INSTITUTO DE INVESTIGACIÓN SANITARIA
SANTIAGO DE COMPOSTELA

idis

ANNUAL REPORT 2024

EDITION AND PRODUCTION

Scientific-Technical Coordination
of the Health Research Institute
of Santiago de Compostela

José Ramón Castro Ruibal
Technical Management

Yolanda Liste Martínez
Technical Management

Iria Louzao Pernas
Technical Management

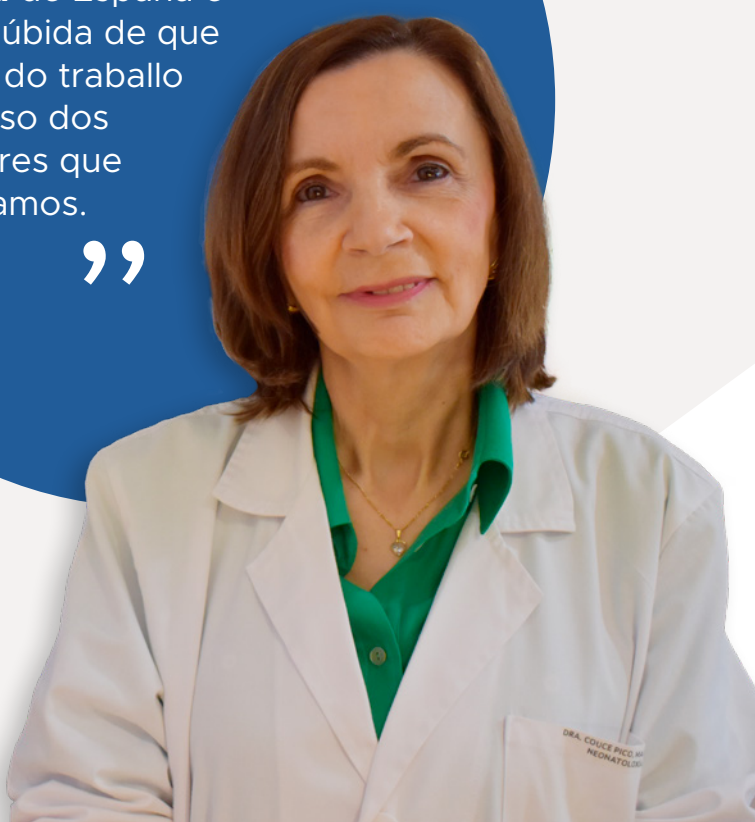
María Rodríguez Carlín
Technical Management

APPROVAL

Direction Board of the Institute at the meeting on 26 Jun, 2025.

ANNUAL REPORT 2024

“Un ano máis seguimos con paso firme e cara adiante situándonos **entre os grandes institutos de investigación biomédica** de España e non cabe dúbida de que isto é froito do traballo e compromiso dos investigadores que o conformamos.”



Mª Luz
Couce Pico
Directora Científica
Scientific Director

É unha honra e unha satisfacción para min, como directora científica do IDIS, presentar a memoria de actividade de 2024 do noso instituto. Un ano máis seguimos con paso firme e cara adiante situándonos entre os grandes institutos de investigación biomédica de España e non cabe dúbida de que isto é froito do traballo e compromiso dos investigadores que o conformamos.

Destacar este ano a re-acreditación do IDIS polo ISCIII. Como sabedes desde 2010 somos un Instituto acreditado polo ISCIII, renovando a acreditación en 2015 e en 2020. En 2024 tivemos o proceso de auditoría para a xa terceira re-acreditación e superámola favorablemente. Isto permítenos continuar coa senda trazada inicialmente e poder competir en proxectos e categorías ás que doutro modo non teríamos acceso. Así mesmo, en outubro de 2024 recoñeceunos a Xunta de Galicia coa medalla Emilia Pardo Bazán en recoñecemento ao compromiso, traballo e defensa da igualdade entre xéneros.

A nosa captación de recursos económicos continúa sendo moi favorable, ao pasar dos 31.000.000 € que tiñamos en 2020 aos 49.925.087 € de 2024, seguindo un ano máis arredor dos 50 millóns. A nosa produción científica incrementouse un 8% chegando aos 1.091 traballos científicos indexados no JCR, sendo o 30% deles do primeiro decil, con participación de grupos internacionais e liderados máis da metade por investigadores do noso Instituto.

Debemos ter moi presente a importancia de difundir a ciencia á sociedade e neste sentido estamos cada vez máis involucrados coa realización de xornadas de formación enfocadas a mellorar a divulgación científica; a participación na Noite Europea dos investigadores, en Reimagina a Ciencia... e a nosa presenza en redes sociais e medios de comunicación. Isto permítenos ter a acreditación de Unidade de Cultura Científica e da Innovación da FECYT (obtida en 2023).

Un dos nosos retos principais é a captación e retención de talento. Para isto, ademais de impulsar e apoiar a captación de recursos humanos competitivos, pese ás dificultades administrativas nos tempos de cumprimento motivadas polo paso ao sector público da nosa Fundación, aumentamos o número de axudas intramurais incorporando na

convocatoria a figura de técnico de plataforma. Isto súmase á produción de teses doutorais, que se incrementou nun 17% en 2024.

Con este crecemento constante que leva a cabo o instituto e os investigadores que o conforman, faise cada vez máis evidente a necesidade de dispor de novos espazos de investigación, feito que ademais queda reflectido na nova guía de acreditación de institutos de investigación biomédica do ISCIII. Esperamos poder contar co apoio das institucións para levar a cabo a execución do proxecto que temos en marcha dun edificio IDIS. Pola nosa parte, ilusión, empuxe e afán para conseguilo non nos faltará.

It is an honor and a pleasure for me, as Scientific Director of IDIS, to present our institute's 2024 activity report. Once again, we continue with a firm step forward, positioning ourselves among the leading biomedical research institutes in Spain, and there is no doubt this is the result of the work and commitment of the researchers who comprise it.

This year, I would like to highlight IDIS's reaccreditation by the ISCIII. As you know, we have been an ISCIII-accredited institute since 2010, renewing our accreditation in 2015 and 2020. In 2024, we underwent the audit process for our third reaccreditation, which we successfully passed. This allows us to continue on the path we initially set out and to compete in projects and categories that we would otherwise not have access to. Furthermore, in October 2024, the Xunta de Galicia awarded us the Emilia Pardo Bazán Medal in recognition of our commitment, work, and defense of gender equality. Our fundraising continues to be very strong, rising from €31,000,000 in 2020 to €49,925,087 in 2024, remaining at around €50 million for another year. Our scientific output increased by 8%, reaching 1,091 scientific articles indexed

in the JCR, 30% of which were in the first decile, with the participation of international groups and more than half led by researchers from our Institute.

We must be mindful of the importance of disseminating science to society, and in this regard, we are increasingly involved in training sessions focused on improving scientific dissemination; participating in the European Researchers' Night, Reimagine Science, and maintaining our presence on social media and in the media. This allows us to be accredited as a Scientific Culture and Innovation Unit by the FECYT (obtained in 2023).

One of our main challenges is attracting and retaining talent. To this end, in addition to promoting and supporting the recruitment of competitive human resources, despite the administrative difficulties regarding compliance times caused by our Foundation's transition to the public sector, we have increased the number of intramural grants by incorporating the position of platform technician into the call for applications. This is in addition to the production of doctoral theses, which increased by 17% in 2024.

With this constant growth experienced by the institute and its researchers, the need for new research spaces is becoming increasingly evident, a fact reflected in the new ISCIII accreditation guide for biomedical research institutes. We hope to count on the support of these institutions to carry out our ongoing project for an IDIS building. For our part, we will not lack the enthusiasm, drive, and desire to achieve this goal.

> "Once again, we continue with a firm step forward, positioning ourselves **the leading biomedical research institutes** in Spain, and there is no doubt this is the result of the work and commitment of the researchers who comprise it."

ANNUAL REPORT 2024

SUMMARY

ANNUAL REPORT 2024

1 EXECUTIVE SUMMARY

The **Health Research Institute of Santiago de Compostela (IDIS)** is a biomedical research center of marked translational character that takes advantage of the synergies of the **University Clinical Hospital of Santiago de Compostela (CHUS)** and the **University of Santiago de Compostela (USC)** to promote and encourage excellent research, scientific and technological knowledge and its subsequent transfer to the productive sector, as well as teaching and training, focused on a clear objective: to improve the people´s health.

VISION

To consolidate our position as a research center of reference, at both national and international level, in the innovative approach of the great challenges of the population in the healthcare field, promoting at all times the transfer of high impact results to society.

MISSION

We are a translational biomedical research center that involves professionals with a sole objective: to improve the health of citizens.

VALUES

- Integration and collaboration.
- Communication and transparency.
- Leadership and research excellence.
- Innovation and result transfer orientation.
- Responsibility to and for society.

