_i$	amount
Articles published	105	264	2,45	
Projects	6			370.330 €
Contracts and Agreements	34			669.126 €
Clinical Trials	8			
Patents	1			
Theses	14			

- Experimental Surgery (C002)
- Epidemiology, Public Health and Evaluation of Health Services (C013)
- Research Methodology (C017)
- Clinical Analysis (C021)
- Radiology (C024)
- Biostatistics (E002)
- Microbiology (E013)
- Clinical Pharmacology (E034)

## INFLAMMATION

A006

	n	$\Sigma fi$	—	amount
Articles published	114	526	4,11	
Projects	3			152.915 €
Contracts and Agreements	35			603.694 €
Clinical Trials	53			
Theses	8			

- Hypertension (C003)
- Rheumatology (C014)
- Cardiology (C016)
- Neuroendocrine Interactions in Rheumatic and Inflammatory Diseases (Neirid) (C027)
- Genetics of Osteoarticular Disorders (C028)
- Experimental Rheumatology (E003)
- Cellular and Molecular Cardiology (E009)
- Platelet Proteomics (E030)
- Pneumology (AC05)





# ANNUAL REPORT 2015



**XUNTA DE GALICIA**  
**CONSELLERÍA DE SANIDADE**