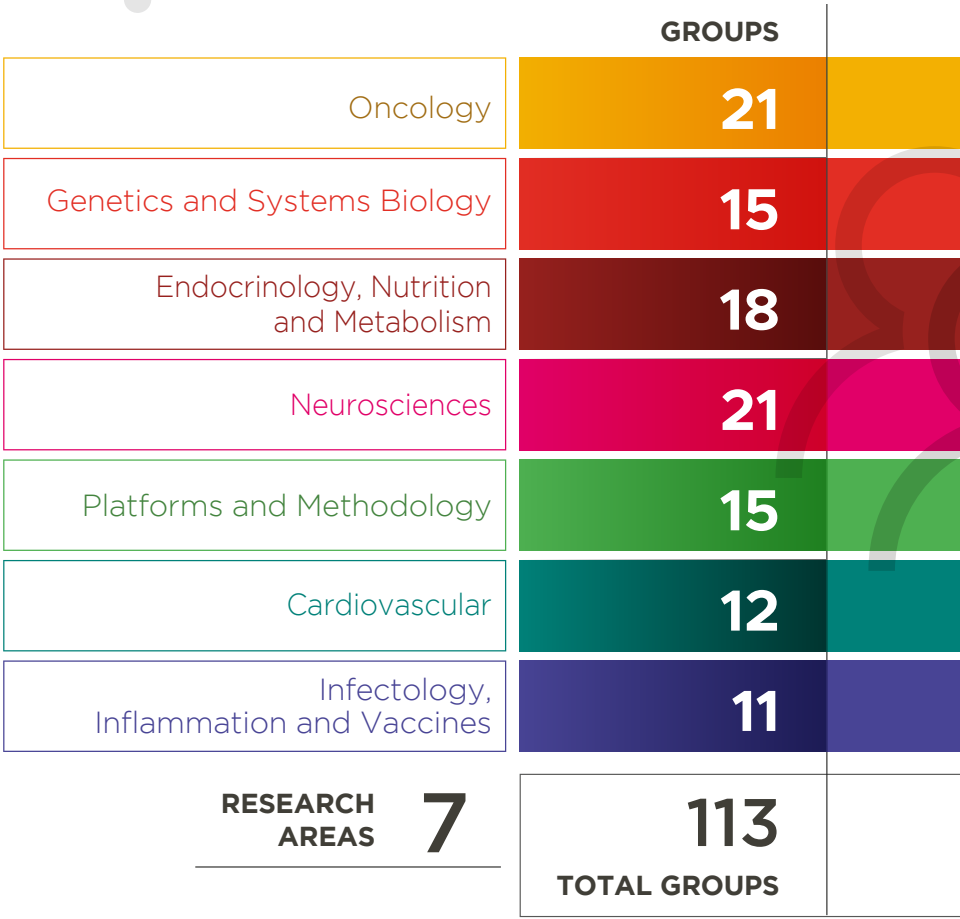

TOTAL
FUNDS RAISED
49.925.087 €

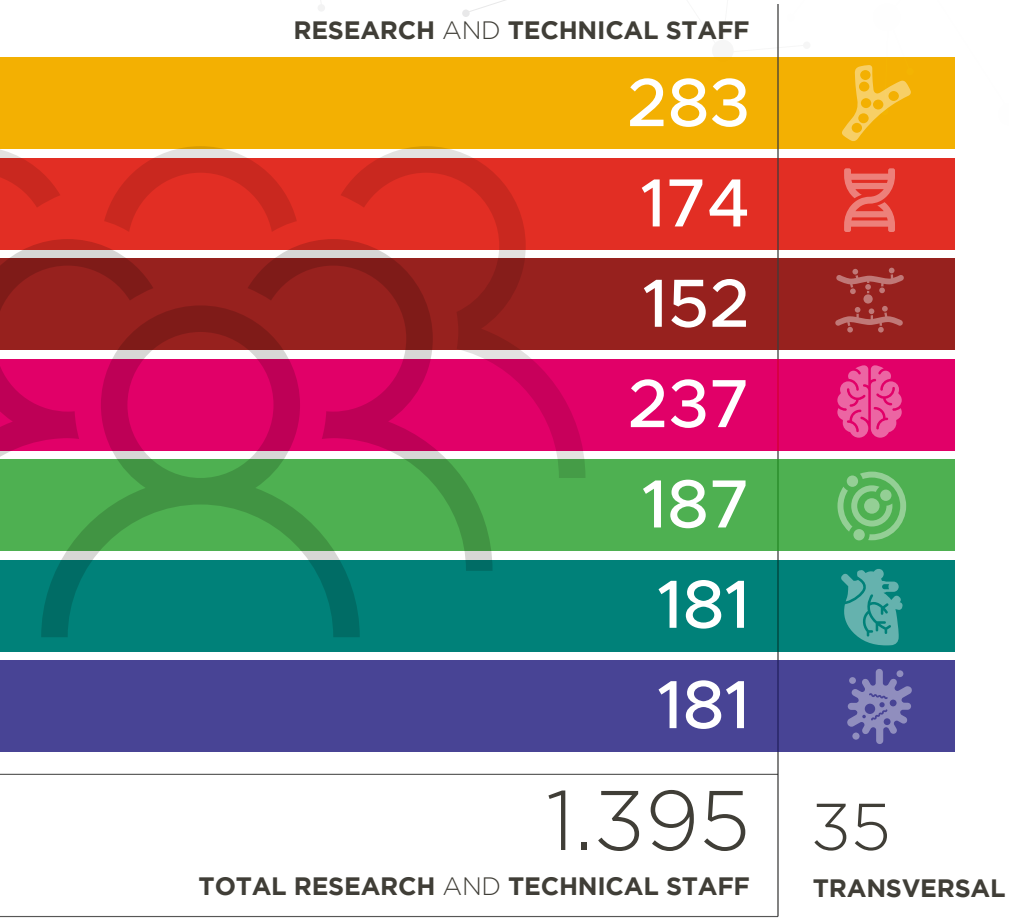
PROJECTS	137
DONATIONS	156
CLINICAL STUDIES	378
CONTRACTS AND PROVISION OF SERVICES	643
STAFF CONTRACTS	95

PUBLISHED ARTICLES	1.091	REQUESTED PATENTS	59
PHD THESES	109	GRANTED PATENTS	17

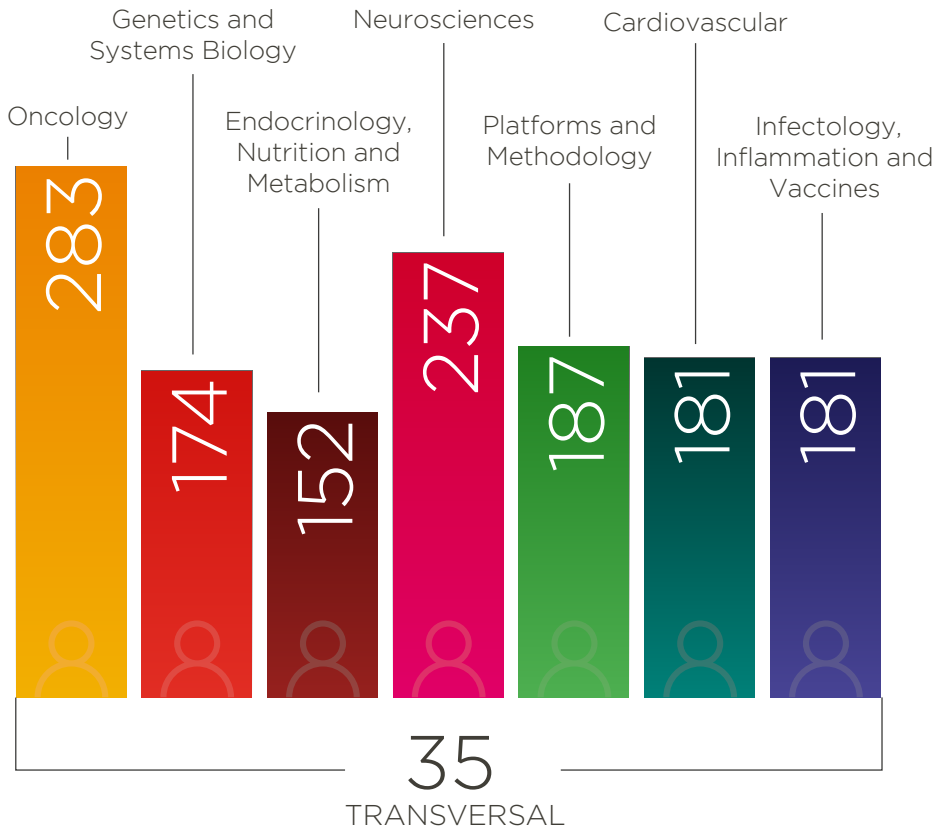
ANNUAL REPORT 2024

GLOBAL ANALYSIS


GROUPS
Oncology
21
Genetics and Systems Biology
15
Endocrinology, Nutrition and Metabolism
18
Neurosciences
21
Platforms and Methodology
15
Cardiovascular
12
Infectology, Inflammation and Vaccines
11
RESEARCH AREAS
7
113
TOTAL GROUPS


RESEARCH AND TECHNICAL STAFF
283
174
152
237
187
181
181
1.395
TOTAL RESEARCH AND TECHNICAL STAFF
35
TRANSVERSAL

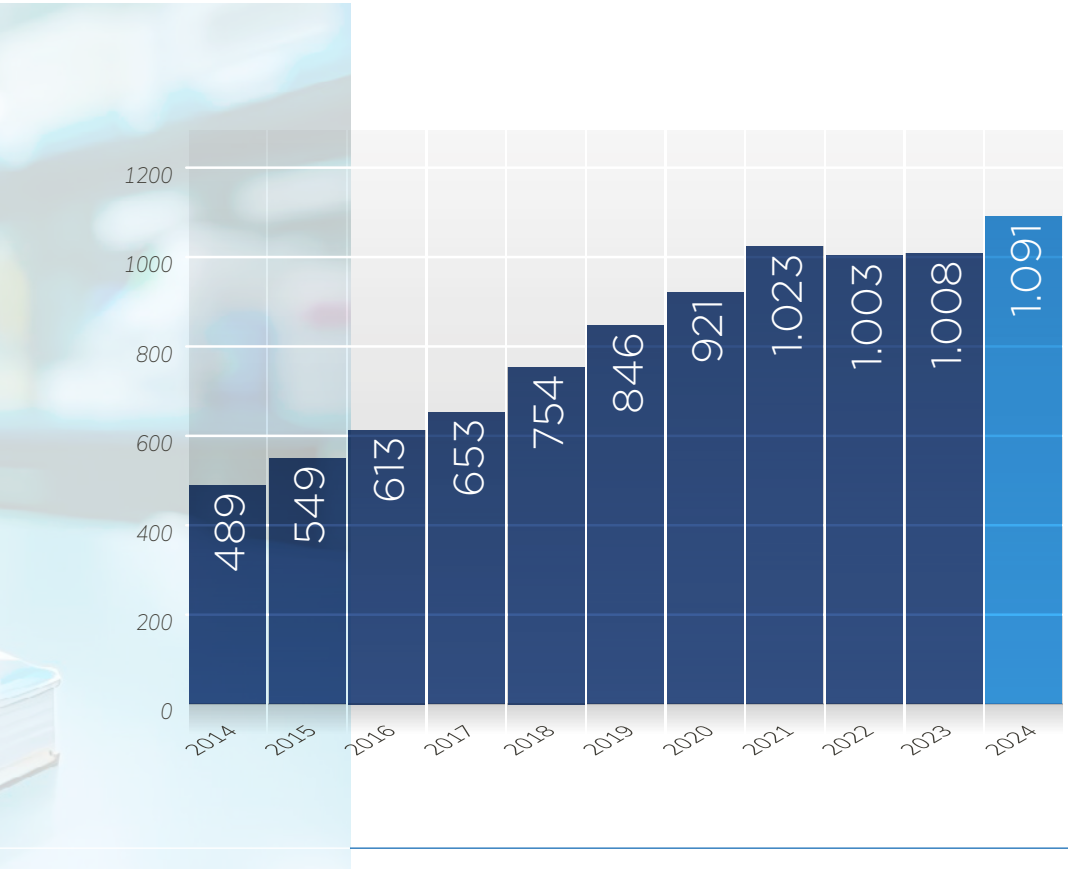
Number of **researchers per area**



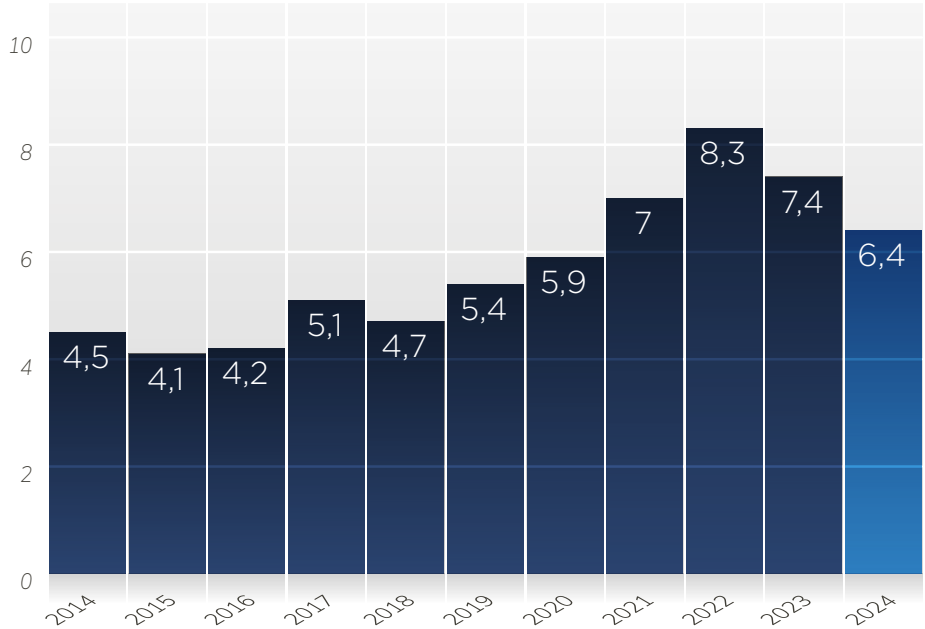
	GROUPS	RESEARCHERS
Consolidated	45	767
Emerging	50	448
Clinical Associate	18	180
	113	TOTAL RESEARCHERS 1.395
		TRANSVERSAL 35
		PEOPLE **1.430**

Number of **published articles per year**

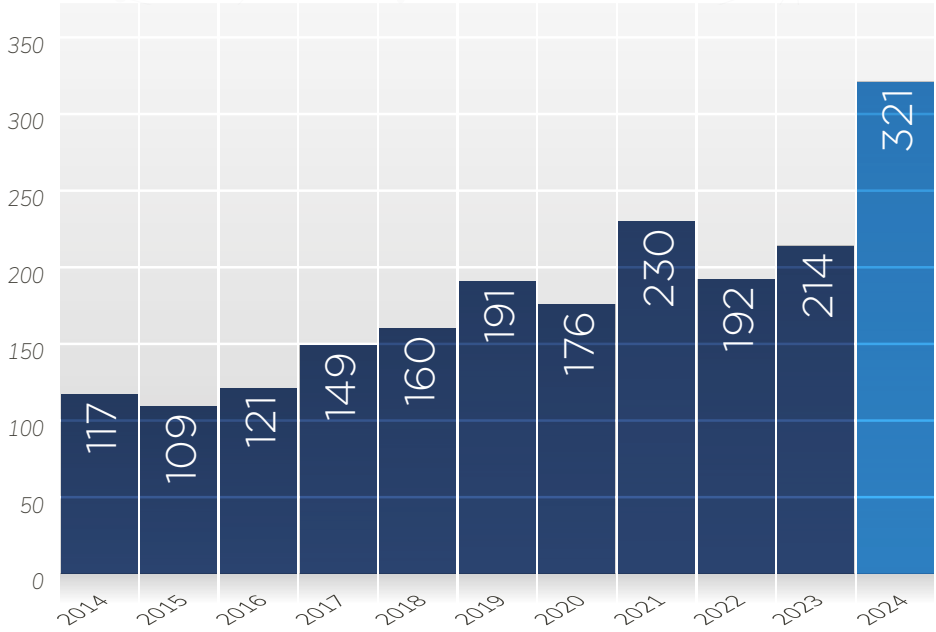
The Institute has published **1.091 original scientific articles, editorials and reviews** in **603 international journals** indexed in the Journal Citation Report with a cumulative impact factor of **7012.6 points**.


1200
1000
800
600
400
200
0
489
549
613
653
754
846
921
1.023
1.003
1.008
1.091
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024

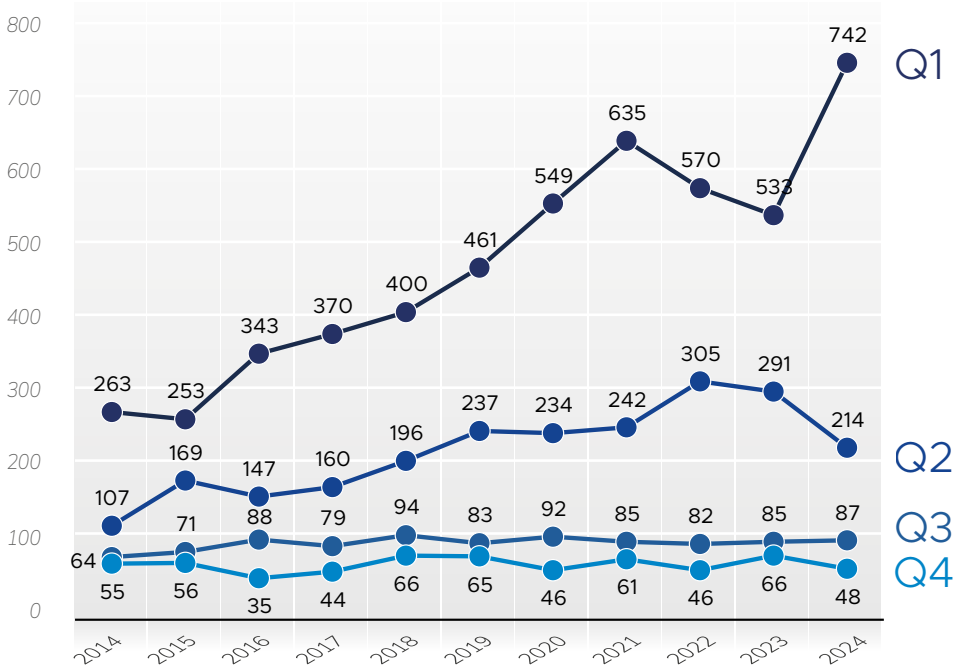
Average **impact factor**



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



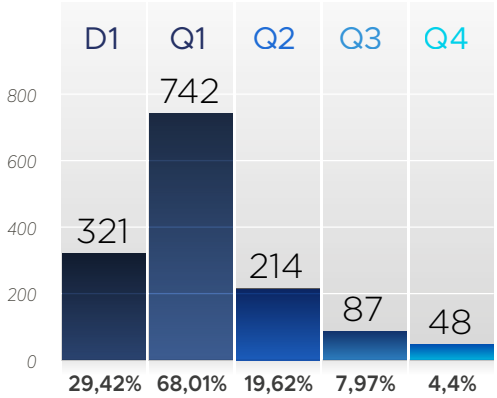
Number of **published articles per year,** by journal quartile



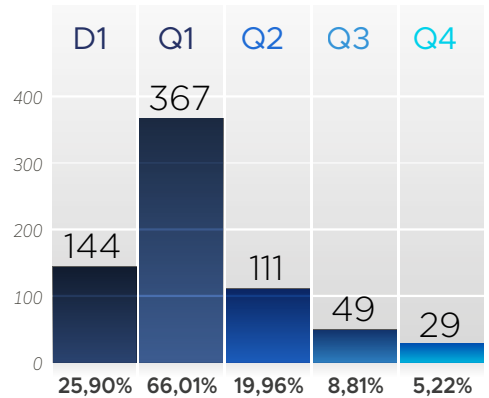
Number of **publications and % of the total** in 2024

Regarding the articles authorship, we identify those publications whose main authors (first, last or corresponding author) are affiliated to an IDIS group.

TOTAL
1.091

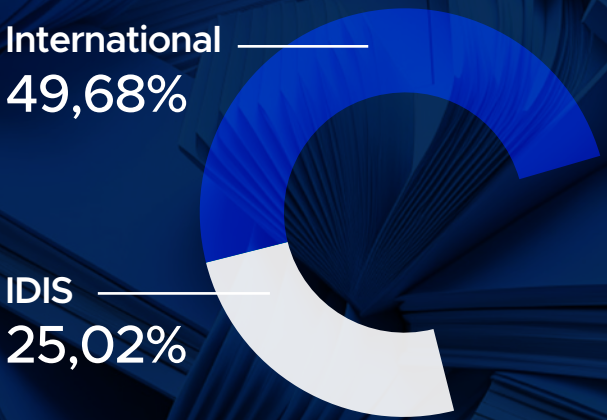


PREFERRED AUTHOR
556



Publications in 2024

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

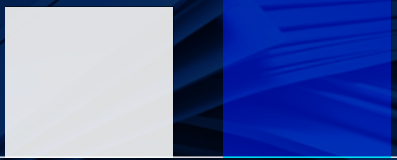


Articles published **in collaboration between groups of centres outside of Spain**.

542

Articles published **in collaboration between IDIS groups**.

273



Amount **2024**

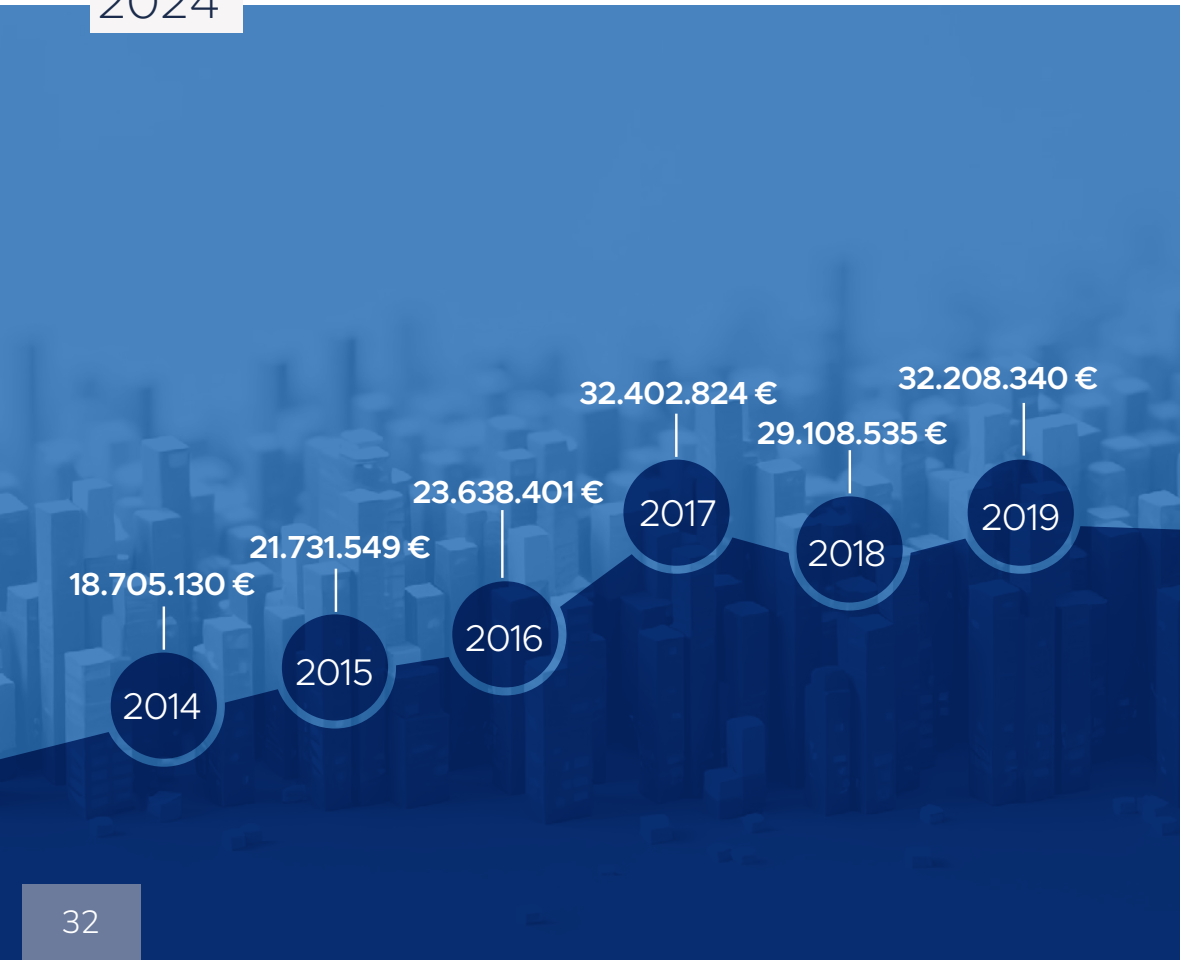
49.925.087 €

During 2024, funding raised in competitive calls for **research projects**, the **recruitment of staff**, **infrastructures, agreements, contracts and provision of services, donations, intellectual property royalties, clinical trials and observational studies** generated **49.925.087 €** which will complement the resources of the institutions that take part in IDIS.

Summary of the funding raised in 2024

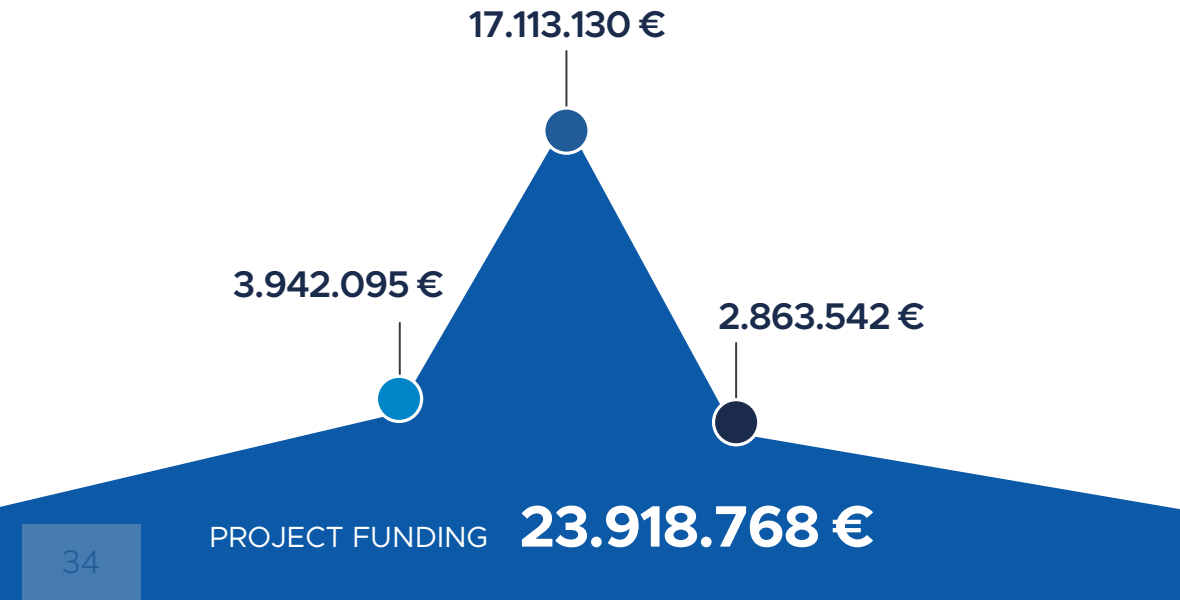
CONCEPT	NUMBER	AMOUNT
Projects	137	**23.918.768,57 €**
Human resources	95	**10.185.542,33 €**
Studies (Clinical Trials, Other Studies)	378	**6.757.063,36 €**
Contracts and provision of services	643	**7.456.583,83 €**
Donations	156	**466.911,47 €**
Mobility grants	2	**25.555,00 €**
Transfer	3	**38.845,56 €**
Infrastructures	1	**1.075.817,72 €**

Amount raised, 2024

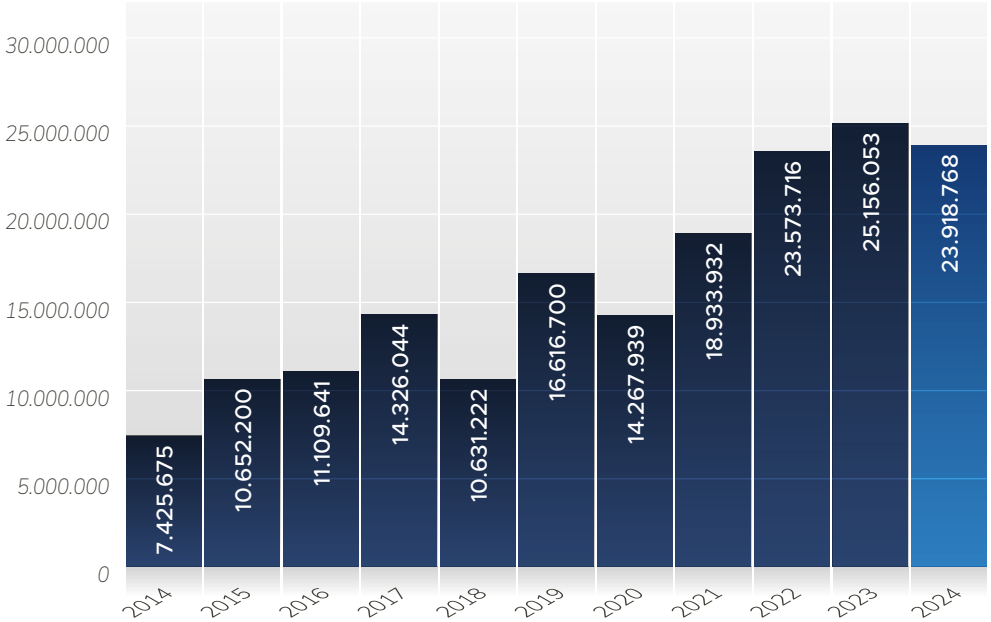


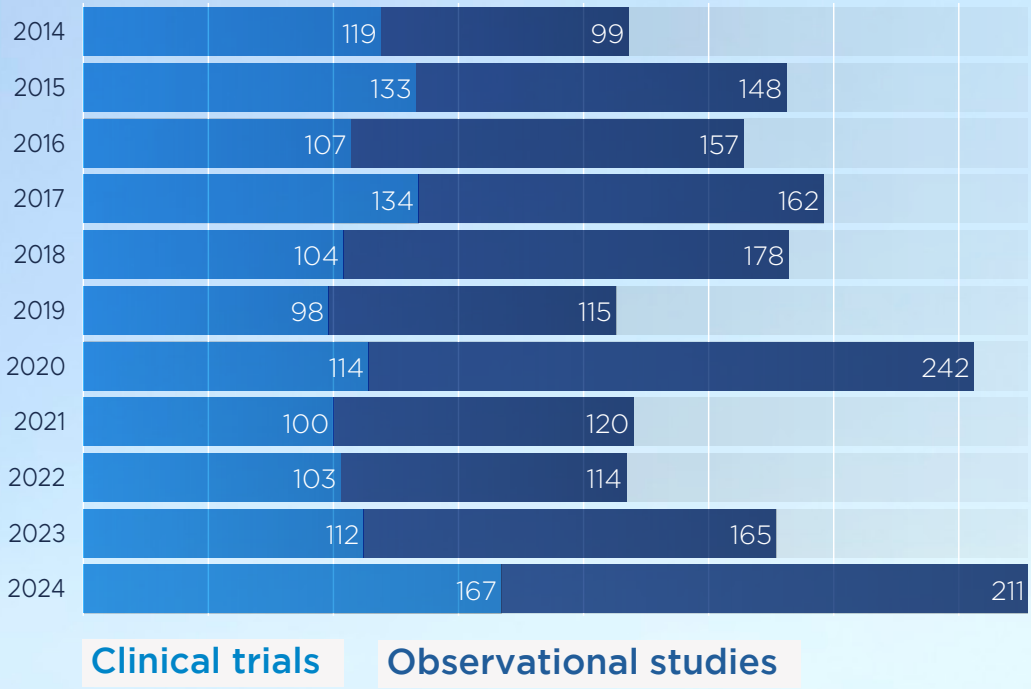

49.925.087 €
52.309.190 €
46.078.575 €
43.577.655 €
31.340.578 €
2020
2021
2022
2023
2024

Number and amount of **funds raised in 2024 for projects** by location

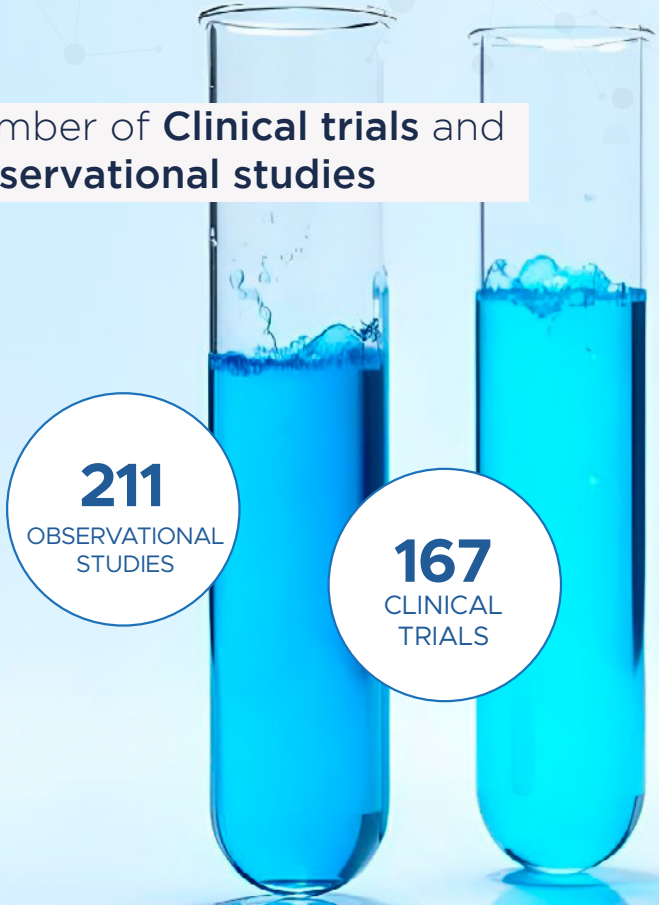


Project funding per year




2014
119
99
2015
133
148
2016
107
157
2017
134
162
2018
104
178
2019
98
115
2020
114
242
2021
100
120
2022
103
114
2023
112
165
2024
167
211
Clinical trials
Observational studies

Number of **Clinical trials** and **Observational studies**

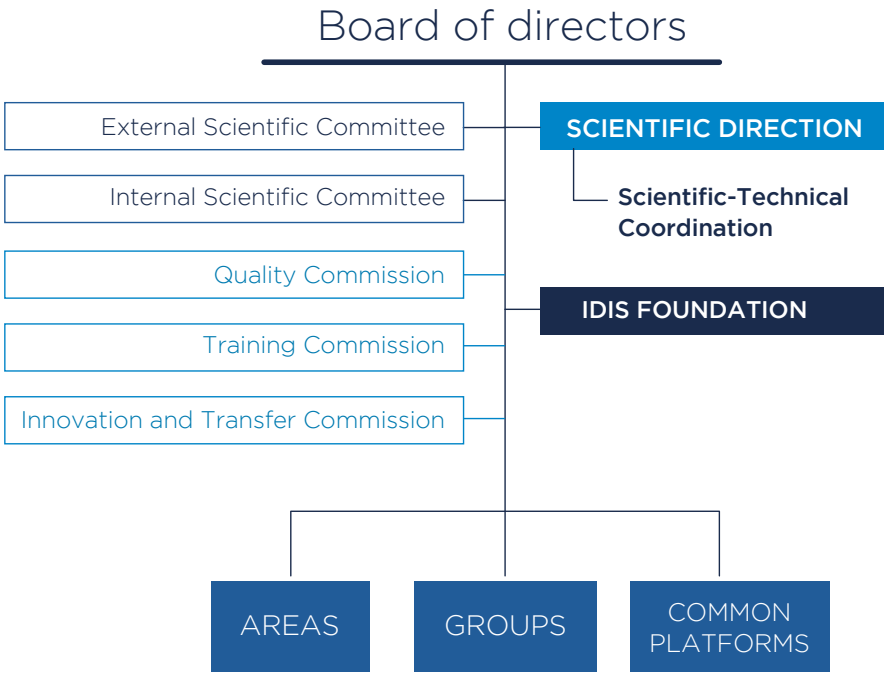


ANNUAL REPORT 2024

2

3 STRUCTURE

4


Board of directors
External Scientific Committee
Internal Scientific Committee
Quality Commission
Training Commission
Innovation and Transfer Commission
SCIENTIFIC DIRECTION
Scientific-Technical Coordination
IDIS FOUNDATION
AREAS
GROUPS
COMMON PLATFORMS

Board of directors

President
Antonio Gómez Caamaño

Vice-President
Antonio López-Díaz

Chairs

Julián Álvarez Escudero
Ángel Carracedo Álvarez
Enrique Domínguez Muñoz
Antonio Fernández Campa
José Ramón González Juanatey
José Luis Labandeira García
Ángel Facio Villanueva
Pilar Bermejo Barrera
Mª Luz Couce Pico (without vote)
Isabel Lista García (without vote)

External Scientific Committee

- Ángeles Almeida Parra
- Melchor Álvarez de Mon Soto
- María del Carmen Ayuso García
- Joan Comella Carnicé
- Encarnación Guillén Navarro
- Rosario Luquin Piudo
- Antonio Vidal Puig

Internal Scientific Committee

President
Mª Luz Couce Pico

Secretary
José Ramón Castro Ruibal

Non-scientific actors

- Afundación Obra Social ABANCA
- Consello Social USC
- Asociación Española Contra el Cáncer - AECC
- Federación Galega de Enfermidades Raras e Crónicas - FEGEREC
- Financiera Maderera S.A FINSA
- Grupo FRINSA del Noroeste

- José Víctor Álvarez González
- Ángel María Carracedo Álvarez
- Miriam Cebey López
- Manuel Collado Rodríguez
- Anxo Fernández Ferreiro
- José Ramón González Juanatey
- Francisco Gude Sampedro
- José Luis Labandeira García
- Isabel Lista García
- Rafael López López
- Miguel López Pérez
- Mabel Loza García
- Miguel Ángel Martínez Olmos
- Federico Martinón Torres
- Laura Muinelo Romay
- Mabel Sampedro Parada
- Ana Vega Gliemmo
- Sandra Vidal Martínez

Quality Commission

President
Miriam Cebey López

Secretary
Iria Louzao Pernas

- Mª Mar Lale Candal
- Isabel Lista García
- Mabel Sampedro Parada

Innovation and Transfer Commission

President
Anxo Fernández Ferreiro

Secretary
José Ramón Castro Ruibal

- Luis León Mateos
- Cristina Fernández Pérez
- María de la Fuente Freire
- Moisés Rodríguez Mañero
- José Brea Floriani
- Adrián Mosquera Orgueira
- Mabel Sampedro Parada

Training Commission

President
Manuel Collado Rodríguez

Secretary
José Ramón Castro Ruibal

- Jorge Barbazán García
- Sonia Eiras Penas
- Ana Estany Gestal
- Anxo Fernández Ferreiro
- Cristina Fernández Pérez
- Francisco Gude Sampedro
- Ana Igea Fernández
- María del Carmen Rivas Vázquez
- Anxo Vidal Figueroa

Scientific - technical coordination

- José Ramón Castro Ruibal
- Yolanda Liste Martínez
- Iria Louzao Pernas
- María Rodríguez Carlín

A001
ONCOLOGY

LEADERS: **RAFAEL LÓPEZ LÓPEZ / JOSÉ MANUEL CASTRO TUBÍO**

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	*Virginia Pubul Núñez*
C045	Cell senescence, cancer and aging	*Manuel Collado Rodríguez*
C050	Mobile Genomes and Disease	*José Manuel Castro Tubío*
E004	Molecular Oncology	*José Antonio Costoya Puente*
E018	Cell Cycle and Oncology (CiClon)	*Anxo Vidal Figueroa*
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*
E043	Medical Physics and Biomathematics	*Juan Pardo Montero*
E044	Nano-Oncology and Translational Therapy Unit	*María de la Fuente Freire*
E051	Oral and maxilofacial medical-surgical pathology	*Mario Pérez-Sayáns García*
E060	Computational and genomic hematology	*Adrián Mosquera Orgueira*
E064	New approaches in radiotherapy (NARA)	*Yolanda Prezado Alonso*
AC01	Lymphoproliferative Disorders	*José Luis Bello López*
AC06	Translational Ophthalmology	*María José Blanco Teijeiro*
AC08	Surgical Oncology	*Manuel Bustamante Montalvo*

A002
GENETICS AND SYSTEMS BIOLOGY

LEADERS: **ÁNGEL CARRACEDO ÁLVAREZ / MARÍA ISABEL LOZA GARCÍA**

C005	Genetics	*Ángel María Carracedo Álvarez*
C009	Translational Research in Digestive System Diseases	*Juan Enrique Domínguez Muñoz*
C026	BIOFARMA	*María Isabel Loza García*
C041	Genetics in Cancer and Rare Diseases	*Ana Paula Vega Gliemmo*
E012	Comparative Genomics of Human Parasites	*Julio Manuel Maside Rodríguez*
E020	Psychiatric Genetics	*Javier Costas Costas*
E021	Genetics and Developmental Biology of Kidney Diseases	*Miguel Ángel García González*
E035	Genetics of Gastrointestinal Tumours	*Clara Ruiz Ponte*
E036	Stem Cells and Human Diseases	*Miguel Ángel Fidalgo Pérez*
E047	Cancer Genetics and Epidemiology Group	*Manuela Gago Domínguez*
E054	Epitranscriptomics and aging	*Diana Guallar Artal*
E055	Cancer Predisposition and Biomarkers	*Ceres Fernández Rozadilla*
E059	MitoPhenomics	*Aurora Gómez Durán*
E061	Pharmacogenomics and drug discovery	*Olalla Maroñas Amigo*
E068	Inmunogenetics	*Roberto Díaz Peña*

A003
ENDOCRINOLOGY, NUTRITION AND METABOLISM

LEADERS: **MIGUEL A. MARTÍNEZ OLMOS / LUISA Mª SEOANE CAMINO**

C001	Neoplasia and Endocrine Differentiation	*Clara Álvarez Villamarín*
C006	Molecular Endocrinology	*Miguel Ángel Martínez Olmos*
C008	Obesity and Nutrition	*Carlos Diéguez González*
C012	Metabolic Disorders	*María de la Luz Couce Pico*
C019	Thyroid and Metabolic Diseases Unit (UETeM)	*David Araújo Vilar*
C022	Paediatric Nutrition	*Rosaura Leis Trabazo*
C029	Neurobesity	*Miguel López Pérez*
C031	Molecular Metabolism	*Rubén Nogueiras Pozo*
C037	Trace Elements, Spectroscopy and Speciation	*Pilar Bermejo Barrera*
E023	Obesidomics	*María Pardo Pérez*
E025	Cellular Endocrinology	*Jesús Pérez Camiña*
E026	Endocrine Physiopathology	*Luisa María Seoane Camino*
E039	Diabesity	*Sulay Tovar Carro*
E041	Epigenomics in Endocrinology and Nutrition	*Ana Belén Crujeiras Martínez*
E057	Translational Endocrinology	*Omar Al-Massadi Iglesias*
E062	Inmunology and small molecules	*Iria Gómez Touriño*
E063	Neuroendocrine Regulation of Metabolism (NeuRoMet)	*Ismael González García*
AC04	Paediatric Endocrinology	*Lidia Castro Feijoo*

A004
NEUROSCIENCES

LEADERS: **JOSÉ LUIS LABANDEIRA GARCÍA / FRANCISCO CAMPOS PÉREZ**

C015	Neurobiology of the Visual System	*Francisco González García*
C018	Experimental Neurology of Parkinson's Disease	*José Luis Labandeira García*
C033	Design, Synthesis and Medical Evaluation of Bioactive Compounds and New Materials	*Antonio Mouriño Mosquera*
C034	Physics of Polymers and Colloids	*Silvia Barbosa Fernández*
C035	R&D in Drugs Dose Forms and Delivery Systems	*Ángel Concheiro Nine*
C036	Magnetism and Nanotechnology (NanoMag)	*José Rivas Rey*
C038	Analytical Chemistry of Compounds of Alimentary, Environmental and Biological Interest	*Antonia María Carro Díaz*
C042	Translational Stroke	*Francisco Campos Pérez*
C043	Neuroimaging and Biotechnology	*Ramón Iglesias Rey*
C044	Neuroaging	*Tomás Sobrino Moreiras*
C046	Gene Regulatory Control in Disease Laboratory	*Ashwin Woodhoo*
E014	Prion Diseases	*Jesús Rodríguez Requena*
E019	Cell Stress	*Juan Bautista Zalvide Torrente*
E029	Cognitive Neuroscience	*Fernando Díaz Fernández*
E050	Headaches and Craniofacial Pain	*Rogelio Leira Muíño*
E052	Corneal neurodegeneration	*María Isabel Lema Gesto*
E053	Circadian And Glial Biology	*Olga Barca Mayo*
E065	Translational Research in Neurological Diseases (ITEN)	*José María Prieto González*
E067	Brain plasticity	*Alba Vieites Prado*
AC03	Critical Patient	*Julián Álvarez Escudero*
AC27	Neuroradiology	*Antonio Jesús Mosqueira Martínez*

A005
PLATFORMS AND METHODOLOGY

LEADERS: **FRANCISCO GUDE SAMPEDRO / IRENE ZARRA FERRO**

C002	Surgery: Complications and advances	*Miguel Ángel Caínzos Fernández*
C013	Epidemiology, Public Health and Evaluation of Health Services	*Adolfo Figueiras Guzmán*
C017	Research Methodology	*Francisco Gude Sampedro*
C021	Clinical Analysis	*Santiago Rodríguez-Segade Villamarín*
E034	FarmaCHUSLab	*Irene Zarra Ferro*
E046	PARAQUASIL	*José Blanco Méndez*
E058	Oral Sciences (OSRG)	*Benjamín Martín Biedma*
AC10	Healthy ageing, fragility and chronicity. Research in Primary Care	*Juán Manuel Vázquez Lago*
AC13	Dermatology and Craniofacial Pathology (DePaCra)	*Pablo Ignacio Varela Centelles*
AC21	Pharmacological Biochemistry	*Fernando Jesús Hermida Ameijeiras*
AC23	Nursing, Management and Care	*Sandra Vidal Martínez*
AC24	Optometry	*Eva Yebra-Pimentel Vilar*
AC25	Radiology	*Miguel Souto Bayarri*
AC26	Experimental and reconstructive maxillofacial microsurgery (MERMAX)	*Joaquim Megías Barrera*
AC28	Home Hospitalization and Telemedicine	*Ignacio Novo Veleiro*

A006
CARDIOVASCULAR

LEADERS: **JOSÉ RAMÓN GONZÁLEZ JUANATEY / MOISÉS RODRÍGUEZ MAÑERO**

C003	Hypertension	*Antonio Pose Reino*
C016	Cardiology	*José Ramón González Juanatey*
C027	Neuroendocrine Interactions in Rheumatic and Inflammatory Diseases (Neirid)	*Oreste Gualillo*
C039	Biodiscovery	*Luis Miguel Botana Pérez*
C048	Cardiovascular Genetics	*María José Brion Martínez*
E009	Cellular and Molecular Cardiology	*Francisca Lago Paz*
E030	Platelet Proteomics	*Ángel García Alonso*
E045	Translational Cardiology	*Sonia Eiras Penas*
E056	Metabolic Homeostasis and Vascular Calcification	*Ricardo Villa Bellosta*
AC05	Pneumology	*Luis Guillermo Valdés Cuadrado*
AC07	Semergal	*Sergio Cinza Sanjurjo*
AC19	Vascular Research Group of Santiago	*Diego Caicedo Valdés*

A007
INFECTOLOGY, INFLAMMATION AND VACCINES

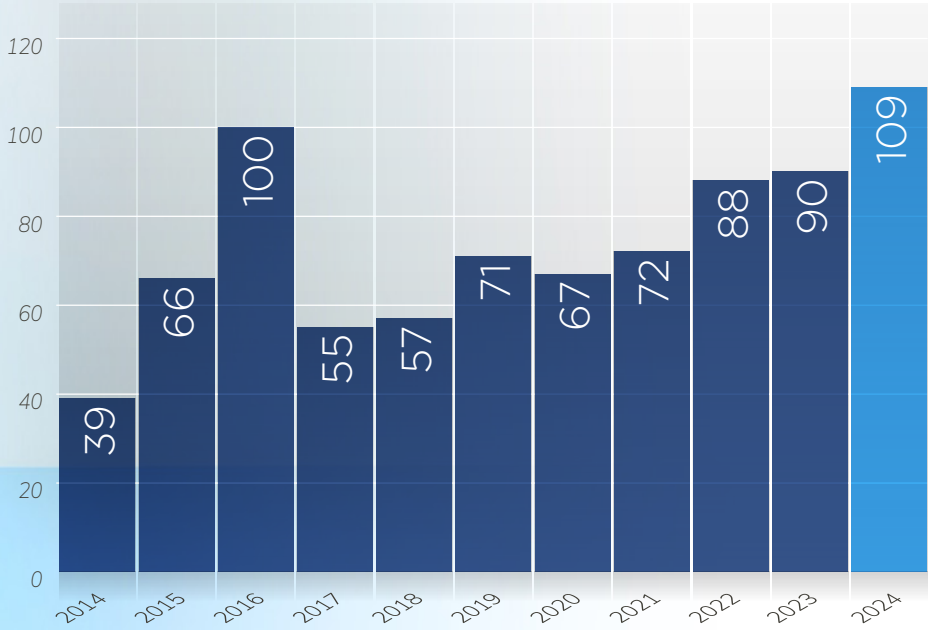
LEADERS: **FEDERICO MARTINÓN TORRES / RODOLFO GÓMEZ BAHAMONDE**

C014	Rheumatology	*Eva María Pérez Pampín*
C020	Genetics, Vaccines, Infections & Pediatrics	*Federico Martinón Torres*
C028	Experimental and Observational Rheumatology	*Antonio González Martínez Pedrayo*
C040	Oral Medical-Surgical Research Group (OMEQUI)	*Pedro Diz Dios*
C047	Population Genetics in Biomedicine	*Antonio Salas Ellacuriaga*
E013	Microbiology	*María Luisa Pérez del Molino Bernal*
E027	Escherichia coli	*Jorge Blanco Álvarez*
E038	Musculoskeletal Pathology	*Rodolfo Gómez Bahamonde*
E048	Molecular and Cellular Gastroenterology	*Javier Conde Aranda*
E066	Simulation, Life Support and Intensive Care (SICRUS)	*Antonio Rodríguez Núñez*
AC20	Translational Research of Airway Diseases	*Francisco Javier González Barcala*

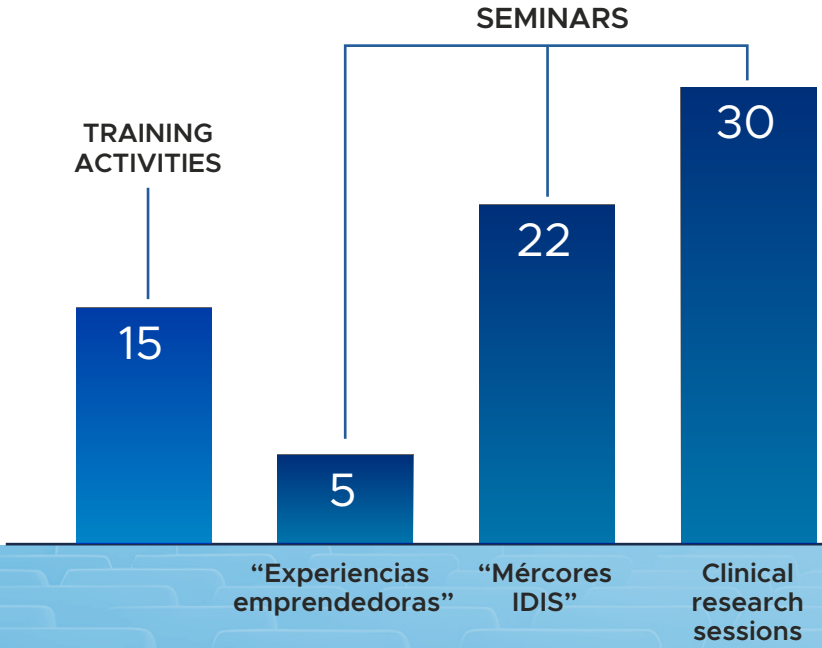
ANNUAL REPORT 2024

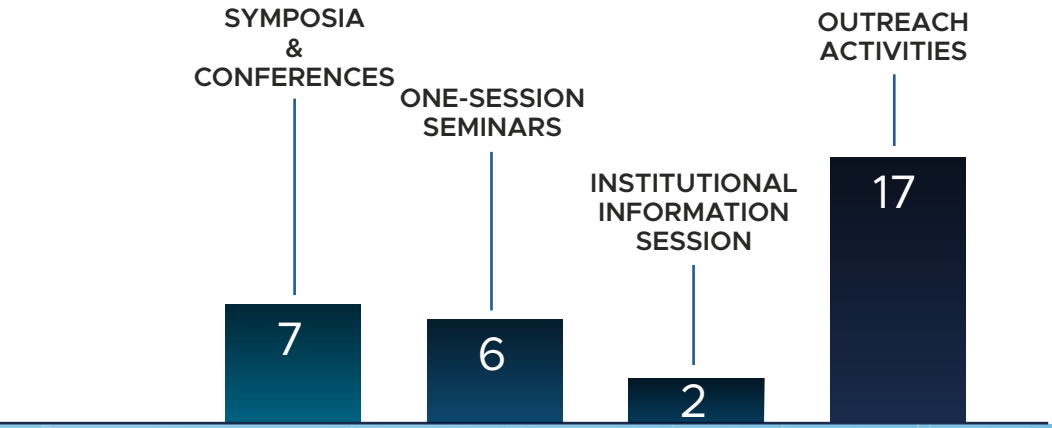
TRAINING & DISSEMINATION

Defended PhD theses per year

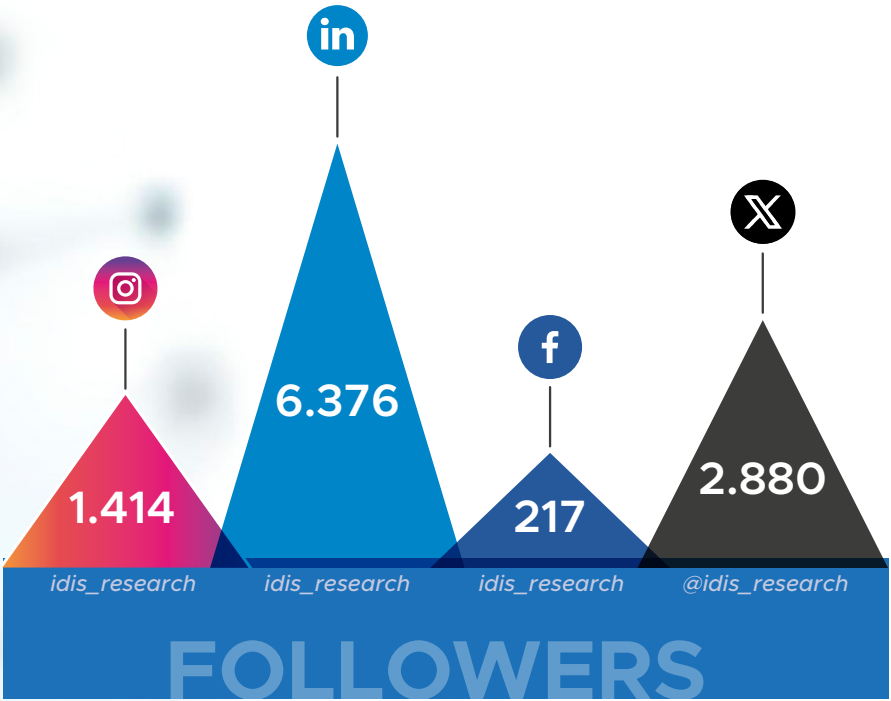


Organization of **training and communication** activities




SYMPOSIA & CONFERENCES
7
ONE-SESSION SEMINARS
6
INSTITUTIONAL INFORMATION SESSION
2
OUTREACH ACTIVITIES
17

Press, web & Social Networks



205 posts Interactions: **1.739**	**> 270** posts	**287** posts Interactions: **3.112**	**≈ 300** posts Impressions: **49.330**


67
Press releases in the media
68.370
Web visits
20
Repercussions in audiovisual press
247
Repercussions in written press
94
Press releases on IDIS website

ANNUAL REPORT 2024

INNOVATION AND TRANSFER

Transfer acceleration through public funding and private investment

ITEMAS network

The Innovation Platform in Medical and Healthcare Technologies (ITEMAS) is a support structure for healthcare innovation promoted by the Carlos III Health Institute (ISCIII), whose objective is to facilitate the innovative ideas of healthcare professionals to generate value for the system, through favoring the transfer of technology, the culture of innovation and communication with the rest of society.

ITEMAS' main goal is the creation of Innovation Support Units (UAI) in hospitals and biomedical research institutes, including IDIS.

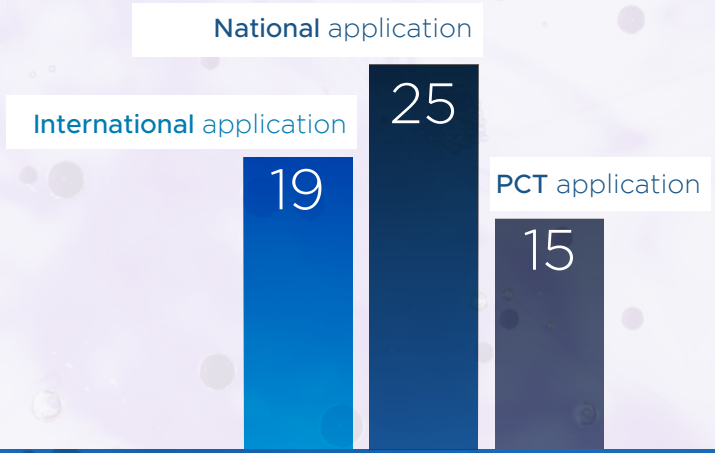
Disseminating our research

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. We have 2 incubated projects.

Intelectual property



REQUESTED PATENTS	59	LICENSED	4
GRANTED PATENTS	17	UTILITY MODELS	4

Spin off

FlowReserve
Personalized Medicine in Cardiology

QUBIO tech

NASASBIOTECH

genome4care
genómica al servicio de su salud

SMART VITAMINS

bflow

Lincbiotech

Celtarys RESEARCH

ventilatiolab

XUNTOS Atención Psicológica y Psiquiátrica, S.L.

DIVERSA

Gazella Biotech

Libera Bio

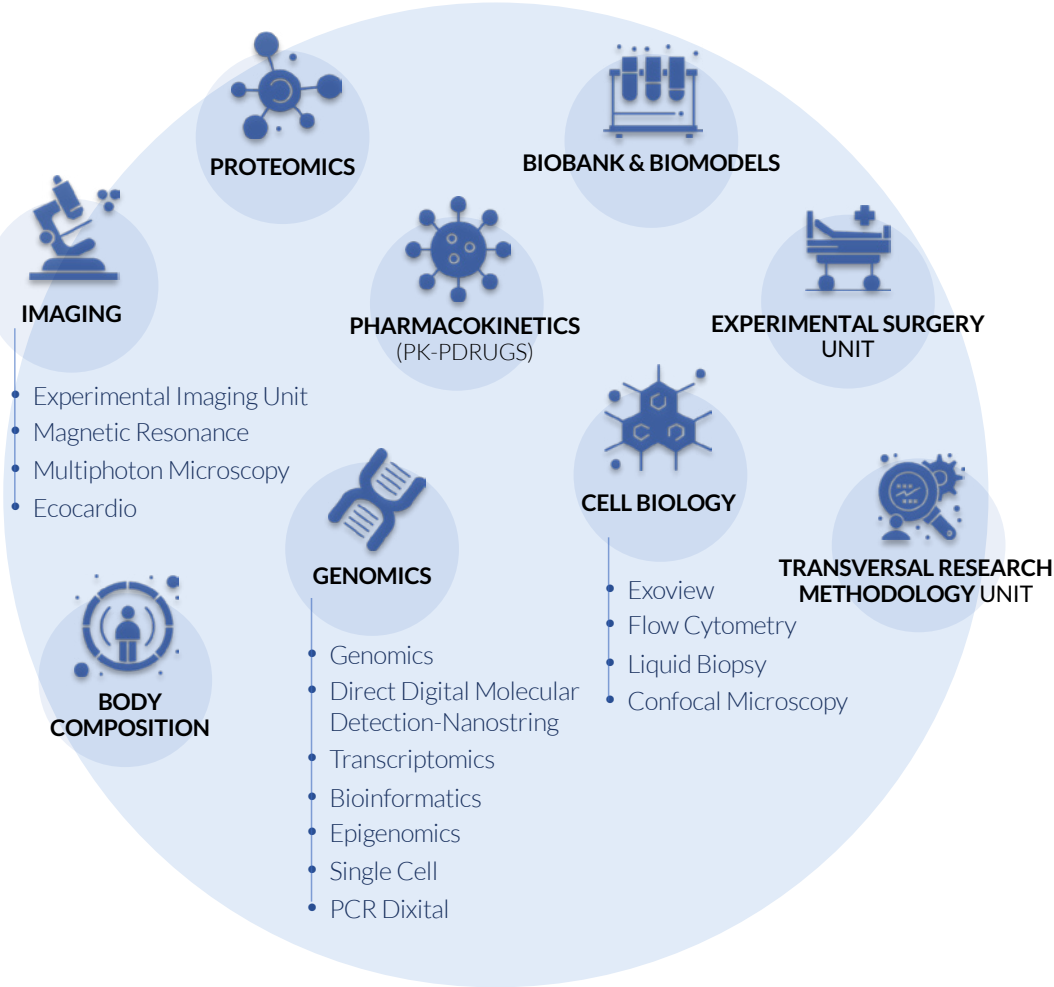
Active Innovations

Software. Trademarks & apps

7
TRADEMARKS

24
INTELLECTUAL PROPERTY

PLATFORMS


PROTEOMICS
BIOBANK & BIOMODELS
IMAGING
PHARMACOKINETICS
(PK-PDRUGS)
EXPERIMENTAL SURGERY
UNIT
Experimental Imaging Unit
Magnetic Resonance
Multiphoton Microscopy
Ecocardio
CELL BIOLOGY
GENOMICS
TRANSVERSAL RESEARCH
METHODOLOGY UNIT
Exoview
Flow Cytometry
Liquid Biopsy
Confocal Microscopy
BODY
COMPOSITION
Genomics
Direct Digital Molecular
Detection-Nanostring
Transcriptomics
Bioinformatics
Epigenomics
Single Cell
PCR Dixital

PROTEOMICS

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

The Proteomics platform was created with the purpose of boosting research, providing support and offering researchers a comprehensive infrastructure in the field of proteomics managed by highly specialized staff.

It has cutting-edge equipment used to conduct complete proteome characterization studies, but also differential expression analysis studies.

LIQUID BIOPSY UNIT

Laura Muinelo Romay
laura.muinelo.romay@sergas.es

The Liquid Biopsy Analysis Unit is a laboratory specialized in the analysis of circulating tumor cells (CTCs), circulating tumor DNA (ctDNA) and other tumor elements present in different biological fluids such as blood, saliva, pleural fluid or cerebrospinal fluid, among others. others.

The unit, created in 2012, provides services to different national and international clinical and research groups for the study of liquid biopsy.

Interest in the study of tumor material present in biological fluids has increased exponentially in the last decade, mainly because it is the least invasive and most dynamic strategy for characterizing tumors.

FLOW CYTOMETRY

Pablo Hervella Lorenzo
pablo.hervella.lorenzo@sergas.es

It is a technique of cell analysis that allows to measure the characteristics of light scattering and cell fluorescence when those cells pass through a light beam. The platform's main aims are:

- To advise users on the principles and applications of flow cytometry analysis and cell sorting.
- To develop, optimize and perform new analytical applications demanded by the users.
- To do cellular isolation through cell sorting.
- To 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 nowadays. The use of this platform in its different variants (anatomical, functional, spectroscopy and molecular imaging) allows for a complete, non-invasive (in vivo) and longitudinal monitoring over time of the process associated with neurovascular diseases and others such as plasticity, reorganization and functional recovery in animal models.

INTEGRATED UNIT OF BIOBANKS AND BIOMODELS

Máximo Fraga;
Rodolfo Gómez;
Anxo Vidal

biobanco.apa.santiago@sergas.es
bbi3d@mpgroup.es
cebega@usc.es
lydia.fraga.fontoira@sergas.es

With the aim of accelerating translational research by offering a comprehensive solution to the research community, currently the following Research Support Platforms dependent on SERGAS and the University of Santiago de Compostela (USC) are constituted as a unicentric integrated unit BIOBANK AND BIOMODELS:

- Biobank CHUS – Máximo Fraga
- Platform of Biovalidation, Biofabrication and 3D Printing (BBI-3D) – Rodolfo Gómez
- Experimental Biomedicine Centre of the University of Santiago de Compostela (CEBEGA) – Anxo Vidal

It is a unique structure made up of these three units with the main objective of accelerating translational research. It is precisely the close relationship between the units that sustains its unique value and its potential to offer a broad portfolio of services to the research community.

EXPERIMENTAL IMAGING UNIT (UNIME)

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.

EXPERIMENTAL SURGERY UNIT

Mª Luz Alonso Alonso

maria.luz.alonso.alonso@sergas.es

The Experimental Surgery Unit provides support in biomedical research with several animal models for IDIS research groups, in strictly controlled sanitary and environmental conditions. The Experimental Surgery 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 holds 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 objectives are 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
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. 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.

PHARMACOKINETICS (PK-PDRUGS)

Anxo Fernández Ferreiro
anxordes@gmail.com

The unit (PK-PDrugs) coordinated from the Research and Innovation Unit of the Pharmacy Service of Santiago de Compostela, is committed to the most sophisticated analytical technologies focused on the determination of drugs and metabolites in the different fields of biomedical research.

EPIGENOMICS

Ana Belén Crujeiras / Ángel Díaz Lagares

anabelencrujeiras@hotmail.com
angel.diaz.lagares@sergas.es

Epigenomics contributes to solving multiple biological processes related to the development of diseases and is particularly useful in the field of personalized medicine. The Epigenomics Unit, created in collaboration between the Endocrinology and Nutrition area and the Oncology area of IDIS and in consortium between FIDIS and the CIBER Physiopathology of Obesity and Nutrition (CIBERobn), aims to provide help and support to research groups and industry at a national and international level in carrying out epigenomic studies, at the level of specific genes or the epigenome.

BIOINFORMATICS

Jorge Amigo Lechuga

jorge.amigo@usc.es

The Bioinformatics Platform is made up of a multidisciplinary team with experience in handling data obtained from omics technologies and in translational medicine. Its purpose is to provide both basic and clinical researchers with technological support and advice on the numerical analysis and processing of large volumes of data from different areas of the life sciences, applying techniques from both the fields of biology and chemistry, physics or mathematics, to obtain new knowledge.

TRANSCRIPTOMICS

Isabel Ferreirós Vidal
Isabel.Ferreiros.Vidal@sergas.es

This technology allows millions of fragments to be sequenced massively and in parallel, improving the speed and accuracy of sequencing while reducing its cost.

The Illumina NextSeq 2000 Sequencing System is provided with a novel super-resolution optical system that produces high-precision imaging data with higher resolution and sensitivity than more traditional Illumina systems.

This technology also provides greater sequencing flexibility, and it is scalable to different production experimental needs and adaptable to both conventional and emerging applications.

DIRECT DIGITAL MOLECULAR DETECTION (NANOSTRING)

Alberto Gómez Carballa
alberto.gomez.carballa@sergas.es

The nCounter® Assay System allows hundreds of mRNAs, miRNAs, SNVs, CNVs or proteins to be analyzed directly by direct digital molecular detection, in a single reaction in the absence of enzymes (no reverse transcription or amplification). It is a system of high sensitivity and reproducibility, with great multiplexing capacity (up to 800 genes in the same reaction). The technique not only reduces the number of necessary reactions, but also saves the amount of RNA/DNA that is used. required for the test.

PLATFORM SP-IRIS/ EXOVIEW

María Pardo Pérez
maria.pardo.perez@sergas.es

The ExoView platform is based on single particle interferometric reflectance imaging sensor SP-IRIS technology providing a compact multi-parameter solution for the capture and analysis of Extracellular Vesicles (EVs)/exosomes, functionalized nanoparticles and viruses. It allows capturing EVs, measuring size (nm) by means of visible light interference, and quantifying by fluorescence the number of vesicles with specific antibodies and/or on demand in small functionalized chips using very little sample (just a few µl) in any biological fluid (plasma, serum, urine, CSF, etc) and secretomes. It allows performing in a single analysis the size, quantity, and protein profile of both membrane and intravesicular proteins; it also allows the detection and analysis of exosomal RNAs using fluorescent probes.

MULTIPHOTON MICROSCOPE

Pablo Hervella Lorenzo
Mª Luz Alonso Alonso
Maria.Luz.Alonso.Alonso@sergas.es

The Multi-Photon Microscope is purpose-built for deep imaging not only in tissue slices and cells but also in clarified tissue, whole organs, and even whole animals. Its working spectral range makes it suitable for 2-photon microscopy applications where the lowest possible phototoxicity is sought and where it is possible to obtain high-quality images at maximum depth, such as in-vivo imaging in small animals such as mice or rats. It is also possible to obtain 2-photon imaging on marker-free samples through secondary and tertiary harmonic imaging.

SINGLE CELL

Isabel Ferreirós Vidal
Isabel.Ferreiros.Vidal@sergas.es

10x Genomics technology provides a better readout of cellular complexity from different perspectives - omics at the "single cell" level: the combination of information from multiple omics layers -transcriptomics, proteomics and epigenomics- increases the power of the experiments.

ECOCARDIO

Ricardo Lage Fernández
ricardo.lage@usc.es

The objective of the unit is to provide professionals in our environment with an effective tool to assess changes in cardiac function in different preclinical models, associated with the pathophysiological process or therapeutic intervention, favoring collaborations and creating synergies between healthcare professionals and researchers.

The ECOCARDIO Cardiac Imaging Platform is made up of a multidisciplinary team with extensive experience in the analysis of cardiac function, from SERGAS, IDIS and USC. Non-invasive imaging techniques are a fundamental piece of current cardiovascular medicine, providing accurate diagnoses and providing prognostic information. In addition, they allow monitoring of different pathophysiological processes, often guiding the therapeutic intervention itself

GENOMICS

Beatriz Sobrino Rey
beatriz.sobrino.rey@sergas.es

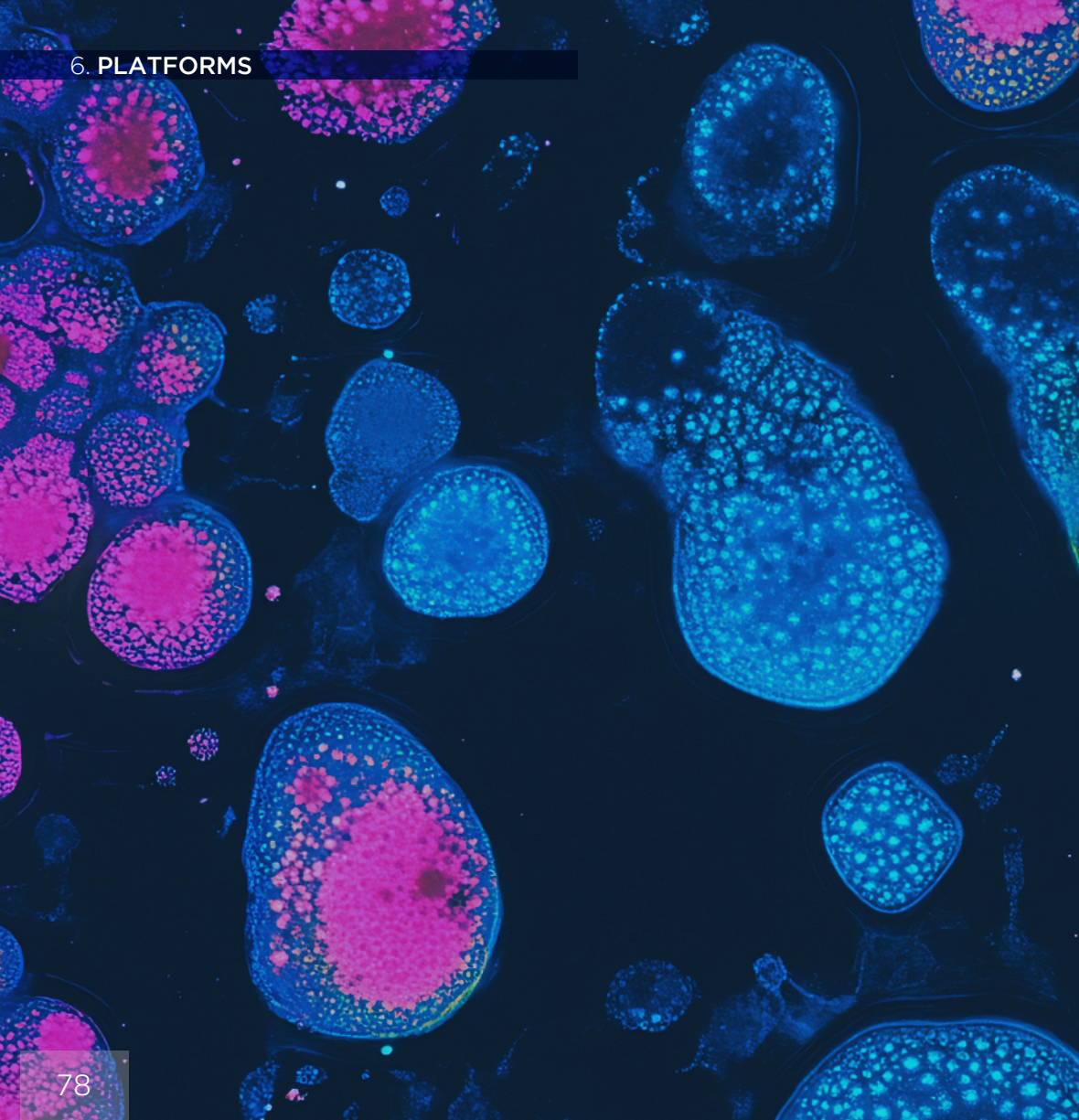
The application of the most modern technologies of genetic or pharmaceutical analysis require, in addition to the necessary equipment, expert knowledge for the adequate interpretation of the results obtained from them.

Before starting the process it is essential to have adequate general knowledge of the field and specific knowledge of the capacities, limitations and alternatives in each particular case.

TRANSVERSAL RESEARCH METHODOLOGY UNIT (UTAMI)

Ana Estany Gestal
metodologia.idis.santiago@sergas.es

The Research Methodology Transversal Unit (UTAMI) is a support unit specialized in research methodology, biostatistics, bioethics and regulation. UTAMI is coordinated from the Research Methodology Unit of IDIS Foundation, with the aim of promoting competitive research by offering research staff a highly qualified service, aimed at promoting three fundamental aspects of research: scientific publications, research projects and doctoral theses.



DIGITAL PCR

Isabel Ferreirós Vidal
isabel.ferreiros.vidal@sergas.es

The QuantStudio Absolute Q digital PCR system is an ideal solution for any application requiring high sensitivity, precision, and accuracy:

- Quantification of low-concentration targets (viruses, liquid biopsies)
- Genotyping of SNPs and gene mutations
- Absolute quantification of genetic material
- Copy number variation analysis
- Gene expression analysis

BODY COMPOSITION

Marcos Couselo Carreira
mccarr@hotmail.es

The Body Composition and Metabolic Checkup Platform was born within the Endocrinology and Nutrition Service of CHUS with the aim of providing scientific, medical and technological support in the field of body composition analysis at different levels:

- Scientific studies or clinical trials that require the use of this methodology.
- Industries in the food or pharmaceutical sector interested in assessing the effect of their marketed or newly developed products at the level of body composition.
- Companies (or individuals) that wish to incorporate "new generation" information in the assessment of the nutritional and health status of their workers.
- Sports sector at both an advanced and initial level to monitor fitness and performance improvement.

ANNUAL REPORT 2024

7 FUNDING

During 2024, **49.925.087 €** were raised in the following concepts: projects, human resources, transfer, donations, contracts, infrastructures, provision of services, agreements and studies.

TOTAL

49.925.087 €

137
95
378
643
156
2
3
1

PROJECTS	23.918.768 €
HUMAN RESOURCES	10.185.542 €
STUDIES (CLINICAL TRIALS, OTHER STUDIES)	6.757.063 €
CONTRACTS AND PROVISION OF SERVICES	7.456.584 €
DONATIONS	466.911 €
MOBILITY	25.555 €
TRANSFER	38.846 €
INFRASTRUCTURES	1.075.818 €

COMPETITIVE FUNDING

35.205.683 €

93
32
12
137

NATIONAL PROJECTS	17.113.130 €
REGIONAL PROJECTS	3.942.095 €
INTERNATIONAL PROJECTS	2.863.542 €
TOTAL	**23.918.768 €**

95
HUMAN RESOURCES

TOTAL

10.185.542 €

AGENCY
AXENCIA GALEGA DE INNOVACIÓN
Instituto de Salud Carlos III
GOBIERNO DE ESPAÑA · MINISTERIO DE CIENCIA, INNOVACIÓN Y UNIVERSIDADES
idis
European Commission

	CONCEPT	NUMBER	AMOUNT
	GAIN Postdoctoral Grant	5	690.126,18 €
	GAIN Predoctoral Grant	31	3.100.243,86 €
	PFIS	5	479.167,00 €
	iPFIS	1	89.900,00 €
	Bioinformatic technician	1	60.000,00 €
	Rio Hortega	6	390.000,00 €
	Sara Borrell	5	475.000,00 €
	Miguel Servet	2	617.200,00 €
	Intensification	2	60.000,00 €
	Ramón y Cajal	2	503.600,00 €
	Juan de la Cierva	3	216.000,00 €
	Predoctoral	11	1.377.200,00 €
	FPU	4	362.691,81 €
	Technical support staff	2	95.700,00 €
	Postdoctoral	3	325.051,52 €
	Predoctoral	6	512.625,00 €
	Platform technician	1	88.284,00 €
	MSCA	1	141.552,96 €
	Others	4	601.200,00 €

ANNUAL REPORT 2024

STRATEGIC ALLIANCES

5 RICORS

RICORS2040
Kidney Disease Network

RICORS-ICTUS
Cerebrovascular Diseases Network

RICORS RIAPAd
Network of Research in Primary Care of Addictions

RICORS SAMID
Primary Care Interventions to Prevent Maternal and Child Chronic Diseases of Perinatal and Developmental Origin

RICORS RICAPPS
Research Network on Chronicity, Primary Care and Prevention and Health Promotion

3 IMPaCT. Precision Medicine Associated with Science and Technology

7 CIBER. Biomedical Research Networking Centres

CIBEROBN, Physiopathology of Obesity and Nutrition

CIBERER, Rare Diseases

CIBERESP, Public Health and Epidemiology

CIBERCV, Cardiovascular Diseases

CIBERONC, Cancer

CIBERNED, Neurodegenerative Diseases

CIBERES, Respiratory Diseases

2 PLATFORMS

SPANISH CLINICAL RESEARCH NETWORK

ITEMAS. Innovation in Medical & Health Technologies

8. STRATEGIC ALLIANCES

4 INTERNATIONAL NETWORK

EATRIS, European Infrastructure for Translational Medicine

COST, European Cooperation in Science and Technology

EU OPENSCREEN - European High-Capacity Screenging Network

ECRIN - European Clinical Research Infrastructure Network

5 OTHER NETWORKS

RECLIP [1], Spanish Pediatric Clinical Trials Network.

REGIC, Clinical Research Management Entities Network.

Cluster Saúde de Galicia

Galicia Life Sciences Business Technological Cluster

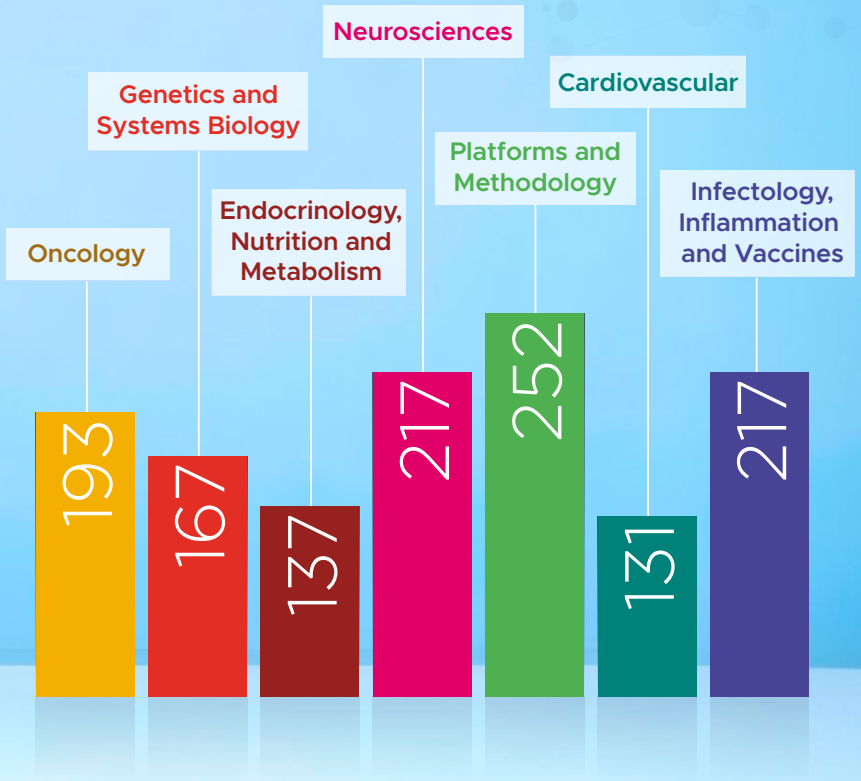
Association of knowledge transfer

[1] *National Coordination IDIS*

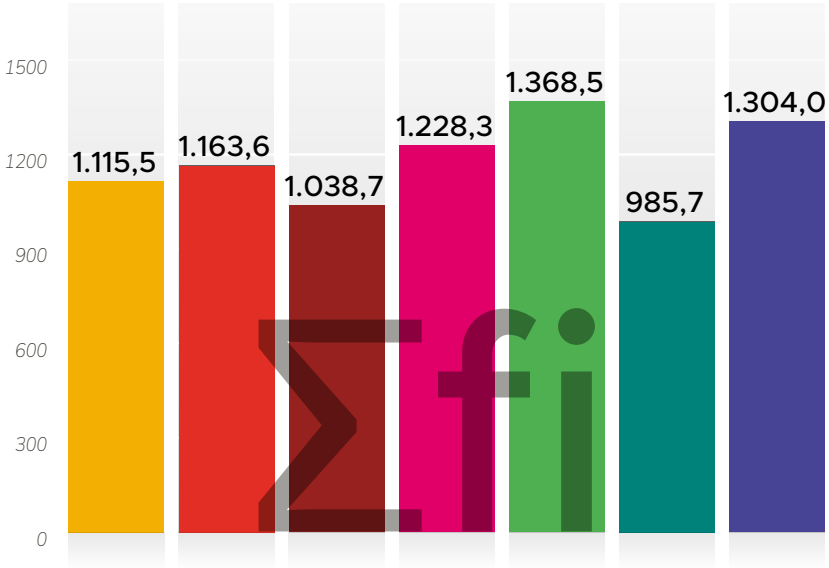
ANNUAL REPORT 2024

9 AREAS

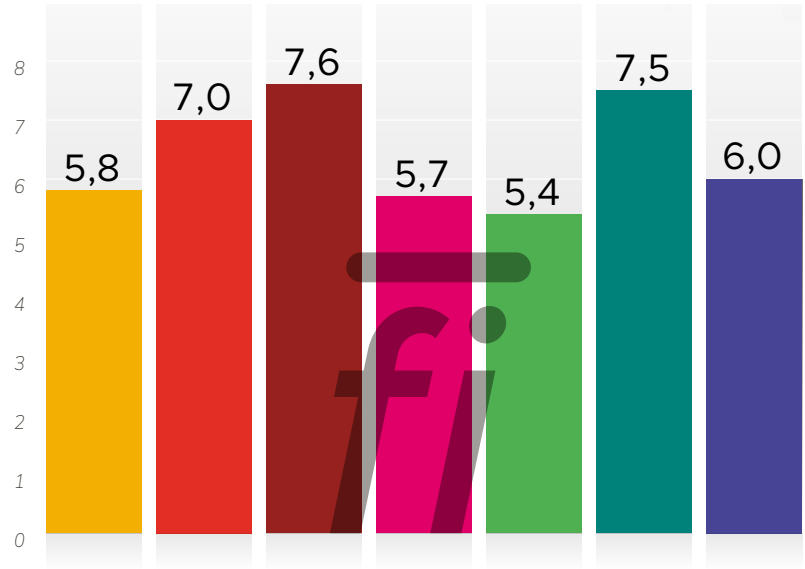
Publications in 2024. Number


Oncology
193
Genetics and Systems Biology
167
Endocrinology, Nutrition and Metabolism
137
Neurosciences
217
Platforms and Methodology
252
Cardiovascular
131
Infectology, Inflammation and Vaccines
217

Σfi



- Oncology
- Genetics and Systems Biology
- Endocrinology, Nutrition and Metabolism
- Neurosciences

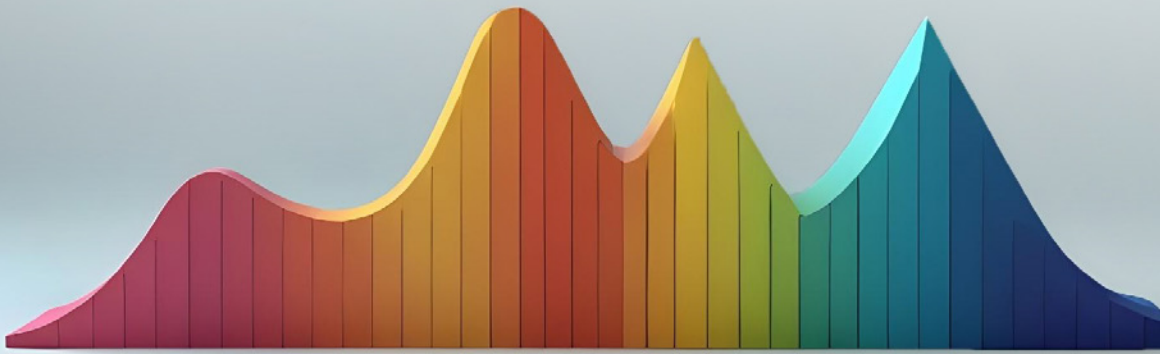


Platforms and Methodology

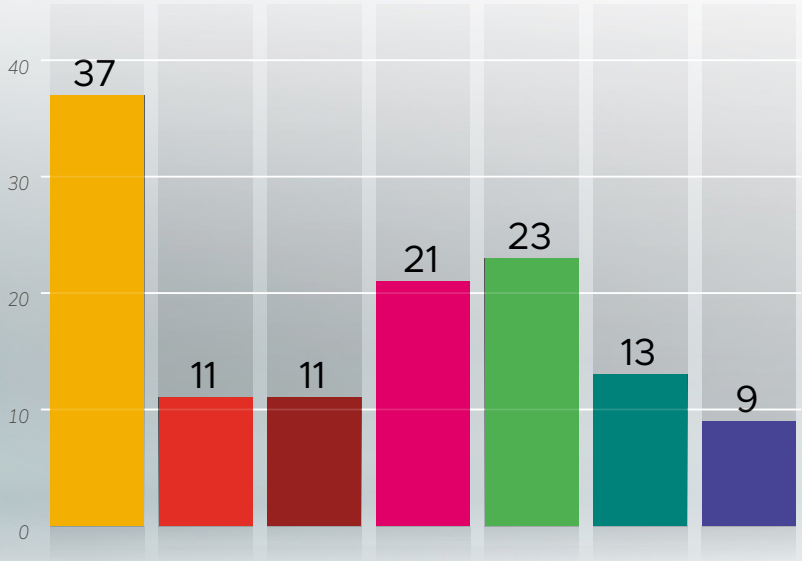
Cardiovascular

Infectology, Inflammation and Vaccines

- Oncology
- Genetics and Systems Biology
- Endocrinology, Nutrition and Metabolism
- Neurosciences
- Platforms and Methodology
- Cardiovascular
- Infectology, Inflammation and Vaccines

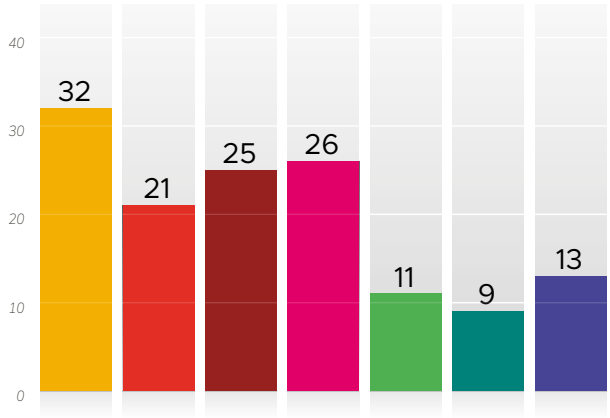


Theses

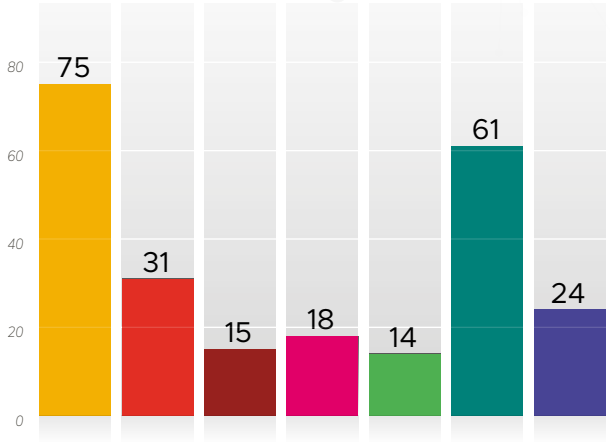


- Oncology
- Genetics and Systems Biology
- Endocrinology, Nutrition and Metabolism
- Neurosciences
- Platforms and Methodology
- Cardiovascular
- Infectology, Inflammation and Vaccines

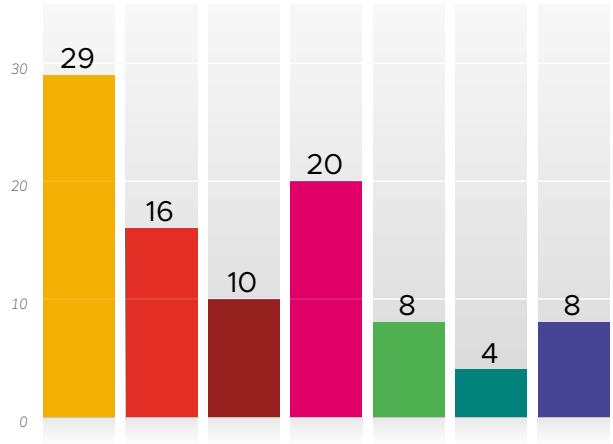
Projects



Clinical Studies



Human Resources



idisantiago.es

ANNUAL REPORT 2024

XUNTA DE GALICIA | CONSELLERÍA DE SANIDADE

idis

USC UNIVERSIDADE DE SANTIAGO DE COMPOSTELA

HR EXCELLENCE IN RESEARCH

Annual Report 2024

INSTITUTO DE INVESTIGACIÓN SANITARIA
SANTIAGO DE COMPOSTELA